

Part II

Comments and Responses

PART II COMMENTS AND RESPONSES

CEQA Section 21091(d) and State CEQA Guidelines Section 15088 require that the lead agency evaluate comments received during the noticed comment period and prepare a written response for each comment relating to any significant environmental issues raised in the DEIR. The written responses presented in this FEIR describe the nature of any significant environmental issues raised and provide a good-faith, reasoned analysis in response. The range of responses includes providing clarification on the DEIR, making factual corrections, explaining why certain comments may not warrant further response, or simply acknowledging the comment for consideration by the decision-making bodies.

Many of the comments received were expressions of support of or opposition to the proposed project, rather than comments on the analysis in the DEIR. CEQA only requires responses to comments on the significant environmental issues raised in a DEIR, rather than to comments on the merits of the proposed project or respond to general reference materials submitted in support of comments. However, in the interest of working cooperatively through issues that reflect the interests of the public and important planning partners and stakeholders, DWR has responded to all comments received during the public comment period.

Many of the comment letters also included attachments. These attachments were considered in the comment responses, and are provided in FEIR Attachment 3, "Comment Letter Attachments."

At least 10 days prior to certifying an environmental impact report, DWR provided written proposed responses, either in a printed copy or in an electronic format, to the public agencies on comments made by that public agency.

II.1 MASTER COMMENTS RESPONSES

The following master responses address comments received from numerous commenters on the same issue. They provide a means of giving a broader context to the response than may be possible in individual responses. In some cases, one or more master responses may respond to an individual comment.

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II.1.1 MASTER RESPONSE 1: SCOPE OF ANALYSIS

CEQA requires that an EIR describe the existing environmental conditions in the vicinity of a proposed project, which is referred to as the “environmental setting.”¹ CEQA places special emphasis on describing sensitive environmental resources in the project vicinity, while other characteristics of the environmental setting need be discussed only to the extent necessary to provide an understanding of the significant effects of the project and of the alternatives analyzed in the EIR.² Existing conditions that are not relevant to the impact analysis need not be discussed in the environmental setting.³

II.1.1.1 GEOGRAPHIC SCOPE

To analyze the full range of potential environmental impacts, the DEIR identified the geographic area in which potential direct and reasonably foreseeable indirect impacts could occur. As explained in DEIR Chapter 4.4, “Aquatic Biological Resources,” the geographic area for evaluation of potential direct and indirect impacts of the Proposed Project is delineated by the following waters:

- Sacramento River from its confluence with the Feather River downstream to the legal Delta boundary at the I Street Bridge in the City of Sacramento
- Sacramento-San Joaquin Delta
- Suisun Marsh and Suisun Bay

Although the SWP is a state-wide system, the Proposed Project is limited to a set of updates to SWP long-term operations that would not cause environmental impacts beyond these boundaries.⁴

To determine the geographic scope of analysis, DWR considered: (1) the geographic scope of SWP operations’ influence (i.e., the “zone of influence”), particularly with respect to the operations affected by the Proposed Project; and (2) whether, in light of SWP and CVP coordinated operations, the Proposed Project would cause a reasonably foreseeable response by Reclamation that could result in changes in CVP operations outside the SWP zone of influence. DWR concluded that the analysis of flow-related impacts was appropriately focused on the SWP zone of influence (the Sacramento River below the confluence of the Feather River, the legal Delta, and the Suisun Marsh and Bay) and does not include areas that are affected only by CVP actions.

Please refer to DEIR Appendix G, “Geographic Scope of Project’s Influence on Flow,” for additional information.

¹ CEQA Guidelines, § 15125, subd. (a).

² *Id.*, subd. (c).

³ *Citizens for Open Government v. City of Lodi* (2012) 205 Cal.App.4th 296, 316.

⁴ The analysis of growth-inducing effects contained within DEIR Chapter 4.6.2, “Growth-Inducing Impacts,” is an exception. That analysis addresses potential indirect effects in the SWP service area.

II.1.1.2 TREATMENT OF OROVILLE COMPLEX

As described in DEIR Appendix G, there are two major components of the SWP that influence flow in the natural waterways. The first major component is the SWP Delta facilities, including the Clifton Court Forebay, Barker Slough Pumping Plant, and Suisun Marsh Salinity Control Gates. The Proposed Project includes operational changes to some of the Delta facilities, and potential effects on those facilities are included in the DEIR. The second major component is the Oroville Complex, which DWR uses to manage runoff from the Feather River Watershed. Water from Oroville then flows from the Feather River into the Sacramento River, which then drains into the Delta.

Operations at the Oroville Complex are governed by separate legal authorizations. A Federal Energy Regulatory Commission (FERC) license, FERC License 2100, governs the Oroville Complex. In addition, parties to the FERC relicensing process executed a Settlement Agreement in March 2006 through which the parties agreed that performance under the Agreement would fulfill existing statutory and regulatory obligations associated with the Oroville relicensing, except to the extent that situations involving material new information arose in the future. NMFS has also issued a final Biological Opinion for the Oroville Complex FERC relicensing. The SWRCB also issued a water quality certification on December 15, 2010 for the Oroville Complex. Thus, the Oroville Complex is already covered by existing permits and legal authorities and is not included in the scope of this Project.

II.1.1.3 OROVILLE OPERATIONS AND ADAPTIVELY MANAGED BLOCK OF WATER

Refined Alternative 2b, as described in FEIR Part III, Chapter 5.3, "Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP," would not alter operations at the Oroville Facilities. Under Refined Alternative 2b, the SWP will provide a 100 TAF block of water for additional outflow in the summer or fall of Wet and Above Normal Years, as defined by the Sacramento Valley water year type classification. This additional outflow will be used for the purpose of testing components identified in the Delta smelt resiliency strategy. The additional outflow will be provided through 1) water purchases, or 2) SWP project water.

If water is provided fully or partially through water purchases, that volume of water purchased for additional outflow would be subjected to the same criteria as any other water transfer which would ensure that water as new additional outflow. This would essentially be a transfer to outflow (instead of the exports).

If water is provided out of SWP project supply, the source likely originates from Oroville storage. This volume would have otherwise been exported, the operation of which is covered by the existing FERC License 2100 and associated governing documents. Instead of exporting at Banks Pumping Plant, that volume of water would be redirected to provide additional outflow. In practice and consistent with authorized FERC operations, the SWP would identify the available water supply in Oroville for SWP export, but instead of exporting all of that identified volume, the portion needed to complete the 100 TAF contribution to additional outflow would instead be redirected to Delta outflow. Thus, the adaptively managed block of water in Refined Alternative 2b would not affect Oroville operations; only the ultimate downstream use of the water (i.e., export or Delta outflow) would change.

In the event that CDFW, through the AMP, chooses to store this water for the following year, then that volume would remain in storage, but would be “subject to spill” if Oroville were to go into flood control operations. The “subject to spill” condition on storage is consistent with how DWR treats all water that is stored in Oroville, regardless of how the water may otherwise be categorized.

II.1.1.4 TREATMENT OF COORDINATED SWP/CVP OPERATIONS

DWR considered whether the long-term operations of the SWP would result in a reasonably foreseeable response by Reclamation that could result in changes in CVP operations that would cause environmental impacts outside the SWP zone of influence. As explained in DEIR Appendix G, even though the SWP and CVP coordinate operations, DWR and Reclamation independently decide how to operate the individual projects to best meet applicable requirements. The Coordinated Operation Agreement (COA) does not define what actions DWR or Reclamation will take in any given set of circumstances and DWR does not control CVP operations. These decisions occur in real-time, allowing operators to account for constantly changing conditions such as tides, accretions and depletions, and hydrology. Therefore, whether Reclamation would alter its operations of the CVP in response to the Proposed Project in a way that would cause environmental impacts outside of the SWP zone of influence is speculative. Under long-standing CEQA principles, speculative analysis is considered not to be meaningful or informative, and thus is not required.⁵

Further, although the SWP and CVP systems are operated in coordination, DWR and Reclamation have operational control over separate components, which they independently decide how best to operate. For example, DWR essentially has two “knobs” in operating the SWP: 1) releases from Oroville, and 2) exports from the SWP Delta facilities (see discussion above). Reclamation, on the other hand, controls operation of the CVP through releases at multiple reservoirs, including Shasta, Trinity, and Folsom, through flows in other conveyances, like the Delta Cross Channel, and CVP exports. Reclamation has discretion, and manual control over multiple potential combinations of actions with respect to the operation of the CVP. The EIR does not try and predict how Reclamation will exercise this discretion in real time, as such an effort would be speculative. For this reason, the EIR does not analyze Reclamation’s operation of CVP facilities, including releases from Shasta, Trinity, etc. and the potential effects of any changes in federal operations on hydrology, water quality and aquatic biological resources.

II.1.1.5 TREATMENT OF COA ADDENDUM

As noted above, DWR and Reclamation operate the SWP and CVP pursuant to COA, which governs how the SWP and CVP share water under their water rights and operate to meet specific water quality and outflow requirements in the Delta. The COA does not establish any of the regulatory requirements applicable to the SWP and CVP.

DWR executed the Addendum to the COA (COA Addendum) with Reclamation on December 12, 2018. The COA Addendum is not a part of this project. On December 14, 2018, DWR filed a Notice of Exemption (NOE) with the State Clearinghouse covering the COA addendum, citing California Public

⁵ See CEQA Guidelines, § 15145; *Rodeo Citizens Assn. v. County of Contra Costa* (2018) 22 Cal.App.5th 214, 225-226.

Resources Code §21169 and CEQA Guidelines §15261(a). As the NOE explains, the relevant portions of the SWP were constructed and operational prior to November 23, 1970 and the 2018 COA Addendum is a normal, intrinsic part of the ongoing operations of the SWP. No further environmental review of the 2018 COA Addendum is necessary.

This EIR incorporates the COA (including the 2018 COA Addendum) in the baseline environmental conditions. Please see Master Response 2, “Baseline,” for more information regarding the conditions included in the baseline. The EIR also includes a discussion of how the 2018 COA Addendum relates to a wide range of resource areas, but the discussion was included as an appendix to the DEIR for informational purposes only. Please see DEIR Appendix B, “2018 Coordinated Operation Agreement Addendum,” for further information.

II.1.2 MASTER RESPONSE 2: BASELINE

II.1.2.1 CEQA ENVIRONMENTAL BASELINE

For a detailed discussion of the CEQA baseline used in the EIR, please refer to DEIR Chapter 4.1.2, “Environmental Baseline.”

An EIR must include a description of the physical conditions in the project’s vicinity, often referred to as the “baseline.” Lead agencies refer to the baseline when determining whether a project’s impact is significant. Pursuant to CEQA Guidelines, §15125(a), generally, the baseline should generally consist of conditions that exist at the time the Notice of Preparation (NOP) is published.¹ Where existing conditions change or fluctuate over time and where necessary to provide the most accurate picture practically possible of the project’s impacts, a lead agency may define existing conditions by referencing historic conditions or conditions expected when the project becomes operational, or both, that are supported with substantial evidence.² The purpose of this requirement is to give the public and decision makers the most accurate and understandable picture practically possible of the project’s impacts.

The purpose of an EIR is to analyze the potential effects of changes in the physical environment caused by a proposed project compared to baseline conditions. Environmental problems that already exist are part of the baseline conditions,³ and the EIR analyzes whether changes to those conditions caused by a proposed project are considered significant under CEQA.

As explained in DEIR Chapter 4.1.2, the baseline used in this EIR consists of the physical conditions that existed at the time of the NOP was published on April 19, 2019. Modeling was used to identify the baseline by incorporating existing operational requirements and conditions impacting the resources analyzed in the EIR, rather than using an actual snapshot of actual conditions on April 19, 2019. Environmental conditions relevant to the project, specifically flows and hydrologic conditions, fluctuate regularly, so a snapshot of conditions that existed at a single point in time would not reflect actual conditions or provide an appropriate basis for analyzing impacts. The baseline also needed to capture variations in existing conditions, including different water year types. The modeling is generally based on data spanning several years to account for such fluctuations and the variations in the types of impacts that could occur under different scenarios. The modeling also includes conditions, agreements, and/or regulations that determine how the SWP is currently operated.

As demonstrated in the EIR, the modeling reflects actual conditions as they currently exist. For instance, simulated results from the Existing Conditions CalSim II model and recent historical observed

¹ See *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 447 (*Neighbors for Smart Rail*).

² See *Neighbors for Smart Rail, supra*, 57 Cal.4th at p. 453.

³ *Paulek v. Department of Water Resources* (2014) 231 Cal.App.4th 35, 44; *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1168; *North Coast Rivers Alliance v. Westlands Water District* (2014) 227 Cal.App.4th 832, 872-873; *Citizens for East Shore Parks v. State Lands Commission* (2011) 202 Cal.App.4th 549, 558-559; *World Business Academy v. California State Lands Commission* (2018) 24 Cal.App.5th 476, 499-503.

data of flows in the Sacramento River at Freeport (near the northern boundary of the Delta) are shown in DEIR Figures 4.2-1 and 4.2-2. Simulated results are based on the 82-year simulation period. DEIR Figure 4.2-1 presents 82-year CalSim II model results in box-and-whisker format indicating the range of hydrology modeled for each month. Lines of historical observed flows at Freeport (water years 2008 to 2019) are overlaid atop the box-and-whisker plot. Figure 4.2-2 presents CalSim II model results of Freeport flow during Critical Years as black points and historical data of Critical Years in the 2008-2019 period as lines. These figures illustrate that the 82-year hydrology and simulated operations in CalSim II generally encompass recent historical flows. Similar data presented in DEIR Figures 4.2-3 through 4.2-5 illustrate that the 82-year hydrology and simulated operations in CalSim II generally encompass recent historical exports. DWR, as the CEQA lead agency, prepared the EIR to ensure that the analyses of the project's potential impacts are as realistic and accurate as possible, consistent with applicable legal principles.

II.1.2.2 TREATMENT OF HISTORICAL CONDITIONS

Some commenters have suggested that the proper baseline for the EIR should have been conditions that existed prior to the commencement of the State Water Project. Similar contentions have been rejected by the courts. For example, in *Citizens for East Shore Parks v. California State Lands Commission*,⁴ the court rejected the notion that an EIR for a 30-year lease renewal for a marine terminal should have included an environmental baseline that assumed the absence of terminal facilities that had been in place for many decades. As the court explained, “[t]he plaintiffs claim the baseline here should reflect conditions that have not existed at the locale for more than a century. This is so, say plaintiffs, because if the baseline does not exclude current conditions, there will never be full environmental review of the marine terminal, since it predates CEQA.”⁵ In rejecting this contention, the court reasoned that “neither the statute, nor any CEQA case, supports plaintiffs’ revisionist approach to the baseline. To the contrary, the CEQA Guidelines require a ‘description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation [of an EIR] is published’ and specify ‘[t]his environmental setting will normally constitute the baseline....’ (CEQA Guidelines §15125, subd. (a), italics added.) The cases further make clear the baseline must include existing conditions, even when those conditions have never been reviewed and are unlawful.”⁶ As another court said in another case, “[t]his baseline principle means that a proposal to continue existing operations without change would generally have no cognizable impact under CEQA.”⁷

Here, the SWP was already lawfully in place and operational at the time CEQA was enacted in 1970. The SWP is thus considered an “ongoing project” for purposes of CEQA Guidelines §15261. CEQA documents assessing changes in SWP operations therefore must focus solely on modifications with the

⁴ (2011) 202 Cal.App.4th 549, 558-561.

⁵ *Id.* at p. 560 (footnote omitted).

⁶ *Ibid.*

⁷ *North Coast Rivers Alliance v. Westlands Water District* (2014) 227 Cal.App.4th 832, 872-873.

potential to cause new significant environmental effects above and beyond those associated with ongoing operations.

As these principles make clear, CEQA is not a remedial environmental statute by which public agencies are charged with enhancing or improving existing conditions from an environmental standpoint. Rather, CEQA is focused on minimizing new environmental harm going forward in time. In this respect, CEQA differs from other environmental statutory schemes in which statutory objectives include improvements over existing conditions (e.g., air quality laws that address means of reducing existing air pollution).

II.1.2.3 TREATMENT OF COA ADDENDUM

As described in DEIR Chapter 4.1.2, one aspect of the baseline is the manner in which the SWP and CVP jointly operate to meet Delta regulatory requirements under the COA. The CVP and SWP are operated in coordination under SWRCB decisions and water right orders related to the CVP's and SWP's water right permits and licenses to appropriate water by diverting to storage, by directly diverting to use, or by re-diverting releases from storage later in the year or in subsequent years. The COA was originally executed in 1986 and subsequently updated in 2018 through the 2018 COA Addendum.

The baseline used in the DEIR includes the 2018 COA Addendum, as opposed to the unmodified 1986 version of the COA, to accurately reflect the existing conditions in the Delta as of April 19, 2019. The DEIR also includes a discussion of changes to surface water hydrology and water quality associated with implementing the 2018 COA Addendum in comparison to the original 1986 COA. That analysis concludes that implementation of the 2018 COA Addendum resulted in minimal change to surface water hydrology in the Delta and upstream waterways. For further detail regarding treatment of COA in this EIR, please see DEIR Appendix B, "2018 Coordinated Operation Agreement Addendum."

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II.1.3 MASTER RESPONSE 3: THE CEQA PROCESS

II.1.3.1 SUBSTANTIVE MANDATE OF CEQA

Although CEQA is primarily a procedural statute, it does contain a “substantive mandate” requiring public agencies to refrain from approving projects with significant environmental effects if “there are feasible alternatives or mitigation measures” that can substantially lessen or avoid those effects.¹ A basic purpose of CEQA is to “[p]revent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.”² As the Legislature found and declared with respect to CEQA:

[I]t is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required by [CEQA] are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects. The Legislature further finds and declares that in the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.

(Pub. Resources Code, § 21002.)

As the California Supreme Court has explained, “alternatives and mitigation measures have the same function—diminishing or avoiding adverse environmental effects. The chief goal of CEQA is mitigation or avoidance of environmental harm.”³

II.1.3.2 PROCEDURAL REQUIREMENTS EFFECTUATING SUBSTANTIVE POLICY

Among the purposes of environmental review are “(a) Sharing expertise, (b) Disclosing agency analyses, (c) Checking for accuracy, (d) Detecting omissions, (e) Discovering public concerns, and (f) Soliciting counter proposals.”⁴ These purposes are served through lead agencies’ solicitation of input from both the general public and from agencies with authority over the project and with technical scientific expertise.

A number of procedural requirements effectuate the substantive mandate of CEQA while involving the public and agencies other than lead agencies in decision-making affecting the environment. One crucial step is to consider whether a proposed project requires an EIR because there is “substantial evidence,

¹ *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 978 (CNPS), quoting *County of San Diego v. Grossmont–Cuyamaca Community College Dist.* (2006) 141 Cal.App.4th 86, 98.

² CEQA Guidelines, § 15002, subd. (a)(3); see also *id.* at § 15021, subd. (a) (“CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible”).

³ *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 403.

⁴ CEQA Guidelines, § 15200.

in light of the whole record before the lead agency, that the project may have a significant effect on the environment[.]”⁵ This “low threshold” evidentiary standard for triggering the obligation to prepare an EIR is commonly known as the “fair argument” standard. It provides that “if a lead agency is presented with a *fair argument* that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect.”⁶ In this context, “substantial evidence includes fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact.”⁷ It is possible that, under this “low threshold” trigger, a lead agency may prepare an EIR and ultimately conclude that substantial evidence supports that the conclusion that a proposed project will *not* have any significant environmental effects. Such an outcome occurred here.

Here, DWR determined that an EIR was required under the fair argument standard based on DWR’s assessment of its factual record as it existed on April 22, 2019, when DWR published the Notice of Preparation (NOP) for the Proposed Project. DWR was aware that its proposal was likely to be of great public interest, and that the preparation of a proposed negative declaration would be controversial and perhaps inappropriate in light of the number of technical comments the project was likely to inspire through the public review process.

In general, where the lead agency determines that an EIR is required for a proposed project, the agency must take several additional procedural steps to effectuate CEQA’s substantive mandate: (i) undertake the “scoping” process to obtain input from responsible and trustee agencies, as well as from the general public; (ii) prepare a DEIR meeting the CEQA requirements for such documents, taking into account input received through scoping; (iii) publish a DEIR that includes, among many other things, a reasonable range of potentially feasible alternatives; (iv) accept input from responsible agencies, trustee agencies, other agencies, and the general public; (v) prepare a FEIR meeting the CEQA requirements for such documents, taking into account input received through comments on the DEIR; and (v) proceed to decision-making against the backdrop of CEQA’s substantive mandate, which at this point is effectuated through CEQA Findings and statements of overriding considerations. For some projects, a lead agency’s decision-making process may involve an application for regulatory approval from an agency that functions as a responsible agency for CEQA purposes. In such circumstances, the lead agency’s action will likely reflect input received through scoping and on the DEIR from that responsible agency.

In a process commonly known as “scoping,”⁸ a lead agency typically determines the proper “scope” of an EIR by consulting with responsible agencies, trustee agencies, the Governor’s Office of Planning and Research (OPR), and any federal agency whose approval or funding is needed for the proposed project.⁹ According to the CEQA Guidelines, “[s]coping has been helpful to agencies in identifying the

⁵ Pub. Resources Code, § 21080, subd. (d).

⁶ CEQA Guidelines, § 15064, subd. (f)(1) (*italics added*); *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 83.

⁷ Pub. Resources Code, § 21080, subd. (e)(1).

⁸ See CEQA Guidelines, § 15083.

⁹ Pub. Resources Code, § 21080.4, subd. (a); CEQA Guidelines, § 15082.6. CEQA also encourages ongoing informal consultation between lead agencies and responsible and trustee agencies. (See, e.g., Pub. Resources Code, § 21080.3.)

range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important.”¹⁰ In addition, “[s]coping has been found to be an effective way to bring together and resolve the concerns of affected federal, state, and local agencies, the proponent of the action, and other interested persons including those who might not be in accord with the action on environmental grounds.”¹¹

The NOP is the procedural device used to initiate formal interagency dialogue. Once the lead agency decides that an EIR will be necessary, the lead agency must send a copy of its NOP to all responsible agencies, trustee agencies, the Office of Planning and Research and “federal agenc[ies] involved in approving or funding the project.”¹² The State Clearinghouse ensures that the involved state agency or agencies reply to the NOP within the required time.¹³ The NOP also must be sent to “any person who has filed a written request for notices with either the clerk of the governing body or, if there is no governing body, with the director of the agency.”¹⁴

After receiving the NOP, each responsible agency, each trustee agency, and the Office of Planning and Research has thirty (30) days in which to respond.¹⁵ The responses must contain specific details regarding how, in terms of scope and content, the EIR should treat environmental information germane to the statutory responsibilities of the responsible agency or other public agencies consulted. Each response must state whether the responding agency is a responsible agency, a trustee agency, or some other public agency.¹⁶

The DEIR, as published by the lead agency, reflects input received from responsible agencies, trustee agencies, various other agencies, and the general public. Among the required topics for the document are a project description and, as discussed below, a “a reasonable range of potentially feasible alternatives.”¹⁷ The project description must include “[t]he precise location and boundaries of the proposed project shall be shown on a detailed map, preferably topographic,” as well as (among other things) “[a] general description of the project’s technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities.”¹⁸ “There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.”¹⁹

In preparing its FEIR, the lead agency must respond in writing to timely “comments raising significant environmental issues[.]”²⁰ Before approving a project for which an EIR has been required, a lead

¹⁰ CEQA Guidelines, § 15083, subd. (a); see also *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 569.

¹¹ CEQA Guidelines, § 15083, subd. (b).

¹² CEQA Guidelines, § 15082, subd. (a); Pub. Resources Code, § 21080.4.

¹³ CEQA Guidelines, § 15082, subd. (d).

¹⁴ Pub. Resources Code, § 21092.2.

¹⁵ Pub. Resources Code, § 21080.4, subd. (a); CEQA Guidelines, § 15082, subd. (b).

¹⁶ CEQA Guidelines, § 15082, subds. (b)(1)–(b)(3).

¹⁷ CEQA Guidelines, § 15126.6, subd. (a).

¹⁸ CEQA Guidelines, § 15124, subds. (a),(c).

¹⁹ CEQA Guidelines, § 15126.6, subd. (a).

²⁰ CEQA Guidelines, § 15088, subd. (a).

agency decisionmaker must (i) certify a FEIR,²¹ (ii) adopt CEQA Findings addressing any significant effects of the proposed projects,²² (iii) adopt a mitigation monitoring or reporting program for any adopted mitigation measures,²³ and, if necessary, (v) adopt a statement of overriding considerations. This last step is only needed where the project would have significant unavoidable environmental effects, despite all feasible mitigation and the consideration of potentially feasible alternatives.²⁴

Where the CEQA process functions well, a common final outcome is the approval of an EIR alternative or a modified version thereof that is environmentally superior to the project as proposed in the DEIR.²⁵ This is because “[t]he CEQA reporting process is not designed to freeze the ultimate proposal in the precise mold of the initial project; indeed, new and unforeseen insights may emerge during investigation, evoking revision of the original proposal.”²⁶

II.1.3.3 CEQA REQUIREMENTS REGARDING THE SCOPE OF ALTERNATIVES

For a detailed discussion of the alternatives analysis in the DEIR, please refer to DEIR Chapter 5, “Alternatives to the Proposed Project.”

Public Resources Code §21100(b)(4) states that an EIR shall include a detailed statement setting forth alternatives to the project. Under the CEQA Guidelines, the range of alternatives to the proposed project should include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more significant effects.²⁷ In this DEIR, however, the Proposed Project does not result in significant effects, thus the need to lessen such effects does not exist. Nevertheless, the DEIR discusses four alternatives to the Proposed Project, in addition to the “no project” alternative. The DEIR compared the potential environmental effects of the Proposed Project to the potential effects of each alternative, in relation to the Existing Conditions (i.e., baseline).

II.1.3.4 CEQA REQUIREMENTS FOR “A REASONABLE RANGE OF ALTERNATIVES”

Under the CEQA Guidelines, the lead agency must consider a reasonable range of alternatives that would feasibly attain all or most of the project objectives but would avoid or substantially lessen any of the significant impacts of the proposed project.²⁸ An EIR need not consider all potential alternatives to the Project. Rather, CEQA requires that the EIR discuss only a “reasonable range” of alternatives.²⁹

²¹ CEQA Guidelines, § 15090.

²² CEQA Guidelines, § 15091, subd. (a).

²³ CEQA Guidelines, § 15097.

²⁴ CEQA Guidelines, § 15093.

²⁵ See, e.g., *See, e.g., South of Market Community Action Network v. City and County of San Francisco* (2019) 33 Cal.App.5th 321, 334-336; *Village Laguna of Laguna Beach, Inc. v. Board of Supervisors* (1982) 134 Cal.App.3d 1022, 1028-1029; *California Oak Foundation v. Regents of University of California* (2010) 188 Cal.App.4th 227, 274-277; and *Cherry Valley Pass Acres and Neighbors et al. v. City of Beaumont* (2010) 190 Cal.App.4th 316, 353-356.

²⁶ *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 736, quoting *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 199.

²⁷ CEQA Guidelines, § 15126.6, subd. (a).

²⁸ CEQA Guidelines, § 15126.6, subd. (a).

²⁹ CEQA Guidelines, § 15126.6, subd. (a).

CEQA does not require that the EIR study specific alternatives proposed by the public or other agencies.³⁰ The lead agency must make a good faith effort to identify and study a reasonable range of appropriate alternatives to the proposed project.³¹

The requirements regarding the selection of alternatives under CEQA are laid out in CEQA Guidelines §15126.6.

Subdivision (a) of that section provides:

Alternatives to the Proposed Project. An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

Subdivision (b) provides:

Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code §21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

Subdivision (c) further provides:

Selection of a range of reasonable alternatives. The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

³⁰ *Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 234 Cal.App.4th 214, 256.

³¹ *City of Maywood v. Los Angeles Unified Sch. Dist.* (2012) 208 Cal.App.4th 362, 420.

And lastly, subdivision (f) emphasizes the “rule of reason” applicable to the selection of alternatives:

Rule of reason. The range of alternatives required in an EIR is governed by a “rule of reason” that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making.

Under these principles, alternatives to be included in an EIR must: 1) be potentially feasible, 2) attain most of the basic objectives of the project, and 3) avoid or substantially lessen any of the significant effects of the project. Under CEQA, a lead agency may structure its alternatives analysis around a reasonable definition of a fundamental underlying purpose, and need not study alternatives that cannot achieve that basic purpose.³² An EIR need not consider alternatives that are infeasible.³³ CEQA defines “feasible” as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.³⁴

Because CEQA establishes no legal imperative as to the scope of alternatives to be analyzed in an EIR, there is no set number of alternatives that must be analyzed to fulfill the requirements of CEQA.³⁵ Rather, as stated in the CEQA Guidelines and supported by abundant CEQA case law,³⁶ the range of alternatives required in an EIR is governed by the “rule of reason,” which requires the EIR to set forth only those alternatives necessary to permit a reasoned choice.³⁷

Furthermore, according to CEQA case law, where the alternatives analyzed in the EIR allow for a wide range of choices with varying degrees of environmental impacts, the document may support the ultimate approval not only of the fully developed alternatives, but also what might be called “hybrid” alternatives whose features and impacts occur within the analytical continuum between the “bookends” created by the least-impacting and most-impacting alternatives, respectively.³⁸

³² *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1165.

³³ CEQA Guidelines, § 15126.6, subd. (a).

³⁴ Pub. Resources Code, § 21061.1; CEQA Guidelines, § 15364.

³⁵ See, e.g., *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 566; *Save San Francisco Bay Association v. San Francisco Bay Conservation and Development Commission* (1992) 10 Cal.App.4th 908, 919; *Mann v. Community Redevelopment Agency* (1991) 233 Cal.App.3d 1143, 1151.

³⁶ See, e.g., *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 566; *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143; *California Native Plant Soc. v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 980.

³⁷ CEQA Guidelines, §15126.6, subds. (c), (f).

³⁸ See, e.g., *Village Laguna of Laguna Beach, Inc. v. Board of Supervisors* (1982) 134 Cal.App.3d 1022, 1028–1029; *California Oak Foundation v. Regents of University of California* (2010) 188 Cal.App.4th 227, 274–277; *Cherry Valley Pass Acres and Neighbors et al. v. City of Beaumont* (2010) 190 Cal.App.4th 316, 353–356; *South of Market Community Action Network v. City and County of San Francisco* (2019) 33 Cal.App.5th 321, 334–336.

II.1.3.5 THE PURPOSE OF DISCUSSING ALTERNATIVES WHEN THERE ARE NO SIGNIFICANT IMPACTS

Although both the Legislature, in enacting CEQA, and the Natural Resources Agency, in promulgating the CEQA Guidelines, assumed that projects requiring EIRs would generally cause one or more significant environmental effects, and thereby required that *all* EIRs discuss in some fashion alternatives that could reduce the severity of such effects, there are instances in which proposed projects for which EIRs are prepared actually do *not* cause any significant environmental effects. This occurs where a project likely would not qualify for a negative declaration or mitigated negative declaration because substantial evidence suggests that significant effects *may* occur. EIRs are required in such circumstances³⁹ even though once a lead agency opts to undertake an EIR, a lead agency may ultimately find itself persuaded by substantial evidence that significant effects will *not* occur. That is what happened here. The project at issue was not one for which *all* conceivable substantial evidence would show an absence of significant effects. Thus, under the circumstances, prudence required DWR to prepare an EIR, despite its sincere finding, supported by substantial evidence, that its Proposed Project would not cause any significant effects. DWR issued its NOP in April of 2019 based on this sense of the likely effects of the Proposed Project.

One of the primary purposes of an EIR, under any circumstance, is to serve as an informational document.⁴⁰ Indeed, an “important purpose” of an EIR is to “provid[e] other agencies and the public with an informed discussion of impacts, mitigation measures, and alternatives.”⁴¹ To satisfy the requirements of CEQA, an EIR must include a reasonable range of alternatives that would “feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.”⁴² CEQA also requires that an EIR analyze a “no project” alternative, to compare the potential impacts of the proposed project to a “no project” scenario.⁴³ These purposes can still be served even where a proposed project would not cause any significant environmental effects. For these reasons, comments that contend that DWR violated CEQA or otherwise acted inappropriately in including alternatives within the EIR are incorrect.

The DEIR evaluates the applicable resource areas and determines that, with respect to each resource area, the Project has either no impact or a less-than-significant impact on the environment. Because the Project would not result in any significant impacts, no mitigation is required under CEQA. Even though CEQA does not require mitigation, the EIR explains that DWR will propose mitigation to meet the legal standard under CESA to minimize and fully mitigate the take of listed species and discusses the mitigation measures that will be identified in DWR’s application for an ITP. Consistent with a literal application of the law, the DEIR also analyzes four project alternatives in addition to the “no project”

³⁹ Pub. Resources Code, § 21080, subd. (d).

⁴⁰ *Banning Ranch Conservancy v. City of Newport Beach* (2017) 2 Cal.5th 918, 940.

⁴¹ *Ibid.*

⁴² CEQA Guidelines, § 15126.6, subd. (a). See also Pub. Resources Code, § 21100, subd. (b)(4) (EIRs shall include “Alternatives to the proposed project”).

⁴³ CEQA Guidelines, § 15126.6, subd. (e).

alternative. Pursuant to CEQA, the DEIR includes sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Project. Importantly, under CEQA, an EIR need not address alternatives at the same level of detail as a proposed project. Rather, “[t]he EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison.”⁴⁴

Here, the discussion of alternatives in DEIR Chapter 5 included more than enough information and analysis to allow for a meaningful comparison of the alternatives with the Proposed Project. The DEIR contained large amounts of analysis and quantitative information (including numerous tables and graphics) allowing readers and decisionmakers to assess the comparative merits of the alternatives against those of the Proposed Project. Key topics involving effects on CESA-listed species are addressed in considerable detail, including hydrology, surface water quality, and aquatic resources. As expressly authorized by the CEQA Guidelines, DEIR Chapter 5 included a detailed matrix addressing very substantial amounts of information regarding the predicted effects of the alternatives on a variety of environmental parameters, including the various life stages of affected aquatic species.

The Alternatives analysis is also intended to cover the range of actions that may be considered by CDFW as a part of the CESA ITP process. Although not required to reduce or avoid significant CEQA impacts, two of the alternatives provide freshwater flows in the spring and summer, and one alternative includes physical barriers and other deterrents to keep fish away from the SWP pumps. By embodying scenarios that would reduce the environmental effects of the Proposed Project (even though they were not significant), these alternatives serve the purposes of CEQA, as set forth above.

II.1.3.6 PUBLIC PARTICIPATION IN THE DEVELOPMENT OF ALTERNATIVES

Although an NOP need not identify any proposed alternatives to a proposed project, the development or refinement of alternatives frequently takes place during the CEQA scoping process. The scoping process invites public comment during a public review period. As part of that process, DWR, pursuant to CEQA Guidelines §15063, Subdivision (c)(3), used the conclusions in the initial study to focus the analysis in the DEIR. Pursuant to CEQA Guidelines §15082, DWR also published a NOP on April 19, 2019 and provided copies of the NOP to (1) local, State, and federal agencies; (2) City and County Clerk offices; and (3) other interested parties. The NOP was circulated for comment for 36 days, ending on May 28, 2019. The NOP included a description of the project background, project objectives, a description of the Proposed Project, and a summary of environmental topics to be considered in the DEIR.

Public scoping meetings were held in Los Angeles on May 6, 2019, and in Sacramento on May 13, 2019.⁴⁵ The purpose of the public scoping meetings was to provide a forum for the public to learn

⁴⁴ CEQA Guidelines, § 15126.6, subd. (d); see also *Laurel Heights Improvement Association v. The Regents of the University of California* (1988) 47 Cal. 3d 376, 406.

⁴⁵ See CEQA Guidelines, § 15083.

about the Proposed Project and make verbal and written comments on the proposed scope and content of the DEIR.

Numerous comments were received in response to the Notice of Preparation (NOP) that was issued at the onset of this DEIR preparation. Many of these comments identified various issues, including technical questions, procedural inquiries, and some matters that were found to be outside the scope of this analysis. The public and other agencies raised issues relating to the alternatives analysis, including alternatives that incorporate actions to reduce demand for water from the Delta and/or actions to reduce impacts on fish species. Comments received in response to the NOP were considered in the preparation of the DEIR.

There is no requirement in CEQA or the CEQA Guidelines that the Project Description found in an EIR be an exact match to the proposed project as described in the NOP. Nor should indications of possible analytical methodology in an NOP be treated as binding on a lead agency if new information emerges later suggesting the need for a change of approach. Notably, the NOP is prepared in the absence of formal input from responsible and trustee agencies, and is designed to facilitate such input. A project might still remain somewhat conceptual at the time of the NOP. For this reason, the NOP need only include a relatively general description of the project, focusing on its location and its probable environmental effects.⁴⁶

A key goal of the NOP is to “provide the responsible and trustee agencies, and the Office of Planning and Research, and county clerk with sufficient information describing the project and the potential environmental effects to enable the responsible agencies to make a meaningful response.”⁴⁷ The solicited agencies’ responses should include “specific detail about the scope and content of the environmental information related to the responsible or trustee agency’s area of statutory responsibility that must be included in the DEIR.”⁴⁸ Such information should identify the “significant environmental issues and reasonable alternatives and mitigation measures that the responsible or trustee agency, or the Office of Planning and Research, will need to have explored in the DEIR.”⁴⁹

After receiving input from these other agencies, and from the public at large, lead agencies are free, as they prepare their DEIRs, to make reasonable modifications to the proposed project as set forth in the NOP. Such changes are to be encouraged where the input received from other agencies and the public has allowed a lead agency to formulate its proposed project in more refined and sophisticated terms than was possible earlier. Thus, some variation is allowed between what a lead agency expects to address in an EIR at the time it issues an NOP and what the lead agency actually addresses in the DEIR it publishes.

Here, some commenters expressed concerns that the geographic scope of the project changed between time of the issuance of the NOP and the date on which the DEIR was published. Nothing in CEQA preclude such changes. The need for a “stable and finite description of a project” applies within

⁴⁶ CEQA Guidelines, § 15082, subd. (a)(1).

⁴⁷ CEQA Guidelines, § 15082, subd. (a).

⁴⁸ CEQA Guidelines, § 15082, subd. (b).

⁴⁹ CEQA Guidelines, § 15082, subd. (b)(1)(A).

the four corners of an EIR.⁵⁰ There is no similar requirement between NOPs and EIRs. Some reasonable level of project evolution is to be expected based on the scoping process. Such evolution may be especially likely where, as here, the lead agency, as applicant for a regulatory approval, maintains periodic informal contact with a responsible agency poised to act as decisionmaker for that regulatory approval. Because DWR and the CDFW stay in near constant contact in order for DWR to operate the SWP consistent with environmental limitations imposed via past incidental take authorization, it was to be expected that DWR's thinking about what operational changes would be needed to successfully obtain a new incidental take permit continued to evolve between April 2019, when the NOP was published, and November of 2019, when the DEIR was issued.

II.1.3.7 HOW A PROPOSED PROJECT AND EIR ALTERNATIVES INFORM PUBLIC DECISION-MAKING

Several comments contend that DWR violated CEQA because the elements of the project description as found in the DEIR do not exactly match the contents of DWR's the application for an incidental take permit, as submitted to CDFW after release of the DEIR. These comments contend that CEQA requires that the application precisely match the project description. DWR disagrees.

These comments imply that the CEQA process is more rigid than it is intended to be. It is to be expected – and hoped – that a project may change for the better over the course of, and as a result of, the environmental review process:

The CEQA reporting process is not designed to freeze the ultimate proposal in the precise mold of the initial project; indeed, new and unforeseen insights may emerge during investigation, evoking revision of the original proposal.⁵¹

Once an EIR has been prepared evaluating a project and alternatives, CEQA *encourages* project modifications that reduce environmental impacts.⁵² “The EIR itself does not control the way in which a project can be built or carried out.”⁵³ Rather, a primary purpose of an EIR is to facilitate the generation of concrete suggestions as to how projects may be modified to avoid causing, or to reduce the severity of, significant environmental impacts. Recognized means of modifying a project in response to environmental concerns include: (1) revising a project proposal; (2) imposing conditions on project approval; (3) choosing an environmentally superior alternative; or (4) disapproving the project.⁵⁴

“CEQA does not handcuff decisionmakers ... The action approved need not be a blanket approval of the entire project initially described in the EIR. If that were the case, the informational value of the document would be sacrificed. Decisionmakers should have the flexibility to implement that portion of a project which satisfies their environmental concerns.”⁵⁵ It is therefore permissible for agency

⁵⁰ See *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 738.

⁵¹ *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 199.

⁵² *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 738.

⁵³ CEQA Guidelines, § 15002, subd. (h).

⁵⁴ *Ibid.*

⁵⁵ *South of Market Community Action Network v. City and County of San Francisco* (2019) 33 Cal.App.5th 321, 336 (*South of Market*), quoting *Dusek v. Redevelopment Agency* (1985) 173 Cal.App.3d 1029, 1041.

decisionmakers to approve an EIR alternative instead of the proposed project as found in an EIR. Indeed, if an alternative can lessen the significant effects of a proposed project and the alternative is feasible, then CEQA favors approval of the alternative over approval of the proposed project. It is also permissible for an agency to approve a variation on either a proposed project or an alternative that does not exactly match either the proposed project or any of the alternatives.⁵⁶

The law is quite clear, then, that neither lead agencies nor responsible agencies are handcuffed by the precise contents of either proposed projects or EIR alternatives. Both can evolve over the course of the CEQA process in response to input from members of the public or from other public agencies. And the final result may not be identical to either the original proposed project or any of the original EIR alternatives.

This potential for such changes is especially likely to arise where, as here, the agency functioning as the lead agency is the applicant for a permit and one of the responsible agencies is the decisionmaker for the lead agency's permit application. In such instances, the lead agency does not control the final form of the permit to be issued by the responsible agency functioning as decisionmaker. Rather, the responsible agency (here, CDFW) controls the final outcome, often based on factors other than the general CEQA principle that significant environmental effects should be mitigated where feasible. Here, CDFW's ultimate decision will be based in part on CEQA considerations but in greater part on CESA requirements.

In light of these principles and realities, it was not surprising that, based on preliminary feedback received from CDFW staff after the release of the DEIR, DWR modified its thinking, as embodied in the project description in the DEIR, when it put together its formal ITP application for submission to CDFW. By the time DWR submitted that application, DWR had received input from CDFW staff indicating that the project description was not as protective of listed aquatic species as CDFW believed was likely to be necessary to achieve the eventual issuance of an ITP. The fact that the dialogue between the two agencies resulted in an ITP application that represents a lesser level of effect on listed species than would occur under the DEIR project description does not represent a violation of CEQA. Rather, the changes reflect the reality that CDFW, as the ultimate decisionmaker on DWR's ITP application, chose to engage with DWR not long after the release of the DEIR and persuaded DWR of the wisdom of modifying the approach DWR had intended to pursue at the time it issued the DEIR. The changes thus represent the kind of environmental problem-solving that CEQA and CESA are intended to facilitate. The fact that a large amount of time did not transpire between the publication of the DEIR and the submission of the ITP application does not affect the legal legitimacy of the approach DWR took to its ITP application.

The ultimate content of DWR's request for ITP authorization continued to evolve during the time period in which the DEIR was being circulated for public comment and in responses to comments on the DEIR, and in particular coordination with CDFW, including in response to CDFW's informal and written comments. Ultimately, DWR seeks to secure an ITP under which it may continue SWP

⁵⁶ *South of Market, supra*, 33 Cal.App.5th at p. 336.

operations consistent with CESA. This is why the FEIR has identified Refined Alternative 2b as DWR's preferred alternative.

II.1.4 MASTER RESPONSE 4: LEGAL STANDARDS

For a detailed discussion of the existing regulatory setting, please refer to DEIR Chapter 3, “Description of the Proposed Project,” Chapter 3.2, “Existing Regulations,” Chapter 4.4.2, “Regulatory Environment and Compliance Requirements,” Chapter 4.4.3, “State Plans, Policies, and Regulations,” Chapter 4.4.4, “Regional and Local Plans, Policies, and Regulations,” and Chapter 4.5.1, “Regulatory Setting” (for Tribal Cultural Resources).

The Proposed Project includes proposed changes to the long-term operation of SWP facilities and application for an Incidental Take Permit (ITP) issued by the California Department of Fish and Wildlife (CDFW) for long-term operations. As stated in DEIR Chapter 2, “Introduction,” DWR is the lead agency for compliance with CEQA, though CDFW is expected to rely on this EIR when issuing a decision on DWR’s ITP application. Thus, CDFW’s role under CEQA is that of a responsible agency.¹

The primary purpose of this EIR is to provide DWR, as the lead agency, and the public with sufficient information about the Proposed Project, its potential environmental effects, and the ways which those effects can be minimized, whether through mitigation measures or project alternatives, so that DWR can make an informed and reasoned decision on whether to approve the Project.² Similarly, the EIR is intended to provide CDFW, as a responsible agency, with adequate information about the parts of the Project that CDFW is responsible for, the potential environmental effects of those parts of the Project, and the way which those effects can be minimized. Additionally, CDFW will review the EIR, along with the information submitted in DWR’s ITP application, to determine if DWR take that is incidental to the long-term operation of the SWP will meet the legal standards under CESA.³

II.1.4.1 STANDARDS OF JUDICIAL REVIEW FOR CEQA AND CESA DETERMINATIONS

The standard of judicial review in a CEQA action is abuse of discretion.⁴ “‘An agency may abuse its discretion under CEQA either by failing to proceed in the manner CEQA provides or by reaching factual conclusions unsupported by substantial evidence. [Citation.] Judicial review of these two types of error differs significantly: While [courts] determine de novo whether the agency has employed the correct procedures, ‘scrupulously enforc[ing] all legislatively mandated CEQA requirements’ [Citation], [courts] accord greater deference to the agency’s substantive factual conclusions. In reviewing for substantial evidence, the reviewing court ‘may not set aside an agency’s approval of an EIR on the ground that an opposite conclusion would have been equally or more reasonable,’ for, on factual questions, our task is ‘not to weigh conflicting evidence and determine who has the better argument.’ [Citation.]”⁵ An abuse of discretion, by itself, is not enough for a court to set aside a CEQA document and the project approvals based on the document. Rather, a *prejudicial* abuse of discretion must be shown.

¹ See CEQA Guidelines, § 15096; Cal. Code Regs., tit. 14, div. 1, § 783.3.

² Pub. Resources Code, § 21061; CEQA Guidelines, § 15003.

³ CEQA Guidelines, § 15096; Cal. Code Regs., tit. 14, § 783.4.

⁴ Pub. Resources Code, §§ 21168, 21168.5, 21005.

⁵ *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 512, quoting *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 435.

“Insubstantial or merely technical omissions are not grounds for relief.”⁶ Instead, a “prejudicial abuse of discretion occurs if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process.”⁷

Similarly, “[a] CESA challenge is brought under Code of Civil Procedure § 1094.5.”⁸ Judicial review “of agency decisions in connection with regulatory approvals is generally one of abuse of discretion. ‘Abuse of discretion is established if the respondent [agency] has not proceeded in the manner required by law, the order or decision is not supported by the findings, or the findings are not supported by substantial evidence.’”⁹ Thus, legal challenges to CDFW’s decision on DWR’s ITP application are generally reviewed under the abuse of discretion standard. CDFW is “entrusted with the statutory obligation of balancing the needs of human populations with those of endangered plants and animals” and is “guided by the expertise of their scientific staff and independent consultants. [Courts] cannot supplant their decisions because we find the views of other experts and other policy options more appealing.”¹⁰ However, the interpretation of CESA and its application to undisputed facts present issues of law, reviewed de novo.¹¹

II.1.4.2 CEQA vs CESA MITIGATION REQUIREMENTS

CEQA and CESA both generally require that public agencies mitigate the harmful environmental effects of proposed projects, though the requirements and standards under the two statutes differ substantially.¹² Because impacts caused by the Proposed Project were determined to be less than significant in the EIR, CEQA does not require mitigation. Because of the different standard imposed under CESA, however, DWR has proposed additional measures as part of its ITP application to “fully mitigate” impacts from the take of listed species.

II.1.4.3 CEQA MITIGATION REQUIREMENTS

Under CEQA, an agency may not approve a project with significant environmental impacts if there are feasible mitigation measures (or alternatives) that would substantially lessen the significant impacts. Thus, if an impact is considered “significant” under CEQA, the agency must mitigate the impact to the extent necessary to render the impact less than significant, unless the agency finds that doing so is not feasible. If an impact is less than significant, either with or without mitigation, an agency is not required to mitigate the impact further, even though some level of adverse environmental change will

⁶ *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 463 (*Neighbors for Smart Rail*) (citing *Environmental Protection Information Center v. California Dept. of Forestry & Fire Protection* (2008) 44 Cal.4th 459, 485-486).

⁷ *Neighbors for Smart Rail, supra*, 57 Cal.4th at p. 463, quoting *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 712.

⁸ *Environmental Council of Sacramento v. City of Sacramento* (2006) 142 Cal.App.4th 1018, 1029 (*ECOS*).

⁹ *Environmental Protection Information Center v. California Dept. of Forestry & Fire Protection* (2007) 44 Cal.4th 459, 478 (*EPIC v. CalFire II*), quoting *Sierra Club v. Stat Bd. of Forestry* (1994) 7 Cal.4th 1215, 1236.

¹⁰ *ECOS, supra*, 142 Cal.App.4th at p. 1042.

¹¹ *San Bernardino Valley Audubon Society v. City of Moreno Valley* (1996) 44 Cal.App.4th 593, 600.

¹² See Pub. Resources Code, § 21081; Fish & Game Code, § 2081.

occur.¹³ Stated differently, the goal of mitigation under CEQA is not to eliminate the impact of a proposed project, but to reduce the impact to an insignificant level.¹⁴ In assessing the significance of impacts under CEQA, lead agencies normally compare the expected environmental effects of proposed projects against the backdrop of a baseline consisting of the existing environmental setting as it exists at the time of issuance of the Notice of Preparation.¹⁵ (See Master Response 2, “Baseline.”)

II.1.4.4 CESA’s “FULLY MITIGATE” STANDARD

Fish and Game Code, § 2081, subdivision (b)(2), requires impacts of the incidental take to be minimized and fully mitigated, and that mitigation measures be capable of successful implementation but “roughly proportional” to the impact of the take on the species.¹⁶ The California Supreme Court has interpreted this language to require that an applicant “bear no more—but also no less—than the costs incurred from the impact of its activity on listed species.”¹⁷ Where various measures are available to meet this obligation, the measures required shall maintain the applicant’s objectives to the greatest extent possible. All required measures shall be capable of successful implementation. For purposes of this section only, impacts of taking include all impacts on the species that result from any act that would cause the proposed taking.”¹⁸

II.1.4.5 FEASIBLE MITIGATION AND FUNDING COMMITMENTS

Fish and Game Code, § 2081, subdivision (b), and California Code of Regulations, title 14, § 783.4, subdivision (a), both require that measures to minimize and fully mitigate impacts of the take, must be “capable of successful implementation.”¹⁹ The implementing regulations provide additional guidance for “determining whether measures are capable of successful implementation,” requiring CDFW to “consider whether the measures are legally, technologically, economically and biologically

¹³ CEQA Guidelines, § 15126.4, subd. (a)(3); see *San Franciscans for Responsible Growth v. City and County of San Francisco* (1989) 209 Cal.App.3d 1502, 1517; *North Coast Rivers Alliance v. Marin Municipal. Water Dist.* (2013) 216 Cal.App.4th 614, 649; *Save Panoche Valley v. San Benito County* (2013) 217 Cal.App.4th 503, 529 (*Save Panoche Valley*); *Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1233.

¹⁴ *Save Panoche Valley, supra*, 217 Cal.App.4th at p. 529 see also *San Diego Navy Broadway Complex Coalition v. California Coastal Commission* (2019) 40 Cal.App.4th 563, 606.

¹⁵ CEQA Guidelines, §15125, subd. (a).

¹⁶ In full, subdivision (b)(2) reads: “The impacts of the authorized take shall be minimized and fully mitigated. The measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking on the species. Where various measures are available to meet this obligation, the measures required shall maintain the applicant’s objectives to the greatest extent possible. All required measures shall be capable of successful implementation. For purposes of this section only, impacts of taking include all impacts on the species that result from any act that would cause the proposed taking.” (See also, Cal. Code Regs., tit. 14, § 783.4, subd. (a)(2).)

¹⁷ *EPIC v. CalFire II, supra*, 44 Cal.4th at p. 511.

¹⁸ Cal. Code Regs., tit. 15, § 783.4, subd. (a).

¹⁹ The implementing regulations also place the burden to minimize and fully mitigate the impacts of the take on the applicant. (Cal. Code Regs., tit. 14, § 783.4, subd. (a)(2).)

practicable.”²⁰ New measures or measures without an established record of successful implementation may be used where there is a “reasonable basis for utilization and a reasonable prospect of success.”²¹

The applicant must also “ensure adequate funding to implement the measures required under the permit to minimize and fully mitigate the impacts of the taking, and to monitor compliance with, and the effectiveness of, the measures.”²² That finding will be upheld, so long as there is substantial evidence in the record before CDFW to support it.²³ As part of the ITP application, DWR has submitted to CDFW both “[a] proposed plan to monitor compliance with the minimization and mitigation measures and the effectiveness of the measures” and “[a] description of the funding source and the level of funding available for implementation of the minimization and mitigation measures.”²⁴

II.1.4.6 HOW CEQA AND CESA ADDRESS EXISTING ENVIRONMENTAL CONDITIONS

As explained above, while CEQA’s mitigation requirements apply to any significant environmental impacts, CESA requires mitigation for the “take” of protected species.

Unlike CEQA, under which agencies assess the significance of impacts against the backdrop of existing conditions, CESA allows CDFW to take into account the degraded status of existing environmental conditions insofar as they are currently adversely affecting a listed species. In addition to ensuring that the impacts of take are minimized and fully mitigated in a manner that is roughly proportional to the extent of the impact, CDFW may not issue the incidental take permit without considering whether “issuance of the permit would jeopardize the continued existence of the species.”²⁵ The posing of this question, of necessity, requires CDFW to consider the extent to which existing environmental conditions may already be degraded or problematic. This is evident from the fact that CDFW’s determination regarding the possibility of “jeopardy” must be “based on the best scientific and other information that is reasonably available” in light of “the species’ capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (1) known population trends; (2) known threats to the species; and (3) reasonably foreseeable impacts on the species from other related projects and activities.”

Other CESA provisions also reference the need to account for the relationship between existing conditions and listed species. Fish and Game Code § 2052 states generally that “it is the policy of the state to conserve, protect, restore, and enhance any endangered species or any threatened species and its habitat[.]” Fish and Game Code § 2055 proclaims that “it is the policy of this state that all state agencies, boards, and commissions shall seek to conserve endangered species and threatened species[.]” To “conserve” in this context means to use “all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures

²⁰ Cal. Code Regs., tit. 14, § 7783.4, subd. (c).

²¹ *Ibid.*

²² Fish & Game Code, § 2081, subd. (b)(3); Cal. Code Regs., tit. 14, § 783.4, subd. (a)(4).

²³ *ECOS, supra*, 142 Cal.App.4th at p. 1044.

²⁴ Cal. Code Regs., tit. 14, § 783.2, subd. (a).

²⁵ Fish & Game Code, § 2081, subd. (c)

provided pursuant to this chapter are no longer necessary.”²⁶ As these passages demonstrate, how well existing conditions protect or sustain a listed species is an important consideration under CESA.

In light of the respective differences in approaches required under CEQA and CESA, it is possible for a lead agency such as DWR, to reach different mitigation conclusions under CEQA and CESA for the same activity. Specifically, in assessing impacts on listed species under CEQA in light of existing conditions, to the lead agency may find an absence of any significant impacts triggering mitigation obligations under CEQA, but CDFW, in assessing known population trends and known threats to the same species, may still find a need for mitigation under CESA.

II.1.4.7 PROJECT EFFECTS COMPARED TO BASELINE CONDITIONS

The Existing Conditions relative to listed fish is an important consideration for long-term SWP operations. By way of an example, Delta Smelt has declined substantially since the 2008 Biological Opinion. There is broad consensus that the decline is caused by a broad suite of factors (IEP 2015). Hence, the role of the SWP must be considered in the context of the broader effects of regional stressors. While the 2008 Biological Opinion increased protections for Delta Smelt (e.g. entrainment protection, fall habitat), the smelt population continued to suffer from a combination of multiple stressors that were exacerbated during historic drought conditions.

One key factor was the rapid expansion in aquatic weeds, which covered up much of the available Delta shallow water habitat, reduced turbidities, and enhanced habitat conditions for predators and competitors. The effect of aquatic weeds served to compound a long-term decline in sediment supply to the Delta, resulting in much higher water clarity and poor habitat conditions for Smelt. A related factor is that climate conditions continue to change in the region, the consequence of which is increasingly lethal summer temperatures for Delta Smelt (Brown et al. 2016a). Periodic hot summer conditions therefore have emerged as an important obstacle to the recovery of smelt. An additional factor is that the food web continues to change rapidly as a result of species invasions (Brown et al. 2016b), resulting in fewer suitable prey for Delta Smelt.

All of these changes were exacerbated during the recent historic drought, and compound the negative effects of other stressors such as invasive predators, contaminants, and harmful algal blooms. Moreover, an increasing concern is that the Smelt population has declined to the state where the population has become self-limiting (IEP 2015). In other words, the number of adults has declined to the point where there are insufficient spawners to respond effectively to improved conditions such as in 2017 and 2019.

While the SWP represents only one of the many drivers that affect Delta Smelt, DWR used emerging science to improve fish management when compared to the 2008 Biological Opinion in the EIR and the ITP application. First, the Proposed Project and the alternatives in the EIR include a more protective first flush action designed as a preventative measure to help keep the species out of the central Delta, where entrainment risk is higher. First flush protections have also been designed in conjunction with a follow-up measure, turbidity management. Managing the turbidity field in the central and south Delta

²⁶ Fish & Game Code, § 2061.

has emerged as an important tool to minimize Delta Smelt movement towards the export facilities. In addition to improved entrainment protection, operations under the Proposed Project and the alternatives are designed to broaden habitat management for Delta Smelt.

As noted above, there is evidence that summer conditions play a major role in whether Delta Smelt survive to fall. To address this issue, the Proposed Project and alternatives also include habitat actions during a broader time period (Summer-Fall), a broader suite of water years (Below Normal-Wet years), and flows to target specific key regions (Suisun Marsh, North Delta). These actions are based on substantial progress in Smelt science during the previous decade. These actions will be bolstered by a 100 TAF block of water that is designed to test and improve the effectiveness of Summer-Fall activities. Note also that the FEIR preferred project, Refined Alternative 2b, includes outflow in spring to support spawning and rearing of species including Delta Smelt.

A related issue is that habitat restoration projects are now coming “on-line” that will start to generate more benefits to the species in the target regions. Finally, the Proposed Project and the alternatives in the EIR include a greater emphasis on the potential use of cultured fish to address the depleted Smelt spawning population. DWR and partners have already begun the process of examining potential uses of cultured fish, and have committed staff and resources to work towards pilot scale supplementation. The overall goal of this effort is to reinforce the wild fish population and minimize potential negative effects. A secondary goal is to make better use of cultured fish as a tool to better evaluate the effects of different management actions (e.g. Adaptive Management flow studies).

II.1.5 MASTER RESPONSE 5: TREATMENT OF HABITAT RESTORATION

II.1.5.1 RELATIONSHIP TO BIOLOGICAL OPINIONS/LONGFIN SMELT ITP COMMITMENTS

The 2008 USFWS Biological Opinion on the Long-Term Operation of the CVP and SWP required 8,000 acres of tidal habitat restoration to offset impacts on Delta Smelt from operation of the CVP and SWP. Specifically, Reasonable and Prudent Alternative (RPA) Component 4 of the 2008 USFWS Biological Opinion directed DWR to implement a program to create or restore a minimum of 8,000 acres of intertidal and associated subtidal habitat in the Delta and Suisun Marsh. The 2009 NMFS Biological Opinion on the Long-Term Operation of the CVP and SWP included RPA Action I.6.1 directing DWR and Reclamation to restore 17,000 to 20,000 acres of seasonal floodplain rearing habitat in the Lower Sacramento River Basin; it also included Action I.7 requiring the reduction of migratory delays and loss of salmon, steelhead, and sturgeon at the Fremont Weir and other structures in the Yolo Bypass. In addition, the 2009 LFS ITP directed DWR to restore 800 acres of intertidal and associated subtidal wetland habitat in the mesohaline part of the Bay Delta Estuary for the benefit of Longfin Smelt. The restoration requirements in the 2008 USFWS and 2009 NMFS Biological Opinions were carried forward into the new Biological Opinions that the USFWS and NMFS issued on October 21, 2019 as baseline conditions and were discussed at a programmatic level.

Under the Fish Restoration Program, DWR is implementing habitat restoration that was identified under the current ESA and CESA authorizations for SWP operations. Some of this restoration is also identified as a part of the Delta Smelt Resiliency Strategy and the Sacramento Valley Salmon Resiliency Strategy. DWR has committed to completing habitat restoration required by the 2008 Biological Opinion and 2009 Incidental Take Permit, which are identified in DEIR Table 4.6-1, "List of Cumulative Projects," for those projects that are known and for which CEQA review has been completed. The potential impacts of completing these habitat restoration requirements are addressed in DEIR Chapter 4.6.1.5, "Aquatic Biological Resources," and Chapter 4.6.1.7, "Habitat Restoration," which are subsections of DEIR Chapter 4.6.1, "Cumulative Impacts." Additional habitat restoration sites have been acquired and those projects are currently in the planning/permitting phase but will be applied towards meeting the 8,000 acre requirement.

If any additional habitat restoration targets are incorporated as a requirement of the ITP that DWR seeks for the Proposed Project, DWR will subsequently comply with the requirement. The specific individual projects needed to achieve such restoration targets, if any, will be subject to separate future CEQA review once specific individual projects have been identified.

II.1.5.2 STATUS OF IMPLEMENTATION

DWR has been pursuing various projects to meet tidal restoration acreage requirements. DEIR Table 4.6-2, "List of Tidal Habitat Restoration Projects Implemented to Date," identifies the tidal restoration projects for which CEQA review has already been completed and regulatory approvals have been granted. DWR has completed CEQA on six of the restoration projects to date. The projects listed in DEIR Table 4.6-2 would be credited toward the restoration requirement identified in the 2008 USFWS Biological Opinion RPA Component 4 (approximately 4,611 acres), and at least two of the projects, Tule

Red (610 acres) and Winter Island (553 acres), would be credited toward the wetland acreage requirement in the 2009 LFS ITP. The impacts of each project differ and are discussed in detail in the project-specific CEQA documents.

DWR has acquired properties that would provide an estimated 9,267 creditable acres toward the remaining tidal restoration identified in the 2008 Biological Opinion. Among those projects, DWR is the lead agency for an EIR that is underway for the Lookout Slough Tidal Habitat Restoration and Flood Improvement Project, which would involve restoring approximately 3,000 acres of tidal marsh habitat toward RPA Component 4 in the 2008 USFWS Biological Opinion and would also provide salmonid rearing habitat. DWR, in partnership with Reclamation, has also developed the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project (YBSHRFPP) consistent with 2009 NMFS Biological Opinion RPA Actions I.6.1 and I.7 to improve fish passage and increase floodplain fisheries rearing habitat in the Yolo Bypass.

Under the EcoRestore initiative and the Fish Restoration Program, DWR continues to work directly with the US Bureau of Reclamation, USFWS, and CDFW to identify, acquire, plan, and implement restoration projects to fulfill the requirements of the 2008 and 2009 Biological Opinions, and the 2009 ITP.

II.1.5.3 HABITAT RESTORATION

DWR is implementing habitat restoration that was identified under the current ESA and CESA authorizations for SWP operations. Some of this restoration is also identified as a part of the Delta Smelt Resiliency Strategy and the Sacramento Valley Salmon Resiliency Strategy. The DEIR does not propose to implement additional habitat restoration as part of the Proposed Project or as mitigation for potentially significant impacts. CDFW may require additional habitat restoration in the final terms and conditions of the ITP. DWR will conduct separate CEQA reviews of additional habitat restoration projects as they are identified and planned consistent with CDFW's requirements in the requested ITP.

II.1.5.4 OPERATIONAL MEASURES TO IMPROVE HABITAT

The Proposed Project includes Summer-Fall habitat actions to improve Delta Smelt food supply and habitat, thereby contributing to the recruitment, growth, and survival of Delta Smelt. The actions include operating the SWP to maintain a monthly average 2 ppt isohaline at 80 km (X2) from the Golden Gate Bridge in Above-Normal and Wet Years in September and October. DWR, in coordination with the US Bureau of Reclamation, CDFW, and USFWS will also implement additional measures such as operation of the Suisun Marsh Salinity Control Gates and providing food subsidies to the Delta, which are expected to achieve additional benefits. These actions are described in detail in DEIR Chapter 3.3.3, "Delta Smelt Summer-Fall Habitat Action." The impact analysis considers the effects of these actions on all species evaluated (see discussion for each species in DEIR Chapter 4.4.7, "Impacts of the Proposed Project.")

The DEIR also evaluates effects of alternatives, which include variations of these operations or include additional actions (e.g., additional spring outflow) to improve habitat for Delta Smelt and Longfin Smelt. The evaluation of alternatives is presented in DEIR Chapter 5, "Alternatives to the Proposed Project."

II.1.6 MASTER RESPONSE 6: DEMAND MANAGEMENT/CONSERVATION MEASURES

Water use efficiency has improved substantially over the past 30 years. Without past efforts, demands on our limited and unreliable water supply would be much higher and ecosystem degradation would be more widespread. Saving water does not only equate to reducing water consumption, in some cases, the water saved from efficiency measures is used to serve more people or to grow more crops. In other cases, saving water reduces the amount of water needed from various water sources, such as needing to pump less ground water. Water saved by water use efficiency measures can be carried over for use at another time if storage is available. Reduced water demand from increased water use efficiency can also reduce the amount and change the timing of water diversions from surface water bodies for human use, thereby benefitting aquatic life (including endangered and threatened species).

Demand Management Measures (DMM) is a management approach that aims to conserve water by influencing demand. It involves the application of selective incentives to promote efficient and equitable use of water. DMM include urban best management practices (BMPs), agricultural efficient water management practices (EWMPs) and groundwater management. The use and combination of these water management measures and alternative sources of supply help local and regional water suppliers reduce their reliance on water from the Delta.

Most DMM are implemented at the local and regional level. Water suppliers and regional agencies generally are the lead agencies implementing water conservation and water management actions. These local agencies have direct contact with retail customers and know the local situation and are best suited to design and implement effective conservation programs.

Demand management is a tool that will continue to be used by water agencies and individual water users as part of an integrated water management approach to water supply reliability regardless of how the SWP is operated. DMM should assist each region that currently relies on Delta water supplies to reduce its long-term reliance on those supplies as compared with conservation efforts and alternative water sources. Based on existing regulatory mandates as well as economic and environmental imperatives, State and regional/local efforts will continue to improve water use efficiency over that already achieved during the past few decades. DMM help make existing supplies go further, save money, reduce environmental degradation, and provide flexibility to ensure that the state's limited and variable water supply is used as efficiently as possible.

In the early 2000s, water management was expanded beyond DMM focus on conservation to include a portfolio of approaches to improving water supply reliability often from a regional perspective. This multi-tool approach is called integrated regional water management (IRWM) and is a collaborative effort to manage all aspects of water resources in a region. IRWM crosses jurisdictional, watershed, and political boundaries; involves multiple agencies, stakeholders, individuals, and groups; and attempts to address the issues and differing perspectives of all the entities involved through mutually beneficial management of water resources.

With IRWM, regions have been able to take advantage of opportunities that are not always available to individual water suppliers: reduce dependence on imported water and make better use of local

supplies; enhance use of groundwater with greater ability to limit groundwater overdraft; increase supply reliability and security; and improve water quality. The extent to which regions have carried these out has been driven by economics, environment, engineering, and institutional feasibility considerations. The developments of IRWM demonstrate that the State of California and its citizens are committed to promoting improved water management.

Some key milestones in the development of IRWM include:

2002 - Senate Bill 1672 created the Integrated Regional Water Management Act to encourage local agencies to work cooperatively to manage local and imported water supplies to improve the quality, quantity, and reliability. Since 2002, 48 IRWM regions have been established, covering 99% of the state's population and 87% of the state's geography.

2002 - California voters passed Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002, which provides \$500,000,000 (CWC §79560-79565) to fund competitive grants for projects consistent with an adopted IRWM plan.

2006 - California voters passed Proposition 84, the Safe Drinking Water, Water Quality, and Supply, Flood Control, River and Coastal Protection Bond Act, which provides \$1,000,000,000 (PRC §75001-75130) for IRWM Planning and Implementation.

2006 - California voters passed Proposition 1E, the Disaster Preparedness and Flood Prevention Bond Act, which provides \$300,000,000 (PRC §5096.800-5096.967) for Stormwater/Flood Management projects outside the State Plan of Flood Control that are consistent with an IRWM plan.

2014 - California voters passed Proposition 1, the Water Quality, Supply, and Infrastructure Improvement Act of 2014, in which Chapter 7 (CWC §79740-79748) provides \$810,000,000 for projects that are included in and implemented in an adopted IRWM plan. \$510,000,000 was allocated to 12 funding areas (excluding the Delta) for IRWM planning and implementation projects; \$100,000,000 was allocated for water conservation and water re-use plans, projects and programs; and \$200,000,000 was allocated for multi-benefit stormwater projects. One of the stated purposes of Proposition 1, Chapter 7 (CWC §79141(c)) is to improve regional water self-reliance consistent with §85021, which states: *Each region that depends on water from the Delta watershed shall improve its regional self-reliance for water through investment in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water supply efforts.*

DWR encourages and incentivizes water conservation and improved water management through grant funding and by providing technical assistance. Further, DWR is also involved in several statewide water conservation and water management programs including urban and agricultural water management plans and the water conservation provisions of SBx7-7, additionally DWR is involved with new

programs, SB 555 (2015), 2018 water conservation legislation SB 606, AB 1668. DWR supports and encourages water use efficiency by utilizing DMM and IRWM as conservation tools and understands it can provide more flexibility for water users, better management of water resources, and satisfy current and future demand under existing export levels. For more information on some of DWR's water conservation efforts and reduced reliance please see Master Response 7, "Delta Reform Act."

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II.1.7 MASTER RESPONSE 7: DELTA REFORM ACT

This master response discusses a variety of issues related to the Sacramento-San Joaquin Delta Reform Act of 2009 (Delta Reform Act), the Delta Stewardship Council (DSC), and the requirements of the Delta Plan, which the DSC adopted in May 2013. Specific elements of this Master Response include:

- Application of the Delta Reform Act to DWR and the SWP operations;
- Overview of the Delta Plan and requirements for covered actions subject to DSC review for consistency with the Delta Plan;
- Purpose and Limitations of the Department of Fish & Wildlife’s 2010 Flow Criteria (Early Actions);
- Delta Reform Act policy goal of “reduced reliance” and the role of water conservation; and
- A description of the Adaptive Management Plan proposed as part of Refined Alternative 2b.

II.1.7.1 THE DELTA REFORM ACT

In the Sacramento-San Joaquin Delta Reform Act of 2009 (Delta Reform Act), created by Senate Bill (SB) 1X7, the Legislature declared that the Delta “serves Californians concurrently as both the hub of the California water system and the most valuable estuary and wetland ecosystem on the west coast of North and South America.”¹ “The economies of major regions of the state depend on the ability to use water within the Delta watershed or to import water from the Delta watershed. More than two-thirds of the residents of the state and more than two million acres of highly productive farmland receive water exported from the Delta watershed.”² Yet “existing Delta policies are not sustainable.”³ Accordingly, included within the Delta Reform Act are mandates to various state agencies aimed at achieving the sustainable management of the Delta.

The Delta Reform Act also established the coequal goals for the Delta of “providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem.”⁴ These coequal goals must be achieved “in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.”⁵

The following objectives, among others, “are inherent in the coequal goals”:

- Manage the Delta’s water and environmental resources and the water resources of the state over the long term;
- Restore the Delta ecosystem, including its fisheries and wildlife, as the heart of a healthy estuary and wetland ecosystem;
- Promote statewide water conservation, water use efficiency, and sustainable water use;

¹ Wat. Code, § 85002.

² Wat. Code, § 85004.

³ Wat. Code, § 85001.

⁴ Pub. Resources Code, § 29702; Wat. Code, § 85054.

⁵ Wat. Code, § 85054.

- Improve water quality to protect human health and the environment consistent with achieving water quality objectives in the Delta; and
- Improve the water conveyance system and expand statewide water storage.⁶

In light of the environmental challenges facing the Delta and the vital importance of water conveyed through and diverted from the Delta to the state’s economy, the Legislature stated that its intentions in enacting the Delta Reform Act are:

to provide for the sustainable management of the Sacramento-San Joaquin Delta ecosystem, to provide for a more reliable water supply for the state, to protect and enhance the quality of water supply from the Delta, and to establish a governance structure that will direct efforts across state agencies to develop a legally enforceable Delta Plan.⁷

The long-term operations of the SWP described in the FEIR will support the coequal goals. Under the project, DWR seeks to improve water supply reliability by improving operational flexibility while protecting fish and wildlife based on the best available scientific information.

The Delta Reform Act also includes a state policy to reduce reliance on the Delta in meeting California’s future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency:

The policy of the State of California is to reduce reliance on the Delta in meeting California’s future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency. Each region that depends on water from the Delta watershed shall improve its regional self-reliance for water through investment in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water supply efforts.⁸

The objectives of the Proposed Project, as set forth in DEIR Chapter 3.1.1, “Project Objectives,” does not state any position regarding increasing or decreasing exports. Furthermore, DWR has developed an environmentally preferred alternative in coordination with CDFW, Refined Alternative 2b, which is described in Part III of the FEIR, Chapter 5.3. Among other environmental benefits provided by Refined Alternative 2b, this alternative would curtail exports to maintain the current SWP spring outflow contribution. The additional outflow would be developed by operating to the SWP proportional share of the spring maintenance flows consistent with flows observed from implementation of the 2008 and 2009 Biological Opinions or through export reductions by the SWP up to 150 TAF in Above Normal, Below Normal, and Dry water years

Additionally, DWR continues to work towards the achievement of this policy through various water conservation efforts. DWR’s Water Use and Efficiency (WUE) Branch is responsible for urban and agricultural water use efficiency and water conservation, the California Irrigation Management

⁶ Wat. Code, § 85020, subds. (a)–(f).

⁷ Wat. Code, § 85001, subd. (c).

⁸ Wat. Code, § 85021.

Information System (CIMIS), as well as urban and agricultural land and water use. Programs and initiatives include urban and agricultural water management planning, technical and local assistance for implementation of efficient water management programs and projects and meeting water use efficiency targets and objectives. WUE also plays an important role in implementing the new long-term water conservation framework for California as mandated in AB 1668 (Friedman) and SB 606 (Hertzberg) in 2018. To fully plan, develop and implement the new framework, DWR is responsible for numerous studies and investigations over the next three years, the development of standards, guidelines and methodologies, performance measures, web-based tools and calculators, data and data platforms, reports and recommendations.

For information on demand management measures please see Master Response 6: “Demand Management Measures.”

II.1.7.2 EARLY ACTIONS UNDER THE DELTA REFORM ACT

The Delta Reform Act required that certain actions be taken in the relative short term by both the California Department of Fish and Wildlife (CDFW)⁹ and the State Water Resources Control Board (SWRCB).

Among the “early actions” coming out of the 2009 legislation was the requirement that, within 12 months of the passage of the Act (i.e., by late 2010), CDFW, in consultation with United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS), and based on the best available science, develop and recommend to the SWRCB “Delta flow criteria and quantifiable biological objectives for aquatic and terrestrial species of concern dependent on the Delta.”¹⁰ In August 2010, CDFW (then CDFG) published a document entitled, “*Quantifiable Biological Objectives and Flow Criteria for Aquatic and Terrestrial Species of Concern Dependent on the Delta.*”

With this input from CDFW, the SWRCB was required, “pursuant to its public trust obligations, [to] develop new flow criteria for the Delta ecosystem necessary to protect public trust resources.” SWRCB was to “review existing water quality objectives and use the best available scientific information. The flow criteria for the Delta ecosystem shall include the volume, quality, and timing of water necessary for the Delta ecosystem under different conditions.”¹¹ These flow criteria were to be developed “[f]or the purpose of informing planning decisions for the Delta Plan and the [BDCP].”¹²

The SWRCB understood this directive to require the development of proposed flows based solely on biological criteria, with no regard to economic consequences and without regard to existing water rights or the balancing of competing interests that SWRCB undertakes in making decisions on water rights. In August 2010, the State Water Board completed the “*Development of Flow Criteria for the Sacramento–San Joaquin Delta Ecosystem*” (State Water Board 2010a and State Water Board 2010b). The final report presented flow criteria to protect the Delta and its ecological resources.

⁹ At the time, the agency was known as the then the Department of Fish and Game.

¹⁰ Wat. Code, § 85084.5.

¹¹ Wat. Code, § 85086, subd. (c)(1).

¹² Wat. Code, § 85086, subd. (c)(1).

In developing these recommended flows, the SWRCB did not consider the competing needs for water or other public trust resource needs such as the need to manage cold-water resources in tributaries to the Delta. Implementing such a flow would also likely affect water users beyond just CVP and SWP south-of-Delta deliveries. More specifically, as explained on page 3 of the final report:¹³

[n]one of the determinations in this report have regulatory or adjudicatory effect. Any process with regulatory or adjudicative effect must take place through the State Water Board's water quality control planning, water rights processes, or public trust proceedings in conformance with applicable law. In the State Water Board's development of Delta flow objectives with regulatory effect, it must ensure the reasonable protection of beneficial uses, which may entail balancing of competing beneficial uses of water, including municipal and industrial uses, agricultural uses, and other environmental uses. The State Water Board's evaluation will include an analysis of the effect of any changed flow objectives on the environment in the watersheds in which Delta flows originate, the Delta, and the areas in which Delta water is used. It will also include an analysis of the economic impacts that result from changed flow objectives.

Nothing in either the Delta Reform Act or in this report amends or otherwise affects the water rights of any person. In carrying out its water right responsibilities, the State Water Board may impose any conditions that in its judgment will best develop, conserve, and utilize in the public interest the water to be appropriated. In making this determination, the State Water Board considers the relative benefit to be derived from all beneficial uses of the water concerned and balances competing interests.

The State Water Board has continuing authority over water right permits and licenses it issues. In the exercise of that authority and duty, the State Water Board may, if appropriate, amend terms and conditions of water right permits and licenses to impose further limitations on the diversion and use of water by the water right holder to protect public trust uses or to meet water quality and flow objectives in Water Quality Control Plans it has adopted. The State Water Board must provide notice to the water permit or license holder and an opportunity for hearing before it may amend a water right permit or license.

The recommended flow criteria do not have regulatory effect. The Delta Reform Act specifically provides that “[t]he flow criteria shall not be considered predecisional with regard to any subsequent board consideration of a permit...” Rather, the recommended flow criteria provide information to the State Water Board that the SWRCB may use in the development of future flow and water quality objectives and water rights decisions, including updates to the Bay-Delta Plan Update. Although by statute the SWRCB must consider its August 2010 flow recommendations should DWR and the United States Bureau of Reclamation seek to amend their existing water rights permits to include new authorized points of diversion, the SWRCB's final August 2010 report makes it clear (on pages 3 and 4) that the SWRCB's ultimate determinations regarding what Delta flow criteria to impose as part of such permit amendment must take into account a variety of factors, including ramifications for “all

¹³ https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/docs/final_rpt080310.pdf.

beneficial uses of water.” Thus, there is no legal mandate that the 2010 flow recommendations be translated directly into actual Delta outflows that must be “funded” (with water) from the SWP alone.

The SWRCB is currently updating the 2006 Water Quality Control Plan through two separate plan amendment processes. DWR will continue to operate the SWP in compliance with the terms and conditions contained in its water rights permits and licenses issued by the SWRCB, including any flow criteria imposed by the SWRCB under those permits and licenses.

For information on the Water Quality Control Plan process please see Master Response 9, “Relationship to WQCP Update and Voluntary Agreements.”

II.1.7.3 THE DELTA STEWARDSHIP COUNCIL’S DELTA PLAN

In addition to setting the policies and requiring the reports described above, the Delta Reform Act also created the DSC, which is tasked with furthering the state’s coequal goals for the Delta through development of a Delta Plan.¹⁴ While the Delta Reform Act and the Delta Plan are often referred to interchangeably, the Delta Reform Act contains a variety of directives for multiple agencies, whereas the Delta Plan, as discussed in more detail below, is limited to regulating “Covered actions.” The Delta Plan is a comprehensive, long-term resource management plan for the Delta, containing both regulatory policies and recommendations, aimed at furthering the coequal goals and promoting a healthy Delta ecosystem.¹⁵

The Delta Plan provides for a distinct regulatory process for activities that qualify as “Covered Actions.” The Delta Reform Act established a self-certification process for demonstrating consistency of “Covered actions” with the Delta Plan.¹⁶ State and local agencies proposing “Covered actions,” prior to initiating the implementation of that action, must prepare a written certification of consistency with detailed findings as to whether the covered action is consistent with applicable Delta Plan policies and must submit that certification to the DSC.¹⁷ The determination that a proposed activity meets the definition of a “Covered action” is the responsibility of the state or local agency undertaking the proposed activity.¹⁸ If an agency determines that a proposed plan, program, or project is not a covered action, that determination is not subject to review by the DSC. The agency determination is, however, subject to judicial review as to whether it was reasonable, made in good faith, and is consistent with the Delta Reform Act and relevant provisions of the Delta Plan.¹⁹

The Delta Plan became effective on September 1, 2013 and has since been updated in April 2018.

¹⁴ Wat. Code, §§ 85300, subd. (a), 85302, subd. (a).

¹⁵ Wat. Code, §§85059, 85300, subd. (a), 85302, subd. (a).

¹⁶ Wat. Code, § 85225.

¹⁷ Wat. Code, § 85225.

¹⁸ Cal. Code Regs., tit. 23, §5001, subd. (j)(3).

¹⁹ Cal. Code Regs., tit. 23, §5001, subd. (j)(3).

II.1.7.4 COVERED ACTIONS

As indicated above, the Delta Plan only applies to activities that qualify as “Covered actions.” In order for an activity to be a “Covered action” it must first meet specific criteria. A “Covered action” is defined as “an activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment ... “directly undertaken by any public agency”²⁰ that (i) will occur, in whole or in part, within the boundaries of the Delta or Suisun Marsh, (ii) will be carried out, approved, or funded by the state or a local public agency, (iii) is covered by one or more provisions of the Delta Plan, and (iv) will have a significant impact on achievement of one or both of the coequal goals or the implementation of government-sponsored flood control programs to reduce risks to people, property, and state interests in the Delta.”²¹ Significant impact is defined as “a substantial positive or negative impact... that is directly or indirectly caused by a project on its own or when the project’s incremental effect is considered together with the impacts of other closely related past, present, or reasonably foreseeable future projects.”²² Projects that are not considered to have a significant impact on the coequal goals include ministerial, emergency, other projects exempted from CEQA (unless there are unusual circumstances indicating a reasonable possibility that the project will have a significant impact), and “[t]emporary water transfers of up to one year in duration.”²³ If an activity does not meet all of the above criteria it is not a “Covered action” for which a consistency determination is required. Additionally, even if an activity meets all of the covered action elements certain activities are statutorily exempt from qualifying as covered actions.²⁴ For instance, “Covered action” does not include, either “[a] regulatory action of a state agency” or “(2) Routine maintenance and operation of the State Water Project or the federal Central Valley Project.”²⁵

As already noted, whether an activity is a “Covered action” subject to the requirements of the Delta Plan is a discretionary decision by the lead agency and must be reasonable and made in good faith.²⁶ DWR has made a good faith determination that the long-term operations of the SWP, as analyzed in the FEIR for purposes of CEQA, is not a covered action. The long-term operations consist of multiple elements that combined characterize future operations of SWP facilities, modify ongoing programs being implemented as part of SWP operations, improve specific activities that would enhance protection of special-status fish species, or support ongoing studies and research on these special-status species to improve the basis of knowledge and management of these species. Implementation of these elements is intended to continue operation of the SWP while minimizing and fully mitigating the take of listed species consistent with CESA requirements. The vast majority of the elements that are encompassed within the project are consistent with those that have occurred historically under the State Water Resources Control Board Decision 1641 (D-1641), and other state and federal

²⁰ Pub. Resources Code, § 21065.

²¹ Wat. Code, § 85057.5.

²² Cal. Code Regs., tit. 23, § 5001, subd. (dd).

²³ Cal. Code Regs., tit. 23, § 5001, subd. (dd).

²⁴ Wat. Code, § 85057.5.

²⁵ Wat. Code, § 85057.5, subd. (b).

²⁶ Cal. Code Regs., tit. 23, § 5001, subd. (j)(3).

environmental requirements, including constraints derived from the California Endangered Species Act (CESA) and the federal Endangered Species Act (ESA). Together with the long-standing contractual commitments under which DWR operates, the overall regulatory framework created by D-1641, CESA, ESA, and other operative environmental standards and laws sets the physical and legal boundaries within which DWR routinely operates and maintains its facilities. Because of ongoing short-term variations in weather and hydrology, SWP operators are inevitably required to respond to changing conditions in real time in order to continue to achieve the SWP's purpose while still complying with all mandated requirements and modifications thereto.

DWR will continue to evaluate individual elements as they move toward implementation and, should any be determined in the future to meet the definition of a "Covered Action" and not fall within an exemption, DWR will submit separate consistency determinations for those elements at the appropriate time. DWR will continue to seek guidance from the Delta Stewardship Council in evaluating the individual elements.

II.1.7.5 ADAPTIVE MANAGEMENT

The Adaptive Management Plan (AMP) which will be incorporated into the Incidental Take Permit (ITP) for Long-Term Operations of the SWP, and which is included in DWR's preferred alternative Refined Alternative 2b, as described in FEIR Part III, Chapter 5.3.3, "Adaptive Management Plan," is consistent with the three-phase and nine-step adaptive management framework adopted by the DSC.²⁷ The AMP will utilize adaptive management to inform operation of the SWP and related activities, consistent with the requirements of the California Endangered Species Act (CESA). The AMP Implementing Agencies seek to use the flexibility provided by an adaptive management approach in a way that balances gaining knowledge to improve future management decisions with taking actions in the face of uncertainty and achieving the best outcomes possible for CESA-listed species. The objectives of the AMP are to (1) continue the long-term operation of the SWP consistent with applicable laws, contractual obligations, and agreements, (2) address scientific uncertainties related to the effects of water project operations on listed species in relation to proposed actions, and (3) provide a mechanism for incorporating adaptive management into the SWP ITP issued for long-term operation of the SWP.

As described in FEIR Part III, Chapter 5.3.3, the Adaptive Management Team (AMT) that will carry out the AMP includes one designated representative and one designated alternate from each of the Implementing Agencies (DWR, CDFW, and the State Water Contractors). In addition, the AMP will use the Delta Science Program in order to organize and guide the activities. The roles of the AMT, as identified in the AMP, is to (1) support the necessary monitoring to carry out the AMP, as required in the ITP; (2) serve as a venue for identifying monitoring and research needs not addressed in other science forums; (3) develop proposals for adaptive management actions or development of discrete proposals, based on consensus among AMT members; (4) track monitoring and research that the AMT determines necessary to carry out the AMP; (5) task technical teams associated with the AMT to regularly synthesize the best available scientific information regarding the covered species and their habitats and the effects of SWP operations and activities on those species and habitats based on established criteria; (6) recommend changes to operations and activities subject to this adaptive

²⁷ DSC 2015. Delta Plan Appendix 1B, available at <http://www.deltacouncil.ca.gov/pdf/delta-plan/2015-appendix-1b.pdf>

management program as well as monitoring protocols where appropriate based upon the results of science and monitoring requirements in the ITP; (7) assure transparency in the implementation of the AMP; and (8) comply with Reporting Annual Work Plan and Budget, and Annual Progress Report requirements. Under the AMP, the results of monitoring and research will inform proposed adaptive management changes. The Implementing Agencies commit to working collaboratively to reach consensus on recommended adaptive management changes to the maximum extent feasible and to elevate and disputes over decisions to appropriate levels of officials for each of the AMT members.

DWR provides technical staff to carry out the roles of the AMT. Additionally, on an annual basis, the AMT will prepare an Annual Work Plan and Budget for the upcoming year that are in addition to required monitoring listed in the ITP or that is part of the IEP annual work plan. The Implementing Entities will ensure that the draft plan accurately sets forth and makes adequate provision for the implementation of the SWP ITP terms under which the SWP operates. Included in each Annual Work Plan and Budget will be a description of the sources of funds that will be used to support the budget.

II.1.8 MASTER RESPONSE 8: OTHER STATE EFFORTS

II.1.8.1 RELATION TO NEW FACILITIES

The project addressed in this EIR -- the long-term operations of the State Water Project -- does not include constructing or installing any new facilities. Rather, the project includes operation of existing SWP facilities, modifications to ongoing programs being implemented as part of SWP operations, improvements to specific activities that would enhance protection of special-status fish species, and commitments to support ongoing studies and research on these special-status species to improve the basis of knowledge and management of these species.

As stated in DEIR Chapter 3.3, "Description of the Proposed Project," DWR is requesting an ITP that would provide discretion in operational decision-making to comply with the terms of its existing water supply and settlement contracts, and other legal obligations. In addition to these requests, DEIR Chapter 3.3 specifically identifies actions that are not to be covered by the ITP, including flood control, Oroville Dam and Feather River operations, prior execution of existing SWP contracts, Coordinated Operation Agreement, Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project, Suisun Marsh Habitat Management Preservation and Restoration, Suisun Marsh Preservation Agreement, and CVP facilities, operations, and agreements. These facilities and operations activities are already covered under existing permits or addressed by other legal authorities.

A number of comments suggested that DWR abused its discretion under CEQA by seeking approval of the ITP for long-term operations of the SWP without at the same time seeking approvals for much larger undertakings to which the ITP is somehow related. These comments suggest, in other words, that DWR is of "piecemealing" by preparing an EIR focused on the ITP and the long-term operations that it would authorize. These comments are mistaken.

As a general matter under CEQA, the fact that discrete projects may be related to one another in some fashion does not mean that an agency involved in such multiple projects has no choice under CEQA but to treat them as a single, indivisible project that must be analyzed as a whole, regardless of the scale and complexity involved. Rather, agencies have discretion to process and approve related projects separately, as long as each project has "independent utility,"¹ which is the case here.

The public interest would not be served if DWR ignored the independent nature of long-term SWP operations and attempted to prepare a single, comprehensive EIR that attempted to treat all aspects of wide range of related activities as a single project. The scale of the document would be impractical,

¹ See *Del Mar Terrace Conservancy, Inc. v. City Council of the City of San Diego* (1992) 10 Cal.App.4th 712, 732-733 (*Del Mar Terrace*) (court upholds an EIR that treated as the "project" one freeway segment within a long-term, multi-segment regional plan to expand the freeway system throughout San Diego County); *Planning and Conservation League v. Castaic Lake Water Agency* (2009) 180 Cal.App.4th 210, 237 (applying "independent utility" test derived from *Del Mar Terrace Conservancy* to a proposed water transfer); and *Rodeo Citizens Assn. v. County of Contra Costa* (2018) 22 Cal.App.5th 214, 224-225 (refinery's proposed project to recover propane was "independent" of any change to the type or quantity of feedstock processed at refinery).

and opportunities to look at alternatives to component parts of the massive project would be lost. Commenters would likely be overwhelmed with technical detail.

II.1.8.2 THE PROPOSED DELTA CONVEYANCE PROJECT IS NOT COVERED BY THE ITP

The proposed Delta Conveyance Project is still in planning stages and subject to separate environmental review and permitting processes. For further information regarding why the Delta Conveyance Project is not addressed in this EIR, please see Master Response 26, “One-Tunnel Delta Conveyance Project.”

The SWP is a component of the programs, policies, and investments being considered as part of the water resilience portfolio being developed in response to Executive Order N-10-19, issued by Governor Newsom. Although DWR has released a draft portfolio, development remains in progress, including solicitation of public input to the inventory and assessment of future water supplies, demands, and availability. Changes to the role of the SWP to meet future water supply requirements is not known because the development of the water portfolio is in progress and may be subject to the interaction with other water sources, regulations, and environmental changes.

The final version of the portfolio will not create a single indivisible project that will have to be processed with a single EIR. Rather, the portfolio will be a compilation of related but independent projects, each of which will have to be considered on its own merits in separate environmental documents. Far from undermining the purposes of CEQA, such separate review for independent (if related) projects will ensure that each such project provides details specific to that project and that it will be considered in connection with proposed alternatives that might meet project objectives at lesser environmental cost.

II.1.8.3 WATER SUPPLY CONTRACT EXTENSION AMENDMENTS

In the 1960s, the Department of Water Resources entered into long-term water supply contracts with public water agencies located in northern California, the Bay Area, San Joaquin Valley, the Central Coast, and Southern California to provide water service to the SWP Contractors in exchange for payments that recover the water supply cost of providing the service. Contract extension involves extending the 29 water supply contracts, which all have the same general provisions, have initial terms of 75 years and have expiration dates that currently range from 2035 to 2042.

The majority of the capital costs associated with the development and maintenance of the SWP is financed using SWP revenue bonds. These bonds have historically been sold with 30-year terms, but such bonds have not been sold with maturity dates that extend beyond the year 2035, the year the contracts begin to expire. In order to ensure continued debt service affordability to the SWP Contractors, it is necessary to extend the contract termination date. Contract extension will allow DWR to again sell bonds with 30-year terms or longer, commensurate with the economic life of the project being financed, thus ensuring the debt service on these bonds remains affordable to SWP Contractors and their water customers. DWR has completed the CEQA documents and has executed the contract extension amendment with many of the SWP contractors. It is too late, then, for this independent, if

related, project to be retroactively folded into the current project (a 10-year ITP for long-term operations).

Moreover, long-term operations of the SWP are only indirectly related to the water supply contract extension because the SWP Contractors will be able to refinance long-term bonds for financing the cost of continued operation and maintenance of the SWP. The Proposed Project provides regulatory approval for the continued operation of SWP Delta facilities that are subject to limits prescribed in the ITP.

II.1.8.4 YOLO BYPASS SALMONID HABITAT RESTORATION AND FISH PASSAGE PROJECT

DWR is already implementing the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project (YBSHRFPP) to satisfy requirements of 2009 NMFS Biological Opinion as defined in the 2012 Yolo Bypass Salmonid Habitat Restoration and Fish Passage Implementation Plan. The 2019 NMFS Biological Opinion carried the YBSHRFPP forward as a baseline condition and included programmatic discussion of the YBSHRFPP. The YBSHRFPP is also a component of California EcoRestore, a long-standing initiative of the California Natural Resources Agency implemented in coordination with state and federal agencies to advance the restoration of at least 30,000 acres of habitat in the Delta.

The YBSHRFPP involves creating an opening in the Fremont Weir that is deeper than the Fremont Weir with operable gates to allow increased flow from the Sacramento River to enter the Yolo Bypass in certain conditions. The YBSHRFPP will contribute to minimizing effects on smelt and salmon associated with operating the SWP, CVP, and other water management facilities in the Delta.

The YBSHRFPP, then, is an approved project and thus cannot be part of the current Proposed Project, which still requires approval. It also has independent utility. The YBSHRFPP was addressed in the cumulative impacts analysis in DEIR Chapter 4.6.1, "Cumulative Impacts." This is the proper way to have treated a separate project that is nevertheless related to the Proposed Project.² By including the YBSHRFPP as a related project in this fashion, the DEIR allowed DWR to consider the Proposed Project, together with the YBSHRFPP, without at the same time indulging in the fiction that the YBSHRFPP is an integral component of the Proposed Project.

II.1.8.5 TIDAL HABITAT RESTORATION PROJECTS

DWR is pursuing more than 8,000 acres of tidal habitat restoration, as part of the Fish Restoration Program, in satisfaction of mitigation requirements in the 2008 USFWS Biological Opinion. The 2019 USFWS Biological Opinion carried forward the 8,000 acres of tidal habitat restoration as a baseline condition and discussed the restoration effort programmaticaly. DWR is also pursuing an additional 800 acres of habitat in the mesohaline part of the Bay-Delta Estuary as required by its 2009 ITP covering Longfin smelt. These tidal habitat restoration projects are also components of California EcoRestore, described above. The tidal habitat restoration projects will be funded pursuant to the applicable funding and/or cost sharing agreements. In a manner similar to the Yolo Bypass Improvements, these tidal habitat restoration projects contribute to minimizing effects on salmon,

² See *Del Mar Terrace, supra*, 10 Cal.App.4th at pp. 737-739.

smelt, and other Delta fish species that are impacted by operations of the SWP, CVP, and other water management facilities in the Delta.

As with the YBSHRFPP (discussed above), these tidal habitat restoration projects, some of which are already approved projects, that separate from, though related to, the Proposed Project. They also have independent utility. Because they grow out of regulatory decisions made more than a decade ago, and indeed some are already approved, they cannot be part of the current Proposed Project, which still requires approval. As with the YBSHRFPP, these tidal habitat restoration projects were addressed in the cumulative impact analysis in DEIR Chapter 4.6.1. As noted above, these are separate and independent projects that are nevertheless related to the Proposed Project because they provide additional minimization and mitigation for Delta Smelt and Longfin Smelt in addition to salmonids evaluated in the DEIR.³

³ See *Del Mar Terrace, supra*, 10 Cal.App.4th at pp. 737-739.

II.1.9 MASTER RESPONSE 9: RELATIONSHIP TO WQCP UPDATE AND VOLUNTARY AGREEMENTS

As discussed in DEIR Chapter 4.3.1, “Environmental Setting,” the Bay-Delta Water Quality Control Plan (WQCP) for the Sacramento and San Joaquin River(s) serves as the basin plan for much of the area that provides the water supplies for the SWP. The WQCP designates beneficial uses, including drinking water municipal and domestic supply beneficial use, for most waters in the Central Valley, including the Delta. The WQCP includes narrative objectives for chemical constituents, taste and odor, sediment, suspended material, and toxicity, and numeric objectives for chemical constituents and salinity. The WQCP incorporates by reference the primary and secondary maximum contaminant levels specified in state regulations, including Title 22 of the California Code of Regulations for waters designated for municipal uses.

As discussed in DEIR Table 4.6-1e, “List of Cumulative Projects – Area-Wide Plans and Programs,” the SWRCB is updating the 2006 Bay-Delta WQCP in two phases: the first focusing on San Joaquin River flows and South Delta salinity and the second focused on the Sacramento River and its tributaries, Delta eastside tributaries, Delta outflows, and interior Delta flows. In December of 2018, the SWRCB adopted WQCP amendments under Phase One to update water quality objectives for San Joaquin River flows and Southern Delta salinity. The Phase One update established an objective to maintain unimpaired flow of 40%, within an adaptive range of 30% to 50%, for San Joaquin River tributaries from February through June of each year. The SWRCB has not yet adopted WQCP updates under Phase Two but issued a framework in July 2018 for potential phase two WQCP amendments proposing a 55% average unimpaired flow, within a range of 45% to 65%, for the Delta and the Sacramento River and its tributaries.

The Voluntary Agreement process is intended to provide an alternative approach to unimpaired flow that would (as discussed in DEIR Chapter 4.6.1.5, “Aquatic Biological Resources”), implement a combination of flow and non-flow actions to support the viability of native fishes in the Bay-Delta watershed and achievement of related objectives in the WQCP. Voluntary Agreements, if and when implemented, would augment Delta outflow, particularly in spring, which, cumulatively with the proposed long-term SWP operations, will result in Delta outflow greater than Existing Conditions in most water year types. Cumulatively, the Voluntary Agreements would contribute to improving conditions for special-status species in the Delta.

The potential magnitude and timing of flow actions that would result from the Voluntary Agreements may relate to long-term SWP operations. The Voluntary Agreements are presently being negotiated by DWR, CDFW, and other participating entities for future submittal to the SWRCB for evaluation and potential adoption. DWR’s preferred alternative, as described in FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP,” includes a dedicated “block” of water for summer or fall Delta outflow and additional spring maintenance flows, which, consistent with the AMP and at the discretion of CDFW, could be shifted for use in summer-fall period of the current or subsequent year. In addition to the Summer-Fall Delta Smelt Habitat Action in the Proposed Project, Refined Alternative 2b also includes a salinity target in the Suisun Marsh to guide

SMSCG operations in wet, above normal and below normal years. The spring through fall water dedicated for Delta outflow would be provided to test hypotheses related to ecosystem conditions and to improve some conditions as identified under the forthcoming CESA permit application for the SWP Long-term operations. While this water would be provided to meet CESA requirements and to maintain consistency with the description in the EIR under CEQA, these blocks of water could also align with the contributions identified in the “Framework of Voluntary Agreements” (“Framework”) provided by CalEPA and California Natural Resources Agency on February 4, 2020. The Framework provides for 800 – 900 TAF of additional flow above Existing Conditions in Above Normal, Below Normal, and Dry Years as well as providing funding sources and habitat improvements. The Framework includes contributions from a wide variety of water users, including SWP exporters. If Voluntary Agreements are successful in their execution, the 150 TAF of spring outflow would continue to be provided as an ongoing contribution. Additionally, a water purchase program identified in the Framework could be made available in the Summer-Fall months from willing upstream water users that could serve the same intended purpose as the outflow identified in CESA permit application.

DWR will comply with all existing and future WQCP flow objectives established by the SWRCB, whether resulting from Voluntary Agreement implementation or otherwise.

II.1.10 MASTER RESPONSE 10: CLIMATE CHANGE

The impact evaluations conducted to address operations-related impacts on water quality and special status species were indirectly considered with differences in hydrology that could occur as a result of climate change and sea level rise. DEIR Appendix F, "Climate Change Sensitivity Analysis," described an analytical comparison of specific CalSim II outputs reflecting SWP and CVP operations under Existing Conditions and the Proposed Project that considered current and future climate and sea level rise conditions.

An updated climate change sensitivity analysis is presented in FEIR Part III, Appendix F, "Climate Change Sensitivity Analysis." The updated analysis reflects DWR's preferred alternative, Revised Alternative 2b, and also uses the CMIP5 model variation. The conclusions of the updated analysis presented in Appendix F of the FEIR are identical to the CMIP3 analysis presented in the DEIR. The DEIR climate change sensitivity analysis considered climate conditions centered around 2030, the year at which additional approval for future operations will be required. The updated analysis, presented in FEIR Part III, considers more recent climate data (from CMIP5) centered on 2035, five years after the proposed term of the Incidental Take Permit that DWR has applied for under the California Endangered Species Act.

Future conditions presented in the FEIR include central tendency climate centered around year 2035 with 15 cm of sea level rise, and central tendency climate centered around year 2035 with 45 cm of sea level rise. The range of sea level rise values of this updated sensitivity analysis consider the findings of the latest Ocean Protection Council Sea Level Rise Guidance released in 2018.

The climate change sensitivity analysis concluded that the relative changes due to the Refined Alternative 2b scenario as compared to Existing Conditions under the future climate and sea level rise scenarios are similar to those identified under the current climate scenario. Based on the results of the climate change sensitivity analysis, the impacts identified in the water quality and special status-species analyses conducted in the EIR would be similar to those under future climate projections. As such, the analyses conducted in the EIR indirectly consider potential effects of climate change.

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II.1.11 MASTER RESPONSE 11: LONGFIN SMELT IMPACT SIGNIFICANCE

The DEIR evaluated the effects of anticipated Delta outflow on Longfin Smelt abundance under the Proposed Project by applying simulated (modeled) flows produced by the CalSim II monthly operations model to a reproduction of the Longfin Smelt population dynamics model published by Nobriga and Rosenfield (2016). The methods applied for this analysis are described in DEIR Appendix E, Section E.3.3.3, “Model Simulation to Compare Scenarios.” The results of the analysis are provided in DEIR Chapter 4.4.7.4, subheading “Delta Outflow-Abundance” (pages 4-177 to 4-180 of the DEIR).

The results of the Nobriga and Rosenfield (2016) model application suggested that differences in the predicted abundance (fall midwater trawl abundance index) between scenarios would be very small (DEIR Figure 4.4-55, Table 4.4-9, and Table 4.4-10 in DEIR Chapter 4.4.7.4), with mean predicted abundance slightly lower under the Proposed Project. The outflow-abundance relationship reproduced from Nobriga and Rosenfield (2016) is uncertain as indicated by the variability in the predicted values (i.e., confidence intervals), which spans several orders of magnitude. When accounting for the variability in the outflow-abundance relationship the potential impact of changes in Delta outflow under the Proposed Project, reductions in predicted abundance are less than 2%. Additionally, the Proposed Project includes measures that would potentially reduce any potential small effects in real-time, including increased measures to reduce entrainment losses for all Longfin Smelt life stages, a commitment to a Longfin Smelt Science Program to understand mechanisms underlying flow-abundance relationships, and to identify and test additional options for Longfin Smelt management, and a commitment to support the fish culture facility for Longfin Smelt culture for future study and adaptive management applications. Further, the small differences in the predicted abundance reflect combined SWP and CVP operations. The proportional share attributable to SWP operations is approximately 40% to 60% of the effects of reduced Delta outflow depending on the month and water year type (DEIR Appendix H, Attachment 1-5, “Estimation of SWP Proportion of Effects”).

Small differences in predicted abundance, of which approximately half of the reduction in abundance is the SWP’s proportional share, along with real-time operations to reduce entrainment losses, funding for a Longfin Smelt Science Program to better understand mechanisms underlying flow-abundance relationships, and funding for a fish culture facility that could improve adaptive management of the SWP to benefit Longfin Smelt, result in the conclusion that impacts on Longfin Smelt associated with reduced Delta outflow are less than significant.

Under Refined Alternative 2b, the preferred alternative in the FEIR, DWR proposed to operate the SWP to provide for spring Delta outflow for the benefit of Longfin Smelt. The same analysis of Longfin Smelt abundance using the Nobriga and Rosenfield (2016) model also was conducted to identify changes in predicted fall midwater trawl abundance index for Longfin Smelt under Refined Alternative 2b using the same methods as those described for the Proposed Project.

Similar to the analysis of the Proposed Project, differences in predicted fall midwater trawl abundance index between Alternative 2b and Existing Conditions scenarios were very small, relative to the variability in the predicted values, which spans several orders of magnitude (see FEIR Part III, Chapter 5.3). Evaluation of Refined Alternative 2b showed that under a “Good” survival scenario, Refined

Alternative 2b would result in a reduction in the Longfin Smelt Abundance Index of 1% to 3% and under a “Poor” survival scenario, Refined Alternative 2b would result in a reduction in the Longfin Smelt Abundance Index of 0% to 4%. When accounting for the variability in the outflow-abundance relationship the potential impact of changes in Delta outflow under the Proposed Project, reductions in predicted abundance are less than 1% for both survival scenarios. As described above for the Proposed Project, the small differences in the predicted abundance under Alternative 2b reflect combined SWP and CVP operations. The SWP operations proportional share is 40% to 60% of the effects of reduced Delta outflow depending on the month and water year type (DEIR Appendix H, Attachment 1-5). Additionally, Refined Alternative 2b would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMET or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further minimize impacts below those identified in the analyses and contribute to fully mitigating impacts.

DWR also conducted a sensitivity analysis for the Proposed Project and Refined Alternative 2b based on the Kimmerer regression model and the analysis confirmed the results of the Nobriga and Rosenfield analysis, but with similar confidence intervals. The results from the Nobriga and Rosenfield (2016) approach show the same general differences and level of uncertainty between the different alternatives as the “Kimmerer regression” approach. Hence, DWR considers that the “Kimmerer regression” analysis does not add value to the comparison of alternatives. Please also see FEIR Part III for updates to DEIR Appendix E, Attachment 2.

II.1.12 MASTER RESPONSE 12: DELTA OUTFLOW

A description of the expected changes to surface water hydrology from implementation of the Proposed Project compared to Existing Conditions is presented in DEIR Chapter 4.2.2, "Comparison of the Proposed Project with the Existing Conditions." In particular, DEIR Figure 4.2-8, "Delta Outflow, Comparison of Long-Term SWP-CVP Operations," shows the difference of monthly Delta outflow between Existing Conditions and the Proposed Project. This description is based on CalSim II modeling, with detailed description of modeling assumptions included in DEIR Appendix H, "CalSim II and DSM2 Model Descriptions and Assumptions."

The modeling results shows that, under the Proposed Project, Delta outflow would be reduced in April and May because export patterns would change with implementation of the Proposed Project. In Wet, Above-Normal, Below-Normal, and Dry Years Delta outflow would decrease by up to 17% during April and May. In Critical Years, Delta outflow under the Proposed Project scenario would remain similar to that under Existing Conditions.

In years following Wet Years, Delta outflow would decrease in September and November under the Proposed Project because of implementation of the proposed Delta Smelt Summer-Fall Habitat Action. Similarly, in years following Above-Normal Years, Delta outflow would increase in September and would decrease in November.

Delta outflow in fall months would remain similar in all other water year types under the Proposed Project. Aside from decreases in April and May of Wet, Above-Normal, Below-Normal, and Dry Years, Delta outflow under the Proposed Project scenario in other months remains similar to the Existing Conditions scenario in all water year types.

Modeling conducted for Refined Alternative 2b (FEIR Section III) describes differences in Delta outflow compared to the Existing Conditions scenario. Detailed Delta outflow model results are presented in FEIR Part III, Appendix C, "Hydrology Model Results." The modeling results show that, over the long term, Delta outflow would increase in August and decrease in September and November. Delta outflow would remain similar in all other months.

Summer Delta outflow under Refined Alternative 2b would be greater than the Existing Conditions in August Wet and Above-Normal Years. In years following Wet Years, Delta outflow would decrease in September and November due to the proposed Delta Smelt Summer-Fall Habitat Action. Similarly, in years following Above-Normal Years, Delta outflow would increase in September and decrease in November. Delta outflow in fall months would remain similar in all other water year types. Aside from increases in August of Wet and Above-Normal Years, Delta outflow under the Refined Alternative 2b scenario in other months would remain similar to the Existing Conditions scenario in all water year types.

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II.1.13 MASTER RESPONSE 13: 2019 FEDERAL BIOLOGICAL OPINIONS

Table II.1-13-1, “Comparison of Proposed Project Actions to Federal Actions,” below compares the Proposed Project’s operations and actions to the proposed U.S. Bureau of Reclamation’s operations and actions for the long-term operation (LTO) of SWP and CVP facilities. The geographic extent of the SWP LTO evaluated in the DEIR is different from the geographic scope of the CVP Reinitiation of Consultation (ROC) project. The Proposed Project consists of multiple elements that would modify ongoing programs being implemented as part of SWP operations, would improve specific activities to enhance protection of special-status fish species, and would support ongoing studies and research on these special-status species to improve the basis of knowledge and management of these species. In addition, the Proposed Project includes preparing an Adaptive Management Plan to evaluate the efficacy of the operations and activities proposed as part of the project.

Both the Proposed Project and the federal ROC project would comply with existing regulatory requirements and minimum export rates; manage OMR reverse flows; and continue operations of the BSPP, South Delta temporary barriers, Suisun Marsh Salinity Control Gates, Roaring River Distribution System, Morrow Island Distribution System, and Goodyear Slough Outfall according to required terms and conditions. In addition, the Proposed Project and federal ROC project would expand the water transfer window, between July through November, with volumes up to 600 thousand acre-feet. Both projects would continue implementing studies to better understand LFS population distribution and abundance in San Francisco Bay and the Delta, and would implement a governance structure for real-time operations of the SWP.

The federal ROC project includes additional actions not included in the SWP LTO such as changes in Delta Cross Channel operations and Tracy Fish Facility improvements that are focused on federal facilities, and studies such as the San Joaquin Basin Steelhead Telemetry Study and Sacramento Deepwater Ship Channel Food Study. The SWP LTO does not propose to increase use of the U.C. Davis Fish Culture Center and a Delta Fish Species Conservation Hatchery for the introduction of cultured fish into the wild; rather, the Proposed Project would continue further studies to prepare for Delta Smelt reintroduction from stock raised at the U.C. Davis Fish Conservation and Cultural Laboratory.

Table II.1-13-1 below presents a comparison of the Proposed Project and the federal ROC project actions. Under Refined Alternative 2b, the preferred alternative in the FEIR, DWR would implement all of the actions and activities identified for both Alternative 2b and the Proposed Project, plus additional actions to further enhance protection of special-status fish species as described in FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP.” Specifically, Refined Alternative 2b would: (1) provide an additional 150 Thousand Acre Feet (TAF) of Delta outflow in the spring; (2) provide an additional adaptively managed 100 TAF of Delta outflow in summer or fall months of Wet and Above Normal Years; (3) provide an additional adaptively managed 150 TAF of Delta outflow in summer or fall following Wet Years; (4) pursue dedication of these additional flows to instream uses under Section 1707 of the California Water Code; (5) provide CDFW with greater authority in the collaborative real-time risk assessment process; (6) implement additional OMR management actions for protection of Winter-run and Spring-run Chinook Salmon; and (7)

develop additional monitoring and modeling tools as part of the Adaptive Management Plan. These additional actions and activities are described in FEIR Part III, Chapter 5.3.

Table II.1-13-1. Comparison of Proposed Project Actions to Federal Actions

Facility or Action	Proposed Project* Actions	Federal Actions
Existing Regulatory Requirements	Comply with D-1641 and USACE Permit 2100.	Same as the Proposed Project
Minimum Export Rate	The combined CVP and SWP export rates at Jones Pumping Plant and Banks Pumping Plant will not be required to drop below 1,500 cfs.	Same as the Proposed Project
Old and Middle River Flow Requirements	Manage OMR reverse flows based on species distribution, modeling, and risk analysis, with provisions for capturing storm flows.	Same as the Proposed Project
Delta Cross Channel Operations	No proposed action.	Operation of the Delta Cross Channel in October and November to meet the existing triggers from the 2009 NMFS BO Action IV.1.2 related to the DCC, but to act in advance of projected water quality standard violations.
Barker Slough Pumping Plant (BSPP)	Continue operating the BSPP to minimize effects on Delta Smelt and Longfin Smelt, and continue implementing sediment removal and aquatic weed management actions as part of normal operations at Barker Slough Pumping Plant.	Same as the Proposed Project
South Delta Temporary Barriers	Continue operation of three South Delta Temporary Barriers according to existing terms and conditions.	Same as the Proposed Project
Suisun Marsh Operations	Operate the Suisun Marsh Salinity Control Gates, Roaring River Distribution System, Morrow Island Distribution System, and Goodyear Slough Outfall in compliance with D-1641.	Same as the Proposed Project
Delta Smelt Summer-Fall Habitat Action	Operate the Suisun Marsh Salinity Control Gate for up to 60 days (not necessarily consecutive) in June through October of below-normal, above-normal, and wet years. SMSCG operations for 30 days during June through October of dry years that follow a below normal water year to achieve the longest continuous duration of a salinity at Belden's Landing of 6 ppt on a 3-day running average. Refer to the section below, Export Curtailments for Spring Maintenance Flows, for additional detail regarding the water used to offset the cost of this action. Project operations are to maintain a monthly average 2 ppt isohaline at 80 kilometers (km) from the Golden Gate Bridge in above normal and wet water years in September and October. Food enhancement actions similar to the North Delta Food Subsidies and Colusa Basin Drain project, and Suisun Marsh Food Subsidies (Roaring River distribution system reoperation).	Same as the Proposed Project
San Joaquin Basin Steelhead Telemetry Study	No proposed action.	Continuation of the San Joaquin Basin Steelhead Telemetry Study. This is a 6-year study on the migration and survival of San Joaquin Origin Central Valley Steelhead.

Facility or Action	Proposed Project* Actions	Federal Actions
North Delta Food Subsidies and Colusa Basin Drain Project	Facilitate increased abundance of phytoplankton and zooplankton in areas inhabited by Delta Smelt.	Same as the Proposed Project
Suisun Marsh Roaring River Distribution System Food Subsidies Study	No proposed action.	Add fish food to Suisun Marsh by coordinating managed wetland flood and drain operations, Roaring River Distribution System food production, and reoperation of SMSCG.
Sacramento Deepwater Ship Channel Food Study	No proposed action.	Continue the food web related pilot study in the Sacramento Deep Water Ship Channel, which involves the addition of nitrogen into the ship channel at levels that naturally occur in the summer season.
Water Transfers	Water transfers would occur during an expanded water transfer window, between July through November, with volumes up to 600 TAF.	Same as the Proposed Project
Delta Cross Channel Improvements	No proposed action.	Improve operations of the Delta Cross Channel by modernizing the gate materials/mechanics together with more comprehensive control systems to allow more frequent operation (e.g., tidally), in association with increased monitoring.
Tracy Fish Facility Improvements	No proposed action.	Improve salvage operations at the Tracy Fish Collection Facility by increasing predator removal activities, through (a) periodic large-scale application of carbon dioxide (CO ₂) for the primary channel, (b) authorizing angling in the primary channel by Reclamation workers, and (c) installing a CO ₂ injection device to allow remote anesthetization of predators within the salvage facility.
Skinner Fish Facility Improvements	No proposed action.	Continue implementation of projects to reduce mortality of ESA-listed fish species, including electroshocking and relocating predators, controlling aquatic weeds, developing a fishing incentives or reward program for catching predators, and operational changes when listed species are present.
Small Screen Program	No proposed action.	Implement the Reclamation Small Screen Program to provide fish screens on small water diversions (less than 150 cfs) to reduce the take of listed fish species.
Clifton Court Forebay	Continue implementing actions to reduce mortality of listed fish species at the Clifton Court Forebay; these measures would include: (a) continued evaluation of predator relocation methods; and (b) controlling aquatic weeds. Predator hotspot removal not proposed.	Same as the Proposed Project Also includes predator hotspot removal by filling the scour hole in the San Joaquin River just downstream of its junction with the Head of Old River and consideration of reconfiguring the San Joaquin River–Old River junction area to increase passage down the San Joaquin River.
Tracy Fish Facility Operations	No proposed action.	Improve salvage operations at the Tracy Fish Collection Facility through partnership with DWR to reduce predation of salvaged fish during release by varying the release locations used and considering mobile release from barges.

Facility or Action	Proposed Project* Actions	Federal Actions
Skinner Fish Facility	Continue implementing studies to better understand and continuously improve the performance of the Skinner Fish Facility including: (a) changes to release site scheduling and rotation of release site locations to reduce post-salvage predation, and (b) continued refinement and improvement of the fish sampling and hauling procedures and infrastructure to improve the accuracy and reliability of data and fish survival.	Same as the Proposed Project
Tidal and Margin Channel Restoration	No proposed action.	Restoration of 8,000 acres of tidal marsh, including any actions needed to complete the restoration in areas identified as part of the 2008 USFWS BO requirements, California EcoRestore goals, and restoration pursuant to California WaterFix Proposed Action, as well as selecting new areas for restoration.
Longfin Smelt Science Program	DWR proposes to continue implementing studies to better understand LFS population distribution and abundance in San Francisco Bay and the Delta.	Same as the Proposed Project
Studies to support Establishment of a Delta Fish Hatchery	Conduct further studies to locate, design, construct, and operate a hatchery facility that would be capable of producing a substantial number of Delta Smelt and other Delta fish species for reintroduction to the Delta and recovery of the species populations.	No proposed action.
Delta Fish Species Conservation Fish Hatchery	No proposed action.	Construct and operate a conservation hatchery for Delta Smelt that would breed and propagate a stock of fish with equivalent genetic resources of the native stock and at sufficient quantities to effectively augment the existing wild population, so that they can be returned to the wild to reproduce naturally in their native habitat.
Reintroduction efforts from the U.C. Davis Fish Conservation and Culture Laboratory	No proposed action.	Increase use of the U.C. Davis Fish Culture Center and a Delta Fish Species Conservation Hatchery for the introduction of cultured fish into the wild.
Conduct Further Studies to Prepare for Delta Smelt Reintroduction from Stock Raised at the University of California, Davis Fish Conservation and Cultural Laboratory	Continue to support facilities and research to establish a Delta Smelt conservation population that is as genetically close as possible to the wild population and to provide a safeguard against extinction.	No proposed action.
Additional elements related to real-time operation of the SWP	DWR proposes a governance structure for real-time operation of the SWP that includes compliance and performance reporting, monitoring, convening independent panels, drought and dry year actions, and Four-Year Reviews.	Same as the Proposed Project

Facility or Action	Proposed Project* Actions	Federal Actions
Adaptive Management Plan	The Adaptive Management Plan (AMP) will be carried out to evaluate the efficacy of the operations and activities stated below. An Adaptive Management Team (AMT) will be established to carry out this AMP. The AMT will oversee efforts to monitor and evaluate the operations and related activities. In addition, the AMT will use structured decision-making to assess the relative costs and benefits of those operations and activities. The AMT will also identify proposed adaptive management changes to those operations and activities. The AMP will be developed before issuance of, and could be incorporated into, the ITP DWR is seeking for CESA coverage for the Proposed Project.	No proposed action.

Source: U.S. Bureau of Reclamation 2019

*Note: The Proposed Project actions presented in Table 1-13-1 include actions included in Refined Alternative 2b.

AMP = Adaptive Management Plan

AMT = Adaptive Management Team

D-1641 = State Water Resources Control Board's Water Rights Decision 1641

DWR = California Department of Water Resources

FCCL = Fish Conservation and Cultural Laboratory

km = kilometers

LFS = Longfin Smelt

OMR = Old and Middle River

ppt = parts per thousand

SWP = State Water Project

TAF = thousand acre-feet

USACE = U.S. Army Corps of Engineers

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II.1.14 MASTER RESPONSE 14: PUBLIC TRUST

II.1.14.1 GENERAL OVERVIEW OF PUBLIC TRUST LAW

The guiding principle of California’s water law and policy is contained in Article X, Section 2 of the California Constitution. This section requires that all uses of the state’s water, including public trust uses, be both reasonable and beneficial.¹ This constitutional provision places a significant limitation on water rights by prohibiting the waste, unreasonable use, unreasonable method of use, and unreasonable method of diversion of water.² In administering resources subject to the public trust, state agencies must act “with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare.”³

National Audubon Society v. Superior Court (1983) 33 Cal.3d 419 is the seminal case articulating the common law public trust doctrine in California. There, the Supreme Court held that the state, as represented by the State Water Resources Control Board (State Water Board), holds the waters of the state in trust for the benefit of all Californians, and therefore “[t]he state has an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible.”⁴ Public trust resources include “environmental and recreational values.”⁵ But the doctrine does not require state agencies with public trust obligations to give greater weight to public trust values than other competing uses of such resources. The Supreme Court determined that to protect the “prosperity and habitability of much of” California, the State Water Board has the discretion to “grant nonvested usufructuary rights to appropriate water even if diversions harm public trust uses.”⁶ Accordingly, in the *State Water Resource Control Board Cases* (2006) 136 Cal.App.4th 674, 778, the court held that the State Water Board was required to balance competing interests to determine what level of protection for public trust resources was “feasible.” Similarly, in *Carstens v. California Coastal Comm.* (1986) 182 Cal.App.3d 277, 293 (*Carstens*), the court held that the Coastal Commission properly took the public trust into account consistent with the public trust doctrine and Coastal Act requirements when it issued permits for a nuclear power plant that blocked public access to a beach, given competing interests. In *Center for Biological Diversity v. Cal. Dept. of Forestry and Fire Protection* (2014) 232 Cal.App.4th 931, 953, the court held that the public trust doctrine did not require the state to oppose a permit for timber harvest. And in *Colberg, Inc. v. State of California ex rel. Dept. Pub. Wks.* (1967) 67 Cal.2d 408, 418-420, the court held that the state can choose to advance one public trust interest over another. Indeed, evaluating a project’s environmental impacts under CEQA has been held to be “sufficient ‘consideration’ for public trust purposes.”⁷

¹ *National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 446 (*National Audubon*).

² CA Water Plan Update 2009, page 1.

³ California Constitution, Article X, § 2.

⁴ *National Audubon, supra*, 33 Cal.3d at p. 446.

⁵ *Id.* at p. 425.

⁶ *Id.* at p. 426.

⁷ *Citizens for East Shore Parks v. Cal. State Lands Comm.* (2011) 202 Cal.App.4th 549, 576-577 (*East Shore Parks*).

In summary, what constitutes feasible protection for public trust resources is a determination made by the responsible state agency after balancing public trust and competing interests and considering its statutory authority and responsibilities. To the extent that the California Department of Water Resources (DWR) has a duty to take public trust values into account before it approves a project, it has done so through the process of designing and studying the impacts of the Proposed Project, as documented by this EIR. The California Department of Fish and Wildlife (CDFW) also has “a public trust duty, derived from statute, specifically Fish and Game Code § 711.7, pertaining to fish and wildlife: ‘The fish and wildlife resources are held in trust for the people of the state by and through the department.’”⁸ The California Department of Fish & Wildlife (CDFW), as the responsible CEQA state agency is expected to rely on this EIR in considering DWR’s ITP application, and will consider its statutory public trust duty in making that decision.

II.1.14.2 PROPOSED PROJECT CONSIDERATION OF PUBLIC TRUST

As part of the Proposed Project, DWR seeks to provide flexibility to improve natural flow patterns through the Delta, which will benefit sensitive fish species that use the Delta for all or part of their life cycles, while also continuing operation of the SWP in accordance with DWR’s contractual and regulatory obligations. The EIR fully analyzes the potential environmental impacts of the Proposed Project and alternatives designed to ensure continued long-term operation while providing flexibility to protect the health of the Delta for the benefit of fish and wildlife. After DWR has balanced the benefits of the Proposed Project against potential adverse environmental impacts, it found the project to be in the public’s interest consistent with the public trust doctrine. DWR intends to make findings on public trust when determining whether to approve the Project.

A hallmark of the public trust doctrine is that water-related projects must provide benefits to the public and not sacrifice public benefit for private or purely local advantage.⁹ As proposed, the project meets the constitutional requirement that water resources be put to beneficial use to the fullest extent of which they are capable.

In addition to the constitutional obligations in administering resources subject to the public trust, the California Supreme Court in the *National Audubon* decision recognized two distinct public trust doctrines: the common law doctrine; and a public trust duty derived from statute.¹⁰ Actions by state agencies involving the planning and allocation of water resources implicate the common law “public trust doctrine.”¹¹ The doctrine “is an affirmation of the duty of the state to protect the people’s common heritage of streams, lakes, marshlands and tidelands, surrendering that right of protection only in rare cases when the abandonment of that right is consistent with the purposes of the trust.”¹² The “traditional triad” of public trust values is navigation, commerce, and fishing on navigable

⁸ *Environmental Protection Information Center v. California Dept. of Forestry & Fire Protection* (2008) 44 Cal.4th 459, 515 (*EPIC v. CalFire II*).

⁹ The Public Trust Doctrine, State Lands Commission, page 9.

¹⁰ *EPIC v. CalFire II*, *supra*, 44 Cal.4th at p. 515.

¹¹ *National Audubon*, *supra*, 33 Cal.3d at p. 446.

¹² *Id.* at p. 441.

waters.¹³ The doctrine could extend to actions on non-navigable tributaries of navigable waters that adversely affect those navigable waters.¹⁴ The protection of recreational and ecological values “is among the purposes of the public trust.”¹⁵

The *National Audubon* court, as well as subsequent courts’ decisions related to public trust, cited early common law to support the state’s responsibilities:

The public trust doctrine, which is traceable to Roman law, rests on several related concepts. First, that the public rights of commerce, navigation, fishery, and recreation are so intrinsically important and vital to free citizens that their unfettered availability to all is essential in a democratic society. “An allied principle holds that certain interests are so particularly the gifts of nature’s bounty that they ought to be reserved for the whole of the populace... Finally, there is often recognition, albeit one that has been irregularly perceived in legal doctrine, that certain uses have a peculiarly public nature that makes their adaptation to private use inappropriate. The best known example is found in the rule of water law that one does not own a property right in water in the same way he owns his watch or his shoes, but that he owns only an usufruct—an interest that incorporates the needs of others. It is thus thought to be incumbent upon government to regulate water uses for the general benefit of the community and to take account thereby of the public nature and the interdependency which the physical quality of the resource implies.”¹⁶

Importantly, the public trust doctrine does not operate as an absolute protection of the resources that come under its ambit. Under the doctrine, the state has an “affirmative duty to protect public trust uses *whenever feasible*.”¹⁷

[B]oth the public trust doctrine and the water rights system embody important precepts which make the law more responsive to the diverse needs and interests involved in the planning and allocation of water resources. To embrace one system of thought and reject the other would lead to an unbalanced structure, one which would either decry as a breach of trust appropriations essential to the economic development of this state, or deny any duty to protect or even consider the values promoted by the public trust.¹⁸

Thus, “[a]s a matter of practical necessity, the state may have to approve appropriations despite foreseeable harm to public trust uses. In so doing, however, the state must bear in mind its duty as

¹³ *Id.* at p. 434.

¹⁴ *Id.* at p. 437.

¹⁵ *Id.* at p. 435.

¹⁶ *Zack’s Inc. v. City of Sausalito* (2008) 165 Cal.App.4th 1163, 1175–1176 (*Zack’s*), quoting *Sax, The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 Mich. L.Rev. 471, 484–485, citations, paragraph breaks, and footnotes omitted.

¹⁷ *National Audubon*, *supra*, 33 Cal.3d at p. 446, italics added.

¹⁸ *Id.* at p. 445.

trustee to consider the effect of the taking on the public trust,” and “to preserve, so far as consistent with the *public interest*, the uses protected by the trust.”¹⁹

Although the legal principles are well established, “[t]here is no set ‘procedural matrix’ for determining state compliance with the public trust doctrine.”²⁰ In general, however, “evaluating project impacts within a regulatory scheme like CEQA is sufficient ‘consideration’ for public trust purposes.”²¹ Notably, CEQA requires the imposition of all feasible means of reducing the severity of significant environmental effects, including those on water-related resources, including fish, and on wildlife species and their habitats.²² Where governmental action authorizes the private use of public trust resources, however, CEQA compliance alone may not be enough; specific findings separately addressing public trust considerations may be necessary.²³

Regarding the statutory public trust doctrine, two examples of statutes that impose a public trust duty are Fish and Game Code §711.7 and §1801. Subdivision (a) of §711.7 provides that “fish and wildlife resources are held in trust for the people of the state by and through the [D]epartment [of Fish and Wildlife].” Fish and Game Code §1801 declares that it is “the policy of the state to encourage the preservation, conservation, and maintenance of wildlife resources under the jurisdiction and influence of the state,” and sets forth several objectives consistent with that policy. Among them are “[t]o provide for economic contributions to the citizens of the state, through the recognition that wildlife is a renewable resource of the land by which economic return can accrue to the citizens of the state, individually and collectively, through regulated management.” Notably, though, the general policy set forth in §1801 “is not intended [to] ... provide any power to regulate natural resources or commercial or other activities connected therewith, except as specifically provided by the Legislature.” To find such authority, courts “will look to the statutes protecting wildlife to determine if DF[W] or another government agency has breached its duties in this regard.”²⁴ One such statute is Fish and Game Code §2081, which authorizes the issuance of incidental take permits for endangered and threatened species.

Here, the proposed changes in the long-term operation of the SWP, as part of the Proposed Project and alternatives, involve proposals by DWR to operate the State Water Project consistent with ongoing operations with changes to consider species protections and water supply. Thus, this EIR provides sufficient analyses for DWR, as lead agency, to meaningfully consider impacts on public trust resources and to make an informed decision on the Project. Further, CDFW, as a responsible agency, will use the information in this EIR to consider the aspects of the Proposed Project for which it is responsible and

¹⁹ *Ibid.*, italics added.

²⁰ *San Francisco Baykeeper, Inc. v. State Lands Commission* (2015) 242 Cal.App.4th 202, 234 (*SF Baykeeper*), quoting *East Shore Parks, supra*, 202 Cal.App.4th at p. 576.

²¹ *East Shore Parks, supra*, 202 Cal.App.4th at pp. 576-577, citing *National Audubon, supra*, 33 Cal.3d at p. 446, fn. 27, and *Carstens, supra*, 182 Cal.App.3d at pp. 289-291.

²² Pub. Resources Code, § 21002; CEQA Guidelines, §§ 15002, subd. (a)(3), 15021, subd. (a)(2).

²³ *SF Baykeeper, supra*, 242 Cal.App.4th at pp. 241-242 [leases authorizing a private lessee to mine sand from the San Francisco Bay].

²⁴ *EPIC v. CalFire II, supra*, 44 Cal.4th at p. 515.

weigh the impacts of those aspects to satisfy its obligations under both the common law public trust doctrine and the statutory public trust doctrine.

Compliance with CEQA, with its mandate to mitigate significant environmental effects to the extent feasible,²⁵ tends to ensure compliance with the public trust doctrine, at least with respect to public projects involving public use of public trust resources.²⁶ This is because the public trust doctrine gives the state an “affirmative duty” to project public trust uses “whenever feasible.”²⁷

The Proposed Project, as detailed in this EIR, includes environmental protective measures that would offset, reduce, or otherwise mitigate potential impacts on special-status species and an adaptive management plan (AMP) intended to balance long-term operation in compliance with applicable laws, contractual obligations, and agreements with ensuring that long-term operation is consistent with CESA. DWR, as the lead agency, has gone to considerable lengths to address potential environmental effects, and particularly those effects on public trust resources in the development of the Proposed Project and in the drafting of the EIR.

As described in this EIR, the project will not have any significant environmental effects under CEQA, and incorporates environmental protective measures intended to minimize impacts to special-status species. Moreover, the EIR includes alternatives intended to cover the range of actions that may be considered as part of the CESA ITP process.

II.1.14.3 PUBLIC TRUST OBLIGATIONS

As discussed above, state agencies, such as DWR, have an “affirmative duty” to protect public trust uses whenever feasible. The obligation extends to protection of the “traditional triad” of public trust uses (navigation, commerce, and fishing), plus the protection of recreational and ecological values.

DWR analyzed impacts on these public trust uses in the Initial Study (see DEIR Appendix A) and in the environmental impact chapters of this EIR. As stated in the DEIR, the Initial Study concluded that the project would not have any potentially significant environmental effects with respect to:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources (Terrestrial)
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Utilities and Service Systems

Because implementation of the Proposed Project would alter existing hydrology, such changes could result in impacts on resources dependent upon existing hydrologic conditions. For this reason, this EIR

²⁵ Pub. Resources Code, § 21002; CEQA Guidelines, §§ 15002, subd. (a)(3), 15021, subd. (a)(2).

²⁶ *East Shore Parks, supra*, 202 Cal.App.4th at pp. 576-577, citing *National Audubon, supra*, 33 Cal.3d at p. 446, fn. 27, and *Carstens, supra*, 182 Cal.App.3d at pp. 289-291

²⁷ *National Audubon, supra*, 33 Cal.3d at p. 446.

addresses potential impacts to Hydrology, Surface Water Quality, and Aquatic Resources. The EIR also analyzes potential impacts to Tribal Cultural Resources. As stated above, the EIR concludes that the project would not have any significant environmental impacts on these resource categories. Thus, the project would not have significant impacts on navigation, commerce, fishing, or recreational and ecological values.

II.1.15 MASTER RESPONSE 15: ENVIRONMENTAL JUSTICE

California law defines “environmental justice” as “the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.”¹ The California Environmental Protection Agency (CalEPA) promotes enforcement of all health and environmental statutes within its jurisdiction in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations in the state.² Hence, those laws, regulations, and policies that are applicable to the Proposed Project (and are identified in the resource chapters in the DEIR) that may affect minority and low-income communities would be enforced through CalEPA’s boards, departments, and offices, including, but not limited to, the State Water Resources Control Board. As necessary, these offices would communicate to all affected communities in carrying out their respective obligations during project construction.

There is no requirement as a part of compliance with CEQA to analyze the extent that an environmental impact might disproportionately impact low-income or minority populations. The project, however, will not have any significant environmental impacts under CEQA (see DEIR Appendix A, Section 1.3, “Summary of Findings,” and DEIR Chapter 1.5, “Summary of Findings.”) Based on the findings of no impacts for all the project area communities, Environmental Justice communities were not specifically reviewed. Further, DWR, throughout the CEQA process, has worked to provide the public with information on the project and its potential environmental effects in compliance with the law. For information regarding public participation please see Master Response 19, “Public Review Period”.

¹ Gov. Code, § 65040.12.

² Pub. Resources Code, § 71110, subd. (b).

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II.1.16 MASTER RESPONSE 16: RELATIONSHIP TO 2019 BIOLOGICAL OPINIONS

As stated in the DEIR, on August 2, 2016, Reclamation and DWR jointly requested the Reinitiation of Consultation on the Coordinated Long-term Operation of the CVP and SWP. The USFWS accepted the reinitiation request on August 3, 2016, and NMFS accepted the reinitiation request on August 17, 2016. On January 31, 2019, Reclamation completed a biological assessment to support consultation under the federal Endangered Species Act (ESA) Section 7, which documents potential impacts on federally listed endangered and threatened species that have the potential to occur in the study area and on critical habitat for these species. The biological assessment also fulfills consultation requirements for the Magnuson-Stevens Fishery Conservation and Management Act of 1976 for Essential Fish Habitat (EFH). USFWS, NMFS, Reclamation, DWR, and other parties continued to coordinate on the consultation after submission of the biological analysis.

USFWS and NMFS each issued new Biological Opinions on October 21, 2019, which include incidental take statements (ITS) for the following federally-listed species: Delta Smelt, Winter-run Chinook Salmon, Spring-run Chinook Salmon, Green Sturgeon, and steelhead. After the Biological Opinions take effect, DWR will be subject to the ITS in accordance with federal law in addition to state requirements. As a result of the difference in species listed under the California Endangered Species Act (CESA) and federal ESA and the coordinated operation of the SWP and CVP, California's proposed project includes operations for the protection of federally listed steelhead and Green Sturgeon. These operations and the federal ITS result in reductions in SWP pumping in addition to the reductions that would be necessary to comply with state law.

DWR filed an application for a California Endangered Species Act (CESA) Incidental Take Permit (ITP) on December 13, 2019 pursuant to Section 2081 of the California Fish and Game Code. The new ITP will cover aquatic species listed under CESA that are subject to incidental take from long-term operation of the SWP (Delta Smelt, Longfin Smelt, Winter-run Chinook Salmon, and Spring-run Chinook Salmon).

CESA ITPs are independent from federal Biological Opinions, whereas Consistency Determinations (CDs) under section 2080.1 of the Fish and Game Code are based on incidental take authorizations issued under the federal ESA. DWR obtained and operated to CDs following issuance of the prior Biological Opinions, issued by the USFWS in 2008 and NMFS in 2009.¹ A new ITP from CDFW will enable SWP operations to avoid relying on the federal Biological Opinions at all to achieve environmental approval to operate consistent with state law (CESA). DWR chose to pursue its own environmental review and permit process to ensure protection of endangered species under state law. The new ITP will replace DWR's existing CESA authorizations to operate the SWP.

¹ DWR also obtained a separate ITP covering Longfin smelt, which is listed under CESA but not the federal ESA, in 2009. The Longfin Smelt ITP is set to expire on March 31, 2020 or upon the issuance of a comprehensive ITP covering long-term SWP operations, whichever occurs first.

II.1.16.1 DIFFERENCES IN THE ACTIONS IN THE 2019 BA/BIOLOGICAL OPINIONS AND IN THE 2019 ITP APPLICATION

Although the federal Biological Opinions include SWP operations, there are major differences in the actions proposed under the federal Biological Opinions and DWR's application for ITP from CDFW. Longfin Smelt are listed under CESA but not under the ESA, so the ITP includes proposed actions to minimize and fully mitigate impacts to that species, while the Biological Opinions do not. Additionally, the 2019 ITP application proposes additional changes to SWP operations intended to minimize and fully mitigate impacts to all the aquatic species listed under CESA that are subject to incidental take from long-term operation of the SWP (Delta Smelt, Longfin Smelt, Winter-run Chinook Salmon, and Spring-run Chinook Salmon). DWR's proposal differs from the federal Biological Opinions in several key ways:

- It improves species protection by vesting authority in CDFW to stop operational changes if CDFW determines they will violate CESA standards.
- It includes multiple alternatives that would provide for dedicated outflow to offset pumping impacts in the Delta.
- It provides clear direction on when Delta pumping can be increased during storm events and caps the amount that exports can be increased in those events.
- It includes updated modeling and quantitative analyses to support habitat actions in summer and fall to benefit Delta smelt.
- It includes specific protections for Longfin Smelt, a protected species under CESA, and a commitment to implementing a longfin smelt science plan.
- It includes an Adaptive Management Plan to evaluate the efficacy of the proposed SWP operations. Any proposed adaptive management changes should provide equivalent or superior conservation benefits to the listed species at equal or lesser societal costs.

For a more detailed discussion of Project elements, including elements intended as environmental protection measures, see DEIR Chapter 3, *Project Description*, Section 3.3, *Description of the Proposed Project*, and Table 3-3. *Proposed Project Elements*.

II.1.16.2 THE FEDERAL LITIGATION OVER THE 2019 BA/BIOLOGICAL OPINIONS

On February 20, 2020, the State filed litigation challenging the 2019 Biological Opinions. The litigation, however, does not affect DWR's operation of the SWP in compliance with both state and federal permits, or its obligation to minimize and fully mitigate the impacts of take of species listed under CESA that are subject to incidental take from the long-term operation of the SWP.

II.1.17 MASTER RESPONSE 17: APPLICATION OF CESA STANDARDS

A number of comments questioned how the Proposed Project meets the CESA standards. As the lead agency, DWR considers the adequacy of the EIR for CEQA purposes. CDFW is the decision-making agency authority for incidental take permit (ITP) applications and associated determinations under CESA, a separate statute. Although DWR does not make CESA determinations, this master response discusses the legal requirements under CESA and how CDFW might rely on the EIR when making its findings. DWR also submitted an ITP application to CDFW on December 13, 2019 including further detailed information regarding the request for incidental take coverage under California Fish and Game Code Section 2081.

For a comparison between various CESA standards and the parallel CEQA standards, see Master Response 4, “Legal Standards.” For a detailed discussion of the requirements of CESA, see DEIR Chapter 4.4.3.1, “California Endangered Species Act.”

II.1.17.1 OVERVIEW OF RELEVANT CESA STANDARDS

Fish and Game Code Section 2081, subdivision (b), allows CDFW to issue ITPs to allow the “take”¹ of endangered, threatened, or candidate species, where specific conditions are met:

- The take is incidental to otherwise lawful activity;
- The impacts of the take are minimized and fully mitigated;
- The measures required to meet the obligation to minimize and fully mitigate are roughly proportional in extent to the impact of the authorized taking on the species; and
- The applicant ensures adequate funding to implement and monitor compliance with and the effectiveness of measures adopted to minimize and fully mitigate the take.

Additionally, subdivision (c) requires CDFW to determine, “based on the best scientific and other information that is reasonably available,” whether issuing the ITP “would jeopardize the continued existence of the species.”

CDFW also has regulations for implementing the ITP process,² which include “[i]ssuance criteria” requiring CDFW to find:

(1) The take authorized by the permit will be incidental to an otherwise lawful activity.

(2) The applicant will minimize and fully mitigate the impacts of the take authorized under the permit. The measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking on the species. Where various measures are available to meet this obligation, the measures required shall maintain the applicant’s objectives to the greatest extent possible. All required measures shall be capable of successful implementation.

¹ Fish and Game Code § 86 defines “take” to mean “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”

² See Fish & G. Code, § 2081, subd. (d).

For purposes of this section only, impacts of taking include all impacts on the species that result from any act that would cause the proposed taking.

(3) The permit will be consistent with any regulations adopted pursuant to Fish and Game Code Section 2112 and Section 2114.

(4) The applicant has ensured adequate funding to implement the measures required under the permit to minimize and fully mitigate the impacts of the taking, and to monitor compliance with, and the effectiveness of, the measures.³

California Code of Regulations, Title 14, Section 783.4, subdivision (b) includes a “jeopardy” determination requirement similar to that of Fish and Game Code Section 2081, subdivision (c). Lastly, California Code of Regulations, Title 14, Section 783.4, subdivision (c), allows CDFW to place terms and conditions on ITPs to ensure that the standards are met, and defines the term “capable of successfully implementation” as “legally, technologically, economically and biologically practicable.”

II.1.17.2 APPLICATION OF CESA STANDARDS TO THE PROJECT

DWR is requesting an ITP for its long-term operation of the SWP. Section 3.3 of the ITP application, “Description of the Proposed Project,” identifies the activities involved in the long-term SWP operation for which DWR is seeking incidental take coverage under CESA. As part of its current application, DWR is *not* requesting an ITP from CDFW for the following actions:

- Flood control
- Oroville Dam and Feather River operations
- Prior execution of existing SWP contracts
- Coordinated Operation Agreement
- Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project
- Suisun Marsh Habitat Management Preservation and Restoration
- Suisun Marsh Preservation Agreement
- CVP facilities, operations, and agreements

These facilities and operations activities are already covered under existing permits or addressed by other legal authorities.

Incidental to otherwise lawful activity

As stated in DEIR Chapter 3.3, “Description of the Proposed Project,” DWR proposes changes to the long-term operation of the SWP that are intended to continue operation of the SWP and deliver up to the full contracted water amounts while minimizing and fully mitigating the take of listed species consistent with CESA requirements. The project would operate in compliance with all applicable state and federal regulations and therefore represents an “otherwise lawful activity” for the purposes of Fish and Game Code Section 2081. Moreover, the take of the listed species is “incidental” to the long-term

³ Cal. Code Regs., tit. 14, § 783.4, subd. (a).

operation of the SWP, as the objective of the project is to continue the long-term operation of the SWP consistent with applicable laws, contractual obligations, and agreements.

Minimize and fully mitigate the impacts of the authorized take

Fish and Game Code Section 2081, subdivision (b)(2), requires that the impacts of the incidental take be minimized and fully mitigated, and that mitigation measures be capable of successful implementation but “roughly proportional” to the impact of the take on the species.⁴ The California Supreme Court has interpreted this language to require that an applicant “bear no more—but also no less—than the costs incurred from the impact of its activity on listed species.”⁵ Operation of the SWP results in the incidental take of special-status species, including Delta Smelt, Longfin Smelt, Winter-run Chinook Salmon, and Spring-run Chinook Salmon. Accordingly, DWR currently operates the SWP in compliance with state and federal permits authorizing the take of those species, which impose measures to minimize and fully mitigate the impacts of the SWP on the special-status species.

The EIR fully analyzes the direct and indirect impacts of the proposed long-term operational conditions of the SWP (including the environmental protective measures) on special-status species, compared to Existing Conditions, and determined that no mitigation under CEQA is required because the project would not have any significant environmental impacts. In deciding whether to issue an ITP, CDFW must determine whether the project meets the CESA standards, which differ from CEQA’s impact analysis and mitigation standards.⁶ In making its decision, CDFW is expected to rely on the information in DWR’s ITP application, as well as this EIR.⁷ DWR’s ITP application includes “[p]roposed measures to minimize and fully mitigate the proposed taking,” and “[a] proposed plan to monitor compliance with the minimization and mitigation measures and the effectiveness of the measures.”⁸ This EIR, as well as the ITP application, provides information that will aid CDFW in determining whether the proposed operational changes, including the environmental protective measures and other measures intended to fully mitigate incidental take, are “legally, technologically, economically and biologically practicable.” DWR submitted this information to show that it will minimize and fully mitigate the impacts of the proposed incidental take, but the decision whether to issue an ITP, and under what terms, lies with CDFW.

⁴ In full, subdivision (b)(2) reads: “The impacts of the authorized take shall be minimized and fully mitigated. The measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking on the species. Where various measures are available to meet this obligation, the measures required shall maintain the applicant’s objectives to the greatest extent possible. All required measures shall be capable of successful implementation. For purposes of this section only, impacts of taking include all impacts on the species that result from any act that would cause the proposed taking.” (See also Cal. Code Regs., tit. 14, § 783.4, subd. (a)(2).)

⁵ *Environmental Protection Information Center v. California Dept. of Forestry & Fire Protection* (2008) 44 Cal.4th 459, 511 (*EPIC v. CalFire II*).

⁶ For detailed information regarding the different legal standards between CEQA and CESA, please refer to Master Response 4. “Legal Standards.”

⁷ See Cal. Code Regs., tit. 14, §§ 783.2, 783.5(c).

⁸ Cal. Code Regs., tit. 14, § 783.2, subd. (a).

Rough Proportionality

Under CESA, a project applicant is only responsible for mitigating the impacts that would be caused by the activities proposed by the applicant, as opposed to impacts caused by others. Under Fish and Game Code Section 2081, Subdivision (b)(2), CDFW, in imposing terms in a permit to minimize and fully mitigate the impacts of an anticipated incidental take, must take care that “[t]he measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking on the species.”

Similar limitations are found in CEQA as well. Under CEQA Guidelines Section 15126.4, which is grounded in the U.S. Constitution, requires that there “must be an essential nexus (i.e., connection) between [a] mitigation measure and a legitimate governmental interest” and that mitigation measures “must be ‘roughly proportional’ to the impacts of the project.”⁹

As explained in the DEIR, DWR operates the SWP in coordination with the CVP, under the Coordinated Operation Agreement (COA) between the federal government and the State of California. The project analyzed in this EIR is DWR’s long-term operation of the SWP only. DWR does not control CVP operations. Thus, DWR has identified the potential impacts attributable to the SWP, including the SWP’s proportional share of impacts from coordinated CVP and SWP operations, summarized below. DEIR Chapter 4.4.7.3 subheading, “Identification of SWP Impacts,” and Section 4.2 of the ITP application, “Operations Effects,” both discuss the means of identifying these impacts in detail. Please note that DWR identified Refined Alternative 2b as the preferred alternative and the description of the SWP’s proportional share of joint operations for Refined Alternative 2b is described in Attachment 1-5 of Appendix H, “CalSim II and DSM2 Model Descriptions and Assumptions.”

When possible, quantitative and qualitative analyses account for only the SWP portion of impacts by considering factors such as entrainment at SWP-only facilities (e.g., entrainment into the Clifton Court Forebay). In some cases, however, such as effects based on Delta outflow, the analyses reflect the combined effects of both SWP and CVP operations. In order to analyze effects that would be caused by the Proposed Project and alternatives, the analysis then determines the proportional share of effects that would be attributable to the SWP.

For example, some of the modeling reflects operations of both the SWP and CVP. Modeling was performed using several models, including a reservoir-river basin planning model (CalSim II) developed by DWR and the Federal Bureau of Reclamation (Reclamation) to simulate the operations of the CVP and SWP over a range of different hydrologic conditions. Modeling is used to perform planning analyses of long-term changes in the CVP and SWP system due to proposed changes. CalSim II includes a generalized and simplified version of a complex water resources system, yet CalSim II offers the best tool available to compare SWP and CVP operational alternatives over a range of hydrologic conditions.

Because the modeling reflects conditions in the entire reservoir-river basin system, many of the impact analyses would overestimate SWP’s share of impacts if model results were examined without considering that the modeled impacts were the result of coordinated CVP and SWP operations. To

⁹ CEQA Guidelines, §15126.4, subd. (a)(4).

address this issue, SWP impacts were isolated based on the premise that, under excess Delta conditions, the joint operations are typically governed by exports at the SWP and CVP pumping plants and, under balanced conditions, COA defines the SWP's and CVP's respective responsibilities. Based on this premise, the SWP's proportion of an impact for months with in-basin use (IBU) balanced conditions was the sharing ratio set forth in COA. For months with unstored water for export balanced and excess conditions, the SWP's proportion of an impact was the SWP's proportion of exports accounting for all exports at the Banks and Jones pumping plants.

DEIR Appendix H, "CalSim II and DSM2 Model Descriptions and Assumptions," provides the percentage of combined SWP and CVP Delta water operations for which the SWP is responsible by month and water year type under both the Proposed Project and Refined Alternative 2b. This information is also included in the ITP application, in Table 4-1, "State Water Project Responsibility for State Water Project and Central Valley Project Combined Delta Water Operations for the Proposed Project, Averaged by Water Year Type and Month."

Provide adequate funding for implementation, compliance and effectiveness monitoring

As with the other CESA standards found within Fish and Game Code Section 2081, CDFW is required to make an affirmative finding that DWR (the applicant) "has ensured adequate funding to implement the measures required under the permit to minimize and fully mitigate the impacts of the taking, and to monitor compliance with, and the effectiveness of, the measures."¹⁰ That finding will be upheld, so long as there is substantial evidence in the record before CDFW to support it.¹¹ As part of the ITP application, DWR has submitted to CDFW both "[a] proposed plan to monitor compliance with the minimization and mitigation measures and the effectiveness of the measures" and "[a] description of the funding source and the level of funding available for implementation of the minimization and mitigation measures."¹² CDFW will determine whether those submissions are adequate to support for the required finding.

Jeopardize the continued existence of the species

The Fish and Game Code and CDFW's implementing regulations require that CDFW's jeopardy determination be "based on the best scientific and other information that is reasonably available."¹³ The "best scientific and other information that is reasonably available" must include information on "the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (1) known population trends; (2) known threats to the species; and (3) reasonably foreseeable impacts on the species from other related projects and activities."¹⁴ DWR's ITP application includes an analysis of potential for jeopardy and addresses each of these categories of information as required.

¹⁰ Fish & G. Code, § 2081, subd. (b); Cal. Code Regs., tit. 14, § 783.4, subd. (a).

¹¹ *Environmental Council of Sacramento v. City of Sacramento* (2006) 142 Cal.App.4th 1018, 1044 (ECOS).

¹² Cal. Code Regs., tit. 14, § 783.2, subd. (a).

¹³ Fish & G. Code, § 2081, subd. (c); Cal. Code Regs., tit. 14, § 783.4, subd. (b).

¹⁴ *Ibid.*

Though this EIR analyzes the project for compliance with CEQA, the information in the EIR, including DEIR Chapter 4, “Environmental Setting and Impact Analysis,” also includes reasonably available scientific and other information that will aid CDFW in determining whether the ITP would “jeopardize the continued existence of the species.”

This EIR includes an analysis of the project’s potential impacts on special status species and includes up-to-date, available information on population trends, threats to special-status species (e.g., predation, entailment, etc.), and a cumulative impact analysis pursuant to CEQA, which provides information on reasonably foreseeable impacts from other related projects and activities.¹⁵ CDFW must decide whether the information in the ITP application, along with the information in this EIR, is sufficient to support the required affirmative finding.

¹⁵ See DEIR Chapter 4, “Environmental Setting and Impact Analysis,” Chapter 4.4.7, “Impacts of the Proposed Project,” and Chapter 4.6.1, “Cumulative Impacts.”

II.1.18 MASTER RESPONSE 18: ADEQUACY OF THE INITIAL STUDY

II.1.18.1 CEQA REQUIREMENTS FOR THE INITIAL STUDY

As provided in CEQA Guidelines §15063(c)(3), one of the primary purposes of preparing an Initial Study is to assist preparation of an EIR by focusing the EIR on the effects determined to be potentially significant, identifying resources that would be affected but determined not to be significant, and explaining the reasons for determining that potentially significant effects would not be significant. An Initial Study may also be used to provide the required statement that briefly indicates the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR.¹ “The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data.”² The discussion in an Initial Study is intended to be “brief” and need not be as detailed as discussions found in EIRs.³

The EIR need not further discuss any environmental effects dismissed in the Initial Study.⁴ When the project description establishes the absence of particular impacts without the need for technical information to support the Initial Study’s findings, no further explanation is required.⁵ The purpose of the Initial Study is to scope out certain impacts from further analysis in the EIR. Eliminating topics in an Initial Study facilitates public participation by focusing attention in the EIR on the impacts that could occur as a result of a proposed project. In any event, DWR’s Initial Study for the Proposed Project includes a robust analysis and discussion why impacts are not significant. The Initial Study was circulated with the DEIR as Appendix A and is therefore part of the DEIR.⁶

II.1.18.2 BASES FOR THE INITIAL STUDY’S EXCLUSION OF IMPACTS

As discussed in DEIR Appendix A, “Initial Study for the Long-Term Operation of the State Water Project,” Section 3, “Initial Study Checklist,” DWR concluded that the project would not have any potentially significant environmental effects with respect to:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources (Terrestrial)
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions

¹ CEQA Guidelines, § 15128.

² CEQA Guidelines, § 15064, subd. (b)(1).

³ See CEQA Guidelines, §§ 15063, subd. (d), 15128; *Lighthouse Field Beach Rescue v. City of Santa Cruz* (2005) 131 Cal.App.4th 1170, 1191-1194; *Gentry v. City of Murrieta* (1995) 36 Cal.App.4th 1359, 1378 (*Gentry*); *Leonoff v. Monterey County Bd. of Supervisors* (1990) 222 Cal.App.3d 1337, 1347 (*Leonoff*).1347.

⁴ CEQA Guidelines, § 15143; see *Leonoff, supra*, 222 Cal.App.3d at p. 1347.

⁵ *Siveira v. Las Gallinas Valley Sanitary Dist.* (1997) 54 Cal.App.4th 980, 989

⁶ Courts have upheld similar portions of EIRs (attached initial studies) against claims that the impacts at issue should have been addressed in more detail. The substantial evidence standard applies to the adequacy of such discussions. (See, e.g., *Mission Bay Alliance v. Office of Community Investment and Infrastructure* (2016) 6 Cal.App.5th 160, 172-179.

- Hazards and Hazardous Materials
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Service Systems
- Wildfire

The project only involves continuing ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. It does not include new development or the construction of new infrastructure. The proposed operational updates are designed to minimize adverse environmental effects, particularly with respect to listed species and water quality, while providing operational flexibility to meet the State’s water supply needs. For example, the Proposed Project would provide for pumping restrictions for the protection of listed species to be triggered in most water year types, which would be more often than under current project operations. The project also would allow operational flexibility where appropriate, but would incorporate specific bounds providing for regulatory oversight, such as CDFW’s ability to object to and stop operational adjustments related to entrainment when it determines that such operations would violate CESA. In addition, a State-organized adaptive management plan would evaluate the long-term SWP operations and identify a process to ensure continued operations are consistent with applicable legal requirements. The project is better tailored than the existing operational scenario to continue long-term SWP operations to provide environmental protection and meet water delivery needs. As documented in the Initial Study, the project would not result in significant impacts to the resource categories listed above. However, because implementation of the project would alter existing hydrology, such changes could result in impacts on resources that could be affected by changes in hydrologic conditions. For this reason, the DEIR addressed potential impacts to Hydrology, Surface Water Quality, and Aquatic Resources. Although the project would also have no impact on Tribal Cultural Resources, DWR elected to include Tribal Cultural Resources in the DEIR because the Tribal consultation process undertaken by DWR had not been completed at the time of the Initial Study’s preparation.

The Initial Study includes extensive analyses of the project’s potential to negatively affect all other resource categories and discloses the information and references upon which those analyses and conclusions are founded.⁷ Based on the information and analyses presented, the Initial Study prepared by DWR identifies and discusses those environmental resources that would not be affected by the project.

⁷ See DEIR Appendix A, “Initial Study of the Long-Term Operation of the State Water Project,” Section 3, “Initial Study Checklist,” and Section 4, “References.”

II.1.19 MASTER RESPONSE 19: PUBLIC REVIEW PERIOD

II.1.19.1 CEQA REQUIREMENTS FOR PUBLIC REVIEW PERIOD DURATION

As a general rule, CEQA requires a 45-day public review period for a DEIR that is submitted to the State Clearinghouse, although CEQA allows for a shorter review period with prior approval by the State Clearinghouse.¹ The 45-day review period for such EIRs is longer than the 30-day review period required for other EIRs.² Although agencies may provide longer review periods if they choose (subject to limits),³ the Legislature has determined that 45 days is sufficient to fulfill CEQA's goals for public participation and informed decision-making. CEQA does not require, or even encourage, an extension of the public review period to account for holidays. While failure to circulate a DEIR for the required period is an abuse of discretion,⁴ there is no legal requirement to grant a request for an extension.

II.1.19.2 PUBLIC REVIEW PERIOD FOR THE DEIR

The public review period provided for the DEIR satisfies CEQA's requirements. The DEIR was circulated for public review and comment for a period of 45 days, from November 21, 2019 to January 6, 2020. The DEIR and associated Notice of Completion were filed with the California Office of Planning and Research State Clearinghouse on November 21, 2019.

DWR provided public notice of availability of the DEIR as required by CEQA Guidelines §15087. Written notice was provided to the last known name and address of all individuals and organizations that previously have requested such notice, including the 19 parties who submitted comments in response to the NOP. A public notice of availability was placed in seven newspapers with regional circulation throughout the state, announcing the availability of the EIR and opportunity to submit comments. The public notice was also distributed to 48 County Clerk offices; and 19 State, federal, and local agencies. Additionally, a public meeting was held on December 12, 2019, to receive input from agencies and the public on the DEIR.

These procedures have provided appropriate notice and time for public review and comment. Although some commenters suggested that the time period should have been extended to account for holiday plans, the laws does not require such an extension. DWR received many comments, including several lengthy comments, covering a wide range of topics and viewpoints before the public review period closed, which demonstrates that the holidays did not interfere with public's ability to submit comments. Although DWR appreciates the public's interest in the Proposed Project, the EIR is not unusually long or complex such that an extended review period is necessary. Furthermore, even though the comment period was closed, DWR continued to accept late comments through January 31, 2020 for responses in the FEIR.

¹ CEQA Guidelines, §§ 15105, subd. (a), 15087, subd. (e).

² *Ibid.*

³ See CEQA Guidelines, § 15105, subd. (a) (EIR public review periods should never be longer than 60 days except in "unusual circumstances").

⁴ *Gilroy Citizens for Responsible Planning v. City of Gilroy* (2006) 140 Cal.App.4th 911, 922.

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II.1.20 MASTER RESPONSE 20: BEST AVAILABLE SCIENCE

DWR selected an approach to the modeling and analysis that utilizes data sets and methods that are scientifically supported and meet the requirements of the CEQA guidelines for evaluation of impacts.

The CEQA Guidelines require a lead agency to identify and analyze the possible impacts of a project on the environment and consider options to avoid or mitigate the significant effects of the project (CEQA Guidelines §15204). It is not uncommon for experts in a particular environmental subject matter to dispute the conclusions reached by the experts whose studies were used in drafting the EIR, where different conclusions can reasonably be drawn from a single pool of information. (CEQA Guidelines §15151; Guide to the California Environmental Quality Act [CEQA] [Remy et al. 2007:499–500]; *Greenebaum v. City of Los Angeles* [1984] 153 Cal. App. 3d 391, 413.) The EIR must be adequate, complete, and a good faith effort at full disclosure (CEQA Guidelines §15151). Unlike some other environmental laws, CEQA does not require lead agencies to use the best available science. Ultimately, courts look for substantial evidence to support the conclusions in an EIR. (Pub. Resources Code, §§ 21168, 21168.5.) Thus, in preparing an EIR in compliance with CEQA, a lead agency need not follow analytical protocols developed for laws other than CEQA, such as, for example, the federal Endangered Species Act, provided that substantial evidence supports the agency’s conclusions. (See, e.g., *Association of Irrigated Residents v. County of Madera* [2003] 107 Cal. App. 4th 1383, 1396-1398.) Here, DWR prepared an EIR for the Proposed Project that provides an adequate, complete, and good faith effort at full disclosure of the physical environmental impacts; and the conclusions are based upon substantial evidence in light of the whole record. The fact that reasonable people might disagree with some conclusions does not affect the legal adequacy of the document. (See CEQA Guidelines §15151.)

Development of the Proposed Project description and analysis of the potential environmental impacts utilized a wide range of relevant data, literature, and tools. DWR used the best available scientific information to produce analyses of the effects of the project, drawing on a number of scientific and engineering disciplines that include geology, hydrology, biology, ecology, chemistry, engineering, and climatology. The data, models, and literature are publicly available, and the methodologies used to apply these tools and information are described in the analyses in Chapters 1 through 5 and the various appendices. The data and information sources utilized to evaluate the Proposed Project are cited in the EIR and also listed in the bibliographies provided at the end of the EIR and each accompanying appendix. The data, models, literature, and analyses have been subjected to review either as part of the customary practices of scientific publication or as part of legal and regulatory processes. Through the public comment process, the impact analyses produced for the project were themselves subject to review and comment by the general public, experts in relevant scientific disciplines, and expert staff from regulatory agencies having jurisdiction over one or more aspects of the project or its permitting (e.g., NMFS, USFWS, CDFW, and the U.S. Army Corps of Engineers). The modeling conducted for the EIR is credible because it is based on reasonable assumptions and appropriate, widely accepted modeling tools.

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II.1.21 MASTER RESPONSE 21: CESA PERMIT VERSUS CONSISTENCY DETERMINATION

In 2009, CDFW issued consistency determinations (CDs) to DWR, pursuant to California Fish and Game Code Section 2080.1, based on the 2008 USFWS and 2009 NMFS Biological Opinions covering the incidental take of Delta Smelt, Winter-run Chinook Salmon, and Spring-run Chinook Salmon. Consistency determinations may be issued by CDFW if a project would impact a species that is listed by both the federal Endangered Species Act (ESA) and California Endangered Species Act (CESA) and certain requirements are met. Fish and Game Code Section 2080.1 allows a person who has obtained a federal incidental take statement pursuant to Section 7 of the ESA to seek a determination from the Director of CDFW that the incidental take statement is consistent with CESA. If the Director issues a CD, no further authorization or approval is necessary under CESA to take the species in accordance with the incidental take statement. DWR also secured an Incidental Take Permit (ITP) from CDFW in 2009 for the ongoing and long-term operations of the SWP in the Delta covering Longfin smelt, a species that is only listed under CESA.

DWR is seeking a new ITP from CDFW pursuant to Section 2081 of the Fish and Game Code. The new ITP will cover all aquatic species listed under CESA that are subject to incidental take from long-term operation of the SWP (Delta Smelt, Longfin Smelt, Winter-run Chinook Salmon, and Spring-run Chinook Salmon). DWR chose to pursue an ITP, instead of CDs, to provide CESA coverage for long-term SWP operations because an ITP provides greater flexibility for CDFW to consider potential permit amendments based on changes identified through the adaptive management process without relying on the need to make changes to the federal Biological Opinions. An ITP also provides CESA authorization for the SWP regardless of any potential changes in federal law.

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II.1.22 MASTER RESPONSE 22: COORDINATION WITH CVP

DEIR Appendix B, “2018 Coordinated Operation Agreement Addendum,” presents a detailed discussion of how the SWP coordinates and interacts with the operations of the CVP. As noted, the Coordinated Operations Agreement (COA) governs how the SWP and federal CVP share water under their water rights and operate to meet specific water quality and outflow requirements in the Delta. The COA is based on negotiated principles of equitable sharing, arising from the requirement that their operations be coordinated and, as a matter of practical necessity, for two large projects to be able to operate together in a complex tidal estuary.

The long-term operations of the SWP assumes the continued implementation of the COA. The COA calls for periodic review and adjustment as appropriate over time. As discussed in DEIR Appendix B, the implementation of the 2018 COA Addendum resulted in no substantial change to hydrology and water quality of the Delta or other affected waterways. The Proposed Project would not alter the terms or provisions of the COA. Please also see Master Response 1, “Scope of Analysis,” and Master Response 2, “Baseline,” for further information regarding how the COA was addressed in the EIR. DWR will continue to coordinate with Reclamation regarding SWP and CVP operations following project approval.

The project identifies operations that are applicable to the SWP, not to the CVP. Although the SWP and CVP will continue to have many consistent operational requirements pursuant to applicable legal requirements, the project identifies some operations that would be SWP-only obligations under the requested California Endangered Species Act (CESA) Incidental Take Permit (ITP), such as SWP-only Delta outflow requirements in Refined Alternative 2b (see FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP.”) DWR would take appropriate action so that these actions would not negatively impact CVP operations, such as seeking agreement with Reclamation regarding adjustments to water accounting mechanisms.

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II.1.23 MASTER RESPONSE 23: IMPACT SIGNIFICANCE (SALMONIDS)

The DEIR evaluated the effects of operations on CESA-listed and other special-status salmonids using various methods that are described in the species-specific subsections of DEIR Chapter 4.4.7.4, “Species-Specific Impacts,” and in DEIR Appendix E, “Biological Modeling Methods and Selected Results.” Although reduced Delta outflow and export-related impacts could occur under the Proposed Project during the spring months (primarily April and May), real-time decision making and the risk assessment-based approach to OMR management would minimize these potential impacts. Additionally, entrainment-related impacts would likely affect a very small percentage of the Sacramento River populations (e.g., <1% of Spring-run Chinook Salmon enter the South Delta based on coded wire tag studies analyzed by Zeug and Cavallo (2014)). Further, the reductions in outflow and increases in entrainment-related impacts include effects of both SWP and CVP operations. SWP operations are responsible for approximately 40% to 50% of the effects of reduced Delta outflow during April and May depending on the month and water year type (DEIR Appendix H, Attachment 1-5, “Estimation of SWP Proportion of Effects”). Because of these factors, potential impacts associated with reduced Delta outflow and potential entrainment-related impacts under the Proposed Project are considered less than significant on anadromous salmonids.

Under Refined Alternative 2b, the preferred alternative in this FEIR, Delta outflow would be similar to the Existing Conditions scenario during the spring months, slightly higher during August, and slightly lower during September and November (see FEIR Part III, Chapter 5.3). Similar to the Proposed Project, real-time decision making and the risk assessment-based approach to OMR management would minimize potential impacts. Additionally, entrainment-related impacts would likely affect a very small percentage of the Sacramento River populations (e.g., <1% of Spring-run Chinook Salmon enter the South Delta based on coded wire tag studies analyzed by Zeug and Cavallo (2014)). Further, the reductions in outflow and increases in entrainment-related impacts include effects of both SWP and CVP operations. SWP operations are responsible for approximately 40% to 60% of the effects of reduced Delta outflow during September and November, depending on the month and water year type (DEIR Appendix H, Attachment 1-5). Because of these factors, potential impacts associated with reduced Delta outflow and potential entrainment-related impacts under the Proposed Project and Refined Alternative 2b are considered less than significant on anadromous salmonids.

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II.1.24 MASTER RESPONSE 24: DROUGHT CONDITIONS

II.1.24.1 MODELING OF DROUGHT CONDITIONS

The hydrologic modeling completed for this project includes hydrology represented by years spanning 1922 to 2003. This sequence of years provides a representative sampling of some of the most extreme conditions, both wet and dry, in the last 100 years, including the historical droughts of 1929 to 1934, 1976 to 1977, and 1987 to 1992. The model simulates the upstream operations of the SWP and the CVP with the goal of meeting all contractual and regulatory obligations under these hydrological conditions. Only after these obligations are met does the model calculate the export of water for the SWP and CVP. Even in the driest of years, when water supplies are limited, the model simulates meeting the regulatory and contractual obligations by drawing on storage in the upstream reservoirs, since this is within the discretion of the two projects, while maintaining a minimum level of export for health and safety.

In recent years, there have been conditions under which the regulatory and contractual obligations were reduced in response to extreme drought conditions and to buffer against future dry conditions. For example in 2014 and 2015 regulatory obligations were reduced through temporary urgency change petition (TUCP) to the State Water Resources Control Board (SWRCB) for relaxation of the Delta standards to help protect storage for instream fisheries and protect water supply in the event of continuing drought conditions. These were conditions that were brought to the SWRCB and coordinated with federal and state resource agencies. Together it was determined that relaxation of standards was appropriate for the conditions. In 2015 physical modifications were made by installing a temporary salinity rock barrier in the Delta to further protect valuable storage. This physical barrier reduced the amount of outflow needed to hold back salinity from intruding deep into the Delta. In addition to these actions, a number of the senior water right holders, voluntarily reduced demand to help reduce the burden on the overall water supply. The combination of all these actions helped minimize the potential significant reservoirs depletions, but these actions are not discretionary actions of the SWP or CVP.

The model does not assume that salinity barriers would be installed, that senior water right holders would reduce demand, or that TUCPs would occur, because that would be a real-time coordination with many agencies, and it would be speculative to predetermine the conditions under which TUCPs might be requested or the actions approved by the SWRCB, which could include limiting export levels, require meeting other standards, or curtailing diverters. Instead, the model simulates the discretionary actions that are available to the SWP and CVP to meet their obligations which generally include releases from reservoirs, allocation to contractors (within contractual limits), and export levels.

II.1.24.2 MINIMUM EXPORT RATE

The model assumes a minimum export rate that varies depending on the situation. The applicable situations reflect regulatory conditions and minimums for health and safety. The model assumes a minimum combined export limit no less than 1,500 cfs when regulatory restrictions like OMR or SJR IE

are constraining the exports. This combined export level, shared by the SWP and CVP, is identified in D-1641, 2008 FWS Biological Opinion, and 2009 NMFS Biological Opinion.

In addition to the regulatory minimum 1,500 cfs limit, extreme dry conditions export levels are also assumed for health and safety. For example, when water supply is limited, the modeling assumes a minimum SWP export of 300 cfs. This assumption is roughly the rate that would be required to maintain health and safety supplies for the SWP South Bay Contractors. The South Bay Contractors do not have access to San Luis storage and are reliant on the SWP Delta export facility for SWP supply.

II.1.25 MASTER RESPONSE 25: REAL-TIME OPERATIONS

DWR proposes to implement real-time operations to provide a timely response to changes in Delta water quality and surface water flows. Weather conditions combined with tidal action can quickly affect Delta salinity conditions and the Delta outflow required to maintain joint salinity standards under D-1641.

The Proposed Project and Refined Alternative 2b include real-time OMR management to minimize entrainment and aquatic species loss during water operations at the Banks Pumping Plant.

DEIR Chapter 3.3.4, “Real-time Water Operations Process,” describes the real-time water operations process for coordination with Reclamation, CDFW, DWR, USFWS, and NMFS. DWR proposes a governance structure for real-time operation of the SWP that includes compliance and performance reporting, monitoring, convening of independent panels, drought and Dry Year actions, and Four-Year Reviews. The process for real-time operations would utilize the currently accepted science to minimize the effects of project operations.

FEIR Part III, Chapter 5.3.1.1, “Collaborative Real-time Risk Assessment,” describes the collaborative, real-time risk assessment process proposed as part of the Refined Alternative 2b. The proposed process is illustrated in Figure II.1.25-1, “Collaborative real-time risk assessment decision-making process for OMR management,” below, and includes the following components:

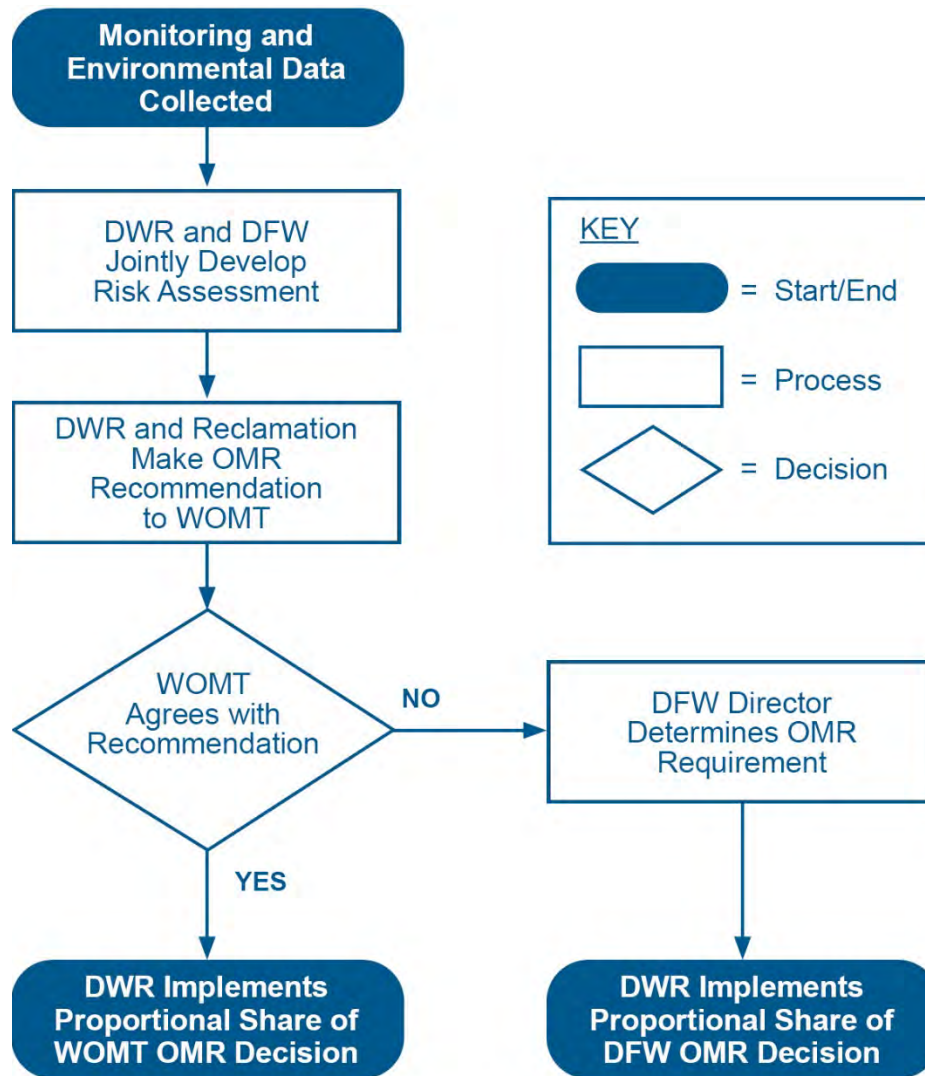
- Weekly meetings of the Smelt Monitoring Group and Salmon Monitoring Group during the OMR Management period to consider survey data, salvage data, and other pertinent biological and abiotic factors;
- Identification of any decision points that would trigger, or off-ramp, an OMR flow requirement or an export constraint;
- A risk assessment to determine whether a requirement is triggered or can be off-ramped.

The risk assessment would be developed by DWR and CDFW technical staff based on the monitoring data and operations forecast.

Monitoring data and surrogate information would be used to evaluate potential for entrainment of Delta Smelt and Longfin Smelt. The potential entrainment impacts on fish in the Old and Middle rivers relative to their estuarine-wide distribution would be evaluated using a number of evaluation tools, including Particle Tracking Model (PTM) runs weighted by the distribution in the surveys. In addition, DWR will use real-time hydrological conditions, salvage data, forecast models (e.g., statistics-based models of historical data), other potential hydrodynamic models, and water quality to assess entrainment risk and to determine appropriate OMR flow targets to minimize entrainment or entrainment risk, or both. In coordination with CDFW, DWR will determine the best available models, the model inputs, and the assessment methods for determining larval and juvenile Longfin Smelt entrainment risk.

Because no juvenile production estimate for Spring-run Chinook Salmon currently exists, Refined Alternative 2b includes OMR management if loss of yearling Coleman NFH Late Fall-run (as yearling

Spring-run Chinook Salmon surrogates) exceeds 0.5% within any of the release groups. In a similar manner, DWR proposes for Refined Alternative 2b to manage OMR if loss of hatchery surrogates for young-of-the-year Spring-run Chinook Salmon exceeds 0.5% for any of several release groups. The hatchery surrogates will be young-of-the-year Spring-run Chinook Salmon from the Feather River Hatchery, to be released at times and locations representative of wild young-of-the-year Spring-run Chinook Salmon based on coordination with CDFW and in consideration of relevant historical information.



60556581_SAC_GFX_227 DWR-DFW Decision Chart VMG

Figure II.1.25-1. Collaborative real-Time Risk Assessment Decision-making Process for OMR Management

II.1.26 MASTER RESPONSE 26: ONE-TUNNEL DELTA CONVEYANCE PROJECT

The One-Tunnel Delta Conveyance Project was not evaluated in the cumulative impacts evaluation of the DEIR because that project is not considered reasonably foreseeable at this time. No environmental documentation has been completed for the One-Tunnel Delta Conveyance Project and the Notice of Preparation of Environmental Impact Report for the Delta Conveyance Project was released on January 15, 2020, after the release of the DEIR.

In November 2019, when DWR issued the DEIR for the Proposed Project, no One-Tunnel Delta conveyance project was yet “under environmental review.” Under long-standing case law, only those potential related projects that are “in environmental review” need be included in a lead agency’s list of reasonably foreseeable projects (or probable future projects). (See *San Franciscans for Reasonable Growth v. City and County of San Francisco* (12984) 151 Cal.App.3d 61, 74.)

Table 4.6-1 in DEIR Chapter 4.6.1, “Cumulative Impacts,” provides a list and a description of identified past, present, and reasonably foreseeable future projects, the impacts of which may combine with impacts from the long-term operation of the SWP to cause a cumulative effect. As presented in DEIR Table 4.6-1, the cumulative analysis considered 68 different known past, present, and reasonably foreseeable projects. A cumulative impact analysis is not required to include every project in the local, regional, or statewide context; rather, the cumulative analysis is limited to known past, present, and reasonably foreseeable future projects, the impacts of which may combine with impacts from the long-term operation of the SWP to cause cumulative impacts (see State CEQA Guidelines Section 15130[b][B][2], “...factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project, and its type”).

DEIR Chapter 4.6.1 contains a cumulative analysis that is consistent with the requirements of the State CEQA Guidelines Sections 15130(a), 15355(a). The analysis presented in DEIR Chapter 4.6.1 is consistent with statutory and regulatory requirements to assess cumulative impacts and includes:

1. A determination of whether the impacts of related past, present, and future plans and projects would cause a cumulatively significant impact; and
2. A determination as to whether implementation of the Proposed Project would have a “cumulatively considerable” contribution to any significant cumulative impact. [See Sections 15130(a), (b), Section 15355(b), Section 15064(h), and Section 15065(a)(3), (c) of the State CEQA Guidelines.]

DWR’s issuance of an NOP for a One-Tunnel Delta Conveyance while the DEIR for the Long-Term Operations project was out for public review did not require DWR to update its cumulative impact analysis. As recent case law holds, a lead agency may use the time of release of its DEIR as a reasonable cut-off date for identifying probable future projects for inclusion in cumulative impact analyses. (*South of Market Community Action Network v. City and County of San Francisco* (2019) 33 Cal.App.5th 321, 337 [court upholds EIR with list of cumulative projects current at the time of DEIR release]; see also

Gray v. County of Madera (2008) 167 Cal.App.4th 1099, 1128 [court upholds EIR for which the lead agency had established a particular cut-off date for identifying probable future projects].)

Furthermore, the mere fact that the NOP for a One Tunnel Conveyance project has been issued does not per se make such a project a probable future project for purposes of cumulative impact analysis. In City of Maywood v. Los Angeles Unified School District (2012) 208 Cal.App.4th 362, 398-401, the court held that the lead agency had not violated CEQA by failing to include in its cumulative impact analysis a proposed highway improvement for which an NOP had been issued. The mere existence of that NOP did not mean that it was “reasonable and practical” for the lead agency to include the proposed highway improvement project in the lead agency’s cumulative impact analysis. In that case, the design details of the proposed highway improvement project were not sufficiently developed to allow for meaningful cumulative analysis. Here, by analogy, the publication of an NOP for what would be a very large public works project did not provide DWR with sufficient detail to understand how the project could affect overall operations of the SWP. Importantly, the NOP for the proposed new conveyance project did not include details on how the SWP would be operated with new Delta conveyance in place. Details regarding how new conveyance would be operated will be developed over the course of the full environmental review for the proposed one-tunnel facility. That process is just getting started and likely will not end until late 2021 at the earliest.

Perhaps most importantly, it is physically impossible that a new Delta conveyance facility will be up and running during the 10-year term of the proposed ITP. Not only does DWR face a lengthy environmental review process and a lengthy permitting process before construction could begin on a new one-tunnel conveyance project; but, the construction period for such a project would itself consume approximately 13 years. Thus, even under what proponents of new conveyance might consider a “best case” scenario, new conveyance may not be in place until 2035 or later. By that time, the currently proposed ITP will already have expired. If and when DWR has constructed and is ready to operate new Delta conveyance, new or adjusted incidental take authorization will be required under both federal and state law. The existence of new conveyance would require very substantial operational changes for the entire SWP and would also affect operations of the CVP. There would be little point in including in the current EIR speculative predictions about such changed operations when there is no chance whatsoever that new conveyance will be in place during the lifespan of the current Proposed Project (SWP operations under the proposed ITP).

In short, there is no credible scenario in which cumulative impacts from new conveyance will compound or exacerbate the effects of the current Proposed Project, which by its very nature has a finite life span in light of the proposed 10-year duration of the proposed ITP.

II.1.27 FORM LETTER RESPONSE: NRDC

The commenters' concerns regarding the Trump Administration and its proposals are acknowledged, however such federal actions are outside of the scope of DWR's proposed long-term operations of the SWP and are not analyzed in the DEIR. Please see Master Response 13, "2019 Federal BiOps," for a comparison of the Proposed Project and the 2019 federal biological opinions. Similarly, comments requesting that California "fight back against" or protect water quality and wildlife from changes in federal policies or the Trump administration are not germane to DWR's Proposed Project or the DEIR and no specific response is required.

As stated in DEIR Chapter 3.3.1, "Project Purpose and Objectives," DWR would operate the SWP in accordance with all applicable laws, contractual obligations and agreements, and the proposal would not include any weakening of protections for water quality or endangered species.

With respect to freshwater flows, detailed modeling results showing the difference in projected Delta outflows between the Proposed Project and Existing Conditions scenarios are presented in Appendix C, Attachment 2-1, in Table 9-1 and Figures 9-1 through Figure 9-18. Potential reductions in Spring and Fall Delta outflows resulting from the project are discussed in DEIR Chapter 4.2.2.1, subheading, "Delta Outflow." Impacts to endangered species and water quality from these anticipated hydrological changes are analyzed in DEIR Chapters 4.3, "Surface Water Quality," and 4.4, "Aquatic Biological Resources," which conclude, on the basis of scientific analysis, that no significant adverse impacts to endangered species or water quality would result. Further discussion of anticipated changes in Delta outflow compared to existing conditions is provided in Master Response 12, "Delta Outflow," while additional discussion of why reductions in Delta outflows would not result in significant impacts to aquatic biological resources is provided in Master Responses 11, "LFS Impact Significance," and 24, "Impact Significance (Salmonids)."

Although the Proposed Project would not result in significant impacts, as discussed in FEIR Part I, "Introduction," DWR and the California Department of Fish and Wildlife continued to consult after publication of the DEIR, resulting in refinements to DWR's proposed long-term operations of the SWP. DWR has chosen the "Refined Alternative 2b," as described in FEIR Part III, Chapter 5.3, as its preferred alternative for proposed long-term operations of the SWP, which includes additional freshwater flows and additional actions that would further improve conditions for endangered species compared to existing conditions or to the Proposed Project analyzed in the DEIR. Further, Refined Alternative 2b would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further minimize impacts below those identified in the DEIR.

The complete analysis for Refined Alternative 2b, as provided in this FEIR, has been supplemented with additional modeling and analysis, which support the conclusions of the DEIR that long-term operations of the SWP would not have any significant environmental impacts.

As discussed in Master Response 20, “Best Available Science,” the DEIR provides an adequate, complete, and good faith effort at full disclosure of the physical environmental impacts of the project; and the conclusions are based upon substantial evidence in light of the whole record. The fact that reasonable people might disagree with some conclusions does not affect the legal adequacy of the document.

The issue of reducing diversions from the Delta via methods such as water recycling and improved water use efficiency is addressed in Master Response 7, “Delta Reform Act.” Master Response 6, “Demand Management/Conservation Measures,” also discusses water conservation measures.

With respect to the request that DWR help protect and restore the Bay-Delta, it is noted that the list of cumulative projects identified in DEIR Chapter 4.6.1, “Cumulative Impacts,” includes a range of water quality, habitat improvement, and invasive species control projects, which demonstrates DWR’s commitment to protecting the environment and restoring the health of the Delta. However, these are separate actions to the Proposed Project assessed in the DEIR. Master Response 5, “Treatment of Habitat Restoration,” provides more discussion of restoration projects being undertaken by DWR and how they relate to the proposed long-term operations of the SWP.

II.1.28 FORM LETTER RESPONSE: SIERRA CLUB

Detailed modeling results showing the difference in projected Delta outflows between the Proposed Project and Existing Conditions scenarios are presented in Appendix C, Attachment 2-1, in Table 9-1 and Figures 9-1 through Figure 9-18. Potential reductions in Spring and Fall Delta outflows resulting from the project are discussed in DEIR Chapter 4.2.2.1, subheading, “Delta Outflow.” Impacts to endangered species and water quality from these anticipated hydrological changes are analyzed in DEIR Chapters 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources,” which conclude, on the basis of scientific analysis, that no significant adverse impacts to endangered species and water quality would result. Further discussion of anticipated changes in Delta outflow compared to existing conditions is provided in Master Response 12, “Delta Outflow,” while additional discussion of why reductions in Delta outflows would not result in significant impacts to aquatic biological resources is provided in Master Responses 11, “LFS Impact Significance,” and 24, “Impact Significance (Salmonids).”

Reduced reliance and the coequal goals are discussed in Master Response 7, “Delta Reform Act.” Master Response 6, “Demand Management/Conservation Measures,” also discusses water conservation measures. As discussed in FEIR Part I, “Introduction,” DWR and the California Department of Fish and Wildlife continued consulting on the Project following issuance of the DEIR and those discussions resulted in revisions to DWR’s proposed long-term operations of the SWP, and identification of “Refined Alternative 2b,” as described in FEIR Part III, Chapter 5.3, as DWR’s preferred alternative. Refined Alternative 2b includes elements of the Proposed Project as described in the DEIR, but also includes refinements and additional actions that would further improve conditions for aquatic biological resources. Further, Refined Alternative 2b would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further minimize impacts below those identified in the DEIR. The complete analysis for Refined Alternative 2b, as provided in this FEIR, has been supplemented with additional modeling and analysis, which support the conclusions of the DEIR that long-term operations of the SWP would not have any significant environmental impacts.

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II.2 FEDERAL COMMENTS AND RESPONSES

Table II.2-1. Federal Commenters

Letter	Commenter	Dated
F-Reclamation-1	United States Department of the Interior, David M. Mooney, Bay-Delta Office Area Manager	January 6, 2020

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United States Department of the Interior

BUREAU OF RECLAMATION
Bay-Delta Office
801 I Street, Suite 140
Sacramento, California 95814

IN REPLY REFER TO:
BDO-100
ENV-6.00

JAN 06 2019

Mr. You Chen Chao
California Department of Water Resources
Executive Division
PO Box 942836
Sacramento, CA 94236-0001

Subject: Comments on the Draft Environmental Impact Report for Long-Term Operation of the California State Water Project

Dear Mr. Chao:

The Bureau of Reclamation (Reclamation) submits this letter in response to the California Department of Water Resources' (DWR) November 22, 2019, Draft Environmental Impact Report (DEIR) for Long-Term Operation of the California State Water Project (SWP), pursuant to the California Environmental Quality Act (CEQA). Reclamation understands the Proposed Project described in the DEIR to be similar to Alternative 1 in the Reinitiation of Consultation on the Coordinated Long-term Operation (ROC on LTO) of the Central Valley Project (CVP) and SWP Environmental Impact Statement (EIS), but with critical exceptions as described below.

1-1

Reclamation is concerned about differences in the proposed operations with respect to reverse flow rates of Old and Middle Rivers (OMRs), proposed fall and spring Delta outflows, physical and non-physical barriers for both fish and salinity, and prescribed real-time management. In addition, we are concerned that these differences were not analyzed in coordination with Reclamation and that we were unable to find where these re-directed impacts were fully analyzed or disclosed in the DEIR.

1-2

Moreover, Reclamation is concerned that the proposed alternatives in the DEIR could result in different operations of the CVP and SWP. The proposed different operating criteria for the San Francisco Bay-Delta and the CVP and SWP shared facilities would make our mutual obligation for coordinated operations challenging under the critical Coordinated Operations Agreement (COA). The sharing of and accounting for modified mutual obligations for the coordinated operation of the CVP and SWP would be determined through coordination and discussions between Reclamation and DWR. DWR did not coordinate with Reclamation on the development of this DEIR and has not yet initiated discussions with Reclamation on the sharing of obligations included in the DEIR. Without an understanding of how the new obligations included in the DEIR would be met and accounted for (which would create different objectives on the same system), the impacts of these actions on both the CVP and SWP cannot be analyzed. In addition, these differing operations would also challenge compliance with applicable State Water Resources Control Board orders, terms and conditions of the Suisun Marsh Preservation

1-3

Agreement, Federal endangered and threatened species regulations, and related United States Army Corps of Engineers' (Corps) permits.

↑ 1-3
(Cont.)

Reclamation understands that the DEIR will also be used by California Department of Fish and Wildlife (CDFW) to authorize an Incidental Take Permit (ITP) under the California Endangered Species Act (CESA), and that the ITP will provide an exemption for the SWP for incidental take of fish species listed under CESA (i.e., Delta Smelt, Longfin Smelt, Winter-run Chinook Salmon, and Spring-run Chinook Salmon). While the DEIR acknowledges that Reclamation is not legally required to comply with state endangered species laws, including Longfin Smelt protective measures (e.g., restricted OMR reverse flows and spring Delta outflows), and describes separate operations, the additional outflow included in the DEIR alternatives may impact CVP operations and water supply, and presents issues for accounting under the COA. Reclamation is concerned that - as currently described - the DEIR and its alternatives designed to comply with the CESA protections may impact CVP operations, and without any proposed mitigation measures.

1-4

Much of the Proposed Project described in the DEIR will need to be coordinated with Reclamation, the U.S. Fish and Wildlife Service (FWS), and/or the National Marine Fisheries Service (NMFS). Reclamation, with DWR as our applicant, completed consultation on the ROC on LTO with FWS and NMFS, culminating with the issuance of Biological Opinions on October 21, 2019 (2019 BOs). There are several components in the DEIR that are not included in the BOs. While Reclamation understands DWR has identified the Corps as the Federal lead for permitting of several of these components, DWR needs to clarify how it intends to address the Federal ESA obligations related to the operational impacts to the CVP and SWP.

1-5

Overall, the DEIR lacks necessary details and does not adequately describe how DWR and Reclamation's proposed operations of the CVP and SWP will work in concert. Since the DEIR was developed in the absence of dialogue with Reclamation, it is speculative to draw conclusions about how the differences in proposed joint operation between the EIS and DEIR will be resolved, and the resulting environmental conditions are therefore unknown.

1-6

Reclamation provides the following specific comments for consideration on the DEIR:

- Additional outflow requirements described under the alternatives would require accounting under COA to be compared to accounting without the alternatives, to understand any effects to the CVP. As mentioned above, the accounting has not yet been discussed and therefore these effects cannot be considered.
- The Federal ESA compliance for outflow, barriers (Head of Old River Barrier [HORB] and Georgiana Slough), and monitoring would be required. DWR has not coordinated the intended ESA process for these components with Reclamation or stated whether it intends to seek separate compliance.
- Given CESA does not apply to Reclamation, we would like to see more detail in the DEIR on the steps, including mitigation measures, DWR and CDFW would take as part of this process to ensure CVP operations and water supply are not impacted.
- The Adaptive Management Plan groups are described as participating in a technical and policy advisory capacity, which may present issues for federal members from a Federal Advisory Committee Act (FACA) perspective. This should be addressed in the DEIR.

1-7

1-8

1-9

1-10

- Some sections reference “future biological opinions” and some sections reference the “finalized BOs”. References need to be updated to consistently reflect the biological opinions issued by FWS and NMFS on October 21, 2019. 1-11
- The Proposed Project needs additional details on the way DWR plans to coordinate with Reclamation, including the proposed Adaptive Management Plan. 1-12
- The DEIR lacks analysis of effects to the CVP, including operations for meeting Federal ESA requirements. Reclamation cannot identify from the document whether there are impacts to CVP reservoir operations, including river temperatures, or the ability to deliver CVP water. 1-13
- The DEIR should include the risk reduction strategies consistent with the 2019 BOs implementation of the Delta Fish Species Conservation Hatchery. 1-14
- The DEIR’s Proposed Project CalSim model does not fully analyze the following Proposed Project elements which may impact the CVP:
 - The salvage-based onset of OMR management for longfin smelt protection after December 1;
 - The calendar-based adult longfin smelt entrainment protection (14-day average OMR requirement of -5,000 cfs), including its flow-based offramps;
 - The OMR storm flexibility cannot occur when the calendar-based adult longfin smelt entrainment protection is occurring from December to end of February. However, the model assumes storm flex to occur in January and February, the same implementation as the Proposed Action (PA) in the EIS. 1-15
 - Salvage-based “Additional Real-time Consideration for Adult Longfin Smelt” that could require a more positive 14-day average OMR flow than -5,000 cfs. Historic data is not used to understand frequency of occurrence of such action, the OMR requirement is not defined under such conditions; therefore, it is difficult to understand how often these conditions would occur, what additional protection would be provided in addition to what has been analyzed in the EIS, or what the water supply cost of these actions would be.
- The DEIR’s Proposed Project CalSim model results in increased exports that are more than what’s observed under the PA modeling. When the model results are compared using a consistent hydrology (under the climate change and sea level rise), increase in total south of Delta exports under the Proposed Project compared to the Existing Conditions is higher than what is simulated under the PA, at the expense of reduction in upstream storage. This type of operation with lower upstream storage does not represent how Reclamation would operate the CVP in the near future. 1-16
- Following the release of the DEIR, DWR has submitted its application to CDFW for an ITP under CESA. The project described in the application appears to differ from the information presented in the DEIR, representing a combination of components from different alternatives. This combination of alternatives has not been analyzed. 1-17

Reclamation provides the following comments specifically on the DEIR alternatives:

Alternative 2A

- Coordinating and balancing project operations would be extremely difficult under Alternative 2A. As mentioned previously, the accounting has not yet been discussed and therefore these effects cannot be considered. 1-18
- DWR should provide more scientific basis for additional Delta outflow in April and May under Alternative 2A to benefit Longfin Smelt (Section 5.2 (page 5.6)). 1-19
- Alternative 2A is predicated on the SWP providing additional Delta outflow in April and May based on DWR's share of the I:E Ratio from the 2009 NMFS Biological Opinion, which is not in the 2019 BOs. If Reclamation is not operating to the same criteria, then the Delta outflow increase would not be the same as targeted by the SWP; therefore, the desired increase in outflow may not occur as intended by the action. 1-20
- The I:E ratio in the 2009 NMFS Biological Opinion was developed for steelhead, not Longfin Smelt. The DEIR should include discussion of why the specific ratios included in I:E for steelhead are appropriate for Longfin Smelt, especially if the goal is simply increased outflow. As described on page 5-38, the effect on CVP exports has not been quantified, nor have mitigation measures been identified, and the potential benefits to Longfin Smelt are uncertain. Given this uncertainty, the DEIR should include scientific justification for this action and propose mitigation measures to ensure no impacts to CVP operations and water supply. 1-21

Alternative 2B

- Similar to Alternative 2A, any impact to CVP operations from the added outflow in Alternative 2B depends on conditions in the Delta and the way releases are accounted for under COA. As mentioned previously, the accounting has not yet been discussed and therefore these effects cannot be considered. 1-22

Alternative 3

- The HORB may cause impacts to flows in Old and Middle River, CVP and SWP exports, and Delta salinity. If flows are reduced such that water users in the South Delta have difficulty diverting water, then exports may need to be reduced to support South Delta water levels during periods when water transfers are occurring subject to the Water Level Response Plan. DWR should provide additional analysis and propose mitigation measures to ensure no impacts to CVP operations and water supply. 1-23
- Components such as barriers may require additional ESA compliance because they were not included in the 2019 BOs for the ROC LTO of the CVP and SWP. The HORB was not included in the PA because of uncertainties surrounding its effectiveness. See the Final EIS for further information. 1-24
- As described in the DEIR in Section 5.4.7, Alternative 3 would potentially impact the ability of the CVP to divert water and these impacts are greater than described in the cumulative section of the DEIR. DWR should provide additional analysis and propose mitigation measures to ensure no impacts to CVP operations and water supply. 1-25

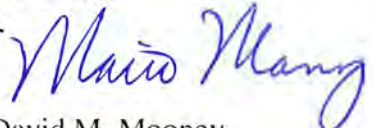
Alternative 4

- Alternative 4 has the potential to have significant impacts on CVP operations and water supply to meet the greatly expanded X2 criteria. Depending on the sharing under COA, additional reservoir releases may also be required from both projects to maintain the X2 position described in Alternative 4, as opposed to the position described in the PA. As mentioned previously, the accounting has not yet been discussed and therefore these effects cannot be considered. 1-26
- The DEIR identified potentially significant impacts to cold water pool and identifies Mitigation Measure Alt 4-1. However, the prescribed water quality criteria in Mitigation Measure Alt 4-1 lacks details and analysis to show how this measure would actually reduce cold water pool impacts to less than significant. DWR should provide additional analysis and details to ensure this mitigation measure ensures no impacts to CVP operations and water supply. 1-27

A large portion of our comments are related to how operations are coordinated between the CVP and SWP and the importance of such coordination. Operating to different criteria creates challenges for both real-time operations and seasonal and long-term planning. Under previous iterations of the LTO, DWR has sought a Consistency Determination (CD) under CESA that allows for the same operating criteria. We continue to encourage the state to consider a CD to ensure coordination of operations. We would also like to see more detail in the DEIR on the steps DWR and CDFW will take as part of this process and how the DEIR may be used in the CESA process. 1-28

In closing, Reclamation finds the Proposed Project in the DEIR to be similar to the PA with critical exceptions as described above. We see a lot more alignment than differences and welcome the opportunity to continue to work with the State of California on permitting for the coordinated long-term operation of the CVP and SWP. Also, we have attached a list of references used in the EIS, PA, and the 2019 BOs that represents additional research of the best available science that should be incorporated into the DEIR. 1-29
1-30

Please contact Mr. Ben Nelson, Bay-Delta Office, at 916-414-2424 or bcnelson@usbr.gov for further coordination.

Sincerely,
ACTING FOR 
David M. Mooney
Bay-Delta Office Area Manager

bc: Amy Aufdemberge
Assistant Regional Solicitor
2800 Cottage Way
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II.2.1 LETTER F-RECLAMATION-1 – UNITED STATES DEPARTMENT OF THE INTERIOR, DAVID M. MOONEY, BAY-DELTA OFFICE AREA MANAGER, DATED JANUARY 6, 2020

II.2.1.1 RESPONSE TO COMMENT F-RECLAMATION-1-1

This comment notes that the Proposed Project is similar to Alternative I in the Reinitiation of Consultation on the Coordinated Long-term Operation (ROC on LTO) of the Central Valley Project (CVP) and SWP Environmental Impact Statement but is different in several elements. These differences are addressed in the following comments.

II.2.1.2 RESPONSE TO COMMENT F-RECLAMATION-1-2

This comment notes that the proposed flow rates of Old and Middle Rivers (OMR) is different from the rate proposed in Reclamation's EIS and was not analyzed in coordination with Reclamation. DWR acknowledges the difference in proposed OMR flows and intends to coordinate with Reclamation in its implementation, in accordance with the COA. Please see Master Response 22, "Relationship to CVP Operations," for further information.

II.2.1.3 RESPONSE TO COMMENT F-RECLAMATION-1-3

As discussed in Master Response 1, "Scope of Analysis," DWR considered whether the long-term operations of the SWP would result in a reasonably foreseeable operational response by Reclamation that could result in environmental impacts beyond the effects caused by SWP operations alone. As explained in DEIR Appendix G, "Geographic Scope of Project's Influence of Flow," DWR and Reclamation independently decide how to operate the SWP and CVP to meet applicable requirements. Therefore, whether Reclamation would alter its operations of the CVP in response to DWR's long-term operations of the SWP in a way that would cause environmental impacts beyond the effects caused by SWP operations alone is speculative.

Please see Master Response 1, "Scope of Analysis," for further discussion. In addition, refer to Master Response 22, "Relationship to CVP Operations," for information regarding CVP coordination; DEIR Appendix B, "2018 Coordinated Operation Agreement Addendum," for a detailed discussion of how the SWP coordinates and interacts with the operations of the CVP; and refer to DEIR Appendix G for additional information regarding the geographic area potentially affected by the long-term operations of the SWP.

II.2.1.4 RESPONSE TO COMMENT F-RECLAMATION-1-4

Please see Response to Comment F-Reclamation-1-3 and Master Response 1, "Scope of Analysis."

As discussed in Master Response 22, "Relationship to CVP Operations," the proposed long-term operations of the SWP assumes that operations of the CVP and SWP will continue to be coordinated. DWR acknowledges the differences between the Proposed Project and the proposal addressed in the Coordinated Long-term Operation (ROC on LTO) of the Central Valley Project (CVP) and SWP

Environmental Impact Statement and intends to coordinate with Reclamation in its implementation, in accordance with the COA.

II.2.1.5 RESPONSE TO COMMENT F-RECLAMATION-1-5

If needed, DWR will seek appropriate federal authorizations for any components of long-term SWP operations that may require federal ESA consultation. This may include DWR seeking authorization through a federal entity that can serve as a lead under ESA or it may include seeking ESA consultation on its own. DWR will also seek any other federal authorizations that may be required for project implementation.

DWR will coordinate with Reclamation regarding operations of all appropriate long-term SWP operational components that are not included in the 2019 Biological Opinions if it determined that such coordination is needed. Please see Master Response 22, “Relationship to CVP Operations,” for discussion regarding SWP coordination with the CVP.

II.2.1.6 RESPONSE TO COMMENT F-RECLAMATION-1-6

Please see Responses to Comments F-Reclamation-1-3, F-Reclamation-1-4, and Master Response 1, “Scope of Analysis.”

II.2.1.7 RESPONSE TO COMMENT F-RECLAMATION-1-7

Please see Responses to Comments F-Reclamation-1-3, F-Reclamation-1-4, and Master Responses 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations.”

II.2.1.8 RESPONSE TO COMMENT F-RECLAMATION-1-8

As explained in Response to Comment F-Reclamation-1-5, DWR will seek appropriate federal authorizations for any components of long-term SWP operations that are not included in the 2019 Biological Opinions. DWR will pursue appropriate federal authorizations once those components are finalized through a project approval and issuance of an ITP for long-term operations of the SWP. The preferred alternative in the FEIR is Refined Alternative 2b.

II.2.1.9 RESPONSE TO COMMENT F-RECLAMATION-1-9

The DEIR does not state whether Reclamation is legally required to comply with state endangered species laws. DWR is seeking an ITP for its long-term operations of the SWP. As discussed in Master Response 17, “Application of CESA Standards,” the DEIR fully analyzes the direct and indirect impacts of the proposed long-term operations of the SWP (including the environmental protective measures) on special-status species. Please also see Response to Comment F-Reclamation-1-3. For a detailed discussion of the requirements of CESA, refer to DEIR Chapter 4.4.3, “State Plans, Policies, and Regulations.”

Please also see Master Response 22, “Relationship to CVP Operations,” for discussion of coordination regarding obligations that apply to water project operations pursuant to the ITP.

II.2.1.10 RESPONSE TO COMMENT F-RECLAMATION-1-10

The proposed Adaptive Management Plan (AMP) is intended to promote the implementation of measures to comply with CESA requirements. Although the AMP identified in the EIR is a state effort, DWR intends to coordinate with Reclamation in its implementation. Please see Master Response 22, "Relationship to CVP Operations."

II.2.1.11 RESPONSE TO COMMENT F-RECLAMATION-1-11

The references have been updated pursuant to the comment. Please see FEIR Part III, which includes revisions to the DEIR, including references to the 2019 Biological Opinions issued by USFWS and NMFS on October 21, 2019.

II.2.1.12 RESPONSE TO COMMENT F-RECLAMATION-1-12

Please see Responses to Comments F-Reclamation-1-3, F-Reclamation-1-10, Master Response 1, "Scope of Analysis," and Master Response 22, "Relationship to CVP Operations."

II.2.1.13 RESPONSE TO COMMENT F-RECLAMATION-1-13

Please see Responses to Comments F-Reclamation-1-3, F-Reclamation-1-10, and Master Response 1, "Scope of Analysis."

II.2.1.14 RESPONSE TO COMMENT F-RECLAMATION-1-14

The FEIR includes similar risk reduction strategies. Please see FEIR Part III, DEIR Chapter 5.3.2, "Adaptive Management Plan," for descriptions of the actions proposed by DWR to minimize impacts to special status fish species and other aquatic resources in the Delta. The Adaptive Management Plan specifically includes studies to establish a Delta Fish Species Conservation Hatchery referenced in this comment.

II.2.1.15 RESPONSE TO COMMENT F-RECLAMATION-1-15

The modeling for the FEIR incorporated simplified assumptions for most of the fishery related criteria. These were generally developed from historical observations. No specific Longfin Smelt based assumptions were incorporated into the modeling because the historic data suggested that the triggering of the Longfin Smelt criteria would be very rare. In the event that a Longfin-based trigger would be activated, it is anticipated that SWP would operate to meet its proportional share and CVP would be unaffected. Please see Master Response 22, "Relationship to CVP Operations," for more information regarding coordination of the SWP with CVP operations.

II.2.1.16 RESPONSE TO COMMENT F-RECLAMATION-1-16

The modeling results presented in the DEIR are focused to the project area, as described in DEIR Chapter 1.2, "Project Background." CalSim II model results are utilized for comparative analysis between the Proposed Project and Existing Conditions scenarios, with more emphasis on trend instead of magnitude. Therefore, increased export documented in the DEIR is not predicting quantity of

exports under the Proposed Project. Similarly, Proposed Project results do not assume operations outside the study area. DWR defers to Reclamation regarding their operation of the CVP. Please see Master Response 1, “Scope of Analysis.”

Please note that the FEIR identifies Refined Alternative 2b, instead of the Proposed Project, as the preferred alternative.

II.2.1.17 RESPONSE TO COMMENT F-RECLAMATION-1-17

Please see Master Responses 4, “Legal Standards,” which discusses the differences between the requirements of CEQA and CESA, and the adequacy of the DEIR’s analysis of impacts. Please also see Master Response 3, “The CEQA Process,” for discussion of the progression of project development.

II.2.1.18 RESPONSE TO COMMENT F-RECLAMATION-1-18

A more detailed evaluation of the alternatives is presented in FEIR Part III, Chapter 5, “Alternatives to the Proposed Project,” based on updated modeling of Alternative 2b assumptions. Please also see Responses to Comments F-Reclamation-1-3 and F-Reclamation-1-4, Master Responses 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations.”

II.2.1.19 RESPONSE TO COMMENT F-RECLAMATION-1-19

The abundance of Longfin Smelt in the estuary has fluctuated over time. A synthesis of prior studies conducted by USFWS in its 12-Month Finding on a Petition to List the San Francisco Bay-Delta Population of the Longfin Smelt as Endangered or Threatened (USFWS 2012) reported that there is a strong positive correlation between winter and spring Delta outflow and Longfin Smelt abundance the following year (Moyle 2002). As stated in the DEIR Chapter 4.4.1.4, subheading “Longfin Smelt,” Longfin Smelt abundance indices have been correlated with Delta outflow, and thus it is thought that habitat suitability for Longfin Smelt in these areas may be influenced by variation in freshwater flow, although the mechanism remains unknown (Jassby et al. 1995; Bennett and Moyle 1996; Kimmerer 2004; Kimmerer et al. 2009). There is also a strong correlation between juvenile survival (adult abundance) in the San Francisco Estuary and Delta outflow (Stevens and Miller 1983), as well as the 2-ppt isohaline (Jassby et al. 1995). Moyle (2002) notes that the reason seems to be that flows increase the rate of transport into rearing habitat in Suisun and San Pablo bays and reduce the probability of larvae being retained in the Delta. Most spawning is from February through April.

To demonstrate the effects of state and federal pumping plants on the smelt, a regression equation has been calculated relating smelt numbers to Delta outflow (B. Herbold. USEPA, pers. comm., 1998 as cited in Moyle [2002]). This equation predicts that mean spring (March-May) outflow much less than 3,4000 cfs will result in reproductive failure of the smelt.

Finally, as stated in the DEIR Chapter 4.4.1.4, subheading “Longfin Smelt,” Longfin Smelt entrainment at the state and federal water export facilities mainly occurs from December to May, with peak adult entrainment from December to February (Grimaldo et al. 2009). Each of the foregoing sources of scientific information provide a collective basis for Delta outflow in April and May to enhance Longfin Smelt survival.

II.2.1.20 RESPONSE TO COMMENT F-RECLAMATION-1-20

In discussing the OMR requirements, the DEIR states repeatedly that DWR will ensure that its proportional share of the OMR requirement will be satisfied. The DEIR does not indicate that DWR would satisfy the CVP share of the OMR requirement. Appendix H, included with the DEIR, describes the potential SWP proportion of any effects due to joint operations of the SWP and CVP. The SWP is committed to meeting its proportional share of the OMR criteria.

DWR is seeking an ITP for long-term operations of the SWP, however, and not for coordinated operations of the SWP and CVP. As discussed in Master Response 17, “Application of CESA Standards,” and Master Response 4, “Legal Standards,” CESA requires that measures to minimize and fully mitigate be roughly proportional in extent to the impacts of the authorized take of listed species.

Please note that the FEIR identifies Refined Alternative 2b as the preferred alternative.

II.2.1.21 RESPONSE TO COMMENT F-RECLAMATION-1-21

Import: Export ratios as defined in the 2009 NMFS Biological Opinion were based on steelhead. However, these measures were presented in the 2008 USFWS Biological Opinion for Delta Smelt with the intention of reducing entrainment by increasing spring outflow. The objective of providing spring outflow is to move Longfin Smelt towards the San Francisco Bay Estuary where their survival is improved. This objective is based on the hypothesis that is supported by research (see Response to Comment F-Reclamation-1-19) that Longfin Smelt abundance may be improved with increased spring outflow (see also DEIR Chapter 5.2, “Alternative 2a”).

II.2.1.22 RESPONSE TO COMMENT F-RECLAMATION-1-22

Please see Responses to Comments F-Reclamation-1-3, F-Reclamation-1-4, F-Reclamation-1-18, and F-Reclamation-1-20, and Master Responses 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations.”

II.2.1.23 RESPONSE TO COMMENT F-RECLAMATION-1-23

Please see Response to Comment F-Reclamation-1-3, Master Response 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations.” Please also note that the FEIR identified Refined Alternative 2b as the preferred alternative.

II.2.1.24 RESPONSE TO COMMENT F-RECLAMATION-1-24

DWR agrees that additional ESA compliance may be required.

II.2.1.25 RESPONSE TO COMMENT F-RECLAMATION-1-25

Please see Response to Comment F-Reclamation-1-3, Master Response 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations.”

II.2.1.26 RESPONSE TO COMMENT F-RECLAMATION-1-26

Please see Responses to Comments F-Reclamation-1-3 and F-Reclamation-1-4 and Master Responses 1, “Scope of Analysis,” and 22, “Relationship to CVP Operations.”

DWR is seeking an ITP for long-term operations of the SWP, and not for coordinated operations of the SWP and CVP. As discussed in Master Response 17, “Application of CESA Standards,” and Master Response 4, “Legal Standards,” CESA requires that measures to minimize and fully mitigate be roughly proportional in extent to the impacts of the authorized take of listed species.

Please note that the FEIR identifies Refined Alternative 2b as the preferred alternative.

II.2.1.27 RESPONSE TO COMMENT F-RECLAMATION-1-27

Please see Responses to Comments F-Reclamation-1-3 and F-Reclamation-1-4 and Master Responses 1, “Scope of Analysis,” and 22, “Relationship to CVP Operations.”

II.2.1.28 RESPONSE TO COMMENT F-RECLAMATION-1-28

Please see Master Response 21, “CESA Permit Versus Consistency Determination,” for a discussion of the applicable permitting process under CESA for long-term operations of the SWP. Please also see Master Response 4, “Legal Standards,” and Master Response 17, “Application of CESA Standards,” for further discussion of CESA standards.

II.2.1.29 RESPONSE TO COMMENT F-RECLAMATION-1-29

The commenter provides a closing statement and no further response is required.

II.2.1.30 RESPONSE TO COMMENT F-RECLAMATION-1-30

The list of references provided is acknowledged. Please also see Master Response 20, “Best Available Science.”

II.2.1.31 RESPONSE TO COMMENT F-RECLAMATION-1-ATT-1

See Response to Comment F-Reclamation-1-30.

II.3 STATE COMMENTS AND RESPONSES

Table II.3-1. State Commenters

Letter	Commenter	Dated
Letter S-Caltrans-1	Caltrans District 10, Nicholas Fung, Metropolitan Planning	December 24, 2019
Letter S-CDFW-1	California Department of Fish and Wildlife, Joshua Grover, Water Branch Chief	January 6, 2020
Letter S-DSC-1	Delta Stewardship Council, Jeff Henderson, Deputy Executive Officer	January 16, 2020
Letter S-SWRCB-1	State Water Resources Control Board, Diane Riddle, Assistant Deputy Director	January 16, 2020

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From: [Fung, Nicholas@DOT](mailto:Fung.Nicholas@DOT)
To: [LTO](#)
Cc: chris.wilkinson@water.ca.gov; [Chao, You.Chen@DWR](mailto:Chao.You.Chen@DWR); [Dumas, Thomas A@DOT](mailto:Dumas.Thomas.A@DOT)
Subject: To Dean Messer: Question about Long-Term Operations DEIR
Date: Tuesday, December 24, 2019 10:14:29 AM

Hello Mr. Messer. I am reviewing the Long-Term Operations for the State Water Project DEIR and I have some questions for you. Will there be any significant changes to the volume or speed of water flow as the result of this project?

1-1

Thanks,

Nicholas Fung
Caltrans District 10
Metropolitan Planning
(209) 948-7190

II.3.1 LETTER S-CALTRANS-1 – CALTRANS DISTRICT 10, NICHOLAS FUNG, METROPOLITAN PLANNING, DATED DECEMBER 24, 2019

II.3.1.1 RESPONSE TO COMMENT S-CALTRANS-1-1

Water volume and velocity in surface waterways will not significantly change with implementation of long-term operations of the SWP. There would be some velocity changes in some selected months during certain water year types in certain parts of the Delta. These changes would remain within the historical range experienced in these waterways. For more information, please refer to DEIR Chapter 4.4.7.4, “Species-Specific Impacts.” In particular, Figures 4.4.31 through 4.4.38 show modeled maximum absolute daily velocity for eight locations in the San Joaquin River, Old and Middle Rivers, and Grant Line Canal.

Anticipated changes in flow under the Proposed Project when compared to Existing Conditions are described in DEIR Chapter 4.2.2.1, “Comparison of Sacramento River Flows into Delta, Delta Outflow, and OMR Flows,” (refer to Figures 4.2-7 through 4.2-9). Sacramento River flows at Freeport are anticipated to increase slightly in some months, while Delta outflows would be reduced in some months. OMR flows would be higher in some months and lower in others when compared to Existing Conditions.



State of California – Natural Resources Agency
 DEPARTMENT OF FISH AND WILDLIFE
 Water Branch
 P.O. Box 944209
 Sacramento, CA 94244-2090
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



Letter S-CDFW-1

January 6, 2020

Dean Messer
 Chief, Division of Environmental Services
 Department of Water Resources
 P.O. Box 942836
 Sacramento, CA, 94236-0001

Subject: Comments on the Draft Environmental Impact Report for Long-Term Operation of the California State Water Project (Project) SCH # 2019049121

Dear Mr. Messer:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a Draft Environmental Impact Report (DEIR) from the Department of Water Resources (DWR) for the Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹ CDFW has previously submitted comments to DWR on May 4, 2019 in response to the Notice of Preparation prepared in May 2019 as a part of an earlier phase of Project development.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California’s **Trustee Agency** for fish and wildlife resources, and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically

1-1

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The “CEQA Guidelines” are found in Title 14 of the California Code of Regulations, commencing with section 15000.

sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. To the extent implementation of the Project as proposed may result in “take” as defined by State law of any species protected under the California Endangered Species Act (CESA), the project proponent may seek related take authorization as provided by the Fish and Game Code (Fish & G. Code, § 2050 et seq.). At the request of an applicant for an incidental take permit (ITP), CDFW shall, to the greatest extent practicable, consult with the applicant regarding the preparation of a permit application in order to ensure that it will meet the requirements CESA and its implementing regulations when submitted to CDFW. (Cal. Code Regs., tit. 14, § 783.2, subd. (b).)

CDFW notes that on December 13, 2019, DWR submitted an ITP application seeking authorization to take Delta smelt, longfin smelt, winter- and spring-run Chinook salmon. CDFW is currently reviewing the application. Some aspects of the project description and proposed minimization and mitigation measures in the application differ from what was presented as the Proposed Project in the DEIR: for example the ITP application’s real time operations decision making structure includes a more collaborative approach to risk assessments and clearer CDFW authority. Additionally, as compared to the DEIR’s Proposed Project, the ITP application’s project description includes an improvement in spring-summer outflow to minimize impacts of Project operations on longfin and Delta smelt. CDFW looks forward to continuing its coordination with DWR as a Responsible Agency and pursuant to its CESA obligations.

PROJECT DESCRIPTION SUMMARY

Proponent: California Department of Water Resources

Objective: The objective of the Project is to continue operating the State Water Project (SWP) to provide flood control and water supply for agricultural, municipal, recreational, and environmental purposes consistent with applicable legal requirements. SWP operations also will continue to be closely coordinated with the Central Valley Project (CVP), including the Coordinated Operations Agreement (COA) and operational requirements resulting from the ongoing reinitiation of federal Endangered Species Act (ESA) consultation on coordinated long-term CVP and SWP operations. Primary Project

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(Cont.)

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activities include operating SWP facilities in the Delta such as pumps, the Suisun Marsh Salinity Control Gates (SMSCG), and the Barker Slough Pumping Plant, updates to the COA including the COA Addendum executed on December 12, 2018, and measures that may be adopted to avoid, minimize or mitigate impacts to listed species resulting from SWP long-term operations, including habitat restoration and other actions to address known stressors.

Location: The Project area (Figure 1) for purposes of CEQA encompasses the following SWP water diversion, storage, and conveyance facilities and SWP service areas throughout the State:

- Harvey O. Banks Pumping Plant
- John E. Skinner Delta Fish Protective Facility
- Clifton Court Forebay
- Barker Slough Pumping Plant
- Suisun Marsh and Suisun Bay Facilities including the Suisun Marsh Salinity Control Gates (SMSCG), the Roaring River Distribution System (RRDS), the Morrow Island Distribution System (MIDS), and the Goodyear Slough Outfall Gates
- South Delta Temporary Barriers
- Head of Old River Barrier
- San Luis Reservoir



1-2
(Cont.)

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist DWR in adequately identifying and/or mitigating the Project’s significant, or potentially significant direct and indirect impacts on fish and wildlife (biological) resources and identifying alternatives that would avoid or minimize adverse impacts.

Section 3.3 - Description of the Proposed Project

- DWR proposes to extend the water transfer window from July through September to July through November to increase SWP operational flexibility. CDFW is concerned that the extended transfer window into the fall months of October and November could affect hydrology, water flow, water quality, or Delta conditions, which in turn may contribute to redd dewatering and juvenile stranding for winter-, spring-, and fall-run Chinook salmon, and redd dewatering for late fall-run Chinook salmon. The DEIR acknowledges water transfer-related issues in the following:

Page 3-51: “The effects of supplies for water transfers in any individual year or a multi-transfer year is evaluated outside of this proposed action.”

Page 4-308: “Projects involving water diversions or transfers (e.g., CVP long-term operations) would affect hydrology and water flow, and therefore would have secondary impacts on salinity levels in the Delta.”

Page 4-314: “A number of other water supply and water management projects could potentially affect Delta conditions, including long-term and short-term water transfers and the Sites Reservoir Project, for example”.

CDFW recommends DWR include an analysis in the Final Environmental Impact Report (FEIR) considering the impacts of the extended transfer window on salmonid redds, incubating eggs, newly emerged fry, and juveniles.

- The description of the Barker Slough Pumping Plant operations varies among sections of the document. Please ensure that the proposed operations for the Barker Slough Pumping Plant are clearly described in terms of diversion rates and are described in the Proposed Project and alternatives. Please also ensure that impacts to listed species as a result of the proposed diversion rates are analyzed in the impact analysis. Because Barker Slough is terminal, and the pumping plant is located near the end, exports have the potential to draw larval longfin smelt and Delta smelt larvae toward the pumps and entrain them.

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- Table 1.1.A indicates that the Delta smelt food actions are part of the Proposed Project and are not considered programmatic components of the DEIR requiring subsequent CEQA analysis. CDFW is concerned about potential impacts to salmonids as a result of food action implementation. The FEIR should contain further analysis of any potentially significant impacts of the actions to water quality or hydrology that could affect biological resources. The FEIR should also analyze the data available regarding the magnitude of benefits for Delta smelt associated with the proposed food actions.

1-5

Section 3.3.1 – Old and Middle River (OMR) Management

- CDFW is concerned that over-reliance upon presence/absence data to minimize impacts to rare species, such as Delta smelt and longfin smelt, as a result of water operations could diminish the effectiveness of the minimization measures. As population sizes decline, the frequency of false-negative catches equals or exceeds the frequency of true negative catches. This creates a bias toward concluding that fish are not in the system when, in fact, they are. The Proposed Project relies on real-time monitoring of rare listed fish species to manage water operations, allowing for less restrictive operations when fish are not present. CDFW is concerned that as a species becomes more rare, their presence in surveys also becomes more infrequent as a result. Because of this nuance, the species may become exposed to even more stressful conditions simply because there are not enough fish to indicate their presence in a given area, further compounding the effect of the Proposed Project on the remaining population. Instead of focusing exclusively on presence/absence as the sine qua non of the proposed real-time monitoring to inform operations decision making, CDFW suggests DWR incorporate it as a part of but not the totality of a suite of information sources that would be used to conduct risk analyses alongside CDFW staff and make decisions in real time.
- In many cases the Proposed Project only commits to sharing risk analyses that would inform implementing an OMR management action with CDFW on an “as needed basis”. This leaves the possibility of DWR conducting a real time analysis to consider implementing an OMR management action, deciding it is not needed, and not consulting with CDFW. CDFW should be consulted to provide the opportunity to object and elevate the operational decision to the Water Operations Management Team (WOMT) and the Directors. We suggest deleting the “as needed basis” and confirming a CDFW decision-making role during all risk analyses when considering initiating, modifying, or ending an OMR management action.

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Additionally, under the Proposed Project CDFW and DWR staff would likely conduct separate simultaneous risk analyses to track species distribution and hydrology in real time. CDFW is concerned that simultaneous, separate risk analyses are not efficient. If the process following a disagreement in a risk assessment is conducted separately, then transmitted among Departments, and reanalyzed, it is likely to delay implementation of an OMR management action and exacerbate impacts to species. Instead, we suggest committing to joint CDFW-DWR risk assessments on regular intervals, potentially weekly, to make the best use of staff time and facilitate rapid decision making.

1-7
(Cont.)

- The beginning of the OMR Management section (Section 3.3.1) cites Grimaldo et al (2017) to support the proposed OMR limit of -5000 cfs to manage fish entrainment. Please note that this paper analyzed Delta smelt entrainment risk and did not evaluate entrainment of longfin smelt or salmonids. Salmonids are known to have different entrainment patterns and swimming behaviors from Delta smelt as a result of differences in their life histories and physiology. CDFW suggests revising this paragraph to properly characterize the scope of the Grimaldo et al (2017) citation and add salmon-specific citations to support the proposed OMR limit.

1-8

- The Proposed Project does not provide specific minimization measures to limit impacts to spring-run Chinook salmon although the analyses show impacts to juveniles as a result of increased entrainment and reduced through-Delta survival. Instead, the DEIR relies on protections for winter-run Chinook salmon and steelhead although their life histories are different from spring-run. We suggest including spring-run specific criteria that would effectively minimize impacts of SWP operations on spring-run Chinook.

1-9

- CDFW suggests adding daily salvage triggers for winter-run and spring-run Chinook, longfin smelt, and Delta smelt. Daily salvage triggers are an important tool to minimize impacts on species as a result of entrainment. Reducing exports following a salvage event can limit further entrainment into the South Delta and reduce subsequent salvage. Additionally, a daily salvage trigger results in a more even distribution of take over the entrainment season than an annual loss threshold, reducing the magnitude of impact on any one life history strategy (for example early vs. late migrants) within a species or run.

1-10

- The first two paragraphs in the OMR Management Section discuss OMR flexibility during excess conditions (hereafter OMR flex) in terms of "storm events". This appears to differ from the subsequent OMR flex criteria which is described in terms of operations during excess conditions.

1-11

- Please note that the CalSim II assumptions used to model the Proposed Project include an OMR limit of -6000 cfs during OMR flex operations, while the operating criteria allows for an OMR limit of -6250 cfs. Additionally, the CalSim II modeling assumes that OMR flex would be pursued in only a few one-week events in above-normal, below-normal, and dry years. We suggest either modifying the CalSim II assumptions or the wording of the OMR flex criteria to ensure consistency between the Proposed Project and the underlying modeling and impact analysis. Limiting the duration and frequency of excess conditions operations would help minimize impacts to fish species during Project implementation.

1-12

- In several places the Proposed Project carries forward operational criteria from the ITP for ongoing operations of the SWP issued in 2009 (2009 ITP). However, substantial new information has been learned since this ITP was issued as a result of new science and monitoring, including the Smelt Larval Survey (SLS). CDFW recommends that the FEIR discuss new information obtained from the SLS or other surveys since the 2009 ITP, and reconsider the operating criteria copied from the 2009 ITP in light of the substantial new information provided by implementation of the SLS and other ongoing surveys since 2009.

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For example, there is broad agreement that using Fall Midwater Trawl (FMWT) index values as multipliers/divisors in establishing criteria is not an efficacious approach moving forward, given the very low abundance of smelt species currently.

- CDFW acknowledges the importance of conducting collaborative risk assessments with DWR in real time to assess hydrologic and biological conditions in the Delta during key time periods for listed species life histories. As has been conducted previously by the Smelt Working Group (SWG), these weekly risk analyses can provide important perspectives on the need for changes in operations to minimize take. However, it is necessary to complement a collaborative risk analysis-based approach with hydrologic or biological parameters to provide a range of possible scenarios that could be analyzed in the impacts analysis. Measures for longfin smelt larval/juvenile protection state: "DWR will determine if an OMR flow protection target is warranted and determine the timing (e.g., days or weeks) and magnitude of the action." Similarly, measures for Delta smelt larval/juvenile protection state: "If necessary, DWR and Reclamation will manage exports to limit entrainment to be protective, based on the modeled recruitment levels." CDFW is concerned that this language is too open ended to be analyzed in an impacts analysis and provides insufficient certainty about the responsive action that would be taken. CDFW

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suggests adding coordination and decision-making roles for CDFW, as well as a range of hydrologic conditions that would be considered in this case.

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- The Salmonids Presence action under the Onset of OMR Management section (DEIR Section 3.3.1.1) would require an OMR of -5,000 after January 1st and if at least 5 percent of a specified salmonid population has entered the Delta. Please note that salmonids are known to enter the Delta before January 1st each year. Examination of the distribution of winter-run Chinook brood years 1994-2018 shows that wild young of year winter-run can be present in the Delta (as determined using Sacramento Trawl data from the Central Valley Prediction and Assessment of Salmon database (SacPAS)) as early as September. Of the 25 years of record, only in seven years has winter-run presence in the Delta occurred after January 1. Using the same data, on average 31.9% of wild young of year winter-run are estimated to be in the Delta by January 1. Although the Salmonids Presence action under the Onset of OMR Management section will provide some protection for salmonids migrating through the Delta and rearing in the Delta, please account in the impact analysis for the timing-related limits in the Salmonids Presence action's effectiveness, based on a January 1 start date.

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- When evaluating salmonid presence in the Delta please note that the two available sources of information, Delta Operations for Salmonids and Sturgeon (DOSS) and SacPAS, have regularly reported different salmonid presence information from 2015 – 2019. SacPAS consistently indicates that salmonids move into the Delta later than DOSS. Additionally, DOSS estimates are founded in professional assessments of a wide range of data sources including available real time data. SacPAS estimates of salmonid distribution are not available in real time. If a decision must be made on January 1 regarding salmonid presence in the Delta, SacPAS will not yet have the information available while DOSS would. For all these reasons we suggest relying on DOSS, as it has been conducted since 2010, instead of SacPAS, to assess salmonids presence in the Delta. During the first few years of Project implementation SacPAS could be evaluated relative to DOSS and considered for inclusion into this action through an Adaptive Management Program.

- Many minimization measures depend on factors that have uncertain timelines or information that may not be available for several years. As a result, implementation of species protections could be delayed while the measures are being finalized, or information is gathered or peer reviewed. For example, the Delta smelt life cycle model intended to serve as the foundation for larval and juvenile Delta smelt entrainment OMR management action is not yet finalized and, to CDFW's knowledge, peer review has not begun. It is unclear when this model could be

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available to use as a peer reviewed fully supported tool to make operations decisions in real time.

As another example, implementation of the cumulative loss threshold criteria involves a process with a long delay before additional minimization or mitigation may be provided to offset increased impacts to listed species. There are no specified actions proposed (for example real-time OMR restrictions) in response to exceeding the cumulative loss thresholds. Instead, after 50% of the cumulative loss threshold is exceeded DWR would convene an independent panel to review actions. DWR will also convene a panel in 2024 to review actions. If the cumulative loss threshold is reached, DWR will seek technical assistance from CDFW and the National Marine Fisheries Service (NMFS) and convene another panel to make recommendations. However, it is unclear what actions would be taken in the event a cumulative salmonid loss threshold is exceeded. There is no description of what measures could be taken to reduce ongoing impacts, nor a specific commitment to implement measures recommended by independent panels or through technical assistance provided by CDFW and NMFS.

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Section 4.4.7 - Impacts of the Proposed Project

- The DEIR analyzes impacts to species on a life-stage by life-stage basis. Impacts on each life stage are generally concluded to be less than significant in spite of analyses that frequently show adverse effects on listed species. It is unclear where the impacts analysis takes the additional step to evaluate all of the accumulated life stage specific impacts on the species. As a result, the FEIR should fully analyze or account for the combined impacts of the Proposed Project across all life history stages.
- The impacts analysis concludes that the modeled impacts to listed species are not likely to be as great as predicted during Project implementation because the models rely upon CalSim II, which cannot account for adjustments to operations in real time as a result of fish distribution.

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For example, the spring-run Chinook salmon impacts analysis states:

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Page 4-211: "Differences between the Proposed Project and Existing Conditions scenarios were apparent in November, April, and May (Figure 4.4-72). For these months, flow proportion into the Old River route is higher under the Proposed Project scenario in all water year types, but the differences were clearest and most substantial in below normal and drier years. In dry years, flow proportion into the

Old River route was 40% greater under the Proposed Project than under the Existing Conditions scenario.” “This change in flow proportion indicates juvenile salmon approaching the Delta from the San Joaquin River basin during April and May are much more likely to enter the Old River route under the Proposed Project than under the Existing Conditions scenario.”

Page 4-212: “It is also important to note that although the Proposed Project does not include installation of the HORB, Spring-run Chinook Salmon juveniles may receive some ancillary protection during April and May from the risk assessment-based approach for OMR flow management included in the Proposed Project that would be undertaken for other species.”

Please note that the CalSim II assumptions did attempt to incorporate some real time operations. For example, CalSim II assumed a limit of OMR at -3500 cfs during the entire months of March and April for most water year types as a result of a steelhead annual loss threshold trigger. Even with this assumption, the analyses note increases in impacts under the Proposed Project as compared to existing conditions. This highlights the importance of the minimization measures and alternatives that CDFW has recommended in this letter, to further minimize impacts to the species.

- Table 4.4-17f on Page 4-214 shows substantial increases in loss of juvenile spring-run Chinook salmon during all water year types (35% in critical years to 216% in above normal years) in the Proposed Project versus Existing Conditions scenario. Table 4.4-6 references this increase in juvenile spring-run Chinook salmon entrainment loss and states, “OMR management for other listed species could incidentally limit Spring-run Chinook Salmon entrainment.” Page 4-215 further states, “Specifically, single year and cumulative loss thresholds for steelhead and Winter-run Chinook Salmon could provide additional protection for Spring-run Chinook Salmon.” CDFW is concerned about reliance on loss thresholds for steelhead and winter-run Chinook salmon to incidentally minimize impacts to spring-run Chinook salmon. Steelhead are not a CESA-listed species and would not be a covered species under the pending ITP. Any specific minimization measures included in a federal permit cannot necessarily be relied upon as minimization measures for covered species under an ITP, and may not be effective in limiting Project impacts to spring-run Chinook salmon. Additionally, reliance on a loss threshold for winter-run Chinook salmon would not provide spring-run Chinook salmon protection, as the two runs have different life histories and thus different salvage seasons. Any minimization measures for winter-run will not fully overlap with spring-run distribution in the Delta, likely missing their peak entrainment period.

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CDFW recommends that the FEIR consider minimization measures that are specifically designed to minimize impacts to spring-run Chinook salmon.

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- CDFW notes the potential benefit to native smelt fishes from food actions and has participated in the adaptive science around these projects that have occurred as pilot experiments. CDFW makes the following point about salmonids to ensure an adequate record for informed decision making that facilitates consideration of potential benefits and impacts.

CDFW recommends that the FEIR should further analyze and characterize how components of the Proposed Project, including the summer and fall Delta smelt food actions, will affect migratory behavior of salmonids. The fall food action has the potential to create a false attraction flow and cause fish to stray into Yolo Bypass. Adult salmonids and other fish stray into the Yolo Bypass regardless of the fall food action. However, Wallace Weir salvage data suggest that this action may increase the number of fish that stray as well as how far they stray into the bypass, likely due to a combination of increased flow and the removal of migration barriers such as agricultural Road Crossing #4 at Swanston Ranch. Telemetry studies have shown that once fish pass the point in the Yolo Bypass where tidal influence ends, they generally do not turn around and are essentially trapped (Frantzich et al 2019). The FEIR should further discuss potential impacts to salmonids associated with false attraction, straying, and entrapment in the Bypass. The FEIR should also include a description and discussion of water quality impacts to native fish species (including Delta smelt) associated with the action. Data from the study period 2016-2019 documented both high levels of contaminants and high water temperatures during the flow action when agricultural drain water was used to generate the flow pulse through Yolo Bypass. Frantzich et al. (2019) states: "Managed flow pulses in the summer using a Sacramento River water source may be a better management strategy to reduce negative impacts from pesticides." In developing the FEIR please consider also including references to Davis et al. (2019), Hammock et al. (2015), and DWR's telemetry data collected between 2010-2018 and salmon salvage data collected at Wallace Weir from 2016-2019 during the North Delta Fall Flow Action Study.

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- CDFW is concerned about impacts to salmonid Delta rearing habitat. Please add further analysis that evaluates potential impacts to rearing salmonids as a result of the Proposed Project.

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- Page 4-15 of the DEIR states that:

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“With implementation of the Proposed Project scenario, Delta outflow would be reduced in April, May, September, and November, when compared to the Existing Conditions scenario. The SWP’s estimated contribution to long-term flow changes ranges from 30% to 60%, depending on the month. Delta outflow would remain similar in all other months.”

Figure 4.2-9 indicates that OMR flows will be more negative during April and May each year. Please note that these are important months during the life history of Delta smelt, longfin smelt, winter- and spring-run Chinook salmon. For example:

- More negative OMR flows and decreased Delta outflow in the spring are likely to result in higher entrainment of spring-run Chinook salmon and larval Delta smelt.
- Kimmerer et al (2009) demonstrated a significant relationship between longfin smelt abundance and Delta outflow from January – June. As a result, reducing Delta outflow in April and May is likely to have a negative impact on longfin smelt abundance.
- Reduced Delta outflow in September is likely to impact Delta smelt by limiting available low salinity zone habitat for rearing juveniles.

- To determine if there are any significant impacts on salmonid species, the DEIR compares existing conditions to the Proposed Project. The DEIR acknowledges that there is a “baseline consisting of a trending decline of listed-species population within the Delta and other waterways used by anadromous fish populations in northern California.” (DEIR, page 4-310; see also page 4-34 to 4-35, quoting from the NMFS 2009 *Biological Opinion and Conference Opinion on the Long-term Operations of the Central Valley Project and the State Water Project* (2009 BO).) The FEIR would benefit from a more detailed consideration of the impacts on salmonids since the 2009 BO was first implemented and their current low populations. Without this first analysis, there is an implicit assumption that the 2009 BO was protective enough for salmonids and thus any small change from current conditions would not be significant. However, when considering adult escapement of all runs of Chinook salmon, it is apparent that populations have continued to decline during the 2010-2018 time period (Grand Tab – Chinook Salmon Escapement, CDFW). With population numbers for all runs of Chinook salmon still declining, the potential for the Proposed Project’s operations to influence that trajectory warrants careful consideration in the FEIR. CDFW encourages DWR to consider alternatives and mitigation measures discussed in these comments to enhance, rather than diminish, protections for these species.

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- The same analytical problem exists for smelt. The FMWT reported the highest abundance index for Delta smelt in 1970 at 1,673 and longfin smelt in 1967 at 81,737. Since the issuance of the United States Fish and Wildlife Service (USFWS) 2008 Biological Opinion for Delta Smelt (2008 BO) and the 2009 ITP authorizing SWP take of longfin smelt, Delta smelt and longfin smelt have continued to decline. After 2008, the FMWT index for Delta smelt and longfin smelt hit record lows in 2015 with a longfin smelt index of 4 and in 2018 with a Delta smelt index of 0. The DEIR acknowledges these extremely low population levels. (DEIR, page 4-55 to 4-58, including Figures 4.4-8 and 4.4-9.) The DEIR states that there is an overall, significant cumulative impact from past and present modifications and projects in the Delta that have contributed to the continuing decline in Delta fish populations and habitat of protected species. In light of these existing impacts, and because both species reached these historic lows under existing conditions, it is reasonable to conclude that protections need strengthening, not weakening, and that any diminishment of existing protections could worsen these species conditions. Modeling used to support the Proposed Project shows that OMR flows will be more negative and Delta outflow will decrease during certain times of the year relative to existing conditions. This is important when considering declining population trends over the last 10 years and the need to consider the sufficiency of existing requirements in minimizing impacts to the smelt species, and further highlights the importance of minimization measures or alternatives that CDFW has recommended in this letter to minimize the Proposed Project's impacts to species.

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Section 3.3.3 - Delta Smelt Summer-Fall Habitat Action

- On page 3-31 the Proposed Project states:

"This action would be coordinated with Reclamation and categorized as an in-basin use for COA purposes. In the event that Reclamation does not meet its share of the Delta outflow to meet 80 km X2, DWR will implement its share of this action."

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Please provide additional text and analyses to characterize the impacts on X2 and the location and quantity of Delta smelt habitat that would be expected if Reclamation does not meet its share of the X2 standard. We also suggest incorporating this information into the impacts analysis as a potential limit to the benefits provided by the proposed summer and fall operations.

- Please note that proposed Delta smelt food actions are still experimental with benefits that may vary year-to-year. Although these are valuable studies to investigate the potential benefits associated with management actions to improve

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food availability for Delta smelt, the magnitude of their benefits is uncertain at this time.

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Section 5.4 - Alternative 3

- Installation of the Head of Old River Barrier (HORB) in the fall and spring could be an important tool for minimizing take of San Joaquin origin salmonids and increasing their chance of survival to the ocean. HORB increases the through-Delta survival of steelhead and fall- and spring-run Chinook salmon by improving outflow and water quality on the San Joaquin River, thereby reducing travel time, predation, and entrainment into the South Delta through Old River (Dauble et al 2010, NMFS 2019 and Michel 2019). There is a correlation between salmonid survival and San Joaquin outflow such that high outflow at Vernalis on the San Joaquin River is associated with high survival (USBR 2013). Newman (2008) showed that survival of salmonids migrating down the mainstem San Joaquin River to Jersey Point was higher than survival of fish that were released in, or traversed through, the Old River route and experienced handling at the salvage facilities. Additionally, analyses of both ocean fishery and freshwater recoveries demonstrated a strong survival relationship when HORB was in river (Newman 2008). River reaches downstream of the head of Old River on the San Joaquin had greater survival rates when HORB was present because HORB directs more water down the mainstem San Joaquin and higher outflows are correlated with higher survival (Buchanan 2018 and NMFS 2019).

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Section 5.5 – Alternative 4

- The analysis of impacts to surface water quality in below normal years as a result of Alternative 4 relies on the most extreme water operations scenario that is not analyzed consistently across alternatives. The Alternative 4 analysis assumes that the SMSCG would not be operational during the entire June – August time period of below normal years. However, analyses of the summer-fall action in the Proposed Project assume that the SMSCG would be continuously available to operate during the summers of wet and above normal years and September and October of below normal years.
- Despite the issuance of the 2008 BO, Delta smelt have continued to decline to the lowest levels observed since monitoring began in the late 1960s, as evidenced by the FMWT index of 0 in 2018. Other long-term monitoring programs such as the Spring Kodiak Trawl, 20 mm survey, and Summer Townet, have all also demonstrated similar declines at other life stages. In addition to this continued

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decline, modeling in the DEIR indicates that the Proposed Project generally results in more negative OMR flows and reduced Delta outflow compared to existing conditions. Because of this, CDFW remains concerned about impacts to Delta smelt. Please consider focusing on including measures in the Proposed Project that will increase the survival rate of larvae and juvenile fish to adulthood, such as the summer-fall habitat action in Alternative 4. By managing water operations to keep the low-salinity zone within the higher-quality habitat areas of Suisun Bay and Marsh during the summer and fall, survival to adulthood is increased. Bolstering the abundance of adult fish going into the winter season would ultimately increase recruitment to the population and buffer the species from continued decline (IEP MAST 2015).

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- Mitigation Measure 4-1 could diminish the benefits of Alternative 4 to Delta smelt habitat by operating to a cap of 100 TAF instead of relying on the 4 ppt salinity criteria at Belden's Landing. Imposing a cap of 100 TAF may, in some years, reduce the duration or extent of Delta smelt habitat as compared to what would be achieved by the operations described in Alternative 4.

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- Please revise the text in Alternative 4 that states that flows associated with Alternative 4's criteria will not change water temperature. It is important to note that even if flows do not lower water temperature directly, the flows provided by Alternative 4 would move the low salinity zone habitat into regions of the Delta where ambient air temperatures, and consequently water temperatures, are known to be cooler than more central regions of the Delta.

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Modeling

- Please note that there appears to be a discrepancy in the timelines of assumptions included in the climate change analysis. It is CDFW's understanding that the analysis assumes two sea level rise predictions at 15cm and 45cm. A 45 cm sea level rise assumption is more appropriate for 2060 projections. CDFW agrees that providing analysis of conditions over this timeframe is important. However, temperature and rainfall projections are based on 2030 conditions. No other parameters were modified for the climate change analysis. CDFW suggests analyzing expected changes in all relevant abiotic factors as of 2060 to provide a more robust long-term analysis in support of cumulative impact conclusions. Limiting the climate change analysis to 2030 does not adequately capture cumulative and reasonably foreseeable impacts to the species.

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- It appears that SWP modeling assumptions used in the 2019 Biological Assessment (BA) for the federal Biological Opinions are not the same as the SWP modeling conducted to support the Proposed Project in the DEIR. For example, the CalSim II results for the mean modeled OMR flows in the DEIR are different from those in the BA, for both the proposed and existing condition scenarios. This makes it difficult to interpret the significance findings and understand future operations of the SWP. For example, in the BA, there is a consistent pattern of more negative mean modeled OMR flows for the Proposed Project versus Existing Conditions scenarios; while, in the DEIR, there is a consistent pattern of more similar mean modeled OMR flows between the Proposed Project and Existing Conditions scenarios across most months, except April and May. CDFW suggests providing an explanation in the FEIR of the model assumptions that were changed from what was used in the BA, how these changes led to expected hydrologic differences, and why these changes were justified. 1-33
- CDFW recommends providing additional modeling results for project alternatives to facilitate a quantitative comparison among the Proposed Project, existing conditions and the alternatives. 1-34

Monitoring

- Under existing conditions there is a requirement for DWR to provide funding for existing Interagency Ecological Program (IEP) surveys that serve as the foundation for real time and long-term species and ecosystem monitoring. CDFW suggests clearly renewing this commitment in the FEIR. Many of the OMR management actions rely upon real time monitoring to inform risk assessments and support operational decision making. The ability to effectively conduct risk assessments and real time monitoring is diminished substantially if existing surveys are not maintained into the future. 1-35
- Page 3-33 of the document notes that advances in real time monitoring, science, and decision support tools reduce the need to rely upon professional opinion and allow operators to increase the use of qualitative and quantitative models. However, the Proposed Project's emphasis on risk analyses to determine whether to implement or off-ramp from a protective measure, such as larval and juvenile Delta smelt protection (DEIR Section 3.3.1.2), appears to rely heavily on professional opinion. Additionally, please note that all models are developed based on professional opinion and measured judgements about the appropriateness of model assumptions. 1-36

- Figure 3.3 depicts the series of questions that must be addressed during the process of evaluating whether to initiate OMR flex operations, which includes a risk analysis based on the distribution of listed species in the Delta. Page 3-35 states that beach seines, enhanced Delta smelt monitoring (EDSM) and acoustic telemetry would be used to inform OMR flex risk analysis. EDSM is a survey designed to target Delta smelt and may not be appropriate for assessing salmonid distribution and abundance. Beach seines were not designed for real-time monitoring and have several weaknesses including: 1) a focus on sampling sites with open, unobstructed shoreline instead of quality rearing habitat with substrate and riparian vegetation, and 2) monitoring is not uniform or daily, instead it is conducted anywhere from twice per month to three times per week depending on the monitoring station. Instead of relying on limited surveys designed for other purposes, like EDSM and beach seines, we suggest committing to support existing IEP surveys and implementing a real time process like the current DOSS and SWG groups to analyze salmonid and smelt distribution in the Delta when evaluating the risk of initiating or continuing OMR flex. 1-37

- In relation to real-time operations the DEIR mentions that new information will be more precise. CDFW recommends that the FEIR explain how or why this new information will be more precise than current information sources. More importantly, monitoring data (which real-time operations relies upon) needs to be both precise AND accurate. 1-38

Scientific Citations

- In CDFW's review we noted several citations that did not clearly align with the analyses and conclusions in the papers cited:
 - Grimaldo et al. (2017a) is used to suggest that longfin smelt larvae hatch and rear in a much broader region and salinity range (2-12 ppt) than previously described. The DEIR does not mention that most fish caught in the study's surveys occurred between 2-4 psu, within the low salinity zone. 1-39

 - Grimaldo et al. (2017b) is cited to suggest that an OMR threshold of -5000 cfs is an inflection point for Delta smelt entrainment. However, this paper did not model a range of OMR values to determine if -5000 cfs is more or less protective than other OMR values, such as -2000 cfs. Additionally, this paper focused on Delta smelt entrainment and did not analyze entrainment patterns of longfin smelt, or winter- and spring-run Chinook salmon.

- Grimaldo et al. (2009) is cited to support the assertion that X2 does not influence entrainment of Delta smelt and longfin smelt (page 4-180). Please note that this is not consistent with the finding of the study, which showed that salvage decreased when X2 was lower. Specifically, this paper states:

“For adult delta smelt and longfin smelt, year class strength did not predict salvage at the interannual level, but X2 (used as an index of their distribution) was a predictor for delta smelt salvage at the intra-annual scale when Old and Middle River flows were negative.”

- If the Directed Outflow Project report is finalized prior to the FEIR and retained as a citation please note that it is limited to analyses of only one water year, 2017, which is not representative of wet water years in recent history and may not provide a good example of conditions expected under wet years in the following ten years.

Comments made on Draft Environmental Impact Statement in August 2019

Below CDFW copied subsets of the comments submitted on the Draft Environmental Impact Statement (Draft EIS) for the Reinitiation of Consultation on the Coordinated Long-Term Operation of the Central Valley Project and State Water Project that also apply to the Proposed Project described in the DEIR. CDFW’s comments on the Draft EIS are presented in italics, with additional and updated comments on the same issue presented below the Draft EIS comment.

Draft EIS comment on Section 5.9.1.7.7 – Longfin smelt: *The Environmental Consequences section of the Draft EIS acknowledges that reduced winter-spring Delta outflow and increased entrainment risk associated with Alternative 1 may impact longfin smelt. Although the document notes a link between winter-spring outflow and longfin smelt abundance, no minimization or mitigation measures are proposed to avoid or minimize such adverse environmental impacts. We suggest conducting a more thorough quantitative analysis, using published outflow-abundance relationships, to quantify potential impacts to longfin smelt as a result of Alternative 1. If this analysis demonstrates adverse impacts to longfin smelt we suggest adding an alternative or mitigation measure in the form of increased Delta outflow during the January – June time period to minimize impacts. (See 40 C.F.R. §§1502.14, subd. (f); 1502.16, subd. (h).)*

Additional comment related to the DEIR: CDFW appreciates that DWR included quantitative analyses of the relationship between longfin smelt abundance and spring outflow. CDFW suggests also including an analysis of the outflow-abundance relationship based on Kimmerer et al. (2009) for the Proposed Project and project alternatives. CDFW

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also appreciates that DWR included Alternatives 2A and 2B, which focus on improving spring and summer outflow for longfin and Delta smelt.

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Draft EIS comments on Section 3.4.5.6.1 – Bay-Delta, Onset of Old and Middle River (OMR) Management

Real-time operating groups: It is essential to clearly articulate membership in all real-time operations groups and decision-making authorities to understand the context for operations decision making under Alternative 1. We suggest assigning final decision-making authority to the agencies responsible for issuing take authorization under the federal and state endangered species acts, USFWS, NMFS and CDFW to ensure the minimization of species impacts attributed to the measure is realized. In our comments below we note portions of the Draft EIS where the decision-making process and associated criteria are unclear.

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Additional comment related to the DEIR: We note the addition of CDFW in some real-time decision-making processes in the description of the Proposed Project. However please see CDFW's earlier suggestions to improve the OMR management section to further clarify and confirm the role of CDFW in decision making.

Single-Year Salvage Threshold:

The proposed single-year salvage thresholds do not include Delta smelt, spring-run Chinook salmon, or hatchery steelhead, all of which are also impacted by the Project. We suggest including a loss threshold for Delta smelt and spring-run Chinook salmon in addition to winter-run and steelhead. For example, a Delta smelt loss threshold could be calculated each year using the average of the FMWT index in the preceding three years. Establishing a loss threshold based on recent years FMWT indices would ensure that the threshold reflects changes in Delta smelt abundance in the recent past.

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Salvage triggers, such as those required in Action IV.3 of the 2009 NMFS Biological Opinion, in addition to the annual loss thresholds, should be considered as a means to minimize take of listed species in real-time based on observations of fish in the SWP/CVP salvage facilities. If salvage triggers are used to implement short term reductions in operations, they can effectively minimize entrainment by temporarily altering the hydrology of the south Delta, potentially giving fish the opportunity to migrate through the central and south Delta out of the zone of influence of the facilities.

Additional comment related to the DEIR: Please consider including salvage triggers in the Proposed Project in the FEIR.

Draft EIS comment on Section 3.4.5.6.3 – Bay-Delta, Storm-Related OMR Flexibility: We suggest revising this section to establish quantifiable criteria that would be used as on-ramps and off-ramps for storm operations. As currently drafted, the Project Description does not allow for a meaningful evaluation of potential impacts to species from storm operations because it is unclear under what scenarios storm operations would be pursued, how long they might last, and the extent to which storm operations would influence entrainment risk and OMR flows. When revising this section please consider the following questions and suggestions:

- We suggest including limits on the duration of storm operations based on observations of storm events in the recent past. Please use an analysis of prior water years to establish a maximum number of days per storm event when OMR flows would be allowed to exceed -5000 cfs.
- Please add quantifiable on-ramps based on observed changes in hydrology. For example, changes in flows at Freeport could be an appropriate indicator of changes in hydrology at the beginning of a storm event.
- Please provide a description of operations after an additional OMR restriction (ex. turbidity and loss thresholds) triggers an off-ramp from storm operations. We suggest revising the text to clearly explain that an off-ramp from storm operations would result in an increase in OMR flows as required by each “Additional Real-Time OMR Restriction”. For example, a 50% wild winter run Chinook annual loss trigger would result in an OMR flow limit no more negative than -3500 cfs. Please also see our comments on individual “Additional Real-Time OMR Restrictions.”

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Additional comment related to the DEIR: CDFW acknowledges that the DEIR does not describe flexible operations during “storm events.” Instead, the DEIR focuses flexible operations on times when the Delta is in excess conditions. This provides some additional information regarding the circumstances in which OMR flexibility would be pursued. However, please see our earlier comments regarding the need for a limit on the duration and frequency of OMR flex operations, and inclusion of quantifiable off-ramps and a clear description of operations after OMR flex operations end.

Draft EIS comment on Section 3.4.5.8 – Bay-Delta, Delta Smelt Summer-Fall Habitat: We suggest revising this portion of the Project Description to provide additional specificity regarding decision making processes, operational off-ramps, and biological goals and criteria. When revising this section please consider the following questions and suggestions:

- It is unclear whether the proposed summer-fall action allows for flexibility in real-time in response to changes in temperature or other conditions that weren’t anticipated during annual planning, to manage conditions and ensure that overarching biological goals will be met.

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- *We suggest adding quantifiable criteria for Delta smelt summer and fall habitat that would be used to select actions each year and gauge success over the long term.*
- *Please remove vague caveats on proposed goals such as, “to the extent practicable.” These make it difficult to assess the limitations on the measure, and consequently its effectiveness in minimizing Project impacts.*
- *Please explain how the benefits provided by planned Delta smelt restoration projects, including Tule Red, would be affected as a result of the Project.*

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Additional comment related to the DEIR: Please provide additional information in the FEIR to better explain the aspects of summer-fall action implementation and associated benefits. Please also consider removing caveats and providing clear commitments to quantifiable criteria that would facilitate long-term evaluation and adaptive management of Delta smelt summer-fall habitat. Please also see comments above related to Alternative 4.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

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FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

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CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist DWR in identifying and mitigating Project impacts on biological resources.

Dean Messer, Division of Environmental Services Chief
Department of Water Resources
January 6, 2020
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Questions regarding this letter or further coordination should be directed to Brooke Jacobs, Environmental Program Manager at 916-376-1986 or Brooke.Jacobs@wildlife.ca.gov.

Sincerely,



Joshua Grover
Water Branch Chief

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II.3.2 LETTER S-CDFW-1 – CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, JOSHUA GROVER, WATER BRANCH CHIEF, DATED JANUARY 6, 2020

II.3.2.1 RESPONSE TO COMMENT S-CDFW-1-1

DWR acknowledges CDFW’s role with respect to long-term operations of the SWP.

DWR also acknowledges the evolution from the Proposed Project described in Chapter 3 of the DEIR to the project described in the ITP application submitted to CDFW on December 13, 2019. As discussed in Master Response 3, “The CEQA Process,” the alternatives analysis presented in DEIR Chapter 5 are intended to cover the range of actions that may be considered by CDFW as a part of the CESA ITP process. Since publication of the DEIR, DWR, in consultation with CDFW, has made further refinements to the project and alternatives, as shown in Part 3 of the FEIR, and Refined Alternative 2b is DWR’s preferred alternative. See Master Response 3, “The CEQA Process,” for more information.

II.3.2.2 RESPONSE TO COMMENT S-CDFW-1-2

This comment describes the commenter’s understanding of the project description. No specific response is required.

II.3.2.3 RESPONSE TO COMMENT S-CDFW-1-3

As noted in the DEIR Chapter 3.3.15, “Water Transfers,” the quantity and timing of Keswick releases would be similar to those that would occur absent the transfer, so minimal effects on salmonids spawning and rearing in the upper Sacramento River (e.g., Winter-run Chinook Salmon) would be expected with implementation of the Proposed Project. As noted in DEIR Appendix G, “Geographic Scope of Project’s Influence on Flow,” operations of the Oroville Complex and resulting flows in the Feather River are not included in the EIR because Oroville operations are governed by separate legal authorizations, including a Federal Energy Regulatory Commission license and other associated regulatory reviews and requirements; so no changes to operations of the Oroville Complex and Feather River are proposed as part of the long-term operations of the SWP. Please see Master Response 1, “Scope of Analysis.”

Water transfers may likely originate from various locations in the Sacramento River basin depending on their specific character (i.e., water source) and timing. Because of this variability, it is not practical to estimate how they may individually and cumulatively affect flows in the affected surface waterways.

As noted in DEIR Chapter 4.6.1, “Cumulative Effects,” it is recognized that other projects including long-term and short-term water transfers would be subject to their own CEQA impact assessment and permitting analyses.

With respect to potential effects to juvenile salmonids within the Delta, expansion of the water transfer window to include July to November would be expected to have limited overlap with Winter-run Chinook Salmon occurrence in the Delta, given that most individuals appear to migrate into the Delta with early winter flow pulses (del Rosario, R. B., Y. J. Redler, K. Newman, P. L. Brandes, T. Sommer, K.

Reece, and R. Vincik. 2013. Migration Patterns of Juvenile Winter-run-sized Chinook Salmon (*Oncorhynchus tshawytscha*) through the Sacramento–San Joaquin Delta. *San Francisco Estuary and Watershed Science* 11(1.).

The potential for greater South Delta entrainment would exist for juvenile Winter-run Chinook Salmon occurring during the extended water transfer window, but this would be expected to be limited and such entrainment loss would count toward cumulative thresholds, which would protect the species throughout the entire winter/early spring entrainment risk period. For Spring-run Chinook Salmon, expansion of the water transfer window to include July to November would be expected to have limited overlap with occurrence in the Delta. Yearlings generally may migrate in winter (as indicated by monitoring of Late Fall-run surrogate fish for entrainment management) and young-of-the-year Spring-run Chinook Salmon migrate through the Delta in spring, so potential for effects including take would be limited. As with Chinook Salmon, there would be expected to be limited potential for effects to steelhead from the expansion of the water transfer window.

For general information regarding water transfers and DWR’s role in facilitating transfers, please see DWR’s website at <https://water.ca.gov/Programs/State-Water-Project/Management/Water-Transfers>.

II.3.2.4 RESPONSE TO COMMENT S-CDFW-1-4

The Barker Slough Pumping Plant (BSPP) facilities and operations are described in several sections of the DEIR. Existing operations at the BSPP are described in DEIR Chapter 3.1.3.4. Proposed operations under the proposed project are summarized in Tables 1-1a and 3-3a and described in more detail in Chapter 3.3.9. Operation of the BSPP would be the same as the Proposed Project for Alternatives 2a, 2b, 3, and 4 and are not described separately. Operations for the No Project alternative would be the same as current operations under existing conditions.

Analysis of potential impacts to listed species as a result of Barker Slough pumping operations is included in the DEIR Chapter 4.4.7.4, “Species-Specific Impact,” e.g., with respect to smelt entrainment based on particle tracking modeling for Delta Smelt and Longfin Smelt under subheading, “Particle Tracking Modeling.”

II.3.2.5 RESPONSE TO COMMENT S-CDFW-1-5

As described in the DEIR Chapter 3.3.3.1, “Food Enhancement Summer-Fall Action,” the Delta Smelt food actions are proposed to take place during the summer/fall, resulting in little potential for overlap with state-listed salmonids. (See response to Comment S-CDFW-1-20 for discussion related to other salmonids.) As suggested by the commenter, an analysis of potential effects to Delta Smelt from the food actions has been added to the FEIR. Please see Part III of the FEIR for specific refinements made to DEIR Chapter 4.4.7.4, “Species-Specific Impacts” subheading, “Qualitative Analysis” of the “Summer-Fall Habitat” discussion for Delta Smelt.

II.3.2.6 RESPONSE TO COMMENT S-CDFW-1-6

As noted in the DEIR Chapter 3.3.1, DWR proposes to manage OMR flow by incorporating all available information into decision support for the management of OMR flow. The available information includes real-time monitoring of fish distribution, turbidity, temperature, hydrodynamic models, and entrainment models. Further, as discussed in Part III of the FEIR, refinements were made to the preferred Refined Alternative 2b to reflect CDFW's request for Collaborative Real-Time Risk Assessment during OMR Management period for species listed under CESA. A revised Chapter 5.3.1.1, "Collaborative Real-Time Risk Assessment," has been added to Alternative 2b, which includes weekly joint meetings between DWR and CDFW technical staff and joint development of risk assessment and supporting documentation. Please see Master Response 25, "Real Time Operations," for further information.

II.3.2.7 RESPONSE TO COMMENT S-CDFW-1-7

Refinements made in coordination with CDFW to Alternative 2b include a greater coordination and decision-making role for CDFW. Specifically, revised Chapter 5.3.1.1, "Collaborative Real-Time Risk Assessment" has been added to Alternative 2b, which includes weekly joint meetings between DWR and CDFW technical staff and joint development of risk assessment and supporting documentation. Please see Master Response 25, "Real Time Operations," for further information.

II.3.2.8 RESPONSE TO COMMENT S-CDFW-1-8

The Grimaldo et al. (2017) paper was focused on Delta Smelt, and a -5,000-cfs inflexion point is consistent with the rationale provided for salmonids in the National Marine Fisheries Service 2009 biological opinion for SWP/CVP operations (see, for example, p.652). However, it is important to note that the DEIR does include comprehensive analyses of juvenile salmon entrainment losses by use of 1) a salvage density-based method and by 2) proportional entrainment loss (e.g. Zeug and Cavallo 2014) based on tens of millions of coded wire-tagged (CWT) hatchery salmon releases (see, for example, p.200-205 of Section 4.4).

For winter run Chinook Salmon, an analysis comparable to Grimaldo et al. (2017) was completed using 178 release groups of CWT winter run hatchery smolts (Zeug and Cavallo 2014). Additional analysis reported by Cavallo and Zeug (2016) showed total exports explained winter-run salvage better than the OMR relationship ($\Delta AIC=6$), with the percentage of winter run Chinook lost to entrainment remaining low and level until combined exports exceeded 6,500 cfs. Also analogous to Grimaldo et al. (2017), Zeug and Cavallo (2014) reported relative mortality because of entrainment loss as a function of total exports (Zeug and Cavallo 2014; Figure 4). These analyses support the conclusions that exports associated with a -5,000 OMR are protective of both juvenile salmon and Delta Smelt.

II.3.2.9 RESPONSE TO COMMENT S-CDFW-1-9

Although the long-term operations of the SWP does not include specific minimization measures related to OMR flow management, ancillary protection would occur as a result of measures for Winter-run Chinook Salmon and steelhead because the presence of wild young of the year Spring-run is a trigger for OMR flow management (DEIR Chapter 3.3.1.1 Onset of OMR Management), and salvage of >0.5% of

yearling Spring-run surrogates would preclude OMR flow management flexibility (DEIR Chapter 3.3.1.2, Real-Time OMR Limits and Performance Objectives). In addition, the project will now include the use of Spring-run fry surrogates as a guide for operations. The details of these releases remain to be finalized but are expected to include tagged fry releases in spring. Moreover, DWR commits to work over the next several years to develop a population index (“JPE”) for Spring-Run so that specific salvage targets can be developed. These JPE-based entrainment targets would eventually replace the use of hatchery fry surrogates.

There are also a number of minimization measures relevant to Spring-run Chinook Salmon set forth in the 2019 NMFS biological opinion, including the yearling incidental take limit for Banks and Jones Pumping Plant; Reasonable and Prudent Measure-5 (in particular predator hot spot management and Skinner and Tracy fish facility improvements), and Reasonable and Prudent Measure-10 (Delta Performance Objective for young of the year CV spring-run Chinook salmon) are two examples. Furthermore, Zeug and Cavallo (2014) analyzed patterns of entrainment loss among 6.8 million natural origin coded wire-tagged (CWT) fall-run, and 2.8 million CWT spring-run juveniles produced by Feather River Hatchery. Entrainment loss for these CWT spring-run was less than 0.0005%, such that further analyses of these data in Zeug and Cavallo (2014) were not feasible. As with fall-run Chinook, a very small proportion of spring-run Chinook originating from the Sacramento River basin are expected to be entrained at the south Delta export facilities. Given these observations, a spring-run trigger comparable to that used for winter-run Chinook (or its surrogates), is unlikely to be reached under proposed south Delta export operations.

II.3.2.10 RESPONSE TO COMMENT S-CDFW-1-10

Although daily salvage triggers are not included in the Proposed Project, Refined Alternative 2b, the preferred alternative for the FEIR, includes a joint real-time risk assessment to be conducted by DWR and CDFW to inform a DWR/Reclamation OMR flow recommendation to the Water Operations Management Team (WOMT), with the CDFW Director determining the OMR flow if WOMT does not agree with the recommendation. This demonstrates that CDFW would have considerable oversight in management of potential factors influencing entrainment risk—recent daily salvage could be one factor considered as part of the risk assessment, for example. In addition, DWR conducted statistical analysis that showed salvage loss estimates with currently available data are highly uncertain. Confidence intervals associated with salvage loss estimates (particularly daily values) are so wide they provide minimal value in setting or defining salvage triggers (Simonis et al. 2016). For daily salvage triggers to yield more meaningful management information, improved estimates of key model parameters would be required.

II.3.2.11 RESPONSE TO COMMENT S-CDFW-1-11

The FEIR includes revisions to accurately and consistently describe operations during excess conditions.

II.3.2.12 RESPONSE TO COMMENT S-CDFW-1-12

The commenter expresses concern with model assumptions for proposed OMR criteria. They note that the CalSim II model assumes an OMR limit of -6,000 cfs as opposed to -6,250 cfs, as described in the

project description. FEIR CalSim II models with OMR Flex criteria have been updated to include a limit of -6,250 cfs, which is reflected in the evaluation of Refined Alternative 2b, which is presented in FEIR Part III, Chapter 5.3. The commenter is also concerned that the frequency of modeled activation of OMR flex criteria is limited. Model representation of OMR Flex criteria are described in Appendix H Attachment 1-7.

II.3.2.13 RESPONSE TO COMMENT S-CDFW-1-13

DWR is not aware of information from the 2009 ITP that is inappropriate for inclusion in the long-term operations of the SWP. However, there are multiple sections of the EIR in which new information is incorporated in order to reflect the best available science. The fall midwater trawl index is used as a divisor in establishing criteria only for adult Longfin Smelt. and the discussions of “Onset of OMR Management” in DEIR Chapter 3.3.1.1, and Chapter 5.3.1.2, note that this criterion may be modified as part of the adaptive management program in coordination with CDFW.

II.3.2.14 RESPONSE TO COMMENT S-CDFW-1-14

Refined Alternative 2b presented in Part III of the FEIR includes greater coordination and participation by CDFW. Specifically, a new DEIR Chapter 5.3.1.1, “Collaborative Real-Time Risk Assessment” has been added, which includes coordination between DWR and CDFW technical staff, and additional clarification regarding CDFW’s decision-making role. Please see Response to Comment S-CDFW-1-6.

II.3.2.15 RESPONSE TO COMMENT S-CDFW-1-15

Regarding accounting for timing-related limits in the Salmonids Presence action’s effectiveness in the impact analysis, the available quantitative analyses based on historical data for occurrence of juvenile salmonids in the Delta suggest little difference between the Proposed Project and Existing Conditions in terms of potential effects for Winter-run Chinook Salmon, e.g., based on DEIR Chapter 4.4.7.4, sub-heading “Delta Passage Model.” The suggestion in the comment to consider DOSS information in addition to SacPAS is not precluded by the Proposed Project, which includes SacPAS as an example of information that would be considered, among other sources (DEIR Chapter 3.3.4.1 Annual Process). Note also that the Refined Alternative 2b recognizes the potential early arrival of migrating winter-run salmon and now includes protective measures (OMR reductions for 5-d) based on new salvage triggers in November and December.

II.3.2.16 RESPONSE TO COMMENT S-CDFW-1-16

DEIR Chapter 3.3.1.2, “Real-time OMR Limits and Performance Objectives,” discussion titled, “Larval and Juvenile Delta Smelt Protection,” describes the Delta Smelt life cycle models proposed to be used to manage annual entrainment levels of larval and juvenile Delta smelt. As described in that discussion, it is anticipated that these models will be publicly vetted and peer reviewed.

The DEIR also describes the process that would be followed in the event that such life cycle models cannot be used in a manner to inform real-time operations, which would also apply in the event that peer review of the models were to be delayed. The DEIR describes the process to be followed if CDFW does not agree with the operational actions determined by DWR. Further information regarding this

process has been included in Part III of the FEIR, which includes reference to the processes described in a new Chapter 5.3.1.1, “Collaborative Real-Time Risk Assessment.”

With respect to cumulative loss thresholds, it is the intent of DWR to implement any recommendations of the independent panel convened to review the actions contributing to this loss trajectory. Revisions to the description of Alternative 2b have been made, as shown in Part III of the FEIR, to explicitly commit DWR to such implementation, unless the process described in DEIR Chapter 5.3.1.1, “Collaborative Real-time Risk Assessment,” determines that further OMR restrictions are not required to benefit fish movement because a risk assessment shows that the risk is no longer present based on real-time information.

DWR would implement recommendations of an independent review panel convened under the conditions described above, unless the process described in DEIR Chapter 5.3.1.1, “Collaborative Real-time Risk Assessment,” determines that further OMR restrictions are not required to benefit fish movement because a risk assessment shows that the risk is no longer present based on real-time information.

II.3.2.17 RESPONSE TO COMMENT S-CDFW-1-17

The DEIR presents a discussion of the accumulated impacts across all life history stages at the end of each species impact analysis section, wherein conclusions for the total impact to each species are based on the life-stage specific analyses previously presented.

II.3.2.18 RESPONSE TO COMMENT S-CDFW-1-18

The impact analysis presented for the Proposed Project is based on the modeled changes in hydrology. As noted in the comment, the CalSim II model has a generalized representation of some protection criteria based on real-time fish presence historical fish distribution and salvage data (Appendix H) and incorporated assumptions that address some real time operations, such as the Steelhead annual loss threshold. The aquatic resources impact analyses assume that additional real-time operational changes would provide further protection that was not modeled. Subsequent to release of the DEIR, DWR developed additional avoidance and minimization measures in coordination with CDFW that are presented in DEIR Chapter 5.3.1, OMR Management, and DEIR Chapter 5.3.2, Adaptive Management Plan, for Refined Alternative 2b, which is the preferred alternative.

II.3.2.19 RESPONSE TO COMMENT S-CDFW-1-19

For the purpose of CEQA, the EIR considers the effects of all actions identified as a part of long-term SWP operations and acknowledges that some actions could provide incidental benefits to species that are not listed under CESA, such as steelhead. For example, protections for Winter-run Chinook Salmon could incidentally protect Spring-run Chinook Salmon by curtailing exports to manage OMR because the timing of Winter-run Chinook Salmon emigration overlaps somewhat with Spring-run Chinook Salmon emigration. Additionally, DWR has incorporated additional protective measures in the FEIR for Spring-run Chinook salmon based on coordination with CDFW following the release of the DEIR. Specifically, DWR has included OMR restrictions for the protection of Spring-run Chinook Salmon based on hatchery surrogate loss thresholds, and included studies to support developing a Spring-run Chinook

Salmon Juvenile Production Estimate (JPE) on which to base future OMR management thresholds. The DEIR evaluates referenced percentage increases in spring-run Chinook Salmon entrainment loss (35% to 216% depending on water year type) in the context the number and proportion of all out-migrating juvenile spring-run Chinook likely to be entrained. As described previously (see S-CDFW-1-9), tagging studies indicate a very small proportion (<0.1%) of Sacramento River basin spring-run Chinook Salmon (similar to Sacramento basin fall run Chinook) are estimated to be lost to entrainment. It also important to recognize that salvage-density based estimates of numbers of spring-run Chinook lost to entrainment (DEIR Chapter 4.4, Table 4.4-17 a-c) are based on past observations of length-at-date criteria sized spring-run, and thus these observations are likely to include a large number of fall-run Chinook, particularly those originating from the San Joaquin River basin as these fish arrive at the salvage facilities at much higher rates than any Sacramento River basin origin fish (Zeug and Cavallo 2014).

II.3.2.20 RESPONSE TO COMMENT S-CDFW-1-20

Aside from the preliminary information on straying in the Davis et al. (2019) reference, analyses of straying data are currently in process and results are not available at the present time. However, there is the potential for salmonid straying/attraction to the Yolo Bypass to be increased as a result of the action, the magnitude of the impact was evaluated based on the preliminary data discussed below.

First, DWR has sampled upstream migrating fish in Yolo Bypass since 1999. A comprehensive analysis by Sommer et al. (2014) show that while a suite of fish species showed a strong relationship to flow pulses, salmonids were not in this category. This suggests that at least modest flow events do not comprise a strong false attraction. Part of the reason could have been that the magnitude of the flow pulses when fyke trapping was possible (e.g., < 6,000 cfs) were too low to general salmonid attraction. In addition, the range of flow pulses studied (and the proposed action) are modest in comparison to the strong tidal flows in this region. Specifically, the freshwater tidal flows in lower Yolo Bypass are approximately 80,000 cfs, so the effect of flow pulses in the range of the proposed action are not substantial enough to significantly increase straying into Yolo Bypass.

Second, based on summer/fall timing, the action would not affect state-listed adult salmonids (i.e., Winter-run and Spring-run Chinook Salmon). Moreover, some Fall-run and Steelhead would not be affected for years when the action is conducted in mid-summer, as was conducted in 2016. Mid-summer actions are expected to occur fairly frequently as part of the program. Late summer and early fall actions would have the potential to affect Fall-run Chinook Salmon and steelhead. In 2019, the number of fish rescued at Wallace Weir during the food action was 350, with 8 mortalities (Davis et al. 2019). There is no evidence whether or not this number is higher than would have been observed without the flow action, when there is typically already some degree of flow during this time of year based on normal agricultural practices. Whether or not the number of fish was influenced by the 2019 food action, the number of fish rescued or dying represents a very small percentage of the overall Sacramento River basin Fall-run Chinook Salmon populations, which during 2010–2018 averaged nearly 200,000 fish (range ~68,000–430,000; see GrandTab database at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=84381> [CDFW 2019b]).

For Central Valley steelhead, 13 fish were rescued, with two mortalities (Davis et al. 2019), although there are no recent data from which to make a percentage of population inference. In contrast to the suggestion that “once fish pass the point in the Yolo Bypass where tidal influence ends, they generally do not turn around and are essentially trapped (Frantzich et al. 2019),” the statistical analysis by Frantzich et al. (2019, p.173) actually suggested that the Interstate-80 bridge crossing is the “point of no return,” which is approximately 6 miles farther upstream than the Lisbon weir, where tidal influence is muted. In addition, it is widely recognized that off-site releases of hatchery-produced fall-run Chinook Salmon are considerably more likely to stray than natural origin salmon or hatchery salmon released near their hatchery of origin (CA HSRG 2012, Sturrock et al. 2019). Thus, to evaluate risks of the summer-fall food action it would be necessary to determine the origin of salmon straying into the area effected by the food action. If the strays are primarily hatchery-origin fish from off-site releases, it would suggest a lesser impact and also suggest alternative strategies are likely to be more effective to minimize the straying.

With respect to water quality impacts and in particular pesticides, the full conclusion from the Frantzich et al. (2019) study is important to consider for context: *“Results during the managed flow pulses in 2016 and 2018 showed increases in overall pesticide concentrations into the Lower Yolo Bypass, but concentrations remained indifferent in the lower part of the study area in the CSC and Lower Sacramento River. There were no detections of pesticides at benchmark toxicity levels in the Lower Yolo Bypass, CSC and Lower Sacramento River regions in all years. Results suggest that as Yolo Bypass water sources reach the CSC and Lower Sacramento River there is high dilution in the larger channels and potentially degradation that occurs over time. There was evidence that pesticide concentrations were higher throughout the study area when performing these managed flow pulses using agricultural return water as in fall 2018. Managed flow pulses in the summer using a Sacramento River water source may be a better management strategy to reduce negative impacts from pesticides”* (Frantzich et al. 2019, p.175).

Frantzich et al. (2019, p.148) notes, *“Additional USGS/DWR research focused on understanding the occurrence of pesticides in zooplankton and how the presence of these contaminants may affect fish health is currently underway.”* The results of these and other relevant investigations would be expected to inform the adaptive management of the summer-fall food action, outlined in Chapter DEIR 3.3.16, “Adaptive Management Plan.”

With respect to water temperature, the 2018 agricultural drain water-based food action did not result in higher temperatures in the Yolo Bypass (Frantzich et al. 2019, Task 1 Figure 18, p.18), and Frantzich et al. (2019, p.21) noted *“The physical water quality conditions (i.e. water temperature, specific conductance, pH and DO) in all regions were similar between study years.”* Additionally, plots of water temperature in the Toe Drain and Sacramento River at Rio Vista showed a decreasing trend during the 2019 flow action (which was agricultural drain water) (Davis et al. 2019, their Figure 1, p.4). Therefore, there does not appear to be evidence indicating increased water temperature as a result of the food action. As noted above, the results of investigations into the food actions in 2016-2019 and related studies would be expected to inform adaptive management of the action for the long-term operations of the SWP.

II.3.2.21 RESPONSE TO COMMENT S-CDFW-1-21

Part III of the FEIR includes additional analysis of potential impacts on rearing habitat as a result of Refined Alternative 2b. The additional analysis has been added to the DEIR Chapter 5.3 in discussions of “Rearing Effects” for Winter-run, Spring-Run, and Fall-/Late fall-run Chinook Salmon.

II.3.2.22 RESPONSE TO COMMENT S-CDFW-1-22

The comment that April and May are important months during the life history of Delta Smelt, longfin smelt, winter- and spring-run Chinook salmon is acknowledged.

With respect to the comment that “More negative OMR flows and decreased Delta outflow in the spring are likely to result in higher entrainment of spring-run Chinook salmon and larval Delta smelt”, the DEIR acknowledged these possibilities, for example, for spring-run Chinook salmon, the DEIR (p.4-212 to p.4-215) stated:

“The salvage-density method suggested that entrainment loss of juvenile Spring-run Chinook Salmon at the SWP South Delta export facility could be appreciably greater under the Proposed Project scenario compared to the Existing Conditions scenario... This is because most juvenile Spring-run Chinook Salmon entrainment occurs during the April–May period when the largest difference in South Delta exports is projected to occur between Proposed Project and Existing Conditions scenarios. As described for Winter-run Chinook Salmon, it should be noted that this analysis is based on size-at-date criteria and does not reflect potential errors in Chinook Salmon race identification based on these criteria. Classification errors resulting from the use of size-at-date criteria are particularly pronounced for Spring-run Chinook Salmon, for which genetic studies have shown that the great majority of spring-run-sized fish may actually be Fall-run Chinook Salmon. It is expected that the latest information (e.g., genetic assignment) would be used as it becomes available to assess and limit potential entrainment loss of Spring-run Chinook Salmon. In addition, a very small proportion (<1%) of Spring-run Chinook Salmon are likely to approach the South Delta. During April-May, Spring-run Chinook Salmon juveniles may receive some ancillary protection from the risk assessment-based approach for OMR flow management included in the Proposed Project that would be undertaken for other species. Specifically, single year and cumulative loss thresholds for steelhead and Winter-run Chinook Salmon could provide additional protection for Spring-run Chinook Salmon.”

On the basis of small number of Spring-run Chinook Salmon approaching the South Delta and the protection provided by real-time risk assessment-based approach to OMR flow management, it was concluded that the impact would be less than significant.

For Delta smelt, the DEIR acknowledged the potential for greater entrainment of larvae and juveniles and described the basis for why this was concluded to be less than significant impact (p.4-170):

“During the March–June period of concern for larval and juvenile Delta Smelt entrainment risk, OMR flows would tend to be more negative under the Proposed Project scenario compared to the Existing Conditions scenario in April and May, but similar in March and June... Flows in both scenarios would be above the -5,000 cfs inflection point at which entrainment tends to sharply increase. As part of real-time operational decision-making OMR management, DWR will use results produced by CDFW and USFWS approved life cycle models along with real-time monitoring of the spatial distribution of Delta Smelt to manage the annual entrainment levels of larval and juvenile Delta Smelt. The life cycle models statistically link environmental conditions to recruitment, including factors related to loss as a result of entrainment such as OMR flows. On or after March 15 of each year, if QWEST is negative and larval or juvenile Delta Smelt are detected within the corridors of the Old and Middle rivers based on real-time sampling of spawning adults or YOY life stages, DWR (in coordination with Reclamation) will run hydrodynamic models and forecasts of entrainment to estimate the percentage of larval and juvenile Delta Smelt that could be entrained; DWR will manage exports, as necessary, to limit entrainment to be protective based on the modeled recruitment levels. Such OMR management is not reflected in the CalSim modeling. The real-time management would be intended to limit entrainment risk to low levels similar to the levels achieved following implementation of the USFWS (2008) BiOp, during which time loss of juvenile Delta Smelt was within authorized incidental take limits.”

Although the modeling predicted an increase in entrainment in April and May, the Proposed Project includes first flush protections that would limit spawning in the South Delta, OMR management to maintain flow more positive than the -5,000 cfs inflection point highlighted in the 2008 Biological Opinion, and the protection provided by real-time risk assessment-based approach to OMR flow management. Based on these protective measures, it was concluded that the impact of the Proposed Project would be less than significant.

With respect to the comment that “Kimmerer et al (2009) demonstrated a significant relationship between longfin smelt abundance and Delta outflow from January – June. As a result, reducing Delta outflow in April and May is likely to have a negative impact on longfin smelt abundance”, the DEIR included an assessment using the Nobriga and Rosenfield (2016) model to analyze the potential relationship between Delta outflow during the winter-spring period and Longfin Smelt abundance the following year. The results of the modeling do not demonstrate a significant difference between the Existing Condition and the Proposed Project. From a hydrological perspective, Table 9-1 included in DEIR Appendix C presents the flow results of CalSim II modeling (see Attachment 2-2). For example, using the modeled 50 % probability of exceedance for total Delta Outflow during the winter-spring spawning and rearing period (January-June) indicates that there is a 6.6 % decrease in total Delta Outflow (8,333 cfs) over the entire six-month period under the Proposed Project compared to Existing Conditions. It should be noted that DWR modelers consider changes in CalSim II results of 5% or less to be within the margin of uncertainty of the CalSim II model, a generalized reservoir-river basin simulation model. The DEIR concluded this would be a less than significant impact. To the extent that the comment points to Kimmerer et al., please refer to Master Response 20, “Best Available Science,” for an explanation of

the legal standard applicable for support of a lead agency's determination. Furthermore, the results of an analysis conducted by DWR using the same approach as the Kimmerer et al. model are consistent with the Nobriga and Rosenfield model analysis (FEIR Part III, Appendix E).

With respect to the comment that "Reduced Delta outflow in September is likely to impact Delta smelt by limiting available low salinity zone habitat for rearing juveniles," the DEIR included considerable analysis of potential effects to low salinity habitat (p.4-156 to p.4-166). The analysis demonstrated that the extent of low salinity habitat (including consideration of salinity, Secchi depth, and temperature) would not have been less under the proposed project relative to existing conditions using the example years of 2012 and 2017, and the impact was concluded to be less than significant. As described in the DEIR (p.3-30), the Delta Smelt Summer-Fall Habitat Action is intended to improve Delta smelt food supply and habitat, using structure decision-making to meet a number of environmental and biological goals.

Additionally, DWR identified Refined Alternative 2b as the preferred alternative in the FEIR, which would (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further minimize impacts below those identified in the DEIR.

II.3.2.23 RESPONSE TO COMMENT S-CDFW-1-23

Please refer to Master Response 4, "Legal Standards," for a discussion of how DWR included consideration of existing conditions, including the degraded condition of listed fish, as a part of the CEQA and CESA analyses.

As noted in the DEIR Chapter 4.6.1, "Cumulative Impacts," multiple factors have contributed to the trending decline of listed-species populations and it is difficult to quantify the proportion of the decline attributable to a specific project, action, or event. For example, the drought experienced within the 2010-2018 period that the commenter cites may have affected populations. The 2009 biological opinion cited by the commenter had protective restrictions that included measures tied to population size such as loss limits for Winter-run Chinook Salmon juveniles, which accounted for fluctuations in abundance.

As described in DEIR Chapter 3.3, "Description of the Proposed Project," the Proposed Project includes a number of elements to protect salmonids, such as OMR flow management, Clifton Court Forebay Operations, and Skinner Fish Facility Improvements. These and other actions will be subject to adaptive management to evaluate their efficacy. In addition, Reclamation and DWR's proposed federal action includes many elements such as conservation measures to protect salmonids, as discussed in the DEIR Chapter 4.6.1.5 under the discussion for, "Water Supply, Water Management, and Water Quality Projects and Actions." These actions would still be implemented as part of the selected Refined Alternative 2b.

Regarding impacts to juvenile salmonids in the Delta, acoustic tagging studies completed since the 2009 NMFS Biological Opinion have not tested, or have not reported on, export/OMR effects for juvenile salmon approaching from the north Delta. Studies have analyzed these potential impacts for San Joaquin River-origin juvenile salmonids. The study results suggest through-Delta survival rates are low and relatively insensitive to export rates or OMR flows (e.g. SST 2017, Buchanan and Skalski 2019).

II.3.2.24 RESPONSE TO COMMENT S-CDFW-1-24

Please refer to Master Response 4, “Legal Standards,” for a discussion of how DWR included consideration of existing conditions, including the degraded condition of listed fish, as a part of the CEQA and CESA analyses.

Similar to salmonids, the proposed long-term operations of the SWP includes a number of elements to protect smelt species, including as OMR flow management, the Delta Smelt summer-fall habitat action, studies to inform reintroduction, and conservation hatchery operations. These, combined with continued implementation of 8,000 acres of tidal habitat restoration and other elements of the proposed federal action (discussed in the DEIR Chapter 4.6.1.5 under the discussion for, “Water Supply, Water Management, and Water Quality Projects and Actions”), are protective of the smelt species. As noted for salmonids, a number of the actions will be subject to adaptive management in order to evaluate their efficacy.

II.3.2.25 RESPONSE TO COMMENT S-CDFW-1-25

Refined Alternative 2b summer-fall habitat action with regard to the X2 = 80 km standard is consistent with the proposed federal action and so it is not anticipated that Reclamation would not contribute its share when the X2 = 80 km standard is applicable. As described in the DEIR, a suite of actions would be proposed by DWR and Reclamation to meet the action’s environmental and biological goals. It is reasonably foreseeable that Reclamation will carry out its obligations to meet the X2 = 80 km standard as specified in the 2019 USFWS Biological Opinion.

Analysis of impacts that might occur in the unlikely event that Reclamation were not to implement their proposed federal action is not required in the DEIR, as such impacts are speculative and not considered reasonably likely to occur as a result of DWR’s long-term operations of the SWP.

Please see Master Response 4, “Legal Standards,” and Master Response 17, “Application of CESA Standards,” for a discussion regarding roughly proportional measures under CESA.

II.3.2.26 RESPONSE TO COMMENT S-CDFW-1-26

The commenter’s statement regarding uncertainty and the experimental nature of the Delta Smelt food actions is acknowledged, and the potential interannual differences in effectiveness is alluded to in new analyses added to the FEIR in the “Qualitative Analysis” section of the “Summer-Fall Habitat” discussion for Delta Smelt in DEIR Chapter 5.3.5.1 “Delta Smelt” (see also response to comment S-CDFW-1-5). The food actions are subject to adaptive management to assess their efficacy, as noted in the DEIR Chapter 3.3.16, Adaptive Management Plan.

II.3.2.27 RESPONSE TO COMMENT S-CDFW-1-27

The comments and citations related to potential beneficial effects of a HORB to San Joaquin River basin origin salmonids are acknowledged, but studies cited do not represent best available science on the issue. For example, Michel et al. (2019) was focused on evaluating relative predation rates and did not explore the effect of flows, routing and exports on the survival of juvenile salmonids. Dauble et al. (2010) reviewed the VAMP study relying primarily upon analyses of CWT salmon conducted by Newman (2008). As articulated in SST (2017), Buchanan et al. (2013), Buchanan et al. (2018) and Buchanan and Skalski (2019); acoustic tagging studies completed since 2009 have yielded outcomes that sometimes contradict earlier CWT-based studies.

While increased San Joaquin River flow can yield survival benefits (particularly upstream of the Delta), these benefits are not as apparent in the tidal Delta. Furthermore, confirming findings from Newman (2008), increased exports can improve survival by leading to increased salvage at the CVP export facilities. Buchanan et al. (2018) reported that > 60% of tags that reached Chipps Island came through CVP when the HORB was not in place.

Survival rates for fish migrating through tidal channels of the San Joaquin River route or the Old River route (and not salvaged at the CVP) are very poor and appear to be unrelated to hydrodynamic conditions occurring in each of those routes (Buchanan and Skalski 2019). Importantly, the DEIR applied the Delta Structured Decision Model, which uses data from recent acoustic studies to develop survival relationships that were then used predictively in conjunction with DSM2 data. This suggested that there would be a less than significant impact of the Proposed Project on through-Delta survival of juvenile San Joaquin origin Spring-run and Fall-run Chinook Salmon because predicted survival was greater under the Proposed Project than Existing Conditions (DEIR, p.4-217 through 4-218, and p.4-234 through 4-236).

Please note that the FEIR identified Refined Alternative 2b as the preferred alternative.

II.3.2.28 RESPONSE TO COMMENT S-CDFW-1-28

As noted in DEIR Chapter 5.5, “Alternative 4 – Alternative Summer-Fall Action,” Alternative 4 SMSCG operations could occur for up to 60 days in June through August during Below Normal and Dry water years. In DEIR Chapter 3, “Project Description,” Proposed Project scenario includes potential operation of the SMSCG for up to 60 days in June through October of Below-Normal, Above-Normal, and Wet water years.

As noted in DEIR Chapter 5.5, “Alternative 4 – Alternative Summer-Fall Action,” Alternative 4 SMSCG operations could occur for up to 60 days in June through August during Below Normal and Dry water years. In DEIR Chapter 3, “Project Description,” proposed project scenario includes potential operation of the SMSCG for up to 60 days in June through October of Below-Normal, Above-Normal, and Wet water years. Detailed hydrodynamic and water quality simulations using SCHISM were performed for June and August starts in 2012 (Below Normal) and September in 2017 (Wet). The most efficient gate operation scenarios were timed to coincide with salinity intrusion at Hunter Cut (6psu or higher) and Beldon Landing (4psu). Additional simulations were conducted for 2009 (Dry) under Alternative 2b; operations were commenced in July based on the same salinity criteria.

As noted in DEIR Chapter 5.5, “Alternative 4 – Alternative Summer-Fall Action,” Alternative 4 SMSCG operations as modeled in CalSim II/DSM2 could occur for up to 60 days in June through August during Below Normal and Dry water years. In DEIR Chapter 3, “Project Description,” SCHISM modeling the proposed project scenario includes potential operation of the SMSCG for up to 60 days in June through October of Below-Normal, Above-Normal, and Wet water years.

II.3.2.29 RESPONSE TO COMMENT S-CDFW-1-29

Please refer to Master Response 4, “Legal Standards,” for a discussion of how DWR included consideration of existing conditions, including the degraded condition of listed fish, as a part of the CEQA and CESA analyses.

There is uncertainty that the summer-fall habitat action included in Alternative 4 would change Delta Smelt survival rates, as demonstrated by analyses cited in the DEIR (see DEIR Chapter 4.4.7.4 “Qualitative Analysis” discussion under “Summer-Fall Habitat”). The assessment of CESA requirements to fully mitigate effects to Delta Smelt is currently ongoing in conjunction with CDFW as part of the ITP Application for the long-term operations of the SWP.

II.3.2.30 RESPONSE TO COMMENT S-CDFW-1-30

The cap of 100 TAF is applied to ensure adequate storage can be made available to meet water quality criteria. The SWP is obligated to meet SWRCB water quality criteria. An increase in Delta outflow of up to 100 TAF in coordination with SMSCG operations are expected to meet the 4 ppt salinity criteria at Belden’s Landing. Qualitative analysis indicate that Delta outflow would need to increase by 60 TAF to 100 TAF to meet the Belden’s Landing salinity criteria. This is further described in DEIR Chapter 5.5.1.4, “Dry Years.”

II.3.2.31 RESPONSE TO COMMENT S-CDFW-1-31

As noted in DEIR Chapter 5.5.3, “Aquatic Resources,” regional weather patterns are the primary drivers of water temperature variations in the estuary. In general, higher flows will move the low salinity zone into geographic areas where air temperatures are slightly cooler.

II.3.2.32 RESPONSE TO COMMENT S-CDFW-1-32

As described DEIR Chapter 4.1.3, “Impact of Climate Change,” and in updated Appendix F, “Climate Change Sensitivity Analysis,” the climate change sensitivity analysis was based on two sea level rise values of 15cm and 45cm. These two values of sea level rise encompass the most current sea level rise projections in the 2018 OPC guidance (OPC 2018) for the year 2035.

Because the duration of the ITP being sought is ten years, climate change impacts analysis was focused on 2035, which is beyond the limits of the requested Incidental Take Permit duration. Therefore, time horizons beyond 2035 are not considered in this analysis. Please see Master Response 10, “Climate Change,” for more details.

Because the incidental take permit DWR is seeking from CDFW would only extend for 10 years, the time frame for the proposed project (as well as for Refined Alternative 2b) should be understood to be

only 10 years. It is true, of course, that DWR intends to continue operating the SWP after the end of the 10-year ITP permit that DWR is seeking, but such continued operations will require another ITP preceded by another CEQA process. In 2030, physical conditions in the Sacramento-San Joaquin River Delta and other areas affected by the SWP may differ from present conditions in ways that, despite best efforts, cannot be predicted with complete accuracy today. Although, as the commenters note, CEQA requires lead agencies, in preparing EIRs, to consider both short-term and long-term effects, neither term is defined. Nor does CEQA describe how far into the future a cumulative impact analysis must extend. Rather, the appropriate time frame for consideration is a function of the nature of the project under consideration. Another relevant factor is the degree to which predictions of future conditions are likely to be speculative and of debatable value for decision making.

A key reason for conducting cumulative impact analyses is to assess a project's incremental contribution to a future cumulative condition, and whether that contribution is itself "cumulatively considerable" and thus significant in and of itself. (See CEQA Guidelines, §§ 15064, subd. (h)(1), 15130, subd. (a); *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 114-121.) Here, because the proposed ITP permit and thus the project itself will extend no further out in time than 10 years, DWR was not required to speculate about conditions that will exist in the SWP systems and affected waterways and other natural resources beyond 2030. The extent of the project's incremental contribution to conditions in 2030 does not require analysis beyond the year 2030. In that year, DWR will require another ITP, which will have to be preceded by another CEQA analysis with a new future horizon year. (See also Master Response 10, "Climate Change.")

II.3.2.33 RESPONSE TO COMMENT S-CDFW-1-33

SWP modeling assumptions in the 2019 Biological Assessment for the federal Biological Opinions are not the same as the SWP modeling conducted in this DEIR. These differences include but are not limited to:

- Climate conditions:
 - All 2019 biological assessment simulations were performed for 2030 climate conditions
 - All DEIR simulations were performed for existing climate conditions
- Sea level rise:
 - All 2019 biological assessment simulations were run at 15 cm of sea level rise (representative of 2030 climate conditions)
 - All DEIR simulations were run at 0 cm of sea level rise (representative of current climate conditions)
- Old and Middle River Flow Criteria
 - 2019 biological assessment modeling is a general representation of the OMR in CalSim II based on assumptions developed for the 2008/2009 Biological Opinions
 - All DEIR simulations utilize OMR assumptions representative of existing conditions
- Delta Smelt Summer-Fall Habitat Action:

- 2019 biological assessment PA model assumptions do not include a Fall X2 criteria or additional SMSCG operations
- DEIR Proposed Project meets an X2 of 80 km in September and October of wet and above normal years and operations SMSCG in July and August of below normal years

Differences in climate change and sea level rise are due to CEQA and ESA baselines. Consistent with CEQA, the DEIR evaluates hydrologic impacts relative to existing climate conditions (baseline).

Baseline Old and Middle River flows in the model are based on observed conditions. As part of the development of the baseline assumptions for the proposed project, previous assumptions that were developed almost 10 years ago prior to the implementation of the 2008/2009 Biological Opinions, were re-evaluated for consistency with current understanding of OMR management. This review is especially necessary considering a known shift in how OMR is determined in real-time for Delta smelt and a recognition that Salmonid protections have been the determining factor on setting OMR more often than originally expected.

Following publication of the 2019 Biological Assessment, the U.S. Bureau of Reclamation (Reclamation) updated their modeling assumptions for Delta Smelt Summer-Fall Habitat Action. Current proposed Reclamation modeling of Delta Smelt Summer-Fall Habitat Action, presented in the 2019 Biological Opinions, are consistent with modeling conducted in the DEIR.

II.3.2.34 RESPONSE TO COMMENT S-CDFW-1-34

CalSim II and DSM2 model setups and results are available for DEIR Proposed Project and existing conditions. The FEIR has identified Refined Alternative 2b as the environmentally preferred alternative. As such, additional quantitative analysis of impacts to special status species is provided in Part III of the FEIR and model results for Refined Alternative 2b are provided in DEIR Appendix C. Providing quantitative model results for alternatives that do not contain the same levels of protective measures and, thus are not considered to be the environmentally preferred alternative (Alternative 2a, 3), or may not be implementable without substantial CVP coordination and cooperation (Alternative 4) is not necessary to understand the relative impacts of these alternatives or support the selection of Refined Alternative 2b as the environmentally preferred alternative.

II.3.2.35 RESPONSE TO COMMENT S-CDFW-1-35

DWR acknowledges the importance of the existing Interagency Ecological Program (IEP) surveys and is committed to continuing support for such programs. DWR has included a commitment to fund its proportional share of IEP surveys in the ITP application submitted to CDFW. Please see Master Response 25, “Real Time Operations,” for further discussion of how the real time operational process will be carried out.

II.3.2.36 RESPONSE TO COMMENT S-CDFW-1-36

Use of tools such as those cited by the commenter (e.g., life cycle models and hydrodynamic models to assist Delta Smelt entrainment management, “Larval and Juvenile Delta Smelt Protection,” discussion

under DEIR Chapter 3.3.1.2) would more fully inform the professional opinion of the agencies including DWR, CDFW, and others.

II.3.2.37 RESPONSE TO COMMENT S-CDFW-1-37

As described in the description of Refined Alternative 2b provided in the FEIR (DEIR Chapter 5.3.1.1), during the OMR Management period for species listed under CESA, DWR and CDFW technical staff, as part of the Smelt Monitoring Group and Salmon Monitoring Group, will meet weekly to consider survey data, salvage data and other pertinent biological and abiotic factors; this is analogous to the DOSS/SWG process mentioned by the commenter. See response to comment S-CDFS-1-35 regarding a commitment to continued support for existing IEP surveys.

II.3.2.38 RESPONSE TO COMMENT S-CDFW-1-38

Real-time water operations will be more accurate and precise compared to existing operations because the proposed operations would utilize refined, species-specific information developed over the last 10 years, ongoing monitoring efforts, and the expertise within the state and federal fish agencies in the real-time monitoring of species distribution and life stages. DWR, in coordination with Reclamation, would then use qualitative and quantitative tools to perform risk analyses that inform operations, and would reduce reliance on professional opinion. The real-time water operations process would rely on weekly coordination meetings of the WOMT, Smelt Monitoring Group, and Smelt Working Group. These groups would rely on real-time information, Delta and Longfin Smelt life cycle models, and structured decision making to recommend operations-related actions that would minimize impacts and benefit CESA-listed species. These recommendations would be implemented by DWR with the approval of CDFW. Reliance on modeling, several working groups, and the approval of CDFW prior to changing operations would create consistency in decision making and ensure that minimizing impacts on CESA-listed species is a main component of SWP operations.

Please see Master Response 25, “Real Time Operations,” for further discussion about how real-time operations will be carried out and the agencies involved.

II.3.2.39 RESPONSE TO COMMENT S-CDFW-1-39

With respect to Grimaldo et al. (2017a), the interpretation of the paper’s findings (e.g., “*With respect to habitat size for early life stages, new information indicates that the distribution of spawning and early life stages may be broader than previously thought, including areas with salinity 2–12 (Grimaldo et al. 2017a)*”, p.4-177) is consistent with the paper’s findings (e.g., from the abstract: “*the analysis based on channel data suggests that Longfin Smelt are hatching and rearing in a much broader region and under higher salinities (~2–12 psu) than previously recognized*”). Grimaldo et al. (2017a) reported that peak newly hatched larval catches were between 2 and 4 ppt, but this does not invalidate a key point in the DEIR, which is to note that until recently, spawning was believed to occur almost exclusively in tidal freshwater areas such as the lower Sacramento River (DEIR p.4-176).

With respect to Grimaldo et al. (2017a), the paper did not model a range of OMR flow values; the full range of values observed in the data during 1993 to 2016 was used, which spanned approximately -

10,000 cfs to 30,000 cfs. It is acknowledged that the paper only analyzed Delta Smelt; see also response to comments S-CDFW-1-8 and S-CDFW-1-9.

In DEIR Chapter 4.4.7.4, under the discussion for “Salvage Old and Middle River Regression” for “Longfin Smelt,” the discussion specifically references Grimaldo et al. (2009) only in the context of adult Longfin Smelt (i.e., “*Grimaldo et al. (2009) found that adult Longfin Smelt salvage at the South Delta export facilities was significantly negatively related to mean December–February OMR flows, but not to X2 (or other variables that were examined).*”) and not for Delta Smelt. This is consistent with p.1261 of Grimaldo et al. (2009), which noted “*For the pelagic fishes, the best models of interannual salvage were based on Old and Middle River flows (Figure 8),*” with the referenced Figure 8 of Grimaldo et al. (2009) showing the relationship that the DEIR is referring to.

With respect to the draft Directed Outflow Project report, we agree that the report focused on 2017, so it may not reflect patterns for other wet years. Nonetheless, it represents some of the best available information about a wet year, and therefore is considered a valuable contribution to our knowledge.

II.3.2.40 RESPONSE TO COMMENT S-CDFW-1-40

Please see responses to comments S-CDFW-41 through S-CDFW-45, which address CDFW’s additional and updated comments on the same issue presented in Reclamation’s Draft EIS comment.

II.3.2.41 RESPONSE TO COMMENT S-CDFW-1-41

Analysis based on an updated version of Kimmerer et al. (2009) is provided in FEIR Part III, DEIR Appendix E, Attachment 2. The DEIR found potential impacts to Longfin Smelt to be less than significant and the Kimmerer analysis in Appendix E was consistent with the DEIR.

DWR is continuing to coordinate with CDFW regarding CESA requirements as a part of the ITP Application for long-term operations of the SWP. Please see Master Response 4, “Legal Standards,” for information regarding the different legal requirements of CEQA and CESA.

II.3.2.42 RESPONSE TO COMMENT S-CDFW-1-42

Please see Responses to Comments S-CDFW-1-6 and S-CDFW-1-7, and Master Response 25, “Real Time Operations.”

II.3.2.43 RESPONSE TO COMMENT S-CDFW-1-43

Please see Response to Comment S-CDFW-1-10.

II.3.2.44 RESPONSE TO COMMENT S-CDFW-1-44

It is assumed that this comment refers to S-CDFW-1-12. Please see the response to comment S-CDFW-1-12.

II.3.2.45 RESPONSE TO COMMENT S-CDFW-1-45

As noted in the response to Comment S-CDFW-1-5, an analysis of potential effects to Delta Smelt from the food actions was added to the FEIR in the “Qualitative Analysis” section of the “Summer-Fall Habitat” discussion for Delta Smelt in Section 4.4.7.4 “Species-Specific Impacts.”

In addition, as described in response to Comment S-CDFW-1-7, additional information regarding the proposed collaborative real-time risk assessment process has been added as a new DEIR Chapter 5.3.1.1 (refer to Part III of the FEIR), which provides additional clarification of DWR’s commitment to, and CDFW’s role in, facilitating the long-term evaluation and adaptive management of Delta Smelt summer-fall habitat. Please see Master Response 25, “Real Time Operations.”

Please note that the FEIR identifies Refined Alternative 2b as the preferred alternative.

II.3.2.46 RESPONSE TO COMMENT S-CDFW-1-46

DWR will report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database.

II.3.2.47 RESPONSE TO COMMENT S-CDFW-1-47

DWR will pay CDFW necessary assessment filing fees.



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RE: Comments on the Draft Environmental Impact Report for the Long-Term Operation of the California State Water Project, SCH# 2019049121

Dear Dr. Chao:

Thank you for the opportunity to comment on the Draft Environmental Impact Report for the Long-Term Operation of the California State Water Project (Draft EIR). The Delta Stewardship Council (Council) recognizes the Department of Water Resources' (DWR) objective to continue the long-term operation of the State Water Project (SWP) consistent with applicable laws, contractual obligations, and agreements. As noted in the Draft EIR (p. 3-15), the proposed project consists of multiple elements that characterize future operations of SWP facilities, modify ongoing programs being implemented as part of SWP operations, improve specific activities that would enhance protection of special-status fish species, or support ongoing studies and research on these special-status species. These elements consist of proposed project and program-level actions, proposed environmental protective measures, and adaptive management actions (collectively described as "Project Actions"). Implementation of the Project Actions is intended to continue operation of the SWP and deliver up to the full contracted water amounts while minimizing and fully mitigating the take of listed species consistent with California Endangered Species Act (CESA) requirements.

The Council is an independent State of California agency established by the Sacramento-San Joaquin Delta Reform Act of 2009 (SBX7 1; Delta Reform Act (Wat. Code, §§ 85000 et seq.)). As stated in the Delta Reform Act, the State has coequal goals for the Delta: providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place (Wat. Code, § 85054). The Council is charged with furthering California's coequal goals for the Delta through the adoption and implementation of the Delta Plan.

"Coequal goals" means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place."

– CA Water Code §85054

Comments Related to the Draft EIR and Delta Plan

The Draft EIR describes the Project Actions in four categories: project-level actions, program-level actions, environmental protective measures, and adaptive management actions. The Draft EIR describes many of the Project Actions as a continuation of DWR’s ongoing efforts to comply with regulatory requirements or in response to reasonable and prudent alternative actions under the 2008 and 2009 Biological Opinions for the SWP and the federal Central Valley Project (CVP). However, some Project Actions appear to be new or not part of ongoing efforts to comply with regulatory requirements, including, but not limited to, the following:

- To establish a minimum combined CVP and SWP export rate no lower than 1,500 cfs to protect human health and safety.
- To manage Old and Middle River (OMR) reverse flows based on species distribution (modeling and risk analysis) with provisions for capturing storm flows to implement real-time OMR management to minimize entrainment and aquatic species loss during water operations.
- Modified operations of the Suisun Marsh Salinity Control Gate (SMSCG) to improve Delta Smelt food supply and habitat.
- Implementing actions to transport productivity (phytoplankton and zooplankton) downstream to be utilized by Delta Smelt.
- To expand the existing water transfer window to extend between the months of July and November, with volumes up to 600 thousand acre-feet (TAF) or 360 TAF (dependent on the water type year) to increase SWP operational flexibility.
- To implement operational changes to salvage release scheduling and location at the Skinner Fish Facility to reduce post-salvage predation.
- To establish an Adaptive Management Team to oversee efforts to monitor and evaluate operations and related activities by using structured decision-making related to benefit and cost of operation activities to potentially be included as part of an incidental take permit, consistent with the CESA, for the long-term operation of the SWP.

1-1

The Council submitted a comment letter to DWR on the Notice of Preparation of an Environmental Impact Report (NOP) for this project. This letter focuses on the more detailed project description and analysis presented in the Draft EIR.

Reduce Reliance on the Delta through Improved Regional Water Self-Reliance. The proposed project includes Project Actions that could modify the amount or timing of water exported from, transferred through, or used in the Delta. Specifically, the Draft EIR describes a new Project Action to establish a minimum export rate of 1,500 cubic feet per second (cfs) to protect human health and safety, as well as a new Project Action to increase the water transfer window from four months to five months (July to November) and set a maximum transfer amount of: (1) 600 TAF for critical water years and dry water years following critical or dry water years, and (2) 360 TAF for all other water year types.

1-2

The Council recommends that additional information be included in the Final EIR describing these Project Actions, including:

- Additional information clearly describing how the 1,500 cfs minimum export rate was derived.
- Additional information describing the rationale for expanding the water transfer window from four months to five months, as well as the potential for the increased window of time to potentially induce more multiple-year water transfers.
- Additional analysis of the volume of water that would be exported from the Delta during the expanded five-month water transfer window. The Draft EIR describes the proposed maximum transfer amounts (360 TAF or 600 TAF) that would apply to specific water year types (Draft EIR, p. 3-51), but does not describe how these proposed maximum transfer amounts were determined or if they would increase exports from the Delta.

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(Cont.)

Delta Flow Objectives. The Draft EIR describes Project Actions that would establish a minimum export rate of 1,500 cfs to protect human health and safety, an expanded window for water transfers from four months to five months, and a proposed maximum transfer amount of 360 TAF or 600 TAF. The Draft EIR includes modeling analysis that simulates Delta conditions with the Project Actions. These simulations indicate that SWRCB flow objectives could be met under the modeled conditions and with implementation of the Project Actions. (Draft EIR, p. 5-11.)

1-3

The Draft EIR also describes Project Actions to implement studies to improve performance of the Skinner Fish Facility for salvage, to improve actions to reduce post-salvage predation and improve accuracy and reliability of data and fish survival. The Draft EIR describes regulatory limitations on operations of delta water diversions, specifically under D-1641. The Draft EIR describes how D-1641 authorizes the SWP and CVP to jointly use their respective pumping plants in the South Delta, with conditional limitations and response coordination plans (referred to as the Joint Point of Diversion, or JPOD). The JPOD accomplishes basic objectives of the SWP and CVP, including minimizing entrainment of Delta fish. The Draft EIR provides modeling results which demonstrate increased entrainment of larval and juvenile Delta Smelt under the proposed project relative to existing conditions. The Final EIR should clarify how the project would address the modeled increase in entrainment under D-1641, or how the increase in entrainment is mitigated by potentially improved salvage techniques and procedures.

Avoid Introductions of and Habitat Improvements for Invasive Nonnative Species. The Draft EIR proposes a Project Action to operate the SMSCG to improve Delta Smelt food supply and habitat. Modified operations of the SMSCG may create additional lower salinity habitat in Suisun Marsh, which would potentially benefit some non-native species, such as largemouth bass. The Final EIR should describe how the proposed Project Action would avoid habitat improvements for nonnative invasive species including, but not limited to, analysis of changes in salinity and flow regime. The proposed AMP should describe data collection methods (e.g., monitoring plan) with respect to the response of non-native species, and evaluate how Project Actions affect habitat for non-native species (see additional comments below).

1-4

Best Available Science. The Final EIR should include additional information and analysis documenting use of best available science relative to the following topics:

- establishing minimum export rates and expanding the water transfer window
- hydrologic modeling conducted to demonstrate achievement of Delta flow objectives; and
- potential for project operations to result in increased entrainment of Delta Smelt at the JPOD.

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Adaptive Management. The proposed Adaptive Management Action includes various components of the Council's adaptive management framework (available in Delta Plan Appendix 1B at <http://www.deltacouncil.ca.gov/pdf/delta-plan/2015-appendix-1b.pdf>), including:

- An AMP to evaluate the efficacy of operations and related activities;
- Establishment of an Adaptive Management Team (AMT) to oversee efforts to monitor and evaluate operations;
- Structured decision-making to assess the relative benefits and costs of proposed operations and activities; and
- Identification of proposed adaptive management changes to operations and related activities.

The Council commends DWR's intent to develop an AMP prior to issuance of an Incidental Take Permit (ITP) and for the California Department of Fish and Wildlife to incorporate the AMP as a condition of the ITP for CESA coverage for long-term operations of the SWP. Development of the AMP will be a significant and multi-agency undertaking, requiring both financial and personnel resources. The Draft EIR describes broadly the components to be included in the AMP. These are ambitious, complex, and far-reaching (e.g., inclusion of a plan for ongoing SWP operations, and the relationship between the AMP and real-time operations). We recommend that the Final EIR provide more specificity and detail on the budget and personnel resources that will be required to fully develop and implement the AMP and demonstrate that these resources will be available to DWR to carry out these aspects of the Proposed Action. The needed resources should also be identified for other aspects of the Draft EIR that are not explicitly mentioned under the AMP, such as the Longfin Smelt Science Plan. Additionally, the Final EIR and/or the subject AMP should clarify and define roles of and interactions between the proposed Delta Coordination Group, the Adaptive Management Team, and the two plans they will respectively generate, the Habitat Action Plan and the Adaptive Management Plan.

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The Draft EIR already acknowledges the Council's Delta Science Program (DSP) as a potential partner for the AMP in the Draft EIR. The DSP is available to support the development and implementation of the AMP. Specifically, the DSP has staff dedicated to Science-Based Adaptive Management. This group facilitates and helps implement adaptive management processes for resource management actions, and is well-suited to assist DWR and the California Department of Fish and Wildlife (CDFW) with the AMP. DSP staff can assist



with analysis and synthesis to inform refinement and implementation of Project Actions in successive years, facilitate meetings, and/or provide guidance on best available science for the AMP. The specific role of DSP Adaptive Management staff can be appropriately defined in collaboration with DWR.

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We invite DWR to engage with Council staff as you finalize the environmental impact analysis and prepare the AMP for the project. Please contact me at (916) 445-0258 (Jeff.Henderson@deltacouncil.ca.gov) or Anthony Navasero at (916) 445-5471 (Anthony.Navasero@deltacouncil.ca.gov) with any questions.

Sincerely,



Jeff Henderson, AICP
Deputy Executive Officer

Cc: Cindy Messer (cindy.messer@water.ca.gov)
Michelle Banonis (michelle.banonis@water.ca.gov)

II.3.3 LETTER S-DSC-1 – DELTA STEWARDSHIP COUNCIL, JEFF HENDERSON, DEPUTY EXECUTIVE OFFICER, DATED JANUARY 16, 2020

II.3.3.1 RESPONSE TO COMMENT S-DSC-1-1

The comment provides the commenter's summary of the Proposed Project and does not present issues regarding the adequacy of the environmental impact analysis. For more information on the project elements listed in this summary, please see response to comments S-DSC-1-2 through S-DSC1-6.

The comments provided by the Council on the NOP were considered in the development of the DEIR.

II.3.3.2 RESPONSE TO COMMENT S-DSC-1-2

The DWR and USBR report to the SWRCB on export amounts to maintain health and safety during a drought. Pumping rates below 1,500 cfs are difficult for the projects to sustain in the long term due to a combination limited water supply sources for some contractors and physical constraints of the facilities. For many reasons, DWR and the USBR believe and have historically maintained a minimum health and safety export level at any one time at a range with a 1,500 cfs cap. Actual health and safety export levels will depend on a number of factors and should take into account not only the need to deliver water directly for drinking water, sanitation, and fire suppression purposes, but also the need to store water now for blending later for health and safety water quality considerations, in addition to considerations of facility operational constraints. A combined pumping rate of 1,500 cfs is the most biologically protective export rate analyzed in both the 2008 Fish and Wildlife Service biological opinion for smelt (2008 Biological Opinion), and the 2009 NOAA Fisheries biological opinion for salmonids and green sturgeon (2009 Biological Opinion) in drought conditions. That rate is based on minimum municipal and refuge contractor supply demands, as well as the physical constraints at Jones Pumping Plant. At the 1,500 cfs level, negative flows in Old and Middle Rivers (OMR) and entrainment risks are reduced.

As stated in Chapter 3.3.15 of the DEIR, DWR and Reclamation propose to continue facilitating transfers of SWP water and other water supplies through CVP and SWP facilities. The maximum transfer amounts were determined by the U.S. Bureau of Reclamation using professional judgement to estimate available pumping capacity at the south Delta pumping facilities. The purpose of the water transfer window from July to November is to allow for SWP operational flexibility. Potential effects of water transfers have been added to the analysis in DEIR Chapter 4.4. Please see Part III of this FEIR for the specific refinements made.

The EIR is not intended to provide project-level coverage for future water transfers, but rather provides only a program-level analysis. This approach reflects the reality that the specific details of future transfers will not be known until specific transfers are proposed, such that any attempt at present to ascertain their individualized impacts of particular transfers would be an exercise in speculation. The kinds of detailed information the commenter is requesting about such future transfers and their possible impacts will have to await future project-level analyses for actual transfer proposals.

Future water transfers would be subject to their own permitting analyses and environmental review, as required for the particular transfer, including any required CEQA documentation.

II.3.3.3 RESPONSE TO COMMENT S-DSC-1-3

Please see response to comment S-DSC-1-2.

DWR will continue to operate the SWP in accordance with all applicable regulatory requirements and within the terms and conditions contained in its water rights permits and licenses issued by the SWRCB.

The DEIR describes Skinner Fish Facility Improvements in Chapter 3.3.11, “Skinner Fish Facility Improvements,” and qualitatively evaluates the effects of these improvements in species-specific evaluations in Chapter 4.4.7, “Impacts of the Proposed Project.” As noted in the DEIR, DWR will continue implementing studies to better understand and continuously improve the performance of the Skinner Fish Facility. Modeling assumptions and limitations associated with proposed species protections are described in Appendix H, CalSim II and DSM2 Model Descriptions and Assumptions. Specifically, real-time risk assessment-based species protections associated with OMR management for Longfin Smelt and Delta Smelt were not modeled in CalSim II. Real-time risk assessment-based OMR management are expected to reduce entrainment of special status fish species below those identified in the DEIR based on the CalSim II modeling. Further, Skinner Fish Facility improvements are expected to reduce entrainment-related mortality. Additionally, DWR included an updated adaptive management action to reduce exports by the SWP to achieve spring maintenance flows consistent with flows observed from implementation of the 2008 and 2009 Biological Opinions or through development of blocks of water as described in Refined Alternative 2b. This adaptive measure would further reduce entrainment during April and May (the main months with high modeled entrainment in the DEIR). See FEIR Part III, DEIR Chapter 5.3, “Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP.”

II.3.3.4 RESPONSE TO COMMENT S-DSC-1-4

All non-native predatory fish species found in the Delta currently occur within the region of Suisun Marsh that would be improved for Delta Smelt as a result of modifications to SMSCG operations. These predatory fish are euryhaline and can thrive in a wide range of salinities (Moyle 2002). The changes in salinity associated with modifications to SMSCG operations is not expected to be sufficient to have measurable effects on habitat utilization for non-native predatory fishes within the area of Suisun Marsh that would be improved for Delta Smelt through modifications to SMSCG operations. See DEIR Chapter 4.4.7.4, “Species-Specific Impacts,” for more details regarding the potential impacts to non-native fish species.

Specific methods and tools to implement the Adaptive Management Program (AMP) are not available at this time. Upon issuance of the ITP by CDFW, DWR will proceed to identify and develop appropriate tools, methods, and approach needed to support implementation of the AMP. For more information on the AMP please see response to comment S-DSC-1-6; and FEIR Part III, DEIR Chapter 5.3.2.

II.3.3.5 RESPONSE TO COMMENT S-DSC-1-5

Appendix C to the DEIR describes in detail the methods and tools used to conduct the hydrologic analysis presented in the DEIR. Appendix H to the DEIR presents a discussion of the models and assumptions used to conduct the analysis. Appendix D presents a description of the Schism Model used to estimate habitat benefits associated with Suisun Marsh Salinity Control Gate operations. Please see Master Response 20, “Best Available Science,” for more information regarding DWR’s selected approach to the modeling and analysis that utilizes data sets and methods that are scientifically supported and meet the requirements of the CEQA guidelines for evaluation of biological resource impacts.

For more information please also see response to comment S-DSC-1-2 and S-DSC-1-3.

II.3.3.6 RESPONSE TO COMMENT S-DSC-1-6

The Adaptive Management Plan (AMP), which will be incorporated into the Incidental Take Permit (ITP) for Long-Term Operations of the SWP, is consistent with the three-phase and nine-step adaptive management framework adopted by the DSC.¹ The AMP will utilize adaptive management to inform operation of the SWP and related activities, consistent with the requirements of the California Endangered Species Act (CESA). The AMP Implementing Agencies seek to use the flexibility provided by an adaptive management approach in a way that balances gaining knowledge to improve future management decisions with taking actions in the face of uncertainty and achieving the best outcomes possible for CESA-listed species. The objectives of the AMP are to (1) continue the long-term operation of the SWP consistent with applicable laws, contractual obligations, and agreements; (2) address scientific uncertainties related to the effects of water project operations on listed species in relation to proposed actions; and (3) provide a mechanism for incorporating adaptive management into the SWP ITP issued for long-term operation of the SWP.

The Adaptive Management Team (AMT) that will carry out the AMP. It includes one designated representative and one designated alternate from each of the Implementing Agencies (DWR, DFW, and the State Water Contractors), as well as the Delta Stewardship Council, Delta Science Program. The roles of the AMT, as identified in the AMP, is to (1) support the necessary monitoring to carry out the AMP, as required in the ITP; (2) serve as a venue for identifying monitoring and research needs not addressed in other science forums; (3) develop proposals for adaptive management actions or development of discrete proposals, based on consensus among AMT members; (4) track monitoring and research that the AMT determines necessary to carry out the AMP; (5) task technical teams associated with the AMT to regularly synthesize the best available scientific information regarding the covered species and their habitats and the effects of SWP operations and activities on those species and habitats based on established criteria; (6) recommend changes to operations and activities subject to this adaptive management program as well as monitoring protocols where appropriate based upon the results of science and monitoring requirements in the ITP; (7) assure transparency in the implementation of the AMP; and (8) comply with Reporting Annual Work Plan and Budget, and Annual

¹ Delta Plan Appendix 1B, available at <http://www.deltacouncil.ca.gov/pdf/delta-plan/2015-appendix-1b.pdf>

Progress Report requirements. Under the AMP, the results of monitoring and research will inform proposed adaptive management changes. The Implementing Agencies commit to working collaboratively to reach consensus on recommended adaptive management changes to the maximum extent feasible and to elevate and disputes over decisions to appropriate levels of officials for each of the AMT members.

DWR and the other Implementing Entities agree to secure funding sufficient to implement the AMP. It is expected that the AMP will require substantial additional IEP resources to support the required evaluations. The specific level of support remains to be determined and will likely vary substantially depending on the adaptive management actions conducted each year. Based on recent experience with pilot North Delta Food Web and Suisun Marsh Salinity Control Gate flow actions, it is anticipated that the required annual cost for monitoring and adaptive management support would be approximately \$2 million/year. However, the final budget could change substantially based on input from the AMT.

DWR appreciates DSC's comment and recognizes that implementation of the AMP is an ambitious, complex, and far-reaching effort.

II.3.3.7 RESPONSE TO COMMENT S-DSC-1-7

DWR thanks the Council for its offer and intends to coordinate with the DSC Delta Science Program to support development and implementation of the AMP.



GAVIN NEWSOM
GOVERNOR



JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

January 30, 2020

You Chen Chao
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236-0001
LTO@water.ca.gov

Dear You Chen Chao,

COMMENTS ON DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE LONG-TERM OPERATION OF THE STATE WATER PROJECT

Thank you for the opportunity to comment on the Department of Water Resources' (DWR) Draft Environmental Impact Report (DEIR) for the Long-Term Operation (LTO) of the State Water Project (SWP) prepared pursuant to the requirements of the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) and CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.).

The mission of the State Water Resources Control Board (State Water Board) and Regional Water Quality Control Boards (Regional Water Boards) is to preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations. The State Water Board administers water rights in California, including DWR's water rights for the SWP and the various conditions placed upon those rights in State Water Board Decision 1641 (D-1641) and other orders and decisions. The State Water Board and Regional Water Quality Control Boards also have primary authority over the protection of the State's water quality. To protect water quality, the State and Regional Water Boards develop water quality control plans that identify beneficial uses of water, water quality objectives to protect those beneficial uses, and a program of implementation to achieve the objectives, as well as monitoring and special studies and reporting requirements. These water quality control plans include the State Water Board's Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan) and the Central Valley and San Francisco Bay Regional Water Boards' water quality control plans for the Central Valley and San Francisco Bay that are relevant to this project.

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This comment letter is focused on the DEIR and not the associated application to the California Department of Fish and Wildlife (CDFW) for an Incidental Take Permit (ITP) pursuant to the California Endangered Species Act (CESA). A full analysis of the ITP project should be provided in the EIR, including complete hydrologic modeling analyses for review with an opportunity for comment.

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E. JOAQUIN ESQUIVEL, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR

The State Water Board acknowledges that a potential voluntary agreement (VA) may be developed by water users (including DWR) that could improve protections for fish and wildlife in the Bay-Delta watershed and may help address issues identified in this comment letter. State Water Board staff look forward to continuing to work with DWR on the development of a robust VA.

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The State Water Board recognizes that, in addition to the VA discussions and DWR's CEQA process and ESA ITP application, multiple other regulatory processes in the Bay-Delta watershed are underway. This includes proposed changes to Central Valley Project (CVP) operations by the U.S. Bureau of Reclamation (Reclamation) to maximize CVP export pumping and the related reinitiation of consultation under the Federal Endangered Species Act (FESA) on the coordinated long-term operations of the CVP and SWP (collectively Projects), including receipt by Reclamation of biological opinions (BiOps) from the National Marine Fisheries Service (NMFS) for marine species and the United States Fish and Wildlife Service (USFWS) for all other federally listed species that could be affected by the Projects' joint operations and issuance of an Environmental Impact Statement pursuant to the National Environmental Policy Act (ROC LTO EIS). The State Water Board previously issued a comment letter (attached) on Reclamation's Draft ROC LTO EIS (see attached). To the extent those comments are related to the DEIR, they are incorporated by reference. Comments in this letter regarding monitoring, workgroups, and other issues are also applicable to actions by Reclamation.

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Proposed Project and Alternatives

The purpose of the proposed project is to continue the operation of the SWP in a coordinated manner with the CVP, consistent with each project's authorized purposes, in a manner that enables DWR and Reclamation to maximize water deliveries and optimize marketable power generation consistent with applicable laws, contractual obligations, and agreements; and to augment operational flexibility by addressing the status of listed species. DWR has also indicated that the proposed project seeks to strengthen safeguards for fish without increasing exports. The proposed project includes proposed modifications to Old and Middle River (OMR) flow management; elimination of export constraints from the 2009 NMFS BiOp/Reasonable and Prudent Alternatives (RPAs - measures to prevent jeopardy to the continued existence of the species); elimination of fall X2 actions from the 2008 USFWS BiOp/RPAs; actions in the summer and fall for the management of Delta smelt; and other components. As discussed further below, it is not clear from the DEIR that the proposed project would strengthen safeguards for fish or limit exports to existing levels. Alternatives to the proposed project would potentially increase protections over the proposed project, but it is not clear that those alternatives would improve protections for fish over existing conditions and that those alternatives would avoid further impacts to native fish species.

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As part of the description of the proposed project, the EIR should include a description of the exact changes to existing regulatory constraints that are proposed in a table or other easily discernable format for ready comparison, including a clear description of the existing constraints that are proposed to be eliminated and what they are proposed to be replaced with, if anything. In addition, the project description should clearly document the scientific basis for each of the changes and should explain how the proposed constraints will prevent harm and, where applicable, improve conditions for the various listed fish species compared to the 2008 and 2009 BiOps and associated RPAs and the 2009 ITP relative to the current degraded conditions of those species.

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In general, the proposed project has the potential to increase water deliveries and exports, increase net cross-Delta flows (reverse flows, or more negative OMR flows) to the export facilities, and decrease Delta outflows during the spring and fall. According to the DEIR, Delta outflows under the proposed project would be decreased by almost 400 thousand acre-feet (TAF) on average annually. Water exports would be increased through the SWP's Banks Pumping Plant by 220 TAF and the CVP's Jones Pumping Plant by 155 TAF on average annually. On average, the largest reductions in Delta outflow would occur in the months of April (2,748 cubic feet per second (cfs)), May (2,677 cfs), September (1,846 cfs), and November (2,985 cfs). Delta outflows would be decreased the most (6,237 cfs) in September of wet water years.

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Alternatives to the proposed project include additional protections over the proposed project, but not above existing conditions. Alternative 2A maintains the spring (April 1 to May 31) export constraints included in the 2009 NMFS BiOp/RPAs for the SWP share only resulting in additional spring outflows above the proposed project but less than existing conditions. Alternative 2B builds on alternative 2A and includes a block of additional summer or fall outflow of 100 TAF in wet and above normal years. Alternative 2B provides more outflows than 2A but still less than existing conditions. Alternative 3 is built on the proposed project and includes physical (Head of Old River Barrier) and nonphysical (Georgiana Slough) barriers. Alternative 4 is built on the proposed project and includes alternate summer and fall actions to those included in the proposed project. Only limited modeling results are provided for the alternatives, but based on the project description for each, all of the alternatives and the proposed project would potentially reduce protections provided in the 2008 and 2009 BiOps/RPAs, and particularly reduce Delta outflows during the spring.

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As described in the peer-reviewed *Scientific Basis Report in Support of New and Modified Requirements for Inflows from the Sacramento River and its Tributaries and Eastside Tributaries to the Delta, Delta Outflows, Cold Water Habitat, and Interior Delta Flows* (Scientific Basis Report) produced by State Water Board staff in 2017 (Scientific Basis Report) in support of potential updates to the Bay-Delta Plan and scientific literature referenced in that report, available scientific knowledge indicates that decreasing freshwater outflows, particularly during the winter and spring and increasing exports and associated reverse flows in the interior Delta is expected to have a negative impact on the survival and abundance of native fish species, including threatened and endangered species that are the subject of the DWR's ITP application and BiOps/RPAs issued by USFWS and NMFS for the Projects in 2008 and 2009, respectively. New BiOps issued in 2019 (2019 USFWS and NMFS BiOps) decrease those protections as Reclamation likewise proposes to increase water deliveries and exports, resulting in increased reverse flows and decreased Delta outflows.

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This is contrary to the broad agreement in the scientific community that increased freshwater flows through the Delta and aquatic habitat restoration are needed to protect Bay-Delta ecosystem processes and native fish species.¹ As stated in the Scientific Basis Report:

It is widely recognized that the Bay-Delta ecosystem is in a state of crisis. Changes in land use due to agricultural practices, urbanization, and flood control combined with substantial and widespread water development, including the construction and operation of the Projects, have been accompanied by significant declines in nearly all species of native fish, as well as other native and nonnative species dependent upon the aquatic ecosystem...water project operations in the southern Delta alter circulation patterns, interfering with fish migration, changing water quality, and entraining fish and other aquatic organisms...upstream diversions and water exports in the Delta have reduced January to June outflows by an estimated 56 percent (average) and annual outflow by an estimated 52 percent (mean).

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(Scientific Basis Report at pp. 1-4, 1-5.)

The Scientific Basis Report concluded that increased Delta inflows and outflows, and cold-water habitat and constraints on pumping in the interior Delta are necessary in order to reasonably protect at-risk fish species. Accordingly, it is not clear how the proposed project will not further degrade conditions for fish and wildlife species that are already in poor conditions, some of which are on the verge of functional extinction or extirpation. Given this, it is also not clear how the proposed project is consistent with existing obligations, including the California Delta Reform Act,² CESA,³ the California Porter-Cologne Water Pollution Control Act (Porter-Cologne Act), various provisions of the California Water Code governing water rights, and the public trust doctrine. (See *National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419). Further, it is

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¹ National Academy of Sciences Natural Resource Council Committee on Sustainable Water Management in California's Bay-Delta (2012) Report: Sustainable Water and Environmental Management in California's Bay-Delta "...sufficient reductions in outflow due to diversions would tend to reduce the abundance of these organisms ["these organisms" refers to 8 Bay Delta aquatic species at various trophic levels]" (page 60); "Thus, it appears that if the goal is to sustain an ecosystem that resembles the one that appeared to be functional up to the 1986-93 drought, exports of all types will necessarily need to be limited in dry years, to some fraction of unimpaired flows that remains to be determined." (page 105); California Department of Fish and Wildlife (2010) Quantifiable Biological Objectives and Flow Criteria "...current Delta water flows for environmental resources are not adequate to maintain, recover, or restore the functions and processes that support native Delta fish." (page 1); Executive Summary; Public Policy Institute of California (2013) Scientist and Stakeholder Views on the Delta Ecosystem "a strong majority of scientists prioritizes habitat and flow management actions that would restore more natural processes within and upstream of the delta" (page 2); http://www.ppic.org/content/pubs/report/R_413EHR.pdf; State Water Board (2010) Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem Flows Report, p.7. "Both flow improvements and habitat restoration are essential to protecting public trust resources [defined as "native and valued resident and migratory species habitats and ecosystem processes" p. 10]; State Water Board (2016) Technical Report on the Scientific Basis for Alternative San Joaquin River Flow and Southern Delta Salinity Objectives. https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/bay_delta_plan/water_quality_control_planning/2018_sed/docs/appx_c.pdf.; State Water Board (2017) Scientific Basis Report in Support of New and Modified Requirements for Inflows from the Sacramento River and its Tributaries and Eastside Tributaries to the Delta, Delta Outflows, Cold Water Habitat, and Interior Delta Flows. https://www.waterboards.ca.gov/water_issues/programs/peer_review/docs/scientific_basis_phase_ii/201710_bdphas_ell_sciencereport.pdf.

² The 2009 Delta Reform Act and Delta Plan call for reducing water supply reliance on the Delta (Wat. Code, § 85021). The proposed project appears to increase reliance on the Delta.

³ It is the policy of the state that all state agencies, boards, and commissions shall seek to conserve endangered and threatened species and shall utilize their authorities in furtherance of CESA's goals (Fish & G. Code, § 2055). Conserve means to use, and the use of, all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to CESA are no longer necessary (Fish & G. Code, § 2061).

not clear how the DEIR can find no impacts to fish and wildlife from the proposed project in light of this science. The proposed project should provide a commitment to protecting winter and spring outflows and preventing increased volumes of water exports out of the Delta. The DEIR should also evaluate a more protective alternative given the current poor status of listed species that would increase Delta outflows during the winter and spring, along with measures to protect fish and wildlife during the summer and fall, including flow and cold water habitat measures that provide protections similar to those that would be provided under the July 2018 Framework for potential updates to the Bay-Delta Plan produced by State Water Board staff and the State Water Board’s 2018 update to the Bay-Delta Plan establishing revised Lower San Joaquin River flow objectives. An alternative with higher outflows was included in Reclamation’s ROC LTO EIS (Alternative 4). The State Water Board provided comments on this alternative (see attached) that should also be considered by DWR.

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Specific Elements of the Proposed Project

OMR Management

It is not clear that the proposed OMR operational constraints will provide for rigorous protection of listed fish species or adequate oversight by regulatory agencies. It is also not possible to adequately model or predict the effects of such operations on the environment or listed species.

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The proposed project would replace the 2008 USFWS and 2009 NMFS BiOp/RPA OMR constrains with largely open-ended real-time OMR management by DWR and Reclamation informed by hydrologic and fisheries modeling and monitoring. It is not clear how modeling and monitoring information will inform real time decision making and whether the constraints will be protective. The proposed project would eliminate the current real-time assessment groups comprised of regulatory agency experts that currently inform OMR management under the 2008 and 2009 BiOps/RPAs (e.g., DOSS and SWG). DOSS and SWG rely on multiple lines of evidence and utilize critical scientific judgement to formulate recommendations for OMR operations. Under the proposed project, it appears that a single line of monitoring or modeling evidence could be employed to make decisions that may not reflect actual risk to the species. In particular, as part of the project, real-time management actions are proposed to be largely informed by monitoring of whether species are present or absent from a monitoring location. Because listed species are very rare and not easily detected, it is very likely that false negatives would occur in monitoring data and that such monitoring would result in a lack of protection for rare species, particularly with further species declines. In addition, current monitoring that is proposed to be relied upon was not designed for real-time decision making and it is not clear that such monitoring will be adequate for real-time decision making. Further, it is not possible to determine that yet to be completed tools (e.g., Delta smelt life cycle model) will be adequate to inform management actions, particularly before they have been developed and peer reviewed. Given these issues, it is not possible to determine whether the operations under the proposed project will be protective or not. The proposed project should include clear protective OMR operational rules that can be assessed for effectiveness and should provide for full and regular involvement by regulatory agencies in technical assessments and decision making. Specific comments on various components of the proposed OMR criteria are provided below.

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OMR Constraints for Delta and Longfin Smelt

The DEIR indicates that when managing for OMR flows, DWR will share its technical analysis and supporting documentation with CDFW on an “as needed basis” and seek their technical assistance. The proposed project should be modified to make it clear that CDFW and other regulatory agencies will be consulted in real-time on “all” OMR management decisions and not

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only on an “as needed” basis as determined by DWR and that ultimate authority over OMR management will reside with the regulatory agencies. The DEIR identifies a process for resolving disagreements regarding OMR limits between DWR and CDFW that could take a protracted amount of time during which needed protections may be delayed. This process should be expedited to provide for more real-time species protections, particularly given elimination of triggers for OMR restrictions that were included in the 2008 and 2009 BiOps/RPAs.

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The DEIR states that “Grimaldo et al. (2017) indicated that -5,000 cfs OMR flow is an inflection point for fish entrainment” and used this citation as the basis for the -5,000 cfs OMR criteria for Delta and longfin smelt and salmon. The reference cited is an unpublished manuscript that has not been peer-reviewed. This paper also does not address longfin smelt or salmon that have different entrainment relationships with OMR flows. The 2008 USFWS BiOp included extensive information on OMR effects on Delta smelt and determined the inflection point for adult Delta smelt salvage to be an OMR flow of -1,800 cfs. Prior to relaxing the existing OMR constraints, the scientific basis for that relaxation should be published and subject to peer review.

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The proposed project would modify the high river flow offramps for OMR flow management substantially from the 2008 USFW BiOp levels of 90,000 cfs on the Sacramento River at Rio Vista and 10,000 cfs on the San Joaquin River at Vernalis that were designed for Delta smelt protection to 55,000 cfs and 8,000 cfs, respectively, that were identified in the 2009 longfin smelt ITP. The scientific basis for applying the proposed offramp to Delta smelt should be provided in the project description with citations to peer-reviewed literature.

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The proposed project states that DWR will operate to meet its proportional share of proposed operational constraints but that DWR cannot guarantee that Reclamation will meet its share of the operational constraints. As acknowledged in the DEIR, this circumstance will limit whether the proposed project will provide the intended benefits and speaks to the need for comprehensive and coordinated regulatory requirements. The DEIR should include an evaluation of the proposed project if Reclamation does not meet its share of the operational constraints.

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It is not clear how the various OMR flow constraints designed for different fish species would interact with one another. The DEIR states that during any time an OMR flow restriction for either Delta smelt or longfin smelt is being implemented, additional OMR flow requirements for protection of the other species shall not occur. It is not clear how such a constraint would be applied in practice. The DEIR should clarify.

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For the Turbidity Bridge Avoidance trigger, the DEIR indicates that “if 5 consecutive days of OMR flow that is less negative than -2,000 cfs does not reduce daily average turbidity at Bacon Island below 12 NTU in a given month, DWR, in coordination with Reclamation, may determine that OMR restrictions to manage turbidity are infeasible and will instead implement an OMR flow target that is deemed protective based on turbidity and adult Delta Smelt distribution and salvage, but will not be a more negative OMR flow than -5,000 cfs.” The basis for limiting OMR constraints to 5 days to avoid a turbidity bridge should be provided and the method by which a protective OMR flow target will be arrived at should be further described. In addition, the DEIR indicates that “To avoid excessive OMR restrictions during a sensor error or a localized turbidity spike, DWR, in coordination with Reclamation, will consider and review data from other locations and sources. Additional information that will be reviewed include regional visualizations of turbidity, alternative sensors, and boat-based turbidity mapping, particularly if

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there was evidence of a local sensor error.” The process for using alternate turbidity metrics should be better defined.

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The Turbidity Bridge Avoidance criteria uses a monitoring location in Old River at Bacon Island. The DEIR states that this trigger is to avoid entrainment of adult Delta smelt into the reaches between the San Joaquin River shipping channel and the south Delta water export facilities (page 3-23). The monitoring location for turbidity (Bacon Island) is roughly the mid-point from the confluence of the San Joaquin to the entrance to Clifton Court Forebay. DWR should consider moving the turbidity monitoring location further downstream closer to the San Joaquin River to improve protection.

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The DEIR states that the OMR flow management, Integrated Early Winter Protection (First Flush Turbidity event) would be triggered more often under the proposed project than existing conditions (page 4-170); however, the figure describing the occurrence (Figure 4.4-50, page 4-170) is not consistent with this statement. The EIR should clarify the findings of this analysis.

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OMR Constraints for Salmon

The proposed project would replace the daily loss thresholds for OMR management in the 2009 NMFS BiOp/RPA that provides for real-time adjustments to OMR operations to avoid entrainment of salmonid species with a less protective single-year loss threshold that does not trigger until significant impacts have already occurred. Specifically, the proposed project would require that OMR flows be managed to prevent salvage in any one year greater than 90% of the greatest juvenile salmonid salvage loss that occurred during 2010–2018. Allowing for the same or greater increases in juvenile mortality in declining salmonid populations than existing conditions is not a protective loss threshold. Further, the trigger for OMR flows to be constrained to -3,500 cfs and -2,500 cfs (when salvage exceeds 50 and 75% respectively of the annual salmonid loss threshold) would not apply until significant impacts have occurred. A more protective loss threshold for salmonids should be included in the proposed project. In addition, the proposed project should be modified to include specific operational constraints to protect federally and state listed spring-run Chinook salmon.

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The proposed project includes convening of an independent review panel to provide recommendations on OMR management for salmonids to stay within permitted take limits. The process for conducting such reviews and for incorporating recommendations from such reviews into OMR management requirements should be better described and should provide regulatory agencies with final decision making authority and oversight.

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The proposed project includes provisions for OMR flows to be further limited below -5,000 cfs if loss thresholds are exceeded “unless DWR, in coordination with Reclamation, determines that further OMR restrictions are not required to benefit fish movement because a risk assessment shows that the risk is no longer present based on real-time information.” The project description should make it clear that decision making authority for these and other off-ramps are vested with regulatory agencies and not the project operators. Further, the proposed risk assessment methodology should be better described in the proposed project with specific operational rules.

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OMR Flexibility

The proposed project (page 3-28) allows for OMR flows more negative than -5,000 cfs and up to -6,250 cfs when there are excess flows in the Delta, defined as “flow in excess of that required to meet Water Quality Control Plan flow and salinity requirements and other applicable regulations.” This is a very broad offramp that could allow for substantial additional negative

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OMR flows and reduced Delta outflows that would not be protective as discussed in this letter. The scientific basis for this measure should be explained in the project description and supported by peer reviewed scientific information. Further, the methodology for determining excess and balanced conditions is not documented and is determined solely by DWR and Reclamation. The methodology for determining excess and balanced conditions should be documented and should provide for regulatory oversight.

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Delta Smelt Summer-Fall Habitat Actions

The proposed project would eliminate the fall X2 action from the 2008 USFWS BiOp/RPA (requiring that X2 be maintained at 74 km and 81 km following wet and above normal years, respectively), which has not yet been fully implemented or evaluated. The fall X2 RPA action would be replaced with: a relaxed X2 action (80 km during September and October following wet and above normal years) that would be implemented initially (page 3-30); operations of the Suisun Marsh Salinity Control Gates (SMSCG) in the summer and fall (June through October) of below normal and above normal years, and possibly wet years if the action shows benefit; and food enhancement actions. The DEIR states that these actions and implementation of other actions will be more fully defined and developed through the structured decision-making or other review process and that the review will include selection of appropriate models, sampling programs, and other information to be used. It is not clear what degree of population-level benefits the proposed actions would provide and what the basis is for relaxing the existing fall X2 constraints while the proposed actions are being developed and evaluated, particularly given the current poor status of the Delta smelt population. It is also not clear what initially is intended to mean for the relaxed fall X2 action or why wet years are not included in initial implementation of the SMSCG operations if this action is expected to provide benefits. The DEIR cites a single reference for the potential benefits of SMSCG operations to a briefing document (page 4-157) but does not cite to any published or peer reviewed sources, which it should if this is the primary basis for relaxation of the fall X2 action in the 2008 USFWS BiOp/RPA.

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Export Rates

The proposed project eliminates the San Joaquin River flow to export ratio (SJR I:E) constraint which will likely result in an increase in entrainment losses of San Joaquin River juvenile salmonids. Previous studies have shown that higher inflow to export ratios are positively associated with higher juvenile salmonid survival through the South Delta, as well as, adult escapement. This suggests that the elimination of the inflow to export ratio restrictions will result in an increase in mortality of migrating juvenile salmonids. This change from baseline should be clearly described in the proposed project description along with the scientific justification for the change, including how San Joaquin River salmonids will continue to be protected absent this constraint.

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The proposed project also includes a minimum export rate of -1,500 cfs for “health and safety purposes.” The DEIR should identify the basis for this minimum export level given historical practices and available storage supplies.

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Transfer Window

The proposed project would expand the allowable transfer window into the fall. The scientific basis for allowing for this extension should be provided in the project description and the potential environmental impacts should be evaluated in the EIR. It seems likely that if the transfer window is expanded that overall transfers would increase. The potential impacts of

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increasing transfers should be evaluated in the DEIR, including impacts to fall-run Chinook salmon related to redd dewatering, impacts to terrestrial species, and impacts to groundwater.

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Head of Old River Barrier

The Proposed Project does not include installation of the Head of Old River Barrier (HORB). The State Water Board’s Scientific Basis Report in support of updates to the Bay-Delta Plan for Lower San Joaquin River flows summarizes multiple studies that found that the installation of the HORB contributes to increased survival of migrating San Joaquin River-origin juvenile salmonids. Increased juvenile survival is attributed to both reduced entrainment toward the export pumps as well as improved water quality downstream of the HORB. The DEIR does not specifically evaluate the effect of discontinued installation of the HORB on juvenile survival or water quality impacts downstream; however, consistent with the previous studies, the Delta Passage Model estimates a decrease in juvenile survival under the Proposed Project scenario. Likewise, the reduction in juvenile survival is consistent with the significant increases in entrainment losses as a result of the proposed project. The DEIR should specifically identify the scientific basis for eliminating installation of the HORB as well as evaluate the impact of the discontinued installation of the HORB on juvenile salmonid migration and returning adults and downstream water quality during the spring and fall.

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Real-Time Water Operations Process

The DEIR states that “DWR, in coordination with Reclamation, would implement activities, monitor performance, and report on compliance with the commitments in the Proposed Project. Implementing the proposed action would require coordination between CDFW, DWR, USFWS, NMFS, Reclamation, and the SWP-CVP water contractors. The federal government is proposing a Real-Time Operations Charter to facilitate federal coordination with the State.” The Real-Time Water Operations Charter states that the ‘Core Water Operation’ serves as the foundation for meeting the requirements of D-1641 and that “implementing the core water operation will require coordination between CDFW, DWR, FWS, NMFS, and Reclamation (collectively, the 5 Agencies).”⁴ The State Water Board should be included in this process as it is responsible for implementation of D-1641 and other applicable requirements for the reasonable protection of fish and wildlife and other beneficial uses of water, as well as the continuing oversight of DWR and Reclamation’s water rights.

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Drought Actions

The DEIR states that DWR will coordinate with Reclamation to develop a voluntary toolkit of drought actions that could be implemented at the discretion of DWR and/or Reclamation. On October 1st, if the prior water year was dry or critical, DWR, in coordination with Reclamation, shall meet and confer with USFWS, NMFS, CDFW, and Public Water Agencies on voluntary measures to be considered if drought conditions continue into the following year. If dry conditions continue, DWR, in coordination with Reclamation, will regularly meet with this group (and potentially other agencies and organizations) to evaluate hydrologic conditions and the potential for continued dry conditions that may necessitate the need for development of a drought contingency plan (that may include actions from the toolkit) for the water year. By February of each year following a critical hydrologic year type, DWR, in coordination with Reclamation, shall report on the measures employed and assess their effectiveness. The toolkit shall be revisited at a frequency of not more than 5-year intervals.

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⁴ Final Biological Assessment Reinitiation of Consultation on the Coordinated Long-Term Operation of the Central Valley Project and State Water Project, Appendix C, page 1.

While voluntary measures are strongly encouraged, the proposed project should also include specific drought year commitments for evaluation, planning, and management to ensure the protection of fish and wildlife. Actions that are within DWR and Reclamation’s control include planning and management of all water diverted under DWR and Reclamation’s water rights, including Settlement contract deliveries of water under DWR and Reclamation’s rights. The State Water Board should be added to the list of agencies to be consulted in such processes. Further, it is not clear why there is a limitation on how frequently any drought toolkit should be revisited. It would seem to be appropriate to employ an adaptive management approach with such a toolkit with ongoing and regular assessments of the effectiveness of actions given that these actions can be assessed in real-time in many cases and by the end of the temperature control season in nearly all cases.

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Restoration Actions

The Proposed Project includes a program to create or restore a minimum of 8,000 acres of intertidal and associated subtidal habitat in the Delta and Suisun Marsh (page 4-317). This habitat restoration requirement was one of the RPAs contained in the 2008 USFWS and 2009 NMFS BiOps/RPAs designed to allow for continued operations of the water exports without causing jeopardy to listed species. The 2008 USFWS BiOp mandated DWR to complete the restoration projects within 10 years of the BiOps. However, the DEIR (Table 4.6-2) shows that only 1,571 acres of tidal habitat restoration projects have been completed as of 2019, with an additional 3,040 acres planned to be completed by 2022, resulting in a total tidal restoration of 4,611 acres, short of the target of 8,000 acres (by 2018). Relaxations to existing protections should not be considered before the previously required restoration is completed and providing for necessary protections to list species.

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Environmental Impacts Assessment

Thresholds of Significance for Environmental Impacts

The thresholds of significance used in the DEIR to determine whether an impact is significant or less than significant should be refined to be less vague and more informative to decision makers. A threshold of significance should be an identifiable quantitative, qualitative, or performance level parameter of a particular environmental effect. Instead, the DEIR relies on a generalized approach that effects are “greater or lower under the Proposed Project, relative to the Existing Conditions scenario” (DEIR at p. 4-115) and imprecise impact conclusion terms such as that impacts are “similar,” “slightly reduced,” “limited,” “potentially beneficial overall,” or “slightly lower” (such as food availability for Delta smelt). Where impacts are deemed “appreciably greater” or “increased” such as for Delta smelt and longfin smelt entrainment, no mitigation is required based on general assumptions regarding measures such as less-restrictive OMR limitations, real-time management decision-making that leaves significant discretion to DWR. The conclusion that all impacts to aquatic resources are less than significant and thus no mitigation is required is then carried forward into the cumulative impacts section which states that all cumulative impacts are also less than significant because “the Proposed Project would essentially ‘self-mitigate’ for its proportional share of its contribution to the cumulative impact. Therefore, the proposed project’s contribution to cumulative impacts would not be cumulatively considerable” (DEIR at p. 4-317).

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Additional facts and analyses are needed to support both the direct and indirect impact conclusions, particularly since OMR flow, San Joaquin River inflow to export ratios, and fall outflow protections are reduced under the proposed project and exports are increased. Facts and analyses are also needed in the cumulative impacts section to explain why the proposed

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action when viewed in combination with other closely related past, present, and reasonably foreseeable future projects, including proposed changes to CVP operations, does not result in potentially significant effects that are cumulatively considerable.

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Project Objectives

The DEIR describes the project’s objectives as to “deliver water pursuant to water contracts and agreements up to full contract quantities” (pages 3-1; 1-5.) The DEIR describes the contracts as Table A contractual entitlements; Feather River settlement contract amounts; and, Article 21 “interruptible water supply.” Article 21 is any water in excess of contractual Table A that can be deemed “project water.” Project water is defined broadly under the Contracts as “water made available for delivery to the contractors by the project conservation facilities and the transportation facilities included in the System.” (Contract, Article 1(l).) Article 21 can also be “reclassified later” as Table A if a contractor has not received its full Table A amounts. (DEIR at p. 3-11.) There is no cap on the quantity of Article 21 water the SWP can deliver other than water supply availability, water demand, and the physical and regulatory constraints of the Projects’ operations.

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Reclamation’s ROC LTO DEIS and related BiOps propose to change CVP operations by maximizing exports, which in turn will reduce species protections. Likewise, the DEIR proposes to “operate the SWP in a manner that maximizes exports” but states it will do so “while minimizing direct and indirect impacts on state and federally listed fish species.” (DEIR at p. 3-18.) The DEIR should provide additional factual support for the conclusion that it can maximize exports above existing conditions in an already severely degraded estuary while minimizing impacts to the listed species.

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As noted above, the ROC LTO EIS project description proposes maximizing Delta exports, which will in turn reduce Delta outflows and lead to increased straying, impingement and entrainment of fish species, among other impacts. Similarly, the SWP is proposing to increase exports, prohibit pumping reductions below 1,500 cfs, reduce Delta outflows, and increase transfers, among other measures. Under the Coordinated Operations Agreement, SWP actions include conveying water for the CVP, which does not appear to be adequately evaluated in the DEIR. For example, the DEIR provides a table labeled as comparing SWP pumping plant exports and SWP deliveries to existing conditions but caveats the table with a statement that “[r]eported values only reflect SWP deliveries and exports and do not include any CVP wheeling or water transfers” (DEIR at p. 4-17).

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The CVP Jones Pumping Plant has a permitted capacity of 4,600 cfs that is further limited to approximately 4,200 cfs by the ability of the CVP Delta-Mendota Canal to convey water supplies due to subsidence and other issues. The SWP Banks Pumping Plant has a capacity of 10,300 cfs, which is limited by U.S. Army Corps of Engineers regulatory conditions and other factors but is still substantially greater than CVP capacity at Jones (DEIR at p. 4-11). As a result, the CVP seeks SWP wheeling capacity through Banks Pumping Plant and the SWP California Aqueduct whenever CVP supplies and demand exceed CVP operational capacity and such wheeling capacity is available. In addition, the CVP and SWP are physically connected through the Delta-Mendota Canal/California Aqueduct Intertie which allows the SWP California Aqueduct to convey up to 900 cfs to the Delta-Mendota Canal using gravity flow (DEIR at p. 4-295). The DEIR should evaluate the degree to which the proposed changes in regulatory constraints will change CVP diversions through the Banks Pumping Plant. The DEIR should also provide substantial evidence to support its conclusions that increased exports, individually and cumulatively, including when the SWP is wheeling, transferring, or otherwise facilitating CVP

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water deliveries, will not cause potentially significantly impacts to aquatic biological resources already impacted by the Projects' operations, including fish species listed as threatened and endangered under FESA, CESA, or both.

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Proportional Responsibilities

The DEIR states in multiple sections that the SWP will only provide its "proportional share" of measures needed to protect aquatic biological resources, such as OMR flow requirements, which are already less protective under the proposed action (DEIR at pp. 3-21, 3-22, 3-23, 3-24, 3-25, 3-27, 3-29, 4-317, 5-6, 5-7, 5-38). However, the DEIR also states that "DWR can take actions to make OMR flows more positive, but there are circumstances when the actual OMR flow may not respond to DWR's actions, particularly if the CVP is operating differently" (DEIR at 3-23). As measures for the protection of aquatic biological resources in the ROC LTO EIS and BiOps are vague and often dependent on Reclamation's own judgment for initiation or continuation, actions by the CVP to mitigate the potentially significant impacts of joint operations are uncertain. Given that uncertainty, the DEIR should provide facts and analyses to demonstrate how DWR's provision of a proportional share of the joint operations will result in less than significant impacts from the proposed project on aquatic biological resources, including less than significant cumulative impacts.

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Minimum Export Level

The description of project operations states that the CVP and SWP would be allowed to export 1,500 cfs in order to "meet human health and safety" and cannot be required to reduce export pumping below that rate (DEIR at p. 1-5). This element of the project description is then defined somewhat differently on DEIR page 3-29 as being needed "in order to meet health and safety needs, critical refuge supplies, and obligations to senior water rights holders." This language prohibits even temporarily reducing exports below 1,500 cfs in order to protect aquatic biological resources, including populations of critically endangered and threatened native fish species. California water supplies are complex and varied. Water is stored south-of-Delta in San Luis, Diamond Valley, and other reservoirs and water users, including senior water rights holders, often rely upon a mix of water supplies including local surface water, groundwater, and recycled water. As noted in the DEIR, "water agencies have been making improvements to regional and local water supplies through enhanced water conservation efforts, wastewater effluent and stormwater recycling, construction of local surface water and groundwater storage facilities, and construction of desalination treatment plants for brackish water sources and ocean water sources." (DEIR at p. 4-13.) The DEIR should evaluate the potential significance of increased impacts to aquatic biological resources if actions to avoid or minimize effects are prohibited in any circumstance that would require combined operations to drop below 1,500 cfs.

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Prevention and Mitigation of Impacts

Measures to prevent or mitigate impacts are frequently characterized in the DEIR as being implemented on an as-needed basis, as determined by DWR. This includes measures to prevent impacts to aquatic biological resources, which often rely upon a consultation process between DWR and CDFW on an "as needed" basis (DEIR 3-21, 3-22, 3-24, 3-27, 3-28). CEQA prohibits a public agency from approving a project as proposed if there are feasible alternatives or mitigation measures available that would substantially lessen any significant effects that the project would have on the environment. CEQA requires that measures to mitigate or avoid

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significant impacts on the environment are fully enforceable through permit conditions, agreements, or other measures (Pub. Resources Code, § 21081.6).⁵

The DEIR should explain the range of potentially significant impacts to species from reliance on measures that are implemented on an “as-needed” basis and based on yet to be developed methods and tools. The analyses should address what assumptions are included in the conclusion that a change in the baseline of project operations from numeric take limits and OMR restrictions based on specified triggers to a negotiation process between DWR and CDFW, results in less than significant impacts to aquatic biological resources, especially in light of the proposed change to CVP operations under the ROC LTO EIS. For example, for adult longfin smelt, the DEIR states that DWR will share its technical analysis and supporting documentation with CDFW “on an as-needed basis” (DEIR page 3-21). If DWR decides that its technical analysis supports imposing a more restrictive OMR flow requirement upon its own operations than the maximum of -5,000 cfs, DWR discusses its risk assessment with the “Water Operations Management Team (WOMT) at its next meeting.” The WOMT is “responsible for overseeing the Watershed Monitoring Workgroups and elevating disagreements to the Directors of CDFW, DWR, Reclamation, USFWS and NMFS, where necessary” (DEIR at p. 3-37) If there is disagreement, the Director of CDFW notifies the Director of DWR and they confer for up to 3 days. If there is no resolution, then DWR takes no protective action unless CDFW provides “an explanation and supporting documentation of how failing to increase the OMR flow requirements would *result in take that would not be minimized or fully mitigated.*” If CDFW meets its burden, then DWR is only obligated to continue to provide its “proportional share of the requirement” (DEIR at p. 3-21; emphasis added.)

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The DEIR does not describe how often the WOMT meets, who has the authority to set a meeting, or who decides if elevating a disagreement is “necessary.” Assuming the WOMT met weekly and decided to elevate a disagreement, the DEIR is outlining a process where DWR only raises issues if, in its own discretion, it believes such issues require elevation and where there could be a 10-day lag or more between when the need for a protective measure is identified and such measure is implemented, if at all. In general, a clearer decision process should be considered that ensures timely decision making that protects listed species.

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The definition of “take” under CESA is to “hunt, pursue, catch, capture, kill, or attempt to hunt, pursue, catch, capture, or kill” (Fish & G. Code, § 86). In other words, actions causing mortality to species. This is a more restrictive standard than FESA, which also includes the broader categories of “harass” or “harm” in its definition of take (16 U.S.C., § 1532 (19)). CESA requires that where take is authorized, the “impacts of the authorized take shall be minimized and fully mitigated *roughly proportional in extent to the impact of the authorized taking on the species*” (Fish & G. Code, § 2081(a)(2); emphasis added). The DEIR states that “[a]ssessment of direct impacts [to aquatic biological resources] is based upon the likelihood of physical injury or mortality to individuals from SWP facilities and operations” adding however that “*it is not possible to predict the number of individuals that would be subject to direct impacts*” (DEIR at p. 4-115, emphasis added). The DEIR caveats that the accuracy of physical and hydrodynamic models used to asses impacts to species is “unknown and unquantifiable because of the

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⁵ Similarly, CESA requires an analysis of whether issuance of the incidental take permit would jeopardize the continued existence of a species that includes consideration of the species' capability to survive and reproduce and any adverse impacts of the taking on those abilities in light of known population trends; known threats to the species; and reasonably foreseeable impacts on the species from other related projects and activities. CESA also requires proposed measures to minimize and fully mitigate the impacts of the proposed taking and a proposed plan to monitor compliance with the minimization and mitigation measures and the effectiveness of the measures (Cal. Code Regs., tit. 14, § 783.2).

planning-level nature under which assumptions of the projected conditions have been established” (DEIR at p. 4-116) and that “uncertainty exists in the relationships used in [biological] models, and, subsequently, in their results” (DEIR at p. 4-118).

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Real-Time Management

The as-needed real-time negotiation process between DWR and CDFW is part of the project description for the proposed project and is relied upon for conclusions that mitigation measures for the project are unnecessary because “no potentially significant impacts were identified in the analysis of the Proposed Project on special-status, or recreationally and commercially important fish and aquatic resources. Therefore, no mitigation is required” (DEIR at p. 4-289). In support of this conclusion the DEIR assumes that, for example, under the as-needed decision-making process “real-time management would be intended to limit entrainment risk to low levels similar to the levels achieved following implementation of the USFWS (2008) BiOp.” (DEIR at p. 4-171.)

The DEIR should provide factual support and analyses for how the real-time decision-making process proposed as part of the project description will achieve the same levels of protection as the required processes in the USFWS 2008 BiOp/RPAs. The 2008 BiOp/RPAs requires the Projects to operate so the OMR flow would be maintained no more negative than -1,250 cfs to -5,000 cfs to prevent Delta smelt *entrainment* based upon a collaborative process led by the agencies responsible for the protection of public trust resources meeting weekly in consultation with the Projects. The DEIR proposes a real-time as-needed decision-making process led by DWR where project operations cannot be required to pump less than 1,500 cfs under any circumstance and, in order to protect species, the SWP *may* reduce its “proportional share” of an OMR flow less negative than the previous maximum of -5,000 OMR; however, it can only be *required* by the CDFW Director to do so upon a demonstration, within 72 hours, that *take* cannot be *minimized and fully mitigated*. This is not a real-time standard. The development by CDFW of measures to minimize and fully mitigate take are roughly proportional based upon anticipated take over the requested period of the permit, which in this case is 10 years. (DWR ITP Application at p. 1-3.) Because the application of the requirement is vague and potentially unenforceable, it is unclear how the DEIR can reasonably rely upon it as equivalent to the protections in the 2008 BiOp/RPAs, how it is a sufficient and feasible avoidance or mitigation measure within the context of either CEQA or CESA, or how it constitutes part of a stable project description that can be appropriately analyzed in sufficient detail.

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Impacts on Tributaries

The DEIR does not evaluate potential impacts of the proposed project on Project tributaries. However, the elimination of the 2008 USFWS BiOp/RPA fall X2 action and other components of the proposed project have the potential to change upstream operations that should be evaluated and disclosed in the EIR. Appendix G of the DEIR discusses the geographic scope of the project and states (page G-2) that operations of the Oroville Complex and resulting Feather River flows are not included in the DEIR because Oroville operations are governed by separate legal authorizations, and that no changes to operations of the Oroville Complex are proposed. However, the proposed project includes changes to SWP operations that affect surface water hydrology in the Lower Sacramento River and it is presumable that such actions could result in changes in streamflows and reservoir levels upstream in the Project tributaries. Accordingly, the EIR should present model results and include impact analyses for Project tributaries.

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Impacts to the Listed Species

The DEIR compares conditions under Existing Conditions to the Proposed Project to determine whether there are any significant impacts to listed fish species. Existing Conditions include the current regulatory constraints for water exports and river flows including those imposed through the USFWS (2008) and NMFS (2009) BiOps/RPAs. These constraints were placed as protective measures to avoid jeopardy to listed fish species (i.e., extinction of natural populations). However, the population abundances of listed fish species, including winter-run Chinook salmon and Delta smelt, have continuously declined over the last 10 years (2008-2018) from levels observed during the previous decades. Average escapement of winter-run Chinook salmon after the implementation of 2009 BiOp RPAs (2010-2018) was about 2,500 fish, which is much lower than the average escapement of more than 7,600 fish during the 10-year period prior (2000-2009) to the implementation of the BiOp. Delta smelt abundance based on the Fall Midwater Trawl (FMWT) also shows a precipitous decline during the last decade despite the protective measures included in the 2008 USFWS BiOp.

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The conclusions derived in the DEIR of “no significant impacts” of the Proposed Project compared to the Existing Conditions indicate that the pattern of fish population decline could continue and increase under the Proposed Project. Modeling data suggest that the Proposed Project will result in more negative OMR flows and decreased Delta outflows during several important months for fish species compared to Existing Conditions. These relaxed environmental constraints would degrade habitat conditions and increase entrainment risks for listed fish species. Given the current historically low abundance levels of listed fish species, it is reasonable that the proposed project strengthen protections for fish species.

The DEIR analyzed the impacts of the Proposed Project to listed fish species on each life stage instead of the whole life history. Impacts on each life stage are generally concluded to be “less than significant” in spite of the analyses frequently showing significant, adverse effects on listed species (e.g., larval/juvenile Delta smelt entrainment through PTM). The DEIR does not appear to include an analysis of the cumulative effects of impacts on the different life stages on the population, including to genetic and life history diversity of the species critical to conservation of species at the ESU and DSP level. Such an analysis should be included in the EIR. Impacts to salmonid species should specifically be assessed based on the viable salmonid population (VSP) parameters that have been used in the previous BiOps. Similar metrics should also be used for other species considered in the EIR.

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Impacts During Droughts

The EIR should also include a specific analysis of the impacts of the proposed project during drought conditions. During the most recent drought listed and non-listed native species were significantly impacted both by the combination of dry conditions that were exacerbated by water diversions. The EIR should include an analysis of how the proposed relaxed operational constraints will affect fish and wildlife and water quality conditions during future droughts. Additional protective measures should also be considered during drought conditions to address current impacts of SWP operations.

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Modeling

Evaluation of a Range of Operational Constraints

Given the vague nature of the proposed operational constraints, and particularly the OMR constraints, the DEIR should evaluate a range of possible operations from least to most

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restrictive to better inform the range of operations that could occur under the proposed project. Specifically, the modeling assumes limited use of OMR flexibility during excess conditions. However, it is not clear that such limitations would occur under the proposed operational constraints. The DEIR assumes that there would be OMR flexibility in January and February and never in wet years. However, flexibility would be possible any time the Delta is in excess conditions which can occur fairly frequently throughout the winter and spring, particularly in wet years. Further assumptions are made about how many flexibility events would occur, with only 2 events in above normal and below normal years and 1 in dry years. The DEIR should evaluate the possibility for OMR flexibility anytime the Delta is in excess conditions given that the proposed project does not include any other clear constraints. In addition, a range of assumptions for turbidity bridge avoidance and single-year salmon loss thresholds should be evaluated.

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Baseline OMR Assumptions

The DEIR includes changes to the assumptions for OMR operations under baseline from previous assumptions and those used in Reclamation’s ROC LTO EIS that generally reflect less stringent constraints. As a result, when comparing the DEIR baseline to the proposed project, the differences in operations are smaller. The DEIR should include a sensitivity analysis to document how these different assumptions affect the analysis.

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Southern Delta Salinity

The DEIR states that modeling results of salinity levels at the three D-1641 south Delta agricultural compliance locations are not presented due to arguments DWR and Reclamation make about their respective responsibilities for meeting these objectives.⁶ D-1641 requires Reclamation and DWR to maintain salinity levels at the three interior southern Delta locations (LSJR at Brandt Bridge, Old River at Tracy Road Bridge, and Middle River near Old River). These salinity objectives were modified in the 2018 Bay-Delta Plan, but responsibility for meeting the objectives was not removed from DWR and Reclamation.⁷ As such, the effects of

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⁶ Activities associated with operating the CVP in the San Joaquin River basin are the principle cause of elevated salinity conditions at Vernalis and partially the cause of elevated salinity conditions in the interior Southern Delta. The State Water Board does not agree with DWR and Reclamation’s position that “the Southern Delta salinity standards are beyond the control of the SWP and CVP due to localized impacts and the lack of sufficient circulation within the South Delta channels.” The State Water Board found in D-1641 that, “The salinity problem at Vernalis is the result of saline discharges to the river, principally from irrigated agriculture, combined with low flows in the river due to upstream water development. The source of much of the saline discharge to the San Joaquin River is from lands on the west side of the San Joaquin Valley which are irrigated with water provided from the Delta by the CVP, primarily through the Delta-Mendota Canal and the San Luis Unit. The capacity of the lower San Joaquin River to assimilate the agricultural drainage has been significantly reduced through the diversion of high-quality flows from the upper San Joaquin River by the CVP at Friant. The USBR [Reclamation], through its activities associated with operating the CVP in the San Joaquin River basin, is responsible for significant deterioration of water quality in the southern Delta.” (D-1641 page 83).

⁷ The 2018 Bay-Delta Plan program of implementation for the interior Southern Delta compliance locations recognizes the complexity of salinity management in the interior southern Delta. In D-1641 the State Water Board concluded that DWR and Reclamation are partially responsible for salinity problems in the interior southern Delta due to hydrologic changes caused by export pumping. D-1641 imposes conditions on DWR’s and Reclamations’ water rights requiring implementation of EC levels of 0.7 dS/m from April through August and 1.0 dS/m from September through March at the three compliance stations in the interior southern Delta. As part of implementing the 2018 Bay-Delta Plan salinity water quality objective for the interior southern Delta, the State Water Board will amend DWR’s and Reclamations’ water rights to require 1.0 dS/m EC year-round as a monthly average at the interior southern Delta compliance locations. Reclamation would still be required to continue to comply with the 0.7 dS/m salinity level for the Lower San Joaquin River at Vernalis in D-1641 to provide the assimilative capacity needed to maintain 1.0 dS/m EC as the required EC condition at the interior Delta locations. The State Water Board may also consider the

the proposed project on salinity levels at these locations should be evaluated. Providing the southern Delta salinity modeling results for the interior Delta compliance locations is also necessary to support CEQA findings. If modeling results show that there are additional exceedances in southern Delta salinity objectives, the CEQA finding of "less than significant" should be reevaluated.

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Transfers

The DEIR indicates in the modeling assumptions section that water transfers are assumed to be the same as existing conditions, however, the proposed project would expand the transfer window. The EIR should specifically evaluate the potential effects of this expanded transfer window. Specifically, impacts to adult and juvenile fall-run Chinook salmon and adult steelhead entrainment and migration should be evaluated. It also seems likely to assume that if the transfer window is expanded that overall transfers would likely increase under the Proposed Project. The potential impacts of increasing transfers should be evaluated.

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Alternatives

The DEIR only includes limited modeling results for other Alternatives (2A, 2B, 3, and 4) limiting the ability to fully evaluate the potential impacts of these alternatives. The full modeling results for these other alternatives should be provided with a further opportunity to review and comment on the analyses.

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Delta Smelt Protection

It is well documented that the Delta Smelt population has been declining during recent years, despite protective measures placed in the 2008 USFWS BiOp. The Proposed Project would increase Delta exports during April and May, the period most larval Delta smelt are in the Delta, while making the trigger for increased larval and juvenile protections more constricted and limited in application. Kimmerer (2008) estimated population level effects of entrainment mortality to range from 1% to 50% of the adult population.

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Particle tracking model (PTM) analyses conducted in the DEIR show significant potential entrainment-related impacts under the Proposed Project to larval and early juvenile Delta smelt compared to Existing Conditions. The PTM analysis indicates that larval and early juvenile Delta smelt entrainment to the Clifton Court Forebay (SWP) under the Proposed Project (Table 4.4-8) could increase considerably during April (31% in critical years to 233% in wet years) and May (26% in critical years to 321% in below normal years) compared to Existing Conditions. In addition, the particles entrained into the CVP export facilities (DEIR Appendix, Table E.2-4) would also be much higher under the Proposed Project than Existing Conditions in April (up to 106%) and May (up to 166%).

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The PTM analyses conducted in the DEIR show that a significant proportion of the Delta smelt population could be entrained each year during the larval and juvenile life stages (Table 4.4-8; DEIR Appendix, Table E.2-4). In April, the percentages of particle entrained into the both CVP and SWP water export facilities would be more than doubled in wet (1.54% under existing conditions vs. 4.13% under the proposed project) and above normal (3.54% under existing

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responsibility of others for implementing the interior southern Delta salinity objective based on implementation or completion of the Comprehensive Operations Plan, Monitoring Special Study, modeling, or Monitoring and Reporting Plan, or development of other information.

conditions vs. 7.92% under the proposed project) water years and nearly doubled during below normal (7.57% under existing conditions vs. 14.45% under the proposed project) and dry (8.97% under existing conditions vs. 12.08% under the proposed project) years under the proposed project compared to existing conditions. In May, the percentage of particles entrained into both the CVP and SWP water export facilities were also much higher under the proposed project compared to existing conditions in wet (3.13% under existing conditions vs. 8.59% under the proposed project), above normal (5.8% under existing conditions vs. 18.25% under the proposed project), below normal (5.62% under existing conditions vs. 18.76% under the proposed project), and dry (9.28% under existing conditions vs. 15.69% under the proposed project) years.

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Previous PTM modeling efforts included in the 2008 USFWS BiOp suggested that particle entrainment should be measured cumulatively over time which would yield even higher entrainment rates. When combined with indirect entrainment losses that are not fully accounted for in PTM analyses, these impacts are substantial. For larval Delta smelt, the 2008 USFWS BiOp, through the PTM analysis, concluded that up to 70% of small organisms in the Old River south of Franks Tract and up to 10-20% of larval Delta smelt located in the San Joaquin River at Fisherman’s Cut would be entrained within 30 days under an OMR flow of -3,000 cfs. The EIR should explain why these analyses from the 2008 BiOp are not used.

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The DEIR states that, despite the PTM modeling results that suggest substantial impacts to larval and juvenile Delta smelt from the proposed project, there would be no expected impacts because real-time operational decision-making, modeling, and OMR flow management would minimize entrainment. It is not clear that the proposed real-time management will be adequate to avoid significant entrainment impacts to the Delta smelt population resulting from increases in water diversions during the sensitive April to May time period without more specific explicit operational constraints.

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The Delta Smelt Summer-Fall Action includes three components to replace the fall X2 action from the 2008 BiOp: fall X2 at 80 km in wet and above normal water years in September and October; Suisun Marsh Salinity Gate (SMSCG) operations for up to 60 days in June through October of below normal and above normal years (and potentially for wet years); and food enhancement action in the north Delta and Suisun Marsh. The proposed project would decrease low salinity habitat in wet years and provide slightly more habitat in above normal years (DEIR page 4-157). The DEIR postulates the combined actions under this Summer-Fall Habitat Actions would provide habitat benefits to Delta smelt and would potentially increase Delta smelt habitat suitability. However, the real-time operations for OMR management and water exports and their impacts have not been modeled or fully evaluated and should be.

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Pilot operations of SMSCG were conducted only once in 2018. The benefits (Delta smelt presence and water quality conditions) of the pilot application were cited in the DEIR, but the information is not yet published or peer reviewed. The DEIR also includes Food Enhancement Actions through the use of Yolo Bypass and Colusa Basin Drain and Suisun Marsh Food Subsidies, and some actions have been implemented as pilot studies. However, information from these pilot studies are also not yet available. It appears to be premature to determine that these habitat-food enhancement action under the proposed project will provide equivalent or better protection for listed species than the fall X2 action from 2008 BiOp RPA to support a less than significant impacts determination.

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Longfin Smelt Analysis

Analyses included in the DEIR suggest that the proposed project would result in considerable impacts to the longfin smelt population. An analysis of the effects of reduced outflows during December-May on the predicted Fall Midwater Trawl abundance index of longfin smelt indicates that median longfin smelt abundance would be expected to decrease by 4% to 11% under the proposed project compared to existing conditions (Figure 4.4-55; Table 4.4-10). Yet, the DEIR claims that there would only be 0% to 2% difference in longfin smelt abundance when accounting for the high signal to noise ratio of the abundance estimates (calculated by dividing the differences in median abundances between the proposed project and existing conditions by the differences in minimum and maximum estimates of the 95% confidence interval under existing conditions). The method used to arrive at the lower population level effects in the DEIR is not an established statistical procedure to compare the differences between two data groups nor an established mathematical process to “reduce” the impacts of high variability of the estimates. This analysis should be revisited as well as the determination that there would not be significant impacts from the proposed project on the longfin smelt population.

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The DEIR provides a PTM analysis to evaluate the potential risk of entrainment of larval longfin smelt during winter months (January-March) indicating that there is little difference in entrainment under the proposed project compared to existing conditions during the 3 months evaluated. However, most spawning of longfin smelt occurs during February through April (USFWS 1995⁸) and metamorphosis into the juvenile form may require 3 months to complete (Rosenfield 2010⁹) with larval longfin smelt present in the Delta possibly until June. This period includes April and May when the SWP water exports could be considerably increased under the proposed project. The PTM analysis provided in the DEIR is not adequate to evaluate the effects of the increased water exports on longfin smelt entrainment under the proposed project and should be revised to provide results for the full time period when longfin smelt may be present in the Delta. Based on this analysis the impacts determination should also be revised.

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The DEIR states that the real-time operational adjustments would reduce the difference in entrainment between the scenarios. The DEIR further states that the longfin smelt losses under the proposed project likely represent a low percentage of the overall juvenile longfin smelt population (Table 4.4-14) because the species is widely distributed in the Bay-Delta. However, the DEIR does not provide any practical procedure to implement the real-time operations as discussed above. In addition, the DEIR does not include any system-wide population estimates of longfin smelt for the Bay-Delta ecosystem to properly assess the relative contribution to the population of longfin smelt residing in the Delta and thus affected by the proposed project.

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Salmonid Analyses

The analyses included in the DEIR fail to account for the genetic diversity of San Joaquin River (SJR) Steelhead. The single year juvenile steelhead loss thresholds under the proposed OMR flow management include a separate time frame (April 1 to June 15) to account for SJR Steelhead. However, the analysis of project impacts on juvenile steelhead loss (Table 4.4-20) treats all steelhead as a single run. While all steelhead show modest increases in salvage rates of 5 to 16% (Table 4.4-20f), SJR Steelhead show increased salvage rates of -1% to 247%,

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⁸ US Fish and Wildlife Service. 1995. Sacramento-San Joaquin Delta Native Fishes Recovery Plan. U.S. Fish and Wildlife Service. Portland, Oregon. https://ecos.fws.gov/docs/recovery_plan/961126.pdf.

⁹ Rosenfield, J.A. 2010. Life History Conceptual Model and Sub-models for Longfin Smelt, San Francisco Estuary Population. DRERIP Report. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=28421>.

depending on water year type. If the Steelhead are being separated for OMR management based on genetic diversity, then the impact analysis should follow suite for complete transparency. The impact assessment should also account for disproportionate impacts to SJR salmonids.

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The DEIR shows that the proposed project will result in an increase in annual entrainment losses of juvenile Chinook salmon and steelhead at the SWP export pumps for fall-run (21-166%, i.e., up to two and a half times greater than existing conditions, Table 4.4-18f, page 4-230 in the DEIS), spring-run (35-154%, Table 4.4-17f, page 4-214), and steelhead (5-16%, Table 4.4-20f, page 4-241). Baseline conditions include the export restrictions in the 2009 NMFS BiOp/RPAs. The relative losses of SJR-origin fall-run Chinook are likely much greater than the DEIR analysis suggests. The entrainment analysis of juvenile losses at the SWP export facility combines Sacramento River and SJR fall-run Chinook which dilutes the estimated proportional impact to SJR salmon. The SJR fall-run Chinook population size is substantially smaller than the Sacramento River population. The increase in juvenile mortality at the pumps will affect the SJR population more because SJR fall-run migration pathways are much closer to the export pumps than Sacramento River fall-run Chinook.¹⁰ The DEIR estimates the proposed project will increase juvenile losses at the export pumps by 21 - 166%, depending on water year type. The majority of this additional loss is likely to be absorbed by the smaller SJR fall-run population, which already experiences 95% mortality in the Delta. Combining Sacramento and SJR fall-run Chinook in the DEIR analysis masks the greater proportional impact to juvenile SJR fall-run Chinook salmon. The EIR should include an analysis that accounts for fish from the two basins.

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The large increases in entrainment losses for fall-run Chinook, spring-run Chinook, and Central Valley steelhead estimated by the entrainment loss method are not consistent with a CEQA finding of "less than significant." Entrainment losses are a direct result of SWP/CVP operations. Large increases in juvenile entrainment losses to depleted salmon and steelhead populations suggests that proposed project impacts to salmonid species could be significant. The EIR should be revised to address this issue.

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Modeling results for juvenile losses at the SWP export facility for alternatives 2A and 2B are not provided in the DEIR. However, Figures 5.2-2, 5.2-3, 5.3-2, and 5.3-3 show that exports in alternatives 2A and 2B will be higher than existing conditions. Increased exports are likely to result in increased juvenile losses at the SWP export facilities. Although juvenile losses associated with alternatives 2A and 2B may be less than the proposed project, increases in juvenile mortality to populations that are already in decline suggests that project impacts from alternatives 2A and 2B may also be significant.

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Monitoring and Assessment

The proposed project relies heavily on monitoring programs and structured decision making. The decision rules and risk assessment tools for real-time operations should be fully described in the EIR. It is not clear whether some or all of the risk assessment and decision support tools have been developed or are in a state of development. The EIR should explicitly identify monitoring data that is provided by existing monitoring programs to be used in the proposed OMR flow management decisions, use of decision rules, and risk assessment tools. The EIR

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¹⁰ The study cited in the DEIR, Zeug and Cavallo 2014 found that "fall run Chinook Salmon released into the San Joaquin River experienced a greater relative loss at the diversions [SWP/CVP export pumps] than any run released in the Sacramento River."

should also describe any additional or supplemental monitoring efforts that are needed to support OMR flow management under the proposed project.

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Existing monitoring programs, such as the fish surveys conducted by CDFW for the Interagency Ecological Program (IEP), provide important information about the impact of the CVP/SWP on native and migratory fish species and ecosystem conditions which are important for managing and protecting the estuary. These programs should continue to provide information on status and trends in the abundance and distribution fish species and lower foodweb resources in the estuary. Any new monitoring the proposed project requires for decision making should be in addition to this existing monitoring.

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The proposed project includes a description of “monitoring for the proposed real-time management” (section 3.3.4.1) of coordinated CVP/SWP operations. This section appears to omit important monitoring programs and should be updated to explicitly identify which existing monitoring programs, elements of existing monitoring programs, and/or new monitoring activities DWR and Reclamation consider necessary to inform coordinated CVP/SWP operations. For example, the list of monitoring programs and activities identified for proposed real-time management (section 3.3.4.1, page 3-35) identifies monitoring for Delta smelt and longfin smelt but omits monitoring activities specific to SJR salmon. The DEIR impact assessment identifies a large increase in juvenile salmon mortality as an outcome of increasing exports. This impact will be greatest on SJR juvenile Chinook salmon but the DEIR omits the Mossdale trawl, which provides information regarding juvenile SJR salmon entry to the Delta, from the monitoring programs to be used in real-time decision-making for OMR management.

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Monitoring programs that provide real-time or near-time information used to inform operations of SWP/CVP are omitted from the monitoring programs identified as needed for proposed real-time management of the SWP/CVP. For example, FMWT is specifically identified in Table 4.4-2 (page 81) as being used to set salvage limits for the CVP and SWP, but this program is omitted from the list of monitoring efforts considered relevant to core operations. Similarly, the 20-mm survey is omitted from the list of monitoring programs to be used for decision making about real-time decisions for core operations but the description of the 20-mm survey in Table 4.4-2 states, “Data from this network of stations are used by Delta managers and scientists to make *real-time decisions* and plan for future events, such as climate change, water operations, restoration projects, evaluations of fish transport, and migration issues,” (emphasis added).

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Similarly, the proposed CVP LTO project description includes a Real Time Operations Charter that identifies a monitoring program for “core water operations,” “status and trends,” and “adaptive management” (CVP Biological Assessment, Appendix C, Exhibit A, Tables C-1, C-2, and C-3). Some of the monitoring programs identified as “status and trends” provide monitoring data for real-time decision making but are not included in Table C-1 which lists the current programs in place that Reclamation considers as supporting Core Water Operations for the CVP ROC on LTO. For example, the San Francisco Bay Study and the Environmental Monitoring Program are compliance requirements of D-1485 and D-1641 and are necessary to inform core operations. However, these monitoring programs are not identified as supporting “core operations.”

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The DEIR and the EIS for the ROC LTO does not explain reasons the identified monitoring activities are considered relevant to inform coordinated CVP/SWP operations or why omitted monitoring programs are not included. Several monitoring programs listed as “status and trends monitoring” in section 3.3.4.1 of the DEIR provide information relevant to real-time or near-time operations. In section 4 of the DEIR, Table 4.4-2 (page 4-81) lists monitoring programs and

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activities performed by DWR as a member agency of IEP. Many of these monitoring programs are described as generating data and information relevant to the coordinated operations of CVP and SWP, but they are not on the list of monitoring programs for use in proposed real-time management or for core operations.

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Table 1 below lists existing monitoring programs that provide real-time or near-time monitoring information relevant to operations of CVP/SWP (as described in Table 4.4-2 in the DEIR) but are not included in the list of monitoring programs for use in proposed real-time management in section 3.3.4.1. The same issue occurs in Appendix C “Status and Trends” section and Table C-2 of the CVP LTO BA. Many programs listed as status and trends are defined as generating data relevant to real-time operations. These monitoring programs generate information that is used to assess water quality objectives and implementation measures.

Table 1: Monitoring Programs Listed in the DEIR as “Status and Trends” and Omitted from Monitoring Programs for proposed Real-Time Management of Coordinated CVP and SWP Operations (see section 3.3.4.1)

Monitoring Program	Connection to SWP/CVP Coordinated Operations*
Fall Midwater Trawl	Delta Smelt data are used to calculate a recovery index and to set salvage limits.
20-mm Survey	Data are used to make real-time decisions and plan for future events.
Juvenile salmon monitoring program and Mossdale trawl	Data provide “near-time” information on the relative vulnerability of key fish species (primarily Chinook Salmon and steelhead) to water project operations.
Environmental Monitoring Program	Continuous collection of water quality data for multiple parameters, including salinity, are available on a near real-time basis for day-to-day CVP and SWP operational decisions.
Spring Kodiak Trawl	Survey detects mature and maturing Delta smelt from January through May. Improved detection of Delta smelt will better inform water export facility operators of the potential to entrain adult Delta Smelt in subsequent weeks, as well as their offspring later in the year.
SJR DO Monitoring	Data are used to guide operations.
Smelt Larva Survey	Survey provides near real-time distribution data for longfin smelt larvae in the Delta, Suisun Bay, and Suisun Marsh to assess vulnerability of larvae to entrainment in export pumps.
Central Valley Juvenile Salmon and Steelhead Monitoring – Knights Landing	Provides an early warning of when juvenile salmon emigrate from the Delta and allow for real-time adaptive management of water operations.

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Coordinated monitoring efforts are important for the continued operation of SWP and CVP. If changes are needed to the existing patchwork of monitoring programs, they should be initiated through existing Interagency Ecological Program procedures and/or reviewed through the State Water Board public process.



Monitoring Workgroups

Many of the monitoring workgroups described in section 3.3.5 are similar to groups that exist as required under the 2008 and 2009 BiOps/RPAs. These work groups also address compliance with State Water Board decisions. State Water Board staff should be identified as participants in these workgroups. The State Water Board is responsible for implementing D-1485 and D-1641 which are a substantial element of CVP/SWP core operations. In addition, the impacts of CVP/SWP on fish and wildlife beneficial uses is directly relevant to the State Water Board's responsibilities to protect fish and wildlife and the associated oversight of water diversions by the SWP and CVP as well as efforts to update and implement the Bay-Delta Plan. The EIR should explain how these groups will change from existing monitoring workgroups already in place such as, but not limited to, Delta Operations for Salmon and Sturgeon, Stanislaus Operations Group, Smelt Working Group, and the WOMT.

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Conclusions

State Water Board staff appreciates the opportunity to provide comments on the DEIR. As indicated above, the State Water Board may have further comments upon further review and release of the ITP application.

If you would like to discuss these comments further, please contact me at diane.riddle@waterboards.ca.gov or (916) 341-5297.

Sincerely,

ORIGINAL SIGNED BY

Diane Riddle, Assistant Deputy Director
Division of Water Rights

II.3.4 LETTER S-SWRCB-1 – STATE WATER RESOURCES CONTROL BOARD, DIANE RIDDLE, ASSISTANT DEPUTY DIRECTOR, DATED JANUARY 16, 2020

II.3.4.1 RESPONSE TO COMMENT S-SWRCB-1-1

This comment provides background information regarding the mission of the commenter and their role in administering water rights, protecting water quality, and developing water quality control plans. No specific response is required.

II.3.4.2 RESPONSE TO COMMENT S-SWRCB-1-2

As explained in Master Response 3, “The CEQA Process,” refinements have been made to the description of the project and alternatives since publication of the DEIR. The Refined Alternative 2b, as described in FEIR Part III, Chapter 5.3, “Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP,” is DWR’s preferred alternative. Additional analysis and modeling have also been included to support in the FEIR.

II.3.4.3 RESPONSE TO COMMENT S-SWRCB-1-3

The commenter’s acknowledgement and support of development of a voluntary agreement is noted. No further response is required.

II.3.4.4 RESPONSE TO COMMENT S-SWRCB-1-4

Please see Responses to Comments S-SWRCB-ATT-1-1 through S-SWRCB-ATT-1-43, which address those portions of the commenter’s previous comments on Reclamation’s EIS that are applicable to the DEIR.

II.3.4.5 RESPONSE TO COMMENT S-SWRCB-1-5

As explained in Master Response 3, “The CEQA Process,” refinements have been made to the project description since publication of the DEIR, and additional analysis has been undertaken to support the DEIR conclusions that the long-term operations of the SWP would not have a significant impact on aquatic biological resources. DWR identified Refined Alternative 2b as the preferred alternative in the FEIR, which would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMET or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further reduce effects below those identified in the DEIR and would fully mitigate impacts on CESA-listed species. These refinements are described in FEIR Part III, Chapter 5.3.

II.3.4.6 RESPONSE TO COMMENT S-SWRCB-1-6

CEQA does not require that a Proposed Project or alternatives considered in an EIR should improve protections for biological resources above existing conditions, or even to maintain Existing Conditions. Rather, CEQA prevents a lead agency from approving a project that would cause significant and unavoidable environmental impacts, unless all feasible mitigation measures are implemented to reduce the impacts and/or if there is an alternative to the project that would reduce significant impacts. As described in FEIR Part I, Chapter 1.6.2, “Environmentally Superior Alternative,” the Proposed Project and other alternatives could be implemented without resulting in significant environmental impacts.

Further, as explained in Master Response 3, “The CEQA Process,” refinements have been made to the description of alternatives since publication of the DEIR, and additional analysis, including revised modeling, has been undertaken to support the DEIR conclusions that the long-term operations of the SWP would not have a significant impact on aquatic biological resources under CEQA, as well as to fully mitigate potential impacts under CESA. These refinements and additional analysis are described in FEIR Part III, Chapter 5, “Alternatives to the Proposed Project.” Refined Alternative 2b, which is the environmentally superior alternative and the preferred alternative in the FEIR would provide additional environmental benefits for CESA-listed fish species.

II.3.4.7 RESPONSE TO COMMENT S-SWRCB-1-7

As stated in DEIR Chapter 3.1.1, “Project Objectives,” DWR intends to continue long-term operations of the SWP consistent with applicable laws, contractual obligations, and agreements. There are no existing regulatory limits that are proposed to be eliminated or replaced as part of the project, therefore a table describing such changes is not necessary in the DEIR.

In DEIR Chapter 3.3, Table 3-3, the elements of the Proposed Project are presented. Several elements in this table would modify limits imposed by the existing 2008 and 2009 federal Biological Opinions, including OMR flow restrictions and SMSCG operations. No other limits would be modified by the Proposed Project or alternatives.

As discussed in Master Response 16, “Relationship to 2019 Biological Opinions,” DWR filed an application for a California Endangered Species Act (CESA) Incidental Take Permit (ITP) on December 13, 2019 pursuant to Section 2081 of the California Fish and Game Code. The new ITP will cover aquatic species listed under CESA that are subject to incidental take from long-term operation of the SWP (Delta Smelt, Longfin Smelt, Winter-run Chinook Salmon, and Spring-run Chinook Salmon). A new ITP from CDFW will enable SWP operations to eliminate the need to rely on the federal Biological Opinions to operate consistent with state law (CESA). The new ITP will replace DWR’s existing CESA authorization to operate the SWP.

II.3.4.8 RESPONSE TO COMMENT S-SWRCB-1-8

DEIR Chapter 4.2, “Hydrology,” presents detailed analysis of changes to Delta outflows, water deliveries and exports, and cross-Delta flows. The comment appears to be summarizing these changes

rather than commenting on the adequacy of the DEIR or requesting changes. No specific response is required for this comment.

II.3.4.9 RESPONSE TO COMMENT S-SWRCB-1-9

As discussed in Response to Comment S-SWRCB-1-6, CEQA does not require a proposed project or alternatives considered in an EIR to improve protections for biological resources above existing conditions, or even to maintain existing conditions. Nevertheless, DWR identified Refined Alternative 2b as the preferred alternative in the FEIR, which would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under existing conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further reduce effects below those identified in the DEIR and would fully mitigate impacts on CESA-listed species.

II.3.4.10 RESPONSE TO COMMENT S-SWRCB-1-10

The impacts of the Proposed Project on Delta outflows and reverse flows in the interior Delta are assessed within DEIR Chapter 4.2, "Hydrology," and subsequent impacts of such hydrological changes on threatened and endangered species are assessed within DEIR Chapter 4.3, "Aquatic Biological Resources." The FEIR also presents updated impact evaluations for Refined Alternative 2b, DWR's preferred alternative, in Part III, revised DEIR Chapter 5.3.

Although the peer reviewed scientific report cited in the comment indicates that decreasing freshwater flows general has a negative impact on the survival and abundance of native fish species, the project-specific analysis undertaken as part of the DEIR analysis found no significant impacts associated with the Proposed Project. Subsequent refinements to Alternative 2b (refer Master Comment 3, "Project CEQA Process") provide additional benefits for aquatic resources, and additional analysis undertaken as part of the FEIR confirms the conclusion that no significant impacts would occur as a result of long-term operation of the SWP.

The comment's suggestion that the new Biological Opinions issued in 2019 by USFWS and NMFS decrease protections for threatened and endangered species is not relevant to the analysis of the project under CEQA. As discussed in Master Response 13, "2019 federal Biological Opinions," the Proposed Project analyzed in DWR's DEIR is not the same as the 2019 federal Biological Opinions. Master Response 16, "Relationship to 2019 Biological Opinions," provides additional discussion of these differences.

II.3.4.11 RESPONSE TO COMMENT S-SWRCB-1-11

Please see Master Response 7, "Delta Reform Act," for discussion of the Delta Reform Act, Delta Stewardship Council Delta Plan, and various sections of the Water Code. Master Response 14, "Public

Trust,” discusses issues relating to the public trust doctrine and DWR’s obligations. Analysis of Refined Alternative 2b impacts on fish and wildlife is provided in DEIR Chapter 5.3, “Refined Alternative 2b.” In addition to that analysis, Master Responses 11, “LFS Impact Significance,” and 24, “Impact Significance (Salmonids),” provide additional discussion specifically related to why no significant impacts to longfin smelt and salmonids were identified, despite reductions in Delta outflows during some months. DWR is required to comply with CESA and the Bay Delta Water Quality Control Plan. Please also see Master Response 4, “Legal Standards,” and Master Response 17, “Application of CESA Standards.” Master Response 9, “Relationship to WQCP Update and Voluntary Agreements,” discusses Porter Cologne Act requirements.

II.3.4.12 RESPONSE TO COMMENT S-SWRCB-1-12

As discussed within DEIR Chapter 3.3.1, “Project Objectives,” the project objective is to continue the long-term operations of the SWP consistent with applicable laws, contractual obligations, and agreements. CEQA does not require a commitment to maintaining existing conditions (see Response to Comment S-SWRCB-1-6.)

II.3.4.13 RESPONSE TO COMMENT S-SWRCB-1-13

Please see Master Response 20, “Best Available Science,” for a general discussion of requirements to develop an adequate range of alternatives considered in an EIR. CEQA does not require a Lead Agency to study specific alternatives proposed by the public or other agencies (Center for Biological Diversity v. Department of Fish and Wildlife (2015) 234 Cal.App.4th 214, 256).

As explained in Master Response 3, “The CEQA Process,” refinements have been made to the description of alternatives since publication of the DEIR. These refinements are described in FEIR Part III, Chapter 5.3, “Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP.” Modifications to Alternative 2b that are included in the Refined Alternative 2b in this FEIR would provide additional environmental benefits for CESA-listed fish species.

Please also see Master Response 9, “Relationship to WQCP Update and Voluntary Agreements.”

II.3.4.14 RESPONSE TO COMMENT S-SWRCB-1-14

Please see Responses to Comments S-SWRCB-ATT-1-1 through S-SWRCB-ATT-1-43, which address those portions of the comment letter’s previous comments on Reclamation’s EIS that are applicable to the DEIR.

II.3.4.15 RESPONSE TO COMMENT S-SWRCB-1-15

Please see Responses to Comments S-SWRCB-1-16 to S-SWRCB-1-30, S-SWRCB-1-46, and S-SWRCB-1-60 and Master Response 25, “Real-Time Operations.” Please also see revisions to the proposed long-term operations of the SWP presented in Part III of the FEIR.

II.3.4.16 RESPONSE TO COMMENT S-SWRCB-1-16

DEIR Chapter 3.3.1.2, “Real-time OMR Limits and Performance Objectives,” presents a detailed discussion of the entrainment limits to be imposed on SWP operations for each species included in the ITP take coverage. These limits include surface water flow, water quality, and fish loss limits that would restrict the operations of the SWP to protect the respective fish species. In addition, this discussion describes the role of CDFW and its ability to enforce its findings and conclusions on SWP operational decisions. Further refinements to the collaborative real-time risk assessment process are included in the Refined Alternative 2b, described in FEIR Part III, Chapter 5.3.1.1, “Collaborative Real-Time Risk Assessment.” These refinements include weekly joint meetings between DWR and CDFW technical staff and joint development of risk assessment and supporting documentation. This additional coordination and input from CDFW will provide opportunities to minimize impacts on listed species based on real-time data.

Additional analysis to support the conclusions of the DEIR and reflect refinements made to Alternative 2b have been included in FEIR (see FEIR Part 1, Chapter 1.4 “Supplemental Technical Studies and Analysis,”) as discussed in Master Response 3, “The CEQA Process.”

II.3.4.17 RESPONSE TO COMMENT S-SWRCB-1-17

Please see Response to Comment S-SWRCB-1-16 and Master Response 25, “Real-Time Operations,” regarding refinements to the collaborative real-time risk assessment made to Alternative 2b, described in FEIR Part III, Chapter 5.3.1.1, “Collaborative Real-Time Risk Assessment.”

II.3.4.18 RESPONSE TO COMMENT S-SWRCB-1-18

Please also see Master Response 25, “Real-Time Operations,” and Response to Comment S-SWRCB-1-16 regarding refinements to the collaborative real-time risk assessment made to Alternative 2b, described in FEIR Part III, Chapter 5.3.1.1, “Collaborative Real-Time Risk Assessment.”

II.3.4.19 RESPONSE TO COMMENT S-SWRCB-1-19

The Grimaldo et al. (2017) paper was focused on Delta Smelt, and a -5,000-cfs inflection point is consistent with the rationale provided for salmonids in the National Marine Fisheries Service 2009 Biological Opinion for SWP/CVP operations (see, for example, p.652 of the 2009 NMFS BiOP). The fact that this paper has not been peer-reviewed is not sufficient reason to dismiss its value to provide guidance for the operation of the SWP.

It is important to note that the DEIR does include comprehensive analyses of juvenile salmon entrainment losses by use of 1) a salvage density-based method and by 2) proportional entrainment loss (e.g., Zeug and Cavallo 2014) based on tens of millions of coded wire-tagged hatchery salmon releases (see, for example, p.200-205 of Section 4.4).

For winter run Chinook Salmon, an analysis comparable to Grimaldo et al. (2017) was completed using 178 release groups of coded-wire tagged winter run hatchery smolts (Zeug and Cavallo 2014). Additional analysis reported by Cavallo and Zeug (2016) showed total exports explained winter-run salvage better than the OMR relationship ($\Delta AIC= 6$), with the percentage of winter run Chinook lost to

entrainment remaining low and level until combined exports exceeded 6,500 cfs. Also analogous to Grimaldo et al. (2017), Zeug and Cavallo (2014) reported relative mortality because of entrainment loss as a function of total exports (Zeug and Cavallo 2014; Figure 4). These analyses support the conclusions that exports associated with a -5,000 OMR are protective of both juvenile salmon and Delta Smelt.

II.3.4.20 RESPONSE TO COMMENT S-SWRCB-1-20

The Proposed Project includes first flush actions (Integrated Early Winter Pulse Protection) which are designed to provide increased protection for adult Delta Smelt that do move upstream towards the south Delta (DEIR Chapter 3.3.1, “Onset of OMR Management”) and which would be triggered more often than the 2008 Biological Opinion criteria (DEIR Chapter 4.4.7.4, subheading “Daily Salvage Loss Density”). This will therefore remain protective of adult Delta Smelt from entrainment risk (as acknowledged in the USFWS ROC LTO Biological Opinion, which deals with a similar project description), regardless of the OMR offramp threshold focusing on Longfin Smelt adults.

II.3.4.21 RESPONSE TO COMMENT S-SWRCB-1-21

Please see Master Response 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations,” for a discussion of the relationship between DWR’s operation of the SWP and Reclamation’s operation of the CVP. Discussion of proportional impacts is provided in Master Response 17, “Application of CESA Standards.”

II.3.4.22 RESPONSE TO COMMENT S-SWRCB-1-22

OMR flow constraints for Delta Smelt and Longfin Smelt are more restrictive than OMR flow requirements for other species. Therefore, flow restrictions for Delta Smelt and Longfin Smelt are applied preferentially even if triggers for other species are met. When Delta Smelt or Longfin Smelt OMR flow constraints are no longer in effect and restrictions for other species have been triggered, then OMR constraints for those species would be applied. Regardless of which species triggers OMR constraints, DWR would always operate to the most restrictive applicable OMR requirement.

II.3.4.23 RESPONSE TO COMMENT S-SWRCB-1-23

DWR has concluded that five days is sufficient to evaluate a turbidity bridge and provide a reasonable time for turbidity to decline to less than 12 NTU. DWR, with CDFW concurrence, may implement more stringent measures if entrainment risk is not abated, as part of its risk assessment as described in FEIR Part III, Chapter 5.3.1.1, “Collaborative Real-Time Risk Assessment.”

II.3.4.24 RESPONSE TO COMMENT S-SWRCB-1-24

As stated in the DEIR (p.3-24) and as noted in the comment, DWR recognizes that sensor errors can occur and proposes to use additional information to evaluate adult Delta Smelt entrainment risk in the case they believe a sensor error has occurred. The additional specificity in this process suggested to be added by the comment is not possible at the present time, but it would include consideration of other monitoring stations including DWR’s turbidity transects as undertaken in recent years. As previously noted, and as described in FEIR Part III, Chapter 5.3.1.1, “Collaborative Real-Time Risk Assessment,”

this information would be considered as part of the Collaborative Real-time Risk Assessment jointly developed between DWR and DFW.

II.3.4.25 RESPONSE TO COMMENT S-SWRCB-1-25

DWR proposes to use the Bacon Island Monitoring location to be consistent with the USFWS 2008 Biological Opinion and because it is located within the footprint of the south Delta corridor where operations (e.g., -5,000 cfs OMR flow) during this period (December-Mar) would be most likely have an effect on turbidity distribution and subsequent entrainment risk. Use of a turbidity station outside this footprint (i.e., on the main stem of the SJR) may be informative for identifying a turbidity bridge between the SWP/CVP intakes and San Joaquin River. As previously noted, and as described in the FEIR, multiple sources of information would be considered as part of the Collaborative Real-time Risk Assessment jointly developed between DWR and DFW, which could also consider other information other than the Bacon Island turbidity monitoring location alone.

II.3.4.26 RESPONSE TO COMMENT S-SWRCB-1-26

The figure included in the DEIR published on November 22, 2019 was incorrect. DWR identified the error and corrected the figure in the DEIR published on DWR's website on December 5, 2019. The corrected figure has also been included in the FEIR.

II.3.4.27 RESPONSE TO COMMENT S-SWRCB-1-27

The discussion presented in DEIR Chapter 3.3.1.2 states, "would avoid exceeding an annual loss threshold equal to 90% of the greatest salvage loss that occurred in the historical record from 2010 through 2018..." In order to accomplish this target, "... SWP and CVP operations exceed 50% of the annual loss threshold, DWR, in coordination with Reclamation, would restrict OMR to a 14-day moving average OMR index that is no more negative than -3,500 cfs..." Further OMR restrictions would be implemented if annual loss reaches 75% or 90% of the greatest salvage loss that occurred in the historical record from 2010 through 2018. DWR has concluded that the SWP can be operated with losses less than 50% of the annual loss threshold and if SWP operations reach these higher levels of annual loss, it would not result in a significant impact to the salmon population. DWR has identified Refined Alternative 2b as the preferred alternative, which includes additional Winter-run Chinook Salmon loss thresholds and a suite of Spring-run Chinook Salmon OMR loss thresholds.

II.3.4.28 RESPONSE TO COMMENT S-SWRCB-1-28

Please see Response to Comment S-SWRCB-1-16 and Master Response 25, "Real-Time Operations," regarding refinements to the collaborative real-time risk assessment made to Alternative 2b, described in FEIR Part III, Chapter 5.3.1.1, "Collaborative Real-Time Risk Assessment."

II.3.4.29 RESPONSE TO COMMENT S-SWRCB-1-29

Please see Response to Comment S-SWRCB-1-16 and Master Response 25, "Real-Time Operations," regarding refinements to the collaborative real-time risk assessment made to Alternative 2b, described in FEIR Part III, Chapter 5.3.1.1, "Collaborative Real-Time Risk Assessment."

II.3.4.30 RESPONSE TO COMMENT S-SWRCB-1-30

Please see Response to Comment S-SWRCB-1-19 for a discussion of the scientific basis for the OMR inflection point, and S-SWRCB-1-60 for discussion of DEIR's approach to the modeling and analysis. Please see Response to Comment S-SWRCB-1-16 and Master Response 25, "Real-Time Operations," regarding collaborative real-time risk assessment which would be used for determining excess and balance conditions.

As proposed, DWR, in coordination with Reclamation, may operate to a more negative 5-day average OMR flow no more negative than -6,250 cfs to capture excess flows in the Delta. OMR flows of -6,250 would only occur when other restrictions, described in Chapter 3.3.1.2 of the DEIR are not in place. Therefore, it is concluded that because of these other restrictions, an OMR flow of -6,250 would not cause a significant impact to Delta fish species.

The determination of when the Delta is in balanced condition has been in practice since adoption of D-1485 by the SWRCB when the CVP and SWP were assigned responsibility to maintain Delta water quality. DWR and Reclamation are responsible for determining when such conditions occur and how the CVP and SWP operations exceeding water quality limits in accordance with D-1641. The determination of balanced conditions and corresponding operations of the SWP and CVP are the responsibility of DWR and Reclamation, respectively, and not subject to the Proposed Project being addressed in this FEIR.

II.3.4.31 RESPONSE TO COMMENT S-SWRCB-1-31

Other than salinity, both the IEP FLASH (Brown et al. 2014, as cited in the DEIR) and MAST (IEP MAST 2015, as cited in the DEIR) reports indicate there is uncertainty as to whether USFWS Fall X2 action provided beneficial biological and physical conditions per the USFWS/Reclamation Adaptive Management Plan. DWR proposes a summer-fall habitat framework (DEIR, p.3-29 and p. 3-30) that provides additional flexibility in implementing measures to benefit juvenile Delta Smelt during the summer and fall of some water year types. The proposed structured-decision making (SDM) framework outlined at p.3-30 will help DWR identify conditions when habitat actions are more most likely to have positive effects to the species.

DWR cites the FLASH synthesis (i.e., Brown et al. 2014; see for example p.3-30 and p.3-32) as the basis for the summer-fall actions and provides a rigorous adaptive management framework for ensuring the actions will be implemented during periods when they are most needed (see DEIR Chapter 3.3.3.2). As the comment notes, there is currently little information available to assess the potential benefits from the summer-fall habitat actions, although work is ongoing to assess previous years of information; it is anticipated that the studies undertaken as part of the action's adaptive management would add to the knowledge. To the extent that the in preparation USFWS Delta Smelt life cycle model when completed incorporates summer-fall habitat, more detailed quantitative assessment of the action's effects on Delta Smelt will be possible.

II.3.4.32 RESPONSE TO COMMENT S-SWRCB-1-32

DWR did not include operating the SWP to the San Joaquin River I:E ratio (SJR I:E ratio) in the Proposed Project so that it would remain consistent with the description in the Reinitiation of Consultation for Long-term Operations of the CVP and SWP Biological Assessment (and Biological Opinion). DWR's preferred alternative, Refined Alternative 2b, would curtail exports to maintain the current SWP spring outflow contribution. The additional outflow would be developed by operating to the SWP proportional share of the spring maintenance flows consistent with flows observed from implementation of the 2008/2009 Biological Opinions or through export reductions by the SWP consistent with the current Voluntary Agreement (VA) proposal. The details of SWP export curtailment for spring outflow are described in the FEIR Part III, Chapter 5.3.

The DEIR evaluated entrainment for Chinook Salmon using the loss density method described in Appendix E of the DEIR. This method applies historical loss estimates to modeled exports to provide an indicator of potential entrainment under the Proposed Project. The DEIR also evaluates San Joaquin River-origin juvenile Chinook Salmon using the CVPIA Structured Decision Model, which shows that survival to Chipps Island is greater under the Proposed Project than under the Existing Condition scenario. Nonetheless, after discussions with CDFW and subsequent to release of the DEIR, DWR identified Refined Alternative 2b as the preferred alternative, which includes spring Delta outflow maintenance flows. The analyses of effects of Refined Alternative 2b presented in Part III of the FEIR, which includes additional Winter-run Chinook Salmon protections in November and December, and a suite of Spring-run Chinook Salmon OMR loss thresholds, shows that entrainment of Chinook Salmon was reduced, relative to the Proposed Project, and survival to Chipps Island was similar to the Proposed Project (i.e., higher than the Existing Condition scenario).

II.3.4.33 RESPONSE TO COMMENT S-SWRCB-1-33

The basis for establishing the 1,500 cfs minimum export rate to protect public health and safety is based on the U.S. Bureau of Reclamation estimate of 1,500 cfs to meet public health and safety needs of communities that solely rely upon water diverted from the CVP and SWP pumping plants. This minimum export rate was proposed as part of the Reinitiation of Consultation on the Coordinated Long-Term Operation of the Central Valley Project and State Water Project EIS (Reclamation 2019). This combined minimum export level, shared by the SWP and CVP, is identified in D-1641, 2008 FWS Biological Opinion, and 2009 NMFS Biological Opinion. In addition to the regulatory minimum 1,500 cfs limit, extreme dry conditions export levels are also assumed for health and safety.

II.3.4.34 RESPONSE TO COMMENT S-SWRCB-1-34

As described in DEIR Chapter 3, "Project Description," the Proposed Project would extend the window of time in which north-to-south water transfers could occur, provided adequate capacity is available in the south Delta pumps. The Proposed Project does not include a specific water transfer proposal which would identify a transfer water source, a transfer water destination, timing of the transfer, or the mechanism which would make the transfer water available for conveyance, such as a groundwater

substitution transfer. This information is beyond the scope of the Proposed Project and would need to be considered at the time a specific transfer is proposed. Such proposals would be subject to their own CEQA and permitting analyses and, if necessary, full mitigation to meet CESA requirements.

To the degree practical, the DEIR does address the potential impacts of water transfers in the Delta. For instance, DEIR Chapter 4.6.1.4 discusses the potential for a water transfer to affect Delta water quality. The DEIR states, “Projects involving water diversions or transfers (e.g., CVP long-term operations) would affect hydrology and water flow, and therefore would have secondary impacts on salinity levels in the Delta.” Chapter 4.6.1.5 goes on to state, “A number of other water supply and water management projects could potentially affect Delta conditions, including long-term and short-term water transfers and the Sites Reservoir Project, for example. Each of these would be subject to their own permitting analyses and, if necessary, full mitigation to meet CESA requirements.”

While these conclusions are general in nature, more specific findings are not possible without a more detailed water transfer proposal to evaluate.

II.3.4.35 RESPONSE TO COMMENT S-SWRCB-1-35

Please see Response to Comment S-SWRCB-1-34.

II.3.4.36 RESPONSE TO COMMENT S-SWRCB-1-36

DWR conducted an analysis of the Proposed Project, as described in Chapter 3 of the DEIR, which did not include annual installation of the HORB. Therefore, the analysis of impacts on Chinook Salmon and other special status species includes consideration of the fact that HORB would no longer be installed on an annual basis. Increases in entrainment, as identified by the loss density method, are expected to reduce losses below those identified in the DEIR because real-time risk assessment-based OMR management, would limit OMR when real-time indicators suggest that entrainment risk would be high for CESA-listed species.

The Delta Passage Model does estimate a reduction in juvenile Chinook Salmon survival. However, the Delta Passage Model does not evaluate survival of San Joaquin River-origin Chinook Salmon. Further, survival of Chinook Salmon through the Delta is expected to be greater than the survival identified in the DEIR because of the increased protection enabled by real-time risk assessment-based OMR management. San Joaquin River-origin Chinook Salmon survival through the Delta to Chipps Island was evaluated using the CVPIA Structured Decision Model, which showed increased survival under the Proposed Project. These results reflect the Proposed Project in its entirety, including discontinuing installation of the HORB.

II.3.4.37 RESPONSE TO COMMENT S-SWRCB-1-37

The implementation of real-time management actions does not involve the SWRCB because no change water rights permit conditions or modification to the existing Water Quality Control Plan or change in other regulatory limits are proposed.

II.3.4.38 RESPONSE TO COMMENT S-SWRCB-1-38

This comment correctly portrays the proposed drought and dry year actions described in DEIR Chapter 3.3.7, “Drought and Dry Year Actions.” No further response is needed.

II.3.4.39 RESPONSE TO COMMENT S-SWRCB-1-39

The development of drought and dry year actions would involve consideration of actual hydrologic conditions and a determination of the potential for continued dry conditions that may necessitate the need for development of a drought contingency plan. Because these conditions may be case-specific to each drought or dry year event, identification of commitments for evaluation, planning, and management of the SWP would be premature at this time.

Please see Response to Comment S-SWRCB-1-37 regarding the role of SWRCB in development of drought and dry actions.

II.3.4.40 RESPONSE TO COMMENT S-SWRCB-1-40

DEIR Chapter 3.3.7 only limits the minimum frequency to update the toolkit to a 5-year period. More frequent updates could occur at the discretion of DWR and other participating agencies.

II.3.4.41 RESPONSE TO COMMENT S-SWRCB-1-41

The changes to SWP operations and Delta water management are being proposed to account for more recent information and understanding of the relationship between Delta fish abundance, distribution, and habitat requirements, and Delta hydrology. The implementation of real-time management that incorporates this improved understanding would enable the SWP to operate more efficiently and with greater levels of protection of designated Delta fish. Delaying the implementation of real-time management actions until completion of habitat restoration actions would provide no benefit to these species which are subject to ongoing take levels. The implementation of real-time management actions should not be linked to other past mitigative requirements because they address distinctly different aspects of the overall solution to protect these designated fish species.

II.3.4.42 RESPONSE TO COMMENT S-SWRCB-1-42

The DEIR explicitly identifies thresholds of significance for water quality (Chapter 4.3.2.1), biological resources (Chapter 4.4.6), tribal cultural resources (Chapter 4.5.3.1). As discussed in DEIR Chapter 4.4.6, “Threshold of Significance,” the significance criteria for biological resources provided in CEQA Guidelines Appendix G do not provide quantitative thresholds against which project elements, actions or representations of hydrologic and hydrodynamic conditions (i.e., simulation model outputs) can be compared to identify potential impacts. Therefore, the DEIR analyzed impacts based on the best available commercial and scientific information that evaluate known impact mechanisms and use observed species responses to changes in environmental conditions as indicators of impact. The results of individual analyses were used as impact indicators in conjunction with expert understanding of species responses to habitat perturbations to identify potential impacts of the Proposed Project on fish and aquatic resources.

With respect to the commenter’s statement about the DEIR conclusion that no mitigation is required for Delta Smelt and Longfin Smelt because of reliance of discretionary actions by DWR (e.g., less restrictive OMR limitations and real-time management decisions), please see DEIR Chapter 3.3.1.2, “Real-time OMR Limits and Performance Objectives,” and Response to Comment S-SWRCB-1-16.

II.3.4.43 RESPONSE TO COMMENT S-SWRCB-1-43

The commenter notes that facts and analyses are needed to support the DEIR direct and indirect impact conclusions but does not specify what facts and analyses the commenter considers to be missing from the DEIR and what would be needed for such support. Please note that since publication of the DEIR, DWR has made further refinements to the project and alternatives with additional information to support the conclusions of “no significant impacts” regarding direct and indirect impacts. These refinements were made in consultation with CDFW, as discussed in Master Response 3, “The CEQA Process.” The refinements to the project and alternatives are described in FEIR Part III, and additional technical studies are included as appendices to the FEIR.

II.3.4.44 RESPONSE TO COMMENT S-SWRCB-1-44

Similar to Comment S-SWRCB-1-43, the comment notes that facts and analyses are needed to support the cumulative impact conclusions but does not specify which facts and analyses the comment considers to be missing from the DEIR.

DEIR Chapter 4.6.1, “Cumulative Impacts,” contains a cumulative analysis that is consistent with the requirements of the State CEQA Guidelines. Section 15064 of the State CEQA Guidelines explains that, “[t]he mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the Proposed Project’s incremental impacts are cumulatively considerable.” The discussion of cumulative impacts should reflect the severity of the impacts as well as the likelihood of their occurrence. The analysis should be guided by the standards of practicality and reasonableness, and it should focus on the cumulative impact(s) to which the other identified projects contribute, rather than to the attributes of other projects which do not contribute to the cumulative impact (State CEQA Guidelines 15130[b]).

The analysis presented in DEIR Section 4.6.1 is consistent with statutory and regulatory requirements to assess cumulative impacts and includes:

1. A determination of whether the impacts of related past, present, and future plans and projects would cause a cumulatively significant impact; and
2. A determination as to whether implementation of the Proposed Project would have a “cumulatively considerable” contribution to any significant cumulative impact. [See Sections 15130(a), (b), Section 15355(b), Section 15064(h), and Section 15065(a)(3), (c) of the State CEQA Guidelines.]

II.3.4.45 RESPONSE TO COMMENT S-SWRCB-1-45

The comment has summarized the objectives described in the DEIR and discusses Article 21 contractual entitlements, noting that there is no cap on the quantity of Article 21 water the SWP can deliver other

than water supply availability, water demand, and the physical and regulatory constraints of the project's operations. No specific response is required.

II.3.4.46 RESPONSE TO COMMENT S-SWRCB-1-46

As noted in the DEIR Chapter 3.3.1, DWR proposes to manage OMR flow by incorporating all available information into decision support for the management of OMR flow, including management to minimize impacts on listed species. The available information includes real-time monitoring of fish distribution, turbidity, temperature, hydrodynamic models, and entrainment models. Please also see Response to Comment S-SWRCB-1-16 regarding refinements to the collaborative real-time risk assessment process have been included in the Refined Alternative 2b, described in FEIR Part III, Chapter 5.3.1.1, "Collaborative Real-Time Risk Assessment," which includes coordination between DWR and CDFW technical staff. This coordination and input from CDFW will provide opportunities to minimize impacts on listed species based on real-time data.

Please refer to Master Response 4, "Legal Standards," for a discussion of how DWR included consideration of existing conditions, including the degraded condition of listed fish, as a part of the CEQA and CESA analyses.

As noted in the DEIR Chapter 4.6.1, "Cumulative Impacts," multiple factors have contributed to the trending decline of listed-species populations and it is difficult to quantify the proportion of the decline attributable to a specific project, action, or event. For example, the drought experienced within the 2010-2018 period that the commenter cites may have affected populations. The 2009 Biological Opinion cited by the commenter had protective restrictions that included measures tied to population size such as loss limits for Winter-run Chinook Salmon juveniles, which accounted for fluctuations in abundance.

DEIR Chapter 3.3, "Description of the Proposed Project," describes a number of elements to protect salmonids and smelt species, including OMR flow management, Clifton Court Forebay Operations, and Skinner Fish Facility Improvements. In addition, Reclamation and DWR's proposed federal and state actions include many elements such as conservation measures to protect salmonids, as discussed in the DEIR Chapter 4.6.1.5 under the discussion for, "Water Supply, Water Management, and Water Quality Projects and Actions" Included in Part III of the FEIR. Further, The Refined Alternative 2b is considered the environmentally superior alternative because it includes all the elements identified in the Proposed Project to minimize impacts on aquatic species and includes additional actions to benefit CESA-listed fish species in the Delta that would not be implemented by the Proposed Project or other alternatives. Refined Alternative 2b would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under existing conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project,

all of which would further reduce effects below those identified in the DEIR and would fully mitigate impacts on CESA-listed species.

These actions combined with continued implementation of 8,000 acres of tidal habitat restoration and other elements of the proposed federal action (discussed in the DEIR Chapter 4.6.1.5 under the discussion for, “Water Supply, Water Management, and Water Quality Projects and Actions”) are intended to be protective of the smelt species. For both smelt species and salmonids, a number of the actions will be subject to adaptive management to evaluate their efficacy.

Regarding impacts to juvenile salmonids in the Delta, acoustic tagging studies completed since the 2009 NMFS Biological Opinion have not tested, or have not reported on, export/OMR effects for juvenile salmon approaching from the north Delta. Studies have analyzed these potential impacts for San Joaquin River-origin juvenile salmonids. The study results suggest through-Delta survival rates are low and relatively insensitive to export rates or OMR flows (e.g., SST 2017, Buchanan and Skalski 2019).

II.3.4.47 RESPONSE TO COMMENT S-SWRCB-1-47

DEIR Table 4.2-1 appropriately reflects only SWP deliveries and exports and excludes CVP wheeling or water transfers. As discussed in DEIR Chapter 3.3.15, “Water Transfers,” DWR and Reclamation propose to continue facilitating transfers of SWP water and other water supplies through CVP and SWP facilities, including north-to-south transfers and north-to-north transfers. The quantity and timing of Keswick releases would be similar to those that would occur absent the transfer. Water transfers would occur through various methods, including, but not limited to, groundwater substitution, release from storage, and cropland idling, and would include individual and multi-year transfers. As noted in DEIR Chapter 4.6.1, “Cumulative Effects,” it is recognized that other projects including long-term and short-term water transfers would be subject to their own CEQA impact assessment and permitting analyses.

Please see Master Response 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations,” for a discussion of the relationship between DWR’s operation of the SWP and Reclamation’s operation of the CVP.

II.3.4.48 RESPONSE TO COMMENT S-SWRCB-1-48

DEIR Appendix B, “2018 Coordinated Operation Agreement Addendum,” presents a detailed discussion of how the SWP coordinates and interacts with the operations of the CVP, and further discussion is provided in Master Response 22, “Relationship to CVP Operations.” As discussed in Master Response 1, “Scope of Analysis,” whether Reclamation would alter its operations of the CVP in response to long-term operations of the SWP in a way that would cause environmental impacts is speculative, and thus inclusion of such details within the DEIR would not be meaningful or informative.

Please see Response to Comment S-SWRCB-1-47 for additional discussion regarding CVP water transfers.

II.3.4.49 RESPONSE TO COMMENT S-SWRCB-1-49

Please see Response to Comment S-SWRCB-1-48 above.

II.3.4.50 RESPONSE TO COMMENT S-SWRCB-1-50

Please see Response to Comment S-SWRCB-1-48 above regarding consideration of CVP operations within the DEIR. As discussed in DEIR Appendix G, “Geographic Scope of Project’s Influence on Flow,” even though the SWP and CVP coordinate operations, DWR and Reclamation independently decide how to operate the individual projects to best meet applicable requirements. The COA does not define what actions DWR or Reclamation will take in any given set of circumstances and DWR does not control CVP operations. DWR cannot commit Reclamation to actions in its operation of the CVP.

Discussion of proportional impacts is provided in Master Response 17, “Application of CESA Standards.”

II.3.4.51 RESPONSE TO COMMENT S-SWRCB-1-51

The DWR and Reclamation report the export amounts to maintain health and safety during a drought to the SWRCB. Pumping rates below 1,500 cfs are difficult for the projects to sustain in the long term due to a combination limited water supply sources for some contractors and physical constraints of the facilities. For many reasons, DWR and Reclamation have historically maintained a minimum health and safety export level with a 1,500 cfs cap. Actual health and safety export levels will depend on a number of factors and would take into account not only the need to deliver water directly for drinking water, sanitation, and fire suppression purposes, but also the need to store water now for blending later for health and safety water quality considerations, in addition to considerations of facility operational constraints. A combined pumping rate of 1,500 cfs is the most biologically protective export rate analyzed in both the 2008 U.S. Fish and Wildlife Service Biological Opinion for Delta Smelt (2008 BiOp), and the 2009 NOAA Fisheries Biological Opinion for salmonids and Green Sturgeon (2009 BiOp) in drought conditions. That rate is based on minimum municipal and refuge contractor supply demands, as well as the physical constraints at Jones Pumping Plant. At the 1,500 cfs level, negative flows in Old and Middle Rivers (OMR) and entrainment risks are reduced.

II.3.4.52 RESPONSE TO COMMENT S-SWRCB-1-52

The DEIR concluded that the Proposed Project would not result in significant impacts on aquatic biological resources or any other resource. Because the Proposed Project would not result in any significant impacts, no mitigation is required under CEQA. Even though CEQA does not require mitigation, the DEIR explains that DWR will propose mitigation to meet the legal standard under CESA to minimize and fully mitigate the take of listed species and discusses the mitigation measures that will be identified in DWR’s application for an ITP.

Please also see Response to Comment S-SWRCB-1-16 regarding refinements to the real-time operations process for Refined Alternative 2b. Specifically, a new DEIR Chapter 5.3.1.1, “Collaborative Real-Time Risk Assessment,” has been added, which includes greater coordination between DWR and CDFW technical staff. This coordination and input from CDFW will provide opportunities to minimize impacts on listed species based on real-time data.

No significant impacts were identified in the DEIR. The conclusion of no-significant impacts does not rely on as-needed coordination between CDFW and DWR. Therefore, DWR does not need to explicitly

identify the range of potentially significant impacts to species from reliance on measures that are implemented on an “as-needed” basis.

II.3.4.53 RESPONSE TO COMMENT S-SWRCB-1-53

The level of detail requested in the comment regarding the specific processes and governance for future WOMT meetings is not required to provide an adequate DEIR. The primary purpose of this EIR is to provide DWR and the public with sufficient information about the Proposed Project, its potential environmental effects, and the ways which those effects can be minimized, whether through mitigation measures or project alternatives, so that DWR can make an informed and reasoned decision on whether to approve the project. The DEIR need not provide specific details on a multi-agency, consensus-based body like WOMT to satisfy this purpose.

Please also see Master Response 4, “Legal Standards,” and Response to Comment S-SWRCB-1-16.

II.3.4.54 RESPONSE TO COMMENT S-SWRCB-1-54

The comment correctly characterizes the definition of CESA and FESA “take” and also correctly describes the discussion on DEIR pages 4-115 and 4-118 regarding the physical, hydrodynamic and biological models used in the DEIR. No further response is needed.

II.3.4.55 RESPONSE TO COMMENT S-SWRCB-1-55

Please see Response to Comment S-SWRCB-1-16 regarding a new DEIR Chapter 5.3.1.1, “Collaborative Real-Time Risk Assessment” which includes coordination between DWR and CDFW technical staff. This coordination and input from CDFW will provide opportunities to minimize impacts on listed species based on real-time data. Real-time decision-making processes proposed for operation of the SWP are anticipated to achieve greater levels of protection than the 2008/2009 Biological Opinions by utilizing current scientific data and real-time monitoring to inform decisions and quickly adjust operations to minimize entrainment and other adverse impacts to special status species.

II.3.4.56 RESPONSE TO COMMENT S-SWRCB-1-56

As discussed in Master Response 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations,” DEIR Appendix A, “Initial Study for the Long-Term Operations of the State Water Project,” addresses hydrologic conditions of the Sacramento River and the Feather River upstream of their confluence north of the Delta. DEIR Appendix A, Section 3.10.1, “Environmental Setting,” concludes that flows in these rivers would not be affected by the proposed changes in SWP operations. DWR also considered whether the Proposed Project would result in a reasonably foreseeable response by Reclamation that could result in changes in CVP operations that would cause environmental impacts outside the SWP zone of influence. As explained in DEIR Appendix G, “Geographic Scope of Project’s Influence on Flow,” even though the SWP and CVP coordinate operations, DWR and Reclamation independently decide how to operate the individual projects to best meet applicable requirements. The COA does not define what actions DWR or Reclamation will take in any given set of circumstances and DWR does not control CVP operations. These decisions occur in real-time, allowing operators to

account for constantly changing conditions such as tides, accretions and depletions, and hydrology. Therefore, whether Reclamation may alter its operations of the CVP in response to the Project in a way that would cause environmental impacts outside of the SWP zone of influence is speculative.

II.3.4.57 RESPONSE TO COMMENT S-SWRCB-1-57

Please see Master Response 2, “Baseline,” for a discussion of the existing degraded condition of the Delta and long-term trends for listed species. Please see Master Responses 11, “LFS Impact Significance,” Master Response 12, “Delta Outflow,” and Master Response 24, “Impact Significance (Salmonids),” for a discussion of OMR flows and Delta outflows under the Proposed Project.

DWR identified Refined Alternative 2b as the preferred alternative, which would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under existing conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further reduce effects below those identified in the DEIR.

II.3.4.58 RESPONSE TO COMMENT S-SWRCB-1-58

The DEIR analyzed the impacts of the Proposed Project on special status fish species by life stage to help define the effects of the Proposed Project at the species level (i.e., the whole life history of the species). Specifically, to understand both the positive and negative effects that could occur on physical habitat and other biological factors (e.g., predation, food availability), as well as reduced recruitment from one life stage to the next (i.e., direct losses of individuals), a comprehensive life cycle model would be required for each species. In the absence of such life cycle models, a life stage by life stage analyses of effects has been the most commonly utilized method of evaluating effects of SWP (and CVP) operations for many years. The DEIR evaluated effects by life stage, and then considered the effects of the Proposed Project on each life stage before drawing conclusions based on the significance criteria identified in DEIR Chapter 4.4.6, “Threshold of Significance.” Comparable evaluations of potential impacts for Refined Alternative 2b, DWR’s preferred alternative, are presented in Part III of the FEIR, in the revised DEIR Chapter 5.3.

Each life stage-specific analysis presented in the DEIR considers operations-related effects using model results, as well as qualitative analysis of those operations-related actions that could not be modeled (e.g., real-time risk assessment-based OMR management). Life stage-specific impacts are not based on model results alone. Therefore, the impacts on each life stage are generally concluded to be “less than significant” based on evaluation of the model results, which sometimes show adverse effects, as well as actions that were not able to be modeled.

The DEIR analyses conclude that the Proposed Project would result in less than significant effects on the species based on the conclusion that impacts on each life stage are less than significant. No further

evaluation of genetic and life history diversity is required if impacts are considered less than significant at the life stage and species level. Further, evaluation of Viable Salmonid Population (VSP) parameters is not warranted because the VSP concept was developed by McElhany et al. (2000) to facilitate recovery planning efforts over wide geographic region and various habitats that are used by anadromous salmonids (e.g., freshwater spawning, rearing, and migrating habitats, and the ocean).

The four key parameters related to population viability include: (1) abundance; (2) productivity; (3) diversity; and (4) spatial structure. Abundance (population size) and trends in abundance reflect extinction risk - small populations are generally at greater risk of extinction than large populations (McElhany et al. 2000). Productivity over the entire life cycle (i.e., population growth rate) and lifestage-to-lifestage specific productivity (e.g., abundance of outmigrant juveniles relative to the number of spawning adults), and factors that affect productivity provide information on how well a population is “performing” in the habitats occupied during the life cycle of the species (McElhany et al. 2000). Diversity of genetic and phenotypic traits allows species to use a wide array of environments, respond to short-term changes in the environment, and survive long-term environmental change (McElhany et al. 2000). Spatial structure reflects how a population’s abundance is distributed among available or potentially available habitats and how it can affect overall extinction risk and evolutionary processes that may alter a population’s ability to respond to environmental change.

The analyses of impacts potentially resulting from implementation of the Proposed Project includes the Delta, which is the area in which effects could occur. The Proposed Project would not affect upstream spawning, rearing, and migration habitat, and would not alter ocean conditions. Therefore, evaluating VSP parameters is not appropriate.

II.3.4.59 RESPONSE TO COMMENT S-SWRCB-1-59

Please see Master Response 24, “Drought Conditions.”

II.3.4.60 RESPONSE TO COMMENT S-SWRCB-1-60

As discussed in DEIR Chapter 4.1.4, “Approach to Modeling,” DWR selected an approach to the modeling and analysis that utilizes data sets and methods that are scientifically supported and meet the requirements of the CEQA guidelines for evaluation of biological resource impacts. As noted in the DEIR Chapter 3.3.1, DWR proposes to manage OMR flow by incorporating available information into decision support for the management of OMR flow. The available information includes real-time monitoring of fish distribution, turbidity, temperature, hydrodynamic models, and entrainment models. Further, as discussed in Part III of the FEIR, refinements were made to the preferred Refined Alternative 2b to reflect CDFW’s request for Collaborative Real-Time Risk Assessment during OMR Management period for species listed under CESA. A revised Chapter 5.3.1.1, “Collaborative Real-Time Risk Assessment,” has been added for Refined Alternative 2b, which includes weekly joint meetings between DWR and CDFW technical staff and joint development of risk assessment and supporting documentation. Model representation of OMR Flex criteria are also described in DEIR Appendix H Attachment 1-7.

The modeling conducted for the EIR is credible because it is based on reasonable range of assumptions and appropriate, widely accepted modeling tools. The comment's request that a broader range of assumptions be applied to modeling for OMR constraints, turbidity bridge avoidance and single-year salmon loss threshold is beyond the level of analysis required by CEQA to provide an adequate assessment of impacts of the Proposed Project.

Following release of the DEIR, DWR has continued to refine the proposed OMR Management measures and the actions proposed under the Adaptive Management Plan process in coordination with CDFW. The modified measures are included in Refined Alternative 2b, DWR's preferred alternative, as described in FEIR, Part III, Chapter 5.3. The modifications proposed by DWR would further reduce potential for impacts to sensitive aquatic resources.

II.3.4.61 RESPONSE TO COMMENT S-SWRCB-1-61

Please see Response to Comment S-SWRCB-1-60 for a discussion of OMR operations assumptions. The commenter's request that a sensitivity analysis be conducted to assess the results of Reclamation's ROC LTO EIS assumption for OMR operations compared to those in the DEIR is beyond the level of analysis required by CEQA to provide an adequate assessment of impacts of the project.

II.3.4.62 RESPONSE TO COMMENT S-SWRCB-1-62

FEIR Part III presents the frequency of modeled salinity exceedance at San Joaquin River at Brandt Bridge, Old River at Tracy Road Bridge, and Middle River near Old River for Existing Conditions and Refined Alternative 2b in FEIR Appendix C. Modeled exceedances under Refined Alternative 2b are not more than 2 percent greater than modeled exceedances under the Existing Conditions. Therefore, given model assumptions and limitations discussed in DEIR Chapter 4.1.4, "Approach to Modeling," modeled exceedances at these locations are similar under Refined Alternative 2b as compared to Existing Conditions. As these compliance locations are subject to CDO WR 2010-0002, modeling may over-estimate exceedances as compared to real-time operations. This is further discussed in DEIR Appendix H Attachment 1-7, "Model Limitations." Therefore, changes to water quality would be less than significant.

II.3.4.63 RESPONSE TO COMMENT S-SWRCB-1-63

As noted in the DEIR Chapter 3.3.15, "Water Transfers," the quantity and timing of Keswick releases would be similar to those that would occur absent the transfer, so minimal effects on salmonids spawning and rearing in the upper Sacramento River (e.g., Winter-run Chinook Salmon) would be expected with implementation of the Proposed Project. As noted in DEIR Appendix G "Geographic Scope of Project's Influence on Flow," operations of the Oroville Complex and resulting flows in the Feather River are not included in the EIR because Oroville operations are governed by separate legal authorizations, including a Federal Energy Regulatory Commission license and other associated regulatory reviews and requirements; so no changes to operations of the Oroville Complex and Feather River are proposed as part of the long-term operations of the SWP. Please see Master Response 1, "Scope of Analysis."

Water transfers may likely originate from various locations in the Sacramento River basin depending on their specific character (i.e., water source) and timing. Because of this variability, it is not practical to estimate how they may individually and cumulatively affect flows in the affected surface waterways. As noted in DEIR Chapter 4.6.1, “Cumulative Effects,” it is recognized that other projects including long-term and short-term water transfers would be subject to their own CEQA impact assessment and permitting analyses.

With respect to potential effects to juvenile salmonids within the Delta, expansion of the water transfer window to include July to November would be expected to have limited overlap with Winter-run Chinook Salmon occurrence in the Delta, given that most individuals appear to migrate into the Delta with early winter flow pulses (del Rosario, R. B., Y. J. Redler, K. Newman, P. L. Brandes, T. Sommer, K. Reece, and R. Vincik. 2013. Migration Patterns of Juvenile Winter-run-sized Chinook Salmon (*Oncorhynchus tshawytscha*) through the Sacramento–San Joaquin Delta. *San Francisco Estuary and Watershed Science* 11(1).).

The potential for greater South Delta entrainment would exist for juvenile Winter-run Chinook Salmon occurring during the extended water transfer window, but this would be expected to be limited and such entrainment loss would count toward cumulative thresholds, which would protect the species throughout the entire winter/early spring entrainment risk period. For Spring-run Chinook Salmon, expansion of the water transfer window to include July to November would be expected to have limited overlap with occurrence in the Delta. Yearlings generally may migrate in winter (as indicated by monitoring of Late Fall-run surrogate fish for entrainment management) and young-of-the-year Spring-run Chinook Salmon migrate through the Delta in spring, so potential for effects including take would be limited. Additionally, DWR identified Refined Alternative 2b as the preferred alternative, which would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under existing conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further reduce effects below those identified in the DEIR. As with Chinook Salmon, there would be expected to be limited potential for effects to steelhead from the expansion of the water transfer window.

For general information regarding water transfers and DWR’s role in facilitating transfers, please see DWR’s website at <https://water.ca.gov/Programs/State-Water-Project/Management/Water-Transfers> (CDFW 2020a).

II.3.4.64 RESPONSE TO COMMENT S-SWRCB-1-64

As discussed in Master Response 20, “Best Available Science,” the analysis of alternatives provided in DEIR Chapter 5 “Alternatives to the Proposed Project” is adequate as it provides a reasonable range of alternatives to the proposed project at a level of detail that allows meaningful evaluation, analysis, and comparison with the proposed project. A discussion of the model simulation used to compare the

proposed project and the various alternatives is provided in DEIR Appendix E, Section E.3.3.3, “Modeling Simulation to Compare Scenarios.”

The alternatives were evaluated in the DEIR, but a more detailed evaluation of the alternatives is presented in the FEIR based on updated modeling of Alternative 2b assumptions (see FEIR Part I, Chapter 1.4, “Supplemental Technical Studies and Analysis”).

II.3.4.65 RESPONSE TO COMMENT S-SWRCB-1-65

DWR acknowledges that the Delta Smelt population has been declining in recent years. Under the Proposed Project, exports would increase during April and May. DEIR Chapter 4.4.7.4, subheading “Entrainment” (starting on page 4-167) presents an analysis of Delta Smelt entrainment and concludes that impacts resulting from entrainment are less than significant (in consideration of PTM model results, OMR model results, and non-modeled actions including real-time risk assessment-based OMR management). Nonetheless, after discussions with CDFW and subsequent to release of the DEIR, DWR has developed Refined Alternative 2b, which would develop spring maintenance flows by operating to the SWP proportional share consistent with flows observed from implementation of the 2008 and 2009 Biological Opinions or through export reductions of up to 150 TAF in Above Normal, Below Normal, and Dry water years. Modeling of Refined Alternative 2b shows that exports are reduced and impacts to Delta Smelt are reduced below those identified in the DEIR (see FEIR Part III, updated DEIR Appendix C). Additionally, implementing Refined Alternative 2b would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under existing conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further reduce effects below those identified in the DEIR and would fully mitigate impacts on CESA-listed species. Together, the suite of actions included in Refined Alternative 2b would result in lesser impacts on Delta Smelt than those identified in the DEIR (see Part III of the FEIR).

II.3.4.66 RESPONSE TO COMMENT S-SWRCB-1-66

The comment describes the PTM analysis results, noting that DSM2 PTM modeling estimated entrainment is appreciably greater under the Proposed Project in April and May. However, as described in DEIR Chapter 4.4.7.4, “Species-Specific Impacts,” for Delta Smelt under subsection, “Entrainment,” a number of protective measures that will minimize entrainment risk. These include real-time operational decision-making, modeling, and OMR management, which would be used by DWR to minimize entrainment under the Proposed Project. Please also see Part III of the FEIR for a discussion of refinements made to the preferred Refined Alternative 2b to reflect CDFW’s request for Collaborative Real-Time Risk Assessment during OMR Management period for species listed under CESA.

II.3.4.67 RESPONSE TO COMMENT S-SWRCB-1-67

The comment describes the results of the PTM analysis from Table 4.4-8; DEIR Appendix Table E.2-4 and summarizes the percentage of particles entrained into both the CVP and SWP water export facilities under different conditions. No further response is required.

II.3.4.68 RESPONSE TO COMMENT S-SWRCB-1-68

DWR applied PTM modeling approaches consistent with other recent analyses (e.g., California WaterFix ITP Application) to assess potential effects of the Proposed Project relative to the baseline. The method focused on comparing differences between the two operational scenarios and as noted in the DEIR, suggested the potential for appreciable increases in entrainment risk for Delta Smelt, consistent with the analysis cited by the commenter even if it was not explicitly cited (See DEIR Chapter 4.4.7.4, “Species-Specific Impacts” for Delta Smelt under subsection, “Entrainment”). As noted in DEIR, the PTM analysis does not consider the real-time operational decision-making, modeling, and OMR management, including the use of life cycle modeling, which would be expected to limit potential entrainment risk; this is consistent with the USFWS ROC LTO Biological Opinion conclusion.

II.3.4.69 RESPONSE TO COMMENT S-SWRCB-1-69

Please see response to S-SWRCB-1-66.

II.3.4.70 RESPONSE TO COMMENT S-SWRCB-1-70

The DEIR utilizes the best available information, including results from SCHISM modeling conducted to identify potential differences in Delta Smelt habitat conditions under the Proposed Project. However, DWR acknowledges that the modeling tools cannot represent all possible elements of the Proposed Project, including modeling real-time risk assessment-based OMR management. Nonetheless, the modeling conducted for the EIR is appropriate because it includes reasonable assumptions regarding OMR management based on available historical data, as described in Attachment 8 of Appendix H to the DEIR. When no historical information was available on which to base model assumptions, DWR could not justify including such assumptions and relied on qualitative analyses to identify impacts on special status fish species.

II.3.4.71 RESPONSE TO COMMENT S-SWRCB-1-71

DWR acknowledges that results of recent SMSCG pilot operations and food enhancement actions are not yet published in peer-reviewed journals. However, results from these studies have been presented at professional society meetings and scientific conferences (e.g., the 149th annual meeting of the American Fisheries Society held in September/October 2019). Further, DWR has coordinated with Delta Smelt experts from CDFW, USFWS, Reclamation, and private industry to identify actions most likely to benefit the species. Additionally, the USFWS, in the Final Biological Opinion on the Long-Term Operation of the CVP and SWP (2019) concluded that the effects of these actions cannot be quantified, but would likely continue to provide salinity habitat may provide better feeding conditions for delta smelt in Suisun Marsh and the Cache Slough Complex (depending on the water year) (pp. 170 -171).

Further, USFWS (2019) suggested that the structured decision-making process called for under this action will incorporate new results each year to help refine the potential benefits to Delta Smelt. Based on preliminary results presented at professional society meetings, coordination with species experts, and the conclusions presented in the Final USFWS Biological Opinion (2019), DWR continues to agree with the conclusions in the DEIR that impacts of the Proposed Project, and specifically SMSCG operations and food enhancement actions, are less than significant. DWR further disagrees with the commenter that it is premature to determine that the habitat-food enhancement action under the Proposed Project will provide equivalent or better protection for listed species than the fall X2 action from 2008 Biological Opinion RPA.

II.3.4.72 RESPONSE TO COMMENT S-SWRCB-1-72

DWR acknowledges that the commenter does not agree that the methods used to calculate the signal to noise ratio in the Delta Outflow-Abundance analyses presented in the DEIR. However, regardless of the statistical process used to estimate the effects of signal to noise (i.e., margin of error) the key results presented in Tables 4.4-9 and 4.4-10 of the DEIR are that the Nobriga and Rosenfield (2016) model suggested that the differences in the abundance index between the Proposed Project and Existing Conditions scenarios would be very small, relative to the variability of the predicted values, which covers several orders of magnitude (i.e., the variability in the predictions within each scenario was substantially greater than the differences between scenarios). This outcome reflects, in part, the variability in Delta outflow associated with different water year types which is substantially greater than the minor differences in Delta outflow associated with changes in SWP operations.

While the DEIR recognizes a high degree of uncertainty in the modeling results, uncertainty in and of itself does not make the analysis approach invalid. Additionally, the Nobriga and Rosenfield (2016) model represents the most recent published relationship between Delta Outflow the subsequent year's Longfin Smelt Abundance index and the uncertainty in the results of the analyses likely represent reflects uncertainty in the relationship.

Further, subsequent to the release of the DEIR, DWR held extensive discussions with CDFW and has identified Refined Alternative 2b as the preferred alternative in the FEIR. Refined Alternative 2b includes additional adaptive management actions not originally included in the DEIR Proposed Project. Evaluation of Refined Alternative 2b showed that under a "Good" survival scenario, Refined Alternative 2b would result in a reduction in the Longfin Smelt Abundance Index of 1 to 3 percent and under a "Poor" survival scenario, Refined Alternative 2b would result in a reduction in the Longfin Smelt Abundance Index of 0 to 4 percent.

Additionally, Refined Alternative 2b would: (1) result in the total amount of SWP water exported from the Delta to generally remain the same as under existing conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of

which would further reduce effects below those identified in the DEIR and would fully mitigate impacts on CESA-listed species.

II.3.4.73 RESPONSE TO COMMENT S-SWRCB-1-73

Most Longfin Smelt spawning occurs January through March (see Grimaldo et al. 2017a as referenced in the DEIR). Grimaldo et al. 2009 (as referenced in the DEIR) shows that most longfin juveniles are susceptible to entrainment during April and May. The Proposed Project includes operational protections for adult, larval, and juvenile Longfin Smelt (see, for example, DEIR, p.3-21 to 3-23).

II.3.4.74 RESPONSE TO COMMENT S-SWRCB-1-74

With respect to the system-wide population estimates of Longfin Smelt suggested to be lacking by the commenter, Table 4.4-14 (p.4-186 and 4-187) in the DEIR provided such estimates for Longfin Smelt. The analysis demonstrates that the percentage of the population entrained 1995-2015 was a relatively small, i.e., less than 1% in most years. Additional description of the real-time operations procedure has been added to the FEIR, in particular related to the real-time risk assessment procedure (see FEIR Part III, Chapter 5.3.1.1 “Collaborative Real-Time Risk Assessment” and the “Longfin Smelt Entrainment Protections” discussion in Chapter 5.3.1.3 “Real-time OMR Limits and Performance Objectives.”

II.3.4.75 RESPONSE TO COMMENT S-SWRCB-1-75

DWR acknowledges that the single year loss thresholds under the proposed OMR flow management include a separate time frame to account for San Joaquin River-origin steelhead. Cumulative loss thresholds also include a separate time frame for the same reason. The analysis applies monthly historical salvage to modeled exports, which, incorporates San Joaquin River-origin steelhead in the analyses. Because the analysis is based on historical salvage, the analysis cannot distinguish between San Joaquin River-origin steelhead and Sacramento River-origin steelhead because the historical salvage did not identify the origin of the salvaged fish.

It is not possible to distinguish from which watershed estimated salvaged steelhead originated in any given month. The comment calculated and presented salvage from April, May, and June, and erroneously assumed that all of those steelhead salvaged during those months originated in the San Joaquin River. Although salvage loss thresholds are included for those months to protect San Joaquin River-origin steelhead, not all steelhead present in the Delta (or salvaged) during those months can be accurately assumed to originate in the San Joaquin River.

Further, the descriptions of the analyses in DEIR Appendix E, “Biological Modeling Methods and Selected Results,” and in subsections of DEIR Chapter 4.4.7.4, “Species-Specific impacts,” disclose that the salvage density method does not consider real-time risk assessment-based OMR management, which would reduce impacts below those identified in the DEIR.

Additionally, subsequent to the release of the DEIR, DWR held extensive discussions with CDFW and has identified Refined Alternative 2b as the preferred alternative in the FEIR. Refined Alternative 2b would curtail exports to maintain the current SWP spring outflow contribution. The additional outflow would be developed by operating to the SWP proportional share of the spring maintenance flows

consistent with flows observed from implementation of the 2008 and 2009 Biological Opinions or through export reductions consistent with the current VA proposal. The potential reduction in exports during April and May proposed under Refined Alternative 2b would further reduce entrainment of San Joaquin River-origin steelhead.

II.3.4.76 RESPONSE TO COMMENT S-SWRCB-1-76

The salvage loss analysis is based on historical entrainment loss. Therefore, the analysis cannot distinguish between San Joaquin River-origin Chinook Salmon and Sacramento River-origin Chinook Salmon because the historical loss estimates did not identify the origin of salvaged fish. Therefore, it is not possible to distinguish from which watershed estimated salvaged Chinook Salmon originated in any given month.

Although the entrainment loss density method indicates that loss under the Proposed Project could be higher than the Existing Condition, as described in the “Entrainment Loss Density” subsections of DEIR Chapter 4.4.7.4, “Species-Specific Impacts,” the method does not consider real-time risk assessment-based OMR management, which would reduce impacts below those identified in the DEIR.

Additionally, subsequent to the release of the DEIR, DWR held extensive discussions with CDFW and developed Refined Alternative 2b (the environmentally preferred alternative). Refined Alternative 2b would increase spring Delta outflow, and it would also reduce exports during April and May, which would further reduce entrainment of San Joaquin River-origin Chinook Salmon.

II.3.4.77 RESPONSE TO COMMENT S-SWRCB-1-77

Although the entrainment loss density method indicates that loss under the Proposed Project could be appreciably higher than under the Existing Condition scenario, as described in the “Entrainment Loss Density” subsections of DEIR Chapter 4.4.7.4, “Species-Specific Impacts,” the method does not consider real-time risk assessment-based OMR management, which would reduce impacts below those identified in the DEIR.

Additionally, subsequent to the release of the DEIR, DWR held extensive discussions with CDFW and developed Refined Alternative 2b (the environmentally preferred alternative). Refined Alternative 2b includes increased spring Delta outflow, and it would also reduce exports during April and May, which would further reduce entrainment of San Joaquin River-origin Chinook Salmon.

II.3.4.78 RESPONSE TO COMMENT S-SWRCB-1-78

DWR acknowledges that April and May exports under Alternatives 2a and 2b would be greater than the Existing Condition scenario. However, similar to the Proposed Project, Alternatives 2a and 2b include real-time risk assessment-based OMR management that would limit entrainment and result in less than significant impacts. Additionally, subsequent to the release of the DEIR, DWR held extensive

discussions with CDFW and developed Refined Alternative 2b (the environmentally preferred alternative). Refined Alternative 2b includes increased spring Delta outflow, and it would also reduce exports during April and May, which would further reduce entrainment of special status species.

Refined Alternative 2b would include the following: (1) the total amount of SWP water exported from the Delta would generally be expected to remain the same as under existing conditions; (2) CDFW would have greater authority in the real-time decision making process and implement decisions from WOMET or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) additional adaptive management actions not originally included in the DEIR Proposed Project. Collectively, these proposed actions would further minimize impacts identified in the analyses of the Proposed Project.

II.3.4.79 RESPONSE TO COMMENT S-SWRCB-1-79

DEIR Chapter 3.3.4, “Annual Process,” provides an overview of some of the monitoring that would inform real-time management. It is anticipated that real-time management and risk assessment would use this and other monitoring including the examples provided by the commenter (Comments S-SWRCB-1-81 through S-SWRCB-1-86) and other decision support tools as necessary. As described in DEIR Chapter 3.3.16, “Adaptive Management Plan,” monitoring considerations are part of the Adaptive Management Plan for operations, which will allow refinement as necessary.

II.3.4.80 RESPONSE TO COMMENT S-SWRCB-1-80

DWR concurs with the commenter that existing monitoring programs provide important data that will continue to inform operations, with new monitoring supplementing the existing monitoring as necessary to inform decision making.

II.3.4.81 RESPONSE TO COMMENT S-SWRCB-1-81

Please see Response to Comment S-SWRCB-1-79.

II.3.4.82 RESPONSE TO COMMENT S-SWRCB-1-82

Please see Response to Comment S-SWRCB-1-79.

II.3.4.83 RESPONSE TO COMMENT S-SWRCB-1-83

Please see Response to Comment S-SWRCB-1-79.

II.3.4.84 RESPONSE TO COMMENT S-SWRCB-1-84

Please see Response to Comment S-SWRCB-1-79.

II.3.4.85 RESPONSE TO COMMENT S-SWRCB-1-85

Please see Response to Comment S-SWRCB-1-79.

II.3.4.86 RESPONSE TO COMMENT S-SWRCB-1-86

Participation of the SWRCB is not specifically identified in the FEIR because the Proposed Project and Refined Alternative 2b are not directly related to a pending regulatory approval by the SWRCB. However, consistent with historic practice, participation by the SWRCB in the WOMT is expected to continue. Please see Response to Comment S-SWRCB-1-79.

II.3.4.87 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-1

This comment contains introductory statements relating to the SWRCB's comments on Reclamation's EIS for Reinitiation of Consultation on the Coordinated Long-Term Operations of the Central Valley Project and State Water Project (EIS). No direct response is required.

II.3.4.88 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-2

The commenter's acknowledgement and support of development of a voluntary agreement is noted. No further response is required.

II.3.4.89 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-3

This comment contains introductory statements relating to the SWRCB's comments on Reclamation's EIS, which are not applicable to DWR's DEIR. No direct response is required.

II.3.4.90 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-4

This comment relates specifically to the project and alternatives described by Reclamation in their EIS, which are not the same as those described in DWR's DEIR. Therefore, the comment is not applicable to the DEIR and no direct response is required.

II.3.4.91 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-5

This comment questions whether Reclamation's Preferred Alternative (which is not the same as DWR's Proposed Project or alternatives described in the DEIR) will further degrade conditions for fish and wildlife species due to decreased freshwater flows. Please see Response to Comment S-SWRCB-1-10 for a discussion of scientific knowledge regarding freshwater flows in the Delta in respect to DWR's long-term operation of the SWP.

II.3.4.92 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-6

This comment questions whether Reclamation's Preferred Alternative (which is not the same as DWR's Proposed Project or alternatives described in the DEIR) will provide reasonable protection of fish and wildlife given scientific basis supports increased spring, winter and fall flows and Delta outflows. Please see Response to Comment S-SWRCB-1-10 for a discussion of scientific knowledge regarding freshwater flows in the Delta in respect to DWR's long-term operation of the SWP.

II.3.4.93 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-7

This comment relates specifically to Alternative 4 to Reclamation’s Proposed Action, described in Reclamation’s EIS, which is not the same as DWR’s Proposed Project or any of the alternatives described in DWR’s DEIR. Discussion of the relationship between DWR’s long-term operation of the SWP and WQCP updates is provided in Master Response 9, “Relationship to WQCP Update and Voluntary Agreement.”

II.3.4.94 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-8

This comment relates to whether the changes in CVP operations proposed in Reclamation’s EIS would comply with State Water Board decisions and orders, Water Quality Control Plan, and Water Code requirements. Discussion of the regulatory framework for DWR’s long-term operations of the SWP is provided in DEIR Chapter 3.2, “Existing Regulations,” as well as DEIR Chapters 4.4.2 through 4.4.5. Master Responses 7, “Delta Reform Act,” and 9, “Relationship to WQCP Update and Voluntary Agreement,” provide additional discussion of regulatory compliance for the Proposed Project.

II.3.4.95 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-9

This comment relates to whether the changes in CVP operations proposed in Reclamation’s EIS complies with D-1641 requirements and is not directly applicable to DWR’s proposed long-term operation of the SWP or the DEIR. Discussion of how DWR’s Proposed Project would comply with D-1641 is provided in DEIR Chapter 4.3.3.3, subheading “D-1641 Compliance.”

II.3.4.96 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-10

This comment relates to a specific change to CVP operations proposed by Reclamation (moving the dissolved oxygen compliance point from Ripon to Orange Blossom Bridge) which is not part of DWR’s proposed long-term operation of the SWP. No direct response is required.

II.3.4.97 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-11

This comment relates to a specific change to CVP operations proposed by Reclamation (changes to temperature management actions below Keswick Reservoir) which is not part of DWR’s proposed long-term operation of the SWP. No direct response is required.

II.3.4.98 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-12

This comment relates to a specific change to CVP operations proposed by Reclamation (reduced Keswick flows) which is not part of DWR’s proposed long-term operation of the SWP. No direct response is required.

II.3.4.99 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-13

This comment relates to a specific change to CVP operations proposed by Reclamation (pulse flows from Shasta Reservoir) which is not part of DWR’s proposed long-term operation of the SWP. No direct response is required.

II.3.4.100 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-14

This comment relates to a specific change to CVP operations proposed by Reclamation (determination of temperature compliance locations) which is not part of DWR’s proposed long-term operation of the SWP. No direct response is required.

II.3.4.101 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-15

This comment relates to a specific change to CVP operations proposed by Reclamation (Shasta Reservoir operations) which is not part of DWR’s proposed long-term operation of the SWP. No direct response is required.

II.3.4.102 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-16

This comment relates to a specific change to CVP operations proposed by Reclamation (winter-run Chinook salmon redd dewatering) which is not part of DWR’s proposed long-term operation of the SWP. No direct response is required.

II.3.4.103 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-17

This comment relates to a specific change to CVP operations proposed by Reclamation (rice decomposition smoothing) which is not part of DWR’s proposed long-term operation of the SWP. No direct response is required.

II.3.4.104 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-18

This comment requests participation by State Water Board in meetings convened to address multiple years of low egg-to-fry survival. Although DWR would be involved in such meetings, they are not part of DWR’s proposed long-term operation of the SWP. No direct response is required.

II.3.4.105 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-19

This comment questions whether decreased flows in the American River as a result of Reclamation’s operation of the CVP will provide reasonable protection of fish and wildlife given that SWRCB’s Scientific Basis Report indicates that winter and spring flows are important for Chinook salmon and steelhead. Please see Response to Comment S-SWRCB-1-10 for a discussion of scientific knowledge regarding freshwater flows in the Delta in respect to DWR’s long-term operation of the SWP.

II.3.4.106 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-20

This comment relates to a specific change to CVP operations proposed by Reclamation (opening of Delta Cross Channel Gates) which is not part of DWR’s proposed long-term operation of the SWP. No direct response is required.

II.3.4.107 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-21

This comment relates to Reclamation’s inclusion of longer transfer windows as part of their Alternative 1, described in the EIS. As discussed in DEIR Chapter 3.3, Table 3-3 b, “Proposed Project Elements –

Proposed Program-Level Changes to SWP Operations and Facilities,” DWR also includes an expanded water transfer window between July through November, with volumes up to 600 TAF. Impacts on special status fish species associated with the expanded transfer window are provided in Part III of the FEIR, DEIR Chapter 4.4.

II.3.4.108 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-22

The need for a fisheries protection plan for Stage 2 or Stage 3 JPOD exports is noted. Such a plan is not an element of the Proposed Project or would be required by a new ITP issued by CDFW.

II.3.4.109 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-23

Please see Response to Comment S-SWRCB-1-46, which addresses DWR’s proposed management of OMR flow through incorporating all available information into decision support for the management of OMR flow, including management to minimize impacts on listed species. Please also see Master Response 25, “Real-Time Operations,” and revisions to the Proposed Project and Alternative 2b, presented in FEIR Part III.

II.3.4.110 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-24

Please see Response to Comment S-SWRCB-1-31 for discussion of Delta Smelt Summer-Fall Habitat Actions proposed by DWR in the DEIR.

II.3.4.111 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-25

This comment relates to specific actions for CVP operations proposed by Reclamation (intervention measures such as expanded use of hatcheries, adult fish rescue, and trap and haul) which are not part of DWR’s proposed long-term operation of the SWP. DWR’s Proposed Project does include studies to support establishment of a Delta Fish Hatchery, as described in DEIR Chapter 3.3.14, “Continue Studies to Establish a Delta Fish Species Conservation Hatchery,” which would include continuation of laboratory and field work to develop a strategy for successful reintroduction of Delta Smelt from the refuge populations. No construction will occur as part of these studies, and they are not intended to directly augment the smelt population. Depending on study results, future decisions to proceed with supplementation from hatcheries would be subject to separate review under CESA, FESA, and CEQA.

II.3.4.112 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-26

As discussed in Response to Comment S-SWRCB-1-ATT-1-25, DWR proposes to continue studies to support development of a reintroduction strategy, but such studies are not intended to directly augment the smelt population. As noted in DEIR Chapter 3.3.14, “Continue Studies to Establish a Delta Fish Species Conservation Hatchery,” the overarching goal of such studies is to determine the best methods to manage Delta Smelt releases from the refuge population to benefit the wild with maximum survival, retention of genetic diversity, and minimal risk to the wild population.

II.3.4.113 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-27

This comment relates to specific actions for CVP operations proposed by Reclamation (trap and haul) which are not part of DWR's proposed long-term operation of the SWP. No direct response is required.

II.3.4.114 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-28

This comment relates to specific actions for CVP operations proposed by Reclamation during drought and dry years. Please see Response to Comment S-SWRCB-1-39 for discussion of DWR's proposed process for developing drought and dry year actions during long-term operation of the SWP.

II.3.4.115 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-29

This comment relates to specific actions for CVP operations proposed by Reclamation during drought and dry years. Please see Response to Comment S-SWRCB-1-39 for discussion of DWR's proposed process for developing drought and dry year actions during long-term operation of the SWP.

II.3.4.116 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-30

This comment relates to the project described by Reclamation in their EIS. Adaptive management provisions are included as part of DWR's proposed long-term operations of the SWP, as described in DEIR Chapter 3.3.16, "Adaptive Management Plan." Refinements made to the project since publication of the DEIR also include additional information on adaptive management for Refined Alternative 2b, as described in FEIR Part III, Chapter 5.3.2, "Adaptive Management Plan."

II.3.4.117 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-31

This comment relates specifically to the level of detailed analysis included in Reclamation's EIS and is therefore not relevant to the DEIR. As discussed in Master Response 20, "Evaluation of Alternatives," the analysis in DWR's DEIR provides an adequate, complete, and good faith effort at full disclosure of the physical environmental impacts and the conclusions are based upon substantial evidence in light of the whole record.

II.3.4.118 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-32

The DEIR analyzed the impacts of the Proposed Project on special status fish species by life stage to help define the effects of the Proposed Project at the species level (i.e., the whole life history of the species). Specifically, to understand both the positive and negative effects that could occur on physical habitat and other biological factors (e.g., predation, food availability), as well as reduced recruitment from one life stage to the next (i.e., direct losses of individuals), a comprehensive life cycle model would be required for each species. In the absence of such life cycle models, a life stage by life stage analyses of effects has been the most commonly utilized method of evaluating effects of SWP (and CVP) operations for many years.

The DEIR evaluated effects by life stage, and then considered the effects of the Proposed Project on each life stage before drawing conclusions based on the significance criteria identified in DEIR Chapter 4.4.6, "Threshold of Significance." The DEIR analyses conclude that the Proposed Project would result

in less than significant effects on the species based on the conclusion that impacts on each life stage are less than significant. No further evaluation of genetic and life history diversity is required if impacts are considered less than significant at the life stage and species level. See Response to Comment S-SWRCB-1-58 for additional detail.

II.3.4.119 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-33

This comment relates specifically to modeling for Reclamation’s proposed project contained in the EIS. As discussed in Master Response 20, “Best Available Science,” the modeling conducted for DWR’s EIR is credible because it is based on reasonable range of assumptions and appropriate, widely accepted modeling tools.

II.3.4.120 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-34

This comment relates specifically to modeling for Reclamation’s proposed project contained in the EIS. As discussed in Master Response 20, “Best Available Science,” the modeling conducted for DWR’s EIR is credible because it is based on reasonable range of assumptions and appropriate, widely accepted modeling tools.

II.3.4.121 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-35

Please see Master Response 2, “Baseline,” for discussion of how existing conditions in the Delta are addressed through the CEQA process. Please see Response to Comment S-SWRCB-1-10 for a discussion of scientific information regarding freshwater flows in the Delta in respect to DWR’s long-term operation of the SWP.

II.3.4.122 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-36

This comment relates specifically to the lack of mitigation measures or operational modifications included in Reclamation’s EIS to reduce adverse effects to Delta smelt. Impacts of DWR’s long-term operations of the SWP on Delta Smelt are discussed in DEIR Chapter 4.4, “Aquatic Biological Resources,” and were found to be less than significant. Subsequent refinements to Alternative 2b (refer Master Comment 3, “Project CEQA Process”) provide additional benefits for aquatic resources, and additional analysis undertaken as part of the FEIR confirms the conclusion that no significant impacts would occur as a result of long-term operation of the SWP.

II.3.4.123 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-37

This comment relates specifically to the lack of mitigation measures or operational modifications included in Reclamation’s EIS to reduce adverse effects to longfin smelt. Impacts of DWR’s long-term operations of the SWP on longfin smelt are discussed in the DEIR and were found to be less than significant. Master Response 11, “LFS Impact Significance,” provides additional discussion of why decreased Delta outflows would not cause significant impacts to longfin smelt. Subsequent refinements to Alternative 2b described in FEIR Part III, Chapter 5.3, “Alternative 2b - Proposed Project with Dedicated Water for Delta Outflow from SWP,” provide additional benefits for aquatic resources,

and additional analysis undertaken as part of the FEIR process confirms the conclusion that no significant impacts would occur as a result of long-term operation of the SWP.

II.3.4.124 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-38

This comment relates specifically to the lack of mitigation measures or operational modifications included in Reclamation’s EIS to reduce adverse effects to fall-run Chinook salmon. Impacts of DWR’s long-term operations of the SWP on salmonids are discussed in the DEIR and were found to be less than significant. Master Response 23, “Impact Significance (Salmonids),” provides additional discussion of why decreased Delta outflows would not cause significant impacts to salmonids. Subsequent refinements to Alternative 2b described in FEIR Part III, Chapter 5.3, “Alternative 2b - Proposed Project with Dedicated Water for Delta Outflow from SWP,” provide additional benefits for aquatic resources, and additional analysis undertaken as part of the FEIR process confirms the conclusion that no significant impacts would occur as a result of long-term operation of the SWP.

II.3.4.125 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-39

This comment relates specifically to the lack of mitigation measures or operational modifications included in Reclamation’s EIS to reduce adverse effects to Stanislaus River salmonids. See Response to Comment S-SWRCB-1-ATT-1-38 for discussion of DWR’s long-term operations of the SWP on salmonids.

II.3.4.126 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-40

This comment relates specifically to the lack of mitigation measures or operational modifications included in Reclamation’s EIS to reduce adverse effects to Stanislaus River salmonids. See Response to Comment S-SWRCB-1-ATT-1-38 for discussion of DWR’s long-term operations of the SWP on salmonids.

II.3.4.127 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-41

This comment relates specifically to the lack of mitigation measures or operational modifications included in Reclamation’s EIS to reduce adverse effects to Stanislaus River salmonids. See Response to Comment S-SWRCB-1-ATT-1-38 for discussion of DWR’s long-term operations of the SWP on salmonids.

II.3.4.128 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-42

This comment relates specifically to references cited within the DEIS and is therefore not relevant to DWR’s DEIR. No direct response is required.

II.3.4.129 RESPONSE TO COMMENT S-SWRCB-1-ATT-1-43

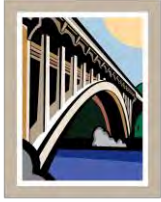
This comment contains conclusory statements relating to the SWRCB’s comments on Reclamation’s EIS. No direct response is required.

II.4 REGIONAL AND LOCAL AGENCY COMMENTS AND RESPONSES

Table II.4-1. Regional and Local Agency Commenters

Letter	Commenter	Dated
Letter L-American River Water Agencies-1	American River Water Agencies: City of Folsom, Marcus Yasutake; El Dorado Irrigation District Jim Abercrombie; Sacramento County Water Agency, Michael Peterson; City of Roseville, Sean Bigley; Placer County Water Agency, Andrew Fecko; Sacramento Surburban Water District, Dan York; City of Sacramento Department of Utilities, Bill Busath; Regional Water Authority, James Peifer; And San Juan Water District, Paul Helliker	January 6, 2020
Letter L-CCWD-1	Contra Costa Water District, Deanna Sereno, Senior Policy Advisor	January 6, 2020
Letter L-CDWA-1	Central Delta Water Agency, Dante Nomellini, Sr. Manager And Co-Counsel	January 6, 2020
Letter L-CDWA-2	Central Delta Water Agency, Dante Nomellini, Jr.	January 6, 2020
Letter L-Friant-1	Friant Water Authority, Jason Phillips, Chief Executive officer	January 6, 2020
Letter L-Land-1	Soluri Meserve, Osha Meserve on Behalf of Local Agencies of North Delta	January 6, 2020
Letter L-NDWA-1	North Delta Water Agency, Melinda Terry, Manager	January 6, 2020
Letter L-SDWA-1	South Delta Water Agency, John Herrick, Esq	January 3, 2020
Letter L-SDWA-2	Mohan, Harris, Ruiz & Rubino, S. Dean Ruiz, Esq on Behalf of South Delta Water Agency	January 6, 2020
Letter L-SMUD-1	Sacramento Municipal Utilities District, Nicole Goi, Regional 7 Local Government Affairs	January 7, 2020
Letter L-SRS Contractors-1	Somach Simmons & Dunn, Andrew Hitchings And Downey Brand Llp, Meredith Nikkel on Behalf of Sacramento River Settlement Contractors	January 6, 2020
Letter L-SWC-1	State Water Contractors, Jennifer Pierre, General Manager	January 6, 2020
Letter L-TCCA-1	Tehama-Colusa Canal Authority, Jeffrey Sutton, General Manager	January 6, 2020
Letter L-Water Authority-1	San Luis & Delta-Mendota Water Authority, Frederico Barajas, Executive Director	January 6, 2020
Letter L-Westlands-1	Westlands Water District, Thomas Birmingham, General Manager	No Date

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CITY OF
FOLSOM



SACRAMENTO COUNTY
WATER AGENCY



January 6, 2020

Mr. You Chen (Tim) Chao, PhD, PE, CFM
Mr. Dean Messer
California Department of Water Resources
Post Office Box 942836
Sacramento, California 94236

VIA E-MAIL
LTO@water.ca.gov

Re: Draft Environmental Impact Report for Long-Term Operation of the California State Water Project (SCH No. 2019049121) – Comments of American River Water Agencies

Dear Mr. Messer:

Our agencies appreciate the opportunity to comment on the above-referenced draft environmental impact report (DEIR). Our agencies are the following:

- City of Folsom
- City of Roseville
- City of Sacramento
- El Dorado Irrigation District
- Placer County Water Agency
- Regional Water Authority (RWA)
- Sacramento County Water Agency
- Sacramento Suburban Water District
- San Juan Water District

Collectively, we serve over 1.5 million people in El Dorado, Placer and Sacramento Counties. RWA is a joint powers authority of the water suppliers in the greater Sacramento metropolitan region. In addition to the service areas referenced above, RWA's

members serve hundreds of thousands of people in areas that include Sutter and Yolo Counties. Through our cooperative regional arrangements, we collectively, sustainably and conjunctively use water from the American and Sacramento Rivers with local groundwater, but the keystone of regional operations is a water supply from Folsom Reservoir that is reliable in all conditions. During the 2014-2015 drought years, Folsom Reservoir was drawn down lower than at any time since it initially filled. Emergency water-supply and fish-protection measures were implemented throughout our region as a result. This experience emphasized the critical nature of water supplies from Folsom Reservoir to our region as a whole and the sensitivity of those supplies to coordinated operations of the State Water Project (SWP) and the Central Valley Project (CVP).

We have reviewed DWR's above-referenced DEIR with that sensitivity to SWP/CVP coordination as the focus of our review. For this reason, and as discussed in more detail below, we greatly appreciate the following two aspects of the DEIR:

- DWR's acceptance of measures that our agencies, along with the federal Bureau of Reclamation, have proposed to protect Folsom Reservoir storage, our region's water supplies and the lower American River's Chinook salmon and steelhead populations; and
- DWR's indication that it will not seek contributions from the CVP – and therefore by implication from Folsom Reservoir – for increased streamflows that may be required by an incidental take permit (ITP) issued under the California Endangered Species Act (CESA).

Because of these elements of the DEIR, we do not object to DWR's decision to limit the scope of the DEIR's environmental review so that it does not include an analysis of possible effects on Folsom Reservoir, the lower American River and the water supplies and fish that depend on those resources. If the DEIR had not contained the elements listed in the above bullets – which we interpret as assurances concerning DWR's planned operation of the SWP – then we would have commented much more extensively on the DEIR's lack of analyses concerning Folsom Reservoir and the lower American River, given the sensitivity of those resources to coordinated SWP/CVP operations.

The DEIR's Acceptance of Measures to Protect Folsom Reservoir Storage

The DEIR's project location and geographic scope of analysis do not include Folsom Reservoir or the American River; the DEIR's analysis does not address any potential impacts on those resources. (See DEIR, pp. 3-1, 4-28, 4-114 to 4-115.) We accordingly reviewed the DEIR's Appendix H to determine what hydrologic assumptions DWR made in using the CalSim model to project what effects implementing DWR's proposed project would have on coordinated SWP/CVP operations. Appendix H preliminarily indicates that DWR analyzed only "Existing Condition" and "Proposed Project" scenarios using CalSim. (DEIR Appendix H, p. H-1.) This limitation indicates that the DEIR contains no hydrological analysis of how implementation of the DEIR's project alternatives might affect Folsom Reservoir and the American River through coordinated SWP/CVP operations.

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(Cont.)

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Our review of the DEIR’s Appendix H, and the actual CalSim modeling files DWR has made available, indicates that DWR has accepted, as part of coordinated SWP/CVP operations associated with DWR’s proposed project, the operational rules for Folsom Reservoir and the American River that our agencies and the federal Bureau of Reclamation have proposed during the development of the recently-issued biological opinions. The DEIR’s Appendix H states, at page H-1-2-4, the following about the assumptions used in the CalSim modeling supporting the DEIR:

Table 2-1 m. Regulatory Standards – Sacramento River Region

-	Existing	Proposed Project
...
American River	-	-
Minimum flow below Nimbus Dam	American River Flow Management (2006) as required by NMFS BO (Jun. 2009) Action II.1	American River Flow Management Standard, per 2017 Water Forum Agreement with a planning minimum end of September storage target of 275 TAF

(See also DEIR, Appendix H, pp. H-1-1-7, H-1-1-15 (text under “Lower American Flow Management” headings).)

Our review of the CalSim modeling files indicates that the above text from page H-1-2-4 contains a typographical error because those files indicate that the “Proposed Project” scenario that DWR modeled with CalSim actually uses a Folsom Reservoir planning minimum value of 275,000 acre-feet at the *end of December*, rather than the end of September as stated on that page. With that correction, which we request be made in the final EIR, the “Proposed Project” CalSim assumptions for “Minimum flow below Nimbus Dam” match the assumptions for that parameter that the Bureau of Reclamation included, with our concurrence, in the CalSim modeling that supports the recent biological opinions.

The inclusion of those assumptions in DWR’s modeling supporting the DEIR is critically important for our agencies and for understanding the potential impacts of DWR’s proposed project on our water supplies and the lower American River’s fish. As stated above, coordinated SWP/CVP operations during the 2014-2015 drought years resulted in serious risks to our region’s water supplies and very poor conditions for the lower American River’s fish, particularly its listed population of steelhead.¹ Following that experience, our agencies worked with the Bureau of Reclamation to develop the measures to protect Folsom Reservoir storage that are included in the recent biological opinions and that DWR now has assumed as part of its CalSim assumptions for the DEIR’s “Proposed Project” scenario. DWR’s inclusion of those assumptions provides our agencies with the assurances necessary

¹As background on these points, we have enclosed testimony presented to the State Water Resources Control Board in its California WaterFix hearing by Tom Gohring, the Executive Director of the Sacramento Water Forum.



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(Cont.)

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for us not to object to the DEIR's omission of any analysis of the potential effects of DWR's proposed project on Folsom Reservoir, the lower American River, our water supplies and the river's sensitive fish.

We have been able to confirm that DWR's proposed project includes the Folsom Reservoir-protection measures by reviewing the results of DWR's CalSim modeling to identify how that modeling projects potential impacts on Folsom Reservoir with implementation of DWR's proposed project. We have enclosed results from DWR's modeling in the form of exceedance curves of Folsom Reservoir's storage levels at the end of May, the end of September and the end of December. These results show the effects we would expect, given that DWR's "Proposed Project" scenario includes the Folsom Reservoir-protection measures that we have developed with the Bureau of Reclamation.

The DEIR's Delta-Outflow Terms Are Limited To The SWP's Contribution

As discussed above, during the 2014-2015 drought years, coordinated SWP/CVP operations resulted in significant issues for our region's water supplies and the lower American River's fish. If DWR were proposing a project under which the CESA ITP that DWR is seeking could result in a greater demand on CVP facilities like Folsom Reservoir, our agencies would be extremely concerned about the fact that the DEIR contains no analysis of that project's potential effects on that reservoir, our region's water supplies and the lower American River's fish.

The DEIR, however, indicates that DWR will not seek any contribution from the CVP to any increase in streamflows that may be required as terms of the ITP. The DEIR analyzes the SWP's particular contribution to potential effects on various parameters and explicitly states that the resources that could be necessary to satisfy such increased streamflows will be limited to those resources controlled by the SWP. (See DEIR, pp. 3-31, 4-14 to 4-16, 4-118, 4-121, 4-147, 4-166, 5-2, 5-13, 5-45, 5-109.) We appreciate this explicit limitation on the project that the DEIR is analyzing and, on that basis, do not object to the fact that the DEIR does not analyze the potential environmental effects related to Folsom Reservoir, the lower American River, our related water supplies and the fish in the river.²

Conclusion

We appreciate DWR's incorporation of measures to protect Folsom Reservoir that are the same as those we have developed with the Bureau of Reclamation following the 2014-2015 drought years. We also appreciate the DEIR's explicit limitation of the resources that may be required for DWR's ITP to those resources that the SWP controls. With these elements contained in the DEIR, our agencies do not object to the DEIR's omission of any analysis concerning Folsom Reservoir and the lower American River.

²In some places, the DEIR contains language that, taken out of context, could be read to suggest that DWR *does* expect the CVP to contribute to potentially higher streamflows. (See, e.g., DEIR, p. 3-31.) Given that DWR has excluded the American River and other streams whose operations are controlled by the CVP, however, implementation of such statements would be outside the DEIR's scope and therefore would violate the California Environmental Quality Act.

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Mr. You Chen (Tim) Chao, PhD, PE, CFM
Mr. Dean Messer
January 6, 2020
Page 5

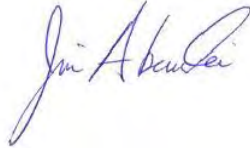
Very truly yours,

CITY OF FOLSOM



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Environmental & Water
Resources Director

EL DORADO
IRRIGATION DISTRICT



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General Manager

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JAMES PEIFER
Executive Director

SAN JUAN WATER
DISTRICT



PAUL HELLIKER
General Manager

Enclosures: Tom Gohring testimony (Exhibits ARWA-300E and ARWA-500)
Modeling results concerning Folsom Reservoir from DEIR modeling

II.4.1 LETTER L-AMERICAN RIVER WATER AGENCIES-1 – AMERICAN RIVER WATER AGENCIES – CITY OF FOLSOM, MARCUS YASUTAKE’ EL DORADO IRRIGATION DISTRICT JIM ABERCROMBIE; SACRAMENTO COUNTY WATER AGENCY, MICHAEL PETERSON; CITY OF ROSEVILLE, SEAN BIGLEY; PLACER COUNTY WATER AGENCY, ANDREW FECKO; SACRAMENTO SUBURBAN WATER DISTRICT, DAN YORK; CITY OF SACRAMENTO DEPARTMENT OF UTILITIES, BILL BUSATH; REGIONAL WATER AUTHORITY, JAMES PEIFER; AND SAN JUAN WATER DISTRICT, PAUL HELLIKER, DATED JANUARY 6, 2020

II.4.1.1 RESPONSE TO COMMENT L-AMERICAN RIVER WATER AGENCIES-1-1

DWR has applied for an ITP for long-term operations of the SWP. Please refer to Master Response 22, “Relationship to CVP Operations,” for information regarding CVP coordination; DEIR Appendix B, “2018 Coordinated Operation Agreement Addendum,” for a detailed discussion of how the SWP coordinates and interacts with the operations of the CVP.

As discussed in Master Response 1, “Scope of Analysis,” DWR considered whether the long-term operations of the SWP would result in a reasonably foreseeable operational response by Reclamation that could result in environmental impacts beyond the effects caused by SWP operations alone. As explained in DEIR Appendix G, “Geographic Scope of Project’s Influence of Flow,” DWR and Reclamation independently decide how to operate the SWP and CVP to meet applicable requirements. Therefore, it would be speculative to consider whether Reclamation would alter its operations of the CVP in response to DWR’s long-term operations of the SWP in a way that would cause environmental impacts beyond the effects caused by SWP operations alone.

II.4.1.2 RESPONSE TO COMMENT L-AMERICAN RIVER WATER AGENCIES-1-2

The error within DEIR Appendix H, Table 2-1m, “Regulatory Standards – Sacramento River Region” referenced by the commenter is a typographical error. The same typographical error also occurs in DEIR Appendix H, Section 3.1, subheading “Lower American Flow Management.” These typographical errors were corrected in the FEIR. Please see FEIR Part III, Appendix H for the specific refinements made to correct these errors. The assumptions used in the CalSim II modeling did not include this error, therefore re-running of the models is not required.

A more detailed evaluation of the alternatives is presented in FEIR Part III, Chapter 5, “Alternatives to the Proposed Project,” based on updated modeling of Refined Alternative 2b assumptions.

II.4.1.3 RESPONSE TO COMMENT L-AMERICAN RIVER WATER AGENCIES-1-3

The exceedance curves referenced and provided in this comment indicate no adverse impact to Folsom Reservoir water storage volumes.

II.4.1.4 RESPONSE TO COMMENT L-AMERICAN RIVER WATER AGENCIES-1-4

Please see Response to Comment L-American River Water Agencies-1-1.

II.4.1.5 RESPONSE TO COMMENT L-AMERICAN RIVER WATER AGENCIES-1-5

Please see Response to Comment L-American River Water Agencies-1-1.

II.4.1.6 RESPONSE TO COMMENT L-AMERICAN RIVER WATER AGENCIES-1-ATT-1

DWR has received and reviewed the exhibits included in Attachment 1. See Response to Comment L-American River Water Agencies-1-3.

II.4.1.7 RESPONSE TO COMMENT L-AMERICAN RIVER WATER AGENCIES-1-ATT-2

DWR has received and reviewed the rebuttal testimony of Tom Gohring, P.E. included in Attachment 2 related to the operation and management of Folsom Reservoir. See Response to Comment L-American River Water Agencies-1-3.



January 6, 2020

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Subject: Contra Costa Water District Comments on Draft Environmental Impact Report for Long-Term Operation of the California State Water Project

Thank you for the opportunity to provide comments on the Draft Environmental Impact Report for Long-Term Operation of the California State Water Project (SWP LTO Draft EIR) by the California Department of Water Resources. Once finalized, the EIR is intended to be used to support DWR’s decision regarding ongoing SWP operations and the decision by the California Department of Fish & Wildlife on DWR’s application for a California Endangered Species Act Incidental Take Permit under Section 2081 of the Fish and Game Code.

Contra Costa Water District serves water from its intakes in the Sacramento-San Joaquin Delta for residential, commercial, and industrial uses in eastern and central Contra Costa County and so has a vital interest in the environmental effects of the proposed action. CCWD is an in-Delta diverter – its service area lies within or immediately adjacent to the Delta, and its return flows contribute to Delta outflow. CCWD relies on the Delta for 100% of its water supply, including Central Valley Project contract deliveries, diversions under CCWD’s own water rights, and diversions under East Contra Costa Irrigation District’s pre-1914 water right.

CCWD’s operation of its diversion, storage, and conveyance facilities meets the permitting requirements of the Endangered Species Act and CESA through biological opinions issued by the National Marine Fisheries Service and the United States Fish & Wildlife Service and an Incidental Take Permit from CDFW, collectively referred to in these comments as the “CCWD-specific BOs and ITP”. The CCWD-specific BOs and ITP are separate and distinct from the BOs for the coordinated long-term operation of the CVP and SWP and from the ITP for ongoing operation of the SWP.

The CCWD-specific BOs and ITP include terms and conditions that fully mitigate for the effects of CCWD’s diversions on covered species. CCWD, DWR, and the United States Department of Interior Bureau of Reclamation currently coordinate operations so that in-Delta standards and fishery regulations are met without additional limitations or restrictions on CCWD’s operations beyond what is necessary to fully mitigate for CCWD’s effects as identified in the CCWD-specific BOs and ITP.

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The SWP LTO Draft EIR DWR uses modeling that is based on the assumption that CCWD would continue to be governed by its own biological opinions and permits, without new or additional restrictions or limitations as a result of the implementation of the SWP LTO project. However, while the SWP LTO Draft EIR incorporates this assumption for purposes of assessing potential impacts, the Draft EIR does not make it clear that this important assumption is part of DWR's proposed project and the alternatives. To the contrary, the Draft EIR incorporates actions that suggest that implementation of the SWP LTO project might in fact result in the imposition of new and additional restrictions on CCWD operations beyond the CCWD-specific BOs and ITP. If this occurs, the SWP LTO project could cause significant adverse impacts on water quality, water supply, and aquatic resources, as described in the attached detailed comments. These potential significant adverse environmental effects have not been adequately disclosed, analyzed or mitigated in the SWP LTO Draft EIR.

In the Final EIR, DWR should make a firm and clear commitment that CCWD's facilities will continue to be operated and maintained according to the biological opinions and permits that specifically apply to those facilities, and that the implementation of the SWP LTO project will not create new or additional limitations or restrictions on CCWD operations beyond the requirements set forth in those separate biological opinions and permits - thereby ensuring that CCWD will have opportunities to fill Los Vaqueros Reservoir that are at least comparable to the current conditions. Reclamation has made such an assurance as part of its federal action for the coordinated long-term operation of the CVP and SWP; we hope DWR will make a similar assurance as part of its project.

Incorporating this important component into the Final EIR's project description for the SWP LTO and the alternatives will help to resolve CCWD's concerns, avoid any confusion about the scope and nature of the project's impacts, and serve to eliminate, or at least substantially reduce, the potential significant adverse effects that are described in the attached comments.

If you have any questions, please do not hesitate to get in touch with me at (925) 688-8079 or dsereno@ccwater.com. We look forward to working with DWR to resolve the issues described above to our mutual benefit.

Sincerely,



Deanna Sereno
Senior Policy Advisor

DS:wec

Attachment

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(Cont.)

Contra Costa Water District

Comments on the California Department of Water Resources'
November 21, 2019 Draft Environmental Impact Report for
Long-Term Operation of the California State Water Project

January 6, 2020

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Contra Costa Water District Comments on the
November 21, 2019 Draft Environmental Impact Report for
Long-Term Operation of the California State Water Project

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Contra Costa Water District Comments on the
November 21, 2019 Draft Environmental Impact Report for
Long-Term Operation of the California State Water Project

1. Introduction

1.1. Framework for Contra Costa Water District Comments

The California Department of Water Resources (DWR) operates the State Water Project (SWP) in coordination with the operation of the Central Valley Project (CVP) by the U.S. Department of Interior Bureau of Reclamation (Reclamation). On August 2, 2016, DWR and Reclamation jointly requested the Reinitiation of Consultation on the Coordinated Long-Term Operation of the CVP and SWP (ROC on LTO) with the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) under Section 7 of the federal Endangered Species Act (ESA).

During development of the proposed action for the ROC on LTO, Contra Costa Water District (CCWD) expressed concerns to Reclamation regarding the potential adverse environmental impacts that the implementation of the action could cause, including negative impacts to water quality, water supply and aquatic resources. CCWD expressed concerns that these impacts could occur if the implementation of the ROC on LTO were to cause or create new or additional limitations or restrictions on CCWD's operations, beyond the separate requirements that USFWS, NMFS and the California Department of Fish & Wildlife (CDFW) already have established in biological opinions and permits that apply specifically to CCWD operations.

In response to CCWD's concerns regarding the significant adverse impacts that could result from the implementation of the ROC on LTO, Reclamation made a commitment as part of the proposed action in its Final Biological Assessment (BA) under the ESA that implementation of the federal action will not restrict CCWD operations beyond the restrictions of the separate biological opinions that are specific to CCWD operations (Reclamation 2019b, at p. 4-59). Reclamation incorporated this commitment into the environmental analysis in its Final BA and its Draft Environmental Impact Statement for the ROC on LTO (Draft EIS). Specifically, the modeling for the proposed action in the BA and for all the action alternatives in the Draft EIS is based on the assumption that CCWD's operations would continue to be governed by its own biological opinions and permits, without any new or additional restrictions or limitations as a result of the implementation of the ROC on LTO.

USFWS and NMFS recently issued new biological opinions for the long-term coordinated operation of the CVP and SWP, which are based on Reclamation's proposed action (USFWS 2019; NMFS 2019). These two recent biological opinions, which will be referred to collectively as the "2019 LTO BOs", rely on this proposed action, including Reclamation's commitment not to cause or create any new or additional restrictions or limitations on CCWD operations, for their findings and conclusions.

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Reclamation further expressed its commitment in its December 2019 Final Environmental Impact Statement for the ROC on LTO (Final EIS). For example, the project description in the Final EIS for Alternative 1 (which is Reclamation’s proposed action) explains as follows:

CCWD facilities would continue to be operated and maintained under applicable permits. Reclamation would work with CCWD to ensure that implementation of the proposed action will not restrict CCWD operations beyond the restrictions of the separate biological opinions. Reclamation agrees to ensure that the implementation of Alternative 1 will not create new or additional restrictions on CCWD’s ability to fill its Los Vaqueros Reservoir beyond the restrictions of the separate Biological Opinions that apply to CCWD’s operations, thereby ensuring that CCWD will have opportunities to fill Los Vaqueros Reservoir that are at least comparable to the current conditions.

(Reclamation 2019c, Chapter 3 at p. 3-38). Reclamation similarly incorporated this important commitment (which will be referred to as “Reclamation’s commitment” or “the commitment by Reclamation” in these comments) into each of the other action alternatives evaluated in the Final EIS. (Reclamation 2019c, Chapter 3 at pp. 3-58 (Alternative 2); 3-61 (Alternative 3); 3-64 (Alternative 4)).

In sum, Reclamation addressed the significant adverse environmental impacts that could result from negatively affecting CCWD operations by making its commitment clear and by incorporating this commitment into its proposed action and into the environmental analysis for all of the ROC on LTO alternatives. CCWD and Reclamation are now in the process of finalizing an agreement to memorialize this commitment and to establish an implementation framework.

Similar to the EIS that Reclamation has prepared pursuant its federal law obligations under the National Environmental Policy Act, DWR has prepared the Draft Environmental Impact Report for Long-Term Operation of the California State Water Project (SWP LTO Draft EIR, or Draft EIR) pursuant to its obligations under the California Environmental Quality Act (CEQA). Once finalized, the EIR is intended to be used to support DWR’s decision regarding ongoing SWP operations and CDFW’s decision on DWR’s application for a California Endangered Species Act (CESA) Incidental Take Permit (ITP) under Section 2081 of the Fish and Game Code.

Similar to Reclamation’s EIS for the ROC on LTO, the Draft EIR prepared by DWR uses modeling that is based on the assumption that CCWD would continue to be governed by its own biological opinions and permits, without new or additional restrictions or limitations as a result of the implementation of the SWP LTO project.

However, while the Draft EIR incorporates this assumption about CCWD’s operations into the modeling for purposes of assessing potential impacts, the Draft EIR does not make it clear that this important assumption is part of DWR’s proposed project and the alternatives. To the contrary, the Draft EIR incorporates actions that suggest that implementation of the

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SWP LTO project might in fact result in the imposition of new and additional restrictions on CCWD operations beyond the separate requirements in the biological opinions and permits that already have been established for CCWD operations. If this is the case, there is a real potential for the types of significant adverse environmental impacts that CCWD has raised with regard to negative effects on water quality, water supply, and aquatic resources.

In the Final EIR, DWR should make a firm and clear commitment that CCWD’s facilities will continue to be operated and maintained under the biological opinions and permits that specifically apply to those facilities, and that the implementation of the SWP LTO project will not create new or additional limitations or restrictions on CCWD operations beyond the requirements set forth in those separate biological opinions and permits – thereby ensuring that CCWD will have opportunities to fill Los Vaqueros Reservoir that are at least comparable to the current conditions. Reclamation has made such an assurance as part of its federal action; CCWD requests that DWR make a similar assurance as part of its project.

Incorporating this important component into the Final EIR’s project description for the SWP LTO and the alternatives will help to resolve CCWD’s concerns, avoid any confusion about the scope and nature of the project’s impacts, and serve to eliminate, or at least substantially reduce, the potential significant adverse effects that are described in these comments.

CCWD’s comments on the Draft EIR are structured as follows:

- Section 1 provides background on CCWD and the ongoing operational coordination between CCWD, Reclamation, and DWR.
- Section 2 describes the issues regarding the Project Description and alternatives analysis in the Draft EIR that prevent a clear understanding about whether the project could cause the significant impacts that CCWD has raised, or whether these impacts would be eliminated or substantially reduced.
- Sections 3 and 4 describe the potential adverse environmental effects on water quality, water supply and aquatic resources that could occur *if* DWR does *not* include as a component of the SWP LTO a firm and clear commitment that the project will not cause or create any new or additional limitations or restrictions on CCWD’s ability to fill its Los Vaqueros Reservoir, beyond the separate CCWD-specific requirements that already apply.

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1.2. Contra Costa Water District

1.2.1. Background

CCWD serves drinking water to 500,000 people in central and eastern Contra Costa County. CCWD is an in-Delta diverter – its service area lies within or immediately adjacent to the Delta, and its return flows contribute to Delta outflow. CCWD relies on the Delta for 100% of its water supply, including CVP contract¹ deliveries, diversions under CCWD’s own water rights, and diversions under East Contra Costa Irrigation District’s pre-1914 water right.

Over the last 25 years, CCWD has invested approximately \$1.2 billion to improve its delivered water quality while providing environmental benefits to the Delta with projects that include:

- Construction of the Los Vaqueros Reservoir, which provides storage of high quality Delta water and allows CCWD to cease Delta diversions during time periods when fish are most at risk;
- Construction of two new Delta intakes at locations with better water quality than the original intakes;
- Installation of state-of-the-art positive barrier fish screens at all CCWD intakes;
- Water quality projects to improve local conditions, such as the Veale Tract Water Quality Improvement Project and the Contra Costa Canal Replacement Project; and
- Water treatment plant improvements.

As a result of these significant investments, CCWD delivers high quality water to its customers throughout the year, even in drought years, by using high quality stored water in Los Vaqueros Reservoir. The use of Los Vaqueros Reservoir does not increase CCWD’s Delta diversions; it is used to shift the timing of diversions to provide year-round delivery of high-quality water (as described below in Section 1.2.2, CCWD Operations), rather than to increase supply. The use of Los Vaqueros Reservoir also allows CCWD to reduce its diversion of Delta water during droughts. For instance, CCWD reduced its Delta diversions by a total of 7,000 acre-feet in 2014 and 22,000 acre-feet in 2015, relying on releases from Los Vaqueros Reservoir instead of diverting from the Delta.

Furthermore, CCWD’s infrastructure investments enhance its operational flexibility, which allows CCWD to more easily coordinate its operations with the CVP and SWP so that in-Delta standards and fishery regulations are met with reduced impacts to water supply (as discussed below in Section 1.3, Operational Coordination).

¹ CCWD obtains its CVP water supply under Water Service Contract I75r-3401A-LTR1 with Reclamation. Pursuant to that contract, Reclamation relies on seventeen water rights permits to supply CVP water to CCWD: Permits 12721, 11967, 12722, 12723, 12725, 12726, 11315, 11316, 16597, 11968, 11969, 11971, 11973, 12364, 13776, 16600, and 15735, issued pursuant to Applications 5626, 5628, 9363, 9364, 9366, 9367, 13370, 13371, 14858, 15374, 15375, 16767, 17374, 17376, 18115, 19304 and 22316.

1.2.2. CCWD Operations

CCWD diverts water from four intakes in the Delta – Mallard Slough Intake, Rock Slough Intake, Old River Intake and Middle River Intake – for treatment and/or delivery to CCWD’s customers. Additionally, CCWD diverts water from two of its intakes – Old River and Middle River – to storage in the Los Vaqueros Reservoir, an off-stream reservoir that is owned and operated by CCWD and was built to improve water quality and provide drought and emergency storage for CCWD’s customers.

CCWD operates its intakes, together with the Los Vaqueros Reservoir, to meet its delivered water quality goals and to protect listed species. The choice of which intake to use at any time is based largely on salinity at the intakes, consistent with fish protection requirements specified in separate biological opinions and permits that govern operation of CCWD’s intakes and Los Vaqueros Reservoir (as described below in Section 1.2.3, CCWD-specific Biological Opinions and Permits).

When Delta water quality is high (i.e. salinity is low), CCWD diverts Delta water directly for delivery to its customers and fills Los Vaqueros Reservoir with high quality Delta water (at a rate of up to 200 cfs) for later use. When Delta water quality degrades (typically in late summer and fall), CCWD releases some high quality water from storage to blend with water pumped directly from the Delta; blending the two water sources allows CCWD to meet its water quality goals. When water is released from Los Vaqueros Reservoir, CCWD concurrently reduces its Delta diversions. The reservoir is then re-filled when high quality water is available in the Delta again, typically during winter and spring. In this way, Los Vaqueros Reservoir allows CCWD to ameliorate the typical seasonal changes in Delta water quality and continually provide high quality water to its customers. Additionally, the water stored in Los Vaqueros Reservoir serves as an emergency and drought water supply should CCWD’s Delta water supply be limited or unavailable.

1.2.3. CCWD-specific Biological Opinions and Permits

CCWD’s operation of its diversion, storage, and conveyance facilities meets the requirements of the federal ESA and the California Endangered Species Act (CESA) through biological opinions (BOs) issued by NMFS and USFWS and through incidental take permits issued by CDFW (previously called the California Department of Fish & Game, or CDFG). (NMFS 1993, NMFS 2007, NMFS 2010, NMFS 2017; USFWS 1993, USFWS 2000, USFWS 2007, USFWS 2010, USFWS 2017; CDFG 2009c; & CDFW 2019). These will be collectively referred to as the “CCWD-specific BOs and ITP.” The CCWD-specific BOs and ITP are separate and distinct from the BOs for the coordinated long-term operation of the CVP and SWP. The CCWD-specific BOs and ITP also are separate and distinct from the ITP for the continued operation of the SWP.

The CCWD-specific BOs and ITP cover both water diverted under CCWD’s water rights and water diverted at CCWD’s intakes pursuant to CCWD’s CVP water service contract. The CCWD-specific BOs and ITP require the following adjustments to CCWD operations for the protection of aquatic resources. The CCWD-specific BOs include annual 75-day “no-fill” period and a concurrent 30-day “no-diversion” period. The CCWD ITP includes

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an annual 75-day to 90-day “no-fill” period. During the no-fill period, CCWD does not fill Los Vaqueros Reservoir, which limits CCWD’s diversions from the Delta to the amount necessary to meet its customer demand. During the no-diversion period, CCWD minimizes diversions from the Delta² and meets customer demand by releasing water from the Los Vaqueros Reservoir. The CCWD-specific BOs and ITP include default timing for the no-fill and no-diversion periods but allow modifications to the requirements with approval from the fishery agencies.

The CCWD-specific BOs and ITP do not have any operational restrictions regarding net flow in Old and Middle Rivers (OMR). The environmental analysis of operation of CCWD’s Old and Middle River intakes (1993, 2007, 2010, and 2017) found no significant impacts on reverse flows. Furthermore, CCWD’s effect on OMR cannot be measured: CCWD’s maximum effect (when pumping at full capacity) on water velocity at the OMR gages is 0.016 feet/second³, which is approximately 4 times lower than the error in calibration⁴ for each of the instruments that measure OMR.

Since CCWD’s operations cannot be detected at the OMR gages, it would not make sense to have an operational requirement for CCWD to manipulate OMR. Instead, the CCWD-specific BOs and ITP include operational criteria that directly limit CCWD operations (i.e., the no-fill and no-diversion periods), which reduce the effects of CCWD’s operations on reverse flows and fully mitigate CCWD’s impacts to the covered species (CDFG 2009c; CDFW 2019).

1.3. Operational Coordination

1.3.1. Existing conditions

As noted above, the FWS and NMFS recently issued new biological opinions (the 2019 LTO BOs) for the coordinated long-term operation of the CVP and the SWP. However, these new biological opinions have not yet taken effect. Until the 2019 LTO BOs become effective through a Record of Decision issued by Reclamation, the coordinated long-term operation of the CVP and SWP is regulated by the 2008 biological opinion issued by USFWS (USFWS 2008) and the 2009 biological opinion issued by NMFS (NMFS 2009). The 2008 and 2009 biological opinions will be referred to collectively as the “current LTO BOs.” A discussion of the current LTO BOs will help facilitate an understanding of the coordination of operations among CCWD, Reclamation, and DWR.

² Rock Slough intake may continue minimum diversions during the no-diversion period to prevent water quality degradation due to agricultural drainage and groundwater interactions in the vicinity of the Rock Slough intake.

³ Maximum effect assumes CCWD’s intakes are operating at full capacity (320 cfs combined diversion at its Old and Middle River intakes) and all water diverted at CCWD’s intakes passes by the USGS gages in Old and Middle Rivers, which have a combined cross-sectional area of 20,000 square feet. $\text{Velocity} = \text{Flow} / \text{Cross-Sectional Area} = 320 \text{ cfs} / 20,000 \text{ sf} = 0.016 \text{ ft/sec}$.

⁴ The root mean square error of the calibration, as provided by Catherine Ruhl (USGS), is 0.0634 ft/sec for the Old River station and 0.0681 ft/sec for the Middle River station.

The current LTO BOs include reasonable and prudent alternative (RPA) actions for operation of CVP and SWP facilities to minimize their effect on listed species to avoid the likelihood of jeopardizing the continued existence of listed species or resulting in the destruction or adverse modification of critical habitat. In 2009 and 2011, CFDW (then called the California Department of Fish & Game, or CDFG) issued “Consistency Determinations” finding that the RPAs and mitigation measures set forth in each of the two current LTO BOs were consistent with the requirements of CESA for authorizing the incidental take of state-listed species from ongoing operation of SWP facilities (CDFG 2009b; CDFG 2011). These consistency determinations are limited to only those actions specifically identified and analyzed in the current LTO BOs (CDFG 2009b; CDFG 2011). Additionally, in 2009, CDFG issued an incidental take permit for long-term operation of the existing SWP facilities for the protection of longfin smelt, a state-listed species (SWP ITP) (CDFG 2009a).

Based upon correlations with salvage of fish at the SWP Skinner Delta Fish Protective Facility and the CVP Tracy Fish Collection Facility, the current LTO BOs and SWP ITP require DWR to operate to meet criteria for OMR as measured by the United States Geological Survey (USGS) in Old and Middle Rivers. Reducing CVP and SWP exports to change measured OMR reduces the direct impacts of salvage and predation at the CVP and SWP export facilities as well as the indirect effects associated with changes to Delta hydrodynamics.

CCWD’s diversions have negligible direct effects on covered species at its own intakes (see Section 4 below) and no effects on covered species at the salvage facilities, and the effect of CCWD’s operations on Delta hydrodynamics is so small that it is not detected in the measurement of OMR by the USGS. If Reclamation and DWR used measured OMR flows to assess compliance with OMR criteria, CCWD’s operations would not have any effect on such compliance or the amount of water that CVP and SWP exports are allowed to divert.

However, because forecasting the net flow in Old and Middle Rivers is difficult, Reclamation and DWR implement the OMR criteria by using an equation to estimate OMR, rather than using the measured OMR, as specified in the current LTO BOs. As CCWD’s diversions do not affect the measured OMR, Reclamation and DWR could use an equation that does not include CCWD operations while still providing the same level of protection for fish. (CCWD 2012). Nonetheless, Reclamation and DWR have chosen to use an equation that includes CCWD’s diversions at its Old River Intake and Middle River Intake. The use of this equation creates an artificial situation under which CCWD’s diversions are deemed to affect how much water the CVP and SWP are allowed to export.

CCWD’s water right permit to fill Los Vaqueros Reservoir from its intakes in the Delta (State Water Resources Control Board, Water Right Permit Number 20749) does not authorize diversion when “such diversion would directly or indirectly require the Central Valley Project or the State Water Project to release water from storage or to reduce their diversion or rediversion of water from the Delta to provide or assure flow in the Delta required to meet any applicable provision of state or federal law.” (SWRCB, 2010, Term 23, pp. 5-6). In recent years, Reclamation and DWR have invoked this water right permit

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term to curtail CCWD’s use of its own water right permit to fill Los Vaqueros Reservoir during times when exports for the CVP and SWP are limited by regulation of OMR.

CCWD believes this curtailment is inappropriate, because CCWD’s diversions do not affect measured OMR flow, which is the applicable metric in the current LTO BOs, DFW’s Consistency Determinations, and the SWP ITP. As explained above, Reclamation and DWR have chosen to use an equation that includes CCWD’s diversions, which creates a contrived set of circumstances in which diversions under CCWD’s water right are deemed to have an effect on CVP and SWP exports, which in turn is used as the basis to trigger Term 23 in CCWD’s water right permit. When OMR limits CVP and SWP exports, there is plenty of water available in the system – the Delta is not in balanced conditions. An equation for OMR flow that provides fish protection equivalent to the measured OMR flow but does not include CCWD’s diversions would meet the requirements under the current LTO BOs without unwarrantedly curtailing CCWD’s diversions.

Under this existing regulatory regime, and despite the use of an OMR index that includes CCWD’s operations, CCWD, Reclamation, and DWR have worked together to successfully coordinate operations so that in-Delta objectives and fishery regulations are met without curtailments to CCWD’s water right permit to fill Los Vaqueros Reservoir. Since 2013, CCWD and Reclamation have requested that CDFW, USFWS, and NMFS allow CCWD’s no-diversion period and no-fill period to be modified to allow coordination with CVP and SWP operations. CCWD and Reclamation have provided sufficient evidence that this can be done without harm to listed species, such that the fishery agencies have approved these requests. Typically, CCWD’s operational limits, which are calendar-based restrictions in the CCWD-specific BOs and ITP⁵, are modified to align with time periods when OMR may potentially limit CVP and SWP exports. This practice has allowed CCWD to fill Los Vaqueros Reservoir when regulations other than OMR are limiting CVP and SWP exports.

Both the State Water Resources Control Board’s water rights decision D-1641 and the 2009 NMFS BO impose restrictions on SWP and CVP exports that do not apply to CCWD diversions. D-1641 includes restrictions on exports to meet the export to inflow ratio (E:I) and the Vernalis inflow to export ratio (Vernalis 1:1). CCWD diversions are not considered “exports” for these export limitations in D-1641. Similarly, the 2009 NMFS BO includes restrictions on exports to meet the San Joaquin River inflow to export ratio (SJR IE), and CCWD diversions are not considered “exports” for the SJR IE. When the CVP and SWP exports are directly limited by such regulations, CCWD has been able to fill Los Vaqueros Reservoir without affecting CVP and SWP exports. Most of CCWD’s filling in recent years has occurred when the SJR IE governs CVP and SWP operations in April and May.

From 1999 through 2017, the CCWD-specific BOs and ITP have restricted CCWD operations more often than the current LTO BOs and SWP ITP have limited CVP and SWP exports to meet OMR criteria (Figure 1-1 below). Modification of CCWD’s operational limits as discussed above, to align with time periods when OMR may limit CVP and SWP

⁵ The 2019 amendment to CCWD’s ITP modified the default time period for CCWD’s no-fill period to allow flexible implementation between January 1 and June 30 of each year. This modification allows CCWD to adjust the timing of its no-fill period to coordinate with CVP and SWP operations

exports, allows implementation of the current LTO BOs and SWP ITP without additional restrictions on CCWD’s filling of Los Vaqueros Reservoir.

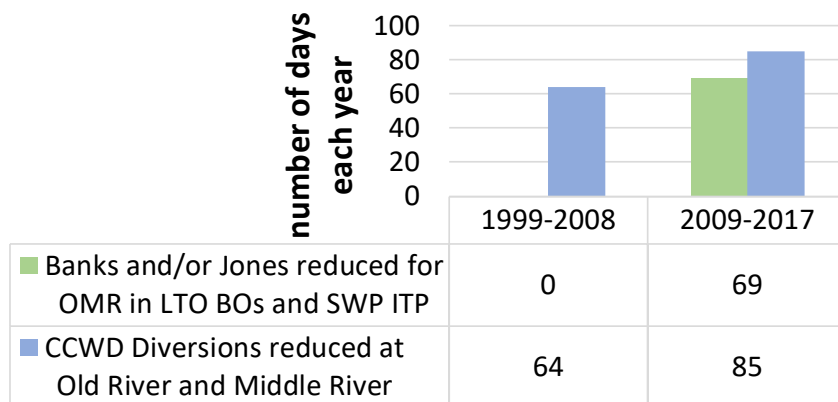


Figure 1-1. Comparison of reduction in diversions under current BOs and ITPs.

Average number of days each year that CVP and SWP exports have been reduced to meet OMR requirements in the current LTO BOs and ITP and the average number of days each year that CCWD diversions have been reduced at Old River and Middle River per the CCWD-specific BOs and ITP.

1.3.2. 2019 LTO BOs

As described in Section 1.1, Reclamation incorporated a commitment into its proposed action for the 2019 LTO BOs that implementation of the action will not restrict CCWD operations beyond the restrictions of the separate biological opinions, thereby allowing CCWD to have opportunities to fill Los Vaqueros Reservoir that are at least comparable to the current conditions. ROC on LTO Final Biological Assessment (Oct. 2019), Chapter 4 at p. 4-59. As discussed, this commitment by Reclamation serves to eliminate or substantially reduce a variety of potential significant adverse environmental impacts from implementation of the federal ROC on LTO action.

CCWD expects that coordination under the 2019 LTO BOs would be similar to the longstanding coordination under the current LTO BOs, with CCWD and Reclamation working together to request that USFWS and NMFS allow CCWD’s no-diversion period and no-fill period to be modified to allow coordination with CVP and SWP operations. Under this coordination, and consistent with Reclamation’s commitment, CCWD would not be restricted from filling Los Vaqueros Reservoir for more days than is required in the CCWD-specific BOs and ITP.

1.3.3. DWR’s Proposed Project and Alternatives

The SWP LTO Draft EIR does not provide any information about operational coordination with CCWD under the Existing Conditions, the Proposed Project, or any of the action

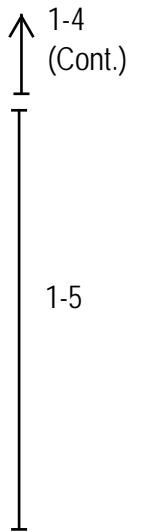
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alternatives. However, the Draft EIR for the SWP LTO raises two issues that could affect the existing coordination between DWR⁶ and CCWD, and thus could result in new or additional restrictions on CCWD operations beyond the requirements set forth in the CCWD-specific BOs and ITP.

As described more fully below, the first issue is the proposed use of an OMR Index that includes CCWD's diversions as part of the SWP LTO project to replace the existing requirement of using net OMR flow as measured by the USGS. The second issue involves potential changes to SWP operational criteria that would eliminate or weaken the current SJR IE restriction. Both of these issues could result in new or additional restrictions on CCWD operations as a result of the SWP LTO project, which in turn would have the potential to cause significant adverse environmental impacts that have not been adequately disclosed or evaluated in the Draft EIR.

Section 2 below describes the problems these two issues raise under CEQA in relation to the project description and the analysis of alternatives. Sections 3 and 4 then describe the potential adverse impacts that could occur in terms of negative effects on water quality, water supply, and aquatic resources.



⁶ As discussed above, CCWD's coordination with Reclamation is addressed through Reclamation's commitment as incorporated into the ROC on LTO Proposed Action, Draft EIS, and Final EIS. As noted above, CCWD and Reclamation are developing an agreement to memorialize Reclamation's commitment and to establish an implementation framework.

2. Incomplete Project Description and Alternatives Analysis

The project description lacks vital information about how SWP operations would be coordinated with CCWD operations, making it impossible to determine whether the full range of potential impacts from the SWP LTO project has been evaluated. The Draft EIR thus fails to include sufficient detail about the whole of the project and its potential impacts to foster meaningful public participation and informed governmental decision-making.

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As explained above, the modeling used for the impact assessment in the Draft EIR is based on the assumption that CCWD operations would continue to be governed by its own biological opinions and permits, without new or additional restrictions or limitations as a result of the SWP LTO project. But at the same time, the Draft EIR raises the prospect that such new or additional restrictions or limitations on CCWD could in fact occur as a result of the project, for example, due to the use of an OMR Index that includes CCWD operations or due to changes in SWP operational criteria, which are discussed further below. This lack of a clear, consistent and stable approach poses an important CEQA issue for the project description and for the analysis of the alternatives.

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As described in Section 1.3.1, under existing conditions, DWR has asked CCWD to curtail CCWD's use of its own water right permit to fill Los Vaqueros Reservoir during times when exports for the CVP and SWP are limited by regulation of OMR. CCWD believes this curtailment is inappropriate, and ultimately curtailments have been avoided by operational coordination between CCWD, DWR, and Reclamation. Through this coordination, CCWD has been able to shift the operational requirements in its CCWD-specific BOs and ITP in time to better align with CVP and SWP operational criteria to meet in-Delta objectives and fishery regulations without any additional restrictions on CCWD beyond the restrictions in the CCWD-specific BOs and ITP.

However, the SWP LTO Proposed Project and action alternatives in the Draft EIR include two components that could remove the current operational flexibility and create new or additional restrictions or limitations on CCWD operations: (1) use of an OMR Index that includes CCWD diversions; and (2) modifications to SWP operational criteria that likely would increase the percentage of time that the CVP and SWP exports would be limited by OMR flow regulations and possibly change Delta outflow requirements.

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(1) OMR Index

In the Proposed Project and all action alternatives, DWR would operate to an OMR Index. Draft EIR at p. 3-18 (Proposed Project), p. 5-6 (Alternative 2A), p. 5-39 (Alternative 2B), p. 5-71 (Alternative 3), and p. 5-85 (Alternative 4). The proposed OMR Index would be in lieu of using net OMR flow as measured by the USGS, which is the criterion specified in existing regulations.

The current LTO BOs and related CDFW Consistency Determinations and the SWP ITP require DWR to operate to the USGS measurements to mitigate for the effects of the CVP and SWP, based upon correlations with salvage of fish at the SWP Skinner Delta Fish Protective Facility and the CVP Tracy Fish Collection Facility. Reducing CVP and SWP exports in accordance with measured OMR reduces the direct impacts of salvage

and predation at the CVP and SWP export facilities.

The SWP LTO Draft EIR Proposed Project and all action alternatives would replace the current OMR regulation with a calculation that includes CCWD’s diversions without any analysis of the consequent environmental effects or any consideration of alternative approaches.

Use of a calculation that includes CCWD’s diversions creates an artificial situation under which CCWD’s diversions are deemed to affect how much water the CVP and SWP are allowed to export. CCWD’s water right permit to fill Los Vaqueros Reservoir from its intakes in the Delta (State Water Resources Control Board, Water Right Permit Number 20749) does not authorize diversion when “such diversion would directly or indirectly require the Central Valley Project or the State Water Project to release water from storage or to reduce their diversion or redirection of water from the Delta to provide or assure flow in the Delta required to meet any applicable provision of state or federal law.” (SWRCB, 2010, Term 23, pp. 5-6). With respect to the OMR restriction that currently applies to operation of the SWP to reduce salvage at the SWP exports, CCWD’s diversions are too small to affect measured OMR flow and do not contribute to salvage at SWP exports. As explained above, this is why CCWD believes it is inappropriate to curtail CCWD operations when the OMR requirement applies to the SWP. The use of an OMR calculation that includes CCWD’s diversions creates a contrived set of circumstances in which diversions under CCWD’s water right are artificially considered to have an effect on CVP and SWP exports, which in turn could be used as the basis to trigger Term 23 in CCWD’s water right permit.

In essence, DWR has designed a component of its project (included in the proposed project and all action alternatives) to curtail CCWD’s water right without any analysis of the resulting environmental effects. As mentioned previously, the analysis in the Draft EIR is based on the assumption that CCWD would continue to be governed by its own biological opinions and permits, without new or additional restrictions or limitations as a result of the implementation of the SWP LTO project. In other words, the analysis in the Draft EIR is based on the assumption that CCWD’s water right permit is not curtailed by implementation of the SWP LTO project. Accordingly, if CCWD’s water right permit is in fact curtailed, this would not be consistent with the modeling of environmental impacts in the Draft EIR and could lead to significant impacts that have not been adequately analyzed or disclosed, as described in the sections below.

Furthermore, the SWP LTO Draft EIR does not consider alternative approaches to meeting the OMR regulation. For this reason, it is not clear that the analysis of alternatives in the SWP LTO Draft EIR is sufficient to meet CEQA’s requirements⁷. An

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⁷ A fundamental requirement of CEQA is that a public agency may not approve a project as proposed if there is a feasible alternative that would substantially lessen the project’s significant environmental impacts. Cal. Pub. Res. Code § 21002. Thus, as the CEQA Guidelines explain, an EIR must evaluate alternatives that could avoid or reduce the project’s significant impacts, even if the alternatives would impede to some degree the attainment of the project objectives. CEQA Guidelines § 15126.6(b). Further, the evaluation of alternatives must “include sufficient

alternative calculation for OMR flow that provides fish protection equivalent to the measured OMR flow but does not include CCWD's diversions would meet the requirements of ESA and CESA without unwarrantedly curtailing CCWD's diversions and without causing the negative environmental impacts that could result from such a curtailment. Since CCWD's diversions are too small to affect measured flow and have been fully mitigated by the operational requirements that specifically apply to CCWD operations (CDFG 2009c; CDFW 2019), DWR could have chosen to use an alternative OMR index that does not include CCWD diversions. CCWD proposed such an alternative index in 2012 in response to a request for information by the State Water Resources Control Board (CCWD 2012). To evaluate whether an alternative flow index would provide equivalent protection of listed fish species in the Delta, CCWD conducted analyses similar to the analyses in the current LTO BOs and the SWP ITP, comparing ecological indicators using both CCWD's alternative flow index and measured OMR by the USGS.

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No such analysis has been performed for DWR's proposed index. In 2017, DWR submitted a report to an independent review panel assembled by the Delta Science Program (DWR 2017). The 2017 report documents the differences between DWR's proposed OMR Index and the USGS OMR measurements for 2011 through 2017. However, the report did not evaluate whether DWR's proposed index would be protective of fish. The independent review panel noted systematic shifts in the prediction errors over time and lack of an ecological assessment of the differences between DWR's proposed OMR Index and the USGS measured values (Gore et al 2018).

In short, the SWP LTO Draft EIR proposes the use of an OMR index without any analysis of the significant environmental effects that could be caused by this the change from current regulations, and without any consideration of alternative indices that could reduce these significant effects.

(2) SWP Operational Criteria

The Proposed Project (DWR's preferred alternative under CEQA), Alternative 3, and Alternative 4 would eliminate the SJR IE regulation established in the 2009 NMFS BO. In place of SJR IE, DWR proposes to modify Old and Middle River management using an OMR index computed using an equation that includes CCWD's diversions, which would increase the percentage of time that CVP and SWP exports would be limited by OMR flow regulations. If DWR asks CCWD to curtail its use of its own water right permit to fill Los Vaqueros Reservoir during times when exports for the CVP and SWP are limited by regulation of OMR (as discussed above), any increase in the amount of time that OMR flow regulations limit exports could result in adverse impacts to CCWD's operations, which in turn could cause significant adverse environmental effects that have not been adequately considered.

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information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." *Id.* § 15126.6(d).

Alternative 2A and Alternative 2B would, at times, include SWP export curtailments to provide spring outflow by operating to the SWP “proportional share” of the SJR IE ratio. Under current operations, CCWD is often diverting under its own water right permit to fill Los Vaqueros Reservoir under excess Delta conditions when SJR IE ratio is limiting CVP and SWP exports. As the SWP export curtailments proposed in Alternatives 2A and 2B are intended to provide additional spring outflow, it is unclear how these alternatives would affect other water right holders.

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In sum, use of an OMR calculation that includes CCWD’s diversions and replacing the SJR IE with a new OMR restriction could remove the current operational flexibility and restrict CCWD’s filling of Los Vaqueros Reservoir, effectively forcing CCWD to reduce its diversions to mitigate the effects of the CVP and SWP export facilities.

If the SWP LTO project results in new or additional restrictions on CCWD operations, that could cause significant adverse water quality and water supply impacts affecting half a million people (see Section 3 below). This scenario also could cause adverse impacts on aquatic resources by reducing CCWD’s diversions at screened intakes where fish are not taken (as shown in Table 5-2 below), in order to allow increased diversions at the CVP and SWP export pumps (see Section 4). If, on the other hand, DWR makes a firm and clear commitment as part of the project description that the SWP LTO will not cause or create such new or additional restrictions that would negatively affect CCWD’s operations, thereby ensuring CCWD has opportunities to fill Los Vaqueros Reservoir that are at least comparable to current conditions, then these potential significant environmental impacts would be eliminated, or substantially reduced.

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The project description and the discussion of the alternatives should be revised to make it clear what the proposed approach is for coordination of SWP operations with CCWD operations, so that it is clear whether or not there are potential significant environmental impacts from DWR’s project that have yet to be adequately disclosed, analyzed or mitigated.

3. Potential Impacts to Contra Costa Water District

The modeling used to evaluate alternatives in the SWP LTO Draft EIR is based on the assumption that CCWD would have opportunities to fill Los Vaqueros Reservoir that are at least comparable to the current conditions. Specifically, the CalSim II modeling for the Existing Conditions and the Proposed Project and the sensitivity studies for all action alternatives assume that CCWD would continue to meet the terms and conditions of the CCWD-specific BOs and ITP and would not be required to reduce diversions in response to OMR regulations or any other export limitations.

The modeling is consistent with the Reclamation's commitment to ensure that implementation of the ROC on LTO will not restrict CCWD operations beyond the restrictions of the CCWD-specific BOs and ITP. However, as noted above, the Draft EIR does not include such a commitment and also raises at least two issues (i.e., the use of a new OMR Index and changes to SWP operational criteria) that suggest that the SWP LTO project might in fact result in such new and additional restrictions on CCWD operations. If this occurs, the project could cause a variety of significant environmental impacts, which are described below. These impacts would be eliminated, or substantially reduced, if DWR makes a firm and clear commitment to ensure that the project will not cause or create new or additional restrictions on CCWD operations, such that CCWD will have opportunities to fill Los Vaqueros Reservoir that are at least comparable to existing conditions.

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3.1. Water quality

3.1.1. Salinity increases could be significant

CCWD operates its facilities to deliver low-salinity water to its customers year-round. The Los Vaqueros Reservoir and Old and Middle River intakes were built for this purpose. CCWD integrates operation of all its facilities based on water quality in the Delta, shifting diversions between its intakes and modifying Los Vaqueros filling and releases in response to salinity changes.

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The SWP LTO Draft EIR presents Electrical Conductivity (EC), a measure of salinity, at each of CCWD's Delta intakes. The effects of the Proposed Project are summarized in Table 3-1. The increase in salinity in fall and winter is related to the proposed modification of an operational criterion (Fall X2) that is required by the current USFWS LTO BO (USFWS 2008). Although water quality modeling has not been performed for the action alternatives, all action alternatives include this modification to Fall X2, and therefore all action alternatives would be likely to increase salinity at CCWD's intakes during fall and winter.

Table 3-1. Salinity (Electrical Conductivity, in $\mu\text{S}/\text{cm}$) near CCWD's Intakes.

Monthly average salinity in the Existing Conditions and the expected monthly average change in salinity under the Proposed Project.

Source: SWP LTO Draft EIR, Appendix C, Attachment 2-7, Tables 7-1, 15-1, 18-1, and 19-1.

	Mallard Slough		Rock Slough		Old River		Victoria Canal	
	Existing EC, $\mu\text{S}/\text{cm}$	Proposed Project Change in EC, $\mu\text{S}/\text{cm}$	Existing EC, $\mu\text{S}/\text{cm}$	Proposed Project Change in EC, $\mu\text{S}/\text{cm}$	Existing EC, $\mu\text{S}/\text{cm}$	Proposed Project Change in EC, $\mu\text{S}/\text{cm}$	Existing EC, $\mu\text{S}/\text{cm}$	Proposed Project Change in EC, $\mu\text{S}/\text{cm}$
Oct	9,174	461	555	6	516	-4	418	-15
Nov	8,173	1,724	522	75	492	44	414	-7
Dec	6,269	973	544	179	519	143	443	60
Jan	3,607	214	517	79	552	79	541	55
Feb	1,579	54	360	21	435	16	501	9
Mar	1,187	-21	285	13	356	18	433	7
Apr	1,403	174	302	-33	350	-11	387	3
May	2,289	422	308	-61	357	-55	379	-38
Jun	4,126	212	270	-16	315	-26	365	-38
Jul	5,905	64	319	-4	321	-3	311	-3
Aug	8,730	115	449	-4	408	-4	330	-2
Sep	8,173	621	614	-23	547	-20	401	-16

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The increase in salinity at CCWD's intakes in the fall and winter due to the Proposed Project would cause significant changes to CCWD's operations in its attempt to continue to deliver high quality water to its customers. The predicted decrease in salinity at some of CCWD's intakes during the spring would not offset the significant salinity increases in the fall and winter. The salinity reduction in the spring is likely due to a reduction in the dominance of agricultural drainage in the south Delta. During the fall and early winter, seawater intrusion from San Francisco Bay is likely to dominate, but in the spring, river flows are often high, and seawater is repelled from the Delta. During those higher runoff periods, agricultural drainage from the San Joaquin River and local discharges dominates. (Denton 2015).

The ratio of chloride to EC is less for agricultural drainage than for seawater. A reduction of 10 EC when agricultural drainage dominates is approximately a reduction of 1.5 mg/l chloride, while an increase of 10 EC when seawater dominates is an increase of approximately 2.85 mg/l chloride. (Denton 1997). Furthermore, a reduction in salinity in the spring when salinity is already low enough to meet CCWD's water quality goals without blending with water stored in Los Vaqueros Reservoir will not alter CCWD's operations. The effects on CCWD's operations are discussed in Section 3.2, Water Supply.

3.1.2. Salinity increases are potentially underestimated

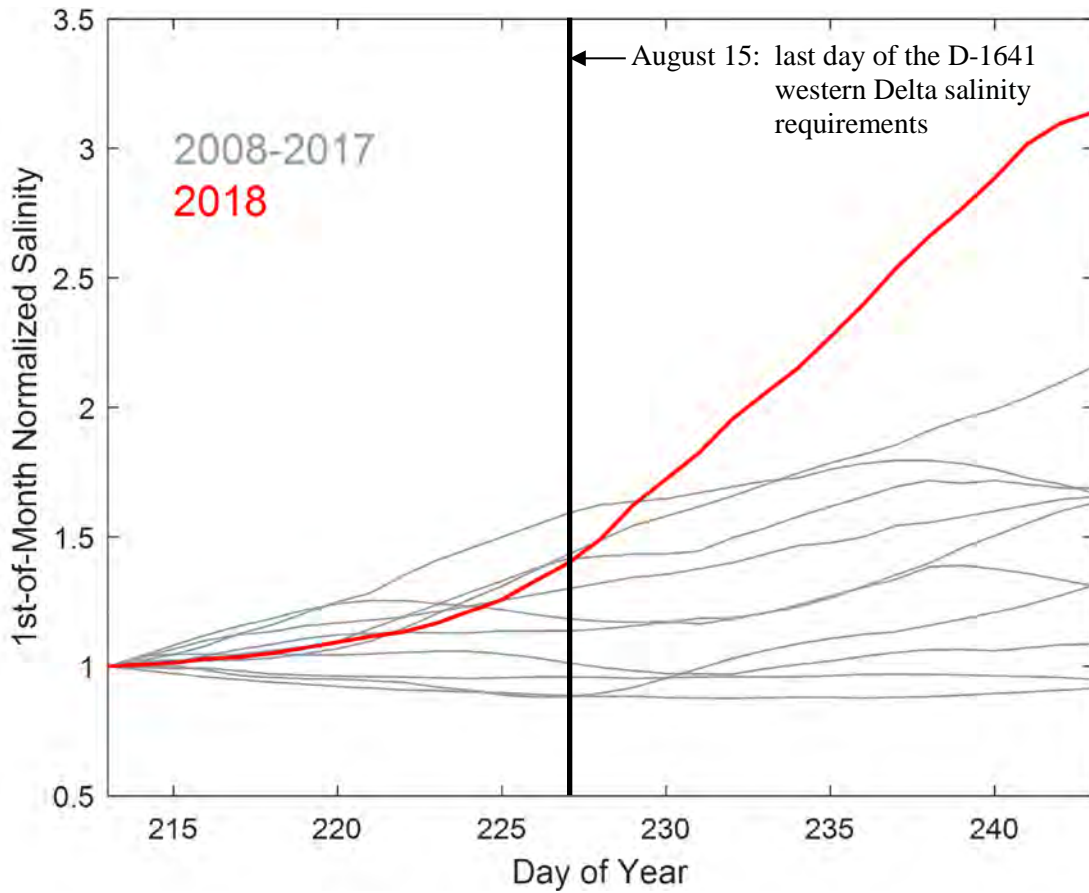
The Proposed Project includes a delta smelt summer-fall habitat action, which includes operation of the Suisun Marsh Salinity Control Gates (SMSCG) for up to 60 days in June through October of below normal, above normal, and wet years. SWP LTO Draft EIR at p. 3-30. Operation of the SMSCG will reduce salinity in Suisun Marsh and increase salinity in the Delta. SMSCG operation was simulated in the analysis for the Draft EIR in July and August of below normal years but was not simulated at all for above normal years or wet years.

In below normal years, the Draft EIR evaluated an additional 60 days of operation of SMSCG in July and August. For this analysis, the salinity requirements in the western Delta were adjusted to account for the effects of the gates and provide additional outflow to prevent exceedances of the D-1641 western Delta salinity requirements, which end on August 15. SWP LTO Draft EIR, Appendix H, Attachment 1-2 at p. H-1-2-7 and Attachment 1-4 at pp. H-1-4-1 to H-1-4-3. However, the SWP LTO Draft EIR also concluded that the most effective period for SMSCG operation is after August 15, when the D-1641 salinity requirements in the western Delta end each year and Suisun Marsh salinity would otherwise rise steadily until preexisting SMSCG operation begins in October. SWP LTO Draft EIR, Appendix D at p. D-14.

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Operation of the SMSCG in August and September of below normal water years would increase salinity above and beyond what is analyzed and disclosed in the SWP Draft EIR. Once D-1641 water quality standards for the western Delta end on August 15, the Delta salinity standards are not likely to limit SWP or CVP operations until later in the fall, and operation of the SMSCG in August and September would increase salinity intrusion during this period.

This effect is evident in DWR's experimental gate operation in August 2018, a below normal water year. The gates were operated from August 2 through September 7, 2018, for a total of 37 days. DWR reported that they provided an additional 37 TAF of Delta outflow during this time to prevent exceeding D-1641 salinity objectives. Despite the additional outflow, chloride concentration at CCWD's Old River intake more than tripled during the gate operation, starting at 41 mg/l Cl on August 2 and increasing to 136 mg/l Cl on September 7. It is not unusual for salinity to increase at CCWD's intakes in August. However, the magnitude of the increase and the rate of increase in 2018 was significantly greater than in prior years. Figure 3-1 illustrates that salinity in August 2018 when the gates were operated more than tripled, a far greater rise than in any other August from 2008 to 2016. Most of the increase in salinity occurred after August 15 (the 227th day of the year) when the D-1641 western Delta water quality standards end. If gate operations had continued further into September, a further increase in salinity could be expected.



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Figure 3-1. Salinity at CCWD’s Old River intake during August, normalized by the salinity on August 1 of each year

Grey lines represent the salinity in water years 2008 through 2017. Red line represents the salinity in 2018 during operation of the SMSCG.

Figure 3-2 illustrates the daily rate of change in chloride concentration at CCWD’s Old River intake. The median rate of change in 2018, 2.9 mg/l/day, is more than double the median rate of change in 2012, 1.2 mg/l/day, which was a similar below normal water year.

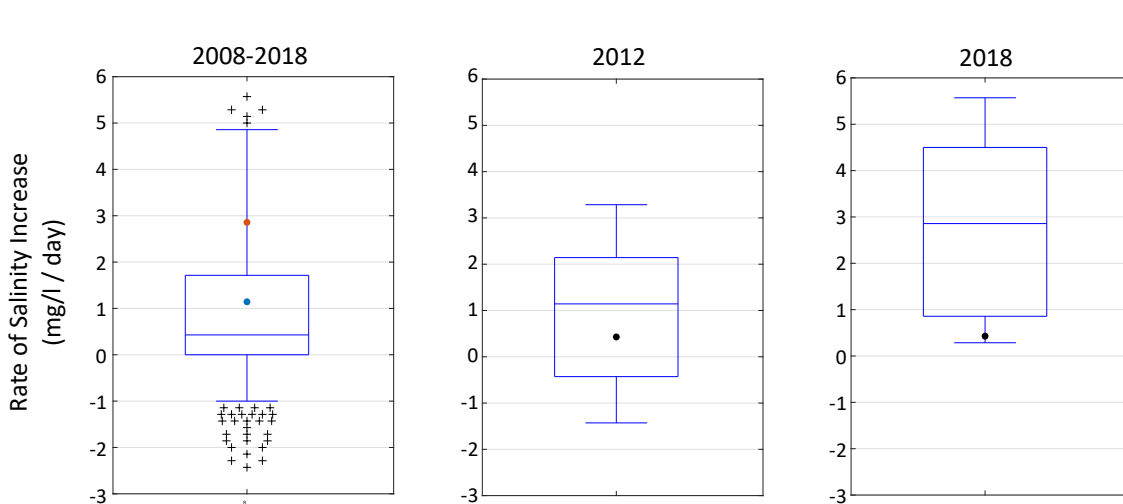


Figure 3-2. Rate of increase of salinity at CCWD’s Old River intake during August
 Each panel is a statistical boxplot of the daily rate of change in chloride concentration at CCWD’s Old River intake for all days in August. Left panel represents 2008 through 2018; center panel is 2012 (below normal water year); right panel is 2018 (below normal water year). Blue dot on the left panel indicates the median for 2012; red dot on the left panel indicates the median for 2018; black dots on center and right panels indicate the median for all years 2008-2018.

The abnormality of salinity changes in August 2018, even though DWR provided additional Delta outflow to avoid exceedance of water quality standards, illustrates the need for the effects of SMSCG to be fully evaluated and disclosed.

As noted above, the Proposed Project includes SMSCG operation for up to 60 days in June through October of below normal, above normal, and wet years. The SWP LTO Draft EIR analysis likely underestimates the increase in salinity in below normal water years by simulating SMSCG operation in July and August, when D-1641 caps the increase in salinity, instead of August and September, when the SWP LTO Draft EIR indicates would be the most effective period for operation of SMSCG. In addition, the SWP LTO Draft EIR fails to analyze the impacts to water quality in above normal and wet water years.

Although water quality modeling has not been performed for the action alternatives, all action alternatives include SMSCG operation for up to 60 days in June through October of certain water year types, and therefore all action alternatives would be likely to increase salinity at CCWD’s intakes during this period.

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3.1.3. Increased salinity may create significant public health impacts

The SWP LTO Draft EIR does not evaluate bromide as a constituent of concern even though bromide reacts with municipal water treatment plant disinfectants to form regulated disinfection byproducts that can cause cancer. The SWP LTO Draft EIR falls short of determining the public health impacts of elevated levels of bromide.

Bromide is of concern in water as a precursor to the formation of disinfection byproducts such as bromate, bromoform and other brominated trihalomethanes (THMs), and haloacetic acids (HAAs), all of which are potentially harmful in municipal water supplies (CALFED 2007 at p. ES-1). Research has shown that these disinfection byproducts cause cancer, kidney failure, thyroid disorders, and negative developmental and reproductive effects in laboratory animals (USEPA 2013a).

The production of carcinogens is directly related to bromide concentration (USEPA 1998), which can be estimated from the EC using the following equation (DWR 2001).

$$\text{Bromide}_{\text{Contra Costa Pumping Plant \#1}} = 0.96 \times (\text{EC}_{\text{Old River at Rock Slough}}) - 114,$$

where Bromide is in $\mu\text{g/l}$ and EC is in $\mu\text{S/cm}$

The long-term average EC in Old River at Rock Slough is $420 \mu\text{S/cm}$ in the Existing Conditions and would increase to $440 \mu\text{S/cm}$ under the Proposed Project. SWP LTO Draft EIR, Appendix C, Attachment 2-7, Table 15-1. This corresponds to a bromide concentration of $289 \mu\text{g/l}$ in the Existing Conditions and $308 \mu\text{g/l}$ in the Proposed Project, using the equation above from DWR 2001. Assuming all other variables remain unchanged, the bromide concentration at the Contra Costa Pumping Plant #1 could cause bromate formation to increase from $3.5 \mu\text{g/L}$ in the Existing Condition to $3.7 \mu\text{g/L}$ in the Proposed Action (USEPA 1998); this corresponds to an increase in cancer risk from 6.9 to 7.4 people per 100,000 people for populations served from the Rock Slough intake (USEPA 2013b). This 7% increase in cancer risk is not evaluated or disclosed in the SWP LTO Draft EIR.

The primary method that CCWD employs to mitigate fluctuations in Delta salinity is the use of Los Vaqueros Reservoir to blend water supplies to appropriate salinity levels before treatment, as discussed in Section 3.2, Water Supply below.

A commitment by DWR that implementation of the SWP LTO would not create new or additional restrictions on CCWD's ability to fill Los Vaqueros Reservoir, in order to ensure that CCWD has opportunities to fill the Reservoir that are at least comparable to current conditions, would facilitate use of Los Vaqueros Reservoir as a source of blending water and thereby reduce the potential public health impacts discussed above.

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3.2. *Water Supply*

3.2.1. *Los Vaqueros Reservoir*

The SWP LTO could adversely affect CCWD's water supplies stored in its Los Vaqueros Reservoir by: (1) reducing the availability of high quality water at CCWD's intakes and (2) reducing the amount of time when CCWD can fill Los Vaqueros Reservoir, even if low-salinity water is available at its intakes. Each of these mechanisms is briefly discussed below, with an estimate of the magnitude of the effect on CCWD's water supply.

(1) **Reduced availability of high quality water at CCWD's intakes.**

The SWP LTO Draft EIR identifies changes in salinity at CCWD's intakes. However, the document does not disclose or evaluate the full nature of this impact. This is because there is no consideration in the Draft EIR of how the changes in water quality would affect CCWD's water supplies by increasing demand on Los Vaqueros Reservoir to compensate for the degradation in Delta water quality caused by the SWP LTO.

CCWD's operations are simulated in CalSim II, the water operations model used for the SWP LTO Draft EIR. CCWD's operations in the model are based upon the salinity at each of CCWD's intakes, which were given as input time series. However, the analysis does not change the salinity between the Existing Conditions and Proposed Project scenarios. In other words, while the SWP ITP Draft EIR analysis simulates CCWD's operations, it does not include the changes in salinity between the Existing Conditions and Proposed Project.

As shown in Table 3-1, the salinity at CCWD's intakes does change between the Existing Conditions and the Proposed Project. CCWD's operations would change in response to the change in salinity due to the Proposed Project. When water in the Delta at CCWD's intakes is salty, CCWD releases high-quality (low-salinity) water from Los Vaqueros Reservoir to blend with the relatively high-salinity water diverted directly from Delta channels. Blending with high-quality stored water allows CCWD to deliver high-quality water to its customers throughout the year; if Delta salinity rises, more blending water from Los Vaqueros is required.

Using results from water quality modeling released by DWR for the SWP ITP Draft EIR, CCWD estimated the change in the frequency and magnitude of water that would need to be released water from Los Vaqueros Reservoir to blend with the relatively high-salinity water diverted directly from Delta channels due to the Proposed Project. The frequency of necessary releases from Los Vaqueros Reservoir would increase by approximately 10%. The average salinity at CCWD's freshest intake during times when CCWD would need to release water from Los Vaqueros Reservoir would increase by 5%, and the increment of salinity above CCWD's water quality goal during this period would increase approximately 24%, indicating the additional magnitude of water that would need to be released from Los Vaqueros.

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(2) **Reduced ability to fill Los Vaqueros Reservoir when low-salinity water is available.**

The SWP LTO project would also reduce CCWD's ability to fill Los Vaqueros Reservoir through the use of an OMR Index that includes CCWD's diversions and relaxations to SWP operating criteria (as discussed in Section 2) that would increase the amount of time when OMR limits CVP and SWP exports. In recent years, Reclamation and DWR have asked CCWD to curtail diversions under its own water right permit to fill Los Vaqueros Reservoir during times when CVP and SWP exports are limited by regulation of OMR. Increasing the amount of time that OMR limits CVP and SWP exports will impact CCWD's ability to fill Los Vaqueros Reservoir.

Using results from water operations modeling released by DWR for the SWP LTO Draft EIR, CCWD estimated that the Proposed Project would increase the number of days that OMR would limit CVP and SWP exports by approximately 28 days per year, which corresponds to an increase of 27% of the time that OMR limits CVP and SWP exports.

CCWD would alter its operations in response to both the reduced availability of high quality water at its intakes and the reduced ability to fill Los Vaqueros Reservoir, in an effort to continue to deliver high quality water to its customers. The subsequent impact to CCWD's water supply is not disclosed in the SWP LTO Draft EIR, because the modeling is based upon an assumption that water quality at CCWD's intakes does not change and assumes that CCWD's ability to fill Los Vaqueros Reservoir is restricted by the CCWD-specific BOs and ITP but not restricted by OMR limits on CVP and SWP exports (as described in Section 1.1 above).

With the increase to salinity identified in the SWP LTO Draft EIR and the potential reduction in CCWD's ability to fill its Los Vaqueros Reservoir, storage in Los Vaqueros Reservoir would be reduced, leaving less water available to mitigate increases in Delta salinity and less water available for emergency supplies.

A revision to the project description to include a firm and clear commitment by DWR that implementation of the SWP LTO would not create new or additional restrictions on CCWD's ability to fill Los Vaqueros Reservoir would be consistent with the modeling and analysis of environmental effects in the Draft EIR and would reduce many of the impacts discussed in these comments.

3.2.2. CVP Water Supply

The modeling used to evaluate alternatives in the SWP LTO Draft EIR assumes no changes to CCWD's water quality or opportunities to fill Los Vaqueros Reservoir. However, if DWR attempts to curtail CCWD's use of its water right, the SWP LTO Alternatives could have additional effects that have not been disclosed in the SWP LTO Draft EIR, including potential impacts to CVP water supply.

Specifically, if CCWD's diversions under its own water right would be reduced, CCWD would need to increase its CVP deliveries to compensate and continue to meet customer demand. The SWP LTO Draft EIR CalSim II modeling indicates that the additional CVP deliveries would be available under CCWD's CVP allocation. However, any increases to

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CCWD's CVP deliveries during balanced conditions would alter CVP operations, either increasing releases from upstream storage or reducing CVP exports. This potential impact to CVP storage or CVP South of Delta deliveries is not evaluated in the SWP LTO Draft EIR.

A revision to the project description to include a firm and clear commitment by DWR that implementation of the SWP LTO would not create new or additional restrictions on CCWD's ability to fill Los Vaqueros Reservoir would be consistent with the modeling and analysis of environmental effects in the Draft EIR and would reduce this impact on CVP water supply.

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3.3. Operational Costs

Changes in water quality and use of Los Vaqueros Reservoir under the SWP LTO Proposed Project and alternatives could have an economic impact on CCWD and its customers, through increased water and power costs.

3.3.1. Water cost

CCWD diverts water from the Delta under its CVP contract, under its own water right permits and license issued by the SWRCB, and under East Contra Costa Irrigation District's pre-1914 water right. If the SWP LTO project creates new or additional restrictions on CCWD's ability to fill Los Vaqueros Reservoir, the amount of water that CCWD would be able to divert under its own water right permits and license would be reduced and CCWD would need to purchase more CVP water supply. DWR's modeling in the SWP LTO Draft EIR indicates that CCWD's CVP allocation would be sufficient to support this shift in water supplies. However, the shift would create an economic impact on CCWD and its customers, since CCWD's CVP water cost is significantly higher than the cost of water diverted under CCWD's own water rights.

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3.3.2. Power cost

3.3.2.1. Diversion location

The cost of power to pump water from CCWD's intakes to its service area varies among the intakes, and the changes in salinity under the alternatives will shift some of CCWD's diversions from its less expensive intakes to its most expensive intake.

3.3.2.2. Use of Los Vaqueros Reservoir

Due to the changes in salinity under the alternatives, Los Vaqueros Reservoir is expected to release more water to blend with the saltier Delta diversions. CCWD will need to refill Los Vaqueros Reservoir to compensate for the increased blending releases. This additional refill

is estimated to cost \$59-77 per acre-foot⁸, depending on the season. Furthermore, if DWR restricts CCWD from using its own water right when OMR limits exports, CCWD would have less opportunity to fill Los Vaqueros Reservoir in the spring, which would shift a larger portion of CCWD's filling operations to the summer when power costs are greater.

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(Cont.)

⁸ Based on 2019 PG&E rates and estimated filling rate with all pumps in service and Los Vaqueros operating elevation of 500ft.

4. Potential Impacts on Aquatic Resources

The modeling used to evaluate alternatives in the SWP LTO Draft EIR assumes that CCWD operations will not be restricted beyond the restrictions of the CCWD-specific BOs and ITP. But if DWR attempts to prevent CCWD from exercising its water right to fill Los Vaqueros Reservoir, beyond the restrictions in the CCWD-specific BOs and ITP that fully mitigate the impacts on species from CCWD's operations, the SWP LTO Alternatives could have additional effects that have not been disclosed in the SWP LTO Draft EIR.

CCWD diversions in the Old and Middle River corridor have minimal impacts on listed species. The positive barrier fish screens, which are now installed at all of CCWD's intakes, have been proven to be highly efficient at preventing entrainment. As shown in Table 4-1, no juvenile or adult listed fish species have been collected behind the fish screens during 20 years of operation and monitoring. Only 16 larval fish have been collected, averaging less than one larval fish per year of operation.

Table 4-1. Total fish collected behind the fish screens at the Rock Slough Intake, Old River Intake, and Middle River Intake for 1999-2018.

During 20 years of monitoring, no juvenile or adult listed species have been observed behind the positive barrier fish screens.

Species	Total Number Collected 1999-2018	Number Collected by Year		
		Rock Slough Intake 2011-2018	Old River Intake 1999-2018	Middle River Intake 2010-2018
Winter-run Chinook salmon	0	All Years – 0	All Years – 0	All Years – 0
Spring-run Chinook salmon	0	All Years – 0	All Years – 0	All Years – 0
Fall-run Chinook salmon	0	All Years – 0	All Years – 0	All Years – 0
Central Valley steelhead	0	All Years – 0	All Years – 0	All Years – 0
Green sturgeon	0	All Years – 0	All Years – 0	All Years – 0
Delta smelt	3 larvae	2012 – 1 (<9 mm)	2000 – 1 (18 mm) 2012 – 1 (<11 mm)	All Years – 0
Longfin smelt	13 larvae	All Years – 0	2002 – 1 (22 mm) 2012 – 4 (<13 mm) 2013 – 7 (<9 mm) 2015 – 1 (< 8 mm)	All Years – 0

For comparison, Table 4-2 summarizes the entrainment at CCWD's intakes and the entrainment of fish as reported through the salvage operations at the CVP and SWP export facilities. The entrainment numbers in Table 4-2 do not include the loss of fish due to predation within and near the facilities. There is no evidence of increased predation near

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CCWD's intake facilities, but the predation in Clifton Court Forebay (CCFB) and in front of the CVP trash racks and primary louvers has been estimated as shown in Table 4-3.

Table 4-2. Entrainment of Delta fish species at CCWD's Old and Middle River intake facilities and the CVP and SWP export facilities for 1998-2018

Since only fish greater than 20 mm in length are counted at the CVP and SWP export facilities, the entrainment numbers are limited to fish greater than 20mm. The entrainment numbers do not take into account prescreen loss or louver efficiency at the CVP and SWP export facilities.

Species	CCWD's Old and Middle River facilities	CVP Jones facility	SWP Banks and CCFB facilities
Delta smelt	0	133,959	301,965
Longfin smelt	1	55,188	65,604
Chinook salmon	0	619,034	251,852
Steelhead	0	40,739	42,683
Total	1	848,920	662,104

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(Cont.)

Table 4-3. Predation mortality at CCWD's Old and Middle River intake facilities and the CVP and SWP export facilities

Species	CCWD's Old and Middle River facilities	CVP Jones facility	SWP Banks and CCFB facilities
Delta smelt	No evidence of predation	unknown	95%
Chinook salmon	No evidence of predation	15%	75%

If DWR attempts to limit CCWD's use of its water right to fill Los Vaqueros Reservoir, beyond the restrictions in the CCWD-specific BOs and ITP that fully mitigate for CCWD's effects, CCWD's diversions could be reduced up to 200 cfs with a corresponding increase of 200 cfs additional exports at the SWP Banks pumping plant. Reducing diversions at facilities that have minimal impacts in order to increase diversions at facilities that impact a significant fraction of the fish that encounter the facility would constitute a significant impact on Delta fish that is not evaluated or disclosed in the SWP LTO Draft EIR.

To eliminate or at least substantially alleviate the CEQA issues described in these comments, DWR should make a firm and clear commitment, as a component of the SWP LTO and the alternatives, that implementation of the project would not create new or additional restrictions on CCWD’s ability to fill Los Vaqueros Reservoir beyond the requirements of the CCWD-specific BOs and ITP that already apply, thereby ensuring that CCWD would continue to have opportunities to fill the Reservoir that are at least comparable to existing conditions. Such a commitment would be consistent with the modeling and analysis of environmental effects in the Draft EIR. Such a commitment by DWR also would be consistent with the commitment made by Reclamation as part of its federal action for the ROC on LTO.

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II.4.2 LETTER L-CCWD-1 – CONTRA COSTA WATER DISTRICT, DEANNA SERENO, SENIOR POLICY ADVISOR, DATED JANUARY 6, 2020

II.4.2.1 RESPONSE TO COMMENT L-CCWD-1-1

DWR will continue work with CCWD and Reclamation to ensure that SWP operations permitted under the CESA ITP do not result in restrictions to CCWD beyond those already created through existing regulatory requirements for Los Vaqueros Reservoir. This includes allowing CCWD to continue to fill Los Vaqueros in a manner consistent with water rights priorities.

II.4.2.2 RESPONSE TO COMMENT L-CCWD-1-2

Please see Response to Comment L-CCWD-1-1 above.

II.4.2.3 RESPONSE TO COMMENT L-CCWD-1-3

This comment provides background information to support subsequent comments within the letter. No direct response is required to this comment.

II.4.2.4 RESPONSE TO COMMENT L-CCWD-1-4

As stated in DEIR Chapter 3.1.1, “Project Purposed and Objectives,” DWR intends to continue long-term operation of the SWP consistent with applicable laws, contractual obligations, and agreements. DWR would continue to coordinate operations with local water districts and agencies in a similar manner to existing conditions. See also Response to Comment L-CCWD-1-1 above.

II.4.2.5 RESPONSE TO COMMENT L-CCWD-1-5

Please see Responses to Comments L-CCWD-1-8 through L-CCWD-1-10.

II.4.2.6 RESPONSE TO COMMENT L-CCWD-1-6

Please see Responses to Comments L-CCWD-1-1 and L-CCWD-1-4.

II.4.2.7 RESPONSE TO COMMENT L-CCWD-1-7

The SWP and CVP are responsible for meeting the OMR criteria described in the document, so long as CCWD operations continue to comply with its existing biological opinions and permits. Please see Response to Comment L-CCWD-1-1 for more details.

The CalSim II model accounts for CCWD operations in its OMR index calculations; however, CCWD operations are not adjusted to meet flow requirements. Instead, SWP pumping accommodates CCWD operations to meet OMR index requirements. See Responses to Comments L-CCWD-1-8 and L-CCWD-1-9 for more details.

II.4.2.8 RESPONSE TO COMMENT L-CCWD-1-8

DEIR Chapter 3.3.1, “OMR Management,” states that the, “OMR flow index allows for shorter-term operational planning and real-time adjustments.” CCWD diversions are an input to OMR index. However, neither the Proposed Project description, nor modeling of the Proposed Project, assume CCWD operations would change to meet updated OMR index requirements. The 2019 LTO Biological Opinion require the CVP and SWP to operate to the OMR index.

As noted in DEIR Chapter 4.2, “Hydrology,” modeling results indicate that OMR criteria are generally less restrictive under the Proposed Project. The percentage of time that the CVP and SWP exports would be limited by OMR flow regulations is not anticipated to increase. CCWD would continue to be governed by its existing biological opinions and permits, without new or additional restrictions or limitation as a result of the implementation of the project. Please see Response to Comment L-CCWD-1-18 for more details regarding frequency of OMR index limitations to CVP and SWP exports.

II.4.2.9 RESPONSE TO COMMENT L-CCWD-1-9

Please see Master Response 20, “Best Available Science,” for a general discussion of requirements to develop an adequate range of alternatives considered in an EIR. The analysis of alternatives provided in DEIR Chapter 5, “Alternatives to the Proposed Project,” is adequate because it provides a reasonable range of alternatives to the Proposed Project with a level of detail that allows meaningful evaluation, analysis, and comparison with the Proposed Project.

A discussion of the model simulation used to compare the Proposed Project and the various alternatives is provided in DEIR Appendix E, Section E.3.3.3, “Model Simulation to Compare Scenarios.” The commenter’s request to consider an alternative calculation for OMR flow that provides fish protection equivalent to the measured OMR flow but does not include CCWD’s diversions is not required to meet CEQA requirements for a reasonable range of alternatives.

An OMR flow index allows for shorter-term operational planning and real-time adjustments. Please see DEIR Chapter 3.3.1, “OMR Management,” for more details.

Please see Response to Comment L-CCWD-1-1 regarding potential impacts to CCWD operations and their ability to exercise existing water rights.

II.4.2.10 RESPONSE TO COMMENT L-CCWD-1-10

The Proposed Project, Alternative 3, and Alternative 4 would not operate to the SJR IE criteria described in the 2009 NMFS Biological Opinion. Instead, these alternatives would operate to OMR criteria as calculated by the OMR index described in Chapter 3.3, “Description of the Proposed Project.” Changes to operation criteria included in the Proposed Project and Refined Alternative 2b, DWR’s preferred alternative, would not increase the percentage of time CVP and SWP exports would be limited by OMR index regulations, as noted in Chapter 4.2, “Hydrology.” Please see Response to Comment L-CCWD-1-18 for more details regarding frequency of OMR index limitations to CVP and SWP exports.

Please see Response to Comment L-CCWD-1-1 regarding potential impacts to CCWD operations and their ability to exercise existing water rights, obligations, and agreements.

II.4.2.11 RESPONSE TO COMMENT L-CCWD-1-11

As discussed in Master Response 3, “The CEQA Process,” DWR has made refinements to the description of Alternative 2b following publication of the DEIR and has undertaken additional analysis of the Refined Alternative 2b. The supplemental technical studies and resulting analyses are described in FEIR Part III, Chapter 5.3, “Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP.”

Please see Response to Comment L-CCWD-1-1 regarding potential impacts to CCWD operations and their ability to exercise existing water rights.

II.4.2.12 RESPONSE TO COMMENT L-CCWD-1-12

Please see Responses to Comments L-CCWD-1-6 through L-CCWD-1-11. The proposed OMR operations criteria would not reduce CCWD’s operational flexibility. As previously stated, the proposed actions for long-term operation of the State Water Project would not affect CCWD operations and no significant impacts to water supply, water quality, nor aquatic resources were identified based on the analyses presented in the DEIR and in the FEIR evaluation of Refined Alternative 2b. The Proposed Project and alternatives would not cause or create restrictions that would negatively affect CCWD’s operations. CCWD would need to continue to operate in compliance with its existing permits. Please see FEIR Part III, Chapter 5.3, “Refined Alternative 2b,” for the descriptions of the proposed OMR Management and Adaptive Management measures.

II.4.2.13 RESPONSE TO COMMENT L-CCWD-1-13

As stated in DEIR Chapter 3.3.1, “Project Purpose and Objectives,” DWR’s objective is to continue the long-term operation of the SWP consistent with applicable laws, contractual obligations, and agreements. DWR would continue to coordinate operations with local water districts and agencies in a similar manner to existing conditions. DWR will continue work with CCWD and Reclamation to ensure that SWP operations permitted under the CESA ITP do not result in restrictions to CCWD beyond those already created through existing regulatory requirements for Los Vaqueros Reservoir. This includes allowing CCWD to continue to fill Los Vaqueros in a manner consistent with water rights priorities.

II.4.2.14 RESPONSE TO COMMENT L-CCWD-1-14

Modeled salinity changes at the CCWD intakes are a result of the proposed Delta Smelt Summer-Fall Habitat Action, described in DEIR Chapter 3.3, “Description of the Proposed Project.” Although salinity increases are modeled to occur at CCWD’s Delta intakes, these increases do not exceed the levels allowed by D-1641 Municipal and Industrial regulations for beneficial uses. This is further discussed in DEIR Chapter 4.3, “Surface Water Quality.”

Please review exceedance plots in DEIR Appendix C, Attachment 2-7. Although long-term average monthly salinity concentrations increase in late-fall and winter months, these increases only occur in

years following wet or above normal water years. It is expected that salinity concentrations would remain relatively lower during late-fall or winter months following a wet or above normal water year. Therefore, the modeled salinity increases would likely remain below the CCWD thresholds for diversion.

Delta outflow is greatest in January through March. These outflows repel ocean salinity effectively, as shown in Figure 6-1 in DEIR Appendix C Attachment 2-7, long-term average monthly salinity at Sacramento River at Collinsville. In Spring months, Delta outflow decreases, allowing greater ocean salinity intrusion. Therefore, central Delta salinity is likely to be related to agricultural runoff and ocean salinity during the winter and spring, respectively. As ocean-based salinity contains less chloride than agricultural runoff, decreases in salinity at CCWD intakes during the spring would provide greater value to CCWD than salinity decreases that may occur in the winter.

Furthermore, as noted in responses to comments L-CCWD-1-6 through L-CCWD-1-11, long-term operations of the SWP will not impact CCWD's ability to fill Los Vaqueros Reservoir.

II.4.2.15 RESPONSE TO COMMENT L-CCWD-1-15

As noted in DEIR Chapter 3.3, "Description of the Proposed Project," SMSCG operations "will be more fully defined and developed through the structured decision-making or other review process... The process will be completed prior to implementation and may be improved in subsequent years as additional information is synthesized and reviewed."

DEIR Appendix D, "SCHISM Model Results," indicates that SMSCG operation in August and September, with compensating flow, would yield the greatest habitat area benefit. If operation of the SMSCG were to occur in August and September, as mentioned in Appendix D, compensating flow would be required to counteract salinity intrusion. This compensating flow would occur regardless of D-1641 regulations. Therefore, salinity increases in August and September in below normal years are not expected.

Compared to other months of August that occurred between 2008 through 2019, Old River salinity increased most rapidly in August 2018. However, salinity concentration at the beginning of this period was less than average and at the end of August 2018 slightly greater than average. There are several years in which the calculated end of August salinity is greater than what was calculated for the end of August salinity in 2018. Although the rate of salinity increase in August 2018 was greater than any other year since 2008, this salinity concentration was not outside the range of existing conditions. Without additional compensating Delta outflow, additional SMSCG operations would result in increased salinity.

If SMSCG operations occurred in above normal or wet years, the structured decision-making process would prevent water quality impacts by increasing Delta outflow. Delta outflow could be increased by either increasing reservoir releases or decreasing exports.

II.4.2.16 RESPONSE TO COMMENT L-CCWD-1-16

Bromide concentration is linearly related to EC and chloride concentrations. Therefore, bromide concentrations are indirectly managed through D-1641 M&I chloride standards. Furthermore, bromide is not a 303(d) listed constituent in the Delta.

As noted in response to Comment L-CCWD-1-1, long-term operations of the SWP will not impact CCWD's ability to fill Los Vaqueros Reservoir compared to existing conditions.

II.4.2.17 RESPONSE TO COMMENT L-CCWD-1-17

Please see responses to Comment L-CCWD-1-1, L-CCWD-1-7, L-CCWD-1-14, and L-CCWD-1-16 for details regarding availability of higher quality water at CCWD intakes.

Water quality boundary conditions at CCWD intakes are identical in the CalSim II modeling of the Proposed Project and existing conditions. If CalSim II considered the Proposed Project's salinity effects at CCWD intakes, modeled CCWD operations would vary from results presented in the DEIR. However, updated results would be similar to results published in the DEIR. Therefore, conclusions in the DEIR remain valid.

A modeled salinity increases of 5% indicates Proposed Project salinity would be similar to Existing Conditions based on the limitations and assumptions of the modeling. Therefore, CCWD operations at Los Vaqueros would also remain similar to existing conditions.

II.4.2.18 RESPONSE TO COMMENT L-CCWD-1-18

As noted in response to Comment L-CCWD-1-8, use of OMR index would not impact CCWD's ability to fill Los Vaqueros Reservoir as compared to Existing Conditions.

OMR limits would not substantially change under the Proposed Project or Refined Alternative 2b. Therefore, CCWD's ability to fill Los Vaqueros Reservoir will not be impacted. OMR controls exports in 258 months under existing conditions and 263 months under Proposed Project operations during the 82-year planning time period. This represents a 2 % increase in OMR controls. Therefore, OMR controls would remain similar under the Proposed Project or the Refined Alternative 2b compared to Existing Conditions.

As discussed in response to Comments L-CCWD-1-1 and L-CCWD-1-14, OMR criteria are not expected to impact CCWD diversions and there would be no impact to CCWD's water supply. Please see FEIR Part III, DEIR Chapter 5.3, "Refined Alternative 2b," for the specific OMR modifications proposed by DWR.

II.4.2.19 RESPONSE TO COMMENT L-CCWD-1-19

As noted in response to Comment L-CCWD-1-1, long-term operations of the SWP will not impact CCWD's ability to fill Los Vaqueros Reservoir compared to existing conditions. Please see FEIR Part III Chapter 5.3, "Refined Alternative 2b," for the specific OMR modifications proposed by DWR.

Because CCWD's diversions will not be reduced, CCWD would not need to increase its CVP deliveries. Therefore, modeled CVP operations do not need to be altered.

II.4.2.20 RESPONSE TO COMMENT L-CCWD-1-20

Please see Response to Comment L-CCWD-1-1 above. DWR will continue to coordinate with CCWD regarding their concerns related to water and power costs outside of the CEQA process. CEQA does not require analysis of economic effects in an EIR.

II.4.2.21 RESPONSE TO COMMENT L-CCWD-1-21

DWR acknowledges differences in entrainment rates and predation potential between CCWD diversion facilities in the Old and Middle River corridor and the SWP facilities, including the Harvey O. Banks pumping plant and Clifton Court Forebay.

As stated in DEIR Section 3.3.1, "Project Objectives," DWR intends to continue the long-term operation of the SWP consistent with applicable laws, contractual obligations, and agreements. DWR would continue to coordinate operations with local water districts and agencies in a similar manner to existing conditions. Therefore, DWR would not attempt to prevent CCWD from exercising its water right to fill Los Vaqueros Reservoir, beyond the restrictions included in the CCWD-specific Biological Opinions and Incidental Take Permit.

II.4.2.22 RESPONSE TO COMMENT L-CCWD-1-22

Please see Response to Comment L-CCWD-1-1 and L-CCWD-1-20.

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January 6, 2020

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Re: DEIR for Long-term Operation of the California State Water Project.

THE DEIR ANALYSIS FOR THE PROPOSED PROJECT FOR LONG-TERM OPERATIONAL CHANGES FOR THE SWP IS PREMATURE AND LACKS NEPA ANALYSIS WHICH SHOULD INCLUDE ANALYSIS OF THE IMPACTS FROM COORDINATED OPERATION WITH THE CVP

The uncertainty associated with actions of the USBR, the Westlands Water District contract for a permanent supply, the lack of clarity regarding a San Joaquin Valley drainage solution, modification of the Fremont weir, climate change, update of the SWRCB water quality standards, groundwater sustainability requirements, and the Governor's predetermination to construct a single tunnel all make more difficult a proper analysis of the longer term impacts and in particular the cumulative impacts. The DEIR fails to provide a good faith attempt to achieve the required analysis.

Experimental temporary changes in OMR restraints and other fish protection actions consistent with recommendations from independent scientists merit consideration. The proposed increase in exports from the Delta and decreases in Delta and San Joaquin River water quality and flow in Above Normal, Below Normal, Dry and Critical years remain unjustifiable. In the wettest years flood flows surplus to the flushing flow needs of the Bay/Delta, at least for a short-term, should be available for export. The long-term needs in the areas of origin including the need to keep groundwater basins sustainable will likely require that SWP and CVP exports be substantially reduced below existing levels. The failure of the projects to continue the planned water development in the North Coast to meet the then planned Delta export deliveries coupled with the elimination of project restraints on delivery of project water for new land development and new permanent demand have made the possibility of balancing water supply and demand well beyond the reach of any proposed long-term plans. Reliance on exports from the Delta must as required by law be reduced, not increased. The failure of the projects to properly design, operate and maintain the facilities already constructed adds to the imbalance.

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NEPA requires full disclosure of the potential effects of major actions proposed by federal agencies and accompanying alternatives, impacts and possible mitigation. NEPA also requires that environmental concerns and impacts be considered during planning and decision making so that steps may be more easily taken to correct or mitigate the impacts of an action. Compliance with NEPA should result in more informed decisions and the opportunity to avoid or mitigate for potential environmental effects before an action is implemented. The NEPA process is intended to identify and evaluate alternatives in an impartial manner. (See Reclamation's NEPA Handbook dated February 2012.)

CEQA requires adequacy, completeness and a good faith effort at full disclosure. The EIR is to inform the decision makers and the public of the environmental impact of proposed actions. (See CEQA Guidelines sections 15002 and 15003.) The purposes include identifying ways to avoid or significantly reduce environmental damage and preventing significant, avoidable damage to the environment by requiring changes in projects through the use of feasible alternatives or mitigation measures.

The DEIR appears to incorporate the practice of the past to define the project purpose to include inappropriate increases in exports from the Delta and numerous uncertainties rendering the project description inadequate.

Section "1.3 Summary of Proposed Project" provides:

"Implementation of these elements is intended to continue operation of the SWP and deliver up to the full contracted water amounts while minimizing and fully mitigating the take of listed species, in compliance with CESA requirements."

Section "3.3.1 OMR Management" provides:

"DWR, in coordination with Reclamation, proposes to operate the SWP in a manner that maximizes exports while minimizing direct and indirect impacts on state and federally listed fish species."

The export of water saved through modification of the OMR requirements is inconsistent with the objective to minimize direct and indirect impacts on state and federally listed fish species which require adequate Delta water quality and increased outflow. Additionally maximizing exports runs contrary to the need for water to meet D 1641 requirements as well as the requirements of the Delta Protection Act (Water Code 12200 et seq.), the Delta Reform Act, and the Watershed Protection Act (Water Code 11460 et seq.)

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THE PROPOSED PROJECT IGNORES THE LEGAL MANDATES REQUIRING THAT EXPORTS BE LIMITED TO WATER WHICH IS TRULY SURPLUS TO THE PRESENT AND FUTURE NEEDS OF THE DELTA AND OTHER AREAS OF ORIGIN INCLUDING FISH AND WILDLIFE NEEDS

The promises and law restricting exports from the Delta are reflected in the representations and promises made at the inception of both the CVP and SWP.

A summary of the promises made on behalf of the United States to those in the areas of origin is contained in the 84th Congress, 2D Session House Document No. 416, Part One Authorizing Documents 1956 at Pages 797-799 as follows:

"My Dear Mr. Engle: In response to your request to Mr. Carr, we have assembled excerpts from various statements by Bureau and Department officials relating to the subject of diversion of water from the Sacramento Valley to the San Joaquin Valley through the operation of the Central Valley Project.

A factual review of available water supplies over a period of more than 40 years of record and the estimates of future water requirements made by State and Federal agencies makes it clear that there is no reason for concern about the problem at this time.

For your convenience, I have summarized policy statements that have been made by Bureau of Reclamation and Department of the Interior officials. These excerpts are in the following paragraphs:

On February 20, 1942, in announcing the capacity for the Delta-Mendota Canal, Commissioner John C. Page said, as a part of his Washington D.C., press release:

"The capacity of 4,600 cubic feet per second was approved, with the understanding that the quantity in excess of basic requirements mainly for replacement at Mendota Pool, will not be used to serve new lands in the San Joaquin Valley if the water is necessary for development in the Sacramento Valley below Shasta Dam and in the counties of origin of such waters."

On July 18, 1944, Regional Director Charles E. Carey wrote a letter to Mr. Harry Barnes, ' chairman of a committee of the Irrigation Districts Association of California. In that letter, speaking on the Bureau's recognition and respect for State laws, he said:

"They [Bureau officials] are proud of the historic fact that the reclamation program includes as one of its basic tenets that the irrigation development in the West by the Federal Government under the Federal reclamation laws is carried forward in conformity with State water laws."

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On February 17, 1945, a more direct answer was made to the question of diversion of water in a letter by Acting Regional Director R. C. Calland, of the Bureau, to the Joint Committee on Rivers and Flood Control of the California State Legislature. The committee had asked the question, "What is your policy in connection with the amount of water that can be diverted from one watershed to another in proposed diversions?" In stating the Bureau's policy, Mr. Calland quoted section 11460 of the State water code, which is sometimes referred to as the county of origin act, and then he said:

"As viewed by the Bureau, it is the intent of the statute that no water shall be diverted from any watershed which is or will be needed for beneficial uses within that watershed. The Bureau of Reclamation, in its studies for water resources development in the Central Valley, consistently has given full recognition to the policy expressed in this statute by the legislature and the people. The Bureau has attempted to estimate in these studies, and will continue to do so in future studies, what the present and future needs of each watershed will be. The Bureau will not divert from any watershed any water which is needed to satisfy the existing or potential needs within that watershed. For example, no water will be diverted which will be needed for the full development of all of the irrigable lands within the watershed, nor would there be water needed for municipal and industrial purposes or future maintenance of fish and wildlife resources."

On February 12, 1948, Acting Commissioner Wesley R. Nelson sent a letter to Representative Clarence F. Lea, in which he said:

"You asked whether section 10505 of the California Water Code, also sometimes referred to as the county of origin law, would be applicable to the Department of the Interior, Bureau of Reclamation. The answer to this question is: No, except insofar as the Bureau of Reclamation has taken or may take assignments of applications which have been filed for the appropriation of water under the California Statutes of 1927, chapter 286, in which assignments reservations have been made in favor of the county of origin.

The policy of the Department of the Interior, Bureau of Reclamation, is evidenced in its proposed report on a Comprehensive Plan for Water Resources Development Central Valley Basin, Calif., wherein the Department of the Interior takes the position that "In addition to respecting all existing water rights, the Bureau has complied with California's 'county of origin' legislation, which requires that water shall be reserved for the presently unirrigated lands of the areas in which the water originates, to the end that only surplus water will be exported elsewhere."

On March 1, 1948, Regional Director Richard L. Boke wrote to Mr. A. L. Burkholder, secretary of the Live Oak Subordinate Grange No. 494, Live Oak, Calif., on the same subject, and said:

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"I can agree fully with the statement in your letter that it would be grossly unjust to 'take water from the watersheds of one region to supply another region until all present and all possible future needs of the first region have been fully determined and completely and adequately provided for.' That is established Bureau of Reclamation policy and, I believe, it is consistent with the water laws of the State of California under which we must operate."

On May 17, 1948, Assistant Secretary of the Interior William E. Warne wrote a letter to Representative Lea on the same subject, in which he said:

"The excess water made available by Shasta Reservoir would go first to such Sacramento Valley lands as now have no rights to water."

Assistant Secretary Warne goes on to say, in the same letter:

"As you know, the Sacramento Valley water rights are protected by: (1) Reclamation law which recognizes State water law and rights thereunder; (2) the State's counties of origin act, which is recognized by the Bureau in principle; and (3) the fact that Bureau filings on water are subject to State approval. I can assure you that the Bureau will determine the amounts of water required in the Sacramento Valley drainage basin to the best of its ability so that only surplus waters would be exported to the San Joaquin. We are proceeding toward a determination and settlement of Sacramento Valley waters which will fully protect the rights of present users; we are determining the water needs of the Sacramento Valley; and it will be the Bureau's policy to export from that valley only such waters as are in excess of its needs."

On October 12, 1948, Secretary of the Interior Krug substantiated former statements of policy in a speech given at Oroville, Calif. Secretary Krug said, with respect to diversion of water:

"Let me state, clearly and finally, the Interior Department is fully and completely committed to the policy that no water which is needed in the Sacramento Valley will be sent out of it."

He added:

"There is no intent on the part of the Bureau of Reclamation ever to divert from the Sacramento Valley a single acre-foot of water which might be used in the valley now or later."

The California Water Resources Development Bond Act provides in Water Code Section 12931 that the Sacramento-San Joaquin Delta shall be deemed to be within the watershed of the Sacramento River.

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Exhibit 16 is a copy of the 1960 ballot argument in favor of the California Water Resources Development Bond Act which spawned the State Water Project (SWP). Of particular note are the following representations:

"No area will be deprived of water to meet the needs of another nor will any area be asked to pay for water delivered to another."

"Under this Act the water rights of Northern California will remain securely protected."

"A much needed drainage system and water supply will be provided in the San Joaquin Valley."

The Delta Reform Act Water Code section 85031(a) provides:

"(a) This division does not diminish, impair, or otherwise affect in any manner whatsoever any area of origin, watershed of origin, county of origin, or any other water rights protections, including, but not limited to, rights to water appropriated prior to December 19, 1914, provided under the law. This division does not limit or otherwise affect the application of Article 1.7 (commencing with Section 1215) of Chapter 1 of Part 2 of Division 2, Sections 10505, 10505.5, 11128, 11460, 11461, 11462, and 11463, and Sections 12200 to 12220, inclusive." (Emphasis added.)

Water Code Sections 11460 et seq. and 12200 et seq. are particularly specific in defining the limitation on the export of water from the Delta by the SWP and CVP. Water Code Sections 11460 et seq. were added by Statutes 1943, c. 370, p. 1896 around the time of commencement of the CVP. Water Code Section 12200 et seq. was added by Statutes 1959, c. 1766, p. 1766 around the time of commencement of the State Water Project.

The limitation of the projects to the export of only surplus water and the obligation of the projects to provide salinity control and assure an adequate water supply sufficient to maintain and expand agriculture, industry, urban, and recreational development in the Delta is clear.

Water Code "12200 through 12205 are particularly specific as to the requirements to provide salinity control for the Delta and provide an adequate water supply in the Delta sufficient to maintain and expand agriculture, industry, urban and recreational development.

For ease of reference, the following Water Code sections are quoted with emphasis added:

12200. Legislative findings and declaration

"The Legislature hereby finds that the water problems of the Sacramento-San Joaquin Delta are unique within the State; the Sacramento and San Joaquin Rivers join at the Sacramento-San Joaquin Delta to discharge their fresh water flows into



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Suisun, San Pablo and San Francisco bays and thence into the Pacific Ocean; the merging of fresh water with saline bay waters and drainage waters and the withdrawal of fresh water for beneficial uses creates an acute problem of salinity intrusion into the vast network of channels and sloughs of the Delta; the State Water Resources Development system has as one of its objectives the transfer of waters from water-surplus areas in the Sacramento Valley and the north coastal area to water-deficient areas to the south and west of the Sacramento-San Joaquin Delta via the Delta; water surplus to the needs of the areas in which it originates is gathered in the Delta and thereby provides a common source of fresh water supply for water-deficient areas. It is, therefore, hereby declared that a general law cannot be made applicable to said Delta and that the enactment of this law is necessary for the protection, conservation, development, control and use of the waters in the Delta for the public good.” (Added by Stats. 1959, c. 1766, p. 4247, '1.)

12201. Necessity of maintenance of water supply

“The Legislature finds that the maintenance of an adequate water supply in the Delta sufficient to maintain and expand agriculture, industry, urban, and recreational development in the Delta area as set forth in Section 12220, Chapter 2, of this part, and to provide a common source of fresh water for export to areas of water deficiency is necessary to the peace, health, safety and welfare of the people of the State, except that delivery of such water shall be subject to the provisions of Section 10505 and Sections 11460 to 11463, inclusive, of this code.” (Added by Stats. 1959, c. 1766, p 4247, '1.)

12202. Salinity control and adequate water supply; substitute water supply; Delivery

“Among the functions to be provided by the State Water Resources Development System, in coordination with the activities of the United States in providing salinity control for the Delta through operation of the Federal Central Valley Project, shall be the provision of salinity control and an adequate water supply for the users of water in the Sacramento-San Joaquin Delta. If it is determined to be in the public interest to provide a substitute water supply to the users in said Delta in lieu of that which would be provided as a result of salinity control no added financial burden shall be placed upon said Delta water users solely by virtue of such substitution. Delivery of said substitute water supply shall be subject to the provisions of Section 10505 and Sections 11460 to 11463, inclusive, of this code.” (Added by Stats. 1959, c. 1766, p 4247, '1.)

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12203. Diversion of waters from channels of delta

“It is hereby declared to be the policy of the State that no person, corporation or public or private agency or the State or the United States should divert water from the channels of the Sacramento-San Joaquin Delta to which the users within said Delta are entitled.” (*Added by Stats. 1959, c. 1766, p 4249, '1.*)

12204. Exportation of water from delta

“In determining the availability of water for export from the Sacramento-San Joaquin Delta no water shall be exported which is necessary to meet the requirements of Sections 12202 and 12203 of this chapter.” (*Added by Stats. 1959, c. 1766, p 4249, '1.*)

12205. Storage of water; integration of operation and management of release of water

“It is the policy of the State that the operation and management of releases from storage into the Sacramento-San Joaquin Delta of water for use outside the area in which such water originates shall be integrated to the maximum extent possible in order to permit the fulfillment of the objectives of this part.” (*Added by Stats. 1959, c. 1766, p 4249, '1.*)

Water Code 11460 provides:

11460. Prior right to watershed water

“In the construction and operation by the department of any project under the provisions of this part a watershed or area wherein water originates, or an area immediately adjacent thereto which can conveniently be supplied with water therefrom, shall not be deprived by the department directly or indirectly of the prior right to all of the water reasonably required to adequately supply the beneficial needs of the watershed, area, or any of the inhabitants or property owners therein.” (*Added by Stats. 1943, c. 370, p. 1896. Amended by Stats. 1957, c. 1932, p. 3410, '296.*)

The December 1960 DWR Bulletin 76 (Exhibit 14) which includes a contemporaneous interpretation by DWR of Water code Section 12200 through 12205 provides at page 12:

“In 1959 the State Legislature directed that water shall not be diverted from the Delta for use elsewhere unless adequate supplies for the Delta are first provided.” (Emphasis added.)

Similarly the DWR confirmed its interpretation of law in the contract between the State of California Department of Water Resources and the North Delta Water Agency For the

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Assurance of a Dependable Water Supply of Suitable Quality dated January 28, 1981, which provides:

"(d) The construction and operation of the FCVP and SWP at times have changed and will further change the regimen of rivers tributary to the Sacramento-San Joaquin Delta (Delta) and the regimen of the Delta channels from unregulated flow to regulated flow. This regulation at times improves the quality of water in the Delta and at times diminishes the quality from that which would exist in the absence of the FCVP and SWP. The regulation at times also alters the elevation of water in some Delta channels."

"(f) The general welfare, as well as the rights and requirements of the water users in the Delta, require that there be maintained in the Delta an adequate supply of good quality water for agricultural, municipal and industrial uses."

"(g) The law of the State of California requires protection of the areas within which water originates and the watersheds in which water is developed. The Delta is such an area and within such a watershed. Part 4.5 of Division 6 of the California Water Code affords a first priority to provision of salinity control and maintenance of an adequate water supply in the Delta for reasonable and beneficial uses of water and relegates to lesser priority all exports of water from the Delta to other areas for any purpose." (Emphasis added.) (See Exhibit 17.)

In United States vs. State Water Resources Control Board 182 Cal.App.3d 82 (1986) at page 139 the appellate court provided:

"In 1959, when the SWP was authorized, the Legislature enacted the Delta Protection Act. (§§ 12200-12220.) The Legislature recognized the unique water problems in the Delta, particularly 'salinity intrusion,' which mandates the need for such special legislation 'for the protection, conservation, development, control and use of the waters in the Delta for the public good.' (§ 12200.) The act prohibits project exports from the Delta of water necessary to provide water to which the Delta users are 'entitled' and water which is needed for salinity control and an adequate supply for Delta users. (§§ 12202, 12203, 12204.)

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In SWRCB D-1485 at page 9 the SWRCB provided:

"The Delta Protection Act accords first priority to satisfaction of vested rights and public interest needs for water in the Delta and relegates to lesser priority all exports of water from the Delta to other areas for any purpose."

As related to the predetermination to build a single tunnel or any other isolated conveyance facility, the requirements of WC 12205 are particularly relevant.

"It is the policy of the State that the operation and management of releases from storage into the Sacramento Joaquin Delta of water for use outside the area in which such water originates shall be integrated to the maximum extent possible to permit fulfillment of the objectives of this part." The objectives include salinity control and an adequate water supply. Conveyance facilities which transport stored water to the export pumps with no outlets or releases to provide salinity control and an adequate water supply in the Delta would not comply.

The export projects must additionally fully mitigate their respective impacts and meet the affirmative obligations to the Delta and other areas of origin including those related to flow. Failure to so do results in a shift of the cost of the project to someone else. The State Water Resources Development Bond Act was intended to preclude such a shift in costs. See also Goodman v. Riverside (1993) 140 Cal.App.3d 900 at 906 for the requirement that the costs of the entire project be paid by the contractors. Water Code Section 11912 requires that the costs necessary for the preservation of fish and wildlife be charged to the contractors. The term "preservation" appears to be broader than mitigation and appears to create an affirmative obligation beyond mitigation.

Title 34 of Public Law 102-575 referred to as the Central Valley Project Improvement Act in Section 3406(b) (1) authorizes and directs the Secretary of Interior to enact and implement a program which makes all reasonable efforts to ensure by the year 2002 natural production of anadromous fish (including salmon, steelhead, striped bass, sturgeon and American shad) will be sustainable on a long term basis at levels not less than twice the average levels attained during the period of 1967-1991

The Delta Reform Act of 2009 includes provisions intended to provide additional protection for the Delta. Such provisions include Water Code § 85054 which provides:

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"§85054. Coequal goals

'Coequal goals' means the two goals of providing a more reliable water supply for California and protecting restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place."

Water Code § 85021 provides:

"§85021. Reduction of reliance on Delta for future water supply needs

The policy of the State of California is to reduce reliance on the Delta in meeting California's future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency. Each region that depends on water from the Delta watershed shall improve its regional self-reliance for water through investment in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water supply efforts."

The Delta and other areas of origin both upstream and downstream are part of California and also need a more reliable water supply. The proposed project is clearly directed only at the ability of the SWP and CVP to export water from the Delta. Restoration and protection of Delta water quality and flows including flushing flows are part of a more reliable water supply for California. Non-degradation of water quality and the statutory obligations to provide enhancement of water quality and an adequate supply are also absent from the proposal.

The cumulative impacts of the proposed project together with the predetermined single tunnel will clearly render water supply less reliable in all areas of the Delta downstream of the Sacramento River intakes and those areas along the current routes of Sacramento River flow to the export pumps. The common pool for the interior Delta will be eliminated along with the common interest in protecting the water quality. The single tunnel has no outlets and requirements to protect water quality in dry periods are always circumvented. For areas throughout the watershed, including those along the tributaries upstream of the Delta, curtailment of local water use, and water transfers to increase utilization of the highly expensive tunnel combined with the need for fish flows and high water consumption habitat to mitigate for the construction and operation of the tunnel will greatly add to unreliability.

The Proposed Project ignores the need to reduce reliance on exports of water from the Delta. The hydrology of the Delta watershed is inadequate to support even the past level of exports.

Development within the watersheds of origin and the need to recapture water from SWP and CVP exports will increase. There is evidence that more water will be needed to mitigate for the SWP and CVP damage to fish including meeting the CVPIA anadromous fish restoration

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requirements of 2 times the average natural production for the years 1967 through 1991. Climate change is also expected to adversely affect water supply. The increasing threat of terrorism, the continuing threat of natural calamities, including earthquakes and the growing need for electricity all gravitate towards less reliance on exports from the Delta and instead concentration on developing local self-sufficiency. The deficit due to the failure to develop North Coast watersheds will not be overcome by efforts at self-sufficiency, however, increased efforts in urban communities can increase the amount of water available for agriculture and the environment.

The hydrology predating the construction of the CVP and SWP reflected that no surplus water would be available for export from the Sacramento-San Joaquin Watershed during a reoccurrence of the 1929-1934 drought.

Exhibit 12 is a copy of the hydrographs from page 116 of the Weber Foundation Studies titled "An Approach To A California Public Works Plan" submitted to the California Legislature on January 28, 1960. The highlights and margin notes are added.

The 1928/29-1933/34 six year drought period reflected on Exhibit 12 shows the average yearly runoff is 17.631 million acre feet with local requirements of 25.690 million acre feet. There is a shortage during the drought period within the Delta Watershed of 8.049 million acre feet per year without any exports. It is questionable whether the groundwater basins can be successfully mined to meet the shortage within the watershed let alone the export demands. A comparable review of the hydrograph for the North Coast area reflects that surplus water could have been developed without infringing on local requirements.

The limited hydrology was clearly recognized in the planning for the SWP which was to develop projects on the rivers in the North Coast watersheds sufficient to import to the Delta about 5,000,000 acre feet of water seasonally for transfer to areas of deficiency. (See Exhibit 14 December 1960 Bulletin 76 page 13). Such areas of deficiency were expected to be both north and south of the Delta pumps. The projects in the North Coast watersheds were never constructed and the projects are woefully short of water.

In addition to the lack of precipitation in the Delta watershed to meet local and export needs are the environmental needs. Water is needed for mitigation of project impacts and the affirmative obligations for salinity control and fish restoration.

The original planning for the SWP and CVP appears to have underestimated the needs to protect fish both as to flow requirements and carryover storage required for temperature control. In 2009 after only two (2) dry years, the SWP and CVP violated the SWRCB February outflow requirements claiming that meeting the outflow requirements would reduce storage below the point necessary to meet cold water requirements for salmon later in the year. Although the project operators lied and the real reason for the violation was the ongoing pumping of the unregulated flow to help fill San Luis Reservoir, the incident clearly shows the inability of the projects to provide surplus water for export in the 4th, 5th and 6th years of drought.

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In May of 2013 the SWP and CVP again claimed a need to preserve cold water in storage for fish. They requested and were allowed by the SWRCB to reduce outflow so as to exceed the western and interior Delta agricultural water quality objectives to save such cold water in storage. They did not suggest and did not reduce export pumping which would have had the same effect as reducing outflow.

In 2014 the 3rd year of drought, the SWRCB issued curtailment notices to post 1914 water right holders in the areas of origin and reduced exports due to the lack of water.

In the 4th year of drought the SWRCB curtailed post 1914 and some pre-1914 water rights and reduced exports due to lack of water.

Six year droughts can be expected and even longer droughts are possible. The historic occurrence of multi-year droughts was examined in a DWR study of tree rings. Exhibit 13 is Table 3 from such study.

The State Water Project Delivery Reliability Report 2013 shows a long-term (10 year period) average Table A delivery as 2,266,000 acre feet per year; a long-term average (1921-2003) as 2,400,000 acre feet per year; a single dry year (1977) as 453,000 acre feet and a 6-year drought (1987-1992) as 1,055,000 acre feet per year. These figures can be contrasted to the Maximum Possible SWP Table A Delivery of 4,172,000 acre feet per year. See Exhibit 15 excerpts from SWP Delivery Reliability Report 2013.

The failure of the SWP and CVP to carry out the plan for development of water projects to yield sufficient surplus water to meet the needs and obligations within the Delta and other areas of origin and the expectations of the export contractors is at the root of the crisis in the Delta.

Under CEQA the Purpose and Need and in this case the Project Description cannot be artificially narrowed to limit objective consideration of reasonable alternatives such as not increasing exports and retaining water for in Delta water quality and Delta Outflow. DWR has done just that. DWR relies on the proposition that "a reasonable definition of underlying purpose and need" (in this case project description) could be used to avoid the objective consideration and evaluation of alternatives that cannot achieve that basic goal of maximizing exports. The Project Description is not reasonable.

The requirements for NEPA are that a DEIS/EIR must meet the requirements of 40 CFR section 1502.14 which provides:

"§ 1502.14 Alternatives including the proposed action.

This Section is the heart of the environmental impact statement. Based on the information and analysis presented in the sections on the Affected Environment (§ 1502.15) and the Environmental Consequences (§ 1502.16), it should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice

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among options by the decision maker and the public. In this section agencies shall:

- (a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.
- (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.
- (c) Include reasonable alternatives not within the ' jurisdiction of the lead agency.
- (d) Include the alternative of no action.
- (e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.
- (f) Include appropriate mitigation measures not already included in the proposed action or alternatives." (Emphasis added.)

An alternative which requires that the SWP and CVP be operated in accordance with current law is a reasonable alternative which must be rigorously and objectively evaluated. The Proposed Project clearly ignores the law establishing the priorities for meeting needs within the Delta and other areas of origin including the needs of fish and wildlife.

The ability of the SWP and CVP to deliver "full contract amounts" never existed and thus could not be restored or protected. The words "up to" conceivably should cover a range from zero deliveries to a high of what can be supported with full compliance with State and federal law and hydrologic conditions. The projects have not been able to meet even the D 1641 requirements.

Although obviously not intended by DWR in controlling the preparation of the DEIR, a range of reasonable alternatives must be considered including substantially reduced and at times no exports from the Delta. The upper range is of course limited by law and hydrology. An impartial evaluation is needed to determine the true capability of the export projects to provide surplus water for export while meeting D1641 over a drought comparable to the 1928/29 through 1933/34 drought, while at the same time meeting listed species requirements, senior water rights, salinity control and providing an adequate supply to serve the needs in the Delta and other areas of origin.

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THE PROPOSED MINIMUM EXPORT RATE IS INAPPROPRIATE

The proposed Project Action In table 3-3 a. is “The combined CVP and SWP export rates at Jones Pumping Plant and Banks Pumping Plant will not be required to drop below 1,500 cfs.”

Export of water from the Delta is counterproductive to minimizing and fully mitigating the take of listed species and the DEIR has failed to present the environmental impacts and alternatives in a manner providing a clear basis for choice among options by the decision maker and the public as required by 40 CFR section 1502.14. CEQA requires adequacy, completeness and a good faith effort at full disclosure. The EIR is to inform the decision makers and the public of the environmental impact of proposed action (See CEQA Guidelines sections 15002 and 15003.) The export pumps physically kill fish and the diversion facilities expose others to increased predation. The proposition that export of flow passing into and through the Bay-Delta Estuary is consistent with minimizing the take of listed species is unique, bold and unsupported. As to human health and safety support for the minimum export there is no such limitation on the proposed action and if there was the commingling with water for other purposes precludes meaningful enforcement. Retention of water flowing into and through the Delta to the Bay would help dilute the harmful toxins and other constituents in the Delta which are harmful to human health and safety.

Water Code §85021 which provides:

“§85021. Reduction of reliance on Delta for future water supply needs

The policy of the State of California is to reduce reliance on the Delta in meeting California’s future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency. Each region that depends on water from the Delta watershed shall improve its regional self-reliance for water through investment in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water supply efforts.”

The legislative intent to increase not diminish protection for the Delta and other areas of origin is made especially clear in the adoption of Water Code section 85031(a) which provides:

“(a) This division does not diminish, impair, or otherwise affect in any manner whatsoever any area of origin, watershed of origin, county of origin, or any other water rights protections, including, but not limited to, rights to water appropriated prior to December 19, 1914, provided under the law. This division does not limit or otherwise affect the application of Article 1.7 (commencing with Section 1215) of Chapter 1 of Part 2 of Division 2, Sections 10505, 10505.5, 11128, 11460, 11461, 11462, and 11463, and Sections 12200 to 12220, inclusive.” (Emphasis added.)

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The obligation of the projects to provide salinity control and an adequate water supply sufficient to maintain and expand agriculture, industry, urban, and recreational development in the Delta was made clear.

Reliability of water supply for exports from the Delta must be junior to the needs and obligations requiring water in the Delta and other areas of origin including fish and wildlife needs. The modeling and analysis should provide a clear confirmation of the types and numbers of years when no water will be available for export and provide estimates of the amounts that might be available in other years. Care should be taken to model carryover storage requirements with due consideration of meeting temperature, flow and statutory requirements to determine the firm yield available for export.

Reliability of water supply for Northern California requires that water to meet the needs of and obligations to restore and even enhance Delta fish, wildlife and agriculture not be exported.

Both State and Federal laws seek to prevent degradation of water quality. The Proposed Project conveyance will remove the higher quality Sacramento River water from the Delta pool thereby reducing the dilution of the poorer quality water returning to the Delta by way of the San Joaquin River from SWP and CVP operations which will deliver more water to the west side of the San Joaquin Valley. The delivery of such water to the San Luis Unit was prohibited by the San Luis Act of 1960 unless there was a Valley Drain with an outlet to the ocean. (See Exhibit 18). The prohibition was circumvented. Even the promise that "A much needed drainage system and water supply will be provided in the San Joaquin Valley" included in ballot argument in favor of the California Water Resources Development Act (SWP) was not kept. (See Exhibit 16). The Proposed Project unreasonably seeks to maintain and increase exports from the Delta to the west side of the San Joaquin Valley which degrade Delta water quality. The cumulative impact from the predetermined single tunnel conveyance will aggravate such degradation. Adding water with salts to an already saline degraded basin without a real drainage solution is unreasonable, not in the public interest and in violation of the public trust. Certainly the impacts require an adequate, complete and good faith disclosure.

The provision of salinity control and an adequate supply for the Delta was deemed to be of utmost importance and is a critical feature of a reliable supply for the Delta.

Salinity control for the Sacramento-San Joaquin Delta is a primary purpose for Shasta Dam. Water Code Section 11207 provides:

"§11207. Primary purposes

Shasta Dam shall be constructed and used primarily for the following purposes:

(a) Improvement of navigation on the Sacramento River to Red Bluff.

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- (b) Increasing flood protection in the Sacramento River.
- (c) Salinity control in the Sacramento-San Joaquin Delta.
- (d) Storage and stabilization of the water supply of the Sacramento River for irrigation and domestic use. (*Added by Stats. 1943, c 370, p. 1896*) (Emphasis added.)

The Delta Protection Act of 1959 in WC 12200 specifically provides: “It is, therefore, hereby declared that a general law cannot be made applicable to said Delta and that the enactment of this law is necessary for the protection, conservation, development, control and use of the waters in the Delta for the public good.”

The degradation of water quality in the Delta adversely impacts agricultural, industrial, urban and recreational (including fish and wildlife) uses in the Delta and surrounding areas as well as areas served with exports from the Delta.

Except as provided by agreement, salinity control and the adequacy of the quality of the water supply for the Delta as determined by water quality objectives set by the SWRCB must be provided in priority to exports. Such objectives provide the minimum level deemed necessary to protect beneficial uses. Although the objectives are set for certain uses for certain periods, it is the composite of all objectives which the SWRCB determined would provide the protection for all beneficial uses. Such objectives have at times been violated and it is critical to the rigorous and objective analysis of alternatives to incorporate with and without compliance conditions.

Federal law is specific as to the obligations for the CVP.

PL99-546 (HR3113) specifically provides:

“(b) (1) Unless the Secretary of the Interior determines that operation of the Central Valley project in conformity with State water quality standards for the San Francisco Bay/Sacramento-San Joaquin Delta and Estuary is not consistent with the congressional directives applicable to the project, the Secretary is authorized and directed to operate the project, in conjunction with the State of California water project, in conformity with such standards. Should the Secretary of the Interior so determine, then the Secretary shall promptly request the Attorney General to bring an action in the court of proper jurisdiction for the purposes of determining the applicability of such standards to the project.

(2) The Secretary is further directed to operate the Central Valley project, in conjunction with the State water project,

so that water supplied at the intake of the Contra Costa Canal is of a quality equal to the water quality standards contained in the Water Right Decision 1485 of the State of California Water Resources Control Board, dated August 16, 1978, except under drought emergency water conditions pursuant to a declaration by the Governor of California. Nothing in the previous sentence shall authorize or require the relocation of the Contra Costa Canal intake.”

Section (b) (1) does not allow for the Bureau of Reclamation to operate the CVP without conforming to the State water quality standards for the San Francisco Bay/Sacramento-San Joaquin Delta and Estuary even if the SWRCB is willing to look the other way. A determination by a court of law is required. (See Exhibit 19.)

There are specific processes and procedures for changes to Water Quality Control Plans including review by the United States EPA, which are not being considered.

Section (b) (1) is thus applicable and requires USBR and USF&WS compliance unless the Secretary of Interior makes a determination that compliance is inconsistent with congressional directives applicable to the project and then the Attorney General is to be requested to bring a legal action for a court determination of the applicability of the standards. There is no such court determination that would allow the CVP to operate without conforming to the standards.

Section (b) (2) provides an additional constraint with regard to the water quality at the intake to the Contra Costa Canal. Even if the standards were determined by the court to not be applicable to the CVP, then the D-1485 water quality standards would be applicable to the intake of the Contra Costa Canal except under drought emergency water conditions pursuant to a declaration by the Governor of California.

In 2004 Congress passed another law to ensure that Delta water quality standards and objectives would be met.

PL 108-361 (HR 2828) in pertinent part provides:

(D) “Program to Meet Standards. -

(I) In General. - Prior to increasing export limits from the Delta for the purposes of conveying water to south-of-Delta Central Valley Project contractors or increasing deliveries through an intertie, the Secretary shall, not later than 1 year after the date of enactment of this Act, in consultation with the

Governor, develop and initiate implementation of a project to meet all existing water quality standards and objectives for which the Central Valley Project has responsibility.” (See Exhibit 20.)

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The Proposed Project of increasing exports from the Delta which to the extent such are for serving south-of-Delta Central Valley Project contractors would be directly contrary to the direction of Congress which was to assure that all existing (October 25, 2004) water quality standards and objectives would first be met.

THE PROPOSED PROJECT HAS DELTA ECOSYSTEM IMPROVEMENTS WHICH CONVERT AGRICULTURAL LAND TO HABITAT AS A SUBSTITUTE FOR REDUCING SWP AND CVP EXPORT OF WATER NEEDED TO PROVIDE ADEQUATE WATER FLOW AND QUALITY FOR FISH AND OTHER DELTA NEEDS

There is strong evidence indicating that fish need water flowing into and out of the Delta to the Bay. The timing and amounts are the subject of ongoing debate and evaluation.

The SWP and CVP affect flow into and out of the Delta primarily through diversions to storage and direct diversions from the tributaries and from locations in the Delta to areas outside the Delta. The reliability of water supply for fish at times directly conflicts with the reliability of the water supply for SWP and CVP deliveries for other purposes and in particular exports from the Delta. The priorities for providing such reliability are established by law.

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Water Code Section 85086 of the Delta Reform Act of 2009 assigned to the SWRCB the task of determining instream flow needs and new flow criteria for the Delta ecosystem necessary to protect public trust resources. Such determinations have not yet been completed, yet the DEIR has been prepared and the Proposed Project is moving forward. Such flow criteria are important to the required rigorous exploration and objective evaluation of all reasonable alternatives. The rush to decision in advance of critical evaluations is further evidence of predetermination and lack of a good faith effort at full disclosure and analysis of impacts.

Driving the need for ecosystem restoration is the need to address the dramatic decline in fish species and in particular those in danger of extinction. The Proposed Project puts forth the proposition that habitat in the Delta and factors other than the amount flow into and through the Delta are the cause of the subject fish declines. They discount the impact of SWP and CVP exports on the amount of flow into and through the Delta from diversion to storage and direct diversion.

The correlation between SWP and CVP exports and the decline of the fisheries has been a concern for many years. In August of 1978 the State Water Resources Control Board rendered its Water Right Decision 1485. The Decision was the culmination of 32 days of evidentiary hearing initiated on November 15, 1976 and concluded on October 7, 1977. At that time the striped bass index was considered to be the indicator of ecosystem health for the Delta and Suisun Marsh. Striped bass were in effect the “canary in the coal mine”. As the years passed and striped bass populations plummeted, the water exporters claimed striped bass to be invasive species, predators on endangered species and a major cause of fish declines wrongfully attributed to the export of water. The canary died and the death was ignored to facilitate greater exports. As Exhibits 22-25 show, striped bass, steelhead, Delta smelt, fall-run Chinook salmon and winter-run Chinook salmon all co-existed at relatively high populations at lower export levels.

In 1978 the SWRCB concluded in D-1485 at page 13 that:

“To provide full mitigation of project impacts on all fishery species now would require the virtual shutting down of the project export pumps.” (See Exhibit 21.)

The SWRCB also concluded in D-1485 at page 14 that:

“Full protection of Suisun Marsh now could be accomplished only by requiring up to 2 million acre feet of fresh water outflow in dry and critical years in addition to that required to meet other standards.” (See Exhibit 21.)

Exports from the Delta were not curtailed and the additional 2 million acre feet of outflow was not provided for the marsh.

Exhibits 22-25 show that significant declines in fish populations commenced when annual exports reached 2 million acre feet. Increased development in the watersheds and the effects of climate change would indicate that additional surplus water yield would have to be developed to provide a comparable level of fish protection for the future and maintain even the 2 million acre feet of exports much less the full amount of export contracts. Little or no export water in dry years and more in wet years would likely help but the Delta watershed cannot produce the needed water. The planners of the SWP determined that by the year 2000 no water would be available for export without major water development in the North Coast.

An examination of the fish population graphs indicates that restoration of the ecosystem for fish is not correlated with Delta wetland habitat conditions in the 1850's or at all. The likely relationship is to water conditions, particularly flow.

The Delta was fully leveed and reclaimed by about 1930.

“By 1930 all but minor areas of the swampland had been leveed and were in production.” (See page 8 of December 1960 Bulletin 76 - Exhibit 14.) The USACE completed project levee construction on the San Joaquin River in the early 1960’s. There are no significant changes in leveed areas or even riverine habitat which appear to be the cause of the decline of the fisheries. In fact, there have been increases in Delta wetland habitat, including tidal wetland, during the periods of apparent decline. Mildred Island flooded in 1983 and has not been reclaimed. Little Mandeville and Little Frank’s Tract flooded in the 1980’s and have not been reclaimed. Lower Liberty Island levees were not restored and the area has been in a tidal wetland condition since at least 2002.

The focus on conversion of Delta land to habitat as a substitute for water for fish is misplaced and the result of the inappropriate commitment to increase exports. Adequate analysis has not been done to determine if development of shallow tidal and other wetland habitat in the Delta and other locations is actually detrimental to salmon and other anadromous fish. In particular, stranding and predation from otters, egrets, herons, cormorants, gulls, white pelicans and the like have been identified as a serious concern.

The limited study (Exhibit 26) showing a picture of larger salmon smolts raised for a time in a wetland versus smaller smolts raised in the channel is cited by BDCP/WaterFix proponents as the evidence that shallow seasonal wetland in the Delta would be a substitute for flow and justification for a 50 year take permit. The study monitored caged smolts in the channel where the fish must constantly swim against the current and compared those smolts to smolts in cages in shallow wetlands where there was little or no current. The experiment did not attempt to evaluate stranding or predation and it is doubtful that the smolts in the channel cages if uncaged would spend as much time swimming against the stronger currents rather than seeking areas of the channel where the velocity is lower. The presentation of results by BDCP including the fat fish/skinny fish photo neglected to show the sizes of the fish from the cages in the channel upstream of the shallow habitat which reportedly were comparable to those in the wetlands. "During periods of low, clear water, fish growth rates in the river site above the floodplain were comparable to those in the floodplain." (Exhibit 26, pg. 1.)

Creation of Floodplain Habitat Is Not a Substitute for Flow

The available evidence and studies do not support such a substitution. The floodplain habitat which is suggested as potentially beneficial is that which is inundated by high flows for a limited period; involves a large area of water of a proper depth to help avoid predation; assumes avian predator populations are limited; is properly drained to avoid stranding and avoids increased water temperatures detrimental to salmonids.

The Jeff Opperman Final Report for Fellowship R/SF-4 referenced above containing the picture of the fat fish and skinny fish is often shown as support for the proposition that floodplain

habitat can be substituted for flow (Exhibit 26.) The study does not put forth that conclusion but suggests "that juvenile Chinook benefit from access to floodplain habitats". (Page 2) It is important to recognize that the test fish were caged and thus predation from birds, fish and other animals was not an issue. Stranding was down-played but admittedly not tested. The test was conducted in and along the Cosumnes River. The skinny fish were in the river swimming against the current and because they were in cages and couldn't move with the current or move to quiet and more productive water. The fat fish obviously saved their energy for growth and apparently benefitted from improved food availability. The report states "During high flows the river offers poor habitat and fish living in this type of habitat will tend to be displaced downstream." High flows and displacement downstream are likely not detrimental. It is generally accepted that the salmon do well in high flow years. The return of adults (escapement) is usually higher two and one-half years after a high flow year. It is recognized that ocean conditions also play a part and may in some cases reduce escapement nullifying the benefit of high flow. The difference in food availability in the high flow channel versus in the quiet water may not be significant in the test given the consumption of energy and lack of opportunity for the skinny fish to move to more favorable parts of the river. Displacement downstream into the cooler and more productive parts of the estuary is likely not bad for displaced salmon smolts.

Floodplain Habitat Not Accompanied by High Flow Does Not Appear to Result in Increased Chinook Salmon Ocean Survival and May Not Improve Survival of Sacramento River Juvenile Chinook Salmon Migrating to the Ocean

In the study titled "Floodplain Rearing of Juvenile Chinook Salmon: Evidence of enhanced growth and survival" by Sommer, et al. (2001), a copy of which is Exhibit 27, tests were conducted in the Yolo Bypass in 1998 and 1999. The study concluded that during such years salmon increased in size substantially faster in the seasonally inundated agricultural floodplain than in the river, suggesting better growth rates. The study, however, provides: "Survival indices for coded-wire-tagged groups were somewhat higher for those released in the floodplain than for those released in the river, but the differences were not statistically significant. Growth, survival, feeding success, and prey availability were higher in 1998 than in 1999, a year in which flow was more moderate indicating that hydrology affects the quality of floodplain rearing habitat". (Exhibit 27, pg. 1.)

In the discussion the authors provide:

"Mean length increased faster in the Yolo Bypass during each study year, and CWT fish released in the Yolo Bypass were larger and had higher apparent growth rates than those released in the Sacramento River. It is possible that these observations are due to higher mortality rates of smaller individuals in the Yolo Bypass or of larger individuals in the Sacramento River; however we have no data or reasonable mechanism to support this argument."

"Elevated Yolo Bypass survival rates are also consistent with significantly faster migration rates in 1998, the likely result of which would be reduced exposure time to mortality risks in the delta, including predation and water diversions."

In the study "Habitat Use and Stranding Risk of Juvenile Chinook Salmon on a Seasonal Floodplain" by Sommer, et al. (2004), a copy of which is Exhibit 28, the authors build upon the above study with further testing in 2000 and present their analysis of ocean survival.

The author's abstract provides:

"Although juvenile Chinook salmon *Oncorhynchus tshawytscha* are known to use a variety of habitats, their use of seasonal floodplains, a highly variable and potentially risky habitat, has not been studied extensively. Particularly unclear is whether a seasonal floodplain is a net "source" or net "sink" for salmonid production ... Adult ocean recoveries of tagged hatchery fish indicate that seasonal floodplains support survival at least comparable with that of adjacent perennial river channels. These results indicate that floodplains appear to be a viable rearing habitat for Chinook salmon, making floodplain restoration an important tool for enhancing salmon production. (Emphasis added.)

The data provided for ocean survival is as follows:

Table 1. - Number of coded wire tags recovered in the ocean and commercial fisheries for Chinook salmon released in the Yolo Bypass and Sacramento River. The total number of tagged fish released in each location for each year is shown in parentheses. The survival ration is calculated as the number of Yolo Bypass recoveries divided by the number of Sacramento River recoveries.

Release Group	1998 (53,000)	1999 (105,000)	2000 (55,000)
Yolo Bypass	75	136	27
Sacramento River	35	138	47
Survival Ratio	2.14	0.99	0.57

In 1998 Yolo Bypass looked like a benefit, in 1999 it was a push and in 2000 Yolo Bypass looked like a detriment.

It is assumed that shaded river aquatic habitat is desirable for special status fish. Attention is called to the BDCP Draft Chapter 8 which puts forth the need to control predators by removing structures which affect flow fields and provide shade. The focus appears to be on

abandoned docks, pilings and the like, however, shaded river aquatic habitat can provide the same effect on flow and provide shade. The impact of shaded river aquatic habitat on special status fish is unclear.

There are a number of significant adverse impacts associated with so-called restoration of tidal floodplain habitat within the Delta which have not been objectively considered or mitigated.

In the Delta where the waters are tidal the proposed habitat restoration is not necessarily floodplain but rather is tidal wetlands which is inundated most if not all of the time.

Increased salinity intrusion could result from the increased tidal prism and/or creation of shortened pathways to the interior Delta and particularly to the large S WP and CVP intakes whether in the north Delta or south Delta.

Setting back, breaching, degrading and/or not restoring levees in the Delta has significant adverse impacts.

Increases in the tidal prism at locations similar to and including the area in and around the lower Yolo bypass not only induces greater salinity intrusion, but also results in advection adversely affecting the out migration of salmon smolts some of which are endangered.

The regularly or permanently inundated areas constitute increased habitat for predator species and increase ambush locations affecting the fish species of concern. The increase in water surface and wetland vegetation will greatly increase the evaporation and evapotranspiration of fresh water. In many cases there is an increased threat of flooding to surrounding areas due to increased fetch and wave action across the habitat area and increased seepage into adjoining levees and lands. Other significant adverse impacts include propagation of vectors including disease bearing mosquitoes, production of methyl Mercury and toxic algal blooms.

There is also the harm to and loss of agricultural land and production.

Exhibit 29-1 contains excerpts from the April 2011 report by Dave Vogel titled "Insights into the Problems, Progress, and Potential Solutions for Sacramento River Basin Anadromous Fish Restoration" prepared for the Northern California Water Association and Sacramento Valley Water Users contains the results of studies which include the Liberty Island Ecological Reserve area. (The entire study can be viewed on the Northern California Water Association website by clicking on "Fisheries")

At pages 112 and 113 the report provides:

Subsequent, additional juvenile salmon telemetry studies were conducted by Natural Resource Scientists Inc. on behalf of the USFWS and CALFED in the north Delta (Vogel 2001, Vogel 2004). Triangulating radio-tagged fish locations

in real time (Figure 61) clearly demonstrated how juvenile salmon move long distances with the tides and were advected into regions with very large tidal prisms, such as upstream into Cache Slough and into the flooded Prospect and Liberty Islands (Figure 62). During the studies, it was determined that some radio-tagged salmon were eaten by predatory fish in northern Cache Slough, near the levee breaches into flooded islands (discussed below).

At page 120 the report provides:

During recent years, there has been an emphasis to reclaim or create shallow, tidal wetlands to assist in re-creating the form and function of ecosystem processes in the Delta with the intent of benefitting native fish species (Simenstad et al. 1999). Among a variety of measures to create such wetlands, Delta island levees either have been breached purposefully or have remained unrepaired so the islands became flooded. A recent example is the flooding of Prospect Island which was implemented under the auspices of creating shallow water habitat to benefit native fish species such as anadromous fish (Christophel et al. 1999). Initial fish sampling of the habitat created in Prospect Island suggested the expected benefits may not have been realized due to an apparent dominance of non-native fish (Christophel et al. 1999). Importantly, a marked reduction of sediment load to the Delta in the past century (Shvidchenko et al. 2004) has implications in the long-term viability of natural conversion of deep water habitats on flooded Delta islands into shallow, tidal wetlands. The very low rates of sediment accretion on flooded Delta islands indicate it would take many years to convert the present-day habitats to intertidal elevations which has potentially serious implications for fish restoration (Nobriga and Chotkowski (2000) due to likely favorable conditions for non-salmonid fish species that can prey on juvenile salmon. Studies of the shallow water habitats at flooded Delta islands showed that striped bass and largemouth bass represented 88 percent of the individuals among 20 fish species sampled (Nobriga et al. 2003).

There have likely been significant adverse, unintended consequences of breaching levees in the Delta. There is a high probability that site-specific conditions at the breaches have resulted in hazards for juvenile anadromous fish through the creation of favorable predator habitats. The breaches have changed the tidal prisms in the Delta and can change the degree in which juvenile fish are advected back and forth with the tides (Figure 61; previously discussed). Additionally, many of the breaches were narrow which have created deep scour holes favoring predatory fish. Sport anglers are often seen fishing at these sites during flood or ebb tides. Breaching the levees at Liberty Island is an example (Figure 72 and 73). Recent acoustic-tagging of striped bass in this vicinity confirmed a high presence of striped bass (Figure 74, D. Vogel, unpub. data.)

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The increased loss of fresh water due to creation of tidal and wetland habitat is clear. Exhibit 29-2 is Table A-5 from DWR Bulletin 168, October 1978 which shows the annual Et values for various crops and for Riparian Vegetation and Water Surface. The Riparian Vegetation and Water Surface 67.5 inches can be compared to tomatoes 33.8 inches and alfalfa 46.0 inches. The increased fresh water loss is from 33.7 inches when compared to tomatoes and 21.5 when compared to alfalfa. The increased loss of fresh water is particularly significant in drier years.

The Division of Water Resources (predecessor to The Department of Water Resources) in the Sacramento - San Joaquin Water Supervisor's report for the year 1931 dated August 1932 and designated Bulletin 23 includes the results of studies of water consumption of tules and cat-tails. Exhibit 29-3 includes Tables 69, 74, 75 and 77 from such report. Consumptive use for open water surface is shown as 4.91 acre feet per acre, tules at 9.63 acre feet per acre, and alfalfa at 3.51 acre feet per acre. To examine the relatively high consumptive use for tules the U.S. Department of Agriculture undertook a continuation of the study of consumptive use for asparagus, tules and cattails. The tables show an average of 14.63 acre feet per acre for cat-tails and 13.48 acre feet per acre for tules. Results from cat-tails and tules grown in tanks at Camp 3, King Island for 1931 are shown in Table 77. The results for normal sized tules was 8.0 acre feet per acre.

ADVERSE IMPACTS TO DELTA WATER QUALITY FROM THE PROPOSED PROJECT VIOLATE ANTI-DEGRADATION POLICIES, THE DELTA REFORM ACT AND WATER CODE SECTIONS 12200 ET SEQ.

Salinity control and an adequate water supply in the Delta sufficient to maintain and expand agriculture, industry, urban and recreational development in the Delta area is a precondition to the SWP and CVP export of water from the Delta. Additionally the projects must reduce reliance on exports from the Delta and as coequal goals provide a more reliable water supply for California including the Delta and protect, restore and enhance the Delta ecosystem. See Water Code section 85054. The unique cultural, recreational, natural resource, and agricultural values of the Delta are specifically referenced.

Tables 5-1, 8-1, 12-1, 13-1, and 14-1 show substantial increases in salinity in the Delta in many months. The increases are particularly harmful in those years designated as Critical, Dry, Below Normal and Above Normal Years.

For agriculture in much of the Delta including the central Delta impact. Salt accumulates in the soil as a result of evapotranspiration and surface evaporation. Due to soil types, shallow groundwater levels and crop limitations increasing leaching fractions by application of greater quantities of irrigation water is not feasible. Salt balance requires application of good quality water during periods of irrigation such that rainfall will achieve the leaching of salts from the soil necessary to achieve salt balance. Control of land use in the Primary zone of the Delta is intended to assure that this area remains in agricultural use including the growing of grain and other forage crops to sustain the wintering waterfowl of the Pacific

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Flyway and other important wildlife. Typically winter flooding is used to saturate the soil so that winter rains can drive the accumulated salts from the root zone for growing the customary crops. Leaching of salts can be accomplished through special land grading with containment dikes and open drains in close proximity that allow applied water to push salts from the root zone area. The process is very expensive and only applicable to growing high value crops.

Compliance with water quality objectives for agricultural uses rather than avoidance of degradation assumes that the objectives avoid significant harm. There is no supporting analysis for such assumption. The analysis of effects ignores the significant adverse impact to water quality from reduced Delta Outflow and tidal and other wetland habitat. Increased salinity intrusion from increases of the tidal prism, shortening the path for salinity intrusion and increased evaporative losses will result from habitat development. Degradation is the result of the desire to increase exports and is inconsistent with the Delta Reform Act requirements to honor the statutory and water right priorities, enhance Delta agricultural values, reduce reliance on the Delta and make the Delta water supply more reliable. The SWRCB has in the past viewed the water quality objectives for specific uses as a composite providing protection for all beneficial uses. Changes in objectives for a particular use will likely impact protection for other beneficial uses.

The DEIR incorrectly minimizes the significant adverse impacts from increases in methyl mercury concentration from the creation of habitat purportedly beneficial to fish to cover fish agency accord for export of water that is not surplus to the needs of the Delta and other areas of origin. Improvement of Delta water quality and flow with reduction of exports so as to provide sufficient conditions to protect fish would avoid the need for habitat measures which increase methyl mercury.

Toxic algal blooms and microcystis are already a significant health hazard in the Delta to recreational users, animals, and even fish. The Delta is a source of drinking water for export and local users and possibility of transmission of toxins is real. The proposed project degradation of Delta water quality will substantially increase the Health risk from such algal blooms. Cumulative impacts with likely future projects and actions will greatly increase the adverse impacts. The proposed single tunnel alone will remove substantial quantities of the good quality Sacramento River water from passing through the interior of the Delta. This will reduce velocities in some areas and increase residence time. Elimination of the flushing action and dilution from the cross-delta flow and outflow will increase residence time in many locations and increase the concentration of constituents contributing to algal blooms. Water temperature and clarity increases could also result. Further investigation and implementation of operational measures to manage residence time is clearly not a good faith effort to fully consider all reasonable alternatives. The most obvious of which is to eliminate isolated conveyance, provide adequate flushing flows and export only water which is truly surplus.

The microcystis effects from habitat development could certainly be mitigated by eliminating those which create the problem. The impacts to fish which habitat development is intended to mitigate can be greatly mitigated with water flow and other measures including the

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reduction of export of water which is not truly surplus and sensitivity as to when to run the export pumps.

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(Cont.)

THE MODELING USED FOR THE DEIR COMPARISONS PRODUCES MONTHLY AVERAGE RESULTS BASED ON YEAR TYPES THEREBY PRECLUDING ANALYSIS OF IMPACTS FROM THE VARIABILITY WITHIN MONTHLY CONDITIONS AND YEAR TYPES.

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Toxicity to human health, animals and even crops is in many cases dependent on the level of toxicity at a specific time and the actual conditions surrounding the same. It is our understanding more real-time modeling tools are available but not used thereby giving rise to the adequacy of the required analysis and disclosure of impacts.

THE DEIR ANALYSIS OF THE GROWTH INDUCING IMPACT OF THE PROPOSED PROJECT IS INADEQUATE AND REFLECTS A LACK OF GOOD FAITH IN ITS PRESENTATION

It is common knowledge that project water originally intended to be applied to specific limited acreages has over time been applied to excess lands within project contractor areas and agencies and now through elimination of transfer limitations can be applied almost anywhere. The amount of water available for irrigation directly impacts the amount land and crops that can be irrigated. The delivery of so called surplus project water originally not intended for use on excess lands or permanent crops has induced large plantings of almonds and other permanent crops which are dependent in great part on groundwater pumping which has contributed to regional subsidence and unsustainability of groundwater basins. The huge expansion of farmable land in the areas served with project water is conclusive evidence of the growth inducing impact of delivery of project water.

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It is also common knowledge that urban land developers through transfers and exchanges have secured project water to satisfy the need for a “permanent” supply to serve urban development. The focus on “direct growth-inducement within the Public Water Agency (PWA) service areas” is at best an artificial focus. The impact is not limited to such PWAs. Generally an acre foot of water will sustain two households for a year. With conservation even more growth can be sustained. 100 TAF to MET could be used to help justify 200,000 more households. The commingling with other sources of water does not diminish the impact. The issue is inducement of new permanent demand for water in arid areas when there is no way to serve present demand. The sustainability of groundwater basins is in doubt, the capability of present facilities to deliver exported water is diminishing, climate change including increased temperature will increase demand in already developed areas and the needs in the areas of origin are increasing. The solution is reduced reliance on exports from the delta; not increased exports.

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A REASONABLE RANGE OF ALTERNATIVES HAS NOT BEEN CONSIDERED AND THE DIRECT AND CUMULATIVE IMPACTS OF THE PROPOSED PROJECT AND ALTERNATIVES HAVE NOT BEEN ADEQUATELY PRESENTED

Additional Alternatives which should be analyzed are:

A short-term project to experiment with modification of the OMR fishery restraints and improvement of conditions for smelt in Suisun Bay with no increase in exports and no restraint on export limitations.

A short-term project to experiment with modification of the OMR fishery restraints and improvement of conditions for smelt in Suisun Bay with a progressive reduction in exports from the Delta by 10% per year without any increase in Delta salinity during ABOVE NORMAL, BELOW NORMAL, DRY and CRITICAL YEARS.

We are concerned that channel bathymetry in DSM2 is out of date and request that all modeling be updated with models incorporating more current channel geometry and the capability of providing data at a more frequent interval than monthly. There is substantial variability in years within each year type and it would be helpful to see how the variation impacts resulting water quality and flow.

The Central Delta Water Agency also joins in the comments of the South Delta Water Agency.

Very truly yours



Dante John Nomellini, Sr.
Manager and Co-Counsel

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II.4.3 LETTER L-CDWA-1 – CENTRAL DELTA WATER AGENCY, DANTE NOMELLINI, SR. MANAGER AND CO-COUNSEL, DATED JANUARY 6, 2020

II.4.3.1 RESPONSE TO COMMENT L-CDWA-1-1

Long-term operations of the SWP is a state action, therefore it is subject to environmental review under CEQA and not NEPA. Master Response 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations,” provide more detail regarding the relationship between DWR’s operation of the SWP and Reclamation’s operation of the CVP. For a discussion of cumulative impacts, including the status of a delta conveyance project, please refer to Master Response 26, “One-Tunnel Delta Conveyance Project.”

The One-Tunnel Delta Conveyance Project was not considered reasonably foreseeable because no environmental documentation has been completed and the Notice of Preparation of Environmental Impact Report for the Delta Conveyance Project was released on January 15, 2020. Please also see Master Response 26, “One-Tunnel Delta Conveyance Project” for additional discussion.

Master Response 4, “Legal Standards,” discusses the standard of review required under CEQA. The DEIR is a good faith attempt to achieve the required analysis, and to provide DWR, the Lead Agency, and the public with sufficient information about the project, its potential environmental effects, and the ways which those effects can be minimized, whether through mitigation measures or project alternatives, so that DWR can make an informed and reasoned decision on whether to approve the project.¹

For information on reduced reliance and water conservation/demand management please see Master Response 7, “Delta Reform Act,” and Master Response 6, “Demand Management/Conservation Measures.”

The Refined Alternative 2b is the preferred alternative identified in the FEIR. Accounting for all water year types, the total amount of SWP water exported from the Delta is generally expected to be the same as under Existing Conditions.

II.4.3.2 RESPONSE TO COMMENT L-CDWA-1-2

See Response to Comment L-CDWA-1-1 above regarding the applicability of NEPA to the project and standard of review required by CEQA.

DWR has analyzed the potential impacts of the long-term operations of the SWP on Delta hydrology, water quality, and protected species and determined that impacts would be less than significant. This discussion is found in DEIR Chapters 4.2, “Hydrology,” 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources.”

See Master Response 4, “Legal Standards,” and Master Response 17, “Application of CESA Standards,” for an explanation as to why DWR’s project objectives can be reconciled with the requirements of CESA

¹ Pub. Resources Code, § 21061; CEQA Guidelines, § 15003.

and the federal Endangered Species Act. Please see Master Response 9, “Relationship to WQCP Update and Voluntary Agreements” for further discussion regarding the Clean Water Act and the Porter-Cologne Water Quality Control Act. For a discussion of the reasons why the Proposed Project is consistent with the Delta Reform Act, see Mater Response 7, “Delta Reform Act.”

The comment does not explain here why it contends that the Proposed Project is inconsistent with Delta Protection Act (Water Code 12200 et seq.) and the Watershed Protection Act (Water Code 11460 et seq.). DWR knows of no such inconsistencies. The Delta Protection Act includes no provisions relevant to the project. The primary focus of that statutory scheme is on maintaining, within the Primary Zone, local land uses that are consistent with maintaining agricultural and open space values therein. The main mechanism for enforcement is the appellate authority of the Delta Protection Commission to review County land use decisions. Because DWR is a state agency, it is not subject to the jurisdiction of the Delta Protection Commission. The Watershed Protection Act is also irrelevant to the project as it applies to water right proceedings. Here, no water rights are in contention. Rather, the main focus of the project is to obtain a new incidental take permit from CDFW that would allow the SWP to operate for another 10 years with take coverage under CESA.

DWR will continue to operate the SWP in accordance with all applicable regulatory requirements, including Delta water quality limits, and within the terms and conditions contained in its water rights permits and licenses issued by the SWRCB. Accounting for all water year types, the total amount of SWP water exported from the Delta is generally expected to be the same as under existing conditions, which is not anticipated to increase water supplies under the Refined Alternative 2b. See FEIR Part III, DEIR Chapter 5.3 for more specifics regarding Refined Alternative 2b. For a discussion on the Delta Reform Act please see Mater Response 7, “Delta Reform Act.”

II.4.3.3 RESPONSE TO COMMENT L-CDWA-1-3

Please see Master Response 7, “Delta Reform Act,” and Master Response 14, “Public Trust,” that addresses requirements that all uses of the state’s water, including public trust uses, are both reasonable and beneficial.

The proposed long-term operations of the SWP includes several elements intended to restore and protect designated aquatic species, as described in DEIR Chapter 3.3, Table 3-3c, “Proposed Project Elements – Proposed Environmental Protective Measures.” In addition, several of the action goals and objectives described in DEIR Chapter 3.3, Table 3-3a, “Proposed Project Elements – Proposed Project-Level SWP Operations and Facilities,” also maintain Delta water quality, minimizing entrainment and species loss, maintain surface water levels and circulation, and improving aquatic species habitat.

DWR acknowledges the multiple legal references, including legislative history, to area of origin laws. The legal term “area of origin” dates back to 1931 in California. At that time, concerns over water transfers prompted enactment of several area of origin statutes. Area of origin statutes were intended to protect local areas against export of water. In particular, counties in Northern California had concerns about the state tapping their water to develop California’s supply. Early statutes prohibited depriving a “county in which the water...originates of any such water necessary for the development of the county.” The major area-of-origin laws are:

- The 1931 County of Origin Law (Water Code Sections 10500–10506)
- The 1933 Watershed Protection Statute (Water Code Sections 11460–11465)
- The 1959 Delta Protection Act (Water Code Sections 12200–12205)

A fourth area-of-origin statute, enacted in 1984, designated specific “protected areas,” all in northern California, and prohibited water exporters from depriving those areas “of the prior right to all the water reasonably required to adequately supply the beneficial needs of the protected area.”

These laws seek to grant areas in which water originates an adequate water supply for present and future needs. An important distinction related to these laws, recently clarified in *Tehama-Colusa Canal Authority v. U.S. Dept. of the Interior*, 819 F. Supp. 2d 956 (E.D. Cal. 2011) and affirmed by the Ninth Circuit in an appeal (721 F.3d 1086 (9th Cir. 2013)), is that these laws generally apply to protect water users within the area of origin against previous appropriations for export. In other words, water users within an area where water originates may apply for new diversions by seeking a water right from the State Water Board and may obtain priority for such diversions ahead of already existing diversions for export uses by the CVP and the SWP. However, when water is acquired and stored in CVP or SWP reservoirs, area-of-origin laws do not control how the stored water is allocated, which is determined by individual water service contracts. Water contractors located in an area of origin cannot assert preferential allocation of acquired and stored water simply because of their location within a watershed.

The comment refers to exports by the SWP and CVP, as well as Reclamation’s operations of Shasta Reservoir. Please note that the project is the long-term operations of the SWP and does not include CVP operations. See Master Response 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations,” for further information regarding the treatment of coordinated SWP and CVP operations in the EIR. The comment also refers to a single tunnel conveyance facility, which is not a part of this project. Please see Master Response 8, “Other State Efforts,” and Master Response 26, “One Tunnel Delta Conveyance Project,” for further information regarding the relationship of long-term SWP operations and a future conveyance facility.

The long-term operations of the SWP would not change current regulatory requirements that protect the beneficial use of water. When exporting water from the Delta, DWR must comply with all current state and federal regulatory requirements in effect at the time of the export pumping, including numerous environmental standards, laws, and regulations relating to Delta inflow and outflow, Delta water quality, fish protection, environmental needs, water rights, and the needs of other users, including in-Delta users. The laws and regulations include regulatory constraints of applicable State Water Board orders, U.S. Army Corps of Engineers permits, Biological Opinions, and any relevant judicial orders in effect at the time of the operation. The State Water Board has also established water quality and flow requirements and limits on the rate of export of water that can be pumped for exports and is currently reviewing those requirements in its Bay-Delta Water Quality Control Plan to ensure beneficial uses are protected. Please see Master Response 9, “Relationship to the WQCP Update and Voluntary Agreements,” for further information on the State Water Board’s process for the Bay-Delta Water Quality Control Plan update.

To the extent that commenter cites section 11912 of the Water Code, DWR notes that it states that,

“The department, in fixing and establishing prices, rates, and charges for water and power, shall include as a reimbursable cost of any state water project an amount sufficient to repay all costs incurred by the department, directly or by contract with other agencies, for the preservation of fish and wildlife and determined to be allocable to the costs of the project works constructed for the development of that water and power, or either. Costs incurred for the enhancement of fish and wildlife or for the development of public recreation shall not be included in the prices, rates, and charges for water and power, and shall be nonreimbursable costs.”

(Emphasis added.) Thus, not all costs associated with preservation of fish and wildlife may be charged to SWP contractors. Only such costs that are allocable to projects works are reimbursable, and costs associated with enhancement of fish and wildlife may not be passed to the SWP contractors.

Please see Master Response 4, “Legal Standards,” and Master Response 17, “Application of CESA Standards,” for information regarding the requirement to fully mitigate. Please also see Master Response 7, “Delta Reform Act,” and Master Response 6, “Demand Management/Conservation Measures,” for more information.

II.4.3.4 RESPONSE TO COMMENT L-CDWA-1-4

Please refer to Master Response 26, “One-Tunnel Delta Conveyance Project,” for discussion of cumulative impacts, including combined impacts from long-term operations of the SWP and the proposed one-tunnel project.

II.4.3.5 RESPONSE TO COMMENT L-CDWA-1-5

Regarding the proposed project and reduced reliance, please see Master Response 7, “Delta Reform Act.”

As discussed in Master Response 2, “Baseline,” under the subheading, “Treatment of Historical Conditions,” CEQA documents assessing changes in SWP operations must focus solely on modifications with the potential to cause new significant environmental effects above and beyond those associated with ongoing operations. The DEIR analyzes potential impacts of the Proposed Project and alternatives and concluded that no significant impacts would result.

Droughts are considered in the 82-year planning simulation period. A discussion of drought actions under the Proposed Project is provided in DEIR Chapter 3.3.7, “Drought and Dry Year Actions.” Furthermore, the Proposed Project is not expected to increase frequency of waivers of protective measures as compared to Existing Conditions. Further discussion is provided in Master Response 24, “Drought Conditions.”

As discussed in Master Response 7, “Delta Reform Act,” under the subheading “Reduced Reliance on the Delta,” DWR will consult with the Delta Stewardship Council and staff as it considers the Delta Plan’s co-equal goals and policies, recognizing the 2009 Delta Reform Act, including the state policy to reduce reliance on the Delta in meeting California’s future water supply needs through a statewide

strategy of investing in improved regional supplies, conservation, and water use efficiency.² Under Water Code Section 85021, it is the obligation of each region that relies on water from the Delta watershed, not DWR, to determine the best ways to meet this goal by improving regional self-reliance.

II.4.3.6 RESPONSE TO COMMENT L-CDWA-1-6

As discussed in Response to Comment L-CDWA-1-1, long-term operation of the SWP is not a federal action subject to environmental review under NEPA. Therefore, the requirements of 40 Code of Federal Regulations Section 1502.14 are not applicable to the project or the DEIR.

The requirements of CEQA relating to consideration of alternatives is discussed further in response to Master Response 3, “The CEQA Process,” Under the CEQA Guidelines, the DEIR should identify a reasonable range of alternatives that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more significant effects.³ Under CEQA, a lead agency may structure its alternatives analysis around a reasonable definition of a fundamental underlying purpose, and need not study alternatives that cannot achieve that basic purpose.⁴

For a discussion on drought please see L-CDWA-1-5 and Master Response 24, “Drought Conditions.”

II.4.3.7 RESPONSE TO COMMENT L-CDWA-1-7

As discussed in DEIR Chapter 3.1.4, “Description of Existing SWP Water Service Contracts,” DWR has water contracts to deliver water to Public Water Agencies located south of the Delta. The analysis found that these deliveries would not result in significant impacts on listed species, water quality, or Delta hydrology caused by the long-term operations of the SWP, including the proposed minimum export rate. See Master Response 7, “Delta Reform Act,” regarding reduced reliance.

The SWP will continue to be operated in a manner that is consistent applicable regulatory requirements, including Delta water quality limits, and within the terms and conditions contained in its water rights permits and licenses issued by the SWRCB.

The DWR and USBR report to the SWRCB on export amounts to maintain health and safety during a drought. Pumping rates below 1,500 cfs are difficult for the projects to sustain in the long term due to a combination limited water supply sources for some contractors and physical constraints of the facilities. For many reasons, DWR and the USBR believe and have historically maintained a minimum health and safety export level at any one time at a range with a 1,500 cfs cap. Actual health and safety export levels will depend on a number of factors and should take into account not only the need to deliver water directly for drinking water, sanitation, and fire suppression purposes, but also the need to store water now for blending later for health and safety water quality considerations, in addition to considerations of facility operational constraints. A combined pumping rate of 1,500 cfs is the most biologically protective export rate analyzed in both the 2008 Fish and Wildlife Service Biological Opinion for smelt (2008 Biological Opinion), and the 2009 NOAA Fisheries Biological Opinion for

² Wat. Code, § 85021.

³ CEQA Guidelines, § 15126.6, sub. (a).

⁴ *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1165.

salmonids and green sturgeon (2009 Biological Opinion) in drought conditions. That rate is based on minimum municipal and refuge contractor supply demands, as well as the physical constraints at Jones Pumping Plant. At the 1,500 cfs level, negative flows in Old and Middle Rivers (OMR) and entrainment risks are reduced.

II.4.3.8 RESPONSE TO COMMENT L-CDWA-1-8

Detailed discussions of potential impacts to water quality and cumulative impacts to water quality are provided in DEIR Chapter 4.3, “Surface Water Quality,” and Section 4.6.1, “Cumulative Impacts,” respectively. The SWP will continue to be operated in a manner that is consistent applicable regulatory requirements, including Delta water quality limits, and within the terms and conditions contained in its water rights permits and licenses issued by the SWRCB.

Please refer to Master Response 26, “One-Tunnel Delta Conveyance Project” for discussion of cumulative impacts, including combined impacts from long-term operations of the SWP and the proposed one-tunnel project.

As written, PL-108-361 requires that “[p]rior to increasing export limits from the Delta for the purposes of conveying water to south-of-Delta Central Valley Project contractors or increasing deliveries through an intertie” USBR is directed to “develop and initiate implementation of a program to meet all existing water quality standards and objectives for which the Central Valley Project has responsibility”. A straightforward reading of the term “initiate” makes it clear that USBR does not need to have fully implemented its plan prior to increasing export limits under PL-108-361. Consistent with that reading, USBR’s website indicates that it is “implementing” the required program (See <https://www.usbr.gov/mp/ptms/background.html>, last checked 2/4/2020). DWR and USBR are also required to meet specific water quality standards under D-1641 and other regulatory restrictions that constrain SWP and CVP operations regardless of USBR’s plan implementation under PL-108-361. (See, e.g., Section 4.4.5 “Regulatory Limitations On Operations of Delta Water Diversions”

For similar issues raised in this section of CDWA’s comment letter 1, please refer to Response to Comment CDWA-1-3.

II.4.3.9 RESPONSE TO COMMENT L-CDWA-1-9

The DEIR has analyzed the impacts of long-term operations of the SWP on Delta hydrology and aquatic biological resources, and determined, based on scientific analysis, that impacts would be less than significant. Further discussion of why reduced Delta outflows in some months would not create a significant impact to salmon is provided in Master Response 24, “Impact Significance (Salmonids).” Please see Master Response 2, “Baseline,” under subheading, “Treatment of historical conditions,” for discussion regarding past decline of fish populations.

Additionally, DWR identified Refined Alternative 2b as the preferred alternative in the FEIR, which would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance

into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further improve environmental conditions beyond those identified in the DEIR. (See Part III of this FEIR, Revisions to the DEIR, for the Refined Alternative 2b in DEIR Chapter 5.3.)

Regarding flow criteria and the Delta Reform Act, please see Master Response 7, “Delta Reform Act.” For additional details on the status of habitat restoration projects, please refer to section 4.6.1.7 in the FEIR and Table 4.6.1.

II.4.3.10 RESPONSE TO COMMENT L-CDWA-1-10

The SWP will continue to be operated in a manner that is consistent with applicable regulatory requirements, including Delta water quality limits, and within the terms and conditions contained in its water rights permits and licenses issued by the SWRCB.

For a discussion on the Water Quality Control Plan updates, please see Master Response 9, “Relationship to WQCP Update and Voluntary Agreements.”

For a response to similar issues raised, please see Response to Comment CDWA-1-5 and in Master Response 7, “Delta Reform Act.” As noted in DEIR Chapter 4.3, “Surface Water Quality,” D-1641 regulations are designed to protect beneficial uses of agriculture, municipal and industrial, and fish and wildlife. Supporting analysis of D-1641 regulations for beneficial uses are provided in the SWRCB (2006) Bay-Delta WQCP, a referenced document in the DEIR. Therefore, compliance with D-1641 water quality objectives would prevent significant harm to agricultural, municipal and industrial, and fish and wildlife beneficial uses. The anti-degradation policy does not apply to the proposed project because it would not result in any discharges to surface waters.

II.4.3.11 RESPONSE TO COMMENT L-CDWA-1-11

Potential impacts to water quality (including from mercury and methyl-mercury) from the Proposed Project are discussed in DEIR Chapter 4.3.2, “Water Quality Constituents That Could Be Affected by The Proposed Project.” See also Master Response 5, “Treatment of Habitat Restoration.” Habitat restoration actions described in DEIR Chapter 4.6.1, “Cumulative Impacts,” are separate projects under CEQA and therefore subject to their own environmental review process (refer Master Response 8, “Other State Efforts”). The cumulative environmental impacts of ongoing and future habitat restoration actions are described in DEIR Chapter 4.6.1.7, “Habitat Restoration.” Potential cumulative impacts to water quality from long-term operations of the SWP in combination with such habitat restoration activities and other cumulative projects are addressed in DEIR Chapter 4.6.1.4, “Surface Water Quality.”

II.4.3.12 RESPONSE TO COMMENT L-CDWA-1-12

As discussed in DEIR Chapter 4.4.7.4, subheading “Harmful Algal Blooms” (p. 4-152 and 4-167), the IEP MAST (2015) conceptual model found that differences in flows could influence harmful algal blooms. DSM2-HYDRO modeling found that there would be little difference in velocity conditions between the

Existing Conditions and Proposed Project and Refined Alternative 2b scenarios; therefore, long-term operations of the SWP is not anticipated to influence the occurrence likelihood of harmful algal blooms.

Analysis of cumulative impacts is presented in DEIR Chapter 4.6.1, “Cumulative Impacts,” with additional discussion, particularly in respect to the “single tunnel” project, provided in Master Response 26, “One-Tunnel Delta Conveyance Project.”

For a decision on alternatives development, please see Master Response 3, “The CEQA Process.”

II.4.3.13 RESPONSE TO COMMENT L-CDWA-1-13

As discussed in Master Response 20, “Best Available Science,” DWR used the best available scientific information to produce analyses of the effects of the project, drawing on a number of scientific and engineering disciplines that include geology, hydrology, biology, ecology, chemistry, engineering, and climatology. CalSim II is the best available science for planning studies. Additionally, the modeling is based on reasonable assumptions and appropriate, widely accepted modeling tools. Please see DEIR Appendix H, Attachment 1-7, “Model Limitations,” for model documentation and appropriate use.

II.4.3.14 RESPONSE TO COMMENT L-CDWA-1-14

As discussed within DEIR Chapter 4.6.2, “Growth-Inducing Impacts,” the total south of Delta SWP deliveries would not exceed the contracted maximum water volume of the individual public water agencies. In addition, under long-term operation of the SWP, deliveries are projected to remain within the range of historical deliveries (see DEIR Chapter 4.6, Figures 4.6-2 and 4.6-3). Historical expansion of irrigated farming as a result of prior SWP operations is not within the scope of analysis of impacts under CEQA, as such conditions represent the existing baseline against which project impacts are compared. For more information on the baseline, please see Master Response 2, “Baseline.”

II.4.3.15 RESPONSE TO COMMENT L-CDWA-1-15

DEIR Chapter 4.6.2.2, “Growth-Inducing Impacts,” acknowledges that the potential increase in future project deliveries might be linked to future growth, as increased water deliveries could be used for urban growth in areas dependent on this water supply. However, the analysis demonstrates that availability of water is only one of many factors that land use agencies consider when making decisions about growth, and that historical fluctuations in South of Delta water deliveries has not had an appreciable effect on population growth in the South of Delta service areas (refer DEIR Chapter 4.6, Figures 4.6-3 and Figure 4.6-4). Based on the absence of a discernable link between SWP water deliveries and population growth based on historical data, long-term operations of the SWP is not anticipated to result in a direct or indirect increase in population.

II.4.3.16 RESPONSE TO COMMENT L-CDWA-1-16

DEIR Chapter 5, “Alternatives to the Proposed Project,” presents a reasonable range of alternatives as required by CEQA. Master Response 3, “The CEQA Process,” provides additional discussion regarding the requirements of CEQA with respect to development of alternatives. CEQA does not require a Lead

Agency to study specific alternatives proposed by the public or other agencies (*Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 234 Cal.App.4th 214, 256). In any case, the two alternatives suggested by the commenter are both short-term projects which do not meet the project objectives for continued long-term operations of the SWP (refer DEIR Section 3.1.1, “Project Objectives”).

II.4.3.17 RESPONSE TO COMMENT L-CDWA-1-17

Although more recent channel bathymetry data are available, they do not reflect the best available science. As DSM2 input data are CalSim II results, these models must be linked. The current tools do not provide a linkage between a DSM2 model with updated bathymetry to a CalSim II model. More details regarding best available science are provided in Master Response 20, “Best Available Science.”

II.4.3.18 RESPONSE TO COMMENT L-CDWA-1-18

Please refer to Responses to Comments L-SDWA-2-1 through L-SDWA-2-25 for specific responses to the comments of the South Delta Water Agency, which this comment letter incorporates by reference.

II.4.3.19 RESPONSE TO COMMENT L-CDWA-1-ATT-1

Please see Response to Comment L-CDWA-1-5.

II.4.3.20 RESPONSE TO COMMENT L-CDWA-1-ATT-2

Please see Response to Comment L-CDWA-1-5.

II.4.3.21 RESPONSE TO COMMENT L-CDWA-1-ATT-3

Please see Response to Comment L-CDWA-1-3, CDWA-1-5, and CDWA-1-9.

II.4.3.22 RESPONSE TO COMMENT L-CDWA-1-ATT-4

Please see Response to Comment L-CDWA-1-5.

II.4.3.23 RESPONSE TO COMMENT L-CDWA-1-ATT-5

Please see Response to Comment L-CDWA-1-3 and CDWA-1-8.

II.4.3.24 RESPONSE TO COMMENT L-CDWA-1-ATT-6

Please see Response to Comment L-CDWA-1-3.

II.4.3.25 RESPONSE TO COMMENT L-CDWA-1-ATT-7

Please see Response to Comment L-CDWA-1-8.

II.4.3.26 RESPONSE TO COMMENT L-CDWA-1-ATT-8

Please see Response to Comment L-CDWA-1-8.

II.4.3.27 RESPONSE TO COMMENT L-CDWA-1-ATT-9

Please see Response to Comment L-CDWA-1-8.

II.4.3.28 RESPONSE TO COMMENT L-CDWA-1-ATT-10

Please see Response to Comment L-CDWA-1-9.

II.4.3.29 RESPONSE TO COMMENT L-CDWA-1-ATT-11

Please see Response to Comment L-CDWA-1-9.

II.4.3.30 RESPONSE TO COMMENT L-CDWA-1-ATT-12

Please see Response to Comment L-CDWA-1-9.

II.4.3.31 RESPONSE TO COMMENT L-CDWA-1-ATT-13

Please see Response to Comment L-CDWA-1-9.

II.4.3.32 RESPONSE TO COMMENT L-CDWA-1-ATT-14

Please see Response to Comment L-CDWA-1-9.

II.4.3.33 RESPONSE TO COMMENT L-CDWA-1-ATT-15

Please see Response to Comment L-CDWA-1-9.

II.4.3.34 RESPONSE TO COMMENT L-CDWA-1-ATT-16

Please see Response to Comment L-CDWA-1-9.

II.4.3.35 RESPONSE TO COMMENT L-CDWA-1-ATT-17

Please see Response to Comment L-CDWA-1-9.

II.4.3.36 RESPONSE TO COMMENT L-CDWA-1-ATT-18

Please see Response to Comment L-CDWA-1-9.

II.4.3.37 RESPONSE TO COMMENT L-CDWA-1-ATT-19

Please see Response to Comment L-CDWA-1-9.

CENTRAL DELTA WATER AGENCY

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January 6, 2020

Via Email Only to LTO@water.ca.gov

Attn: You Chen Chou
CA Dept. of Water Resources
P.O. Box 942836
Sacramento, CA 94236-0001

Re: CDWA SUPPLEMENTAL Comments on the DEIR for the Long-Term Operation of the SWP.

Dear You Chen Chou:

These comments supplement other comments being submitted on the above-referenced matters by the Central Delta Water Agency (CDWA).

I. The Misleading Assertion that the Long-Term Operations “Do[] Not Seek to Increase SWP Exports” Must be Eliminated.

DWR’s website states that the Proposed Project “does not seek to increase SWP exports.” (<https://water.ca.gov/News/News-Releases/2019/November/Long-Term-Operations-of-State-Water-Project>, as of January 6, 2020.) In actuality, and as everyone is well aware, the entire purpose of the proposed changes to the SWP’s operations is to increase SWP exports.

As the DEIR explains at page 3-18, with emphasis added:

DWR, in coordination with Reclamation, proposes to operate the SWP in a manner that maximizes exports while minimizing direct and indirect impacts on state and federally listed fish species.

According to the DEIR, this desire to “maximize[] exports” will indeed result in substantial increases in exports:

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Long-term average annual total SWP deliveries would potentially increase by 219 TAF (6%) under the Proposed Project scenario compared to the Existing Conditions scenario. Relative delivery increases would be greatest in above-normal, below-normal, and dry years.

In the dry and critical water years, proposed long-term average annual SWP deliveries would increase by 193 TAF (8%), compared to deliveries under the Existing Conditions scenario. For the most part, the Proposed Project would result in greater relative increases in deliveries in dry and critical water years.

(DEIR, p. 4-18, emphasis added.)

What is worse is the fact that “the Proposed Project would result in greater relative increases in deliveries in dry and critical water years,” i.e., the times when that exported water is needed the most for fish and wildlife, in-Delta uses and/or other area of origin needs.

Needless to say, the statement on DWR’s website that the Proposed Project “Does Not Seek to Increase SWP Exports” is false and misleading and must be removed.

2. Increasing Exports is Contrary to the State Policy to Reduce Reliance on the Delta.

In Water Code section 85021, the Legislature declares:

The policy of the State of California is to reduce reliance on the Delta in meeting California's future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency.

DWR’s goal for the Proposed Project, i.e., “to operate the SWP in a manner that maximizes exports while minimizing direct and indirect impacts on state and federally listed fish species” is directly contrary to that reduced reliance policy.

If DWR is somehow able to “free up” additional water by modifying its operations, the very last place that water should be diverted is through DWR (or the USBR’s) Delta export pumps, especially during dry and critical years. Only water that is truly surplus can be lawfully exported. The DEIR has come no where close to demonstrating that any of the proposed increased exports constitute water that is truly surplus.

3. The DEIR Fails to Analyze the Proposed Project During Foreseeable Droughts.

As explained in the CDWA’s other comments on this Project, a chronic failure of DWR (and the USBR) is the failure to prepare for foreseeable drought conditions. Instead, history reveals that in the earliest stages of drought conditions DWR and the USBR claim that they do not have enough water in their reservoirs to meet all D-1641 and other requirements. The DEIR

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reveals that DWR (and the USBR) are once again proposing to proceed with long term operations with effectively zero analysis of how they will operate during foreseeable drought conditions.

Rather than conduct a thorough and detailed analysis of DWR's operations during future drought conditions as mandated by CEQA, the DEIR merely states the following under the heading "Drought and Dry Year Actions":

DWR shall coordinate with Reclamation to develop a voluntary toolkit of drought actions that could be implemented at the discretion of DWR and/or Reclamation.

(DEIR, p. 3-38, emphasis added.)

As a result, the public and the decision makers are (once again) left in the dark about the nature of the SWP's long term operations during foreseeable drought conditions. An obvious threshold inquiry that the DEIR must analyze is whether any of the proposed substantial increases in exports from the Proposed Project will be needed to meet D-1641 or other in-Delta or area of origin requirements during drought conditions. For example, will those increased exports need to remain in carryover storage to address those requirements in the subsequent year or years?

As it stands, the DEIR's analysis of the proposed long term operations are fatally deficient without any analysis and specification of how DWR intends to operate during foreseeable drought conditions. Questions such as, "How much water will DWR be carrying over during its proposed long term operations in any particular year in anticipation of the subsequent year or years being dry or critically dry," must be thoroughly addressed and discussed. The entire range of potentially significant impacts from those operations and potentially feasible mitigation measures and alternatives to address those impacts must also be thoroughly addressed and discussed.

4. DWR's Reliance on its Compliance with D-1641 to Render Water Quality and Flow Impacts Less than Significant is Misplaced.

a. Drought Conditions.

As just discussed, the DEIR includes no discussion or analysis of how DWR (or the USBR) plan to comply with D-1641 during drought conditions. The DEIR does not even define "drought conditions" to even begin a meaningful discussion or analysis of such compliance.

Accordingly, DWR's assertion that impacts to salinity from the Proposed Project, for example, will not be significant because the "SWP will comply with D-1641 standards" rings hollow when it comes to foreseeable drought conditions. As explained in the CDWA's other

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comments on this project, rather than comply with D-1641 standards in drought conditions, DWR's pattern and practice is to seek near immediate relief from the D-1641 standards at essentially the outset of such conditions. Rather than reduce exports to preserve water to meet those standards to the maximum extent possible during drought conditions, DWR historically opts to seek waivers of those standards.

If DWR is truly planning to at all times try to meet the D-1641 standards to the maximum extent possible (which, needless to say, it is required by law to do), then the DEIR must discuss and analyze how DWR is going to meet those standards during foreseeable droughts, and especially, how the proposed changes to its long term operations set forth in the Proposed Project, including substantial increases in exports in all year times, including dry and critically dry years, will affect its ability to meet those standards. In this regard, a thorough analysis of the extent to which DWR intends to restrict its exports under the Proposed Project to retain sufficient water in its reservoirs for the subsequent year or years in anticipation of drought conditions is essential.

b. Term 91.

A further complication to the DEIR's reliance on the Projects' compliance with D-1641 to reduce the individual (or cumulative) impacts from the Project to a level of insignificance is the fact that whenever the Projects release storage water to maintain the D-1641 standards, the State Water Board curtails all post-1914 appropriative water right holders within the Delta watershed that have "Term 91" in their water permits or licenses. Thus, to the extent this Project, individually or cumulatively, triggers the need for the Projects to release storage water to maintain one or more of D-1641's salinity or other standards, a vast number of diverters within the Delta watershed, including the Delta itself, must cease diverting under their post-1914 appropriative water rights. Such cessation of diversions has the potential to cause substantial and widespread effects on numerous environmental resources including terrestrial species, air quality, groundwater recharge, etc. (Information on Term 91 is readily available on the State Water Board's website at: https://www.waterboards.ca.gov/water_issues/programs/delta_watermaster/term91.html)

Accordingly, to the extent the DEIR relies on the Projects' compliance with the various D-1641 standards to mitigate the impacts from the individual or cumulative impacts of the Project, the DEIR must analyze the extent, and under what hydrological and other conditions, those impacts will trigger the need for the Projects to the release storage water to bring those standards into compliance and analyze the entire host of environmental resources impacted by such releases, including the impacts on those resources from the widespread curtailment of post-1914 appropriative rights which contain Term 91.

If on the other hand DWR determines that it is not reasonably feasible that the Project, individually or cumulatively, will ever trigger the need for the Projects to release storage water to offset impacts on any D-1641 standard under any reasonably foreseeable drought or other

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hydrological condition, then DWR must provide sufficient facts and analysis to support such a determination. As it stands, the DEIR concedes that the Project “generally would increase salinity during the late fall and early winter in the years following wet and above-normal water years” (DEIR, p. 4-28) and notes that, “[d]espite the potential for salinity increases, SWP will comply with D-1641 standards” (*ibid.*), and there are no facts or analysis in the DEIR that CDWA is aware analyzing or discussing the extent to which the Project individually, or cumulatively, will, or will not, trigger Term 91.

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5. **Inadequate Project Description, Improper Deferral, Piecemealing, Etc.**

An adequate project description is essential to an adequate EIR. Without knowing the precise details of the Proposed Project, a meaningful environmental analysis of the project is impossible. Many aspects of the Proposed Project are inadequately defined, including the following aspects:

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- The duration of the Proposed Project, i.e., how many years into the future is the DEIR intended to cover?
- The details of the “adaptive management program.” The DEIR states at page 3-51, with emphasis added: “The AMP will be developed before issuance of, and could be incorporated into, the ITP DWR is seeking for CESA coverage for the Proposed Project. Any proposed adaptive management changes should provide equivalent or superior conservation benefits to the listed species at equal or lesser societal costs.” This lack of detail renders the project description inadequate and also constitutes and improper deferral of the development of those details. (The same is true for the adaptive management plan for the so-called “Delta Smelt Summer-Fall Habitat Actions” [DEIR, p. 3-30].)
- The details of the minimum 1,500 cfs export component of the Proposed Project. This component comes out of nowhere. At one point it is solely for “health and safety” and at other times it is for “health and safety needs, critical refuge supplies, and obligations to senior water rights holders . . .” (DEIR, pp. 3-29 & 3-30.) Not only is this component inadequately, and inconsistently, described, there is no discussion or analysis whatsoever regarding where this 1,500 cfs figure came from. For example, what are the facts and analysis supporting that amount? What are those specific health and safety needs, critical refuge supplies and alleged “senior water right holders” that DWR is intending to satisfy with this minimum amount? Moreover, what are the full range of potential environmental impacts of diverting this 1,500 away from other water needs, e.g., health and safety needs within the Delta or in areas of origin, not to mention senior water right needs in those areas? Not only is there no foundation for the establishment of this minimum amount of exports, there is zero analysis of the potential environmental impacts from providing this minimum amount in any foreseeable

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drought or other circumstances.

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- The details of the up to 600 TAF of water transfers “during an expanded water transfer window, between July through November.” (DEIR, p. 1-6.) According to the DEIR, “Water transfers would occur through various methods, including, but not limited to, groundwater substitution, release from storage, and cropland idling, and would include individual and multi-year transfers. The effects of developing supplies for water transfers in any individual year or a multi-year transfer is evaluated outside of this proposed action.” (DEIR, p. 3-51.) If this DEIR is intended to cover the programmatic or project-level approval of any water transfers, which it seemingly is, the DEIR needs to analyze all aspects of these transfers, including but not limited to “the effects of developing supplies” for the transfers. A complete analysis includes an examination of where and how the transferred water would have been used in the absence of the transfer and a comparison of where and how it will be used with the transfer. The breadth of potentially significant impacts is substantial. Impacts on all essentially all aspects of the environment are potentially affected. Impacts to groundwater and groundwater basins are a particularly sensitive topic. Legal restrictions on the direct or indirect export of groundwater via a water transfer must also be discussed and analyzed, including but not limited to Water Code section 1220. Thus far, the DEIR concedes it has done essentially zero analysis of the up to 600 TAF of water transfers that DWR contends are an integral part of its proposed long term operations. That lack of analysis is fatal to any purported programmatic or project-level approve of those transfers.

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- The DEIR lacks any details on the maintenance of export facilities including the export aqueducts during the long term operations covered by the Proposed Projects. It is well-known that the California Aqueduct has been and continues to suffer substantial subsidence. It is certainly reasonably feasible that DWR will take action to try to address that subsidence during the course of its long term operations. Accordingly, the entire range of potential environmental impacts from such maintenance activities, including but not limited to subsidence reversal activities, must be addressed in the DEIR. Contrary to the DEIR’s suggestion, such impacts would include green house gas emissions, among numerous other impacts. (See e.g., DEIR Volume 2, at “pdf” p. 152 [“The long-term operation of the SWP would not generate new sources of GHGs that would significantly impact the environment because the Proposed Project would not construct new facilities or physically alter existing facilities”].)

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- The foregoing, and other, failures to address various actions in this DEIR also constitute improper piecemealing of those actions. CEQA requires the “whole of the action” to be addressed together at one time. For the foregoing and other reasons, the DEIR wholly fails in that regard.

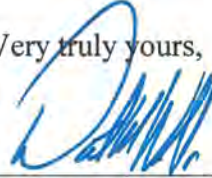
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6. **Ongoing Federal and State Disputes Over Coordinated Operations.**

The entire DEIR relies on the fact that the CVP and SWP coordinate their operations. The recent disputes between the state and federal governments over those operations throw a substantial monkey wrench into the future coordination of those operations. The DEIR must therefore fully discuss those disputes and address and analyze the reasonably foreseeable operations of the CVP and SWP in light thereof. The failure to specifically address the CVP's operations along with the SWP's operations also constitutes impermissible piecemealing.

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Very truly yours,



Dante J. Nomellini, Jr.

II.4.4 LETTER L-CDWA-2 – CENTRAL DELTA WATER AGENCY, DANTE NOMELLINI, JR., DATED JANUARY 6, 2020

II.4.4.1 RESPONSE TO COMMENT L-CDWA-2-1

As compared to Existing Conditions, the DEIR found that exports would increase with implementation of the Proposed Project. However, exports under the Refined Alternative 2b, which is the preferred alternative for the FEIR, would remain similar to existing conditions. This is described in FEIR Part III, DEIR Chapter 5.3, “Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP.” The statement on DWR’s website is consistent with modeled results of Refined Alternative 2b.

II.4.4.2 RESPONSE TO COMMENT L-CDWA-2-2

For a discussion of the Delta Reform Act and reduced reliance, please see Master Response 7, “Delta Reform Act.” Please also see Master Response 6, “Demand Management/Conservation Measures.”

II.4.4.3 RESPONSE TO COMMENT L-CDWA-2-3

Droughts are considered in the 82-year planning simulation period. A discussion of drought actions under the Proposed Project is provided in DEIR Chapter 3.3.7, “Drought and Dry Year Actions.” Furthermore, the long-term operations of the SWP is not expected to increase frequency of waivers of protective measures as compared to Existing Conditions. SWP operations assess the risk of drought as well as flood in every water year. Further discussion is provided in Master Response 24, “Drought Conditions.”

II.4.4.4 RESPONSE TO COMMENT L-CDWA-2-4

Please see Response to Comment L-CDWA-2-3.

II.4.4.5 RESPONSE TO COMMENT L-CDWA-2-5

The CalSim II model accounts for Term 91 curtailments. Curtailments only occur when: (1) supplemental project water is needed to meet water quality objectives and (2) the Delta is in balanced conditions. Drier conditions in the Delta result in Term 91 curtailments. Conditions during which Term 91 curtailments typically occur during the summer and fall months but may be extended as a result of drought conditions. Please review Term 91 Water Availability and Curtailment FAQ (https://www.waterboards.ca.gov/water_issues/programs/delta_watermaster/docs/term_91_faq.pdf) for more details. As Term 91 curtailments are triggered by environmental and hydrologic conditions, the proposed long-term operations of SWP would not alter frequency of Term 91 curtailments as compared to existing conditions. As there is no expected increased to cessation of Term 91 diversions, no impacts to terrestrial species, air quality, and groundwater recharge would occur.

II.4.4.6 RESPONSE TO COMMENT L-CDWA-2-6

The Incidental Take Permit that is being sought by DWR has a duration of ten years. Please see FEIR Part III, DEIR Chapter 3.3, “Description of the Proposed Project,” for the specific refinements made to include this information.

II.4.4.7 RESPONSE TO COMMENT L-CDWA-2-7

See Part III of this FEIR for Refinements to the DEIR, specifically DEIR Chapter 5.3, subheading “Adaptive Management Plan.” Refined Alternative 2b includes an adaptive management plan developed in coordination with CDFW, that is consistent with the ITP application. Additional details regarding adaptive management are provided in Master Response 25, “Real-Time Operations.”

II.4.4.8 RESPONSE TO COMMENT L-CDWA-2-8

Regarding the basis for establishing the 1,500 cfs minimum export rate to protect public health and safety, please refer to CDWA letter 1, Comment L-CDWA-1-7.

II.4.4.9 RESPONSE TO COMMENT L-CDWA-2-9

As discussed in DEIR Chapter 4.6.1.5, “Cumulative Impacts,” water transfers would require their own permitting analyses and environmental review, as required for the particular transfer, including any required CEQA documentation. Please see Response to Comment L-CDWA-1-17 regarding DSM2 channel cross sections. Some additional analysis of potential effects of water transfers have been added to the analysis in DIER Chapter 4.4. Please see Part III of this FEIR for the specific refinements made.

The EIR is not intended to provide project-level coverage for future water transfers, but rather provides only a program-level analysis. This approach reflects the reality that the specific details of future transfers will not be known until specific transfers are proposed, such that any attempt at present to ascertain their individualized impacts of particular transfers would be an exercise in speculation. The kinds of detailed information the commenter is requesting about such future transfers and their possible impacts will have to await future project-level analyses for actual transfer proposals.

II.4.4.10 RESPONSE TO COMMENT L-CDWA-2-10

Long-term operation of the SWP would not include construction of any new facilities or physical alteration of existing facilities. The proposed long-term operations of the SWP includes operation of existing SWP facilities, modifications to ongoing programs being implemented as part of SWP operations, improvements to specific activities that would enhance protection of special-status fish species, and commitments to support ongoing studies and research on these special-status species to improve the basis of knowledge and management of these species.

See Master Response 8, “Other State Efforts,” for a discussion of “piecemealing” principles. As is evident from that discussion, nothing in CEQA precludes DWR from seeking a new ITP from CDFW

without DWR, at the same time, having to include within the EIR analyses of the effects of maintenance activities and efforts to address subsidence.

The operations and maintenance of the SWP is described throughout the DEIR. Please refer to the DEIR Chapter 4.4.7.1, “General Analytical Approach,” which includes: Operations and maintenance components of the Proposed Project include all aspects of operating and maintaining the SWP. Components of the operations and maintenance (O&M) impacts analyses also include evaluating impacts of annual O&M activities included in the Proposed Project, such as installing and removing agricultural barriers and aquatic weed removal. Following the analysis of potential impacts of O&M components of the Proposed Project, this section also analyzes the Environmental Protective Measures included in the Proposed Project to address and offset the impacts of the O&M components on listed species. Each specific component of the Proposed Project is identified as an O&M component or environmental protective measure (see Chapter 3, “Project Description”), potential impact mechanism(s) are described, and the Proposed Project components are evaluated for each potentially affected species accordingly.

II.4.4.11 RESPONSE TO COMMENT L-CDWA-2-11

Please see Responses to Comments L-CDWA-2-6 through L-CDWA-2-10. Master Response 8, “Other State Efforts,” includes a discussion about why the analysis in the DEIR is not considered “piecemealing” under CEQA.

DWR’s effort to obtain a new Incidental Take Permit from CDFW is an action with “independent utility” that can be pursued separate from other, related activities. Importantly, by seeking a new ITP, DWR is not doing the equivalent of seeking permission to build and operate the SWP for the first time. Rather, the authorization and construction of the SWP occurred before CEQA was enacted. The current proposed project is focusing on the need for a new ITP in order to keep the system functioning for another 10 years. This limited project is not an occasion for assessing what changes may or should be made to the SWP to improve and/or optimize the system. Such efforts can be pursued separately.

II.4.4.12 RESPONSE TO COMMENT L-CDWA-2-12

As discussed in Master Response 16, “Relationship to 2019 Biological Opinions,” the pending litigation does not affect DWR’s long-term operation of the SWP in compliance with both state and federal permits, or its obligation to minimize and fully mitigate the impacts to species listed under CESA that are subject to incidental take from the long-term operation of the SWP. Both DWR and Reclamation are bound by the terms and provisions of the COA and will continue to operate the SWP and CVP respectively in accordance with the 2018 COA Addendum. Further discussion of the COA is provided in Master Response 22, “Relationship to CVP Operations.”

January 6, 2020

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You Chen (Tim) Chao, PhD, PE, CFM
Executive Division, California Department of Water Resources
PO Box 942836
Sacramento, CA, 94236

Sent via E-Mail to: LTO@water.ca.gov

Subject: Comments on Draft EIR for Long-term Operations of the State Water Project

Dear Mr. Chao:

The Friant Water Authority (Friant) appreciates the opportunity to provide comments on the Draft Environmental Impact Report (Draft EIR) for Long-Term Operation of the California State Water Project (Proposed Project). Friant is a joint-powers authority that serves two important roles: 1) to provide unified representation on common interests of their member agencies; and 2) to operate and maintain the Friant-Kern Canal of the Central Valley Project (CVP) upon which some of Friant's member agencies depend for delivery of their water supply. Friant's member agencies contract with the U.S. Bureau of Reclamation for a portion of their water supply and provide water to approximately 1.5 million acres of irrigated agriculture in the San Joaquin Valley.

In total, the California Department of Water Resources' (DWR) Proposed Project reflects operations of the State Water Project (SWP) that would be coordinated with new proposed operations of the Central Valley Project (CVP) that are very similar to the federal Biological Opinions issued pursuant to the Re-initiation of Consultation on Long-Term Operations (ROC on LTO) of the CVP and SWP, which we support fully. Therefore, we are pleased that the Draft EIR concludes that that the Proposed Project has no significant adverse environmental impacts. However, we have concerns regarding the adequacy of information provided in the Draft EIR, particularly regarding the identified project alternatives, and significant differences in project operations portrayed between the EIR and the California Department of Fish and Wildlife's Draft Incidental Take Permit (ITP). Specifically, we are concerned that the Draft EIR lacks clear descriptions of basic components of the identified alternatives and lacks sufficient detail in the analysis of their impacts. For instance, the Draft EIR does not provide a sufficient level of detail to understand how each of the identified alternatives would be implemented through coordinated SWP and CVP operations and fails to sufficiently describe the environmental difference between the identified alternatives and the Proposed

Project. Further, the ITP appears to rely on components of the alternative that have not been fully evaluated and are also absent from the Proposed Project, as written.

Lack of Clear Project Description

CEQA Guidelines require an environmental impact report's description of alternatives, like the proposed project, to identify and describe each alternative's technical, economic, and environmental characteristics, and other details necessary to allow an evaluation and to review the alternative's environmental impacts¹.

In order to describe and analyze the impacts of each alternative and the Proposed Project, the details of coordination between SWP and CVP facilities must be described. Unfortunately, the Draft EIR provides an insufficient level of necessary detail to evaluate the environmental impacts of the alternatives or Proposed Project. For example, the Draft EIR refers to "proportional share" of regulatory requirements and "equitable" coordination between SWP and CVP operations but does not define either term, does not describe whether and how requirements imposed only on the SWP impact coordinated operations, and lacks sufficient description regarding impacts to CVP operations. The Draft EIR does not provide sufficient information to enable interested parties or DWR to fully understand the alternatives and compare them to the Proposed Project.

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Insufficient Analysis of Impacts

The Draft EIR also fails to provide sufficiently detailed analysis of potential environmental impacts. CEQA Guidelines also require an environmental impact report to contain enough information about each alternative to allow for an evaluation of the relative merits of each alternative and a comparison between each alternative and the Proposed Project². The Draft EIR fails to provide sufficient analysis of the impacts of each alternative. Notably, the Draft EIR does not contain a summary or technical detail regarding modeling results or provide an explanation regarding how CVP operations may be affected by implementation of each alternative. For example, the Draft EIR fails to sufficiently analyze the impacts of each alternative on CVP upstream storage. This lack of adequate analysis prevents us and others from being able to meaningfully comment and prevents decision-makers from meaningfully evaluating and understanding the environmental impacts of each alternative. In summary, the Draft EIR lacks sufficient detail and analysis, particularly as it pertains to the identified alternatives, and does not appear to support the ITP. Important elements regarding DWR's coordination with Reclamation are insufficiently described and reasonably foreseeable environmental impacts, particularly the impacts of the alternatives on the CVP, are not disclosed³. As a result of this insufficient level of detail in the draft EIR, we were not able to provide detailed comments and are concerned that DWR will not have the information available to decide between the Proposed Project or one of the alternatives. We encourage DWR to work with

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¹ CEQA Guidelines, § 15124(c)

² CEQA Guidelines, § 15126.6(a)

³ Pub. Resources Code, § 21100(a)(1); CEQA Guidelines, §§ 15126.2, 15144

Reclamation to address the deficiencies identified above prior to approving the Proposed Project or an alternative. Further, components of the operations portrayed in the ITP are not fully analyzed in this EIR.

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Thank you for the opportunity to comment on your efforts to analyze the environmental impacts associated with updating the long-term operations of the State Water Project. If you have any questions about this letter or the issues we have raised, please do not hesitate to contact Alexandra Biering at 559-562-6305.

Regards,



Jason Phillips, Chief Executive Officer
Friant Water Authority

II.4.5 LETTER L-FRIANT-1 – FRIANT WATER AUTHORITY, JASON PHILLIPS, CHIEF EXECUTIVE OFFICER, DATED JANUARY 6, 2020

II.4.5.1 RESPONSE TO COMMENT L-FRIANT-1-1

As discussed in Master Response 1, “Scope of Analysis,” DWR considered whether the long-term operations of the SWP would result in a reasonably foreseeable operational response by Reclamation that could result in environmental impacts beyond the effects caused by SWP operations alone. As explained in DEIR Appendix G, “Geographic Scope of Project’s Influence of Flow,” DWR and Reclamation independently decide how to operate the SWP and CVP to meet applicable requirements. Therefore, whether Reclamation would alter its operations of the CVP in response to DWR’s long-term operations of the SWP in a way that would cause environmental impacts beyond the effects caused by SWP operations alone is speculative.

Refer to Master Response 22, “Relationship to CVP Operations,” for information regarding CVP coordination; DEIR Appendix B, “2018 Coordinated Operation Agreement Addendum,” for a detailed discussion of how the SWP coordinates and interacts with the operations of the CVP; and refer to DEIR Appendix G for additional information regarding the geographic area potentially affected by the long-term operations of the SWP. Please see Master Response 4, “Legal Standards,” and Master Response 17, “Application of CESA Standards,” which explain that CESA requires that measures to minimize and fully mitigate be roughly proportional in extent to the impacts of the authorized take of listed species. Please see Master Response 3, “The CEQA Process,” for information regarding CEQA requirements for alternatives.

II.4.5.2 RESPONSE TO COMMENT L-FRIANT-1-2

As discussed in Master Response 3, “The CEQA Process,” the analysis of alternatives provided in DEIR Chapter 5, “Alternatives to the Proposed Project,” is adequate as it described a reasonable range of alternatives to the Proposed Project at a level of detail that allowed meaningful evaluation, analysis, and comparison with the Proposed Project. The alternatives were evaluated in DEIR Chapter 5, but a more detailed evaluation of the alternatives is presented in the FEIR. Updated modeling of Alternative 2b assumptions in the FEIR is based on the Refined Alternative 2b described in FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP.”

A discussion of the model simulation used to compare the Proposed Project and the various alternatives was provided in DEIR Appendix E, Section E.3.3.3, “Model Simulation to Compare Scenarios.” DEIR Chapter 4.1.4, “Approach to Modeling,” presented the approach to modeling used in the analysis and a discussion of the appropriate use of modeling. Further information regarding the use of modeling and scientific analysis is also provided in Master Response 20, “Best Available Science.”

As discussed in Response to Comment L-Friant-1-1 above, analysis of potential impacts on CVP operations from the Proposed Project or alternatives would be speculative and is therefore not required under CEQA. Please see Master Response 1, “Scope of Analysis.” Please also see Master Response 22, “Relationship to CVP Operations,” for information regarding CVP coordination; DEIR

Appendix B, “2018 Coordinated Operation Agreement Addendum,” for a detailed discussion of how the SWP coordinates and interacts with the operations of the CVP.



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510 8th Street · Sacramento, CA 95814

January 6, 2020

Dear Ms. Mellon:

These comments are submitted on behalf of the Local Agencies of North Delta (“LAND”) regarding the Department of Water Resources’ (“DWR”) Draft Environmental Impact Report (“EIR”) for Long-Term Operation of the State Water Project (“SWP”) (the “project”). LAND is a coalition of reclamation, levee and water districts in the northern Delta. LAND notes that requests to extend the comment period on the Draft EIR were denied, even though DWR designated the review period to occur during months with major holidays and planned vacations. This timing inhibited the ability of LAND and other members of the public to meaningfully comment on the document.

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No Significant Impacts and No Mitigation Not Credible

The Draft EIR’s conclusion that the project would result in no significant impacts and that no mitigation is necessary (Draft EIR, pp. 1-8 to 1-9) does not appear to be credible. Under the project, “DWR, in coordination with Reclamation, proposes to operate the SWP in a manner that maximizes exports while minimizing direct and indirect impacts on state and federally listed fish species.” (Draft EIR, p. 3-18.) “[T]he Proposed Project has the potential to increase average annual water supply yields, . . .” (Draft EIR, p. 1-10.) “[T]he Proposed Project would increase the potential delivery of water from the Delta . . .” (Draft EIR, pp. 4-324, 4-322, 4-323.) Moreover, DWR admits, “Increasing or decreasing SWP or CVP exports can achieve changes to Delta outflow immediately.” (Draft EIR, p. 3-12.)

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In addition to water quality impacts, which the Draft EIR purports to analyze, SWP operations also has the potential to have impacts on agriculture in the Delta. These impacts can occur from changes in water quality as well as other physical changes, such as placement of barriers and changes in flow patterns. Agriculture in the Delta depends on an adequate supply of high quality water, and water users in the Delta generally have

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more senior water rights than the SWP. The Draft EIR should have addressed the potential of the project to impact agriculture.

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(Cont.)

Delta Plan Consistency

The Draft EIR does not recognize the need for the project to be consistent with the Delta Plan as a covered action, and mentions the Delta Plan only as background. (Draft EIR, p. 4-106.) In particular, WR P1 Reduce Reliance on the Delta through Improved Regional Water Self-Reliance (23 Cal. Code regs, § 5003) applies to this project. Yet the Draft EIR makes no mention of compliance with this state policy, as implemented by the Delta Stewardship Council. (See Wat. Code, § 85021.) The SWP (directly and through its contractors) is required to take steps to reduce reliance on the Delta.

In addition, the adaptive management description and other references to adaptive management in the Draft EIR should, but does not, refer to Adaptive Management as defined in the Delta Plan. (See 23 Cal. Code Regs., Appendix 1B.) Adaptive management is defined in the Delta Plan as “a framework and flexible decision-making process for ongoing knowledge acquisition, monitoring, and evaluation leading to continuous improvement in management planning and implementation of a project to achieve specified objectives.” (Cal. Code Regs., § 5001, subd. (a).) According to the Delta Plan, Consistency Findings requirements:

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(Cal. Code Regs., § 5002, subd. (b)(4).)

The Draft EIR should be revised to include a complete discussion of consistency with applicable adaptive management requirements.

Real Time Operations and Adaptive Management

The Draft EIR discusses real time operations identifying stakeholders as DWR, Bureau of Reclamation, and state and federal water contractors. (Draft EIR, pp. 3-33 to 3-35.) Local water users within the Delta are also impacted by operation of the SWP. As has been articulated in other Delta proceedings, there should be a role in real time

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operations and in adaptive management for local Delta stakeholders when there are localized impacts. Barrier projects are a good example of project aspects that have local effects that should be addressed through active engagement of local stakeholders.

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(Cont.)

In addition, the Draft EIR improperly relies on real time operations to allegedly avoid increases in salinity, including violations of D-1641. (See, e.g., p. 5-78.) In fact, DWR has a history of failing to meet D-1641, particularly in drought conditions. As noted above, these water quality impacts also cause impacts on agriculture.

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Cumulative Impacts

Under CEQA Guidelines section 15130, subdivision (b)(1), the cumulative projects list should include “past, present, and probable future projects producing related or cumulative impacts.” Here, the Draft EIR fails to list a Delta Water Tunnel project as a related project. (Draft EIR, Table 4.6-1.) This omission is despite the fact that the Draft EIR relies heavily on documents associated with the now withdrawn WaterFix Two Tunnels project. Chapter 6 (References) includes numerous documents from the WaterFix planning and permitting processes. In addition the discussion of cumulative projects that are included is extremely cursory and fails to inform the public about how the project would interact with related projects.

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* * *

DWR’s cursory and rushed Draft EIR fails to meet CEQA’s basic requirements and inadequately informs the public regarding the environmental consequences of the project. As a result, the Draft EIR should be revised and recirculated for public review. Thank you for considering these comments and feel free to contact my office with any questions.

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Very truly yours,

SOLURI MESERVE
A Law Corporation

By: 
Osha R. Meserve

II.4.6 LETTER L-LAND-1 – SOLURI MESERVE, OSHA MESERVE ON BEHALF OF LOCAL AGENCIES OF NORTH DELTA, DATED JANUARY 6, 2020

II.4.6.1 RESPONSE TO COMMENT L-LAND-1-1

Please see Master Response 19, “Public Review Period,” for discussion of why the public review period for the DEIR satisfies the requirements of CEQA.

II.4.6.2 RESPONSE TO COMMENT L-LAND-1-2

The comment suggests that there are significant impacts and mitigation is required without providing specific impacts or mitigation to consider. Analysis of how long-term operations of the SWP would affect Delta hydrology is presented in DEIR Chapter 4.2, “Hydrology,” and associated impacts on water quality and aquatic biological resources resulting from such changes in hydrology are presented in DEIR Chapters 4.3, “Water Quality,” and 4.4, “Aquatic Biological Resources,” respectively. Additional discussion of why reduced Delta outflows would not result in significant impacts on longfin smelt or salmonids is presented in Master Response 11, “LFS Impact Significance,” and Master Response 23, “Impact Significance (Salmonids),” respectively.

The DEIR is a good faith attempt to achieve the required analysis, and to provide DWR, the Lead Agency, and the public with sufficient information about the project, its potential environmental effects, and the ways which those effects can be minimized, whether through mitigation measures or project alternatives, so that DWR can make an informed and reasoned decision on whether to approve the project.¹

II.4.6.3 RESPONSE TO COMMENT L-LAND-1-3

Impacts from long-term operations of the SWP to agricultural resources are discussed in Chapter 3.2, “Agriculture and Forestry Resources,” of the Initial Study (DEIR Appendix A). Proposed long-term operations of the SWP would not reduce opportunities to divert water using existing water rights of more senior water rights holders. DEIR Appendix A, Chapter 3.10.1, “Environmental Setting,” also addresses hydrologic conditions of the Sacramento River and the Feather River upstream of their confluence north of the Delta and concludes that flows in these rivers would not be affected by the proposed changes in SWP operations. As noted in DEIR Chapter 1.2, “Project Background,” DWR would continue the ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. These limits include consideration of existing water rights.

II.4.6.4 RESPONSE TO COMMENT L-LAND-1-4

As stated in DEIR Chapter 3.3.1, “Project Purpose and Objectives,” the objective of the long-term operations of the SWP is to continue the long-term operation of the SWP consistent with applicable

¹ Pub. Resources Code, § 21061; CEQA Guidelines, § 15003.

laws, contractual obligations, and agreements. Please see Master Response 7, “Delta Reform Act,” for information regarding the Delta Reform Act, reduced reliance, and the Delta Plan.

II.4.6.5 RESPONSE TO COMMENT L-LAND-1-5

Please see Master Response 25, “Real-Time Operations,” for a discussion of how the decision-making process and adaptive management actions would be implemented. Involved parties in the real-time decision making process include regulatory agencies, water users and operators. There are opportunities for other interested parties to provide input, such as the CALFED Operations Group.

II.4.6.6 RESPONSE TO COMMENT L-LAND-1-6

Please see Master Response 25, “Real-Time Operations,” for a discussion of how real-time operations would minimize increases in salinity, and see Response to Comment L-LAND-1-3 for information regarding impacts to agriculture. Master Response 24, “Drought Conditions,” provides more information on how DWR would operate the SWP during drought conditions and potential impacts that might result from long-term operations of the SWP during drought conditions.

II.4.6.7 RESPONSE TO COMMENT L-LAND-1-7

The One-Tunnel Delta Conveyance Project was not considered reasonably foreseeable because no environmental documentation has been completed for the One-Tunnel Delta Diversion Project and the Notice of Preparation of Environmental Impact Report for the Delta Conveyance Project was released on January 15, 2020. Please also see Master Response 26, “One-Tunnel Delta Conveyance Project” for additional discussion of the Water Tunnel Project and potential cumulative impacts.

II.4.6.8 RESPONSE TO COMMENT L-LAND-1-8

As mentioned above, the DEIR is a good faith attempt to achieve the required analysis, and to provide DWR, the Lead Agency, and the public with sufficient information about the project, its potential environmental effects, and the ways which those effects can be minimized, whether through mitigation measures or project alternatives, so that DWR can make an informed and reasoned decision on whether to approve the project.²

Further discussion of the legal standards required by CEQA is provided in Master Response 4, “Legal Standards.”

² Pub. Resources Code, § 21061; CEQA Guidelines, § 15003.



<i>Chairman</i>	Steve Mello
<i>Vice-Chairman</i>	Jack Kuechler
<i>Secretary/Treasurer</i>	Tom Slater
<i>Director</i>	Justin van Loben Sels
<i>Director</i>	Mark van Loben Sels
<i>Manager</i>	Melinda Terry

Letter L-NDWA-1

January 6, 2020

Via U.S. and Electronic Mail (LTO@water.ca.gov)

You Chen (Tim) Chao, PhD, PE, CFM
Executive Division
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236-0001

Re: North Delta Water Agency's Comments to California Department of Water Resources' Draft Environmental Impact Report for Long-Term Operations of the California State Water Project

Dear Dr. Chao:

To secure the current contractual and individual water rights of constituent landowners in the North Delta of the Sacramento and San Joaquin Rivers to adequate water supply and quality, the North Delta Water Agency (the "Agency") submits these comments on the Draft Environmental Impact Report for Long-Term Operations of the California State Water Project ("Draft EIR"). The Agency appreciates this opportunity to provide feedback on the proposed changes to the long-term operations of the State Water Project.

I. Background

In 1973, the Agency was formed by a special act of the Legislature to represent northern Delta water users in negotiating a water supply and quality contract with both the United States Bureau of Reclamation and California Department of Water Resources in order to mitigate the water rights impacts of the Central Valley Project and the State Water Project. In 1981, the Agency and the Department of Water Resources ("DWR") executed the Contract for the Assurance of a Dependable Water Supply of Suitable Quality ("1981 Contract"). The 1981 Contract guarantees that DWR will maintain a suitable supply of water to satisfy all agricultural and other reasonable and beneficial uses in all channels within the Agency's boundaries. Specifically, the State is obligated to furnish "such water as may be required within the Agency to the extent not otherwise available under the water rights of water users." The 1981 Contract contains specific minimum water quality criteria to be maintained year-round and obligates DWR to avoid or repair damage from hydrological changes

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resulting from the operation of the State Water Project. California law also requires that the operation of the federal Central Valley Project and State Water Project protect area-of-origin water rights.

Under the 1981 Contract, the “Agency consents to the State’s export of water from the Delta so long as this contract remains in full force and effect ***and the State is in compliance herewith.***” In other words, if through modification of the long-term SWP operations proposed in the Draft EIR, the State is unable to maintain the water quality criteria in the 1981 Contract, then the Agency’s consent for water to be exported by the SWP is revoked until the water quality criteria specified in the 1981 Contract is no longer being exceeded.

The 1981 Contract also prohibits the State from conveying State Water Project water if doing so would cause a decrease in natural flow, increase in natural flow, reversal of natural flow direction, or alteration of water surface elevations in Delta channels to the detriment of Delta channels or water users within the Agency. The State must also either repair or alleviate damage, improve the channels as necessary, or provide diversion facility modifications required for any seepage or erosion damage to lands, levees, embankments, or revetments adjacent to Delta channels within the Agency associated with conveyance of State Water Project water supply. In addition to enforcement of the 1981 Contract, the Agency has a clear statutory mandate under its Agency Act to take all actions necessary to assure that the lands within the North Delta have a dependable supply of water of suitable quality sufficient to meet present and future needs. It is with this background that the Agency submits these comments on the Draft EIR.

In 1998, DWR and the Agency executed a memorandum of understanding wherein DWR acknowledged responsibility for any obligation imposed by the State Water Resources Control Board (“SWRCB”) upon the use of water within the NDWA to assist in achieving the objectives of the 1995 Delta Water Quality Control Plan. This DWR obligation to provide flows assigned within NDWA was further supported when the SWRCB adopted Water Decision 1641.

II. The Draft EIR Fails to Adequately Identify, Analyze, or Mitigate for the Impacts of the Project.

An EIR is an “environmental ‘alarm bell’ whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.” *Santiago County Water Dist. v. County of Orange* (1981) 118 Cal. App.3d 818. It is intended “to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.” *No Oil, Inc., v. City of Los Angeles* (1974) 13 Cal.3d 68, 86; State CEQA Guidelines, § 15003(d). To serve that purpose, the project description must provide the necessary detail to allow the public and decision-makers to make an informed decision about a project’s impacts. *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Ca1.App.4th



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645, 672. When a project will cause potentially significant environmental impacts, the EIR must propose and describe mitigation measures to minimize or avoid those effects. *East Sacramento Partnership for a Livable City v. City of Sacramento* (2016) 5 Cal. App. 5th 281, 303, citing Pub. Res. Code §§ 21002.1(a), 21100(b)(3); State CEQA Guidelines, 14 C.C.R. § 15126.4(a)(1). This Draft EIR does not meet CEQA’s requirements because the Draft EIR contains an inadequate analysis of the project’s impacts to water supply and quality, water diversion infrastructure, or water channels and embankments. The document further fails to provide adequate, enforceable mitigation measures and monitoring programs to minimize or avoid those impacts.



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A. The Draft EIR Project Description Is Inadequate

The Agency is concerned that recent modifications to DWR’s proposal to update the long-term operations of the State Water Project will alter water quality, water surface elevations, and velocities in the North Delta to the detriment of water users. Such impacts must be fully analyzed and mitigated in the Draft EIR.

In particular, the Draft EIR fails to acknowledge or describe DWR’s contractual obligations under the 1981 Contract nor does it explain how DWR will operate the State Water Project in accordance with the terms of the 1981 Contract. Therefore, the Draft EIR’s Project Description and each alternative should be revised to explain that the long-term State Water Project operations will all DWR to fully comply with the year-round water quality criteria and other terms and conditions of the 1981 Contract.

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The final Project Description and alternatives should include a comprehensive description of the 1981 Contract; identify the 1981 Contract as a significant legal constraint on the long-term operation of the State Water Project; and identify how proposed long-term coordinated operations will assure water supply reliability, availability, and quality for all North Delta water users, including compliance with the water quality criteria contained in the 1981 Contract, and avoid erosion and seepage impacts to channels and embankments.

B. The Draft EIR Does Not Consider the Effects of Operating the State Water Project in Compliance with the 1981 Contract.

DWR’s compliance with the 1981 Contract is not discretionary. Therefore, while CEQA requires DWR to implement feasible mitigation measures to reduce significant impacts of projects to less-than-significant levels, the 1981 Contract still forbids DWR from choosing not to comply with the specific requirements of the 1981 Contract based on a determination of infeasibility, or otherwise.

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The Draft EIR section addressing thresholds of significance for water quality impacts states a potentially significant impact would occur if the Project would cause “violation of a water quality standard or waste discharge requirement, or otherwise substantially degrade water quality.” Draft EIR, 4-24. But this section fails to address compliance with the water quality criteria of the 1981

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Contract. Draft EIR, 4-24 to 4-25. Nor does the remainder of the Draft EIR and its appendices even mention or acknowledge the 1981 Contract. The salinity criteria of the 1981 Contract is separate and distinct from D-1641 standards and is year-round; therefore, the Draft EIR should include DWR’s nondiscretionary obligation to abide by the terms of the 1981 Contract and should analyze the impacts of the project operating in compliance with those terms. All hydrological and hydraulic modeling undertaken to analyze the alternatives must assume that the terms and conditions of the 1981 Contract, including but not limited to its water quality requirements in the fall and winter months (August 16 through April 30) will remain in full force and effect.

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C. The Draft EIR Fails to Adequately Identify, Analyze, or Mitigate Potential Significant Impacts to Water Quality.

Besides ignoring DWR’s nondiscretionary obligation to abide by the terms of the 1981 Contract, the Draft EIR’s analysis of the water quality impacts of the project is also insufficient. The Draft EIR acknowledges that DWR’s modeling shows increased electrical conductivity (a proxy for salinity and thus water quality) at Emmaton in January, November, and December in wet and above-normal water years. Draft EIR, 4-25. The Draft EIR concludes, without any analysis, that such exceedances are not a potentially significant impact because “DWR does not anticipate that these exceedances would occur in real time.” Draft EIR, 4-27. The Draft EIR simply explains that DWR will comply with D-1641 standards, but does nothing to explain how it will comply with the 1981 Contract or the potential impacts of doing so.

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The Agency previously addressed its concern with DWR’s use of the same modeling approach in support of the WaterFix project.¹ The 1981 Contract sets year-round water quality standards at Three Mile Slough, upstream of Emmaton, which DWR failed to include in the modeling for the EIR for that project. See SWRCB Hearing Transcript, Vo1.14; p. 29:15-20 (Aug. 24, 2016); see also *id.* at 21:1 through 29:23. When the 1981 Contract water quality criteria were applied against the modeling results used in the WaterFix EIR analysis, a significant and measurable increase in contract violations was apparent. MBK Engineers, Technical Comments on California WaterFix Modeling (Aug. 31, 2016) [SWRCB WaterFix Hearing Exhibit NDWA-032 Errata, at 6]; MBK Engineers, Technical Comments on California WaterFix Modeling (July 13, 2016) [SWRCB WaterFix Hearing Exhibit NDWA-502, at 6-8]; see also SWRCB WaterFix Hearing Exhibit NDWA-501; SWRCB WaterFix Part 2 Hearing Transcript, Vo1.5, p. 109-115.

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Despite its own modeling and analysis of potential violations of the 1981 Contract, DWR does not identify exceedances of the 1981 Contract water quality criteria as a potential significant impact and does not provide any mitigation measures. In terms of operating the SWP, DWR may need to cease all diversions to storage in Oroville, release stored water from SWP reservoirs, cease all exports by the SWP from Delta channels, or a combination of these operational actions in order to

¹ Copies of the evidence and testimony presented during the WaterFix hearing before the State Water Resources Control Board are attached hereto and incorporated fully herein.

maintain the year-round water quality criteria specified in the 1981 Contract. DWR thus fails to provide sufficient accountability for the prevention of impacts. Instead of identifying and analyzing the impacts and proposing mitigation measures, DWR relies solely on its future non-binding discretionary decision making. This approach does not provide the certainty required by the law to determine whether the actions to avoid the project’s impacts are adequate. This falls far short of CEQA requirements for identifying and mitigating significant impacts.

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D. Additional Comments on the Draft EIR

The Agency makes the following additional comments to the Draft EIR:

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- 1. The Draft EIR fails to meaningfully evaluate or quantify its ability to continue meeting its contract obligations to the Agency.
- 2. The Draft EIR does not meaningfully address or quantify the economic, health, and agriculture impacts due to identified and unidentified water quality exceedances and other changes in water surface elevation.
- 3. The Draft EIR fails to mention the thousands of individual diversion intakes, primarily agricultural siphons, located in the North Delta. The Final EIR must analyze and mitigate any adverse impacts to surface water elevation and water quality where these diversions are located.
- 4. The Draft EIR fails to analyze whether the flows necessary for DWR to comply with water quality criteria obligations in the 1981 Contract will be assured in long-term operations of the State Water Project.
- 5. The Draft EIR should incorporate the mitigation measures committing DWR to the repair, modification, or replacement of existing landowner diversion facilities and levees as required under Article 6 of the 1981 Contract due to the proposed long-term modification of the operations of the State Water Project.

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III. Conclusion

The Agency has long been a stakeholder and highly engaged participant in DWR’s operations of the State Water Project. Unfortunately, the Draft EIR fails to include a clear or finite project description; the lack of discussion of the significant obligations imposed on DWR via 1981 Contract throughout the Draft EIR; and the lack of real, meaningful mitigation measures and oversight to minimize hydrodynamic and water supply and quality impacts from the project.

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Meaningful public review is the strongest assurance of the adequacy of the Draft EIR. For the reasons laid out above, and described in detail in our prior comments, this Draft EIR and the

analysis contained therein do not meet the requirements of CEQA. We urge you to revise the EIR to address comments herein and recirculate the revised document for public review and comment.

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(Cont.)

Sincerely,



Melinda Terry,
Manager

II.4.7 LETTER L-NDWA-1 – NORTH DELTA WATER AGENCY, MELINDA TERRY, MANAGER, DATED JANUARY 6, 2020

II.4.7.1 RESPONSE TO COMMENT L-NDWA-1-1

DWR appreciates the background information provided in the comment and acknowledges the contract between DWR and the NDWA. In DEIR Chapter 3.1.4, “Description of Existing SWP Water Service Contracts,” DWR describes its contracts with Public Water Agencies. As discussed in Chapters 1.2, 1.3, and 3.1, the long-term operations of the SWP would continue to meet its contractual obligations. Regarding NDWA contractual assurances, DWR will continue to comply with terms of the 1981 contract.

DWR will continue to comply with the terms of the 1981 NDWA contract. When required pursuant to the contract, applicable mitigation measures include compensation to property owners for economic losses due to implementation of the project.

II.4.7.2 RESPONSE TO COMMENT L-NDWA-1-2

The DEIR provides an adequate, complete, and good faith effort at full disclosure of the physical environmental impacts and the conclusions are based upon substantial evidence in light of the whole record. Further discussion of the legal standards required by CEQA is provided in Master Response 4, “Legal Standards,” while further discussion of DWR’s selected approach to modeling and analysis is provided in Master Response 20, “Best Available Science.”

DEIR Appendix A, “Initial Study of the Long-Term Operations of the State Water Project,” addresses hydrologic conditions of the Sacramento River and the Feather River upstream of their confluence north of the Delta. DEIR Appendix A, Chapter 3.10.1, “Environmental Setting,” addresses flows of these rivers and concluded that flows in these rivers would not be affected by the proposed changes in SWP operations. Impacts to water diversion infrastructure are therefore not anticipated. Impacts of long-term operations of the SWP on water supply and water channels and embankments are discussed in DEIR Appendix A, Chapters 3.19.2, “Discussion,” and 3.10.2, “Discussion,” respectively. No impacts in relation to these topics were identified.

A detailed analysis of impacts to water quality from long-term operation of the SWP is provided in DEIR Chapter 4.3, “Surface Water Quality,” and such impacts were found to be less than significant. Impacts that are less than significant are not required to be mitigated under CEQA.

II.4.7.3 RESPONSE TO COMMENT L-NDWA-1-3

Please see Response to Comment L-NDWA-1-1 and L-NDWA-1-2.

II.4.7.4 RESPONSE TO COMMENT L-NDWA-1-4

DWR acknowledges the 1981 Contract with the North Delta Water Agency and has included it in its analysis. In DEIR Chapter 3.1.4, “Description of Existing SWP Water Service Contracts,” DWR describes its contracts with Public Water Agencies.

DWR will continue to comply with the terms of the 1981 NDWA contract. When required pursuant to the contract, applicable mitigation measures include compensation to property owners for economic losses due to implementation of the project.

A detailed analysis of impacts to water quality from long-term operation of the SWP is provided in DEIR Chapter 4.3, "Surface Water Quality," and such impacts were found to be less than significant. Impacts that are less than significant are not required to be mitigated under CEQA.

II.4.7.5 RESPONSE TO COMMENT L-NDWA-1-5

The NDWA contract is included in the modeling assumptions and analysis. The analysis does not indicate any impacts to water quality. DWR will continue to meet water quality commitments.

II.4.7.6 RESPONSE TO COMMENT L-NDWA-1-6

Please see Response to Comment L-NDWA-1-2 and L-NDWA-1-5.

Regarding NDWA contractual assurances, DWR will continue to comply with terms of the 1981 contract.

II.4.7.7 RESPONSE TO COMMENT L-NDWA-1-7

DEIR Chapter 4.3.2, "Water Quality Constituents that Could Be Affected by the Proposed Project," provides an in-depth discussion of how changes in Delta surface water quality conditions resulting from long-term operation of the SWP could be related to changes in salinity (as measured by chloride or electrical conductivity), and changes in other water quality constituents are not anticipated. CalSim II and DSM2 model results, presented as exceedance plots, are provided in DEIR Appendix C, "Hydrology Model Results." Also see FEIR Part III, DEIR Chapter 5.3.5, "Hydrology" for an in-depth analysis of the changes to hydrology associated with implementation of Refined Alternative 2b, which is DWR's preferred alternative.

DWR will continue to operate the state water project meeting D1641 requirements. Integral to the operations of the SWP includes real-time operations governed by the Department of Fish and Wildlife services and considering real time data to adjust operations to meet required water quality standards and protective species measures as described in the FEIR.

II.4.7.8 RESPONSE TO COMMENT L-NDWA-1-8

The cited testimony does not indicate that significant and measurable increase in contract violations were apparent. Cited exhibits indicate a slight change in exceedances of NDWA criteria. As noted in the cited testimony (SWRCB Hearing Transcript, Vo1.14), these exceedances are modeling artifacts which would not occur under real time operations. These are further detailed in the 2016 testimony of Dr. Nader-Tehrani, referenced in DEIR Chapter 4.3.3, "Impacts of the Proposed Project," and in FEIR Part III, DEIR Chapter 5.3.6, "Surface Water Quality." Therefore, operations under the Proposed Project and Refined Alternative 2b are not expected to increase exceedances of the criteria specified in the 1981 Contract. The FEIR presents model EC results at Three Mile Slough to demonstrate no impact to water quality at this location.

II.4.7.9 RESPONSE TO COMMENT L-NDWA-1-9

As discussed in DEIR Chapter 3.1.4, “Description of Existing SWP Water Service Contracts,” DWR has water supply contracts to deliver water to the contracted Public Water Agencies. As discussed in Chapters 1.2, 1.3, and 3.1, the long-term operations of the SWP would continue to meet its contractual obligations.

II.4.7.10 RESPONSE TO COMMENT L-NDWA-1-10

DEIR Chapter 4.2.2, “Comparison of Proposed Project with the Existing Conditions,” addresses the changes to hydrology associated with long-term operations of the SWP. The DEIR includes descriptions of estimated changes in hydrology to provide a basis for understanding potential impacts on designated beneficial uses, including uses related to economics, health, and agriculture. Where applicable, estimated SWP contribution to hydrologic changes are also provided. See also DEIR Appendix H, “CalSim II and DSM2 Model Descriptions and Assumptions,” for a detailed discussion of the approach and methodology for estimating SWP contribution to hydrological change.

DEIR Chapter 4.3.2, “Water Quality Constituents that Could Be Affected by the Proposed Project,” provides an in-depth discussion of how changes in Delta surface water quality conditions resulting from long-term operation of the SWP could result in changes in salinity (as measured by chloride or electrical conductivity) and concludes that changes in other water quality constituents are not anticipated. CalSim II and DSM2 model results, presented as exceedance plots, are provided in DEIR Appendix C, “Hydrology Model Results.” As discussed in the DEIR Chapter 4.3.3.3, “Evaluation of the Proposed Project,” and FEIR Part III, DEIR Chapter 5.3 “Evaluation of Refined Alternative 2b,” long-term operation of the SWP would generally increase salinity during the late fall and early winter in the years following wet and above-normal water years. Despite the potential for salinity increases, operations of the SWP will comply with D-1641 standards. The salinity standards in D-1641 were established specifically to protect water quality, including beneficial uses for fish and wildlife and agricultural and urban uses. Long-term operations of the SWP would not result in an exceedance of any water quality standard or waste discharge requirement, or otherwise substantially degrade water quality. Therefore, the DEIR concluded that changes to water quality would be less than significant.

II.4.7.11 RESPONSE TO COMMENT L-NDWA-1-11

Surface water elevation results are provided in DEIR Appendix C, Attachment 2-6, “Water Surface Elevation Results (DSM2-HYDRO).” Water quality results are provided in DEIR Appendix C, Attachment 2-7, “Salinity Results (DSM2-QUAL).”

DEIR Figure 4.2-7, “Sacramento River Freeport, Comparison of Long-Term SWP-CVP Operations,” analyzed the Sacramento River inflow to the Delta under the Proposed Project. FEIR Part III, DEIR Chapter 5.3.5, “Hydrology,” also analyzes Sacramento River at Freeport for Refined Alternative 2b, which is the preferred alternative. Similar to the Proposed Project, the Sacramento River inflow to the Delta under the Refined Alternative 2b would decrease by 1,974 cfs (11%) and 1,650 cfs (10%) in September and November, respectively, compared to the Existing Conditions scenario, and remain similar in other months. Proposed operations would reduce Sacramento River flow in September and

November in years following a wet water year. In years following above-normal water years, the estimated Sacramento River flow at Freeport would increase in September and decrease in November.

II.4.7.12 RESPONSE TO COMMENT L-NDWA-1-12

Please see Responses to Comments -NDWA-1-3, L-NDWA-1-8, and L-NDWA-1-11.

II.4.7.13 RESPONSE TO COMMENT L-NDWA-1-13

DEIR Appendix A, “Initial Study of the Long-Term Operations of the State Water Project,” addresses hydrologic conditions of the Sacramento River and the Feather River upstream of their confluence north of the Delta. DEIR Appendix A, Chapter 3.10.1, “Environmental Setting,” addresses flows of these rivers and concluded that flows in these rivers would not be affected by the proposed changes in SWP operations. Impacts to water diversion infrastructure are therefore not anticipated, and no mitigation measures are required for the repair, modification, or replacement of existing landowner diversion facilities or levees. Impacts of long-term operations of the SWP on water supply and water channels and embankments are discussed in DEIR Appendix A, Chapters 3.19.2, “Discussion,” and 3.10.2, “Discussion,” respectively. No impacts in relation to these topics were identified. DWR continues to meet the terms and provisions of the 1981 contract with NDWA.

II.4.7.14 RESPONSE TO COMMENT L-NDWA-1-14

As discussed above, the long-term operations of the SWP will not result in impacts on surface water hydrology, water supply, or water quality. The DEIR provides an adequate, complete, and good faith effort at full disclosure of the physical environmental impacts and the conclusions are based upon substantial evidence in light of the whole record. Further discussion of the legal standards required by CEQA is provided in Master Response 4, “Legal Standards,” while further discussion of DWR’s selected approach to modeling and analysis is provided in Master Response 20, “Best Available Science.”

The DEIR and FEIR are complete in its analysis of water quality impacts. Please refer to FEIR Part III, DEIR Chapter 5.3 “Evaluation of Refined Alternative 2b.” It evaluates impacts, direct and cumulative, and the project description is complete and satisfies the requirements of CEQA. It provides the public and decision makers sufficient analysis on which to make informed comments, which has been incorporated into the FEIR.

To: McQuirk, Jacob@DWR <Jacob.McQuirk@water.ca.gov>

Cc: dean@mohanlaw.net; jherrlaw@aol.com

Subject: DWR LTO DEIR

The DEIR states the barriers are installed each year on April 15, which is of course only marginally correct given permit conditions. The DEIR later states that the barriers will continue to be installed "under existing permits starting in **May** ..." It also states the barriers are installed from April 15 **through September 30** which better be a typo. You are not responsible for the DEIR but has DWR made a policy change to not install the barriers in April and to remove them at the end of September?

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1-1
|

I assume the DEIR writers don't know what they are talking about but need to check to see if you guys are screwing SDWA in a very quiet, discreet way. JOHN

JOHN HERRICK, ESQ.
SOUTH DELTA WATER AGENCY
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II.4.8 LETTER L-SDWA-1 – SOUTH DELTA WATER AGENCY, JOHN HERRICK, ESQ, DATED JANUARY 3, 2020

II.4.8.1 RESPONSE TO COMMENT L-SDWA-1-1

DWR acknowledges the typographic error in the description of existing barrier operations provided in DEIR Chapters 3.1.3.6, “South Delta Temporary Barrier Project.” Please see Part III of this FEIR for the specific refinements made to DEIR Chapters 3.1.3.6 to correct the error and Response to Comment L-SDWA-2-14 for further clarification regarding barrier operation.

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January 6, 2020

Via email: LTO@water.ca.gov
You Chen Chou
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236-0001

Subject: SDWA Comments on Draft Environmental Impact Report (DEIR) for Long-term Operation of the California State Water Project

Dear You Chen Chou:

The South Delta Water Agency (“SDWA”) herein submits its comments on the Draft Environmental Impact Report (“DEIR”) prepared by the Department of Water Resources (DWR) for the Long-Term Operations of the State Water Project (“Project”).

The DEIR Is Inadequate Because the Regulatory Assumptions Upon Which it is Based Are Fundamentally Flawed and in the Process of Being Amended

The extremely uncertain regulatory framework through which the Project is analyzed renders the DEIR woefully inadequate. The State Water Quality Control Plan (“Plan”) is outdated having last been amended over twenty years ago. The Plan has been rendered mostly moot by subsequent state and federal regulatory actions and rulings. The Plan has recently been partially and significantly amended. Major amendments to the remainder of the Plan are ongoing including but not limited to changes to stream flows and Delta outflows requirements, both of which are inapposite to the objective of the Project’s Preferred Alternative.

2-1



The Newsom Administration, which includes DWR, has announced its commitment to pursue an isolated conveyance project in the form of a single tunnel which will necessarily and fundamentally alter Delta flows and DWR’s operations of reservoir releases and exports. On the last business day before the deadline for submission of comments on the DEIR, the Newsom Administration, through the Natural Resources Agency, released a draft of its Water Resilience Portfolio in response to Executive Order N-10-19 which seeks to “build connections” to “improve physical infrastructure to store, move, and share water more flexibly... (emphasis added). Hence, DWR is attempting to move forward with the Project and obtain long-term take authorizations while at the same time intending to materially and imminently alter the operations for which it seeks long term operational and take authorization. CEQA does not contemplate or authorize the evaluation of a project wherein the the project proponent is in the process of fundamentally altering the operation for which the approval is sought. DWR should withdraw the DEIR until amendment of the long overdue Bay Delta Water Quality Control Plan is completed and the fate of the isolated conveyance is clarified.

2-1
(Cont.)

The Project Should be Analyzed Pursuant to NEPA Which Should Include Analysis of the Its Coordinated Operations With the CVP

In Section 2.1 of the DEIR, DWR is described as the lead agency for the Long-Term Operation of the CVP and SWP. The joint operations of the SWP and the CVP are governed and inextricably linked through the Coordinated Operations Agreement. NEPA requires full and complete disclosure of potential major action proposed by or significantly involving federal agencies. The DEIR is inadequate for failing to include a full NEPA analysis.

2-2

The DEIR’s Analysis of the Project’s Impacts on South Delta Salinity is Inadequate Because it is based on a Fundamental Misunderstanding of DWR’s obligation.

Although the DEIR states that the State Water Project will operate in compliance with the current regulatory framework, DWR has a history of failing to comply with Southern Delta Water Quality Standards for Agricultural Beneficial Uses (“Salinity Standards.”) Notwithstanding DWR’s assertions on page 4-28 of the DEIR, DWR and the United States Bureau of Reclamation (“USBR”) are obligated to meet the Salinity Standards. DWR and USBR have gone through two hearings before the State Water Resources Control Board (“SWRCB”) regarding compliance with the Salinity Standards resulting in two Cease and Desist Orders. The first resulted in Water Right Order 2006-0006 and the second in Water Right Order 2010-0002.

2-3

WRO 2010-0002 is attached hereto and incorporated herein. On pages 20 to 22 of that Order the SWRCB requires DWR and USBR to submit a plan to “obviate” the threats of non-compliance with the Salinity Standards, which are obligations of DWR and USBR. That plan was due 180 days after the SWRCB completed a process to consider changes to the Salinity Standards. The Order further provided that if any such changes were not completed or changes were adopted but the water rights process to implement those changes was not completed or initiated before January 1, 2013, such a water right proceeding would be deemed complete. No such changes were adopted before the January 1, 2013 deadline and a water rights process was not initiated or completed by that date. Accordingly, at minimum, DWR and USBR were required to submit a plan by which they would meet the Salinity Standards seven years ago. No such plan was ever presented and DWR and USBR have been and are in violation of Cease and desist Order WRO 2010-0002.

Said violations are relevant to the DEIR because the Salinity Standards are commonly violated. Hence, DWR’s assertions in the DEIR that it will operate to meet D-1641 is unreliable. Attached hereto are two examples, one during the winter and one during the summer, of such violations. The first is from 12/30/18 – 1/6/19 during which the 1.0 EC standard was violated. The second is from and 8/6/18 – 9/4/18 during which the 0.7 EC standard was violated. There are hundreds of such examples since the Salinity Standards became fully effective in April of 2005. DWR claims it is operating according to D-1641 when in fact it is violating D-1641 which imposes permit conditions on DWR and USBR. As such, the DEIR’s impact analysis is based on significantly incorrect understanding of DWR’s current operations.

2-3
(Cont.)

DWR asserts that south delta salinity is a function of San Joaquin River flows and that it has informed the State Water Resources Control Board (“SWRCB”) that violations of the Salinity Standards are beyond its and USBR’s “reasonable control.” (DEIR p. 4-28) Such self-serving statements do not change the fact that compliance with the Salinity Standards are a condition of DWR’s permit to divert water from the Delta. There is no middle ground where DWR can assert it is not responsible for an obligation imposed upon it during the water rights proceeding which led to D-1641. Consistent with its assertion that it not capable, and therefore, not required to meet the Salinity Standards, the DEIR fails to examine the impacts from DWR’s violations of said Standards. This omission renders the impacts analysis fatally flawed

The DEIR is Inadequate Because DWR has Failed to Conduct a Water Availability Analysis and Because the Permits Governing Operation of the SWP Have Expired.

The DEIR fails to consider the fundamental basis for the current and future operations of the State Water Project (“SWP”) by ignoring the glaring fact that there is abundant and

2-4

overwhelming evidence demonstrating there is not enough surplus water in the system most years to satisfy the intent of the Project. Therefore, a comprehensive water availability analysis should be conducted as a precondition to determining if desired exports can be achieved. The DEIR avoids this analysis by relying on "assumptions" contained within its models. Such assumptions do not reflect senior water rights or regulatory obligations and, instead, attempt to "balance" the junior water rights of exporters with the senior water rights of other users and of the environment/public trust.

2-4
(Cont.)

The DEIR also fails to address the fact the Permit Applications associated with the State Water Project ("SWP") expired before the project was completed. Although DWR untimely applied to renew its Applications, no action has been taken on same. As such, no lawful permit exists to allow operation of the SWP thereby rendering the DEIR premature and irrelevant.

2-5

Any Application encompassing the scope of operations contemplated by DWR should be required to include a water availability analysis to determine what water is available and when for the Applicant. DWR, the USBR and the SWRCB do not want to and will not require or conduct such an analysis because it will show that the amounts currently being exported by DWR are in excess of the water available to them after prior and superior rights are satisfied.

Attached hereto and incorporated herein is a chart from the Weber Foundation Studies which were conducted in anticipation of the SWP. The chart shows that Sacramento-San Joaquin River systems produces 17,631,000-acre feet (average annual) over the six-year drought of 1927-1934. At the same time, the local requirements which are the in-basin needs, were estimated at 25, 690,000-acre feet (average annual). This results in an 8 MAF shortage in each year of such a drought. Thus, the SWP has virtually no water available to export in some years. It is of note that the assumptions of local needs in the studies vastly underestimates environmental needs as they are understood to be today.

2-6

To address this shortage, the SWP was supposed to develop water supplies from various north coast rivers to add 5 MAF of water to the Sacramento system in each and every year (see Bulletin 76 chart attached). That 5 MAF was supposed to be added by the year 2000 but none of it was or will be so added. Until this fundamental supply issue is analyzed, updated and applied, no environmental review of SWP operations is valid.

It must also be noted that given the inherent permanent shortage of export supply, the amounts of water exported by the SWP and the CVP over the past decades certainly explains the crash of the fisheries and the increased deterioration of the Delta waters.

The DEIR describes the elements of the preferred alternative in Table 1-1 a. It lists a minimum export pumping amount of no less than 1,500 cfs (combined CVP and SWP) even during drought. This number is greater than the SWP and CVP were able to export during the recent drought. Such a minimum is purported to be for the protection of health and safety, but there is no evidence of that need contained in the DEIR. Moreover, it is inappropriate to permit DWR to receive permanent authorization for 1,500 cfs. Such determinations must be made only during times of extreme drought and can not be pre-authorized in a vacuum.

2-7

Despite the implication of the DEIR, Exports are not somehow protected from California law. Exports are the junior-most water rights. Superior water right holders and the environment are entitled to water before any exports can occur. According to the Racanelli decision (US vs. SWRCB 182 Cal App.3d 82 (1986)) The Delta Protection Act (Water Code Sections 12200-12205) "prohibits project exports from the Delta of water necessary to provide water to which the Delta users are entitled and water which is needed for salinity control and an adequate supply for Delta users." (at page 139). Thus, the controlling court case on SWP exports prohibits any exports until all salinity control and supply needs in the Delta are met.

The DEIR is Inadequate Because it Fails to Examine Impacts to Southern Delta Salinity and Fails to Utilize Best Available Science by Relying on Fundamentally Flawed Modelling

The DEIR relies on modeling for its analysis of impacts but that analysis is not accurate and therefore not the best available science. The DEIR goes to great lengths to explain why the CalSim II and DSM2 models are useful tools in conducting an impacts analysis while at the same time cautioning that the models cannot be used to determine the specific impacts/effects from the Project over time periods shorter than one month. The DEIR asserts that the modeling results can only be used to show comparisons of different scenarios and long-term trends. This is the same untenable position DWR took in the WaterFix proceedings. More specifically, DWR asserts that because the CalSim II model generates monthly data, which is then used as inputs to the DSM2 model, the models cannot be used to predict actual conditions or actual impacts. Further, the DEIR takes the position that since the model may be unable to consistently preform as designed, any output that shows a 5% or less change should be disregarded as a modeling error. These explanations are wrong for a number of reasons as discussed below.

2-8

Although the CalSim II model does generate data on a monthly scale that does not mean the data cannot be used to examine impacts on smaller time frames. The CalSim II data is used by DWR to both operate the Delta on a daily basis and to estimate daily impacts/changes to flows, levels and quality. The daily operations of DWR in fact use DSM2 to predict such things as western Delta salinity and outflow. In fact, DWR and USBR operations are adjusted accordingly to meet the various water quality standards. Thus, DWR actually does use DSM2 to predict and analyze short term conditions.

DWR uses DSM2 to make weekly reports to satisfy a number of its permit conditions. The reports show actual measured criteria for salinity levels for each day and compare that to what the model predicts. This data is used to make daily operational decisions. Attached hereto and incorporated herein is one of the weekly reports produced by DWR in order to comply with the permit conditions which allow it to pump export water for the CVP pursuant to what is referred to as Joint Point of Diversion or ("JPOD.") As indicated in the report, DWR uses DSM2 to predict daily changes in electroconductivity (EC) and water levels. This begs the question that if DSM2 is supposedly incapable of accurately predicting water quality and water levels on a daily basis, why does DWR use the model to comply with its permit obligations which require it to predict impacts on water quality and levels resulting from JPOD operations? In fact, DWR cannot have it both ways and its claims in the DEIR that the DSM2 model cannot be used to predict and analyze impacts on short time scales is contrary to its ongoing practices.

2-8
(Cont.)

The DEIR must be amended and recirculated for public comment because it is void of any analysis of how the Project will affect southern Delta water quality. DWR cannot simply fail to consider such impacts based on its assertions that it has historically complied with D-1641 or that compliance with the Salinity Standards are beyond its reasonable control. No such exemption exists in CEQA. For the sake of argument if an assumption is made the Project will result in a 5% increase in south Delta salinity, the DEIR must disclose whether this would be considered a significant impact or a modelling limitation. These issues must be included in a revised and recirculated CEQA document.

Moreover, if the model cannot accurately predict actual conditions as DWR asserts, then one cannot evaluate how any change may or may not affect compliance with a standard. A 100 increase in EC might raise the salinity from 200 to 300 EC or it might raise the salinity from 700 to 800 EC.

2-9

During the recent WaterFix proceedings DWR presented testimony that there were little or no impacts on southern Delta salinity based on long term monthly averages. This position was consistent with DWR's assertions that the models cannot predict short term impacts. SDWA ran and analyzed DWR's modeling and found that the long-term monthly averages masked many shorter-term salinity impacts, some as much as 800 ED. When an EC standard is 700 or 1000 EC, an 800 increase can only be described as significant if not catastrophic. Attached hereto and incorporated herein is the testimony of Thomas Burke, PE which SDWA submitted at the WaterFix hearings in which he shows and explains how DSM2 modeling can be used to predict project effects on southern Delta water quality. This testimony and technical data show that DWR's position on the DEIR is wrong and that they should have examined the Project's effects on southern Delta water quality.

DWR cannot avoid using its own tools (e.g. DSM2) to analyze the effects of the Project by claiming those tools are not reliable to do such analysis when they in fact use those tools

every day for other analyses. Such obfuscation and failure to examine central issues is in direct conflict with the purposes of CEQA.

Significantly, DWR's approach to only look at impacts in surface water quality in the channels is false. As per the Testimony of Dr. Michelle Leinfelder-Miles and Terry Prichard, the measure of adverse impacts from increase salinity is the effect on soil salinity, not the effects on applied (Delta channel) water. Each crop can tolerate certain soil salinities depending on various conditions. Increases in the salinity of the applied water is only the first step in any analysis. Any such increase must then be analyzed to see how it affects a crop over a growing season. Thus, large short-term increases might have an effect but also small longer-term increases can also have an effect. This approach was fully explained in the WaterFix hearings as the only way to analyze impacts to agriculture from changes in Delta channel salinity. The DEIR has no such analysis and is therefore inadequate. The testimony of Dr. Leinfelder-Miles and Mr. Prichard are attached hereto and imported herein.

The modeling that was done in the DEIR and any modeling that should have been done as explained above is not the best science for another reason. Models such as DSM2 are a series of calculations which determine/predict what happens later in time and farther down (or up) stream based on certain conditions. For example, the model "knows" current conditions (if those have been inputted) and then can predict what happens tomorrow, or a mile upstream or any particular point, based on other inputs about flows changes, or temperature changes or salinity changes. The model calculates what happens to these parameters as the water moves and time moves forward. As such, the model must have some level of accuracy in the conditions about which it is making calculations. If the model "thinks" the air temperature is 100 degrees F when the temperature is actually 70 degrees F, then the model outputs will necessarily be wrong. Just such a problem was pointed out in the WaterFix hearings by SDWA and its expert witness Thomas Burke. SDWA had channel soundings performed to measure the actual cross sections of large areas of the southern Delta because of observed siltation. Those sounding indicated that significant siltation has indeed occurred. DSM2 was using old data in the model for these channel cross sections. The result was that the DSM2 model "thought" some channels were 10' feet deep when in fact they were now only a foot or less deep. The specific soundings and the differences from the DSM2 inputs are of course voluminous and need not be covered here. However, the fact that the model significantly "misunderstood" the depth of channels and thus how much water passed through them means the DSM2 outputs are not just unreliable but also just plain wrong.

The water quality of Delta channels is dependent upon how much water is in and passes through them. If the model does not accurately represent the amount of water flowing through the channels it can't accurately predict how much salinity exists at any specific location or what dilution volumes will be available to mitigate the salinity. Given it has the wrong inputs the DEIR has not analyzed the project's impacts to in-Delta water quality.

2-9
(Cont.)

2-10

It does not take a modeler or a scientist to understand that if a model assumes a Delta channel is allowing only 5 times the volume of water to pass through than is actually occurring, the model is not useful and not the best science available. Whether the models are or can be accurate is one thing. A model which has 20-year-old inaccurate data as inputs is an entirely different issue. It is incumbent on DWR to update the model so that it at least semi-accurately represent Delta channel depths before it does any analysis of a project of this scope. Although the SDWA channels soundings have been provided to DWR, it appears they have not been used to update the out-of-date DSM2. Mr. Burke's attached testimony discusses this issue in detail.

2-10
(Cont.)

Moreover, the Project may very well result in significant impacts on southern Delta salinity even if the Salinity Standards are being met. This was demonstrated by SDWA during the WaterFix proceedings (see the testimony of Burke, Pritchard and Leinfelder-Miles attached hereto.) This is particularly relevant given that the DEIR furthers DWR's approach to bury such impacts in long term monthly averages over many years. It is well understood that impacts to crops occur in real time. The DEIR must analyze the impacts from increased salinity levels even if they purportedly don't violate D-1641.

2-11

Logically, if the DSM2 model cannot accurately predict the correct amount of flow in and through the southern Delta channels, it is also not accurately predicting the project effects on water levels. The levels in the southern Delta are a function of a number of things but mostly tides, San Joaquin River flows and withdrawals from diversions. Attached hereto and incorporated herein is the 1980 Report on the Effects of the Central Valley Project on the Southern Delta Water Supply. This Report, authored by SDWA and USBR (though USBR was temporarily know by another name at the time) describes the effects of the CVP, and to some extent the SWP, on southern Delta flows, quality and water levels. With regard to water levels, the Report describes how the CVP and SWP export pumps decrease local water levels incrementally for every 1000 cfs being exported. These calculations reflect channel depths and capacities which were much greater than those revealed in the recent SDWA channel soundings referenced above. When the channels carry less water than before, the impact by CVP and SWP export pumps becomes greater. Given the fact that the model being relied upon by DWR to analyze impacts to the South Delta contains incorrect model inputs, the DEIR is fundamentally flawed and must be corrected and recirculated.

2-12

Lower water levels adversely impact local agricultural diversions, sometimes preventing any diversions at all. Attached hereto and incorporated herein is a draft Problem Statement recently produced by SDWA, DWR staff, USBR staff, San Luis Delta Mendota Water Authority staff, Westlands Water District staff and the Watermaster's Office of the SWRCB. The Statement describes the effects of the siltation discovered by the SDWA channel soundings, but more importantly includes photos of essentially empty channels. These photos indicate how significantly siltation impairs Delta Channels.

The DEIR describes the Project as including additional exports of water transfers and new minimum exports during dry times, but makes no effort to analyze how such exports will affect southern Delta water levels or how that will affect local diverters. When such analysis is done, the DSM2 model must be updated with accurate channel cross sections or it will be unable to accurately predict impacts to water levels. The DEIR is legally inadequate until such analysis is included.

2-13

The DEIR's Description and Analysis of the Southern Delta Temporary Barriers is Inaccurate and therefore the Related Impacts Analysis is Inaccurate and Incorrect

The DEIR's analysis of the temporary barriers is inadequate. The DEIR contains conflicting language about when the barriers are installed and operated. Section 3.1.3.6 states that the barriers are in place from April 15 through September 30 of each year. In Section 3.3.8 it states that the barriers will "continue to be installed" in May and must be removed by November 30. Neither is accurate. The current permits allow installation to begin on April 15 if the HOR barrier is installed, and later if it is not. The barriers are allowed to fully function (flap gates in operation) only after June 1 at the earliest. The barriers are "notched" in the fall for fish passage and fully removed by November 30. The barriers are not operated "as needed" as claimed by the DEIR, rather the barrier can be operated during the times stated above if allowed by the fish agencies. The barriers cannot be installed or operated from December through April 15 even if SWP and CVP exports are lowering local water levels to the detriment of local diverters. Thus, the partial mitigation for the SWP and CVP effects on southern Delta water levels (i.e. the barriers) cannot be used as need yet the action causing the harm (the export pumps) is allowed to continue.

2-14

Section 3.3.8 of the DEIR states that the barriers will always have one culvert (flap gate) open if temperatures are less than 77 degrees Fahrenheit. This appears to be a new condition which as referenced above allows exports to continue as long as a fishery action is taken to increase harm to southern Delta diverters. This of course is unacceptable and the DEIR must be amended accordingly.

It is incumbent on DWR to accurately describe the existing barrier program and permit conditions to clearly specify how the Project will change and impact current conditions. Absent such disclosure and analysis, the DEIR is woefully inadequate.

The DEIR Contains Various Additional Inadequacies

The DEIR omits some relevant operational criteria from its analysis. The SWP is bound by both a Water Quality Response Plan and a Water Level Response Plan mandated under D-1641. The DEIR should describe how these limit SWP and CVP operations and analyze how the project may affect compliance with these plans. The plans are included herewith.

2-15

Similarly, DWR has an agreement with SDWA regarding the operation of the Clifton Court Forebay. The timing of the filling of the forebay is expressed in this document known as Priority Operations which is attached hereto and incorporated herein affects when and how much incoming and outgoing tides are affected, which in turn affects southern Delta water quality, flows and levels. The DEIR should describe how and when the Priorities affect export operations and how the Project might affect and determine which Priority must be used and how that, such decisions effect the southern Delta.

2-16

Section 3.3.7 of the DEIR describes the Project's proposed actions in Dry and Drought years. The project seeks to "meet and confer" when dry conditions occur instead of planning ahead as to what might be done. By deferring decisions on how CVP and SWP operations change during dry times, the project avoids any analysis of the impacts of such dry year operation. As evidenced in the recent drought, DWR and USBR had no drought contingency plans and were thus unable to meet their permit obligations to the detriment of all other beneficial uses and users. As a result, DWR and USBR petitioned the SWRCB for relief from their permit conditions approximately 19 times during the drought. As such, DWR undertook operations which had not been previously analyzed and are not analyzed in the DEIR. Thus, the "meet and confer" portion of the Project is a method of avoiding compliance with permit conditions or analyzing such compliance.

2-17

Section 4.1.4.1 of the DEIR describes how CalSim II will often inaccurately predict things such as reservoir storage in dry times because "real" operations would not result, for example, in reservoirs reaching minimum pool while the model does. This admission is critical in that it shows the modeling is ignoring prior DWR and USBR practices. If conditions occur whereby DWR and USBR alter releases or exports or compliance with water quality standards those should be included in the models so there can be some level of accuracy. DWR and the DEIR specifically do not include such operations because it would show that they plan on violating permit conditions and water quality standards while still exporting water. The DEIR is both misleading and inaccurate for not including such known dry year operations in the analysis.

2-18

Section 4.2.2.1 of the DEIR provides that Delta inflow from the Sacramento River and Delta outflow would both decrease per the modeling. This is a truly remarkable proposal and indicates that DWR is tone deaf to current science and common sense. Contra Costa Water District previously showed that the projects have turned every fall into dry year conditions to the detriment of all Delta users and especially of the fisheries. Ongoing processes like the SWRCB Bay-Delta water quality control planning seek to increase both inflow and outflow. In spite of this DWR proposes to decrease inflows and outflows. This ill-conceived strategy to squeeze every drop out of the Delta is not only bad policy but contrary to the statutes and case law cited above.

2-19

The DEIR fails to analyze how the Project is affected by compliance with the federal PL 108-361. Said statute requires the USBR to develop and implement a Program to Meet Standards, and, specifically, the water quality standards on the San Joaquin River and in the Delta. The USBR has ignored this requirement and, instead, produced a plan by which it would begin evaluating how it might meet some of the standards. Until the USBR complies with PL 108-361 there can be no review of or analysis of the SWP's long term operations because some of the obligations to meet these standards are shared by DWR. Until DWR knows what actions USBR will take in response to PL 108-361 it cannot determine its own long-term operations. PL 108-361 and the USBR's Plan are attached hereto and incorporated herein.

2-20

Section 5.4.3 of the DEIR is a portion of the examination of Alternative 3. This Alternative includes the Spring Head of Old River Barrier, but includes no analysis of how that barrier affects southern Delta water levels or flows or quality, or how it affects the ability of DWR to install the temporary barrier that partially mitigate project effects in the area. The DEIR is not sufficient unless it includes analyses of the HOR barrier and its effects.

2-21

Appendix H of the DEIR describes what portions of the existing Biological Opinions (Delta Smelt and Salmon) were used in the modeling. It is important to note that the models only included some of the BiOps RPA's and not all of them. CEQA requires that the analysis include all not some of the currently existing regulatory requirements. Any apparent desire by DWR and USBR to not fully comply with the BiOps, does not alleviate the requirement to do so when constructing the base case and No Action Alternative under CEQA.

2-22

The Project description includes the transfer of up to 600,000-acre feet per year. The DEIR fails to adequately analyze the real impacts from such transfers by failing to adequately disclose and analyze the effects from groundwater substitution related to the presumed transfers. The DEIR also fails to analyze impacts from such transfers on senior water right holders in the Delta. Once such analyses are conducted and included in the DEIR, it must be recirculated for public review and comment.

2-23

The DEIR must be revised to include an alternative that when implemented will result in less reliance on the Delta as required by the Delta Reform Act of 2009. The Preferred Alternative is inapposite to the Act.

2-24

SDWA herein incorporates by reference the comments submitted by the Central Delta Water Agency.

2-25

Very Truly Yours,

MOHAN, HARRIS, RUIZ & RUBINO, LLP

By:



S. DEAN RUIZ, ESQ.
Attorney for South Delta Water Agency

SDR/js

II.4.9 LETTER L-SDWA-2 – MOHAN, HARRIS, RUIZ & RUBINO, S. DEAN RUIZ, ESQ ON BEHALF OF SOUTH DELTA WATER AGENCY, DATED JANUARY 6, 2020

II.4.9.1 RESPONSE TO COMMENT L-SDWA-2-1

DWR acknowledges that the State Water Quality Control Plan has been amended multiple times and continues to be amended, and that planning efforts are currently underway that could ultimately affect stream flows and Delta outflows requirements. However, because the SWP must continue to provide water supplies to a large population while complying with CESA, it cannot agree that securing incidental take coverage for listed fish species should wait until the Bay Delta Water Quality Control Plan is complete. DWR will continue to work cooperatively with regulatory agencies to develop interim and long-term operations solutions that are responsive to state and federal law and that preserve and protect special-status species affected by SWP operations.

II.4.9.2 RESPONSE TO COMMENT L-SDWA-2-2

The statement in DEIR Chapter 2.1, “Purpose of the DEIR,” regarding DWR being the lead agency for the long-term operation of the CVP and SWP is an error and should only refer to long-term operation of the SWP. Please see FEIR Part III, DEIR Chapter 2.1 for the specific corrections made.

Long-term operation of the SWP is not a major federal action and is therefore not subject to NEPA. As explained in DEIR Appendix G, “Geographic Scope of Project’s Influence on Flow,” even though the SWP and CVP coordinate operations, DWR and Reclamation independently decide how to operate the individual projects to best meet applicable requirements. The COA does not define what actions DWR or Reclamation will take in any given set of circumstances and DWR has no control over CVP operations. Master Response 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations,” provide more detail regarding the relationship between DWR’s operation of the SWP and Reclamation’s operation of the CVP and why these are considered separate projects.

II.4.9.3 RESPONSE TO COMMENT L-SDWA-2-3

USBR prepared “Special Study: Evaluation of Dilution Flow to Meet Interior South Delta Water Quality Objectives” on April 8, 2011. According to public WRO 2010-0002 correspondences, DWR and USBR have acted pursuant to WRO 2010-0002. DWR and USBR are in compliance with the 2010 CDO and SWRCB SWP and CVP permit requirements. The update of the DCO Compliance Plan is required after implementation of the updated 2018 WQCP, which will be done in a water rights proceeding.

More details regarding south Delta water quality with implementation of the project are provided in FEIR Part III, DEIR Chapter 5.3.6, which analyses water quality conditions to determine if there were changes in salinity in the Delta due to implementation of the Refined Alternative 2b, which is DWR’s preferred alternative.

II.4.9.4 RESPONSE TO COMMENT L-SDWA-2-4

The comment has not provided information about how conducting a Water Availability Analysis would have changed the conclusions of the DEIR. DWR does not agree that the model assumptions do not

reflect senior water rights or regulatory obligations. As stated in DEIR Chapter 3.3.1, “Project Objectives,” DWR intends to continue the long-term operation of the SWP consistent with applicable laws, contractual obligations, and agreements. These limits include compliance with existing water rights of other senior water rights holders. DWR would continue to coordinate operations with local water districts and agencies in a similar manner to existing conditions.

II.4.9.5 RESPONSE TO COMMENT L-SDWA-2-5

DWR water rights Permits 16477, 16478, 16480, 16481, and 16482 utilized in operating SWP were issued to DWR on September 26, 1972, with an initial construction completion date of December 1, 1980 and date within which to apply water to full beneficial use of December 1, 1990. Pursuant to SWRCB water rights orders issued on July 2, 1991, all permits were extended to allow full construction by December 31, 2000 and complete application of water to beneficial use by December 31, 2009. On December 31, 2009, DWR timely filed Petitions for Time Extension for all such permits. Pending future SWRCB action on the Petitions for Time Extension, DWR is lawfully diverting water under the Permits. Related, under existing water law, DWR has vested rights to the amounts of water placed to beneficial use to-date under the Permits, subject to appropriate terms and conditions that may be imposed by the SWRCB in a future licensing proceeding.

II.4.9.6 RESPONSE TO COMMENT L-SDWA-2-6

Please see Response to Comment L-SDWA-2-4. The modeling of SWP operations indicates that the Proposed Project is able to operate, achieve its stated goals, and comply with existing applicable regulatory limits. DEIR Chapter 3.3.7 explicitly discusses how the SWP would be managed during drought and dry year conditions. Further discussion is provided in Master Response 24, “Drought Conditions.”

II.4.9.7 RESPONSE TO COMMENT L-SDWA-2-7

The basis for establishing the 1,500 cfs minimum export rate to protect public health and safety is based on the U.S. Bureau of Reclamation estimate of 1,500 cfs to meet public health and safety needs of communities that solely rely upon water diverted from the CVP and SWP pumping plants. This minimum export rate was proposed as part of the Reinitiation of Consultation on the Coordinated Long-Term Operation of the Central Valley Project and State Water Project EIS (Reclamation 2019).

Proposed operations of the SWP would not reduce opportunities to divert water using existing water rights of senior water right holders or to satisfy salinity control requirements. Appendix C, Table 1-1 presents the CALSIM II water model results itemized by region and user type. This table does show a decrease in water deliveries to CVP Settlement contractors on the order of 10 TAF or 0.6% of their existing water deliveries. This value is considered to be an artifact of the CALSIM II calculation and does not represent an actual decrease in water deliveries. As noted in DEIR Chapter 1.2, “Project Background,” DWR would continue the ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. These limits include compliance with existing water rights of other senior water rights holders.

II.4.9.8 RESPONSE TO COMMENT L-SDWA-2-8

Please see Response to Comment L-SDWA-2-3.

II.4.9.9 RESPONSE TO COMMENT L-SDWA-2-9

Please see Response to Comment L-SDWA-2-3.

II.4.9.10 RESPONSE TO COMMENT L-SDWA-2-10

DWR used the best available science throughout the DEIR. The version of DSM2 utilized for the DEIR is the best available planning model. Please review DSM2 model description in DEIR Appendix H “CalSim II and DSM2 Model Descriptions and Assumptions.” Further discussion regarding the analysis and methodology used in the DEIR is provided in Master Response 20, “Best Available Science.”

II.4.9.11 RESPONSE TO COMMENT L-SDWA-2-11

DEIR Chapter 4.3.2, “Water Quality Constituents That Could Be Affected by the Proposed Project,” provides details regarding water quality impacts.

II.4.9.12 RESPONSE TO COMMENT L-SDWA-2-12

Please see Response to Comment SDWA-2-10.

II.4.9.13 RESPONSE TO COMMENT L-SDWA-2-13

As discussed in DEIR Chapter 4.6.1, “Cumulative Impacts,” water transfers would require their own permitting analyses and CEQA assessment, if necessary. Please see Response to Comment L-CDWA-1-17 regarding DSM2 channel cross sections.

II.4.9.14 RESPONSE TO COMMENT L-SDWA-2-14

The SDWA comment suggesting the DEIR has conflicting language does not support a conclusion that the DEIR analysis of the temporary barriers is inadequate. The last paragraph of the DEIR Chapter 3.1.3.6 states that the DEIR is “focused on the operation of the barriers within the South Delta and does not analyze or address the construction or removal of the barriers, which is covered by a separate Biological Opinion (BiOp) and associated permits.” DWR acknowledges the typographic error in the description of existing barrier operations provided in DEIR Chapters 3.1.3.6, “South Delta Temporary Barrier Project”. Please see Part III of this FEIR for the specific refinements made to DEIR Chapters 3.1.3.6 to correct these errors and provide further clarification regarding barrier operation.

The impact analysis presented in the DEIR is appropriate as it is consistent with the Temporary Barriers Project’s (TBP’s) US Army Corps of Engineers permit (USACE) and the associated 2018 Biological Opinions. Under these permits, DWR can begin installing the temporary agricultural barriers when it is installing the HORB, which can be as early March 1, if flows on the San Joaquin River at Vernalis are not too high (i.e., below 5,000 cfs for the duration of construction). However, when the HORB is not installed, the agricultural barriers installation begins no sooner than May 1 (see 2018 NMFS BiOp for TBP, pp. 10-12; 2018 USFWS BiOp for TBP, pp. 8-13).

The permit conditions for installing the temporary agricultural barriers allow for full closure and operation prior to June 1 (see 2018 NMFS BiOp for TBP, pp. 10-12; 2018 USFWS BiOp for TBP, pp. 8-13). When the HORB and the agricultural barriers are installed concurrently in the spring, DWR may under specified conditions fully operate the agricultural barriers between April 1 and May 31. Also, when DWR does not install the HORB, the agricultural barriers may be fully operated from May 15-30 when specified conditions are met. These conditions for early operations may include obtaining approval by the fish agencies.

The TBP permits require that the temporary barriers are notched on or before September 15 (or flash boards are removed) to allow passage of adult salmon and must be completely removed by November 30, although removal could be earlier depending on hydrology and other conditions (see 2018 NMFS BiOp, Tables 1, 2, and 3, pages 10-12; and DEIR Chapter 5.4.1, pages 5-71 to 5-72).

The SDWA comment appears to refer to language in DEIR Chapter 3.3.8, which states, “DWR proposes to continue operating three temporary barriers at the Old River at Tracy, Middle River, and Grant Line Canal each year, when necessary to maintain operations of agricultural water users.” The intent of the proposal is to continue installing and operating the three agricultural barriers according to the terms and conditions in permits for the barriers from the USACE and associated Biological Opinions, CDFW, the Central Valley RWQCB, and Long-term CVP/SWP operation Biological Opinions. The DEIR analysis of the proposed long-term SWP operation that includes the three temporary agricultural barriers as described in DEIR Chapter 3.3.8 is consistent with the continuation of the existing TBP. The language “when necessary” is included because the barriers are operated at times needed to enable agricultural water users to divert from the south delta canals. This is consistent with DWR’s objectives for this action and the permits authorizing DWR to install and operate the barriers each year, while also requiring agency approvals for some actions and that certain high flow conditions may not allow installation, as noted in the above response. The language in the DEIR is correct because the dates listed are consistent with the permit terms without the spring HORB.

The Proposed Project and alternatives include continued installation and operation of the three agricultural barriers in the south Delta in accordance with the existing permit conditions and objectives of the program. The TBP has been part of the SWP Delta operations since the early 1990s (DEIR Chapter 3.1.3.6, p. 3-6) and the existing USACE permit for installing the agricultural barriers without the HORB authorizes installation to begin in May.

The objectives of operating the three temporary agricultural barriers are the same under the Proposed Project as they are under Existing Conditions, which is to increase water levels, circulation patterns, and water quality in the southern Delta area for local agricultural diversions (see Chapters 3.1.3.6 and 3.3.8). Installation of the HORB can reduce water levels in Old River, Middle River, and Grant Line Canal downstream of the confluence with the San Joaquin River. Because of the potential to reduce water levels, the USACE permit allows installation of the agricultural barriers concurrent with the HORB in order to improve water levels in these channels.

In addition to the barriers, DWR operates the Clifton Court Forebay to minimize impacts on water levels in the nearby south Delta channels. The DEIR states on page 3-3, Chapter 3.1.3.3:

“A set of five radial gates are located at the CCF inlet near the confluence of the Grant Line and West Canal. They are operated so that they can be closed during critical periods of the ebb/flood tidal cycle to protect water levels experienced by local agricultural water users in the South Delta. The gates are operated on the tidal cycle to reduce approach velocities, prevent scour in adjacent channels, and minimize fluctuations in water elevation in the South Delta by taking water in through the gates at times other than low tide. Banks Pumping Plant pumping rates are constrained operationally by limits on CCF diversions from the Delta.”

DEIR Chapter 3.3.8 describing the Proposed Project includes proposed barrier operations to allow for fish passage by having one culvert flap gate open while temperatures are not lethal to fish. This action is included in the 2019 proposed action by USBR and DWR for the reinitiation of consultation on long-term CVP/SWP operations provided to the USFWS and NMFS. USFWS and NMFS included this action in the 2019 Delta Smelt and Salmonid Biological Opinions, respectively (See USFWS 2019 BiOp for CVP/SWP long-term operations, pp. 36 and 128; NMFS 2019 BiOp for CVP/SWP long-term operations, p. 571). This requirement was the result of a mandated study under the NMFS 2009 Biological Opinion on the effects of the TBP. This is a recommendation of the 2018 report “Effects of the South Delta Temporary Barriers on Emigrating Juvenile Salmonids.” It is important to note that DWR has 6, 8, or 9 culverts through the barriers, so at most, DWR is only changing conveyance by 17%. Also, through the TBP adaptive management plan, DWR will be looking at the tradeoff between passage and stage protection.

SDWA provides no evidence that this action would adversely affect south Delta diverters. DWR’s DEIR analysis shows that the Proposed Project will not result in significant impacts on hydrology, water surface resources, water quality, or aquatic resources (see DEIR Chapters 4 and 5, and Appendix A). Thus, there is no basis to amend or revise the DEIR.

II.4.9.15 RESPONSE TO COMMENT L-SDWA-2-15

The Water Quality Response Plan (WQRP) and Water Level Response Plan (WLRP) identified by the comment are requirements of D-1641, but the plans do not modify or alter the D-1641 flow or water quality criteria imposed on the SWP and CVP. As analyzed in DEIR Chapter 4.3.2, the Proposed Project and the preferred alternative, Refined Alternative 2b, would slightly increase salinity during late fall and early winter in the years following wet and above-normal years but will not cause exceedances of D-1641 standards. For that reason, analysis of the WQRP and WLRP and specific compliance requirements set forth therein will not shed additional light on any alleged potential environmental impacts of the Proposed Project.

Related, the purpose of the WQRP under D-1641 was “to ensure that operation of JPOD does not significantly degrade water quality in the southern and central Delta to the injury of water users in the southern and central Delta.” (CDO WR 2006-0006). However, in CDO WR 2010-0002, the SWRCB found the original WQRP “no longer viable” and modified DWR and USBR’s original deadline to implement a plan to meet interior Delta salinity objectives stating,

“we will not require the revised compliance plan to be submitted until we have completed our review of the 2006 Bay-Delta Plan and any subsequent water right proceeding to consider whether to change DWR’s or USBR’s responsibility for meeting the objectives as a result of any changes to the 2006 Bay-Delta Plan.” (pp.11-12).

As such, there is no “viable” WQRP under D-1641, or any subsequent water right proceeding, that DWR can presently analyze. In the absence of a viable WQRP, the SWRCB has required certain salinity control actions on an interim basis pursuant to CDO WR 2010-0002, which the DEIR addressed by stating, “[p]roposed project operations will not affect actions pursuant to CDO WR 2010-0002.” (Chapter 4.3.3, “Impacts of the Proposed Project”, p.4-28).

II.4.9.16 RESPONSE TO COMMENT L-SDWA-2-16

The Proposed Project will not affect existing water rights, nor will it affect Priority Operations referenced in the commenter’s letter. Therefore, no additional discussion is required because the Proposed Project will not affect the Priority Operations agreement.

II.4.9.17 RESPONSE TO COMMENT L-SDWA-2-17

The SWP is bound by both a Water Quality Response Plan and a Water Level Response Plan mandated under D-1641.

The Water Quality Response Plan (WQRP) and Water Level Response Plan (WLRP) identified by commenter are requirements of D-1641, but the plans do not modify or alter the D-1641 flow or water quality criteria imposed on the SWP and CVP. These plans require DWR to prepare analysis of effects to water levels and water quality prior to conducting Joint Point of Diversion (JPOD) operations and water transfers. DWR only undertakes such operations in a manner that avoids additional impacts to water level and quality due to the operations. Also, as analyzed in DEIR Chapter 4.3.2, the Proposed Project (and Refined Alternative 2b) would result in small increases in salinity during late fall and early winter in the years following wet and above-normal years but will not cause exceedances of D-1641 standards. For that reason, analysis of the WQRP and WLRP requirements, that are set forth within D-1641, will not add information to that already included within environmental impacts analysis of the Proposed Project and updated information is provided in Part III, Chapter 5.3 for Refined Alternative 2b.

The purpose of the WQRP under D-1641 was “to ensure that operation of JPOD does not significantly degrade water quality in the southern and central Delta to the injury of water users in the southern and central Delta.” (CDO WR 2006-0006). However, in CDO WR 2010-0002, the SWRCB found the original WQRP “no longer viable” and modified DWR and USBR’s original deadline to implement a plan to meet interior Delta salinity objectives stating,

“we will not require the revised compliance plan to be submitted until we have completed our review of the 2006 Bay-Delta Plan and any subsequent water right proceeding to consider whether to change DWR’s or USBR’s responsibility for meeting the objectives as a result of any changes to the 2006 Bay-Delta Plan.” (pp.11-12).

As such, there is no “viable” WQRP under D-1641, or any subsequent water right proceeding, that DWR can presently analyze. In the absence of a viable WQRP, the SWRCB has required certain salinity control actions on an interim basis pursuant to CDO WR 2010-0002, which the DEIR addressed by stating, “[p]roposed project operations will not affect actions pursuant to CDO WR 2010-0002.” (Chapter 4.3.3, “Impacts of the Proposed Project”, p.4-28).

II.4.9.18 RESPONSE TO COMMENT L-SDWA-2-18

Historically, DWR and Reclamation have coordinated Temporary Urgency Change Petition (TUCP) applications. For example, the language of DWR and Reclamation’s January 29, 2014 TUCP refers to storage criteria for Lake Oroville, Shasta Lake, and Folsom Lake. It is not feasible to predict future actions of DWR and Reclamation based upon historical activities that occurred under different operational and regulatory criteria. The DEIR analyzed operations under the Proposed Project as compared to Existing Conditions; however, this DEIR cannot predict responses from the agencies. Please see Master Response 24, “Drought Conditions,” for a more detailed discussion of Dry Year operations.

II.4.9.19 RESPONSE TO COMMENT L-SDWA-2-19

As noted in DEIR Chapter 1.2, “Project Background,” DWR intends to continue the ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. These limits include the consideration of existing water rights of other senior water rights holders.

II.4.9.20 RESPONSE TO COMMENT L-SDWA-2-20

As written, PL-108-361 requires that “[p]rior to increasing export limits from the Delta for the purposes of conveying water to south-of-Delta Central Valley Project contractors or increasing deliveries through an intertie” USBR is directed to “develop and initiate implementation of a program to meet all existing water quality standards and objectives for which the Central Valley Project has responsibility.” A straightforward reading of the term “initiate” makes it clear that USBR does not need to have fully implemented its plan prior to increasing export limits under PL-108-361. Consistent with that reading, USBR’s website indicates that it is “implementing” the required program (See <https://www.usbr.gov/mp/ptms/background.html>, last checked 2/4/2020).

The comment asserts that DWR “cannot determine its own long-term operations” prior to USBR fully implementing its plan. However, that assertion discounts existing agreements and regulatory requirements. DWR and USBR are mutually bound by a Coordinated Operations Agreement (COA), as amended in 2018, that establishes the respective responsibilities of the parties for specific water quality and outflow requirements (see Master Response 22, “Relationship to CVP Operations”). DWR and USBR are also required to meet specific water quality standards under D-1641 and other regulatory restrictions that constrain SWP and CVP operations regardless of USBR’s plan implementation under PL-108-361. (See, e.g., Chapter 4.4.5 “Regulatory Limitations On Operations of Delta Water Diversions”).

II.4.9.21 RESPONSE TO COMMENT L-SDWA-2-21

This level of analysis is not required for every alternative, as discussed in Master Response 3, “The CEQA Process.”

II.4.9.22 RESPONSE TO COMMENT L-SDWA-2-22

The comment expresses concern with modeled representation of the Biological Opinions RPAs. Existing Conditions for the project description include all regulatory requirements at the time of the NOP. As noted in Appendix H, “CalSim II and DSM2 Model Descriptions and Assumptions,” some of these criteria are not modeled due to lack of data needed to develop a simplifying assumption.

II.4.9.23 RESPONSE TO COMMENT L-SDWA-2-23

The Proposed Project does propose to implement a project-specific water transfer that includes the potential source of the transfers or its operational characteristics. The Proposed Project only provides a window in time in which the transfer water can be conveyed through the South Delta pumps. At the time future transfers are proposed, the proposer will be required to comply with CEQA and provide this level of information and analyze potential effects on hydrology, groundwater, water quality, and other environmental topics.

II.4.9.24 RESPONSE TO COMMENT L-SDWA-2-24

Regarding alternatives and reduced reliance, please refer to Master Response 3, “The CEQA Process,” the NOP, Proposed Project, Alternatives and FEIR Preferred Alternative and Master Response 7, “Delta Reform Act,” which includes a discussion of the Delta Plan’s reduced reliance policy and also Master Response 6, “Demand Management/Conservation Measures,” describing DWR’s role in water conservation and demand management.

II.4.9.25 RESPONSE TO COMMENT L-SDWA-2-25

Please see Responses to Comments L-CDWA-1-1 through L-CDWA-1-18 and L-CDWA-2-1 through L-CDWA-2-12 for specific responses to the comments of the Central Delta Water Agency, which this commenter incorporates by reference.

II.4.9.26 RESPONSE TO COMMENT L-SDWA-2-ATT-1

See Response to Comment L-SDWA-2-16.

II.4.9.27 RESPONSE TO COMMENT L-SDWA-2-ATT-2

See Response to Comment L-SDWA-2-8.

II.4.9.28 RESPONSE TO COMMENT L-SDWA-2-ATT-3

See Response to Comment L-SDWA-2-3.

II.4.9.29 RESPONSE TO COMMENT L-SDWA-2-ATT-4

See Response to Comment L-SDWA-2-3.

II.4.9.30 RESPONSE TO COMMENT L-SDWA-2-ATT-5

See Response to Comment L-SDWA-2-3.

II.4.9.31 RESPONSE TO COMMENT L-SDWA-2-ATT-6

See Response to Comment L-SDWA-2-3.

II.4.9.32 RESPONSE TO COMMENT L-SDWA-2-ATT-7

See Response to Comment L-SDWA-2-12.

II.4.9.33 RESPONSE TO COMMENT L-SDWA-2-ATT-8

See Response to Comment L-SDWA-2-20.

II.4.9.34 RESPONSE TO COMMENT L-SDWA-2-ATT-9

See Response to Comment L-SDWA-2-20.

II.4.9.35 RESPONSE TO COMMENT L-SDWA-2-ATT-10

See Response to Comment L-SDWA-2-6.

II.4.9.36 RESPONSE TO COMMENT L-SDWA-2-ATT-11

See Response to Comment L-SDWA-2-15.

II.4.9.37 RESPONSE TO COMMENT L-SDWA-2-ATT-12

See Response to Comment L-SDWA-2-15.

II.4.9.38 RESPONSE TO COMMENT L-SDWA-2-ATT-13

DWR has reviewed and considered L-SDWA-2-Att-13.

II.4.9.39 RESPONSE TO COMMENT L-SDWA-2-ATT-14

See Response to Comment L-SDWA-2-9.

II.4.9.40 RESPONSE TO COMMENT L-SDWA-2-ATT-15

See Response to Comment L-SDWA-2-9.

II.4.9.41 RESPONSE TO COMMENT L-SDWA-2-ATT-16

See Response to Comment L-SDWA-2-9 and L-SDWA-2-11.

II.4.9.42 RESPONSE TO COMMENT L-SDWA-2-ATT-17

DWR has reviewed and considered L-SDWA-2-Att-17.

II.4.9.43 RESPONSE TO COMMENT L-SDWA-2-ATT-18

See Response to Comment L-SDWA-2-9 and L-SDWA-2-11.

II.4.9.44 RESPONSE TO COMMENT L-SDWA-2-ATT-19

See Response to Comment L-SDWA-2-9 and L-SDWA-2-11.

II.4.9.45 RESPONSE TO COMMENT L-SDWA-2-ATT-20

See Response to Comment L-SDWA-2-12.

II.4.9.46 RESPONSE TO COMMENT L-SDWA-2-ATT-21

See Response to Comment L-SDWA-2-12.

II.4.9.47 RESPONSE TO COMMENT L-SDWA-2-ATT-22

DWR has reviewed and considered L-SDWA-2-Att-22.

II.4.9.48 RESPONSE TO COMMENT L-SDWA-2-ATT-23

See Response to Comment L-SDWA-2-9.

II.4.9.49 RESPONSE TO COMMENT L-SDWA-2-ATT-24

See Response to Comment L-SDWA-2-9.

II.4.9.50 RESPONSE TO COMMENT L-SDWA-2-ATT-25

See Response to Comment L-SDWA-2-9, L-SDWA-2-10, and L-SDWA-2-11.

II.4.9.51 RESPONSE TO COMMENT L-SDWA-2-ATT-26

See Response to Comment L-SDWA-2-9, L-SDWA-2-10, and L-SDWA-2-11.

II.4.9.52 RESPONSE TO COMMENT L-SDWA-2-ATT-27

See Response to Comment L-SDWA-2-9, L-SDWA-2-10, and L-SDWA-2-11.

II.4.9.53 RESPONSE TO COMMENT L-SDWA-2-ATT-28

See Response to Comment L-SDWA-2-9, L-SDWA-2-10, and L-SDWA-2-11.

II.4.9.54 RESPONSE TO COMMENT L-SDWA-2-ATT-29

See Response to Comment L-SDWA-2-9, L-SDWA-2-10, and L-SDWA-2-11.

II.4.9.55 RESPONSE TO COMMENT L-SDWA-2-ATT-30

See Response to Comment L-SDWA-2-9.

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Sent Via E-Mail

January 7, 2020

Dean Messer
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 942836
LTO@water.ca.gov

Subject: Long-Term Operation of the California State Water Project / EIR / 2019049121

Dear Mr. Messer:

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide comments on the Draft Environmental Impact Report (EIR) for the Long-Term Operation of the State Water Project (Project, SCH 2019049121). SMUD is the primary energy provider for Sacramento County and the proposed Project area. SMUD's vision is to empower our customers with solutions and options that increase energy efficiency, protect the environment, reduce global warming, and lower the cost to serve our region. As a Responsible Agency, SMUD aims to ensure that the proposed Project limits the potential for significant environmental effects on SMUD facilities, employees, and customers.

It is our desire that the Project EIR will acknowledge any Project impacts related to the following:


- Overhead and or underground transmission and distribution line easements. Please view the following links on smud.org for more information regarding transmission encroachment:
 - <https://www.smud.org/en/Business-Solutions-and-Rebates/Design-and-Construction-Services>
 - <https://www.smud.org/en/Corporate/Do-Business-with-SMUD/Land-Use/Transmission-Right-of-Way>
- Utility line routing
- Electrical load needs/requirements
- Energy Efficiency
- Climate Change
- Cumulative impacts related to the need for increased electrical delivery
- The potential need to relocate and or remove any SMUD infrastructure that may be affected in or around the project area

1-1

SMUD would like to be involved with discussing the above areas of interest as well as discussing any other potential issues. We aim to be partners in the efficient and sustainable delivery of the proposed Project. Please ensure that the information included in this response is conveyed to the Project planners and the appropriate Project proponents.

Environmental leadership is a core value of SMUD and we look forward to collaborating with you on this Project. Again, we appreciate the opportunity to provide input on this EIR. If you have any questions regarding this letter, please contact SMUD's Environmental Management Specialist, Rob Ferrera, at rob.ferrera@smud.org or 916.732.6676.

Sincerely,

A handwritten signature in blue ink that reads "Nicole Goi".

Nicole Goi
Regional & Local Government Affairs
Sacramento Municipal Utility District
6201 S Street, Mail Stop B404
Sacramento, CA 95817
nicole.goi@smud.org

Cc: Rob Ferrera

II.4.10 LETTER L-SMUD-1 – SACRAMENTO MUNICIPAL UTILITIES DISTRICT, NICOLE GOI, REGIONAL 7 LOCAL GOVERNMENT AFFAIRS, DATED JANUARY 7, 2020

II.4.10.1 RESPONSE TO COMMENT L-SMUD-1-1

As discussed in DEIR Chapter 3, “Description of the Proposed Project,” DWR’s proposed long-term operation of the SWP would not include new development or the construction of new infrastructure. Therefore, long-term operation of the SWP would not result in transmission encroachment, would have no effects on overhead or underground transmission or distribution line easements, and would not result in the need to relocate and or remove any utility lines or other SMUD infrastructure. DEIR Appendix A, “Initial Study of the Long-Term Operations of the State Water Project,” analyzed the impacts of long-term operations of the SWP relating to energy and utility services. The project would not include any changes related to the SWP electrical load needs or energy efficiency or result in cumulative impacts related to the need for increased electrical delivery or climate-related impacts. As discussed in DEIR Appendix A, Chapter 3.6, “Energy,” SWP energy consumption for operational purposes would continue to vary on an annual basis due to fluctuations in water deliveries due to climatic variability and would remain within the range of energy consumption historically used by the SWP. Over time, the sources of energy used to power the SWP would become more renewable, and the efficiency of energy use would improve through compliance with DWR adopted plans, policies, and legislative mandates requiring increased reliance on renewable resources and energy efficiency.

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January 6, 2020

Via Electronic Mail and First-Class Mail

You Chen (Tim) Chao, PhD, PE, CFM
Executive Division
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236-0001
LTO@water.ca.gov

Re: Sacramento River Settlement Contractors’ Comments to California Department of Water Resources’ Draft Environmental Impact Report for Long-Term Operations of the California State Water Project

Dear Dr. Chao:

These comments on the California Department of Water Resources’ (“DWR”) Draft Environmental Impact Report for Long-Term Operations of the California State Water Project (“Draft EIR”) are submitted on behalf of various parties listed on Exhibit A, attached hereto, and hereinafter referred to as the “Sacramento River Settlement Contractors” or “SRS Contractors.”

In an effort to assist DWR’s efforts toward adequate environmental review, and to improve the SRS Contractors’ understanding of the proposed project impacts on the environment, including potential impacts of the Project and alternatives on SRS Contractor operations, the undersigned are providing these comments related to concerns with the Draft EIR. In addition, the SRS Contractors hereby join in the comments submitted by the United States Bureau of Reclamation (“Reclamation”).

1-1

1. The Draft EIR Fails to Adequately Define the Project Being Analyzed.

A finite project description is the “*sine qua non* of an informative and legally sufficient EIR.” (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193 (“*County of Inyo*”).) In contrast, a “curtailed, enigmatic or unstable project description draws a red herring across the path of public input.” (*County of Inyo, supra*, 71 Cal.App.3d at pp. 187-98.) “‘Project’ means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.” (Cal.

1-2

Code Regs., tit. 14¹, § 15378 (emphasis added).) Here, the project that is the subject of the Draft EIR is modified State Water Project (“SWP”) operations pursuant to California Endangered Species Act incidental take authorization (“Project”) that would be provided by the California Department of Fish and Wildlife (“CDFW”) in response to DWR’s “Incidental Take Permit Application for Long-Term Operation of the State Water Project,” dated December 13, 2019. (“ITP Application”) The Draft EIR project description lacks the information necessary for members of the public to evaluate Project impacts.

1-2
(Cont.)

a. Lack of Detail on SWP/CVP Operations

The Draft EIR does not provide sufficient specificity to adequately identify what the impacts of the Project will be. For example, the Draft EIR explains that DWR will coordinate with Reclamation to develop a “voluntary toolkit of drought actions that could be implemented at the discretion of DWR and/or Reclamation.” Draft EIR, at 3-38. However, there is no explanation of what actions would be considered, or how operations under the Project would differ under any such drought toolkit.

More generally, the Draft EIR fails to explain how SWP operations will be coordinated with the Central Valley Project (“CVP”) and its operations in accordance with the biological opinions issued in October 2019 by the U.S. Fish and Wildlife Service and National Marine Fisheries Service. Instead, Appendix G of the Draft EIR purports to artificially narrow the geographic scope of the project² and omits discussion of potential impacts north of the Delta and to CVP operations and water supplies because DWR allegedly “cannot reasonably foresee how Reclamation might respond to” SWP operations. However, elsewhere, DWR acknowledges that it “operates the SWP in coordination with the CVP, under the Coordinated Operation Agreement (COA) between the federal government and the State of California (authorized by Public Law 99-546” (Draft EIR, p. 1-3), and the proposed Project operations largely assume extensive coordination with Reclamation. (See, e.g., Draft EIR, pp. 3-18 – 3- 38 [OMR Management].) Accordingly, DWR’s artificially narrow scope of analysis is lacking sufficient detail about how changes to SWP operations will result in changes to upstream operations for both the SWP and the CVP.

1-3

A lead agency may dismiss certain impacts as speculative and refuse to evaluate them in an EIR only after first conducting a “thorough investigation.” (CEQA Guidelines, § 15145.) The Draft EIR contains no information about whether DWR consulted with Reclamation to determine what actions Reclamation might take in response to the Project, including the numerous Project

¹ The Guidelines for Implementation of the California Environmental Quality Act, Cal. Code Regs., tit. 14. §15000 et seq., hereinafter referred to as the “CEQA Guidelines.”)

² In other areas, however, the Draft EIR itself proposes actions by Reclamation and CVP water users, such as the SRS Contractors, in areas outside the purported geographic scope. (Draft EIR, pp. 3-31–3-32.) In this way the Draft EIR is internally inconsistent and fails to serve the informational requirements of CEQA.

elements that assume coordination between the two agencies. Thus, the assertions in the Draft EIR and Appendix G that DWR cannot reasonably foresee how Reclamation might operate the CVP with the Project in place and that any impacts outside the limited geographic area are “speculative” is not supported by substantial evidence and violates CEQA’s requirement that DWR “use its best efforts to find out and disclose all that it reasonably can” about Project impacts. (CEQA Guidelines, § 15144.)

1-3
(Cont.)

In addition, the Draft EIR states that it will provide “its proportional share of the OMR flow requirements described for Longfin Smelt” (Draft EIR, p. 3-23). However, for reasons not explained in the Draft EIR, the Draft EIR “does not model the proposed adult Longfin Smelt entrainment protections for adult, larval and juvenile Longfin Smelt” (Draft EIR, p. 4-14) and it does not identify where DWR’s “proportional share” is coming from or whether providing that share will have an impact.

1-4

The Draft EIR’s description of potential Project operations is so vague and open-ended as to make it impossible to understand how physical conditions may change if the Project is approved. (See, e.g., Draft EIR at page 3-25, describing operations proposed to be conducted by DWR “in coordination with Reclamation” for larval and juvenile Delta smelt protection (the effects of which also were not modeled [Draft EIR, p. 4-14]): “In the event the life cycle models cannot be operationalized in a manner that can be used to inform real-time operations, Reclamation, DWR, CDFW, and USFWS will coordinate to develop an alternative plan to provide operational actions protective of this life stage.”) Without a full understanding of such details, it is impossible to adequately analyze impacts.

b. Inconsistencies Between Project Description and ITP Application

Moreover, an EIR that describes one project but analyzes another does not meet CEQA’s basic objectives of promoting informed decision-making. (*County of Inyo, supra*, 71 Cal.App.3d at 197 [EIR’s “incessant shifts among different project descriptions . . . vitiate the city’s EIR process as a vehicle for intelligent public participation”]; see also *Western Placer Citizens for an Agriculture & Rural Environment v. County of Placer* (2006) 144 Cal.App.4th 890, 898 [the project analyzed must be consistent with the project description, “[t]he defined project and not some different project must be the EIR’s bona fide subject.”].)

1-5

Here, the Project is defined by DWR’s ITP Application. The ITP Application and the Draft EIR project description should be identical, and the Draft EIR project description largely repeats the ITP Application verbatim. However, the Draft EIR project description omits several elements of the adaptive management actions included in the ITP Application. In particular, the Draft EIR states that “the [adaptive management plan] AMP extends to specified SWP operations and activities undertaken by DWR concomitant to those operations. They include the following: . . .” (Draft EIR, p. 3-52.) The bulleted list of actions that follows is identical to six of the actions listed at page 3-54 of the ITP Application but omits two elements of the AMP from the ITP Application: “Cultured Delta Smelt studies” and “Additional summer-fall actions.” (Compare

Draft EIR, p. 3-52 with ITP Application, p. 3-54). The Draft EIR’s omission of these Project elements is particularly troubling due to the vague and open-ended nature of the ITP Application’s proposed “additional summer-fall actions” and the ITP Application’s statement that the Project may be “expanded in the future to include other operations and activities.” (ITP Application, p. 3-54.) Without any information in the Draft EIR about such “additional summer-fall actions,” or even the most general description of the potential future “operations and activities,” there is no way for the public or decision makers to understand the full range of proposed activities that would be authorized under the ITP Application or their potential impacts.

The Draft EIR also omits a key aspect of the ITP Application—Adaptive Management Across Wetter and Drier Years. (See ITP Application, pp. 3-55–3-57.) In this section of the ITP Application, DWR expresses its intent through the proposed Project to increase exports and provide 100,000 acre feet of additional water for outflow. The Draft EIR’s failure to describe these aspects of the Project is confusing in light of references in the ITP Application to the “DEIR” as apparent justification for the proposed actions. (See ITP Application p. 3-57 [“Moreover, as shown in the DEIR, the Proposed Project is not expected to decrease June through August outflow as compared to baseline. Therefore, there is no mitigation required for SWP related changes in summer outflow.”].) The omission of these elements of the Project from the Draft EIR project description is also problematic because immediately following the ITP Application’s statement that “there is no mitigation required for SWP related changes in summer outflow,” the application describes the proposal to make available 100,000 acre-feet of water between June and November as “additional outflow” or to “offset impacts to Delta water quality standards”, or for some undefined “alternative purpose.” (ITP Application, p. 3-57.) The ITP Application further states that the 100,000 acre-feet of water could be provided “through water purchase or SWP project water.” (*Id.*) The use of water to “offset impacts to Delta water quality standards” is particularly confusing given that the Draft EIR states the Project will *not* cause violations of water quality standards. (Draft EIR, p. 4-28.) It is unclear whether the Project may cause the referenced “impacts to Delta water quality standards,” or what the source of purchased water might be. At a minimum the Draft EIR needs to acknowledge these potential aspects of the Project and describe their potential impacts, including clarifying (1) whether the Project itself may cause the Delta water quality impacts that require such extensive mitigation (100,000 acre-feet of additional outflow); (2) where DWR might acquire up to 100,000 acre-feet of water for those purposes; and (3) the impacts of acquiring that much water (such as crop idling or groundwater substitution pumping).

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c. Inaccurate Description of North Delta Food Subsidies and Colusa Basin Drain Project in Draft EIR section 3.3.3.1

In order to accurately characterize this aspect of the Project, the following clarifying revisions should be made to Draft EIR section 3.3.3.1 on page 3-31:

1-6

- 1st paragraph, 2nd sentence: “While the Cache Slough Complex and the lower Yolo Bypass are known to have relatively high levels of food resources, local water

diversions within these vicinities create net negative flows during summer and fall that may inhibit downstream food transport.”

- 2nd paragraph, 2nd sentence: “For the first approach, water would be ~~provided~~ diverted by Sacramento River water districts, such as Reclamation District 108 and Glenn Colusa Irrigation District.”
- 3rd paragraph, 1st sentence: “The second approach would use agricultural drain water in fall, which is available ~~in fall~~ when valley rice fields discharge irrigation water at the end of the growing season.”
- 5th paragraph, 2nd sentence: “Similarly, the action depends on partnerships with the US Bureau of Reclamation to make water available and local water users including Reclamation District 108, Glenn Colusa Irrigation District, Conaway Ranch, and Swanston Ranch.”

1-6
(Cont.)

2. The Draft EIR Fails to Adequately Disclose and Analyze Project Impacts on CVP and SRS Contractor Operations.

CEQA requires that an EIR’s analysis and impact determinations be based on substantial evidence. CEQA “[c]ase law defines ‘substantial evidence’ supporting an agency’s decision as ‘relevant evidence that a reasonable mind might accept as adequate support for a conclusion’ [citation] or ‘evidence of “ponderable legal significance . . . reasonable in nature, credible, and of solid value” [citation].” (*Banker’s Hill, Hillcrest, Park West Community Preservation Group v. City of San Diego* (2006) 139 Cal.App.4th 249, 261 fn. 10.) For the reasons discussed herein, the technical analyses supporting the Draft EIR have flaws that might undermine DWR’s ability to meet this standard.

The SRS Contractors retained MBK Engineers (“MBK”), who have extensive experience analyzing the operations of the CVP and the SWP, to evaluate the hydrological modeling that serves as the foundation for the environmental analysis of the Draft EIR. (See Draft EIR, p. 4-3 [describing models as constituting “a major component of the DEIR findings and conclusions.”].) As described in the technical memorandum attached hereto as Exhibit B, MBK’s review of the modeling revealed potential impacts that are not analyzed in the Draft EIR including the following:

1-7

- Annual average reduction in Sacramento River Settlement Contract deliveries of 10,000 acre-feet. This is a result of a modeling error that must be corrected.
- Increased upstream releases and Sacramento River flow in May.

- December through March increases in Yolo Bypass flow due to increases in upstream reservoir spills. The effects of operating reservoirs in this manner is neither disclosed nor analyzed in the Draft EIR.
- Reduced flow in the Sacramento River below Keswick in September and November of wet years.
- Reduced Shasta storage in certain year types from June through December.

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(Cont.)

The Draft EIR fails to adequately identify these results or analyze the potential impacts of these changes. Changes to reservoir operations and flows may have adverse impacts to water temperatures in the Sacramento River. Increases in Yolo Bypass flows could have a number of potentially significant impacts, including impacts to agricultural production on lands within the Yolo Bypass as a result of changes in the seasonal timing of inundation of the Yolo Bypass. The months of March, April, and May are critically important in the rice farming season, as this is the time in which preparation and planting of the field begins. If modified operations under the Project increase the extent or duration of inundation from historical patterns into March, planting could not begin until June. A delay in planting into June could lower crop yields significantly.

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Increased flows also have the potential to impact critical infrastructure, including the Yolo Bypass levees (from seepage), drainage culverts, and ditches. Drainage culvert capacity may need to be increased, and general ditch maintenance, including sediment deposition removal, may need to occur more frequently. Increased Bypass flows also could have adverse impacts to recreation, by decreasing suitable duck hunting opportunities if flows reduce the availability of shallow-flooded wetlands during the hunting season. Finally, changes in water levels can also alter the habitat suitability for migratory waterfowl that utilize the Yolo Bypass, as different species of waterfowl prefer different water levels and water depth influences which species will utilize a particular area.

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1-11
1-12

In addition to these omissions, DWR does not provide sufficient specificity in its modeling to adequately identify what the impacts of the Project will be. For example, the Draft EIR states that the modeling does not include certain proposed protections for Longfin smelt and Delta smelt. (Draft EIR, p. 4-14.) Without any analysis of how the proposed protections will affect overall operations under the Project, it is impossible to adequately analyze impacts of those proposed protections.

1-13

3. The Draft EIR Fails to Provide Full Mitigation for Significant Impacts.

CEQA implements a policy that agencies adopt feasible measures to reduce or avoid significant environmental effects of a project. Accordingly, an EIR must identify measures to mitigate each significant impact identified in the EIR. (Pub. Res. Code, §§ 21002.1(a), 21100(b)(3); Cal. Code Regs., tit. 14, § 15126.4.)

1-14
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The Draft EIR states that Alternative 4 has a potentially significant impact on cold water (Draft EIR 5-99 to 5-100), but it does not include any mitigation of this impact. Alternative 4 is based on a CDFW proposal, with CDFW as the responsible agency for approving DWR's ITP Application. Because the Draft EIR does not adequately identify mitigation measures for Alternative 4, CDFW cannot rely on the Draft EIR to issue an ITP based on Alternative 4.

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1-14
(Cont.)

The SRS Contractors appreciate the opportunity to comment on the Draft EIR. Thank you for your consideration of these comments.

Sincerely,

SOMACH SIMMONS & DUNN



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DOWNEY BRAND LLP



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MEN:cg

Attachments

II.4.11 LETTER L-SRS CONTRACTORS -1 – SOMACH SIMMONS & DUNN, ANDREW HITCHINGS AND DOWNEY BRAND LLP, MEREDITH NIKKEL ON BEHALF OF SACRAMENTO RIVER SETTLEMENT CONTRACTORS, DATED JANUARY 6, 2020

II.4.11.1 RESPONSE TO COMMENT L-SRS CONTRACTORS-1-1

DWR acknowledges that the commenter has incorporated by reference and joins the comments on the DEIR submitted by the United States Bureau of Reclamation. Please see Responses to Comments F-Reclamation-1-1 through F-Reclamation-1-30.

II.4.11.2 RESPONSE TO COMMENT L-SRS CONTRACTORS-1-2

The project description presented in the DEIR describes the modified SWP operations that are proposed to meet the project objectives. The project description includes a list of project elements and discussion describing each of the actions and activities included in the proposed project. Following the issuance of the DEIR, DWR has continued to consult with CDFW to further refine the project and enable issuance of an ITP. Please see Master Response 3, “The CEQA Process,” for further discussion regarding the CEQA process for long-term operations of the SWP. The EIR is adequate under CEQA to allow the Lead Agency and the public to evaluate environmental impacts resulting from long-term operations of the SWP.

II.4.11.3 RESPONSE TO COMMENT L-SRS CONTRACTORS-1-3

The EIR’s focus on SWP operations and the SWP’s zone of influence is not an artificial narrowing of the geographic scope, but is consistent with CEQA. Please see Master Response 1, “Scope of Analysis,” for further information regarding how DWR identified the geographic scope of the project. Please see Master Response 22, “Relationship to CVP Operations,” for discussion of SWP-CVP coordination.

II.4.11.4 RESPONSE TO COMMENT L-SRS CONTRACTORS-1-4

As discussed in Response to Comment L-SRS Contractors-1-2, the project description adequately describes the SWP operations that are proposed to meet the project objectives. DWR has continued to coordinate with the CDFW to further refine the operations and management of the project to include additional measures to further avoid and minimize potential impacts to aquatic biological resources. These refinements are presented in FEIR Part III, Chapter 5.3 as part of Refined Alternative 2b. Please see Master Response 3, “The CEQA Process,” for further discussion regarding the CEQA process for long-term operations of the SWP. Specific elements that have been modified include the Collaborative Real-Time Risk Assessment for OMR Management, expansion of the Longfin Science Program to include a Longfin Smelt Life-Cycle Model, and an expanded Adaptive Management Plan.

With respect to “proportional share” questions, please refer to Master Response 4, “Legal Standards,” and Master Response 17, “Application of CESA Standards,” for further detail.

II.4.11.5 RESPONSE TO COMMENT L-SRS CONTRACTORS-1-5

As noted by the commenter, the Proposed Project described in DEIR Chapter 3, “Project Description,” is different from the project described in DWR’s ITP application. The alternatives analysis in DEIR Chapter 5, “Alternatives to the Proposed Project,” were intended to cover the range of actions that may be considered by CDFW as a part of the CESA ITP process. Although alternatives were not necessary to reduce or avoid significant CEQA impacts because the DEIR concluded that there would be no significant impacts, two of the alternatives provide freshwater flows in the spring and summer, and one alternative includes physical barriers and other deterrents to minimize fish entrainment by the SWP pumps.

As discussed in Response to Comment L-SRS Contractors-1-2, refinements have been made to the description of the project and alternatives following publication of the DEIR. The Refined Alternative 2b, as described in FEIR Part III, Chapter 5.3, “Refined Alternative 2b,” is DWR’s preferred alternative. Please see Master Response 3, “The CEQA Process,” for further discussion regarding the CEQA process for long-term operations of the SWP.

As discussed in Chapter 4.3, “Surface Water Quality,” the DEIR Proposed Project does not include 100,000 acre-feet of additional Delta outflow to offset Delta water quality standards. The FEIR identifies Refined Alternative 2b as the preferred alternative. Please see FEIR Part III, Chapter 5.3 for more details regarding the components that are included in Refined Alternative 2b. Please see FEIR Part III, Chapter 5.3.3, “Hydrology,” for more details regarding the evaluation of potential hydrologic changes associated with the proposed actions under Refined Alternative 2b.

II.4.11.6 RESPONSE TO COMMENT L-SRS CONTRACTORS-1-6

The suggested changes to the description of the North Delta Food Subsidies and Colusa Basin Drain Project in DEIR Chapter 3.3.3.1, “Food Enhancement Summer-Fall Actions,” are accepted by DWR. Please see FEIR Part III, Chapter 3.3.3.1 for the specific refinements made in response to this comment.

II.4.11.7 RESPONSE TO COMMENT L-SRS CONTRACTORS-1-7

The following observations provided in the comment are outside the project area:

- Annual average reduction in Sacramento River Settlement Contract deliveries of 10,000 acre-feet. This is a result of a modeling error that must be corrected.
- Increased upstream releases and Sacramento River flow in May.
- December through March increases in Yolo Bypass flow due to increases in upstream reservoir spills. The effects of operating reservoirs in this manner is neither disclosed nor analyzed in the Draft EIR.
- Reduced flow in the Sacramento River below Keswick in September and November of wet years.
- Reduced Shasta storage in certain year types from June through December.

SWP long-term operations would not cause environmental impacts beyond the Sacramento River from its confluence with the Feather River downstream to the legal Delta boundary at the I Street Bridge in

the City of Sacramento, Sacramento-San Joaquin Delta, and Suisun Marsh and Bay. Please refer to Master Response 1, "Scope of Analysis," for more details.

Furthermore, the modeled difference in Sacramento River Settlement Contractor Deliveries is not a model error. An annual average reduction in Sacramento River Settlement Contract deliveries of 10,000 acre-feet is a less than one percent difference in model results. According to model assumptions and limitations, discussed in Appendix H Attachment 1-7, "Model Limitations, Sacramento River Settlement Contractor deliveries are similar under the Proposed Project as compared to the Existing Conditions. Similarly, Sacramento River Settlement Contractor are similar under Refined Alternative 2b as compared to the Existing Conditions.

The following information presented in Exhibit B to Sacramento River Settlement Contractors comment letter are also outside the scope of the project area:

- Annual average changes at (Exhibit B, page 2):
 - Shasta Carryover
 - Oroville Carryover
 - Sacramento River Settlement Delivery
 - CVP NOD Water Service Delivery
 - Folsom Carryover
 - Yolo Bypass
- Change in Yolo Bypass flow into the Delta
 - December through March increases in Yolo Bypass flow are due to increases in upstream reservoir spills, this is because reservoirs are held higher in PA scenario
- Change in Sacramento River Settlement Contractor Delivery
 - Decreases in October are for fall Sacramento River flow stabilization, these decrease in October should result in a corresponding increase in November. This is an error in the modeling that should be corrected and average annual changes to SRSC should be zero rather than -10 TAF
- Change in Yolo Bypass flow
 - December through March increases in Yolo Bypass flow are due to increases in upstream reservoir spills, this is because reservoirs are held higher in PA scenario
- Change in Sacramento River Flow below Keswick
 - Reduction in flow in September of wet years is due to Delta Smelt Summer-Fall Habitat Action
 - Increase in flow in September of above normal years is due to Delta Smelt Summer-Fall Habitat Action
 - Reduction in flow in November or wet and above normal years is primarily due to Delta Smelt Summer-Fall Habitat Action
 - Increases in May are partly due to increases in upstream releases to support exports
- Plots of Shasta Storage
- Plots of Folsom Storage

- Plots of Oroville Storage

SWP long-term operations would not cause environmental impacts beyond the Sacramento River from its confluence with the Feather River downstream to the legal Delta boundary at the I Street Bridge in the City of Sacramento, Sacramento-San Joaquin Delta, and Suisun Marsh and Bay. Please refer to Master Response 1, "Scope of Analysis," for more details.

The following information presented in Exhibit B to the Sacramento River Settlement Contractors comment letter are consistent with what is presented in the DEIR:

- Annual average changes at (Exhibit B, page 2):
 - Sacramento River at Hood
 - Delta Outflow
 - San Joaquin River at Vernalis
 - Banks Export
 - Jones Export
- Change in Delta Outflow
 - Average annual decrease in Delta outflow of 400 TAF
 - Reduction in September of wet years of about 6000 cfs due to Delta Smelt Summer-Fall Habitat Action
 - Increase in September of above normal years of about 1000 cfs due to Delta Smelt Summer-Fall Habitat Action
 - Reduction in November in wet and above normal years is due to Delta Smelt Summer-Fall Habitat Action
 - Reductions in April and May are due to removal of SJR I/E ratio restriction on exports
 - December through March increases are in part due to increases in reservoir spills, because reservoirs are higher from Delta Smelt Summer-Fall Habitat Action
- Changes in Jones Export
 - Average annual increase in Jones export is 155 TAF
 - Most of the increase in Jones export is due to removal of SJR I/E ratio
 - Increases in October and November are primarily due to Delta Smelt Summer-Fall Habitat Action
- Changes in Banks Export
 - Average annual increase in Banks export is 220 TAF
 - Most of the increase in Banks export is due to removal of SJR I/E ratio
 - Increases in October and November are primarily due to Delta Smelt Summer-Fall Habitat Action
- Changes in Sacramento River flow into the Delta
 - Reduction in flow in September of wet years is due to Delta Smelt Summer-Fall Habitat Action

- Increases in flow in September of above normal years is due to Delta Smelt Summer-Fall Habitat Action
- Reduction in flow in November in wet and above normal years is due to Delta Smelt Summer-Fall Habitat Action
- Increases in May are partly due to increases in upstream releases to support exports
- Plots of San Joaquin River flow into the Delta

The FEIR identifies Refined Alternative 2b as the preferred alternative.

II.4.11.8 RESPONSE TO COMMENT L-SRS CONTRACTORS-1-8

The most-upstream location of the project area is the confluence of the Sacramento and Feather Rivers. Reservoir operations upstream of this location will have no effect on water temperatures because reservoir releases will be unchanged from existing conditions. Please see Master Response 1, “Scope of Analysis,” for further information regarding geographic scope. Please see Master Response 2, “Baseline,” for further information regarding existing conditions.

II.4.11.9 RESPONSE TO COMMENT L-SRS CONTRACTORS-1-9

As discussed in DEIR Appendix A, “Initial Study of the Long-Term Operations of the State Water Project,” the long-term operations of the SWP would not have any potentially significant environmental effects with respect to agricultural production (see DEIR Appendix A, Section 3.2, “Agriculture and Forestry Resources”). Proposed water deliveries to agricultural land uses as part of the long-term operation of the SWP would be consistent with historic deliveries, which fluctuate depending on water year type, water demands, and cropping patterns. As shown in DEIR Chapter 4.4.7.4, Figures 4.4-16 through 4.4-21, “Mean Modeled Flow Through Yolo Bypass,” and accompanying discussion (page 4-144), modeling suggests that there would be little difference in flow through the Yolo Bypass between the Proposed Project and Existing Conditions scenarios. This is also true for Refined Alternative 2b, which is the preferred alternative in the FEIR. Therefore, long-term operations of the SWP would not result in changes to seasonal timing of inundation in the Yolo Bypass that would affect agricultural operations.

II.4.11.10 RESPONSE TO COMMENT L-SRS CONTRACTORS-1-10

As discussed in Response to Comment L-SRS Contractors 1-9, there would be little difference in flow through the Yolo Bypass as a result of long-term operations of the SWP. Therefore, long-term operations of the SWP would not result in changes that would adversely impact levees, drainage culverts, ditches, or the maintenance of such infrastructure.

II.4.11.11 RESPONSE TO COMMENT L-SRS CONTRACTORS-1-11

As discussed in Response to Comment L-SRS Contractors-1-9, there would be little difference in flow through the Yolo Bypass as a result of long-term operations of the SWP. Therefore, long-term operations of the SWP would not reduce the availability of shallow flooded wetlands that provide duck-hunting opportunities.

II.4.11.12 RESPONSE TO COMMENT L-SRS CONTRACTORS-1-12

As discussed in Response to Comment L-SRS Contractors-1-9, there would be little difference flow through the Yolo Bypass as a result of long-term operations of the SWP. Please see DEIR Appendix C, Attachment 2-2, Table 3-1, “Yolo Bypass Flow, Monthly Flow,” and associated Figures 3-1 through 3-18, which show flows through the Yolo Bypass. During the early waterfowl migration period (approximately September to mid-November), differences in Yolo Bypass flows are anticipated to be negligible. During the peak waterfowl migration period (approximately mid-November through March), differences in Yolo Bypass flows would be small, would occur rarely (approximately 10-20 percent of the time), and would occur primarily when flows are relatively high. During the late waterfowl migration period (approximately April), differences in Yolo Bypass flows would be negligible.

Water depths between approximately 12 inches and 18 inches are generally considered optimal depending on the species. Waterfowl use of water deeper than 18 inches is similar among species. During high flow periods when Yolo Bypass flows under the Proposed Project scenario would be greater than those under the Existing Condition, water depths already are likely to be greater than 18 inches and potential differences in depth would be unlikely to affect waterfowl habitat use.

II.4.11.13 RESPONSE TO COMMENT L-SRS CONTRACTORS-1-13

Although some OMR management measures were not modeled, potential impacts to special status fish species were evaluated qualitatively as part of the overall impact analysis. The modeling for the FEIR incorporated simplified assumptions for most of the fishery related criteria including Delta Smelt habitat conditions (e.g., turbidity) and salmonid single year loss thresholds. These assumptions were generally developed from historical observations. No specific Longfin Smelt-based assumptions were incorporated because the historic data is very sparse for adults and unavailable for larval Longfin Smelt. For further discussion of the modeling assumptions, see DEIR Appendix H, Attachment 1-1, “Model Assumptions.”

II.4.11.14 RESPONSE TO COMMENT L-SRS CONTRACTORS-1-14

The comment asserts that the DEIR identified a potentially significant impact to water quality associated with Alternative 4 but does not include any mitigation of this impact. The assertion that there is no mitigation for Alternative 4 is incorrect. The DEIR proposed Mitigation Measure Alt 4-1, which would reduce the potential water quality impact to a less than significant level because it would limit the amount of water required to meet the 4 ppt salinity criteria at Belden’s Landing during below normal water years to 100 TAF. This limit would substantially reduce the amount of water potentially released from storage, which mitigates a potential reduction in the cold water pool available for fisheries habitat management in the Feather River above the confluence with the Sacramento River in subsequent water years.

Please note that the FEIR identifies Refined Alternative 2b as the preferred alternative.

II.4.11.15 RESPONSE TO COMMENT L-SRS CONTRACTORS-1-ATT-1

DWR acknowledges the comments within the SRS Contractors comment letter are submitted on behalf of the parties listed in Exhibit A of the comment letter.

II.4.11.16 RESPONSE TO COMMENT L-SRS CONTRACTORS-1-ATT-2

See Response to Comment L-SRS Contractors-1-7.



January 6, 2020

Delivered via email: LTO@water.ca.gov

Mr. You Chen (Tim) Chao, PhD, PE, CFM
Executive Division
California Department of Water Resources
PO Box 942836
Sacramento, CA, 94236-0001

Re: Long-Term Operations (LTO) of the State Water Project (SWP) Project

Dear Mr. Chao:

The State Water Contractors (“SWC”) appreciate this opportunity to comment on the Draft Environmental Impact Report for the Incidental Take Permit Application for On-Going State Water Project Operations (“DEIR”). The Proposed Project identified in the DEIR avoids jeopardizing the continued existence of covered fish species and includes measures to minimize and fully mitigate the impacts of the proposed taking. (See Cal. Fish & Game Code 2081(b), (c); Cal. Code Regs., tit. 14, § 783.2(a)(7)-(8).) DWR concluded that the Proposed Project identified in the DEIR has no significant and unavoidable impacts, and therefore no mitigation is required under the California Environmental Quality Act (“CEQA”). The SWC concurs with this conclusion.

Since DWR concluded that the Proposed Project has no significant environmental impacts, no additional alternatives should have been included in the DEIR as there are no significant effects requiring mitigation. Similarly, DWR should not have proposed anything beyond the Proposed Project in its incidental Take Permit Application for the Long-Term Operation of the California State Water Project (“CESA Application”) because the Proposed Project already satisfies CESA. By incorporating portions of the project alternatives into the CESA Application, DWR is incorporating mitigation into the project description that is not in proportion with the effect of the project and is therefore in excess of legal requirements. (Cal. Fish & Game Code §2081(b)(2) [“The measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking on the species,” and, “...measures required shall maintain the application’s objectives to the greatest extent possible.”]) The Proposed Project identified in the DEIR already includes the legally necessary and scientifically-based operational requirements to avoid jeopardizing the continued existence of covered species and to minimize and fully mitigate the impacts of the proposed taking of covered species including approximately \$450,000,000 worth of mitigation measures, in addition to the upwards of approximately \$1 billion of mitigation measures contained in the CVP/SWP Biological Opinions, some of which DWR is also responsible for implementing.

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In addition, neither the alternatives in the DEIR nor the project described in the CESA Application can be selected without additional analysis to fully disclose the resultant effects to the public and decision makers as required by CEQA.

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I. The project in DWR’s CESA Application is biologically unjustified; the Proposed Project satisfies CESA.

To the extent the CESA Application differs from the State’s Proposed Project in the EIR, the SWC object. The SWC and its member agencies do not share an interest in pursuing the project DWR described in its CESA Application, which includes additional mitigation described as adaptive management, but unrelated to the effects of the SWP. The permit application is not based on the best scientific and other information that is reasonably available in spite of DWR’s legal obligation to do so under Cal. Code Regs., tit. 14, § 783.2(b).

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The SWC support adaptive management of the SWP, including the Proposed Project’s Adaptive Management Program. In fact, the SWC have consistently supported collaborative scientific investigations and adaptive management in the Delta, through programs such as the longfin smelt settlement investigations, the Collaborative Science and Adaptive Management Program, the Interagency Ecological Program, and many independently-funded scientific investigations. The SWC continue to support testing hypotheses as part of these forums or through future implementation of the Voluntary Agreements, where multiple parties are collaborating to provide sizable assets to implement environmental actions in a rigorous scientific framework. However, there is no legal or scientific basis for the actions set forth in the Adaptive Management section of the CESA application, section 3.3.16.1, specifically those that require more outflow than the Proposed Project, and would be the sole responsibility of the SWP.

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The CESA Application’s Adaptive Management section includes, and the SWC object to, the partial implementation of Action IV.2.1 (the San Joaquin River I:E ratio) of the 2009 NMFS RPA for the protection of Central Valley steelhead in April and May. Steelhead is not a state-listed species under CESA. The SWC object to any suggestion that the SWP is legally required to fully mitigate for species that are not protected under CESA and/or mitigate for future operations of the Central Valley Project.¹

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To the extent that the 2009 NMFS RPA for steelhead and the resulting change in outflow could affect other species, it should be acknowledged that the modeling of the Proposed Project does not include all the operations included in the Proposed Project. As such, the modeling results do not reflect actual expected operational differences in April-May outflow, and the Proposed Project likely over mitigates for any modeled biological effect. Specifically, the modeling of the Proposed Project fails to include the OMR management for larval and juvenile delta smelt, and the OMR

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¹ Central Valley steelhead is protected under the federal Endangered Species Act, and the SWP protects steelhead through its federal permit. The SWC objection is to any alleged state authority over steelhead under CESA.

management for larval and juvenile longfin smelt as described in the Proposed Project. Therefore, April-May outflow will likely be higher than suggested by DWR's modeling.

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Regardless of modeled changes in outflow, there is a paucity of evidence that this change in outflow due to export constraints for steelhead using the I:E ratio provided any secondary benefits for other species. For example, DWR's own analysis shows that the statistical relationships between longfin smelt abundance and outflow/X2 are so uncertain that any measureable change in species abundance related to the implementation of the Proposed Project identified in the DEIR is unlikely. Several researchers who presented at the November 2019 Longfin Smelt Symposium, including Dr. Fred Feyrer, made clear that even if Delta exports were completely eliminated in April and May, it is unlikely that there would be any significant abundance response; most researchers focused on habitat, including spawning and rearing habitat, and ocean conditions as important management and research topics. (See Section IV(A), below.) Even if there were a potential change in April-May outflow and a potential impact on longfin smelt from that change, those effects are already fully mitigated by the additional habitat included in Proposed Project identified in the DEIR in addition to several other conservation measures.

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The SWC object to the excessive mitigation that DWR included in section 3.3.16.1 of its CESA Application for summer-fall delta smelt habitat. The Proposed Project identified in the DEIR is based on the best available scientific and other information, and already includes new habitat actions in summer, which have never been part of SWP operations. The Proposed Project identified in the DEIR also provides delta smelt habitat actions in below normal water year types, and new summer food actions, which have not been previously required. The SWC support the Proposed Project's summer habitat Adaptive Management actions to better understand rearing habitat conditions necessary for delta smelt. However, as even the CESA Application acknowledges, summer actions are not mitigating a summer effect of SWP operations because the SWP (and the CVP) have been supplementing summer flows for decades, and the Proposed Project identified in the DEIR does not cause any new effects during this time of year. There is no scientific or legal basis that would justify DWR's decision to add new required summer-fall outflows.

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As proposed, the SWC also object to DFW having final decision-making authority on all real-time operational decisions when operations are within the bounds of the incidental take statement because the CESA Application lacks a clear definition of the scope of DFW's discretion.

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II. The CESA Application is inconsistent with DWR's project objective.

The goal of no increases in SWP water exports as stated in DWR's press release for the issuance of the DEIR, and repeated by DWR in numerous other forums, is disconnected from legal requirements and contrary to the DEIR's stated project objective of seeking to "optimize water supply and improve operational flexibility" while protecting fish and wildlife based on the best available scientific information in order to deliver water pursuant to its contracts "up to full contract quantities." (DEIR, p.3-1.) In its CESA Application, DWR assumes an overly simplistic relationship between species protection and rate or volume of SWP exports. This simplistic relationship is not based on best available scientific information, and is contrary to the necessity for the SWP to operate under increasingly extreme climate change conditions. Over the last decade,

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the scientific community has substantially improved its understanding of how to minimize take, and the Proposed Project identified in the DEIR is a reflection of that experience and the best available science.

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An environmental impact report must include a statement of objectives. (Cal. Code Regs., tit. 14, § 15124.) Both the DEIR and the CESA Application include the identical statement of project objectives:

The objective of the Proposed Project is to continue the long-term operation of the SWP consistent with applicable laws, contractual obligations, and agreements. DWR proposes to store, divert, and convey water in accordance with DWR's existing water rights to deliver water pursuant to water contracts and agreements up to full contract quantities. DWR seeks to optimize water supply and improve operational flexibility while protecting fish and wildlife based on the best available scientific information.

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(DEIR, p. 3-1; ITP Application, p. 3-1.)

Unfortunately, DWR contradicts this statement of objectives in places throughout both the DEIR and the CESA Application, which creates ambiguity regarding the project objectives and inhibits the public's ability to comment meaningfully on the Proposed Project. For example, in the press release issued with the DEIR, DWR states that the agency "does not seek to increase SWP exports" in the DEIR. (News Release, dated Nov, 21, 2019.) This statement cannot be reconciled with the project objective to "convey water in accordance with DWR's existing water rights to deliver water pursuant to water contracts and agreements up to full contract quantities." (DEIR, p. 3-1; CESA Application, p. 3-1.)

III. The DEIR's analysis of project alternatives is legally insufficient.

The Proposed Project has no potentially significant impacts, and therefore no analysis of additional alternatives is required. Nevertheless, DWR chose to include additional project alternatives; but it did so without providing sufficient analysis to support its conclusions. DWR also chose to incorporate components of the project alternatives and other measures into the CESA Application; the DEIR does not sufficiently evaluate these new components of the project description.

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A. The DEIR project alternatives have not been modeled, which conceals their potentially significant impacts and precludes informed decision-making and public comment.

The DEIR fails to model any of the project alternatives. Without modeling the alternatives, DWR has no basis for determining whether or not the alternatives would result in potentially significant impacts. (Cal. Code Regs., tit. 14, § 15088.5, subd. (a)(4).) For example, Alternative 4 includes major changes to flows in the summer, including in drier water years. Alternative 4 could result in changes in upstream reservoir operations that have not been evaluated. Changes in upstream reservoirs could affect upstream storage volumes, which could result in changes in water quality and biological or other impacts in subsequent water years; these potential impacts have not been

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disclosed. It is also possible that Alternative 4 could so significantly change south of Delta export deliveries that there would be impacts to groundwater as water users are forced to shift to alternative supplies. Alternatives 2a and 2b also have not been modeled so it is unknown if there would be impacts to reservoir operations. Alternatives 2a and 2b have more restrictive OMR and new summer delta smelt habitat actions as compared to the No Project Alternative, so there could be significant adverse effects that have not been previously disclosed. As a further example of previously undisclosed impacts, Alternative 3 would also likely have impacts because operating the Head of Old River Barrier would have an impact on Central Valley Project operations; these potential impacts to the CVP have not been disclosed or evaluated. In addition to these alternatives not being fully evaluated, as explained in Section IV, these alternatives are not mitigating project effects, and are unnecessary and uncertain mitigation measures.

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Before DWR can adopt any of the alternatives (Alternatives 2-4 or any variation thereof), and before DFW can impose any permit conditions relying on the alternatives analysis in the DEIR, the DEIR requires a more thorough analysis of the alternatives, including modeling. If any of the alternatives or a combination thereof results in any significant adverse impacts, DWR would be required by CEQA to adopt the proposed project as a feasible alternative that avoids the significant impacts.

B. The DEIR incorrectly assumes that the SWP can meet specific OMR requirements without coordination with the Central Valley Project, which renders certain alternatives infeasible.

The DEIR incorrectly assumes that the SWP can achieve a specific OMR without coordination with the CVP. For example, if DFW seeks -3,500 cfs OMR, and total allowed south Delta exports for -3,500 cfs OMR is 4,000 cfs, given the San Joaquin River flow; even if the SWP is diverting at the 600 cfs for minimum human health and safety pumping, CVP could be diverting at their maximum pumping ability of 4,200 cfs, which will not result in -3,500 cfs OMR. The DEIR should disclose this limitation of the SWP, and the explicit recognition that the SWP cannot fully satisfy OMR or outflow requirements independent of the CVP.

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The DEIR also mistakenly assumes that the state could utilize Water Code section 1707 to require the CVP to reduce exports when the CVP has a right to divert. The operational relationship and water rights of the SWP and CVP are not such that section 1707 is a feasible option. For example, when there are excess flows in the Delta, the SWP and CVP have an equal right to that water. The SWP cannot instantaneously declare that it would have diverted up to a specific quantity of water, but instead chose to leave that water in the river, and seek to stop the CVP from diverting that water. The CVP has an equal right to excess flows in the Delta up to its export capacity. The DEIR should acknowledge that SWP export cuts likely will not result in the full quantity of that water showing up as outflow. The DEIR should disclose this limitation.

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Furthermore, if the SWP is required to operate to a different OMR or outflow relative to the CVP, then the operations may not be fully consistent with the 2018 COA Amendment.

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C. The project description in the CESA Application is not analyzed in the DEIR.

The project in the CESA Application, which is a combination of alternatives, has not been evaluated in the DEIR. In addition to the limitations identified below for the alternatives, the project described in the CESA Application was not evaluated because none of the DEIR alternatives include holding water over until the next year for use in the subsequent year. (CESA Application, pp. 3-55 to 3-57.) It is unclear how water that is moved into a subsequent water year would be used, thus those unknown potential uses have not been analyzed in the DEIR, nor have the potentially significant impacts on water supplies from carrying over water to a subsequent water year been disclosed or analyzed.

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The DEIR also fails to analyze the CESA Application's implementation where the DFW makes all final decisions regarding real-time operations. The Proposed Project in the DEIR includes a framework for DFW discretion (DEIR, p. 3-24)² that was removed from the CESA Application (CESA Application, p. 3-19), and the SWC object. The CESA Application is devoid of any framework describing the nature and extent of the decisions that DFW would be making at each real-time operation decision-point. Even the 2008 FWS biological opinion had some description of agency decision-making that included an operational range and a decision-matrix. The modeling in the DEIR is based on assumed implementation of real-time decision-making; and while OMR could be reduced for the entire season at DFW's behest, such a reduction is not reflected in the modeling, thus the DEIR does not disclose the resultant effects to the public and decision makers as required by CEQA.

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The project alternatives cannot be selected without further analysis. The analysis of alternatives includes insufficient modeling and analyses. While a variety of project alternatives were analyzed in the DEIR, none of the analyzed project alternatives includes all of the features now included in the project as described in DWR's CESA Application. Specifically, the CESA Application Adaptive Management Program includes moving water from one water year to the next, switching the purpose of actions between species in unspecified ways, and suspending an alternative similar to Alternative 2(b) in wet years. (CESA Application, pp. 3-55 to 3-57.)

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IV. The Alternatives in the DEIR are unnecessary and are not required to fully mitigate the authorized incidental take resulting from the effects of the Proposed Project.

The Proposed Project identified in the DEIR includes limitations on State Water Project ("SWP") diversions that are more protective than those limitations included in the 2008 Fish and Wildlife Service ("FWS") and 2009 National Marine Fisheries Service ("NMFS") biological opinions and associated reasonable and prudent alternatives ("RPAs"). In fact, the Proposed Project includes more protective versions of a number of the same limitations included in the 2008 and 2009 RPAs, with proposed operations designed to provide for greater protections based on scientific and other

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² DEIR, p. 3-24 ["CDFW provides explanation and supporting documentation on how off-ramping the turbidity bridge avoidance action or not implementing this action would result in take that would not be minimized or fully mitigated."]

information developed in the decade since issuance of the RPAs. In addition, as a back-stop, performance objectives are set to ensure losses remain less than or equal to incidental take that occurred over the last decade during implementation of the RPAs, a decade that already had very low incidental take of covered salmonids. For example, winter-run Chinook salmon escapement has increased and decreased over the last decade in response to a variety of conditions, showing stable species escapement over-all. Winter-run Chinook salmon escapement was 8,033 in 2019 as compared to 1,596 in 2009, which illustrates the escapement variation over the last decade. See Table 1, below.

Table 1. California Central Valley Chinook Population Database Report. CDFW. Source: <http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=168640&inline=1>. Winter-run Chinook Salmon. 5/8/19.

Dec	2009 to	Aug	2010	1,596
Dec	2010 to	Aug	2011	287
Dec	2011 to	Aug	2012	2,671
Dec	2012 to	Aug	2013	6,084
Dec	2013 to	Aug	2014	3,015
Dec	2014 to	Aug	2015	3,440
Dec	2015 to	Aug	2016	1,547
Dec	2016 to	Aug	2017	977
Dec	2017 to	Aug	2018	2,639
Dec	2018 to	Aug	2019	8,033

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Tables 1 through 6 in Attachment 1 to this letter compare the Proposed Project to the RPAs in the 2008 and 2009 BiOps and illustrate the enhanced protectiveness of the State's Proposed Project. As these tables illustrate, the Proposed Project substantially minimizes incidental take of state listed species at the SWP (thereby also minimizing the impacts of authorized incidental take on listed species as CESA requires), improving upon the 2008 and 2009 biological opinions based on best available scientific information.

The minimization provided by the Proposed Project's operational limitations are supplemented by mitigation that includes habitat restoration and other conservation measures, thereby satisfying CESA.

A. The Proposed Project fully mitigates potential impacts of authorized incidental take of longfin smelt and avoids jeopardy.

It is unlikely that the Proposed Project will have a meaningful negative impact on longfin smelt abundance. Nevertheless, DWR has already committed to 8,000 acres of tidal marsh, and 800 acres of mesohaline habitat.³ There is strong evidence that longfin smelt use tidal marsh based on Dr.

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³ DWR'S original commitment was to mitigate 30 years of project operations, even though only 10-years of project operations occurred. The remainder of this habitat obligation is to mitigate the next ten years of project operations.

Hobbs research in the Alviso Marsh in the South Bay, where Dr. Hobbs and his team have observed longfin smelt larvae. (Lewis et al 2019.)⁴ The Proposed Project satisfies CESA with respect to longfin smelt.⁵

The scientific information presented in the Draft EIR and CESA Application demonstrate that the Proposed Project will not result in a meaningful change in species abundance as a result of the predicted change to April-May outflow. (DEIR, pp. 4-179 to 4-180; CESA Application, pp. 4-59 to 4-61.) The Nobriga and Rosenfield model and the Kimmerer regression model both show only a small potential difference in median abundance. The median difference is very low when compared to the range of the abundance predictions for both models, as expressed by the signal-to-noise ratio in the Draft EIR. Using either model, the signal to noise ratio is between 0-2 percent. (*Ibid.*) The large range of the abundance predictions in both models suggests that Delta outflow explains only a portion of the variability in the longfin abundance, making them poor tools for effective management decisions that can improve longfin abundance. When this 0-2 percent signal-to-noise ratio is combined with the uncertainty associated with the CALSIM II model outputs, which are the source data for the predictions, including the fact that not all April-May actions are in the model, it is clear that the models do not provide support for the proposition that the Proposed Project will result in any change in the species' abundance.

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As Dr. Kimmerer has explained:

The fish-X2 relationships are retrospective, not predictive. If the physical configuration of the estuary changes, these relationships may change in ways that cannot now be predicted. The nature of the relationships and underlying mechanisms are major uncertainties regarding these relationships.

(Kimmerer 2004, p. 90.)⁶ The fact that the modeled relationship has changed over time, such that there are fewer and fewer longfin smelt predicted for the same level of outflow, See e.g., Tamburello et al. 2019⁷, supports Dr. Kimmerer's caution in interpreting the relationship. The change in the longfin smelt: X2 relationship was illustrated by the State Water Resources Control Board's expert panel during its Flow Policy workshops in 2010. See Figure 1, which shows how the longfin Smelt relationship has changed over-time, indicating less species abundance for the same quantity of outflow. As the figure illustrates, species abundance in the survey area (which

⁴ Lewis, L. S., Willmes, M., Barros, A., Crain, P. K., & Hobbs, J. A. (2019). Newly discovered spawning and

⁵ The CESA Application added an additional 750 acres of low salinity zone habitat. By itself, this additional habitat is more mitigation than is legally required since it was calculated to provide full mitigation of the entire change in April-May outflow based on the combined operation of the CVP and SWP. (CESA Application, p. 5-5.)

⁶ Kimmerer WJ. 2004. Open water processes of the San Francisco Estuary: from physical forcing to biological responses. San Francisco Estuary and Watershed Science [online serial].Vol. 2, Issue 1 (February 2004), Article 1.<http://repositories.cdlib.org/jmie/sfews/vol2/iss1/art1>

does not represent the species full range) has continued to decline (compare green points to purple points) for the same outflow. Based on this relationship, providing more outflow would not provide significant species benefits, rather determining the reason for the decadal shift downward would be more informative of future management actions. Spring Delta outflow does not appear to be the direct mechanism explaining this relationship.

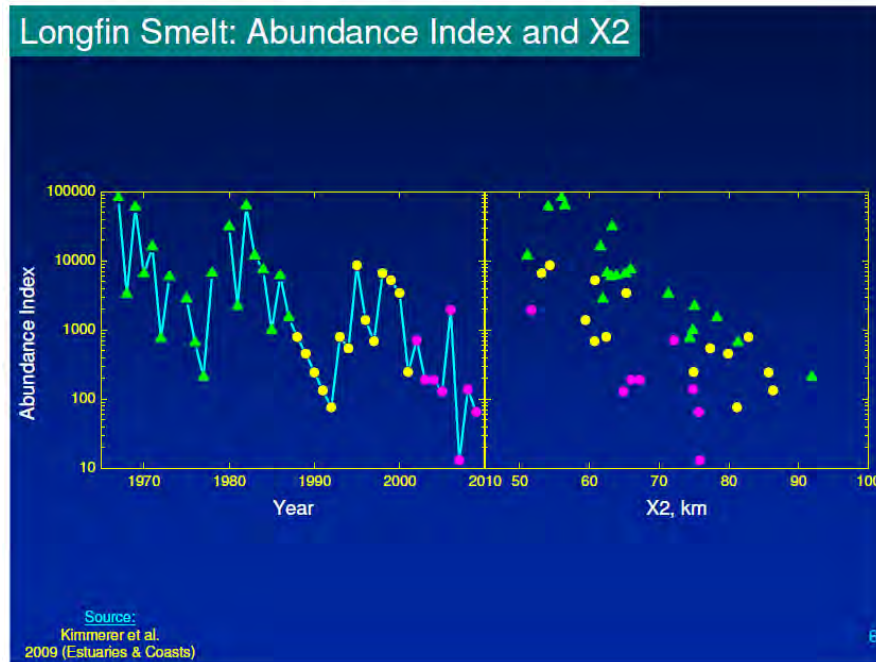


Figure 1. Dr. Wim Kimmerer, Delta Environmental Flows Group Presentation, SWRCB Flow Policy, Workshop 1. ⁸

To further illustrate the limited predictive ability of the model, Dr. Feyrer showed a preliminary draft analysis at the recent Longfin Smelt Symposium comparing the predicted change in abundance if all water diversions in the system were eliminated, not just the SWP. While this analysis still needs further review, it indicates that there may only be a small predicted increase in abundance if all diversions are eliminated. See Longfin Smelt Symposium, at 2:03:55, Figure 2. It is therefore not surprising that the substantially smaller change in outflow related to the Proposed Project would not result in a significant change in species abundance.

⁸ Delta Environmental Flows Group Introductory Presentation, March 22, 2010. Presentation by Kimmerer, W., Life-History Responses to Freshwater Flow at slide 6, https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/docs/presentations/intro_4.pdf

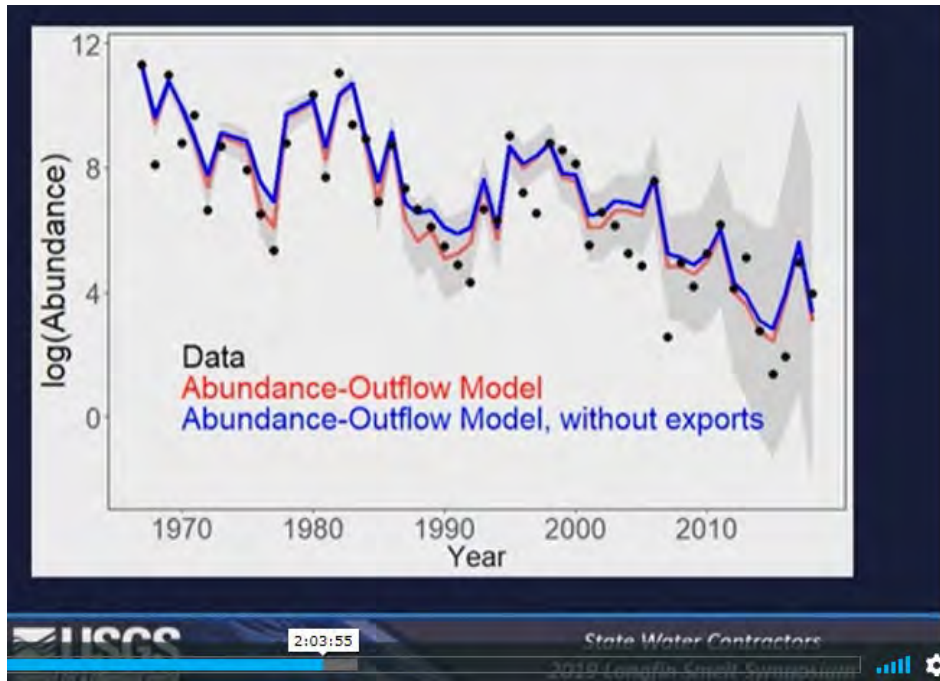


Figure 2, Longfin Smelt Symposium, Dr. Fred Feyrer.

Dr. Feyrer's prediction is consistent with the relative flatness of the relationship between winter-spring X2 and species abundance. As another way to view the relationship, the Delta Science Program's Delta Outflow Panel Report recommended that the longfin smelt relationship also be considered on a linear scale, thereby removing the log-scale from the original relationship. The result is a fairly flat relationship, particularly within the range of flows at issue for the Proposed Project Figure 3.

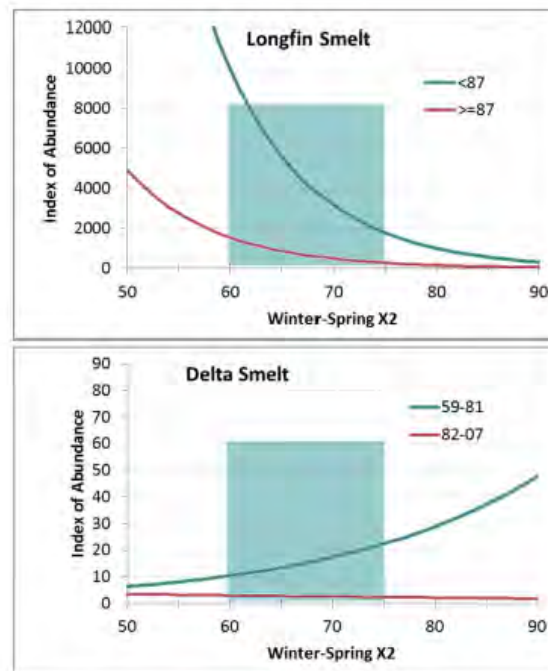


Figure 3. Relationships between Longfin (upper panel) and Delta Smelt (lower panel) abundance indices (mid water trawl and tow net series respectively) and average X2 over the winter-spring period during two different periods of time (before 1987 and after 1986 for Longfin Smelt; 1959-1981 and 1982-2007 for Delta Smelt). These relationships are based on parameters from Table 2 of Kimmerer et al. (2009) transformed from \log_{10} to linear space. The blue boxes represent the X2 range required to achieve low salinity conditions in Suisun Bay.

Figure 3. Delta Science Program, Delta Outflow Panel Report, 2014 (Figure 3).

In addition, as Dr. Kimmerer and others have explained, the interpretation of the results of any biological model is uncertain when the underlying biological mechanism is unknown. (Kimmerer 2002⁹ [“The flow relationships that form the basis of the current salinity standard provide no guidance about how they [species] may respond to such a major change in the configuration of the estuary. Predicting these responses is contingent on understanding the mechanisms underlying the flow relationships.”], see also, Delta Outflow Panel Report, p. 64 [“...correlations can be misunderstood and over interpreted because they are specific to a set of conditions and do not provide information on causality....”] There is no single flow management action that is known to benefit all species, including all species with an abundance:X2 relationship. This is true for longfin smelt as well. For example, experts cannot reliably predict how longfin smelt abundance would respond to changes in reservoir releases, as compared to changes in outflow originating from wet hydrology, because the biological mechanism that would explain the observed statistical relationship is unknown. If the biological mechanism is, for example, turbidity then increasing reservoir releases will have no effect because turbidity does not increase with reservoir releases. Kimmerer 2002, p. 1284-1285, explains:

Even for a single species the timing and duration of flow-based management should coincide with the mechanism by which the species responds to flow. This implies

⁹ Kimmerer, W.J. 2002, Physical, Biological, and Management Responses to Variable Freshwater Flow in the San Francisco Estuary. *Estuaries*, Vol 25, No. 6B, pp. 1275-1290.

knowledge of the species mechanism. A mechanism involving an increase in brackish habitat during the rearing season (mechanism 10, Table 1) may require a long period of increased flow, and opportunities for efficiency will be limited; a mechanism involving tidal stream transport and gravitational circulation in the lower estuary (mechanism 11) may occur over a relatively brief period of larval or juvenile recruitment into the estuary.

As a more specific example, Sacramento splittail clearly respond to increasing flow through inundation of floodplains during early spring (Sommer *et al* 1997). This effect may occur through access to spawning habitat, in which case the period of effectiveness would be fairly brief, or rearing habitat, which would require a longer period of inundation. Distinguishing between these mechanisms and determining their importance to overall abundance of the species are important research objectives....”

The longfin smelt life cycle model by Drs. Rick Deriso and Mark Maunder further illustrates this point. (Maunder and Deriso (2015).)¹⁰ The results of that model suggest that flow may be important to species abundance, but just as Kimmerer 2002 observed above, the question is “which flow?” Precipitation, outflow, X2 and flows into San Francisco Bay tributaries are cross-correlated. The Maunder and Deriso model selected Napa River flow, which could be used as a surrogate for San Francisco Bay inflow, as being the strongest predictor of increased longfin smelt abundance. If the model is correct, the most effective longfin smelt management action may be restoration activities within the San Francisco Bay’s tributaries or restoration of the marshes around the Bay.

There have been many studies attempting to identify the biological mechanism(s), but the mechanism(s) so far remains unidentified. The Delta Regional Ecosystem Restoration Implementation Plan (“DRERIP”)¹¹, which is the working conceptual model for the fishery agencies and Bay-Delta scientific community, concludes at p. 9 stating:

The mechanism behind this relationship is not completely understood, and it is quite likely that more than one mechanism is behind the overall effect. High flows may increase available spawning habitat, increase hatching success, decrease predation on LFS larvae, increase success of larval-juvenile transformation (e.g., by increasing food sources), or some combination of these factors. Baxter (1999) and Dege and Brown (2004) observed that larval densities did not respond significantly to freshwater flow conditions. This argues against mechanisms that produce positive correlation between egg-larval and increase in available spawning territories or improved egg hatching success) and for mechanisms that increase success of larvae-juvenile transition....

¹⁰ Maunder, M.N., Deriso, R.B., Hanson, C.H. 2015. Use of State-Space Population Dynamics Models in Hypothesis Testing: Advantages Over Log-linear Regression for Modeling Survival Illustrated with Application to Longfin Smelt (*Spirinchus thaleichthys*). *Fisheries Research*, Vol. 164: 102-111. <http://doi.org/10.1016/J.Fisheries.2014.10.017>.

¹¹ Rosenfield, J.A. 2010. Life history conceptual model and submodels for longfin smelt, San Francisco Estuary population. For the Delta Regional Ecosystem Restoration Implementation Plan. May 2010.

As explained in the DRERIP model, longfin smelt spawning in the upper estuary is not correlated well with outflow. In wet years, there are generally low numbers of larvae captured in the upper Estuary, a likely explanation is that longfin smelt descend downstream of the Delta to spawn. Recent studies show that longfin smelt are spawning and rearing in tributaries throughout San Francisco Bay during wetter periods, suggesting mechanisms underlying abundance in wetter years is related to habitat conditions seaward of Suisun Bay and Delta. (Grimaldo et al. 2017¹²; Lewis et al. 2018¹³) Therefore, it is unlikely that increased spawning and larvae survival in the upper estuary in high outflow years is the biological mechanism behind the longfin smelt abundance: X2 relationship. In Dr. Hobbs recent presentation, he showed that longfin smelt are primarily spawning downstream of the Delta, in the Bay tributaries, including the South Bay in wet years, and utilizing the Delta more heavily in drier years. (Longfin Smelt Symposium, Dr. Hobbs, <https://www.swc.org/in-the-news/2740/longfin-smelt-science-symposium>, at 1:13:48 to 1:34:40.) This suggests that the mechanism underlying the relationship is likely downstream of the Delta. (Ibid.)

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Kimmerer et al. (2013)¹⁴ evaluated the relationship between the spatial extent of the low salinity zone and species abundance and concluded for longfin smelt that “the observed X2–abundance relationships are inconsistent with a mechanism that involves extent of low-salinity habitat.” (Kimmerer et al. 2013 at p. 12). Therefore, it does not appear that the spatial extent of low salinity habitat is the underlying biological mechanism.

Latour (2016)¹⁵ suggested suspended sediment concentration is more statistically supported than Delta outflow as a predictor of longfin smelt trends in catch per unit effort. Latour’s (2016) study noted that the relationship with suspended sediment concentration could reflect detection of longfin smelt by the sampling gear, and Peterson and Barajas (2018)¹⁶ also identified suspended sediment concentrations as a factor affecting the detection of longfin smelt; studies are underway to reduce this area of scientific uncertainty (Feyrer et al. 2019 in prep). The Delta Science Program’s Outflow Panel Report also recognized the importance of investigating the ability of the surveys to reliably estimate abundance. (Delta Outflow Panel Report, p.32.) Investigations into other mechanisms such as changes in retention and entrainment at SWP and CVP are also ongoing (Gross et al. 2019, in prep).

¹² Grimaldo L, Feyrer F, Burns, J, Maniscalco D. 2017. Sampling Uncharted Waters: Examining Rearing Habitat of Larval Longfin Smelt (*Spirinchus thaleichthys*) in the Upper San Francisco Estuary. *Estuaries and Coasts* 40:1771-1784.

¹³ Lewis LS, Willmes M, Barros A, Crain P, Hobbs JA. 2019. Newly discovered spawning and recruitment of threatened Longfin Smelt in restored and under-explored tidal wetlands. *The Scientific Naturalist*, available at <https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/ecy.2868>

¹⁴ Kimmerer, W.J., M.L. MacWilliams, and E.S. Gross. 2013. Variation in fish habitat and extent of the low-salinity zone with freshwater flow in the San Francisco Estuary. *San Francisco Estuary and Watershed Science*, 11(4).

¹⁵ Latour, R.J. 2016. Explaining patterns of pelagic fish abundance in the Sacramento-San Joaquin Delta. *Estuaries and Coasts* 39:233-247.

¹⁶ Peterson, J. T., & Barajas, M. F. (2018). An Evaluation of Three Fish Surveys in the San Francisco Estuary, 1995–2015. *San Francisco Estuary and Watershed Science*, 16(4).

Longfin smelt entrainment in the SWP is also unlikely to have a population level effect. As Dr. Kimmerer explained at the recent Longfin Smelt Symposium, he is not particularly concerned about longfin smelt entrainment since the species distribution, as shown in the larval survey, which is a particularly vulnerable life stage, is such that it is unlikely that entrainment in the SWP is a driver of species abundance. (Longfin Smelt Symposium, <https://www.swc.org/in-the-news/2740/longfin-smelt-science-symposium>, time 3:15-3:47.) Whereas previous studies suggested most spawning was concentrated in fresh water of the north Delta, more recent research has shown that spawning occurs in a much wider range of salinity throughout the Bay. (Hobbs et al. 2010,¹⁷ Grimaldo et al. 2017¹⁸; Hobbs et al. 2019¹⁹; Grimaldo et al. 2019, in prep).

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(Cont.)

The potential effects of the Proposed Project's authorized incidental take of longfin smelt are small and highly uncertain. Nevertheless, the DEIR Proposed Project includes ample measures to fully mitigate any effects that might occur.

B. The Proposed Project fully mitigates potential impacts of authorized incidental take of delta smelt and avoids jeopardy.

It is unlikely that the Proposed Project would have an impact on delta smelt abundance. Nevertheless, the Proposed Project already includes measures that most likely would fully mitigate any potential impacts of the Proposed Project. Assuming that the location of X2 in the fall is related to delta smelt abundance, a point the SWC do not agree with based on the science described below, the Proposed Project fully mitigates for this potential effect because the Proposed Project moves X2 to 80 km in September and October of above normal water years, which is downstream of the 2008 RPA location, and adds delta smelt habitat enhancement actions in summer and in below normal water years, including food enhancement actions. These habitat enhancements are in addition to restoration of 8,000 acres of tidal marsh, and 800 acres of mesohaline habitat, including many restoration projects that were completed in 2019. The Proposed Project satisfies CESA with respect to delta smelt.

1-27

There are no published studies that suggest that summer outflow or X2 has any relationship to delta smelt abundance. Similarly, there is no reliable evidence indicating that fall outflow or X2 has any relationship to delta smelt abundance.²⁰ Regardless, the Proposed Project does not result in changes in summer outflow, and causes only some changes in some fall months following wetter

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¹⁷ Hobbs, J. A., Lewis, L. S., Ikemiyagi, N., Sommer, T., & Baxter, R. D. (2010). The use of otolith strontium isotopes

¹⁸ Grimaldo, L., F. Feyrer, J. Burns, and D. Maniscalco. 2017. Sampling uncharted waters: Examining rearing habitat of larval Longfin Smelt (*Spirinchus thaleichthys*) in the Upper San Francisco Estuary. *Estuaries and Coasts*, 40:1771-1784

¹⁹

²⁰ The CESA Application cites a conceptual model, suggesting that X2 or outflow is related to abundance, survival and growth, CESA Application, p. 4-34, but fails to explain that there is no reliable evidence supporting this model and therefore the CESA Application should be amended accordingly.

years. Nevertheless, the DEIR includes alternatives for new summer and fall outflow, which are incorporated into the CESA Application, without nexus to SWP impacts.

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(Cont.)

Numerous studies using diverse multivariate approaches have explored how both physical and biotic factors, including outflow and X2, affect the abundance of delta smelt and none found evidence that the location of low salinity in the fall determined the performance delta smelt. (MacNally et al. 2010²¹; Thomson et al. 2010²²; Maunder and Deriso 2011²³; Miller et al. 2012²⁴; Hamilton and Murphy 2018.²⁵) The only model that has been relied on to suggest an X2 to abundance relationship is Feyrer et al. 2007, which was included in the 2008 FWS biological opinion. The Feyrer et al. model has been criticized, see e.g., NRC 2010, p. 53,²⁶ being a biologically inappropriate linear model where new delta smelt can originate from zero adults. The Feyrer et al. model itself is therefore unreliable evidence. However, as was shown in ICF 2017, even if the Feyrer et al. 2007²⁷ model was biologically appropriate and was applied, a change in wet water-year outflow from 74km (2008 RPA) to 80km (Proposed Project) would not be expected to result in a change in delta smelt abundance, showing instead an equally likely chance of an increase in species abundance or a decrease in species abundance. (ICF, 2019, pp.33-38.)²⁸

↓ 1-29

The ongoing adaptive management studies also have failed to identify strong evidence of a species benefit resulting from implementation of the 2008 Fall Habitat RPA, which required that X2 be located at 74km in wet years and 81 km in above-normal water years from September-October (with a November pass-through requirement). The results of the adaptive management studies have generally been inconclusive. The 2014 FLASH Report, which showed some evidence that delta

↓ 1-30

²¹ MacNally R, Thomson JR, Kimmerer WJ, Feyrer F, Newman KB, Sih A, Bennett WA, Brown L, Fleishman E, Culberson SD, Castillo G. 2010. Analysis of pelagic species decline in the upper San Francisco Estuary using multivariate autoregressive modeling (MAR). *Ecological Applications* 20:1417–1430.

²² Thomson JR, Kimmerer WJ, Brown LR, Newman KB, Mac Nally R, Bennett WA, Feyrer F, Fleishman E. 2010. Bayesian change point analysis of abundance trends for pelagic fishes in the upper San Francisco Estuary. *Ecological Applications* 20:1431–1448.

²³ Maunder, MN Deriso RB. 2011. A state–space multistage life cycle model to evaluate population impacts in the presence of density dependence: illustrated with application to delta smelt (*Hypomesus transpacificus*). *Canadian Journal of Fisheries and Aquatic Sciences* 68:1285-1306.

²⁴ Miller WJ, Manly BFJ, Murphy DD, Fullerton D, Ramey RR. 2012. An investigation of factors affecting the decline of delta smelt (*Hypomesus transpacificus*) in the Sacramento-San Joaquin Estuary. *Reviews in Fisheries Science* 20:1-19.

²⁵ Hamilton SA, Murphy DD. 2018. Analysis of Limiting Factors Across the Life Cycle of Delta Smelt (*Hypomesus transpacificus*). *Environmental Management* 62:365-382.

²⁶ National Research Council. 2010. A Scientific Assessment of Alternatives for Reducing Water Management Effects on Threatened and Endangered Fishes in the Delta. Committee on Sustainable Water and Environmental Management in the California Bay-Delta. ISBN: 978-0-309-12802-5.

²⁷ Feyrer F, Nobriga M, Sommer T. 2007. Multidecadal trends for three declining fish species: habitat patterns and mechanisms in the San Francisco estuary, California, USA. *Canadian Journal of Fisheries and Aquatic Sciences*, 64:723-734.

²⁸ ICF. 2017. Public Water Agency 2017 Fall X2 Adaptive Management Plan Proposal. Submitted to United States Bureau of Reclamation and Department of Water Resources. Draft. August 30. (ICF 00508.17.) Sacramento, CA.

smelt abundance was improved after the 2011 wet water year and cool summer, stated that, “In general, the FLaSH investigation of the mechanisms linking X2 and delta smelt abundance has been somewhat inconclusive as of the writing of this report.” (Brown et al. 2014 at p 66).²⁹ The results for 2017, the only other wet water-year after the 2008 BiOp for which there are study results, showed no evidence that delta smelt abundance benefitted from the wet conditions. (Draft FLOAT-MAST, p. 91 [“In 2017, recruitment was low, very similar to the previous year and substantially lower than recent years 2014-2015.”].)³⁰ Similarly, there was no evidence of increased food availability in 2017. (Draft FLOAT-MAST, p. 99 [“Overall, the data do not support our prediction that during wet years food availability will increase resulting in greater food consumption by Delta Smelt. Gut fullness was high in the wet year of 2017 but the wet year of 2011 had gut fullness similar to drier years.”].) For 2017, it appears that temperatures appeared to be the most significant factor affecting delta smelt habitat quality. (Draft FLOAT-MAST, p. 101 [“Water temperatures appear to have been a major factor limiting the success of Delta Smelt in 2017.”].) However, there does not appear to be a relationship between water temperature and outflow as wet years can be warm or cool, *Ibid.*, as was the case in 2006 and 2017 when water temperatures were elevated in the summer. Regardless, the SWP has no ability to affect water temperatures in the estuary. (Kimmerer 2004.)³¹

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Not only are the DEIR alternatives and CESA Application’s inclusion of additional summer and fall outflow for delta smelt not scientifically justified, this additional outflow would not be mitigating for any actual effect of the Proposed Project. The 2008 FWS biological opinion did not include a summer delta smelt habitat RPA as it properly acknowledged that the SWP and CVP do not negatively affect outflow in the summer. (2008 biological opinion, p. 195 [“Further, summer and early fall inflows (PCE #2, #3 and #4) may be increased over natural hydrograph as reservoirs release stored water to support export operations.”].)³² DWR’s CESA application also acknowledges that the SWP and CVP do not negatively affected summer outflow, stating:

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Historically, the long-term trend in Delta outflow in the summer is positive (Hutton et. al., 2017a p. 8). Since the 1950s, Delta outflow in July and August has increased, with June and September outflow showing no long-term trend (Hutton et. al., 2017b p. 7). The positive outflow change is attributed primarily to the effects of the SWP and CVP operations, which have more than fully attenuated impacts of diversions by non-SWP/CVP

²⁹ Brown, L.R., Baxter, R., Castillo, G., Conrad, L., Culberson, S., Erickson, G., Feyrer, F., Fong, S., Gehrts, K., Grimaldo, L., Herbold, B., Kirsch, J., Mueller-Solger, A., Slater, S., Souza, K., and Van Nieuwenhuysse, E. 2014. Synthesis of studies in the fall low-salinity zone of the San Francisco Estuary, September–December 2011: U.S. Geological Survey Scientific Investigations Report 2014–5041, 136 p., <http://dx.doi.org/10.3133/sir20145041>.

³⁰ Management, Analysis, and Synthesis Team (FLOAT-MAST). 2019. Synthesis of data and studies relating to Delta Smelt biology in the San Francisco Estuary, emphasizing water year 2017. IEP Technical Report XXXX-XX. Interagency Ecological Program, Sacramento, CA. Preliminary Draft March 2019.

³¹ Kimmerer, W. 2004. Open water processes of the San Francisco Estuary; from physical forcing to biological responses, *San Francisco Estuary and Watershed Science*, 2(1).

³² U.S. Fish and Wildlife Service. 2008. Endangered Species Act consultation on coordinated operation of the Central Valley Project and State Water Project. December 15, 2008.

diversion (Hutton et. al., 2017b p 7). Moreover, as shown in the DEIR, the Proposed Project is not expected to decrease June through August outflow as compared to baseline.

(CESA Application at p. 3-56). Similarly, the CVP and SWP do not negatively affect fall outflow. As the DEIR states, “compared to pre-project conditions, Hutton et al. (2015) found no trend in X2 in July, October, and November, and the water projects were making conditions fresher in August and September.” (DEIR at 4-69.) The Proposed Project only minimally affects fall outflow in the wettest water years and in Novembers following wet water years. For the reasons described above, this project related change in outflow would not be expected to negatively affect delta smelt or result in “take.”

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(Cont.)

The potential effects of the Proposed Project on delta smelt habitat are small and highly uncertain. Nevertheless, the Proposed Project includes ample measures to fully mitigate any effects that might occur, as described in the DEIR.

C. There is little evidence that the Head of Old River barrier improves salmonid survival; regardless the SWP is not required to seek authorization for the experimental take of spring-run Chinook salmon.

The DEIR’s Alternative 3 includes the Head of Old River Barrier and a non-physical barrier at Georgianna Slough. These barriers are not required to satisfy CESA.

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The only state-listed salmonid species originating from the San Joaquin River is the federally designated nonessential experimental population of spring-run Chinook salmon. The SWP does not require authorization under CESA for taking of this population. California Fish and Game Code section 2080.4 states that no state authorization for taking of the nonessential experimental spring-run Chinook salmon population is required if the federal authorization allows the taking and the Director of DFW finds that the federal regulations are protective. The federal regulations allow taking of the spring-run Chinook salmon nonessential experimental population by otherwise lawful activities such as operations of the SWP (78 FR 79622), and the Director of DFW determined that the regulations met the requirements of section 2080.4 in a March 18, 2014 determination letter (CDFW file No. 2080-2014-005-04).³³ The CESA Application should also be amended to acknowledge that DWR is not seeking take authorization for the experimental spring-run population originating from the San Joaquin River.

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Even if the SWP were required to seek take authorization, the Proposed Project is not affecting the experimental population. The Head of Old River barrier is intended to protect salmonids out-migrating from the San Joaquin River. However, as the DEIR states, “acoustic tagging studies have not reported significant differences in survival between the Head of Old River route and the San Joaquin mainstem route. The San Joaquin Delta SDM model incorporates acoustic tagging

³³ California Regulatory Notice Register 2014, No 13-Z. March 28, 2014. Department of Fish and Wildlife. California Endangered Species Act Consistency Determination No. 2080-2014-005-04. Nonessential Experimental Population Designation and 4(d) Take Provisions for Reintroduction of Central Valley Spring-Run Chinook Salmon to the San Joaquin River Below Friant Dam.

data in the south Delta including fish entrained into the facilities. This model found higher survival under the proposed project [] with uncertainty but suggests survival would not be impaired for fish routed into Old River.” (DEIR at p. 5-22) Therefore, even if take authorization was necessary, the Proposed Project does not result in a significant difference in survival.

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Even if the Proposed Project did result in a change in species survival, and that change in survival involved a species requiring further take authorization, it is unclear whether the Head of Old River Barrier would be effective mitigation. The Delta Science Program is responsible for reviewing implementation of the 2008 and 2009 biological opinions; and after review of the science underlying the implementation of the barrier, their panel concluded, “Lacking evidence to the contrary, it is difficult to conclude that the HORB provided equal or greater protection for smolts.”³⁴ It is therefore uncertain whether barrier installation benefits species.

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V. Conclusion

The SWC agree with DWR’s analysis and conclusions establishing that the Proposed Project does not have any potentially significant impacts. We will continue to support adaptive management activities that help us to better understand and manage the Delta ecosystem and water supply. However, the SWC objects to the inclusion of project alternatives that are not necessary for mitigating project effects and the scientifically unsupported project outlined in DWR’s CESA Application. Additionally, by proposing more mitigation than is legally required, DWR is not fulfilling its contractual obligations to the SWC member agencies. Despite these objections, we hope to support DWR in the future as it seeks legally and scientifically sound solutions.

1-35

Sincerely,



Jennifer Pierre
General Manager

cc: Karla Nemeth
Michelle Banonis
Dean Messer

³⁴ Anderson, J.J., Gore, J.A. Kneib, R.T., Lorang, M.S., Nester, J.M., Van Sickle, J.V. 2012. Report of the 2012 Delta Science Program Independent Review Panel (IRP) on the Long-Term Operations Opinions (LOO) Annual Review. Prepared for the Delta Science Program. p. 30.

II.4.12 LETTER L-SWC-1 – STATE WATER CONTRACTORS, JENNIFER PIERRE, GENERAL MANAGER, DATED JANUARY 6, 2020

II.4.12.1 RESPONSE TO COMMENT L-SWC-1-1

DWR acknowledges the commenter’s concurrence with the DEIR conclusion that long-term operations of the SWP will not result in significant and unavoidable impacts.

II.4.12.2 RESPONSE TO COMMENT L-SWC-1-2

Master Response 3, “The CEQA Process,” explains DWR has included a description and analysis of alternatives, even though no significant environmental impacts are anticipated. CEQA does not prohibit a lead agency from analyzing alternatives in an EIR. Although mitigation is not required under CEQA because there would not be any significant impacts, CESA requires application of different legal standards to the ITP Application. The alternatives analysis in DEIR Chapter 5, “Alternatives to the Proposed Project,” is intended to cover the range of actions that may be considered by CDFW as part of the ITP process, which would reduce environmental effects (even though those effects were not significant). Further discussion of the legal standards applicable under CEQA and CESA is provided in Master Response 4, “Legal Standards.” Please also see Master Response 17, “Application of CESA Standards.”

II.4.12.3 RESPONSE TO COMMENT L-SWC-1-3

Please see Response to Comment L-SWC-1-2 regarding inclusion of alternatives and CESA requirements.

DWR selected an approach to the modeling and analysis that utilizes data sets and methods that are scientifically supported and meet the requirements of the CEQA guidelines for evaluation of biological resource impacts. A discussion of the model simulation used to compare the Proposed Project and the various alternatives is provided in DEIR Appendix E, Section E.3.3.3, “Model Simulation to Compare Scenarios.” DEIR Chapter 4.1.4, “Approach to Modeling,” presents the approach to modeling used in the analysis and a discussion of the appropriate use of modeling. Further information regarding the use of modeling and scientific analysis in the DEIR is also provided in Master Response 20, “Best Available Science.”

The alternatives were evaluated in DEIR Chapter 5, “Alternatives to the Proposed Project,” but a more detailed evaluation of the alternatives is presented in FEIR Part III, Chapter 5, based on refinements to the description of Alternative 2b and updated modeling. As discussed in Master Response 3, “The CEQA Process,” the Refined Alternative 2b described in FEIR Part III, Chapter 5.3, “Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP,” is DWR’s preferred alternative.

II.4.12.4 RESPONSE TO COMMENT L-SWC-1-4

The objection within the comment is noted. As discussed in Response to Comment L-SWC-1-3, the Refined Alternative 2b described in FEIR Part III, Chapter 5.3, “Alternative 2b – Proposed Project with

Dedicated Water for Delta Outflow from SWP,” is DWR’s preferred alternative, consistent with the project description provided in the ITP application DWR submitted to the CDFW. Please see Master Response 3, “The CEQA Process,” for information regarding the evolution of this project during the CEQA process. Please see Master Response 20, “Best Available Science,” explaining that a lead agency’s determination must be supported by substantial evidence. Please also see Master Response 4, “Legal Standards,” and Master Response 17, “Application of CESA Standards,” for information regarding CESA requirements.

II.4.12.5 RESPONSE TO COMMENT L-SWC-1-5

The commenter’s support of adaptive management for the SWP, and the Adaptive Management Program for the Proposed Project is noted. The legal basis for including additional adaptive management actions, specifically those included in the Refined Alternative 2b described in FEIR Part III, Chapter 5.3, “Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP,” is discussed further within Master Response 4, “Legal Standards,” Master Response 3, “The CEQA Process,” and Master Response 17, “Application of CESA Standards.”

With respect to the scientific basis for actions requiring greater outflow than the proposed project, note that the commenter is referring to the CESA Application which differs from the DEIR (p.3-52); the latter focuses on the spring outflow actions. With respect to spring outflow actions mentioned as part of adaptive management considerations, it is reasonable to assume that such actions could be tested in response to information learned as part of the proposed continuation of the Longfin Smelt Science Program, for example (DEIR, p.3-48). In general, it would be anticipated that adaptive management actions would be undertaken to test specific hypotheses; considerations for such hypotheses related to other periods (i.e., summer-fall) were outlined in Appendix I of the DEIR.

II.4.12.6 RESPONSE TO COMMENT L-SWC-1-6

DWR acknowledges the SWC objection to operating the SWP to its proportional share of San Joaquin River Inflow to Export Ratio (SJR I:E ratio) because the objective of RPA Action IV.2.1 as described in the 2009 NMFS Biological Opinion is: *To reduce the vulnerability of emigrating CV steelhead within the lower San Joaquin River to entrainment into the channels of the South Delta and at the pumps due to the diversion of water by the export facilities in the South Delta, by increasing the inflow to export ratio.* DWR further acknowledges that Central Valley Steelhead Distinct Population Segment is not listed as Threatened or Endangered under CEQA.

Although SWC assert that operating the SWP to meet SJR I:E is to protect Central Valley Steelhead, DWR is not proposing to operate to the SJR I:E ratio to specifically protect steelhead, although such protection may incidentally occur. Further, DWR identified Refined Alternative 2b as the preferred alternative, which would curtail exports to maintain the current SWP spring outflow contribution. The additional outflow would be developed by operating to the SWP proportional share of the spring (April and May) maintenance flows consistent with flows that would occur from continued implementation of the 2008 and 2009 Biological Opinions. Although DWR is not providing spring maintenance flows for the purposes of protecting steelhead, DWR realizes that San Joaquin Steelhead may receive protections from these flows. (See FEIR Part III, DEIR Chapter 5.3.)

Please note that the FEIR identifies Refined Alternative 2b as the preferred alternative.

II.4.12.7 RESPONSE TO COMMENT L-SWC-1-7

As noted in DEIR Appendix H Attachment 1-4, “Scenario Related Changes to CalSim II and DSM2,” the assumed triggering of species-specific single-year loss threshold criteria occurs at a higher frequency than the historical record (from 2010 through 2018). However, assumed threshold values remain at the minimum of the species-specific single-year loss threshold description. Therefore, the assumption may over-estimate the frequency of the 50% salvage-loss occurrence but may under-estimate the frequency of the 75% salvage-loss occurrence. Additionally, after discussion with CDFW, DWR included Spring-run Chinook Salmon OMR loss thresholds in Refined Alternative 2b.

It is uncertain as to what level of OMR restriction would occur with Adult Longfin Smelt Entrainment Protection, Larval and Juvenile Longfin Smelt Criteria, and Larval Delta Smelt criteria. The tools and processes used for operating to these criteria are new. As noted in DEIR Appendix H Attachment 1-1, “Model Assumptions,” there are not enough data to develop a simplifying assumption. Please see Master Response 20, “Best Available Science,” for more details.

II.4.12.8 RESPONSE TO COMMENT L-SWC-1-8

DWR agrees that the Longfin Smelt abundance and outflow analyses are uncertain and that changes in Delta outflow would not have significant impacts on Longfin Smelt. DWR’s analyses in the DEIR did not suggest that no measurable impact would occur but stated that the *differences in predicted fall midwater trawl abundance index between the Proposed Project and Existing Conditions scenarios would be very small, relative to the variability in the predicted values*. Although the differences in Longfin Smelt abundance index would be small and less than significant under CEQA, after extensive discussions with CDFW, DWR proposes to implement the Adaptive Management Plan described in the ITP Application submitted to CDFW on December 13, 2019 and described in Refined Alternative 2b presented in Part III of the FEIR. The Adaptive Management Plan includes operations that would include SWP’s spring outflow. Spring outflow is an important component proposed to meet the fully mitigated requirement under CESA.

II.4.12.9 RESPONSE TO COMMENT L-SWC-1-9

This comment is on the ITP application that DWR submitted to CDFW on December 13, 2020, and not on the Draft EIR. DWR has responded to the comment below, however, to address the stated concerns.

As noted in DEIR Chapter 5.5.3, “Aquatic Resources,” regional weather patterns are the primary drivers of water temperature variations in the estuary. In general, higher flows in summer-fall will move the low salinity zone into geographic areas where air temperatures are slightly cooler. The Adaptive Management Program included in Refined Alternative 2b is intended to evaluate the efficacy of increased summer-fall outflow to improve habitat conditions for Delta Smelt.

Please also see Response to Comment L-SWC-1-4, above.

II.4.12.10 RESPONSE TO COMMENT L-SWC-1-10

The objection within the comment is noted. DEIR Chapters 3.3.1, “OMR Management,” and 3.3.4, “Real-time Operations Process,” describe the real-time operational decision-making procedures applicable to the long-term operations of the SWP. Refinements to the project description have been made since circulation of the DEIR, as shown in FEIR Part III. This includes additional description of the collaborative real-time risk assessment process and the scope of CDFW’s role in the process (see FEIR Part III, DEIR Chapter 5.3.1.1, “Collaborative Real-Time Risk Assessment”). Additional discussion of real-time operations is provided in Master Response 26, “Real-Time Operations.”

II.4.12.11 RESPONSE TO COMMENT L-SWC-1-11

Please see Response to Comment L-SWC-1-12 regarding alleged discrepancies between DWR’s press release statements and the objectives described in the DEIR.

It is unclear to which “overly simplistic relationship between species protection and rate or volume of SWP exports” the comment is referring. The analyses presented in the DEIR and ITP Application was developed recognizing the availability of new data, scientific information, and updated methods to calculate environmental change. The ITP Application applied methods based on available empirical data, established models, and published relationships to assess potential effects on species and characterize uncertainty. Examples in the DEIR include assessment of potential effects to the Delta Smelt prey *Eurytemora affinis* (DEIR Chapter 4.4.7.4, subheading “Food Availability,” [p. 4-145 through 4-146]), Delta outflow-abundance effects on Longfin Smelt (DEIR Chapter 4.4.7.4, subheading “Delta Outflow-Abundance,” [p.4-177 through 4-180]), the Delta Passage Model for juvenile Winter-run Chinook Salmon (DEIR Chapter 4.4.7.4, subheading, “Delta Passage Model,” [p.4-203 through 4-204]) and Spring-run Chinook Salmon (DEIR Chapter 4.4.7.4, subheading, “Delta Passage Model,” [p.4-215 through 4-216]). Please see Master Response 20, “Best Available Science.”

II.4.12.12 RESPONSE TO COMMENT L-SWC-1-12

The comment correctly quotes the project objectives as they appear in both the NOP and the Draft EIR for the Proposed Project. The comment goes on, however, to state that “DWR contradicts this statement of objectives in places throughout both the DEIR and the CESA Application, which creates ambiguity regarding the project objectives and inhibits the public’s ability to comment meaningfully on the Proposed Project.” The comment does not provide any examples, however, of inconsistent statements within the DEIR and CESA Application. Instead, the comment only cites a press release indicating that DWR “does not seek to increase SWP exports.” This news release was not intended to operate as a substitute to, or modification of, the project objectives and should not be understood to contradict the quoted project objectives. DWR stands by the project objectives quoted in the comment.

Furthermore, the press statement and the project objectives are not inconsistent. The project objectives, which reference the need to optimize water supply, does not guarantee that water exports will be increased. The DEIR includes multiple alternatives, including the Proposed Project, that would have different consequences on SWP exports. The inclusion of the various alternatives confirms that

DWR did not predetermine whether long-term operations of the SWP would, or would not, increase exports.

II.4.12.13 RESPONSE TO COMMENT L-SWC-1-13

As discussed in Master Response 3, “The CEQA Process,” the analysis of alternatives provided in DEIR Chapter 5, “Alternatives to the Proposed Project,” is adequate as it describes a reasonable range of alternatives at a level of detail that allows meaningful evaluation, analysis, and comparison with the Proposed Project. A more detailed evaluation of the alternatives is presented in FEIR Part III, Chapter 5, “Alternatives to the Proposed Project,” based on refinements made to the description of Alternative 2B and updated modeling assumptions. The FEIR identifies Refined Alternative 2b as the preferred alternative.

A discussion of the model simulation used to compare the Proposed Project and the various alternatives is provided in DEIR Appendix E, Section E.3.3.3, “Model Simulation to Compare Scenarios.” DEIR Chapter 4.1.4, “Approach to Modeling,” presents the approach to modeling used in the analysis and a discussion of the appropriate use of modeling.

II.4.12.14 RESPONSE TO COMMENT L-SWC-1-14

Please see Response to Comment L-SWC-1-13.

II.4.12.15 RESPONSE TO COMMENT L-SWC-1-14

Alternative 4 criteria entail Delta outflow changes in the summer, including in drier years. As described in DEIR Chapter 5.5.1, “Hydrology,” Delta outflow changes would most likely be a result of decreasing Delta exports. Although it is less likely, reservoir releases could be increased to increase Delta outflow. Mitigation Measure Alt 4-1 is proposed to minimize significant decreases in upstream storage. Therefore, enough upstream storage would be available to preclude impacts to water quality and aquatic ecosystems. Please see DEIR Chapter 5.5.2, “Surface Water Quality,” for more detail.

DEIR Chapter 5.5.1, “Hydrology,” provides estimates for increased Delta outflow by water year:

- Wet and above normal years: 80 TAF
- Below normal years:
 - 40 TAF for SMSG operations
 - 500 TAF for 80 km X2
- Dry years: 60 to 100 TAF

Mitigation Measure Alt 4-1, presented in DEIR Chapter 5.5.2, “Surface Water Quality,” limits additional outflows to 100 TAF. Considering Mitigation Measure Alt 4-1, increases to Delta outflow could be as much as 100 TAF in a given year. If increases to Delta outflow were solely a result of decreasing Delta exports, Delta exports decreases could be as much as 100 TAF in a given year. Except for the summer-fall action, Alternative 4 is similar to the Proposed Project. Therefore, south of Delta SWP deliveries under Alternative 4 could decrease by up to 100 TAF when compared to the Proposed Project. When compared to existing conditions, long-term average south of Delta SWP deliveries increase by about

200 TAF under the Proposed Project. By connecting the previous two comparisons, south of Delta SWP deliveries increase by 100 TAF under Alternative 4 as compared to existing conditions.

In sum, Alternative 4 would not reduce south of Delta water supplies as compared to existing conditions. Therefore, Alternative 4 would have no impact to groundwater conditions.

Note that the FEIR identifies Refined Alternative 2b as the preferred alternative.

II.4.12.16 RESPONSE TO COMMENT L-SWC-1-16

As discussed in Response to Comment L-SWC-1-13 above, the alternatives were evaluated in the DEIR, with a more detailed evaluation of the alternatives is presented in FEIR Part III, Chapter 5, "Alternatives to the Proposed Project." The FEIR identifies Refined Alternative 2b as the preferred alternative and Refined Alternative 2b would not result in any significant impacts.

II.4.12.17 RESPONSE TO COMMENT L-SWC-1-17

DEIR Appendix B, "2018 Coordinated Operation Agreement Addendum," presents a detailed discussion of how the SWP coordinates and interacts with the operations of the CVP. As discussed further in Master Response 1, "Scope of Analysis," whether Reclamation would alter its operations of the CVP in response to the Proposed Project in a way that would cause environmental impacts is speculative, and thus inclusion of such details within the DEIR would not be meaningful or informative. This same logic applies to whether Reclamation would alter its operations of the CVP in response to one of the alternatives described in DEIR Chapter 5, "Alternatives to the Proposed Project," or to the Refined Alternative 2b described in FEIR Part III, Chapter 5, which the FEIR identifies as the preferred alternative. See also Master Response 22, "Relationship to CVP Operations," that describes how DWR will coordinate operation with the CVP.

II.4.12.18 RESPONSE TO COMMENT L-SWC-1-18

See Response to Comment L-SWC-1-13.

II.4.12.19 RESPONSE TO COMMENT L-SWC-1-19

In discussing the OMR requirements, the DEIR states repeatedly that DWR will ensure that its proportional share of the OMR requirement will be satisfied. The DEIR does not indicate that DWR would satisfy the CVP share of the OMR requirement. Appendix H, included with the DEIR, describes the potential SWP proportion of any effects due to joint operations of the SWP and CVP. The SWP is committed to meeting its proportional share of the OMR criteria.

II.4.12.20 RESPONSE TO COMMENT L-SWC-1-20

Under the Preferred Alternative, Refined Alternative 2b, DWR would pursue an instream flow dedication under section 1707 of the California Water Code to protect flow provided by the SWP for Delta outflow. "for purposes of preserving or enhancing wetlands habitat, fish and wildlife resources, or recreation in or on, the water." (Wat. Code, § 1707.) Under Water Code section 1707, "Any person entitled to the use of water, whether based upon an appropriative, riparian, or other right, may

petition the board...for a change for purposes of preserving or enhancing wetlands habitat, fish and wildlife resources, or recreation in, or on, the water.” (Wat. Code, § 1707, subd. (a)(1).) DWR, as an appropriate water right holder, has the right to submit a 1707 petition to the Board for its consideration. Additionally, as acknowledged in the FEIR, DWR may also seek agreements with other water users such as Reclamation and downstream diverters.

The water for the 1707 dedication would be from the additional spring outflow the 100 TAF Block of Delta outflow in summer and fall. The CVP would not be able to recapture flows that are not diverted by the SWP because the reduction in exports would be dedicated for instream flow and protected from recapture under 1707.

II.4.12.21 RESPONSE TO COMMENT L-SWC-1-21

DWR disagrees that the OMR operations and outflow are inconsistent with the COA. The COA provides the basis for determining the proportional share as set forth in Appendix H. Furthermore, the 2018 COA Addendum calls for more frequent reviews and, if necessary, updates.

II.4.12.22 RESPONSE TO COMMENT L-SWC-1-22

Since publication of the DEIR, refinements have been made to both the project description and the description of alternatives, as detailed in FEIR Part III. The Refined Alternative 2b described in FEIR Part III, Chapter 5.3, “Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP,” now includes the concept of holding water over until the next year for use in the subsequent year, as described in the ITP application. Master Response 3, “The CEQA Process” provides more details and discussion of the process by which refinements to alternatives have been made during the CEQA process. The adaptively managed block of water in Refined Alternative 2b would not affect Oroville operations because it is within the current operating range of the Reservoir as explained in Master Response 1, “Scope of Analysis.” The effects of eventual release of the water through the Delta would be beneficial for water quality and aquatic biological resources. Although the block of water would not be available for export, the model indicates that the long term average exports for Refined Alternative 2b would be comparable to long term averages under existing conditions.

II.4.12.23 RESPONSE TO COMMENT L-SWC-1-23

Please see Response to Comment L-SWC-1-10 and Master Response 26, “Real-Time Operations.” The modeling is based on reasonably foreseeable conditions as set forth in the description of Refined Alternative 2b. The modeling does not address every theoretical permutation of real time decision making that could occur.

II.4.12.24 RESPONSE TO COMMENT L-SWC-1-24

The alternatives analysis in DEIR Chapter 5, “Alternatives to the Proposed Project,” is intended to cover the range of actions that may be considered by CDFW as part of the ITP process. Please see Responses to Comments L-SWC-1-13 and L-SWC-1-18A, and Master Response 3, “The CEQA Process.”

II.4.12.25 RESPONSE TO COMMENT L-SWC-1-25

DWR acknowledges receipt of the comment's comparison of the Proposed Project and RPAs in the 2008 and 2009 Biological Opinions, including the tables in attachments to the comment.

This comment focuses on the adequacy of the Proposed Project for CESA purposes. The EIR, however, analyzes the Proposed Project and alternatives, compared to existing conditions, for CEQA purposes. Please see Master Response 4, "Legal Standards," for discussion of the different legal standards required under CEQA and CESA. Please also see Master Response 17, "Application of CESA Standards."

II.4.12.26 RESPONSE TO COMMENT L-SWC-1-26

As the comment summarizes, the DEIR noted the potential for negative effects to Longfin Smelt as a result of changes in Delta outflow, with appreciable uncertainty (p.4-177 through 4-180). The assessment of satisfaction of CESA requirements is currently ongoing in conjunction with DFW as part of the ITP Application for the project. See also Master Response 4, "Legal Standards," and Master Response 17, "Application of CESA Standards."

II.4.12.27 RESPONSE TO COMMENT L-SWC-1-27

This comment focuses on the adequacy of the Proposed Project for CESA purposes. The EIR, however, analyzes the Proposed Project and alternatives, compared to existing conditions, for CEQA purposes. Please see Master Response 4, "Legal Standards," for discussion of the different legal standards required under CEQA and CESA. Please also see Master Response 17, "Application of CESA Standards."

The long-term operation of the SWP includes measures intended to minimize and mitigate take of the various state-listed fish species, and a number of measures to minimize and mitigate potential impacts to Delta Smelt. DWR and CDFW are assessing the ability of these measures to satisfy CESA requirements as part of preparing the ITP Application for the long-term operations of the SWP.

II.4.12.28 RESPONSE TO COMMENT L-SWC-1-28

The conceptual basis for Alternative 4, proposed by CDFW, was adapted from the proposed operations and environmental criteria developed by CDFW and is presented in DEIR Appendix I "*California Department of Fish and Wildlife Proposal for Project Alternative 4.*" As discussed in Master Response 3, "The CEQA Process," the alternatives are included because they are expected to include the range of actions that may be considered as part of the CESA ITP process, including summer-fall Delta outflow.

II.4.12.29 RESPONSE TO COMMENT L-SWC-1-29

The conceptual basis for determining potential effects of fall outflow/X2 (summer-fall habitat) on Delta Smelt is discussed in DEIR Chapter 4.4.7.4, subheading "Summer-Fall Habitat," (p.4-156 through 4-157), wherein the limited existing evidence for a relationship between Delta Smelt performance and fall habitat identified in this comment is noted.

II.4.12.30 RESPONSE TO COMMENT L-SWC-1-30

The Summer-Fall habitat action would be undertaken through a structured-decision making process (see DEIR Chapter 3.3.3, “Delta Smelt Summer-Fall Habitat Action,”) and adaptively managed (see DEIR Chapter 3.3.16, “Adaptive Management Plan”) in order to address the uncertainty associated with the action. These processes have been further refined by DWR since publication of the DEIR, as detailed in FEIR Part III.

II.4.12.31 RESPONSE TO COMMENT L-SWC-1-31

Please see Responses to Comments L-SWC-1-22, L-SWC-1-23, L-SWC-24, and L-SWC-25. The long-term operation of the SWP includes a number of different measures to minimize and mitigate potential impacts to Delta Smelt. DWR and CDFW are assessing the ability of these measures to satisfy CESA requirements as part of preparing the ITP Application for the long-term operations of the SWP.

II.4.12.32 RESPONSE TO COMMENT L-SWC-1-32

The different legal standards of CEQA and CESA are discussed in Master Response 4, “Legal Standards.” See also Master Response 17, “Application of CESA Standards.” This comment does not address the adequacy of the DEIR.

II.4.12.33 RESPONSE TO COMMENT L-SWC-1-33

DWR acknowledges that the only state-listed salmonid species originating from the San Joaquin River is the federally designated nonessential experimental population of spring-run Chinook salmon. DWR does not intend to amend the ITP Application seeking take authorization for four CESA-listed fish species to explicitly state that DWR is not seeking take authorization for the experimental Spring-run Chinook Salmon population. DWR acknowledges the assertion by the State Water Contractors that, even if take authorization was necessary, the long-term operations of the SWP would not result in a significant difference in survival.

II.4.12.34 RESPONSE TO COMMENT L-SWC-1-34

DWR has not proposed installation the HORB as mitigation for the Proposed Project or Refined Alternative 2b. However, analysis of San Joaquin River origin Chinook Salmon survival using the San Joaquin Structured Decision Model shows that survival of Fall-run Chinook Salmon and the experimental population Spring-run Chinook Salmon would be higher under the Proposed Project and Refined Alternative 2b than under the existing condition scenario because the HORB is not in place. These results suggest that the HORB reduces entrainment into the CVP facilities, but because of low outmigrant survival from the San Joaquin River and high salvage efficiency at the CVP facilities, the overall survival of Chinook Salmon emigrating from the San Joaquin River is higher without the HORB. Regardless, the DEIR evaluated the annual installation of the Head of Old River Barrier (HORB) during the spring only as part of Alternative 3. DWR has not included installation the HORB as part of Refined Alternative 2b, which DWR has identified as the environmentally superior and preferred alternative.

II.4.12.35 RESPONSE TO COMMENT L-SWC-1-35

The commenter's concurrence with the DEIR's conclusion that the Proposed Project will not result in potentially significant impacts is noted. The commenter's support for adaptive management activities, and for seeking scientifically sound solutions to managing the Delta ecosystem and water supply, is also noted.

As discussed in Master Response 3, "The CEQA Process," and in DEIR Chapter 5, "Alternatives to the Proposed Project," one of the purposes of the alternatives analysis is to cover the range of actions that may be considered by CDFW as a part of the CESA ITP process. Even though CEQA does not require mitigation for projects that do not have significant impacts, DWR will propose mitigation to meet the legal standard under CESA to minimize and fully mitigate the take of listed species. The DEIR further discusses the mitigation measures that will be identified in DWR's application for an ITP. Although not required to reduce or avoid significant CEQA impacts, two of the alternatives provide freshwater flows in the spring and summer, and one alternative includes physical barriers and other deterrents to keep fish away from the SWP pumps. By embodying scenarios that would reduce the environmental effects of the Proposed Project (even though they were not significant), these alternatives serve the purposes of CEQA. Further discussion of the different legal standards required by CEQA and CESA is provided in Master Response 4, "Legal Standards."

II.4.12.36 RESPONSE TO COMMENT L-SWC-1-ATT-1

See Response to Comment L-SWC-1-20.

Tehama-Colusa Canal Authority

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January 6, 2020

You Chen (Tim) Chao, PhD, PE, CFM
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California Department of Water Resources
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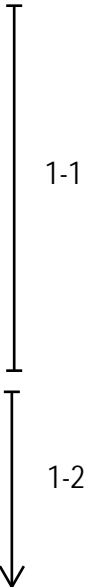
Via U.S. and Electronic Mail
(LTO@water.ca.gov)

Subject: Comments of the Tehama-Colusa Canal Authority on the California Department of Water Resources’ Draft Environmental Impact Report for Long-Term Operations of the California State Water Project

Dear Dr. Chao:

The Tehama-Colusa Canal Authority (“TCCA”) is a joint exercise of powers agency comprised of eighteen water districts and companies that receive water from the federal Central Valley Project and that are located in the counties of Colusa, Glenn, Tehama, and Yolo. TCCA was formed in order to secure a reliable water supply that would meet the needs of our member agencies, as well as exercising our rights to water originating in the Sacramento Valley.

TCCA has reviewed the Draft Environmental Impact Report for Long-Term Operations of the California State Water Project (“Draft EIR”). In an effort to assist DWR’s efforts toward adequate environmental review and to improve TCCA’s understanding of the proposed project impacts on the environment, TCCA offers these comments to the Draft EIR. TCCA hereby incorporates by reference and joins the comments on the Draft EIR submitted by the Sacramento River Settlement Contractors (“Settlement Contractors”) dated January 6, 2020 as though fully stated herein. In addition, TCCA hereby incorporates by reference and joins the comments on the Draft EIR submitted by the United States Bureau of Reclamation (“Reclamation”), dated January 6, 2020 as though fully stated herein.



TCCA would like to take this opportunity to underscore several comments made by the Settlement Contractors that are of particular importance for TCCA. First, the Draft EIR fails to adequately define the project being analyzed in the Draft EIR. The Draft EIR fails to explain how State Water Project operations will be coordinated with the Central Valley Project and its operations in accordance with the biological opinions recently issued by the U.S. Fish and

Wildlife Service, and the Draft EIR lacks sufficient detail regarding coordination with Reclamation in the event of a drought.

↑ 1-2
(Cont.)

Second, the project descriptions included in the Draft EIR and its related Incidental Take Permit (“ITP”) Application should be identical. However, the Draft EIR’s project description is inconsistent with the project description for the ITP, as detailed by the Settlement Contractors.

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Further, the Draft EIR fails to disclose significant impacts. The Settlement Contractors attached a technical memorandum from MBK Engineers (“MBK”) showing a number of potential impacts that the Draft EIR failed to adequately identify or analyze and directly concern TCCA. Such potential impacts include: an error in the reduction of deliveries; increased upstream releases and Sacramento River flow in May; increases in Yolo Bypass flow due to an increase in upstream reservoir spills in December through March, without addressing the effects; reduced flow in the Sacramento River below Keswick in September and November of wet years; and reduced Shasta storage in certain year types from June through December. The document fails to model the effects on the CVP related to temperature impacts and fails to provide any mitigation for such impacts. These actions could potentially affect coordinated operations between the SWP and the CVP, and moreover could negatively affect CVP operations and coldwater management actions, which could negatively impact CVP and TCCA contractor allocations.

1-4

MBK’s technical memorandum also notes that DWR does not provide sufficient specificity in its modeling to adequately identify what the impacts of the project will be. For example, the Draft EIR states that the modeling does not include certain proposed protections for Longfin smelt and Delta smelt. DWR cannot provide an adequate analysis of the impacts of the proposed projections without addressing in its modeling how those projections will affect overall operations under the project.

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Fourth, the Draft EIR fails to provide full mitigation for significant impacts. Specifically, the Draft EIR states that Alternative 4 has a potentially significant impact on cold water (Draft EIR 5-99 to 5-100), but it does not include any mitigation of this impact. Because the Draft EIR includes no mitigation measures for the significant impacts in Alternative 4, CDFW, as the responsible agency for approving the ITP Application, cannot rely on the Draft EIR in order to issue an ITP based on Alternative 4.


1-6

Lastly, the Draft EIR fails to utilize the best available science in regard to the analysis of alleged benefits to longfin smelt actions (a state listed species, but not a federally listed species).

1-7

Thank you for your attention to these comments.

Very truly yours,


Jeffrey P. Sutton
General Manager

cc: Board of Directors
Andrea Clark, General Counsel

II.4.13 LETTER L-TCCA-1 – TEHAMA-COLUSA CANAL AUTHORITY, JEFFREY SUTTON, GENERAL MANAGER, DATED JANUARY 6, 2020

II.4.13.1 RESPONSE TO COMMENT L-TCCA-1-1

Please see Responses to Comments L-SRS Contractors-1-1 through L-SRS Contractors-1-14 and Responses to Comments F-Reclamation-1-1 through F-Reclamation-1-30 for specific responses to the comments of the Sacramento River Settlement Contractors and U.S. Bureau of Reclamation, which this comment incorporates by reference.

II.4.13.2 RESPONSE TO COMMENT L-TCCA-1-2

DEIR Appendix B, “2018 Coordinated Operation Agreement Addendum,” contains a detailed discussion of how the SWP coordinates and interacts with the operations of the CVP. DEIR Appendix G, “Geographic Scope of Project’s Influence on Flow,” describes how DWR and Reclamation independently decide how to operate the SWP and CVP to meet applicable requirements. Master Response 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations,” provide additional discussion of these issues.

The SWP and CVP currently operate in accordance with the terms and conditions of the 2008 USFWS Biological Opinion. USFWS and NMFS each issued new Biological Opinions on October 21, 2019. The new USFWS and NMFS Biological Opinions include incidental take statements (ITS) for Delta Smelt, Winter-run Chinook Salmon, Spring-run Chinook Salmon, Green Sturgeon, and Steelhead. After the Biological Opinions take effect, DWR will comply with the ITS in accordance with federal law in addition to state requirements during all water year types, including droughts. As a result of the difference in species listed under the CESA and ESA and the coordinated operation of the SWP and CVP, the Proposed Project includes operations for the protection of federally listed steelhead and Green Sturgeon. These operations and the ITSs result in reductions in SWP pumping in addition to the reductions that would be necessary to comply with state law.

II.4.13.3 RESPONSE TO COMMENT L-TCCA-1-3

The project description presented in the DEIR describes the modified SWP operations being proposed to meet the project objectives. There is a clear list of project elements and discussion describing each of the actions and activities being considered. Since issuance of the DEIR, DWR has continued to consult with CDFW to further refine the project and enable issuance of an ITP. As a result, some refinements to the description of the project and alternatives, and additional analysis, have been made since circulation of the DEIR, as discussed further in Master Response 3, “The CEQA Process.” The revised DEIR, presented in FEIR Part III, is adequate under CEQA to allow the Lead Agency and the public, to evaluate environmental impacts resulting from long-term operations of the SWP.

II.4.13.4 RESPONSE TO COMMENT L-TCCA-1-4

Sacramento River flow releases and Sacramento River Settlement Contractor deliveries are outside of the project area and are not influenced by the operation of the SWP (refer Master Response 1, “Scope

of Analysis”). Please also refer to the US Bureau of Reclamation’s Reinitiation of Consultation Final Environmental Impact Statement.

II.4.13.5 RESPONSE TO COMMENT L-TCCA-1-5

Reasoning for not modeling the proposed protections for Longfin and Delta smelt mentioned by the comment is provided in DEIR Appendix H, Attachment 1-1, “Model Assumptions.” As noted in Appendix H, “CalSim II and DSM2 Model Descriptions and Assumptions,” some OMR operational criteria are not modeled because of the lack of data needed to develop a simplifying assumption.

II.4.13.6 RESPONSE TO COMMENT L-TCCA-1-6

The comment asserts that the DEIR identified a potentially significant impact to water quality associated with Alternative 4 but does not include any mitigation of this impact. The assertion that there is no mitigation for Alternative 4 is incorrect. The DEIR proposed Mitigation Measure Alt 4-1, which would reduce the potential water quality impact to a less than significant level because it would limit the amount of water required to meet the 4 ppt salinity criteria at Belden’s Landing during below normal water years to 100 TAF. This limit would substantially reduce the amount of water potentially released from storage, which would mitigate a potential reduction in the cold-water pool available for fisheries habitat management in the Feather River above the confluence with the Sacramento River in subsequent water years.

Please note that the FEIR identifies Refined Alternative 2b as the preferred alternative.

II.4.13.7 RESPONSE TO COMMENT L-TCCA-1-7

As discussed in Master Response 20, “Best Available Science,” DWR utilized the best available scientific information to conduct the impact analyses. The methods used to evaluate effects of the Proposed Project on Longfin Smelt are described in DEIR Appendix E, “Biological Modeling Methods and Selected Results,” and the analyses are presented in DEIR Chapter 4.4, “Aquatic Biological Resources.” The best available scientific analyses include: (1) particle tracking modeling of larval entrainment; (2) application of modeled flows to the relationship between juvenile Longfin Smelt salvage in April and May and mean April–May Old and Middle River flows identified by Grimaldo et al. (2009); (3) analysis of effects of Delta outflow on Longfin Smelt abundance using the most recent Longfin Smelt population dynamics model published by Nobriga and Rosenfield (2016); and (4) qualitative analyses by Longfin Smelt experts of project elements that were not able to be modeled.



January 6, 2020

Sent via E-Mail to: LTO@water.ca.gov

You Chen (Tim) Chao, PhD, PE, CFM
Executive Division, California Department of Water Resources
PO Box 942836
Sacramento, CA, 94236

Dear Mr. Chao:

The San Luis & Delta-Mendota Water Authority (“Water Authority”) appreciates the opportunity to provide comments on the Draft Environmental Impact Report (“Draft EIR”) for Long-Term Operation of the California State Water Project (“Proposed Project”). The Water Authority is a joint-powers authority that serves two important roles: 1) to provide unified representation on common interests of its 28 member agencies; and 2) to operate and maintain the Central Valley Project (CVP) facilities that the Water Authority’s member agencies depend on for delivery of their water supply, including the Jones Pumping Plant, the Delta-Mendota Canal, and the O’Neill Pumping Plant. The Water Authority’s member agencies contract with the U.S. Bureau of Reclamation for a portion of their water supply and provide water to approximately 1.2 million acres of irrigated agriculture in the San Joaquin Valley, over 2,000,000 people in the Silicon Valley, and approximately 200,000 acres of managed wetlands of critical importance to the Pacific Flyway.

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The California Department of Water Resources’ (“DWR”) Proposed Project reflects State Water Project (“SWP”) operations that would be coordinated with new proposed operations of the Central Valley Project (“CVP”) that are very similar to the federal Biological Opinions issued pursuant to the Reinitiation of Consultation on Long-Term Operations (ROC on LTO) of the CVP and SWP, which we fully support. The Water Authority supports the operations changes in the Proposed Project, as well as the conclusions of the Draft EIR that the Proposed Project has no significant adverse environmental impacts. However, we have concerns regarding the adequacy of information provided in the Draft EIR, particularly regarding the identified project alternatives. Specifically, we are concerned that the Draft EIR lacks clear descriptions of basic components of the identified alternatives and lacks sufficient detail in the analysis of their impacts. For instance, the Draft EIR does not provide a sufficient level of detail to understand how each of the identified alternatives would be implemented through coordinated SWP and CVP operations and fails to sufficiently describe the environmental difference between the identified alternatives and the Proposed Project.

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Lack of Clear Project Description

CEQA Guidelines require an environmental impact report’s description of alternatives, like the proposed project, to identify and describe each alternative’s technical, economic, and



environmental characteristics, and other details necessary to allow an evaluation and to review the alternative's environmental impacts¹.

In order to describe and analyze the impacts of each alternative and the Proposed Project, the details of coordination between SWP and CVP facilities must be described. Unfortunately, the Draft EIR provides an insufficient level of necessary detail to evaluate the environmental impacts of the alternatives or Proposed Project. For example, the Draft EIR refers to "proportional share" of regulatory requirements and "equitable" coordination between SWP and CVP operations but does not define either term, does not describe whether and how requirements imposed only on the SWP impact coordinated operations, and lacks sufficient description regarding impacts to CVP operations. The Draft EIR does not provide sufficient information to enable interested parties or DWR to fully understand the alternatives and compare them to the Proposed Project.

1-1
(Cont.)

Insufficient Analysis of Impacts

The Draft EIR also fails to provide sufficiently detailed analysis of potential environmental impacts. CEQA Guidelines also require an environmental impact report to contain enough information about each alternative to allow for an evaluation of the relative merits of each alternative and a comparison between each alternative and the Proposed Project². The Draft EIR fails to provide sufficient analysis of the impacts of each alternative. Notably, the Draft EIR does not contain a summary or technical detail regarding modeling results or provide an explanation regarding how CVP operations may be affected by implementation of each alternative. For example, the Draft EIR fails to sufficiently analyze the impacts of each alternative on CVP operations and delivery of water supplies to its contract holders, or the impacts to CVP upstream storage required to meet regulatory and contractual obligations. This lack of adequate analysis prevents the Water Authority and others from being able to meaningfully comment and prevents decision-makers from meaningfully evaluating and understanding the environmental impacts of each alternative.

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In summary, the Draft EIR lacks sufficient detail and analysis, particularly as it pertains to the identified alternatives. Important elements regarding DWR's coordination with Reclamation are insufficiently described and reasonably foreseeable environmental impacts, particularly the impacts of the alternatives on the CVP, are not disclosed³. As a result of this insufficient level of detail in the draft EIR, we were not able to provide detailed comments and are concerned that DWR will not have the information available to decide between the Proposed Project or one of the alternatives. We encourage DWR to work with Reclamation to address the deficiencies identified above prior to approving the Proposed Project or an alternative.

Thank you for the opportunity to comment on the Draft EIR for long-term operations of the State Water Project. If you have any questions, please do not hesitate to contact Scott Petersen at 916-321-4526.

Regards,



Federico Barajas, Executive Director
San Luis & Delta-Mendota Water Authority

¹ CEQA Guidelines, § 15124(c)

² CEQA Guidelines, § 15126.6(a)

³ Pub. Resources Code, § 21100(a)(1); CEQA Guidelines, §§ 15126.2, 15144

II.4.14 LETTER L-WATER AUTHORITY-1 – SAN LUIS & DELTA-MENDOTA WATER AUTHORITY, FEDERICO BARAJAS, EXECUTIVE DIRECTOR, DATED JANUARY 6, 2020

II.4.14.1 RESPONSE TO COMMENT L-WATER AUTHORITY-1-1

As explained in DEIR Appendix G, “Geographic Scope of Project’s Influence of Flow,” DWR and Reclamation independently decide how to operate the SWP and CVP to meet applicable requirements. Therefore, whether Reclamation would alter its operations of the CVP in response to DWR’s long-term operations of the SWP in a way that would cause environmental impacts beyond the effects caused by SWP operations alone is speculative. See Master Response 22, “Relationship to CVP Operations,” for information regarding how the SWP operations will be coordinated with the CVP. See also Master Response 4, “Legal Standards,” and Master Response 17, “Application of CESA Standards,” for a discussion of the CESA legal standards related to rough proportionality. Additional information regarding proportionality is provided in DEIR Appendix H, Attachment 1-5, “Estimation of SWP Proportion of Effects.”

II.4.14.2 RESPONSE TO COMMENT L-WATER AUTHORITY-1-2

Please see Master Response 3, “The CEQA Process,” for a discussion of what is required in developing a range of alternatives considered in an EIR. The analysis of alternatives provided in DEIR Chapter 5, “Alternatives to the Proposed Project,” is adequate as it provides a reasonable range of alternatives to the Proposed Project at a level of detail that allows meaningful evaluation, analysis, and comparison with the Proposed Project. A discussion of the model simulation used to compare the Proposed Project and the various alternatives is provided in DEIR Appendix E, Section E.3.3.3, “Model Simulation to Compare Scenarios.” DEIR Chapter 4.1.4, “Approach to Modeling,” presents the approach to modeling used in the analysis and a discussion of the appropriate use of modeling. Further information regarding the use of modeling and scientific analysis in the DEIR is provided in Master Response 20, “Best Available Science.”

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Westlands Water District

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Sent via email to: LTO@water.ca.gov.

You Chen (Tim) Chao, PhD, PE, CFM
Executive Division, California Department of Water Resources
PO Box 942836
Sacramento, CA, 94236
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Dear Mr. Chao:

Westlands Water District (“District”) thanks the California Department of Water Resources (“DWR”) for the opportunity to submit these comments on the Draft Environmental Impact Report (SCH #2019049121) (“Draft EIR”) for Long-Term Operation of the California State Water Project (“Proposed Project”).

The District supports the Proposed Project, which is substantially similar to the action advanced by U.S. Bureau of Reclamation (“Reclamation”) for the Coordinated Long-Term Operation of the Central Valley Project (“CVP”) and the State Water Project (“SWP”). Further, the District concurs with the conclusions rendered in the Draft EIR that the Proposed Project has no significant adverse environmental impacts. However, the District does have concerns regarding the adequacy of information provided in the Draft EIR, especially regarding the project alternatives.

1-1

The Draft EIR fails to adequately describe basic components of the alternatives and analyze their impacts. The Draft EIR lacks sufficient detail as to how each of the alternatives would be implemented through coordinated SWP and CVP operations, fails to describe or demonstrate any meaningful environmental difference between the alternatives and the Proposed Project, and fails to explain how each of the alternatives would be legal and feasible to implement. (CEQA Guidelines, § 15126.6(a)-(d); *Tracy First v. City of Tracy* (2009) 177 Cal.App.4th 912, 929.)

1-2

Inadequate Project Description

An environmental impact report’s description of alternatives, like the proposed project, must set forth, for each alternative, its technical, economic, and environmental characteristics, and other details necessary to allow an evaluation and review of its environmental impacts. (CEQA Guidelines, § 15124(c).) To meaningfully describe and analyze the impacts of each alternative and the Proposed Project, as CEQA requires, the details of coordination between SWP and CVP facilities cannot be merely implied or deferred. (CEQA Guidelines, §§ 15124(c), 15378; *Sierra Club v. City of Orange* (2008) 163 Cal.App.4th 523, 533 [EIR’s project description must provide enough information to “ascertain the project’s environmentally significant effects, assess ways of mitigating them, and consider project alternatives”].) Unfortunately, the Draft EIR fails to set forth the details necessary to allow an evaluation of the environmental impacts of the alternatives or Proposed Project. For example, the Draft EIR makes reference to “proportional share” of requirements and “equitable” coordination between SWP and CVP operations but fails to define

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either term, fails to describe whether and how requirements imposed only on the SWP impact coordination, and fails to describe whether and how CVP operations are affected. The Draft EIR thus fails to provide enough information regarding what is being proposed to enable the District, other interested parties, and DWR to fully understand the alternatives in a manner that would enable an intelligent comparison of each alternative to the Proposed Project.

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(Cont.)

Inadequate Impact Analysis

The Draft EIR also fails to provide adequate analysis of potential environmental impacts. An environmental impact report must contain enough information about each alternative to allow for an evaluation of the relative merits of each alternative and a comparison between each alternative and the Proposed Project. (CEQA Guidelines, § 15126.6(a).) The Draft EIR provides insufficient quantitative or qualitative assessment of the effects of each alternative. Absent from the Draft EIR is a summary or other distillation of the modeling results or some other explanation of how CVP operations may be affected. Nowhere does the Draft EIR disclose the impacts of each alternative on CVP upstream storage or on Reclamation's ability to make CVP water available for in-stream purposes, for wildlife, for urban uses, or for agricultural uses. This lack of adequate analysis prevents the District and others from being able to meaningfully comment and decision-makers to meaningfully evaluate and understand the environmental impacts of each alternative.

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In sum, the Draft EIR lacks sufficient detail and analysis. Important elements, particularly those related to how DWR would coordinate with Reclamation, are not described, and the reasonably foreseeable environmental impacts, particularly the impacts of the alternatives on the CVP, are not disclosed. (Pub. Resources Code, § 21100(a)(1); CEQA Guidelines, §§ 15126.2, 15144.) Because of the insufficient information, the District was not able to meaningfully comment and is concerned that DWR will not have the ability to make an informed decision whether to approve the Proposed Project or one of the alternatives. The District encourages DWR to work with Reclamation to address the deficiencies identified above prior to approving the Proposed Project or an alternative.

1-5

Sincerely,



Thomas Birmingham
General Manager
Westlands Water District
P.O. Box 6056
Fresno, CA 93703

II.4.15 LETTER L-WESTLANDS-1 – WESTLANDS WATER DISTRICT, THOMAS BIRMINGHAM, GENERAL MANAGER, NO DATE

II.4.15.1 RESPONSE TO COMMENT L-WESTLANDS-1-1

The comment expresses support for the Proposed Project, and concurs with the DEIR conclusion that the Proposed Project would have no significant adverse environmental impacts. Please see Responses to Comments L-Westlands 1-2 through L-Westlands-1-5 regarding concerns about the adequacy of information provided in the DEIR.

II.4.15.2 RESPONSE TO COMMENT L-WESTLANDS-1-2

As discussed in Master Response 3, “The CEQA Process,” the analysis of alternatives provided in DEIR Chapter 5, “Alternatives to the Proposed Project,” is adequate as it described a reasonable range of alternatives at a level of detail that allows meaningful evaluation, analysis, and comparison with the Proposed Project. The alternatives were evaluated in the DEIR, and a more detailed evaluation of the alternatives is presented in FEIR Part III, Chapter 5, “Alternatives to the Proposed Project,” based on refinements made to the description of Alternative 2b and updated modeling assumptions. Additional discussion of refinements made to the alternatives, and DWR’s identification of Refined Alternative 2b as the preferred alternative, is also provided in Master Response 3.

II.4.15.3 RESPONSE TO COMMENT L-WESTLANDS-1-3

Please see Response to Comment L-Westlands-1-2 with respect to the adequacy of the alternatives analysis. See Master Response 22, “Relationship to CVP Operations,” for information regarding how the SWP operations will be coordinated with the CVP. See also Master Response 4, “Legal Standards,” and Master Response 17, “Application of CESA Standards,” for a discussion of the CESA legal standards related to rough proportionality. Additional information regarding proportionality is provided in DEIR Appendix H, Attachment 1-5, “Estimation of SWP Proportion of Effects.” As explained throughout DEIR Chapter 3, “Description of the Proposed Project,” DWR operates the SWP in coordination with the CVP, under the Coordinated Operation Agreement (COA) between the federal government and the State of California. The Proposed Project analyzed in the DEIR is DWR’s long-term operation of the SWP. DWR does not control CVP operations. Thus, DWR has addressed the potential impacts attributable to the SWP, including the SWP’s proportional share of impacts from coordinated CVP and SWP operations, summarized below. DEIR Chapter 4.4.7.3, subheading “Identification of SWP Impacts,” discusses the means of identifying these impacts in detail.

When possible, quantitative and qualitative analyses account for only the SWP portion of impacts by considering factors such as entrainment at SWP-only facilities (e.g., entrainment into the Clifton Court Forebay). In some cases, however, such as effects based on Delta outflow, the analyses reflect the combined effects of both SWP and CVP operations. In order to analyze effects that would be caused by the Proposed Project, the analysis then determines the proportional share of effects that would be attributable to the SWP.

II.4.15.4 RESPONSE TO COMMENT L-WESTLANDS-1-4

Please see Master Response 20, “Best Available Science,” for discussion of why DWR’s selected approach to modeling and analysis for the DEIR is adequate. Please see Response to Comment L-Westlands-1-2 with respect to the adequacy of the alternatives analysis. Modeling results are presented in DEIR Appendix C, “Hydrology Model Results,” DEIR Appendix D, “SCHISM Model Results,” and DEIR Appendix E, “Biological Modeling Methods and Selected Results,” and are discussed in several locations throughout the DEIR.

DEIR Appendix B, “2018 Coordinated Operation Agreement Addendum,” contains a detailed discussion of how the SWP coordinates and interacts with the operations of the CVP. DEIR Appendix G, “Geographic Scope of Project’s Influence on Flow,” describes how DWR and Reclamation independently decide how to operate the SWP and CVP to meet applicable requirements. Master Response 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations,” provide additional discussion of these issues.

II.4.15.5 RESPONSE TO COMMENT L-WESTLANDS-1-5

Please see Responses to Comments L-Westlands-1-2 through L-Westlands-1-4.

II.5 TRIBAL COMMENTS AND RESPONSES

While there were no letters received from tribes, the Winnemem Wintu Tribe was a signatory of the letter received by the North Coast Rivers Alliance (NCRA). Please see FEIR Part II.6, Organizations Comment Responses, for Comment No. O-NRCA-1-1, O-NRCA-1-2, O-NRCA-1-3, and O-NRCA-1-21, and O-NRCA-1-Att-1-9.

Table II.5-1. Tribal Commenters

Letter	Commenter	Dated
O-NCRA et al-1	Law Office of Stephan Volker on behalf of North Coast Rivers Alliance, Institute for Fisheries Resources, Pacific Coast Federation of Fishermen's Association, San Francisco Crab Boat Owners Association and Winnemem Wintu Tribe	January 6, 2020
O-NCRA-2	Law Office of Stephan Volker on behalf of North Coast Rivers Alliance, Institute for Fisheries Resources, Pacific Coast Federation of Fishermen's Association, San Francisco Crab Boat Owners Association and Winnemem Wintu Tribe	January 6, 2020

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II.6 ORGANIZATIONS COMMENTS AND RESPONSES

Table II.6-1. Organization Commenters

Letter	Commenter	Dated
O-AquAlliance-1	AquAlliance, Barbara Vlanis, Executive; California Sportfishing Protection Alliance, Bill Jennings, Chariman; California Water Impact Network, Carolee Kreiger, President (AquAlliance)	January 6, 2020
O-California Indian Water Commission-1	California Indian Water Commission, Don Hankins, Ph.D, President	January 5, 2020
O-Coalition-1	Nossaman, Paul Weiland on behalf of Coalition for a Sustainable Delta	January 6, 2020
O-CSPA-1	California Sportfishing Protection Alliance, Chris Shutes, Water Rights Advocate and Bill Jennings, Executive Director; California Water Impact Network, AquAlliance, Michael Jackson, Counsel; and California Water Research, Deirdre des Jardins, Director (CSPA)	January 6, 2020
O-NCRA-1	Law Office of Stephan Volker on behalf of North Coast Rivers Alliance, Institute for Fisheries Resources, Pacific Coast Federation of Fishermen's Association, San Francisco Crab Boat Owners Association and Winnemem Wintu Tribe	January 6, 2020
O-NCRA-2	Law Office of Stephan Volker on behalf of North Coast Rivers Alliance, Institute for Fisheries Resources, Pacific Coast Federation of Fishermen's Association, San Francisco Crab Boat Owners Association and Winnemem Wintu Tribe	January 6, 2020
O-NRDC-1	Natural Resources Defense Council, Doug Obegi; The Bay Institute, Gary Bobker; Defenders of Wildlife, Rachel Zwillinger; San Francisco Baykeeper, Jonathan Rosenfield, Ph.D; California Sportfishing Protection Alliance, Chris Shutes; and Golden State Salmon Association, John McManus	January 6, 2020
O-NRDC-2	Natural Resources Defense Council, Doug Obegi; The Bay Institute, Gary Bobker; Defenders of Wildlife, Rachel Zwillinger; San Francisco Baykeeper, Jonathan Rosenfield, Ph.D; California Sportfishing Protection Alliance, Chris Shutes; and Golden State Salmon Association, John McManus	January 6, 2020
O-NRDC-3	Natural Resources Defense Council, Megan Friend	January 6, 2020
O-RTD-1	Restore the Delta, Barbara Barrigan-Parrilla, Executive Director and Tim Stroshane, Policy Analyst	December 30, 2019
O-RTD-2	Restore the Delta, Barbara Barrigan-Parrilla, Executive Director	January 2, 2020
O-Sierra Club-1	Sierra Club California, Bob Wright, Counsel	January 6, 2020

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AQUALLIANCE

DEFENDING NORTHERN CALIFORNIA WATERS



January 6, 2020

You Chen (Tim) Chao
Executive Division
California Department of Water Resources
PO Box 942836
Sacramento, CA, 94236-0001
LTO@water.ca.gov via email

Re: DWR’s Draft Environmental Impact Report for *Long-Term Operation of the SWP* (State Clearinghouse No. 2019049121)

Dear Mr. Chao:

AquAlliance, the California Sportfishing Protection Alliance, and the California Water Impact Network (hereinafter “AquAlliance”) submit the following comments and questions for the Draft Environmental Impact Report (“DEIR”), *Long-Term Operation of the SWP* (“Project”) prepared by the California Department of Water Resources (“DWR”).

I. The DEIR is Seriously Deficient

The DEIR has numerous deficiencies and should be withdrawn. To start, the Project description is internally inconsistent and misleading, which results in the failure to disclose, analyze, and propose avoidance or mitigation for the potential environmental impacts from the project. Most prominent is the inconsistent discussion of the coordinated operations of the Central Valley Project (“CVP”) and the State Water Project (“SWP”) as the proposed project. Additionally, the Project’s complete dependence on an obsolete model with a data end date of 2003 renders the results questionable at best and fraudulent at worst. It is also apparent that too much uncertainty is present in the DEIR regarding the scope, technical basis, and practical utility of the CalSim II model to trust the modeling for a project of this magnitude. Added to the grave modeling inadequacy, the DEIR’s minimal disclosure and analysis of significant direct, indirect, and cumulative impacts renders it useless. For these reasons that are explained further below, DWR must withdraw the DEIR or revise and recirculate it for additional public review and comment before a final Project EIR is considered.

1-1

A. Lack of Project Description Clarity

Unfortunately, we are forced to summarize the incomprehensible Project that appears to be to obtain more water for points south of the area of origin: the Sacramento Valley and foothills. However, this is not stated, but it is the subtext that is determined by a thorough reading of details that *are* present in the DEIR.

1-2

“An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR.” *County of Inyo v. City of Los Angeles*, 71 Cal. App. 3d 185, 193 (1977). “Only through an accurate view of the project may affected outsiders and public decision makers balance the proposal’s benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal . . . and weigh other alternatives in the balance.” *Id.* at 192-93. A project description may not provide conflicting signals to decision makers and the public about the nature and scope of the project as such a description is fundamentally inadequate and misleading. *San Joaquin Raptor Rescue Center v. County of Merced*, 149 Cal. App. 4th 645, 655-656 (2007) (EIR on mining project was conflicted when project description asserted that no increases in mine production were being sought, despite also providing for substantial increases in mine production).

Courts have applied *County of Inyo* to find project descriptions conflicting and unlawful when their scope or size reveals internal inconsistencies. *See San Joaquin Raptor*, 149 Cal. App. 4th at 655 (project description unlawful when draft EIR asserted project would not significantly increase a mine’s annual output, while proposed permit that would be approved by final EIR permitted a more than doubling of mine output); *Communities for a Better Env’t v. City of Richmond*, 184 Cal. App. 4th 70, 84 (2010) project description inadequate when project proponent offered conflicting characterizations of oil refinery project about whether project would allow refinery to process a more polluting product).

Here, the DEIR violates CEQA because its description of the project is internally inconsistent and misleading, and as a result, the DEIR inaccurately models and assesses potential environmental impacts from the project. In particular, the DEIR: (1) inconsistently describes whether the coordinated operations of the CVP and SWP are the proposed project; (2) whether the coordinated operations would actually achieve the proposed environmental flows, or only a proportional share of those flows; and (3) fails to accurately model the measures that are proposed for project. Such discrepancies give conflicting signals to the public and decision makers, thereby rendering the DEIR inadequate and misleading. *See San Joaquin Raptor*, 149 Cal. App. at 655-656 Further discussion is below.

B. The Baseline is Inaccurate

The DEIR suggests that the baseline for the Project is April 2019. The legitimate baseline for the Project should be prior to the SWP. It is from that time that the State’s long-term impacts commenced even if DWR doesn’t wish to face those impacts. The published portion of *North County Advocates v. City of Carlsbad* (2015) 2015 Cal.App.LEXIS 891 (*North County*) supports an important exception to the traditional baseline determination under CEQA of “the physical environmental conditions in the vicinity of the project, as they exist at the time . . . environmental review is commenced.” (CEQA Guidelines, § 1525, subd. (a).) A lead agency may look back to historic conditions to establish a baseline and with this Project, it is essential. (See *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 327-328; *Cherry Valley Pass Acres & Neighbors v. City of Beaumont* (2010) 190 Cal.App.4th 316, 337-338.) Fish are but *one* example that must be viewed through a pre-SWP baseline.

Affected special status species have reached yet lower all-time lows, and any impacts should be considered cumulatively considerable. For example, the status of Delta Smelt was downgraded to endangered in 2009 and this population set progressively lower record population lows in 2004, 2005, 2008, 2009, 2014, 2015, and 2017; and, the 2018 and 2019 FMWT index was 0 – the lowest possible. Longfin smelt set new population lows in 2007, 2015, and 2016. Southern Resident Killer Whale, federally listed as endangered in

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2005, specialize in feeding on salmon and steelhead and this population’s continuing decline and subsequent inability to recover have been linked to persistently low production of Central Valley Chinook Salmon (NMFS 2009, 2018). Abundance of all runs of Central Valley Chinook salmon are far lower than they were historically, declining by more than half relative to their 1967-1991 baseline, despite implementation of the current water quality objectives and passage of the federal Central Valley Project Improvement Act (CVPIA) in 1992 – both of these programs were intended to double natural production of Central Valley anadromous fishes (including Chinook Salmon) over the 1967-1991 baseline. After rebounding from a historic low set in the early 1990s, returns of adult winter-run Chinook Salmon exceeded 15,000 in both 2005 and 2006; however, the population has declined since then and returning adults numbered less than 1,000 in 2017. Spring-run Chinook salmon also increased during a wet period between 1995 and 2000, and returning adults numbered greater than 30,000 as recently as 2003; the population has since declined substantially with less than 2000 adults observed in 2017. By 2016, the Southern Resident Killer Whale population had dropped 15%, from 87 in 2005 to 74 individuals in 2018 (Orca Task Force 2018). In addition, one SRKW was stillborn in 2018; failed pregnancies are increasingly common among this population, as a result of inadequate supplies of their main food source, Chinook Salmon (Wasser et al. 2017).

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(Cont.)

The DEIR must be withdrawn. If DWR seeks to expand exports with a future LTO DEIR, it must reflect the baseline conditions that preceded the SWP.

C. Objectives Conflict With Planned Operations

The DEIR states that, “The objective of the Proposed Project is to continue the long-term operation of the SWP consistent with applicable laws, contractual obligations, and agreements. DWR proposes to store, divert, and convey water in accordance with DWR’s existing water rights to deliver water pursuant to water contracts and agreements up to full contract quantities. DWR seeks to optimize water supply and improve operational flexibility while protecting fish and wildlife based on the best available scientific information.” (p. 3-1) In contrast, the U.S. Bureau of Reclamation (“Bureau”) stated in its July 2019 Long Term Operations *Revisions to the Coordinated Long-Term Operation of the Central Valley Project and State Water Project* DEIS that, “The need for the action is to use updated scientific information to better meet statutory responsibilities of the CVP and SWP. The purpose of the action considered in this EIS is to continue the operation of the CVP in coordination with the SWP, for their authorized purposes, in a manner that enables Reclamation and DWR to maximize water deliveries and optimize marketable power generation consistent with applicable laws, contractual obligations, and agreements, and to augment operational flexibility by addressing the status of listed species” (p. 2-2). The DEIS stated somewhat differently.

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The DEIR fails to note upfront in the Project’s stated objectives that it intends to coordinate with the CVP and that the joint goals include the ability “[t]o maximize water deliveries and optimize marketable power generation consistent with applicable laws, contractual obligations, and agreements” as stated in the Bureau’s DEIS. While the DEIR periodically refers to the Bureau and the CVP elsewhere and both Long Term Operations environmental review documents acknowledge seeking operational flexibility, the DEIR’s omission that the SWP and the CVP jointly plan to “maximize water deliveries and optimize marketable power generation” leaves Chapter 3, Project Description, seriously inadequate. The difference between the DEIR’s goal to “optimize water supply” and the July 2019 DEIS’ “maximize water deliveries” is made starkly clear in the contrasting amounts of water disclosed in the respective environmental review documents (see Table 1).

Table 1.

Agency and project	Contracts Amounts	Current average conveyance	Increases
DWR/SWP	4.173 MAF (DEIR p. 3-7)	2.9 MAF (DEIR p. 3-1)	193-219 TAF (DEIR p. 4-18).
Bureau/CVP		7.0 MAF (DEIS p. 1-1) (5.0 MAF for agriculture)	23%-39% for agriculture (DEIS p. 1.3) = 1.15 MAF - 1.95 MAF
Totals		9.9 MAF	1.34 MAF - 2.17 MAF

Using material from the Bureau’s July DEIS and this DEIR, our table illustrates that both the SWP and CVP intend to increase deliveries. Chapter 3, *Project Description*, fails to mention this significant part of the Project. What is also not stated, but understood by water insiders, is that the Project, in joint operation with the CVP Long Term Operations plan, seeks to export more water at the continued expense of California’s biological heritage and the vast majority of its people.

D. Source Water is Undefined

The Project must unambiguously identify the source of the water planned for additional exports. The Project seeks to increase SWP water:

“Long-term average annual total SWP deliveries would potentially increase by 219 TAF (6%) under the Proposed Project scenario compared to the Existing Conditions scenario. Relative delivery increases would be greatest in above-normal, below-normal, and dry years.

“In the dry and critical water years, proposed long-term average annual SWP deliveries would increase by 193 TAF (8%), compared to deliveries under the Existing Conditions scenario. For the most part, the Proposed Project would result in greater relative increases in deliveries in dry and critical water years.” (DEIR p. 4-18).

As Table 1 demonstrates, the CVP agricultural deliveries will increase by 23%-39% under the Bureau’s preferred alternative for the San Joaquin hydrologic region.¹ A CVP increase of this magnitude is somewhere between 1.15 MAF - 1.95 MAF (actual increases in acre-feet were not found in the DEIS). Using the figures from the DEIR and the Bureau’s DEIS, actual water delivery increases could be over 2 MAF annually (Table 1). Since South of Delta exports appreciably depend on Sacramento River inflows, where will the increased export water come from during all years and in particular, drought years? The Sacramento River hydrology clearly shows that there are few years that can be clearly identified as average; most of the years are clustered in to two groups, a dry group (56% of the years, average 12.5 MAF, 4-river index) and a wet group (44% of the years, average 24 MAF, 4-river index). Some of the driest years can barely support senior diverters in the Sacramento Valley with very small allowances for Delta outflow.

The total claims to consumptive water available in the Delta watershed, including the Trinity River and its tributaries, are not presented in the DEIR. As AquAlliance has presented many times to DWR and the Bureau (“Agencies”), the unimpaired runoff of the Sacramento River basin is 21.6 MAF, but the consumptive use claims are an extraordinary 120.6 MAF – 5.6 times more claims than there is available

¹ USBR 2019. DEIS *Revisions to the Coordinated Long-Term Operation of the Central Valley Project and State Water Project*. p. 5-13.

water.² The DEIS is seriously deficient without this information. The DEIR also fails to inform the public of the CVP and SWP's junior claims to water, which is another serious omission.

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(Cont.)

Despite proposing joint SWP and CVP delivery increases of over 2 MAF for south of Delta contractors (CVP #s extrapolated from the 23%-39% increase from July 2019 DEIS; see Table 1 above), the DEIR claims that few water delivery impacts will occur in the area of origin rivers and the Delta and what may occur is insignificant. Page 4-18 states, "This section describes the changes to hydrology due to implementation of the Proposed Project. Changes to surface water hydrology, by themselves, are not considered a significant impact based on the Initial Study (provided in Appendix A). Description of potential changes to hydrology are presented to provide a basis for understanding the potential impacts to other secondary environmental resources evaluated in this DEIR." This conclusion is not supported by the increase in exports (aka 'deliveries') individually, let alone how changes in timing and operations by the SWP and its partner CVP will affect the many aquatic species already on the verge of extinction.

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Is the faulty conclusion based on CalSim II failures, such as "The CalSim II model output includes minor fluctuations of up to 5% because of model assumptions and approaches. Therefore, for analytical purposes if the quantitative differences in a CalSim model output parameter between the Existing Conditions and Proposed Project model scenarios are 5% or less, the conditions between the scenarios are considered to be 'similar.'" (p. 4-4) A 5% error may sound small, but it is affecting species already in serious decline, so every decline in water, water quality, and habitat is considerable. With such a significant margin of error, have there been field measurements to validate any of the hydrologic areas modeled? We found no references given for independent field studies.

The DEIR conspicuously fails to mention that senior water rights claimants north of the Delta may lose water as SWP and CVP exports expand. This is a very serious omission and must be corrected. What we know is from the Bureau's July 2019 EIS, Appendix H that illustrates that a 5% loss of water is used as an *average* throughout the CVP and SWP and that the Settlement Contractors may have up to a 10% decrease in the preferred alternative, #1 (p. H-19). This equates to a potential loss of approximately 160,000 af each year, although that was not expressed in the Bureau's DEIS, and it is of course not disclosed in the DEIR. Is 160,000 af a "minor change" when the source water to compensate for such a loss may very well be groundwater in already stressed basins rated high and medium under SGMA?

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DWR needs to correct the missing impacts to senior diverters in a recirculated DEIR or withdraw the Project. If recirculation occurs, there are more unanswered questions including, but not limited to:

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- How will the losses to senior water rights claimants be calculated and allocated? Will there be hard numbers by year or will the Bureau and DWR shift the losses between contractors year-to-year?
- Among the senior contractors who have the most secure claims to river water, why were the Feather River contractors and the Exchange Contractors treated so lightly or not at all in the Bureau's DEIS decreases? In other words, why are the CVP Settlement Contractors treated differently from the Feather River contractors and the Exchange Contractors?
- Is the pressure on the CVP Settlement Contractors to accept a decrease in allocation a new and circuitous way to have groundwater substitution transfers of unlimited proportions?
- How will senior water claimants be compensated for their losses to junior claimants like the Bureau, DWR, and Westlands Water District?

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² California Water Impact Network, AquAlliance, and California Sportfishing Protection Alliance 2012. *Testimony on Water Availability Analysis for Trinity, Sacramento, and San Joaquin River Basins Tributary to the Bay-Delta Estuary.*

The DEIR fails to assist the public with the review process as required by CEQA when it stumbles so badly with a conclusion of no hydrologic impact while obfuscating changes to senior diverters. With such important foundational information omitted from the DEIR, it is not a credible CEQA document and should be withdrawn, or, if the Project moves forward, revised and recirculated.

1-14

1. Extended Water Transfer Window Will Harm Salmon

In Chapter 3, the DEIS does discuss the joint plans between the SWP and CVP operations regarding water transfers. “DWR and Reclamation propose to continue facilitating transfers of SWP water and other water supplies through CVP and SWP facilities, including north-to-south transfers and north-to-north transfers. The quantity and timing of Keswick releases would be similar to those that would occur absent the transfer. Water transfers would occur through various methods, including, but not limited to, groundwater substitution, release from storage, and cropland idling, and would include individual and multi-year transfers. The effects of developing supplies for water transfers in any individual year or a multi-year transfer is evaluated outside of this proposed action. North-to-South water transfers would occur from July through November in total annual volumes up to those described in Table 3-5.” (p. 3-51)

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Attempting to read between the lines once again, an extended transfer window would allow more total water to move from the area-of-origin in the Sacramento Valley to south of the Delta. In addition to the Project’s increased dewatering of the Sacramento River Watershed, the longer window to transfer “[w]ould lead to dewatering and potentially significant impacts to salmonid redds.”³ The California Department of Fish and Wildlife explains that, “Water transfers during October and November could result in flows being higher for a short period in which salmonids would build redds in margin habitat that would not be sustained for the duration of egg incubation. This would result in redd dewatering mortality when the transfer flows end.”⁴ The DEIR fails to disclose the significant impact and therefore fails to propose avoidance measures or mitigation.

E. The Project Model Is Defective

In addition, CalSim II operates with the deficiency mentioned above with the data input into the model ending in 2003, which fails to account for current conditions, climate change conditions, and future conditions. The DEIR actually reinforces the dysfunction of the model stating, “However, not all salinity requirements are included as CalSim II is not capable of predicting salinities in the Delta.” (p. H-1-1-8) The adequacy of CalSIM II been called into question for some time.⁵ Examples of CalSIM II weaknesses from Close et al. include:

1-16

- *The model provides limited and inadequate coverage of non CVP or SWP water and of the California water system south of the Delta.*
- *The model assumes that facilities, land-use, water supply contracts and regulatory requirements are constant over this period, representing a fixed level of development rather than one that varies in response to hydrologic conditions or changes over time.*
- *Groundwater has only limited representation in CALSIM II.*
- *Groundwater resources are assumed infinite, i.e., there is no upper limit to groundwater pumping.*

³ CDFW 2019. Comments on *Long-Term Water Transfer Program SDEIS/RDEIR*. p. 6. (Exhibit A)

⁴ *Id.*

⁵ Close, A., et al, 2003. A Strategic Review of CALSIM II and its Use for Water Planning, Management, and Operations in Central California (Exhibit B)

- *The linear programming model considers only the current month, and hence CALSIM II operating rules are required to determine annual water allocations, to establish reservoir carryover storage targets, and to trigger transfers from north of Delta to south of Delta storage.*
- *Better quality control is needed both for the model and its current version and the input data. Procedures for model calibration and verification are also needed. Currently many users are not sure of the accuracy of the results. A sensitivity and uncertainty prediction capability and analysis is needed.*
- *Need improved ways of altering the models geographic scope and resolution and its temporal resolution to better meet the needs of various analyses and studies.*
- *Need to improve the models comparative as well as absolute (or predictive) capabilities.*
- *CALSIM II needs better capabilities for analyzing economic, water quality, and groundwater issues.*
- *Need improved documentation explaining how the model works, its assumptions, its limitations, and its applicability to various planning and management issues.*
- *DWR and USBR have not provided a centralized source of support for CALSIM II. More training for CALSIM II is needed. There is a need for more people who can run CALSIM II. There is a need for a well-publicized user group. A more extensive users guide is needed.*
- *Improved capabilities are needed for real-time operations especially during droughts, gaming involving stakeholders during a simulation run, handling of evapotranspiration and agriculture demand changes over time, water transfers, Delta storage, carryover contract rights, refuge water demands and more up to date representation of Feather River, Stanislaus River, Upper American River, San Joaquin River and Yuba River operations.*
- *Need an improved graphical user interface to facilitate input of model data, setting of model constraints and weights, operating the model, and displaying and post analysis of model results.*
- *[Users] need to be able to change the model time period durations for improved accuracy of model results.*

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(Cont.)

In 2014, an additional critique of CalSim II was written for the Twin Tunnels project and is as applicable today as it was then. Issues include:

1) Provenance

The concerns of data provenance are more subtle, but they are equally important, and they lead to one of the continuing critiques of CalSim II made by the peer reviewers. The initial peer review effort identified a software quality problem⁶ with archiving of code and input datasets in CalSim II, a problem that is currently being remedied by the CalSim II developers, but which should never have occurred in the first place. That problem is one of establishing the all-important mapping between input data and the CalSim II results that are generated by those datasets. This mapping is termed *data provenance*.

Provenance is a subtle concept, but it is fundamentally important, as anyone who has ever enjoyed watching an episode of the PBS television series “Antiques Roadshow” knows. A valuable antique, such as a painting by Monet, must be distinguished from a cheap imitation prepared by a forger by the process of examining the trail of custody of the antique. If a trusted mapping from the current owner of the antique back to the artist can be established, then the claim of value and authenticity is validated. If not, then the antique may prove to be worthless.

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⁶ Close, et al, op. cit., page 8 and 58

Provenance is equally important in computational modeling, as input datasets contain the fundamental assumptions that generate computed results, which are then used to effect policy decisions, e.g., water transfers based on the computational simulation. If the chain of custody between the policy decision and the input data that generated the results that influenced that policy cannot be established, then the results (and the policy) cannot be trusted. So as in the world of antiques, provenance is a fundamentally-important requirement for computer analysis.

Provenance is established in computer models by providing an appropriate form of configuration management for both the software source code, and for all the datasets used, both as input and as output. Normal software-quality-assurance practices would require that the mapping between input datasets and generated results be tested regularly (often daily), so that changes to the software do not cause deviations in the results. Such deviations could easily call into question the legitimacy of policy decisions made on the basis of these computations.

The original 2003 review panel pointed out that CalSim II did not include such configuration management capabilities, and the CalSim II developer community agreed to remedy this substantial deviation from standard software quality practices⁷. CalSim II now includes some configuration management capabilities for input datasets, but it is not clear from the Draft EIR/EIS or from the various review documents how effectively these new data management capabilities are utilized. This problem alone causes serious concerns about whether the analyses of the various Draft EIR/EIS alternatives can be trusted. And this question of trust touches on another problem with CalSim II identified during the peer review process⁸, namely that CalSim II analyses may not be repeatable, i.e., the results may be strongly dependent on the experience and personal preferences of the particular analysts carrying out the modeling, so that the computed results may not be objective. This opens the door to concerns that model results may be biased, either accidentally or intentionally. Thus there are serious limitations in how much the results of CalSim II can be trusted.⁹

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2) Assumptions

The peer review documents also identify the potential for a completely-inaccurate assumption embedded in the groundwater modeling components of CalSim II, and the CalSim II response to this criticism is insufficient in technical detail to determine whether this inaccuracy is present or not. The criticism is based on an inherent assumption of simple porous-flow models, such as those used in CalSim II, namely that these models assume an infinite supply of usable groundwater available at the outer boundaries of the geographic domain modeled.

A groundwater aquifer has physical limits, e.g., the alluvial deposits that store the water eventually reach bedrock, and hence the aquifer's capacity is limited by geologic constraints. But including these hard constraints into a porous-flow model is not trivial: in particular, the resulting modeling problem becomes nonlinear, and requires more complex solution techniques that require more computer resources. It is not clear from the Draft EIR/EIS's discussion of the modeling assumptions inherent in CalSim II, or from the

⁷ Arora and Peterson, op. cit, page 12

⁸ Close, et al, op. cit, page 24, and Arora and Peterson, op. cit, page 17

⁹ Mish, Kyran D. 2014. *Comments for AquAlliance on BDCP Draft EIR/EIS*. pp. 7-8. (Exhibit C)

various peer review documents, exactly how the CalSim II model incorporates these all-important constraints, and this type of potential limitation of the CalSim II model needs to be included in the Draft EIR/EIS groundwater modeling discussions, with due technical detail for how it is (or could be) overcome in practice.¹⁰

As demonstrated above, there is too much uncertainty in the DEIR document regarding the scope, technical basis, and practical utility of the CalSim II model to trust. To the extent CalSim II is relied upon, the DEIR must be transparent and clearly explain and justify all assumptions made in model runs. It must explicitly state when findings are based on post processing and when findings are based on direct model results. Results must include error bars to account for uncertainty and margin of safety. Lastly, a 5% error margin is completely unacceptable.

F. Sacramento Valley Groundwater

The DEIR fails to discuss groundwater. The section 3.10.2 *Discussion* in the Initial Study (Appendix A) at least looks at it in Appendix A page 3-100 – *one page*. Therein, DWR finds that the Project will not, “Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.” How this conclusory assertion is reached is unknown. The water from the Sacramento River watershed is crucial to the health and survival of the State of California, supplying 77% of the water to the Sacramento /San Joaquin Delta ((Appendix A p. 3-83), yet the DEIR fails to disclose existing Sacramento Valley groundwater conditions.

2. Existing Groundwater Conditions Are Not Disclosed

The health of the Sacramento River and its tributaries are inextricably tied to the health of their groundwater basins. Yet, the DEIR fails to address in every way the existence and the consequence of declining Sacramento Valley groundwater levels (see Figure 1 below). The DEIR doesn’t even provide a half-hearted attempt to gloss over what has and is happening in the Sacramento Valley groundwater basins, which at least the Bureau floated in the July 2019 DEIS.¹¹ AquAlliance’s concern is not isolated as Davids Engineering stated in 2012 that, “Persistently declining groundwater levels in many areas of the Sacramento Valley over the past decade reveal that groundwater discharge exceeds recharge. Simply put: if the objective is to stem or reverse the trend, the groundwater balance must be adjusted either by putting more water into the ground or taking less out.”¹² The documentation of very serious groundwater conditions is also found in DWR’s maps that are presented in Table 1 and by information and study (e.g., Brush 2013 and NCWA, 2014). In addition, a Glenn County farmer has experienced the effects of increased groundwater use by GCID, a district that previously used only river water for irrigation.

¹⁰ Mish, Kyran D. 2014 pp.8-9. (Exhibit C)

¹¹ The Bureau continued erroneous conclusions from the 2015 *Coordinated Long-Term Operation of the Central Valley Project and State Water Project* and many water transfer NEPA documents stating that, “Overall, the Sacramento Groundwater Basin is approximately balanced with respect to annual recharge and pumping demand.” Without defining “approximately balanced,” the 2019 DEIS stated, just as the 2015 NEPA document did, that, “However, there are several locations showing early signs of persistent drawdown, suggesting limitations due to increased groundwater use in dry years. Locations of persistent drawdown include: Glenn County, areas near Chico in Butte County, northern Sacramento County, and portions of Yolo County.” Unfortunately, the DEIS failed to elaborate through maps or text leaving the public without specific details regarding this serious decline in Sacramento Valley groundwater.

¹² Davids Engineering 2012. Prepared for NCWA, *Sacramento Valley Groundwater Assessment Active Management – Call to Action*, p. 14.

Prior to 2007, the aquifers were able to fully recharge with an average rainfall year.

GCID began large scale groundwater pumping in 2007 and continued until July 2015. Although this pumping was ostensibly limited to the 950'---1200' deep (Tuscan) aquifer, the three overlying aquifer strata at ±600', 300' and 100' have all been affected, and remain compromised.

The ranches I operate for my family and friends rely on 19 groundwater wells. Since 2011--- 2012 several of these wells have shown abnormal and erratic behavior. Our pump 19 went completely dry on July 19, 2014. In the years since, three important wells have become unusable for several days at a time...

The extremely rapid draw down when these pumps are turned on, appears to be a significant factor in a new occurrence [sic] for our area ---subsidence. New cracks in two of my brick houses that are both built on heavy foundations began to appear after 2007. They are getting more serious with time...

The responsibility for proving damage under this system leaves the average landowner at a severe disadvantage, and I don't believe this is what the law intends. The unraveling of small groundwater dependent farms is a very significant issue that they want to prevent, not mitigate.

I have just replaced one of three wells that have failed since this all began. I hoped that the cessation of GCID pumping would allow the main ag and domestic levels to recover enough for them to be useable. Even with above average rainfall in the past 3 years, they have not. I will be out a half million dollars, just on these three replacements. And still have 15 other wells to worry about.¹³

The DEIR's Appendix C failed to disclose current groundwater conditions as we provide in Table 2 (based on DWR's maps).¹⁴ What is also missing from the DEIR is what these trends look like over a longer period of time. One example is Butte County where declines are not as severe as Glenn and Colusa counties, yet our Exhibit E¹⁵ demonstrates how despite some very wet years, Sacramento Valley water is *not* recovering, as the agencies are wont to claim when viewed over a dozen years. Many wells in BMO Alert Stages remain there, which should have been disclosed in the DEIR.

The DEIR's statements that the proposed Project will not negatively impact groundwater is unsupported here and by history. "The proposed long-term operation of the SWP would only modify surface water hydrology to a limited extent that would remain within the range of historical operations. This limited change to surface water hydrology would not result in decreasing groundwater supplies, interfere with groundwater recharge, or impede sustainable groundwater management in the SWP project area. No impact

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¹³ Billiou, Michael 2019. Comments on the *Long-Term Transfer* SDEIS/RDEIR. (Exhibit D)

¹⁴ DWR. <https://data.cnra.ca.gov/dataset/northern-sacramento-valley-groundwater-elevation-change-maps>

¹⁵ Butte County 2019. Spring 2008-2019 Groundwater Elevations – CASGEM. (Exhibit E)

would occur. (Appendix A p. 3-100) This is a conclusory statement without supporting material to justify it, only modeling that has been demonstrated in our comments as extremely deficient. These conclusions highlight once again that DWR attempts to obfuscate historic, current, and future impacts by diminishing or hiding factual data at every opportunity. It is clear to AquAlliance that demand for water only increases in California and the Project itself serves to confirm this.

Direct and indirect impacts to groundwater in the areas-of-origin, the Delta, and the receiving areas results doesn't even make into the DEIR, therefore there is no avoidance or mitigation proposed. The Initial Study concludes on pages 3-100 of the Initial Study that: "b) The proposed long-term operation of the SWP would only modify surface water hydrology to a limited extent that would remain within the range of historical operations. This limited change to surface water hydrology would not result in decreasing groundwater supplies, interfere with groundwater recharge, or impede sustainable groundwater management in the SWP project area. No impact would occur." The potential for groundwater substitution transfers (p. 3-51) and the loss of 160,000 af to senior diverters requires a conclusion of "significant impact" and the proposal of mitigation measures. Revisions to the DEIR are required if the Project continues.

Table 2. Northern Sacramento Groundwater Changes

County	Deep Wells (Max decrease gwe) Fall '04 - '18	Deep Wells (Max decrease gwe) Fall '04 - '17	Deep Wells (Max decrease gwe) Fall '04 - '16
Butte	-36.4	-13.9	-28.3
Colusa	-42.6	-67.2	-66.4
Glenn	-141.4	-166.3	-65.8
Tehama*	-47.6	-44.0	-35.8

County	Intermediate Wells (Max decrease gwe) Fall '04 - '18	Intermediate Wells (Max decrease gwe) Fall '04 - '17	Intermediate Wells (Max decrease gwe) Fall '04 - '16
Butte	-23.8	-22.1	-28.3
Colusa	-61.5	-62.4	-78.9
Glenn	-62.7	-51.5	-58.3
Tehama*	-34.0	-35.0	-29.3

County	(Max decrease gwe) Fall '04 - '18	Shallow Wells (Max decrease gwe) Fall '04 - '17	Shallow Wells (Max decrease gwe) Fall '04 - '16
Butte	-14.7	-10.8	-18.3
Colusa	-50.8	-51.8	-51.7
Glenn	-63.8	-58.7	-59.6
Tehama*	-31.5	-28.9	-36.3

*Tehama County portion in the Sacramento Valley groundwater basin.

3. Conjunctive Use

Conjunctive water use (“CWU”) of surface and groundwater (also known as groundwater substitution transfers) by Sacramento Valley water districts contributes to declining groundwater. Historic, independent groundwater pumpers may be economically injured by declining aquifer levels. “While conjunctive use may prove successful for an individual or group of water users to manage an immediate situation, it is also possible for conjunctive use to unintentionally harm the groundwater basin and other groundwater users who are not involved in conjunctive use but are reliant on the same groundwater basin.”¹⁶

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Since CWU is considered as part of the Project (p. 3-51), the DEIR must identify areas where communities, farms, residential wells, and groundwater dependent ecosystems (“GDE”) may be impacted by CWU. “In order to identify potential habitat impacts associated with potential changes in water management practices, a program-specific network of shallow monitor monitoring wells should be developed to detect changes in water levels over the shallowest portion of the aquifer. In evaluating impacts to certain GDE species, it is important to discern both the rate of groundwater level change, as well as the cumulative change over the entire year. Data collection and monitoring frequency should be appropriately selected to support the temporal and long-term evaluations.”¹⁷

4. Sustainable Groundwater Management Act of California

Under the Sustainable Groundwater Management Act, critically over-drafted basins must come up with a Groundwater Sustainability Plan (“GSP”) by January 30, 2020. In the Sacramento Valley with medium- to high-priority basins, the GSPs must be developed by January 31, 2022 and achieve sustainability within 20 years. DWR will not finish reviewing all of the GSPs until 2024. The Project timing is problematic. At a minimum, over-drafted basins must have an opportunity to create plans without including whatever additional surface water DWR and the Bureau propose to make available. To do otherwise may result in a GSP for one region that would intensify unsustainable water transfers in another. A conservative approach would dictate that no major revisions to CVP and SWP water operations take place until DWR has an opportunity to review all of the GSPs.

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5. Sacramento Valley Groundwater Impact Analysis

DWR’s modeling and existing conditions data are seriously deficient as noted above. The Bureau’s July 2019 DEIS also asserted that little would change with Sacramento Valley groundwater, despite what we have demonstrated in Table 1: increased deliveries may exceed 2 MAF.

As discussed in Section 5.3, Surface Water Supply, CVP and SWP water deliveries under Alternatives 1 through 4 would have small changes in the Sacramento Valley. Deliveries to CVP agricultural service contractors would increase, but other deliveries would be essentially unchanged. Changes in deliveries associated with Alternatives 1 through 4 would not likely affect groundwater pumping or groundwater levels in the Sacramento Valley. .
(DEIS 5-19)

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If the DEIS’s conclusion of between 5-10% loss to Sacramento Valley senior diverters is accurate, how much water does that actually involve and in what region/groundwater basin? Is this a new and circuitous

¹⁶ Dudley, Toccoy and Allan Fulton, 2005. *Conjunctive Water Management: What Is It? Why Consider It? What are the Challenges?* <https://www.buttecounty.net/Portals/26/Education/second1.pdf>

¹⁷ McManus, Dan (DWR) et al 2007. *Sacramento Valley Water Resource Monitoring, Data Collection and Evaluation Framework*. pp. 5-6

way to have a groundwater substitution transfer of significant proportions? Failure to disclose the source of “new” water for export, as also explained above, leaves the DEIR terribly deficient and it should be withdrawn.

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G. Impacts to Native Tribes

The DEIR must evaluate the SWP/CVP direct and indirect impacts to indigenous people in the Project’s geography who have been deprived of their abundant supply of numerous salmon runs, destruction of sacred sites, and destruction and disruption of food, fiber, and cultural sites. The DEIR must consider the cumulative cultural ramifications of building Sites Reservoir and raising Shasta Dam. There are culturally sensitive sites that will be flooded if the reservoir is built and the dam is raised (Winnemem Wintu).¹⁸

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H. Impacts to the Upstream Watershed

The DEIR failed to analyze how the inflow of fresh water drives the health of the Central Valley watershed. The elimination of the majority of spawning anadromous fish is depriving riparian corridors, agricultural land and forested watersheds of marine derived nutrients. “Pacific salmon transfer large quantities of marine-derived nutrients to adjacent forest ecosystems with profound effects on plant and wildlife production... These data suggest that robust salmon runs continue to provide important ecological services with high economic value, even in impaired watersheds. Loss of Pacific salmon can not only negatively affect stream and riparian ecosystem function, but can also affect local economies where agriculture and salmon streams coexist.”¹⁹ A revised DEIR must include historic details and charts regarding impacts to fish and other species from past and current operations of the two projects – the CVP (Shasta) and the SWP (Oroville).

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In addition, streamflow depletion is neither disclosed nor analyzed. The CVP and SWP have extended water far from the areas of origin for agricultural, urban, and industrial uses. In so doing, particularly with paper water, as discussed further below, the state and federal governments have facilitated a destructively unrealistic demand for water. Ever willing to destroy natural systems to meet demand for profit, the San Joaquin River dried up and subsidence caused by groundwater depletion in the San Joaquin Valley is even cracking water conveyance facilities.²⁰ Enter conjunctive use where the Agencies facilitate, and their contractors implement, river water sales and pump groundwater to continue crop production (see above). The continual, long-term groundwater overdraft in the San Joaquin Valley, the expansion of new permanent crops in both the San Joaquin and Sacramento valleys, and groundwater substitution transfers by CVP and SWP contractors *all* cause streamflow depletion. The current state of streamflow depletion in the Sacramento River basin is highly significant as demonstrated in Figure 1 that used data from the Northern California Water Association.^{21 22}

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¹⁸ Sisk, Caleen 2017. *Personal Communication*.

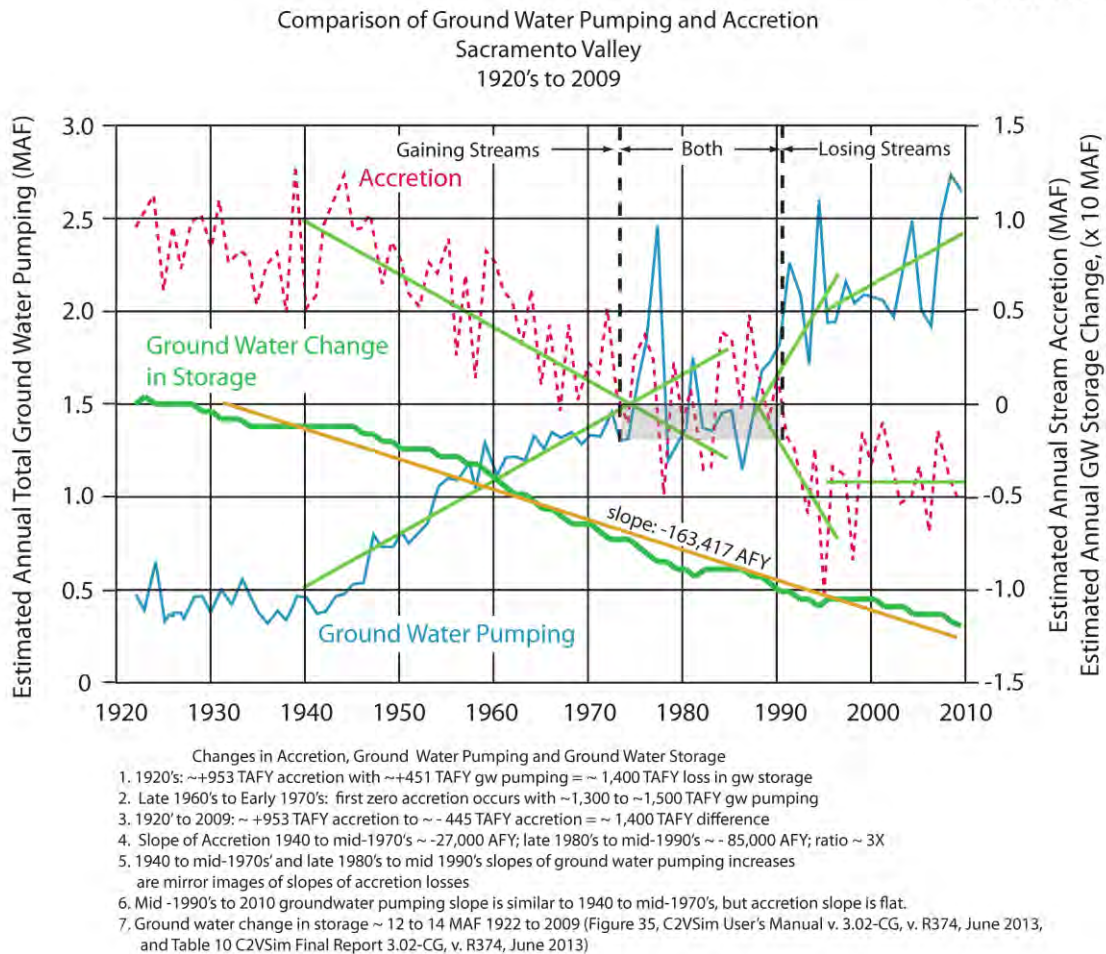
¹⁹ Merz, Joseph E., et al. 2006. *Salmon, Wildlife, and Wine: Marine-Derived Nutrients in Human-Dominated Ecosystems of Central California*. <https://pdfs.semanticscholar.org/1342/ce8aa20421c8531c7466bdb2a64bc60cc774.pdf>

²⁰ Sneed, et al., 2012. Abstract: *Renewed Rapid Subsidence in the San Joaquin Valley, California*. “The location and magnitude of land subsidence during 2006–10 in parts of the SJV were determined by using an integration of Interferometric Synthetic Aperture Radar (InSAR), Global Positioning System (GPS), and borehole extensometer techniques. Results of the InSAR measurements indicate that a 3,200-km² area was affected by at least 20 mm of subsidence during 2008–10, with a localized maximum subsidence of at least 540 mm. Furthermore, InSAR results indicate subsidence rates doubled during 2008. Results of a comparison of GPS, extensometer, and groundwater-level data suggest that most of the compaction occurred in the deep aquifer system, that the critical head in some parts of the deep system was exceeded in 2008, and that the subsidence measured during 2008–10 was largely permanent.” Conference presentation at *Water for Seven Generations: Will California Prepare For It?*, Chico, CA.

²¹ Northern California Water Association, 2014a, Sacramento Valley Groundwater Assessment, Active Management – Call to

Figure 1.²³

Exhibit 10.7



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(Cont.)

How the long-term operation of the CVP and SWP cause streamflow depletion must be disclosed in a recirculated DEIR or the document must be withdrawn.

I. Freshwater Flow to the Ocean Sustains the San Francisco Bay

The DEIR failed to consider how water diversions create artificial, super critically dry years in the San Francisco Bay. A revised DEIR must consider the following:

- How will dry years shift the size and location of the ecologically important salinity mixing zone?
- How will water diversions divert the inflow of nutrients, food, and sediment from the watershed that are vital components of fish and wildlife habitat?
- How will decreased flows prevent periodic flushing and allow pollutants to persist?

1-28

Action, prepared by Davids Engineering, Macaulay Water Resources, and West Yost Associates, June 2014, pp. 20 (<http://www.norcalwater.org/res/docs/NCWA-GW-2014-web.pdf>).

²² Northern California Water Association, 2014b, Sacramento Valley Groundwater Assessment, Active Management – Call to Action, Technical Supplement, prepared by Davids Engineering, Macaulay Water Resources, and West Yost Associates, June 2014, pp. 91 (http://www.norcalwater.org/res/docs/NCWA_supp-web.pdf).

²³ Custis, Kit 2014. Comparison of Ground Water Pumping and Accretion, Sacramento Valley 1920s -2009.

- How will reduced flows facilitate invasions by undesirable non-native species?²⁴

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(Cont.)

The DEIR also failed to analyze how dams and diversions have prevented sediment from flowing into the Bay Estuary depriving the Bay and the down current ocean beaches of sand needed to sustain the existence of sandy beaches. A revised DEIR must consider the role of sediment transport as a means of dealing with rising sea levels. Marsh formation is a critical tool in dealing with rising sea levels. The DEIR should have examined the role of how freshwater flow regimes in the estuary facilitate the preservation and growth of freshwater marshes in response to rising sea levels. According to The Bay Institute, “Organic matter accumulates faster in freshwater marshes than it does in saltwater marshes. Wetlands and beaches act as natural flood barriers to protect shoreline communities in the Bay Area.”²⁵

1-29

J. Biological Resources

During the end of 2019, while the DEIR is circulated for public review, DWR has significantly accelerated exports. This is not covered by a past CEQA document nor is it discussed in the DEIR. Nonetheless, DWR is madly pumping water out of the Delta, hammering fish species.²⁶

DWR’s partner, the Bureau asserted in their LTO DEIS on page 2-2 that many factors cause the devastating decline of California’s fisheries while omitting the primary culprit: exports. The paragraph begins with what appears to be a complaint about restrictions on the CVP and SWP (“Projects”). “These requirements and projects [D- 1485, 1992 CVPIA amendments, D-1641, Bay-Delta Plan amendments flows for the lower San Joaquin River and revised southern Delta salinity objectives, and the Trinity ROD] have *constrained* the operation of the CVP and SWP, and the RPAs in the 2008 USFWS and 2009 NMFS BOs *added additional restrictions* (as described above).” (emphasis added) However, even with constraints, the SWP and the CVP have consistently ignored the law or asked for waivers or forgiveness, while using every available tactic to increase exports, which state and federal agencies repeatedly allowed.

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The Bureau’s DEIS callously continued stating that, “At the same time, California native fishes have declined and are likely to continue to decline because of stressors such as long-term meteorological variability, sea level rise, extreme weather events, predation, and ecosystem changes caused by nonnative species. Reclamation requested reinitiation of consultation based on new information based on multiple years of drought, monitoring of listed fish populations, and new information available as a result of ongoing scientific processes.” p. 2-2. The CVP and SWP violations of D-1641, the ESA, CESA, and the Public Trust Doctrine are obvious, yet there is no sign in the DEIR or the DEIS of responsibility for the impacts to all manner of species and people from SWP and CVP operations.

1. Terrestrial species excluded from the DEIR

The DEIR contends, based on the Initial Study, that it may exclude impacts to all special status terrestrial species based on the faulty conclusion that the Project basically changes nothing from existing conditions. (p. 2-3) In addition, another part of the exclusion emanates from DWR’s erroneous choice of a 2019 baseline for all analysis in the DEIR although the SWP has operated well over 50 years. These points are addressed below.

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²⁴ The Bay Institute, 2016. *San Francisco Bay: The Freshwater-Starved Estuary. How Water Flowing to the Ocean Sustains California’s Greatest Aquatic Ecosystem.* https://bayecotarium.org/wp-content/uploads/freshwater_report.pdf. p. 10.

²⁵ (*Id.*)

²⁶ Cannon, Tom 2020. Critique of November & December 2019 Delta export pumping. (Exhibit F)

- a) If the Project changes so little from existing conditions, why is an EIR needed at all? Moreover, how do failures in operation, such as the Oroville Dam main spillway failure and crater and the emergency spillway’s massive erosion, fit into the tidy picture of a Project presented as so minimalist? 1-32
- b) In choosing a 2019 baseline (see I.B. above), the Lead Agency escapes responsibility for the negative impacts from the SWP that lead to the existence of all the special status species in the first place. This is certainly a convenient escape hatch. DWR and its state partners, the Department of Fish and Wildlife and the State Water Resources Control Board, have not only facilitated the declining survival of the special species in tables 3.4-4 and 3.4-5 in the Initial Study,²⁷ but continue the decline through existing operations and acquiescence, let alone with the Project that expands exports. Added to the failure to acknowledge SWP past, current, and future impacts to the species in the two tables provided (3.4-4 and 3.4-5), it is noticeable that *countless species that have been and will be impacted individually and cumulatively by the SWP are absent even from consideration in the Initial Study, such as all vernal pool landscape flora and fauna.* 1-33

II. Alternatives

A. Feasible Alternatives to Lessen Project Impacts Are Excluded

The DEIR fails to evaluate a reasonable range of alternatives as required by CEQA. None of the alternatives presented will achieve the SWP’s legal obligations regarding fish and wildlife protection, restoration and mitigation, compliance with state water quality standards, and complying with CESA and the ESA. This is especially problematic in light of the fact that coordinated operations of the CVP and SWP have:

- Exceeded incidental take limits under the existing biological opinions.
 - Failed to reinitiate consultation that other federal agencies stated was required.
 - Failed to prevent continued declines of listed species and caused additional harm by operations not considered in the existing biological opinions.
- 1-34

The DEIR is required to evaluate and implement feasible project alternatives that would lessen or avoid the project’s potentially significant impacts. Pub. Resources Code §§ 21002, 21002.1(a), 21100(b)(4), 21150; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564. This is true even if the EIR purports to reduce or avoid any or all environmental impacts to less than significant levels. *Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376. Alternatives that lessen the project’s environmental impacts must be considered even if they do not meet all project objectives. CEQA Guidelines § 15126.6(a)-(b); *Habitat & Watershed Caretakers v City of Santa Cruz* (2013) 213 Cal.App.4th 1277, 1302; *Center for Biological Diversity v. County of San Bernardino* (2010) 185 Cal.App.4th 866. Further, the EIS/EIR must contain an accurate no-project alternative against which to consider the project’s impacts. CEQA Guidelines § 15126.6(e)(1); *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477.

It is regrettable that DWR fails to consider available alternatives such as those presented below. This illustrates the continuing intractability of the lead agency in planning to deal with the multitude of negative

²⁷ “Tables 3.4-4 and 3.4-5 list the species that are discussed in this Initial Study. These are species with the potential to occur in areas in the project area that may be directly or indirectly affected by the proposed changes to the SWP because they occur 1) along rivers downstream from SWP facilities, 2) in potential habitat restoration areas in the Yolo Bypass and Suisun Marsh, or 3) in riparian corridors in the Delta. The geographic scope includes the Sacramento River from the Feather River confluence downstream to, and including, the Delta and Suisun Marsh.” (Appendix A p. 3-34)

impacts from the operation of the SWP and its partner CVP for numerous decades coupled with increased climate impacts to water in California.

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(Cont.)

1. Watershed Rehabilitation as Storage

The DEIR should have evaluated alternatives that expand Sierra/Cascade watershed management programs that rehabilitate mountain meadows²⁸ and restore wildlands into fire-evolved ecosystems. Natural fire regimes restore forest structure that reduces small diameter ladder fuel and enhances precipitation percolation. Degraded mountain meadows release high volumes of runoff quickly while healthy meadows hold and slowly release water in storage. “Meadows are also important for water storage and habitat connectivity, providing California with water to sustain its ever-growing population and agricultural endeavors. Promoting the restoration of mountain meadows is critical for supplying our state with enough water to grow and habitat for the plant and animal species that we cherish.”²⁹

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2. Decreased Demand Alternative

The DEIR should have evaluated an alternative that would focus on reduction of water demand that is in keeping with DWR’s junior water claims status in an over-subscribed system - 120.6 MAF that is 5.6 times more claims than there is available water in the Sacramento River watershed.³⁰ A decreased demand alternative would include elements such as:

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- Expanding agricultural and urban conservation.
- Reduced exports from the Delta to protect endangered fish species.
- Increased winter-spring Delta outflows to protect native species and their habitats based on findings of numerous state and federal agencies that such measures are necessary.

3. Reduced Dependence on Water Imported From the Delta

The DEIR fails to provide an alternative that honors California Water Code Section 85021 that requires all regions of California reduce their dependence on water imported from the Delta. “The policy of the State of California is to reduce reliance on the Delta in meeting California’s future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency. Each region that depends on water from the Delta watershed shall improve its regional self-reliance for water through investment in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water supply efforts.”³¹

1-37

DWR must withdraw the DEIR or revise and recirculate it for additional public review and comment with feasible project alternatives that would lessen or avoid the project’s potentially significant impacts.

²⁸ <https://www.plumascorporation.org/uploads/4/0/5/5/40554561/ieca.pdf>

²⁹ Earthwatch Institute, 2017, *Restoring Sierra Meadows: The Source of California’s Water*. p. 1. <http://earthwatch.org/briefings/web-teen-earthwatch-restoring-sierra-meadows-the-source-of-californias-water-2017.pdf>

³⁰ California Water Impact Network, AquAlliance, and California Sportfishing Protection Alliance 2012. *Testimony on Water Availability Analysis for Trinity, Sacramento, and San Joaquin River Basins Tributary to the Bay-Delta Estuary*.

³¹ California Water Code. DIVISION 35. SACRAMENTO-SAN JOAQUIN DELTA REFORM ACT OF 2009 [85000 - 85350] (Division 35 added by Stats. 2009, 7th Ex. Sess., Ch. 5, Sec. 39.) https://leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=WAT&division=35.&title=&part=1.&chapter=2.&article=

III. The DEIR Fails to Adequately Analyze Numerous Cumulative Impacts.

As discussed above, the Project is dependent on the hydrology of the Feather River, Sacramento River, and Delta watersheds to implement the proposed Project. The cumulative impact analysis is abysmal as it fails to consider many past, present and reasonably foreseeable future actions in the Delta watersheds. Whether this was done through the DWR's screening process or by deferring analysis to a future day, the cumulative analysis fails.

An EIR must discuss significant cumulative impacts. CEQA Guidelines §15130(a). Cumulative impacts are defined as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. CEQA Guidelines § 15355(a). "[I]ndividual effects may be changes resulting from a single project or a number of separate projects. CEQA Guidelines § 15355(a). A legally adequate cumulative impacts analysis views a particular project over time and in conjunction with other related past, present, and reasonably foreseeable future projects whose impacts might compound or interrelate with those of the project at hand. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. CEQA Guidelines § 15355(b). The cumulative impacts concept recognizes that "[t]he full environmental impact of a proposed . . . action cannot be gauged in a vacuum." *Whitman v. Board of Supervisors* (1979) 88 Cal. App. 3d 397, 408 (internal quotation omitted).

The DEIR fails to comply with these standards for cumulative impacts upon surface water and groundwater supplies, subsidence, vegetation, and biological resources.

A. The Cumulative Impact Analysis Is Vacuous

1. Modeling

Data used for modeling the Project ends in 2003.

- All fish species modeled use the 1922-2003 data. (pp. xiv – xv).
- “Sacramento Valley and tributary rim-basin hydrology uses an adjusted historical sequence of monthly stream flows over an 82-year period (1922 to 2003).” (p. 4-4)
- “Based on CALSIM-II modeling over the 82-year simulation period.” (p.4-18)
- “‘Long-Term’ is the average quantity for the period of October 1921 through September 2003.” (p.4-18)
- “Dry and critical years average is the average quantity for the combination of the State Water Resources Control Board D-1641 40-30-30 dry and critical years for the period of October 1921 through September 2003.” (p. 4-18)

These antiquated dates and explanatory language are also replete throughout the appendices that are intended for cumulative impact analysis. DWR's failure to use more current data on conditions and activities after 2003 is a significant limitation on the utility of the model for estimating potentially significant impacts.

For example, baseline conditions in the Sacramento Valley groundwater basin have changed significantly since 2003 including continued dramatic localized decreases in groundwater levels, decreases in water quality, and the expansion of subsidence. “The decrease in groundwater levels and quality has resulted in the many of the Sacramento Valley groundwater subbasins being listed as medium to high priority under SGMA. These subbasins are considered unsustainable under current conditions, and therefore require

management under a Groundwater Sustainability Plan. The modeling effort doesn't appear to account for the causes of the SGMA ranking or clearly address the potential for creating or expanding any SGMA undesirable results.”³² The failure to utilize more current data in the modeling for the Project by itself makes the DEIR meaningless.

1-39
(Cont.)

B. Recently Past, Current, and Future Transfers are Not Disclosed.

The DEIR has deprived the public of knowledge or connection to recent supply projects that include river water transfers that may involve groundwater substitution transfer pumping. Below is a list of transfers from the recent past that illustrate the ongoing nature of such transfers, which at a minimum should have been considered in the DEIR.

1. 2009. The Bureau approved a one-year water transfer program under which a number of transfers occurred. Regarding NEPA, the Bureau issued a FONSI based on an EA.
2. 2010-2011. The Bureau approved a two-year water transfer program. No actual transfers occurred under this approval. Regarding NEPA, the Bureau again issued a FONSI based on an EA.
3. 2012. Settlement contractors in the Sacramento Valley received 100% of their allocation. The Bureau planned 2012 water transfers of 76,000 AF of CVP water all through groundwater substitution, but it is unclear if CVP transfers occurred.³³ SWP contractors and the Yuba County Water Agency (“YCWA”) did transfer water and the cumulative total transferred is stated to be 190,000 af.³⁴
4. 2013. WY – Dry. Settlement contractors in the Sacramento Valley received 100% of their allocation. The Bureau approved a 1-year water transfer program, again issuing a FONSI based on an EA. The EA incorporated by reference the environmental analysis in the 2010-2011 EA. The *2013 Water Transfer Program* proposed the direct extraction of up to 37,505 AF of groundwater (pp. 8, 9, 11, 28, 29, 35), the indirect extraction of 92,806 AF of groundwater (p. 31), and the cumulative total of 190,906 (p. 29).³⁵ Reported transfers amounted to 210,000 af.³⁶
5. 2014. Federal Settlement Contractors in the Sacramento Valley received 75% and State Settlement Contractors received 100% of their allocations. Total maximum proposed north-to-south transfers were 378,733 af and total maximum proposed north-to-north transfers were 295,924 af.³⁷ Reported north-to-south transfers amounted to 198,000 af.³⁸

1-40

³² Custis, Kit. 2019. Comments on the *Long-Term Water Transfers*. p. 6. (Exhibit G)

³³ USBR 2012. Memo to the Deputy Assistant Supervisor, Endangered Species Division, Fish and Wildlife Office, Sacramento, California regarding Section 7 Consultation.

³⁴ Western Canal Water District, 2015. *Initial Study and Proposed Negative Declaration for Western Canal Water District 2015 Water Transfer Program*. (p. 21)

³⁵ USBR, 2013. Draft Environmental Assessment and Findings of No Significant Impact for the *2013 Water Transfers*. (p. 29)

³⁶ Western Canal Water District, 2015. *Initial Study and Proposed Negative Declaration for Western Canal Water District 2015 Water Transfer Program*. (p. 21)

³⁷ AquAlliance, 2014. *2014 Sacramento Valley Water Transfers*. (Data from: 1) USBR, 2014 EA for *2014 Tehama-Colusa Canal Authority Water Transfers*; 2) USBR and SLDMWA, 2014. EA/Negative Declaration, *2014 San Luis & Delta Mendota Water Authority Transfers*.)

³⁸ Western Canal Water District, 2015. *Initial Study and Proposed Negative Declaration for Western Canal Water District 2015 Water Transfer Program*. (p. 21)

6. 2015-2024. The Bureau and SLDMWA approved the FEIS/EIR for the 10-Year Water Transfer Program (aka Long-Term Water Transfers) with the ability to transfer up to 600,000 af per year. This plan is mentioned in the DEIR cumulative project’s list, however the FEIS/EIR was vacated in 2018, which is not clarified.
7. 2016-2020. The Bureau’s *Accelerated Water Transfer and Exchange Program for Sacramento Valley Central Valley Project Contractors – Contract Years 2016-2020* may transfer up to 150,000 acre-feet among Central Valley Project contractors for “[i]rrigation, incidental domestic use, M&I use, groundwater recharge, and/or maintenance of habitat and habitat conditions for fish and wildlife resources.”
8. 2018-2024. The Western Canal Water District and Richvale Irrigation District Water approved a project that may transfer up to 60,000 af per year to south of the Delta.
9. 2018-2023. 5-year Warren Act Contracts for CVP water service contractors within the Sacramento Canals Unit to convey groundwater in Federal facilities.
10. 2018-2024. The Bureau and SLDMWA circulated a SDEIS/RDEIR for a 6-Year Water Transfer Program (aka Long-Term Water Transfers) that plans to transfer up to 600,000 af per year.

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(Cont.)

C. Yuba Accord

The Yuba River is the major tributary to the Feather River. However, the role of the Yuba Accord is not discussed in any way. Moreover, the DEIR declines to discuss or analyze it. “Values do not include deliveries associated with Central Valley Project (CVP) Cross-Valley Canal contracts, CVP Joint Point of Diversion (JPOD) exchanges, and water transfers under the Lower Yuba River Accord (Component 1).” (p. 4-18) The relationship between the federal and state Agencies seeking or facilitating transfer water is illuminated in a 2013 Environmental Assessment. “The Lower Yuba River Accord (Yuba Accord) provides supplemental dry year water supplies to state and Federal water contractors under a Water Purchase Agreement between the Yuba County Water Agency and the California Department of Water Resources (DWR). Subsequent to the execution of the Yuba Accord Water Purchase Agreement, DWR and the San Luis & Delta- Mendota Water Authority (Authority) entered into an agreement for the supply and conveyance of Yuba Accord water, to benefit nine of the Authority’s member districts (Member Districts) that are SOD [south of Delta] CVP water service contractors.”³⁹

1-41

In a Fact Sheet produced by the Bureau, it provides some numerical context and more of DWR’s involvement by stating, “Under the Lower Yuba River Accord, up to 70,000 acre-feet can be purchased by SLDMWA members annually from DWR. This water must be conveyed through the federal and/or state pumping plants in coordination with Reclamation and DWR. Because of conveyance losses, the amount of Yuba Accord water delivered to SLDMWA members is reduced by approximately 25 percent to approximately 52,500 acre-feet. Although Reclamation is not a signatory to the Yuba Accord, water conveyed to CVP contractors is treated as if it were Project water.”⁴⁰ However, the Yuba County Water Agency (“YCWA”) may transfer up to 200,000 under Corrected Order WR 2008-0014 for Long-Term

³⁹ Bureau of Reclamation, 2013. Storage, Conveyance, or Exchange of Yuba Accord Water in Federal Facilities for South of Delta Central Valley Project Contractors.

⁴⁰ Bureau of Reclamation, 2013. Central Valley Project (CVP) Water Transfer Program Fact Sheet.

Transfer and, “In any year, up to 120,000 af of the potential 200,000 af of transfer total may consist of groundwater substitution. (YCWA-1, Appendix B, p. B-97.)”⁴¹

Potential cumulative impacts from the Project and the YCWA Long-Term Transfer Program from 2008 - 2025 are not disclosed or analyzed in the DEIR. As mentioned above, the 2015-2024 Water Transfer Program could have transferred up to 600,000 af per year through the same period that the YCWA Long-Term Transfers were potentially sending 200,000 af into and south of the Delta. How these two projects operate simultaneously could have a very significant impact on the environment and economy of the Feather River and Yuba River’s watersheds as well as the Delta, but it is not any part of the Project’s DEIR. The involvement of Browns Valley Irrigation District and Cordua Irrigation District in both long-term water transfer programs should also be considered. If the Project is not withdrawn, the Yuba Accord and other Yuba River water transfers’ cumulative impacts must be analyzed and presented to the public in a revised draft DEIR.

Also not available in the DEIR are any issues associated with the Yuba River transfers that have usually been touted as a model of success. The Yuba County Water Agency (“YCWA”) transfers have encountered troubling trends for over a decade that, according to the draft Environmental Water Account’s EIS/EIR, were mitigated by deepening domestic wells (2003 p. 6-81). While digging deeper wells is at least a response to an impact, it hardly serves as a proactive measure to avoid impacts. Additional information finds that it may take 3-4 years to recover from groundwater substitution in the south sub-basin⁴² although YCWA’s own analysis fails to determine how much river water is sacrificed to achieve the multi-year recharge rate. None of this is found in the DEIR. What was found in the 2015-2024 Long Term Water Transfer Program’s environmental review is that even the inadequate SACFEM2013 modeling revealed that it could take more than six years in the Cordua ID area to recover from multi-year transfer events, although recovery was not defined (pp, 3.3-69 to 3.3-70). This is a very significant impact that is not addressed cumulatively in the DEIR.

1. The DWR Dry Year Purchase Agreement for Yuba County Water Agency water transfers from 2015-2025 to SLDMWA.⁴³
2. Installation of numerous production wells by selling water districts, many with the use of public funds such as Butte Water District,⁴⁴ GCID, Anderson Cottonwood Irrigation District,⁴⁵ RD108, and Yuba County Water Authority,⁴⁶ among others.

⁴¹ State Water Resources Control Board, 2008. ORDER WR 2008 - 0025

⁴² 2012. *The Yuba Accord, GW Substitutions and the Yuba Basin*. Presentation to the Accord Technical Committee. (pp. 21, 22).

⁴³ SLDMWA Resolution # 2014 386

http://www.sldmwa.org/OHTDocs/pdf_documents/Meetings/Board/Prepacket/2014_1106_Board_PrePacket.pdf

⁴⁴ Prop 13. Ground water storage program: 2003-2004 Develop two production wells and a monitoring program to track changes in ground.

⁴⁵ “The ACID Groundwater Production Element Project includes the installation of two groundwater wells to supplement existing district surface water and groundwater supplies.” http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=8081

⁴⁶ Prop 13. Ground water storage program 2000-2001: Install eight wells in the Yuba-South Basin to improve water supply reliability for in-basin needs and provide greater flexibility in the operation of the surface water management facilities. \$1,500,00;

1-41
(Cont.)

1-42

*AquAlliance et al Comments on the DEIR for SWP Operations
January 6, 2020*

In closing, all the signatories request notification of any future meetings, documents, notices, or any other communication regarding the Project. Thank you for the opportunity to comment.

Sincerely,



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II.6.1 LETTER O-AQUALLIANCE-1 – AQUALLIANCE, BARBARA VLANIS, EXECUTIVE; CALIFORNIA SPORTFISHING PROTECTION ALLIANCE, BILL JENNINGS, CHARIMAN; CALIFORNIA WATER IMPACT NETWORK, CAROLEE KREIGER, PRESIDENT (AQUALLIANCE)—JANUARY 6, 2020

II.6.1.1 RESPONSE TO COMMENT O-AQUALLIANCE-1-1

The DEIR consistently describes the Proposed Project to be the continuation of long-term operations of the SWP, consistent with applicable laws, contractual obligations, and agreements; and describes in multiple places throughout the DEIR that SWP operations would be separate from, but coordinated with, Reclamation’s operation of the CVP. However, two typographical errors were made in the DEIR that are inconsistent with the intended project description. These errors have been corrected as part of the FEIR, as shown in FEIR Part III, Chapter 1, “Summary,” and Chapter 2.1, “Purpose of the DEIR.” Further discussion of how SWP and CVP operations would be coordinated is provided in Master Response 22, “Relationship to CVP Operations.” Further discussion regarding the adequacy of the project description is provided in Response to Comment O-AquAlliance-1-2.

The modeling conducted for the Proposed Project in support of the analysis contained in the DEIR is appropriate and accurate; and the DEIR as a whole contains an appropriate disclosure of the physical impacts of the Proposed Project on the environment in accordance with the requirements of CEQA (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (CCR Title 14, Section 15000 et seq.). Further discussion of the approach to analysis and modeling for the DEIR is provided in Master Response 20, “Best Available Science.” Additional discussion related to modeling is provided in Response to Comments O-AquAlliance-1-16 and O-AquAlliance-1-17.

Further, as described in FEIR Part I, “Introduction,” after public release of the DEIR, DWR, in coordination with CDFW, made refinements to Alternative 2b to better reflect the project described in the ITP application. DWR has selected the Refined Alternative 2b, as described in FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP,” as its preferred alternative in the FEIR. The complete analysis for Refined Alternative 2b, as provided in this FEIR, has been supplemented with additional modeling and analysis, which support the DEIR impact conclusions for the Alternative. None of the impact conclusions in the DEIR were changed as a result of the technical analyses of hydrology, water quality, or biological resources conducted for the FEIR. Therefore, the results of the supplemental technical studies are not considered significant new information requiring recirculation under Section 15088.5 of the CEQA Guidelines. Please see Master Response 3, “The CEQA Process,” for more discussion.

For more detailed responses to each of the issues raised by AquAlliance, please see Responses to Comments O-AquAlliance-1-2 through 1-42.

II.6.1.2 RESPONSE TO COMMENT O-AQUALLIANCE-1-2

With the exception of the typographical errors discussed in Response to Comment O-AquAlliance-1-1, the DEIR consistently describes the Proposed Project to be the long-term operation of the SWP,

consistent with applicable laws, contractual obligations, and agreements. For example, DEIR Chapter 3.1.1, “Project Purpose and Objectives,” states, “DWR’s project objectives are to store, divert, and convey water in accordance with DWR’s existing water rights to deliver water pursuant to water contracts and agreements up to full contract quantities...” And, furthermore, that DWR “seeks to optimize water supply and improve operational flexibility while protecting fish and wildlife based on the best available scientific information.” As discussed in further detail in Master Response 2, “Baseline,” and as explained in the DEIR, DWR operates the SWP in coordination with the CVP, under the Coordinated Operation Agreement (COA) between the federal government and the State of California. However, the DEIR analyzed DWR’s long-term operation of the SWP only. DWR does not control operations for the CVP. Please see Master Response 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations.”

As discussed in DEIR Chapter 3.3, “Description of the Proposed Project,” the DEIR evaluates multiple elements that characterize future operations of SWP facilities, modify ongoing programs being implemented as part of SWP operations, improve specific activities that would enhance protection of special-status fish species, or support ongoing studies and research on these special-status species to improve the basis of knowledge and management of these species. Implementation of these elements is intended to continue operation of the SWP and deliver up to the full contracted water amounts while minimizing and fully mitigating the take of listed species consistent with CESA requirements. Each of these elements is summarized in Table 3.3, “Proposed Project Elements,” and described in more detail within the subsections of DEIR Chapter 3.3.

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. The DEIR includes multiple alternatives, including the Proposed Project, that would have different consequences on SWP exports. The inclusion of the various alternatives confirms that DWR did not predetermine whether long-term operations of the SWP would, or would not, increase exports.

Finally, the comment alleges that the DEIR “fails to accurately model the measures that are proposed for project.” The meaning of this comment is unclear. To the extent that the comment is referencing the hydrologic and hydraulic modeling performed to assist DWR in determining the potential physical environmental effects of implementing the Proposed Project, please see Responses to Comments O-AquAlliance-1-16 and 1-17. Further, since public release of the DEIR, additional modeling and analysis were completed and are provided in this FEIR (see Part III, “Revisions to the DEIR”) for Refined Alternative 2b, which is the preferred alternative in the FEIR. Under Refined Alternative 2b the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. Additionally, Refined Alternative 2b includes a collaborative real-time risk assessment approach to Old Middle River (OMR) management and commits DWR to implementing its proportional share of OMR restrictions when such restrictions are recommended by the Water Operations Management Team (WOMT) or required by CDFW. The additional modeling and analysis provided in the FEIR support the impact conclusions in the DEIR.

II.6.1.3 RESPONSE TO COMMENT O-AQUALLIANCE-1-3

Specific concerns related to the baseline raised by AquAlliance are contained in Comments O-AquAlliance-1-31, 1-32, 1-33; please see Responses to Comments O-AquAlliance-1-31, 1-32, 1-33. With regards to the general comment that impacts to fish should be evaluated using an environmental baseline that begins prior to the start of the SWP, please see Master Response 2, “Baseline,” for a detailed discussion related to the environmental baseline.

II.6.1.4 RESPONSE TO COMMENT O-AQUALLIANCE-1-4

DWR acknowledges that Delta Smelt, Longfin Smelt, Chinook Salmon, and Southern Resident Killer Whale populations are reduced from historical numbers, and such historic decline is described in relevant subsections of DEIR Section 4.4.1, “Environmental Setting,” as well as DEIR Chapter 4.6.1.5, “Aquatic Biological Resources.” Further discussion regarding the existing degraded condition of the Delta is addressed in Master Response 4, “Legal Standards.” Further discussion of the environmental baseline used for the DEIR is provided in Master Response 2, “Baseline.” Please also see Response to Comment O-AquAlliance-1-26.

State CEQA Guidelines Section 15064 explains that, “[t]he mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the Proposed Project’s incremental impacts are cumulatively considerable.” Cumulative impacts of the Proposed Project on special-status species are analyzed in DEIR Chapter 4.6.1.5, “Aquatic Biological Resources,” which concluded that the contribution of the Proposed Project to the cumulative impact on aquatic resources would not be cumulatively considerable because the proposed SWP operations are subject to the same regulatory framework promulgated by the federal and state resource agencies, and include environmental commitments, conservation, or protective measures specifically intended to offset, reduce, or otherwise limit potential impacts on aquatic species.

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not guarantee that water exports will be increased. The DEIR includes multiple alternatives, including the Proposed Project, that would have different consequences on SWP exports. The inclusion of the various alternatives confirms that DWR did not predetermine whether long-term operations of the SWP would, or would not, increase exports. Please note that the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions.

Additionally, DWR staff has worked closely with CDFW staff since the issuance of the DEIR to formulate ITP terms and conditions to allow for the issuance of an ITP meeting the standards of CESA. The result of the consultation between the two agencies resulted in Refined Alternative 2b. Refined Alternative 2b would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMET or CDFW; (3) include a

behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further improve environmental conditions beyond those identified in the DEIR. (See FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP.”)

II.6.1.5 RESPONSE TO COMMENT O-AQUALLIANCE-1-5

The comment quotes the objectives of the Proposed Project as stated in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” and points out that these objectives differ from those contained within Reclamation’s EIS for the long-term operations of the CVP. As explained within DEIR Chapter 3.3, “Description of the Proposed Project,” the Proposed Project is DWR’s long-term operations of the SWP and does not include Reclamation’s operation of CVP facilities. The objectives of DWR’s EIR and Reclamation’s EIS therefore reflect the purpose and intent of each respective agency for their respective operations, and are not—nor need they be—identical.

The comment asserts that the DEIR fails to note that it intends to coordinate with the CVP, yet the phrase “DWR, in coordination with Reclamation,” is used no fewer than 37 times within DEIR Chapter 3, “Proposed Project.” Further explanation of the relationship between the Proposed Project and CVP operations is provided in DEIR Appendix B, “2018 Coordinated Operations Agreement Addendum.” As explained in DEIR Appendix G, “Geographic Scope of Project’s Influence on Flow,” even though the SWP and CVP coordinate operations, DWR and Reclamation independently decide how to operate the individual projects to best meet applicable requirements. The COA does not define what actions DWR or Reclamation will take in any given set of circumstances and DWR does not control CVP operations. Please see Master Response 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations,” for an additional detailed discussion.

DEIR Chapter 4.6.2.1, “Direct Impacts of the Proposed Project,” clearly describes the potential increase of SWP water deliveries that would result with implementation of the Proposed Project. The DEIR states, “... implementation of the Proposed Project scenario would potentially increase annual SWP deliveries by 219 TAF (6%) compared to the Existing Conditions scenario. Relative delivery increases would be greatest in Above-Normal, Below-Normal, and Dry Years. In Dry and Critical Years, proposed long-term average annual SWP deliveries would increase by 193 TAF (8%), compared to the Existing Conditions scenario.”

DWR staff has worked closely with CDFW staff since the issuance of the DEIR to formulate ITP terms and conditions that CDFW finds to be protective of listed aquatic species to allow for the issuance of an ITP meeting the standards of CESA. The result of the consultation between the two agencies resulted in Refined Alternative 2b. Refined Alternative 2b would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to

minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further improve environmental conditions beyond those identified in the DEIR. See FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP.”

II.6.1.6 RESPONSE TO COMMENT O-AQUALLIANCE-1-6

DEIR Chapter 3.3, “Description of the Proposed Project,” discusses increased deliveries are a result of regulatory changes. As noted in Response to Comment O-AquAlliance-1-2, the Proposed Project consists of DWR’s long-term operation of the SWP only. Therefore, the source of increased SWP exports are explicitly stated in the DEIR. As discussed in Comment O-AquAlliance-1-24, the DWR does not propose to increase deliveries to two MAF.

II.6.1.7 RESPONSE TO COMMENT O-AQUALLIANCE-1-7

Total claims to consumptive water availability are provided in DEIR Appendix H, “CalSim II and DSM2 Model Descriptions and Assumptions.”

As noted in Response to Comment O-AquAlliance-1-9, DWR proposes to continue its long-term operation of the SWP in manner that will allow DWR to continue to store, divert, and convey water, in accordance with its existing water rights, to deliver water pursuant to water contracts and agreements up to full contract quantities. The SWP operates pursuant to water rights permits and licenses issued by the State Water Resources Control Board.

II.6.1.8 RESPONSE TO COMMENT O-AQUALLIANCE-1-8

As discussed in Comment O-AquAlliance-1-24, the DWR does not propose to increase deliveries to 2 MAF. Estimated increase in total SWP deliveries under the Proposed Project would be 219 TAF. As discussed in Response to Comment AquAlliance-1-6, increases to exports are a result of regulatory changes. Furthermore, DEIR Chapter 4.4, “Aquatic Biological Resources,” concludes that the Proposed Project operations would not impact aquatic biological resources as compared to Existing Conditions.

CalSim II is used for comparative purposes. It is inappropriate to be used as a predictive tool. Therefore, modeled results must be compared against another set of modeled results. Based on findings in DEIR Appendix H Attachment 1-7, “Model Limitations,” it is concluded that a 5% difference in modeled results indicates similar conditions. Please see Response to Comment O-AquaAlliance-1-16 for further discussion of the CalSim II model, which addresses the conclusions and accuracy of the CalSim II model and why no field measurements are required.

Please note that the FEIR identifies Refined Alternative 2b as the preferred alternative. See Response to Comment AquAlliance-1-5 for further information.

II.6.1.9 RESPONSE TO COMMENT O-AQUALLIANCE-1-9

As explained within DEIR Chapter 3.3, “Description of the Proposed Project,” the Proposed Project is DWR’s long-term operations of the SWP and does not include Reclamation’s operation of CVP facilities. DWR proposes to continue the long-term operation of the SWP in a manner that will allow DWR to continue to store, divert, and convey water, in accordance with its existing water rights, to deliver water pursuant to water contracts and agreements up to full contract quantities (see DEIR Chapter 3.1.1, “Project Purpose and Objectives”). The SWP operates pursuant to water rights permits issued by the State Water Resources Control Board.

Long-term operations of the SWP would not reduce opportunities to divert water using existing water rights of more senior water rights holders. DEIR Appendix A, “Initial Study of the Long-Term Operations of the State Water Project,” addresses hydrologic conditions of the Sacramento River and the Feather River upstream of their confluence north of the Delta. DEIR Appendix A Section 3.10, “Hydrology and Water Quality” concluded that flows in these rivers would not be affected by the proposed changes in SWP operations. This conclusion is further supported by the discussion presented in DEIR Chapter 4.2, “Hydrology.” As shown in DEIR Figure 4.2-7, “Sacramento River Freeport, Comparison of Long-Term SWP-CVP Operations,” the Proposed Project would generate only minimal change to surface hydrology of the Sacramento River upstream of the Delta. Because no change to upstream flow conditions would occur, no claims or water rights losses warranting compensation are expected. Figures 1-1 through 1-9 of DEIR Appendix C Attachment 2-4, “Water Supply Results (CalSim II),” illustrate changes to CVP North of Delta Agricultural Water Users deliveries and SWP South of Delta Deliveries.

DWR has selected the Refined Alternative 2b, as described in FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP,” as its preferred alternative in the FEIR. There would be no change to the availability of water upstream of the Feather and Sacramento river confluence (see Master Response 1, “Scope of Analysis”). No adverse effect to the Settlement Contractors is anticipated.

II.6.1.10 RESPONSE TO COMMENT O-AQUALLIANCE-1-10

Please see Response to Comment O-AquAlliance-1-9.

II.6.1.11 RESPONSE TO COMMENT O-AQUALLIANCE-1-11

The comment asks a specific question about the treatment of Feather River contractors and Exchange Contractors within Reclamation’s EIS for long-term operations of the CVP and is therefore not directly applicable to DWR’s Proposed Project or the DEIR. Nevertheless, information related to potential impacts of DWR’s long term operation of the SWP on these contractors is provided below. It should be noted that DWR intends to continue to operate the SWP consistent with applicable laws, contractual obligations, and agreements.

As discussed in Response to Comment O-AquAlliance-1-9, DEIR Appendix A, “Initial Study of the Long-Term Operation of the State Water Project,” addresses hydrologic conditions of the Sacramento River and the Feather River upstream of their confluence north of the Delta and concluded that flows in

these rivers would not be affected by the proposed changes in SWP operations. No adverse effect to CVP North of Delta agricultural water users or SWP South of Delta water users is anticipated.

As shown in Figure 4.2-7 of DEIR Chapter 4.2, "Hydrology," CalSim II model results indicate that over the 82-year simulation period, Sacramento River inflow to the Delta as measured at Freeport, under the Proposed Project would decrease by 1,968 cubic feet per second (cfs) (11%) and 1,687 cfs (11%) in September and November, respectively, as compared to the Existing Conditions scenario and would remain similar in other months. These computer results indicate that no substantive change to upstream flow conditions would occur with implementation of long-term operations of the SWP.

Changes to surface hydrologic conditions resulting from implementation of long-term operations of the SWP would be limited to Delta outflow and specific waterways associated with SWP facilities, such as Old and Middle Rivers. As shown in Figure 4.2-8 of DEIR Chapter 4.2, Delta outflow would be reduced in April and May because export patterns would change with implementation of the Proposed Project. In Wet, Above-Normal, Below-Normal, and Dry Years Delta outflow decreases by up to 17% in April and May. In Critical Years, Delta outflow under the Proposed Project scenario would remain similar to that under the Existing Conditions scenario. Please note that the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions.

As further discussed in DEIR Chapter 4.2.2.1, "Comparison of Sacramento River Flows into Delta, Delta Outflow, and OMR Flows," in years following Wet Years, Delta outflow decreases in September and November due to the proposed Delta Smelt Summer-Fall Habitat Action. Similarly, in years following Above-Normal Years, Delta outflow increases in September and decreases in November. Delta outflow in fall months remains similar in all other water year types. Aside from decreases in April and May of Wet, Above-Normal, Below-Normal and Dry Years, Delta outflow under the Proposed Project scenario in other months would remain similar to the Existing Conditions scenario in all water year types.

II.6.1.12 RESPONSE TO COMMENT O-AQUALLIANCE-1-12

The Proposed Project would not result in impacts to upstream users including the CVP Settlement Contractors. Modeling incorporated changes associated with the federal Biological Opinions that are not a part of this project. Any changes to upstream conditions would be attributable to actions included in the federal project and not actions proposed in the SWP long-term operations. The magnitude for potential changes observed in the model results are within the variability of the model and are not interpreted as changes that are likely to occur. As explained in Master Response 1, "Scope of Analysis," the geographic extent of the project is limited to the Sacramento River below the confluence with the Feather River.

II.6.1.13 RESPONSE TO COMMENT O-AQUALLIANCE-1-13

Please see Response to Comment O-AquAlliance-1-9.

II.6.1.14 RESPONSE TO COMMENT O-AQUALLIANCE-1-14

The DEIR appropriately concludes that long-term operations of the SWP would not have a significant impact on hydrologic resources. In addition, the DEIR does not obfuscate changes to senior water users. As addressed in DEIR Appendix A, Section 3.10, "Hydrology and Water Quality," the proposed long-term operation of the SWP would only modify surface water hydrology to a limited extent that would remain within the range of historical operations. This limited change to surface water hydrology would not result in decreasing groundwater supplies, interfere with groundwater recharge, or impede sustainable groundwater management in the SWP project area. This conclusion is based on the analysis presented in DEIR Appendix A, "Initial Study of the Long-Term Operations of the State Water Project," and is further supported by the discussion presented in DEIR Chapter 4.2, "Hydrology." As shown in DEIR Figure 4.2-7, "Sacramento River Freeport, Comparison of Long-Term SWP-CVP Operations," the Proposed Project would generate only minimal change to surface hydrology of the Sacramento River upstream of the Delta.

Table 1-1 of DEIR Appendix C, Attachment 2-4, "Water Supply Results (CalSim II)," presents the CALSIM II water model results itemized by region and user type. This table does show a decrease in water deliveries to CVP Settlement contractors on the order of 10 TAF or 0.6% of their existing water deliveries. This value is considered to be an artifact of the CALSIM II calculation and not does not represent an actual decrease in water deliveries. As noted in DEIR Chapter 3.1.1, "Project Purpose and Objectives," DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. These limits include compliance with existing water rights of other senior water rights holders.

DWR has selected the Refined Alternative 2b, as described in FEIR Part III, Chapter 5.3, "Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP," as its preferred alternative in the FEIR. Under Refined Alternative 2b the total amount of SWP water exported from the Delta is generally expected to remain the same as under Existing Conditions.

II.6.1.15 RESPONSE TO COMMENT O-AQUALLIANCE-1-15

DEIR Chapter 3, Table 3-5, "Proposed Annual North-South Water Transfer Volume," describes the maximum amounts of water that would be transferred during an extended transfer window. DEIR Chapter 3.3.15, "Water Transfers," also states that the quantity and timing of Keswick releases would be similar to those that would occur absent the transfer, so effects on salmonids spawning and rearing in the upper Sacramento River (e.g., Winter-run Chinook Salmon) would be expected to be similar under the Proposed Project and Existing Conditions. As noted in DEIR Appendix G, "Geographic Scope of Project's Influence on Flow," operations of the Oroville Complex and resulting flows in the Feather River are not included in the EIR because Oroville operations are governed by separate legal authorizations, including a Federal Energy Regulatory Commission (FERC) license and other associated regulatory requirements; no changes to operations of the Oroville Complex are proposed as part of the Proposed Project, and so the Feather River is not part of the project area. Please also see Master Response 1, "Scope of Analysis," and Master Response 2, "Baseline."

DEIR Chapter 4.6.1, “Cumulative Effects,” also acknowledges other projects including long-term and short-term water transfers that would be subject to their own permitting analyses.

II.6.1.16 RESPONSE TO COMMENT O-AQUALLIANCE-1-16

As noted in DEIR Appendix H, “CalSim II and DSM2 Model Descriptions and Assumptions,” CalSim II is run for an 82-year historical hydrological period, at a project level of hydrology and demands; and under an assumed framework of regulations. Therefore, the 82-year simulation does not provide information about historical conditions. It provides information about variability of conditions that would occur at the assumed level of hydrology and demand with the assumed operations, under the same historical hydrologic sequence. Modeling presented in the DEIR is not representative of the historical operations from 1921 through 2003. Furthermore, the CalSim II model is not a predictive tool. Results may only be utilized for comparative analysis. In summary, modeling results consider recent conditions and activities. Further discussion regarding CEQA requirements for evaluation of impacts is provided in Master Response 20, “Best Available Science.”

The “examples of CalSim II weaknesses from Close et al” noted in the comment are taken from a strategic review of the usefulness of CalSim II for California water planning in general, not in relation to the specific use of CalSim to inform the EIR analysis of the long-term operations of the SWP. While CalSim II has some limitations, it represents the best available science at the time the EIR was prepared and the limitations of the model are disclosed within DEIR Appendix H, Attachment 1-7, “Model Limitations.” The modeling conducted for the EIR is credible because it is based on reasonable assumptions and appropriate, widely accepted modeling tools.

Specific responses to the “weaknesses” listed in the comment are provided below:

- As discussed in DEIR Chapter 3.1.2, “Project Location,” the project area includes the SWP Service Areas and existing SWP storage and export facilities located within the Delta and vicinity. Therefore, although CalSim II does not need to provide coverage of non CVP or SWP water or California water system south of the Delta.
- As noted previously, CalSim II assesses operations and water supply of a given set of regulations over a hydrologic period. The purpose of the model is two compare two sets of regulations.
- Although CalSim II groundwater modeling is limited, it does not impact the surface water related decisions in the model. Its indication that SWP deliveries would increase indicates less reliance on groundwater supplies. Therefore, the DEIR’s conclusion regarding groundwater does not rely on the ability of CalSim II to model groundwater. Similarly, the lack of an upper limit to groundwater pumping does not impact the DEIR conclusions.
- CalSim II makes operating decisions based on its current month. This assumption reflects real-time operations.
- CalSim II is not a predictive tool. Its results cannot be calibrated or validated with historical data. It is designed as a comparative analysis tool. More details regarding CalSim II are provided in DEIR Appendix H, “CalSim II and DSM2 Model Descriptions and Assumptions.”
- CalSim II is the best available science for the geographic scope required of this project.

- CalSim II is documented in DEIR Appendix H, and the references provided therein include further documentation.
- DWR organizes a CalSim II modeling group that is publicly available through GitHub.
- The CalSim II model is designed to indicate changes to operations and water supply for a given regulatory criteria. Real-time decision making and gaming of stakeholders are outside the scope of regulations. CalSim should not assume policy decisions.
- Given the complexity of the CalSim II model, a graphical user interface would be incoherent, adding difficulty to using the model.
- The hydrologic time-period is utilized to provide an understanding of regulatory operations over a long-term hydrologic sequence.

In sum, CalSim II is the best available science for assessing potential impacts to beneficial uses in the DEIR project area. Limitations to the model are described in Appendix H Attachment 1-7, “Model Limitations.”

II.6.1.17 RESPONSE TO COMMENT O-AQUALLIANCE-1-17

CalSim II modeling assumptions and data inputs are thoroughly reviewed by the scientific community. The CalSim II models, assumptions, and input datasets for this DEIR are publicly available. The CALSIM II assumptions are provided in detail in Appendix H, Attachment 1-1, “Model Assumptions,” as well as Appendix H, Attachment 1-7, “Model Limitations.” Review documents published on the DWR website (CDFW 2020b) do not indicate significant issues with provenance nor assumptions development.

The DEIR indicates whether findings are based on CalSim II outputs or post-processed outputs. For example, the water quality and aquatic biological resources chapters (DEIR Chapters 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources,” respectively) indicate whether presented data are directly from CalSim II or presented with a post-processing model (e.g. DSM2).

Based on findings in Appendix H Attachment 1-7, it is concluded that a 5% difference in modeled results indicates similar conditions.

CalSim II is the best available science for assessing impacts to beneficial uses. Please see Master Response 20, “Best Available Science,” for more discussion regarding CEQA requirements for evaluation of impacts.

II.6.1.18 RESPONSE TO COMMENT O-AQUALLIANCE-1-18

The project objectives are to continue the coordinated long-term operation of the SWP for water supply and power generation, consistent with applicable laws, contractual obligations, and agreements, and to increase operational flexibility by focusing on non-operational measures to avoid significant adverse effects, as presented in DEIR Chapter 3.1.1, “Project Purpose and Objectives.” The objectives do not address improvement of non-SWP water supplies or surface water or groundwater conditions that would not be modified by implementation of the Proposed Project as compared to Existing Conditions.

Implementation of the long-term operations of the SWP would result in changes in the Sacramento River downstream of the Feather River confluence. The analysis in the DEIR indicated that changes in the Sacramento River flows at Freeport would be partially caused by implementation of the project. As shown in DEIR Figure 4.2-7, “Sacramento River Freeport, Comparison of Long-Term SWP-CVP Operations,” flows in the Sacramento River at Freeport would be similar between Existing Conditions and Proposed Project except in September and November. During September and November, the total Sacramento River flows would decline by approximately 11% under the Proposed Project as compared to Existing Conditions; and the reductions due to SWP operations under the Proposed Project as compared to the Existing Conditions would range from approximately 3% to 7%. This increment is considered to be minor because changes in model results of approximately 5% with the use of a monthly time-step model (e.g., CalSim II) are considered to be “similar.”

These results are similar to the statement in DEIR Appendix A, Section 3.10.2, “Discussion,” that, “the proposed long-term operation of the SWP would only modify surface water hydrology to a limited extent that would remain within the range of historical operations.”

It is also recognized that groundwater near the Sacramento River is influenced by changes in flows in the Sacramento River. However, because changes in flow of the Sacramento River due to the project would be limited as compared to the Existing Conditions, the following statement in DEIR Appendix A Section 3.10.2 is consistent: “This limited change to surface water hydrology would not result in decreasing groundwater supplies, interfere with groundwater recharge, or impede sustainable groundwater management in the SWP project area. No impact would occur.”

Please see Master Response 18, “Initial Study Conclusions,” for a detailed discussion regarding the adequacy of the Initial Study. Based on the assessment of the Initial Study and the reasoning explained in Master Response 18, groundwater is not analyzed in the EIR. As groundwater is not analyzed, an environmental setting on the resource is not required.

II.6.1.19 RESPONSE TO COMMENT O-AQUALLIANCE-1-19

DEIR Appendix C, “Hydrology Model Results,” does not disclose groundwater conditions. DEIR Appendix A, Section 3.10 “Hydrology and Water Quality,” notes that no impact to groundwater would occur as a result of the Proposed Project. Therefore, groundwater supply is not discussed in the EIR. As groundwater is not discussed in the EIR, a groundwater environmental setting is not required. More details are provided in Response to Comment O-AquAlliance-1-18.

II.6.1.20 RESPONSE TO COMMENT O-AQUALLIANCE-1-20

DEIR Appendix A, Section 3.10 “Hydrology and Water Quality,” notes that no impact to groundwater would occur as a result of the Proposed Project. The Proposed Project does not decrease deliveries to any of the SWP service areas. SWP contractors would not receive less water and therefore need to pump groundwater. Please note that the FEIR identifies Refined Alternative 2b as the preferred alternative. Refined Alternative 2b would result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions. More details are also provided in Response to Comments O-AquAlliance-1-9 and O-AquAlliance-1-18.

Please review Master Response 18, “Initial Study Conclusions,” for more details regarding the adequacy of the Initial Study. Issues raised regarding DEIR model results are addressed in Responses to Comments O-AquaAlliance-1-16 and O-AquaAlliance-1-17, and provided in Master Response 20, “Best Available Science.”

II.6.1.21 RESPONSE TO COMMENT O-AQUALLIANCE-1-21

The Proposed Project would not impact groundwater resources. Details regarding potential groundwater impacts are provided in Responses to Comments O-AquaAlliance-1-9, O-AquaAlliance-1-14, and O-AquaAlliance-1-18. The Proposed Project does not propose to implement a project-specific water transfer that includes the potential source of the transfers or its operational characteristics. The Proposed Project only provides a window in time in which the transfer water can be conveyed through the South Delta pumps. The environmental consequences of future transfers will be evaluated consistent with applicable legal requirements as specific information regarding the proposed transfers becomes available.

II.6.1.22 RESPONSE TO COMMENT O-AQUALLIANCE-1-22

The Proposed Project would not result in conjunctive use of surface water and groundwater. Please see Responses to Comments O-AquaAlliance-1-9, O-AquaAlliance-1-14, and O-AquaAlliance-1-18.

II.6.1.23 RESPONSE TO COMMENT O-AQUALLIANCE-1-23

Development of Groundwater Sustainability Plans is independent of the DEIR. DEIR Table 4.6-1b, “List of Cumulative Projects – Habitat Improvement Projects and Actions,” considers Groundwater Sustainability Plans in the cumulative impact discussion.

II.6.1.24 RESPONSE TO COMMENT O-AQUALLIANCE-1-24

To the extent the comment relates to Reclamation’s DEIS, a response is not necessary. The below response was provided for clarification, however. The CVP may deliver up to 5 MAF of water to its agricultural contractors (settlement, exchange, service, etc.). However, the CVP does not deliver that volume of water in an average year. Therefore, one should apply the percentage increase in deliveries to the long-term average delivery volume (which is much less than 5 MAF). Furthermore, the referenced percentage increase in CVP agricultural service contractor deliveries does not account for settlement, nor exchange contractors. Total increase to agricultural service contractor deliveries would be approximately 246 TAF, not 2 MAF.

Additionally, the DEIR does not describe a decrease in deliveries to Sacramento Valley senior diverters. Under the Proposed Project, senior diverters in the Sacramento Valley will receive similar volumes of deliveries as compared to Existing Conditions. Additionally, DWR staff has worked closely with CDFW staff since the issuance of the DEIR to allow for the issuance of an ITP meeting the standards of CESA. The FEIR identifies Refined Alternative 2b as the preferred alternative. Refined Alternative 2b would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral

modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further improve environmental conditions beyond those identified in the DEIR. (See FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP.”)

II.6.1.25 RESPONSE TO COMMENT O-AQUALLIANCE-1-25

The requirements for CEQA analyses related to cultural, archaeological, historic, and Tribal Cultural Resources are set forth in PRC Section 21074, Section 21083.2, Section 21084.1 through Section 21084.3, and the State CEQA Guidelines Section 15064.5. DEIR Appendix A Section 3.5, “Cultural Resources,” contains an analysis of potential project impacts on cultural, archaeological, and historic resources. As stated therein (see DEIR Appendix A, Section 3.5.2, “Discussion”), long-term operations of the SWP would not increase water flow nor raise water levels beyond Existing Conditions, would not include installation of additional barriers beyond those that already are in place, nor involve any construction or land-disturbing activities. Therefore, no impacts would occur.

DWR sent letters by certified mail, return receipt, on May 3, 2019, to 16 California Native American Tribes that had requested formal notification of proposed projects from DWR under Assembly Bill (AB) 52, which requires that a CEQA lead agency must begin consultation once it determines that the project application is complete, before the agency issues a NOP for an EIR (see DEIR Chapter 4.5, “Tribal Cultural Resources”). No tribal cultural resources, as defined in PRC Section 21074, were identified by the Tribes through the tribal consultation conducted by DWR. Therefore, the DEIR found that no impacts to tribal cultural resources would occur (see DEIR pages 4-291 and 4-292). Thus, no additional analyses related to cultural, archaeological, historic or tribal cultural resources are necessary.

Cumulative impacts from raising Shasta Dam (i.e., Shasta Lake Water Resources Investigation project) and the Sites Reservoir project were included in the DEIR’s cumulative impact analysis (see Table 4.6-1 in DEIR Chapter 4.6 1 “Cumulative Effects”). However, the Initial Study (DEIR Appendix A, Section 3.5) found that long-term operations of the SWP would result in no impacts related to cultural, archaeological, or historic resources. Therefore, the long-term operations of the SWP could not contribute to any cumulative impacts related to these resources and no cumulative analysis is required.

As discussed in the cumulative impact analysis for tribal cultural resources in DEIR Chapter 4.5, DWR consulted with numerous Tribal groups, including Fernandeano Tataviam Band of Mission Indians, the Karuk Tribe, United Auburn Indian Community of the Auburn Rancheria, Wilton Rancheria, and the Yocha Dehe Wintun Nation, to determine if tribal cultural resources would be adversely affected by long-term operations of the SWP. No tribal cultural resources were identified during this consultation process, and therefore the DEIR found that the long-term operation of the SWP’s contribution to potential cumulative impacts on tribal cultural resources would not be cumulatively considerable.

II.6.1.26 RESPONSE TO COMMENT O-AQUALLIANCE-1-26

DEIR Chapter 4.6 1, “Cumulative Impacts,” presents a discussion of changes to surface water hydrology associated with past and ongoing water management actions, including the SWP and CVP. In addition, the DEIR identifies numerous past, present, and other foreseeable future projects that may contribute to cumulative effects on environmental resources. Specifically, DEIR Chapter 4.6.1.5, “Aquatic Biological Resources,” characterizes the condition of the surface waters in the Delta and northern California where it states,

“The impacts of past projects, including past operation of the SWP, have been included in the description of the baseline environmental conditions provided in Section 3.4. The cumulative impact of these past projects has resulted in a baseline consisting of a trending decline of listed-species population within the Delta and other waterways utilized by anadromous fish populations in northern California. As noted, multiple factors have contributed to this trending decline, and it is difficult to quantify the proportion of the decline attributable to a specific project, action, or event. Existing federal statutes and regulatory requirements on federal actions provide protective measures to avoid jeopardizing those species listed in accordance with the federal ESA. Specifically, Biological Opinions were prepared to allow the SWP and CVP to continue operating without causing jeopardy to listed species or adverse modification to designated critical habitat. In addition, California state requires an incidental take permit for the long-term operation of the SWP facilities in the Delta for the protection of state-listed species. Despite these protections, the cumulative effect of past Delta modifications and other past and present projects have contributed to the continuing decline in Delta fish populations and habitat of protected species. This overall cumulative impact is significant.”

Further discussion relating to the existing degraded conditions of the Delta in relation to special-status species is provided in master Response 4, “Legal Standards,” under the subheading, “Treatment of Historical Conditions.” Further discussion explaining why impacts that have occurred as a result of historic operation of the SWP are not analyzed within the DEIR is provided in Master Response 2, “Baseline.”

II.6.1.27 RESPONSE TO COMMENT O-AQUALLIANCE-1-27

The DEIR addresses the impact of long-term operations of the SWPs. The DEIR is not intended to address other aspects of the SWP which are not involved with the long-term operations of the SWP, including past impacts of constructing or installing SWP facilities. As stated in DEIR Chapter 4.1.2, “Environmental Baseline,” the environmental baseline used to characterize Existing Conditions consists of the physical conditions that existed at the time of the NOP publication which occurred on April 19, 2019. Please also see Master Response 2, “Baseline,” for further discussion.

Impacts of the Proposed Project on groundwater and streamflow are analyzed in DEIR Chapter 4.2, “Hydrology,” and in DEIR Appendix A, Section 3.10, “Hydrology and Water Quality.” Please see Response to Comments O-AquAlliance-1-18 and O-AquAlliance-1-19 and also see Master Response 1,

“Scope of Analysis,” for information regarding the geographic scope of analysis as well as treatment of other activities.

II.6.1.28 RESPONSE TO COMMENT O-AQUALLIANCE-1-28

Table 9-1 of the DEIR Appendix C Attachment 2-2, “Flow Results (CalSim II),” itemizes changes in Delta monthly outflow by water year type. As shown, long-term changes of Delta monthly outflow may range from about +1,224 cfs in March to about -2,749 cfs in April. The smallest changes in Delta monthly outflow would occur during Critical (Dry) Years while the largest changes would occur in Wet Year types. The net annual long-term change in Delta monthly outflow rate equals about 6,647 cfs or about 2.5% of existing Delta monthly outflow rates. This change is considered a minor reduction in Delta outflow rates and is not considered to be sufficient to result in shifting the size and location of the salinity mixing zone, decreased periodic flushing events, affect pollutant concentrations, or facilitate invasions of non-native species in San Francisco Bay. Greater freshwater outflows associated with winter storm events and marine tidal action will continue to be the predominate events that affect salinity mixing, periodic flushing, San Francisco Bay water quality.

Further, after public release of the DEIR, additional modeling and analysis were completed and are provided in this FEIR (see FEIR Part III, “Revisions to the DEIR”) for Refined Alternative 2b, which is the preferred alternative in the FEIR. Refined Alternative 2b would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project.

II.6.1.29 RESPONSE TO COMMENT O-AQUALLIANCE-1-29

The DEIR addresses the impact to long-term operations of the SWP. The DEIR is not intended to address other aspects of the SWP which are not involved with the long-term operations of the SWP, including past impacts of constructing or installing SWP facilities. As stated in DEIR Chapter 4.1.2, “Environmental Baseline,” the environmental baseline used to characterize Existing Conditions consists of the physical conditions that existed at the time of the NOP publication which occurred on April 19, 2019. Please also see Master Response 2, “Baseline,” for further discussion. Impacts of the Proposed Project in relation to sedimentation are addressed within DEIR Appendix A, Section 3.10, “Hydrology and Water Quality,” and discussion of climate change and sea level rise in relation to the Proposed Project is addressed in DEIR Chapter 4.1.3, “Impact of Climate Change,” and DEIR Appendix F, “Climate Change Sensitivity Analysis.” Please also see Master Response 1, “Scope of Analysis.”

II.6.1.30 RESPONSE TO COMMENT O-AQUALLIANCE-1-30

The environmental baseline used to assess impacts of long-term operations of the SWP is the date of the issuance of the NOP on April 19, 2019. This baseline provides the point in time for assessing

environmental effects resulting from implementing the Proposed Project or alternatives. DEIR Chapter 4.6.1, "Cumulative Impacts," does acknowledge the condition of the Delta that is now present as a result of past and ongoing projects. Page 4-311 of the DEIR states,

"... the cumulative impact of past Delta modifications and other past and present projects has contributed to the continuing decline in Delta fish populations and habitat of protected species. This overall cumulative impact is significant."

The issuance of a new ITP by CDFW will establish new and enhanced ongoing programs to protect designated aquatic species.

To the extent that the comment alleges that SWP operations have violated the law, DWR disagrees. DWR has operated the SWP in compliance with all legal requirements. In drought conditions, DWR filed Temporary Urgency Change Petitions with the SWRCB when needed, which is legally permissible and appropriate.

Please note that the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions.

II.6.1.31 RESPONSE TO COMMENT O-AQUALLIANCE-1-31

Please see Response to Comment O-AquAlliance-1-33 for discussion relating to impacts on terrestrial biological resources.

Existing environmental conditions in the Delta are the result of many different factors affecting the hydrology, water quality and aquatic habitats, which is part of the baseline conditions. The DEIR analyzes whether changes to those environmental conditions caused by the Proposed Project or alternatives are considered significant under CEQA. Please see Master Response 2, "Baseline," for additional discussion relating to baseline conditions.

II.6.1.32 RESPONSE TO COMMENT O-AQUALLIANCE-1-32

Both the Legislature, in enacting CEQA, and the Natural Resources Agency, in promulgating the CEQA Guidelines, assumed that projects requiring EIRs would generally cause one or more significant environmental effects, and thereby required that all EIRs discuss in some fashion alternatives that could reduce the severity of such effects. There are instances in which proposed projects for which EIRs are prepared actually do not cause any significant environmental effects. This occurs where a project likely would not qualify for a negative declaration or mitigated negative declaration negative declaration because substantial evidence suggests that significant effects may occur.

EIRs are required in such circumstances (see PRC Section 21080[d]), even though, once a lead agency opts to undertake an EIR, a lead agency may ultimately find itself persuaded by substantial evidence that significant effects will not occur. That is the situation for this project. Thus, under the circumstances, DWR prudently chose to prepare an EIR, despite its sincere finding, supported by substantial evidence, that neither the Proposed Project nor Refined Alternative 2 would cause any significant effects. (See also Master Response 3, "The CEQA Process," for additional discussion.)

The Oroville spillway incident is not within the scope of this Project. As explained in Master Response 8, “Other State Efforts,” a lead agency need not analyze activities that have independent utility in a single environmental document. Please also see Master Response 1, “Scope of Analysis.”

II.6.1.33 RESPONSE TO COMMENT O-AQUALLIANCE-1-33

Existing environmental conditions in the Delta are the result of many different factors affecting the hydrology, water quality and aquatic habitats, which are part of the baseline conditions. The DEIR analyzes whether changes to those environmental conditions caused by the Proposed Project or alternatives are considered significant under CEQA. Please see Master Response 2, “Baseline,” for additional discussion relating to baseline conditions.

Tables 3.4-4 and 3.4-5, referenced in the comment (contained in DEIR Appendix A Section 3.4.2, “Terrestrial Biological Resources”) list 25 special-status wildlife and seven special-status plant species that were evaluated in the Initial Study. These are species with the potential to occur in areas in the project area that may be directly or indirectly affected by the proposed changes to the SWP because they occur 1) along rivers downstream from SWP facilities, 2) in potential habitat restoration areas in the Yolo Bypass and Suisun Marsh, or 3) in riparian corridors in the Delta. The geographic range for these species considered in the Initial Study includes the Sacramento River from the Feather River confluence downstream to, and including, the Delta and Suisun Marsh.

The comment states that “countless species that have been and will be impacted individually and cumulatively by the SWP are absent even from consideration in the Initial Study”; however, the comment fails to identify which additional species they believe should have been analyzed. Further, because the Proposed Project was found to have no impact to terrestrial biological species (DEIR Appendix A Section 3.4.2.2, “Discussion – Terrestrial Biological Resources”), it could not contribute to any potentially significant cumulative impacts on such species.

Evaluation of potential project impacts on vernal pool landscape flora and fauna was analyzed in DEIR Appendix A, Section 3.4.2.2. As stated therein, proposed long-term operation of the SWP would not involve construction of water facilities, infrastructure, or other projects that would result in adverse effects on wetlands, marshes, vernal pools, or other federally protected wetlands. Therefore, no impact would occur.

Please see Master Response 18, “Initial Study Conclusions,” regarding how resource areas were addressed in the Initial Study.

II.6.1.34 RESPONSE TO COMMENT O-AQUALLIANCE-1-34

DEIR Chapter 5, “Alternatives to the Proposed Project,” considered four alternatives. These alternatives cover the range of actions that are being considered as a part of the CESA ITP process. The DEIR considered a reasonable range of alternatives that would feasibly attain all or most of the project objectives but would avoid or substantially lessen any of the significant impacts of the Proposed Project (State CEQA Guidelines Section 15126.6[a]). An EIR need not consider every conceivable alternative to a project; rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation (State CEQA Guidelines Section

15126.6[a]). CEQA does not require that the EIR study specific alternatives proposed by the public or other agencies. The lead agency must make a good faith effort to identify and study a reasonable range of appropriate alternatives to the proposed project. DEIR Chapter 5 also evaluated a No Project alternative as required by the State CEQA Guidelines Section 15126.6(e)(1).

Master Response 3, “The CEQA Process,” discusses the requirements of CEQA with respect to the development of alternatives and public involvement in the alternative development process.

Furthermore, as stated in Response to Comment O-AquAlliance-1-30, DWR has operated the SWP in compliance with legal requirements. DWR and Reclamation requested the reinitiation of consultation through letters to the USFWS and NMFS on August 2, 2016. Through this DEIR, DWR has considered the impacts of long-term operations of the SWP. Please also see Master Response 10, “Climate Change,” explaining how the impact evaluation addresses climate change.

II.6.1.35 RESPONSE TO COMMENT O-AQUALLIANCE-1-35

Please see Response to Comment O-AquAlliance-1-34.

II.6.1.36 RESPONSE TO COMMENT O-AQUALLIANCE-1-36

Please see Response to Comment O-AquAlliance-1-34.

II.6.1.37 RESPONSE TO COMMENT O-AQUALLIANCE-1-37

Please see Response to Comment O-AquAlliance-1-34. Please also see Master Response 6, “Demand Management/Conservation Measures,” and Master Response 7, “Delta Reform Act.”

II.6.1.38 RESPONSE TO COMMENT O-AQUALLIANCE-1-38

DEIR Chapter 4.6.1, “Cumulative Impacts,” provides a list and a description of identified past, present, and reasonably foreseeable future projects, the impacts of which may combine with impacts from the long-term operation of the SWP to result in cumulative impacts. The comment states that the DEIR fails to consider “many” past, present, and reasonably foreseeable future actions in the Delta watersheds. However, as presented in DEIR Table 4.6-1, “List of Cumulative Projects,” the cumulative analysis identified 68 different known past, present, and reasonably foreseeable future projects. Furthermore, the comment does not provide the details of the “many” projects which AquAlliance claims were not considered; rather, the comment lists only a select few water transfers (discussed in Response to Comment O-AquAlliance-1-40) and the Yuba Accord (discussed in Response to Comment O-AquAlliance-1-41).

A cumulative impact analysis is not required to include every single project in the local, regional, or statewide context; rather, the cumulative analysis is limited to known past, present, and reasonably foreseeable future projects, the impacts of which may combine with impacts from the long-term operation of the SWP to cause cumulative impacts (see State CEQA Guidelines Section 15130[b][B][2], “...factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project, and its type”).

DEIR Chapter 4.6.1 contains a cumulative analysis that is consistent with the requirements of the State CEQA Guidelines Section 15130(a) and Section 15355(a). As stated in DEIR Chapter 4.6.1, Section 15064 of the State CEQA Guidelines explains that, “[t]he mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the long-term operation of the SWP’s incremental impacts are cumulatively considerable.” The analysis presented in DEIR Chapter 4.6.1 is consistent with statutory and regulatory requirements to assess cumulative impacts and includes:

1. A determination of whether the impacts of related past, present, and future plans and projects would cause a cumulatively significant impact; and
2. A determination as to whether implementation of the Proposed Project would have a “cumulatively considerable” contribution to any significant cumulative impact. [See State CEQA Guidelines Section 15130(a), (b), Section 15355(b), Section 15064(h), and Section 15065(a)(3)(c).]

The discussion of cumulative impacts should reflect the severity of the impacts as well as the likelihood of their occurrence. The analysis should be guided by the standards of practicality and reasonableness, and it should focus on the cumulative impact(s) to which the other identified projects contribute, rather than to the attributes of other projects which do not contribute to the cumulative impact (State CEQA Guidelines 15130[b]).

Finally, the comment states that the DEIR fails to comply with the standards contained in the State CEQA Guidelines for cumulative impacts on surface water and groundwater supplies, subsidence, vegetation, and biological resources as related to the hydrology of the Feather River, Sacramento River, and Delta watersheds. The impacts of the long-term operation of the SWP related to surface water and groundwater supplies, subsidence, vegetation, and biological resources are evaluated in DEIR Appendix A, “Initial Study of the Long-Term Operations of the State Water Project,” which addresses hydrologic conditions of the Sacramento River and the Feather River upstream of their confluence north of the Delta. DEIR Appendix A Section 3.10, “Hydrology and Water Quality,” addresses flows of these rivers and concludes that flows in these rivers would not be affected by the proposed changes in SWP operations. The analyses contained in DEIR Appendix A Section 3.4.2, “Terrestrial Biological Resources,” Section 3.7, “Geology and Soils,” and Section 3.19, “Utilities and Service Systems,” determined that the long-term operation of the SWP would have no impacts related to terrestrial biological resources, vegetation, subsidence, and water supplies, respectively. Therefore, the long-term operation of the SWP would also have no cumulative contribution related to these issues, and thus no analysis of cumulative impacts for these topic areas is required. DEIR Chapter 4.6.1.5, “Aquatic Biological Resources,” provides a cumulative impact analysis related to aquatic biological resources.

II.6.1.39 RESPONSE TO COMMENT O-AQUALLIANCE-1-39

As noted in DEIR Appendix H “CalSim II and DSM2 Model Descriptions and Assumptions,” CalSim II is run for an 82-year historical hydrological period, at a project level of hydrology and demands; and under an assumed framework of regulations. Therefore, the 82-year simulation does not provide

information about historical conditions. CalSim II estimates the results of project operations over the range of hydrologic conditions, demand and existing regulatory requirements.

Although the CalSim II model was not developed as a predictive tool, it remains the best available science for evaluating potential future impacts of project operations. CalSim II is best utilized for comparative analysis between different alternatives. Potential changes to future hydrology were incorporated in the Climate Change Sensitivity Analysis provided in Appendix F. Refer also to Master Response 10, Climate Change.”

Potential impacts to special status fish species were evaluated in the DEIR using most recent life history characteristics and population trends.

II.6.1.40 RESPONSE TO COMMENT O-AQUALLIANCE-1-40

The Project does not include individual water transfers, regardless of whether the transfers are past, present, or future. Chapter 4.6.1 identifies and discusses various water transfers in the cumulative impacts analysis. As noted in Response to Comment O-AquAlliance-1-21, at the time future transfers are proposed, the proposer will be required to comply with CEQA and provide this level of information and analyze potential effects on hydrology, groundwater, water quality, and other environmental topics.

II.6.1.41 RESPONSE TO COMMENT O-AQUALLIANCE-1-41

Although Lower Yuba River Accord (LYRA) is not discussed in the main document of the DEIR, it is discussed in DEIR Appendix A, “Initial Study of the Long-Term Operations of the State Water Project,” within Section 3.10.9.1, “Water Transfers.” As also addressed in DEIR Appendix A, Section 3.10 “Hydrology and Water Quality,” the proposed long-term operation of the SWP would only modify surface water hydrology to a limited extent that would remain within the range of historical operations. This limited change to surface water hydrology would not result in decreasing groundwater supplies, interfere with groundwater recharge, or impede sustainable groundwater management in the SWP project area. Furthermore, the modeled representation of the LYRA in the CalSim II models of Existing Conditions and Proposed Project is provided in DEIR Appendix H, “CalSim II and DSM2 Model Descriptions and Assumptions.” Please see Response to Comments O-AquAlliance-1-18 and O-AquAlliance-1-19. Because there are no groundwater impacts of the Proposed Project, inclusion of any groundwater impacts of related projects in the cumulative discussion was unnecessary.

II.6.1.42 RESPONSE TO COMMENT O-AQUALLIANCE-1-42

Although LYRA transfers and other transfers not initiated by DWR are modeled and discussed in the DEIR Appendix (see Response to Comment AquAlliance-1- 41), DWR is not currently proposing any additional water transfers. See also Response to Comment O-AquAlliance-1-21, which addresses the need to evaluate potential environmental impacts of future transfers proposing to use SWP facilities.

As also addressed in DEIR Appendix A, Section 3.10 “Hydrology and Water Quality,” the proposed long-term operation of the SWP would only modify surface water hydrology to a limited extent that would remain within the range of historical operations. This limited change to surface water hydrology would

not result in decreasing groundwater supplies, interfere with groundwater recharge, or impede sustainable groundwater management in the SWP project area. Please also see Response to Comments O-AquAlliance-1-18 and O-AquAlliance-1-19.

II.6.1.43 RESPONSE TO COMMENT O-AQUALLIANCE-1-ATT-1

See Response to Comment O-AquAlliance-1-15. Also, the attachment is not a comment on the DEIR.

II.6.1.44 RESPONSE TO COMMENT O-AQUALLIANCE-1-ATT-2

See Response to Comment O-AquAlliance-1-16 and O-AquAlliance-1-17. Also, the attachment is not a comment on the DEIR.

II.6.1.45 RESPONSE TO COMMENT O-AQUALLIANCE-1-ATT-3

See Response to Comment O-AquAlliance-1-17. Also, the attachment is not a comment on the DEIR.

II.6.1.46 RESPONSE TO COMMENT O-AQUALLIANCE-1-ATT-4

See Response to Comment O-AquAlliance-1-18. Also, the attachment is not a comment on the DEIR.

II.6.1.47 RESPONSE TO COMMENT O-AQUALLIANCE-1-ATT-5

See Response to Comment O-AquAlliance-1-19. Also, the attachment is not a comment on the DEIR.

II.6.1.48 RESPONSE TO COMMENT O-AQUALLIANCE-1-ATT-6

See Response to Comment O-AquAlliance-1-30. Also, the attachment is not a comment on the DEIR.

II.6.1.49 RESPONSE TO COMMENT O-AQUALLIANCE-1-ATT-7

See Response to Comment O-AquAlliance-1-39. Also, the attachment is not a comment on the DEIR.

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CALIFORNIA INDIAN WATER COMMISSION

5 January 2020

You Chen Chao, PhD, PE, CFM
Executive Division
California Department of Water Resources
PO Box 942836
Sacramento, CA, 94236-0001

Subject: Draft EIR Long Term Operations of SWP

Dear Dr. Chao:

These comments are provided in response to the subject document, hereafter document. As an Intertribal self-determination organization pursuant to PL 93-638, these comments are submitted in reverence to the responsibility we uphold to be good stewards of lands and waters. The proposed project, actions and alternatives thereof all fail to meet the needs of the ecology, culture, and meta physical properties of traditional Indigenous homelands and features impacted. Please see Hankins (2018)¹ to better understand specific shortcomings of analysis as pertains to the project. We have previously advised the Department of Water Resources (DWR) to assess ecocultural impacts from their projects and actions by using the Mauriometer (<http://mauriometer.com>), which assesses impacts to the environment, cultural well being, social well being, and economic well being. The use of this tool should be done i n consultation and participation with tribes, traditional cultural practitioners, and tribal organizations (hereafter beneficiaries).

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The document states that DWR has consulted with tribes pursuant to AB 52, and the document provides a narrative of specific tribes that were contacted due to their specific requests for AB 52 consultation with DWR. However, AB 52 is not the sole nexus for consultation with tribes, and other mechanisms for outreach and analysis have not occurred. This is evidenced by the fact that all tribes and intertribal organizations impacted by the project were not consulted despite DWR having knowledge of specific concerns by some tribes and intertribal organizations. Certainly the agency has a list of those entities that have participated in development of the state water plan and through the agency's Native American Liaison. Furthermore, it is apparent that the Sacred Lands File database was not checked in regards to the proposed project. Specifically, portions of the SWP, including some of the key facilities, fall within areas identified as sacred lands, and are recorded with the Native American Heritage Commission. The document has not identified those impacts, and no consultation for such impacts has occurred. Thus, consultation with beneficiaries, including the California Indian Water Commission in the development of the proposed alternatives is clearly lacking.

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Section 4-2 states that the baseline for consideration of impacts of the project is established with the timeline for development of the Notice of Preparation. However, this does not adequately consider the scope of impacts the SWP has had to date, including those impacts occurring prior to the requirements of CEOA or tribal consultation. It is unclear how DWR is fulfilling its tribal trust responsibilities to beneficiaries, interspecies kinship relationships, or impacts thereto. The current operations of the SWP

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1 Hankins, D.L. 2018. Ecocultural Equality in the Miwko? Waali?. *San Francisco Estuary and Watershed Science* 16(3): 1-11

is counterintuitive to the laws of nature and our traditional laws, and will continue to adversely affect trust resources, for which DWR is obligated to uphold pursuant to federal and state laws. While the SWP was developed prior to existence of laws requiring consultation, the Trust responsibilities to tribes has existed, yet there has been no real effort to address direct, indirect, and cumulative impacts to tribal trust resources (e.g., water, fish, wildlife, and other transitory resources) as the intended by law. For instance, prior legal precedence identifies beneficiaries' preeminent rights to surface and ground water (see *Winters v. United States* and *Agua Caliente v. Coachella Valley Water District & Desert Water Agency*). Since time immemorial California Indians have stewarded the lands and waters for our own needs, but also to fulfill the needs of the landscape and species therein. Yet, the analysis fails to address this inclusive of all areas impacted by the SWP. In fact, the document hinges water transfers without addressing how those rights infringe upon tribal water rights. Many adverse impacts of the SWP have occurred over the lifetime of the project, which need to be considered and addressed. Included in these impacts are impacts to tribal water rights. Section 4.2-1 references increases in delivery for certain contractors, yet, fails to address how those deliveries infringe on tribal water rights. Given the current state of biodiversity decline and climate uncertainty, we cannot afford further increases in delivery. Alternatives to deliveries not included in the analysis are opportunities for land retirement, water recycling, and other methods to decrease demands on the limited availability of water.

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(Cont.)

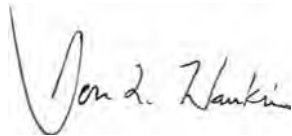
Table 4.4-1 attempts to identify Tribally important species, but clearly misses the mark in identifying culturally significant species impacted by the SWP. The document claims to utilize new science in the development of the document, however, it is clear DWR staff are not reading pertinent documents such as Hankins 2018 which discuss culturally significant species, identify the Delta as a traditional cultural landscape with traditional cultural properties, etc. Had this information been utilized, then the treatment of biological, cultural, and tribal resources within the document would have different assessment outcomes. The short of the matter is that tribal cultural resources and cultural landscapes are being impacted, and the document does not address those impacts.

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Clearly, the document is deficient in its analysis, and we hope DWR staff will consult with our organization to address these deficiencies. However, given the lack of comprehensive analysis and consultation at this time, we support the no project alternative.

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Sincerely,



Don L. Hankins, Ph.D.

President

II.6.2 LETTER O-CALIFORNIA INDIAN WATER COMMISSION-1 – CALIFORNIA INDIAN WATER COMMISSION, DON HANKINS, PH.D, PRESIDENT–JANUARY 5, 2020

II.6.2.1 RESPONSE TO COMMENT O-CIWC-1-1

The “Essay” referred to by the comment—published by D.L. Hankins in *San Francisco Estuary and Watershed Science* (Volume 16(3) pages 1-11 [Hankins 2008])—suggests that a “more holistic, ecocultural approach” that includes tribal consultation should occur for every project in the Delta region. The DEIR for the long-term operations of the SWP was prepared in accordance with the requirements of CEQA (PRC Section 21000 et seq.) and the State CEQA Guidelines (CCR Title 14, Section 15000 et seq.). DEIR Chapter 4.5, “Tribal Cultural Resources,” presents an analysis of long-term operations of the SWP on Traditional Cultural Resources as required by CEQA and the State CEQA Guidelines. Furthermore, DEIR Appendix A, Section 3.5, “Cultural Resources,” contained an analysis of potential project impacts on cultural resources. As stated therein (pages 3-51 and 3-52), Proposed Project actions would not increase water flow nor raise water levels beyond Existing Conditions, would not include installation of additional barriers beyond those that already are in place, nor involve any construction or land-disturbing activities.

As discussed in DEIR Chapter 4.5, DWR sent letters by certified mail, return receipt, on May 3, 2019, to 16 California Native American Tribes that had requested formal notification of proposed projects from DWR under Assembly Bill (AB) 52, which requires that a CEQA lead agency must begin consultation once it determines that the project application is complete, before the agency issues a Notice of Preparation for an EIR. No Tribal Cultural Resources, as defined in PRC Section 21074, were identified by the Tribes through the tribal consultation conducted by DWR (see DEIR pages 4-291 and 4-292).

Please note that CEQA considers impacts on the environment and generally does not include analysis of social and economic considerations. Therefore, social and economic effects do not require evaluation in an EIR (see State CEQA Guidelines Section 15131[a] and Section 15382, the “economic or social effects of a project shall not be treated as significant effects on the environment... Rather, the focus of the analysis shall be on the physical changes.”) Therefore, no further analysis is required.

II.6.2.2 RESPONSE TO COMMENT O-CIWC-1-2

As described in DEIR Appendix A, Section 3.10, “Hydrology and Water Quality,” and DEIR Chapter 3, “Project Description,” no new SWP facilities would be constructed or installed as part of the Proposed Project. The DEIR identifies eight existing SWP facilities that would be subject to modified operations. Therefore, no physical change would occur to land use, land cover, or other environmental resources, including sites, features, places, cultural landscapes, sacred places, and objects with cultural value that maybe associated with SWP facilities. As documented in DEIR Chapter 4.5, “Tribal Cultural Resources,” DWR has met its obligations to consult with interested Tribes in accordance with AB 52 requirements.

II.6.2.3 RESPONSE TO COMMENT O-CIWC-1-3

Please see Responses to Comments O-CIWC-1-1 and O-CIWC-1-2.

DEIR 4.6.1, “Cumulative Impacts,” does address the changes that have occurred to hydrology, water quality, aquatic biological resources. DEIR Chapter 4.6.1.6, “Tribal Cultural Resources,” specifically addresses Tribal Cultural Resources in relation to potential cumulative impacts of long-term operations of the SWP. As stated, DWR solicited input from numerous Tribal groups to identify and determine if Tribal Cultural Resources would be adversely affected with implementation of the long-term operations of the SWP. No Tribal Cultural Resources were identified during this consultation process. It was therefore concluded that the Proposed Project’s contribution to potential cumulative impacts on Tribal Cultural Resources would not be cumulatively considerable.

II.6.2.4 RESPONSE TO COMMENT O-CIWC 1-4

Table 4.4-1 in DEIR Chapter 4.4, “Aquatic Biological Resources,” lists the aquatic species which have been designated in accordance with the federal ESA, California ESA, and which have been reported to occur in waterways which may be affected by long-term operations of the SWP. This constitutes a focused list of species for detailed discussion in the DEIR. As stated in DEIR Chapter 4.4.1.1, “Special-Status Fish of Focal Interest”:

“Certain fish species were selected to be the focus of evaluation in this DEIR based on their use of the Sacramento River from the confluence with the Feather River to the Delta and the Delta, as well as their potential sensitivity to the Proposed Project. Fish species of focal evaluation include those species within the project area that fall within any of the following categories:

- Species listed by the federal government as threatened or endangered
- Species listed by the State as threatened or endangered
- Species that are formally proposed for federal listing or are candidates for federal listing as threatened or endangered
- Species that are candidates for State listing as threatened or endangered
- Species that meet the definitions of threatened or endangered under CEQA
- Species identified by the California Department of Fish and Wildlife (CDFW) as species of special concern (SSC) and species designated by California statute as fully protected (i.e., California Fish and Game Code, Section 5515 [fish])
- Species that are recreationally or commercially important”

In regard to considering information developed by Hankins 2018, that document presents a list of ecoculturally important species (Table 1) derived from the Bay Delta Conservation Plan 2015. The species identified in Table 1 of Hankins 2018 as ecoculturally important are included in DEIR Table 4.4-1 and were considered in detail in the analysis of impacts on aquatic biological species. Please also see Response to Comment O-CIWC-1-1.

II.6.2.5 RESPONSE TO COMMENT O-CIWC-1-5

The primary purpose of this EIR is to provide DWR, the lead agency, and the public with sufficient information about the Proposed Project, its potential environmental effects, and the ways which those effects can be minimized, whether through mitigation measures or project alternatives, so that DWR

can make an informed and reasoned decision on whether to approve the project (see PRC Section 21061 and the State CEQA Guidelines Section 15003). The DEIR appropriately considered potential impacts of the Proposed Project on cultural resources in DEIR Appendix A Section 3.5, “Cultural Resources,” and DEIR Chapter 4.5, “Tribal Cultural Resources.” Furthermore, DWR conducted project-specific consultation with Native American Tribes as required by AB 52, and no Traditional Cultural Resources were identified by the Tribes (see DEIR Chapter 4.5.2, “Native American Consultation”). Therefore, the DEIR meets the requirements of CEQA, and the impact analyses and conclusions contained in the DEIR are accurate.

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Refer To File # 300062-0001

January 6, 2020

You Chen Chou
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236-0001
LTO@water.ca.gov

Re: Draft EIR on Long-Term Operations of the State Water Project

Dear Mr. Chou:

We submit this letter on behalf of the Coalition for a Sustainable Delta (Coalition) to the Department of Water Resources (DWR) with respect to the Draft Environmental Impact Report (DEIR) and Incidental Take Permit (ITP) Application for Long-Term Operations of the California State Water Project (SWP). The Coalition is a California nonprofit corporation comprised of agricultural, municipal, and industrial water users, as well as individuals in the San Joaquin Valley. The Coalition and its members depend on water from the Sacramento-San Joaquin Delta (Delta) for their continued livelihood. Individual Coalition members frequently use the Delta for environmental, aesthetic, and recreational purposes; thus, the economic and non-economic interests of the Coalition and its members are dependent on a healthy and sustainable Delta ecosystem.

The Coalition has significant concerns regarding the DEIR and ITP Application. In brief:

- DWR has failed to provide a clear and consistent proposed project so that the project description is unstable, therefore, it is not possible to analyze the effects of the proposed project,
- DWR has concluded that the proposed project in the DEIR has less than significant impacts so that both Alternative 2b in the DEIR and the alternative described in the ITP Application need not be considered and should, in fact, be rejected outright,
- DWR is required to recirculate the DEIR in the event that the agency intends to pursue the proposed project in the ITP Application rather than the proposed project in the DEIR; the alternative in the ITP Application is not analyzed in the DEIR, and
- DWR has failed to propose a project in the ITP Application that is based on the best scientific and other information that is reasonably available.

DWR has failed to provide a clear and consistent proposed project so that the project description is unstable.

Both the DEIR and the ITP Application include the identical statement of project objectives:

The objective of the Proposed Project is to continue the long-term operation of the SWP consistent with applicable laws, contractual obligations, and agreements. DWR proposes to store, divert, and convey water in accordance with DWR's existing water rights to deliver water pursuant to water contracts and agreements up to full contract quantities. DWR seeks to optimize water supply and improve operational flexibility while protecting fish and wildlife based on the best available scientific information.

(DEIR, p. 3-1; ITP Application, p. 3-1.) The agency is required to include a statement of objectives in the DEIR. (Cal. Code Regs., tit. 14, § 15124.)

Inexplicably, DWR contradicts its own statement of objectives in a press release issued with the DEIR, where the agency states that it “does not seek to increase SWP exports.” (News Release, dated November 21, 2019.) This statement cannot be reconciled with the project objective to “convey water in accordance with DWR's existing water rights to deliver water pursuant to water contracts and agreements up to *full contract quantities*.” (DEIR, p. 3-1; ITP Application, p. 3-1.)

In the ITP Application, DWR describes its objectives as follows: to “continue the long-term operation of the SWP in a manner that improves water supply reliability and water quality consistent with applicable laws, contractual obligations, and agreements” and “use the knowledge gained from the scientific study and analysis described in the AMP to avoid, minimize and fully mitigate the adverse effects of SWP operations on CESA-listed aquatic species.” This statement also cannot be reconciled with the statement of objectives set forth in the DEIR and ITP Application.

We are concerned DWR has been unclear regarding its objectives. This is problematic because the range of alternatives analyzed in the DEIR is guided by the statement of objectives. It is also problematic because the public, including the Coalition, cannot provide meaningful directed comments. The absence of a consistent statement of objectives is compounded by contradictory proposed project descriptions. Together these effectively undermine the entire process. DWR should clarify its commitment to the official statement of project objectives in the DEIR and ITP Application, rather than the contradictory objectives stated elsewhere.

DWR concluded that the proposed project in the DEIR has no significant environmental impacts; therefore, DWR should reject consideration of any alternatives.

DWR concluded that the proposed project in the DEIR has no significant environmental impacts; therefore, DWR should reject consideration of any alternatives that inhibit the agency's ability to meet the DEIR's statement of project objectives. Both Alternative 2b in the DEIR and

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the alternative described in the ITP Application inhibit DWR's ability to meet its statement of project objectives because both reduce the agency's ability "to deliver water pursuant to water contracts and agreements up to full contract quantities." Alternative 2b in the DEIR and the alternative described in the ITP Application include restrictions on Project operations that have no demonstrable benefits for the covered species. This point is made in several places in the DEIR itself. (DEIR, pp. 5-13, 5-45, 5-46 (characterizing the possible benefits of Alternative 2b as highly uncertain), 5-135 (indicating that the restrictions in Alternative 2b have unproven benefits).)

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(Cont.)

Alternative 2b in the DEIR and the alternative described in the ITP Application also should be rejected because DWR has failed to analyze the adverse environmental consequences of these alternatives, which would reduce water deliveries. These consequences include negative impacts on wetlands and the species they support, on water banking, and on farming. In light of the unquestionable and unanalyzed adverse impacts of Alternative 2b in the DEIR and the alternative described in the ITP Application on the environment and the speculative beneficial impacts of those same alternatives on the environment, DWR should reject those alternatives.

DWR has failed to analyze the project proposed in the ITP Application.

Recirculation of a Draft Environmental Impact Report is required where "significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification." (Cal. Code Regs., tit. 14, § 15088.5, subd. (a); see also Pub. Resources Code, § 21166.) Significant new information includes, but is not limited to situations where there is a "feasible project alternative or mitigation measure considerably different from others previously analyzed..." (*Ibid.*) The proposed project described in the ITP Application is neither the proposed project described in the DEIR, nor is it an alternative analyzed in the DEIR. Recirculation of the DEIR therefore is required, unless DWR withdraws the current ITP Application and submits a new application that tracks the proposed project in the DEIR.

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DWR has failed to propose a project in the ITP Application that is based on the best scientific and other information reasonably available.

DWR is required to base the ITP Application on the best scientific and other information that is reasonably available. (Cal. Code Regs., tit. 14, § 783.2(b).) DWR has failed to do so.¹ For example, DWR proposes multiple so-called fall habitat actions to benefit delta smelt. (DEIR, p. 3-30, ITP Application, p. 3-57.) These actions are based on the assertion that the location of X2 in the Delta is a surrogate (or proxy) for delta smelt habitat and that reservoir releases and export reductions intended to shift X2 westward will increase the quantity and quality of delta smelt habitat. This is a false narrative that is contradicted by the available information in multiple peer-reviewed scientific sources.

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¹ Similarly, under CEQA DWR is required to make its decisions on the basis of substantial evidence.

Research published in the past decade has generated a body of work that contributes directly to evaluating the purported relationship between the location of X2 in the estuary, and both the location and extent of delta smelt habitat and delta smelt abundance. Murphy and Weiland (2019) show that in its 2008 biological opinion the U.S. Fish and Wildlife Service did not appropriately characterize delta smelt habitat and took no steps to validate its assumption that the location of X2 determines the extent and quality of delta smelt habitat. The authors drew from publicly available survey data, mapping the distribution of delta smelt, and illustrating that delta smelt are frequently found outside the portion of the low-salinity zone used as a “surrogate indicator” for its actual habitat, thereby establishing that the foundational premise for a fall habitat action is invalid.

Polansky et al. (2018) demonstrate that delta smelt are largely concentrated in three geographic areas in the upper estuary: Suisun Bay and Suisun Marsh in the west of the species’ geographic range, at and adjacent to the Sacramento and San Joaquin rivers confluence, and in the Cache Slough complex of channels and embayments to the northeast. In contrast to Feyrer et al. (2011) and consistent with Manly et al. (2015), they found that salinity and turbidity appear to explain little of the variation in catch of adult delta smelt. Polansky et al.’s findings buttress the conclusion in Murphy and Weiland (2019) that outflow through the Delta is not a surrogate for delta smelt habitat. That conclusion is further reinforced by Kimmerer et al. (2013), who state unequivocally that “our use of salinity as the only variable that defines habitat is *clearly inadequate*.”

Kimmerer et al. (2013) examined the relationship of the location of X2 in the estuary on the area and volume of the low-salinity zone, and then considered how X2 affects the abundance of delta smelt and other fishes. Using the UnTRIM model, they quantified the relationship between X2 and the area and volume of the low salinity zone, observing that both Suisun and San Pablo bays encompass wide ranges of salinity under most flow conditions. They concluded that the variation in the volume or area of physical habitat, as defined by salinity, does not have a strong influence on the abundance of many of the fish species that they considered, including Delta Smelt. The analysis reinforced results from multiple multivariate studies that there is no detectable relationship between delta smelt abundance and the monthly average location of X2 in the fall. In fact, that finding has been affirmed by landscape-scale “experiments” in the field – no measured increases in delta smelt numbers followed enhanced outflow actions in the autumns of 2017 and 2019.

Both Feyrer et al. (2007) and Kimmerer et al. (2013) recognized that zooplankton prey availability may well be a critical component of delta smelt habitat, with the former opining in their conclusion that “the greatest opportunity for improving our analyses ... lies with additional studies on the effects of food availability.” Kimmerer et al. (2013) note that when outflow is greater and X2 is positioned westward in the estuary, the low-salinity zone is located in the shallows of Suisun Bay, where grazing by invasive clams removes a substantial portion of the phytoplankton biomass making it less available to support the delta smelt’s zooplankton prey.

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(Cont.)

Kimmerer et al. (2019) confirm that observation. Analyzing the distribution of zooplankton populations in the Delta and how they are affected by varying flow regimes, the authors find that elevated rates of copepod mortality occur in the low-salinity zone, concluding that that phenomenon greatly depresses prey availability (thus habitat quality) for delta smelt in western portions of the low-salinity zone. The authors suggest that reduced prey availability in the low-salinity zone may explain the shift of delta smelt to more northern portions of the estuary. This observation is reinforced in a recently submitted manuscript, which employs an empirical model to show that the delta smelt's copepod prey biomass is redistributed by Delta through-flows away from areas that support higher densities of the fish to downstream areas less suitable for it (Hamilton et al. 2020).

In the ITP Application, DWR also proposes to curtail exports to maintain the current SWP spring outflow contribution through the continued use of the San Joaquin River inflow-to-export ratio (I:E ratio) during April and May. (ITP Application, p. 3-55) The I:E ratio was a requirement of the National Marine Fisheries Service 2009 biological opinion, a reasonable and prudent alternative intended to protect steelhead. The requirement was since dropped by the National Marine Fisheries Service, acknowledging the lack of evidence that it benefitted steelhead and because the data used to justify the requirement were derived from releases of hatchery-reared Chinook salmon, which are not an appropriate surrogate for wild steelhead. (Murphy et al. 2011). In that light and importantly because steelhead is not state listed, it is inappropriate for the state to seek to impose this requirement via an ITP application.

DWR acknowledges that the I:E ratio "only takes into account San Joaquin River conditions," and so "may not be the most appropriate way to manage total Delta outflow." (DEIR, p.3-56) DWR does not describe any legitimate basis for the requirement. DWR may be seeking to benefit longfin smelt. But there is no scientific or other information reasonably available demonstrating that manipulating the I:E ratio is necessary to avoid jeopardizing longfin smelt or to fully mitigate for the impacts of SWP operations on longfin smelt. For that matter, survey data on the distribution and abundance of longfin smelt in the estuary gathered over the past several years by DFW staff establishes that the fish is a species broadly distributed and spawning in multiple tributaries into San Francisco Bay, and is relatively infrequent in the upper reaches of the Delta. That knowledge indicates that an enhanced outflow requirement will not result in benefits for longfin smelt.

It's also important to acknowledge that the information on the distribution, population status, and trends in numbers for longfin smelt presented in the DEIR and ITP Application is out of date and incorrect, therefore is not based on the best scientific and other information reasonably available. (DEIR, p. 4-56, ITP Application, p.2-12.) Data gathered over the past decade demonstrates that the fall midwater trawl index is an unreliable indicator of the status of longfin smelt, as it does not sample across the species' full distribution, it under-samples the fish's actual habitat, and it does not track the fish's occurrences across the Bay-Delta landscape during rearing and spawning. Lewis et al. (2020) describe just some of the data that now allows for a more complete understanding of the longfin smelt's life history. The fall midwater trawl index, which was used to justify the state listing of the fish a decade ago, is unreliable; even

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within its pre-existing survey footprint, the trawl does not sample the range of habitat strata used by the fish (see Grimaldo et al. 2017 and data from J. Hobbs DFW). DWR cannot ignore the fact that the trawler-based surveys sample only a fraction of the species' consistently occupied habitats, thus cannot provide reliable information about the species' distribution and abundance (Gentes 2019). Accordingly, DWR's analysis of State Water Project effects on longfin smelt is inadequate and must be corrected to take into account up-to-date data regarding the life history, distribution, and abundance of the species.

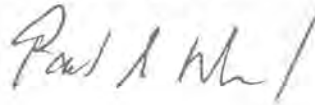
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Conclusion

It would be unlawful for DWR to continue to pursue a 2081 permit for the actions described in the ITP Application. DWR should instead submit a new application based on the proposed action in the DEIR. Doing so would allow the agency to comply with CEQA and CESA and pursue the objectives set forth in the DEIR.

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Very truly yours,



Paul S. Weiland
Nossaman LLP

PSW:lmb

II.6.3 LETTER O-COALITION-1 – NOSSAMAN, PAUL WEILAND ON BEHALF OF COALITION FOR A SUSTAINABLE DELTA –JANUARY 6, 2020

II.6.3.1 RESPONSE TO COMMENT O-COALITION-1-1

The comment correctly quotes the project objectives as they appear on DEIR Chapter 3.1.1, “Project Objectives,” and ITP application page 3-1. In both documents, the project objectives include the statement that “DWR proposes to store, divert, and convey water in accordance with DWR’s existing water rights to deliver water pursuant to water contracts and agreements up to full contract quantities.” The comment goes on to note that a press release dated November 21, 2019, states that DWR “does not seek to increase SWP exports.” This news release was not intended to operate as a substitute to, or modification of, the project objectives and should not be understood to contradict the quoted project objectives. Furthermore, DWR’s press release is consistent with the objectives. The DEIR includes multiple alternatives, some of which would result in SWP water exports not changing overall and some that would increase exports, which demonstrates that DWR’s openness to considering various operational scenarios with differing export outcomes. DWR stands by the project objectives quoted by the comment.

The comment also mentions additional statements within the ITP application that the comment claims are inconsistent with the overall objectives mentioned in DEIR Chapter 3.1.1, “Project Objectives,” (page 3-1). Although the comment does not state where within the ITP the quoted language comes from, the language appears in Table 3-3d,” Proposed Project Elements – Adaptive Management Actions.” Within that table is the following statement of the objectives of the Adaptive Management Plan (AMP): “The objectives to the AMP are to: (i) continue the long-term operation of the SWP in a manner that improves water supply reliability and water quality consistent with applicable laws, contractual obligations, and agreements; and (ii) use the knowledge gained from the scientific study and analysis described in the AMP to avoid, minimize and fully mitigate the adverse effects of SWP operations on CESA-listed aquatic species.”

This language is not inconsistent with the overall statement of objectives. Rather, the language reflects the reality that DWR’s goal of providing as much water for delivery as is allowed under existing contracts must be pursued within a regulatory context that includes the need for compliance with the California Endangered Species Act (CESA). As is explained at length in Master Responses 4, “Legal Standards,” and 17, “Application of CESA Standards,” the requirements of CESA operate as limits on how much water DWR may lawfully deliver under its contracts with its water suppliers. The same is true of the federal Endangered Species Act, the Clean Water Act, and the Porter-Cologne Water Quality Control Act. All of these federal and state statutes create legal requirements with which DWR must comply. In most types of water years, these requirements make it impossible for DWR to supply all of the water ostensibly subject to delivery under the contracts. Hydrological conditions also affect DWR’s ability to provide water to its contractors.

DWR disagrees with the comment that the press release and DWR’s statement of objectives for its adaptive management program undermine the project objectives and preclude the formulation of meaningful comments on the DEIR. See also Master Response 3, “The CEQA Process,” which explains

how the interface between DWR, as applicant for an incidental take permit under CESA, and CDFW, as the decisionmaker for that ITP, has required DWR to modify its expectations for how its long-term operations can be conducted in a way that is permissible under CESA.

II.6.3.2 RESPONSE TO COMMENT O-COALITION-1-2

Please see Response to Comment Coalition-1-1. Please also see Master Response 3, “The CEQA Process,” that discusses the requirements of CEQA with respect to the development of alternatives, the purpose served by alternatives where there are no significant impacts, and public involvement in the alternative development process.

The comment states that Alternative 2b would decrease water deliveries and, in turn, result in unanalyzed adverse environmental impacts. Alternative 2b has been refined since issuance of the DEIR and is referred to as “Refined Alternative 2b” in the FEIR (see FEIR Part III, Chapter 1, “Summary”). Refined Alternative 2b would result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions. Therefore, no adverse environmental impacts associated with reduced deliveries are expected.

II.6.3.3 RESPONSE TO COMMENT O-COALITION-1-3

The comment contends that DWR’s submittal of an ITP application that differed from the Project Description in the DEIR required DWR to revise and recirculate the DEIR. This is so, the comment asserts, because the “proposed project described in the ITP application is neither the proposed project described in the DEIR, nor is it an alternative analyzed in the DEIR.” See Master Response 3, “The CEQA Process,” which explains how the interface between DWR, as applicant for an incidental take permit under CESA, and CDFW, as the decisionmaker for that ITP, has required DWR to modify its expectations for how its long-term operations can be conducted in a way that is permissible under CESA.

The mere fact that the project described in the ITP application is not identical to either the Proposed Project or any EIR alternative does not trigger recirculation under CEQA Guidelines Section 15088.5. Subdivision (a)(3) sets forth the circumstances when a new alternative triggers recirculation. Under that provision, recirculation is triggered by “[a] feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project’s proponents decline to adopt it.” The Court of Appeal addressed the meaning of this language in *South County Citizens for Smart Growth v. County of Nevada* (2013) 221 Cal.App.4th 316, 328-332. For a new alternative to trigger recirculation, the alternative “must be feasible; it must be considerably different from other alternatives previously analyzed; it must clearly lessen the significant environmental impacts of the proposed project; and the project’s proponents must decline to adopt it.” (Id. at p. 330.) Under this formulation, a project opponent “bears the burden of proving a double negative, that the [lead agency’s] decision not to revise and recirculate the final EIR is not supported by substantial evidence.” (Ibid.)

Here, the alternative included in the ITP application is similar to Alternative 2b as set forth in the Draft EIR. The proposal is not “considerably different” than Alternative 2b. In particular, both include greater spring Delta outflow than the Proposed Project, as well as consideration of a 100 TAF block of water in

the Summer-Fall, which are the major differences between Alternative 2 and the ITP's proposed project relative to the DEIR proposed project. And, although the proposal in the ITP application evolved into what is called "Refined Alternative 2b" in the FEIR, the project proponent – DWR – has not "declined to adopt" the proposal. Rather, with the additional refinements found in Revised Alternative 2b, DWR is proposing that CDFW approve the proposal. In short, Refined Alternative 2b, as described in this FEIR, is consistent with the project description provided in the ITP application DWR submitted to CDFW on December 13, 2019, therefore recirculation is not required.

II.6.3.4 RESPONSE TO COMMENT O-COALITION-1-4

The comment does not address the adequacy of the DEIR but is focused on the ITP application. Nonetheless, the below response addresses the comment's scientific assertions. Please see Master Response 4, "Legal Standards," for a discussion of the applicable legal requirements associated with CEQA and CESA, respectively.

The comment suggests that the fall habitat actions are based on the assertion that the location of X2 in the Delta is a surrogate (or proxy) for Delta Smelt habitat and that reservoir releases and export reductions intended to shift X2 westward will increase the quantity and quality of Delta Smelt habitat, which the comment suggests is contradicted by available information. In fact, there are multiple considerations and facets to the Summer-Fall habitat actions, as presented in the DEIR Chapter 3, "Project Description" (DEIR pages 3-30 and 3-31), including water operations but also Suisun Marsh Salinity Control Gate operations as well as food enhancement actions. The Summer-Fall habitat action in large part focuses on maintaining low salinity habitat in Suisun Marsh, based on a recent published study work (Hammock, B. G., J. A. Hobbs, S. B. Slater, S. Acuña, and S. J. Teh 2015) suggesting that this is a productive area relative to other portions of the species' range, in addition to maintaining connectivity of low salinity habitat in the north Delta arc where Delta Smelt are relatively abundant; low salinity habitat having also been shown to provide reduced cellular stress compared to higher salinity (Hasenbein, M., L. M. Komoroske, R. E. Connon, J. Geist, and N. A. Fangue 2013). As the comment suggests and as noted in the references they provide, multiple habitat attributes including food are likely to be of importance and the Proposed Project aims to address these with the Summer-Fall habitat action. The DEIR acknowledges the uncertainty in the response of Delta Smelt to fall habitat in the effects analysis (e.g., DEIR pages 4-156 to 4-157) and DWR intends to adaptively manage the action (see DEIR pages 3-32 to 3-33) with structured decision making to assess its efficacy. Note that the comment's inclusion of Polansky et al. (2018) to discuss Delta Smelt distribution is inappropriate because Polansky et al. (2018) focused on adult Delta Smelt during Winter-Spring, whereas the other papers consider juvenile/subadult Delta Smelt in Fall (September-December), and the habitat action that the comment is focusing on Summer-Fall.

With respect to the San Joaquin River I:E ratio, the comment is apparently referring to the Draft ITP Application for the Proposed Project, rather than the DEIR (there is no page 3-56 in the DEIR). As noted for Alternatives 2a/2b in the DEIR (pages 5-6 and 5-38), which are largely the same in terms of spring operations as the ITP Application's Proposed Project, the objective of increased spring outflow is based on the hypothesis that longfin smelt abundance can be improved with increased spring outflow. As the commenter alludes, there is uncertainty in the operations-related effect of spring outflow on longfin

smelt, which the DEIR acknowledged in discussing a conceptual model of the species and the science related to the correlation between longfin smelt abundance and Delta outflow/X2 (see DEIR pages 4-176 to 4-178); this discussion touches on the issues that the commenter raised to suggest that the analysis is inadequate. The DEIR showed the potential for negative effects (see Table 4.4-9, page 4-179), albeit with uncertainty in the extent to which operations-related differences in Delta outflow could affect longfin smelt. New information such as the references cited by the commenter are important considerations for further exploration as DWR undertakes its proposed Longfin Smelt Science Program (see DEIR page 3-48) and adaptively manages the spring outflow action (see DEIR page 3-52). Thus, DWR considers the analysis to be adequate and acknowledges that there is uncertainty that will be aimed to be further reduced.

As discussed in Master Response 20, “Best Available Science,” development of the Proposed Project description and analysis of the potential environmental impacts utilized a wide range of relevant data, literature, and tools, and the modeling conducted for the EIR is credible because it is based on reasonable assumptions and appropriate, widely accepted modeling tools.

The DEIR for the Proposed Project provides an adequate, complete, and good faith effort at full disclosure of the physical environmental impacts and the conclusions are based upon substantial evidence in light of the whole record.

II.6.3.5 RESPONSE TO COMMENT O-COALITION-1-5

Please see Responses to Comments O-Coalition-1-1 through O-Coalition-1-1 and Master Response 4, “Legal Standards,” and Master Response 17, “Application of CESA Standards.”

II.6.3.6 RESPONSE TO COMMENT O-COALITION-1-ATT-1

Please see Response to Comment O-CSD-1-4.

II.6.3.7 RESPONSE TO COMMENT O-COALITION-1-ATT-2

Please see Response to Comment O-CSD-1-4.

II.6.3.8 RESPONSE TO COMMENT O-COALITION-1-ATT-3

Please see Response to Comment O-CSD-1-4.



January 6, 2020

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Sacramento, CA, 94236-0001
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Via electronic filing

RE: Comments on the Draft Environmental Impact Report for the Long Term Operation of the State Water Project

Dear Mr. Chao:

The California Sportfishing Protection Alliance, the California Water Impact Network, AquAlliance, and California Water Research (collectively, CSPA et al.) respectfully submit comments on the Department of Water Resources’ (DWR) Draft Environmental Impact Report for the Long Term Operation of the State Water Project (DEIR).¹

CSPA et al. supports and incorporates by reference the comments on the DEIR of National Resources Defense Council (NRDC) et al. More specifically, CSPA et al. concurs with NRDC et al. that the DEIR:

- Fails to provide an accurate and consistent project description;
- Fails to consider a reasonable range of alternatives;



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¹ Department of Water Resources, *Draft Environmental Impact Report for the Long Term Operation of the State Water Project*, State Clearinghouse No. 2019049121, November 22, 2019.

- Fails to adequately analyze the effects of implementing the addendum to the Coordinated Operating Agreement, notwithstanding DWR’s Notice of Preparation;
- Fails to adequately disclose likely environmental impacts during droughts, including by failing to consider the effects of climate change;
- Fails to consider the whole of the action under CEQA, because it fails to analyze the effects of coordinated operations of the State Water Project (SWP) and Central Valley Project (CVP) upstream of the Delta;
- Fails to adequately analyze environmental impacts and fails to disclose the significant adverse impacts of the Proposed Project; and
- Violates the California Endangered Species Act.

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CSPA et al. adds the following additional lines of commentary:

- The Proposed Project substitutes process for clear enforceable measures.
- Commitments by the State of California in the 2000 CALFED Record of Decision for flow improvements in the Delta largely failed to occur.
- None of the alternatives analyzed in the DEIR is adequate under CESA or is sufficient to protect other public trust fishery resources.
- The DEIR mischaracterizes the results of studies of the Pelagic Organism Decline and ignores the need for increases in Delta outflow.
- The DEIR fails to adequately describe or address the collapse in primary production in the Bay-Delta.
- Regulatory requirements on which the DEIR relies are either not adequately protective or are not complied with.
- The DEIR fails to adequately analyze the effects of implementing the addendum to the Coordinated Operating Agreement.
- The DEIR fails to adequately disclose likely environmental impacts during droughts.
- The DEIR fails to analyze the baseline and reasonably foreseeable future conditions of the water supply operation of Oroville Reservoir.
- The DEIR’s finding that the impacts of the Proposed Project to Delta water quality are less than significant ignores substantial evidence to the contrary.
- The DEIR fails to consider the mandates of the 2009 Delta Reform Act.
- The DEIR fails to consider the constitutional mandate to prevent the waste and unreasonable use of water.
- The DEIR’s exclusion of an analysis of the impacts of the Proposed Project on recreation and harmful algal blooms as not having potential significant impacts is unwarranted.

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These comments of CSPA et al. supplement the legal and factual arguments of NRDC et al. on the shortcomings of the DEIR.

The analysis of CSPA et al. finds that the DEIR is inadequate under CEQA. CSPA et al. recommends that DWR withdraw the DEIR and recirculate a legally sufficient DEIR that corrects the inadequacies that both CSPA et al. and NRDC et al. identify in their respective comments.

I. The Proposed Project substitutes process for clear enforceable measures.

On multiple issues and topics, the DEIR describes a Proposed Project that would substitute process for clear, enforceable measures. Indeed, much of the premise of the DEIR is that “real-time operations” and adaptive management, along with physical habitat improvements, will improve conditions for pelagic and anadromous fish in the Bay-Delta estuary.

In place of defined Old and Middle River (OMR) protections, the DEIR proposes an elaborate decision making protocol that would allow “flexible” OMR operation.² The protocol involves eight “physical checks” and six potential “off-ramps.”

DWR and the California Department of Fish and Wildlife (CDFW) would evaluate a large suite of factors in evaluating management for each of the four covered species in order to choose from a suite of possible OMR operations. One of these factors includes whether annual entrainment has exceeds 90% of the greatest annual entrainment numbers for each species from the 2010-2018 time period. This threshold itself is not a valid standard of protection, particularly for smelt, considering the decline of species since 2010. A far smaller number of smelt entrained in 2020 may account for a much higher percentage of the overall population of smelt than the maximum entrainment figures represented when populations were more abundant.

Many of the processes designed to protect fish involve participation from entities other than DWR and CDFW, whose cooperation is not certain. For example, a “food subsidy action” relies on “partnerships with local water users.”³

Additionally, “The federal government is proposing a Real-Time Operations Charter to facilitate federal coordination with the State.”⁴ However, the federal government has not yet produced such a charter. It is unknown whether the federal government will produce such a Charter, whether it will acceptable on its face, and whether the Bureau of Reclamation (Reclamation) will change it unilaterally, consistent with its recent behavior.⁵

A real-world example of real-time management of OMR operations similar to those in the Proposed Project occurred in December 2019. The SWP and CVP maintained very high pumping levels, and salinity in the south and central Delta increased substantially, moving spawning smelt into fresh water closer to the Delta pumps.⁶ Neither the Smelt Working Group, nor the Water Operations Management Team, nor the Director of the Department of Fish and Wildlife intervened to correct these hazardous conditions for smelt that were spawning in the central Delta.

² DEIR, p. 3-19.

³ DEIR, p. 3-31.

⁴ DEIR, p. 3-33.

⁵ See, for example, discussion of Reclamation’s 2017 decision not to comply with flow requirements at Vernalis, later in this document.

⁶ See figures and analysis at: <http://calsport.org/fisheriesblog/?p=2981>.

The public and decision makers cannot rely on the production of promised measures, their implementation, or their effectiveness. In addition, the public will be largely shut out of oversight of their implementation. DWR must recirculate the DEIR and ground the Proposed Project in clear and enforceable measures that are reasonably certain to occur.

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II. Commitments by the State of California in the 2000 CALFED Record of Decision for flow improvements in the Delta largely failed to occur.

The California Secretary of Natural Resources was a signatory to the 2000 CALFED Programmatic Record of Decision (CALFED ROD).⁷ A cornerstone of the 2000 CALFED ROD was an environmental water budget of 1.18 million acre-feet. Page 57-58 of the CALFED ROD documents the assumed commitments:

Tier 1 is baseline water, provided by existing regulation and operational flexibility as described above. The regulatory baseline consists of the biological opinions on winter-run salmon and delta smelt, 1995 Delta Water Quality Control Plan, and 800 TAF of CVP Yield pursuant to CVPIA Section 3406(b)(2).

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Tier 2 consists of the assets in the EWA combined with the benefits of the ERP and is an insurance mechanism that will allow water to be provided for fish when needed without reducing deliveries to water users. (These assets are shown in the table on page 58 of the ROD). Tier 1 and Tier 2 are, in effect, a water budget for the environment and will be used to avoid the need for Tier 3 assets as described below.

Tier 3 is based upon the commitment and ability of the CALFED Agencies to make additional water available should it be needed. It is unlikely that assets beyond those in Tier 1 and Tier 2 will be needed to meet ESA requirements. However, if further assets are needed in specific circumstances, the third tier will be provided. In considering the need for Tier 3 assets, the fishery agencies will consider the views of an independent science panel. Although the CALFED Agencies do not anticipate needing access to Tier 3 of water assets, the CALFED Agencies will prepare an implementation strategy for Tier 3 by August 2001, establishing a timely scientific panel process and identifying tools and funding should implementation of Tier 3 prove necessary.

As described in Appendix A to these comments, *Disappearance of Environmental Water Budgets in the CALFED Programmatic Record of Decision*, the promised 800,000 acre-feet of water annually dedicated to fish and wildlife under CVPIA section 3406(b)(2) has vanished, as

⁷ CALFED Bay-Delta Program, Programmatic Record of Decision, August 28, 2000. Available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=5075>. The full set of attachments is available at: https://www.dfg.ca.gov/erp/envcomp_rod.asp, including Attachment 1: California Environmental Quality Act Requirements.

has the 380,000 acre-feet of water that was to be provided annually by the Environmental Water Account.

In 19 years of implementation since the CALFED Record of Decision, and 25 years since the 1994 Bay-Delta Agreement, the CALFED Ecosystem Restoration Program has failed to achieve its objectives. DWR's contemporary EcoRestore Program is basically a rebranding of the CALFED Ecosystem Restoration Program, which was only partially implemented.

Contrary to commitments in the CALFED Programmatic Record of Decision, its Adaptive Management Program has never made additional water available under Tier 3 to protect ESA-listed species, and has failed to achieve the stated objectives in the CALFED ROD.

Based on the historical practice of the State of California, vague promises in the instant DEIR of future flow augmentation or other measures to be potentially supplied under real-time operations or adaptive management are not reasonably certain to occur as required under CEQA.

III. None of the alternatives analyzed in the DEIR is adequate under CESA or is sufficient to protect other public trust fishery resources.

A. The Proposed Project and other Project Alternatives do not meet the requirements of CESA.

Neither the Proposed Project nor the other alternatives that the DEIR analyzes would meet the requirements of California Endangered Species Act. Thus, they are not reasonable alternatives.

Much of the DEIR uses a degraded baseline under CEQA to say that there would be no significant impacts because the Proposed Project or other project alternatives would leave conditions equal to or slightly better than the No Project alternative. The DEIR states::

The DEIR addresses the incremental contribution of the Proposed Project in combination with other related past, present, and future plans and projects. As discussed in Section 4.6.1, the DEIR finds that while ecological conditions in the Delta have been degraded because of past actions and activities, the Proposed Project's contribution to this cumulative impact is not cumulatively considerable, and the Proposed Project would not contribute to cumulatively significant impacts when viewed in combination with other reasonably foreseeable plans or projects.⁸

The simple fact is that the Delta ecosystem has collapsed under the operation of the SWP and CVP, and the Proposed Project would not reverse this collapse and put listed species on a trajectory for recovery. For this reason, the Proposed Project is not a reasonable alternative. Each of the other project alternatives suffers from the same failure to meet a threshold trajectory for recovery. CEQA mandates "that public agencies should not approve projects as proposed if

⁸ DEIR, p. 1-9.

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there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects.” PRC § 21002. Further, “[e]ach public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so.” PRC §§ 21002.1(b), 21081; CEQA Guidelines §§ 15091, 15093.

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The failure to define alternatives that would reverse the collapse in the Delta ecosystem and the impending extinction of one or more species renders the DEIR deficient as a CEQA document and inadequate for CESA.

B. The Proposed Project’s changes in OMR and related operations would increase the certainty that San Joaquin River salmonids would not be successful in volitionally emigrating through the Delta.

The DEIR states: “DWR, in coordination with Reclamation, proposes to operate the SWP in a manner that maximizes exports while minimizing direct and indirect impacts on state and federally listed fish species.”⁹ This is not accurate. What DWR proposes to do is keep impacts no worse than the existing impacts. That is different than “minimizing” impacts.

The DEIR uses much of the “new science” that it brings to bear to show that Proposed Project will not perform any more poorly than the recent operation of the SWP under the 2008 and 2009 BiOps.

For example, the Proposed Project would do away with use of the Head of Old River Barrier (HORB). HORB is a protective feature designed to reduce passage of juvenile salmonids from the San Joaquin River watershed out of the San Joaquin River into Old River and other south Delta channels that are in close proximity to the SWP and CVP export pumps. The DEIR acknowledges that without HORB, both spring-run salmon and fall-run salmon from the San Joaquin watershed are much more likely to enter “the Old River route” than when HORB is deployed.¹⁰

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However, rather than seeking to improve success of passage through the San Joaquin River (away from the SWP and CVP export pumps) with flow or by identifying other feasible measures, the DEIR concludes that the almost certain adverse impact of routing juvenile salmonids past the pumps is acceptable, on the grounds that survival of outmigrants in routes other than Old River is low anyway. The DEIR states:

While this routing increases entrainment risk for these fish, available coded-wire-tagging and acoustic-tagging studies indicate survival in this region is very poor generally and not adversely influenced by export rates (SST 2017). Entrainment at the CVP has been observed to yield higher through-Delta survival (via trucking) than volitional migration through the Delta by other routes, even with positive OMR conditions (Buchanan et al.

⁹ DEIR p. 3-18.

¹⁰ DEIR, p. 4-211, 4-223.

2018; SJRGA 2011, 2013). Though entrainment has the potential to increase during April and May due to increased exports under the Proposed Project scenario in these months, through-Delta survival of juvenile Fall-run Chinook Salmon originating from the San Joaquin River basin may not be impaired by these operations, relative to the Existing Conditions scenario.¹¹

There is no rational basis for saying that this approach is “minimizing” impacts. It is, rather, using science conducted under degraded conditions to justify making adverse impacts more certain. The fact that entrainment leads to salvage and higher survival via trucking is sorry consolation for the fact that the Proposed Project does nothing to improve the success of salmonids volitionally outmigrating from the San Joaquin watershed. The DEIR uses “new science” as the science of surrender.

The DEIR offers the additional consolation for San Joaquin River spring-run: “Spring-run Chinook Salmon juveniles may receive some ancillary protection during April and May from the risk assessment-based approach for OMR flow management included in the Proposed Project that would be undertaken for other species.”¹² Absent explicit protection, the DEIR again relies on process in place of substance to provide “ancillary protection.”

In sum, the DEIR is misleading in stating that it will minimize impacts to listed species. It will also not minimize impacts to fall-run salmon. Instead, the DEIR uses scientific study to justify increasing water supply by increasing the certainty that San Joaquin salmonids will not succeed in volitional outmigration through the Delta. This increased certainty of unsuccessful salmonid outmigration is, moreover, a significant impact under CEQA.

IV. The DEIR mischaracterizes the results of studies of the Pelagic Organism Decline and ignores the need for increases in Delta outflow.

The DEIR shows graphs of the CDFW’s Fall Midwater Trawl (FMWT) indices for Delta smelt and longfin smelt.¹³ Graphs of the indices for other species, including striped bass, American shad, splittail, and threadfin shad are available on the CDFW FMWT website.¹⁴ The FMWT indices establish that, between 1967-1971 and 2014-2018, populations of striped bass, Delta smelt, longfin smelt, American shad, splittail and threadfin shad have declined 98.5, 99.4, 99.9, 52.6, 98.6 and 93.3 percent, respectively. This collapse is known as the Pelagic Organism Decline (POD). This collapse is continuing. Survey results for Delta smelt led U.C. Davis fisheries professor Peter Moyle to warn state officials in 2018 to prepare for the extinction of Delta smelt.¹⁵

¹¹ DEIR, p. 4-223. Tracking studies of San Joaquin watershed salmon focus on fall-run because they are more abundant and available for study than spring-run.

¹² DEIR, p. 211.

¹³ DEIR, pp. 4-59 and 4-57, respectively.

¹⁴ CDFW FMWT Monthly Abundance Indices, available at: <http://www.dfg.ca.gov/delta/data/fmwt/indices.asp>.

¹⁵ See <http://www.capradio.org/44478>, <http://californiawaterblog.com/2015/03/18/prepare-for-extinction-of-delta-smelt/>, <http://news.nationalgeographic.com/2015/04/150403-smelt-california-bay-delta-extinction-endangered-species-drought-fish/>.

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The DEIR refers to the Interagency Ecological Program (IEP) team that studied the Pelagic Organism Decline as the “POD-Modeling Team.”¹⁶ This description fails to communicate the scope of the large interdisciplinary, multi-agency scientific team that was formed to study the Pelagic Organism Decline. Sommer et. al. characterized the Pelagic Organism Decline Management Team as follows:

In response to the POD, the IEP formed a work team in 2005 to evaluate the potential causes of the decline (IEP 2005, 2006). The team organized an interdisciplinary, multi-agency effort including staff from DFG, California Department of Water Resources, Central Valley Regional Water Quality Control Board, U.S. Bureau of Reclamation, U.S. Environmental Protection Agency, U.S. Geological Survey, CALFED, San Francisco State University, and the University of California at Davis. A suite of 47 studies was selected based on the ability of each project to evaluate the likely mechanisms for the POD, and the feasibility of each project in terms of methods, staffing, costs, timing, and data availability.¹⁷

The last report of the IEP POD work team was the 2010 *Pelagic Organism Decline Work Plan and Synthesis of Results* (2010 POD Synthesis Report) (Baxter et al., 2010.)¹⁸ The 2010 POD Synthesis Report was comprehensive, citing hundreds of scientific studies. While the DEIR mentions the 2010 POD Synthesis Report, it mischaracterizes the conclusions in the report.

The DEIR states that the 2010 POD Synthesis Report identified the nine drivers of the Pelagic Organism Decline as

(1) mismatch of larvae and food; (2) reduced habitat space; (3) adverse water movement/transport; (4) entrainment; (5) toxic effects on fish; (6) toxic effects on fish food items; (7) harmful cyanobacteria *Microcystis aeruginosa* blooms; (8) non-native overbite clam (*Potamocorbula amurensis*) effects on food availability; and (9) disease and parasites.”¹⁹

However, the 2010 POD Synthesis Report cites these factors as having been *evaluated* in the 2005 POD conceptual models, stating further:

¹⁶ DEIR, p. 4-44.

¹⁷ Sommer, Ted & Armor, Chuck & Baxter, Randall & Breuer, Richard & Brown, Larry & Chotkowski, Mike & Culberson, Steven & Feyrer, Fredrick & Gingras, Marty & Bruce, Herbold & Kimmerer, Wim & Mueller-Solger, Anke & Nobriga, Matthew & Souza, Kelly. (2007). The Collapse of Pelagic Fishes in the Upper San Francisco Estuary: El Colapso de los Peces Pelagicos en La Cabecera Del Estuario San Francisco. Fisheries. 32. 270-277. 10.1577/1548-8446(2007)32[270:TCOPFI]2.0.CO;2. P. 275. Available at: https://water.ca.gov/LegacyFiles/iep/docs/pod/sommers_fish.pdf.

¹⁸ Baxter, R., R. Breuer, L. Brown, L. Conroy, F. Feyrer, S. Fong, K. Gehrts, L. Grimaldo, B. Herbold, P. Hrodey, A. Mueller-Solger, T. Sommer, and K. Souza. 2010. *Pelagic Organism Decline Work Plan and Synthesis of Results*. Interagency Ecological Program for the San Francisco Estuary. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/FOTR/for_60.pdf.

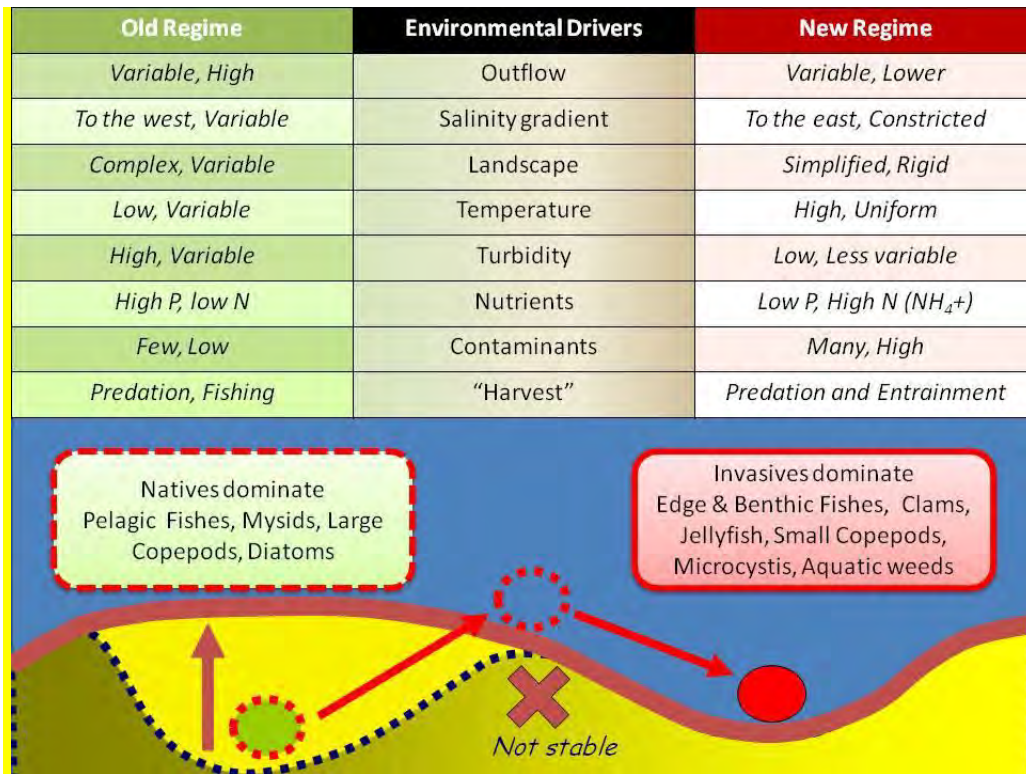
¹⁹ DEIR p. 4-44, citing p. 18 at 676 of the 2010 POD Synthesis Report.

These earlier conceptual models provided a useful way to: (1) summarize understanding of factors that may have contributed to the POD and (2) design the initial suite of research studies; however, they had several shortcomings. They did not adequately reflect spatial and temporal variation in the nine drivers evaluated, new data showed several assumptions to be incorrect, and the initial models were relatively cumbersome.²⁰

The DEIR does not mention one of the central hypotheses in the 2010 POD Synthesis Report: that there has been a regime shift in the Delta ecosystem, and that the primary driver of the regime shift is Delta outflow.

The POD Management Team hypothesized that “drivers that changed slowly over decades (slow drivers) contributed to the slow erosion of ecological resilience of the system. This made the system more vulnerable to the effects of drivers that changed more rapidly around the time of the POD and/or have greater species specificity.”²¹ The POD Management Team hypothesized that the slow drivers of the POD regime shift, in order of their hypothesized importance to the resilience of the system and approximate rate of change were: 1) Delta outflow, 2) salinity, 3) landscape, 4) temperature, 5) turbidity, 6) nutrients, 7) contaminants, and 8) harvest.²² The POD Management Team illustrated regime shift and the drivers of this shift in the figure reproduced below.²³

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²⁰ POD Synthesis Report, p. 18 at 672.

²¹ *Id.*, p. 11 at 379.

²² *Id.*, p. 11 at 383.

²³ POD Synthesis Report, Figure 8, pdf p. 144.

Of these slow abiotic drivers, the SWP and CVP operations strongly influence outflow, and salinity, and also influence temperature. Without addressing these fundamental drivers of change in the Delta ecosystem, the DEIR’s proposal to restore 30,000 acres of tidal wetland, floodplain habitat, and riparian habitat²⁴ and reintroduce hatchery-bred smelt is inadequate.

A December 2019 review of the future of Delta smelt by noted fisheries biologist Peter Moyle and others stated:

While water users hope that restoration provides an alternative to water use, this is not realistic. Successful restoration requires water flowing across the landscape. Moving water promotes the exchange of nutrients, controls introduced species, distributes food production, and creates habitat structure. Flows help restorations mimic natural environments and improves their effectiveness. Flows give managers better control of where Delta smelt end up during the spring, summer and fall. Habitat with minimal outflow is an empty promise.²⁵

V. The DEIR fails to adequately describe or address the collapse in primary production in the Bay-Delta.

The DEIR cites a 2015 paper by Hammock et. al. However, the DEIR fails to cite a more recent 2019 paper by Hammock et. al., which found a 97% decline in production of chlorophyll in the estuary a due to invasion by *Potamocorbula amurensis* and the effects of Delta exports.²⁶ As discussed by fisheries expert Tom Cannon:²⁷

The [2019 Hammock et al.] paper concludes there is “a growing consensus that the decline in pelagic fish abundance in the SFE [San Francisco Estuary] is at least partially due to a trophic cascade, triggered by declining phytoplankton (Feyrer et al. 2003; Sommer et al. 2007; Hammock et al. 2017; Hamilton and Murphy 2018)”.

The authors noted that “the suppression of phytoplankton abundance due to exports cannot be reversed with equivalent releases from upstream reservoirs. Releasing water in late summer/fall increases flow, which decreases residence time, and therefore suppresses phytoplankton abundance (Table 2, Fig. 6).” This finding is extremely important because the primary form of mitigation for Delta exports has been maintaining outflow by increasing inflow with reservoir releases.

²⁴ DEIR, p. 4-68.

²⁵ Moyle, P., Bork, K., Durand, J., Hung, T., Rypel, A., *Futures for Delta Smelt*, <https://californiawaterblog.com/2019/12/15/futures-for-delta-smelt/>

²⁶ Hammock, B.G., Moose, S.P., Solis, S.S. et al., “Hydrodynamic Modeling Coupled with Long-term Field Data Provide Evidence for Suppression of Phytoplankton by Invasive Clams and Freshwater Exports” *San Francisco Estuary Environmental Management* (2019) 63: 703. <https://doi.org/10.1007/s00267-019-01159-6>. Available at <https://link.springer.com/article/10.1007/s00267-019-01159-6>.

²⁷ Tom Cannon, The Delta’s Trophic Collapse Explained, blog post, April 17, 2019. Available at <http://calsport.org/fisheriesblog/?p=2570>.

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The study's analyses strongly indicate that the decline in estuary productivity is associated with the clam invasion and increasing exports over the past five decades. The effects are most pronounced in non-wet years when fish production is most negatively affected.

The DEIR describes the collapse in primary production only qualitatively, and does not discuss the new research tying the decline to Delta exports. The Proposed Project consequently fails to adequately address the issue. The DEIR proposes to address food web effects by running water from the Colusa Basin Drain down the Yolo Bypass in the summer and fall, titling this action the "North Delta Food Subsidies and Colusa Basin Drain Project." The DEIR states: "Initial results suggest that a target pulse of 27 TAF over a 4-week period would improve downstream transport of phytoplankton."²⁸ But the analysis fails to quantify the scale of the action in comparison to the total volume of the estuary and the massive deficit in primary production.

The decline of primary production in the Delta has been a long-standing issue. The 1983 Interagency Ecological Program Annual Report documents that there was an "apparent lack of a spring algal bloom in the lower San Joaquin River near Antioch since 1976."²⁹ During the 1976-1977 drought, salinity in the estuary increased greatly due to relaxation of salinity standards by the State Water Resources Control Board.

The DEIR fails to analyze an alternative that would sufficiently restore the natural hydrograph, although this was specifically requested in scoping comments by California Water Research. Restoring the natural hydrograph in spring was also one of the main conclusions of the State Water Resources Control Board's (SWRCB or Water Board) report from the 2010 Delta flow criteria informational hearing,³⁰ discussed in Section XI of these comments. Restoring the natural hydrograph in spring is also proposed in the State Water Resources Control Board's 2018 Framework for the ongoing update of the Bay-Delta Water Quality Control Plan.³¹ The Water Board's 2018 Framework proposed Delta outflow requirements of 55% of unimpaired flow from the Sacramento River and tributaries, with an adaptive range of up to 65% of unimpaired flow, and 40% of unimpaired flow from the San Joaquin River and tributaries, with an adaptive range of up to 50% of unimpaired flow. See SWRCB Framework at 14-18.

As documented by American Rivers in a presentation to the State Water Resources Control Board's 2012 Bay-Delta Water Quality Control Plan workshop, there has been a

²⁸ DEIR, p. 3-31.

²⁹ Interagency Ecological Program, 1983 Annual Report, p. 32. Electronic copies taken offline by the California Department of Water Resources and the US Bureau of Reclamation.

³⁰ State Water Resources Control Board, *Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem*, 2010. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/swrcb_25.pdf

³¹ State Water Resources Control Board, July 2018 *Framework for the Sacramento/Delta Update to the Bay-Delta Plan*. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/sed/sac_delta_framework_070618%20.pdf.

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dramatic shift in releases from Oroville Reservoir from the spring to the summer, turning the natural hydrograph on its head.³² Figure 1 from that presentation, showing the change in Feather River flows for above normal, below normal, and dry years, before and after Decision 1641, is shown below.³³

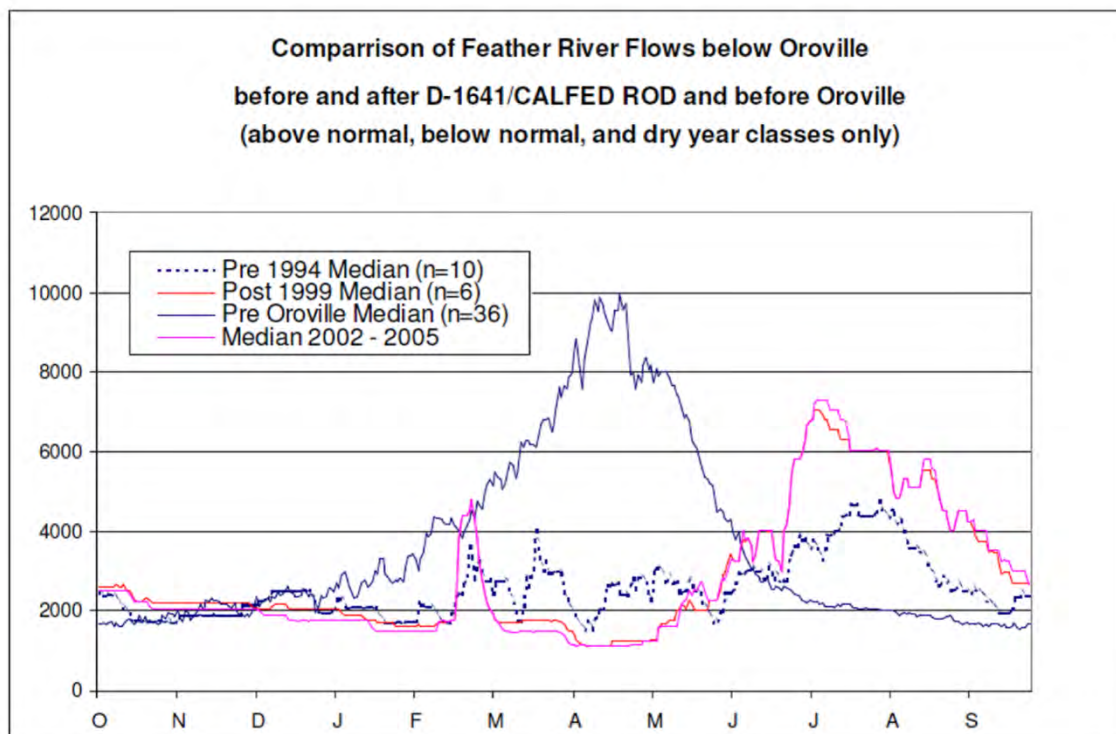


Figure 1: Influence of the Sacramento-San Joaquin Delta Regulations on Feather River Hydrograph. The blue line depicts pre-Oroville median flows and approximates the natural flow regime. In 1995 the Water Quality Control Plan tightened restrictions on the timing of Delta diversions. The pre-1994 hydrograph compared to the post-1999 hydrograph illustrates how the hydrograph shifted spring flows to summer releases to optimize water diversions with the Delta export/inflow requirements.

These operations of Oroville Dam and releases to the Feather River avoid triggering the increased spring outflow requirements in Table 4 of the Bay-Delta Water Quality Control Plan (p. 21.)³⁴ The operations maximize exports, but at the cost of fisheries and the estuarine food web.

³² American Rivers, letter and report to State Water Resources Control Board, *RE: Bay-Delta Workshop 2: Bay-Delta Fishery Resources*. Available at https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/cmnt091412/john_cain.pdf.

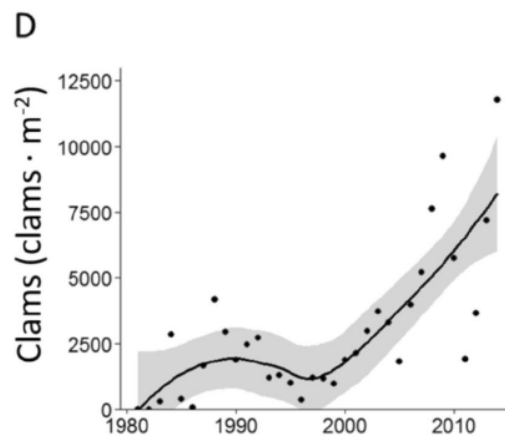
³³ *Id* at p. 5.

³⁴ Part 2 Testimony of Deirdre Des Jardins for Pacific Coast Federation of Fishermen’s Associations in the WaterFix Change in Point of Diversion Hearing, pp. 14-17. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/PCFFA&IGFR/part2/pcffa_161.pdf

The DEIR discusses the invasion of the overbite clam, *Potamcorbula amurensis*, and its effects on the food web, in the section on Nutrients and Food Web Support.³⁵ However, the DEIR does not mention the outcome of the IEP Pelagic Organism Decline study on *P. amurensis*. In a 27-year retrospective, Peterson and Vayssieres found that “benthic assemblages [in the Bay-Delta] were not geographically static, but shifted with salinity, moving down-estuary in years with high delta outflow, and up-estuary during years with low delta outflow.”³⁶

Greg Gartrell also observed that Delta smelt populations increased between 1995 and 2000, an extended period when Suisun Bay freshened.³⁷ Hammock et. al. (2019) shows a temporary reduction in the density of *P. amurensis* from about 1995 to 2000 (Figure “D”, shown below).³⁸

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The DEIR fails to consider operations to freshen Suisun Bay for multiple years for suppression of *P. amurensis*, although California Water Research requested such an evaluation in scoping comments. DWR’s failure to analyze this alternative violates CEQA. Under CEQA, lead agencies may not dismiss from consideration “any alternatives that feasibly might reduce the environmental impact of a project on the unanalyzed theory that such an alternative might not prove to be environmentally superior to the project.” *Habitat & Watershed Caretakers v. City of Santa Cruz* (2013) 213 Cal.App.4th 1277, 1305 (emphasis omitted). (“The purpose of an EIR is to provide the facts and analysis that would support such a conclusion so that the decision maker can evaluate whether it is correct.”) *Id.* Omission of this discussion “fail[s] to satisfy the informational purpose of CEQA.” *Id.*

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³⁵ DEIR, p. 4-168.

³⁶ Peterson HA, Vayssieres M (2010) “Benthic assemblage variability in the upper San Francisco Estuary: a 27-year retrospective.” *San Francisco Estuary Watershed Sci* 8:1–27. Available at: <http://www.escholarship.org/uc/item/4d0616c6>

³⁷ Gartrell, G. PE, *Will Increasing Outflow in the Summer Increase Delta Smelt Survival?* Public Comment on Bay-Delta Phase 2 Working Draft Report, December 15, 2016. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/comments121616/docs/greg_gartrell.pdf.

³⁸ Hammock et. al. (2019), *op cit.* Figure 3D, p. 8.

VI. Regulatory requirements on which the DEIR relies are either not adequately protective or are not complied with.

A. The 2006 Bay-Delta Water Quality Control Plan did not address the Pelagic Organism Decline.

The DEIR relies in part on compliance with the 2006 Bay-Delta Water Quality Control Plan for protection of fish and wildlife (*see* Section 4.4.5, Regulatory Limitations on Operations of Water Project Diversions, subsection 4.4.5.1, Decision 1641). But the 2006 Bay-Delta Water Quality Control Plan was issued before the reports of the Pelagic Organism Decline Management Team were available, and did not address the POD.

The Plan Amendment Report, Appendix 1 to the 2006 Bay-Delta Water Quality Control Plan³⁹ states:

The reasons for the POD are still unknown, and water project operations are included in the conceptual model for many of the POD studies as a possible factor/cause for the decline. The study results are expected in 2007, and may have an impact on the Delta Outflow objective and its implementation. The study results could help staff assess when the current Delta outflow objective must be met to protect the beneficial uses and whether the objective can be relaxed without causing an additional negative impact to sensitive species. In light of this, the State Water Board did not change this objective in the 2006 Plan. The State Water Board will not consider changing the Delta Outflow objective until the POD studies are completed or the Board receives other reliable technical information, warranting a change.⁴⁰

The Water Board held two workshops in 2007 and 2008 to receive information on the Pelagic Organism Decline.^{41,42} But the Water Board deferred consideration of the results presented in the two workshops until the Pelagic Organism Decline studies were completed. The initial Pelagic Organism Decline studies have since been completed, and academic papers from the POD studies have been published and peer-reviewed.

The Proposed Project cannot rely on compliance with the 2006 Bay-Delta Water Quality Control Plan to assure protection of pelagic fish and other organisms in the Delta.

³⁹ SWRCB, SWRCB, Plan Amendment Report, Appendix 1 to the 2006 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta, December 13, 2006. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/wq_control_plans/2006wqcp/docs/2006_app1_final.pdf.

⁴⁰ *Id.*, pp. 45-46.

⁴¹ SWRCB, 2007 Pelagic Organism Decline Workshop Notice is available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/pelagic_organism/docs/pn_pod.pdf.

⁴² SWRCB, January 2008 Pelagic Organism Decline Workshop Notice is available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/pelagic_organism/docs/pod_wkshop_notice.pdf.

B. The SWP and CVP have not complied with the narrative salmon protection standard in the Bay-Delta Water Quality Control Plan.

The State Water Project and Central Valley Project have not complied with the narrative salmon protection standard in Table 3 of the SWRCB’s Bay-Delta Plan. The objective states: “Water quality conditions shall be maintained together with other measures in the watershed, sufficient to achieve a doubling of natural production of Chinook salmon from the average production of 1967-1991, consistent with the provision of State and federal law.”⁴³ This salmon doubling provision is also mandated in the California Fish and Game Code (FGC §6902) and the CVPIA.

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The U.S. Fish and Wildlife Service’s (USFWS) Anadromous Fisheries Restoration Program (AFRP) documents that, since the 1967-1991 baseline period, natural production of Sacramento River mainstem winter-run Chinook salmon and spring-run Chinook salmon have declined by 88.8 and 97.96 percent, respectively, and are only at 5.5 and 1.02 percent, respectively, of doubling levels mandated by the California Water Code (CWC), California Fish & Game Code, and the Central Valley Project Improvement Act. Natural production of San Joaquin River System fall-run Chinook salmon has declined since 1967-1991 by 54.5% and is only 22.7% of doubling levels.⁸ Natural production since the 2008 USFWS and 2009 NMFS Biological Opinions (BiOps)⁹ were issued is significantly below production in the initial 15 years of the doubling period (1992-2007).

The Proposed Project makes no effort to comply with the requirements of the salmon doubling goal. On the contrary, it uses a standard of existing conditions as the yardstick by which it measures salmon protection under proposed SWP Delta operations.

C. The SWP and CVP have not complied with the D-1641 requirement for a fisheries protection plan prior to use of Stage 2 of the JPOD.

Subsection 4.4.5.1 of the DEIR states that the use of Stage 2 of the Joint Point of Diversion requires completion of a fisheries response plan.⁴⁴ However, the DEIR does not acknowledge the Bureau of Reclamation’s failure to update the fisheries response plan since 2006, although such an update was required by the Executive Director of the State Water Resources Control Board in approving the plan submitted in 2006.⁴⁵ The Department of Water

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⁴³ SWRCB, Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, December 13, 2006, p. 14. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/swrcb_27.pdf.

⁴⁴ DEIR, p. 4-110.

⁴⁵ Part 2 Testimony of Deirdre Des Jardins for Pacific Coast Federation of Fishermen’s Associations, Section 3, Decision 1641 Operations Plan, p. 9-11. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/PCFFA&IGFR/part2/pcffa_161.pdf; U.S. Bureau of Reclamation and California Department of Water Resources, December 26, 2006 Plan for Protection of Fish, Wildlife, and Other Legal Users of Water During Stage 2 Joint Point of Diversion. Available at:

Resources has never submitted an acceptable plan for use of Joint Point use of Reclamation’s pumping plant, and requested an exemption in 2017 after the intake structure for Clifton Court Forebay was damaged.⁴⁶ The exemption was denied.⁴⁷

Section 4.4.5.1 of the DEIR also discusses circumstances in which the JPOD might be used, but does not discuss the impacts on such use of the 2018 *Addendum to the Agreement Between the United States of America and the Department of Water Resources of the State of California for Coordinated Operation of the Central Valley Project and the State Water Project*⁴⁸ (2018 COA Addendum). Amendment #2 of the 2018 COA Addendum allocates 65% of the SWP and CVP joint export capacity to the CVP during balanced water conditions, and 60% during excess water conditions.⁴⁹ Instead, the DEIR addresses the export sharing formula only as a modeling assumption.⁵⁰

DWR should issue a recirculated DEIR that analyzes the impacts of Reclamation’s sharing of the export capacity at Banks Pumping Plant under Amendment #2 to the 2018 COA Addendum and discuss potential mitigations.

D. The CVP has stopped complying with D-1641 minimum instream flow requirements at Vernalis.

The description of the Proposed Project in Table 1-1 on p. 1-5 of the DEIR fails to mention the fact that the Bureau of Reclamation is currently refusing to comply with the minimum instream flows required at Vernalis under Decision 1641. On February 15, 2017, Richard Woodley, Reclamation’s Resources Manager, sent a letter to the California State Water Resources Control Board stating that Reclamation will not comply with the Bay-Delta Water Quality Control Plan’s 2006 Table 3 requirements for minimum instream flows at Vernalis, but only those in Appendix 2E of the National Marine Fisheries Services Biological Opinion.⁵¹ The

http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/jpod/docs/fish_plan_122606.pdf; February 8, 2007 letter From Tom Howard to U.S. Bureau of Reclamation and California Department of Water Resources, titled, *Fishery Protection Plan for Joint Point Of Diversion*. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/jpod/docs/fish_plan_approval020807.pdf.

⁴⁶ April 19, 2017 letter from Department of Water Resources to SWRCB Executive Director Tom Howard, titled, *Request for a Short-Term Exemption from JPOD limits*. Obtained from:

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/jpod/docs/04192017_dwrltr.pdf

⁴⁷ May 4, 2017 letter From Tom Howard to John Leahigh, Chief, Water Operations Office, California Department of Water Resources, titled *Joint Points of Diversion Request*. Obtained from:

http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/jpod/docs/05042017_swbltr.pdf

⁴⁸ US Bureau of Reclamation and California Department of Water Resources, *Addendum to the Agreement Between the United States of America and the Department of Water Resources of the State of California for Coordinated Operation of the Central Valley Project and the State Water Project*, December 12, 2018. Available at:

<http://calsport.org/news/wp-content/uploads/Signed-COA-Addendum-121218.pdf>.

⁴⁹ *Id.*, p. 2.

⁵⁰ DEIR, p. H-1-1-5.

⁵¹ The February 15, 2017 letter from Richard Woodley to Tom Howard, Executive Director of the State Water Resources Control Board is available at:

https://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/tucp/docs/woodley_ltr02152017.pdf.

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project has not been operated to meet the 2006 Bay-Delta Water Quality Control Plan's minimum instream flows at Vernalis since that time.

As described by Delta Watermaster Michael George in a 2018 presentation to the Delta Protection Commission,⁵² the south Delta has had serious deterioration of water quality, including reduced net flow in channels, reduced dissolved oxygen, and impeded navigation, as well as increased water temperature, increased harmful algal blooms, and build-up of salinity hot spots. While Mr. George cites buildup of sediment, the failure of Reclamation to provide adequate flows at Vernalis is a major contributing factor.

1-15

Subsection 4.4.5.1 of the DEIR (addressing Decision 1641) fails to discuss the reduction in inflows at Vernalis since the expiration of the San Joaquin River Agreement in December of 2009.⁵³ The conclusion that water quality would be protected by compliance with Decision 1641 requirements is not supported. By this omission, the DEIR fails to address the continuing decline in water quality conditions in the south Delta.

The DEIR also fails to discuss impacts of the reduced San Joaquin River flows on entrainment of pelagic and anadromous fish. The 2007 report of the Interagency Ecological Program Pelagic Organism Decline Management Team noted that increases in entrainment in the winter were correlated with reductions in San Joaquin River inflow as a fraction of total inflow⁵⁴:

In trying to evaluate the mechanism(s) for increased winter-time salvage, POD studies by USGS made three key observations (IEP 2005). First, there was an increase in exports during winter as compared to previous years (Figure 16). Second, the proportion of tributary inflows shifted. Specifically, San Joaquin River inflow decreased as a fraction of total inflow around 2000, while Sacramento River increased (Figure 17). Finally, there was an increase in the duration of the operation of barriers placed into south Delta channels during some months. These changes may have contributed to a shift in Delta hydrodynamics that increased fish entrainment.
(p. 18-19.)

1-16

Juvenile San Joaquin River fall-run Chinook salmon are also not surviving migration through the Delta. From 2010 through 2015, annual estimates of the probability of surviving through the Delta ranged from 0 to 0.05, based on acoustic-telemetry data. Over half the

⁵² Michael Patrick George, Delta Water Master. Update of Activities, July 18, 2019. Presentation to the Delta Protection Commission, pdf p. 13-16. Available at: <https://cah20research.com/wp-content/uploads/2020/01/2019-07-18-Item-8a-Delta-Watermaster.pdf>.

⁵³ San Joaquin River Agreement, 2000. Available at: <http://www.sjrg.org/agreement.htm>.

⁵⁴ Baxter, R., R. Breuer, L. Brown, M. Chotkowski, F. Feyrer, M. Gingras, B. Herbold, A. Mueller-Solger, M. Nobriga, T. Sommer, and K. Souza. 2008. *Pelagic Organism Decline Progress Report: 2007 Synthesis of Results*. Technical Report 227. Interagency Ecological Program for the San Francisco Estuary. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/pelagic_organism/docs/pod_ieppodmt_2007synthesis_011508.pdf.

surviving fish were salvaged at the CVP facilities.⁵⁵ The near-zero survival rate is likely tied to entrainment as well as reduced flows since the expiration of the San Joaquin River Agreement.

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The DEIR's failure to disclose Reclamation's non-compliance with D-1641 flow requirements for Vernalis and the impacts of this non-compliance fails to meet CEQA's standard for fair disclosure.

VII. The DEIR fails to adequately analyze the effects of implementing the 2018 Addendum to the Coordinated Operating Agreement.

The Environmental Impact Report / Environmental Impact Statement for the April 1986 Coordinated Operating Agreement (1986 COA EIR/EIS) between the US Bureau of Reclamation and the California Department of Water Resources was 556 pages long.⁵⁶ It analyzed effects on carryover storage in Oroville Reservoir, on critical year operations, on water temperatures, on Delta water quality, and on fish and wildlife.

The Public Review Section of the 1986 COA EIR/EIS indicated that copies of the 1986 COA EIR/EIS were distributed for comment to the state and federal fish and wildlife agencies; to the State Water Resources Control Board; to the two U.S. Senators from California and the California Congressional delegation; to all of the relevant water agencies, including the Delta water agencies; and to environmental and fishing groups.

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The only CEQA document DWR issued prior to signing the 2018 *Addendum to the Agreement Between the United States of America and the Department of Water Resources of the State of California for Coordinated Operation of the Central Valley Project and the State Water Project*⁵⁷ (2018 COA Addendum) was a Notice of Exemption.⁵⁸

The ability of the State Water Project to meet the requirements in Decision 1641 and the Bay-Delta Water Quality Control Plan since 1986 has been largely based on the storage releases in the 1986 Coordinated Operations Agreement (1986 COA).⁵⁹ Article 6(c) in the 1986 COA⁶⁰ provided:

⁵⁵ Buchanan, R., Brandes, P., Skalski, J. "Survival of Juvenile Fall-Run Chinook Salmon through the San Joaquin River Delta, California, 2010–2015." North American Journal of Fisheries Management, Volume 38, Issue 3, June 2018. Pages 663-679. Available at: <https://afspubs.onlinelibrary.wiley.com/doi/abs/10.1002/nafm.10063>.

⁵⁶ The EIR/EIS for the 1986 COA is available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/FOIR/for_103.pdf

⁵⁷ US Bureau of Reclamation and California Department of Water Resources, *Addendum to the Agreement Between the United States of America and the Department of Water Resources of the State of California for Coordinated Operation of the Central Valley Project and the State Water Project*, December 12, 2018. *Op. cit.*

⁵⁸ Notice of Exemption is available at: http://calsport.org/news/wp-content/uploads/NOE-COA-Addendum-12102018_12142018-signed.pdf. The US Bureau of Reclamation issued an Environmental Assessment under the National Environmental Policy Act for the 2018 COA Addendum dated December 10, 2018, two days before the document was signed. It is available at: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=36503.

⁵⁹ US Bureau of Reclamation and California Department of Water Resources, *Agreement Between the United States of America and the Department of Water Resources of the State of California for Coordinated Operation of the*

(c) Sharing of Responsibility for Meeting Sacramento Valley Inbasin use With Storage Withdrawals During Balanced Water Conditions: Each party's responsibility for making available storage withdrawals to meet Sacramento Valley inbasin use of storage withdrawals shall be determined by multiplying the total Sacramento Valley inbasin use of storage withdrawals by the following percentages:

United States	State
75%	25%

The 75%/25% ratio of obligations for storage releases in the 1986 COA is roughly proportional to the CVP and SWP share of the projects' reservoir storage in the Sacramento Valley, plus Trinity Reservoir. According to the California Data Exchange Center, the CVP and SWP reservoirs have the following capacities (shown in million acre-feet):

Project	Reservoir	Capacity (MAF)
CVP	Shasta	4.55
CVP	Folsom	0.98
CVP	Trinity	2.45
SWP	Oroville	3.54
	Total	11.52

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(Cont.)

Oroville Reservoir has about 31% of the joint project storage capacity, and Shasta, Folsom, and Trinity have about 69%. The 1986 Coordinated Operating Agreement obligations for storage withdrawals for inbasin needs roughly followed the projects share of joint storage capacity.

But the amendment of Article 6(c) in the 2018 COA Addendum significantly increased the obligation of the State Water Project in dry and critically dry years. Amendment #1⁶¹ provided that “[e]ach party’s responsibility for making available storage withdrawals to meet Sacramento Valley inbasin use of storage withdrawals shall be determined by multiplying the total Sacramento Valley inbasin use of storage withdrawals by the following percentages:

	United States	State
Wet Years	80%	20%
Above Normal Years	80%	20%
Below Normal Years	75%	25%
Dry Years	65%	35%
Critical Years	60%	40%

Central Valley Project and the State Water Project, November 24, 1986. Available at https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/petitioners_exhibit/glenn/gcid_1.pdf.

⁶⁰ 1986 COA, pp. 9-10.

⁶¹ 2018 COA Addendum, p. 1.

Model output in the DEIR shows increased drawdown of Oroville Reservoir due to the 2018 Coordinated Operating Agreement Addendum, but fails to discuss potential mitigation for the impact, such as increased carryover storage targets.⁶²

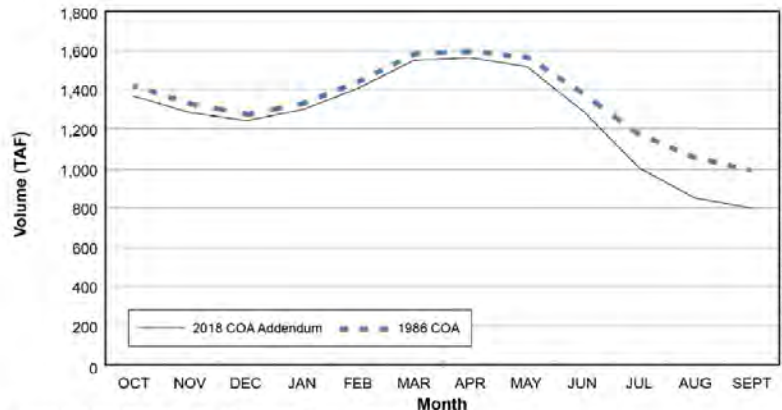


Figure 8. Lake Oroville, Critically Dry Year Average Storage

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DWR and Reclamation’s January 29, 2014 Temporary Urgency Change Petition (TUCP) stated that a primary reason for the TUCP was that Oroville carryover storage was very low at 1.2 million acre-feet (MAF):

Extremely low reservoir storage levels are forecasted for this year in Northern California, in some cases surpassing prior record low levels. At this time, total storage at the SWP's Lake Oroville is roughly 1.2 million acre-feet (MAF), and the total combined storage at the CVP's Shasta and Folsom reservoirs is also very low at about 1.8 MAF. Storage in all three reservoirs is below what they were at this time in 1977 when the state was in a severe drought (see <http://cdec.water.ca.gov/cgi-progs/products/rescond.pdf>).⁶³

This language in the 2014 TUCP strongly suggests that DWR would submit a TUCP whenever end-of-September storage levels below 1.2 million acre-feet are followed by a critically dry year.

The DEIR also fails to consider drawdown in multiple dry and critically dry years. The Amendment to Article 6(c) in the 2018 COA Addendum further states that the obligation of the SWP for meeting the Bay-Delta Water Quality Control Plan standards under such conditions is undefined:

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⁶² DEIR, p. B-13, Figure 8.

⁶³ DWR and Reclamation, Temporary Urgency Change Petition, January 29, 2014, Attachment 1, p. 4 (pdf p. 13) [link shown in quote is in original]. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/tucp/bd_tucp.pdf

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In a Dry or Critical Year following two Dry or Critical Years, the United States and State will meet to discuss additional changes to the percentage sharing of responsibility to meet inbasin use.⁶⁴

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A dry or critically dry year following two dry or critically dry years occurs 11 times in the historic record: 1926, 1931, 1932, 1933, 1934, 1989, 1990, 1991, 1992, 2009, 2015. The modelling for the Proposed Project assumes, without justification, that the obligations for the projects will not be changed (DEIR, Table 1, p. H-1-1-4.) The DEIR also does not consider alternatives for meeting the Water Quality Control Plan standards in a dry or critical Year following two critically dry years. Because this obligation is essentially undefined in the 2018 COA Addendum, and no alternatives are considered in the DEIR, the statements in the DEIR that the COA Addendum has no impact on Delta hydrology is unsupported insofar as it applies to extended droughts.

Furthermore, absent discussion of how it will operate to meet Delta standards and other water right permit requirements during droughts, the Proposed Project fails as a successor to the 2006 plan prepared by the Department of Water Resources to meet Decision 1641 requirements, which DWR submitted to the State Water Resources Control Board as directed by Water Code 138.10:

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(a) On or before January 1, 2006, the director, in collaboration with the Secretary of Interior or his or her designee, shall prepare a plan to meet the existing permit and license conditions for which the department has an obligation, as described in the State Water Resources Control Board Decision No. 1641.

Such a plan is a legal obligation of the State Water Project.

VIII. The DEIR fails to adequately disclose likely environmental impacts during droughts.

The DEIR fails to consider alternatives to the 1500 cfs minimum export rate in Section 3.3.2, or to justify the need for minimum export rates.

The DEIR also fails to consider carryover storage targets that would meet the 1500 cfs minimum export rate during a series of dry and critically dry years without the need for TUCPs. For this reason, the DEIR is inadequate under CEQA. Thus, it fails to show how “existing supplies can meet future demands for water” in the context of “minimum streamflow requirements.” *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, 871.

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Appendix B to these comments, “*Pattern and Practice: Carryover Storage*,” discusses how the DEIR’s failure to adequately analyze impacts of carryover storage policies continues a

⁶⁴ COA Addendum, p. 1.

long-standing pattern and practice by the Department of Water Resources of inadequately analyzing the impacts of risk-taking with carryover storage.

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IX. The DEIR fails to analyze the baseline and reasonably foreseeable future conditions of the water supply operation of Oroville Reservoir.

The DEIR states: “DWR is not requesting an ITP from CDFW for the following actions: ... Oroville Dam and Feather River operations. ... These facilities and operations activities are already covered under existing permits or addressed by other legal authorities.”⁶⁵

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This is not true. The SWP’s water supply operations for Oroville Dam and the Feather River are not conditioned under the existing hydropower license or the pending new license for the hydropower operation of the “Oroville Facilities.” The SWP’s water supply operations for Oroville Dam and the Feather River are not covered under any ESA or CESA permit. The SWP’s water supply operations for Oroville Dam and the Feather River are not conditioned in the water quality certification for the relicensing of the Oroville Facilities. The SWP’s consumptive water rights (applications 5630 and 14443) for the operation of Oroville Reservoir place no specific conditions on the storage operation there other than maximum annual diversion and season of diversion.⁶⁶

Further, there has never been a CEQA analysis of the SWP’s water supply operations for Oroville Dam and the Feather River, and there is none in the instant DEIR. There is no baseline analysis in for this operation. There is no quantification of the operation. There is no analysis of how this operation has changed or could reasonably be expected to change in the future. Thus, the DEIR cannot disclose the impacts of the Proposed Project on the water supply operations of Oroville Reservoir and the Feather River downstream of Oroville Dam. As a result, the DEIR also cannot disclose the environmental impacts of changes to the water supply operations of Oroville Reservoir and changes to the Feather River downstream of Oroville Dam.

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A. The FERC relicensing of the Oroville Facilities does not cover water supply operations at Oroville Reservoir.

The Federal Energy Regulatory Commission’s (FERC) relicensing of the “Oroville Facilities” explicitly excluded the water supply operation of Oroville Dam and Reservoir and the Feather River downstream to the Sacramento River. The Final Environmental Impact Statement for the Oroville relicensing (Oroville FEIS) states: “Water rights in California are regulated

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⁶⁵ DEIR, p. 3-18/pdf p. 62.

⁶⁶ The power generation water rights for Oroville Reservoir, application numbers 5629 and 14444, also do not place any restrictions on storage other than maximum annual diversion and season of diversion. All permits retrieved from SWRCB’s “eWRIMS” database at:

https://ciwqs.waterboards.ca.gov/ciwqs/ewrims/EWServlet?Redirect_Page=EWWaterRightPublicSearch.jsp&Purpose=getEWAppSearchPage

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under the Water Board’s Division of Water Rights. The Commission does not have jurisdictional authority to resolve California’s water rights issues.”⁶⁷

The Oroville FEIS concludes:

The Proposed Action would slightly increase flows in the low flow channel; however, such changes would not be expected to produce a major shift in flows downstream of the Oroville Facilities. Under all the alternatives, we would expect average annual Feather River service area deliveries under existing conditions and year 2020 conditions to remain 994,000 acre-feet, and average annual South Delta deliveries to increase from the existing 3,051,000 acre-feet to 3,247,000 acre-feet in year 2020.⁶⁸

The Oroville relicensing simply did not address the water supply operation of Oroville Reservoir, including carryover storage. In fact, the operations model that DWR developed for use in relicensing did not include carryover storage as a variable input; relicensing participants were thus not able to model different possible carryover requirements.

The Draft Environmental Impact Report (“Oroville DEIR”) that DWR prepared for the relicensing and in support of the State Water Resources Control Board’s water quality certification for the relicensing stated:

The objective of the Proposed Project is the continued operation and maintenance of the Oroville Facilities for electric power generation, including implementation of any terms and conditions to be considered for inclusion in a new FERC hydroelectric license.

As an integral part of the SWP, water stored in Lake Oroville is released from the Oroville Facilities to meet a variety of statutory, contractual water supply, flood management, and environmental commitments. These contractual, flood management, fishery, water quality, and other environmental obligations are defined in numerous operating agreements that specify timing, flow limits, storage amounts, and/or constraints on water releases. The Proposed Project is consistent with these existing commitments and no changes to the contractual obligations or to the general pattern of these releases are anticipated.⁶⁹

The subsequent Final Environmental Impact Report (“Oroville FEIR”) that DWR prepared for the relicensing and in support of the State Water Resources Control Board’s water quality certification for the relicensing stated:

The principal actions in the SA and analyzed in the DEIR are potential physical changes to the Oroville Facilities, environmental restoration actions in the lower Feather River,

⁶⁷ FERC, *Final Environmental Impact Statement, Oroville Facilities California (FERC Project No. 2100)* (May 18, 2007), p. 98. Available at: https://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20070518-4001.

⁶⁸ *Id.*, p. 104.

⁶⁹ DWR, Oroville Facilities Relicensing, FERC Project No. 2100, Draft Environmental Impact Report (May 2007) (Oroville DEIR), p. ES-2.

and recreational improvements in the Project area. None of the SA actions analyzed in the DEIR would affect net flow releases into the Feather River, and thus could be considered independent of OCAP.⁷⁰

The Oroville FEIR also declares:

Changes in water supply and water quality in the No-Project Alternative as compared to the baseline are presented in Section 5.2 of the DEIR [for the Oroville relicensing]. Effects on the cold water pool volume in the Proposed Project as compared to baseline are the same in the DEIR as in the PDEA [Preliminary Draft Environmental Assessment, a relicensing document] because the same assumptions regarding future demand, operations, water temperature requirements, and net facilities flow releases are made in the operations modeling studies conducted for both documents. Analysis of future changes to the State Water Project (SWP) statewide operations is outside the scope of this EIR.⁷¹

The National Marine Fisheries Services' 2016 Biological Opinion for the relicensing of the Oroville Facilities (Oroville Relicensing BiOp) makes explicit that that Opinion and the overall relicensing had a hands-off approach to water supply:

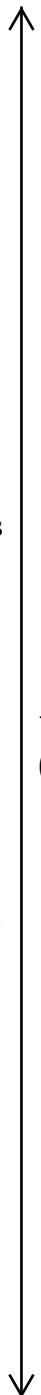
The proposed action analyzed in this Opinion is FERC's proposed relicensing of the Oroville Facilities (FERC Project No. 2100-134). The Oroville Facilities were developed as part of the SWP, a water storage and delivery system of reservoirs, aqueducts, power plants, and pumping plants. The SWP stores and distributes water to supplement the needs of urban and agricultural water users in Northern California, the San Francisco Bay Area, the San Joaquin Valley, Central Coast, and Southern California. As part of the SWP, the Oroville Facilities are also operated for flood management, power generation, water quality improvement in the Delta, recreation, and fish and wildlife enhancement. The FERC relicensing only applies to the facilities and operations authorized under the Federal Power Act. The operations and features that are only for the delivery of water are not part of the FERC relicensing, and therefore not part of proposed action analyzed in this Opinion.⁷²

As described in the Oroville Relicensing BiOp, spring-run Chinook salmon are present in the Feather River downstream of Oroville Dam. Spring-run Chinook are listed under both the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA). Yet as the document explicitly states as quoted above, there is no ESA coverage under the Oroville

⁷⁰ DWR, Oroville Facilities Relicensing, FERC Project No. 2100, Final Environmental Impact Report (June 2008) ("Oroville FEIR"), p. 6-15. The Oroville FEIR incorporated the entire Oroville DEIR.

⁷¹ *Id.*, p. 4-51.

⁷² *Endangered Species Act (ESA) Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat (EFH) Response and Fish and Wildlife Coordination Act Recommendations*; Oroville Facilities Hydroelectric Project Relicensing (Project No. 2100-134); National Marine Fisheries Service (NMFS) Consultation Number: 151422-WCR2015-SA00115, p. 5 (pdf p. 26). Available at: https://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20161205-5420



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Relicensing BiOp for these species in the Feather River as they are affected by DWR’s water supply operations. Equally, there is no incidental take permit or consistency determination that covers the water supply operations of Oroville Reservoir under CESA.

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In sum, there are no rules or enforceable conditions under the ESA, CESA, or Federal Power Act that govern, condition or permit water supply operations at Oroville Reservoir.

B. The State Water Resources Control Board has placed no condition on storage operations at Oroville Reservoir other than maximum annual diversion to storage and season of diversion.

The (SWRCB’s water quality certification for the relicensing of the Oroville Facilities does not address the water supply and storage operations of Oroville Reservoir. It places no conditions on the storage operations of Oroville Reservoir. In contrast, the certification simply acknowledges the “normal operation” of the project:

Normal operation is the operation of the State Water Project (SWP) based on standard factors such as hydrology, storage, routine maintenance and SWP obligations. Changes in operation that are a result of unusual events such as flood control releases, accidents, project failures, and major or unusual maintenance are not considered normal operation.⁷³

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The water rights that give DWR the right to store water for water supply operation at Oroville Reservoir (Applications 5630 and 14443) contain no restrictions on storage operations other than maximum annual diversion to storage and season of diversion.⁷⁴ Specifically, they include no explicit carryover storage requirements. The corresponding water rights for power generation at Oroville Reservoir equally place no condition on carryover storage (Applications 5629 and 14444).

C. Testimony in the hearings for the “California Waterfix” is the closest public definition to date of water supply operation of Oroville Reservoir.

During the 2015-2018 “California WaterFix” hearings before the SWRCB for a change in point of diversion of SWP water rights,⁷⁵ SWP operator John Leahigh testified under oath about DWR’s carryover storage operations at Oroville. Under cross examination on May 9, 2017, SWP operator John Leahigh stated that “[O]ur monthly water operations report to State Water Contractors” contains an equation within it that embodies a “policy” by which DWR sets storage

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⁷³ SWRCB, Final Water Quality Certification for the relicensing of the Oroville Facilities, p. 10. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/docs/oroville_ferc2100/121510/401certification.pdf.

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⁷⁴ Water rights retrieved from SWRCB eWRIMS database at: https://ciwqs.waterboards.ca.gov/ciwqs/ewrims/EWServlet?Redirect_Page=EWWaterRightPublicSearch.jsp&Purpose=getEWAppSearchPage

⁷⁵ General webpage for the California WaterFix hearings is available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/water_right_petition.html

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targets for Oroville Reservoir annually.⁷⁶ Mr. Leahigh subsequently produced an example of that monthly report, which became Exhibit DWR-902.⁷⁷ Important admissions from Mr. Leahigh’s testimony under cross-examination about this report include:

- The monthly “report” that embodies DWR’s policy on carryover storage in Oroville Reservoir is not available on the internet or generally available to the public.⁷⁸
- DWR has changed the “floor” carryover storage target for Oroville Reservoir several times in the previous decade.⁷⁹
- Within the previous decade, DWR’s has changed the “floor” carryover storage target for Oroville Reservoir by as much as 500,000 acre-feet per year.⁸⁰
- There are no enforceable requirements in DWR’s “policy” for carryover storage at Oroville Reservoir.⁸¹

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DWR’s Application for an Incidental Take Permit for the Long Term Operation of the State Water Project reaffirms the lack of enforceable conditions that might govern water supply operations at Oroville. The Application states: “DWR and Reclamation shall retain sole discretion for ... Water Operations of the SWP and CVP, including allocations, under Reclamation Law and the State Water Project, as appropriate.”⁸² This description of “sole discretion” provides no more clarity than the DEIR concerning how DWR will conduct its water supply operations at Oroville Reservoir.

D. DWR must withdraw the DEIR and issue a recirculated DEIR that includes a description of baseline and future water supply operations at Oroville Reservoir.

Absent a description and analysis of the existing or proposed rules and practices that characterize DWR’s operation of Oroville Reservoir for water supply, the DEIR defaults to model output to demonstrate that storage conditions at Oroville Reservoir are unlikely to change under the Proposed Project.

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⁷⁶ WaterFix Hearing Transcript, May 5, 2017, p. 160, ll. 19, 22-24. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/docs/transcripts/20170505_transcript.pdf.

⁷⁷ WaterFix exhibit DWR-902. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/petitioners_exhibit/dwr/dwr_902_swp.pdf.

⁷⁸ WaterFix Hearing Transcript, May 9, 2017, p. 21, ll. 2-12. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/docs/transcripts/20170509_transcript.pdf.

⁷⁹ *Id.*, pp. 15-17.

⁸⁰ *Id.*, pp. 15-16.

⁸¹ WaterFix Hearing Transcript, May 5, 2017, p. 161, ll. 14-17.

⁸² DWR, *Incidental Take Permit Application for Long-Term Operation of the California State Water Project* (Dec. 13, 2019), p. 3-35/pdf p. 91. Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Files/1_DWR_LTO_ITP_Application_2019-12-13_a_y19.pdf.

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This reliance on model output confuses the map and the territory. The model of course will perform whatever the inputs to the model instruct to perform.

But even more fundamentally, it provides an answer without explaining its work. This violates CEQA.

In *County of Amador et al. v. El Dorado County Water Agency et al.* (1999) 76 Cal.App.4th 931 [91 Cal.Rptr.2d 66], a California court of appeals laid out basic requirements for describing reservoir operations in a CEQA document. The court stated at pp. 955-956:

We agree that a mere recitation of end-of-month lake levels does not provide an adequate description of the existing environment or how PG&E determined water releases. The hydrologist himself referred to this data as a "a presentation of historical observations, rather than an operational analysis."

The month-end water level is only one element of the operation. Just as important to fisheries, river habitation, and recreational users is how those lake levels were determined. When were releases made and at what rate? What were the factors that determined when releases would be made? Are those factors equally applicable for purposes of power generation and inelastic consumptive use? ... Reliance on lake levels alone is insufficient to describe the current release program or to assess the impacts of the proposed project.

Nor does the FERC license describe existing conditions. Minimum stream flow requirements do not describe actual water releases. An EIR must focus on impacts to the existing environment, not hypothetical situations. [*internal citation omitted*] The fact that water flow must be kept at a certain minimum level does not reveal what flows were actually maintained; higher water flows would comport with FERC requirements, but might adversely affect lake levels and/or the downstream environment.

The underlying message of *Amador v. El Dorado* is that it is inadequate to say that reservoir operations will not change with a Proposed Project. A CEQA document has to *describe and analyze* both the baseline operation and the operation under the Proposed Project.

Such description and analysis is simply absent in the instant DEIR.

DWR must withdraw the DEIR and issue a recirculated DEIR that discloses the baseline condition of the water supply operations at Oroville Reservoir and the impacts of the Proposed Project on those operations and the aquatic resources in the lower Feather River that those operations affect. If the recirculated DEIR shows that the Proposed Project could result in operations that could cause take of CESA-listed species in the lower Feather River, DWR must also revise its application for an incidental take permit to cover those species.

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X. The DEIR’s finding that the impacts of the Proposed Project to Delta water quality are less than significant ignores substantial evidence to the contrary.

The DEIR acknowledges that modeling indicates possible exceedances of water quality standards in the Delta required under Water Rights Decision 1641 (D-1641).⁸³ However, in addition to dismissing this model output as a modeling artifact, the DEIR relies on testimony of DWR operator John Leahigh in the California WaterFix hearings to find that predicted exceedances would not be significant. The DEIR states:

DWR does not anticipate that these exceedances would occur in real time. SWP and CVP have a high degree of success in meeting D-1641 requirements, as demonstrated by the historical record (Leahigh, 2016). Therefore, D-1641 compliance under the Proposed Project is similar to D-1641 compliance under the Existing Conditions scenario.⁸⁴

However, this characterization of DWR’s compliance record is contradicted by the record, both prior to and under D-1641.

The SWRCB’s D-1485 established Delta water quality and flow standards applicable to the SWP/CVP between 1978 and 1994. Those standards were violated 61 times in 1979 and 319 times between 1988 and 1994.⁸⁵ The violations cited only involve standards for which both the SWP and CVP are jointly responsible and exclude violations applicable to only one project, e.g. Vernalis standards. SWRCB D-1641 established new Delta water quality standards applicable to the SWP and CVP. Between 1995 and 2015, standards were violated 1,886 times, and violations occurred in 15 of the 20 years.⁸⁶ The SWRCB never issued enforcement actions for these violations.

The DEIR acknowledges that electrical conductivity (EC) and chloride levels would increase under the Proposed Project as compared to the No Project Alternative.

As compared to the Existing Conditions scenario, modeled electrical conductivity increased average electrical conductivity at Emmaton by 47 µmhos/cm (11%), 260 µmhos/cm (19%), and 160 µmhos/cm (18%) in January, November, and December, respectively, with electrical conductivity remaining similar in other months. ...

⁸³ DEIR, p. 4-27.

⁸⁴ Id. Reference “Leahigh 2016” in the DEIR is to Exhibit DWR-61, testimony of Mr. Leahigh during the California WaterFix hearings. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/petitioners_exhibit/dwr/dwr_61.pdf.

⁸⁵ Exhibit DWR-401, Bay-Delta Objectives Exceedance Metrics (Joint SWP/CVP responsibility), presented during the WaterFix Hearing. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/petitioners_exhibit/dwr/dwr_401.pdf

⁸⁶ Exhibit DWR-402, Bay-Delta Objectives Exceedance Metrics (Joint SWP/CVP responsibility), presented during the WaterFix Hearing. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/petitioners_exhibit/dwr/dwr_402.pdf

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As compared to the Existing Conditions scenario, modeled electrical conductivity increased average electrical conductivity at Jersey Point by 92 $\mu\text{mhos/cm}$ (14%), 377 $\mu\text{mhos/cm}$ (29%) and 360 $\mu\text{mhos/cm}$ (32%) in January, November, and December, respectively, and remains similar in other months.⁸⁷

The DEIR relies on Leahigh (2016) to state that each of its alternatives would have “less than significant” impacts on water quality because each of those alternatives would have about the same number of exceedances of Delta water quality standards as existing conditions.⁸⁸

However, this contradicts the DEIR’s stated criterion for significance:

If a water quality constituent declines because the Proposed Project scenario is implemented rather than the Existing Conditions scenario, the impact would not be potentially significant unless it would result in exceeding applicable limits and would violate a standard or other requirement.⁸⁹

The prediction is that exceedances will occur. Thus they would be significant. The contention that they would occur with roughly the same frequency as in the No Project Alternative does not make them any less significant.

The citation in the DEIR to Mr. Leahigh’s assertion of a “high degree of success in meeting D-1641 requirements” is also misleading because this asserted success does not include periods when the SWRCB granted the SWP and CVP Temporary Urgency Change Petitions (TUCP’s). This is important. The SWRCB has succumbed to a pattern and practice of waiving (*i.e.*, weakening) water quality, flow and temperature criteria whenever requested in TUCP’s. Prior to 1991, the SWRCB simply didn’t enforce violations of water quality standards. In 1992, Reclamation and DWR intended to submit a TUCP, but CDFW wouldn’t agree to approval; the SWRCB chose not to take enforcement action for some 218 violations.⁹⁰ In June of 1992, the SWRCB relaxed D-1485 Suisun Marsh salinity and Contra Costa Canal chloride standards.⁹¹ The SWRCB conducted a February 2009 hearing on a joint petition by Reclamation and DWR to relax Delta water quality standards, but miracle March rains made relaxation unnecessary.⁹²

In 2013, the SWRCB allowed Reclamation and DWR to operate to critical year water quality standards in a dry year, effectively weakening the standards.⁹³ In 2014 and 2015, the

⁸⁷ DEIR, pp. 4-25 and 4-26.

⁸⁸ DEIR, pp. 5-11, 5-43, 5-79.

⁸⁹ DEIR, p. 4-25.

⁹⁰ SWRCB letter to USBR and DWR regarding D-1485 water quality violations, June 1992, pp. 1-2 and 4.

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/CS_PA%20et%20al/part2/cspa_252.pdf

⁹¹ Order 92-02, Order Establishing Drought-Related Requirements for the Bay-Delta During 1992, p. 30-32.

https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/orders/1992/wro92-02.pdf

⁹² Order WR 2009-0013-EXEC, Order Denying Temporary Urgency Change, February 24, 2009, p. 6.

https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/orders/2009/wro2009_0013.pdf

⁹³ Letter from SWRCB Executive Director Tom Howard to Ronald Milligan and David Roose, Actions to Conserve Cold Water Pool in Shasta Reservoir for Fishery Resources, May 29, 2013, p. 3.

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SWRCB weakened water quality, flow and/or temperature criteria some 35 times.⁹⁴ Between January 2014 and December 2015, the SWRCB issued a series of fourteen orders largely granting TUCPs submitted by Reclamation and DWR for the Delta and San Joaquin River.⁹⁵ In 2014, SWRCB staff observed that the TUCP orders reduced regulatory Delta outflow by 43% and increased Delta exports by 18%. In 2015, SWRCB actions reduced regulatory outflow by 78% in order to increase exports by 32%. These changes shifted more than one million acre-feet of water from fisheries protection to agricultural and urban use.⁹⁶

1-22
(Cont.)

The DEIR’s reliance on Mr. Leahigh’s testimony in the WaterFix hearings to make a finding that exceedances of D-1641 water quality standards will be less than significant is not a reliable basis for this finding.

In addition, the crash of CESA-listed pelagic and anadromous fish species in the Delta is essential context for considering whether the DEIR’s stated criterion for significance (violation of a water quality standard) sets too high a bar. Many of the D-1641 water quality standards are standards for salinity. Salinity directly affects habitat conditions for Delta smelt. Moving the habitat of Delta smelt further into the Delta by increasing salinity is likely to reduce available habitat for that species, even when no standards are exceeded. The months of December and January, in which the DEIR acknowledges that increases in salinity will occur, are key months in the Delta smelt’s spawning and larval life stages.

1-23

Finally, the Proposed Project would weaken salinity standards in “Fall X2” months in Wet years. By definition, a standard won’t be violated if it is weakened so that a violation under previous standard is no longer a violation.

A recirculated DEIR should re-evaluate the level of significance of changes in water quality under the Proposed Project.

XI. The DEIR fails to consider the mandates of the 2009 Delta Reform Act.

1-24

Increasing degradation of the Delta’s water quality and fisheries led the California Legislature to adopt the 2009 Delta Reform Act.⁹⁷ California Water Code (CWC), Division 35

https://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/sacramento_river/docs/05292013swrcb.pdf

⁹⁴ Pubic Policy Institute of California, *What if California’s Drought Continues?* August 2015, page 7: http://www.ppic.org/content/pubs/report/R_815EHR.pdf and the Technical Appendix at page 6:

http://www.ppic.org/content/pubs/other/815EHR_appendix.pdf

⁹⁵ State Water Project and Central Valley Project Temporary Urgency Change Petition page, 2015 and 2015.

https://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/tucp/

⁹⁶ SWRCB, staff presentation at the 20 May 2015 public workshop on drought activities in the Bay-Delta. Available at:

http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/workshops/swrcb_staff_pres_session1b.pdf

⁹⁷ California Legislative Information, Senate Bill No. 1, Chapter 5, (2009-2010). Available at:

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/CS_PA%20et%20al%20cspa_26.pdf

(Sacramento-San Joaquin Delta Reform Act of 2009), General Provisions, Sections 85000-85067 establishes a state water policy for the Delta. The Legislature found and declared that:

The Sacramento-San Joaquin Delta watershed and California’s water infrastructure are in crisis and existing Delta policies are not sustainable. Resolving the crisis requires fundamental reorganization of the state’s management of Delta watershed resources. (§ 85001(a).)

The Sacramento-San Joaquin Delta, referred to as the Delta in this division, is a critically important natural resource for California and the nation. It serves Californians concurrently as both the hub of the California water system and the most valuable estuary and wetland ecosystem on the west coast of North and South America. (§ 85002.)

It established a policy of the State of California to:

Restore the Delta ecosystem, including its fisheries and wildlife, as the heart of a healthy estuary and wetland ecosystem. (§ 85020(c)) Promote water conservation, water use efficiency, and sustainable water use. (§ 85020(d)) Improve water quality to protect human health and the environment consistent with achieving water quality objectives in the Delta. (§85020(e).)

It further found and declared:

The policy of the State of California is to reduce reliance on the Delta in meeting California’s future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency. (c) The Delta is a distinct and valuable natural resource of vital and enduring interest to all the people and exists as a delicately balanced estuary and wetland ecosystem of hemispheric importance. (§ 85022(c)(1).) The permanent protection of the Delta’s natural and scenic resources is the paramount concern to present and future residents of the state and nation. (§ 85022(c)(2).) The longstanding constitutional principle of reasonable use and the public trust doctrine shall be the foundation of state water management policy and are particularly important and applicable to the Delta. (§ 85023.)

The DEIR fails to adequately discuss or analyze the requirements of state law as mandated by the Delta Reform Act and relevant sections of the CWC, particularly insofar as the DEIR fails to even acknowledge the requirement to “reduce reliance on the Delta in meeting California’s future water supply needs.” *See* DEIR, p. 4-105. The Proposed Project, by contrast, would increase water supply deliveries from the Delta. Failure to consider state policy and law regarding the Delta renders the DEIR deficient with respect to fair disclosure and environmental setting. The DEIR must be revised and recirculated to address these shortcomings.

CWC, Division 35 (Sacramento-San Joaquin Delta Reform Act of 2009, Part 2, (Early Actions), Section 85084.5 required:

The Department of Fish and Game, in consultation with the United States Fish and Wildlife Service and the National Marine Fisheries Service and based on the best available science, shall develop and recommend to the board Delta flow criteria and quantifiable biological objectives for aquatic and terrestrial species of concern dependent on the Delta.

Following an extensive public proceeding including a peer-review process, CDFW issued a report titled *Quantifiable Biological Objectives and Flow Criteria for Aquatic and Terrestrial Species of Concern Dependent on the Delta*.⁹⁸ The report found that “recent Delta flows are insufficient to support native Delta fishes in habitats that now exist in the Delta” and recommended numerous biological and goals and objectives and specific recommendations for instream flow necessary to protect public trust fisheries. It also included the specific flow recommendations by the expert panel, fishery agencies and NGOs in the SWRCB’s 2010 flow hearing.⁹⁹ The DEIR fails to acknowledge, discuss or analyze the findings and recommendations in the legislatively-directed CDFW report. None of the alternatives in the DEIR incorporate the findings and recommendations in the report. Failure to consider the report and the scientific findings buttressing the report renders the DEIR deficient with respect to reasonable alternatives, fair disclosure and environmental setting. The DEIR must be revised and recirculated to address these shortcomings.

CWC, Division 35 (Sacramento-San Joaquin Delta Reform Act of 2009, Part 2, (Early Actions), Section 85086(c)(1) required the SWRCB to:

Pursuant to its public trust obligations, develop new flow criteria for the Delta ecosystem necessary to protect public trust resources. In carrying out this section, the board shall review existing water quality objectives and use the best available scientific information. The flow criteria for the Delta ecosystem shall include the volume, quality, and timing of water necessary for the Delta ecosystem under different conditions.

Section 85086(c)(2) also required that:

Any order approving a change in the point of diversion of the State Water Project or the federal Central Valley Project from the southern Delta to a point on the Sacramento River shall include appropriate Delta flow criteria and shall be informed by the analysis conducted pursuant to this section.

Pursuant to legislative direction, the SWRCB conducted an extensive public proceeding to determine flow criteria for the Delta necessary to public trust resources, using best available scientific information. The SWRCB’s proceeding to develop instream flows protective of public trust resources was the most intense and comprehensive effort to determine necessary flows to

⁹⁸ California Department of Fish and Game, *Quantifiable Biological Objectives and Flow Criteria for Aquatic and Terrestrial Species of Concern Dependent on the Delta*, Nov. 23, 2010.

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/swrcb_66.pdf

⁹⁹ *Id.*, pp. 94, 97-104, 105-107.

protect public trust fish and wildlife resources in the 52-year history of the Board. The Board appointed an illustrious group of recognized experts to serve as an expert and reference 325 technical documents. Twenty-four parties to the proceeding provided 84 expert witnesses and 488 exhibits, plus exhibits from previous Bay-Delta hearings.¹⁰⁰

The resulting SWRCB report, titled *Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem*, found that “[t]he best available science suggests that current flows are insufficient to protect public trust resources” and that “recent Delta flows are insufficient to support native Delta fishes for today’s habitats.” It recommended flow criteria, crafted as percentages of unimpaired flows, of “75% of unimpaired Delta outflow from January through June, 75% of unimpaired Sacramento River inflow from November through June and 60% of unimpaired San Joaquin River inflow from February through June.”¹⁰¹ The report also included the specific flow recommendations of an expert panel, fishery agencies, and NGO’s in the hearing.¹⁰² The DEIR fails to acknowledge, discuss or analyze the findings and recommendations in the legislatively directed SWRCB Flow Criteria report. Nor do any of the alternatives in the DEIR incorporate the findings and recommendations in the report. Failure to consider the report and the scientific findings buttressing the report renders the DEIR deficient with respect to reasonable alternatives, fair disclosure and environmental setting. The DEIR must be revised and recirculated to address these shortcomings.

Together, the legislatively mandated SWRCB and CDFW 2010 proceedings represent the most comprehensive and scientifically robust effort to determine necessary flows to protect fishery resources in a watershed in the state’s history. The DEIR’s failure to disclose, discuss and analyze declared state policy and CWC requirements or to discuss and include the findings and recommendations of the SWRCB and CDFW reports in a project alternative is inexplicable and fails to meet the fair disclosure requirements of CEQA. It effectively sabotages the selection of alternatives and any effects analysis. The DEIR must be revised and recirculated for additional public review.

XII. The DEIR fails to consider the constitutional mandate to prevent the waste and unreasonable use of water.

The Proposed Project will increase average annual water deliveries by an estimated 373,000 acre-feet on average.¹⁰³ With respect to the increased water deliveries, the DEIR states:

As discussed in Section 4.6.2, while the Proposed Project has the potential to increase average annual water supply yields, any potential additional water supply would be within the historic range of water supply deliveries. In addition, any increase in water

¹⁰⁰ SWRCB, Delta Flow Criteria Program website:

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/.

¹⁰¹ SWRCB, *Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem*, 2010, p. 5,

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/swrcb_25.pdf

¹⁰² *Id.*, pp. 153-177.

¹⁰³ DEIR, Volume II: Appendices, Table 1-2, pdf pp. 665-666.

1-26
(Cont.)

1-27

would be allocated between the 24 SWP water agencies south of the Delta and would not significantly increase water deliveries within areas serviced by these agencies. Thus, the Proposed Project would not remove a water-related obstacle to growth and would not induce growth in the areas served by SWP water agencies beyond what is already planned by the various local jurisdictions.¹⁰⁴

The DEIR fails to consider whether these increased deliveries are a reasonable use of water under the California Constitution. Increased deliveries will perpetuate the chronic overappropriation of water.

DWR, as a state agency, is required to comply with the California Constitution. Article 10, Section 2 of the Constitution states:

It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare. The right to water or to the use or flow of water in or from any natural stream or water course in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water.

1-27
(Cont.)

California has a Mediterranean climate that experiences frequent droughts. The state also has an over appropriated water supply where demands for water exceed supply. It is beyond reasonable that the DEIR, for a Proposed Project that would supply more water for consumptive purposes and thereby reduce water available to support a seriously degraded aquatic ecosystem, should analyze whether the increased diversion of water is reasonable and whether the water would be put to a reasonable and beneficial use.

California agriculture comprises 2% of the state's GDP and uses an estimated 29 MAF of water annually. Scientists connected with the U.C. Davis Center for Watershed Sciences conducted a study of agricultural water use. They found that the top revenue producing and job creating commodities use the least water. Vegetables, horticulture, non-tree fruits, deciduous fruits, cucurbits (melons, squash, cucumbers, watermelon, zucchini, etc.), tomatoes, vine (wine and table grapes), onions, potatoes, etc. produce 81.8% of the jobs and 62.7% of the revenue but use 21.5% of the water. By comparison, irrigated pasture, alfalfa, corn, almonds, pistachios and cotton use 53.7% of water but only provide 19.6% of the revenue and 13.9% of the jobs.¹⁰⁵

A recirculated DEIR must discuss and analyze whether the additional water to be diverted by the Proposed Project would be put to a reasonable and beneficial use and whether the state's

¹⁰⁴ DEIR, p. 1-10.

¹⁰⁵ UC Davis Center for Watershed Science, Jobs per drop irrigating California crops, 2015. <https://californiawaterblog.com/2015/04/28/jobs-per-drop-irrigating-california-crops/>

economic and social interests would be best served by leaving that water in rivers to serve the aquatic ecosystem. Failure to conduct such an analysis renders the DEIR deficient as a fair disclosure documents and deprives the public and decision-makers of information necessary to make an informed decision.

1-27
(Cont.)

XIII. The DEIR’s exclusion of an analysis of the impacts of the Proposed Project on recreation and harmful algal blooms as not having potential significant impacts is unwarranted.

There is an immense body of evidence that SWP operations have significant impacts on recreation and aesthetics, including recreational fishing¹⁰⁶ and the recent proliferation of Harmful Algal Blooms (HABs) in the Delta.¹⁰⁷ However, the DEIR excludes analysis of the impacts of the Proposed Project on these beneficial uses of the Delta.

1-28

The condition of these resources is likely to worsen under the Proposed Project. A recirculated DEIR should analyze and propose mitigations for these potentially significant impacts.

XIV. Conclusion


DWR should withdraw the DEIR and issue a recirculated DEIR that corrects the deficiencies described in these comments and in those of NRDC et al.

1-29

Respectfully submitted,

¹⁰⁶ See testimony of Bill Jennings, Dan Bacher, and David Hurley in the WaterFix hearing on the decline of Delta recreational fisheries. Available at https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/CS_PA%20et%20al/part2/cspa_200.pdf, https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/CS_PA%20et%20al/part2/cspa_214.pdf, and https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/CS_PA%20et%20al/part2/cspa_216.pdf. Supporting exhibits are available at https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/cspa_et_al.html.

¹⁰⁷ See testimony of Erik Ringelberg in the WaterFix Hearing on Harmful Algal Blooms (HABs), Available at https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/CO_SJ%20et%20al/SJC_004.pdf. Supporting exhibits are available at https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/cosj_et_al.html.



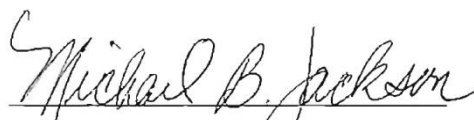
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II.6.4 LETTER O-CSPA-1 – CALIFORNIA SPORTFISHING PROTECTION ALLIANCE, CHRIS SHUTES, WATER RIGHTS ADVOCATE AND BILL JENNINGS, EXECUTIVE DIRECTOR; CALIFORNIA WATER IMPACT NETWORK, AQUALLIANCE, MICHAEL JACKSON, COUNSEL; AND CALIFORNIA WATER RESEARCH, DEIRDRE DES JARDINS, DIRECTOR (CSPA)—JANUARY 6, 2020

II.6.4.1 RESPONSE TO COMMENT O-CSPA-1-1

The CSPA has incorporated by reference the NRDC's comment letter. Please see responses to comments O-NRDC-1-4 through 1-51.

II.6.4.2 RESPONSE TO COMMENT O-CSPA-1-2

Key points listed by CSPA in bullet form (separate and apart from CSPA's incorporation by reference) are presented by CSPA in further detail in comments O-CSPA-1-3 through 1-29. DWR has provided specific responses thereto in responses to comments O-CSPA-1-3 through 1-29.

II.6.4.3 RESPONSE TO COMMENT O-CSPA-1-3

The real-time water operations process would increase protections for CESA-listed and other special status fish species in the Delta because it would rely on real-time monitoring information, increase the use of qualitative and quantitative models to assess risk in real time based on species distributions and relevant physical and biological factors, and would take advantage of the expertise within state and federal fish agencies, rather than rely on prescriptive measures which may not consider real-time species distributions and risk. For example, during the OMR Management period for species listed under CESA, DWR and CDFW technical staff, as part of the Smelt Monitoring Group and Salmon Monitoring Group, will meet weekly to consider survey data, salvage data and other pertinent biological and abiotic factors. These groups will jointly develop a risk assessment and supporting documentation based on the monitoring data and operations forecast and make recommendations to WOMT. DWR will operate to the decision from WOMT, subject to CDFW approval.

Additionally, implementing a real-time water operations process allows for adaptive management of operations to improve conditions for listed species as information is learned from the suite of studies included in the Proposed Project and Refined Alternative 2b, rather than waiting 10 years to reinitiate consultation with USFWS and NMFS, and re-apply for an ITP from CDFW. Subsequent to the release of the DERI, the Adaptive Management Plan was refined and is described in Part III of the FEIR.

DWR is correcting the record regarding OMR management and salmonid loss thresholds. OMR management is not proposing to rely on entrainment thresholds for Delta Smelt. Entrainment thresholds only apply to Winter-run Chinook Salmon and steelhead, and OMR restrictions begin when 50% of a single year threshold is met, and OMR would be further restricted when 75% of the annual loss threshold is met. Additionally, after discussion with CDFW, DWR included Spring-run Chinook Salmon OMR loss thresholds in Refined Alternative 2b.

Although actions to protect species such as the food subsidy action may rely on participation from other agencies, DWR is committed to obtaining such participation. Further, DWR is confident that other agencies will participate as they did during a recent pilot program when a target pulse of 27 TAF over a 4-week period was demonstrated to improve downstream transport of phytoplankton. In addition, DWR would not rely on the federal government's real time operations charter and would implement the real-time water operations and Adaptive Management Plan as described in the Proposed Project and Refined Alternative 2b.

II.6.4.4 RESPONSE TO COMMENT O-CSPA-1-4

As noted in DEIR Chapter 4.4.4, "Regional and Local Plans, Policies, and Regulations," CALFED program objectives have been implemented among numerous CALFED elements since the CALFED Program Record of Decision in 2000. Several programs listed in DEIR Chapter 4.6, "Cumulative Impacts" (Table 4.6-1, "List of Cumulative Projects"), are related to the CALFED ROD. Under Refined Alternative 2b, as described in FEIR Part III, Chapter 5.3, "Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP," long-term operations of the SWP would be implemented in a similar manner as previous elements of the CALFED ROD have been implemented.

II.6.4.5 RESPONSE TO COMMENT O-CSPA-1-5

The DEIR provided an accurate description of the Proposed Project that has been refined with additional environmental protections based on additional consultation and feedback from CDFW. Neither lead agencies nor responsible agencies must adopt the precise contents of either Proposed Projects or EIR alternatives. Both can evolve over the course of the CEQA process in response to input from members of the public or from other public agencies. And the final result may not be identical to either the original Proposed Project or any of the original EIR alternatives.

This potential for such changes is especially likely to arise where, as here, the agency functioning as the lead agency is the applicant for a permit and one of the responsible agencies is the decisionmaker for the lead agency's permit application. In such instances, the lead agency does not control the final form of the permit to be issued by the responsible agency functioning as decisionmaker. Rather, the responsible agency (here, CDFW) controls the final outcome, often based on factors other than the general CEQA principle that significant environmental effects should be mitigated where feasible. Here, CDFW's ultimate decision will be based in part on CEQA considerations but in greater part on CESA requirements.

For additional information regarding how the Proposed Project informed the CEQA process for decision-making, please refer to Master Response 3, "The CEQA Process."

For a comparison between various CESA standards and the parallel CEQA standards, see Master Response 4, "Legal Standards." For a detailed discussion of the requirements of CESA, see DEIR Chapter 4, Environmental Setting and Impact Analysis, Chapter 4.4.3.1, California Endangered Species Act.

With regards to the comments regarding the Coordinated Operations Agreement and the Project, the DEIR Chapter 4.1.2, describes that the SWP and CVP jointly operate to meet Delta regulatory requirements under the COA. The CVP and SWP are operated in coordination under SWRCB decisions

and water right orders related to the CVP's and SWP's water right permits and licenses to appropriate water by diverting to storage, by directly diverting to use, or by re-diverting releases from storage later in the year or in subsequent years. The COA was originally executed in 1986 and subsequently updated in 2018 through the 2018 COA Addendum.

The baseline used in the DEIR includes the 2018 COA Addendum, as opposed to the unmodified 1986 version of the COA, to accurately reflect the Existing Conditions in the Delta as of April 19, 2019. The DEIR also includes a discussion of changes to surface water hydrology and water quality associated with implementing the 2018 COA Addendum in comparison to the original 1986 COA. That analysis concludes that implementation of the 2018 COA Addendum resulted in minimal change to surface water hydrology in the Delta and upstream waterways. For further detail regarding treatment of COA in this EIR, please see DEIR Appendix B, "2018 Coordinated Operation Agreement Addendum."

II.6.4.6 RESPONSE TO COMMENT O-CSPA-1-6

San Joaquin River Fall-run Chinook Salmon and steelhead are not listed as threatened or endangered under CESA and the non-essential experimental population of Spring-run Chinook Salmon are not subject to CESA. Therefore, the impacts of the Proposed Project on these species are required to be assessed under CEQA, relative to the CEQA baseline. As described in Master Response 4, "Legal Standards," the legal standard for the CEQA baseline is Existing Conditions. Further, the impacts of the Proposed Project are evaluated relative to the significance criteria identified in DEIR Chapter 4.4.6, "Threshold of Significance," which considers an impact significant if the project would result in substantial adverse impacts. With respect to SWP operations, Existing Conditions are the conditions that occurred in the Delta along with SWP operations that occurred under the 2008 USFWS and 2009 NMFS Biological Opinions. Therefore, DWR is required to conduct an analysis that identifies impacts of implementing the Proposed Project, relative to the impacts that occurred during implementation of the 2008 and 2009 Biological Opinions. The results of these analyses show San Joaquin River salmonids are more likely to pass through Old River and Grant Line Canal and approach the export facilities under the long-term operations of the SWP. The analyses also show that recent acoustic tagging studies indicate no difference in survival for fish migrating through the Old River route relative to fish continuing through the San Joaquin River route (Buchanan et al. 2018, DEIR page 4-212) and that through-Delta survival of Spring-run Chinook Salmon was higher under the Proposed Project scenario for all years (DEIR Figure 4.4-75, "Mean Estimates of San Joaquin River Spring-Run Chinook Salmon Through-Delta Survival"). Further, the DEIR shows that San Joaquin River Spring-run Chinook Salmon likely would receive protections from real-time risk assessment-based operations and that the SWP responsibility for impacts on these fish varies from 30% to 60% depending on the year type. In consideration of all of the above factors, the DEIR appropriately concludes that the impacts on Spring-run Chinook Salmon are less than significant, which included San Joaquin River fish. Additionally, Refined Alternative 2b would result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions, and includes Spring-run Chinook Salmon OMR loss thresholds, which would further reduce impacts from those described in the DEIR.

Results from analyses conducted for Fall-run Chinook Salmon and steelhead are similar to those for Spring-run Chinook Salmon and the DEIR also concluded that impacts on these species would be less than significant under the Proposed Project, relative to Existing Conditions.

II.6.4.7 RESPONSE TO COMMENT O-CSPA-1-7

DWR acknowledges that a comprehensive description of the Pelagic Organism Decline (POD) synthesis report was not included in the DEIR. DWR also appreciates that the comment provided the POD Management Team’s hypothesized slow drivers of the POD regime shift, including highlighting that several drivers are influenced by SWP operations including Delta Outflow, salinity, and water temperature. The DEIR acknowledges the importance of these components of aquatic habitat in DEIR Chapter 4.4.1.4, subheading “Bay Delta Aquatic Habitat.” DEIR Chapter 4.2.2, “Comparison of Proposed Project with the Existing Conditions,” evaluates changes in Delta outflow under the Proposed Project and describes Delta outflow under the Proposed Project and Existing Conditions model scenarios, as presented in Table 9-1 and Figures 9-1 through 9-18 in DEIR Appendix C, Attachment 2-2, “Flow Results (CalSim II).” DEIR Appendix H, “CalSim II and DSM2 Model Descriptions and Assumptions,” acknowledges that CalSim II does not model the proposed adult Longfin Smelt entrainment protections for adult, larval, and juvenile Longfin Smelt, and does not model larval and juvenile Delta Smelt entrainment protection. Thus, Delta outflow may be higher than the modeled values presented in DEIR Appendix C, “Hydrology Model Results,” during winter and spring months. The DEIR evaluates effects of changes in Delta outflow on Delta Smelt food availability and habitat, and Longfin Smelt abundance (DEIR Chapter 4.4.7.4 subheadings “Delta Smelt,” and “Longfin Smelt,” and DEIR Table 4.4-6, “Summary of Impacts and Conclusions Associated with Implementation of the Proposed Project,” along with Environmental Protective Measures and Other Actions to Offset Impacts Presented by Species and Life Stage). Both suites of analyses conclude that the effects of differences in Delta Outflow resulting from the Proposed Project are less than significant. Additionally, subsequent to the release of the DEIR, DWR committed to include additional adaptive management actions not originally included in the DEIR Proposed Project that would increase Delta Outflow in the spring and summer months of various water year types, which would further minimize impacts below those identified in the DEIR.

II.6.4.8 RESPONSE TO COMMENT O-CSPA-1-8

DWR acknowledges conclusions presented by Hammock et al. (2019) that there is “a growing consensus that the decline in pelagic fish abundance in the SFE [San Francisco Estuary] is at least partially due to a trophic cascade, triggered by declining phytoplankton (Feyrer et al. 2003; Sommer et al. 2007; Hammock et al. 2017; Hamilton and Murphy 2018).” Figure 3 presented in Hammock et al. (2019) shows a relatively steep decline in chlorophyll a from 1975/1976 to the early 1990s and then shows relatively constant abundance through 2013/2014. As described in Master Response 2, “Baseline,” the legal standard for the CEQA baseline is Existing Conditions, which consists of the physical conditions that existed at the time of the Notice of Preparation (NOP) was published on April 19, 2019. Environmental conditions relevant to the project, specifically flows and hydrologic conditions, fluctuate regularly, so a snapshot of conditions that existed at a single point in time would

not reflect actual conditions or provide an appropriate basis for analyzing impacts. The baseline for the DEIR needed to capture variations in Existing Conditions, including different water year types.

As described in DEIR 4.4.7.1, “General Analytical Approach,” the impact analyses utilize species-specific conceptual models to identify environmental variables that could be affected by SWP operations, which then could affect each species. Food availability is posited by the IEP MAST (2015) conceptual model to affect the probability Delta Smelt transitioning from one life stage to the next and was evaluated to the extent possible using the best available scientific information and modeling tools. Therefore, the evaluations of Delta Smelt food availability are conducted relative to Existing Conditions (i.e., conditions and operations that occurred under the 2008 and 2009 Biological Opinions), which meet the requirements for conducting evaluations under CEQA. These analyses suggest that food availability would be similar under the long-term operations of the SWP and Existing Conditions scenarios. Available conceptual models for other special-status species do not suggest that food availability, especially with regard to primary productivity, are important drivers of population dynamics and, therefore, food availability was not evaluated for these species.

DWR acknowledges that the description of the North Delta Food Subsidies and Colusa Basin Drain Project does not quantify the scale of the action in comparison to the total volume of the estuary. Nonetheless, based on initial results from a pilot effort, the North Delta Food Subsidies and Colusa Basin Drain Project is expected to provide additional phytoplankton to the Delta, relative to the CEQA baseline (i.e., Existing Conditions). As described in DEIR Chapter 3.3.3.1, “Food Enhancement Summer-Fall Actions,” this food subsidy action is an adaptive management action that relies on monitoring and evaluation in order to optimize its efficacy.

II.6.4.9 RESPONSE TO COMMENT O-CSPA-1-9

Public Resources Code §21100(b)(4) states that an EIR shall include a detailed statement setting forth alternatives to the project. The range of alternatives to the Proposed Project should include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more significant effects. In the DEIR, however, the Proposed Project does not result in significant effects, thus the need to lessen does not exist. The DEIR still discussed four alternatives, in addition to the “no project” alternative. Please see Master Response 3, “The CEQA Process,” for more details.

The development and adoption of the Bay Delta Water Quality Control Plan is a separate process under the jurisdiction of the SWRCB (See EIR Chapter 4.3.1, “Environmental Setting,” Chapter 4.4.3.4, “Water Quality Control Plans,” and Chapter 4.6.1 Cumulative Impacts, Table 4.6-1e). Please review Master Response 8, “Other State Efforts,” and 9, “Relationship to WQCP Update and Voluntary Agreements,” for more details regarding other state processes and the Bay Delta Water Quality Control Plan.

II.6.4.10 RESPONSE TO COMMENT O-CSPA-1-10

DWR acknowledges that benthic assemblages in the Delta may not be static and that providing additional fresh water to Suisun Bay may increase Delta Smelt populations. However, the suggestion that the Proposed Project should increase freshwater flow to Suisun Bay does not take into

consideration other factors influencing Delta Smelt abundance and benthic assemblages such as water temperature and food availability. DWR is proposing Summer-Fall habitat actions to benefit Delta Smelt, and subsequent to the release of the DEIR has identified additional adaptive management flow actions that could be used to benefit Delta Smelt during non-wet years.

II.6.4.11 RESPONSE TO COMMENT O-CSPA-1-11

DWR acknowledges that an alternative that operates the SWP for the purpose of freshening Suisun Bay for multiple years was not evaluated. Excluding such an alternative does not violate CEQA because the alternative would not meet the project objectives described in DEIR Chapter 3.1.1, "Project Objectives." Under the CEQA Guidelines, the range of alternatives to the Proposed Project should include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more significant effects. In this DEIR, however, the long-term operation of the SWP does not result in significant effects, thus the need to lessen such effects does not exist. Nevertheless, the DEIR discusses four alternatives to the Proposed Project, in addition to the "no project" alternative. The DEIR compared the potential environmental effects of the Proposed Project to the potential effects of each alternative, in relation to the Existing Conditions (i.e., baseline). Please see Master Response 3, "The CEQA Process," that discusses the requirements of CEQA with respect to the development of alternatives and the purpose served by alternatives where there are no significant impacts.

II.6.4.12 RESPONSE TO COMMENT O-CSPA-1-12

DWR is required by various regulatory agencies including the State Water Resources Control Board to operate the SWP in compliance with all applicable state and federal regulations, including the most current Bay Delta Water Quality Control Plan.

The Plan Amendment Report, Appendix 1 to the 2006 Bay-Delta Water Quality Control Plan³⁹ states: The reasons for the POD are still unknown, and water project operations are included in the conceptual model for many of the POD studies as a possible factor/cause for the decline. The study results are expected in 2007 and may have an impact on the Delta Outflow objective and its implementation. The study results could help staff assess when the current Delta outflow objective must be met to protect the beneficial uses and whether the objective can be relaxed without causing an additional negative impact to sensitive species. In light of this, the State Water Board did not change this objective in the 2006 Plan. The State Water Board will not consider changing the Delta Outflow objective until the POD studies are completed or the Board receives other reliable technical information, warranting a change.

The Water Board held two workshops in 2007 and 2008 to receive information on the Pelagic Organism Decline, but the Water Board deferred consideration of the results presented in the two workshops until the Pelagic Organism Decline studies were completed. The initial Pelagic Organism Decline studies have since been completed, and academic papers from the POD studies have been published and peer-reviewed.

The Proposed Project cannot rely on compliance with the 2006 Bay-Delta Water Quality Control Plan to assure protection of pelagic fish and other organisms in the Delta.

II.6.4.13 RESPONSE TO COMMENT O-CSPA-1-13

DWR operates the SWP to comply with all applicable water quality standards in the Bay Delta Water Quality Control Plan, including the narrative salmon protection standard in Table 3 of the plan, which states that “water quality conditions shall be maintained together with other measures in the watershed sufficient to achieve a doubling of natural production of Chinook salmon from the average production of 1967-1991, consistent with the provision of State and federal law.” DWR also operates in compliance with all other requirements to protect salmon in the watershed and continues to implement protective measures for salmon, as required by the 2009 NMFS Biological Opinion (e.g., the Yolo Bypass Salmonid Habitat and Fish Passage Project). DWR has no legal authority or responsibility to regulate other entities that contribute to reduced water quality or increased salmon mortality in the Delta. The DEIR complies with the CEQA requirement to evaluate impacts of the Proposed Project, relative to Existing Conditions (see Master Response 4, “Legal Standards,” for a description of the legal standards required for CEQA analyses).

The WQCP’s is not a self-executing and DWR is in compliance with D-1641, which states, in part, “Implementing the narrative objective for salmon protection requires a long-term process. A period of actual operation meeting the numerical objectives in the [Bay-Delta Plan], coupled with adequate monitoring, is required before the SWRCB can determine whether additional implementation measures are needed to meet this objective.” Additionally, the 2018 Bay-Delta plan update for LSJR states, “D-1641 did not require separate actions to implement the narrative objective for salmon because the State Water Board expects that implementation of the numeric flow-dependent objectives and other non-flow measures will implement this objective” and that “the State Water Board will consider monitoring results when determining whether numeric objectives either should replace or augment the narrative objective. The Board may use the information it receives to modify the objective in future proceedings.” DWR will comply with any new or revised measures imposed by the SWRCB in a future water rights hearing to implement the WQCP narrative salmon doubling objective.

II.6.4.14 RESPONSE TO COMMENT O-CSPA-1-14

Response does not directly address alleged D-1641 requirement for fisheries protection plan prior to Stage 2 of the JPOD & USBR failure to update plan since 2006 despite SWRCB order to do so in 2006, or claim that “The Department of Water Resources has never submitted an acceptable plan for use of Joint Point use of Reclamation’s pumping plant, and requested an exemption in 2017 after the intake structure for Clifton Court Forebay was damaged.⁴⁶ The exemption was denied.”

No changes to CVP or SWP water allocations are expected as a result of implementing the Proposed Project, including implementation of the 2018 COA Addendum. As discussed in DEIR Appendix B, “2018 Coordinated Operation Agreement Addendum,” implementation of the 2018 COA Addendum would shift responsibilities for meeting obligations between the CVP and SWP. Changes to surface water flow upstream from the Delta would be minimal. The shift in responsibilities would result in reduced SWP exports to south of Delta water users and an increase in export to CVP water users. These changes

would be minor when compared to the total volume of water delivered by either the CVP or SWP. The minimal change to surface water hydrology and water deliveries would not induce new adverse effects on other environmental resources.

The COA does not define what actions DWR or Reclamation will take in any given set of circumstances and DWR has no control over CVP operations. These decisions occur in real-time, allowing operators to account for constantly changing conditions such as tides, accretions and depletions, and hydrology. Therefore, whether Reclamation would alter its operations of the CVP in response to the Proposed Project in a way that would cause environmental impacts outside of the SWP zone of influence is speculative. Under long-standing CEQA principles, speculative analysis is considered not to be meaningful or informative, and thus is not required.

Please also see Master Response 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations,” for further discussion of the COA.

II.6.4.15 RESPONSE TO COMMENT O-CSPA-1-15

Long-term operations of the SWP include operation of all the SWP facilities; however, the operational changes proposed as part of the project do not involve all the SWP components. To analyze the full range of potential environmental impacts, the DEIR identified the geographic area in which potential direct and reasonably foreseeable indirect impacts could occur. The geographic area for evaluation of potential direct and indirect impacts of the Proposed Project is delineated by the following waters:

- Sacramento River from its confluence with the Feather River downstream to the legal Delta boundary at the I Street Bridge in the City of Sacramento
- Sacramento-San Joaquin Delta
- Suisun Marsh and Bay

Although the SWP is a state-wide system, the Proposed Project is a limited set of updates to SWP long-term operations that would not cause environmental impacts beyond these boundaries. Please see Master Response 1, “Scope of Analysis,” for more detail.

DWR considered whether long-term operations of the SWP would result in a reasonably foreseeable response by Reclamation that could result in changes in CVP operations that would cause environmental impacts outside the SWP zone of influence, which would include effects south of the Delta. As explained in Master Response 22, “Relationship to CVP Operations,” and DEIR Appendix G, “Geographic Scope of Project’s Influence on Flow,” even though the SWP and CVP coordinate operations, DWR and Reclamation independently decide how to operate the individual projects to best meet applicable requirements. DWR will continue to comply with the regulatory requirements of D-1641 independent of Reclamation’s actions. See also Response to Comment O-CSPA-1-14.

With regards the comment related to the further decline of water quality in the Delta, the SWRCB in its December 2018 amendment revised WQ assessment for the South Delta and is in process for updating the WQCP for the Sacramento River which will address future conditions regarding water quality. See also Master Response 9, “Relationship to the WQCP Update and Voluntary Agreements.”

II.6.4.16 RESPONSE TO COMMENT O-CSPA-1-16

The DEIR evaluates entrainment of most special-status fish species based on CalSim II modeling. Longfin Smelt and Delta Smelt entrainment is evaluated using DSM2 PTM. These modeling tools account for San Joaquin River flow. Therefore, the evaluation of entrainment at the Banks Pumping Plant also accounts for San Joaquin River flow.

DWR acknowledges that San Joaquin River-origin Fall-run Chinook Salmon outmigrant survival is low and provides an analysis of outmigrant survival in the DEIR Chapter 4.4.7.4, subheading, “San Joaquin River-Origin Fall-run Chinook Salmon Structure Decision Model under the Fall-run and Late Fall-run Chinook Salmon.”

DWR is not required to evaluate Reclamation’s non-compliance with D-1641 flow requirements for Vernalis because DWR does not have authority to operate the CVP and is not proposing to control Reclamation’s operations. DWR included the Reclamation’s Long-term Operation of the Central Valley Project in Table 4.6-1a, “List of Cumulative Projects,” and evaluated the effects of that project, along with all other reasonably foreseeable projects in DEIR Chapter 4.6.1, “Cumulative Impacts.”

II.6.4.17 RESPONSE TO COMMENT O-CSPA-1-17

DEIR Appendix B, “2018 Coordinated Operation Agreement Addendum,” presents an analysis of conditions under the 2018 COA as compared to 1986 COA. Details regarding modeling of extreme conditions are provided in the DEIR Appendix H Attachment 1-7, “Model Limitations.”

The model results presented in DEIR Appendix B indicate that Lake Oroville storage at the end of September may be lower under 2018 COA as compared to 1986 COA. However, the monthly time-step CalSim II model cannot simulate specific operational flexibility that occurs “real-time.” Therefore, differences in CalSim II results for the 2018 COA as compared to 1986 COA during extreme drought conditions are not necessarily representative of actual operations. Instead the results should be considered to be representative of reduced storage in extreme conditions. It is not possible to determine if the reduced storage conditions would necessarily result in an increase in requests for Temporary Urgent Change Permit by DWR.

II.6.4.18 RESPONSE TO COMMENT O-CSPA-1-18

As noted in DEIR Chapter 3.3.7, “Drought and Dry Year Actions,” DWR shall coordinate with Reclamation to develop a voluntary toolkit of drought actions that could be implemented at the discretion of DWR and/or Reclamation. On October 1st, if the prior water year was Dry or Critical, DWR, in coordination with Reclamation, shall meet and confer with USFWS, NMFS, CDFW, and Public Water Agencies on voluntary measures to be considered if drought conditions continue into the following year. If dry conditions continue, DWR, in coordination with Reclamation, will regularly meet with this group (and potentially other agencies and organizations) to evaluate hydrologic conditions and the potential for continued dry conditions that may necessitate the need for development of a drought contingency plan (that may include actions from the toolkit) for the water year. For more details, please see Master Response 24, “Drought Conditions.”

II.6.4.19 RESPONSE TO COMMENT O-CSPA-1-19

The scope of this project does not encompass all activities undertaken by DWR that are subject to regulatory oversight, and it is not intended, nor appropriate, that this project should be considered a substitute or successor to D-1641. Upon implementation of this project, DWR will continue to be subject to D-1641 and all requirements imposed therein. Additionally, in December of 2018, the State Water Resources Control Board (SWRCB) adopted an amendment to the “Water Quality Control Plan for the San Francisco Bay/Sacramento – San Joaquin Delta Estuary” with new and revised flow water quality objectives for the Lower San Joaquin River and revised southern Delta salinity water quality objectives. As stated in the SWRCB’s December 12, 2018 WQCP update, “the State Water Board will amend DWR’s and USBR’s water rights to continue to require implementation of the interior southern Delta salinity water quality objectives consistent with this plan.” (2018 WQCP, p.35). The 2018 WQCP update likewise directs DWR and USBR to develop and implement a Comprehensive Operations Plan (COP) that will, in part, “describe the actions that will fully address the impacts of SWP and CVP export operations on water levels and flow conditions that may affect salinity conditions in the southern Delta...” (2018 WQCP, p.36). In August 2019, DWR and the USBR submitted a preliminary draft COP to the SWRCB, subject to further development and revision prior to the SWRCB consideration for approval. Further, any future water rights proceeding to implement the 2018 WQCP will succeed D-1641 and will establish the water quality operational limitations DWR must meet.

II.6.4.20 RESPONSE TO COMMENT O-CSPA-1-20

A combined CVP and SWP export rate of 1,500 cfs is required to satisfy physical constraints of the pumps as well as refuge supplies off the DMC and San Luis Canal. Holding export rates will result in no additional effects to species not already analyzed in the 2008 and 2009 Biological Opinions. Please review “Updated Report to SWRCB on Export Amounts to Maintain Health and Safety During Drought,” for more details.

Oroville operations assess several issues (e.g., flood risk, water supply, ecosystem benefits, etc.). Changes from these operations (i.e., increasing carryover storage) may result in significant flood impacts.

II.6.4.21 RESPONSE TO COMMENT O-CSPA-1-21

The comment asserts that water supply operations at the Oroville Reservoir are not appropriately permitted under various laws. DWR does not propose any changes to its operations of SWP facilities on the Feather River, including Oroville Dam, (Oroville Facilities) as a part of the long-term operations of the SWP, i.e., this Project. Please see Response to Comment NRDC-1-20 for an explanation of the difference between this Project and operation of the Oroville Facilities, as well as information regarding regulatory requirements applicable to operation of the Oroville Facilities. To the extent that comment disagrees with operations at the Oroville Facilities or the requirements governing those operations, such concerns cannot be addressed in this proceeding.

The comment asserts that “it is inadequate to that that reservoir operations will not change” and that the EIR must describe and analyze both the baseline and Project operations at Oroville, the comment

misunderstands the modeling for this EIR. The hydrologic modeling for the EIR is a useful tool for analyzing differences between various scenarios for the purpose of comparing relative benefits and impacts. Modeling for the EIR includes operations at Oroville in the baseline (Existing Conditions), Proposed Project, and Refined Alternative 2b scenarios. But because operations of the Oroville Facilities are not a part of this Project (long-term operations of the SWP), those operations will not change between the scenarios.

For further information regarding the geographic scope of Project impacts, please refer to Master Response 1, "Scope of Analysis." For information regarding baseline conditions, please refer to Master Response 2, "Baseline." For information regarding the development of the Project and CEQA analysis, please refer to Master Response 3, "The CEQA Process."

II.6.4.22 RESPONSE TO COMMENT O-CSPA-1-22

Mr. Leahigh's testimony cites Exhibits DWR-401 and DWR-402 (referenced in the comment). Exhibit DWR-401 shows that D-1485 standards were exceeded 0.5% of the time. Exhibit DWR-402 shows that D-1641 standards were exceeded 1.5% of the time. These exceedances do not account for relaxation of standards through Temporary Urgent Change Permits. Percent exceedance of standards would further decrease if relaxation of standards were considered. Furthermore, the testimony notes that modeling simulation of compliance show exceedances rates to be higher than historical record. This statement reinforces the statement that modeled exceedances presented in the DEIR are modeling artifacts. Therefore, the EIR does not conclude exceedances to occur.

II.6.4.23 RESPONSE TO COMMENT O-CSPA-1-23

As noted in DEIR Chapter 4.3.3, "Impacts of the Proposed Project," the Proposed Project generally would increase salinity during the late fall and early winter in the years following Wet and Above-Normal Years. Despite the potential for salinity increases, the SWP will comply with D-1641 standards. The salinity standards in D-1641 were established specifically to protect water quality, including beneficial uses for fish and wildlife and agricultural and urban uses. The Proposed Project would not result in a violation of any water quality standard or waste discharge requirement, or otherwise substantially degrade water quality.

Despite increases to salinity in December and January, DEIR Chapter 4.4.7, "Impacts of the Proposed Project," concludes that the impact of the Proposed Project on Delta Smelt would be less than significant.

The Proposed Project proposes to no longer comply with the USFWS Delta Smelt biological opinion Action 4, instead the 80 km X2 distance, as described in Chapter 3.3, "Description of the Proposed Project."

II.6.4.24 RESPONSE TO COMMENT O-CSPA-1-24

Please see Master Response 7, "Delta Reform Act."

II.6.4.25 RESPONSE TO COMMENT O-CSPA-1-25

Master Response 7, “Delta Reform Act,” discusses a variety of issues related to the Sacramento-San Joaquin Delta Reform Act of 2009 (Delta Reform Act). CDFW’s 2010 report titled *Quantifiable Biological Objectives and Flow Criteria for Aquatic and Terrestrial Species of Concern Dependent on the Delta* did not contain prescriptions for Delta flows but provided recommendations for instream flows in the Delta. The SWRCB’s Bay Delta Water Quality Control Plan update process reviewed the CDFW’s 2010 report and included flow requirements in the Substitute Environmental Document for public review in 2013 and 2016. In 2018, the SWRCB adopted the Bay-Delta Plan amendments establishing the lower San Joaquin River flow objectives and revised southern Delta salinity objectives. However, the SWRCB did not assign responsibility to any water right holders to meet these new and revised objectives. The SWRCB continues to work on proposed amendments for the Sacramento River, its tributaries and the Delta. Therefore, DWR is not required to propose alternatives or evaluate recommendations included in CDFW’s 2010 report. However, DWR is participating in the Voluntary Agreement process that is intended to provide additional instream and Delta flows to meet the recommendations of CDFW’s 2010 report (see Master Response 9, “Relationship to the WQCP Update and Voluntary Agreements,” for further discussion).

II.6.4.26 RESPONSE TO COMMENT O-CSPA-1-26

The Voluntary Agreements consider the SWRCB report, “Development of Flow Criteria for the Sacramento – San Joaquin Delta Ecosystem” (SWCRB 2010). The DEIR considers implementation of Voluntary Agreements as a future project in DEIR Chapter 4.6.1, “Cumulative Impacts.” As Voluntary Agreements are a separate program undergoing development, actions associated to the Voluntary Agreements are only considered for Cumulative Impacts. Please see Master Response 8, “Other State Efforts,” and Master Response 9, “Relationship to WQCP Update and Voluntary Agreements,” for more details regarding other state processes and the Voluntary Agreements.

II.6.4.27 RESPONSE TO COMMENT O-CSPA-1-27

The legal analysis of whether a particular diversion is considered a waste or unreasonable use of water is not an environmental impact subject to review under CEQA. Furthermore, DWR diverts water under permits issued by the State Water Resources Control Board (SWRCB) and the type of interest balancing requested is properly left to the SWRCB’s discretion when establishing and implementing WQCP objectives to protect beneficial uses, including those related to the aquatic ecosystem. The determination of appropriate allocation of water by the SWRCB in the context of water quality is, “essentially a policy judgment requiring a balancing of the competing public interests, one the Board is uniquely qualified to make in view of its special knowledge and expertise and its combined statewide responsibility to allocate the right to, and to control the quality of, state water resources.” (United States v. State Water Resources Control Board (1986) 182 Cal. App. 3d 82, 130 (citing Water Code §174)).

To the extent the comment intended to raise public trust considerations, see Master Response 14, “Public Trust.”

II.6.4.28 RESPONSE TO COMMENT O-CSPA-1-1-28

The potential for long-term operations of the SWP to cause adverse impacts to listed aquatic species from Harmful Algal Blooms (HAB) was evaluated in DEIR Chapter 4.4, “Aquatic Biological Resources.” See, for example, DEIR pages 4-152 through 4-156, which discuss the results of DSM2-HYDRO modeling focused on an analysis of maximum daily absolute velocity to assess exceedance of a 1 foot per second (ft/s) threshold, above which turbulent mixing may disrupt *Microcystis* blooms. The modeling results suggested there would be little difference between the Proposed Project and the Existing Conditions scenarios in the potential for velocity conditions to affect HAB. The potential for HAB to affect aquatic species in the Delta is evaluated by species and is summarized in DEIR Table 4.4-6 (pages 4-121 through 4-137). DEIR Chapter 4.4 found that impacts on all aquatic species from HAB would be less than significant.

Because the results of DSM2-HYDRO modeling found there would be little difference between the Proposed Project and Existing Conditions scenarios in the potential for velocity conditions to affect HAB, the Proposed Project also would not result in a significant, indirect impact on recreational fishing or aesthetics from HAB.

Furthermore, as described in DEIR Chapter 3.3.10.1, “Aquatic Weed Removal and Disposal,” DWR will apply herbicides or will use mechanical harvesters on an as-needed basis to control aquatic weeds and algal blooms in the Clifton Court Forebay (see DEIR Table 3-4, “Methods to Control Aquatic Weeds and Algal Blooms in Clifton Court Forebay,” for a summary of methods and chemicals to control HAB).

Other impacts of long-term operations of the SWP on recreation (including direct impacts on sport fishing) and aesthetics (including direct impacts related to the visual appearance of project-related waterbodies) were evaluated in the Initial Study prepared for the Proposed Project contained in DEIR Appendix A, “Initial Study of the Long-Term Operations of the State Water Project,” in Section 3.1, “Aesthetics,” and Section 3.16, “Recreation,” and it was determined that no impacts would occur. Therefore, no mitigation measures are required (see also Master Comment 18, “Initial Study Conclusions”).

II.6.4.29 RESPONSE TO COMMENT O-CSPA-1-29

No specific response is necessary, as the particular contentions supporting this suggestion are dealt with in individual responses to earlier comments in this letter and in responses to the comments filed by the Natural Resources Defense Council (NRDC) and the other organizations that joined in NRDC’s letters. Please see Responses to Comments in comment letters O-NRDC-1 and O-NRDC-2.

II.6.4.30 RESPONSE TO COMMENT O-CSPA-1-ATT-1

Please see Responses to Comment O-CSPA-1-4.

II.6.4.31 RESPONSE TO COMMENT O-CSPA-1-ATT-2

Please see Responses to Comment O-CSPA-1-20.

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January 6, 2020

Via Email
You Chen (Tim) Chao
Executive Division
California Department of Water Resources
PO Box 942836
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LTO@water.ca.gov

Re: LTO of SWP Project

Dear Mr. Chao:

On behalf of the North Coast Rivers Alliance, Institute for Fisheries Resources, Pacific Coast Federation of Fishermen’s Associations, San Francisco Crab Boat Owners Association, and the Winnemem Wintu Tribe we submit the following comments in response to the Department of Water Resources’ (“DWR’s”) Draft Environmental Impact Report (“DEIR”) for the Long-Term Operation of the California State Water Project (“Project”). To the extent that DWR has failed to consider and address our May 28, 2019 scoping comments for the Project, attached as Exhibit 1, we incorporate those comments by reference.

1-1

INTRODUCTION

North Coast Rivers Alliance (“NCRA”) is a non-profit unincorporated association with members throughout Northern California. NCRA was formed for the purpose of protecting California’s rivers and their watersheds from the adverse effects of excessive water diversions, ill-planned urban development, harmful resource extraction, pollution, and other forms of environmental degradation. Its members use and enjoy California’s rivers and watersheds for recreational, aesthetic, scientific study, and related non-consumptive uses.

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The Institute for Fisheries Resources (“IFR”) is a non-profit, tax-exempt organization that works to protect and restore salmon and other fish populations and the communities that depend on them. IFR both funds and manages many fish habitat protection programs and initiatives. In that capacity, IFR seeks reforms to protect fish health and habitat throughout the West Coast of

the United States and has successfully advocated for dam removals, improved pesticide controls, better forestry management and stream protection standards, and enhanced marine and watershed conservation regulations.

Pacific Coast Federation of Fishermen’s Associations (“PCFFA”) is a nonprofit membership organization incorporated in 1976. PCFFA is composed of more than 14 separate commercial fishing and vessel owners’ associations situated along the Pacific Coast of the United States. By virtue of its combined membership of approximately 750 fishermen and women, PCFFA is the single largest commercial fishing advocacy organization on the West Coast. PCFFA represents the majority of California’s organized commercial salmon fishermen and has been an active advocate for the protection of Pacific salmon and their spawning, rearing and migratory habitat for more than 40 years.

The San Francisco Crab Boat Owners Association is a century-old association of owners and operators of small, family-owned fishing boats that catch Dungeness crab, wild California King salmon, Pacific herring, and other species that live in and depend upon the cold waters of the Pacific Ocean, the San Francisco Bay-Delta and the Sacramento and San Joaquin Rivers and their tributaries. It is also actively involved in community education and advocacy concerning fisheries resources legislation to ensure that the rich heritage of commercial fishing in the Bay Area will survive for future generations.

Save California Salmon is a conservation organization that seeks to restore key salmon watersheds and water quality through flow restoration, fish passage, and toxics clean up, along with responding to threats to adequate flows and clean water. It focuses on diversifying the environmental movement and helping Tribes and other underrepresented people create strategic and successful campaigns for clean water and healthy, harvestable fisheries. The specific watersheds it works to protect are the Klamath, Trinity, Eel, San Joaquin, Smith, Pit and Sacramento rivers, and the Bay Delta.

The Winnemem Wintu Tribe is a California-recognized Tribe whose aboriginal territory encompasses the upper watersheds of the Sacramento River including the McCloud River. The Winnemem Wintu Tribe was traditionally dependent on salmon fishing for both subsistence and cultural purposes, and maintains a deep cultural, spiritual and recreational interest in the continued viability of California’s salmon runs that pass through the Sacramento-San Joaquin River Delta (“Delta”). The Winnemem Wintu Tribe is a strong proponent of Delta restoration.

Each of these groups encourages DWR to reconsider its Proposed Project and recirculate a revised, adequate DEIR. When DWR does so, it must consider an alternative that allows DWR to operate the State Water Project (“SWP”) to protect public trust resources, including fisheries, and not just those currently listed under the California Endangered Species Act (“CESA”) and the Endangered Species Act (“ESA”). DWR must act to protect public trust resources, including the fisheries that historically thrived throughout the Sacramento San Joaquin Delta system, and



the greater Project area. And in defining the purposes for which DWR operates the Project, DWR must include traditional public trust uses, including commercial fishing.

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I. CEQA CONSIDERATIONS

A. THE DRAFT FAILS TO INCLUDE A STABLE PROJECT DESCRIPTION

The California Environmental Quality Act, Public Resources Code section 21000, et seq. (“CEQA”), requires DWR to provide a clear description of the Project under consideration. “An accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR.” *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193; *Concerned Citizens of Costa Mesa, Inc. v. 32nd District Agricultural Association* (1986) 42 Cal.3d 929, 938; *Washoe Meadows Community v. Department of Parks & Recreation* (2017) 17 Cal.App.5th 277, 287. Yet, DWR’s DEIR fails to present a clear proposed project to allow for informed public comment.

Instead, the DEIR states:

The Proposed Project, which is the preferred alternative in this [DEIR], consists of multiple elements that characterize future operations of SWP facilities, modify ongoing programs being implemented as part of SWP operations, improve specific activities that would enhance protection of special-status fish species, or support ongoing studies and research on these special-status species to improve the basis of knowledge and management of these species. Implementation of these elements is intended to continue operation of the SWP and deliver up to the full contracted water amounts while minimizing and fully mitigating the take of listed species consistent with CESA requirements.

1-3

DEIR 3-15. It further states:

For discussion purposes in this DEIR, these elements are divided into four categories and consist of (1) proposed SWP operations that can be described in detail and assessed on a project-level basis; (2) proposed SWP operations that can only be described generally and assessed on a program-level basis; (3) proposed environmental protective measures that would offset, reduce, or otherwise mitigate potential environmental impacts on special-status species, and (4) adaptive management actions that include establishing a governance framework, a compliance and reporting program, specific drought- and dry-year actions, and independent review panels, as well as conducting Four-Year Reviews of management measures.

Id. The DEIR presents these four categories of Project elements in a series of tables, discussing

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each part of the Project and the goal or objective to which it relates. DEIR 3-15 to 3-17. This discussion lacks sufficient detail to understand the Project. *Id.*

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(Cont.)

First, most of the elements that the DEIR designates as “Project-Level” elements are not clearly described and defined. DEIR 3-15. For example the first is “[c]omply with D-1641 and [U.S. Army Corps of Engineers (“USACE”) Permit 2100.” *Id.*¹ And the sixth is “[o]perate the Suisun Marsh Salinity Control Gates, Roaring River Distribution System, Morrow Island Distribution System, and Goodyear Slough Outfall in compliance with D-1641.” DEIR 3-16. But the chart does not discuss the specific actions that DWR must to take to comply with D-1641 or USACE Permit 2100. DEIR 3-15 to 3-16. Although D-1641 is woefully inadequate to restore the Delta as the law requires, compliance with this obsolete ruling is at least a start. But this DEIR does not even tell the public how this would be accomplished. Demonstrating how compliance would be achieved is particularly important in light of the U.S. Bureau of Reclamation’s (“the Bureau’s”) current position that it “has neither the legal authority, nor the legal obligation” to implement D-1641 in its operation of the Central Valley Project (“CVP”).² Thus, DWR may need to alter operations to meet the requirements of D-1641 that the Bureau of Reclamation fails to honor.

1-4

(See below
for 1-5.)

Similarly, the third “Project-Level” element of the Proposed Project – to “[m]anage [Old and Middle River (“OMR”)] reverse flows based on species distribution, modeling, and risk analysis, with provisions for capturing storm water flows” – is likewise devoid of the operational parameters needed to understand how it would achieve these objectives. DEIR 3-15. The fourth element – to “[c]ontinue operating [Barker Slough Pumping Plant (“BSPP”)] to minimize effects on Delta Smelt and Longfin Smelt, and continue implementing sediment removal and aquatic weed management actions as part of normal operations at [BSPP]” – is similarly bereft of essential details. *Id.* And the last “Project-Level” element of the Proposed Project – “[f]acilitate downstream transport of phytoplankton and zooplankton to areas inhabited by Delta Smelt” – likewise provides no operational information. DEIR 3-16. In none of these instances does the DEIR provide context for how DWR intends to accomplish these elements. Absent a clear description of the measures necessary to take these actions, the DEIR’s skeletal description of these elements of the Proposed Project fails to provide the public with the information necessary to understand and comment on them.

1-6

B. DWR’S DISCUSSION OF THE PROJECT’S PURPOSE AND OBJECTIVES VIOLATES CEQA

1-7

¹ It appears that this permit number is incorrect. The existing USACE permit for the SWP is listed elsewhere as SPK-1999-0715. DEIR 3-13.

1-5

² February 15, 2017 Letter from U.S. Bureau of Reclamation to State Water Resources Control Board, attached as Exhibit 2.

The DEIR must include “[a] statement of the objectives sought by the proposed project. . . . The statement of objectives should include the underlying purpose of the project and may discuss the project benefits.” 14 C.C.R. § 15124(b). “[A] lead agency may not give a project’s purpose an artificially narrow definition.” *North Coast Rivers Alliance v. Kawamura* (2015) 243 Cal.App.4th 647, 668 (quoting *In re Bay-Delta* (2008) 43 Cal.4th 1143, 1166). The agency’s formulation of its underlying purpose and objectives is essential to its consideration of alternatives. *Id.* An agency need not study alternatives that cannot satisfy the Project’s basic goal. *Id.*

Here, the Project Description does not contain a statement regarding the underlying purpose of the Project. DEIR 3-1. Instead, it states:

The objective of the Proposed Project is to continue the long-term operation of the SWP consistent with applicable laws, contractual obligations, and agreements. DWR proposes to store, divert, and convey water in accordance with DWR’s existing water rights to deliver water pursuant to water contracts and agreements up to full contract quantities. DWR seeks to optimize water supply and improve operational flexibility while protecting fish and wildlife based on the best available scientific information.

DEIR 3-1. Thus, the DEIR does not clearly explain what DWR intends the Project to do, and why. Some Project components appear to relate to DWR’s request for an incidental take permit (“ITP”) from the California Department of Fish and Wildlife (“CDFW”) “which will cover species that are listed under the [California Endangered Species Act (“CESA”)] and are subject to incidental take from long-term operation of the SWP (Delta Smelt, Longfin Smelt, Winter-run Chinook Salmon, and Spring-run Chinook Salmon).” DEIR 2-2, 3-15 to 3-18. All the same, DWR does not clarify whether the Project’s changes to SWP operation are necessary for CDFW to issue an ITP. Without a clear statement of the underlying goal of the Project, DWR frustrates the formulation and discussion of reasonable alternatives to the Project.

C. THE DRAFT EIR FAILS TO APPROPRIATELY ADDRESS THE COA AMENDMENT

On December 12, 2018, DWR approved the Coordinated Operations Agreement Addendum (“COA Addendum”), which DWR now admits “would modify operations and associated reservoir storage, downstream surface water flows, and diversions at selected [State Water Project (“SWP”)] facilities. DEIR B-27. Yet, before it approved the COA Addendum, DWR did not perform any environmental review.

In its Notice of Preparation for the Project, DWR included a commitment to study the COA Addendum. But the DEIR fails to appropriately do so here.

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(Cont.)

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The DEIR incorporates the COA Addendum’s changes to SWP operations into the environmental baseline for the Project. DEIR 4-2. Thus, DWR continues its ongoing failure to appropriately address the impacts of the COA Addendum on the environment – and to study alternatives to the COA Addendum that could lessen Project impacts – in this DEIR. Only by examining an environmental baseline that includes coordinated operations of the SWP and CVP under the parameters that existed *before* the December 12, 2018 COA Addendum can DWR and the public understand the likely impacts of that approval.

Instead the DEIR, in Appendix B, compares modeling of the COA Addendum to modeling of the 1986 Coordinated Operations Agreement (“1986 COA”), but does not address how the Project’s impacts would differ with or without the COA Addendum. Appendix B also fails to detail the COA Addendum’s changes to Oroville Reservoir’s carryover storage, and the resulting impacts on public trust resources – including fish, flows, and water quality in the Feather River, and the San Francisco-San Joaquin Bay Delta. DWR does include one chart of modeling results that shows that under the COA Addendum, Oroville Reservoir’s monthly average storage in critically dry years drops by roughly 200,000 acre feet, as compared to the 1986 COA. DEIR Appendix B, B-13. This does not address carryover storage in multiple critically dry years. DWR concludes, despite this significant drop in storage, that the impacts would be “similar” under the COA Addendum and the 1986 COA. DEIR Appendix B, B-31. But DWR’s discussion of the COA Addendum’s impacts does not address Oroville Reservoir’s storage. Appendix B, B-27 to B-43 (discussing only the impacts downstream of the confluence of the Sacramento River and the Feather River, and omitting Oroville Reservoir from storage discussion).

Further, while Appendix B purports to link to a “complete CalSim II model output for the 2018 COA Addendum and the 1986 COA Studies,” that link does not lead to the material referenced. DEIR Appendix B, B-42.³ Thus it is impossible to determine whether the CALSIM II modeling referenced in Appendix B shows that under the COA Amendment, Oroville storage would have been drawn below dead pool in eight of twelve critically dry years modeled, as is implied by Appendix B Figure 8. Appendix B, B-13.

Fundamentally, however, DWR must rescind its approval of the COA Addendum in order

³ The link (last checked January 2, 2020) <https://d3.water.ca.gov/owncloud/index.php/s/kKiT64Ma5ATGeEf> leads to various error messages, depending upon the internet browser. For example, in Google Chrome, the error message reads “This site can’t be reached . . . ERR_CONNECTION_RESET.” And in Microsoft Internet Explorer, the error message states “This page can’t be displayed . . . Make sure the web address <https://d3.water.ca.gov> is correct.”



1-8
(Cont.)

to comply with CEQA. As the California Supreme Court has made clear, “an EIR must be performed before a project is approved, for “if postapproval environmental review were allowed, EIR’s would likely become nothing more than *post hoc* rationalizations to support action already taken.” *Save Tara v. City of West Hollywood* (2008) 45 Cal.4th 116, 130 (bracket omitted, quoting *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 276, 394)). The COA Amendment’s impacts are just the sort of significant effects that DWR should have considered, disclosed and evaluated *before* deciding whether to approve the COA Amendment.

1-8
(Cont.)

Finally, by incorporating the COA Addendum into the existing baseline, DWR skews its analysis of Project impacts. The COA Addendum impairs SWP’s ability to provide cold-water flows necessary for fish survival when they are most needed, and thereby prevents DWR from meeting existing Bay-Delta Water Quality Standards.

D. THE DEIR FAILS TO DISCUSS THE PROJECT’S IMPACTS

1. The Project’s Geographic Scope Excludes Areas Impacted by the Project

While the Notice of Preparation indicated that Project activities will occur “throughout the state” (NOP 4, 7), the DEIR artificially limited the Project area to include only “the SWP Service Areas and Existing SWP storage and export facilities located within the Delta and vicinity.” DEIR 3-1. DWR included only the areas receiving Project benefits, and excluded areas the Project would harm. Equally improper, it excluded the related CVP facilities from the Project Area, as well as DWR facilities upstream of the Delta. DEIR 1-4; 3-1. Thus, despite the interrelated nature of their SWP and CVP operations, and the manner in which each water project alters the conditions for the other, the DWR’s Project Area excludes watersheds and water facilities that will face changed environmental conditions due to DWR’s Project operation. Further, when discussing the Project and its impacts, the DEIR fails to account for the ways that its operation of Oroville Reservoir will impact Oroville Reservoir’s carryover storage, and instream flows in the Feather River above its confluence with the Sacramento River, and other direct impacts of the Project.

1-9

DWR’s artificial curtailing of the geographic scope of the Project allows DWR to omit potentially significant impacts from operation of Oroville Reservoir. This omission is particularly glaring, given that in Appendix G, DWR acknowledges that “when making operational decisions, SWP operators essentially have [just] two knobs: 1) releases from Oroville, and 2) SWP exports. When SWP operators manage the Oroville releases and Clifton Court Forebay allotment, they are managing to conditions within the Feather River, like flood and minimum instream flow requirements. They are also managing to conditions in the Delta including outflow, interior flow, and water quality requirements.” DEIR Appendix G, G-3. The DEIR’s analysis completely overlooks the primary water source for the flows necessary for the Project – the Feather River – and the Project’s impacts on storage of these flows in successive

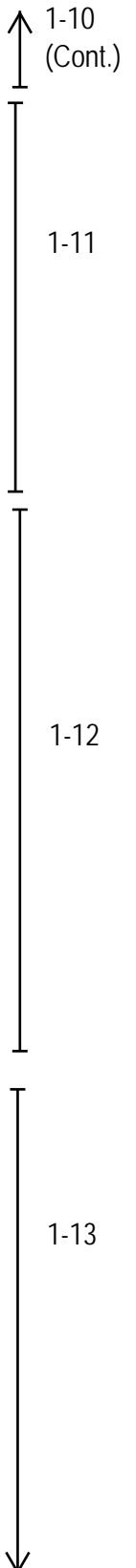
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critically dry years.

In this vein, the DEIR completely avoids any discussion of how the Project impacts the Trinity River, including impacts to temperature and flows that would harm Trinity River coho salmon, and spring-run and fall-run Chinook salmon. These species depend on sufficient water temperature and flows in the Klamath River system, and are harmed when water is diverted from the Klamath basin to the Sacramento River. DWR must include modeling that addresses how the Project, and alternatives thereto, will impact the Trinity River system. Likewise, DWR treated areas on the Sacramento River above the confluence with the Feather River as outside the Project Area, and failed to include them in the discussion of the Project impacts. *E.g.* DEIR 4-37. And DWR failed to consider whether the Bureau of Reclamation’s reasonably foreseeable operation of the CVP will, when combined with the Project, create unacceptable impacts on these resources.

The DEIR also fails to address impacts to fisheries resources in the Feather River upstream of its confluence with the Sacramento River, and fails to analyze how the Project could impact water quality – including flows, temperature, turbidity, etc. – on the Feather River upstream of its confluence with the Sacramento River. DEIR 4-8, 4-28 (excluding the Feather River from aquatic resources project area), 4-115 (excluding the Feather River from the “geographic scope for evaluation of direct and indirect impacts of the Proposed Project”). By addressing only the Sacramento River below its confluence with the Feather River, DWR washes its hands of the conditions it causes in the Feather River upstream of that point. The DEIR fails to examine whether DWR can alter its operations on the Feather River to better protect hatchery-raised spring and fall run Chinook salmon and steelhead released from the Feather River Fish Hatchery, as well as the wild fish that rely upon these rivers for spawning and rearing habitat. DWR also failed to examine whether there are Project alternatives or mitigation measures it could adopt that would lessen impacts on these resources. These omissions violate CEQA. Public Resources Code §§ 21002, 21002.1, 21081.

DWR must examine these impacts and potential mitigation measures or alternatives that could avoid them, even if DWR lacks authority to adopt these alternatives or mitigation measures. Pub. Res. Code § 21081(a)(2). DWR must also inform the public that the authority lies with a separate agency that “can and should” act to mitigate the impacts. *Id.* But if DWR retains “concurrent jurisdiction with another agency to deal with identified feasible mitigation measures or alternatives,” DWR must affirmatively mitigate these impacts. *City of San Diego v. Board of Trustees of California State University* (2015) 61 Cal.4th 945, 957-958. DWR cannot avoid its duty to carefully examine the impacts of its Project simply because other agencies, such as the Federal Energy Regulatory Commission, CDFW, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the State Water Resources Control Board also regulate SWP operations. DWR must work with these agencies to affirmatively mitigate the impacts of Project operations by coordinating flows, hydrology, cold water pooling, carryover storage, and hatchery operations for the benefit of listed and public trust species, and present strategies and



measures for doing so in its DEIR.

↑ 1-13
(Cont.)

2. The Project Will Harm Water Quality

Proposed fall pulse flows from agricultural drain water (DEIR at 3-31) are likely to be high in mercury and nutrients due to conditions in the rice fields and in Yolo Bypass. Water high in nutrients and mercury that stagnates is likely to develop methylmercury contamination (SFB RWCB 2012) and will thereby violate Sacramento and San Joaquin, and possibly the Bay Delta, Mercury TMDLs, impact beneficial uses, and violate water quality control plans. The Colusa Basin Drain is already a major source of mercury into the Sacramento River and Bay Delta. DEIR 3-97. This fall release of agricultural waste will likely also add to nutrient, temperature, DO, anoxic water, and algal impairments in the Sacramento River and Delta. This is especially a concern because the preferred alternative lowers flows at this time of year and therefore creates stagnant conditions.

1-14

This agricultural return flow proposal is also a major Environmental Justice issue for subsistence and commercial fishermen due to the mercury and other water quality issues, and will likely also impact drinking water supplies and local fish and recreation dependent economies.

3. The Project's Pesticide Use Will Create Unreasonable and Significant Impacts

The Project includes the application of copper-based herbicides and Aquathol K – an endothall-based aquatic herbicide – to address aquatic weeds in the Clifton Court Forebay. While the DEIR discusses the risks of Aquathol K on salmon smolts, including the concentrations at which sublethal effects occur, the DEIR does not discuss whether Aquathol K breaks down into other harmful compounds, binds to soil, or lingers in the water table after application. DEIR 3-43. It also fails to disclose that aquatic plants treated with Aquathol K can “can result in oxygen loss from decomposition of dead plants. This loss can cause fish suffocation. Water bodies containing very high plant density should be treated in sections to prevent suffocation of fish.”⁴ And, it omits any discussion of measures to avoid or mitigate these horrendous impacts.

1-15

The DEIR contains even less information about the potential impacts of copper-based herbicides. DEIR 3-44. It does not discuss the known risks of copper-based herbicides on fish, including salmonids and green sturgeon, nor does it discuss how copper-based pesticides degrade

⁴ Aquathol K label, p. 3, available at: https://www3.epa.gov/pesticides/chem_search/ppls/070506-00176-20150423.pdf (last visited January 2, 2020).

in the water table. Instead, the DEIR relies upon monitoring of copper concentrations to avoid harm. DEIR 3-44 to 3-47. But by collapsing its discussion of the measures DWR intends to take to avoid harm with its discussion of the pesticide application procedures, DWR fails to disclose and assess the potential harm posed by its actions.

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(Cont.)

Equally alarming, as noted above the DEIR proposes “using agricultural drain water from Colusa Drain . . . over a 4-week period [in the fall to] improve downstream transport of phytoplankton.” DEIR 3-31. But the DEIR fails to address whether this drain water would be contaminated with pesticides and other chemicals commonly used in the rice fields drained by the Colusa Drain. Other essential operational facts – and potential impacts – are likewise ignored. These omissions violate CEQA.

1-16

4. The Project Will Harm Spring Chinook Salmon

The DEIR proposes to lower flows in May and June for most year classes in the Sacramento and San Joaquin rivers. This will impact juvenile salmon outmigration and the return and spawning of threatened Spring chinook salmon. These low flows will undermine Spring salmon reintroduction and recovery efforts in the San Joaquin and Sacramento rivers, which have cost millions of dollars. Under this plan, fall flow into the Delta will be lower, and fall exports will be higher. Yet the fall is a critical time for Fall chinook and coho salmon migration. Higher summer flows and lower fall flows could trigger early migration of Fall salmon, which would encourage Fall and Spring run mating and impact Spring run salmon genetic diversity and integrity. Low late winter and spring flows are also major threats to the survival of Spring run salmon in the Sacramento River.

1-17

Furthermore, the DEIR’s baseline relies on the 2009 Biological Opinion’s spring and fall flow pulses, and Reasonable and Prudent Alternatives, even though the 2019 Biological Opinion does not include these actions. The lowering of needed flows in these crucial times of year is a major cumulative impact to returning adult Fall, Spring run and coho salmon, and out-migration for all runs of salmon.

1-18

Finally, the DEIR misrepresents the existing conditions, baseline, and cumulative impacts of the Project by relying on the 2009 Federal Biological Opinion and not analyzing the impacts from the proposed Sites Reservoir diversions and current “One-Tunnel” Delta diversion proposal. Both Sites and the One-Tunnel proposal are key elements in the Governor’s water portfolio. The draft water portfolio was released on January 3, 2019, and therefore was reasonably foreseeable.

E. THE DEIR’S DISCUSSION OF PROJECT ALTERNATIVES IS INADEQUATE

As discussed above, DWR’s discussion of the Project omits large areas that will be

1-19

impacted by the Project’s implementation. For this, and other reasons, DWR improperly concludes that the Project has no significant effects on the environment. All the same, DWR includes four alternatives to the Proposed Project, in addition to the No Project Alternative. DEIR 5-1. But the DEIR’s presentation of these alternatives does not foster informed decisionmaking.

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(Cont.)

The discussion of the No Project Alternative, and the four other alternatives, fails to clearly describe the differences between the Proposed Project and its alternatives in a manner that comprehensibly details the practical differences. For example, the No Project Alternative discussion simply states that it does not include the Proposed Project’s actions, and refers the reader to the DEIR’s discussion of the existing environmental conditions. DEIR 5-1 to 5-5. The discussion of the other alternatives provides some additional information, but continues to obfuscate the differences between the various alternatives. DEIR 5-6 to 5-135. For example, the DEIR’s discussion of Alternative 4 indicates that it would replace summer and fall actions of the Proposed Project to add additional Delta Smelt habitat criteria. DEIR 5-87. The DEIR indicates that this change may require “additional outflow” which would be provided through “some combination of” (1) “SWP and CVP export reductions,” (2) increased releases from Oroville Reservoir, or (3) “[w]ater purchases from other water users.” *Id.* But, as with its discussion of the Proposed Project, the DEIR fails to examine the impacts of these changes throughout the impacted watershed. And, because DWR excluded Oroville Reservoir and the Feather River from its analysis, the DEIR lacks the information necessary to understand the impacts of Alternative 4 as compared to the No Project Alternative or the Proposed Project. DEIR 5-102 (discussing impacts upstream of the Delta for Alternative 4).

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F. DWR FAILED TO CONSULT WITH THE WINNEMEM WINTU TRIBE BEFORE CIRCULATING THE DRAFT EIR

CEQA requires DWR to consult with any California Native American tribe that requests consultation and that is traditionally and culturally affiliated with the geographic area of the proposed project. Pub. Res. Code §§ 21084.2, 21080.3.1. In our May 28, 2019 comments on DWR’s Notice of Preparation, we informed DWR of its duty to consult with the Winnemem Wintu Tribe. The DEIR does not include the Winnemem Wintu Tribe in the list of California Native American Tribes that DWR contacted to initiate consultation. DEIR 4-291 to 4-292.

1-21

II. DWR FAILS TO ADDRESS THE PUBLIC TRUST DOCTRINE

DWR fails to address its duties under the Public Trust Doctrine. Although compliance with CEQA “may assist an agency in complying with its duties under the public trust doctrine [,] CEQA review of a project does not necessarily or automatically satisfy the agency’s affirmative duties to take the trust into account and protect public trust uses whenever feasible.” *San Francisco Baykeeper Inc. v. State Lands Com.* (2018) 29 Cal.App.5th 562, 571. “[A] public

1-22



trust use is not any use that may confer a public benefit, but rather a use that facilitates public access, public enjoyment, or public use of trust land.” *Id.* at 570.

DWR’s DEIR does not discuss DWR’s duty to protect to the extent feasible the public trust resources and uses under its jurisdiction. DWR makes no attempt to address its duty to do more than simply maintain the baseline condition, where feasible. Unlike CEQA, where the impacts of the Project – and the alternatives designed to lessen those impacts – are framed in the context of that baseline condition, the Public Trust Doctrine requires DWR to examine whether its activities will protect public trust uses independently of that condition. Where, as here, decades-long mismanagement of the state’s water supply has resulted in stark declines in the populations of delta smelt, long-fin smelt, salmon, and steelhead, among others, DWR must take affirmative action to protect the remaining fish populations throughout the waterways of the Project area. These actions include habitat restoration, new or improved fish passage projects, dam removal, increased instream flow requirements, sufficient minimum Delta inflow and outflow requirements, and other protective measures to restore these imperiled fish, including recovery of the McCloud River salmon and the habitat required to accomplish that objective.

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(Cont.)

III. DWR MUST SATISFY THE DELTA REFORM ACT AND ADDRESS THE PROJECT’S INCONSISTENCIES WITH THE DELTA PLAN

While the Delta Reform Act, Water Code section 85000, et seq., states that “[r]outine maintenance and operation of the State Water Project” are not covered actions, the Project is nonetheless subject to the Delta Reform Act’s requirements. Water Code § 85057.5(b). The Project, including the COA Amendment, does not qualify for this exemption because it constitutes neither routine maintenance nor routine operation of the SWP. *Id.* Instead, DWR’s Project will alter the current operational strategy to (1) accommodate the COA Amendment and (2) comply with any incidental take permits issued by CDFW. Neither of these operational changes are “routine.”⁵

1-23

While DWR mentions the consistency certification requirements of the Delta Reform Act in the DEIR, DWR does not indicate that it considers the Project to be subject to these requirements. DEIR 4-105 to 4-106. Instead, it appears to consider only whether the Delta Plan could be a cumulative project for the purposes of DWR’s CEQA analysis. DEIR 4-304. That is not the appropriate consideration. Because the routine operation exemption does not apply, DWR must “prepare a written certification of consistency with detailed findings as to whether the covered action is consistent with the Delta Plan,” and submit that written finding to the Delta Stewardship Council. Water Code § 85225. DWR must do this *before* it approves the Project, as the Delta Stewardship Council’s evaluation may lead to mandatory changes to the Project, should

⁵ Indeed, if such activities were mere routine operation, DWR would not be undertaking an EIR for this Project.

the Delta Stewardship Council determine that DWR's Project conflicts with the Delta Plan or the co-equal goals of the Delta Reform Act.

↑ 1-23
(Cont.)

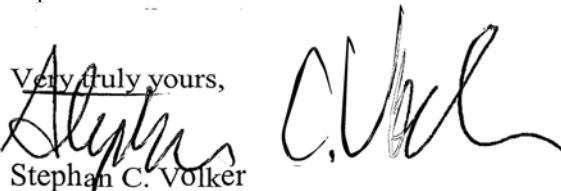
DWR also overlooks its failure to comply with CEQA's requirement that it "discuss any inconsistencies between the proposed project and applicable . . . regional plans" such as the Delta Stewardship Council's Delta Plan. CEQA Guidelines [14 C.C.R.] section 15125(d).

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CONCLUSION

For the reasons stated above, DWR's DEIR is insufficient. DWR has failed to describe and disclose the Project and its impacts. And, DWR's Project fails to protect and restore the Delta's beleaguered fisheries and other public trust resource

1-25

Very truly yours,

Stephan C. Volker

Attorney for North Coast Rivers Alliance, Pacific Coast
Federation of Fisherman's Associations, Institute for
Fisheries Resources and the California Sportfishing
Protection Alliance

List of Exhibits

- Exhibit 1: May 28, 2019 Scoping Comment Letter from NCRA, et al. to DWR
- Exhibit 2: February 15, 2017 Letter from Bureau of Reclamation to State Water Resources Control Board

II.6.5 LETTER O-NCRA-1 – LAW OFFICE OF STEPHAN VOLKER ON BEHALF OF NORTH COAST RIVERS ALLIANCE, INSTITUTE FOR FISHERIES RESOURCES, PACIFIC COAST FEDERATION OF FISHERMEN’S ASSOCIATION, SAN FRANCISCO CRAB BOAT OWNERS ASSOCIATION AND WINNEMEM WINTU TRIBE—JANUARY 6, 2020

II.6.5.1 RESPONSE TO COMMENT O-NCRA-1-1

DWR considered all comments received during the scoping period. Responses to the scoping comments submitted by NCRA are provided in Responses to Comments NCRA-1-ATT-1-1 to 1-ATT-1-12.

II.6.5.2 RESPONSE TO COMMENT O-NCRA-1-2

The comment introduces the members of the NCRA. No further response is required.

II.6.5.3 RESPONSE TO COMMENT O-NCRA-1-3

Master Response 14, “Public Trust,” discusses topics related to the public trust doctrine. More specifically, it provides a general overview of public trust law and its relation to the Proposed Project and public trust obligations.

DWR analyzed impacts on these public trust uses in the initial study (see DEIR Appendix A, “Initial Study of the Long-Term Operations of the State Water Project”) and in the environmental impact chapters of the EIR. Because implementation of long-term operations of the SWP would alter existing hydrology, such changes could result in impacts on resources dependent upon existing hydrologic conditions. For this reason, this EIR addresses potential impacts to Hydrology, Surface Water Quality, and Aquatic Resources (DEIR Chapters 4.2, 4.3, and 4.4, respectively). The EIR also analyzes potential impacts to Tribal Cultural Resources (DEIR Chapter 4.5). As stated above, the EIR concludes that long-term operations of the SWP would not have any significant environmental impacts on these resource categories. Thus, long-term operations of the SWP would not have significant impacts on navigation, commerce, fishing, or recreational and ecological values.

The comment does not establish any of the grounds for recirculation set forth in CEQA Guidelines Section 15088.5.

II.6.5.4 RESPONSE TO COMMENT O-NCRA-1-4

The DEIR’s four tables summarizing project elements (Tables 3-3a through Tables 3-3d) appropriately offer a broad overview of the major components of the Proposed Project rather than specific details, but ample additional information on project elements is provided in the remainder of DEIR Chapter 3.3. This chapter describes multiple elements that characterize future operations of SWP facilities, modify ongoing programs being implemented as part of SWP operations, improve specific activities that would enhance protection of special-status fish species, or support ongoing studies and research on these special-status species to improve the basis of knowledge and management of these species. Implementation of these elements is intended to continue operation of the SWP and deliver up to the

full contracted water amounts while minimizing and fully mitigating the take of listed species consistent with CESA requirements.

For example, DEIR Chapter 3 3.3.1, “OMR Management,” pages 3-18 through 3-29, describes in considerable detail how DWR, in coordination with Reclamation, proposes to operate the SWP in a manner that maximizes exports while minimizing direct and indirect impacts on state and federally listed fish species. (Please note that the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions.) DEIR Chapter 3.3.3, “Delta Smelt Summer Fall Habitat Action,” describes in detail how DWR and Reclamation propose to use structured decision-making to implement Delta Smelt habitat actions and improve Delta Smelt food supply and habitat, thereby contributing to the recruitment, growth, and survival of Delta Smelt. Subsection 3.3.3.2, “Delta Smelt Summer Fall Habitat Action Adaptive Management Planning,” describes the conceptual model and the planning process needed to create the framework for the adaptive management plan for Delta Smelt Summer Fall Habitat Action.

Numerous subsections of DEIR Chapter 3.3 further expand on the elements summarized in Tables 3-3 a through Tables 3-3 d to provide sufficient detail to fully understand the project and to meet the level of detail required under Section 15124 of the CEQA Guidelines. These include: subsection 3.3.4, “Real-time Water Operations Process,” subsection 3.3.6, “Four-Year Reviews,” subsection 3.3.8, “Continued Installation of South Delta Temporary Barriers,” subsection 3.3.9, “Barker Slough Pumping Plant Operations,” subsection 3.3.10, “Clifton Court Forebay Operations,” subsection 3.3.11, “Skinner Fish Facility Improvements,” subsection 3.3.12, “Longfin Smelt Science Program,” subsection 3.3.13, “Conduct Further Studies to Prepare for Delta Smelt Reintroduction from Stock Raised at the UC Davis Fish Conservation and Cultural Laboratory,” 3.3.16, “Continue Studies to Establish a Delta Fish Species Conservation Hatchery,” subsection 3.3.14, “Water Transfers,” and subsection 3.3.14, “Adaptive Management Plan.”

II.6.5.5 RESPONSE TO COMMENT O-NCRA-1-5

As discussed in Response to Comment O-NCRA-1-4, Tables 3-3a through Tables 3-3d in DEIR Chapter 3 (pages 3-15 and 3-16) offer an overview of project elements and are not intended to describe the specific actions that DWR must take to comply with D-1641 or USACE Permit SPK-1999-00715. Those details are provided elsewhere in DEIR Chapters 3 and 4. The Project proposes operating the Suisun Marsh Salinity Control Gates, Roaring River Distribution System, Morrow Island Distribution System, and Goodyear Slough Outfall in compliance with D-1641 to improve habitat conditions for the benefit of Delta Smelt. DEIR Chapter 3, subheading 3.1.3.1, “Harvey O. Banks Pumping Plant,” describes the specifics of how this pumping plant regulates the diversion of water into Clifton Court Forebay in accordance with D-1641 and U.S. Army Corps of Engineers permits. DEIR Chapter 3, “Project Description,” subheading 3.1.3.5, “Suisun Marsh Operations,” describes the existing operations of the Suisun Marsh Salinity Control Gates, Roaring River Distribution System, Morrow Island Distribution System, and Goodyear Slough Outfall. DEIR Chapter 3, subheading 3.1.7, “Daily Operations,” describes how DWR and Reclamation coordinate their operations on a daily basis and consider effects of operations on Delta outflow and water quality to maintain joint salinity standards under D-1461.

Rather than provide prescriptive details on how DWR and Reclamation will implement actions to satisfy water quality requirements, this section of the DEIR describes the process for daily operations decision-making to achieve these standards.

DEIR Chapter 3, subheading 3.3.3, “Delta Smelt Summer-Fall Habitat Action,” describes proposed operations of the Suisun Marsh Salinity Control Gates to achieve the Proposed Project’s objective of improving habitat conditions to benefit of Delta Smelt. In addition, Chapter 4.4, “Aquatic Biological Resources,” subsection 4.4.7, “Impacts of the Proposed Project,” discusses the reoperation of the Salinity Control Gates and the benefits of those operations to Delta Smelt.

DWR would continue to comply with all existing permits and regulatory requirements, including permits from the State Water Resources Control Board and the USACE, as set forth in the Proposed Project. SWP and CVP have had a high degree of success in meeting D-1641 requirements, as demonstrated by the historical record. Further discussion of how DWR’s Proposed Project would comply with D-1641 is provided in DEIR Chapter 4.3, “Surface Water Quality,” subheading 4.3.3.3, “Evaluation of the Proposed Project.” More detailed D-1641 compliance results are provided in FEIR Part III, Appendix H. The applicable USACE permit is the permit for daily diversions into Clifton Court Forebay, USACE Permit SPK-1999-00715.

II.6.5.6 RESPONSE TO COMMENT O-NCRA-1-6

DEIR Chapter 3, “Project Description,” subheading 3.3.1, “OMR Management,” provides project-specific details related to proposed management of the OMR. Chapter 3, subheading, “Food Enhancement Summer-Fall Actions,” details DWR proposed actions to improve flow conditions in the North Delta in summer and fall, thereby facilitating downstream transport of phytoplankton and zooplankton. In addition, Chapter 3, subheading 3.3.9, “Barker Slough Pumping Plant Operations,” details DWR proposed actions to address sediment and aquatic weed removal. Chapter 4.4, “Aquatic Biological Resources,” subsection 4.4.7, “Impacts of the Proposed Project,” describes impacts associated with continued operations at the Barker Slough Pumping Plant to minimize effects on Delta Smelt and Longfin Smelt, continued implementation of sediment removal and aquatic weed management actions as part of normal operations at Barker Slough Pumping Plant, the downstream transport of phytoplankton and zooplankton to provide additional food availability for Delta Smelt.

II.6.5.7 RESPONSE TO COMMENT O-NCRA-1-7

The FEIR includes a description of the project purpose in Chapter 3.1.1 “Project Purpose and Objectives,” which is reproduced below:

The underlying purpose of the Proposed Project is to obtain incidental take authorization from the California Department of Fish and Wildlife pursuant to the California Endangered Species Act to allow DWR to continue the long-term operation of the SWP consistent with applicable laws, contractual obligations, and agreements.

The Proposed Project includes proposed changes to the long-term operation of SWP facilities and application for an ITP issued by the CDFW for long-term operations. As stated in DEIR Chapter 2, “Introduction,” DWR is the lead agency for compliance with CEQA, though CDFW is expected to rely on

this EIR when issuing a decision on DWR's ITP application. The EIR is intended to provide CDFW, as a responsible agency, with adequate information regarding the potential environmental effects of the Project for the issuance of the ITP. Please also see Master Response 4, "Legal Standards."

II.6.5.8 RESPONSE TO COMMENT O-NCRA-1-8

The comment addresses environmental review for the COA Addendum, which was executed by DWR and Reclamation on December 12, 2018. The COA Addendum is not a part of this Project. On December 14, 2018, DWR filed a Notice of Exemption (NOE) with the State Clearinghouse covering the COA addendum, citing California Public Resources Code 21169 and California Environmental Quality Act Guidelines § 15261(a). As the NOE explains, the SWP was constructed in relevant part and operational prior to November 23, 1970 and the COA Addendum is a normal, intrinsic part of the ongoing operations of the SWP. Neither the COA Addendum nor the COA Addendum approval are the subject of this EIR.

To accurately reflect existing conditions in the Delta as of April 19, 2019, the COA Addendum was included in the baseline for this Project. Please see Master Response 2, "Baseline," for additional information regarding existing conditions.

II.6.5.9 RESPONSE TO COMMENT O-NCRA-1-9

Please see Master Response 1, "Scope of Analysis," for information regarding how DWR defined the scope of the Project consistent with CEQA.

II.6.5.10 RESPONSE TO COMMENT O-NCRA-1-10

The DEIR provides a detailed explanation as to why Oroville Dam and the Feather River are not included in the Proposed Project. As noted in DEIR Appendix A Section 3.4.1, "Aquatic Biological Resources," the operation of Oroville Dam and Reservoir are not part of the discretionary action addressed in the analysis because its operations are set through licensing with the FERC and other existing governing documents. As stated:

"Because DWR is not proposing changes to current operations of the Oroville facilities or those evaluated in the Biological Opinion for the Oroville facilities relicensing, DWR is not including operations of the Oroville facilities in the Proposed Project and is not seeking additional incidental take authorization under CESA for Oroville Facilities operations. Therefore, no further evaluation of Feather River aquatic resources is conducted."

Please also see Master Response 1, "Scope of Analysis," for further discussion of the treatment of Oroville facilities in the DEIR. As discussed in Master Response 1, the Proposed Project would not alter operations at the Oroville Facilities.

II.6.5.11 RESPONSE TO COMMENT O-NCRA-1-11

Master Response 1, "Scope of Analysis," to analyze the full range of potential environmental impacts, the DEIR identified the geographic area in which potential direct and reasonably foreseeable indirect impacts could occur. DWR considered: (1) the geographic scope of SWP operations' influence (i.e., the

“zone of influence”), particularly with respect to the operations affected by the Proposed Project; and (2) whether, in light of SWP and CVP coordinated operations, the Proposed Project would cause a reasonably foreseeable response by Reclamation that could result in changes in CVP operations outside the SWP zone of influence. DWR concluded that the analysis of flow-related impacts was appropriately focused on the SWP zone of influence (the Sacramento River below the confluence of the Feather River, the legal Delta, and the Suisun Marsh and Bay) and does not include areas that are affected only by CVP actions. Therefore, the Proposed Project would not affect fisheries resources or water quality in the Trinity River.

Please see Responses to Comments O-NCRA-1-12 and O-NCRA-1-13.

II.6.5.12 RESPONSE TO COMMENT O-NCRA-1-12

As noted in DEIR Appendix G, “Geographic Scope of Project's Influence on Flow,” operations of the Oroville Complex and resulting flows in the Feather River are not included in the EIR because Oroville operations are governed by separate legal authorizations, including a Federal Energy Regulatory Commission license and other associated regulatory requirements; no changes to operations of the Oroville Complex are proposed as part of the Proposed Project, and so the Feather River is not part of the project area. This conclusion is further supported by the discussion presented in DEIR Chapter 4.2, “Hydrology.”

In addition, Master Response 1, “Scope of Analysis,” explains why DWR did not identify any significant effects upstream of the Feather River’s confluence with the Sacramento River, and could not identify any reasonably foreseeable actions affecting the Sacramento River that might be taken by the United States Bureau of Reclamation in response to the Proposed Project or Refined Alternative 2b. The Proposed Project and Refined Alternative 2b would not change the historic range of Oroville Reservoir operations and thus would not impact the Feather River upstream of the confluence compared to existing conditions. Therefore, the Proposed Project or Refined Alternative 2b would not affect fisheries resources or water quality in the Feather River upstream of its confluence with the Sacramento River. Please also see Responses to Comments O-NCRA-1-10 and O-NCRA-1-13.

II.6.5.13 RESPONSE TO COMMENT O-NCRA-1-13

The comment contends that, despite DWR’s lack of authority over, and lack of ability to control, conditions on the Sacramento River upstream of the Feather River’s confluence with the Sacramento River, the EIR was nevertheless required to identify impacts in that upstream reach of the Sacramento River, to identify mitigation measures to address such impacts, and to exhort agencies with the power to mitigate those impacts to do so.

Master Response 1, “Scope of Analysis,” explains why DWR did not identify any significant effects upstream of the Feather River’s confluence with the Sacramento River, and could not identify any reasonably foreseeable actions affecting that reach that might be taken by the United States Bureau of Reclamation in response to the Proposed Project or Refined Alternative 2b. DWR therefore disputes the comment’s assumption that there are reasonably foreseeable significant upstream impacts in need of mitigation under CEQA.

One statutory provision invoked by the comment is Public Resources Code Section 21081, subdivision (a)(2). Notably, it is not directly relevant to the adequacy of EIRs. Rather, the provision is relevant to the “CEQA Findings” that lead and responsible agencies must make when taking actions on proposed projects for which EIRs are required. Subdivision (a) of Section 21081 lays out the three potential findings that agencies can make with respect to the significant environmental effects laid out in the EIRs for the proposed projects before them. Subdivision (a)(2) provides findings language for significant impacts that require mitigation measures or alternatives beyond the control of the agency making the findings. For such impacts, the agency may find that such measures or alternatives “are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.” Through this language, the Legislature has required lead agencies to exhort responsible agencies to adopt mitigation measures or alternatives to solve environmental problems beyond the lead agencies’ control. The same language similarly requires responsible agencies, in granting project approvals, to take note of mitigation measures or alternatives already adopted by lead agencies. The comment is critiquing DWR’s EIR, not any CEQA Findings proposed by DWR.

The comment suggests that DWR has “concurrent jurisdiction” with various other agencies over Sacramento River conditions upstream of the Feather River’s confluence with the Sacramento River. The comment then further suggests that DWR must exercise this purported concurrent jurisdiction in order to “affirmatively mitigate” impacts that the comment says will occur in that reach of the Sacramento River. As noted above, DWR has not identified any reasonably foreseeable significant environmental effects within that reach. Thus, there are no upstream significant effects requiring mitigation under CEQA. Furthermore, although DWR is certainly able to cooperate, as it operates the SWP, with agencies such as the Federal Energy Regulatory Commission, CDFW, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the State Water Resources Control Board, DWR does not enjoy “concurrent jurisdiction” with those agencies. Unlike these regulatory agencies, which set rules and standards with which DWR must comply, DWR does not act in a regulatory capacity as operator of the SWP. Rather, DWR acts more like a public utility that provides service against the backdrop of rules and regulations set by other agencies.

II.6.5.14 RESPONSE TO COMMENT O-NCRA-1-14

Mercury loading to Yolo Bypass occurs primarily during the winter-spring, when high flow events mobilize mercury-laden sediments from the watershed and deposit this material onto the floodplain. The proposed action is focused on the summer and fall, when this sediment is not mobilized. The flow action is modest, involving management of local water sources rather than inputs from the entire watershed, that are mobilized during flood periods. The bottom line is that there would be no substantial increase in loading of total mercury to the Yolo Bypass.

It is also important to consider the possible effect of the flow action on mercury methylation, a complex process by which total mercury is converted to methylmercury which is more toxic and bioavailable to organisms. Mercury methylation can occur when lands are flooded, such as during high flow events, for rice production, or for wildlife habitat management. As noted above, the flow action is very modest and will not involve any additional flooding of terrestrial habitat. Hence, there would not be additional mercury methylation during the flow action. Instead, mercury methylation during the

summer and fall will continue to be driven by normal land use activities, principally rice field production and wildlife habitat management.

Furthermore, as noted in DEIR Chapter 3.3, “Description of the Proposed Project,” flow pulses of agricultural drain water from Colusa Drain is an adaptive management action that relies on monitoring and evaluation. Potential water quality concerns would be addressed through the Summer-Fall Adaptive Management Process. As noted in DEIR Chapter 4.3.2, “Water Quality Constituents That Could Be Affected by the Proposed Project,” the Proposed Project would not affect nutrients and methylmercury because the project would only include project operations and would not affect mercury sources or the extent of wetlands.

Please see Master Response 15, “Environmental Justice,” for an explanation of environmental justice under CEQA. Also, please note that CEQA considers impacts on the environment and generally does not include analysis of social and economic considerations.

II.6.5.15 RESPONSE TO COMMENT O-NCRA-1-15

As shown in DEIR Chapter 3.3.10, “Clifton Court Forebay Operations,” the U.S. Environmental Protection Agency (EPA) maximum concentration allowed for Aquathol K is 5 ppm. The target concentration of treatments proposed for the control of aquatic weeds is 2 to 3 ppm, which is well below the concentration of 9 to 12 ppm where sublethal effects have been observed. Further details regarding application and conditions of use are described in DEIR Chapter 3.3.10.

Aquathol K does not break down into other harmful compounds, bind to soil, nor linger in the water table. It is broken down by microorganisms into carbon, hydrogen, and oxygen. Initial breakdown product of Endothall, the active ingredient in Aquathol K, is amino and glutamic acid, rapidly consumed by bacteria. Although the DEIR does not state that Aquathol K can result in oxygen loss from decomposition of vegetation, DEIR Chapter 3.3.10, “Clifton Court Forebay Operations,” explicitly notes that Aquathol K will be applied to a 900-acre section at a time. Application of Aquathol K to single sections of Clifton Court Forebay will prevent significant decrease in dissolved oxygen levels. The DEIR does not state the risks of copper-based herbicides on fish. However, herbicide application procedure as well as avoidance and minimization practices address concerns with Aquathol K and copper-based herbicide applications. Water quality sampling for copper will evaluate concerns for potential accumulation of copper in the Forebay.

II.6.5.16 RESPONSE TO COMMENT O-NCRA-1-16

Flow pulses of agricultural drain water from Colusa Drain is an adaptive management action that relies on monitoring and evaluation. The Proposed Project would not increase the frequency or quantity of irrigation return water discharged to the Sacramento River system from the Colusa Drain. Because rice growing practices require holding of water to reduce the concentrations of pesticides, it is not likely that agricultural return water would contain elevated levels of pesticides. Please see Response to Comment O-NCRA-1-14 for more details.

II.6.5.17 RESPONSE TO COMMENT O-NCRA-1-17

DWR conducted detailed evaluations of effects to special status salmonids including Spring-run Chinook Salmon and Fall-run Chinook Salmon. These evaluations are presented in DEIR Chapter 4.4.7, "Impacts of the Proposed Project." DWR's analyses of effects to special status salmonids concluded that long-term operations of the SWP would not significantly impact these species. Additionally, DWR staff has continued to work closely with CDFW staff since the issuance of the DEIR to allow for the issuance of an ITP meeting the standards of CESA. The result of the consultation between the two agencies resulted in Refined Alternative 2b. Refined Alternative 2b would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMET or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further minimize impacts below those identified in the DEIR. Please also see Master Response 5, "Treatment of Habitat Restoration," for further discussion.

Coho Salmon were not considered in the DEIR because they do not occur in the Delta, Sacramento, or San Joaquin river drainages in appreciable numbers and individual Coho Salmon that are found in these water bodies are strays from other drainages.

II.6.5.18 RESPONSE TO COMMENT O-NCRA-1-18

Master Response 2, "Baseline," describes the legal standard for the baseline, which requires DWR to evaluate the Proposed Project, relative to the Existing Conditions at the time the Notice of Preparation is released. These conditions include those that occurred during and as a result of the 2008 and 2009 Biological Opinions.

The Sites Reservoir Project is appropriately referenced and evaluated as part of the Cumulative Impacts discussions in DEIR Chapter 4.6.1, "Cumulative Impacts."

The "One-Tunnel Delta diversion proposal" was not considered reasonably foreseeable because no environmental documentation has been completed for the One-Tunnel Delta Conveyance Project and the Notice of Preparation of Environmental Impact Report for the Delta Conveyance Project was released on January 15, 2020, after publication of the DEIR for long-term operation of the SWP. Please also see Master Response 26, "One-Tunnel Delta Conveyance Project."

II.6.5.19 RESPONSE TO COMMENT O-NCRA-1-19

Long-term operations of the SWP include operation of all the SWP facilities; however, the operational changes proposed as part of the project do not involve all the SWP components. To analyze the full range of potential environmental impacts, the DEIR identified the geographic area in which potential direct and reasonably foreseeable indirect impacts could occur. The geographic area for evaluation of potential direct and indirect impacts of the Proposed Project is delineated by the following waters:

- Sacramento River from its confluence with the Feather River downstream to the legal Delta boundary at the I Street Bridge in the City of Sacramento
- Sacramento-San Joaquin Delta
- Suisun Marsh and Bay

See Master Response 1, “Scope of Analysis.”

II.6.5.20 RESPONSE TO COMMENT O-NCRA-1-20

Master Response 3, “The CEQA Process,” discusses the requirements of CEQA with respect to the development of alternatives, the purpose served by alternatives where there are no significant impacts, and public involvement in the alternative development process.

As discussed in Master Response 3, an EIR must include a reasonable range of alternatives that would “feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives.” CEQA also requires that an EIR analyze a “no project” alternative, to compare the potential impacts of the proposed project to a “no project” scenario.

The DEIR also analyzes four project alternatives in addition to the “no project” alternative. Pursuant to CEQA, the DEIR includes sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project. Although not required to reduce or avoid significant CEQA impacts, two of the alternatives provide freshwater flows in the spring and summer, and one alternative includes physical barriers and other deterrents to keep fish away from the SWP pumps. By embodying scenarios that would reduce the environmental effects of the Proposed Project (even though they were not significant), these alternatives serve the purposes of CEQA, as set forth above.

The alternatives were evaluated in the DEIR, but a more detailed evaluation of the alternatives is presented in the FEIR based on updated modeling of Refined Alternative 2b assumptions. See FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP,” for updated analyses resulting from supplemental technical information and modeling results. Updated modeling results are provided in FEIR Part III, Appendices C, E, and F.

II.6.5.21 RESPONSE TO COMMENT O-NCRA-1-21

This comment states that DWR had a duty to consult with the Winnemum Wintu Tribe before circulating the Draft EIR. DWR disagrees. California Public Resources Code § 21080.3.1(b) states that a lead agency shall consult,

“... with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation.”

To date, the Winnemum Wintu Tribe has not requested, in writing, that DWR inform the tribe of projects that DWR is pursuing in the geographic area of its traditional and cultural affiliation. The May 28, 2019 letter from Stephan F. Volker re the Notice of Preparation of Environmental Impact Report for Long-Term Operations of the State Water Project does not constitute such a request. The May 28, 2019 letter was from an attorney, not the tribe itself. The letter also did not include a request to be notified “of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe,” as required by § 21080.3.1(b)(1) of the Public Resources Code. The May 28, 2019 letter only stated that DWR should consult with the Winnemum Wintu Tribe on the project as a result of the tribe’s cultural practices along the McCloud River and the tribe’s relationship with McCloud River salmon.

A representative of the Winnemum Wintu agreed, several months after Attorney Volker sent his May 28, 2019 letter to DWR, that the tribe had not yet submitted a consultation request to DWR as required by § 21080.3.1(b)(1). DWR’s Tribal Policy Advisor spoke with a representative of the Winnemum Wintu on September 11, 2019 at the Delta Conveyance Informational Meeting for The California Tribal Community in Lincoln, California. DWR’s Tribal Policy Advisor reminded the Winnemum Wintu representative that DWR had not yet received a request for consultations per the Public Resources Code, and the representative agreed that such a letter had yet to be submitted for consultation purposes.

Regardless, even if the Winnemum Wintu had submitted a request for formal consultation as statutorily required, the Native American Heritage Commission does not identify the Winnemum Wintu as a California Native American tribe that is traditionally and culturally affiliated with the geographic area where the Project would occur. Under § 21080.3.1(c) of the Public Resources Code, a lead agency may seek the assistance of the Native American Heritage Commission in identifying California Native American tribes that are traditionally and culturally affiliated with the project area. Thus, DWR requested and received lists from the Native American Heritage Commission on October 3, 2019 and October 10, 2019 of such tribes in the project area as identified in the EIR. The Winnemum Wintu Tribe did not appear on either of these lists.

In sum, DWR did not have a duty to consult with the Winnemum Wintu under the Public Resources Code. Even though DWR is not statutorily required to consult with the Winnemum Wintu, DWR has reached out to the tribe to discuss the Project. DWR’s effort is to coordinate and communicate with the tribe but is not formal consultation as set forth in the Public Resources Code.

II.6.5.22 RESPONSE TO COMMENT O-NCRA-1-22

Please see Master Response 14, “Public Trust.”

II.6.5.23 RESPONSE TO COMMENT O-NCRA-1-23

For a discussion on the Delta Reform Act please see Master Response 7, “Delta Reform Act.” Please see Response to Comment O-NCRA-1-8 explaining that the COA Addendum is not a part of this Project and how it is addressed in the DEIR. Please also see Master Response 2, “Baseline.”

II.6.5.24 RESPONSE TO COMMENT O-NCRA-1-24

Master Response 7, “Delta Reform Act,” discusses the requirements of the Delta Plan.

II.6.5.25 RESPONSE TO COMMENT O-NCRA-1-25

The comments provided in this letter have been addressed above in Responses to Comments O-NCRA-1-1 to O-NCRA-1-24.

This specific comment ends its author’s letter by asserting, in summary fashion, that “[f]or the reasons stated above, DWR’s DEIR is insufficient. DWR has failed to describe and disclose the Project and its impacts. And, DWR’s Project fails to protect and restore the Delta’s beleaguered fisheries and other public trust resources.” No specific response is necessary, as the particular contentions supporting this suggestion are dealt with in individual responses to earlier comments in this letter.

II.6.5.26 RESPONSE TO COMMENT O-NCRA-1-ATT-1-1

Please see Response to Comment O-NCRA-1-2.

II.6.5.27 RESPONSE TO COMMENT O-NCRA-1-ATT-1-2

Please see Response to Comment O-NCRA-1-3.

II.6.5.28 RESPONSE TO COMMENT O-NCRA-1-ATT-1-3

Please see Response to Comment O-NCRA-1-3.

II.6.5.29 RESPONSE TO COMMENT O- NCRA -1-ATT-1-4

Please see Response to Comment O-NCRA-1-8.

II.6.5.30 RESPONSE TO COMMENT O- NCRA -1-ATT-1-5

Please see Response to Comment O-NCRA-1-19.

II.6.5.31 RESPONSE TO COMMENT O- NCRA -1-ATT-1-6

Please see Response to Comment O-NCRA-1-11.

II.6.5.32 RESPONSE TO COMMENT O- NCRA -1-ATT-1-7

Please see Response to Comment O-NCRA-1-12.

II.6.5.33 RESPONSE TO COMMENT O- NCRA -1-ATT-1-8

Please see Response to Comment O-NCRA-1-13.

II.6.5.34 RESPONSE TO COMMENT O- NCRA -1-ATT-1-9

Please see Response to Comment O-NCRA-1-21.

II.6.5.35 RESPONSE TO COMMENT O- NCRA -1-ATT-1-10

Please see Response to Comment O-NCRA-1-22.

II.6.5.36 RESPONSE TO COMMENT O- NCRA -1-ATT-1-11

Please see Response to Comment O-NCRA-1-23.

II.6.5.37 RESPONSE TO COMMENT O- NCRA -1-ATT-1-12

Please see Response to Comment O-NCRA-1-25.

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10.628.01

January 7, 2020

Via Email

You Chen (Tim) Chao
Executive Division
California Department of Water Resources
PO Box 942836
Sacramento CA 94236-0001
LTO@water.ca.gov

Re: LTO of SWP Project (Corrected)

Dear Mr. Chao:

On behalf of the North Coast Rivers Alliance, Institute for Fisheries Resources, Pacific Coast Federation of Fishermen's Associations, San Francisco Crab Boat Owners Association, Save California Salmon, and the Winnemem Wintu Tribe we submit the following comments in response to the Department of Water Resources' ("DWR's") Draft Environmental Impact Report ("DEIR") for the Long-Term Operation of the California State Water Project ("Project"). To the extent that DWR has failed to consider and address our May 28, 2019 scoping comments for the Project, attached as Exhibit 1, we incorporate those comments by reference.

INTRODUCTION

North Coast Rivers Alliance ("NCRA") is a non-profit unincorporated association with members throughout Northern California. NCRA was formed for the purpose of protecting California's rivers and their watersheds from the adverse effects of excessive water diversions, ill-planned urban development, harmful resource extraction, pollution, and other forms of environmental degradation. Its members use and enjoy California's rivers and watersheds for recreational, aesthetic, scientific study, and related non-consumptive uses.

The Institute for Fisheries Resources ("IFR") is a non-profit, tax-exempt organization that works to protect and restore salmon and other fish populations and the communities that depend on them. IFR both funds and manages many fish habitat protection programs and initiatives. In that capacity, IFR seeks reforms to protect fish health and habitat throughout the West Coast of

the United States and has successfully advocated for dam removals, improved pesticide controls, better forestry management and stream protection standards, and enhanced marine and watershed conservation regulations.

Pacific Coast Federation of Fishermen's Associations ("PCFFA") is a nonprofit membership organization incorporated in 1976. PCFFA is composed of more than 14 separate commercial fishing and vessel owners' associations situated along the Pacific Coast of the United States. By virtue of its combined membership of approximately 750 fishermen and women, PCFFA is the single largest commercial fishing advocacy organization on the West Coast. PCFFA represents the majority of California's organized commercial salmon fishermen and has been an active advocate for the protection of Pacific salmon and their spawning, rearing and migratory habitat for more than 40 years.

The San Francisco Crab Boat Owners Association is a century-old association of owners and operators of small, family-owned fishing boats that catch Dungeness crab, wild California King salmon, Pacific herring, and other species that live in and depend upon the cold waters of the Pacific Ocean, the San Francisco Bay-Delta and the Sacramento and San Joaquin Rivers and their tributaries. It is also actively involved in community education and advocacy concerning fisheries resources legislation to ensure that the rich heritage of commercial fishing in the Bay Area will survive for future generations.

Save California Salmon is a conservation organization that seeks to restore key salmon watersheds and water quality through flow restoration, fish passage, and toxics clean up, along with responding to threats to adequate flows and clean water. It focuses on diversifying the environmental movement and helping Tribes and other underrepresented people create strategic and successful campaigns for clean water and healthy, harvestable fisheries. The specific watersheds it works to protect are the Klamath, Trinity, Eel, San Joaquin, Smith, Pit and Sacramento rivers, and the Bay Delta.

The Winnemem Wintu Tribe is a California-recognized Tribe whose aboriginal territory encompasses the upper watersheds of the Sacramento River including the McCloud River. The Winnemem Wintu Tribe was traditionally dependent on salmon fishing for both subsistence and cultural purposes, and maintains a deep cultural, spiritual and recreational interest in the continued viability of California's salmon runs that pass through the Sacramento-San Joaquin River Delta ("Delta"). The Winnemem Wintu Tribe is a strong proponent of Delta restoration.

Each of these groups encourages DWR to reconsider its Proposed Project and recirculate a revised, adequate DEIR. When DWR does so, it must consider an alternative that allows DWR to operate the State Water Project ("SWP") to protect public trust resources, including fisheries, and not just those currently listed under the California Endangered Species Act ("CESA") and the Endangered Species Act ("ESA"). DWR must act to protect public trust resources, including the fisheries that historically thrived throughout the Sacramento San Joaquin Delta system, and

the greater Project area. And in defining the purposes for which DWR operates the Project, DWR must include traditional public trust uses, including commercial fishing.

I. CEQA CONSIDERATIONS

A. THE DRAFT FAILS TO INCLUDE A STABLE PROJECT DESCRIPTION

The California Environmental Quality Act, Public Resources Code section 21000, et seq. (“CEQA”), requires DWR to provide a clear description of the Project under consideration. “An accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR.” *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193; *Concerned Citizens of Costa Mesa, Inc. v. 32nd District Agricultural Association* (1986) 42 Cal.3d 929, 938; *Washoe Meadows Community v. Department of Parks & Recreation* (2017) 17 Cal.App.5th 277, 287. Yet, DWR’s DEIR fails to present a clear proposed project to allow for informed public comment.

Instead, the DEIR states:

The Proposed Project, which is the preferred alternative in this [DEIR], consists of multiple elements that characterize future operations of SWP facilities, modify ongoing programs being implemented as part of SWP operations, improve specific activities that would enhance protection of special-status fish species, or support ongoing studies and research on these special-status species to improve the basis of knowledge and management of these species. Implementation of these elements is intended to continue operation of the SWP and deliver up to the full contracted water amounts while minimizing and fully mitigating the take of listed species consistent with CESA requirements.

DEIR 3-15. It further states:

For discussion purposes in this DEIR, these elements are divided into four categories and consist of (1) proposed SWP operations that can be described in detail and assessed on a project-level basis; (2) proposed SWP operations that can only be described generally and assessed on a program-level basis; (3) proposed environmental protective measures that would offset, reduce, or otherwise mitigate potential environmental impacts on special-status species, and (4) adaptive management actions that include establishing a governance framework, a compliance and reporting program, specific drought- and dry-year actions, and independent review panels, as well as conducting Four-Year Reviews of management measures.

Id. The DEIR presents these four categories of Project elements in a series of tables, discussing

each part of the Project and the goal or objective to which it relates. DEIR 3-15 to 3-17. This discussion lacks sufficient detail to understand the Project. *Id.*

First, most of the elements that the DEIR designates as “Project-Level” elements are not clearly described and defined. DEIR 3-15. For example the first is “[c]omply with D-1641 and [U.S. Army Corps of Engineers (“USACE”) Permit 2100.” *Id.*¹ And the sixth is “[o]perate the Suisun Marsh Salinity Control Gates, Roaring River Distribution System, Morrow Island Distribution System, and Goodyear Slough Outfall in compliance with D-1641.” DEIR 3-16. But the chart does not discuss the specific actions that DWR must to take to comply with D-1641 or USACE Permit 2100. DEIR 3-15 to 3-16. Although D-1641 is woefully inadequate to restore the Delta as the law requires, compliance with this obsolete ruling is at least a start. But this DEIR does not even tell the public how this would be accomplished. Demonstrating how compliance would be achieved is particularly important in light of the U.S. Bureau of Reclamation’s (“the Bureau’s”) current position that it “has neither the legal authority, nor the legal obligation” to implement D-1641 in its operation of the Central Valley Project (“CVP”).² Thus, DWR may need to alter operations to meet the requirements of D-1641 that the Bureau of Reclamation fails to honor.

Similarly, the third “Project-Level” element of the Proposed Project – to “[m]anage [Old and Middle River (“OMR”)] reverse flows based on species distribution, modeling, and risk analysis, with provisions for capturing storm water flows” – is likewise devoid of the operational parameters needed to understand how it would achieve these objectives. DEIR 3-15. The fourth element – to “[c]ontinue operating [Barker Slough Pumping Plant (“BSPP”)] to minimize effects on Delta Smelt and Longfin Smelt, and continue implementing sediment removal and aquatic weed management actions as part of normal operations at [BSPP]” – is similarly bereft of essential details. *Id.* And the last “Project-Level” element of the Proposed Project – “[f]acilitate downstream transport of phytoplankton and zooplankton to areas inhabited by Delta Smelt” – likewise provides no operational information. DEIR 3-16. In none of these instances does the DEIR provide context for how DWR intends to accomplish these elements. Absent a clear description of the measures necessary to take these actions, the DEIR’s skeletal description of these elements of the Proposed Project fails to provide the public with the information necessary to understand and comment on them.

B. DWR’S DISCUSSION OF THE PROJECT’S PURPOSE AND OBJECTIVES VIOLATES CEQA

¹ It appears that this permit number is incorrect. The existing USACE permit for the SWP is listed elsewhere as SPK-1999-0715. DEIR 3-13.

² February 15, 2017 Letter from U.S. Bureau of Reclamation to State Water Resources Control Board, attached as Exhibit 2.

The DEIR must include “[a] statement of the objectives sought by the proposed project. . . . The statement of objectives should include the underlying purpose of the project and may discuss the project benefits.” 14 C.C.R. § 15124(b). “[A] lead agency may not give a project’s purpose an artificially narrow definition.” *North Coast Rivers Alliance v. Kawamura* (2015) 243 Cal.App.4th 647, 668 (quoting *In re Bay-Delta* (2008) 43 Cal.4th 1143, 1166). The agency’s formulation of its underlying purpose and objectives is essential to its consideration of alternatives. *Id.* An agency need not study alternatives that cannot satisfy the Project’s basic goal. *Id.*

Here, the Project Description does not contain a statement regarding the underlying purpose of the Project. DEIR 3-1. Instead, it states:

The objective of the Proposed Project is to continue the long-term operation of the SWP consistent with applicable laws, contractual obligations, and agreements. DWR proposes to store, divert, and convey water in accordance with DWR’s existing water rights to deliver water pursuant to water contracts and agreements up to full contract quantities. DWR seeks to optimize water supply and improve operational flexibility while protecting fish and wildlife based on the best available scientific information.

DEIR 3-1. Thus, the DEIR does not clearly explain what DWR intends the Project to do, and why. Some Project components appear to relate to DWR’s request for an incidental take permit (“ITP”) from the California Department of Fish and Wildlife (“CDFW”) “which will cover species that are listed under the [California Endangered Species Act (“CESA”)] and are subject to incidental take from long-term operation of the SWP (Delta Smelt, Longfin Smelt, Winter-run Chinook Salmon, and Spring-run Chinook Salmon).” DEIR 2-2, 3-15 to 3-18. All the same, DWR does not clarify whether the Project’s changes to SWP operation are necessary for CDFW to issue an ITP. Without a clear statement of the underlying goal of the Project, DWR frustrates the formulation and discussion of reasonable alternatives to the Project.

C. THE DRAFT EIR FAILS TO APPROPRIATELY ADDRESS THE COA AMENDMENT

On December 12, 2018, DWR approved the Coordinated Operations Agreement Addendum (“COA Addendum”), which DWR now admits “would modify operations and associated reservoir storage, downstream surface water flows, and diversions at selected [State Water Project (“SWP”)] facilities. DEIR B-27. Yet, before it approved the COA Addendum, DWR did not perform any environmental review.

In its Notice of Preparation for the Project, DWR included a commitment to study the COA Addendum. But the DEIR fails to appropriately do so here.

The DEIR incorporates the COA Addendum's changes to SWP operations into the environmental baseline for the Project. DEIR 4-2. Thus, DWR continues its ongoing failure to appropriately address the impacts of the COA Addendum on the environment – and to study alternatives to the COA Addendum that could lessen Project impacts – in this DEIR. Only by examining an environmental baseline that includes coordinated operations of the SWP and CVP under the parameters that existed *before* the December 12, 2018 COA Addendum can DWR and the public understand the likely impacts of that approval.

Instead the DEIR, in Appendix B, compares modeling of the COA Addendum to modeling of the 1986 Coordinated Operations Agreement (“1986 COA”), but does not address how the Project's impacts would differ with or without the COA Addendum. Appendix B also fails to detail the COA Addendum's changes to Oroville Reservoir's carryover storage, and the resulting impacts on public trust resources – including fish, flows, and water quality in the Feather River, and the San Francisco-San Joaquin Bay Delta. DWR does include one chart of modeling results that shows that under the COA Addendum, Oroville Reservoir's monthly average storage in critically dry years drops by roughly 200,000 acre feet, as compared to the 1986 COA. DEIR Appendix B, B-13. This does not address carryover storage in multiple critically dry years. DWR concludes, despite this significant drop in storage, that the impacts would be “similar” under the COA Addendum and the 1986 COA. DEIR Appendix B, B-31. But DWR's discussion of the COA Addendum's impacts does not address Oroville Reservoir's storage. Appendix B, B-27 to B-43 (discussing only the impacts downstream of the confluence of the Sacramento River and the Feather River, and omitting Oroville Reservoir from storage discussion).

Further, while Appendix B purports to link to a “complete CalSim II model output for the 2018 COA Addendum and the 1986 COA Studies,” that link does not lead to the material referenced. DEIR Appendix B, B-42.³ Thus it is impossible to determine whether the CALSIM II modeling referenced in Appendix B shows that under the COA Amendment, Oroville storage would have been drawn below dead pool in eight of twelve critically dry years modeled, as is implied by Appendix B Figure 8. Appendix B, B-13.

Fundamentally, however, DWR must rescind its approval of the COA Addendum in order

³ The link (last checked January 2, 2020)

<https://d3.water.ca.gov/owncloud/index.php/s/kKiT64Ma5ATGeEf> leads to various error messages, depending upon the internet browser. For example, in Google Chrome, the error message reads “This site can't be reached . . . ERR_CONNECTION_RESET.” And in Microsoft Internet Explorer, the error message states “This page can't be displayed . . . Make sure the web address <https://d3.water.ca.gov> is correct.”

to comply with CEQA. As the California Supreme Court has made clear, “an EIR must be performed before a project is approved, for “if postapproval environmental review were allowed, EIR’s would likely become nothing more than *post hoc* rationalizations to support action already taken.” *Save Tara v. City of West Hollywood* (2008) 45 Cal.4th 116, 130 (bracket omitted, quoting *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 276, 394)). The COA Amendment’s impacts are just the sort of significant effects that DWR should have considered, disclosed and evaluated *before* deciding whether to approve the COA Amendment.

Finally, by incorporating the COA Addendum into the existing baseline, DWR skews its analysis of Project impacts. The COA Addendum impairs SWP’s ability to provide cold-water flows necessary for fish survival when they are most needed, and thereby prevents DWR from meeting existing Bay-Delta Water Quality Standards.

D. THE DEIR FAILS TO DISCUSS THE PROJECT’S IMPACTS

1. The Project’s Geographic Scope Excludes Areas Impacted by the Project

While the Notice of Preparation indicated that Project activities will occur “throughout the state” (NOP 4, 7), the DEIR artificially limited the Project area to include only “the SWP Service Areas and Existing SWP storage and export facilities located within the Delta and vicinity.” DEIR 3-1. DWR included only the areas receiving Project benefits, and excluded areas the Project would harm. Equally improper, it excluded the related CVP facilities from the Project Area, as well as DWR facilities upstream of the Delta. DEIR 1-4; 3-1. Thus, despite the interrelated nature of their SWP and CVP operations, and the manner in which each water project alters the conditions for the other, the DWR’s Project Area excludes watersheds and water facilities that will face changed environmental conditions due to DWR’s Project operation. Further, when discussing the Project and its impacts, the DEIR fails to account for the ways that its operation of Oroville Reservoir will impact Oroville Reservoir’s carryover storage, and instream flows in the Feather River above its confluence with the Sacramento River, and other direct impacts of the Project.

DWR’s artificial curtailing of the geographic scope of the Project allows DWR to omit potentially significant impacts from operation of Oroville Reservoir. This omission is particularly glaring, given that in Appendix G, DWR acknowledges that “when making operational decisions, SWP operators essentially have [just] two knobs: 1) releases from Oroville, and 2) SWP exports. When SWP operators manage the Oroville releases and Clifton Court Forebay allotment, they are managing to conditions within the Feather River, like flood and minimum instream flow requirements. They are also managing to conditions in the Delta including outflow, interior flow, and water quality requirements.” DEIR Appendix G, G-3. The DEIR’s analysis completely overlooks the primary water source for the flows necessary for the Project – the Feather River – and the Project’s impacts on storage of these flows in successive

critically dry years.

In this vein, the DEIR completely avoids any discussion of how the Project impacts the Trinity River, including impacts to temperature and flows that would harm Trinity River coho salmon, and spring-run and fall-run Chinook salmon. These species depend on sufficient water temperature and flows in the Klamath River system, and are harmed when water is diverted from the Klamath basin to the Sacramento River. DWR must include modeling that addresses how the Project, and alternatives thereto, will impact the Trinity River system. Likewise, DWR treated areas on the Sacramento River above the confluence with the Feather River as outside the Project Area, and failed to include them in the discussion of the Project impacts. *E.g.* DEIR 4-37. And DWR failed to consider whether the Bureau of Reclamation's reasonably foreseeable operation of the CVP will, when combined with the Project, create unacceptable impacts on these resources.

The DEIR also fails to address impacts to fisheries resources in the Feather River upstream of its confluence with the Sacramento River, and fails to analyze how the Project could impact water quality – including flows, temperature, turbidity, etc. – on the Feather River upstream of its confluence with the Sacramento River. DEIR 4-8, 4-28 (excluding the Feather River from aquatic resources project area), 4-115 (excluding the Feather River from the “geographic scope for evaluation of direct and indirect impacts of the Proposed Project”). By addressing only the Sacramento River below its confluence with the Feather River, DWR washes its hands of the conditions it causes in the Feather River upstream of that point. The DEIR fails to examine whether DWR can alter its operations on the Feather River to better protect hatchery-raised spring and fall run Chinook salmon and steelhead released from the Feather River Fish Hatchery, as well as the wild fish that rely upon these rivers for spawning and rearing habitat. DWR also failed to examine whether there are Project alternatives or mitigation measures it could adopt that would lessen impacts on these resources. These omissions violate CEQA. Public Resources Code §§ 21002, 21002.1, 21081.

DWR must examine these impacts and potential mitigation measures or alternatives that could avoid them, even if DWR lacks authority to adopt these alternatives or mitigation measures. Pub. Res. Code § 21081(a)(2). DWR must also inform the public that the authority lies with a separate agency that “can and should” act to mitigate the impacts. *Id.* But if DWR retains “concurrent jurisdiction with another agency to deal with identified feasible mitigation measures or alternatives,” DWR must affirmatively mitigate these impacts. *City of San Diego v. Board of Trustees of California State University* (2015) 61 Cal.4th 945, 957-958. DWR cannot avoid its duty to carefully examine the impacts of its Project simply because other agencies, such as the Federal Energy Regulatory Commission, CDFW, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the State Water Resources Control Board also regulate SWP operations. DWR must work with these agencies to affirmatively mitigate the impacts of Project operations by coordinating flows, hydrology, cold water pooling, carryover storage, and hatchery operations for the benefit of listed and public trust species, and present strategies and

measures for doing so in its DEIR.

2. The Project Will Harm Water Quality

Proposed fall pulse flows from agricultural drain water (DEIR at 3-31) are likely to be high in mercury and nutrients due to conditions in the rice fields and in Yolo Bypass. Water high in nutrients and mercury that stagnates is likely to develop methylmercury contamination (SFB RWCB 2012) and will thereby violate Sacramento and San Joaquin, and possibly the Bay Delta, Mercury TMDLs, impact beneficial uses, and violate water quality control plans. The Colusa Basin Drain is already a major source of mercury into the Sacramento River and Bay Delta. DEIR 3-97. This fall release of agricultural waste will likely also add to nutrient, temperature, DO, anoxic water, and algal impairments in the Sacramento River and Delta. This is especially a concern because the preferred alternative lowers flows at this time of year and therefore creates stagnant conditions.

This agricultural return flow proposal is also a major Environmental Justice issue for subsistence and commercial fishermen due to the mercury and other water quality issues, and will likely also impact drinking water supplies and local fish and recreation dependent economies.

3. The Project's Pesticide Use Will Create Unreasonable and Significant Impacts

The Project includes the application of copper-based herbicides and Aquathol K – an endothall-based aquatic herbicide – to address aquatic weeds in the Clifton Court Forebay. While the DEIR discusses the risks of Aquathol K on salmon smolts, including the concentrations at which sublethal effects occur, the DEIR does not discuss whether Aquathol K breaks down into other harmful compounds, binds to soil, or lingers in the water table after application. DEIR 3-43. It also fails to disclose that aquatic plants treated with Aquathol K can “can result in oxygen loss from decomposition of dead plants. This loss can cause fish suffocation. Water bodies containing very high plant density should be treated in sections to prevent suffocation of fish.”⁴ And, it omits any discussion of measures to avoid or mitigate these horrendous impacts.

The DEIR contains even less information about the potential impacts of copper-based herbicides. DEIR 3-44. It does not discuss the known risks of copper-based herbicides on fish, including salmonids and green sturgeon, nor does it discuss how copper-based pesticides degrade

⁴ Aquathol K label, p. 3, available at: https://www3.epa.gov/pesticides/chem_search/ppls/070506-00176-20150423.pdf (last visited January 2, 2020).

in the water table. Instead, the DEIR relies upon monitoring of copper concentrations to avoid harm. DEIR 3-44 to 3-47. But by collapsing its discussion of the measures DWR intends to take to avoid harm with its discussion of the pesticide application procedures, DWR fails to disclose and assess the potential harm posed by its actions.

Equally alarming, as noted above the DEIR proposes “using agricultural drain water from Colusa Drain . . . over a 4-week period [in the fall to] improve downstream transport of phytoplankton.” DEIR 3-31. But the DEIR fails to address whether this drain water would be contaminated with pesticides and other chemicals commonly used in the rice fields drained by the Colusa Drain. Other essential operational facts – and potential impacts – are likewise ignored. These omissions violate CEQA.

4. The Project Will Harm Spring Chinook Salmon

The DEIR proposes to lower flows in May and June for most year classes in the Sacramento and San Joaquin rivers. This will impact juvenile salmon outmigration and the return and spawning of threatened Spring chinook salmon. These low flows will undermine Spring salmon reintroduction and recovery efforts in the San Joaquin and Sacramento rivers, which have cost millions of dollars. Under this plan, fall flow into the Delta will be lower, and fall exports will be higher. Yet the fall is a critical time for Fall chinook and coho salmon migration. Higher summer flows and lower fall flows could trigger early migration of Fall salmon, which would encourage Fall and Spring run mating and impact Spring run salmon genetic diversity and integrity. Low late winter and spring flows are also major threats to the survival of Spring run salmon in the Sacramento River.

Furthermore, the DEIR’s baseline relies on the 2009 Biological Opinion’s spring and fall flow pulses, and Reasonable and Prudent Alternatives, even though the 2019 Biological Opinion does not include these actions. The lowering of needed flows in these crucial times of year is a major cumulative impact to returning adult Fall, Spring run and coho salmon, and out-migration for all runs of salmon.

Finally, the DEIR misrepresents the existing conditions, baseline, and cumulative impacts of the Project by relying on the 2009 Federal Biological Opinion and not analyzing the impacts from the proposed Sites Reservoir diversions and current “One-Tunnel” Delta diversion proposal. Both Sites and the One-Tunnel proposal are key elements in the Governor’s water portfolio. The draft water portfolio was released on January 3, 2019, and therefore was reasonably foreseeable.

E. THE DEIR’S DISCUSSION OF PROJECT ALTERNATIVES IS INADEQUATE

As discussed above, DWR’s discussion of the Project omits large areas that will be

impacted by the Project's implementation. For this, and other reasons, DWR improperly concludes that the Project has no significant effects on the environment. All the same, DWR includes four alternatives to the Proposed Project, in addition to the No Project Alternative. DEIR 5-1. But the DEIR's presentation of these alternatives does not foster informed decisionmaking.

The discussion of the No Project Alternative, and the four other alternatives, fails to clearly describe the differences between the Proposed Project and its alternatives in a manner that comprehensibly details the practical differences. For example, the No Project Alternative discussion simply states that it does not include the Proposed Project's actions, and refers the reader to the DEIR's discussion of the existing environmental conditions. DEIR 5-1 to 5-5. The discussion of the other alternatives provides some additional information, but continues to obfuscate the differences between the various alternatives. DEIR 5-6 to 5-135. For example, the DEIR's discussion of Alternative 4 indicates that it would replace summer and fall actions of the Proposed Project to add additional Delta Smelt habitat criteria. DEIR 5-87. The DEIR indicates that this change may require "additional outflow" which would be provided through "some combination of" (1) "SWP and CVP export reductions," (2) increased releases from Oroville Reservoir, or (3) "[w]ater purchases from other water users." *Id.* But, as with its discussion of the Proposed Project, the DEIR fails to examine the impacts of these changes throughout the impacted watershed. And, because DWR excluded Oroville Reservoir and the Feather River from its analysis, the DEIR lacks the information necessary to understand the impacts of Alternative 4 as compared to the No Project Alternative or the Proposed Project. DEIR 5-102 (discussing impacts upstream of the Delta for Alternative 4).

F. DWR FAILED TO CONSULT WITH THE WINNEMEM WINTU TRIBE BEFORE CIRCULATING THE DRAFT EIR

CEQA requires DWR to consult with any California Native American tribe that requests consultation and that is traditionally and culturally affiliated with the geographic area of the proposed project. Pub. Res. Code §§ 21084.2, 21080.3.1. In our May 28, 2019 comments on DWR's Notice of Preparation, we informed DWR of its duty to consult with the Winnemem Wintu Tribe. The DEIR does not include the Winnemem Wintu Tribe in the list of California Native American Tribes that DWR contacted to initiate consultation. DEIR 4-291 to 4-292.

II. DWR FAILS TO ADDRESS THE PUBLIC TRUST DOCTRINE

DWR fails to address its duties under the Public Trust Doctrine. Although compliance with CEQA "may assist an agency in complying with its duties under the public trust doctrine [,] CEQA review of a project does not necessarily or automatically satisfy the agency's affirmative duties to take the trust into account and protect public trust uses whenever feasible." *San Francisco Baykeeper Inc. v. State Lands Com.* (2018) 29 Cal.App.5th 562, 571. "[A] public

trust use is not any use that may confer a public benefit, but rather a use that facilitates public access, public enjoyment, or public use of trust land.” *Id.* at 570.

DWR’s DEIR does not discuss DWR’s duty to protect to the extent feasible the public trust resources and uses under its jurisdiction. DWR makes no attempt to address its duty to do more than simply maintain the baseline condition, where feasible. Unlike CEQA, where the impacts of the Project – and the alternatives designed to lessen those impacts – are framed in the context of that baseline condition, the Public Trust Doctrine requires DWR to examine whether its activities will protect public trust uses independently of that condition. Where, as here, decades-long mismanagement of the state’s water supply has resulted in stark declines in the populations of delta smelt, long-fin smelt, salmon, and steelhead, among others, DWR must take affirmative action to protect the remaining fish populations throughout the waterways of the Project area. These actions include habitat restoration, new or improved fish passage projects, dam removal, increased instream flow requirements, sufficient minimum Delta inflow and outflow requirements, and other protective measures to restore these imperiled fish, including recovery of the McCloud River salmon and the habitat required to accomplish that objective.

III. DWR MUST SATISFY THE DELTA REFORM ACT AND ADDRESS THE PROJECT’S INCONSISTENCIES WITH THE DELTA PLAN

While the Delta Reform Act, Water Code section 85000, et seq., states that “[r]outine maintenance and operation of the State Water Project” are not covered actions, the Project is nonetheless subject to the Delta Reform Act’s requirements. Water Code § 85057.5(b). The Project, including the COA Amendment, does not qualify for this exemption because it constitutes neither routine maintenance nor routine operation of the SWP. *Id.* Instead, DWR’s Project will alter the current operational strategy to (1) accommodate the COA Amendment and (2) comply with any incidental take permits issued by CDFW. Neither of these operational changes are “routine.”⁵

While DWR mentions the consistency certification requirements of the Delta Reform Act in the DEIR, DWR does not indicate that it considers the Project to be subject to these requirements. DEIR 4-105 to 4-106. Instead, it appears to consider only whether the Delta Plan could be a cumulative project for the purposes of DWR’s CEQA analysis. DEIR 4-304. That is not the appropriate consideration. Because the routine operation exemption does not apply, DWR must “prepare a written certification of consistency with detailed findings as to whether the covered action is consistent with the Delta Plan,” and submit that written finding to the Delta Stewardship Council. Water Code § 85225. DWR must do this *before* it approves the Project, as the Delta Stewardship Council’s evaluation may lead to mandatory changes to the Project, should

⁵ Indeed, if such activities were mere routine operation, DWR would not be undertaking an EIR for this Project.

Department of Water Resources
LTO@water.ca.gov
January 7, 2020
Page 13

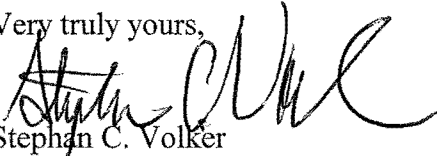
the Delta Stewardship Council determine that DWR's Project conflicts with the Delta Plan or the co-equal goals of the Delta Reform Act.

DWR also overlooks its failure to comply with CEQA's requirement that it "discuss any inconsistencies between the proposed project and applicable . . . regional plans" such as the Delta Stewardship Council's Delta Plan. CEQA Guidelines [14 C.C.R.] section 15125(d).

CONCLUSION

For the reasons stated above, DWR's DEIR is insufficient. DWR has failed to describe and disclose the Project and its impacts. And, DWR's Project fails to protect and restore the Delta's beleaguered fisheries and other public trust resources.

Very truly yours,



Stephan C. Volker

Attorney for North Coast Rivers Alliance, Institute for Fisheries Resources, Pacific Coast Federation of Fishermen's Associations, San Francisco Crab Boat Owners Association, Save California Salmon, and the Winnemem Wintu Tribe

List of Exhibits

- Exhibit 1: May 28, 2019 Scoping Comment Letter from NCRA, et al. to DWR
- Exhibit 2: February 15, 2017 Letter from Bureau of Reclamation to State Water Resources Control Board

II.6.6 LETTER O-NCRA-2 – LAW OFFICE OF STEPHAN VOLKER ON BEHALF OF NORTH COAST RIVERS ALLIANCE, INSTITUTE FOR FISHERIES RESOURCES, PACIFIC COAST FEDERATION OF FISHERMEN’S ASSOCIATION, SAN FRANCISCO CRAB BOAT OWNERS ASSOCIATION AND WINNEMEM WINTU TRIBE–JANUARY 6, 2020

II.6.6.1 RESPONSE TO COMMENT O-NCRA-2-1

This is a duplicate of Letter O-NCRA-1. The only change was the comment letter list of signatories. This change is noted and does not require direct response. Please see Responses to Comments in Letter O-NCRA-1.



January 6, 2020

You Chen (Tim) Chao, PhD, PE, CFM
Executive Division
California Department of Water Resources
PO Box 942836
Sacramento, CA, 94236-0001

RE: Comments on the Draft Environmental Impact Report for Operations of the State Water Project

Dear Mr. Chao:

On behalf of the Natural Resources Defense Council, The Bay Institute, Defenders of Wildlife, San Francisco Baykeeper, California Sportfishing Protection Alliance, and Golden State Salmon Association, we are writing to provide comments on the Department of Water Resources (“DWR”) Draft Environmental Impact Report (“DEIR”) regarding Operations of the State Water Project (“SWP”). Unfortunately, as discussed in detail on the pages that follow, the DEIR fails to comply with requirements of the California Environmental Quality Act (“CEQA”), and recirculation of a revised DEIR is required to comply with CEQA. In particular, the DEIR:

- Fails to provide an accurate and consistent project description;
- Fails to consider a reasonable range of alternatives;
- Fails to adequately analyze the effects of implementing the addendum to the Coordinated Operating Agreement, notwithstanding DWR’s Notice of Preparation;
- Fails to adequately disclose likely environmental impacts during droughts, including by failing to consider the effects of climate change;
- Fails to consider the whole of the action under CEQA, because it fails to analyze the effects of coordinated operations of the SWP and Central Valley Project (“CVP”) upstream of the Delta; and,
- Fails to adequately analyze environmental impacts and fails to disclose the significant adverse impacts of the proposed project.

DWR must substantially revise the DEIR to comply with CEQA, and DWR must recirculate the revised DEIR for public comment. *See* Cal. Code Regs., tit. 14, §§ 15088.5(a)(1)-(3), 15090.

↑ 1-1
(Cont.)

In addition, DWR appears to have already prejudged the outcome of the CEQA process before the conclusion of the public comment period. Subsequent to release of the DEIR, DWR has asserted that it is “committed to ensuring that the Final EIR is certified and the Notice of Determination is filed with the State Clearinghouse by February 28, 2020.” *See* Department of Water Resources, Request for Minor Amendment to Extend Incidental Take Permit Term to March 31, 2020 or until the issuance of an incidental take permit (“ITP”) covering all CESA-listed species is issued, Dec. 2, 2019, at 2. DWR cannot lawfully commit to a date for the conclusion of this CEQA process, and thereby determine that recirculation is not required, before it considers comments from the public and other state agencies. DWR’s comments appear to unlawfully prejudice the outcome of this CEQA process. In addition, DWR has repeatedly delayed submitting an application for an ITP to the California Department of Fish and Wildlife for more than 18 months, and DWR’s failure to submit a timely application does not justify rushing this critically important process.

1-2

1-3

Finally, DWR’s preferred alternative in the DEIR plainly would jeopardize the continued existence of species listed under the California Endangered Species Act (“CESA”), in violation of CESA’s requirements. DWR’s preferred alternative appears nearly identical to the proposed operations authorized by the Trump Administration’s recent biological opinions,¹ despite the repeated objections and concerns raised by the California Department of Fish and Wildlife (“DFW”) and the State of California’s announcement of its intention to file litigation to invalidate those biological opinions. The DEIR is wholly inadequate for use by DFW in its consideration of an ITP under CESA.

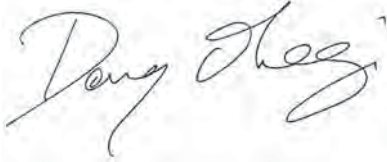
1-4

These issues are discussed in further detail on the pages that follow. Please let us know if you have questions about these comments or would like to discuss this matter further.

¹ As discussed in more detail below, the proposals use nearly identical CalSim modeling assumptions, identical annual limits on fish salvage, and generally describe the same coordinated operations with respect to Delta operations and summer/fall outflow, except that in the DEIR, DWR proposed that: (1) DFW would have the final say on SWP operations; (2) Old and Middle River flows (“OMR”) during storm events would not exceed -6,250 cfs; (3) OMR storm waivers could be used any time the Delta is in excess conditions under D-1641; and (4) the SWP would only provide a proportional share of required measures, such as outflow or OMR, to protect fish and wildlife. *See also* DEIR, Vol. 2 at H-1-8-2 (“The modeling completed for this CEQA/CESA process assumes that the SWP and CVP operate to consistent regulatory criteria, i.e., the resulting OMR would be the same requirement for the SWP as for the CVP”). In addition, while the Trump Administration incorporated climate change in its hydrologic modeling, DWR excluded all consideration of climate change from the modeling.

Thank you for consideration of our views.

Sincerely,



Doug Obegi
Natural Resources Defense Council



Jonathan Rosenfield, Ph.D.
San Francisco Baykeeper



Gary Bobker
The Bay Institute



Rachel Zwillinger
Defenders of Wildlife



John McManus
Golden State Salmon Association



Chris Shutes
California Sportfishing Protection Alliance

Enclosures

I. The DEIR Violates CEQA Because it Fails to Provide an Accurate Project Description

The DEIR violates CEQA because it fails to provide an accurate description of the project. First, DWR’s public statements make clear that the preferred alternative in the DEIR is not their proposed project, misleading the public and decision-makers about the scope and nature of the proposed project. Second, the DEIR violates CEQA because its description of the project is internally inconsistent and misleading, and as a result the DEIR inaccurately models and assesses potential environmental impacts from the project. In particular, the DEIR: (1) inconsistently describes whether the coordinated operations of the CVP and SWP are the proposed project; (2) whether the coordinated operations would actually achieve the proposed environmental flows, or only a proportional share of those flows; and (3) fails to accurately model the measures that are proposed for project. Each of these fundamental flaws is discussed below.

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It is black letter law that, "[a]n accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR." *County of Inyo v. City of Los Angeles*, 71 Cal. App. 3d 185, 193 (1977). CEQA requires that a DEIR identify a preferred alternative. *Washoe Meadows Community v. Department of Parks and Recreation*, 17 Cal.App.5th 277, 285-87 (2017). That preferred alternative must give a clear explanation of the nature and scope of the proposed project, otherwise it “is fundamentally inadequate and misleading.” *See Communities for a Better Environment v. City of Richmond*, 184 Cal.App.4th 70, 84-85 (2010).

DWR has violated these requirements here.

First, DWR’s proposed project in the DEIR is inconsistent with DWR’s description of the proposed project in their press release announcing the DEIR. For instance, DWR’s press release for the release of the DEIR claims that the proposed project “does not seek to increase SWP exports.”² In addition, the Department of Natural Resources spokeswoman Lisa Lien-Mager publicly claimed that, “the plan would set aside 200,000 acre-feet of water to offset the additional pumping impacts in the Delta, which when combined with other factors ‘does not result in a net increase in exports.’”³ However, the DEIR shows that the preferred alternative would increase SWP exports on average by 222,000 acre feet per year. DEIR at 4-17; *id.* at 4-18; *see id.*, Vol. 2 at pdf pages 666, 676. Indeed, it appears from DWR’s press release that their proposed project is not the preferred alternative, but instead some other alternative in the DEIR, as the press release explains that, “DWR’s draft proposal...includes multiple alternatives that

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² Department of Water Resources, DWR Moves to Strengthen Protections of Fish, Improve Real-Time Management of State Water Project, Nov. 21, 2019, available online at: <https://water.ca.gov/News/News-Releases/2019/November/Long-Term-Operations-of-State-Water-Project>.

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³ Associated Press, *California to sue over federal rules governing water*, Adam Beam, November 21, 2019, available online at: <https://apnews.com/810c41b719a84ca19eb9bb60aaa7739a>. This media story is hereby incorporated by reference.

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provide a block of environmental water that can be used to offset pumping impacts in the Delta, with adjustments made over time as new information is learned.” The proposed project in the DEIR does not include such a “block of environmental water.”

Moreover, in DWR’s application for an ITP under CESA for operations of the SWP that it subsequently submitted to DFW, DWR did not propose to operate the SWP consistent with the proposed project in this DEIR, but instead proposed to operate the SWP similar to Alternative 2B in the DEIR. Thus, the proposed project in the CEQA document is inconsistent with the proposed project under CESA, even though DWR’s ITP application specifically relies on the DEIR to meet obligations under CEQA for issuance of the ITP. *See* DWR, Incidental Take Permit Application for Long-Term Operation of the California State Water Project (“ITP Application”), December 13, 2019, at 1-3.

These wholly inconsistent descriptions of the proposed project are grossly misleading to the public and decisionmakers in violation of CEQA. *See, e.g., San Joaquin Raptor Rescue Center v. County of Merced*, 149 Cal.App.4th 645, 655-56 (2007) (holding that the project description was inconsistent as to whether the project would increase mining production and violated CEQA, in part based on statements in public hearings on the CEQA document that demonstrated such inconsistencies); *Communities for a Better Environment*, 184 Cal.App.4th at 83-84 (holding project description violated CEQA because of inconsistent statements whether the objectives of the project were to increase processing of heavier crudes at the refinery, relying in part on contradictory statements made by Chevron in a 10-K filing).

Therefore, the DEIR violates CEQA because DWR’s preferred alternative is not DWR’s proposed project as publicly described. The DEIR must be revised to provide a consistent and stable project description that is the project that DWR intends to implement, and thereafter recirculated for public comment.

Second, the project description violates CEQA because it inconsistently describes whether the Bureau of Reclamation’s (“Reclamation”) operations of the CVP are part of the proposed project. As a result, the DEIR provides wholly inconsistent analyses of potential environmental effects of the proposed project.

On the one hand, the Notice of Preparation (“NOP”) claims that the proposed project is operations of the SWP, and the DEIR repeatedly describes the proposed project as DWR’s operations of the SWP. *See, e.g.,* DEIR at 1-3 (“The Proposed Project would continue DWR’s ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements.”); *id.* at 1-5 (“The Proposed Project would consist of multiple elements that are expected to characterize future operations of SWP facilities...”); *id.* at 3-1 (“The objective of the Proposed Project is to continue the long-term operation of the SWP consistent with applicable laws, contractual obligations, and agreements.”). The DEIR likewise describes SWP facilities and SWP water contracts. *Id.* at 3-1 to 3-9.

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On the other hand, the DEIR also states that the proposed project is the operations of the SWP and CVP, stating that, “The Long-Term Operation of the Central Valley Project and State Water Project (Proposed Project), which is the preferred alternative in this Draft Environmental Impact Report (DEIR)...” *Id.* at 1-2; *see id.* at 2-2 (“As the lead agency for the Long-Term Operation of the Central Valley Project and State Water Project (Proposed Project)...”).⁴

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Thus, the DEIR claims both that the proposed project includes the operations of the CVP and that the proposed project does not include the operations of the CVP. These inconsistencies infect the analyses in the DEIR, misleading the public as to the effects of the project. For instance, the DEIR repeatedly claims that DWR and Reclamation will coordinate operations to meet Old and Middle River flow requirements:

- “DWR, **in coordination with Reclamation**, will operate to an OMR index that is no more negative than a 14-day moving average of -5,000 cfs unless a storm event occurs (described below).” DEIR at 3-18 (emphasis added).
- “From December 1 through February 28, DWR, **in coordination with Reclamation, will ensure that the OMR flow 14-day running average is no more negative than -5,000 cfs unless....**” *Id.* at 3-20.
- “During the year, if SWP and CVP operations exceed 50% of the annual loss threshold, **DWR, in coordination with Reclamation, would restrict OMR to a 14-day moving average OMR index that is no more negative than -3,500 cfs**, unless DWR, in coordination with Reclamation, determines that further OMR restrictions are not required to benefit fish movement because a risk assessment shows that the risk is no longer present based on real-time information.” *Id.* at 3-27.
- **DWR, in coordination with Reclamation, may operate to a more negative OMR flow but no more negative than -6,250 cfs** to capture excess flows in the Delta.” *Id.* at 3-28.

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The modeling and analyses in the DEIR assume that DWR and Reclamation would jointly operate to achieve these requirements. *See, e.g.*, DEIR, Vol. 2, at H-1-2-6 to H-1-2-7 (pdf pages 1652-53) (OMR modeling assumptions and Fall X2 modeling assumptions, showing that OMR and Fall X2 requirements would be fully implemented).

However, the DEIR demonstrates that DWR’s proposed project would not ensure that these OMR requirements are achieved, but it would instead only ensure that DWR’s “proportional share” of such requirements would be implemented. *See, e.g., id.* at 3-21 (“DWR will ensure that its proportional share of the OMR flow requirements described herein is satisfied.”); *see also id.*

⁴ The DEIR also fails to note that the contractual obligations of DWR and its SWP contractors are currently being renegotiated and could be modified in that process to reduce the water delivery obligations of DWR, increase water efficiency requirements, increase requirements to comply with state policy to reduce diversions from the Delta, and a host of other protective measures that could vastly reduce the unsustainable volumetric delivery amounts included in historic SWP contracts. These are connected actions that contribute to the Project’s cumulative impact. *See* Cal. Code Regs., tit. 14, § 15355.

at 3-22, 3-23, 3-24, 3-25, 3-27, 3-29. The same is true for other environmental flows, such as fall outflow. *See id.* at 3-31 (“In the event that Reclamation does not meet its share of the Delta outflow to meet 80 km X2, DWR will implement its share of this action.”). Equally important, Reclamation’s final biological assessment for SWP/CVP operations and 2019 National Marine Fisheries Service (“NMFS”) and U.S. Fish and Wildlife Service (“USFWS”) biological opinions do not include this -6,250 cfs OMR limit, and impose no limit on the magnitude of reverse OMR flows, contradicting the assertions in the DEIR.

As a result, the analyses and modeling in the DEIR are inconsistent with the actual proposed project, and fail to analyze the likely environmental impacts of the project. For instance, if DFW determined that OMR must be -3,500 cfs because SWP and CVP operations exceed 50% of the annual loss threshold, then the language on page 3-20 suggests, and modeling in the DEIR assumes, that OMR would be -3,500 cfs. However, the language on page 3-21 indicates that if Reclamation refused to comply, the coordinated operations of the CVP and SWP could result in significantly more negative OMR than -3,500 cfs, as the State Water Project would only provide its proportional share of such requirements. Like the unlawful CEQA documents in *San Joaquin Raptor Rescue Center and Communities for a Better Environment*, the DEIR here inconsistently claims on the one hand that OMR and outflow requirements will be achieved and ensured, and on the other hand that DWR will only ensure that a proportion of such OMR and outflow requirements will be achieved.⁵

Finally, the project description in the DEIR is inconsistent with the modeling and analyses of the project in the DEIR. Most obviously, the project description allows DWR to operate to an OMR flow of -6,250 cfs any time that the Delta is in excess conditions under D-1641, *see* DEIR at 3-28, but the DEIR never models an OMR flow of -6,250 cfs or models the extent of reverse OMR flows permitted under the proposed project. Under D-1641, the Delta is in “excess conditions” any time that OMR is controlling operations in the Delta, because otherwise water quality standards under D-1641 would be controlling. *Id.* (“Excess flows occur typically from storm-related events and are defined as flows in excess of that required to meet water quality control plan flow and salinity requirements and other applicable regulations.”). As such, -5,000 cfs OMR would never be required if OMR is controlling operations in the Delta, instead allowing OMR of -6,250 cfs any time that OMR is controlling operations. However, that is not the project that DWR modeled in the DEIR. Instead, the DEIR modeling assumes that OMR is more positive

⁵ In addition to failing to provide an accurate project description, the failure to ensure that these operational requirements will be achieved appears to violate CEQA’s requirements that mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments. Cal. Code Regs., tit. 14, § 15126.4(a)(2). This proportional share approach clearly would violate CESA, since it does not ensure that these measures are successfully implemented, nor does it prevent the coordinated operations of the CVP and SWP from jeopardizing the continued existence of CESA-listed fish species. *Id.* §§ 783.4(a)(2), (b), (c). Because the SWP is operated by the State of California, which has a duty to conserve listed species, CESA’s general requirement of rough proportionality does not apply. Cal. Fish and Game Code §§ 2052, 2052.1.



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than -5,000 cfs from January 1 to June 30, with very limited exceptions for storm events (7 days of -6,000 cfs OMR in January and February of Above Normal and Below Normal years, and 7 days of -6,000 cfs OMR in either January or February of Dry years). See DEIR, Volume 2 at H-1-2-6 (PDF page 1652); *id.* at H-1-4-13 (PDF page 1691). The DEIR also models OMR of -3,500 cfs in March and April, *id.* at H-1-2-6, even though this is not required by the proposed project.^{6,7} The DEIR never models OMR of -6,250 cfs, even though that flow level is explicitly allowed in the proposed project. The DEIR also never models OMR of -6,000 cfs in wet or critically dry years, and never models OMR more negative than -3,500 cfs in March and April, even though these are permissible operations under the proposed project.⁸ As a result, the modeling in the DEIR is inconsistent with the proposed project, misleading the public and decision makers as to the impacts of the proposal.

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Because the DEIR is wholly inconsistent as to whether the coordinated operations of the CVP are part of the proposed action, because the DEIR's modeling and analysis are inconsistent with Reclamation's proposed operations of the CVP, and because the DEIR's modeling and analyses are inconsistent with the proposed project's limitation to providing a "proportional share" of the modeled flows, the DEIR violates CEQA. DWR must revise the DEIR and recirculate to address these fundamental flaws.

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II. The DEIR Violates CEQA Because it Fails to Consider a Reasonable Range of Alternatives

CEQA requires that a reasonable range of alternatives to the proposed project be considered in the environmental review process, including a no project alternative. Cal. Pub. Res. Code §§ 21002, 21061, 21100; tit. 14, Cal. Code Regs. ("CEQA Guidelines") § 15126.6. The DEIR states that the objective of the proposed project is the continued operation of the SWP consistent with applicable laws, contractual obligations, and agreements. DEIR at 3-1. Compliance with CESA is clearly one of those applicable laws, and indeed DWR's application for an ITP is the intended

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⁶ The proposed project also provides that OMR may not be reduced to -3,500 cfs even after the 50% annual salvage limit is exceeded, if "DWR and Reclamation determines that further OMR restrictions are not required to benefit fish movement because a risk assessment shows that the risk is no longer present based on real-time information." DEIR at 3-27. Thus, reductions in OMR to -3,500 cfs even after salvage thresholds are exceeded are not reasonably certain.

⁷ The proposed project would end OMR management for salmonids when 95% of winter run and spring run have passed through the Delta, with no consideration of steelhead. DEIR at 3-29. While the modeling assumes that OMR is reduced to -3,500 cfs in March and April because of exceeding the 50% annual salvage threshold, it appears that OMR management for salmonids would likely end in May, precluding OMR restrictions, even after the 75% annual salvage threshold for steelhead is exceeded in June, as would have occurred in 2011 and 2013. See DEIR, Vol. 2 at H-1-4-16.

⁸ Even though the DEIR does not analyze or model OMR of -6,250 cfs in March, April or May, the DEIR admits that there would be significant numbers of days on average when these OMR provisions would be possible. See DEIR, Vol. 2, at H-1-4-14 to H-1-4-15 (pdf page 1691-92).

use of this document. *Id.* at 2-2 (“This document also may be used by CDFW, as a responsible agency as defined by CEQA, in its discretionary approval process and consideration to issue an ITP for the proposed long-term SWP operations.”).

The DEIR fails to provide a reasonable range of alternatives because while the best available science demonstrates that existing protections need to be strengthened to comply with CESA (which will likely result in reduced diversions from the Delta), the DEIR fails to consider any alternatives that would increase protections for endangered fish species and reduce water exports from the Delta compared to today. In addition, the DEIR fails to provide a reasonable range of alternatives because it fails to include any alternative that would require increased winter-spring Delta outflows, despite the findings of numerous state and federal agencies that such measures are necessary to protect native species and their habitats.

First, none of the alternatives included in the DEIR would strengthen protections for endangered fish and wildlife compared to today. The DEIR excludes consideration of any alternatives that provide increased restrictions on Delta exports and reduces water diversions in order to reduce entrainment and salvage of fish, that propose habitat restoration in addition to that which was required previously, or that propose other measures to improve the survival and abundance of listed species. As the Secretary of the Interior explained to President Obama in August 2016, reinitiation of consultation on the 2008 and 2009 biological opinions was required under the federal Endangered Species Act in order to strengthen protections in the existing biological opinions, which would likely reduce water supply south of the Delta. *See* Secretary of the Interior Sally Jewell, Memorandum for the President, Update on California Water Issues, August 30, 2016, at 2 (“The reinitiation process will likely lead to new or amended biological opinions that will increase protections for these species.”). However, all of the alternatives considered in the DEIR would increase or maintain current SWP water diversions and allow for increased CVP water diversions; none of the alternatives would impose additional limits on OMR, require additional habitat restoration, or increased instream flows.

Consistent with the 2016 findings of the Secretary of the Department of the Interior, the State Water Resources Control Board (“SWRCB”), and other state and federal agencies, it is clear that increased protections for endangered fish and wildlife in the Bay-Delta is necessary to meet the requirements of state and federal law including CESA. In 2008 the Supreme Court upheld the failure to consider a reduced export alternative in the final EIR for CALFED, stating that,

Bay–Delta ecosystem restoration to protect endangered species is mandated by both state and federal endangered species laws, and for this reason water exports from the Bay–Delta ultimately must be subordinated to environmental considerations. The CALFED Program is premised on the theory, as yet unproven, that it is possible to restore the Bay–Delta's ecological health while maintaining and perhaps increasing Bay–Delta water exports through the CVP and SWP. If practical experience demonstrates that the theory is unsound, Bay–Delta water exports may need to be capped or reduced.

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In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings, 43 Cal. 4th 1143, 1168 (2008). Practical experience over the past many years, including the 2016 findings of the Secretary of the Interior, has demonstrated that theory is unsound; indeed, the DEIR (and recent federal biological opinions) demonstrate that the proposed project and alternatives are likely to result in continued declines in the survival and abundance of CESA-listed fish species in the Bay-Delta watershed. Thus, the failure to consider an alternative in this DEIR that reduces water diversions from the Delta in order to improve environmental conditions for fish and wildlife violates CEQA.

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Second, numerous state and federal agencies have identified the need to increase winter-spring outflow to protect fish and wildlife, including endangered species. In contrast, the DEIR fails to even consider any alternatives that would increase winter-spring outflow, and only the no action alternative would maintain existing outflow.

For instance, in 2018 the SWRCB released its Framework for updating the Bay-Delta Water Quality Control Plan (“SWRCB Framework”),⁹ which proposed that Delta outflow should be significantly increased from today, finding that:

- “Existing regulatory minimum Delta outflows are too low to protect the ecosystem, and without additional regulatory protections, existing flows will likely be reduced in the future as new storage and diversion facilities are constructed, and as population growth continues.” SWRCB Framework at 6.
- “The Science Report also documents the needs for new and modified Delta outflow requirements to protect estuarine species and to contribute to protection of species in the Bay and near shore ocean. The survival and abundance of many of these native species is closely related to Delta outflows. The dramatic declines in population size of these species, like longfin smelt, indicate that current Delta outflows are not sufficient to protect the ecosystem.” *Id.* at 8.

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As a result, the Framework proposes Delta outflow requirements of 55% of unimpaired flow from the Sacramento River and tributaries, within an adaptive management range up to 65% of unimpaired flow, and 40% of unimpaired flow from the San Joaquin River and tributaries, within an adaptive range of up to 50% of unimpaired flow, which would significantly increase Delta outflows in many years as compared to today. *See* SWRCB Framework at 14-18.

Similarly, the Resources Agency has repeatedly claimed that Voluntary Agreements would increase Delta outflows compared to today, such as in the December 12, 2018 presentation to the SWRCB. Relatedly, a 2017 document obtained by NRDC from the Resources Agency pursuant to the California Public Records Act includes several different scenarios to increase Delta

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⁹ This report is available online at:

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/sed/sac_delta_framework_070618%20.pdf. It is hereby incorporated by reference.

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outflow in the winter and spring months.¹⁰ And in August 2019, DFW warned Reclamation that its nearly identical proposed project could harm Longfin smelt and suggested “adding an alternative or mitigation measure in the form of increased Delta outflow during the January – June time period to minimize impacts.” Letter from California Department of Fish and Wildlife to U.S. Bureau of Reclamation, Comments on the Reinitiation of Consultation on the Coordinated Long-Term Operation of the Central Valley Project and State Water Project Draft Environmental Impact Statement, August 21, 2019.

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Despite the repeated recognition of the need to increase Delta outflow in the winter and spring months, none of the alternatives in the DEIR would increase Delta outflow in the winter and spring months,¹¹ and only the no action alternative would even maintain existing Delta outflows. This failure to consider one or more alternatives that increase Delta outflow from January to June is even more problematic because, as discussed *infra*, the DEIR’s conclusion that the reduction in Delta outflow would not cause a significant impact is clearly erroneous and is the result of statistical manipulation in contravention of sound science.

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Because the DEIR fails to consider a reasonable range of alternatives in violation of CEQA, it must be revised and recirculated.

III. The DEIR Violates CEQA Because it Fails to Analyze the Effects of the 2018 Addendum to the Coordinated Operating Agreement

Contrary to DWR’s representations in its NOP, the DEIR fails to analyze the effects of DWR’s execution and implementation of the 2018 Addendum to the Coordinated Operating Agreement (“COA”).

The Notice of Preparation states that the DEIR will analyze potential impacts associated with “... Updates to the COA including the COA Addendum that was executed on December 12, 2018.” NOP at 4. The NOP also identifies the Project Area to include upstream areas, such as Lake Oroville and Shasta Dam and Reservoir. NOP at 4 (“The CEQA project encompasses SWP water diversion, storage, and conveyance facilities and SWP service areas throughout the state, as shown in Figure 1, attached.”); *id.* at Fig. 1 (map showing the CEQA project area including Lake Oroville).

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However, the DEIR ignores the potential adverse effects of implementing the Addendum to the COA at Lake Oroville and other areas upstream of the Delta, and rather than evaluating these potential effects, instead includes the Addendum to the COA in the environmental baseline.

¹⁰ This document is available online at: https://assets.nrdc.org/sites/default/files/media-uploads/delta_outflow_4.18.18.pptx. It is hereby incorporated by reference.

¹¹ For instance, the DEIR admits that, “[u]nder Alternative 2A, April-May Delta outflow would be less than the No Project Alternative but greater than the Proposed Project.” DEIR at 5-7.

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DEIR at 4-2; *see* DEIR, Modeling Appendix at B-5.¹² This is unlawful, because it is inconsistent with the NOP and because there is a fair argument that implementation of the COA Addendum would cause significant adverse environmental impacts under CEQA.

Reclamation’s Environmental Assessment found that implementing the COA Addendum would cause storage in Lake Oroville to be lower in below normal (1% decline), dry (2.9% decline), and critically dry water year types (6.5% decline). *See* Bureau of Reclamation, Environmental Assessment, Addendum to the Coordinated Operating Agreement, Central Valley Project/State Water Project, December 2018.¹³ Similarly, staff with the USFWS have indicated that CalSim modeling shows that implementing the Addendum to the COA contributes to storage in Lake Oroville dropping to unmanageable and unrealistically low levels during droughts. *See* email from Derek Hiltz to Doug Obegi dated March 29, 2019, which is attached hereto as Exhibit 1. Oroville storage has never historically been drawn below 882,000 acre feet, yet this modeling shows that Oroville storage would be drawn far below this level.¹⁴ While the DEIR fails to include modeling of upstream effects generally, DWR’s CalSim modeling outputs for the proposed project that were provided to NRDC show that reservoir storage in Lake Oroville is drawn to dramatically low levels in most major droughts, as shown in the figure below.

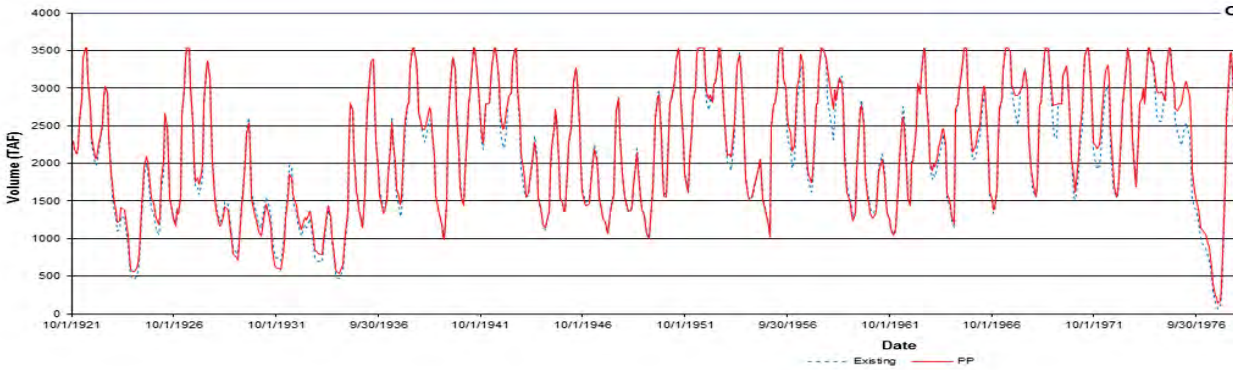
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¹² “The Appendix considers whether implementation of the 2018 COA Addendum affected flows entering and exiting the Delta by assessing the operational and hydrologic conditions that occurred under the 1986 COA and the 2018 COA Addendum. This assessment was done for the purpose of determining whether the baseline conditions, as described in the EIR, sufficiently represent Delta conditions before execution of the 2018 COA Addendum as well as the existing physical conditions in the Delta. This Appendix also discusses how the 2018 COA Addendum relates to a wide range of resource areas for public information purposes only.” (DEIR, Modeling Appendix, at B-5)

¹³ This document is available online at: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=36503. It is hereby incorporated by reference.

¹⁴ It appears that DWR could not release water from Oroville Reservoir at the rates and amounts modeled by CalSim at these low storage levels. Moreover, DWR’s implementation of the COA Addendum would contribute to significant adverse environmental impacts, such as impacts on salmon and other fish species in the Feather River caused by high temperature of water released from Oroville under such storage levels. None of these impacts are analyzed in the DEIR.

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These modeling results, which are not disclosed or discussed in the DEIR, are consistent with the analysis by staff from the USFWS.

The construction and ongoing operation of SWP facilities have resulted in significant temperature impairment of the Feather River below Oroville Dam, which regularly results in temperatures that can be damaging or lethal to salmon eggs and juveniles. As a result of the design and operation of the SWP's facilities, approximately half of the spawning habitat on the Feather River is unusable by Chinook salmon and steelhead. By further lowering reservoir storage, particularly in dry years, the proposed project, including the COA amendments, would further degrade the Feather River below Oroville Dam in several ways. First, by reducing water storage in Lake Oroville, particularly in drier water year types, the COA Addendum would further degrade temperature conditions in the Feather River, resulting in increased temperature dependent mortality and reduced survival of salmon and steelhead eggs and fry. The Bureau of Reclamation's final Biological Assessment shows that the proposed project would further increase water temperatures in September and in drier Octobers. These temperature impacts could affect not only the high flow channel, but also the low flow channel below Oroville Dam, which provides important refugia for steelhead, salmon and green sturgeon. Second, by reducing SWP storage (again, particularly in drier water year types), the COA Addendum would increase the likelihood that DWR will seek to weaken or waive environmental protections in future droughts.

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DWR has a duty to disclose the effects of the Addendum to the COA, including these significant adverse effects. DWR has not complied with its NOP, and DWR must revise the NOP and/or revise the DEIR to analyze the effects of implementing the addendum to the COA.

IV. The DEIR Fails to Adequately Analyze and Disclose the Significant Adverse Environmental Impacts that the Proposed Project is Likely to Cause during Droughts

The DEIR fails to analyze or disclose the adverse environmental effects of water project operations during droughts. It is reasonably foreseeable that operational and other protective measures for fish and wildlife (such as water temperature standards, Old and Middle River flow restrictions, and Delta outflow requirements) including measures considered in the DEIR will not

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be implemented during future droughts. The DEIR fails to disclose the likely adverse impacts that will result from less protective operations during droughts, and it fails to identify mitigation measures that could reduce or avoid these impacts.

During California's recent drought, DWR and Reclamation repeatedly and consistently proposed to waive or weaken numerous water quality standards (including minimum Delta outflow) and ESA requirements under the 2008 and 2009 biological opinions, and failed to meet water temperature standards. The SWRCB and fishery agencies generally concurred in these proposals, which gravely weakened protections for fish and wildlife in the drought, resulting in water project operations that were not analyzed in the 2008 and 2009 biological opinions or in the SWRCB's 1995 Bay-Delta Water Quality Control Plan and Water Right Decision 1641. *See, e.g.,* Water Rights Order 2014-0029 (September 24, 2014);¹⁵ Water Rights order dated February 3, 2015;¹⁶ April 6, 2015 Revised Order;¹⁷ July 3, 2015 order conditionally approving petition for temporary urgency change.¹⁸ For instance, in 2015 the waivers of water quality standards reduced Delta outflows and increased water deliveries by approximately 800,000 acre feet.

These waivers of required operations contributed to devastating impacts to winter-run Chinook salmon, spring-run Chinook salmon, Delta smelt, Longfin smelt, and other native fish species, including:

- Greater than 95% mortality of endangered winter-run Chinook salmon eggs and juveniles above Red Bluff Diversion Dam in 2014 and 2015, including temperature dependent mortality of 77% in 2014 and 85% in 2015 due to lethal and chronically adverse water temperatures below Keswick Dam;
- Greater than 95% mortality of fall-run Chinook salmon eggs and juveniles that spawned in the mainstem Sacramento River above Red Bluff Diversion Dam in 2014;
- Record low abundance indices for Delta smelt in the 2014 Fall Midwater Trawl, 2015 Spring Kodiak Trawl, and other surveys;
- Near record low abundance of Longfin smelt in the 2014 Fall Midwater Trawl survey and a new record low abundance in the 2015 Fall Midwater Trawl survey;
- Increases in the abundance of nonnative species like Black bass in the Delta; and,
- Increases in harmful algal blooms like *Microcystis*.

¹⁵ This order is available online at:

http://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/orders/2014/wro2014_0029.pdf and is hereby incorporated by reference.

¹⁶ This order is available online at:

http://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/orders/2014/wro2014_0029.pdf and is hereby incorporated by reference.

¹⁷ This order is available online at:

http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/tucp/2015/tucp_order040615.pdf and is hereby incorporated by reference.

¹⁸ This order is available online at:

http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/tucp/2015/tucp_order070315.pdf and is hereby incorporated by reference.

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See, e.g., Water Rights Order 2014-0029; Water Rights order dated February 3, 2015; April 6, 2015 Revised Order; July 3, 2015 order conditionally approving petition for temporary urgency change; Protest to TUCP filed by the NRDC dated February 13, 2015, available online at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/comments_tucp2015/docs/nrdc_obegi021315.pdf; March 24, 2015 Petition for Temporary Urgency Change, Attachment A, available online at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/tucp/2015/apr2015_req032415.pdf.

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(Cont.)

The DEIR briefly admits that operations of the SWP that are modeled in the DEIR are not likely to be implemented in future droughts, but wholly fails to model, analyze or consider the grave impacts of such drought waivers:

Under extreme hydrologic and operating conditions where not enough water supply exists to meet all requirements, CalSim II uses a series of operating rules to reach a solution, to allow continuation of the simulation. These operating rules are recognized to be a simplified version of the very complex decision processes that CVP and SWP operators use in actual extreme conditions. Therefore, model results and potential changes under these extreme conditions should be evaluated on a comparative basis between alternatives and are an approximation of extreme operating conditions. For example, CalSim II model results show simulated occurrences of extremely low storage conditions at CVP and SWP reservoirs during critical drought periods,¹⁹ when storage is at dead-pool levels, at or below the elevation of the lowest level outlet. Simulated occurrences of reservoir storage conditions at dead-pool levels may occur coincidentally with simulated impacts that are determined to be potentially significant. **When reservoir storage is at dead-pool levels, instances may occur in which flow conditions fall short of minimum flow criteria, salinity conditions may exceed salinity standards, diversion conditions may fall short of allocated diversion amounts, and operating agreements may not be met.**

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(Cont.)

DEIR at 4-5 (emphasis added). In its 2016 final EIR for the California WaterFix project, which included language similar to that excerpted above, DWR concluded that it was “reasonably foreseeable” that protective measures would be waived in future droughts, including Temporary Urgency Change Petitions to reduce Delta outflow requirements and other water quality standards and more negative Old and Middle River flows. Moreover, droughts are an entirely foreseeable and predictable aspect of California’s hydrology, and more frequent and severe

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¹⁹ Despite this admission that the modeling shows extremely low reservoir storage in drought conditions, the DEIR wholly fails to consider environmental impacts from water project operations upstream from the Delta, including reservoir storage and related water temperature conditions. *See infra*.

droughts are anticipated as a result of climate change.²⁰ The DEIR must be revised and recirculated to model and analyze the effects of SWP operations during droughts, including waivers of protective measures, that are reasonably foreseeable.

As noted *supra*, modeling that is not disclosed in the DEIR shows that Lake Oroville reservoir storage during droughts will be far below the minimum water storage ever observed historically, which DWR admits is likely to result in changes to water project operations during future droughts that includes not meeting minimum flow conditions and violating salinity standards. These and similar operational responses are likely to cause significant adverse effects on fish and wildlife, including adverse water temperatures in the Feather River and the significant adverse effects observed in 2014-2015. However, these reasonably foreseeable adverse effects are not considered in the DEIR. In addition, the DEIR's analysis and modeling improperly assumes that the proposed operational measures would be implemented in future droughts, when the text indicates otherwise. *See* CEQA Guidelines § 15126.4(a)(2).

Because waivers of protective operations in future drought conditions are reasonably foreseeable, and because such waivers are likely to result in significant adverse impacts that are not disclosed in the DEIR, DWR must identify feasible mitigation measures to reduce or avoid these significant impacts. CEQA Guidelines §§ 15126, 15126.4. DWR must recirculate a revised DEIR that includes such mitigation measures. CEQA Guidelines § 15088.5(a)(1)-(3).

V. The DEIR Fails to Adequately Analyze and Consider Environmental Impacts from the Whole of the Action

CEQA requires that the DEIR analyze the effects of the whole project on the environment. CEQA Guidelines § 15378 (definition of “project” means “the whole of an action”). The definition of a project is broadly construed in order to maximize protection of the environment. *Nelson v. County of Kern*, 190 Cal.App.4th 252, 271 (2010). Additionally, the entire project being proposed must be described in the EIR, and the project description must not minimize project impacts. *City of Santee v. County of San Diego* (1989) 214 CA3d 1438, 1450.

DWR's NOP states that, “The CEQA project encompasses SWP water diversion, storage, and conveyance facilities and SWP service areas throughout the state, as shown in Figure 1, attached.” NOP at 4. Figure 1 in the NOP identifies Lake Oroville as one of the State Water Project facilities upstream of the Delta that is included in the Project location. The DEIR likewise states that,

²⁰ *See, e.g.*, DWR, ITP Application, at 2-9. However, DWR chose to omit the effects of sea level rise and climate change from the CalSim modeling in the DEIR. *See, e.g.*, DEIR at 4-3; *id.*, Vol. 2 at F-1 (pdf page 1599) (“The scenario with historical climate (Q0) did not include any sea level rise.”); *id.*, Vol. 2 at H-1-2-1. As a result, the DEIR's analysis of salinity intrusion and surface water quality in the Delta is inaccurate and understates likely violations of water quality standards, including violations during droughts. Such water quality violations would constitute a significant adverse effect under CEQA. *See* DEIR at 4-26.



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(Cont.)



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The SWP includes water, power, and conveyance systems, moving an annual average of 2.9 million acre-feet of water. The principal facilities of the SWP are the Oroville Reservoir and related facilities, San Luis Dam and related facilities, facilities in the Sacramento–San Joaquin Delta (Delta), the Suisun Marsh Salinity Control Gates, the California Aqueduct (including its terminal reservoirs), and the North and South Bay Aqueducts.

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(Cont.)

DEIR at 2-1; *see id.* at 3-1. Figure 1-1 of the DEIR also shows the Project Area as including Oroville Reservoir and upstream areas, as well as the service area of SWP contractors. *Id.* at 1-4. There can be no question that SWP operations in the Delta are affected by, and affect, storage in Oroville Reservoir.

However, the DEIR generally fails to provide any modeling or analysis of upstream effects at SWP facilities such as Lake Oroville, or from the coordinated operations of CVP and SWP reservoirs upstream of the Delta pursuant to the COA (as modified by the 2018 Addendum). This is unlawful.

The DEIR simply asserts that the proposed project would not cause any significant impacts upstream, so the DEIR excludes analyses of the effects of SWP operations upstream of the Delta. *See* DEIR at 5-84 (“As described in Section 1.4 Summary of Environmental Consequences and discussed in detail in Appendix A, Initial Study, implementing the Proposed Project is not expected to result in a change in hydrologic conditions (i.e. reservoir storage and river flows) to such a degree that would result in an impact on the environment.”); *id.* at 5-94. In contrast to these unsupported assertions:

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1. The DEIR asserts that Alternative 4 would cause significant adverse impacts upstream of the Delta, and as a result DWR weakens the protective measures proposed in Alternative 4. DEIR at 5-94 (“The potential impacts to surface water quality would be potentially significant under Alternative 4 due to the reduced availability of cold water and reservoir storage needed to meet water quality criteria during years following below normal water years.”); *id.* at 5-134.²¹ Yet the DEIR otherwise omits meaningful analysis of upstream effects in the proposed project and most of the alternatives. Because the DEIR must consider one or more alternatives that increase Delta outflow in the winter and spring months, and because DWR has asserted that increased outflow would affect upstream reservoir storage and could cause a significant impact, the DEIR must evaluate upstream effects in a revised DEIR.

²¹ These and other potential environmental impacts could be mitigated by reducing water diversions and deliveries by the SWP to its contractors, which would better protect fish and wildlife. DWR failed to even consider such an alternative mitigation measure that would retain the protections for fish and wildlife.

2. Reclamation’s modeling shows that implementation of the COA Addendum does result in reduced storage in Lake Oroville in dry and critically dry years, and that storage in Oroville is drawn below dead-pool in all major droughts, which will cause significant impacts that are not disclosed in the DEIR. *See supra*. 1-22
3. DWR has previously concluded that under a similar no project alternative there would be significant adverse impacts under CEQA from the coordinated operations of the CVP and SWP, including adverse effects on fish from water temperatures below upstream reservoirs, in the final EIR for the California WaterFix project. *See infra*. 1-23
4. In order to evaluate DWR’s application for an ITP under CESA, DFW must consider upstream effects of coordinated SWP and CVP operations in order to ensure that the effects (including cumulative effects) will not jeopardize listed species, such as temperature impacts on salmon and steelhead below upstream SWP and CVP dams.²² 1-24

In addition, while the DEIR inconsistently describes whether operations of the CVP are part of the project description, there is no question that “DWR operates the SWP in coordination with the CVP, under the Coordinated Operation Agreement (COA) between the federal government and the State of California (authorized by Public Law 99–546).” DEIR at 1-3.²³ 1-25

For all of these reasons, the DEIR must analyze and disclose to the public the potential impacts from the coordinated operations of CVP and SWP upstream of the Delta, including impacts from operations of Shasta and Keswick dams. DWR’s failure to do so is unlawful, and the DEIR must be revised and recirculated.

In addition, the CEQA guidelines also require that the DEIR consider “both the short-term and long-term effects.” *Id.* at § 15126.2(a). There is no question that DWR anticipates operations of the SWP long into the future, well beyond the year 2030. However, the DEIR’s analysis is limited to a 10-year period to the year 2030, and fails to consider longer term impacts, particularly in light of the longer-term effects of climate change, which DWR has previously concluded would be significant. *See infra*. The failure to consider the potential environmental impacts from operations after 10 years violates CEQA. 1-26

²² The NOP also states that “activities that occur outside the Delta and are unrelated to SWP operations (in the remainder of the area shown in Figure 1) will not be addressed in the application for CESA coverage.” NOP at 4. Therefore, in order to be excluded from the CESA application consistent with the NOP, activities must be unrelated to SWP operations **and** outside of the Delta. In contrast, SWP operations at Lake Oroville and the coordinated operations of upstream CVP and SWP reservoirs pursuant to the Addendum to the COA plainly are related to SWP operations, even if they are outside of the Delta.

²³ At a minimum, the cumulative impacts from coordinated operations of the CVP and SWP must be considered under CEQA. However, as discussed *infra*, the DEIR fails to adequately disclose and consider cumulative impacts.

VI. The DEIR Fails to Accurately Assess Environmental Impacts, and the DEIR Fails to Disclose Significant Environmental Impacts of the Proposed Project

CEQA requires that the DEIR accurately assess potential environmental impacts from the proposed project and alternatives, using credible methods of analysis. *See, e.g.,* Cal. Code Regs., tit. 14, § 15151; *Laurel Heights Improvement Assn. v. Regents of University of Cal.*, 47 Cal.3d 376, 409 (1988). The DEIR fundamentally fails this essential function, and it fails to disclose environmental impacts that are significant. The DEIR must be revised and recirculated.

1-27

A. The Flawed Modeling in the DEIR, including Baseline Modeling, Results in Inaccurate Assessment of Environmental Impacts

First, as discussed *supra*, the CalSim modeling in the DEIR is deeply flawed. Because this CalSim modeling is used as an essential input to the biological models and analyses that are used to assess potential environmental impacts, the flawed hydrological modeling infects the DEIR's assessment of environmental impacts, leading the DEIR to report misleading and erroneous conclusions regarding significant impacts.

As discussed in Section 1 of this letter, the project description in the DEIR is inconsistent with the CalSim modeling and analyses of the project in the DEIR. As a result, the DEIR fails to model the more negative OMR conditions authorized by the project description, including:

- OMR of -6,250 cfs (the CalSim modeling never results in OMR more negative than -6,000 cfs, *see* DEIR, Vol. 2 at H-1-2-6 (PDF page 1652));
- OMR of -6,000 cfs lasting for longer than 7 days (*id.*);
- OMR of -6,000 cfs in a wet or critically dry water year type (*id.*);
- OMR of -6,000 cfs occurring more frequently than once per month in January or February of an Above Normal or Below Normal water year type, or more frequently than once in either January or February in a dry year (*id.*);
- Monthly average OMR more negative than -3,500 cfs in March or April, more negative than -4,061 cfs in May, or more negative than -5,000 cfs in June (DEIR, Vol. 2, at Table 7-1 (pdf page 471)).

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More negative OMR is likely to increase entrainment and reduce survival and abundance of fish species, including Delta smelt, Longfin smelt, winter-run Chinook salmon, spring-run Chinook salmon, fall-run Chinook salmon, and Central Valley Steelhead. These modeling flaws significantly underestimate the environmental impacts of the proposed project and alternatives. As a result, the failure to accurately model the proposed project results in biased and inaccurate assessment of environmental impacts of the project and alternatives.²⁴

²⁴ In addition, the DEIR's modeling also fails to account for the fact that the proposed project only requires a proportional share of OMR, Delta outflow, or other protective measures. *See* Section 1, *supra*. As a result, the DEIR overestimates the protective and/or mitigation measures

Second, the CalSim modeling fails to account for low upstream reservoir storage conditions during droughts and the reasonably foreseeable waivers of protective measures including OMR and Delta outflow requirements. *See* Section 4, *supra*. During California’s recent drought, there is no question that the waiver of OMR and Delta outflow requirements contributed to significant adverse impacts on fish species in the Delta, yet the DEIR fails to consider and incorporate the effects of more negative OMR and reduced Delta outflow in future droughts. As a result, the DEIR fails to analyze and disclose likely significant environmental impacts.

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In addition, DWR has significantly revised modeling of baseline conditions under the 2008/2009 biological opinions, resulting in more negative OMR conditions under the baseline than in prior modeling, such as the final EIR for the California WaterFix project. *See* DEIR, Vol. 2 at H-1-4-6 to H-1-4-10. The new baseline used in CalSim modeling results in OMR that is more negative than historic conditions actually implemented under the biological opinions in all or part of the years of 2009, 2011, 2012, 2013, and 2016. In other words, this new baseline assumes less protective OMR than actually occurred in these years. By changing the environmental baseline to have more negative OMR values than previously modeled or historically implemented, the DEIR biases the effects analysis by diminishing the difference between the proposed project and the environmental baseline.

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Finally, the DEIR’s significance conclusions appear inconsistent with DWR’s prior conclusion under CEQA that a nearly identical No Action Alternative²⁵ would cause significant adverse impacts on fish and wildlife in the Delta, including significant impacts caused by upstream water temperatures for spawning and egg incubation, water operations in the Delta on rearing habitat, and effects of water operations on migration habitat for covered fish species. *See* Department of Water Resources, Bay Delta Conservation Plan / California WaterFix, Final Environmental Impact Report / Environmental Impact Statement, December 2016, at ES-67 to ES-68; *id.*, Chapter 11, at 11-273 to 11-275. In this DEIR, however, even though the proposed project would increase entrainment, reduce survival of salmon migrating into and through the Delta, and reduce winter-spring Delta outflow and abundance of Longfin smelt as compared to the same No Action Alternative, DEIR now concludes that these impacts would be less than significant. Because DWR has previously concluded under CEQA that the same No Action Alternative would cause significant impacts, a proposed project that worsens conditions compared to the same no project alternative should result in a conclusion that the proposed project would cause significant impacts. At a minimum, DWR must provide a reasoned explanation for the different conclusions regarding significance, and it has not done so here.

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that are certain to be implemented and underestimates the likely environmental impacts of the proposed project and alternatives, as well as the cumulative impacts.

²⁵ While DWR has changed the modeling of the baseline in this DEIR, as of today the no action alternative has not substantially changed since the final WaterFix EIR was issued in December 2016.

B. The DEIR's conclusions that the project will not cause significant impacts to fish is clearly erroneous and is not based on credible analyses

In addition to the inaccurate modeling preventing accurate assessment of impacts, the analyses that are presented are scientifically flawed, and the DEIR fails to disclose significant environmental impacts of the proposed project.

Most notably, the DEIR's analysis of modeled effects of reduced Delta outflow on Longfin smelt is fundamentally flawed in several ways that obscure meaningful differences between project alternatives. There is no question that the proposed project would significantly reduce winter-spring outflow, particularly in the months of April and May. See DEIR, Vol. 2, at pdf page 509. There is also no question that increases and decreases in Longfin smelt population abundance in this estuary correspond very strongly to Delta outflow rates (or their inverse correlate, X_2) during the winter and spring. See, e.g., Stevens and Miller 1983; Jassby et al. 1995; Kimmerer 2002; Rosenfield and Baxter 2007; Sommer et al. 2007; Kimmerer et al. 2009; MacNally et al. 2010; Thomson et al. 2010; Nobriga and Rosenfield 2016. The DEIR relies on a stock-recruitment model to predict outcomes for Longfin smelt under different alternative flow scenarios. Delta outflow from December-May is the only environmental input variable that affects population growth from year-to-year in this model (because that is the only environmental variable that had a significant effect on Longfin smelt population dynamics); other variables, including density dependence and survival of juveniles to adults, are not flow-dependent in the model. This model is intended to reproduce one designed originally by Nobriga and Rosenfield (2016) to screen alternative conceptual models of Longfin smelt population dynamics. The original model was not designed as a predictive tool; converting it into a predictive tool ought to have involved adjustments to the model's architecture and parameterization consistent with the findings of Nobriga and Rosenfield (2016).²⁶

The DEIR analyzes outputs from this version of the Nobriga and Rosenfield model in a manner that is not appropriate to the DEIR's purpose, which is to reveal differences among alternative operational scenarios that produce different Delta outflows ("flow scenarios"²⁷). Indeed, the entire analysis of the model output is seriously flawed, misleading, and not credible. Comparing flow scenarios run through the same model requires comparing the *differences* in model outputs among those flow scenarios with respect to the variance in those *differences* – variance is estimated by studying deviations in the differences between flow scenarios across a set of model runs ("replicates") in which non-treatment variables are allowed to vary randomly within

²⁶ For example, to account for density dependence they detected, Nobriga and Rosenfield (2016) incorporated a strong density-dependent term (a Ricker model); however, they made no effort to explore different density-dependent terms (e.g., a Beverton-Holt stock-recruit relationship) because such an investigation was beyond the scope of their research. In the end they concluded (on page 54) that the model they constructed was "too strongly density dependent." The model used for the DEIR made no effort to correct or study this problem or to consider a range of stock-recruit alternatives.

²⁷ Statisticians might refer to the different flow scenarios as "treatments."

prescribed boundaries. Nobriga and Rosenfield (2016) found a very strong and highly significant effect of Delta outflow on juveniles per adult (“recruits-per-spawner”). As a result, in almost all years, the model will generate more Longfin smelt recruits-per-spawner in scenarios with higher December-May outflows.²⁸ Given that survival from Age 0 (recruits) to Age 2 (spawner) fish is not related to flow in the Nobriga and Rosenfield model, the model will almost always predict higher abundance of Longfin smelt in flow scenarios with higher December-May Delta outflow, all other parameters being equal. This result is consistent with findings made by TBI et al. (2010) and SWRCB (2010; 2017) of very strong correlations between inter-generation population growth and winter-spring Delta outflows. The most important result of running different flow scenarios through the Nobriga and Rosenfield model is that scenarios with higher flows will consistently produce higher Longfin smelt abundance in almost every year – this result is completely obscured by DWR’s invalid analysis.

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(Cont.)

The current modeling effort does not analyze the variance in differences among flow scenarios; rather it appears to confound variance due to differences in the flow scenarios with a population trend across years (which results, in part, from a “survival” term that is not flow related), and randomization of certain model elements across model runs. The effect of this analytical error is to make the differences between flow scenarios look small relative to the highly inflated variance. The DEIR’s comparison of results across year types mixes years at the beginning and end of a long time series during which Longfin smelt populations varied by several orders of magnitude; for example, the estimated abundance of Longfin smelt in wet years like 1982, 1995, 2006 are lumped together, even though the abundance of Longfin smelt preceding those years (stock) varied by orders of magnitude (see Table 4.4.-10). This approach ignores the best available science that shows that abundance in any one year is influenced by abundance (stock) in prior years. This DEIR’s approach buries large and significant differences among flow scenarios in variance that has nothing at all to do with the flow scenarios.

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There are numerous ways in which DEIR’s use of the water-year type median for each flow scenario is an inappropriate and misleading representation of the effect of these alternatives. For instance, there is no argument that the Longfin smelt time series is experiencing a prolonged declining trend. Medians (and means) are measures of central tendency; if there is a trend in the population, there is no central tendency and the means and medians depend entirely on the year’s incorporated into the modeling or sampling. Thus, the DEIR misrepresents the “average” difference between flow scenarios by focusing on medians, which are likely to be years in the middle of a time series that displays a long-term population decline. Also, by presenting median

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²⁸ The exception to the otherwise universal increase in recruits-per-spawner predicted by the model in response to increasing winter-spring Delta outflows occurs during exceptionally wet conditions, when the model’s estimate of recruits-per-spawner may decline. This potential for decline is based on 1-2 years of data in the original time series. Other wet years do not show declining recruits-per-spawner. Thus, it is very possible that the model’s potential to reduce recruits-per-spawner at the highest flows is simply a sampling artifact; more years of data collected in very wet years would be required to determine whether there is any reduction in recruits-per-spawner under such conditions and, if so, how much of a decline occurs.

values by water year type, the DEIR ignores a key finding of Nobriga and Rosenfield (2016) that abundance in one year has an effect on abundance in subsequent years. Differences detected in a single year (a) would affect recruitment and overall abundance in subsequent years and (b) would be compounded across years.

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(Cont.)

All of the problematic approaches described above notwithstanding, the DEIR finds that the proposed project will lead to a 4-11% reduction in the median abundance of this critically endangered species. Even if this comparison of results across alternatives were valid, the DEIR erroneously suggests that the difference between the baseline and proposed project is best represented by dividing the resulting value by the confidence interval. DEIR at 4-178 to 4-180. The DEIR states that,

Difference is absolute difference between median estimates, with values in parentheses representing mean % difference based on difference between Proposed Project and Existing in each year, divided by the Existing 95% confidence interval, which is an indicator of signal to noise. Specifically, the value represents the percentage of the median change in relation to the 95% confidence intervals of the abundance estimates.

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Id. at 4-179; *see id.* at 4-180. In this way too, DWR’s analysis of the relative effect of population changes under proposed operations is statistically invalid, not credible, and represents an arbitrary view of the scale of differences among alternatives.²⁹

²⁹ This procedure does not allow one to determine whether the difference in modeled outcomes is statistically significant. It is not even clear what it means to “divide[] by the Existing 95% confidence interval;” an interval is not a point value that can serve in the denominator. It appears that “dividing by the confidence interval” was accomplished by using the midpoint of the confidence interval as a denominator. But the 95% confidence interval is asymmetric around the mean of the non-log-transformed units (because it was based on log values), and, as a result, the midpoint of the confidence interval is much larger than the median and thus makes the median (and differences between two medians) look small. Furthermore, this approach of dividing the difference between median results by the 95% confidence interval has not been used previously by DWR and is not used for other analyses in the DEIR, further indicating that this method is inappropriate. For instance, when DWR re-ran the Nobriga and Rosenfield model in its July 2, 2018 testimony to the SWRCB in the WaterFix proceeding, DWR did not divide the difference in median results by the confidence interval. *See* DWR-1352 at 7, available online at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/petitioners_exhibit/dwr/part2_rebuttal/dwr_1352.pdf. Nor does the DEIR use this statistically flawed methodology for assessing the impacts of reduced Delta outflow on the abundance of *Eurytemora affinis*; instead, the DEIR simply presents the differences in mean results from the proposed project and baseline scenarios by water year type without dividing by the 95% confidence interval, even though it claims there is substantial uncertainty in the *E. affinis* model results based on the 95% confidence intervals, DEIR at 4-145 to 4-146, similar to the DEIR’s assertions of model uncertainty with respect to Longfin smelt. This inconsistency in

After performing the invalid division of the mean by the confidence interval, the DEIR suggests that the effect of the proposed project will be only a 1-2% reduction in abundance. This is a completely invalid interpretation. Furthermore, the DEIR claims, without any supporting evidence, that a 1-2% reduction in abundance is not significant.³⁰ *Id.* at 4-179 to 4-180; *see id.* at 4-124.

Table 4.4-10. Predicted Median Longfin Smelt Fall Midwater Trawl Index Averaged by Water Year Type, Based on Nobriga and Rosenfield (2016) Assuming Poor (Post-1991) Juvenile Survival

Water Year Type	Existing (95% Confidence Interval)	Proposed Project (95% Confidence Interval)	Proposed Project vs. Existing ¹	Proposed Project vs. Existing ²
Wet	2,916 (86-54,509)	2,729 (82-51,692)	-187 (-7%)	-187 (-1%)
Above Normal	948 (37-11,658)	851 (33-10,654)	-97 (-11%)	-97 (-1%)
Below Normal	197 (9-3,963)	179 (8-3,707)	-18 (-10%)	-18 (0%)
Dry	152 (6-2,333)	141 (6-2,215)	-11 (-8%)	-11 (0%)
Critical	83 (3-1,398)	80 (3-1,374)	-3 (-4%)	-3 (0%)

Notes: ¹ Difference is absolute difference between median estimates, with values in parentheses representing % difference in median.
² Difference is absolute difference between median estimates, with values in parentheses representing mean % difference based on difference between Proposed Project and Existing in each year, divided by the Existing 95% confidence interval, which is an indicator of signal to noise. Specifically, the value represents the percentage of the median change in relation to the 95% confidence intervals of the abundance estimates.

There can be little question that a 4-11% reduction in abundance of a critically endangered species, which is already declining in abundance under baseline conditions, would be a significant impact under CEQA. However, even using DWR’s unfounded and illegitimate methodology, a 1-2% reduction in abundance on an annual basis would be a significant environmental impact, because this effect could be compounded every year through its effect on spawning stock. Similar to the significant effects of entrainment and loss of Delta smelt on the species’ abundance over time, even a 1-2% reduction in abundance of Longfin smelt caused by the proposed project can be “simultaneously nearly undetectable in regression analysis, and devastating to the population.” *See also* Kimmerer 2011. The unavoidable facts are that the proposed project is expected to cause measurable reductions in the abundance of a critically imperiled species in every year type and, because of the relationship between spawning stock and subsequent population size (Nobriga and Rosenfield 2016), those negative effects would be compounded every year. It is also important to note that the Existing Project baseline is one in which Longfin smelt abundance has declined by more than 90% in the past eight years; baseline conditions are inadequate to protect this species, and the DEIR finds that the Proposed Project will exacerbate this decline.

Numerous state and federal agencies have concluded that the best available science shows that reductions in Delta outflow during the winter-spring months is likely to reduce the abundance of Longfin smelt. The California Department of Fish and Wildlife flagged this concern in their comments on Reclamation’s Draft Environmental Impact Statement, and the State Water

the analyses further indicates the invalidity of the DEIR’s analysis of impacts to Longfin smelt from reduced winter-spring Delta outflow.

³⁰ The proposed project would result in even less Delta outflow, and greater reductions in abundance, if OMR were -5,000 cfs or -6,000 cfs in April and May, as allowed by the proposed project but never modeled in the DEIR.

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Resources Control Board and other state agencies have reached similar conclusions in numerous scientific reports, including its 2017 Scientific Basis Report in Support of New and Modified Requirements for Inflows from the Sacramento River and its Tributaries and Eastside Tributaries to the Delta, Delta Outflows, Cold Water Habitat, and Interior Delta Flows.³¹ A recent analysis by scientists with The Bay Institute also indicates that the Longfin smelt population is likely to drop below quasi-extinction thresholds in the next 10 years absent immediate actions to reverse the decline of the species, which is attached hereto as Exhibit 2.

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(Cont.)

DWR’s conclusion appears to be based on manipulations and presentations of the data that have no statistical basis—they are inconsistent with the best available science,³² and do not represent a credible scientific analysis. The DEIR must be revised to acknowledge that the proposed project would cause a significant adverse impact on Longfin smelt and to propose mitigation measures to address this significant impact, and the revised DEIR must thereafter be recirculated for public comment.

For other species, the modeling in the DEIR shows that the proposed project would increase entrainment and reduce survival. For instance, the DEIR shows that the proposed project would cause an increase of salvage and loss of spring-run Chinook salmon, *see* DEIR at 4-213 to 4-214, fall run Chinook salmon, *id.* at 4-229 to 4-230, juvenile Longfin smelt, *id.* at 4-185 to 4-186, and juvenile and larval Delta smelt, *id.* at 4-123.³³ Moreover, while the proposed annual salvage thresholds would not have been exceeded every year between 2008-2018 under the 2008 and 2009 biological opinions, *see* DEIR, Vol. 2 at H-1-4-16, the DEIR assumes that the 50% annual salvage thresholds are exceeded in every year except for critically dry years, *id.* at H-1-4-15 (“In March and April of wet, above-normal, below-normal and dry years, it is assumed that the 50% of the proposed single year loss thresholds for one or more of the species will be exceeded, which triggers an OMR flow requirement of -3,500 cfs.”). As a result, the DEIR assumes, and the modeling shows, that the proposed project will increase entrainment of most listed fish species on a persistent basis.

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Similarly, the DEIR also finds that survival of salmon migrating through the Delta will be lower for most of the species. DEIR at 4-215 to 4-216 (spring-run); *id.* at 4-232 to 4-233 (fall-run). Even though these reductions in survival through the Delta may appear small, NMFS has repeatedly warned that, “[s]mall reductions across multiple life stages can be sufficient to cause

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³¹ This peer reviewed report is available online at https://www.waterboards.ca.gov/water_issues/programs/peer_review/docs/scientific_basis_phase_ii/201710_bdphaseII_sciencereport.pdf and is hereby incorporated by reference.

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³² The DEIR wholly ignores scientific information from the USFWS that reductions in spring outflow also reduce the recruitment and abundance of Delta smelt, and the DEIR fails to consider whether the significant reduction in Delta outflow in April and May would cause significant impacts to Delta smelt.

³³ The DEIR only presents information regarding salvage from operations of the SWP in this section, instead of providing results from the coordinated operations of the SWP and CVP as the DEIR does in other sections, like results from the Delta Passage Model.

the extirpation of a population,” and in the WaterFix biological opinion concluded that a 1% reduction in survival observed in the Delta Passage Model “can impact the population to a greater degree,” and that a “1% to 2% mean reduction in survival is a notable reduction for an endangered species, especially if it occurs on a consistent (i.e., annual) basis.” NMFS, Final Biological Opinion, California WaterFix Project, NMFS Consultation No. WCR-2016-5506.

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(Cont.)

Relatedly, the life cycle modeling results presented in the 2019 biological opinions, which are not utilized or presented in the DEIR, also indicate that the nearly identical federal proposed project will result in continued declines in abundance of Delta smelt and winter-run Chinook salmon. Independent scientific peer reviews of the federal biological opinions also found that under the proposed project, winter-run Chinook salmon and Delta smelt are likely to continue declining towards extinction.

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Indeed, DWR admits in the DEIR that OMR flows more negative than -5,000 cfs would exceed the “-5000 inflection point deemed protective of Delta smelt entrainment risk,” and that -5,000 cfs OMR is “the inflection point at which entrainment tends to sharply increase.” DEIR at 4-123. Given DWR’s finding that OMR more negative than -5,000 cfs is not protective of Delta smelt, it is unclear why the proposed project allows exceeding this threshold any time that the Delta is in excess conditions, and why the DEIR maintains that more negative OMR flows would not cause a significant environmental impact under CEQA.

Moreover, other elements of coordinated operations of the CVP and SWP as proposed clearly would cause significant environmental impacts, including:

- Reductions of instream flows in the Stanislaus River during the winter and spring months, and elimination of water temperature requirements on the Stanislaus River. This action is likely to cause a significant impact by reducing the survival and abundance of fall-run Chinook salmon, Central Valley steelhead, and spring-run Chinook salmon in that river. *See, e.g.,* DFW Comments to Reclamation 2018; SWRCB 2016, 2018; Zeug et al. 2014; Sturrock et al. 2019. In addition, these flows in the Stanislaus River (as well as instream flows in the lower San Joaquin River at Vernalis from April 15 to May 15) appear to violate water quality standards under the Bay-Delta Water Quality Control Plan, which would also constitute a significant impact under CEQA.³⁴
- The DEIR fails to adequately consider the effects of eliminating the San Joaquin River inflow: export ratio under the 2009 NMFS biological opinion, as the 2016 six-year study report supports the conclusion that increased inflow, lower exports, and a higher inflow: export ratio increase survival of migrating steelhead. *See* Rebecca Buchanan, 2016 Six

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³⁴ In addition, the DEIR fails to analyze whether and how the proposed project and alternatives would affect achievement of the 1995 Bay-Delta Water Quality Control Plan's narrative salmon protection objective. To the extent that the proposed project or alternatives fails to provide flow and water quality conditions that are inconsistent with achievement of the salmon doubling objective, this would constitute a significant impact under CEQA because it would impede compliance with a water quality standard.

Year Acoustic Telemetry Steelhead Study: Statistical Methods and Results, Dec. 7, 2018, at 76 (“the prevailing conceptual model of how water project operations and river conditions influence survival through the Delta is that survival is higher during periods of higher Delta inflow, lower export rates, higher I:E, and lower water temperatures (SST 2017).³⁵ The survival estimates from the 2016 six-year study support the conceptual model regarding Delta inflow, exports, and the I:E ratio.”).³⁶ In addition, DWR’s findings in the DEIR appear inconsistent with NMFS’s July 1, 2019 jeopardy biological opinion and the findings of state and federal agencies in the WaterFix final Environmental Impact Statement/ Environmental Impact Report and CESA permits regarding the importance of this reasonable and prudent alternative action in the 2009 NMFS biological opinion.

1-42

Finally, the DEIR incorrectly concludes that the reduction in fall outflow under the proposed project would not cause a significant adverse impact on Delta smelt. However, the DEIR admits that the proposed project would result in a reduction in low salinity habitat meeting salinity, Secchi depth, and water temperatures criteria than the 74 km X₂ requirements of the 2009 USFWS biological opinion. *See* DEIR at 4-162. Numerous scientific studies and analyses have found a relationship between Delta outflow in the fall and the abundance of Delta smelt. *See, e.g.,* Feyrer et al. 2008; Feyrer et al. 2011; MAST 2015; Polansky et al. *in review*. Moreover, DFW has repeatedly rejected similar proposals to weaken the Fall X₂ requirement of the 2008 biological opinion and found that similar proposals fail to fully mitigate impacts under CESA. *See* Letter from DFW to DWR regarding Request for Consistency Determination for the Continued Operation of the State Water Project Incorporating 2017 Proposed Change to Action 4 of the 2008 Biological Opinion For the Coordinated Long-Term Operations of the Central Valley Project and State Water Project (2080-2017-009-03), October 17, 2017; Letter from DFW to Reclamation regarding Implementation of Fall X₂ Action in Fall of 2019, September 24, 2019. The DEIR’s conclusion is not supported by substantial evidence, and the DEIR demonstrates that the proposed project does not fully mitigate impacts under CESA. Additional scientific information regarding the effects of Fall X₂ on Delta smelt are enclosed.

1-43

Given the imperiled status of these species, the further reductions in abundance and survival caused by the proposed project constitute mandatory findings of significant impacts under CEQA. The populations of Delta smelt, Longfin smelt, winter-run Chinook salmon, and spring-run Chinook salmon already are not self-sustaining (particularly without hatchery supplementation of salmonids) and are declining in abundance, and the proposed project would further “cause a fish or wildlife population to drop below self-sustaining levels.” Cal. Code

1-44

³⁵ This document is available online at:

<http://www.cbr.washington.edu/sites/default/files/papers/UW%206yr%20steelhead%20report%202016%20FINAL.pdf> and is hereby incorporated by reference.

³⁶ This report is available online at:

<http://www.cbr.washington.edu/sites/default/files/papers/UW%206yr%20steelhead%20report%202016%20FINAL.pdf>. It is hereby incorporated by reference.

Regs., tit. 14, § 15065(a)(1).³⁷ Because the DEIR fails to recognize these mandatory findings of significance, the document must be revised to acknowledge these significant impacts and propose necessary mitigation measures, and the revised DEIR must be recirculated for public comment.

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(Cont.)

C. The DEIR Fails to Adequately Consider Cumulative Impacts

The DEIR also fails to adequately consider and disclose cumulative impacts. The DEIR admits that “[t]he cumulative impact of these past projects has resulted in a baseline that has altered Delta outflows and degraded surface water quality in the Delta,” and that the impact of the proposed project in conjunction with these cumulative effects would be potentially significant. DEIR at 4-308. Yet despite these numerous projects that would increase upstream storage and reduce flows into the Delta,³⁸ the DEIR asserts that the SWP’s effects would not be cumulatively considerable. *Id.*

Similarly, the DEIR admits that, “The cumulative impact of these past projects has resulted in a baseline consisting of a trending decline of listed-species population within the Delta and other waterways used by anadromous fish populations in northern California. Despite these protections, the cumulative impact of past Delta modifications and other past and present projects has contributed to the continuing decline in Delta fish populations and habitat of protected species. **This overall cumulative impact is significant.**” *Id.* at 4-310 to 4-311 (emphasis added). Despite these findings, the DEIR concludes that, “The cumulative impact of the Proposed Project would therefore be Less Than Significant.” *Id.* at 4-315.

1-45

However, DWR reaches this conclusion in part by relying on the Bureau of Reclamation’s draft environmental impact statement:

In consideration of the conclusions in Section 5.9 of Reclamation (2019) and Section 4.4., above, the Proposed Project’s contribution to cumulative impacts associated with the Reinitiation of Consultation of the CVP and SWP would not be cumulatively considerable.

Id.; see *id.* at 4-312. DFW has already identified significant flaws in Reclamation’s draft environmental impact statement and likely significant impacts of the proposed action. See Letter from California Department of Fish and Wildlife to U.S. Bureau of Reclamation, Comments on the Reinitiation of Consultation on the Coordinated Long-Term Operation of the Central Valley

³⁷ Moreover, any reductions in abundance and survival of listed species under the proposed project compared to the baseline demonstrates that the proposed project is not fully mitigating impacts as required by CESA, and thus that the proposed project is inconsistent with the project objectives.

³⁸ The DEIR’s list of cumulative projects includes the Sites Reservoir Project, Shasta Dam expansion, and Upper San Joaquin River Storage Investigation (Temperance Flat). Environmental review for these projects has shown that they would increase water storage and reduce flows into the Delta, modifying hydrology upstream of the Delta and causing significant adverse impacts to fish and wildlife.

Project and State Water Project Draft Environmental Impact Statement, August 21, 2019.³⁹ NRDC likewise raised concerns with the draft environmental impact statement, which are attached hereto as Exhibit 3. Similarly, the biological opinions demonstrate that the proposed project will reduce the abundance of winter run Chinook salmon, reduce survival of salmon and steelhead migrating through the Delta, increase entrainment of listed species, and result in ongoing declines in the abundance of Delta smelt. *See* Exhibit 4. DWR's reliance on the conclusions in Reclamation's draft environmental impact statement is inappropriate.⁴⁰

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Moreover, the coordinated operations of the SWP and CVP are responsible for a significant proportion of the water that is stored and diverted in the Bay-Delta system, and thus are responsible for a significant proportion of the adverse effects on fish and wildlife in the watershed including from changes in hydrology, water quality and temperature, entrainment, and habitat loss. More than half of the total water diversions in the Bay-Delta watershed are associated with the CVP and SWP in some years, and the decline in fish species has accelerated as the CVP and SWP increased diversions over the past several decades. The DEIR's conclusion that the impacts are cumulatively significant, but that the SWP's contribution to these problems is not cumulatively considerable, is not supported by substantial evidence.

1-46

VII. The proposed project violates the California Endangered Species Act, and the California Department of Fish and Wildlife Should Not Rely on the DEIR

There is no question that the abundance of CESA-listed species including winter-run Chinook salmon, spring-run Chinook salmon, Delta smelt, and Longfin smelt has declined significantly under baseline conditions. There is also no question that the coordinated operations of the CVP and SWP have significantly contributed to the declines of these and other fish species, and the adverse effects of CVP and SWP operations have never been fully mitigated, including over the past decade when numerous requirements of the 2008 and 2009 biological opinions were waived, weakened, and/or not fully implemented.⁴¹ The best available science demonstrates that increased protections are necessary to avoid jeopardizing the species and fully mitigate impacts,

1-47

³⁹ Moreover, the DEIR also incorrectly asserts that the annual loss thresholds are not considered in the CalSim modeling, and therefore are not considered in the biological opinions, suggesting that this will improve protections for the species. DEIR at 4-134. In fact, the CalSim modeling in the biological opinions, which is identical to that used in this DEIR, assumes that the annual loss thresholds are triggered every year, resulting in more restrictive OMR conditions in the spring months.

⁴⁰ The operations of the CVP are also included in the DEIR's list of cumulative projects. There is no quantitative analysis of cumulative impacts from coordinated operations of the CVP and SWP, simply qualitative statements. The DEIR's conclusions as to the cumulative effects of the CVP operations are flawed for the reasons described herein.

⁴¹ The federal CVP currently does not have an ITP under CESA, and to our knowledge DWR lacks an ITP under CESA for upstream operations of the State Water Project, including take resulting from SWP operations of Lake Oroville and in the Feather River. *See also* DEIR at 3-18 (stating that DWR is not seeking an ITP for Oroville Dam and Feather River operations, Coordinated Operation Agreement, or CVP facilities, operations and agreements).

as state and federal agencies have found. *See, e.g.*, Secretary of the Interior Sally Jewell, Memorandum for the President, Update on California Water Issues, August 30, 2016, at 2 (“The reinitiation process will likely lead to new or amended biological opinions that will increase protections for these species.”).

However, like the Trump Administration’s new biological opinions, DWR’s proposed project would eliminate many existing protections for these species and worsen conditions for many of these species, as well as for fall-run Chinook salmon, the backbone of the state’s salmon fishery. NMFS staff concluded on July 1, 2019 that the proposed project would jeopardize listed salmonids in violation of the federal ESA,⁴² and independent scientific peer reviews of the draft biological opinions found that listed species are likely to continue declining in abundance and that the biological opinions failed to use the best available science.⁴³ As discussed herein, under the proposed project CESA-listed species are likely to continue declining in abundance, and that survival and abundance of CESA-listed species are lower under the proposed project than under baseline conditions, demonstrating that the effects of the proposed project are not fully mitigated⁴⁴ as required under CESA and are likely to jeopardize the continued existence of the species.

Moreover, the proposed project would not require that the protective measures modeled in the DEIR are fully implemented, instead providing numerous offramps and exceptions, including:

- only requiring that DWR implement a proportional share of these measures without requiring that the federal Central Valley Project also comply with CESA;
- allowing the agencies to decide not to reduce OMR even when salvage thresholds are exceeded;
- not requiring the fall X2 action to be implemented based on vague and uncertain future findings;
- Relying on purchases of water for Delta outflow, without identifying the funding needed to ensure that the action would be implemented. DEIR at 5-38; *id.* at 5-87.

The proposed project also fails to include any thresholds on the number of spring-run Chinook salmon or Delta smelt that can be salvaged at the pumps, despite DFW specifically

⁴² This biological opinion is available online at:

<https://www.documentcloud.org/documents/6311822-NMFS-Jeopardy-Biop-2019-OCR.html>. It is incorporated here by reference.

⁴³ A copy of these independent scientific peer reviews, as well as other supporting documentation, will be provided separately to DFW and DWR.

⁴⁴ In addition, there is no credible scientific basis to conclude that tidal marsh habitat restoration would offset or mitigate for the adverse effects on Longfin smelt caused by the reduction in winter-spring Delta outflow, as proposed in DWR’s ITP application. The ITP application fails to provide a reasoned explanation for this approach, particularly given the improvements in scientific understanding in the past decade (*see, e.g.*, Herbold et al. 2014, Nobriga and Rosenfield 2016) and the continued decline in abundance of Longfin smelt over the past decade despite the habitat restoration required under the prior Longfin smelt ITP and other actions.

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recommending salvage thresholds for those species, as well as recommending that the proposed project include salvage triggers like those included in the 2009 NMFS biological opinion. *See* DFW comments to Reclamation 2019.

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(Cont.)

In addition, while DWR purports to only seek an ITP under CESA for project operations in the Delta, we are unaware of any authority for SWP operations in the Feather River to incidentally take CESA-listed species. DFW must consider the whole of the operations of the CVP and SWP to ensure that the proposed project will not jeopardize listed species, in light of upstream impacts and other impacts on the species. Finally, as discussed *supra* the DEIR fails to use the best available science regarding the effects of the proposed project on CESA-listed fish species and fails to analyze effects upstream. Therefore, DFW should not rely on the DEIR in making its conclusions under CESA.

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Because the modeling of the proposed project is the same as the Trump Administration's biological opinions, we have attached our 60-day notice letter to the Bureau of Reclamation regarding the flaws in those biological opinions, including information which demonstrates that the proposed project is likely to jeopardize listed species under the ESA, and therefore under CESA. *See* Exhibit 4. These comments are incorporated by reference regarding the effects of the proposed project in this DEIR under both CEQA and CESA.

1-51

It is abundantly clear that the proposed project is inconsistent with the requirements of CESA, and that the proposed project, alone and in combination with the Trump Administration's modification of CVP operations, will jeopardize the continued existence of species listed under CESA. Therefore, DWR must significantly revise the proposed project before submitting an application for an ITP under CESA, and DWR must recirculate a revised DEIR describing that revised project for public and agency review and comment.

II.6.7 LETTER O-NRDC-1 – NATURAL RESOURCES DEFENSE COUNCIL, DOUG OBEGI; THE BAY INSTITUTE, GARY BOBKER; DEFENDERS OF WILDLIFE, RACHEL ZWILLINGER; SAN FRANCISCO BAYKEEPER, JONATHAN ROSENFELD, PH.D; CALIFORNIA SPORTFISHING PROTECTION ALLIANCE, CHRIS SHUTES; AND GOLDEN STATE SALMON ASSOCIATION, JOHN MCMANUS—JANUARY 6, 2020

II.6.7.1 RESPONSE TO COMMENT O-NRDC-1-1

This comment is introductory in that it lays out a list of alleged inadequacies of the DEIR, with each point discussed in detail later in the letter. DWR does not agree that the DEIR must be substantially revised and recirculated in order to comply with CEQA. The comment does not establish any of the grounds for recirculation set forth in CEQA Guidelines Section 15088.5.

The issues noted in this comment are addressed in the following Responses to Comments O-NRDC-1-2 through O-NRDC-1-51.

II.6.7.2 RESPONSE TO COMMENT O-NRDC-1-2

In *Save Tara v. City of West Hollywood* (2008) 45 Cal.4th 116, the California Supreme Court held that a lead agency must complete CEQA review prior to approving a project. Although there is no bright-line rule for determining when an agency has effectively approved a project absent CEQA review, courts apply the general principal that “agencies must not take any action that significantly forecloses alternatives or mitigation measures that would ordinarily be part of CEQA review of that project” absent CEQA review. *Save Tara* at 138.

On December 2, 2019, DWR requested a minor amendment (Minor Amendment) to its Incidental Take Permit (ITP) for Longfin Smelt for California State Water Project Delta Facilities and Operations (Permit No. 2018-2009-001-03-A2), consisting only of an extension of the expiration date of the ITP from December 31, 2019 to March 31, 2020 or until issuance of an ITP covering all listed species, whichever comes first. DWR requested the Minor Amendment to ensure that it continued to have CESA coverage for incidental take of Longfin smelt pending issuance of the comprehensive long-term ITP for SWP operations. DWR explained the status of CESA and CEQA efforts associated with seeking a comprehensive ITP to explain why the Minor Amendment was needed, noting that it was “committed to ensuring that the FEIR is certified and the Notice of Determination is filed with the State Clearinghouse by February 28, 2020.”

Merely stating a schedule for CEQA review does not foreclose alternatives or mitigation measures, effectively equating to a project approval without environmental review. DWR has continued to explore alternatives for long-term operations and the DEIR disclosed that, even though no significant impacts were identified in the CEQA review process, mitigation may be required to meet California Endangered Species Act (CESA) standards. It is common practice for lead agencies to set project schedules for planning purposes and to inform the public of upcoming milestones. Project schedules are targets that sometimes change as planning progresses, which has occurred here as demonstrated

by the fact that DWR will certify the FEIR and file the Notice of Determination with the State Clearinghouse after February 28, 2020. To the extent that the comment argues that DWR's schedule does not allow time for recirculation, CEQA does not require an agency to pre-schedule a recirculation period. Furthermore, none of the triggers for recirculation exist here.

In sum, DWR's Minor Amendment request did not constitute an improper project approval before CEQA review. CEQA does not prohibit a lead agency from having, or publicly stating, its schedule for CEQA review.

II.6.7.3 RESPONSE TO COMMENT O-NRDC-1-3

DWR disagrees with the statement that it has rushed the permitting process for long-term operations of the SWP. DWR has been planning for further regulatory approvals since at least August 2, 2016, when it sent joint letters with Reclamation to the USFWS and NMFS requesting the reinitiation of consultation under Section 7 of the ESA. DWR issued a CEQA Notice of Preparation on April 19, 2019 announcing its intent to prepare an EIR for a separate ITP under CESA. The preparation of the EIR is being conducted in compliance with procedural requirements set forth by CEQA and the State CEQA Guidelines. The ITP application was prepared in compliance with CESA and in consultation with CDFW who is considering issuance of the ITP.

II.6.7.4 RESPONSE TO COMMENT O-NRDC-1-4

The DEIR included a Proposed Project as well as the following alternatives: No Project; Alternative 2a; Alternative 2b; Alternative 3; and Alternative 4. Although the comment states that the Proposed Project in the DEIR is "nearly identical" to the operations in the 2019 Biological Opinions, significant differences between the operations exist as disclosed in Footnote 1 of the comment. The comment also asserts that DWR did not account for climate change, however, DWR included a climate change sensitivity analysis in DEIR Appendix F, "Climate Change Sensitivity Analysis," which concluded that the relative changes due to the Proposed Project scenario compared to the Existing Conditions scenario under future climate and sea level rise conditions scenarios are similar to those identified under the current climate scenario. Please see Master Response 10, "Climate Change," for further information regarding how the EIR addresses climate change.

DWR staff has worked closely with CDFW staff since the issuance of the DEIR to formulate ITP terms and conditions that CDFW finds to be protective of listed aquatic species to allow for the issuance of an ITP meeting the standards of CESA. Refined Alternative 2b is the result of the consultation between the two agencies and is the preferred alternative in the FEIR. The complete analysis for Refined Alternative 2b, as provided in the FEIR, has been supplemented with additional modeling and analysis, which support the DEIR impact conclusions for the Alternative. See Master Response 3, "The CEQA Process," for more detailed discussion of the NOP, Proposed Project, Alternatives, and FEIR Preferred Alternative.

Please also see Master Response 16, "Relationship to 2019 Biological Opinions," which discusses the relationship between DWR's ITP application for the long-term operation of the SWP and the federal litigation over the 2019 Biological Opinions.

Please also see Responses to Comments O-NRDC-1-47 and O-NRDC-1-51.

II.6.7.5 RESPONSE TO COMMENT O-NRDC-1-5

See Response to Comment O-NRDC 1-4 above regarding the development of alternatives and Refined Alternative 2b.

Master Response 1, “Scope of Analysis,” discusses the scope of the analysis for the Proposed Project and the relationship between the Proposed Project and the Central Valley Project (CVP). As explained in DEIR Appendix G, even though the SWP and CVP coordinate operations, DWR and Reclamation independently decide how to operate the individual projects to best meet applicable requirements. The Coordinated Operation Agreement (COA) does not define what actions DWR or Reclamation will take in any given set of circumstances and DWR has no control over CVP operations. These decisions occur in real time, allowing operators to account for constantly changing conditions such as tides, accretions and depletions, and hydrology. Therefore, whether Reclamation would alter its operations of the CVP in response to the Proposed Project in a way that would cause environmental impacts outside of the SWP zone of influence is speculative. Under long-standing CEQA principles, speculative analysis is considered not to be meaningful or informative, and thus is not required.

In addition, refer to Appendix B of the DEIR for a detailed discussion of how the SWP coordinates and interacts with the operations of the CVP, and refer to Appendix G of the DEIR for additional information regarding the geographic area potentially affected by the project.

With respect to the contention that the DEIR violates CEQA because DWR’s public statements suggest that the “preferred alternative” in the DEIR is “not their Proposed Project,” see Master Response 3, “The CEQA Process.”

The comment states that “In particular, the DEIR: (1) inconsistently describes whether the coordinated operations of the CVP and SWP are the Proposed Project; (2) whether the coordinated operations would actually achieve the proposed environmental flows, or only a proportional share of those flows; and (3) fails to accurately model the measures that are proposed for project. Each of these fundamental flaws is discussed below.” Rather than respond to each of these points here, DWR addresses them below, where the comment develops each of the points more fully.

II.6.7.6 RESPONSE TO COMMENT O-NRDC-1-6

With respect to the issue of the allegedly inconsistent project description in the DEIR, see Master Response 3, “The CEQA Process.”

The comment points to press statements to suggest that there is inconsistency with respect to whether the project is intended to increase or decrease exports. The objectives of the project, as set forth in the EIR, do not state any position regarding increasing or decreasing exports. DWR’s press release is consistent with the objectives. Furthermore, the EIR includes multiple alternatives, some of which would result in SWP water exports not changing overall and some that would increase exports, which demonstrates DWR’s openness to considering various operational scenarios with differing export outcomes. One of the alternatives, the Proposed Project identified in the DEIR, is expected to increase

exports approximately 222 TAF. However, the preferred alternative identified in the FEIR, Refined Alternative 2b, and the ITP application that DWR submitted to CDFW does not result in this increase of SWP water exports. Refined Alternative 2b would result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions.

II.6.7.7 RESPONSE TO COMMENT O-NRDC-1-7

DEIR Chapter 1.3, “Summary of the Proposed Project,” states that the Proposed Project consists of multiple elements, including “(1) proposed SWP operations that can be described in detail and assessed on a project-level basis; (2) proposed SWP operations that can only be described generally and assessed on a program-level basis; (3) proposed environmental commitments or protective measures that would offset, reduce, or otherwise mitigate potential environmental impacts on special-status species, and (4) adaptive management actions that would include establishing a governance framework, a compliance and reporting program, and specific drought- and dry-year actions; establishing independent review panels; and conducting Four-Year Reviews of management measures.” Discussions of the relationship of the SWP with CVP are presented in the DEIR to provide the reader with an understanding of how the two projects operate cooperatively and share the Sacramento River and Delta water conveyance system. As explained in DEIR Appendix G, “Geographic Scope of Project’s Influence on Flow,” even though the SWP and CVP coordinate operations, DWR and Reclamation independently decide how to operate the individual projects to best meet applicable requirements. The Coordinated Operation Agreement (COA) does not define what actions DWR or Reclamation will take in any given set of circumstances and DWR has no control over CVP operations. Please also see Master Response 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations.”

The statements referenced in the comment regarding DWR being the lead agency for the long-term operation of the CVP and SWP (DEIR Chapter 2.1, “Purpose of the DEIR”) and the Proposed Project being the long-term operations of the CVP and SWP (DEIR Chapter 1, “Summary”) are errors and should only refer to long-term operation of the SWP. Please see FEIR Part III, Chapters 1 and 2.1 for the specific corrections made.

See Master Response 3, “The CEQA Process,” for a detailed discussion on the reasons why CEQA did not require an exact match between the project description in the NOP and the DEIR, or between the Proposed Project as set forth in the DEIR and the application for an incidental take permit that DWR filed with CDFW, or between the Preferred Alternative in the FEIR.

II.6.7.8 RESPONSE TO COMMENT O-NRDC-1-8

As explained in DEIR Appendix G, “Geographic Scope of Project’s Influence on Flow,” even though the SWP and CVP coordinate operations, DWR and Reclamation independently decide how to operate the individual projects to best meet applicable requirements. The Coordinated Operation Agreement (COA) does not define what actions DWR or Reclamation will take in any given set of circumstances and DWR does not control CVP operations. These decisions occur in real-time, allowing operators to account for constantly changing conditions such as tides, accretions and depletions, and hydrology. Therefore, whether Reclamation would alter its operations of the CVP in response to the Proposed

Project in a way that would cause environmental impacts outside of the SWP zone of influence is speculative. Under long-standing CEQA principles, speculative analysis is considered not to be meaningful or informative, and thus is not required.

CalSim II is the best available tool to simulate SWP operations. This model simulates joint CVP and SWP operations and it would be unrealistic to assume that the CVP would not operate, so assumptions need to be made for both SWP and CVP facilities. DWR utilized assumptions for CVP operations from the Reinitiation of Consultation Biological Assessment (2019) and it would be speculative to assume that Reclamation would not operate in accordance with the 2019 USFWS and NMFS Biological Opinions. To avoid discrepancies between CVP and SWP operations, the DEIR states that DWR will coordinate with Reclamation on operations and where there could be operational differences, DWR will operate the SWP consistent with its proportional share of the requirements, as described in Appendix H, “CalSim II and DSM2 Model Descriptions and Assumptions,” (see Attachments 1-5, 1-8, and 1-9).

Refined Alternative 2b Summer-Fall habitat action with regard to the X2 = 80 km standard is consistent with the proposed federal action and so it is not anticipated that Reclamation would not contribute its share when the X2 = 80 km standard is applicable. As described in the DEIR, a suite of actions would be proposed by DWR and Reclamation to meet the action’s environmental and biological goals. It is reasonably foreseeable that Reclamation will carry out its obligations to meet the X2 = 80 km standard as specified in the 2019 USFWS Biological Opinion. Analysis of impacts that might occur in the unlikely event that Reclamation were not to implement their proposed federal action is not required in the DEIR, as such impacts are speculative and not considered reasonably likely to occur as a result of DWR’s long-term operations of the SWP.

To the extent that the comment alleges that mitigation measures are unenforceable, the EIR concludes that the project will not result in any significant environmental impacts and no mitigation is required under CEQA.

In addition, refer to DEIR Appendix B, “2018 Coordinated Operation Agreement Addendum,” for a detailed discussion of how the SWP coordinates and interacts with the operations of the CVP, and refer to DEIR Appendix G for additional information regarding the geographic area potentially affected by the project. Please also see Master Response 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations.” Please also see Master Response 4, “Legal Standards,” and Master Response 17, “Application of CESA Standards,” for a discussion of roughly proportional mitigation measures under CESA.

II.6.7.9 RESPONSE TO COMMENT O-NRDC-1-9

Conditions with OMR criteria of -6,250 cfs are analyzed in a sensitivity analysis presented in FEIR Part III, Appendix H, “CalSim II and DSM2 Model Descriptions and Assumptions.” However, the OMR Flexibility criteria are not activated every time the Delta is in Excess Conditions. If any other flow limit (including real-time OMR restriction) is active, an OMR flexibility action would be precluded. Therefore, operating to -5,000 cfs instead of -6,250 OMR is often required. Criteria for OMR flexibility activation are modeled. Model assumptions are presented in FEIR Part III, Appendix H, Attachment 1-1, “Model

Assumptions.” For more details regarding conditions upon which OMR flexibility is activated, see DEIR Chapter 3.3.1, “OMR Management.”

The FEIR identifies Refined Alternative 2b as the preferred alternative. Modeling assumptions of Refined Alternative 2b, provided in FEIR Appendix H, include an OMR criteria of -6,250 cfs.

The Proposed Project description, provided in Chapter 3.3, “Description of the Proposed Project,” states that single-year loss threshold actions of -3,500 cfs or -2,500 cfs may cease when DWR and Reclamation determine that further OMR restrictions are not required to benefit fish movement. DWR and Reclamation will prepare risk assessments regarding benefits of OMR flows to fish movement based on real-time monitoring, historical trends of salmonids exiting and entering the Delta, fish detected in salvage, relevant environmental conditions, etc. Therefore, operating to -3,500 cfs OMR is part of the Proposed Project description. As such, modeling assumptions incorporate this action. Historical timing of natural loss from 2010 through 2018 were considered in development of model assumptions for single-year loss threshold actions. Please see FEIR Part III, Appendix H Attachment 1-4, “Scenario Related Changes to CalSim II and DSM2,” for more details.

Steelhead loss are considered in the Proposed Project description (Chapter 3.3.1) and modeling assumptions (FEIR Part III, Appendix H Attachment 1-4). Modeling assumptions for single-year loss threshold actions are based on a generalization of historical salvage. In real time operations, salvage can vary.

It is expected that OMR flexibility would not occur in Wet Years because storm events are likely to coincide with turbidity bridge events. OMR flexibility is also not expected to occur in Critical Years because Critical Years generally do not include storm events with excess flow, as noted in FEIR Part III, Appendix H Attachment 1-1.

II.6.7.10 RESPONSE TO COMMENT O-NRDC-1-10

The comment does not establish any of the grounds for recirculation set forth in CEQA Guidelines Section 15088.5.

See also see the following: Responses to Comments O-NRDC-1-7, O-NRDC-1-8, and O-NRDC-1-9; Master Response 3, “The CEQA Process;” Master Response 4, “Legal Standards;” Master Response 17, “Application of CESA Standards;” and Master Response 22, “Relationship to CVP Operations.”

II.6.7.11 RESPONSE TO COMMENT O-NRDC-1-11

Master Response 3, “The CEQA Process,” discusses the requirements of CEQA with respect to the development of alternatives, the purpose served by alternatives when there are no significant impacts, and public involvement in the alternative development process.

To satisfy the requirements of CEQA, an EIR must include a reasonable range of alternatives that would “feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives.” CEQA also requires that an EIR analyze a “no project” alternative, to compare the potential impacts of the

Proposed Project to a “no project” scenario. These purposes can still be served even where a Proposed Project would not cause any significant environmental effects.

The DEIR evaluates the applicable resource areas and determined that, with respect to each resource area, the project has either no impact or a less-than-significant impact on the environment. Because the project would not result in any significant impacts, no mitigation is required under CEQA. Even though CEQA does not require mitigation, the EIR explains that DWR will propose mitigation to meet the legal standard under CESA to minimize and fully mitigate the take of listed species and discusses the mitigation measures that will be identified in DWR’s application for an ITP. The DEIR also analyzes four project alternatives in addition to the “no project” alternative. Pursuant to CEQA, the DEIR includes sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project. Although not required to reduce or avoid significant CEQA impacts, two of the alternatives provide freshwater flows in the spring and summer, and one alternative includes physical barriers and other deterrents to keep fish away from the SWP pumps. By embodying scenarios that would reduce the environmental effects of the Proposed Project (even though they were not significant) the DEIR does consider alternatives that would increase protections for fish species.

Further, DWR staff has continued to work closely with CDFW staff since the issuance of the DEIR regarding issuance of an ITP meeting the standards of CESA. The result of the coordination between the two agencies resulted in Refined Alternative 2b. Refined Alternative 2b would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further minimize impacts below those identified in the analyses and contribute to fully mitigating impacts. The complete analysis for Refined Alternative 2b, as provided in the FEIR, has been supplemented with additional modeling and analysis, which support the DEIR impact conclusions for the Alternative. (See FEIR Part III, “Revisions to the DEIR.”)

Finally, an EIR need not consider all potential alternatives to the project. Rather, CEQA requires that an EIR discuss only a “reasonable range” of alternatives. CEQA does not require that the EIR study specific alternatives proposed by the public or other agencies. The lead agency must make a good faith effort to identify and study a reasonable range of appropriate alternatives to the Proposed Project.

Please also see Master Response 4, “Legal Standards,” and Master Response 20, “Best Available Science,” for information regarding CEQA and CESA’s applicable legal standards.

II.6.7.12 RESPONSE TO COMMENT O-NRDC-1-12

Please see Response to Comment O-NRDC-1-11 and Master Response 3, “The CEQA Process.” Please also see Master Response 4, “Legal Standards,” and Master Response 20, “Best Available Science,” for information regarding CEQA and CESA’s applicable legal standards.

II.6.7.13 RESPONSE TO COMMENT O-NRDC-1-13

Please see Response to Comment O-NRDC-1-11 and Master Response 3, “The CEQA Process.” Please also see Master Response 4, “Legal Standards,” and Master Response 20, “Best Available Science,” for information regarding CEQA and CESA’s applicable legal standards.

II.6.7.14 RESPONSE TO COMMENT O-NRDC-1-14

FEIR Part III, Appendix K, “Framework of Voluntary Agreements,” presents the framework for Voluntary Agreements to update and implement the Bay-Delta Water Quality Control Plan, as presented by the secretaries of the California Natural Resources Agency and California Environmental Protection Agency on February 4, 2020. Although the comment suggested that the Proposed Project was nearly identical to the Proposed Action in the DEIS, DWR has identified Refined Alternative 2b as the preferred alternative, which includes a suite of additional protections to minimize impacts on Longfin Smelt. Please also see Master Response 13, “2019 Federal Biological Opinions.”

II.6.7.15 RESPONSE TO COMMENT O-NRDC-1-15

The DEIR acknowledged that entrainment of special status species could be higher in April and May. For example, for Spring-run Chinook Salmon, the DEIR (p.4-212 to p.4-215) stated:

“The salvage-density method suggested that entrainment loss of juvenile Spring-run Chinook Salmon at the SWP South Delta export facility could be appreciably greater under the Proposed Project scenario compared to the Existing Conditions scenario... This is because most juvenile Spring-run Chinook Salmon entrainment occurs during the April–May period when the largest difference in South Delta exports is projected to occur between Proposed Project and Existing Conditions scenarios. As described for Winter-run Chinook Salmon, it should be noted that this analysis is based on size-at-date criteria and does not reflect potential errors in Chinook Salmon race identification based on these criteria. Classification errors resulting from the use of size-at-date criteria are particularly pronounced for Spring-run Chinook Salmon, for which genetic studies have shown that the great majority of spring-run-sized fish may actually be Fall-run Chinook Salmon. It is expected that the latest information (e.g., genetic assignment) would be used as it becomes available to assess and limit potential entrainment loss of Spring-run Chinook Salmon. In addition, a very small proportion (<1%) of Spring-run Chinook Salmon are likely to approach the South Delta. During April-May, Spring-run Chinook Salmon juveniles may receive some ancillary protection from the risk assessment-based approach for OMR flow management included in the Proposed Project that would be undertaken for other species. Specifically, single year and cumulative loss thresholds for

steelhead and Winter-run Chinook Salmon could provide additional protection for Spring-run Chinook Salmon.”

On the basis of small number of Spring-run Chinook Salmon approaching the South Delta and the protection provided by real-time risk assessment-based approach to OMR flow management, it was concluded that the impact would be less than significant.

For Delta smelt, the DEIR acknowledged the potential for greater entrainment of larvae and juveniles and described the basis for why this was concluded to be less than significant impact (p.4-170):

“During the March–June period of concern for larval and juvenile Delta Smelt entrainment risk, OMR flows would tend to be more negative under the Proposed Project scenario compared to the Existing Conditions scenario in April and May, but similar in March and June... Flows in both scenarios would be above the -5,000 cfs inflection point at which entrainment tends to sharply increase. As part of real-time operational decision-making OMR management, DWR will use results produced by CDFW and USFWS approved life cycle models along with real-time monitoring of the spatial distribution of Delta Smelt to manage the annual entrainment levels of larval and juvenile Delta Smelt. The life cycle models statistically link environmental conditions to recruitment, including factors related to loss as a result of entrainment such as OMR flows. On or after March 15 of each year, if QWEST is negative and larval or juvenile Delta Smelt are detected within the corridors of the Old and Middle rivers based on real-time sampling of spawning adults or YOY life stages, DWR (in coordination with Reclamation) will run hydrodynamic models and forecasts of entrainment to estimate the percentage of larval and juvenile Delta Smelt that could be entrained; DWR will manage exports, as necessary, to limit entrainment to be protective based on the modeled recruitment levels. Such OMR management is not reflected in the CalSim modeling. The real-time management would be intended to limit entrainment risk to low levels similar to the levels achieved following implementation of the USFWS (2008) BiOp, during which time loss of juvenile Delta Smelt was within authorized incidental take limits.”

Although the modeling predicted an increase in entrainment in April and May, the Proposed Project includes first flush protections that would limit spawning in the South Delta, OMR management to maintain flow more positive than the -5,000 cfs inflection point highlighted in the 2008 Biological Opinion, and the protection provided by real-time risk assessment-based approach to OMR flow management. Based on these protective measures, it was concluded that the impact of the Proposed Project would be less than significant.

The DEIR included an assessment using the Nobriga and Rosenfield (2016), the most recent peer-reviewed Longfin Smelt population dynamics model to analyze the potential relationship between Delta outflow during the winter-spring period and Longfin Smelt abundance the following year. The results of the modeling do not demonstrate a significant difference between the Existing Condition and the Proposed Project. From a hydrological perspective, Table 9-1, “Delta Outflow, Monthly Outflow,” in DEIR Appendix C, Attachment 2-2, “Flow Results,” presents the flow results of CalSim II modeling. For

example, using the modeled 50% probability of exceedance for total Delta Outflow during the winter-spring spawning and rearing period (January-June) indicates that there is a 6.6% decrease in total Delta Outflow (8,333 cfs) over the entire six-month period under the Proposed Project compared to Existing Conditions. It should be noted that DWR modelers consider changes in CalSim II results of 5% or less to be within the margin of uncertainty of the CalSim II model, a generalized reservoir-river basin simulation model. The DEIR concluded this would be a less than significant impact.

DWR identified Refined Alternative 2b as the preferred alternative in the FEIR, which would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further improve environmental conditions beyond those identified in the DEIR. (See FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP.”)

Please see Response to Comment O-NRDC-1-11 and Master Response 3, “The CEQA Process.”

The comment does not establish any of the grounds for recirculation set forth in CEQA Guidelines Section 15088.5.

II.6.7.16 RESPONSE TO COMMENT O-NRDC-1-16

Please see Master Response 2, “Baseline,” for information regarding conditions included in the baseline, including the COA Addendum. Please also see Master Response 3, “The CEQA Process,” for a discussion of the project’s progression from NOP to FEIR. Although the COA Addendum is properly a part of the baseline, DWR included DEIR Appendix B, “2018 Coordinated Operation Agreement Addendum,” to provide information comparing conditions following the 2018 COA Addendum to conditions under the 1986 COA. Details regarding modeling of extreme conditions are provided in the DEIR Appendix H Attachment 1-7, “Model Limitations.”

Please see Response to Comment O-NRDC-1-18 and Master Response 24, “Drought Conditions.” The model results presented in DEIR Appendix B indicate that Oroville storage at the end of September may be lower under 2018 COA as compared to 1986 COA. However, the monthly time-step CalSim II model cannot simulate specific operational flexibility that occurs in extreme drought conditions, which would result in extensive coordination with regulatory agencies (i.e., a conference year). Therefore, differences in CalSim II results for the 2018 COA as compared to 1986 COA during extreme drought conditions are not necessarily representative of actual operations. As part of actual operational activities, DWR may seek Temporary Urgency Change Petitions (TUCPs) that could result in changes to operations and relaxation of water quality standards. These changes could result in effects on special status fish species which are not reasonably foreseeable and are speculative at this time. Nonetheless, DWR’s real-time risk assessment-based operations along with the suite of protective measures and

robust adaptive management plan included in Refined Alternative 2b (the preferred alternative) would minimize potential impacts on aquatic species during extreme drought conditions.

II.6.7.17 RESPONSE TO COMMENT O-NRDC-1-17

Please see Response to Comment O-NRDC-1-16. Please also see Master Response 1, “Scope of Analysis,” for information regarding the geographic scope analyzed in the EIR.

II.6.7.18 RESPONSE TO COMMENT O-NRDC-1-18

Master Response 24, “Drought Conditions,” discusses how drought conditions were addressed in the modeling. As explained in Master Response 24, the DEIR incorporates hydrologic modeling that accounts for drought conditions using historical data that include droughts but avoids speculation. The modeling also accounts for a minimum export rate based on regulatory conditions as well as health and safety needs.

The comment requests DWR to analyze or disclose adverse environmental impacts attributable to SWP operations during future drought conditions and alleges that the “DEIR fails to disclose the likely adverse impacts that will result from less protective operations during droughts, and it fails to identify mitigation measures that could reduce or avoid these impacts.” The comment essentially requests DWR to speculate as to potential future drought conditions, including future hydrology and regulatory constraints, and to mitigate for assumed future deviations from applicable water quality operational constraints. Appropriate future drought-response actions will be highly dependent on then-existing hydrology and coordination with other State and Federal agencies such as the Federal Energy Regulatory Commission, CDFW, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the State Water Resources Control Board.

DWR operates the SWP in full compliance with its obligations under permits associated with the Proposed Project and the requirements of D-1641 and applicable biological opinions. In all instances of modified SWP and CVP operations during the drought years of 2011-2015, DWR appropriately sought Temporary Urgency Change Petition (TUCP) authority from the SWRCB, as permitted by Water Code Section 1435. Unless suspended by a future Governor’s Proclamation of a drought emergency, any such future TUCP would likewise be subject to CEQA. (See Cal. Code Regs., Title 23, Section 805.)

Analyzing potential future drought actions with specificity within the scope of the current project proposal, without an understanding of future drought hydrology conditions, water quality and flow objectives, and other projects and actions affecting the overall Bay-Delta watershed, appears to call for an unwarranted level of speculation. In WRO 2015-0043, and in response to comments critical of current D-1641 standards for purposes of drought planning, the SWRCB noted its current process to update the WQCP objectives for the protection of fish and wildlife, and that “[f]ollowing that update process, the State Water Board will undertake a proceeding to implement any revised objectives” which “will include provisions to address drought circumstances.” (Id. at 42). That future proceeding is appropriate to establish drought processes and potential mitigation measures that exceed the scope of the present project. In addition to the appropriate Drought and Dry Year Actions set for in DEIR Chapter 3.3.7, “Drought and Dry Year Actions,” DWR will comply with any conditions imposed on its

water right permits in any future water rights proceeding to implement updated SWRCB drought mitigation requirements

II.6.7.19 RESPONSE TO COMMENT O-NRDC-1-19

Please see Responses to Comments O-NRDC-1-16 and O-NRDC-1-18, and Master Response 24, “Drought Conditions.” Additionally, although TUCPs could be sought by DWR, the extent of changes to operations, relaxation of water quality standards, and potential effects on special status fish species of those changes to operations is not reasonably foreseeable and are speculative at this time.

Nonetheless, DWR’s real-time risk assessment-based operations along with the suite of protective measures and robust adaptive management plan included in Refined Alternative 2b (the preferred alternative) would minimize potential impacts on aquatic species during extreme drought conditions.

The comment does not establish any of the grounds for recirculation set forth in CEQA Guidelines Section 15088.5.

II.6.7.20 RESPONSE TO COMMENT O-NRDC-1-20

The comment states that the EIR does not satisfy CEQA because it does not model or analyze impacts of the Project at Oroville Reservoir and areas upstream of the Delta. DWR disagrees. DWR does not propose any changes to its operations of SWP facilities on the Feather River, including Oroville Dam, (Oroville Facilities) as a part of this project.

As discussed in DEIR Chapter 3.3, “Description of the Proposed Project,” the DEIR evaluates multiple elements that characterize future operations of SWP facilities, modify ongoing programs being implemented as part of SWP operations, improve specific activities that would enhance protection of special-status fish species, or support ongoing studies and research on these special-status species to improve the basis of knowledge and management of these species. Long-term operations of the SWP include operation of all the SWP facilities; however, the operational changes proposed as part of the project do not involve all the SWP components. To analyze the full range of potential environmental impacts, the DEIR identified the geographic area in which potential direct and reasonably foreseeable indirect impacts could occur. Although the SWP is a state-wide system, the Proposed Project is a limited set of updates to SWP long-term operations that would not cause environmental impacts beyond these boundaries. See Master Response 1, “Scope of Analysis,” and Master Responses 22, “Relationship to CVP Operations,” for further information.

Also see Master Response 3, “The CEQA Process,” for a detailed description of the progression of project development from NOP through DEIR, ITP application, and FEIR.

II.6.7.21 RESPONSE TO COMMENT O-NRDC-1-21

Please see Response to Comment O-NRDC-1-11 and Master Responses 1, “Scope of Analysis,” and Master Response 3, “The CEQA Process.” Please also note that the FEIR identifies Refined Alternative 2b as the preferred alternative.

II.6.7.22 RESPONSE TO COMMENT O-NRDC-1-22

As noted in Response to Comment O-NRDC-1-16, differences in CalSim II results for the 2018 COA Addendum as compared to 1986 COA during extreme drought conditions are not necessarily representative of actual operations. Also, please see Master Response 24, “Drought Conditions.”

II.6.7.23 RESPONSE TO COMMENT O-NRDC-1-23

Please see Response to Comment O-NRDC-1-31.

II.6.7.24 RESPONSE TO COMMENT O-NRDC-1-24

Please see Response to Comment O-NRDC-1-5, O-NRDC-1-11, and Master Response 1, “Scope of Analysis.”

II.6.7.25 RESPONSE TO COMMENT O-NRDC-1-25

Please see Response to Comment O-NRDC-1-5 and Master Responses 1, “Scope of Analysis,” and Master Response 22, “Relationship to CVP Operations.” The comment does not establish any of the grounds for recirculation set forth in CEQA Guidelines Section 15088.5.

II.6.7.26 RESPONSE TO COMMENT O-NRDC-1-26

Because the incidental take permit DWR is seeking from CDFW would only extend for 10 years, the time frame for the Proposed Project (as well as for Refined Alternative 2b) should be understood to be only 10 years. It is true, of course, that DWR intends to continue operating the SWP after the end of the 10-year ITP permit that DWR is seeking, but such continued operations will require another ITP preceded by another CEQA process. In 2030, physical conditions in the Sacramento-San Joaquin River Delta and other areas affected by the SWP may differ from present conditions in ways that, despite best efforts, cannot be predicted with complete accuracy today. Although, as the comment notes, CEQA requires lead agencies, in preparing EIRs, to consider both short-term and long-term effects, neither term is defined. Nor does CEQA describe how far into the future a cumulative impact analysis must extend. Rather, the appropriate time frame for consideration is a function of the nature of the project under consideration. Another relevant factor is the degree to which predictions of future conditions are likely to be speculative and of debatable value for decision making.

A key reason for conducting cumulative impact analyses is to assess a Proposed Project’s incremental contribution to a future cumulative condition, and whether that contribution is itself “cumulatively considerable” and thus significant in and of itself. (See CEQA Guidelines, Section 15064, subd. (h)(1), 15130, subd. (a); *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 114-121.) Here, because the proposed ITP permit and thus the project itself will extend no further out in time than 10 years, DWR was not required to speculate about conditions that will exist in the SWP systems and affected waterways and other natural resources beyond 2030. The extent of the project’s incremental contribution to conditions in 2030 does not require analysis beyond the year 2030. In that year, DWR will require another ITP, which will have to be preceded by another CEQA

analysis with a new future horizon year. See also Master Response 10, “Climate Change,” and Master Response 26, “One-Tunnel Delta Conveyance Project.”

II.6.7.27 RESPONSE TO COMMENT O-NRDC-1-27

This comment introduces in a summary fashion a series of points that are developed more fully below. Responses to Comments O-NRDC-1-28 through O-NRDC-1-46 below address each of these points in turn. The comment does not establish any of the grounds for recirculation set forth in CEQA Guidelines Section 15088.5.

II.6.7.28 RESPONSE TO COMMENT O-NRDC-1-28

The OMR criteria referenced in this comment were not evaluated in the model runs for several reasons:

- a) Conditions with OMR flow of -6,250 cfs were analyzed in a sensitivity analysis, as presented in the updated FEIR Part III, Appendix H Attachment 2-4, “CalSim II Sensitivity Analysis for the Revised Proposed Project.” The sensitivity analysis concluded that the differences between an OMR flow of -6,000 cfs and -6,250 were negligible. Refined Alternative 2b, identified as the preferred alternative in the FEIR, operates to an OMR flow of -6,250 cfs.
- b) The OMR flexibility criteria are not analyzed for longer than 7 days because it is assumed other species protections, such as turbidity, would limit the duration of the OMR flex action, or the OMR flow would increase (i.e., become less negative), based on the historical analysis. Similarly, it is assumed that other species protections would limit OMR flexibility to 6 days under Refined Alternative 2b. Historical analysis and assumptions documentation are provided in FEIR Part III, Appendix H Attachment 1-4, “Scenario Related Changes to CalSim II and DSM2.”
- c) It is expected that OMR flexibility would not occur in Wet Years because storm events are likely to coincide with turbidity bridge events. OMR flexibility is also not expected to occur in Critical Years because Critical Years generally do not include storm events with excess flow, as noted in FEIR Part III, Appendix H Attachment 1-1, “Model Assumptions.”

The model assumes that OMR flexibility under the Proposed Project would occur for 7 days in January and February of Above Normal and Below Normal Years, and that these conditions also would represent a long-term average because of the frequency that these conditions occur over the 82-year modeled period. It is also assumed that OMR flexibility would not be implemented frequently in Dry Years because analysis of recent conditions in years 2002 through 2018 indicate infrequency of OMR flexibility during Dry Years. Therefore, it is assumed that only one 7-day implementation of OMR flexibility would occur per season.

As noted above, OMR flexibility actions are limited to 6 days under Refined Alternative 2b. Although OMR flexibility duration was modified in Refined Alternative 2b, expected frequency of OMR flexibility, for reasons described above, remain identical. These assumptions are described in detail in FEIR Part III, Appendix H Attachment 1-4.

- d) The OMR is limited to -3,500 cfs in March and April of Wet, Above Normal, Below Normal, and Dry Years per the Salvage Loss criteria which were developed through an assessment of historical timing of natural loss from 2010 through 2018. These assumptions are described in detail in FEIR Part III, Appendix H Attachment 1-4.
- e) As described in DEIR Chapter 3.3.1, "OMR Management," OMR is required to be greater (or less negative) than -5,000 cfs in May and June due to D-1641 regulations. Therefore, minimum June OMR flow is -5,000 cfs. Minimum May OMR flow is greater (or less negative) than -5,000 cfs because another operational parameter (e.g., D-1641 water quality compliance) is controlling magnitude of OMR flow.

II.6.7.29 RESPONSE TO COMMENT O-NRDC-1-29

As detailed in Master Response 1, "Scope of Analysis," upstream reservoirs are outside the geographic scope of the Proposed Project. Please also see Master Response 24, "Drought Conditions," for an explanation of how the EIR considered extreme conditions and why Temporary Urgency Changes are speculative.

II.6.7.30 RESPONSE TO COMMENT O-NRDC-1-30

Based on review of data generated over the past decade, DWR revised modeling of baseline conditions used for the 2008/2009 Biological Opinions to better represent Existing Conditions. FEIR Part III, Appendix H Attachment 1-4, "Scenario Related Changes to CalSim II and DSM2," demonstrates that updated OMR methodology more closely matches actual historical OMR regulatory limits. Compared to previous versions of the model, the updated CalSim model OMR logic and assumptions more accurately predict the historic OMR flows compared to the previous model OMR logic and assumptions. In addition, the updated model addresses OMR requirements (e.g., first flush, turbidity bridge avoidance) that improve the evaluation of the Proposed Project and Refined Alternative 2b comparison to baseline. As these methodologies are consistent in model assumptions for the Proposed Project, Refined Alternative 2b, and Existing Conditions, legitimacy of the comparative analysis is preserved.

II.6.7.31 RESPONSE TO COMMENT O-NRDC-1-31

The California WaterFix (CWF) No Action Alternative (NAA) is not the same as the No Project Alternative in the DEIR. As explained in the CWF Final EIR at p. 11-274, a page cited by NRDC, CWF Existing Conditions are different than the CWF NAA because "the NAA includes sea level rise and other anticipated climate changes as well as expected increase in water right demands, implementation of facilities currently under construction, and ongoing implementation of fall X2." In contrast, the DEIR No Project Alternative represents the same climate and regulatory conditions as the DEIR Existing Conditions baseline, not the future projected climate change conditions represented in the CWF NAA. Therefore, DEIR No Project Alternative modeling is not comparable to the CWF NAA modeling. The CWF Final EIR did not find that the CWF Existing Conditions baseline resulted in significant impacts; the same is true for the DEIR.

In the CWF Final EIR, DWR determined that the projected warming due to the climate change was the main reason for the differences in upstream effects between CWF existing conditions and CWF NAA. In addition, the differences between CWF existing conditions and CWF NAA in upstream migration and rearing habitat were, to some extent, driven by the fact that the Fall X2 RPA was not in the CWF Existing Condition baseline, but Fall X2 was included in the CWF NAA. The comparative reduction in flow in the CWF NAA as a result of the implementation of Fall X2 caused the salmon flow-survival relationships to report the degraded upstream salmon habitat cited by NRDC. (See CWF Final EIR at p. 274 [a page cited by NRDC].) These differences are entirely irrelevant and not comparable to the modeling completed for the DEIR.

II.6.7.32 RESPONSE TO COMMENT O-NRDC-1-32

The DEIR contains accurate, scientifically-based analyses and presents all impacts of the Proposed Project. Please review Master Response 20, “Best Available Science,” for a more detailed discussion regarding best available science. Model description and assessment are provided in DEIR Chapter 4.4.7, “Impacts of the Proposed Project” with specific description of the analysis based on Nobriga and Rosenfield (2016) provided in DEIR Appendix E, Section E.3.3 “Delta Outflow-Abundance Analysis (Based on Nobriga and Rosenfield 2016).” The EIR does not use the Delta Outflow-Abundance model as a predictive tool in the sense of making predictions regarding future abundance indices; the purpose of model results is for comparative analysis, where differences in model outputs are compared. DWR included the analysis based on the Nobriga and Rosenfield (2016) model because it was judged to be more appropriate relative to other tools such as “X2-abundance index calculations” (subsequently included in the FEIR at the request of DFW; see FEIR Part III, Appendix E, Attachment 2, “Analysis with X2-Longfin Smelt Abundance Index Relationship”), consistent with the testimony of Dr. Rosenfield as witness for the commenter during the California WaterFix hearings.¹ DWR considers the model to be the best available that addresses potential differences as a result of Delta outflow², notwithstanding the shortcomings suggested by the comment. As noted in the FEIR (Section 4.4.7.4 [“Delta Outflow-Abundance” analysis for Longfin Smelt] and Appendix E Section E.3.3.1), the Beverton-Holt method suggested by the commenter was explored for the FEIR but was found to be a poorer fit to the empirical data than the Ricker method, so the Ricker method consistent with Nobriga and Rosenfield (2016) was retained. It would be anticipated that adaptive management of the spring outflow actions (see DEIR p.3-52) and knowledge gained from the Longfin Smelt Science Program (see DEIR p. 3-48) would inform refinements of this type of analysis.

With respect to the comment that “Given that survival from Age 0 (recruits) to Age 2 (spawner) fish is not related to flow in the Nobriga and Rosenfield model, the model will almost always predict higher abundance of Longfin smelt in flow scenarios with higher December-May Delta outflow, all other

¹ e.g., p.27-29 [https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/NRDC_TBI_DOW/nrdc_58_errata.pdf] and Hearing transcript part 2, volume 33, p.208 lines 10-22 [https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/docs/transcripts/2018/20180424_transcript.pdf]

² As noted in the DEIR (p.4-178), other analyses have suggested general hydrological conditions as opposed to specifically Delta outflow was a better explanation of trends in abundance indices of Longfin Smelt (Maunder et al. 2015).

parameters being equal”, it should be noted that outputting the predicted age 2 abundance indices from the model—i.e., the model’s representation of spawners (adults) as opposed to the fall midwater trawl indices (the representation of recruits), which were reported in the DEIR for consistency with Nobriga and Rosenfield (2016)—gives less difference between scenarios than comparing predicted fall midwater trawl indices, based on comparisons of differences between the means of annual medians by water-year type for the ‘poor’ juvenile survival scenario: for the proposed project compared to existing conditions (i.e., proposed project minus existing conditions), the differences were -2% in wet years, -5% in above normal years, -3% in below normal years, 0% in dry years, and -4% in critical years; for Refined Alternative 2b compared to existing conditions (i.e., Refined Alternative 2b minus existing conditions), the differences were -1% in wet years, -2% in above normal years, 0% in below normal and dry years, and -4% in critical years; as with juveniles, there was very large overlap between scenarios. Although the commenter suggests that “There is also no question that increases and decreases in Longfin smelt population abundance in this estuary correspond very strongly to Delta outflow rates”, the statistical correlation with outflow appears to be related to survival of juveniles (represented by the fall midwater trawl index) and not spawners, given that the modeled differences in juvenile abundance (fall midwater trawl indices) are greater than differences in spawner abundance (see above).

Although the DEIR concluded based on Delta Outflow-Abundance (based on Nobriga and Rosenfield 2016) that the impact would be less than significant, in consideration of CESA full mitigation requirements, DWR has identified Refined Alternative 2b as the preferred alternative in the FEIR and Refined Alternative 2b provides for additional outflow compared to the Proposed Project in the DEIR; this difference is reflected in the modeling with the Delta Outflow-Abundance (based on Nobriga and Rosenfield 2016) for Refined Alternative 2b compared to the Proposed Project (e.g., differences between predicted abundance indices by water year type compared to Existing Conditions ranging from 0 to -4% under Refined Alternative 2b compared to -2% to -11% under the Proposed Project). CESA mitigation will also include mesohaline tidal habitat restoration of nearly 400 acres (see FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP”). With respect to the comment’s concerns regarding assessment of differences in scenarios, see Response to Comment O-NRDC-1.

II.6.7.33 RESPONSE TO COMMENT O-NRDC-1-33

Results presented in DEIR Table 4.4-10, in DEIR Chapter 4.4.7.4, “Species-Specific Impacts,” are based on CalSim II the 82-year CalSim II planning period. Accordingly, results must observe appropriate use of CalSim II model results described in DEIR Appendix H Attachment 1-7 Section 3, “Appropriate Use of CalSim II and DSM2 Model Results.” This section states the model results should be reported as statistics based on long-term and water year type averages. Presentation of the results in the manner undertaken in the DEIR accounts for factors influencing the results by water year type, with the results in a given water year reflecting both the prior abundance (stock) and the Delta outflow conditions. Please see also Response to Comment O-NRDC-1-32 regarding differences in stock (spawners) from the modeling.

II.6.7.34 RESPONSE TO COMMENT O-NRDC-1-34

As noted in Response to Comment O-NRDC-1-33, model results should be reported as statistics based on long-term and water year type averages, and results reflect both prior abundance and Delta outflow conditions. The tabular summaries of results are in fact arithmetic means of the median values presented by water year type, as opposed to the medians suggested by the comment. DWR repeated the analysis using a deterministic implementation of the Nobriga and Rosenfield (2016) that focused on differences in mean values based on point coefficients, which gave similar results: for Refined Alternative 2b assuming poor juvenile survival, the differences in mean predicted fall midwater trawl indices was 3% less in wet years, 4% less in above normal years, 3% less in below normal and dry years, and 1% less in critical years.

II.6.7.35 RESPONSE TO COMMENT O-NRDC-1-35

The comment states that the Longfin Smelt is a “critically endangered species.” This characterization of Longfin Smelt is not consistent with the legal status of this species. Under CESA, Longfin Smelt is listed as “Threatened” (California Department of Fish and Wildlife CNDDDB Special Animals List 2019, page 18). Under the federal ESA the Longfin Smelt is not listed but is classified as a “Candidate” species for potential listing.

The comment does not agree with the methods used to calculate the signal to noise ratio in the Delta Outflow-Abundance analyses presented in the DEIR, but DWR stands by its analysis. However, regardless of the statistical process used to estimate the effects of signal to noise (i.e., margin of error) the key results presented in Tables 4.4-9 and 4.4-10 of the DEIR are that the Nobriga and Rosenfield (2016) model suggested that the differences in the abundance index between the Proposed Project and Existing Conditions scenarios would be very small, relative to the variability of the predicted values, which covers several orders of magnitude (i.e., the variability in the predictions within each scenario was substantially greater than the differences between scenarios). This outcome reflects, in part, the variability in Delta outflow associated with different water year types which is substantially greater than the minor differences in Delta outflow associated with changes in SWP operations.

The footnote to the comment claims that one cannot determine whether the modeled outcomes are significantly different. Comparing scenarios for statistical significance would be possible but is not appropriate given the underlying modeling assumptions from CalSim; the emphasis is placed on assessing biological significance given the magnitude of the modeled abundance indices.

While the DEIR recognizes a high degree of uncertainty in the modeling results, uncertainty in and of itself does not make the analysis approach invalid. Additionally, the Nobriga and Rosenfield (2016) model represents the most recent published relationship between Delta Outflow the subsequent year’s Longfin Smelt Abundance index and the uncertainty in the results of the analyses likely represent reflects uncertainty in the relationship.

Please note that the FEIR identifies Refined Alternative 2b as the preferred alternative.

II.6.7.36 RESPONSE TO COMMENT O-NRDC-1-36

As noted in Response to Comments O-NRDC-1-35, the differences in predicted fall midwater trawl abundance indices between operational scenarios were very small relative to the variability and overlap in predictions between scenarios, which formed the basis for the less than significant conclusion. The comment incorrectly states that the mean was divided by the confidence interval. The analysis in the DEIR actually divides the water-year type mean of the median by the confidence interval. As noted in the DEIR, the variability in the results span several orders of magnitude which is a reflection of the uncertainty in the modeled results. As explained further below and as also noted in Response to Comment O-NRDC-1-35, the modeled differences between the existing conditions and the proposed project scenarios are small, within the range of variability between scenarios, and not expected to have a measurable effect on the population of Longfin Smelt. Furthermore, the predicted differences in Longfin Smelt abundance are influenced to a much greater degree by natural variability of Delta outflow (e.g., different water year types) than by the minor differences in the modeled Longfin Smelt abundance due to operational changes (see DEIR, p.4-178).

The analysis based on the Nobriga and Rosenfield (2016) model application includes consideration of December–May Delta outflow, which depends on combined SWP and CVP operations. During this time period, the SWP is responsible for approximately 40% to 60% of Delta water operations, depending on month and water year type. Therefore, the effects of SWP operations are less than the change indicated by the application of the Nobriga and Rosenfield (2016) model to the CalSim II modeled Delta outflow, which the DEIR concludes is not significant.

With respect to the comment’s comparison to the Kimmerer (2011) paper, as the comment notes, that paper examined a different species with respect to entrainment, as opposed to longfin smelt and Delta outflow effects. Regardless, the Kimmerer (2011) paper examined relatively large differences (a mean of 10% of Delta Smelt population lost to entrainment), which is much greater than the differences between operational scenarios suggested for the analysis based on Nobriga and Rosenfield (2016). DWR disagrees with the comment’s suggestion that “the Proposed Project is expected to cause measurable reductions in the abundance of a critically imperiled species”, given the wide variability in the estimates of longfin smelt abundance index in comparison to the differences in means from the analysis based on Nobriga and Rosenfield (2016).

With respect to the compounding of effects every year that the commenter suggests would occur because of differences in outflow, such compounding would be reflected in the analysis based on Nobriga and Rosenfield (2016) because the analysis includes spawning stock; please see Response to Comment O-NRDC-1-32 regarding differences in stock (spawners) from the modeling.

DWR continued to have extensive discussions with CDFW following release of the DEIR regarding operations that would satisfy the CESA standard. DWR has identified Refined Alternative 2b (the environmentally superior alternative) as the preferred alternative in the FEIR. Please see Master Response 3, “The CEQA Process,” for further information.

Refined Alternative 2b includes additional adaptive management actions not originally included in the DEIR Proposed Project. Evaluation of Refined Alternative 2b showed that under a “Good” survival

scenario, Refined Alternative 2b was modeled to result in a reduction in the mean Longfin Smelt fall midwater trawl abundance index of 1 to 3 % relative to existing conditions and under a “Poor” survival scenario, Refined Alternative 2b was modeled to result in a reduction in the Longfin Smelt fall midwater trawl abundance index of 0 to 4 % relative to existing conditions, again with considerable overlap between scenarios (see also Response to Comment O-NRDC-1-32). Additionally, Refined Alternative 2b would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further improve environmental conditions beyond those identified in the DEIR.

This comment again repeats that claim that Longfin Smelt are a “critically endangered species” and a “critically imperiled species.” The correct CESA status is Threatened.

II.6.7.37 RESPONSE TO COMMENT O-NRDC-1-37

DWR acknowledges that the comment disagrees with the DEIR’s conclusion regarding the potential effects of the Proposed Project on Longfin smelt as a function of differences in Delta outflow from Existing Conditions. As discussed in Master Response 20, “Best Available Science,” the lead agency’s determination must be supported by substantial evidence. The DEIR included an assessment using the Nobriga and Rosenfield (2016) model to analyze the potential relationship between Delta outflow during the winter-spring period and Longfin Smelt abundance the following year. The results of the modeling were not concluded to demonstrate a significant difference between the Existing Condition and the Proposed Project as discussed in Responses to Comments O-NRDC-1-35 and O-NRDC-1-36.

Please note that the FEIR identifies Refined Alternative 2b as the preferred alternative. See Response to Comment O-NRDC 1-36 above for more details regarding Refined Alternative 2b.

II.6.7.38 RESPONSE TO COMMENT O-NRDC-1-38

DWR acknowledges that the DEIR modeling suggests that increases in salvage could occur, but the modeling does not account for real-time risk assessment that would reduce the risk of entrainment. The proposed real-time risk assessment process is described in DEIR Chapter 3.3.1.2 “Real-Time OMR Limits and Performance Objectives.” For example, the OMR limits would reduce the risk of entrainment by maintaining OMR flows that are more positive than -5,000 cfs, which is an important threshold for minimizing entrainment. The DEIR, Chapter 4.4, also notes that entrainment of special status fish species is low under existing conditions and would be expected to remain at low levels under the proposed project and alternatives.

Based on implementation of the real-time decision process and the low entrainment of special status fish species, the DEIR appropriately concludes that entrainment impacts on special status species are less than significant.

Please note that the FEIR identifies Refined Alternative 2b as the preferred alternative. Refined Alternative 2b also includes additional loss thresholds that would be implemented to further limit the potential for entrainment. See FEIR Part III, Chapter 5.3 “Salmonid Entrainment Loss Protections” for details regarding the proposed entrainment loss thresholds proposed for Refined Alternative 2b.

II.6.7.39 RESPONSE TO COMMENT O-NRDC-1-39

The comment states that survival of most salmonid species migrating through the Delta would decrease. However, the DEIR for long-term operations of the SWP identified a 0.1% increase in survival of CESA-listed Endangered Sacramento River Winter-run Chinook Salmon and small decreases in survival for other Chinook salmon species based on the Delta Passage Model as described below.

The DEIR suggested the potential for an average 0.5% decrease in through-Delta survival for Central Valley Fall-Run Chinook Salmon, and the potential for a 0.3% decrease in through-Delta survival of Central Valley Late Fall-run Chinook Salmon, based on the Delta Passage Model. Both estimates have generally overlapping confidence intervals between Existing Conditions and the Proposed Project (see DEIR figures 4.4-79, 4.4-80, 4.4-81, and 4.4-82). The DEIR notes the potential for ancillary protection by restrictions for listed species for these runs and given this and the small differences between scenarios, the DEIR appropriately concludes that reductions in survival for these Chinook Salmon runs are less than significant (Table 4.4-6).

The DEIR identified the potential for an average 0.6% decrease in survival of CESA-listed Threatened Central Valley Spring-run Chinook Salmon based on the Delta Passage Model. This potential decrease in survival reported by the Delta Passage Model is less than the minimum of 1% reported in the NMFS WaterFix Biological Opinion that the comment suggests would constitute a “notable reduction for and endangered species.” Further, real-time risk assessment-based operations are not modeled in CalSim II, and therefore, are not reflected in the Delta Passage Model outputs. Therefore, entrainment would likely be reduced, and survival likely would be higher than reported by the Delta Passage Model. Also, the reported reductions in survival reflect CVP and SWP operations. The SWP responsibility for these reductions in survival varies from 40% to 60% depending on the year type, which further reduces the SWP impact associated with reduced survival. Therefore, the DEIR appropriately concludes that reductions in survival described by the Delta Passage model for this species is less than significant (DEIR Table 4.4-6).

Additionally, DWR identified Refined Alternative 2b as the preferred alternative in the FEIR, which would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further improve environmental conditions beyond those identified in the DEIR. (See FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP.”)

II.6.7.40 RESPONSE TO COMMENT O-NRDC-1-40

The comment refers to the 2019 Federal Biological Opinions and not related directly to the DEIR or the Proposed Project. The Proposed Project and the 2019 Biological Opinions are not identical. Please see Master Response 13 for more information regarding the differences between the Proposed Project and the 2019 Biological Opinions. Please note that the preferred alternative, Refined Alternative 2b, is further distinct from the Federal 2019 Biological Opinions. See FEIR Part III, Chapter 5.3 for a complete description of Refined Alternative 2b.

OMR flexibility conditions are the only criteria that allow OMR flows more negative than -5,000 cfs during the January through June period. OMR flexibility, which allows OMR flow more negative than -5,000 cfs, may be implemented if conditions indicate no additional adverse impacts. More details regarding implementation of OMR flexibility for the preferred Alternative are provided in FEIR Part III, DEIR Chapter 5.3.1, “OMR Management” and in FEIR Part III, DEIR Chapter 3.3.1 “OMR Management” for the Proposed Project.

II.6.7.41 RESPONSE TO COMMENT O-NRDC-1-41

Please see Response to Comment O-NRDC-1-5 and Master Response 1, “Scope of Analysis.” With respect to the comment in footnote 34 about the doubling goal, discussion of the goal in the 2006 Bay-Delta Water Quality Control Plan notes (p.33): “The narrative objective for salmon protection in the Delta is consistent with the anadromous fish doubling goals of the CVPIA. Under the Anadromous Fish Restoration Program (AFRP), State, federal and local entities are continuing to implement programs within and outside the Delta geared towards achieving the CVPIA anadromous fish doubling goals.” That the Proposed Project is estimated to have little potential for negative effects to salmon relative to Existing Conditions in the Delta on the basis of the analyses considered in the DEIR indicates that it is not inconsistent with the overall program of work toward achieving the doubling goals, which as noted above includes multiple programs.

II.6.7.42 RESPONSE TO COMMENT O-NRDC-1-42

The DEIR evaluates potential impacts of each aspect of the Proposed Project and alternatives, including San Joaquin River I:E ratio implementation proposed for Alternatives 2a and 2b, to hydrology, water quality and aquatic biological resources. Analytical discussion of migrating steelhead is provided in DEIR Chapter 4.4.7, “Impacts of the Proposed Project.” Subsequent to release of the DEIR, DWR developed Refined Alternative 2b in coordination with CDFW. Refined Alternative 2b would curtail exports to maintain the current SWP spring outflow contribution. The additional outflow would be developed by operating to the SWP proportional share of the spring (April and May) maintenance flows consistent with flows observed from implementation of the 2008 and 2009 Biological Opinions. The results of additional modeling of the potential impacts of Refined Alternative 2b are presented in the FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP,” and in the updated appendices. Contrary to the comment statements that the I:E ratio in the 2009 Biological Opinion was an important component for the California WaterFix, it was not carried forward into the final ITP for the project. Also, the operative NMFS biological opinion

for coordinated operations of the CVP and SWP is the October 2019 Biological Opinion. The impact conclusions presented in the DEIR are unchanged in the FEIR.

II.6.7.43 RESPONSE TO COMMENT O-NRDC-1-43

With respect to the comment that “Numerous scientific studies and analyses have found a relationship between Delta outflow in the fall and the abundance of Delta smelt. See, e.g., Feyrer et al. 2008; Feyrer et al. 2011; MAST 2015; Polansky et al. in review,” the DEIR noted (p.4-156 and p.4-157) examples of analyses both supporting and not supporting fall outflow (or its surrogate, X2) as an influence on Delta Smelt abundance (survival).

The DEIR evaluates several scenarios in the SCHISM modeling analysis to identify changes in habitat area that result from combinations of Suisun Marsh Salinity Control Gate (SMSCG) operation and operations to maintain X2 at specific locations. The Proposed Project operations are intended to maintain X2 at 80 km in September and October and include operation of the SMSCG for 60 days (at different times depending on the water year). The Proposed Project was compared to historical operations in two specific years (2012, a Below Normal Year and 2017, a Wet Year; the latter reflecting operations that met the CESA criteria stipulated in the letter from DFW that the commenter cites) to test how Proposed Project operations compare to historical operations in that year. Additional scenarios are provided for comparison purposes.

The scenario represented by historical 2017 operations that were adaptively managed to achieve X2 of 74 km in September and October was included simply for comparison purposes because this would not necessarily be feasible in all Wet Years (i.e., as described in DEIR Appendix D, “SCHISM Model Results,” the scenario ignores upstream constraints). Additionally, maintaining X2 at 74km is subject to adaptive management and is not an operational requirement in all years (USFWS 2008). Therefore, the DEIR appropriately evaluated and described the results of the Proposed Project, relative to the historical operations in 2012 and 2017.

The results from the analyses show the following:

The 2012 analysis that commenced SMSCG operations for 60 days beginning on August 15 and considered water temperature and turbidity (water clarity) in addition to salinity generally suggested that modest differences between scenarios would occur at the scale of the North Delta arc or the Cache to Montezuma link corridor, with greater differences occurring in Suisun Marsh. In other words, the representation of the Proposed Project yielded more suitable habitat in Suisun Marsh, an area generally considered more suitable for Delta Smelt than Suisun Bay (Hammock et al. 2015), than historical 2012 operations.

The 2017 analysis that commenced SMSCG operations for 60 days beginning on September 1 and considered water temperature and turbidity (water clarity) in addition to salinity generally suggested the potential for the Proposed Project scenario to increase the area of suitable habitat relative to the Existing Conditions scenario, with the greatest increase in suitable habitat occurring in Suisun Marsh and modest increases at the larger scale of the North Delta arc. The results of this analysis are consistent with the conclusion that the Proposed Project would yield more suitable habitat in Suisun Marsh than historical 2017 operations.

Overall, these results suggest that the Proposed Project would provide a similar or greater area of suitable habitat for Delta Smelt than Existing Conditions.

Additionally, subsequent to the release of the DEIR, DWR included additional adaptive management actions as part of Refined Alternative 2b, which could further improve fall X2 conditions for Delta Smelt, relative to those identified in the DEIR.

Please also see Master Response 20, “Best Available Science,” regarding the applicable standard for the lead agency’s determination.

II.6.7.44 RESPONSE TO COMMENT O-NRDC-1-44

The DEIR identifies significance criteria and conducts an evaluation of the Proposed Project, relative to Existing Conditions using the best available tools. The DEIR draws significance conclusions based on the results of the analyses and the significance criteria. Based on all of the information presented in the analyses, including recognition that many quantitative results have large confidence intervals, specific components of the Proposed Project could not be modeled, and the effects identified in the analyses are a result of combined CVP and SWP operations (i.e., the SWP responsibility for the impacts on these species varies from 30% to 60% depending on the month and water year type), the DEIR appropriately concludes that the overall effect of implementing the Proposed Project in its entirety would result in less than significant impacts on these species. Neither the Proposed Project or Refined Alternative 2b would cause special status fish species populations to drop below self-sustaining levels based on the analyses presented in the DEIR. The Mandatory Findings of Significance are considered in the Initial Study (Appendix A).

Additionally, DWR identified Refined Alternative 2b as the preferred alternative in the FEIR, which would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further improve environmental conditions beyond those identified in the DEIR. See FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP.”

The comment does not establish any of the grounds for recirculation set forth in CEQA Guidelines Section 15088.5.

II.6.7.45 RESPONSE TO COMMENT O-NRDC-1-45

DEIR Chapter 4.6.1, “Cumulative Impacts,” contains a cumulative analysis that complies with the requirements of the State CEQA Guidelines Sections 15130(a), 15355(a). As stated in DEIR Chapter 4.6.1, Section 15064 of the State CEQA Guidelines explains that, “[t]he mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the long-term operation of the SWP’s incremental impacts are cumulatively considerable.” The analysis

presented in DEIR Chapter 4.6.1 is consistent with statutory and regulatory requirements to assess cumulative impacts and includes:

1. A determination of whether the impacts of related past, present, and future plans and projects would cause a cumulatively significant impact; and
2. A determination as to whether implementation of the Proposed Project would have a “cumulatively considerable” contribution to any significant cumulative impact. [See Sections 15130(a), (b), 15355(b), Section 15064 (h), and Section 15065 (a)(3), (c) of the State CEQA Guidelines.]

If a project’s contribution is not “cumulatively considerable, the project would not result in a significant impact notwithstanding the existence of a significant cumulative impact caused by the other cumulative projects. The discussion of cumulative impacts should reflect the severity of the impacts as well as the likelihood of their occurrence. The analysis should be guided by the standards of practicality and reasonableness, and it should focus on the cumulative impact(s) to which the other identified projects contribute, rather than to the attributes of other projects which do not contribute to the cumulative impact (State CEQA Guidelines 15130[b]).

The DEIR followed the two-step process required for cumulative impact analyses. As noted in the comment, the DEIR acknowledges that the cumulative impact of past Delta modifications and other past and present projects has contributed to the decline in Delta fish populations and habitat of protected species, which is considered a cumulatively significant impact. Performing the second step, the DEIR went on to consider whether the Proposed Project’s contribution to that impact is “cumulatively considerable.” The DEIR’s conclusion that the Proposed Project’s contribution is not cumulatively considerable is supported by substantial evidence.

The comment claims the DEIR’s reliance on Reclamation’s Reinitiation of Consultation on the Coordinated Long-Term Operation of the Central Valley Project and State Water Project Draft Environmental Impact Statement (ROC EIS) is inappropriate. While the DEIR references the ROC EIS in discussing the combined impacts of the CVP and SWP, the DEIR does not rely solely on that analysis to support the conclusion that the Proposed Project’s contribution to cumulatively significant impacts is not cumulatively considerable, and there is ample substantial evidence to support the conclusion independent of the ROC EIS. For example, as explained in the discussion of cumulative impacts in DEIR Chapter 4.6.1.5, “Aquatic Biological Resources,” impacts of SWP and CVP facilities on special-status species inhabiting and traversing the Delta are also evaluated in DEIR Chapter 4.4, “Aquatic Biological Resources.” As described in those species-specific analyses, many of the impacts are reported as joint SWP and CVP impacts because the models provide outputs for the SWP and CVP combined. The Proposed Project would only be responsible for a portion of the changes shown in the models, and even the minimal changes shown in the models would not actually occur for several reasons, including real-time and adaptive management actions, and other regulatory measures that would prevent impacts to species and habitat. The Proposed Project also includes environmental protection measures that would provide additional benefits for species and habitat that cannot be quantified. Moreover, as noted in DEIR Chapter 3.1.1, “Project Objectives,” the underlying purpose of the Proposed Project is to obtain an ITP from CDFW for SWP Long-Term Operations, which will provide even further regulatory

oversight to ensure the Proposed Project will not result in significant impacts to protected species by requiring that impacts be “fully mitigated” in compliance with CESA. Thus, the incremental contribution of the Proposed Project to larger cumulatively significant impacts is not cumulatively considerable, regardless of the analysis and conclusions in the ROC EIS, although that document provides additional evidence that supports the DEIR’s conclusions.

It is also important to note that the FEIR identifies Refined Alternative 2b as the preferred alternative. Refined Alternative 2b, which was refined in consultation with CDFW, reduces the amount of change compared to Existing Conditions and includes greater environmental protections compared to the Proposed Project. Thus, the contribution to cumulatively significant impacts is even less under Refined Alternative 2b, and likewise would not be cumulatively considerable.

II.6.7.46 RESPONSE TO COMMENT O-NRDC-1-46

Please see Master Response 2, “Baseline,” under subheading, “Treatment of Historical Conditions,” for discussion regarding past decline of fish populations. Please refer to Master Response 4, “Legal Standards,” for a discussion of how DWR included consideration of existing conditions, including the degraded condition of listed fish, as a part of the CEQA and CESA analyses. The DEIR evaluates long-term SWP operations compared to existing conditions. DEIR Chapter 4.6.1, “Cumulative Impacts,” contains a cumulative analysis that is consistent with the requirements of the State CEQA Guidelines. Section 15064 of the State CEQA Guidelines explains that, “[t]he mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the Proposed Project’s incremental impacts are cumulatively considerable.”

Additionally, DWR identified Refined Alternative 2b as the preferred alternative in the FEIR, which would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further improve environmental conditions beyond those identified in the DEIR.

II.6.7.47 RESPONSE TO COMMENT O-NRDC-1-47

The comment addresses CESA, not the adequacy of the DEIR. Please see Master Response 4, “Legal Standards,” and Master Response 17, “Application of CESA Standards,” for discussion of CESA as it relates to long-term operations of the SWP.

DWR does not agree with the comment that the adverse effects of SWP operations are not being fully mitigated because DWR has complied with the requirements 2008 and 2009 federal Biological Opinions and the 2009 ITP for Longfin Smelt, including the terms and conditions associated with any waivers obtained, and continues to implement the mitigation requirements included in these previous regulatory documents.

DWR has included a suite of protections in the Proposed Project and Refined Alternative 2b. Refined Alternative 2b, as the preferred alternative in the FEIR, would (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMT or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further minimize impacts below those identified in the DEIR and would fully mitigate impacts on CESA-listed species. See FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP.”

Although the comment references an early draft Biological Opinion dated July 1, 2019, which concluded that the Proposed Project, as defined at the time, would jeopardize listed salmonids, the referenced document was not approved and is not available from NMFS. The Biological Opinion issued on October 21, 2019 is approved by the Assistant Administrator of NOAA Fisheries and concludes that continued operation of the CVWP and SWP would not jeopardize the continued existence of the species.

DWR acknowledges that peer reviewers of the draft Biological Opinions found that listed species are likely to continue declining in abundance and that the draft Biological Opinions failed to use the best available science. DWR conducted analyses in the DEIR and ITP application using the best available science and concluded that impacts on CESA-listed species would be less than significant in the DEIR. Please also see Master Response 20, “Best Available Science,” regarding the applicable standard for the lead agency’s determination.

Please see Response to Comment O-NRDC-1-50 regarding authorizations for operation of the Oroville facilities.

II.6.7.48 RESPONSE TO COMMENT O-NRDC-1-48

As noted in DEIR Appendix H Attachment 1-5, “Estimation of SWP Proportion of Effects,” the scope of the project is to secure coverage for the long-term operations of the SWP under CESA. The approach used to identify the SWP proportion of any potential effects that may be a result of joint SWP/CVP operations is described in DEIR Appendix H Attachment 1-5. CDFW is the decision-making agency authority for determinations under CESA. Please see Master Responses 16, “Relationship to 2019 Biological Opinions,” and Master Response 17, “Application of CESA Standards,” for more details regarding CESA compliance.

Although a salvage threshold may be exceeded, OMR restrictions may not be required to benefit fish movement because a risk assessment may show that the risk is no longer present. Risk assessments would consider several factors, including but not limited to, real-time monitoring, historical trends of salmonids exiting the Delta and entering the South Delta, fish detected in salvage, and relevant environmental conditions. More details on off-ramping and the real-time risk assessment process are provided in FEIR Part III, DEIR Chapter 5.3.1, “OMR Management.”

In place of the Fall X2 action, DWR proposes the Delta Smelt Summer-Fall Habitat Action, intended to improve Delta Smelt food supply and habitat. Delta Smelt Summer-Fall Habitat Actions are based on the Synthesis of studies in the fall low-salinity zone of the San Francisco Estuary (FLaSH Synthesis). Please review DEIR Chapter 3.3.3, “Delta Smelt Summer-Fall Habitat Action,” for more details.

As noted in FEIR Part III, DEIR Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP,” the additional 100 TAF “Block” of Delta outflow in Summer or Fall would be available for use during June through October from water purchases or SWP project water. Although DWR is considering water purchases as an option to provide additional Delta outflow, it is not relying on water purchases. Additional outflow may also be achieved through export reductions.

Please note that Refined Alternative 2b is the preferred alternative for the FEIR.

II.6.7.49 RESPONSE TO COMMENT O-NRDC-1-49

DWR acknowledges that CDFW recommended salvage loss triggers for Delta Smelt and Spring-run Chinook Salmon. To date it has not been possible to develop loss triggers for these species because no reliable population estimates are available. Therefore, it has not been possible to identify loss trigger based on entrainment of the proportion of the population.

Since the release of the DEIR, DWR has held extensive discussions with CDFW, and has proposed to support development of a juvenile production estimate for Spring-run Chinook Salmon, which could be used to develop loss thresholds (see Part III of the FEIR, Refinements to the DEIR). In the interim, Refined Alternative 2b includes Spring-run Chinook Salmon loss thresholds using hatchery surrogates.

Additionally, DWR has held extensive discussions with CDFW, and DWR would implement several additional protective measures for Delta Smelt, including coordination with the Smelt Monitoring Group during the real-time risk assessment for OMR management, development of a Delta Smelt life cycle model that would be used to avoid entrainment, additional Smelt Larval Survey monitoring, monitoring for Delta Smelt in CCF, and coordination regarding OMR flows if salvage occurs or Delta Smelt are detected during these monitoring activities (see Part III of the FEIR, Refinements to the DEIR).

II.6.7.50 RESPONSE TO COMMENT O-NRDC-1-50

DWR does not propose any changes to its operations of SWP facilities on the Feather River, including Oroville Dam, (Oroville Facilities) as a part of this Project.

As the comment notes, a lead agency must analyze a “project,” which is defined as the “whole of the action,” CEQA Guidelines Section 15378(a). Where actions have independent utility from one another, however, the separate actions need not be analyzed in a single environmental document. See *Del Mar Terrace Conservancy, Inc. v. City Council of the City of San Diego* (1992) 10 Cal.App.4th 712. Operations of the Oroville Facilities are governed by a license issued by the Federal Energy Regulatory Commission (FERC) pursuant to the Federal Power Act (FPA). The original FERC license to operate the Oroville Facilities expired in January 2007. Since January 2007, FERC has issued an annual license that renews automatically each year, authorizing DWR to continue operating to the terms of the original FERC

license until a new license is issued. On March 24, 2006, DWR filed a Settlement Agreement for the relicensing of the Oroville Facilities with FERC. The Settlement Agreement contains proposed terms and conditions for the operation of the Oroville Facilities for a proposed license term of 50 years. Through the Settlement Agreement, federal and state regulatory agency parties (including the California Department of Fish and Wildlife, which is the regulatory agency charged with implementing the California Endangered Species Act) agreed that the terms and conditions set forth in the Settlement Agreement resolve all issues that may arise in the issuance of all permits and approvals associated with the issuance of the new project license, including but not limited to ESA Section 7, NEPA and CEQA. The settling parties, including DFW, further agreed that the proposed license articles satisfy the statutory, regulatory, or other legal requirements for the protection, mitigation and enhancement of natural resources, water quality, recreation and cultural and historic resources affected by the operation of the Oroville Facilities under the proposed license, and that each public agency's statutory, regulatory, and or other legal responsibilities are, or can be, met through FERC's approval without material modification of the Settlement Agreement and DWR's subsequent implementation of the new project license.

Further, NMFS and USFWS have issued separate biological opinions for the operation of the Oroville Facilities under the proposed new project license, and the State Water Resources Control Board issued a water quality certification pursuant to Section 401 of the Clean Water Act setting forth additional terms and conditions which will ensure the Oroville Facilities continue to meet all applicable water quality standards during the life of the license. Because the operations of the Oroville Facilities are covered under a separate regulatory framework which neither affects nor is affected by the Proposed Project, it is appropriate for DWR to consider the Project in this EIR without expanding the scope to include analysis of operations at the Oroville Facilities.

Please see Master Response 20, "Best Available Science," regarding the applicable standard for the lead agency's determination. Please also see Master Response 4, "Legal Standards," and Master Response 17, "Application of CESA Standards," for a discussion of CESA in relation to long-term operations of the SWP.

II.6.7.51 RESPONSE TO COMMENT O-NRDC-1-51

Modeling conducted for the Proposed Project is not the same as the Trump Administration's Biological Opinions. DWR conducted modeling specifically for the Proposed Project for use in the DEIR, which was conducted independently from the Reinitiation of Consultation process led by the U.S. Bureau of Reclamation. DWR's Proposed Project includes some similar actions as those described in the U.S. Bureau of Reclamation's Proposed Action, but also includes additional protections for CESA-listed species such as a limit on OMR flows during storm flex operations.

DWR disagrees that the Proposed Project is inconsistent with the requirements of CESA. As described in DEIR Chapter 3, "Project Description," the Proposed Project includes multiple protections for CESA-listed species. Additionally, subsequent to the release of the DEIR, through extensive meetings with CDFW, DWR identified Refined Alternative 2b as the preferred alternative in the FEIR, which would: (1) result in the total amount of SWP water exported from the Delta to generally be expected to remain

the same as under Existing Conditions; (2) provide CDFW with greater authority in the real-time decision making process and implement decisions from WOMET or CDFW; (3) include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; (4) include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and (5) include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further improve environmental conditions beyond those identified in the DEIR. These additional protections are refinements to Alternative 2b, which was evaluated in the DEIR, and do not require recirculating a revised DEIR. See FEIR Part III, Chapter 5.3, “Refined Alternative 2b – Proposed Project with Dedicated Water for Delta Outflow from SWP.”

Please see Master Response 4, “Legal Standards,” and Master Response 17, “Application of CESA Standards,” for a discussion of CESA in relation to long-term operations of the SWP.

II.6.7.52 RESPONSE TO COMMENT O-NRDC-1-ATT-1

See Response to Comment O-NRDC-1-16.

II.6.7.53 RESPONSE TO COMMENT O-NRDC-1-ATT-2

See Response to Comment O-NRDC-1-37.

II.6.7.54 RESPONSE TO COMMENT O-NRDC-1-ATT-3

See Response to Comment O-NRDC-1-45.

II.6.7.55 RESPONSE TO COMMENT O-NRDC-1-ATT-4

See Responses to Comments O-NRDC-1-45 and O-NRDC-1-51.

II.6.7.56 RESPONSE TO COMMENT O-NRDC-1-ATT-5

See Responses to Comments O-NRDC-1-12 and O-NRDC-1-47.

II.6.7.57 RESPONSE TO COMMENT O-NRDC-1-ATT-6

See Response to Comment O-NRDC-1-13.

II.6.7.58 RESPONSE TO COMMENT O-NRDC-1-ATT-7

See Response to Comment O-NRDC-1-14.

II.6.7.59 RESPONSE TO COMMENT O-NRDC-1-ATT-8

See Responses to Comments O-NRDC-1-14, O-NRDC-1-45, and O-NRDC-1-49.

II.6.7.60 RESPONSE TO COMMENT O-NRDC-1-ATT-9

See Response to Comment O-NRDC-1-16.

II.6.7.61 RESPONSE TO COMMENT O-NRDC-1-ATT-10

See Response to Comment O-NRDC-1-18.

II.6.7.62 RESPONSE TO COMMENT O-NRDC-1-ATT-11

See Response to Comment O-NRDC-1-18.

II.6.7.63 RESPONSE TO COMMENT O-NRDC-1-ATT-12

See Response to Comment O-NRDC-1-18.

II.6.7.64 RESPONSE TO COMMENT O-NRDC-1-ATT-13

See Response to Comment O-NRDC-1-18.

II.6.7.65 RESPONSE TO COMMENT O-NRDC-1-ATT-14

See Response to Comment O-NRDC-1-18.

II.6.7.66 RESPONSE TO COMMENT O-NRDC-1-ATT-15

See Responses to Comments O-NRDC-1-19 and O-NRDC-1-31.

II.6.7.67 RESPONSE TO COMMENT O-NRDC-1-ATT-16

See Response to Comment O-NRDC-1-31.

II.6.7.68 RESPONSE TO COMMENT O-NRDC-1-ATT-17

See Response to Comment O-NRDC-1-35.

II.6.7.69 RESPONSE TO COMMENT O-NRDC-1-ATT-18

See Response to Comment O-NRDC-1-37.

II.6.7.70 RESPONSE TO COMMENT O-NRDC-1-ATT-19

See Response to Comment O-NRDC-1-41.

II.6.7.71 RESPONSE TO COMMENT O-NRDC-1-ATT-20

See Response to Comment O-NRDC-1-42.

II.6.7.72 RESPONSE TO COMMENT O-NRDC-1-ATT-21

See Response to Comment O-NRDC-1-43.

II.6.7.73 RESPONSE TO COMMENT O-NRDC-1-ATT-22

See Response to Comment O-NRDC-1-43.

II.6.7.74 RESPONSE TO COMMENT O-NRDC-1-ATT-23

See Response to Comment O-NRDC-1-47.

II.6.7.75 RESPONSE TO COMMENT O-NRDC-1-ATT-24

See Response to Comment O-NRDC-1-47.

II.6.7.76 RESPONSE TO COMMENT O-NRDC-1-ATT-25

See Response to Comment O-NRDC-1-47.

II.6.7.77 RESPONSE TO COMMENT O-NRDC-1-ATT-26

See Response to Comment O-NRDC-1-6.

II.6.7.78 RESPONSE TO COMMENT O-NRDC-1-ATT-27

See Response to Comment O-NRDC-1-6.

II.6.7.79 RESPONSE TO COMMENT O-NRDC-1-ATT-28

See Response to Comment O-NRDC-1-45.

From: [Obegi, Doug](#)
To: [LTO](#)
Cc: [Wilcox, Carl@Wildlife](#); [Little, Shannon@Wildlife](#)
Subject: RE: LTO of SWP Project
Date: Monday, January 6, 2020 1:50:45 PM
Attachments: [Final Compiled Reviews - Anadromous Fishes BiOp \(1\).pdf](#)
[Final Compiled Reviews - Delta Smelt BiOp \(1\).pdf](#)
[CDFW ROC on LTO EIS comment letter 8-21-19.pdf](#)
[DOI Secretary to POTUS 8-30-16.pdf](#)
[ROC on LTO Track 1 EA cover e-mail_07132018 \(002\).docx](#)
[fws-response-to-reinitiation-request-08032016.pdf](#)
[sac_delta_framework_070618 .pdf](#)
[CDFW denial of consistency determination request fall x2 2017.pdf](#)
[delta_outflow_4.18.18.pptx](#)
[DOI Secretary to POTUS 8-30-16.pdf](#)
[Excerpt from final EIS EIR for WaterFix.pdf](#)
[Fall outflow supporting materials.pdf](#)
[Polansky et al 2019 in review \(Delta Smelt\).pdf](#)

Attached are several of the documents that are incorporated by reference in our comment letter; unfortunately, many of the referenced documents (2019 biological opinions, July 2019 NMFS jeopardy biological opinion, 2017 SWRCB Scientific Basis Report) are too large to email. Please include all documents that are incorporated by reference in the administrative record for both CEQA and CESA purposes.

2-1

From: Obegi, Doug
Sent: Monday, January 6, 2020 1:07 PM
To: LTO@water.ca.gov; lto@water.gov; Banonis, Michelle@DWR <Michelle.Banonis@water.ca.gov>
Cc: [Bobker, Gary \(Mail Contact\) <bobker@sbcglobal.net>](mailto:Bobker, Gary (Mail Contact) <bobker@sbcglobal.net>); jon@baykeeper.org; [Rachel Zwillinger \(rzwillinger@defenders.org\) <rzwillinger@defenders.org>](mailto:Rachel Zwillinger (rzwillinger@defenders.org) <rzwillinger@defenders.org>); [Barry Nelson \(barry@westernwaterstrategies.com\) <barry@westernwaterstrategies.com>](mailto:Barry Nelson (barry@westernwaterstrategies.com) <barry@westernwaterstrategies.com>); John McManus <john@goldenstatesalmon.org>; [Chris Shutes \(blancapaloma@msn.com\) <blancapaloma@msn.com>](mailto:Chris Shutes (blancapaloma@msn.com) <blancapaloma@msn.com>); Poole, Kate <kpoole@nrdc.org>; Wilcox, Carl@Wildlife <Carl.Wilcox@wildlife.ca.gov>; [Dibble, Chad@Wildlife \(Chad.Dibble@wildlife.ca.gov\) <Chad.Dibble@wildlife.ca.gov>](mailto:Dibble, Chad@Wildlife (Chad.Dibble@wildlife.ca.gov) <Chad.Dibble@wildlife.ca.gov>); Little, Shannon@Wildlife <Shannon.Little@wildlife.ca.gov>
Subject: LTO of SWP Project

Attached are comments on DWR's Draft Environmental Impact Report regarding operations of the State Water Project, including exhibits. These comments are submitted on behalf of NRDC, Defenders of Wildlife, The Bay Institute, San Francisco Baykeeper, California Sportfishing Protection Alliance, and Golden State Salmon Association. If you have any problems opening the attachment or exhibits, please let me know at your earliest convenience.

In addition, DWR's webpage (<https://water.ca.gov/News/Public-Notices/November-19/NOA-DEIR-Long-Term-SWP-Operation>) identifies 2 distinct email addresses to which to address comments, so we have sent this to both addresses in an abundance of caution.

Would you please kindly confirm receipt of the attached comment letter and exhibits? I intend to follow up with several additional documents that are incorporated by reference in our comments, which also should be included in the administrative record for this matter.

Thank you,

Doug

DOUG OBEGI

*Senior Attorney**

Water Program

NATURAL RESOURCES

DEFENSE COUNCIL

111 SUTTER ST., 21ST FLOOR

SAN FRANCISCO, CA 94104

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DOBEGI@NRDC.ORG

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Please save paper.
Think before printing.

** Admitted to practice in California*

II.6.8 LETTER O-NRDC-2 – NATURAL RESOURCES DEFENSE COUNCIL, DOUG OBEGI; THE BAY INSTITUTE, GARY BOBKER; DEFENDERS OF WILDLIFE, RACHEL ZWILLINGER; SAN FRANCISCO BAYKEEPER, JONATHAN ROSENFELD, PH.D; CALIFORNIA SPORTFISHING PROTECTION ALLIANCE, CHRIS SHUTES; AND GOLDEN STATE SALMON ASSOCIATION, JOHN McMANUS—JANUARY 6, 2020

II.6.8.1 RESPONSE TO COMMENT O-NRDC-2-1

O-NRDC-2-1 provides supporting and cited documents for comments provided in O-NRDC-1, and requests that all cited documents incorporated by reference be included as part of the administrative record. Please see Responses to Comments O-NRDC-1-ATT-1 through ATT-27, and O-NRDC-2-ATT-1 through ATT-3. No direct response is required.

II.6.8.2 RESPONSE TO COMMENT O-NRDC-2-ATT-1

This document was attached to Letter O-NRDC-2 as supporting documentation for comments made in Letter O-NRDC-1. It was not directly referenced within Letter O-NRDC-1, however, it is referenced within other attachments to that letter. See Response to Comment O-NRDC-1-ATT-18.

II.6.8.3 RESPONSE TO COMMENT O-NRDC-2-ATT-2

This document was attached to Letter O-NRDC-2 as supporting documentation for comments made in Letter O-NRDC-1. It was not directly referenced within Letter O-NRDC-1, however, it is referenced within other attachments to that letter. See Responses to Comments O-NRDC-1-ATT-3 and O-NRDC-1-ATT-4.

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From: [Friend, Megan](#)
To: [LTO](#)
Subject: LTO of SWP Project
Date: Monday, January 6, 2020 1:30:41 PM
Attachments: [LTO of SWP Project COMMENTS 1.6.2020.xlsx](#)

Dear California Department of Water Resources:

Please accept these 3,915 public comments (attached) from online members and activists of the Natural Resources Defense Council (NRDC), urging you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to the 25 million Californians who depend on the delta for drinking water and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thank you,
NRDC

MEGAN FRIEND

Senior Regional Digital Advocacy & Partnerships Campaign Manager

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3-1

II.6.9 LETTER O-NRDC-3 – NATURAL RESOURCES DEFENSE COUNCIL, MEGAN FRIEND—JANUARY 6, 2020

II.6.9.1 RESPONSE TO COMMENT O-NRDC-3-1

This document is a cover letter for the submission of more than 3,000 individual letters written by NRDC members. The majority of these are identical or very similarly worded letters to the body of the cover document, and are addressed in Master Response 27, "Form Letter Response - NRDC" in FEIR Part II.1.27. Copies of all the identical or similarly worded form letters are contained in FEIR Attachment 1, "NRDC Form Letters". Letters received that raised additional substantive comments on the DEIR not addressed in the standard form letter wording have been responded to individually within FEIR Part II.7.

From: [Barbara Barrigan-Parrilla](#)
To: [LTO](#)
Cc: [Tim Strohane](#)
Subject: Restore the Delta comments on Draft (DEIR) for Long-term Operation of the California State Water Project
Date: Monday, December 30, 2019 3:45:34 PM
Attachments: [20193012 Restore the Delta comments LTO SWP DEIR Final.docx](#)

Dear You Chen Chou,

Please find attached our comment letter in response to the Draft Environmental Impact Report for Long-term Operation of the California State Water Project. Please confirm for us your receipt of the attached comment letter.

Thank you. I hope you have a good holiday.

Sincerely,

Barbara Barrigan-Parrilla
Executive Director
925 N Yosemite St, Unit 3
Stockton, CA 95203
office: (209) 475-9550
cell: (209) 479-2053



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42 N. Sutter Street, Suite 506
Stockton, CA 95202
(209) 475-9550
www.restorethedelta.org

December 30, 2019

via email: LTO@water.ca.gov

You Chen Chou
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236-0001

Subject: Restore the Delta comments on Draft Environmental Impact Report (DEIR) for Long-term Operation of the California State Water Project

Dear You Chen Chou:

Restore the Delta advocates for local Delta stakeholders to ensure that they have a direct impact on water management decisions affecting the water quality and well-being of their communities, and water sustainability policies for all Californians. We work through public education and outreach so that all Californians recognize the Sacramento-San Joaquin Delta as part of California's natural heritage, deserving of restoration. We fight for a Delta whose waters are fishable, swimmable, drinkable, and farmable, supporting the health of the San Francisco Bay-Delta Estuary, and the ocean beyond. Our coalition envisions the Sacramento-San Joaquin Delta as a place where a vibrant local economy, tourism, recreation, farming, wildlife, and fisheries thrive as a result of resident efforts to protect our waterway commons.

We appreciate the opportunity to comment on this DEIR for the above-described action by the California Department of Water Resources (DWR). It is our understanding that the EIR for long-term operations of the State Water Project (SWP) would have the following applications:

- It will be used by the California Department of Fish and Wildlife (CDFW) as a basis for issuing new incidental take permits (ITPs) to DWR for four listed species: long fin smelt, Delta smelt, winter-run Chinook salmon, and spring-run Chinook salmon. Consequently, we expect there will be a substantial fisheries/aquatic biology section of this document. In this connection, aquatic biology and ecosystem issues will be critical to the adequacy of this EIR.

- The new EIR will evaluate operations “consistent with applicable legal requirements” and that those operations include close coordination with the federal Central Valley Project (CVP), including the Coordinated Operating Agreement (COA) between the CVP and the SWP as well as operational requirements resulting from ongoing re-initiation of federal Endangered Species Act (ESA) consultation on coordinated long-term CVP and SWP operations.
- We wondered in our NOP comments why the two projects are not doing a coordinated EIR/EIS under both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA)—together, rather than separately. The NOP says that DWR and USBR requested re-initiation of consultation with FWS and NMFS on their coordinated operations, yet their environmental reviews will proceed separately. We urged DWR that this separation of the long-term operations environmental reviews needs more explanation so that the public may adequately understand DWR’s reasoning.
- We understand from the NOP issued in April 2019 that new, updated operating criteria will be operated particularly in the Delta (Banks PP, Suisun Marsh Salinity Control Gates, and North Bay Aqueduct), and will be evaluated. We understand these new operating criteria also include the new COA changes negotiated in December 2018 between the US Bureau of Reclamation and DWR.

General Comments

Summary of Specific Comments:

1. The baseline date for this DEIR is improperly set.
2. The COA Addendum results in significant changes to Delta hydrology and water quality—specifically in dry and critically dry years.
3. Climate change sensitivity analysis is likely not sensitive enough to the effects of climate change, rendering DEIR impacts analysis inadequate.
4. The DEIR fails to evaluate SWP long-term operations as necessarily involving climate change adaptations, since it is long-established articles of faith among California water agencies that climate change will affect their adaptations to reduced water supplies.
5. The DEIR fails to take account of how the COA Addendum may reduce State Water Project’s capacity to adapt to climate change.
6. The DEIR provides no sea level rise analysis for long-term operations of the SWP (including a single tunnel project) as it would affect Delta operations.

7. The DEIR does show that, even under these flawed assumptions about climate change, dramatic reductions in both spring and fall Delta outflow from the modeling addenda—this will harm endangered fish, Suisun Marsh, and Delta drinking water quality. In turn these latter effects on Delta water quality will likely raise the cost of drinking water for Delta environmental justice communities.
8. Reduced San Joaquin River flows signal that under proposed long-term SWP operations, conditions will occur more frequently in the near future conducive to growth of harmful algal blooms (HABs).
9. The increased salinity and HABs presence in these waters would increase water treatment costs and potentially impose water rate hikes to cover those rising costs. Increased water rates would disproportionately impact environmental justice ratepayers in communities affected by these adverse changes in local water quality.
10. The DEIR should address the potential for impacts to the Stockton water diversion, since that was a significant point of contention concerning the flow and salinity impacts of California WaterFix, before this latter project was cancelled by the Newsom Administration. Restore the Delta is concerned that flow and salinity impacts—and potential HABs impacts—will drive up water treatment costs for the City of Stockton and its water ratepayers, in neighborhoods affected by adverse changes in drinking and surface water quality.
11. DWR must incorporate into its SWP operational program steps it will take to reduce or eliminate HABs in the Delta. The DEIR is fundamentally inadequate in omitting HABs as a problem for public health and environmental justice in the Delta.
12. Despite human reliance on subsistence fishing throughout the Delta and Suisun Marsh, the DEIR contains no environmental justice impacts discussion on the Delta, nor cumulative EJ impacts if increased exports continue to degrade Delta water quality.
13. Increased presence of stressors like selenium and mercury from alterations to hydrology (flow volume, timing, and magnitude) and water quality could increase food web pathways to humans relying on subsistence fishing. The DEIR fails to analyze these potential effects on humans
14. The DEIR fails to properly evaluate how worsening salinity and other water quality constituents all over Suisun Marsh would reduce subsistence fishing opportunities throughout the marsh for Delta EJ residents reliant on fish in this and other parts of the San Francisco Bay-Delta Estuary.
15. The DEIR fails to mitigate modeled degradation of drinking water quality for Contra Costa Water District at Rock Slough and Antioch intakes. Degradation of water quality is not lawful under the federal Clean Water Act, the state Porter-Cologne

Water Quality Control Act, and State Water Resources Control Board Resolution 68-16, none of which authorize degradation of water quality.

16. The single-tunnel option is not listed among cumulative impact projects in Table 4.6-1 of EIR. Does this mean that DWR regards it as a speculative project at present? Once the design is put forward DWR must issue a supplemental EIR on long-term operations of the SWP since operations will change to accommodate tunnel capacity and operational rules.

Thank you for the opportunity to comment on this DEIR. If you have any questions, do feel free to contact us.

Sincerely



Barbara Barrigan-Parrilla
Executive Director
barbara@restorethedelta.org



Tim Stroshane
Policy Analyst
tim@restorethedelta.org

Attachments:

1. Restore the Delta, *Climate Equity and Seismic Resilience for the San Francisco Bay-Delta Estuary*, August 2019.
2. Screen shots of DEIR showing searches showing no environmental justice or public health analyses or mitigations.

cc: Michelle Ghafar, Earthjustice
Nina Robertson, Earthjustice
Thomas H. Keeling, The Freeman Firm
Kelley Taber, Somach & Simmons
S. Dean Ruiz, South Delta Water Agency
John Herrick, South Delta Water Agency
Dante Nomellini, Central Delta Water Agency
Osha Meserve, Soluri Meserve LLC
Roger Moore, Law Office of Roger B. Moore
Jonas Minton, Planning & Conservation League
Bob Wright, Sierra Club California
Bill Jennings, California Sportfishing Protection Alliance
Carolee Krieger, California Water Impact Network
Michael B. Jackson, California Water Impact Network
Barbara Vlamis, AquAlliance
Regina Chichizola, Save California Salmon
Tom Stokely, Save California Salmon
Patricia Schifferle, Pacific Advocates

Kathryn Phillips, Sierra Club California
Adam Keats, Center for Food Safety
Doug Obegi, NRDC
Kate Poole, NRDC
Jon Rosenfield, San Francisco Baykeeper
Gary Bobker, The Bay Institute
Noah Oppenheim, PCFFA
John McManus, Golden State Salmon

Attachment 1
Specific Restore the Delta Comments
State Water Project Long-Term Operations Draft EIR

1. The baseline date for this DEIR is improperly set. The DEIR states that its baseline is set at April 19, 2019 (or the actual release date of April 22, 2019, that Michele Banonis stated at the NOP hearing in May 2019. (DEIR, p. 4-2.). However, there is no explanation as to why its baseline date is not the date of the Coordinated Operating Agreement Addendum (COA Addendum) executed on December 12, 2018. It is strange and nonsensical for the DEIR to state that “The baseline used in this DEIR includes the 2018 COA Addendum, as opposed to the unmodified 1986 version of the COA, to accurately reflect the existing conditions in the Delta as of April 19, 2019.” The reason it should be the date of the COA Addendum is that this seems to be the date of operational rules that made it necessary for the NOP to be issued and the DEIR prepared in the first place. It is *this* date (that is December 12, 2018) that chronologically includes the NOP date, and not the other way around. If DWR wants to include the COA Addendum as “part” of the baseline, just make its execution date the baseline date for the DEIR.
2. The COA Addendum results in significant changes to Delta hydrology and water quality—specifically in dry and critically dry years. We disagree that the changes represented in the COA Addendum resulted in a “minimal change” to surface water hydrology in the Delta, upstream hydrology, and upstream water quality. (DEIR, p. 4-2.) This completely glosses over the fact that the COA Addendum reveals that CVP reservoir storage will gain average storage levels year-round, while the State Water Project’s Lake Oroville will shoulder much greater responsibility for meeting flow obligations under D-1641 and the 2006 Bay-Delta Water Quality Control Plan (See DEIR, p. 4-2, compared with Appendix B COA Addendum, Figures 2, 8, 10, and 12.). The Central Valley Project reservoirs serve primarily agricultural water contractors, while the State Water Project serves primarily urban water contractors, many of whose customers are residential water users.
3. Climate change sensitivity analysis is likely not sensitive enough to the effects of climate change, despite being based on the more recent CMIP5 model suite (which we saw discussed in some detail in Appendix F of Volume 2 of the DEIR). We find

that the hydrology and water quality portions of Chapter 4 do not specifically indicate what the sensitivity ranges are for the impacts that are described in Sections 4.2, hydrology, and 4.3, water quality, so a reasonable reader cannot know what the sensitivity ranges are for the findings made in these sections. In addition, we find too that Appendix F does not incorporate more recent science on potential hydrologic, water quality, and temperature impacts derivable from climate change models used in California's own Fourth Climate Assessment from 2018. The hydrology that is used in CalSIM II is still the 82-year historical hydrology, rather than hydrologic modeling inputs available from the Fourth California Climate Assessment—this means that DWR is continuing to look historically at hydrology rather than to future modeling where “stationarity is dead” as a broad understanding of climate science; in the Central Valley this means that the past is not a guide to future hydrology and water quality.

4. The DEIR fails to evaluate SWP long-term operations as necessarily involving climate change adaptations, since it is long-established articles of faith among California water agencies that climate change will affect their adaptations to reduced water supplies. It might be objected by DWR that reliance on future modeling would be speculative—rather than on CalSIM II's 82-year hydrology record—for the required CEQA analyses of hydrology, water quality, aquatic resources, and tribal cultural resources. This would be ironic, since DWR and many other state agencies are making policy and investment decisions today about the future based on modelers' best analytic and scientific efforts to peer into the future. For example, several reports to the California Energy Commission (whose authors included DWR or other state water-related employees) that supported the 2018 Fourth California Climate Assessment rely on downscaling of general circulation models used in standard climate modeling research to construct future hydrology and water quality projections. These reports find that developed water supplies, including those of the state and federal projects, will decrease substantially as climate change unfolds in California. Such supply reductions are not contemplated in this DEIR. DWR is clearly using a stationarity-based modeling approach for this DEIR concerning its *long-term operations of the State Water Project*. DWR's decision to avoid hydrological and water quality modeling that is future oriented renders the DEIR fundamentally and functionally inadequate to the task of evaluating the environmental impacts of SWP long-term operations.
5. Thus while purporting to analyze climate change impacts of the proposed COA Addendum, the DEIR instead fails to take account of how the COA Addendum may reduce State Water Project's capacity to adapt to climate change. We already know from the COA Addendum that Lake Oroville will be called upon much more to “backstop” water quality objectives while the Central Valley Project continues to export water from the Delta. This likelihood is supported by Appendix C, Attachment 2-1, Table 1c-1 showing monthly average decreases in south-of-Delta SWP exports of between 2 thousand acre-feet (TAF) and 28 TAF from CalSIM II modeling at San Luis Reservoir in critical years—nearly year-round. There is no analysis in the DEIR of the potential for climate-change-induced reduced reservoir storage, Delta exports,

Delta outflow, or degraded water quality and increased flood risk impacting long-term operations of the State Water Project—and most important, whether the SWP can properly adapt to such conditions while remaining operationally and financially viable. We attach Restore the Delta's discussions of these issues in our *Climate Equity and Seismic Resilience* report which we issued in August 2019 where we summarize key California Fourth Climate Assessment report findings in relation to water supply, flooding, Delta levee issues, and river flow. See especially Chapter 3 and Appendix E in our report.

6. The DEIR provides no sea level rise analysis for long-term operations of the SWP (including a single tunnel project) as it would affect Delta operations. Only precipitation and temperature changes were considered. Clifton Court Forebay is at very low elevation. Analysis is needed to determine the potential for inundation at SWP intakes at tunnel project intakes in the north Delta and at Clifton Court Forebay and Banks Pumping Plant. Since the DEIR considers tunnel project intakes as part of a cumulative projects list, this analysis is absent, except for listing the tunnel in the cumulative impacts chapter. This project is in design now by the Delta Conveyance Design and Construction Authority; it is not speculative. Therefore more detailed analysis of the cumulative impacts of sea level rise is needed in this DEIR as well as discussion of how SWP long-term operations would mitigate sea level rise at the tunnel intakes. But such analysis is omitted from the DEIR. Therefore the DEIR is inadequate.
7. The DEIR does show that, even under these flawed assumptions about climate change, dramatic reductions in both spring and fall Delta outflow from the modeling addenda—this will harm endangered fish, Suisun Marsh, and Delta drinking water quality. In turn these latter effects on Delta water quality will likely raise the cost of drinking water for Delta environmental justice communities.
8. The DEIR modeling appendix shows that San Joaquin River monthly average flows at Vernalis will decrease on average between 7 and 212 cubic feet per second (cfs) From winter through fall months in critical years, and between 4 and 238 cfs in dry years. (Attachment C, Attachment 2-2, Table 5-1.) These are crucial water year types where the river's ecosystems and subsistence fishing species need more flow for improved water quality (not only for salinity but to help control water temperatures). Yet these reduced San Joaquin River flows signal that under proposed long-term SWP operations, conditions will occur more frequently in the near future conducive to growth of harmful algal blooms (HABs). HABs have been plaguing south Delta and Stockton area river channels, including Mormon Slough near downtown Stockton.
9. In addition to reduced San Joaquin River flows, Old and Middle River reverse flows (upstream flow to the state and federal pumps near Tracy and Byron) will also increase dramatically in dry and critically dry years. (Appendix C, Attachment 2-2, Table 7-1.) These flow changes strongly signal that salinity will worsen and residence time of water in areas like Discovery Bay, and Contra Costa Water

District's drinking water intakes located in Rock Slough, Victoria Island, and Middle River. Reduced downstream flows in these areas will increasingly trap cyanobacteria and generate more harmful algal blooms. The increased salinity and HABs presence in these waters would increase water treatment costs and potentially impose water rate hikes to cover those rising costs. Increased water rates would disproportionately impact environmental justice ratepayers in communities affected by these adverse changes in local drinking and surface water quality. The DEIR does not recognize these potential impacts, focusing as it does only on the impacts of salinity and HABs to aquatic species, while ignoring public health and economic impacts to environmental justice communities.

10. Reduced flows into and through the Delta under long-term SWP operations means that salinity of in-Delta waters will increase. This is shown in Appendix C, Attachment 2-7, Tables 5-1 through through 15-1, which include salinity modeling results for such central and south Delta locations as Jersey Point, Prisoners Point, and San Andreas. Along with other salinity monitoring stations, results at these locations suggests there will be additional water quality impacts close to the Stockton water diversion at Empire Tract. Delta Cross Channel flow results (Appendix C, Attachment 2-2, Table 2-1) indicates between 72 and 223 cfs monthly average decreases in flow in October an area near the Stockton water diversion. The DEIR should address the potential for impacts to the Stockton water diversion, since that was a significant point of contention concerning the flow and salinity impacts of California WaterFix, before this latter project was cancelled by the Newsom Administration. Restore the Delta is concerned that flow and salinity impacts—and potential HABs impacts—will drive up water treatment costs for the City of Stockton and its water ratepayers, in neighborhoods affected by adverse changes in drinking and surface water quality. The DEIR does not recognize these potential impacts, focusing as it does only on the impacts of salinity and HABs to aquatic species, while ignoring public health and economic impacts to environmental justice communities.
11. Restore the Delta incorporates into this letter by reference our five-minute video on Harmful Algal Blooms in the San Francisco Bay-Delta Estuary, accessible at <https://www.youtube.com/watch?v=NCoKBIEJph0>. It briefly describes the causal factors leading to harmful algal blooms. In addition, the long-term SWP operations DEIR needs to commit the proposed project to far more intensive HABs monitoring and data sharing. Recently, we learned that DWR scientists gathered data on 2019 HABs in the Delta and found a total of eleven (11) different species of cyanobacteria that bloom, many of which have cyanotoxins. Withholding this data from water quality regulators and the impacted public in our view is dangerous and reckless management of California water resources.

The most well-known cyanotoxin is microcystin from the *Microcystis* species. Even more disturbing than the biodiversity of cyanobacteria in the Delta is that some species' cyanotoxins can become airborne, meaning that HABs are not just toxic when ingested by humans or dogs, but may be inhaled by human beings next to or

not far from water bodies where HABs are present. This raises a serious public health concern for Delta residents in warm seasons. Of course the HABs typically subside and dissipate once higher flows, colder water, and more wintry weather prevail, as occurred at the end of October and early November 2019 when San Joaquin River flows increased, yet they will rebloom when warm weather returns, worsening and spreading each year, until water quality and quantity conditions are improved.

Since, under climate change conditions, it is expected that warmer temperatures are expected to occur throughout the Delta and Central Valley, DWR must incorporate into its SWP operational program steps it will take to mitigate, reduce, and eliminate HABs in the Delta. Moreover, DWR should consult with the California Air Resources Board (CARB) to implement an air monitoring program for cyanobacteria to incorporate into its SWP operational program for Stockton waterways adjacent to the San Joaquin River. Stockton environmental justice tracts near the Port of Stockton and South Stockton waterways were recently awarded AB617 status to foster improved air quality conditions. The proliferation of airborne cyanobacteria could undercut other efforts to improve air quality for these impacted environmental justice communities. Thus, the DEIR is fundamentally inadequate in omitting HABs as a problem requiring mitigation and elimination for public health and environmental justice in the Delta.

12. Despite human reliance on subsistence fishing throughout the Delta and Suisun Marsh, the DEIR contains no environmental justice impacts discussion on the Delta, nor cumulative EJ impacts if increased exports continue to degrade Delta water quality. In fact, the phrase, "environmental justice," does not appear in the 610 page DEIR, nor does "public health." (See attachment 2 to this letter.) This renders the DEIR inadequate under California civil rights law and the California Environmental Quality Act.
13. Increased presence of stressors like selenium and mercury from alterations to hydrology (flow volume, timing, and magnitude) and water quality could increase food web pathways to humans relying on subsistence fishing. The DEIR fails to analyze these potential effects on humans, instead focusing primarily on contaminant impacts to salmonids and Delta smelt in the water quality discussion of the DEIR. The absence of a public health or environmental justice analysis of this potential contamination effect on human subsistence fishing in the Delta renders this DEIR inadequate.
14. The DEIR fails to properly evaluate how worsening salinity and other water quality constituents all over Suisun Marsh would reduce subsistence fishing opportunities throughout the marsh for Delta EJ residents reliant on fish in this and other parts of the San Francisco Bay-Delta Estuary. Appendix C, Attachment 2+ modeling analyses for Suisun Marsh locations indicate dramatic increases in salinity, electrical conductivity and chloride concentrations.

15. The DEIR fails to mitigate modeled degradation of drinking water quality for Contra Costa Water District at Rock Slough and Antioch intakes. Degradation of water quality is not lawful under the federal Clean Water Act, the state Porter-Cologne Water Quality Control Act, and State Water Resources Control Board Resolution 68-16, none of which authorize degradation of water quality. The DEIR is inadequate for failing to mitigate this degradation to drinking water quality as a public health and environmental justice impact.

16. The single-tunnel option is not listed among cumulative impact projects in Table 4.6-1 of EIR. Does this mean that DWR regards it as a speculative project at present? Once the design is put forward DWR must issue a supplemental EIR on long-term operations of the SWP since operations will change to accommodate tunnel capacity and operational rules.

II.6.10 LETTER O-RTD-1 – RESTORE THE DELTA, BARBARA BARRIGAN-PARRILLA, EXECUTIVE DIRECTOR AND TIM STROSHANE, POLICY ANALYST–DECEMBER 30, 2019

II.6.10.1 RESPONSE TO COMMENT O-RTD-1-1

This comment letter was replaced by comment letter O-RTD-2 at the comment’s request. No response is required. Please refer to responses to comments O-RTD-2-1 through O-RTD-2-18.

From: [Tim Stroshane](#)
To: [LTO](#)
Cc: [Barbara Barrigan-Parrilla](#); [Michelle Ghafar](#); [Nina R. Birnbaum, MD](#); [Thomas H Keeling](#); [Kelley Taber](#); [Dean Ruiz, Esq.](#); [John Herrick Esq.](#); [Dante J. Nomellini Esq.](#); [Osha Meserve](#); [Roger Moore](#); [Jonas Minton](#); [Bob Wright](#); [Bob Wright](#); [Bill Jennings](#); [Carolee Krieger](#); [Michael Jackson Esq.](#); [Barbara Vlamis](#); [Chichizola, Regina](#); [Tom Stokely](#); [Patricia Schifferle](#); [Kathryn Phillips](#); [Adam Keats](#); [Doug Obegi](#); [Kate Poole](#); [Jon Rosenfield](#); [Gary Bobker](#); [Noah Oppenheim](#); [John McManus](#)
Subject: Revised Restore the Delta comments on SWP Long-term Operations Draft EIR
Date: Thursday, January 2, 2020 11:35:51 AM
Attachments: [RestoretheDelta Comment Letter20200102Reduced.pdf](#)

Dear You Chen Chou,

On behalf of Barbara Barrigan-Parrilla, executive director of Restore the Delta, we resubmit our revised comment letter in response to the Draft Environmental Impact Report for Long-term Operation of the California State Water Project.

We intend that it replace our initial letter to you from December 30, as it has some additional comments and attachments that were not in the previous version provided.

Please confirm for us your receipt of the attached comment letter.

Truly,
Tim Stroshane



42 N. Sutter Street, Suite 506
Stockton, CA 95202
(209) 475-9550
www.restorethedelta.org

December 30, 2019

via email: LTO@water.ca.gov

You Chen Chou
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236-0001

Subject: Restore the Delta comments on Draft Environmental Impact Report (DEIR) for Long-term Operation of the California State Water Project

Dear You Chen Chou:

Restore the Delta advocates for local Delta stakeholders to ensure that they have a direct impact on water management decisions affecting the water quality and well-being of their communities, and water sustainability policies for all Californians. We work through public education and outreach so that all Californians recognize the Sacramento-San Joaquin Delta as part of California's natural heritage, deserving of restoration. We fight for a Delta whose waters are fishable, swimmable, drinkable, and farmable, supporting the health of the San Francisco Bay-Delta Estuary, and the ocean beyond. Our coalition envisions the Sacramento-San Joaquin Delta as a place where a vibrant local economy, tourism, recreation, farming, wildlife, and fisheries thrive as a result of resident efforts to protect our waterway commons.

We appreciate the opportunity to comment on this DEIR for the above-described action by the California Department of Water Resources (DWR). It is our understanding that the EIR for long-term operations of the State Water Project (SWP) would have the following applications:

- It will be used by the California Department of Fish and Wildlife (CDFW) as a basis for issuing new incidental take permits (ITPs) to DWR for four listed species: long fin smelt, Delta smelt, winter-run Chinook salmon, and spring-run Chinook salmon. Consequently, we expect there will be a substantial fisheries/aquatic biology section of this document. In this connection, aquatic biology and ecosystem issues will be critical to the adequacy of this EIR.

- The new EIR will evaluate operations “consistent with applicable legal requirements” and that those operations include close coordination with the federal Central Valley Project (CVP), including the Coordinated Operating Agreement (COA) between the CVP and the SWP as well as operational requirements resulting from ongoing re-initiation of federal Endangered Species Act (ESA) consultation on coordinated long-term CVP and SWP operations.
- We wondered in our NOP comments why the two projects are not doing a coordinated EIR/EIS under both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA)—together, rather than separately. The NOP says that DWR and USBR requested re-initiation of consultation with FWS and NMFS on their coordinated operations, yet their environmental reviews will proceed separately. We urged DWR that this separation of the long-term operations environmental reviews needs more explanation so that the public may adequately understand DWR’s reasoning.
- We understand from the NOP issued in April 2019 that new, updated operating criteria will be operated particularly in the Delta (Banks PP, Suisun Marsh Salinity Control Gates, and North Bay Aqueduct), and will be evaluated. We understand these new operating criteria also include the new COA changes negotiated in December 2018 between the US Bureau of Reclamation and DWR.

General Comments

Summary of Specific Comments:

1. The baseline date for this DEIR is improperly set.
2. The COA Addendum results in significant changes to Delta hydrology and water quality—specifically in dry and critically dry years.
3. Climate change sensitivity analysis is likely not sensitive enough to the effects of climate change, rendering DEIR impacts analysis inadequate.
4. The DEIR fails to evaluate SWP long-term operations as necessarily involving climate change adaptations, since it is long-established articles of faith among California water agencies that climate change will affect their adaptations to reduced water supplies.
5. The DEIR fails to take account of how the COA Addendum may reduce State Water Project’s capacity to adapt to climate change.
6. The DEIR provides no sea level rise analysis for long-term operations of the SWP (including a single tunnel project) as it would affect Delta operations.

7. The DEIR does show that, even under these flawed assumptions about climate change, dramatic reductions in both spring and fall Delta outflow from the modeling addenda—this will harm endangered fish, Suisun Marsh, and Delta drinking water quality. In turn these latter effects on Delta water quality will likely raise the cost of drinking water for Delta environmental justice communities.
8. Reduced San Joaquin River flows signal that under proposed long-term SWP operations, conditions will occur more frequently in the near future conducive to growth of harmful algal blooms (HABs).
9. The increased salinity and HABs presence in these waters would increase water treatment costs and potentially impose water rate hikes to cover those rising costs. Increased water rates would disproportionately impact environmental justice ratepayers in communities affected by these adverse changes in local water quality.
10. The Draft EIR masks such potential significant impacts of SWP long-term operations by failing to analyze predicted increased salinity in late-fall to early winter in relation to whether it violates state and federal clean water antidegradation policies.
11. Long-term average water quality monthly averaging of water quality conditions is completely inadequate as a methodology for properly evaluating whether water quality degradation occurs. The modeling and impact evaluation must identify the potential number of days in which such violations do occur and whether they exceed the policy and time period.
12. The DEIR should address the potential for impacts to the Stockton water diversion, since that was a significant point of contention concerning the flow and salinity impacts of California WaterFix, before this latter project was cancelled by the Newsom Administration. Restore the Delta is concerned that flow and salinity impacts—and potential HABs impacts—will drive up water treatment costs for the City of Stockton and its water ratepayers, in neighborhoods affected by adverse changes in drinking and surface water quality.
13. DWR must incorporate into its SWP operational program steps it will take to reduce or eliminate HABs in the Delta. The DEIR is fundamentally inadequate in omitting HABs as a problem for public health and environmental justice in the Delta.
14. Despite human reliance on subsistence fishing throughout the Delta and Suisun Marsh, the DEIR contains no environmental justice impacts discussion on the Delta, nor cumulative EJ impacts if increased exports continue to degrade Delta water quality.
15. Increased presence of stressors like selenium and mercury from alterations to hydrology (flow volume, timing, and magnitude) and water quality could increase

food web pathways to humans relying on subsistence fishing. The DEIR fails to analyze these potential effects on humans

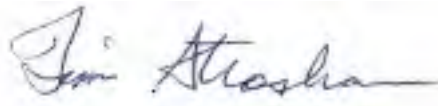
16. The DEIR fails to properly evaluate how worsening salinity and other water quality constituents all over Suisun Marsh would reduce subsistence fishing opportunities throughout the marsh for Delta EJ residents reliant on fish in this and other parts of the San Francisco Bay-Delta Estuary.
17. The DEIR fails to mitigate modeled degradation of drinking water quality for Contra Costa Water District at Rock Slough and Antioch intakes. Degradation of water quality is not lawful under the federal Clean Water Act, the state Porter-Cologne Water Quality Control Act, and State Water Resources Control Board Resolution 68-16, none of which authorize degradation of water quality.
18. The single-tunnel option is not listed among cumulative impact projects in Table 4.6-1 of EIR. Does this mean that DWR regards it as a speculative project at present? Once the design is put forward DWR must issue a supplemental EIR on long-term operations of the SWP since operations will change to accommodate tunnel capacity and operational rules.

Thank you for the opportunity to comment on this DEIR. If you have any questions, do feel free to contact us.

Sincerely



Barbara Barrigan-Parrilla
Executive Director
barbara@restorethedelta.org



Tim Strohane
Policy Analyst
tim@restorethedelta.org

Attachments:

1. Restore the Delta, *Climate Equity and Seismic Resilience for the San Francisco Bay-Delta Estuary*, August 2019.
2. Screen shots of DEIR showing searches showing no environmental justice or public health analyses or mitigations.

cc: Michelle Ghafar, Earthjustice
Nina Robertson, Earthjustice
Thomas H. Keeling, The Freeman Firm
Kelley Taber, Somach & Simmons
S. Dean Ruiz, South Delta Water Agency

John Herrick, South Delta Water Agency
Dante Nomellini, Central Delta Water Agency
Osha Meserve, Soluri Meserve LLC
Roger Moore, Law Office of Roger B. Moore
Jonas Minton, Planning & Conservation League
Bob Wright, Sierra Club California
Bill Jennings, California Sportfishing Protection Alliance
Carolee Krieger, California Water Impact Network
Michael B. Jackson, California Water Impact Network
Barbara Vlamis, AquAlliance
Regina Chichizola, Save California Salmon
Tom Stokely, Save California Salmon
Patricia Schifferle, Pacific Advocates

Kathryn Phillips, Sierra Club California
Adam Keats, Center for Food Safety
Doug Obegi, NRDC
Kate Poole, NRDC
Jon Rosenfield, San Francisco Baykeeper
Gary Bobker, The Bay Institute
Noah Oppenheim, PCFFA
John McManus, Golden State Salmon

Attachment 1
Specific Restore the Delta Comments
State Water Project Long-Term Operations Draft EIR

1. The baseline date for this DEIR is improperly set. The DEIR states that its baseline is set at April 19, 2019 (or the actual release date of April 22, 2019, that Michele Banonis stated at the NOP hearing in May 2019. (DEIR, p. 4-2.). However, there is no explanation as to why its baseline date is not the date of the Coordinated Operating Agreement Addendum (COA Addendum) executed on December 12, 2018. It is strange and nonsensical for the DEIR to state that “The baseline used in this DEIR includes the 2018 COA Addendum, as opposed to the unmodified 1986 version of the COA, to accurately reflect the existing conditions in the Delta as of April 19, 2019.” The reason it should be the date of the COA Addendum is that this seems to be the date of operational rules that made it necessary for the NOP to be issued and the DEIR prepared in the first place. It is *this* date (that is December 12, 2018) that chronologically includes the NOP date, and not the other way around. If DWR wants to include the COA Addendum as “part” of the baseline, just make its execution date the baseline date for the DEIR.
2. The COA Addendum results in significant changes to Delta hydrology and water quality—specifically in dry and critically dry years. We disagree that the changes

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2-2

represented in the COA Addendum resulted in a “minimal change” to surface water hydrology in the Delta, upstream hydrology, and upstream water quality. (DEIR, p. 4-2.) This completely glosses over the fact that the COA Addendum reveals that CVP reservoir storage will gain average storage levels year-round, while the State Water Project’s Lake Oroville will shoulder much greater responsibility for meeting flow obligations under D-1641 and the 2006 Bay-Delta Water Quality Control Plan (See DEIR, p. 4-2, compared with Appendix B COA Addendum, Figures 2, 8, 10, and 12.). The Central Valley Project reservoirs serve primarily agricultural water contractors, while the State Water Project serves primarily urban water contractors, many of whose customers are residential water users.

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(Cont.)

3. Climate change sensitivity analysis is likely not sensitive enough to the effects of climate change, despite being based on the more recent CMIP5 model suite (which we saw discussed in some detail in Appendix F of Volume 2 of the DEIR). We find that the hydrology and water quality portions of Chapter 4 do not specifically indicate what the sensitivity ranges are for the impacts that are described in Sections 4.2, hydrology, and 4.3, water quality, so a reasonable reader cannot know what the sensitivity ranges are for the findings made in these sections. In addition, we find too that Appendix F does not incorporate more recent science on potential hydrologic, water quality, and temperature impacts derivable from climate change models used in California’s own Fourth Climate Assessment from 2018. The hydrology that is used in CalSIM II is still the 82-year historical hydrology, rather than hydrologic modeling inputs available from the Fourth California Climate Assessment—this means that DWR is continuing to look historically at hydrology rather than to future modeling where “stationarity is dead” as a broad understanding of climate science; in the Central Valley this means that the past is not a guide to future hydrology and water quality.

2-3

4. The DEIR fails to evaluate SWP long-term operations as necessarily involving climate change adaptations, since it is long-established articles of faith among California water agencies that climate change will affect their adaptations to reduced water supplies. It might be objected by DWR that reliance on future modeling would be speculative—rather than on CalSIM II’s 82-year hydrology record—for the required CEQA analyses of hydrology, water quality, aquatic resources, and tribal cultural resources. This would be ironic, since DWR and many other state agencies are making policy and investment decisions today about the future based on modelers’ best analytic and scientific efforts to peer into the future. For example, several reports to the California Energy Commission (whose authors included DWR or other state water-related employees) that supported the 2018 Fourth California Climate Assessment rely on downscaling of general circulation models used in standard climate modeling research to construct future hydrology and water quality projections. These reports find that developed water supplies, including those of the state and federal projects, will decrease substantially as climate change unfolds in California. Such supply reductions are not contemplated in this DEIR. DWR is clearly using a stationarity-based modeling approach for this DEIR concerning its *long-term*

2-4

operations of the State Water Project. DWR’s decision to avoid hydrological and water quality modeling that is future oriented renders the DEIR fundamentally and functionally inadequate to the task of evaluating the environmental impacts of SWP long-term operations.

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(Cont.)

5. Thus while purporting to analyze climate change impacts of the proposed COA Addendum, the DEIR instead fails to take account of how the COA Addendum may reduce State Water Project’s capacity to adapt to climate change. We already know from the COA Addendum that Lake Oroville will be called upon much more to “backstop” water quality objectives while the Central Valley Project continues to export water from the Delta. This likelihood is supported by Appendix C, Attachment 2-1, Table 1c-1 showing monthly average decreases in south-of-Delta SWP exports of between 2 thousand acre-feet (TAF) and 28 TAF from CalSIM II modeling at San Luis Reservoir in critical years—nearly year-round. There is no analysis in the DEIR of the potential for climate-change-induced reduced reservoir storage, Delta exports, Delta outflow, or degraded water quality and increased flood risk impacting long-term operations of the State Water Project—and most important, whether the SWP can properly adapt to such conditions while remaining operationally and financially viable. We attach Restore the Delta’s discussions of these issues in our *Climate Equity and Seismic Resilience* report which we issued in August 2019 where we summarize key California Fourth Climate Assessment report findings in relation to water supply, flooding, Delta levee issues, and river flow. See especially Chapter 3 and Appendix E in our report.

2-5

6. The DEIR provides no sea level rise analysis for long-term operations of the SWP (including a single tunnel project) as it would affect Delta operations. Only precipitation and temperature changes were considered. Clifton Court Forebay is at very low elevation. Analysis is needed to determine the potential for inundation at SWP intakes at tunnel project intakes in the north Delta and at Clifton Court Forebay and Banks Pumping Plant. Since the DEIR considers tunnel project intakes as part of a cumulative projects list, this analysis is absent, except for listing the tunnel in the cumulative impacts chapter. This project is in design now by the Delta Conveyance Design and Construction Authority; it is not speculative. Therefore more detailed analysis of the cumulative impacts of sea level rise is needed in this DEIR as well as discussion of how SWP long-term operations would mitigate sea level rise at the tunnel intakes. But such analysis is omitted from the DEIR. Therefore the DEIR is inadequate.

2-6

7. The DEIR does show that, even under these flawed assumptions about climate change, dramatic reductions in both spring and fall Delta outflow from the modeling addenda—this will harm endangered fish, Suisun Marsh, and Delta drinking water quality. In turn these latter effects on Delta water quality will likely raise the cost of drinking water for Delta environmental justice communities.

2-7

8. The DEIR modeling appendix shows that San Joaquin River monthly average flows at Vernalis will decrease on average between 7 and 212 cubic feet per second (cfs) from winter through fall months in critical years, and between 4 and 238 cfs in dry years. (Attachment C, Attachment 2-2, Table 5-1.) These are crucial water year types where the river's ecosystems and subsistence fishing species need more flow for improved water quality (not only for salinity but to help control water temperatures). Yet these reduced San Joaquin River flows signal that under proposed long-term SWP operations, conditions will occur more frequently in the near future conducive to growth of harmful algal blooms (HABs). HABs have been plaguing south Delta and Stockton area river channels, including Mormon Slough near downtown Stockton.

2-8

9. In addition to reduced San Joaquin River flows, Old and Middle River reverse flows (upstream flow to the state and federal pumps near Tracy and Byron) will also increase dramatically in dry and critically dry years. (Appendix C, Attachment 2-2, Table 7-1.) These flow changes strongly signal that salinity will worsen and residence time of water in areas like Discovery Bay, and Contra Costa Water District's drinking water intakes located in Rock Slough, Victoria Island, and Middle River. Reduced downstream flows in these areas will increasingly trap cyanobacteria and generate more harmful algal blooms. The increased salinity and HABs presence in these waters would increase water treatment costs and potentially impose water rate hikes to cover those rising costs. Increased water rates would disproportionately impact environmental justice ratepayers in communities affected by these adverse changes in local drinking and surface water quality. The DEIR does not recognize these potential impacts, focusing as it does only on the impacts of salinity and HABs to aquatic species, while ignoring public health and economic impacts to environmental justice communities.

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10. A project can have a significant impact on the environment even when an adopted water quality standard is not found to be violated. The Draft EIR masks such potential significant impacts of SWP long-term operations by failing to analyze predicted increased salinity in late-fall to early winter in relation to whether it violates state and federal clean water antidegradation policies. Degraded salinity conditions do in fact violate CEQA for failing to provide mitigation measures for such a significant impact, and violate Clean Water Act and State Water Resources Control Board's Resolution 68-13 concerning degradation without providing any or adequate justification for which such degradation should be allowed to occur.

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11. Long-term average water quality monthly averaging of water quality conditions is completely inadequate as a methodology for properly evaluating whether water quality degradation occurs. The modeling and impact evaluation must identify the potential number of days in which such violations do occur and whether they exceed the policy and time period. This is especially important for conditions throughout the Delta relating to salinity and water quality factors relating to HABs (e.g., temperature, salinity, light, water clarity, and presence of nutrients such as nitrogen and

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phosphorus. On this basis the water quality analysis in the Draft EIR is inadequate, and should be supplemented with additional analysis of such impacts.

2-11
(Cont.)

12. Reduced flows into and through the Delta under long-term SWP operations means that salinity of in-Delta waters will increase. This is shown in Appendix C, Attachment 2-7, Tables 5-1 through through 15-1, which include salinity modeling results for such central and south Delta locations as Jersey Point, Prisoners Point, and San Andreas. Along with other salinity monitoring stations, results at these locations suggests there will be additional water quality impacts close to the Stockton water diversion at Empire Tract. Delta Cross Channel flow results (Appendix C, Attachment 2-2, Table 2-1) indicates between 72 and 223 cfs monthly average decreases in flow in October an area near the Stockton water diversion. The DEIR should address the potential for impacts to the Stockton water diversion, since that was a significant point of contention concerning the flow and salinity impacts of California WaterFix, before this latter project was cancelled by the Newsom Administration. Restore the Delta is concerned that flow and salinity impacts—and potential HABs impacts—will drive up water treatment costs for the City of Stockton and its water ratepayers, in neighborhoods affected by adverse changes in drinking and surface water quality. The DEIR does not recognize these potential impacts, focusing as it does only on the impacts of salinity and HABs to aquatic species, while ignoring public health and economic impacts to environmental justice communities.

2-12

13. Restore the Delta incorporates into this letter by reference our five-minute video on Harmful Algal Blooms in the San Francisco Bay-Delta Estuary, accessible at <https://www.youtube.com/watch?v=NCoKBIEJph0>. It briefly describes the causal factors leading to harmful algal blooms. In addition, the long-term SWP operations DEIR needs to commit the proposed project to far more intensive HABs monitoring and data sharing. Recently, we learned that DWR scientists gathered data on 2019 HABs in the Delta and found a total of eleven (11) different species of cyanobacteria that bloom, many of which have cyanotoxins. Withholding this data from water quality regulators and the impacted public in our view is dangerous and reckless management of California water resources.

2-13

The most well-known cyanotoxin is microcystin from the *Microcystis* species. Even more disturbing than the biodiversity of cyanobacteria in the Delta is that some species' cyanotoxins can become airborne, meaning that HABs are not just toxic when ingested by humans or dogs, but may be inhaled by human beings next to or not far from water bodies where HABs are present. This raises a serious public health concern for Delta residents in warm seasons. Of course the HABs typically subside and dissipate once higher flows, colder water, and more wintry weather prevail, as occurred at the end of October and early November 2019 when San Joaquin River flows increased, yet they will rebloom when warm weather returns, worsening and spreading each year, until water quality and quantity conditions are improved.

Since, under climate change conditions, it is expected that warmer temperatures are expected to occur throughout the Delta and Central Valley, DWR must incorporate into its SWP operational program steps it will take to mitigate, reduce, and eliminate HABs in the Delta. Moreover, DWR should consult with the California Air Resources Board (CARB) to implement an air monitoring program for cyanobacteria to incorporate into its SWP operational program for Stockton waterways adjacent to the San Joaquin River. Stockton environmental justice tracts near the Port of Stockton and South Stockton waterways were recently awarded AB617 status to foster improved air quality conditions. The proliferation of airborne cyanobacteria could undercut other efforts to improve air quality for these impacted environmental justice communities. Thus, the DEIR is fundamentally inadequate in omitting HABs as a problem requiring mitigation and elimination for public health and environmental justice in the Delta.

2-13
(Cont.)

14. Despite human reliance on subsistence fishing throughout the Delta and Suisun Marsh, the DEIR contains no environmental justice impacts discussion on the Delta, nor cumulative EJ impacts if increased exports continue to degrade Delta water quality. In fact, the phrase, "environmental justice," does not appear in the 610 page DEIR, nor does "public health." (See attachment 2 to this letter.) This renders the DEIR inadequate under California civil rights law and the California Environmental Quality Act.

2-14

15. Increased presence of stressors like selenium and mercury from alterations to hydrology (flow volume, timing, and magnitude) and water quality could increase food web pathways to humans relying on subsistence fishing. The DEIR fails to analyze these potential effects on humans, instead focusing primarily on contaminant impacts to salmonids and Delta smelt in the water quality discussion of the DEIR. The absence of a public health or environmental justice analysis of this potential contamination effect on human subsistence fishing in the Delta renders this DEIR inadequate.

2-15

16. The DEIR fails to properly evaluate how worsening salinity and other water quality constituents all over Suisun Marsh would reduce subsistence fishing opportunities throughout the marsh for Delta EJ residents reliant on fish in this and other parts of the San Francisco Bay-Delta Estuary. Appendix C, Attachment 2+ modeling analyses for Suisun Marsh locations indicate dramatic increases in salinity, electrical conductivity and chloride concentrations.

2-16

17. The DEIR fails to mitigate modeled degradation of drinking water quality for Contra Costa Water District at Rock Slough and Antioch intakes. Degradation of water quality is not lawful under the federal Clean Water Act, the state Porter-Cologne Water Quality Control Act, and State Water Resources Control Board Resolution 68-16, none of which authorize degradation of water quality. The DEIR is inadequate for failing to mitigate this degradation to drinking water quality as a public health and environmental justice impact.

2-17

18. The single-tunnel option is not listed among cumulative impact projects in Table 4.6-1 of EIR. Does this mean that DWR regards it as a speculative project at present? Once the design is put forward DWR must issue a supplemental EIR on long-term operations of the SWP since operations will change to accommodate tunnel capacity and operational rules.

2-18

II.6.11 LETTER O-RTD-2 – RESTORE THE DELTA, BARBARA BARRIGAN-PARRILLA, EXECUTIVE DIRECTOR—JANUARY 2, 2020

II.6.11.1 RESPONSE TO COMMENT O-RTD-2-1

Please see Master Response 2, “Baseline,” for a discussion of why the baseline used in the EIR is appropriate under CEQA and why the 2018 COA Addendum is included in the baseline. Chapter 15125(a)(i) of the CEQA Guidelines states that, “Generally, the lead agency should describe physical environmental conditions as they exist at the time the notice of preparation is published.” The baseline used to prepare the DEIR includes the 2018 COA Addendum to accurately reflect the Existing Conditions in the Delta as of April 19, 2019, the date that the NOP was released for public and agency review.

II.6.11.2 RESPONSE TO COMMENT O-RTD-2-2

DEIR Appendix B includes a discussion of changes to surface water hydrology and water quality associated with implementing the 2018 COA Addendum in comparison to the original 1986 COA. That analysis concludes that implementation of the 2018 COA Addendum resulted in minimal change to surface water hydrology in the Delta and upstream waterways.

Although DEIR Appendix B does demonstrate increased storage in some reservoirs during critically dry water years, the reservoir storage volume would still be within the historic range of operations and maximum storage in the reservoirs would not increase as a result of the 2018 COA Addendum. Even with increased storage levels, the 2018 COA Addendum is the appropriate baseline. As stated within Appendix B, DWR has identified a baseline that includes the 2018 COA Addendum as opposed to the unmodified 1986 version of the COA. A baseline that includes the COA Addendum accurately represents the existing physical conditions in the Delta. In addition, CalSim II modeling results indicate that the flows entering and exiting the Delta are unaffected by execution of the 2018 COA Addendum. Therefore, using the 2018 COA Addendum as a baseline condition would sufficiently represent Delta conditions under D1641 and the 2008/2009 Biological Opinions as well as under Existing Conditions.

II.6.11.3 RESPONSE TO COMMENT O-RTD-2-3

As noted in DEIR Chapter 4.2, “Hydrology,” changes to surface water, by themselves, are not considered a significant impact based on the Initial Study. Chapter 4.3.3 “Impacts of the Proposed Project,” describes the thresholds of significance for water quality impact analyses.

An updated Climate Change Sensitivity Analysis and comparison of CMIP3 to CMIP5 is presented in Part III of this FEIR, Appendix F. Appendix F, “Climate Change Sensitivity Analysis,” incorporates the most recent science on potential impacts to hydrology, water quality, and aquatics. Both California’s Fourth Climate Assessment and the EIR use climate data from Coupled Model Intercomparison Project 5 (CMIP5). CalSim II input hydrology represent future climate conditions. Although planning period simulation dates are 1921 through 2003, these dates do not represent historical data. Appendix F describes an analytical comparison of specific CalSim II outputs reflecting SWP and CVP operations under Existing Conditions and the Proposed Project under current and future climate and sea level rise

conditions. Future conditions include Q5 (central tendency) climate centered around year 2030 with 15 cm of sea level rise, and Q5 climate centered around year 2030 with 45 cm of sea level rise. The future climate projections were developed for the Bay-Delta Conservation Plan/California WaterFix Analyses (ICF 2016). The range of sea level rise values of this sensitivity analysis consider the findings of the latest Ocean Protection Council Sea Level Rise Guidance released in 2018. Based on the results of the climate change sensitivity analysis, the impacts identified in the water quality and special status-species analyses conducted in the DEIR would be similar to those under future climate projections. As such, the analyses conducted in the DEIR indirectly consider potential effects of climate change.

More information regarding utilization of CalSim II is provided in Appendix H Attachment 1-7 "Model Limitations." Master Response 10, "Climate Change," provides additional justification for the methodology used for climate change sensitivity analysis.

II.6.11.4 RESPONSE TO COMMENT O-RTD-2-4

DWR incorporates climate change into its modeling. Further details regarding incorporation of climate change and California's Fourth Climate Change Assessment are provided in Response to Comment O-RTD-2-3. The climate change sensitivity analysis, presented in FEIR Part III, DEIR Appendix F, demonstrates changes to flows related to climate change. Impacts of long-term operations of the SWP are evaluated with climate change and sea level rise considered.

II.6.11.5 RESPONSE TO COMMENT O-RTD-2-5

Need a double-check on reference that San Luis storage is lower under PP; Table 1a-1 of Appendix to ITP App appears to show higher storage, but want to make sure appropriate staff checks this statement and the reference

DEIR Appendix B, "2018 Coordinated Operation Agreement Addendum," demonstrates that implementation of the 2018 COA is insignificant as compared to implementation of the 1986 COA. Appendix C Attachment 2-1 presents figures and tables comparing CalSim II results of the Proposed Project and Existing Conditions. Changes to San Luis reservoir storage do not necessarily indicate water scarcity. Appendix C Attachment 2-4 demonstrates that water supply increases with Proposed Project as compared to Existing Conditions, even though San Luis storage is lower under Proposed Project as compared to Existing Conditions. Appendix F, "Climate Change Sensitivity Analysis," assesses the potential impacts of climate change and sea level rise under the Proposed Project, Refined Alternative 2b, and Existing Conditions.

II.6.11.6 RESPONSE TO COMMENT O-RTD-2-6

Appendix F, "Climate Change Sensitivity Analysis," summarizes key findings from a sensitivity analysis of operational changes to Existing Conditions and Proposed Project under climate change and sea level rise conditions. Two increments of sea level rise are assessed in the appendix.

The project description does not include construction of tunnels. Therefore, assessment of issues related to tunnels, beyond description in the cumulative impacts chapter, is outside the scope of this

document. Please see Master Response 8, “Other State Efforts,” and Master Response 26, “One-Tunnel Delta Conveyance Project,” for more details regarding other state projects in the Delta.

II.6.11.7 RESPONSE TO COMMENT O-RTD-2-7

Assumptions about climate change are scientifically accurate, as demonstrated in responses to comments O-RTD-2-3 and O-RTD-2-4. Under the Proposed Project, Delta outflow decreases in the Spring and Fall as compared to Existing Conditions, but these changes to Delta outflow do not impact water quality nor aquatic resources. Description of impacts to water quality and aquatic resources are provided in DEIR Chapters 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources,” respectively. As there are no significant impacts to water quality, nor aquatic biological resources, the cost of drinking water is not expected to increase.

II.6.11.8 RESPONSE TO COMMENT O-RTD-2-8

As compared to Existing Conditions, San Joaquin River flow at Vernalis under the Proposed Project is similar. These results are detailed in DEIR Appendix C, Attachment 2-2. Furthermore, there are no impacts to San Joaquin River at Vernalis water quality, as described in DEIR Chapter 4.3, “Surface Water Quality.” As noted in Chapter 4.4.7, “Impacts of the Proposed Project,” there will be little difference between the Proposed Project and Existing Conditions scenarios in the potential for velocity conditions affecting harmful algal blooms (HABs). Therefore, HABs are not expected to increase in frequency under proposed long-term operations of the State Water Project as compared to Existing Conditions.

II.6.11.9 RESPONSE TO COMMENT O-RTD-2-9

The potential for the project to result in increased HABS is analyzed within DEIR Chapter 4.4 (Pages 4-152 and 4-167), based on the IEP MAST (2015) conceptual model and DSM2-HYDRO modeling. The analysis suggests that there would be little difference between the Proposed Project and Existing Conditions flow and water velocity that would modify or increase the presence of HABs. Further discussion of HABs is provided in Response to Comment O-RTD-2-13.

Please see Master Response 15, “Environmental Justice,” for a discussion of why environmental justice issues are not addressed within the DEIR.

II.6.11.10 RESPONSE TO COMMENT O-RTD-2-10

As noted in DEIR Chapter 4.3.3, “Impacts of the Proposed Project,” the Proposed Project generally would increase salinity during the late fall and early winter in the years following wet and above-normal water years as a result of the Delta Smelt Summer-Fall Habitat Action. The SWP long-term operations do not violate any state nor federal clean water antidegradation polices. As noted in Chapter 4.3, “Surface Water Quality,” the EPA designated the California SWRCB to act as its agent to develop and enforce Federal water quality objectives. Likewise, the SWRCB adopts State water quality objectives under the Porter-Cologne Act consistent with State and Federal anti-degradation policies, including SWRCB Resolution 68-16 which comprises the State ant-degradation policy (comment referenced SWRCB resolution 68-13 but is presumed to have meant SWRCB Resolution 68-16). DWR

complies with such policies under D-1641 by operating the SWP to meet existing water quality control plan requirements.

II.6.11.11 RESPONSE TO COMMENT O-RTD-2-11

As described in Appendix H Attachment 1-7, “Model Limitations,” model results should be presented on a monthly basis. Select model results may be reported on a sub-monthly basis with adequate caution. Modeled exceedances of water quality standards are assessed at a daily time step. These exceedances are provided in DEIR Chapter 4.3.3, “Impacts of the Proposed Project.” Further details regarding water quality modeling are provided in DEIR Chapter 4.3.3.

II.6.11.12 RESPONSE TO COMMENT O-RTD-2-12

Model results presented in DEIR Appendix C, “Hydrology Model Results,” indicate that Delta inflow and outflow increase in some months and decrease in others. Therefore, salinity at various locations throughout the Delta (e.g. Jersey Point, Prisoners Point, and San Andreas) may increase in some months and decrease in others. As noted in Chapter 4.3.3, “Impacts of the Proposed Project,” the Proposed Project does not have a significant impact because it does not cause an exceedance of any water quality standard or waste discharge requirement, or otherwise substantially degrade water quality. Delta Channel flows slightly decrease in October due to NMFS Action 4.1.2. This decrease is slightly offset by a 37 cfs increase in flow at Georgianna Slough (from 2,516 cfs to 2,554 cfs). Furthermore, the relative change in flow near Empire Tract (sum of Mokelumne River, Georgianna Slough and DCC flow) is less than 2 %. Therefore, October flow conditions at Empire Tract under Proposed Project conditions are similar to Existing Conditions.

As operations are not expected to impact water quality and flow conditions at Empire Tract, there are no potential impacts to Stockton water diversion.

HABs are not expected to increase in frequency under long-term operation of the State Water Project as compared to Existing Conditions. Please refer to Response to Comment O-RTD-2-8 for more details.

Water quality regulations consider agricultural, municipal and industrial, and fish and wildlife beneficial uses. Please see Chapter 4.3.1, “Environmental Setting,” for more details. Therefore, public health and economic impacts were considered in the DEIR.

II.6.11.13 RESPONSE TO COMMENT O-RTD-2-13

As indicated in to Response to comment O-RTD-2-8, the Proposed Project and the proposed alternatives would not increase frequency of HABs as compared to Existing Conditions.

The Project Objectives are to continue the coordinated long-term operation of the SWP for water supply and power generation, consistent with applicable laws, contractual obligations, and agreements, and to increase operational flexibility by focusing on non-operational measures to avoid significant adverse effects, as presented in DEIR Chapter 3.1.1. Please review Master Response 4, “Legal Standards,” for requirements of the DEIR.

II.6.11.14 RESPONSE TO COMMENT O-RTD-2-14

Please see Master Response 15, “Environmental Justice,” for a discussion of why environmental justice issues are not addressed within the DEIR. Potential public health issues relate primarily to air quality, hazardous emissions, or water quality. The potential for these environmental impacts to occur as a result of the Proposed Project has been analyzed. As discussed in DEIR Appendix A, “Initial Study of the Long-Term Operations of the State Water Project,” Chapters 3.3, “Air Quality,” and 3.9.2, “Hazards and Hazardous Materials,” there would be no impacts from the Proposed Project to air quality or hazardous emissions.

DEIR Chapter 4.3.2 describes the water quality constituents that could be affected by the Proposed Project, which are limited to changes in salinity (as measured by chloride or electrical conductivity). However, the changes to water quality are less than significant, because the Project will not result in an exceedance of any water quality standard or waste discharge requirement. Changes in other constituents such as nutrients and methylmercury are not anticipated, as the Proposed Project would only include changes to operation of the SWP and would not affect sources of mercury or nutrients. Further discussion regarding the potential for impacts relating to mercury and selenium is provided in Response to Comment O-RTD-2-15 below. Further discussion of HABS is provided in Response to Comment O-RTD-13 above.

II.6.11.15 RESPONSE TO COMMENT O-RTD-2-15

As presented in DEIR Appendix A, Table 3.7-3, the main source of selenium in Delta waters is from the selenium salts that occur naturally in soils of the western and central San Joaquin Valley, that are derived from marine sedimentary rocks of the Coast Ranges and subjected to irrigation and subsequent agricultural runoff. These areas of selenium-rich soils are primarily served by the CVP. Information related to existing levels of mercury within the project area is discussed on pages 3-96 through 3-98 of the Initial Study.

DEIR Chapter 4.3.2 describes the water quality constituents that could be affected by the Proposed Project, which are limited to changes in salinity (as measured by chloride or electrical conductivity). Changes in other constituents such as nutrients and methylmercury are not anticipated, because the Proposed Project would only include changes to operation of the SWP and would not affect sources of mercury or nutrients.

Because there would be no significant impacts to water quality, significant impacts to subsistence fishing are not anticipated from proposed long-term operation of the SWP.

II.6.11.16 RESPONSE TO COMMENT O-RTD-2-16

Please see Response to Comment O-RTD-2-14.

II.6.11.17 RESPONSE TO COMMENT O-RTD-2-17

Please see Chapter 4.3.3, “Impacts of the Proposed Project” for more details on the Project’s less than significant impact on surface water quality. See FEIR Part III, where the DEIR includes an assessment of D-1641 M&I compliance of maximum mean daily 150 mg/L Cl for at least the number of days shown in

"Table 1. Water Quality Objectives for Municipal and Industrial Beneficial Uses." Please see Response to Comment O-RTD-2-10 regarding the alleged violation of anti-degradation laws.

The "One-Tunnel Delta diversion proposal" was not considered reasonably foreseeable because no environmental documentation has been completed for the One-Tunnel Delta Diversion Project and the Notice of Preparation of Environmental Impact Report for the Delta Conveyance Project was released on January 15, 2020. Please see Master Response 26, "One-Tunnel Delta Conveyance Project."

II.6.11.18 RESPONSE TO COMMENT O-RTD-2-ATT-1

See Response to Comment O-RTD-2-5.

II.6.11.19 RESPONSE TO COMMENT O-RTD-2-ATT-2

See Response to Comment O-RTD-2-14.

From: [Bob Wright](#)
To: [Mellon, Erin@DWR](mailto:Mellon,Erin@DWR); [LTO](#)
Subject: Comments on DWR DEIR for Long-Term SWP Operation
Date: Monday, January 6, 2020 12:37:02 PM
Attachments: [1.6.20 FINAL cmts DEIR SWP L T opns for pdf.pdf](#)
[12.20.19 DWR 6th offer SWP de ta conveyance.pdf](#)

Dear Assistant Director Mellon and Department of Water Resources:

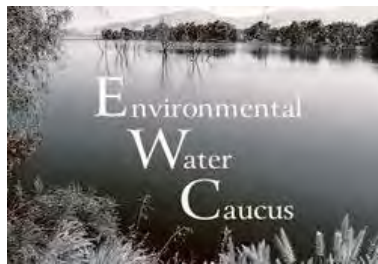
Please find our written comments of today, January 6, 2020, on DWR's DEIR for Long-Term Operation of the SWP. We also include one attachment.

Our comments are submitted on behalf of 8 public interest organizations. You are welcome to call me with any questions you may have.

We would appreciate a reply today, confirming your receipt of our comments.

Sincerely,

Bob Wright, Counsel
Sierra Club California
Sacramento, CA
(916) 557-1104



January 6, 2020

Erin.mellon@water.ca.gov

via email

Erin Mellon, Assistant Director
Public Affairs Office, Department of Water Resources

LTO@water.ca.gov

via email

Re: Written Comments on DWR's Draft EIR for Long-Term Operation of the SWP
(State Clearinghouse No. 2019049121)

Dear Assistant Director Mellon and Department of Water Resources:

By this letter our public interest organizations comment, pursuant to the California Environmental Quality Act (CEQA), on the Department of Water Resources (DWR) Draft Environmental Impact Report (Draft EIR) for Long-Term Operation of the State Water Project (SWP).¹ Our public interest organizations object to approval of the project and object to certification of a Final EIR for the project.

Our Table of Contents is on the next page:

¹ AquAlliance, California Water Impact Network, California Sportfishing Protection Alliance, Center for Biological Diversity, Environmental Water Caucus, Planning and Conservation League, Restore the Delta, and Sierra Club California join in this letter.

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Introduction

SWP operations have numerous and enormous environmental impacts on California’s rivers and the San Francisco Bay-Delta estuary (Delta.) “The SWP includes water, power, and conveyance systems, moving an annual average of 2.9 million acre-feet of water.” (Draft EIR 2-1.)²

DWR released the Draft EIR for public review on November 21, 2019. The Draft EIR “was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.” (CEQA Guidelines, § 15088.5(a)(4).)³ DWR must, therefore, prepare a new Draft EIR.

1-1

“A feasible project alternative” “considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project’s proponents decline to adopt it.” (CEQA Guidelines, § 15088.5(a)(3.) Reducing exports has always been an obvious alternative that would increase needed freshwater flows through the Delta. Moreover, reducing reliance on the Delta is *required* by the Delta Reform Act. The project instead *increases* reliance on the Delta. Again, a new Draft EIR is required.

1-2

“A new significant environmental impact would result from the project” and “A substantial increase in the severity of an environmental impact would result” from the project. (CEQA Guidelines, § 15088.5 (a) (1) and (2.) Though the project would have many severe adverse environmental impacts, *the Draft EIR claims it would have none. As just one example, the danger posed to people by the worsening algal blooms in the Delta is not even mentioned in the Draft EIR.* Yet again, a new Draft EIR is required.

1-3

The astonishing number and seriousness of the omissions and deficiencies in the Draft EIR were avoidable. Our organizations advised DWR what was necessary in order to comply with CEQA in our May 28, 2019, comment letter on the Notice of Preparation (NOP) and scoping.

1-4

Preparation and recirculation of a new, adequate Draft EIR for public review and comment is required by CEQA, including CEQA Guidelines § 15088.5(a).⁴

1-5

² In each citation to the Draft EIR, the first number refers to the section of the document and the second number refers to the page number within the section.

³ The CEQA Guidelines are codified at 14 Code Cal. Regs, § 15000 et seq.

⁴ Cases involving water issues and requiring recirculation of environmental documents under CEQA include *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 447-449 and *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1120.

Alternatives Reducing Reliance on the Delta are Required by the Delta Reform Act

The Sacramento-San Joaquin Delta Reform Act of 2009 (Delta Reform Act) is codified at Water Code § 85000 et seq. Water Code section 85021 establishes the policy of the State of California “to reduce reliance on the Delta in meeting California’s future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency.” The Delta Reform Act establishes co-equal goals meaning, “the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem.” (Water Code § 85054.)

The Sacramento River and San Joaquin River watersheds remaining flows, flow into the Delta prior to portions being diverted for export to regions south of the Delta by SWP and federal Central Valley Project (CVP) operations. “The sustainability of California’s water resources depends on the environmental health of the Sacramento-San Joaquin Delta.” (Draft EIR 1-1.) “Reclamation and DWR propose to use the Sacramento River, San Joaquin River, and Delta channels to transport water to export pumping plants located in the South Delta.” (Draft EIR 3-30.)

“DWR, in coordination with Reclamation, proposes to operate the SWP in a manner that maximizes exports while minimizing direct and indirect impacts on state and federally listed fish species. ” (Draft EIR 3-18.) DWR admits “the Proposed Project has the potential to increase average annual water supply yields, . . .” (Draft EIR 1-10.) Other versions of the admission include “the Proposed Project would increase the potential delivery of water from the Delta, . . . (Draft EIR 4-324, also 4-322, 323.) DWR admits, “Increasing or decreasing SWP or CVP exports can achieve changes to Delta outflow immediately.” (Draft EIR 3-12.)

“The Proposed Project would continue DWR’s ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. DWR proposes long-term operation of the SWP that will allow DWR to continue to store, divert, and convey water, in accordance with its existing water rights, to deliver water pursuant to water contracts and agreements up to full contract quantities. DWR is seeking to optimize water supply and improve operational flexibility while protecting fish and wildlife.” (Draft EIR 1-3; also 3-1.)

A central issue in a legally sufficient Draft EIR would be consideration of the trade-offs between delivery of full contract quantities, and reduction of deliveries in order to improve water quantities and quality in California’s rivers and the Delta.

DWR virtually ignores the Delta Reform Act, simply mentioning it in two sentences. (Draft EIR 4-105.) Yet DWR admits under the heading “areas of controversy”

1-6

that “Issues raised by the public and other agencies [in comments on the Notice of Preparation (NOP) and scoping] include: Alternatives that incorporate actions to reduce demand for water from the Delta.” (Draft EIR 1-10.)

1-6
(Cont.)

A new Draft EIR must be prepared and recirculated for public review and comment because the document fails to comply with State policy established by the Delta Reform Act by failing to include alternatives that would reduce reliance on the Delta.

Public Trust Doctrine Analysis Will be of Critical Importance in Doing the Quantification Work Required by the Delta Reform Act

The Delta Reform Act (Water Code § 85023) mandates,

The longstanding constitutional principle of reasonable use and the public trust doctrine shall be the foundation of state water management policy and are particularly important and applicable to the Delta.

The California Natural Resources Agency, CalEPA, and the California Department of Food & Agriculture released the Draft Water Resilience Portfolio (Draft Portfolio) on Friday afternoon, January 3, 2020. The Draft Portfolio admits,

Improved understanding is needed about the amount of water that must stay in rivers and streams to protect fish, wildlife, habitat, and water quality, and further actions are needed to support the availability of water for these needs.

1-7

Drastic loss of fish and wildlife habitat makes it important to restore and connect habitat where feasible. (Draft Portfolio 13.)⁵

Moreover,

The projected statewide water needs of California fish, wildlife, and natural ecosystems have not been quantified, given the diversity of the state’s river systems and evolving understanding of both the biological needs of species and future climate-driven conditions. However, it is clear that each river system requires adequate season-by-season water flow to protect the natural functions fish and wildlife need. Such flows also support healthy water quality and temperatures and should be complemented by adequate habitat and removal of invasive species to enable fish and wildlife to thrive. (Draft Portfolio 15.)

Public Trust Doctrine analysis is of critical importance here. A real public trust analysis of the 26 rivers of the Delta watershed needs to be done in performing the

⁵ The number in citations to the Draft Portfolio refers to the page number cited.

quantification work required to make informed, rational decisions about SWP Long-Term operations. Having a real public trust analysis that includes all non-market public trust resources, including clean water, healthy flowing rivers, healthy abundant fish, and recreational opportunities, is also critical information for an alternatives analysis.

1-7
(Cont.)

DWR Must Prepare and Recirculate a new Draft EIR Including the Required Range of Reasonable Alternatives in order to Proceed in the Manner Required by CEQA

“Evaluation of project alternatives and mitigation measures is ‘the core of an EIR.’” (*Banning Ranch Conservancy v. City of Newport Beach* (2017) 2 Cal.5th 918, 937.) An EIR must “describe a range of reasonable alternatives to the project . . . which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.” CEQA Guidelines § 15126.6(a). “[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.” § 15126.6(b).

Section 5 of the Draft EIR sets forth the discussion of alternatives including the “no project alternative,” and four additional alternatives. No alternatives are included that would reduce reliance on the Delta as required by the State policy established by the Delta Reform Act. No alternatives are included that would increase freshwater flows through the Delta and protect California’s rivers by reducing exports. The Draft EIR instead simply starts and ends with a given being to maximize exports. No “hard look” is taken at trade-offs between maintaining or increasing exports as opposed to reducing exports to protect the Delta and California’s rivers.

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The founders of our nation and our State created governments of laws not rulers. Whether California Executive Branch officers wish to consider real alternatives to the proposed SWP Long-Term operations project, is not the standard. The standard is set by CEQA, the Delta Reform Act, and the public trust doctrine. Such alternatives, including ones reducing exports, must be included and considered in a new Draft EIR to be recirculated for public review and comment.

Real alternatives must be included in the new Draft EIR to be prepared and recirculated, including alternatives that would increase freshwater flows through the Delta and improve Delta water quality by reducing SWP exports. For example, the Governor’s *Executive Order N-10-19* (April 29, 2019) calls for a water resilience portfolio that will do such things as “embrace innovation and new technologies” and “incorporate successful approaches from other parts of the world.” Implementing such

modern water measures would reduce the claimed need for SWP exports and thus improve water quality in California's rivers and the Delta.

As an example of such alternatives, our organizations presented *A Sustainable Water Plan for California* (Environmental Water Caucus, May 2015) attached to our May 28, 2019 comment letter on the NOP and scoping that is part of DWR's Record. By way of brief summary, the *Sustainable Water Plan* alternative includes reducing exports out of the Delta to 3,000,000 acre-feet, or other variants on that quantity. Also included are: spending funds on such modern water measures as water conservation, water recycling, groundwater treatment and desalination and agricultural water conservation including conversion to drip irrigation in export areas, annual crops in export areas that can be fallowed in drought years, and staged removal from production of drainage-impaired lands in export areas that worsen water quality by such consequences as selenium discharge.

The Ninth Circuit Court of Appeals reversed a district court decision denying environmental plaintiffs' summary judgment because the challenged environmental document issued by the Bureau of Reclamation under NEPA (National Environmental Policy Act), "did not give full and meaningful consideration to the alternative of a reduction in maximum water quantities." (*Pacific Coast Federation of Fishermen's Assn's v. U.S. Dept. of the Interior*, 655 Fed.Appx. 595, 2016 WL 3974183*3 (9th. Cir., No. 14-15514, July 25, 2016) (Not selected for publication).) "Reclamation's decision not to give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities was an abuse of discretion and the agency did not adequately explain why it eliminated this alternative from detailed study." (*Id.* at *2.) Reclamation's "reasoning in large part reflects a policy decision to promote the economic security of agricultural users, rather than an explanation of why reducing maximum contract quantities was so infeasible as to preclude study of its environmental impacts." (*Id.* at *3.)

The requirement under NEPA, also true under CEQA, to consider the alternative of reducing exports to increase flows through the Delta is so obvious that the Ninth Circuit's decision was not selected for publication because no new legal analysis was required to reach the decision. The decision pertained to interim two-year contract renewals. If the alternative of reducing exports must be considered during renewal of two-year interim contracts, it most assuredly must be considered during the course of DWR's EIR on Long-Term operations of the SWP.

Alternatives reducing exports must be considered pursuant to CEQA and under the mandates of the Delta Reform Act. (Water Code § 85000 et seq). Again, the Delta Reform Act establishes the policy of the State of California "to reduce reliance on the Delta in meeting California's future water supply needs through a statewide strategy of

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investing in improved regional supplies, conservation, and water use efficiency.” (Water Code § 85021.)

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DWR must comply with CEQA, by developing and including real alternatives in a new Draft EIR recirculated for public review and comment, which would improve Delta and river water quantities and quality by reducing SWP exports. (CEQA Guidelines § 15088.5(a)(3.))

A New Draft EIR must be Prepared and Recirculated for Public Review and Comment for DWR to perform CEQA-Required Full Environmental Disclosure

Absence of Quantification

“While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.’ (Guidelines, § 15144.)” (*Banning Ranch Conservancy*, 2 Cal.5th 918, 938). A primary goal of CEQA is “transparency in environmental decision-making.” (*Save Tara v. City of West Hollywood* (2008) 45 Cal.4th 116, 136.) “CEQA requires full environmental disclosure.” (*Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 88.)

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As explained above, the Draft EIR simply takes maximizing exports and deliveries up to full contract quantities as givens. There is no real quantification of real water available for export and the adverse environmental impacts of maximizing exports.

The Water Resilience Portfolio referenced above, would require the subject agencies to “first inventory and assess” eight subjects, including, “Existing demand for water on a statewide and regional basis and available water supply to address this demand.” (*Executive Order N-10-19* ¶ 2a.) Other required subjects include “projected water needs in coming decades for communities, economy and environment” (¶ 2c), and “anticipated impacts of climate change to our water systems, . . . (¶ 2d.)

We understood the State plan had been to release the Draft Portfolio around the end of 2019. Sierra Club California, requested extension of the public comment period on the Draft EIR of at least one month, to afford the public the opportunity to comment on the Draft EIR informed by the information expected in the Portfolio. (Letter request, December 17, 2019.) That request was denied. DWR has failed to provide water availability and demand information in the Draft EIR. DWR has refused to extend the public comment period to allow the public to have the benefit of the information provided in the Portfolio. Again, the State agencies released the Draft Portfolio on Friday afternoon, January 3, 2020. That was 1/2 business day before comments were due on this Draft EIR on Monday, January 6, 2020. The State agencies have denied the public reasonable time to review the Draft Portfolio before closure of the public comment period

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on this Draft EIR. DWR has violated its full environmental disclosure duties and has failed to use its best efforts to find out and disclose all that it reasonably can.

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Failure to Disclose and Analyze DWR's Delta Water Tunnel Project

There is more. The Draft EIR in addition to its omissions also misleads and amounts to environmental concealment. *The Draft EIR does not even mention the ongoing Delta Water Tunnel project.* The Tunnel would worsen the existing crisis in the Delta by diverting massive quantities of freshwater upstream from the Delta. The flows diverted upstream would no longer provide any benefits by first flowing through the already impaired Delta.

In fact, there is an ongoing Delta Conveyance Design and Construction Authority (DCDCA) process (Delta Water Tunnel process) involving DWR, the Metropolitan Water District of Southern California (MWD) and several other exporters. Pursuant to the Delta Water Tunnel process, over \$300 million is being spent between May 2019 and June 2022 on engineering, fieldwork, property access, property acquisition, and power, roads, and utilities for the previously selected Water Tunnel alignment.

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Under the previous Administration, an amended and restated joint exercise of powers Agreement was entered into between DWR and several SWP contractors including MWD making up the DCDCA on October 26, 2018. The DCDCA had been created by a Joint Powers Agreements including MWD and several other export contractors on May 14, 2018.

The Amendment No. 1, amended and restated Joint Exercise of Powers Agreement of June, 2019, defines in Section 2(a), "Conveyance Project,"

For the purposes of the Planning Phase, "Conveyance Project" shall mean the planning, environmental documentation, permitting, and other preconstruction activities associated with the evaluation and development of a proposal and, as appropriate, alternatives for new Delta water conveyance facilities to be owned and operated by DWR, that would convey water from the Sacramento River north of the Delta directly to the existing SWP and, potentially, CVP pumping plants located in the south Delta.

Amendment No. 1 included a revised exhibit B, the Planning Budget and Schedule. That shows expenditures of \$348,100,000 from May 2019 through June 2022. That includes \$173,200,000 for engineering, \$56,000,000 for field work, \$19,900,000 for property access and acquisition services, and \$30,600,000 for power, roads, and utilities.



We understand that geotechnical work began at 19 sites in San Joaquin, Sacramento, and Contra Costa counties on June 10, 2019, including borehole drilling 150-200 feet down, to the depths of the previously proposed Delta Tunnels.

There is still more. The SWP Contract Amendment negotiation process defines the Delta Conveyance Facility (DCF) as,

Delta Conveyance Facility (DCF) shall mean those facilities of the State Water Project consisting of a water diversion intake structure, or structures, located on the Sacramento River in the northern Delta and connected by facilities to Banks Pumping Plant in the southern Delta with a single tunnel that will, in whole or in part, serve the purposes of this AIP.

DWR refers to this process as “the Contract Negotiations Concerning Water Supply Contract Cost and Benefit Allocation of Delta Conveyance Facilities of the State Water Project.” (DWR Preface to Sixth Offer, December 20, 2019.) (A copy of DWR’s Preface and Sixth Offer is attached.)

The “First Offer” submitted by the State Water Contractors to DWR on July 24, 2019, calls for the negotiation process to result in an Agreement-in-Principle (AIP.) The Contractors proposed that the AIP include a definition of the proposed new conveyance project, meaning Delta Water Tunnel, to include (First Offer, p. 5),

Project objectives
Capacity
General configuration (alignment, number of intakes, tunnels, pump stations, etc.) (First Offer, p. 5.)

DWR’s Sixth Offer of December 20, 2019, says “It is the Department’s continued belief that a Delta conveyance facility is in the best interests of the state, the PWAs [public water agencies], and the Delta.” (DWR’s Preface, p.1 of 1, December 20, 2019.) The Sixth Offer recites,

This Agreement in Principle is by and between the undersigned State Water Project Public Water Agencies and the State of California by and through the Department of Water Resources for the purpose of providing a mechanism for amending the State Water Project Water Supply Contracts that will address cost and benefit allocation of *Delta Conveyance Facilities of the State Water Project with an assumed State Water Project capacity of 6000 cubic feet per second.* (DWR’s Sixth Offer, p.2, December 20, 2019)(Emphasis added.)

DWR’s Sixth Offer includes the definition,

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Delta Conveyance Facility (DCF) shall mean those facilities of the State Water Project consisting of a water diversion intake structure, or structures, located on the Sacramento River and connected by facilities to Banks Pumping Plant in the southern Delta with a single tunnel that will serve the water supply purposes of the State Water Project. (DWR’s Sixth Offer, p.3, December 20, 2019.)

The previous Bay-Delta Conservation Plan (BDCP)/Water Fix project does not exist as the approval was rescinded by DWR on May 2, 2019. There is no EIR for the previous project because certification of the previous EIR was set aside by DWR on May 2, 2019.

The claimed purpose for DWR’s single Tunnel project is to improve SWP water export conveyance and deliveries. The Tunnel will be a SWP facility. Since SWP Long-Term operations are the reason for DWR’s single Tunnel project, omitting the Delta Tunnel process from the Draft EIR, renders it “so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.” (CEQA Guidelines, § 15088.5(a)(4.)

The Draft EIR includes affirmative misrepresentations,

The Proposed Project would not include any of the following:

- New construction of water facilities, infrastructure, or other land disturbance
- Construction of new facilities or modification to existing facilities that could increase the capacity of the SWP (Draft EIR 4-321.)

The truth is that DWR is in the process right now of planning the Delta Water Tunnel project for the very purpose of maximizing SWP water exports. The truth is that DWR is continuing its ongoing negotiations with water exporters over the cost and benefit allocation of Delta Conveyance Facilities of the SWP, meaning the Delta Water Tunnel. The truth is that the Proposed Project does include construction of the Delta Water Tunnel project.

The Draft EIR says, “Reclamation and DWR propose to use the Sacramento River, San Joaquin River, and Delta channels to transport water to export pumping plants located in the South Delta.” (Draft EIR 3-30.) That is false. The truth is that DWR proposes to develop, construct, and use an enormous, more than 30 miles long, underground Tunnel to transport water to export pumping plants located in the South Delta.

DWR’s deception includes *omitting* the Delta Water Tunnel project from its list of more than 40 cumulative water supply, management, and quality projects and actions in the Draft EIR. (Draft EIR, Table 4. 6-1a, List, following page 4-294.)

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There is still more. The just released Draft Portfolio admits,

The Administration is advancing a single-tunnel conveyance project under the Delta, . . . The project is undergoing environmental review and includes significant public engagement to design a project to limit Delta impacts and provide local benefits. (Draft Portfolio 16, also 7, 22 proposal 19.1, 113, unnumbered online page 143.)

The Draft EIR provides the opposite of CEQA-required full environmental disclosure. The Draft EIR instead provides concealment, deception, and misrepresentations.

This Draft EIR Process Must be Integrated with DWR’s Other Related Processes

CEQA Guidelines § 15124(d)(1)(C) requires that the EIR project description include “A list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies.” The second sentence in that subsection goes on to require, “*To the fullest extent possible, the lead agency should integrate CEQA review with these related environmental review and consultation requirements.*” (Emphasis added.) CEQA’s policy is to conduct integrated review. (*Banning Ranch Conservancy v. City of Newport Beach* (2017) 2 Cal.5th 918, 939, 942.) Moreover, “Lead agencies in particular must take a *comprehensive* view in an EIR.” (*Banning Ranch Conservancy*, 2 Cal.5th 918, 939, citing Public Resources Code § 21002.1(d).)

As shown above, instead of integrated CEQA review, key environmental review processes are going ahead separately, each in its silo. With one hand, DWR is proceeding to plan the design of the Delta Water Tunnel. With another hand, DWR is negotiating cost allocations with the water exporters for the Delta Water Tunnel. With an extra hand, DWR issued the subject Draft EIR that conceals instead of reveals the Delta Water Tunnel project and its causal relationship with SWP Long-Term operations.

This “silo” approach is puzzling given that the just released Draft Portfolio emphasizes that addressing new challenges such as climate change requires reflection, innovation, communication, and coordination. “*This cannot take place in silos but must be integrated within and across regions.*” (Draft Portfolio 25.)(Emphasis added.)

To proceed in the manner required by CEQA, DWR must prepare a new, honest Draft EIR and recirculate it for public review and comment. An accurate water availability and needs analysis, quantification, and disclosure and analysis of the Delta Water Tunnel project and its causal relationship with SWP Long-Term operations must be central focuses of the new Draft EIR.

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DWR Must Not Segment Environmental Analysis

Guidelines § 15378(a) in pertinent part defines a “project” to be:

‘Project’ *means the whole of an action*, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following . . . (Emphasis added.)

Guidelines § 15378(c) adds that:

The term ‘project’ *refers to the activity* which is being approved and which may be subject to several discretionary approvals by government agencies. The term ‘project’ does not mean each separate governmental approval. (Emphasis added.)

CEQA prohibits the piecemealing or segmentation of environmental analysis. A lead agency must not piecemeal the analysis of several smaller projects that are part of a larger project. Piecemealing is prohibited in order to ensure “that environmental considerations not become submerged by chopping a large project into many little ones, each with a potential impact on the environment, which cumulatively may have disastrous consequences.” (*Burbank-Glendale-Pasadena Airport Authority v. Hensler* (1991) 233 Cal.App.3d 577, 592.)

DWR and the exporters are designing the construction and operations of a Tunnel project in the absence of any CEQA compliance whatsoever. They are likewise negotiating an agreement in principle for the specific project. The Draft EIR on Long-Term SWP operations conceals rather than reveals and analyzes those ongoing DWR activities. Instead of dealing with the whole of the action as required by CEQA, these processes are all being done separately and segmented from each other. DWR is failing to proceed in the manner required by CEQA. DWR must prepare a new Draft EIR and recirculate it for public review and comment in order to correct these deficiencies.

DWR Must Analyze the Impacts of providing Water to the Entire Project

Pursuant to CEQA an EIR,

must assume that all phases of the project will eventually be built and will need water, and must analyze, to the extent reasonably possible, the impacts of providing water to the entire proposed project. (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 431.)

Moreover,

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The future water supplies identified and analyzed must bear a likelihood of actually proving available; speculative sources and unrealistic allocations (“paper water”) are insufficient bases for decision-making under CEQA. (*Vineyard Area Citizens*, 40 Cal.4th 412, 432.)

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The inventory and assessment and water resilience portfolio required by the Governor’s *Executive Order* are also the type of information required by CEQA to be in an EIR. There is no such information in the Draft EIR and therefore no foundation for determining SWP Long-Term operations. Consequently, a new Draft EIR and recirculation are necessary.

DWR Must Accurately Evaluate Cumulative Environmental Impacts

The Draft EIR concludes “the Proposed Project would have no impacts on aesthetics, agricultural resources, air quality, terrestrial biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, land-use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wild fire; and therefore, it would not contribute to potential cumulative impacts on these resource topics.” (Draft EIR 4-294.) This conclusory error will be addressed later.

The Draft EIR then states, “Thus, the cumulative impacts analysis in this DEIR is limited to the potential of the project to contribute to potentially significant cumulative impacts related to the topics of hydrology, surface water quality, aquatic resources and tribal cultural resources.” (Draft EIR 4-294.)

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The Draft EIR concludes, “*the contribution of the Proposed Project to Delta water quality would not be cumulatively considerable*” because “DWR operates the SWP in accordance with obligations under D-1641.” (Draft EIR 4-308.) (Emphasis added.) The Draft EIR reaches the same conclusion, that the cumulative impact of the Proposed Project is less than significant as to aquatic biological resources, again, because of the existing regulatory framework. (Draft EIR 4-316, 317.) The plan for the Project is to “Comply with D- 1641 and USACE Permit 2100” “Existing Regulatory Requirements.” (Draft EIR 1-5, Table 1-1 a; also, 3-15, Table 3-3a .) The “Action Goal or Objective” is “Continue to comply with existing limits and permit requirements to protect water quality for the beneficial uses of fish and wildlife, agriculture and urban uses.” (Draft EIR 1-5, Table 1-1 a; also, 3-15, Table 3-3a.)

The Water Quality Control Plan for the San Francisco Bay-San Joaquin - Sacramento Delta Estuary (WQCP) (Water Rights Decision 1641, D-1641) was adopted in 1995, and amended without substantive changes in 2006. The Water Board is in the

process of a periodic update of the WQCP, which is occurring in phases. The statement in the Water Board February 11, 2016 Ruling (on DWR’s Petition for a point of diversion change, p.4) reflecting reality is that: “The appropriate Delta flow criteria will be more stringent than petitioners’ current obligations and may well be more stringent than petitioners’ preferred project.”

D-1641 is now a quarter century out of date. In September 2016, the Water Board determined that under its new flow proposal for the San Joaquin River and its tributaries it would be necessary to “decrease the quantity of surface water available for diversion for other uses compared to the current condition (water supply effect).” (Evaluation of San Joaquin River Flow and Southern Delta Water Quality Objectives and implementation, Executive Summary at (ES) -21). As the Board pointed out: “The Bay-Delta is in ecological crisis. Fish species have not shown signs of recovery since adoption of the 1995 Bay-Delta Plan objectives intended to protect fish and wildlife.” (*Id.* at ES -1).⁶

In October 2017, the Water Board found that: “it is widely recognized that the Bay-Delta ecosystem is in a state of crisis.” (Final Scientific Basis Report in Support of New and Modified Requirements for Inflows from the Sacramento River and its Tributaries and Eastside Tributaries to the Delta, Delta Outflows, Cold Water Habitat, and Interior Delta Flows, at 1-4). The water management infrastructure including the Central Valley Project (CVP) and State Water Project (SWP) “have been accompanied by significant declines in nearly all species of native fish, as well as other native and non-native species dependent on the aquatic ecosystem. Fish species have continued to experience precipitous declines since last major update and implementation of the Bay-Delta Plan in 1995 that was intended to halt and reverse the aquatic species declines occurring at that time. In the early 2000s, scientists noted a steep and lasting decline in population abundance of several native estuarine fish species that has continued and worsened during the recent drought. Simultaneously, natural production of all runs of Central Valley salmon and steelhead remains near all-time low levels.” (*Id.*). According to the Water Board, the best available science indicates that existing “requirements are insufficient to protect fish and wildlife.” (*Id.* at 1 – 5).

The Draft EIR admits,

on December 12, 2018, through State Water Board Resolution No. 2018-0059, the State Water Board adopted the Bay-Delta Plan amendments establishing the lower San Joaquin River flow objectives and revised Southern Delta salinity objectives. However, the SWRCB did not assign responsibility to any water right holders to meet these new and revised objectives. In addition, the amendments are being

⁶ Also in September 2016, The Bay Institute published its report, *San Francisco Bay: The Freshwater-Starved Estuary*. Basically, water taken from the rivers is reducing water flowing from the rivers feeding the estuary so that the estuary--the Sacramento-San Joaquin River Delta, Suisun Marsh, and the bay-- ecosystem is collapsing.

legally challenged and have not yet been implemented through a water rights decision. The SWRCB continues to work on proposed amendments for the Sacramento River, its tributaries and the Delta. (Draft EIR 4-108, 109.)

The just released Draft Portfolio admits,

State and federal laws enacted to protect against reduced river flows and loss of habitat have been unevenly applied and only partially successful. . . . As ecological stressors mount, existing approaches to protecting fish and wildlife must be modernized to protect and restore natural systems that support our state’s celebrated bio diversity. (Draft Portfolio 12.)

The Draft Portfolio also admits, of course water diversions have significant adverse environmental impacts,

Over the last 200 years, human engineering to capture and divert flows has altered the natural functions of most major rivers in the state. . . . These changes have impaired our overall resilience as a state and impacted fish and wildlife, threatening the existence of several native fish species including distinct runs of salmon and steelhead.

Reduced stream flows, increased temperatures, lack of habitat, and proliferation of invasive species have impacted many fish species across the state. Native fish and wildlife evolved to cope with drought, and dry periods are increasingly stressful given reduced habitat and river flow in recent decades. . . . Pollution compounds the stress. Many species are declining, and the number of fish species considered highly vulnerable to extinction rose from nine in 1975 to 31 species today. (Draft Portfolio 12.)

It is unreasonable to conclude that SWP Long-Term operations complying with the outdated and insufficient standards in D-1641 will not result in cumulatively considerable adverse impacts on Delta water quality and aquatic biological resources.

Again, also, the Draft EIR fails to reveal and evaluate the impacts of the cumulative Delta Water Tunnel project which is a result of SWP Long-Term operations. An EIR must discuss a related project when “it [is] reasonable and practical to include the project and...without [its] inclusion, the severity and significance of the cumulative impacts” could not be adequately stated. *Gray v. County of Madera* (2008) 167 Cal. App. 4th 1099, 1127. An “EIR must contain facts and analysis, not just the bare conclusions of the agency.” *Gray*, 167 Cal. App. 4th at 1109. EIRs require detail for a very commonsense reason. Without a complete understanding of a project, decision-makers cannot determine whether it would make sense.

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The omission of the Delta Water Tunnel project renders the Draft EIR so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment on direct, indirect, and cumulative environmental impacts of the project are precluded.

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DWR Must Disclose and Evaluate Project Growth-Inducing Impacts

The Draft EIR concludes “the Proposed Project is not growth-inducing and would not induce secondary impacts of growth.” (Draft EIR 4-326.) Nothing could be further from the truth. It is the Long-Term operation of the SWP that is the reason for DWR’s ongoing processes to develop and approve the Delta Water Tunnel project. A new Draft EIR and recirculation are required in order to fully and accurately disclose and evaluate the growth inducing impacts of SWP Long-Term operation and the Delta Water Tunnel project.

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DWR Must Disclose and Analyze the Significant Adverse Environmental Impacts of the Project

The SWP moves “an annual average of 2.9 million acre-feet of water.” (Draft EIR 2-1.) DWR is pursuing the Delta Water Tunnel project to facilitate SWP Long-Term operations. Yet the Draft EIR concludes “*the proposed project does not result in significant effects, . . .*” (Draft EIR 5-1; also, 4-294, 308, 316, 317) (Emphasis added.)

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The conclusions in the Draft EIR are not supported by substantial evidence. They are simply based on speculation and argument. Just as compliance with the quarter century old D-1641 does not mean the project will not have significant adverse cumulative environmental impacts; the same is true with respect to direct and indirect impacts of the project. In addition, as shown above, DWR’s Delta Water Tunnel project is underway and is intended to facilitate SWP Long-Term operations. The Tunnel would cause numerous adverse environmental impacts including reducing freshwater flows through the already impaired Delta as a result of a new, large upstream diversion for the Tunnel. The Draft EIR admits “estimated changes to Delta outflow could affect the surface water quality or aquatic resources, . . .” (Draft EIR 4-14.) The Draft EIR obscures, in the process of admitting, the Delta is already impaired, not meeting water quality standards, including the pollutants chlorpyrifos and diazinon, DO, mercury and methylmercury, pathogens, pesticides, organochlorine pesticides, salt and boron, and selenium. (Draft EIR 4-104.)

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Again, the just-released Draft Portfolio admits the obvious; reducing river flows by diversions adversely impacts fish species. (Draft Portfolio 12, 13.)

As an example of an adverse impact, the Draft EIR contains a brief two paragraph discussion of environmental toxins, confined to exposure of Delta Smelt to toxins

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including toxic blue-green cyanobacteria (Microcystis.) (Draft EIR 5-101, 102.) The Draft EIR ignores the danger to people. On September 1, 2019, Bay City News Service reported,

A buildup of blue-green algae (cyanobacteria), commonly called an algae bloom, along the Sacramento-San Joaquin River Delta has prompted a safety warning from Contra Costa Environmental Health Services.

The department is advising people out for holiday weekend recreation on the Delta that contact with blooms can make people and pets very sick. Cyanobacteria create a green, blue-green, white or brown coloring on the surface of slow-moving waterways.

Advisory notices have been posted at the kayak launch and around the fishing dock at Big Break Regional Shoreline in Oakley after cyanobacteria was detected in the water.

It warns users to stay out of the water, and do not touch algae scum in the water or on the shore, do not use the water for drinking, cleaning or cooking; do not let pets or livestock enter or drink the water; and do not eat fish or shellfish from the water.

A caution advisory has also been posted near the boat ramp around the mouth of Mormon Slough by the California State Water Resources Control Board.

Stockton urban waterways are stagnant and thick with algal scum and toxins. Algae blooms are regularly found from Stockton to Discovery Bay with smaller ones becoming visible in sloughs between the cities. Increasing or even maintaining exports combined with climate change will reduce freshwater flows and increase the buildup of these dangerous algal blooms.

According to the EPA (

<https://www.epa.gov/nutrientpollution/harmful-algal-blooms>),

Harmful algal blooms can:

- Produce extremely dangerous toxins that can sicken or kill people and animals
- Create dead zones in the water
- Raise treatment costs for drinking water
- Hurt industries that depend on clean water

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According to the Draft Portfolio, “A warmer climate provides optimal conditions for worsening harmful algal blooms, which can force the closure of beaches, rivers, and lakes due to health risks for people and pets.” (Draft Portfolio 13.) Moreover, “Waterways are becoming increasingly prone to harmful algal blooms and low dissolved oxygen levels. (Draft Portfolio 13.)

We incorporate by reference the written comments submitted by Restore the Delta (submitted January 6, 2020.) Those comments go into much greater detail on several important subjects including water quality, harmful algal blooms, and climate change.

DWR must prepare and recirculate a new Draft EIR to accurately and honestly disclose and evaluate the numerous, serious adverse environmental impacts caused by increasing or even maintaining current SWP export levels. Producing or increasing dangerous toxins that can kill or sicken people, create dead zones in the water, and raise treatment costs for drinking water are examples of the serious adverse environmental impacts caused or worsened by SWP Long-Term operations. These serious impacts are ignored in the Draft EIR.

DWR Must Evaluate the Reality that DWR’s Federal Partner is Committed to Maximizing Exports Regardless of the Environmental Consequences

In the real world, the governing political landscape has changed. As has been said as to other issues, “hope is not a plan.” Until recently, the hope was that federal and state agencies would act in good faith to work together to protect water quality while operating the SWP in the case of the State, and the Central Valley Project (CVP) in the case of the U.S. Bureau of Reclamation. “DWR operates the SWP in coordination with the CVP, under the Coordinated Operation Agreement (COA) between the federal government and the State of California (authorized by Public Law 99-546).” (Draft EIR 1-3.) There is no longer any basis for such hope with respect to the federal government. It is a critically important issue when two partners in an operation, in this case the State, and the federal executive branch, are in foundational and fundamental disagreement.

Former Secretary of the Interior Ryan Zinke issued his August 17, 2018, memorandum to his staff on the subject “California Water Infrastructure.” The Memorandum stated, within 15 days, the Assistant Secretaries “shall jointly develop and provide to the Office of the Deputy Secretary an initial plan of action that must contain options for: maximizing water supply deliveries; . . .” That same memorandum included a directive to develop a plan of action for “preparing legislative and litigation measures that may be taken to maximize water supply deliveries to people; . . .”

On October 19, 2018, the president issued the *Presidential Memorandum on Promoting the Reliable Supply and Delivery of Water in the West*. (83 Fed.Reg. 53961, October 25, 2018.) The *Presidential Memorandum* in Section 2(a)(ii) ordered the

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Secretary of the Interior and the Secretary of Commerce to within 30 days designate one official to,

identify regulations and procedures that potentially burden the [California water infrastructure] project and develop a proposed plan, for consideration by the Secretaries, to appropriately suspend, revise, or rescind any regulations or procedures that unduly burden the project beyond the degree necessary to protect the public interest or otherwise comply with the law. For purposes of this memorandum, ‘burden’ means to unnecessarily obstruct, delay, curtail, impede, or otherwise impose significant costs on the permitting, utilization, transmission, delivery, or supply of water resources and infrastructure.

1-21
(Cont.)

On March 28, 2019, the federal government brought two lawsuits against the Water Board seeking to divert more water for the CVP, challenging the Water Board’s new flow requirements set forth in the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta estuary.⁷ The Draft EIR mentions that the Water Board’s “amendments are being legally challenged” but fails to disclose that one of the challengers is the federal government. (Draft EIR 4-107, 108.)

The Draft EIR fails to include significant new information. It states “When the new USFWS [United States Fish and Wildlife Service] and NMFS [National Marine Fisheries Service] Biological Opinions are issued, they will include incidental take statements (ITS) for Delta Smelt, Winter-run Chinook Salmon, Spring-run Chinook Salmon, Green Sturgeon, and steelhead. DWR will comply with the ITS in accordance with federal law in addition to state requirements.” (Draft EIR 3-14.)

In fact, the new federal biological opinions have already been issued. They were issued back on October 21, 2019. On July 1, 2019, NMFS biologists had concluded in a 1123-page biological opinion that Reclamation’s plan would likely jeopardize listed salmon and steelhead, along with Southern Resident killer whales, and would be likely to destroy or adversely modify critical habitat, all in violation of the federal Endangered Species Act.⁸ The federal government subsequently replaced the biologists with political appointees, and the October 21, 2019 NMFS biological opinion concluded Reclamation’s plan was not likely to jeopardize the continued existence of the subject species or destroy or adversely modify their critical habitats. Also on October 21, 2019, the USFWS issued a biological opinion concluding Reclamation’s plan was not likely to jeopardize the continued existence of Delta Smelt or destroy or modify its critical habitat.

1-22

Several public interest organizations filed a complaint on December 2, 2019, in the United States District Court for the Northern District of California seeking to set aside the

⁷ One federal lawsuit seeks a writ of mandate in state court, the Superior Court, County of Sacramento, while the other federal lawsuit seeks declaratory and injunctive relief in federal court, in the Eastern District of California.

⁸ The July 2019 biological opinion is available at: <https://www.documentcloud.org/documents/6311822-NMFS-Jeopardy-Biop-2019-OCR.html>.

October 2019 biological opinions as being unlawful under the Administrative Procedure Act and the Endangered Species Act. The suit is entitled *Pacific Coast Federation of Fishermen’s Associations et al. v. Wilbur Ross et al.*, Case No. 19-cv-07897.⁹

↑ 1-22
(Cont.)

According to the Sacramento Bee, “Gov. Gavin Newsom’s administration said Thursday [November 21, 2019] it will sue the Trump Administration over its efforts to push more water through the Sacramento-San Joaquin Delta, saying the federal plan would harm the sprawling estuary and the fragile fish populations that live there.” (Ryan Sabalow, *Newsom says California will sue Trump over Delta water, endangered fish*, Sacramento Bee, November 21, 2019.)

The federal government now claims it can override California environmental protection laws and Water Board water allocations and protections. The new federal policy is to maximize water exports regardless of the environmental damage and California’s water policies. The Draft EIR gives no hint of the new federal policies contrary to California’s laws and policies.

DWR must, pursuant to CEQA, disclose and analyze the fight that the federal government is now waging against the efforts of California state government to protect water quality. Long-Term SWP operations cannot be evaluated or determined in a vacuum from the federal efforts to maximize project exports.

1-23

The Court noted in *Banning Ranch Conservancy v. City of Newport Beach* (2017) 2 Cal.5th 918, 941 that the governmental actions not only conflicted with CEQA obligations, “but also ignored the practical reality. . . .” The integrity of the process of decision under CEQA is to be ensured “by precluding stubborn problems or serious criticism from being swept under the rug . . . (*Banning Ranch Conservancy*, 2 Cal.5th 918, 940-41.) Again, CEQA is a full environmental disclosure statute. DWR must disclose and analyze the likely impacts of the new federal policies and how Long-Term SWP operations can be modified to prevent or mitigate the adverse impacts of the new federal policies to maximize exports. For example, increasing or maintaining instead of reducing SWP exports will further worsen water quality and watershed degradation given the new federal policies to maximize exports as well as reduced runoff and increasing salinity intrusion due to climate change. The new federal policies to maximize exports are a practical reality that cannot be covered up by the State in making decisions regarding Long-Term SWP operations and whether to develop a Water Tunnel project.

DWR Must Evaluate SWP Long-Term Operations in light of Climate Change

The Draft EIR evades the impacts of climate change in one page plus part of one sentence. (Draft EIR 4-3, 4.) The discussion includes misleading statements, saying that

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⁹ The facts in this and the preceding paragraph are taken from the filed complaint.

“The Proposed Project is not expected to exacerbate any hazards, such as flood potential, because River flows and SWP pumping would remain within historical operating range. Thus, no further climate change analysis is required for this EIR.” (Draft EIR 4-3.) “No additional analysis or discussion of impacts of climate change on the environmental resources addressed in the DEIR is warranted.” (Draft EIR 4-4.)

In fact, the already impaired Delta is facing a quadruple whammy. There will be decreasing watershed runoff as a result of decreased snowfall due to climate change. That will reduce freshwater flows through the Delta. “Rising winter temperatures will reduce mountain snowpack in the Sierra Nevada and Cascade ranges by 65% on average by the end of the century, increasing flashy winter run off and flood risks while reducing spring and summer stream flow.” (Draft Portfolio 14.) Rising sea levels caused by climate change will result in greater salinity intrusion further into the Delta. “San Francisco Bay and the Sacramento-San Joaquin Delta will face salinity intrusion as sea level rises. (Draft Portfolio 14.) “Although the Delta is not one of the state’s ten major hydrologic regions, it plays a complex role in the water resilience of California and faces particularly acute climate risks.” (Draft Portfolio 110.) The new federal policy to maximize exports will further decrease freshwater flows. DWR’s Delta Water Tunnel will further reduce freshwater flows through the Delta. That means that maintaining or increasing SWP exports will further exacerbate the Delta’s poor freshwater flows and water quality.

These issues need to be dealt with in a, new, recirculated Draft EIR to allow informed development and consideration of alternatives responsive to the problems. That will include reducing exports to by that way increase freshwater flows through the Delta to compensate for declining watershed runoff and worsening salinity intrusion.

DWR Must Disclose and Assess the future Reduction in Claimed Needs for SWP Exports as a result of New Technologies and Curtailed Exports

The refusal of DWR to extend the public comment period so the public would be informed by the Draft Portfolio appears deliberate. Paragraph 3 of *Executive Order N-10-19* requires that the portfolio established by the State agencies embody seven principles including, “Utilize natural infrastructure such as forests and floodplains” (¶ 3(b); “Embrace innovation and new technologies” (¶ 3(c); and “Incorporate successful approaches from other parts of the world.” (¶ 3) (e.)” That type of information would be invaluable in lessening the future claimed need for water exports from the Delta. We understand, for example, the City of Los Angeles has a plan to reduce its imported water supply by 50% by the year 2025. According to Water Replenishment District President John Allen, “Water recycling is the wave of the future.” (Release, August 22, 2019.) “SB 606 and AB 1660 [signed into law May 31, 2018] emphasize efficiency and stretching existing water supplies in our cities and on farms.” (State Water Resources Control Board fact sheet.)

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(Cont.)

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The Draft Portfolio informs,

More efficient use of water by communities and agriculture has stretched water supplies to meet demands, especially on urban landscapes.

Diverse water supply sources and reuse of water have helped many communities effectively weather drought. (Draft Portfolio 12.)

Many Southern California water districts are building regional self-sufficiency but do not expect to be able to feasibly replace *all* water supply diverted from the Delta over the next couple of decades. (Draft Portfolio 113.)(Emphasis added.)

Moreover,

The most cost-effective, environmentally beneficial way to stretch water supplies is through better water use efficiency and eliminating water waste. . . . Recycled water is a sustainable, nearly drought-proof supply when used efficiently, and the total volume of water California recycles today could triple in the next decade. (Draft Portfolio 17.)

Water exports will be reduced. “The trade-off to manage salinity could reduce the amount of water available to support an ecosystem already under stress and for export from the Delta. Exports could be naturally curtailed by about 10% under mid-century climate projections, and by about 25% by 2100.” (Draft Portfolio 111.) By 2050 the amount of water used by agriculture is expected to decline, and decline the most in the San Joaquin and Tulare Lake regions. (Draft Portfolio unnumbered page, page 58 online.)

Utilizing natural infrastructure would mean continuing to use the Sacramento River and Delta channels for conveying water as opposed to diverting large river flows into an expensive underground Tunnel.

In the absence of any meaningful discussion of utilization of natural infrastructure, embracing innovation, and incorporating successful approaches from other parts of the world, the Draft EIR appears deliberately calculated to simply justify increasing or maintaining the existing levels of exports. The Draft EIR appears deliberately calculated to omit information and analysis that would be essential to an informed evaluation of the trade-offs between increasing or maintaining exports or instead finally beginning to reduce exports. As is true on every critical issue, the November 21, 2019 Draft EIR is so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

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(Cont.)

DWR Must Include an Accurate, Stable, and Finite Project Description

Pursuant to CEQA,

[a]n accurate, stable and finite project description is the *sine qua non* [indispensable requirement] of an informative and legally sufficient EIR. However, a curtailed, and enigmatic or unstable project description draws a red herring across the path of public input. Only through an accurate view of the project, may the public and interested parties and public agencies balance the proposed project’s benefits against its environmental cost, consider appropriate mitigation measures, assess the advantages of terminating the proposal and properly weigh other alternatives. (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 654 (Internal citations omitted).)

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The Draft EIR, instead of providing the required accurate project description, uses such vague phrases as “operational flexibility” and “adaptive management” as a substitute for the legally required detail and quantification of the actual impacts of SWP Long-Term operations on the environment. (Draft EIR 1-2.)

The State and the federal government are in essence partners in operating the SWP and CVP and in creating new project facilities. The federal government has recently changed policies to maximize exports regardless of the consequences. The Governor recently threatened a lawsuit against the federal government as a result. The “Conveyance Project” is defined to include conveying water in addition to SWP pumping plants, to “potentially, CVP pumping plants located in the south Delta.” The existing Draft EIR failed to disclose and evaluate the new federal policies to maximize exports. It also failed to disclose and evaluate DWR’s Delta Water Tunnel project. These types of omissions look deliberate. The law, here CEQA, requires sounding the environmental alarm bell in Draft EIRs over serious issues. The Draft EIR project description is inaccurate, unstable, and not finite.

There are adverse environmental impacts from SWP exports, which would increase with a Water Tunnel, on other resources as well as endangered fish species, including Delta agriculture, freshwater flows, water supply, water quality, fisheries, growth-inducement, and cumulative impacts. The State’s EIR must also assess the impacts of Long-Term SWP operations under the public trust doctrine. Moreover, it is time also to evaluate SWP exports “through the Human Right to Water and environmental justice lenses to ensure that environmental justice communities are being included and treated as partners in water decision-making.” ([The Fate of the Delta: Impacts of Proposed Water Projects and Plans on Delta Environmental Justice Communities](#)) (at p. 94) (Restore the Delta, September 17, 2018.) For example, the Delta includes large environmental justice communities adversely impacted by SWP exports.

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The *Fate of the Delta* document is a comprehensive and current explanation of Delta water issues. You can click on the report title, above, and get to this resource document.

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(Cont.)

A new, recirculated Draft EIR must present the case for stricter standards including reduction in SWP exports to increase freshwater flows, not just compliance with outdated D-1641.

DWR’s Draft EIR Substitutes Argument, Speculation, and Unsubstantiated Opinion for Substantial Evidence

CEQA Guidelines § 15384(b) defines “substantial evidence” as including “facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.” “Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, . . . does not constitute substantial evidence.” (§ 15384(a.)

The word uncertain or one of its derivatives is used almost 200 times throughout the Draft EIR. The Draft EIR recites, “Project environmental commitments include facility operations, facility and habitat improvement actions, funding for studies that reduce uncertainty about SWP effects on Delta fishes, and an adaptive management framework that, individually and collectively are intended to minimize the effects of the Proposed Project and improve conditions for Delta fishes.” (Draft EIR 5-3.) Over and over again, impacts are uncertain or highly uncertain with respect to fish species.¹⁰ The repeated reference to uncertainties is a deliberate device to avoid admitting the truth; the project will have numerous, significant, adverse environmental impacts. DWR has failed to use its best efforts to find out and disclose all that it reasonably can.

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The Draft EIR throughout substitutes speculation for substantial evidence, in reaching the clearly erroneous conclusion that SWP Long-Term operations have no significant adverse environmental impacts, and no significant cumulative impacts.

Conclusion

The Draft EIR issued November 21, 2019, is so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment have been precluded. Consequently, DWR must prepare and recirculate a new Draft EIR in order to proceed in the manner required by CEQA. (CEQA Guidelines, § 15088.5(a.)

1-29

Contacts for this comment letter are Conner Everts, Facilitator, Environmental Water Caucus (310) 804-6615 or connere@gmail.com , or Robert Wright, Counsel, Sierra Club California (916) 557-1104 or bwrightatty@gmail.com . We would do our best to answer any questions you may have.

¹⁰ A few examples include Draft EIR 3-50, 4-6, 4-116, 117, 120, 121, 132, 134, 145, 215, 5-38, 100.

Sincerely,



E. Robert Wright, Counsel
Sierra Club California



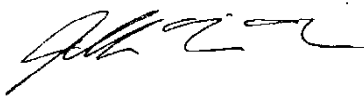
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AquAlliance



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California Sportfishing Protection
Alliance



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Advisor
Planning and Conservation League

II.6.12 LETTER O-SIERRA CLUB-1 – SIERRA CLUB CALIFORNIA, BOB WRIGHT, COUNSEL—JANUARY 6, 2020

II.6.12.1 RESPONSE TO COMMENT O-SIERRA CLUB-1-1

Master Response 4, “Legal Standards,” discusses the standard of review required under CEQA. The DEIR is a good faith effort to achieve the required analysis, and to provide DWR, the Lead Agency, and the public with sufficient information about the project, its potential environmental effects, and the ways which those effects can be minimized, whether through mitigation measures or project alternatives, so that DWR can make an informed and reasoned decision on whether to approve the project.¹

II.6.12.2 RESPONSE TO COMMENT O-SIERRA CLUB-1-2

The requirements of CEQA relating to consideration of alternatives is discussed further in Master Response 3, “The CEQA Process,” Under the CEQA Guidelines, the DEIR should identify a reasonable range of alternatives that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more significant effects.² Under CEQA, a lead agency may structure its alternatives analysis around a reasonable definition of a fundamental underlying purpose, and need not study alternatives that cannot achieve that basic purpose.³

On the subject of the Delta Reform Act policy requiring reduced reliance, please see Master Response 7, “Delta Reform Act.” For more information please also see also Master Response 6, “Demand Management/Conservation Measures.”

II.6.12.3 RESPONSE TO COMMENT O-SIERRA CLUB-1-3

The potential impact of the Proposed Project related to Harmful Algal Blooms (HABs) was evaluated in DEIR Chapter 4.4, “Aquatic Biological Resources.” See, for example, DEIR pages 4-152 through 4-156, which discuss the results of DSM2-HYDRO modeling focused on an analysis of maximum daily absolute velocity to assess exceedance of a 1 foot per second (ft/s) threshold, above which turbulent mixing may disrupt *Microcystis* blooms. The modeling results suggested there would be little difference between the Proposed Project and the Existing Conditions scenarios in the potential for velocity conditions to affect HAB. The potential for HAB to affect aquatic species in the Delta is evaluated by species and is summarized in DEIR Table 4.4-6 (pages 4-121 through 4-137). DEIR Chapter 4.4 found that impacts on all aquatic species from HAB would be less than significant.

¹ Pub. Resources Code, § 21061; CEQA Guidelines, § 15003.

² CEQA Guidelines, § 15126.6, sub. (a).

³ *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1165.

II.6.12.4 RESPONSE TO COMMENT O-SIERRA CLUB-1-4

The reference to the Sierra Club May 28, 2019 comment letter submitted to DWR during the public scoping period following the Notice of Preparation (NOP) is noted. DWR reviewed and considered all of the comments submitted during the NOP scoping period during preparation of the DEIR.

II.6.12.5 RESPONSE TO COMMENT O-SIERRA CLUB-1-5

Please see Response to Comment O-Sierra Club-1-1 and Master Response 19, "Public Review Period."

II.6.12.6 RESPONSE TO COMMENT O-SIERRA CLUB-1-6

The Proposed Project consists of multiple elements that characterize future operations of SWP facilities, modify ongoing programs being implemented as part of SWP operations, improve specific activities that would enhance protection of special-status fish species, or support ongoing studies and research on these special-status species to improve the basis of knowledge and management of these species. Implementation of these elements is intended to continue operation of the SWP while minimizing and fully mitigating the take of listed species consistent with CESA requirements (see DEIR pages 3-15 through 3-52).

With regards to the Delta Reform Act, please see Master Response 7, "Delta Reform Act."

With regards to alternatives please see Response to Comment O-Sierra Club-1, and see also Master Response 3, "The CEQA Process."

II.6.12.7 RESPONSE TO COMMENT O-SIERRA CLUB-1-7

For a discussion of the Delta Reform Act please see Master Response 7, "Delta Reform Act." The project area includes the SWP Service Areas and existing SWP storage and export facilities located within the Delta and vicinity. DEIR Chapter 3, "Project Description," Figure 3-1 (page 3-2) shows those SWP facilities that are located in the Delta and vicinity, which are summarized in DEIR Table 3-3 (pages 3-15 through 3-17) and described in detail on DEIR pages 3-17 through 3-53. The DEIR contains an analysis of the proposed facilities and programs listed in Table 3-3. DEIR Chapter 1, "Introduction," Figure 1-1 (page 1-4) shows the long-term operations area of the SWP.

DEIR Appendix A, "Initial Study of the Long-Term Operations of the State Water Project," addressed hydrologic conditions of the Sacramento River and the Feather River upstream of their confluence north of the Delta. DEIR Appendix A, Chapters 3.10.1.1 and 3.10.1.2 addressed flows of these rivers and concluded that flows in these rivers would not be affected by the proposed changes in SWP operations. As noted in DEIR Appendix A Chapter 3.10.1 (page 3-79), for the San Francisco Bay Area, Central Coast, San Joaquin Valley, and Southern California water service areas, surface water streams are not used to convey SWP water supplies.

DEIR Appendix A, Chapter 3.16, "Recreation," found there would be no project-related impacts related to recreation. Additional analyses related to hydrology and water quality are contained in DEIR Chapter 4.2, "Hydrology," and Chapter 4.3, "Water Quality," and impacts were found to be less than significant.

The Public Trust Doctrine does not require state agencies with public trust obligations to give greater weight to public trust values than other competing uses of such resources. The Supreme Court determined that to protect the “prosperity and habitability of much of” California, the State Water Resources Control Board has the discretion to “grant nonvested usufructuary rights to appropriate water even if diversions harm public trust uses” (National Audubon Society v. Superior Court [1983] 33 Cal.3d 426). Accordingly, in the State Water Resource Control Board Cases (2006) 136 Cal.App.4th 674, 778, the court held that the State Water Board was required to balance competing interests to determine what level of protection for public trust resources was “feasible.” What constitutes feasible protection for public trust resources is a determination made by the responsible state agency after balancing public trust and competing interests and considering its statutory authority and responsibilities.

To the extent that DWR has a duty to take public trust values into account before it approves a project, it has done so through the process of designing and studying the impacts of the Proposed Project, as documented in large part by this EIR. No further analysis is required. Please see also Master Response 14, “Public Trust,” for a detailed discussion related to the Public Trust Doctrine.

II.6.12.8 RESPONSE TO COMMENT O-SIERRA CLUB-1-8

Please see responses to Comments O-Sierra Club-1-2, O-Sierra Club-1-6, and O-Sierra Club-1-7.

II.6.12.9 RESPONSE TO COMMENT O-SIERRA CLUB-1-9

Exports and deliveries presented in the DEIR are not maximized to full contract quantities. They are representations of the quantification of the real water available for export with the best available science. Please review Master Response 20, “Best Available Science,” for a more detailed discussion regarding best available science. Per CEQA compliance, the DEIR quantifies potential impacts of the Proposed Project or other alternatives to Existing Conditions. These impact analyses are provided in Chapter 4, “Environmental Setting and Impact Analysis,” and Chapter 5, “Alternatives to the Proposed Project.”

Existing demand and available water supply are assessed in Chapter 4.2.1, “Environmental Setting.” As noted in Appendix H Attachment 1-2, “CalSim II Model Assumptions Callouts,” modeling accounts for predicted 2030 land-use assumptions. Land use assumptions are limited to 2030 because the approval process will need to re-commence in 2030. Anticipated impacts of climate change and sea level rise are discussed in Appendix F, “Climate Change Sensitivity Analysis.”

Please see Master Response 6, “Demand Management/Conservation Measures” for more information.

II.6.12.10 RESPONSE TO COMMENT O-SIERRA CLUB-1-10

The “Draft Portfolio” is not the subject of this EIR. The public review period provided for the DEIR satisfies CEQA requirements. The DEIR was circulated for public review and comment for a period of 45 days, from November 22, 2019 to January 6, 2020. The DEIR and associated Notice of Completion were filed with the California Office of Planning and Research State Clearinghouse on November 22, 2019.

There is no legal requirement to grant a request for an extension. Please see also Master Response 19, “Public Review Period,” for additional details related to the public review period.

II.6.12.11 RESPONSE TO COMMENT O-SIERRA CLUB-1-11

With regards to the suggestion that the DEIR should have considered the Delta Conveyance Design and Construction Authority (DCDCA) process, please see Master Response 26, “One-Tunnel Delta Conveyance Project.” For the reasons set forth therein, the DEIR does not require recirculation.

II.6.12.12 RESPONSE TO COMMENT O-SIERRA CLUB-1-12

As described in DEIR Chapter 3.3, “Description of the Proposed Project,” the Proposed Project does not include constructing or installing any new facilities. Rather, the Proposed Project includes operation of existing SWP facilities, modifications to ongoing programs being implemented as part of SWP operations, improvements to specific activities that would enhance protection of special-status fish species, and commitments to support ongoing studies and research on these special-status species to improve the basis of knowledge and management of these species.

As also stated in DEIR Chapter 3.3, DWR is requesting an ITP that would provide real-time operational decision-making to enable satisfying existing SWP water supply and settlement contracts and other legal obligations. The proposed Delta Conveyance Project is still in early planning stages and is subject to separate environmental review and permitting processes. Therefore, it would not be appropriate to combine the environmental analysis of the Proposed Project with an environmental document addressing a potential future Delta Conveyance Project. Based on these points, the DEIR for long-term operations of the SWP require does not warrant recirculation. Please see Master Response 26, “One-Tunnel Delta Conveyance Project,” for a detailed discussion of why the One-Tunnel Project is not included in the EIR.

II.6.12.13 RESPONSE TO COMMENT O-SIERRA CLUB-1-13

As the comment notes, CEQA Guidelines Section 15378(a) requires a lead agency to analyze a “project,” which is defined as the “whole of the action.” Where actions have independent utility from one another, however, the separate actions need not be analyzed in a single environmental document. See *Del Mar Terrace Conservancy, Inc. v. City Council of the City of San Diego* (1992) 10 Cal.App.4th 712. As discussed in Master Response 8, “Other State Efforts,” the proposed Delta Conveyance Project is still in planning stages and subject to separate environmental review and permitting processes. The long-term operations of the SWP and a future Delta Conveyance Project are related but independent projects, each of which will have to be considered on its own merits in separate environmental documents. Far from undermining the purposes of CEQA, such separate review for independent (if related) projects will ensure that each such project receives the scrutiny it deserves and that it will be considered in connection with proposed alternatives that might meet project objectives at lesser environmental cost. Please see Master Response 26, “One-Tunnel Delta Conveyance Project,” for more details regarding the “Tunnel project.”

II.6.12.14 RESPONSE TO COMMENT O-SIERRA CLUB-1-14

The caselaw referenced in the comment—*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412—pertains to the lack of a secondary analysis of the availability of water supplies for a new master planned community, which would create a substantial new demand for potable water supplies. Unlike the *Vineyard* case, the Proposed Project does not involve or require a determination as to whether SWP water supplies will be adequate to meet the future needs of new housing developments. Rather, as stated in DEIR Chapter 3.3, “Description of the Proposed Project,” the Proposed Project includes operation of existing SWP facilities, modifications to ongoing programs being implemented as part of SWP operations, improvements to specific activities that would enhance protection of special-status fish species, and commitments to support ongoing studies and research on these special-status species to improve the basis of knowledge and management of these species. As stated in DEIR Chapter 3.3, DWR is requesting an ITP that would provide discretion in operational decision-making to comply with the terms of its existing water supply and settlement contracts (which include maximum deliveries under the terms of these contracts), and other legal obligations. The water resilience portfolio is not the subject of this EIR. Please see also Response to Comment O-Sierra Club-1-6. Therefore, recirculation of the DEIR is not required.

II.6.12.15 RESPONSE TO COMMENT O-SIERRA CLUB-1-15

The DEIR has been properly prepared in accordance with the physical conditions that existed at the time the NOP was published on April 19, 2019, and as modeled based on CalSim II. DWR operates the SWP in accordance with its water rights permits, which are issued by the State Water Resources Control Board.

In preparation of the DEIR, DWR is not required to speculate as to the potential future changes that may or may not be made to existing water rights permits or to the Basin Plans. As noted in the State CEQA Guidelines Section 15145, “If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.” DWR has properly noted in the DEIR passages cited in the comment that the referenced Bay-Delta Plan amendments are being legally challenged and have not yet been implemented, and that the SWRCB continues to work on proposed amendments for the Sacramento River, its tributaries, and the Delta (see DEIR Chapter 4.4, “Aquatic Biological Resources,” pages 4-107 and 4-108). The water resilience portfolio is not the subject of this EIR. Therefore, no changes to the DEIR’s cumulative analysis are required. (Please see also Master Responses 2, “Baseline,” and Master Response 26, “One-Tunnel Delta Conveyance Project,” for additional discussions related to the environmental baseline and cumulative impacts, respectively.)

II.6.12.16 RESPONSE TO COMMENT O-SIERRA CLUB-1-16

The “One-Tunnel Delta diversion proposal” was not considered reasonably foreseeable because no environmental documentation has been completed for the One-Tunnel Delta Diversion Project and the Notice of Preparation of Environmental Impact Report for the Delta Conveyance Project was released on January 15, 2020. Please see Master Response 26, “One-Tunnel Delta Conveyance Project.”

II.6.12.17 RESPONSE TO COMMENT O-SIERRA CLUB-1-17

DEIR Chapter 4.6.2.2, "Growth-Inducing Impacts," acknowledges that the potential increase in future project deliveries might be linked to future growth, as increased water deliveries could be used for urban growth in areas dependent on this water supply. However, the analysis demonstrates that availability of water is only one of many factors that land use agencies consider when making decisions about growth, and that historical fluctuations in South of Delta water deliveries has not had an appreciable effect on population growth in the South of Delta service areas (refer DEIR Chapter 4.6, Figures 4.6-3 and Figure 4.6-4). Based on the absence of a discernable link between SWP water deliveries and population growth based on historical data, long-term operations of the SWP is not anticipated to result in a direct or indirect increase in population.

Please also see Master Response 26, "One-Tunnel Delta Conveyance Project."

II.6.12.18 RESPONSE TO COMMENT O-SIERRA CLUB-1-18

The fact that DWR is separately considering the Delta Tunnel Conveyance does not serve as evidence that the Proposed Project would have significant environmental impacts. As described in DEIR Chapter 3.3, "Description of the Proposed Project," the Proposed Project consists of continued operation of a specific set of existing infrastructure and programs and a new ITP for special-status fish species. Please see Response to Comment O-Sierra Club-1-12 and Master Response 26, "One-Tunnel Delta Conveyance Project," for an additional discussion of the Proposed Project's relationship to other State efforts.

II.6.12.19 RESPONSE TO COMMENT O-SIERRA CLUB-1-19

Master Response 4, "Legal Standards," discusses the standard of review required under CEQA. The DEIR is a good faith effort to achieve the required analysis, and to provide DWR, the Lead Agency, and the public with sufficient information about the project, its potential environmental effects, and the ways which those effects can be minimized, whether through mitigation measures or project alternatives, so that DWR can make an informed and reasoned decision on whether to approve the project.⁴ Please also see Response to Comment O-Sierra Club-1-18. The Proposed Project includes operation of existing SWP facilities, modifications to ongoing programs being implemented as part of SWP operations, improvements to specific activities that would enhance protection of special-status fish species, and commitments to support ongoing studies and research on these special-status species to improve the basis of knowledge and management of these species. Please see Master Response 8, "Other State Efforts," for an additional discussion of the Proposed Project's relationship to other State efforts. The water resilience portfolio is not the subject of this EIR.

The Porter Cologne Water Quality Control Act requires the RWQCBs to prepare and periodically update basin plans. In accordance with Section 13050(f) of the Porter-Cologne Act, the basin plans must identify beneficial uses of water, adopt water quality objectives to protect the beneficial uses, and develop implementation programs for achieving the objectives. Water quality criteria in the basin plans

⁴ Pub. Resources Code, § 21061; CEQA Guidelines, § 15003.

also must be developed in accordance with the federal Clean Water Act. Existing impairments to the Delta are addressed in the applicable regional Basin Plans, and DWR is required to operate the SWP in compliance with water rights permits issued by the SWRCB, which take into account the impairments and water quality objectives of the regional Basin Plans. (See DEIR Chapter 4.3, “Surface Water Quality.”) The DEIR identifies designated beneficial uses, total maximum daily loads, impaired waterbodies, and water quality constituents that could be affected by the project, and concludes that water quality impacts with implementation of the long-term operations of the SWP would be less than significant (see DEIR pages 4-20 through 4-28). No changes to the DEIR are required.

The DEIR contains a thorough analysis of the Proposed Project’s potential impacts on special-status fish species, which is supported by substantial evidence contained in the whole of the project record (see DEIR Chapter 4.4, “Aquatic Biological Resources”).

II.6.12.20 RESPONSE TO COMMENT O-SIERRA CLUB-1-20

As noted in Chapter 4.4.7, “Impacts of the Proposed Project,” there would be little difference between the Proposed Project and Existing Conditions scenarios in the potential for velocity conditions affecting harmful algal blooms (HABs). Therefore, HABs are not expected to increase in frequency under the Proposed Project as compared to Existing Conditions. Please see Response to Comment O-Sierra Club-1-3 for more details. The water resilience portfolio is not the subject of this EIR.

Regarding comments submitted by Restore the Delta, please see Comment Letter O-RTD-1.

II.6.12.21 RESPONSE TO COMMENT O-SIERRA CLUB-1-21

Please see Master Response 22, “Relationship to CVP Operations,” which describes the relation between the SWP and CVP as enabled through the COA. As stated in DEIR Chapter 3.2.3, DWR will comply with the incidental take statements ITS included in the USFWS and NMFS Biological Opinions, in accordance with federal law, in addition to state requirements. Until Reclamation issued a Record of Decision (ROD) in February 2020, the SWP and the CVP operated in accordance with the 2008 United States Fish and Wildlife Service (USFWS) Biological Opinion and the 2009 National Marine Fisheries Service (NMFS) Biological Opinion issued pursuant to Section 7 of the federal Endangered Species Act (ESA) of 1973. The USFWS and NMFS issued new biological opinions on October 21, 2019 (2019 Biological Opinions), which Reclamation adopted through issuance of the February 2020 ROD.

DWR will continue to operate the SWP in accordance with all applicable regulatory requirements, including Delta water quality limits, and within the terms and conditions contained in its water rights permits and licenses issued by the SWRCB.

II.6.12.22 RESPONSE TO COMMENT O-SIERRA CLUB-1-22

Until Reclamation issued a Record of Decision (ROD) in February 2020, the SWP and the CVP operated in accordance with the 2008 United States Fish and Wildlife Service (USFWS) Biological Opinion and the 2009 National Marine Fisheries Service (NMFS) Biological Opinion issued pursuant to Section 7 of the federal Endangered Species Act (ESA) of 1973. The USFWS and NMFS issued new biological opinions on October 21, 2019 (2019 Biological Opinions), which Reclamation adopted through issuance of the

February 2020 ROD. The new Biological Opinions include incidental take statements (ITS) for the following federally-listed species: Delta Smelt, Winter-run Chinook Salmon, Spring-run Chinook Salmon, Green Sturgeon, and steelhead. DWR will be subject to the ITS in accordance with federal law in addition to state requirements.

DWR acknowledges that several public interest organizations filed a complaint on December 2, 2019 in the United States District Court for the Northern District of California seeking to set aside the October 2019 Biological Opinions as being unlawful under the Administrative Procedure Act and the Endangered Species Act. Further discussion of matters pertaining to the federal Biological Opinions is provided in Master Responses 13, “2019 Federal Biological Opinions,” and 16, “Relationship to 2019 Biological Opinions.”

II.6.12.23 RESPONSE TO COMMENT O-SIERRA CLUB-1-23

Please see responses to Comments O-Sierra Club-1-22.

The purpose of an EIR issued pursuant to CEQA is to provide public agencies and the public in general with detailed information about the effect that a Proposed Project is likely to have on the environment, to identify ways in which the significant effects of such a project might be minimized, and to evaluate reasonable alternatives to such a project. (Cal. Pub. Res. Code Section 21002.1(a), 21061.) In this instance, the project is the Long-Term Operations of the State Water Project (SWP). Although the project does not include CVP operations, neither the DEIR nor FEIR excluded discussion of CVP operations. Long-term operations of the CVP are specifically addressed in the cumulative analysis, chapter 4.6.1, of the FEIR. Please see Master Response 3, “The CEQA Process,” for further information regarding development of the project. Please see Master Response 1, “Scope of Analysis,” and Master Response 22, “Coordination with CVP,” for more information regarding the relationship between SWP and CVP operations. Please also see Master Response 16, “Relationship to 2019 Biological Opinions,” for information related to the federal litigation.

II.6.12.24 RESPONSE TO COMMENT O-SIERRA CLUB-1-24

As explained in DEIR Chapter 4.1.3, “Impact of Climate Change,” and DEIR Appendix A, “Initial Study of the Long-Term Operations of the State Water Project,” the project would have no impact, directly or indirectly, on Greenhouse Gas Emissions. CEQA generally does not require any further analysis of climate change impacts, such as an evaluation of impacts of the environment on a project, unless the project may exacerbate existing environmental hazards. The Proposed Project is not expected to exacerbate any hazards, such as flood potential, because river flows and SWP pumping would remain within historical operating range.

DWR voluntarily chose to prepare a sensitivity analysis of operational changes to the Existing Conditions and the Proposed Project scenarios under climate change and sea level rise conditions, for informational purposes only. The Existing Conditions and the Proposed Project and Refined Alternative 2b scenarios were simulated using CalSim II (see DEIR Appendix F, “Climate Change Sensitivity Analysis,” for further details) assuming projected climate change and sea level rise conditions. The results from these simulations were analyzed to understand if the incremental changes between the

Existing Conditions and the Proposed Project or Refined Alternative 2b scenarios would remain similar or would be different with and without climate change.

As discussed in detail on DEIR page 4-3, modeling results indicate that the incremental changes in the Delta surface water flows and other waterways affected by SWP operations under the future climate and sea level rise scenarios around year 2035 are expected to be similar Existing Conditions. Furthermore, because the hydrologic characteristics would remain similar, the analysis of water quality in the Delta and other waters affected by SWP operations, as influenced by hydrology, would also remain similar.

An updated Climate Change Sensitivity Analysis and comparison of CMIP3 to CMIP5 is presented in Part III of this FEIR. Appendix F, Climate Change Sensitivity Analysis, describes an analytical comparison of specific CalSim II outputs reflecting SWP and CVP operations under Existing Conditions and the Proposed Project under current and future climate and sea level rise conditions. Future conditions include Q5 (central tendency) climate centered around year 2030 with 15 cm of sea level rise, and Q5 climate centered around year 2030 with 45 cm of sea level rise. The future climate projections were developed for the Bay-Delta Conservation Plan/California WaterFix Analyses (ICF 2016). The range of sea level rise values of this sensitivity analysis consider the findings of the latest Ocean Protection Council Sea Level Rise Guidance released in 2018. Based on the results of the climate change sensitivity analysis, the impacts identified in the water quality and special status-species analyses conducted in the DEIR would be similar to those under future climate projections. As such, the analyses conducted in the DEIR indirectly consider potential effects of climate change. The DWR response to Master Response 10, "Climate Change," provides additional justification for the methodology used for climate change sensitivity analysis.

The water resilience portfolio is not the subject of this EIR.

Please also see Master Response 26, "One-Tunnel Delta Conveyance Project."

II.6.12.25 RESPONSE TO COMMENT O-SIERRA CLUB-1-25

The comment concerns regarding the Draft Portfolio (Water Resiliency Portfolio) are noted; however, these comments do not pertain to the analysis contained in the DEIR.

With regards to the public comment period that was provided for the DEIR, please see Response to Comment O-Sierra Club-1-10 and Master Response 19, "Public Review Period."

With regards to the comment that "the DEIR appears deliberately calculated to omit information and analysis that would be essential to an informed evaluation of the trade-offs between increasing or maintaining exports or instead finally beginning to reduce exports," please see Response to Comment O-Sierra Club-1-6.

II.6.12.26 RESPONSE TO COMMENT O-SIERRA CLUB-1-26

Please see Response to Comment O-Sierra Club-1-1 and Response to Comment O-Sierra Club-1-21. With regards to the comment concerns that the potential Delta Tunnel Project should have been evaluated as part of the Proposed Project, either in combination with, as an alternative, or in the

cumulative analysis, please see Responses to Comments O-Sierra Club-1-11, 1-12, 1-13, 1-16, 1-17, 1-19; and Master Responses 2, “Baseline,” Master Response 3, “The CEQA Process,” and Master Response 26, “One-Tunnel Delta Conveyance Project.”

II.6.12.27 RESPONSE TO COMMENT O-SIERRA CLUB-1-27

Please see Master Response 1, “Scope of Analysis,” and Master Response 14, “Public Trust,” which address the scope of the DEIR analysis and requirements to address public trust resources. As discussed in Master Response 14, to the extent that DWR has a duty to take public trust values into account before it approves a project, it has done so through the process of designing and studying the impacts of the Proposed Project, as documented in large part by this EIR. Please also see Master Response 26, “One-Tunnel Delta Conveyance Project.”

II.6.12.28 RESPONSE TO COMMENT O-SIERRA CLUB-1-28

The CEQA Guidelines require a lead agency to identify and analyze the possible impacts of a project on the environment and consider option to avoid or mitigate the significant effects of the project (CEQA Guidelines Section 15204). It is not uncommon for experts in a particular environmental subject matter to dispute the conclusions reached by the experts whose studies were used in drafting the EIR where different conclusions can reasonably be drawn from a single pool of information. (CEQA Guidelines Section 15151; Guide to the California Environmental Quality Act [CEQA] [Remy et al. 2007:499–500]; *Greenebaum v. City of Los Angeles* [1984] 153 Cal. App. 3d 391, 413.) The EIR must be adequate, complete, and a good faith effort at full disclosure (CEQA Guidelines Section 15151). The DEIR for long-term operations of the SWP provides an adequate, complete, and good faith effort at full disclosure of the physical environmental impacts and the conclusions are based upon substantial evidence in light of the whole record.

Development of the Proposed Project description and analysis of the potential environmental impacts utilized a wide range of relevant data, literature, and tools. DWR used the best available scientific information to produce analyses of the effects of the Proposed Project, drawing on a number of scientific and engineering disciplines that include geology, hydrology, biology, ecology, chemistry, engineering, and climatology. The data, models, and literature are publicly available, and the methodologies used to apply these tools and information are described in the analyses in DEIR Chapters 1 through 5 and the various appendices.

The data and information sources utilized to evaluate the Proposed Project are cited in the EIR and also listed in the bibliographies provided at the end of the EIR and each accompanying appendix. The data, models, literature, and analyses have been subjected to review either as part of the customary practices of scientific publication or as part of legal and regulatory processes. The modeling conducted for the EIR is based on reasonable assumptions and appropriate, widely accepted modeling tools.

Despite the application of a sound scientific approach used by DWR to draw conclusions in the DEIR, all scientific inquiry contains a certain level of uncertainty, especially when dealing with complex hydrological and biological systems such as the Delta. Field sampling techniques and the use of mathematical models to simulate biological phenomenon are but two areas where error and

imprecision exist and influence conclusions and decision-making. These are inherent in all scientific investigations and impact assessments. Statements of uncertainty, infrequent or not, should not be confused with deliberate attempts to hide the truth.

II.6.12.29 RESPONSE TO COMMENT O-SIERRA CLUB-1-29

The DEIR contains a thorough, well-reasoned, and adequate analysis of the potential physical impacts of the Proposed Project on the environment, which is supported by substantial evidence contained in the whole of the project record and provided for meaningful public review and comment. Therefore, a recirculated DEIR is not required.

As the preceding responses to comments for this comment letter make clear, the DEIR was not “so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment have been precluded.” The quoted language comes from CEQA Guidelines Section 15088.5, subdivision (a)(4), which has been narrowly interpreted by the courts. The language should be understood against the backdrop of the principle, announced by the California Supreme Court nearly three decades ago, that “[r]ecirculation was intended to be an exception, rather than the general rule.” (Laurel Heights Improvement Assn. v. Regents of University of California (1993) 6 Cal.4th 1112, 1132.) In Clover Valley Foundation v. City of Rocklin (2011) 197 Cal.App.4th 200, 223-224, in declining to order recirculation of an EIR based on this language, the court noted that the quoted language from Section 15088.5 codified the holding of an earlier case, Mountain Lion Coalition v. Fish & Game Commission (1987) 214 Cal.App.3d 1043, 1051, 1052, where “[t]he Court of Appeal sustained the trial court's exercise of its continuing jurisdiction over the matter and the grant of a writ of mandate against the second DEIR because the new draft failed to comply with the trial court's earlier order.” According to the court in Clover Valley, “the remedy exercised by the court in [Mountain Lion Coalition] is limited to its unique factual situation of enforcing a prior court order.” (197 Cal.App.4th at p. 224.) No such situation exists with respect to DWR’s Proposed Project.

II.6.12.30 RESPONSE TO COMMENT O-SIERRA CLUB-1-ATT-1

See Response to Comment O-Sierra Club-1-11.

II.7 INDIVIDUAL COMMENTS AND RESPONSES

Table II.7-1-1. Individual Commenters

Letter	Commenter	Date
I-Vanessa Abel-1	Vanessa Abel	January 6, 2020
I-Jeffrey Anis-1	Jeffrey Anis	January 6, 2020
I-Thomas Anderson-1	Thomas Anderson	January 6, 2020
I-JoEllen Arnold-1	JoEllen Arnold	January 6, 2020
I-Teresa Awtrey-1	Teresa Awtrey	November 24, 2019
I-George Ball-1	George Ball	January 6, 2020
I-Melody Barrett-1	Melody Barrett	January 6, 2020
I-Barrigan-Parrilla-1	Barrigan-Parrilla	December 12, 2019
I-Charles Battaglia-1	Charles Battaglia	January 6, 2020
I-David Bezanson-1	David Bezanson	December 18, 2019
I-Dr. Richard Bradus-1	Dr. Richard Bradus	January 6, 2020
I-Daniel Brower-1	Daniel Brower	January 6, 2020
I-Paula Bungen-1	Paula Bungen	January 6, 2020
I-Stephanie Butler-1	Stephanie Butler	November 29, 2019
I-Thomas Carlino-1	Thomas Carlino	December 18, 2019
I-Carol Casselman-1	Carol Casselman	January 6, 2020
I-Gary Chambers-1	Gary Chambers	November 24, 2019
I-Rosemary Churnside-1	Rosemary Churnside	January 6, 2020
I-Ruth Corwin-1	Ruth Corwin	January 6, 2020
I-John Cosgrave-1	John Cosgrave	January 6, 2020
I-Curt Cotner-1	Curt Cotner	November 24, 2019
I-Anabel Croice-1	Anabel Croice	December 12, 2019
I-Jacalyn Dean-1	Jacalyn Dean	January 23, 2020
I-Pamela Dernham-1	Pamela Dernham	November 24, 2019
I-Ingrid Desilvestre-1	Ingrid Desilvestre	January 6, 2020
I-Edward Dijeau-1	Edward Dijeau	December 19, 2019
I-Chris Eaton-1	Chris Eaton	January 6, 2020
I-Marcia Edelen-1	Marcia Edelen	January 6, 2020
I-Pam Edmonston-1	Pam Edmonston	November 25, 2019
I-Rich Elam-1	Rich Elam	January 6, 2020
I-Anita Farnholtz-1	Anita Farnholtz	November 24, 2019
I-Cay FitzGerald-1	Cay FitzGerald	January 6, 2020
I-Jadene Fourman-1	Jadene Fourman	January 6, 2020
I-Kyri Freeman-1	Kyri Freeman	December 19, 2019
I-Ellen Gachesa-1	Ellen Gachesa	December 19, 2019
I-Linda Garfield-1	Linda Garfield	December 22, 2019
I-Robert Geyer-1	Robert Geyer	January 6, 2020
I-Kirk Glaser-1	Kirk Glaser	January 6, 2020
I-Joe Gonzales-1	Joe Gonzales	January 6, 2020
I-Joe Gonzales-2	Joe Gonzales	December 19, 2019
I-Marc Gordon-1	Marc Gordon	December 18, 2019

Letter	Commenter	Date
I-Sheila Gorsuch-1	Sheila Gorsuch	November 25, 2019
I-Carol Hankermeyer-1	Carol Hankermeyer	January 5, 2020
I-Stuart and Carol Hansen-1	Stuart and Carol Hansen	January 4, 2020
I-Renee Harper-1	Renee Harper	January 6, 2020
I-Tom Hicks-1	Tom Hicks	January 6, 2020
I-Marilyn Hills-1	Marilyn Hills	January 6, 2020
I-Judith Hoaglund-1	Judith Hoaglund	January 6, 2020
I-Janet Holder-1	Janet Holder	January 6, 2020
I-Alice Howard-1	Alice Howard	January 6, 2020
I-Lesley Hunt-1	Lesley Hunt	January 6, 2020
I-Lola Hunter-1	Lola Hunter	November 28, 2019
I-Shirlee Jack-1	Shirlee Jack	January 6, 2020
I-Karen Jacques-1	Karen Jacques	December 18, 2019
I-Kevin Jarvis-1	Kevin Jarvis	November 30, 2019
I-Alden Jenks-1	Alden Jenks	January 6, 2020
I-Claire Joaquin-1	Claire Joaquin	January 6, 2020
I-P Johansen-1	P Johansen	December 18, 2019
I-Jonathan Johnsen-1	Jonathan Johnsen	January 6, 2020
I-John Paul Jones-1	John Paul Jones	December 17, 2019
I-Karrer-1	Karrer	December 11, 2019
I-Kathy-1	Kathy	December 4, 2019
I-Theresa Kellerman-1	Theresa Kellerman	January 6, 2020
I-William Kelly-1	William Kelly	November 24, 2019
I-Judith Kirk-1	Judith Kirk	January 6, 2020
I-Barbara Kluger-1	Barbara Kluger	January 6, 2020
I-Ellen Koivisto-1	Ellen Koivisto	December 18, 2019
I-Lori Koon-1	Lori Koon	November 24, 2019
I-Lorin Koran-1	Lorin Koran	November 25, 2019
I-Don Kreuter-1	Don Kreuter	January 6, 2020
I-Kay L.-1	Kay L.	January 6, 2020
I-Philip Lefcourt-1	Philip Lefcourt	December 18, 2019
I-Shelly Levinthal-1	Shelly Levinthal	December 2, 2019
I-Eleanor Lewis-1	Eleanor Lewis	January 3, 2020
I-Sherman Lewis-1	Sherman Lewis	December 19, 2019
I-Steve Lewis-1	Steve Lewis	December 14, 2019
I-Steve Lewis-2	Steve Lewis	December 14, 2019
I-Allen Lilleberg-1	Allen Lilleberg	January 6, 2020
I-Alan Linzer-1	Alan Linzer	November 27, 2019
I-Charles Little-1	Charles Little	December 18, 2019
I-Denise Louie-1	Denise Louie	January 6, 2020
I-Judy Lukasiewicz-1	Judy Lukasiewicz	January 6, 2020
I-Robert MacLean-1	Robert MacLean	December 1, 2019
I-Robert MacLean-2	Robert MacLean	December 1, 2019
I-Bonnie Macraith-1	Bonnie Macraith	January 6, 2020

Letter	Commenter	Date
I-Josh Michels-1	Josh Michels	January 6, 2020
I-Fritz Milas-1	Fritz Milas	January 6, 2020
I-Renee Milburn-1	Renee Milburn	January 6, 2020
I-Bruce Mitchell-1	Bruce Mitchell	November 24, 2019
I-Constance Mitchell-1	Constance Mitchell	November 24, 2019
I-Marilyn Morrish-1	Marilyn Morrish	December 18, 2019
I-Linda Newton-1	Linda Newton	January 6, 2020
I-Alice Nguyen-1	Alice Nguyen	December 18, 2019
I-Vince Nicaastro-1	Vince Nicaastro	December 18, 2019
I-Ralph Nichols-1	Ralph Nichols	December 19, 2019
I-Melody O'Neill-1	Melody O'Neill	January 6, 2020
I-Gregory Orr-1	Gregory Orr	November 28, 2019
I-David Oстераas-1	David Oстераas	December 19, 2019
I-Sheryl Patton-1	Sheryl Patton	January 6, 2020
I-Karen Phillips-1	Karen Phillips	January 6, 2020
I-Joel Pitney-1	Joel Pitney	November 25, 2019
I-Lynn Price-1	Lynn Price	November 25, 2019
I-Nora Privitera-1	Nora Privitera	January 6, 2020
I-Gary Ranz-1	Gary Ranz	January 6, 2020
I-D. Rincon-1	D. Rincon	January 6, 2020
I-Diana Rizza-1	Diana Rizza	November 24, 2019
I-Rachel Robson-1	Rachel Robson	January 6, 2020
I-James Roscoe-1	James Roscoe	November 27, 2019
I-Stewart Rosen-1	Stewart Rosen	January 6, 2020
I-Stewart Rosen-2	Stewart Rosen	January 6, 2020
I-Stewart Rosen-3	Stewart Rosen	December 19, 2019
I-Suellen Rowlison R.N.-1	Suellen Rowlison R.N.	January 6, 2020
I-Linda Savidge-1	Linda Savidge	January 6, 2020
I-Laurel Sebastian-1	Laurel Sebastian	January 6, 2020
I-Susan Shawl-1	Susan Shawl	December 4, 2019
I-Tim Shearer-1	Tim Shearer	November 24, 2019
I-Tom Shoup-1	Tom Shoup	December 20, 2019
I-Edward & Beatrice Simpson-1	Edward & Beatrice Simpson	January 6, 2020
I-Sue Stack-1	Sue Stack	January 6, 2020
I-Steven Stansbery-1	Steven Stansbery	January 6, 2020
I-Regina Stefaniak-1	Regina Stefaniak	December 19, 2019
I-June Steiner-1	June Steiner	November 24, 2019
I-Katherine S Stewart-1	Katherine S Stewart	January 6, 2020
I-John D Stickle D.C.-1	John D Stickle D.C.	January 6, 2020
I-Ruth Stoner Muzzin-1	Ruth Stoner Muzzin	December 18, 2019
I-Shelley Strohm-1	Shelley Strohm	January 6, 2020
I-Dianna Suarez-1	Dianna Suarez	January 6, 2020
I-Deborah Symes-1	Deborah Symes	January 6, 2020
I-Kathleen Tandy-1	Kathleen Tandy	January 6, 2020

Letter	Commenter	Date
I-Marvin Tarbox-1	Marvin Tarbox	November 25, 2019
I-Roger Thibault-1	Roger Thibault	December 12, 2019
I-Gary Thorne-1	Gary Thorne	January 6, 2020
I-Linda Tiffany-1	Linda Tiffany	January 6, 2020
I-Cornelia Twitchell-1	Cornelia Twitchell	January 6, 2020
I-Amy Van Syoc-1	Amy Van Syoc	January 6, 2020
I-Gerald Veiluva-1	Gerald Veiluva	November 26, 2019
I-Gerald Veiluva-2	Gerald Veiluva	November 26, 2019
I-Phil Vrankovich-1	Phil Vrankovich	December 1, 2019
I-Penelope Ward-1	Penelope Ward	December 18, 2019
I-Jeffrey Weaver-1	Jeffrey Weaver	November 26, 2019
I-Sharon and Bill Whitten-1	Sharon and Bill Whitten	November 26, 2019
I-Beverly Williams-1	Beverly Williams	November 27, 2019
I-Katie Wilsker-1	Katie Wilsker	January 6, 2020
I-Susan Worden-1	Susan Worden	January 6, 2020
I-Susan Worden-2	Susan Worden	January 6, 2020
I-Melinda Wright-1	Melinda Wright	January 6, 2020
I-Linda Wuy-1	Linda Wuy	January 1, 2020
I-Tynan Wyatt-1	Tynan Wyatt	December 29, 2019
I-Mark Zhou-1	Mark Zhou	January 6, 2020
I-Carol Zimmerman-1	Carol Zimmerman	January 6, 2020
I-Catherine Zukowski-1	Catherine Zukowsk1	January 6, 2020
I-Catherine Zukowski-2	Catherine Zukowsk2	January 6, 2020

Letter I-Vanessa Abel-1

January 6, 2020

Dear Director of California's Department of Water Resources,

Cc: Director of California's Department of Fish and Wildlife,

Cc: Secretary of California's Natural Resources Wade Crowfoot

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary, from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct while worsening water quality, and threatening thousands of fishing jobs. And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta!

Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months. Our rivers are a dynamic part of our ecosystem and are crucial to the 25 million Californians who depend on the Delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration, and to protect our water quality and wildlife!

The state must rely on established science, and use its' legal authority to stop this reckless proposal and to safeguard salmon and all of the communities, and economies that rely on the Bay-Delta.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency California can reduce water diversions from the Bay-Delta while sustaining our economy. Be on the right side of history by helping to protect and restore the San Francisco Bay-Delta!

Thanks so much for your consideration.

Vanessa Abel
Oakland, CA

II.7.1 LETTER I-VANESSA ABEL-1 – VANESSA ABEL – DATED JANUARY 6, 2020

II.7.1.1 RESPONSE TO COMMENT I-VANESSA ABEL-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The importance of rivers as a dynamic and crucial part of the ecosystem is acknowledged.

Letter I-Jeffrey Ainis-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

As a species, we have the unique ability to appreciate the beauty of our surroundings and to do things to ensure the continued existence of wildlife and protect our own health and security. We also have the ability to destroy nature and use it for short-term profit, with longterm negative and even devastating consequences on many levels.

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thank you!

Jeffrey Ainis
Alhambra, CA

II.7.2 LETTER I-JEFFREY AINIS-1 – JEFFREY AINIS – DATED JANUARY 6, 2020

II.7.2.1 RESPONSE TO COMMENT I-JEFFREY AINIS-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The concerns regarding the broader impact of humans on the environment are noted but do not require a response. As discussed within the DEIR, the proposed long-term operations of the SWP would have no significant environmental impacts.

Letter I-Thomas Anderson-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs. Wetland ecosystems are critical for carbon sequestration, something Earth needs now more than ever.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Thomas Anderson
Huntington Beach, CA

II.7.3 LETTER I-THOMAS ANDERSON-1 – THOMAS ANDERSON – DATED JANUARY 6, 2020

II.7.3.1 RESPONSE TO COMMENT I-THOMAS ANDERSON-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The comment regarding the importance of wetland ecosystems for carbon sequestration is noted. Impacts of the Proposed Project relating to greenhouse gas emissions were analyzed in DEIR Appendix A, “Initial Study for the Long-term Operations of the State Water Project.” DEIR Appendix A, Section 3.8, “Greenhouse Gas Emissions, concluded that the Proposed Project would have no impacts relating to greenhouse gasses. Please also see DEIR Appendix F, “Climate Change Sensitivity Analysis,” and DEIR Chapter 4.1.3, “Impact of Climate Change,” for additional discussion relating to greenhouse gas and climate change.

Letter I-JoEllen Arnold-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

Water is life. Protect the water of the Delta, too much has already been depleted.

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

JoEllen Arnold
Sacramento, CA

II.7.4 LETTER I-JOELLEN ARNOLD-1 – JOELLEN ARNOLD – DATED JANUARY 6, 2020

II.7.4.1 RESPONSE TO COMMENT I-JOELLEN ARNOLD-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Master Response 4, “Legal Standards,” explains the legal standards applicable to CEQA and CESA, and provides discussion regarding the existing condition of the Delta.

From: [Terry Awtry](#)
To: [LTO](#)
Subject: Delta water plan
Date: Sunday, November 24, 2019 1:55:33 PM

I urge Governor Newsom to reconsider his plan for pumping the water from the delta. Please carefully examine the science of the delta water before making his final conclusions. The health of the delta is of vital importance for the wildlife and the human drinking water for the local residents.

1-1

Thanks for your consideration,
Teresa Awtry
1322 Burkette Drive
San Jose, Ca 95129

II.7.5 LETTER I-TERESA AWTREY-1 — TERESA AWTREY — DATED NOVEMBER 24, 2019

II.7.5.1 RESPONSE TO COMMENT I-TERESA AWTREY-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. In considering the project impacts, DWR used the best available scientific information to produce its analyses of the effects of the project, drawing on a number of scientific and engineering disciplines that include geology, hydrology, biology, ecology, chemistry, engineering, and climatology. As discussed in Master Response 20, “Best Available Science,” the data, models, and literature are publicly available, and the methodologies used to apply these tools and information are described throughout the DEIR and its appendices. For information regarding Governor Newsom’s overall water management plan, please review Master Response 8, “Other State Efforts,” which includes a description of his Executive Order N 10-19.

Letter I-George Ball-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

Biodiversity crumbles all around us. It is time to step up and fight for Nature before we start looking more like Mars and less like our Big Blue Planet.

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

George Ball
Inglewood, CA

II.7.6 LETTER I-GEORGE BALL-1 — GEORGE BALL — DATED JANUARY 6, 2020

II.7.6.1 RESPONSE TO COMMENT I-GEORGE BALL-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The comment expressing general concern for biodiversity and the planet is noted but do not require a response.

Letter I-Melody Barrett-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy. It is overwhelmingly and stunningly profound to listen to president donald trump's stupid comments regarding how "the water runs to the ocean." Of course the water runs to the ocean- it was meant to do that. It allows salmon to spawn in mountain streams and then eventually migrate to the ocean to live their lives and then return to the place where the eggs containing them were laid in gravel in the very same stream or even salmon fishery. We do not have to be stupid like Mr Trump and his family are stupid! Protect the San Francisco Bay and the Delta estuaries.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Melody Barrett
Valley Springs, CA

II.7.7 LETTER I-MELODY BARRETT-1 — MELODY BARRETT — DATED JANUARY 6, 2020

II.7.7.1 RESPONSE TO COMMENT I-MELODY BARRETT-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Comments regarding the water cycle and lifecycle of salmon are noted but do not require a response. The DEIR has analyzed the potential impacts of the project on hydrology, water quality and aquatic resources, and concluded, based on scientific analysis, that no significant adverse impacts would occur.

1 And now I think we'll go ahead and break and,
2 like I said, we will have DWR folks in badges available
3 roaming around the room and feel free to ask questions.
4 And thank you very much. I appreciate it.

5 UNKNOWN SPEAKER: Just to clarify, the e-mail
6 address is water.CA.gov.

7 MS. BANONIS: Oh, well, because I screwed that
8 up, didn't I? All right. So sorry about that, guys.

9 MS. BARRIGAN-PARRILLA: There are seven points I
10 have found within the EIR of the long-term operations of
11 the state water project. We will submit robust, written
12 comments by the deadline.

13 First, there is no Environmental Justice impacts
14 discussion of the Delta nor any analysis of cumulative
15 environmental justice impacts if increased exports
16 continue to degrade Delta water quality. HABS, h-a-b-s,
17 and subsistence fishing are not covered.

18 Two, dramatic reductions in both spring and fall
19 Delta outflow are found in modeling addenda, and this
20 will harm both endangered fish and Delta drinking water
21 quality; likely raising the cost of water quality
22 treatment for our Delta Environmental Justice
23 communities in San Joaquin County.

24 Three, there are dramatic reductions in outflow
25 that will lead to increased presence of stressors like

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1 selenium and mercury from alterations to hydrology,
 2 water quality and non-native invasive plants could
 3 increase in pathways for humans relying on subsistence
 4 fishing.

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(Cont.)

5 Four, worsening drinking water quality is found
 6 in the document we believe for Contra Costa Water
 7 District.

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8 Five, there is worsening salinity all over
 9 Suisun marsh, which could reduce subsistence fishing
 10 opportunities throughout the marsh for Delta
 11 Environmental Justice residence reliance on it.

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12 Six, there is no analysis for long-term
 13 operations of the state water project, only
 14 precipitation and water temperatures were considered.
 15 Analysis is needed for determination of potential
 16 inundation to state water project intakes.

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17 Seven, the single tunnel option is not listed
 18 among the cumulative impact projects in Table 4.6 of the
 19 EIR. Does this mean the DWR regards it as a speculative
 20 project at present? Once the design is put forward, DWR
 21 must issue a supplemental EIR for long-term operations
 22 of the state water project since operations will change
 23 to accommodate tunnel capacity and operational roles.

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24 Last, on the tunnel issue, we see this entire
 25 EIR as a moving of the goal posts to enable building of

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that project. Thank you.

(The meeting was adjourned at 11:00 a.m.)

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(Cont.)

II.7.8 LETTER I-BARRIGAN-PARRILLA-1 — MS. BARRIGAN-PARRILLA — DATED DECEMBER 12, 2019

II.7.8.1 RESPONSE TO COMMENT I-BARRIGAN-PARRILLA-1-1

Please see Master Comment 15, “Environmental Justice,” for a discussion of why environmental justice issues are not addressed within the DEIR. The potential for the project to result in increased HABS is analyzed within DEIR Chapter 4.4.7.4 subheading “Harmful Algal Blooms,” (Pages 4-152 and 4-167), based on the IEP MAST (2015) conceptual model and DSM2-HYDRO modeling. The analysis suggests that there would be little difference between the Proposed Project and Existing Conditions scenarios in the potential for velocity conditions affecting harmful algal blooms.

Please see Responses to Comments I-Barrigan-Parrilla-3 and I-Barrigan-Parrilla-5 for discussion of potential impacts to subsistence fishing.

II.7.8.2 RESPONSE TO COMMENT I-BARRIGAN-PARRILLA-1-2

Detailed modeling results showing the difference in projected Delta outflows between the Proposed Project and Existing Conditions scenarios are presented in DEIR Appendix C, Attachment 2-2, “Flow Results (CalSim II),” in Table 9-1 and Figures 9-1 through 9-18. Potential reductions in Spring and Fall Delta outflows resulting from the project are discussed in DEIR Chapter 4.2.2.1, subheading, “Delta Outflow.” Impacts to endangered species and water quality from these anticipated hydrological changes are analyzed in DEIR Chapters 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources,” which conclude, on the basis of scientific analysis, that no significant adverse impacts to endangered species and water quality would result. Further discussion of anticipated changes in Delta outflow compared to Existing Conditions is provided in Master Response, 12, “Delta Outflow,” while additional discussion of why reductions in Delta outflows would not result in significant impacts to aquatic biological resources is provided in Master Responses 11, “LFS Impact Significance,” and 23, “Impact Significance (Salmonids).” Environmental justice issues are addressed in Master Response 15, “Environmental Justice.”

II.7.8.3 RESPONSE TO COMMENT I-BARRIGAN-PARRILLA-1-3

DEIR Chapter 4.4.1, “Environmental Setting,” acknowledges that there are longstanding concerns related to mercury and selenium in the Sacramento and San Joaquin watersheds, the Delta, and San Francisco Bay. Please see Master Response 4, “Legal Standards,” under the subheading, “Treatment of Historical Conditions,” for further discussion of historical changes in water quality. As discussed in DEIR Chapter 4.3.2, “Water Quality Constituents That Could Be Affected By The Proposed Project,” changes in SWP operations are not anticipated to affect water quality constituents other than salinity (as measured by chloride or electrical conductivity). The project would not affect other contaminants, including methylmercury, because the project would only include changes to long-term SWP operations and would not affect mercury sources or the extent of wetlands. Additionally, flow pulses associated with the North Delta Food Subsidies would not be of sufficient magnitude or duration to increase methylmercury production above levels currently observed associated with rice production, natural, or managed wetlands. The DEIR concluded, on the basis of scientific analysis, that long-term

operation of the SWP would not result in significant adverse impacts to water quality. Because there would be no significant impacts to water quality, significant impacts to subsistence fishing are not anticipated.

II.7.8.4 RESPONSE TO COMMENT I-BARRIGAN-PARRILLA-1-4

Please see Chapter 4.3.3, “Impacts of the Proposed Project” for more details on the Project’s less than significant impact on surface water quality. See FEIR Part III, where the DEIR includes an assessment of D-1641 M&I compliance of maximum mean daily 150 mg/L Cl for at least the number of days shown in “Table 1. Water Quality Objectives for Municipal and Industrial Beneficial Uses.” Please see Response to Comment O-RTD-2-10 regarding the alleged violation of anti-degradation laws.

II.7.8.5 RESPONSE TO COMMENT I-BARRIGAN-PARRILLA-1-5

Anticipated changes in salinity levels as a result of long-term operations of the SWP are presented in DEIR Chapter 4.3.3.3, “Evaluation of the Proposed Project.” Modeling results indicate changes of between 0% and 2% in the frequency that D-1641 compliance standards would be for the Proposed Project, compared to Existing Conditions. As discussed in the DEIR, these exceedances are an artifact of modeling assumptions and model limitations, and DWR does not anticipate that such exceedances would occur in real time. For more information on real-time operations, please refer to Master Response 25, “Real-Time Operations.” The DEIR concluded, on the basis of scientific analysis, that long-term operation of the SWP would not result in significant adverse impacts to water quality. Because there would be no significant impacts to water quality, significant impacts to subsistence fishing are not anticipated. Please see Master Response 15, “Environmental Justice” for discussion of environmental justice issues.

II.7.8.6 RESPONSE TO COMMENT I-BARRIGAN-PARRILLA-1-6

The Proposed Project analyzed in the DEIR is the long-term operations of the SWP. Analysis of potential environmental impacts resulting from implementation of the project considered all environmental topics required by Appendix G of the CEQA Guidelines, although many of these topics were assessed within DEIR Appendix A, “Initial Study for the Long-Term Operations of the State Water Project,” and screened from further analysis within the DEIR. The potential for the project to result in inundation is assessed in DEIR Appendix A, Section 3.10.2, “Discussion.” Because surface water flows would remain within the range of historical operations, no impacts related to flooding or inundation are anticipated. With respect to inundation of SWP facilities by inundation not caused by the project, CEQA generally does not require analysis of the environment’s impact on a project, unless the project may exacerbate existing environmental hazards. As discussed in DEIR Chapter 4.1.3, “Impact of Climate Change,” the Proposed Project would have no impact on greenhouse gas emissions and is not expected to exacerbate any hazards such as flood potential, because river flows and SWP pumping would remain within historical operating range.

II.7.8.7 RESPONSE TO COMMENT I-BARRIGAN-PARRILLA-1-7

Please see Master Response 26, “One-Tunnel Delta Conveyance Project,” which provides discussion of the tunnel project.

II.7.8.8 RESPONSE TO COMMENT I-BARRIGAN-PARRILLA-1-8

Please see Master Response 26, “One-Tunnel Delta Conveyance Project,” which provides discussion of a tunnel project, as well as Master Response 8, “Other State Efforts” that includes a description of the Delta conveyance project within the Governor’s water resilience portfolio, Executive Order N-10-19.

Letter I-Charles Battaglia-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

As a wetland ecologist who has worked in the Sacramento and San Joaquin River Delta (Delta) for nearly 25 years and who received a BA and MS degree that focused on the ecological processes in estuaries, rivers, and wetlands, I understand the processes that are lacking and putting the whole ecosystem at risk for a major ecological collapse and one that could lead to the extinction of salmon, steelhead, and other wildlife. These large rivers once had large floodplains and abundant inputs of cold water from the Sierra Nevada that supported healthy salmon populations, but they are now confined to and function as large canals bound by levees and due to less cold water from massive water diversions or urban populations and agriculture. Summer temperatures are already too high and getting higher each year, mainly due to increased diversions. I therefore am urgently asking that you do everything possible to protect the Delta from the Trump administration's plan to increase water diversions in the region. The Trump administration's proposal would certainly decrease water quality, and would increase the chances of driving salmon, steelhead, other native species to extinction, which would result in the loss of thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife. The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Charles Battaglia
Woodland, CA

II.7.9 LETTER I-CHARLES BATTAGLIA-1 — CHARLES BATTAGLIA — DATED JANUARY 6, 2020

II.7.9.1 RESPONSE TO COMMENT I-CHARLES BATTAGLIA-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Master Response 4, “Legal Standards” explains the legal standards applicable to CEQA and CESA and provides discussion regarding the existing condition of the Delta. As discussed in DEIR Chapter 5.8, subheading “Temperature,” regional weather patterns including air temperature and sunlight are the primary drivers of water temperature variations in the estuary, therefore changes in flow resulting from proposed long-term operations of the SWP are not anticipated to affect water temperatures.

From: [David Bezanson \(bezanpsy3506@hotmail.com\)](mailto:bezanpsy3506@hotmail.com) Sent You a Personal Message
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Wednesday, December 18, 2019 6:35:28 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities. This depletion also jeopardizes the ability of the Delta to sequester and store carbon. It increases the release of a more potent GHG, methane, which has a heat-trapping effect during its initial 20 years in the atmosphere that is 85 times higher than that of carbon. To overcome the climate crisis, proposals like DWR's must be replaced with proposals that are more climate-friendly.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable.

California needs to operate its water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species. Thank you.

Sincerely,

David Bezanson
41 Grandview St
Santa Cruz, CA 95060
bezanpsy3506@hotmail.com
(831) 636-4439

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

1-1

II.7.10 LETTER I-DAVID BEZANSON-1 — DAVID BEZANSON — DATED DECEMBER 18, 2019

II.7.10.1 RESPONSE TO COMMENT I-DAVID BEZANSON-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. The commenter states that the project would decrease the Delta’s ability to sequester and store carbon and would increase methane emissions, but provides no substantial evidence to support these claims. Impacts of the Proposed Project relating to greenhouse gas emissions were analyzed in DEIR Appendix A, “Initial Study for the Long-term Operations of the State Water Project.” DEIR Appendix A, Section 3.8, “Greenhouse Gas Emissions, concluded that the Proposed Project would have no impacts relating to greenhouse gasses. Please also see DEIR Appendix F, “Climate Change Sensitivity Analysis,” and DEIR Chapter 4.1.3, “Impact of Climate Change,” for additional discussion relating to greenhouse gasses and climate change.

Letter I-Dr. Richard Bradus-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I am writing to urge you to do everything you can to protect the San Francisco Bay-Delta Estuary, and oppose the Trump administration's reckless scheme to increase water diversions in the region.

While appealing to the most regressive of corporate agricultural and business interests, the Trump administration's proposal could potentially drive native species extinct, worsen water quality, and threaten thousands of fishing jobs. Yet I understand that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. That is simply unacceptable!

Having suffered through a number of droughts and with climate change effects only projected to get worse, proper management of our water resources becomes even more important for the millions of Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

California's resource agencies have the tools necessary to fight back against the Trump administration and protect our water quality and wildlife. The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

We can do better! By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

So, I encourage you continue to use the best available science and the help of partner organizations to help protect and restore the San Francisco Bay-Delta estuary!

Thank you for your consideration.

Dr. Richard Bradus
San Francisco, CA

II.7.11 LETTER I-DR. RICHARD BRADUS-1 — DR. RICHARD BRADUS — DATED JANUARY 6, 2020

II.7.11.1 RICHARD BRADUS-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Information on how future drought conditions have been accounted for within the DEIR analysis is discussed in Master Response 24, “Drought Conditions.” Impacts of the Proposed Project relating to greenhouse gas emissions were analyzed in DEIR Appendix A, “Initial Study for the Long-term Operations of the State Water Project”. DEIR Appendix A, Section 3.8, “Greenhouse Gas Emissions, concluded that the Proposed Project would have no impacts relating to greenhouse gasses. Please also see DEIR Appendix F, “Climate Change Sensitivity Analysis,” and DEIR Chapter 4.1.3, “Impact of Climate Change,” for additional discussion relating to greenhouse gas and climate change.

Letter I-Daniel Brower-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

Protecting and preserving the Bay-Delta Estuary is a priority for me. I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Delta and many species that inhabit it are in serious decline. More protections are needed, not less.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs. This would be a travesty and these harmful efforts must be curbed.

Furthermore, it is unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Shame on you. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife. And indeed, we must resist.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

As a 38 year resident of CA, taxpayer and voter, I urge you to please help protect and restore the San Francisco Bay-Delta estuary!

Thanks you for your time.

Daniel Brower
Fremont, CA

II.7.12 LETTER I-DANIEL BROWER-1 — DANIEL BROWER — DATED JANUARY 6, 2020

II.7.12.1 RESPONSE TO COMMENT I-DANIEL BROWER-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Master Response 4, “Legal Standards” explains the legal standards applicable to CEQA and CESA and provides discussion regarding the existing condition of the Delta.

Letter I-Paula Bungen-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

This is a time for sustainability not growth. It is a known fact that there is less continual waterfall in the winter months.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Paula Bungen
San Francisco, CA

II.7.13 LETTER I-PAULA BUNGEN-1 — PAULA BUNGEN — DATED JANUARY 6, 2020

II.7.13.1 RESPONSE TO COMMENT I-PAULA BUNGEN-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As discussed in DEIR Chapter 4.6.2, “Growth-Inducing Impacts,” the proposed long-term operations of the SWP does not include any new construction or development, expansion of service areas, or modification of facilities to increase capacity of the SWP and would therefore not directly or indirectly induce growth.

Opinion

Sharon Ryan: President and Publisher, Bay Area News Group

Frank Pine
Executive Editor

Bert Robinson
Senior Editor

Randall Keith
Managing Editor Digital

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Managing Editor Features, Sports, PJ

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** Please read in file
an order to (AL
residents*

Editorial

*I thank you
Stephanie Butler*

Governor's Delta water proposal is merely 'Trump lite'

Join the crowd of California water officials if you are confused by the mixed message Gavin Newsom offered Thursday on the future of the Sacramento-San Joaquin River Delta.

Give the governor credit for announcing that California will sue the Trump administration over its plan to send more water to farmers at the expense of the Delta's health. That's huge. The White House plan is a recipe for extinction for endangered species living in the largest estuary west of the Mississippi. But the alternative put forward by the governor also ignores decades of peer-reviewed science.

No issue is more important to the state. Nor is any issue more complex. The Delta supplies fresh water for more than 27 million of California's 40 million residents. It also provides the water to irrigate 3 million acres of farmland in the Central Valley. Maybe Mark Twain doesn't deserve credit for the quote, "Whiskey is for drinking, water is for fighting over." But whoever said it first was onto something.

We should all care about preserving endangered species, but for those who don't, consider this: The chinook salmon are merely the canary in the coal mine when it comes to preserving the estuary's health. Further degradation to the Delta will ultimately threaten the quality of the drinking water for Northern California residents.

On the same day the governor announced his lawsuit against the Trump administration, the state rolled out a 610-page draft environmental report outlining its proposal for future pumping operations in the Delta. Shockingly, the plan substantially mirrors the president's approach.

"It's Trump lite," said Doug Obegi, a senior attorney for the Natural Resources Defense Council.

The governor's plan would allow for a significant increase in pumping water south to farmers, decreasing the amount of water that flows

The governor's plan would allow for a significant increase in pumping water south to farmers, decreasing the amount of water that flows through the Delta.

through the Delta.

We understand Newsom's desire to craft a compromise between environmentalists who want to protect the health of the Delta and farmers who want more water to expand their operations. But study after study by state and federal scientists over the course of the last decade have consistently said that increasing water flow in the Sacramento-San Joaquin River Delta and ensuring cold water for salmon in streams and rivers is essential for fish to survive. Sending more water south would undermine that goal.

Ignoring the science of the Delta is deplorable for a governor who routinely attacks the president for not accepting scientists' conclusions on the threat of climate change.

The good news is that the governor's report is just a draft. The public has until Jan. 6 to comment on the report. (Send emails to LTO@water.ca.gov or mail comments to You Chen Chou, California Department of Water Resources, P.O. Box 942836, Sacramento, CA 94236.)

Newsom and the state Department of Water Resources need to hear that they should reexamine their environmental analysis. The report runs contrary to the state Water Resources Control Board and state Department of Fish and Wildlife findings that the best way to preserve the health of the Delta is to pour more water — not less — through it.

The governor should offer a consistent, clear message that he will do everything possible to guarantee a supply of quality fresh water for current and future Californians.

1-1

II.7.14 LETTER I-STEPHANIE BUTLER-1 — STEPHANIE BUTLER — DATED NOVEMBER 29, 2019

II.7.14.1 RESPONSE TO COMMENT I-STEPHANIE BUTLER-1-1

The comment submitted is a newspaper article, with underlined text regarding water quality. The article covers various issues that are addressed in Master Response 8, “Other State Efforts,” Master Response 13, “2019 Federal Biological Opinions,” and Master Response 20, “Best Available Science.” With respect to the underlined text regarding water quality, as noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. DEIR Chapter 4, “Environmental Setting and Impact Analysis,” analyzed potential impacts of the project and concluded, based on scientific analysis, that long-term operations of the SWP would not have any significant environmental impacts, including meeting water quality standards.

From: [Thomas Carlino \(srrclb@axomoxa.com\) Sent You a Personal Message](mailto:srrclb@axomoxa.com)
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Wednesday, December 18, 2019 5:10:03 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

I demand that the Department of Water Resources revise its proposed operations plan for the State Water Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

It reeks of the Traitor Trump Creep Show's proposed operations of the federal Central Valley Project. This is unacceptable.

California needs to operate its water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species.

1-1

Sincerely,

Thomas Carlino
549 Quail Bush Ct
San Jose, CA 95117
srrclb@axomoxa.com
(555) 555-5555

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

II.7.15 LETTER I-THOMAS CARLINO-1 — THOMAS CARLINO — DATED DECEMBER 18, 2019

II.7.15.1 RESPONSE TO COMMENT I-THOMAS CARLINO-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Discussion of the relationship between DWR’s proposed long-term operations of the SWP and Reclamation’s proposed long-term operations of the CVP is provided in Master Response 22, “Relationship to CVP Operations.” Please also see Master Response 13, “2019 Federal Biological Opinions,” for a comparison of the Proposed Project and the 2019 Biological Opinions.

Letter I-Carol Casselman-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you in the strongest terms to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs. Trump's lack of concern for the environment is the height of irresponsibility and is profoundly dangerous. Californians expect much better decision making from their leaders.

It's totally unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science--not pressure from corporations or this administration in D.C.-- and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thank you for your time.

Carol Casselman
Redondo Beach, CA

II.7.16 LETTER I-CAROL CASSELMAN-1 — CAROL CASSELMAN — DATED JANUARY 6, 2020

II.7.16.1 RESPONSE TO COMMENT I-CAROL CASSELMAN-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. In accordance with CEQA, the lead agency (DWR) will utilize its own discretion, based on substantial evidence presented in the EIR, when making decisions on the project.

From: [Gary Chambers](#)
To: [LTO](#)
Subject: Draft Environmental Report
Date: Sunday, November 24, 2019 11:01:11 AM

I completely agree with the East Bay Times editorial today in that this proposal is a massive mistake with longterm negative consequences. I don't want to hurt sustainable agriculture, but this plan will future damage the delta water simply to enable Central Valley farmers to increase water intensive acres of avocados, almonds, and vineyards. The objective of these farms is not to feed the world, but to enrich themselves. The governor's plan is an obvious result of the excessive influence of Central Valley Agribusiness. I oppose this "Trump-Lite" plan and will oppose it in the upcoming elections.

1-1

Gary Chambers
2015 Tempranillo Lane
Brentwood, CA 94513

II.7.17 LETTER I-GARY CHAMBERS-1 — GARY CHAMBERS — DATED NOVEMBER 24, 2019

II.7.17.1 RESPONSE TO COMMENT I-GARY CHAMBERS-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. DEIR Chapter 4.3, “Surface Water Quality,” addresses potential short- and long-term impacts to water quality and Delta health. The DEIR concluded, based on scientific analysis, that the proposed long-term operations of the SWP would not result in significant impact.

Letter I-Rosemary Churnside-1

January 6, 2020

Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Give pause, and consider these important words:

The earth does not belong to man, man belongs to the earth. All things are connected like the blood that unites us all.

What is a man without the beasts? If all the beasts were gone, men would die from great loneliness of spirit, for whatever happens to the beasts also happens to man. All things are connected. This we know. Whatever befalls the Earth befalls the sons of the Earth. Man did not weave the web of life, he is merely a strand in it. Whatever he does to the web, he does to himself.

ChiefSeattle

Rosemary Churnside
Redondo Beach, CA

II.7.18 LETTER I-ROSEMARY CHURNSIDE-1 — ROSEMARY CHURNSIDE — DATED JANUARY 6, 2020

II.7.18.1 RESPONSE TO COMMENT I-ROSEMARY CHURNSIDE-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The comment’s quotation regarding the interconnectedness of the environment is acknowledged but do not require a response.

Letter I-Ruth Corwin-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I have been one of the individuals working to save the San Francisco Bay and Delta since I was a student, including helping to put on the Save the Bay conference in 1984. We have dealt with everything from fill to pollution to fisheries and wildlife protection to water diversions in our efforts to protect this vital resource.

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Ruth Corwin
Novato, CA

II.7.19 LETTER I-RUTH CORWIN-1 — RUTH CORWIN — DATED JANUARY 6, 2020

II.7.19.1 RESPONSE TO COMMENT I-RUTH CORWIN-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The commenter’s personal actions to protect and restore the Bay-Delta are acknowledged but do not require a response.

Letter I-John Cosgrave-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

And while we are at it, Stop the Democrats from sending water south. Weather you like it or not I consider Jerry Brown's transferring so much water south to be as bad as or possibly worse for our healthy waterways and bay than Trump's water quality move. Our natural flows of Northern California water are being attacked by both major political parties. Do what is necessary for the environment and your tax paying citizens.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

John Cosgrave
Boulder Creek, CA

II.7.20 LETTER I-JOHN COSGRAVE-1 — JOHN COSGRAVE — DATED JANUARY 6, 2020

II.7.20.1 RESPONSE TO COMMENT I-JOHN COSGRAVE-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The proposed long-term operations of the SWP does not include any changes to those contracts. The DEIR has analyzed the potential impacts of the project on Delta hydrology and water quality, and concluded, based on scientific analysis, that no significant adverse impacts would occur.

From: [Curt Cotner](#)
To: [Spanglet, Harry@DWR](#); [Wilkinson, Chris@DWR](#)
Subject: Governor's water proposal
Date: Sunday, November 24, 2019 8:40:33 AM

I am writing to express my strong support for increasing fresh water flows to the delta. All the biological studies for the last 10 years have shown that Salmon and other wildlife are being destroyed by a lack of fresh water and habitat. We cannot allow a small number of rich farming interests to destroy our environment in exchange for more almonds exported to China.

1-1

Sincerely,
Curt Cotner
408-842-7804
Gilroy, CA

Sent from my iPad

II.7.21 LETTER I-CURT COTNER-1 — CURT COTNER — DATED NOVEMBER 24, 2019

II.7.21.1 RESPONSE TO COMMENT I-CURT COTNER-1-1

As noted in DEIR Chapter 3.1.1, "Project Purpose and Objectives," DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR addresses potential impacts to aquatic biological resources (including salmon) and their habitats. The DEIR concluded that, based on scientific analysis, the proposed long-term operations of the SWP would not result in significant impact to such resources. This discussion is found in DEIR Chapters 4.2, "Hydrology," 4.3, "Surface Water Quality," and 4.4, "Aquatic Biological Resources." DEIR Chapter 5, "Alternatives to the Proposed Project," analyzed alternatives to the project, some of which include increased freshwater flows through the Delta during specific times of the year to benefit aquatic species. Refined Alternative 2b is described in FEIR Part III, Chapter 5.3, "Refined Alternative 2b - Proposed Project with Dedicated Water for Delta Outflow from SWP." Please see Master Response 23, "Impact Significance (Salmonids)" for more discussion of impacts to salmon.



Public Meeting for the Draft Environmental Impact Report for the Long-Term Operation of the California State Water Project

Name: Anabel Croice

Organization: Self concerned citizen (if any)

Address (optional):

City: Elk Grove State: CA Zip: 95758

Comments

I've been following the proposed tunnel, 'water fix', project for 2 years now. Every thing I've heard and through my own research lead me to the same question - why? There is no guarantee for water to be sent south - the only for sure is that

Continue overleaf if needed

California Department of Water Resources invites you to provide specific comments on the DEIR. Please hand in during the meeting.

1-1

damage and destruction will occur within the Delta ecosystem - possibly destroying damage beyond

Public Meeting for the Draft Environmental Impact Report for the Long-Term Operation of the California State Water Project

Comments (cont.)

the point of repair or return to a viable system. Not only all living species of the delta ecosystem and all ecosystems within but the humans on top of the delta who depend on this thriving delta for livelihood will all be adversely affected.

II.7.22 LETTER I-ANABEL CROICE-1 — ANABEL CROICE — DATED DECEMBER 12, 2019

II.7.22.1 RESPONSE TO COMMENT I-ANABEL CROICE-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR addresses potential impacts to the Delta ecosystem with a specific focus on hydrology, water quality and aquatic biology. The DEIR concluded that, based on scientific analysis, the proposed long-term operations of the SWP would not result in significant adverse impact to these resources. This discussion is found in DEIR Chapters 4.2, “Hydrology,” 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources.” Please see Master Response 26, “One-Tunnel Delta Conveyance Project,” for more discussion of the one-tunnel project.

From: [Jacalyn Dean \(missojackie@aol.com\) Sent You a Personal Message](#)
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Thursday, January 23, 2020 2:03:45 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

We need to keep our water. The entire San Francisco Bay and Delta system of natural resources must be maintained to protect the indigenous species of fish, birds, flora and fauna. If we continue to destroy, deplete and put profits over ecological preservation we risk catastrophic implication on our habitats and ecological balance.

Thank you

I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable.

California needs to operate it's water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species. Thank you.

Sincerely,

Jacalyn Dean
2960 Putnam Blvd Apt C
Walnut Creek, CA 94597
missojackie@aol.com
(925) 270-9049

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. If you need more information, please contact Lillian Miller at Sierra Club at core.help@sierraclub.org or (415) 977-5500.



II.7.23 LETTER I-JACALYN DEAN-1 — JACALYN DEAN — DATED JANUARY 23, 2020

II.7.23.1 RESPONSE TO COMMENT I-JACALYN DEAN-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR has analyzed the potential impacts of the project on the environment, and concluded, based on scientific analysis, that no significant adverse impacts would occur on biological resources such as fish, birds, flora, and fauna.

From: [Pam Dernham](#)
To: [LTO](#)
Subject: The Delta needs a healthy environment - walk your talk, Governor Newsom
Date: Sunday, November 24, 2019 9:41:15 AM

California Department of Water Resources,

We are in a critical time crunch to try to stave off the threatening apocalypse of climate change. Governor Newsom has spoken eloquently on our need to save our environment. There is no justification for sending more water to farmers when the health of the Delta is threatened. It is clear that if water is transferred away from the Delta, that the short term effects will decimate chinook salmon and the long term effects will a threat to human health.

Please re-examine the draft environmental report for future pumping operations in the Delta with vital consideration of, and action **to, preserve the health of the Delta.**

Thank you,
Pamela Dernham

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II.7.24 LETTER I-PAMELA DERNHAM-1 — PAMELA DERNHAM — DATED NOVEMBER 24, 2019

II.7.24.1 RESPONSE TO COMMENT I-PAMELA DERNHAM-1-1

Issues relating to climate change are addressed in DEIR Chapter 4.1.3, “Impact of Climate Change,” and in Master Response 10, “Climate Change.” As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR addresses potential impacts to water quality and salmon and concluded that the proposed long-term operations of the SWP would not result in exceeding existing water quality limits and would not result in significant impacts. This discussion is found in DEIR Chapters 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources.” Please see Master Response 23, “Impact Significance (Salmonids)” for more information on impacts to salmonids.

Letter I-Ingrid Desilvestre-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

Can it possibly be true that you're on the same page as the Trump Administration - the TRUMP ADMINISTRATION - regarding diversion of water from the Bay-Delta Estuary? This at a time when the environment is under incredible stress? When water quality is at risk. When salmon numbers are plummeting, and the fishery is declining. When Orca are dying and many species are going extinct. California, of all the states in the Union, is joining the most unethical, shortsighted and destructive administration in recent history to speed up these developments?

There are other solutions to water shortages. Seek those out before you destroy the Estuary.

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

It's unacceptable that the California Department of Water Resources has proposed a plan similar to the Trump Administration's to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Ingrid Desilvestre
Mountain View, CA

II.7.25 LETTER I-INGRID DESILVESTRE-1 — INGRID DESILVESTRE — DATED JANUARY 6, 2020

II.7.25.1 RESPONSE TO COMMENT I-INGRID DESILVESTRE-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The DEIR has analyzed the potential impacts of the project on water quality and aquatic biological resources, including direct impacts to salmon and other fish species, and indirect impacts to orca, and concluded, based on scientific analysis, that no significant adverse impacts would occur.

From: [Edward Dijeau \(dijeau@msn.com\) Sent You a Personal Message](mailto:dijeau@msn.com)
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Thursday, December 19, 2019 9:07:36 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. The current DWR plan is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable...

The Draft Environmental Impact Report for the proposal reveals increased freshwater exports, reduced flows through the estuary, weakened protections for salmon and other imperiled fish in the Delta, and more water to be funneled for giant agricultural corporations. .

California needs to operate it's water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species.

We need to use De-salination of Ocean or Bay salty waters powered by wind and solar to add NEW supplies of water, not take existing water and spreading it so thin that we don't get enough distributed to include maintaining the health of our natural waterways.

. Thank you.

Sincerely,

Edward Dijeau
35034 Begonia St
Union City, CA 94587
dijeau@msn.com
(510) 471-9311

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

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II.7.26 LETTER I-EDWARD DIJEAU-1 — EDWARD DIJEAU — DATED DECEMBER 19, 2019

II.7.26.1 RESPONSE TO COMMENT I-EDWARD DIJEAU-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The SWP serves more than 20 million Californians, as well as providing water for agriculture and industry. The long-term operations of the SWP does not include the development of new water supplies such as desalination projects. Please see Master Response 6, “Demand Management/Conservation Measures,” and Master Response 7, “Delta Reform Act,” under the subheading “Reducing Reliance on the Delta” for information regarding why other measures are not included in the scope of this project.

Letter I-Chris Eaton-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

As modern people living in an industrialized society we easily lose sight of how the world around us actually works. The importance of the balance of nature is overlooked in the quest for the almighty industrialized profit. For our world to support life in the manner we need to survive and prosper it is essential to maintain this crucial balance. Without adequate water life ends and nature's balance fails.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Chris Eaton
Tujunga, CA

II.7.27 LETTER I-CHRIS EATON-1 — CHRIS EATON — DATED JANUARY 6, 2020

II.7.27.1 RESPONSE TO COMMENT I-CHRIS EATON-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Comments expressing general concern regarding the importance of water and the balance of nature are noted, but do not require a response.

Letter I-Marcia Edelen-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I have lived in the East Bay of the San Francisco Bay Area for the past 66 years. I am not a the type of senior citizen who denies the need for change, but on this issue I am "a conservative"; I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife. Let's use them - i.e. the legal authority to stop this reckless proposal and safeguard salmon, the endangered orcas, and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Marcia Edelen
Berkeley, CA

II.7.28 LETTER I-MARCIA EDELEN-1 — MARCIA EDELEN — DATED JANUARY 6, 2020

II.7.28.1 RESPONSE TO COMMENT I-MARCIA EDELEN-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The DEIR analyzes potential impacts of the project on salmon and orca in DEIR Chapter 4.4.7.4, “Species-Specific Impacts,” and concluded, based on scientific analysis, that no significant adverse impacts would occur.

From: [P.SME](#)
To: [LTO](#)
Subject: Delta water
Date: Monday, November 25, 2019 6:24:31 AM

We should not pump ANY more water out of the delta. Northern CA residents and wildlife depend on it. Southern CA has expanded enough and there are enough farms - more growth would be irresponsible and court environmental disaster.

From the San Jose Mercury News:

“Newsom and the state Department of Water Resources need to hear that they should re-examine their environmental analysis. The report runs contrary to the state Water Resources Control Board and state Department of Fish and Wildlife findings that the best way to preserve the health of the Delta is to pour more water — not less — through it.

1-1

The governor should offer a consistent, clear message that he will do everything possible to guarantee a supply of quality fresh water for current and future Californians.”

“Further degradation to the Delta will ultimately threaten the quality of the drinking water for Northern California residents.”

“But study after study by state and federal scientists over the course of the last decade have consistently said that increasing water flow in the Sacramento-San Joaquin River Delta and ensuring cold water for salmon in streams and rivers is essential for fish to survive. Sending more water south would undermine that goal.”

Thanks,

Pam Edmonston

Martinez, CA voter, resident, employee, homeowner, influencer

II.7.29 LETTER I-PAM EDMONSTON-1 — PAM EDMONSTON — DATED NOVEMBER 25, 2019

II.7.29.1 RESPONSE TO COMMENT I-PAM EDMONSTON-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR addresses potential impacts to water quality and biological resources and concluded, based on scientific analysis, that the proposed long-term operations of the SWP would not result in significant impacts. This discussion is found in DEIR Chapters 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources.” Please see Master Response 23, “Impact Significance (Salmonids)” for more information on impacts to salmonids.

Letter I-Rich Elam-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

Everyone needs to understand we must save every specie and every square inch of natural habitat we have left or there will be nothing left to help buffer what Climate Change is going to slam into our heads.

Estuaries and Deltas are some of the most important ecosystems necessary for our clean water and fisheries.

If we destroy them we will be destroying our own ability to survive.

I am a UCSD scientist and I am not just BSing here this is no joke.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Rich Elam
San Diego, CA

II.7.30 LETTER I-RICH ELAM-1 — RICH ELAM — DATED JANUARY 6, 2020

II.7.30.1 RESPONSE TO COMMENT I-RICH ELAM-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The DEIR analyzes potential impacts of the project on Delta hydrology, water quality, and aquatic biological resources, and concluded, based on scientific analysis, that no significant adverse impacts would occur. Please see Master Response 10, “Climate Change,” for discussion of the climate change sensitivity analysis undertaken as part of the DEIR and FEIR.

From: [Anita Farnholtz](#)
To: [LTO](#)
Subject: Delta Water Quality
Date: Sunday, November 24, 2019 12:50:59 PM

Please refrain from sending more water to Southern California endangering the quality of the Delta water for drinking and for supporting the existing wild life.
Thank you

1-1

Anita Farnholtz

II.7.31 LETTER I-ANITA FARNHOLTZ-1 — ANITA FARNHOLTZ — DATED NOVEMBER 24, 2019

II.7.31.1 RESPONSE TO COMMENT I-ANITA FARNHOLTZ-1-1

The DEIR addresses potential impacts to water quality and wildlife. The DEIR concluded that, based on scientific analysis, the proposed long-term operations of the SWP would not result in exceeding existing water quality limits and would not result in significant impacts to biological resources. This discussion is found in DEIR Chapters 4.2, “Hydrology,” 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources.”

Letter I-Cay FitzGerald-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region. It may be penny-wise, but it's dollar foolish when you consider the ramifications of those actions.

I have worked with folks who have done fish studies in the Bay-Delta, and through that work, have come to realize that fish are the fulcrum of species both in the water and on land. I know that the farmers complain that we are protecting "a little fish that you can't even see!" but they do not understand the interrelationships that exist in life. Yes, they are little. They are food for larger species, which are food for even larger species, and so on.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Cay FitzGerald
Santa Barbara, CA

II.7.32 LETTER I-CAY FITZGERALD-1 — CAY FITZGERALD — DATED JANUARY 6, 2020

II.7.32.1 RESPONSE TO COMMENT I-CAY FITZGERALD-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The DEIR analyzes potential impacts of the project on aquatic biological resources, including indirect impacts on the wider food chain. The DEIR concluded, based on scientific analysis, that no significant adverse impacts would occur as a result of project implementation.

Letter I-Jadene Fourman-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

We are tasked with stewardship of our life support system, Earth's biosphere. Regional and local protections for vital ecosystems need to come before ALL development if we as a species are to survive. Period.

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Jadene Fourman
Altadena, CA

II.7.33 LETTER I-JADENE FOURMAN-1 — JADENE FOURMAN — DATED JANUARY 6, 2020

II.7.33.1 RESPONSE TO COMMENT I-JADENE FOURMAN-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As discussed in DEIR Chapter 3, Project Description, the proposed long-term operations of the SWP does not include any new development. The DEIR analyzes potential impacts of the project on the environment and concluded, based on scientific analysis, that no significant adverse impacts would occur.

From: [Kyri Freeman \(kyrifreeman@yahoo.com\)](mailto:kyrifreeman@yahoo.com) Sent You a Personal Message
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Thursday, December 19, 2019 7:27:05 AM

Dear CA Department of Water Resources,

Dear Mr. Chao:

I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project. I would prefer water in CA to be more locally and sustainably handled rather than to have large-scale but shortsighted plans that effectively rob Peter to pay Paul and do not take into account the long-term droughts that are probably in our future.

There are some concerns and questions that I have about this project.

How will it improve the recovery of natural habitat, wildlife and commercial fish stocks in the Bay-Delta?

Why is this management plan preferable to other plans to improve water sustainability in the Central Valley, such as local rainwater storage and planting crops appropriate to local conditions rather than crops requiring more water than is available?

How does it comply with the Delta Reform Act?

Thank you.

Sincerely,

Kyri Freeman
1251 Sunshine Dr
Barstow, CA 92311
kyrifreeman@yahoo.com
(831) 239-2917

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

1-1

II.7.34 LETTER I-KYRI FREEMAN-1 — KYRI FREEMAN — DATED DECEMBER 19, 2019

II.7.34.1 RESPONSE TO COMMENT I-KYRI FREEMAN-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. Please see Master Response 24, “Drought Conditions,” for discussion of how future drought conditions have been taken account of in the DEIR analysis. The issue of reducing reliance on the Delta to meet California’s future water needs via methods such as local rainwater storage or more water-efficient agricultural methods is addressed in Master Response 7, “Delta Reform Act,” under the subheading “Reduced Reliance on the Delta”.

From: [Ellen Gachesa \(trueromanticlife@gmail.com\)](mailto:Ellen.Gachesa(trueromanticlife@gmail.com)) Sent You a Personal Message
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Thursday, December 19, 2019 1:06:27 AM

Dear CA Department of Water Resources,

Dear Mr. Chao:

It is the duty of the Department of Water Resources to revise its proposed operations plan for the State Water Project.

It is no secret that your organization is heavily weighted toward giving our water to rich farmers instead of protecting our environment for future generations.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities. **THIS IS UNSUSTAINABLE!**

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is **UNACCEPTABLE** and **UNSUSTAINABLE**. You **MUST** protect our water resources for the future!

California needs to operate its water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species. Thank you.

Sincerely,

Ellen Gachesa
1247 Monticello Rd
Napa, CA 94558
trueromanticlife@gmail.com
(707) 307-8220

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

II.7.35 LETTER I-ELLEN GACHESA-1 — ELLEN GACHESA — DATED DECEMBER 19, 2019

II.7.35.1 RESPONSE TO COMMENT I-ELLEN GACHESA-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The SWP serves more than 20 million Californians, as well as providing water for agriculture and industry. The DEIR has analyzed the potential impacts of the project on the Delta water quality and aquatic resources, and concluded, based on scientific analysis, that no significant adverse impacts would occur. The list of cumulative projects identified in DEIR Chapter 4.6.1, “Cumulative Impacts” includes a range of water quality, habitat improvement, and invasive species control projects, which demonstrates that DWR and other agencies are committed to protecting the environment and restoring the health of the Delta. However, these are separate actions to the Proposed Project assessed in the DEIR. Please also see Master Response 6, “Demand Management/Conservation Measures,” for information regarding why other measures are not included in the scope of this project.

From: [Linda Garfield \(lindag_52@comcast.net\)](mailto:lindag_52@comcast.net) Sent You a Personal Message
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Sunday, December 22, 2019 2:44:11 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

I don't support sending additional water to industrial farming interests on the West Side of the Central Valley. This area was traditionally dry. In other words, it should not be farmed at the scale it currently is. I support returning large swaths of this area to seasonal flooding/wetlands to support wild-life.

I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable.

California needs to operate its water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species. Thank you.

Sincerely,

Linda Garfield
341 Mitchell Dr
Boulder Creek, CA 95006
lindag_52@comcast.net
(831) 555-5555

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

1-1

II.7.36 LETTER I-LINDA GARFIELD-1 — LINDA GARFIELD — DATED DECEMBER 22, 2019

II.7.36.1 RESPONSE TO COMMENT I-LINDA GARFIELD-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The SWP serves more than 20 million Californians, as well as providing water for agriculture and industry. Comments regarding the conversion of existing agriculture lands to wetlands to support wildlife is beyond the scope of the project or the DEIR, however the commenter is referred to Table 4.6-1b in DEIR Chapter 4.6.1, “Cumulative Impacts,” for a list of habitat improvement projects that are being undertaken, or are proposed, by DWR and other agencies and organizations.

Letter I-Robert Geyer-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

Some of the actions that will help save water in our state are lining the canals to reduce leakage and covering them to prevent evaporation. As an aside, arrays of solar panels could also be built along the canals to shade them and provide power, too.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time and positive actions to protect the Delta.

Robert Geyer
San Francisco, CA

II.7.37 LETTER I-ROBERT GEYER-1 — ROBERT GEYER — DATED JANUARY 6, 2020

II.7.37.1 RESPONSE TO COMMENT I-ROBERT GEYER-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The construction of new facilities such as canal covers, canal linings, or solar panels to reduce evaporation and/or seepage is not an element of the Proposed Project or any of the alternatives. Please see Master Response 3, “The CEQA Process,” regarding alternatives considered during the environmental review process.

Letter I-Kirk Glaser-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

The San Francisco Bay-Delta Estuary is a jewel of ecosystems supporting a myriad of wildlife as well as providing key water for many human needs. It needs strong protection to keep it from being destroyed and harming our future water supplies.

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Kirk Glaser
Santa Cruz, CA

II.7.38 LETTER I-KIRK GLASER-1 — KIRK GLASER — DATED JANUARY 6, 2020

II.7.38.1 RESPONSE TO COMMENT I-KIRK GLASER-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The commenter’s statement regarding the importance of the Bay-Delta for supporting wildlife and providing water is noted. The DEIR analyzes potential impacts of the project on hydrology and water quality and concluded, based on scientific analysis, that no significant adverse impacts would occur. Analysis of impacts to aquatic and terrestrial wildlife species supported by the Delta is provided in DEIR Chapter 4.4, “Aquatic Biological Resources,” and DEIR Appendix A, Section 3.4.2, “Terrestrial Biological Resources,” respectively.

Letter I-Joe Gonzales-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

You must do everything you can to protect the San Francisco Bay-Delta Estuary from the most CORRUPT administration in HISTORY! The Trump administration's reckless scheme to increase water diversions in the region will degrade our environment and kill endangered species.

The Trump administration's damaging proposal would drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. STOP catering to rich farmers and corporate interest and DO YOUR JOB protecting OUR environment!!

Reverse this destructive course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Joe Gonzales
Napa, CA

II.7.39 LETTER I-JOE GONZALES-1 — JOE GONZALES — DATED JANUARY 6, 2020

II.7.39.1 RESPONSE TO COMMENT I-JOE GONZALES-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The SWP serves more than 20 million Californians, as well as providing water for agriculture and industry. The DEIR analyzes potential impacts of the project on the environment and concluded, based on scientific analysis, that no significant adverse impacts would occur.

From: [Joe Gonzales \(iwillwireit@yahoo.com\) Sent You a Personal Message](mailto:iwillwireit@yahoo.com)
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Thursday, December 19, 2019 1:11:11 AM

Dear CA Department of Water Resources,

Dear Mr. Chao:

The Department of Water Resources must revise its proposed operations plan for the State Water Project.

The DWR has depleted our water for the profits of rich farmers instead of taking the utmost care to protect them for future generations. **THIS IS UNSUSTAINABLE!** It is your **DUTY** to protect our environment.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

THIS IS UNACCEPTABLE and **ANTI-ENVIRONMENT** so that rich farmers can siphon off **OUR** water - the profits of the **FEW** against the interests of the **MAJORITY**. **SHAME ON YOU!** You might as well let the **100% CORRUPT** Trump criminals run our water system until it's **EMPTY**.

California needs to operate it's water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species. Thank you.

Sincerely,

Joe Gonzales
1247 Monticello Rd
Napa, CA 94558
iwillwireit@yahoo.com
(707) 307-8220

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

2-1

II.7.40 LETTER I-JOE GONZALES-2 — JOE GONZALES — DATED DECEMBER 19, 2019

II.7.40.1 RESPONSE TO COMMENT I-JOE GONZALES-2-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The SWP serves more than 20 million Californians, as well as providing water for agriculture and industry. The DEIR has analyzed the potential impacts of the project on the environment, and concluded, based on scientific analysis, that no significant adverse impacts would occur.

From: [Marc Gordon \(marcsgordon@hotmail.com\)](mailto:marcsgordon@hotmail.com) Sent You a Personal Message
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Wednesday, December 18, 2019 7:36:44 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

A healthy San Francisco Bay and Delta are essential to the economic strength of California, as well as being critical to the environment. I strongly urge the Department of Water Resources to revise its Draft Environmental Impact Report operations plan for the State Water Project to increase flows through the estuary, further strengthen protections for salmon and other imperiled fish in the Delta, and decrease the amount of water that will be funneled for giant agricultural corporations.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable.

California needs to operate its water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species. Please revise and greatly strengthen protections for the Bay and Delta in the Draft Environmental Impact Report. Thank you.

Sincerely,

Marc Gordon
1474 Samedra St
Sunnyvale, CA 94087
marcsgordon@hotmail.com
(408) 220-4754

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

1-1

II.7.41 LETTER I-MARC GORDON-1 — MARC GORDON — DATED DECEMBER 18, 2019

II.7.41.1 RESPONSE TO COMMENT I-MARC GORDON-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. The importance of San Francisco Bay and Delta as part of the environment, and to the economic strength of California is acknowledged by DWR. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The SWP serves more than 20 million Californians, as well as providing water for agriculture and industry.

From: [Sheila Gorsuch](#)
To: [LTO](#)
Subject: Delta Water Proposal
Date: Monday, November 25, 2019 1:07:01 PM

PLEASE, PLEASE, PLEASE DO NOT ALLOW AN INCREASE IN PUMPING WATER GOING SOUTH TO FARMERS. SAVE OUR DELTA. DO NOT, DO NOT, DO NOT BE A TRUMPER!

1-1

II.7.42 LETTER I-SHEILA GORSUCH-1 — SHEILA GORSUCH — DATED NOVEMBER 25, 2019

II.7.42.1 RESPONSE TO COMMENT I-SHEILA GORSUCH-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. DEIR Chapter 4, “Environmental Setting and Impact Analysis,” analyzed potential impacts of the project and concluded, based on scientific analysis, that long-term operations of the SWP would not have any significant environmental impacts.

From: [Carol Hankermeyer](#)
To: [LTO](#)
Subject: Tuolumne River water
Date: Sunday, January 5, 2020 5:12:11 PM

Dear Sir:

I am shocked and disappointed to learn about Governor Newsom’s environmental report outlining his proposal to increase future pumping operations in the Delta. We have a boat in the Delta, and I have nearly 50 years of experience watching the Delta gradually decline environmentally due to water being diverted to Southern California for urban and agricultural interests.

Earlier this year, Governor Newsom vetoed SB1—a bill that would have protected California’s rivers from the Trump Administration’s environmental rollbacks. Now this new draft proposal threatens cold water fisheries essential to the health of salmon and other fish populations. I urge Governor Newsom and the State Department of Water Resources to re-examine their environmental analysis. The report is contrary to the State Department of Fish and Wildlife findings that less water water flowing into the Delta will harm its health longterm.

Respectfully,
Carol Hankermeyer
Palo Alto, California



II.7.43 LETTER I-CAROL HANKERMEYER-1 — CAROL HANKERMEYER — DATED JANUARY 5, 2020

II.7.43.1 RESPONSE TO COMMENT I-CAROL HANKERMEYER-1-1

As noted in DEIR Chapter 3.1.1, "Project Purpose and Objectives," DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR addresses potential impacts to water quality and to aquatic biological resources such as salmon and other fish populations. The DEIR concluded that, based on scientific analysis, the proposed long-term operations of the SWP would not result in exceeding existing water quality limits or result in significant impact to such resources. This discussion is found in DEIR Chapters 4.2, "Hydrology," 4.3, "Surface Water Quality," and 4.4, "Aquatic Biological Resources." Please see Master Response 23, "Impact Significance (Salmonids)" for more information on impacts to salmonids. Past degradation of the Delta is acknowledged in Master Response 4, "Legal Standards," under the subheading, "Treatment of Historical Conditions." DEIR Chapter 5, "Alternatives to the Proposed Project," analyzed alternatives to the project, some of which include increased freshwater flows through the Delta during specific times of the year to benefit aquatic species. DWR has selected Refined Alternative 2b as its preferred alternative, as described in FEIR Part III, Chapter 5.3, "Refined Alternative 2b - Proposed Project with Dedicated Water for Delta Outflow from SWP."

Letter I-Stuart and Carol Hansen-1

From: [Stuart Hansen](#)
To: [LTO](#)
Subject: Gov Newsom's Water Plan
Date: Saturday, January 4, 2020 5:19:07 PM

We wish to go on-record as OPPOSED to the governor's plan.
His plan to send more of our delta water to allow farmers to expand their irrigated land in the central valley is unacceptable.
Stuart and Carol Hansen

1-1

II.7.44 LETTER I-STUART AND CAROL HANSEN-1 — STUART AND CAROL HANSEN — DATED JANUARY 4, 2020

II.7.44.1 RESPONSE TO COMMENT I-STUART AND CAROL HANSEN-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. DEIR Chapter 4, “Environmental Setting and Impact Analysis,” analyzed potential impacts of the project and concluded, based on scientific analysis, that long-term operations of the SWP would not have any significant environmental impacts.

Letter I-Renee Harper-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

California needs to prioritize sustainable local and regional water supply projects like water recycling and improved water use efficiency, instead of endangering the health of the Delta through increasing diversions. Doing so will reduce water diversions from the Bay-Delta while sustaining our economy. California should not be diverting more water from the Bay-Delta,

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Renee Harper
San Leandro, CA

II.7.45 LETTER I-RENEE HARPER-1 — RENEE HARPER — DATED JANUARY 6, 2020

II.7.45.1 RESPONSE TO COMMENT I-RENEE HARPER-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions.

From: Tom Hicks <tdh@tomhickslaw.com>
Sent: Monday, January 6, 2020 3:57 PM
To: Mellon, Erin@DWR <Erin.Mellon@water.ca.gov>
Cc: Crothers, Cathy@DWR <Cathy.Crothers@water.ca.gov>; Fock, Anna@DWR <Anna.Fock@water.ca.gov>
Subject: Comments on DWR Draft EIR re Long-Term Operation of the CA SWP

Ms. Mellon,

My name is Tom Hicks and I am a water law-real property-conservation attorney submitting these email comments in my own capacity not on behalf of any paid client.

I think the Draft EIR lacks sufficient coverage of how voluntary projects that enhance stream flow can integrate and co-exist within the regulatory framework that now dictates both state and federal operations in the Sacramento-San Joaquin River systems.

This might include reference and more treatment on Wildlife Conservation Board projects that enhance stream flow on all tributaries of the Feather River in Plumas County, as well as Oroville re-operation considerations related to reduced consumptive use land-water conservation opportunities in the Feather River watershed.

How SWP operations contribute to Delta outflow and unimpaired flow targets alongside these increments of enhancement flow remain uncertain for conservation minded landowners.

Separately, the Draft EIR does not appear to provide enough treatment or coverage on issues of federal and/or state forest management or fire management in the upper watershed which has a most direct and quantifiable impact on federal reserved and other rights that are, especially in the aftermath of a fire, an added increment of water that is not fully re-consumed by the forest for a generation of re-growth. How these short term benefits to SWP operations are parsed and distinguished from other water and water rights in Lake Oroville seems important, but under-represented for long-term water quantification.

Please direct me to any sections that provide coverage of these issues that I might have overlooked.

Please provide an acknowledgement at your earliest convenience of your receipt of these comments as provided as timely and on the record.

Thank you,

--
Tom Hicks
Attorney at Law
(415) 309-2098 (direct)
tdh@tomhickslaw.com
www.tomhickslaw.com

1-1
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II.7.46 LETTER I-TOM HICKS-1 — TOM HICKS — DATED JANUARY 6, 2020

II.7.46.1 RESPONSE TO COMMENT I-TOM HICKS-1-1

Voluntary agreements are discussed in DEIR Chapter 4.6.1, “Cumulative Impacts,” and DEIR Table 4.6-1a, “List of Cumulative Projects.” Master Response 9, “Relationship to WQCP Update and Voluntary Agreements,” provides additional information pertaining to the relationship between voluntary agreements and the long-term operation of the SWP.

II.7.46.2 RESPONSE TO COMMENT I-TOM HICKS-1-2

DEIR Appendix A, “Initial Study for the Long-Term Operations of the State Water Project,” addresses forestry and wildfire-related impacts, and concluded that no impacts relating to these topics would result from implementation of the project. CEQA generally does not require analysis of the environment’s impact on a project, unless the project may exacerbate existing environmental hazards. As discussed in DEIR Appendix A, Section 3.20, “Wildfire,” the Proposed Project would not exacerbate any wildfire hazards. DEIR Appendix A, Section 3.2, “Agriculture and Forestry Resources,” demonstrates that the Proposed Project would not cause or exacerbate any impacts relating to forestry.

Proposed operations of the SWP would not reduce opportunities to divert water using existing water rights of more senior water rights holders. DEIR Appendix A, Section 3.10.1, “Environmental Setting,” addresses hydrologic conditions of the Sacramento River and the Feather River upstream of their confluence north of the Delta and concluded that flows in these rivers would not be affected by the proposed changes in SWP operations. Because no change to upstream flow conditions would occur, no impacts to water rights are anticipated.

Letter I-Marilyn Hills-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

Clean water is a necessity to sustain our lives. Please don't endanger it any move. That fracking is allowed to proceed without even disclosing what chemicals are used with what disastrous results- from gas out of home water faucets to earthquakes in non-earthquake states like Oklahoma. This should not be negotiable

. Please don't add more damage to our water systems.

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Marilyn Hills
San Jose, CA

II.7.47 LETTER I-MARILYN HILLS-1 — MARILYN HILLS — DATED JANUARY 6, 2020

II.7.47.1 RESPONSE TO COMMENT I-MARILYN HILLS-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. DEIR Chapter 4.3, “Surface Water Quality,” analyzes potential impacts of the project on water quality and concluded, based on scientific analysis, that no significant adverse impacts would occur. Hydraulic fracturing, or “fracking,” is not an element of the Proposed Project or any of the alternatives.

Letter I-Judith Hoaglund-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

I live in Sonoma County. We value our environment and the protection of our estuaries. Protected estuaries are critical to the life cycle of many native species, especially aquatic ones. It is also critical to ground water and drinking water for millions of people and billions of animals.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Judith Hoaglund
Santa Rosa, CA

II.7.48 LETTER I-JUDITH HOAGLUND-1 — JUDITH HOAGLUND — DATED JANUARY 6, 2020

II.7.48.1 RESPONSE TO COMMENT I-JUDITH HOAGLUND-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The DEIR analyzes potential impacts of the project on hydrology, water quality, and aquatic biological resources and concluded, based on scientific analysis, that no significant adverse impacts would occur.

Letter I-Janet Holder-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region. I am disgusted by how much DWR panders to Big Ag and Southern CA water agencies by depleting our northern rivers and threatening our fish and wildlife. Those of us who live in Northern CA look to you to protect our unique bay and delta estuary.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Stand up for us not against us! Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Janet Holder
Fair Oaks, CA

II.7.49 LETTER I-JANET HOLDER-1 — JANET HOLDER — DATED JANUARY 6, 2020

II.7.49.1 RESPONSE TO COMMENT I-JANET HOLDER-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR analyzes potential impacts of the project on Delta hydrology, water quality, and aquatic biological resources and concluded, based on scientific analysis, that no significant adverse impacts would occur.

Letter I-Alice Howard-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary! We don't need any water diversions from this estuary!

Thanks so much for your time.

Alice Howard
Paso Robles, CA

II.7.50 LETTER I-Alice Howard-1 — Alice Howard — Dated January 6, 2020

II.7.50.1 RESPONSE TO COMMENT I-Alice Howard-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions.

Letter I-Lesley Hunt-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

MY PERSONAL THOUGHTS: I believe that the Westlands Water District has unduly influenced this proposal and that it is bad for California as a whole. A Nature Conservancy scientist told me recently that California grows 90% of the world's almonds because other producers have drawn down their water tables below the point where almond tree roots can reach them. Why should the rest of the state subsidize the Central Valley's endless thirst for water when the right policy is to change their ways and restore their water table? If they get away with this, they'll only ask for more, and it will be harder to correct the problem next time. Likewise, our salmon industry deserves protection because of its economic importance.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Lesley Hunt
Walnut Creek, CA

II.7.51 LETTER I-LESLEY HUNT-1 — LESLEY HUNT — DATED JANUARY 6, 2020

II.7.51.1 RESPONSE TO COMMENT I-LESLEY HUNT-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. Changes to agricultural practices are not within the scope of this Project. Please see Master Response 1, “Scope of Analysis.” Please also see Master Response 3, “The CEQA Process,” for more information regarding alternatives.

From: [m.owner](#)
To: [LTO](#)
Subject: Delta Water Proposal
Date: Thursday, November 28, 2019 11:08:27 PM

You Chen Chou, CA Dept of Water Resources:

It is with great interest and some amusement I read Sunday's oped articles in The Daily Review newspaper. I grew up in the San Joaquin Valley. The idea of sending "our water" to the deserts in Southern California for use by the rich, corporate farmers and to keep all the swimming pools full and the landscaping watered was laughable. The idea of splitting the state into Northern and Southern was an equally ridiculous alternative. Fast forward many decades and the issues are the same as are the alternatives.

The solution, I don't know. I still do think the idea of sending "our water" to the deserts of Southern California for use by the rich, corporate farmers and to keep all the swimming pools full and the landscaping watered is as laughable as is splitting the state in two.

Lola Hunter

1-1

II.7.52 LETTER I-LOLA HUNTER-1 — LOLA HUNTER — DATED NOVEMBER 28, 2019

II.7.52.1 RESPONSE TO COMMENT I-LOLA HUNTER-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR concluded, based on scientific analysis, that the proposed long-term operations of the SWP would not result in significant impacts. This discussion is found in DEIR Chapter 4, “Environmental Setting and Impact Analysis.”

Letter I-Shirlee Jack-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

Please do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's ill-advised plans to increase water diversions in the region.

The Trump administration's proposal would almost certainly result in the extinction of native species, worsen water quality, and threaten thousands of fishing jobs.

Also unacceptable is the California Department of Water Resources proposal for a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months rather than diverting water from these critical habitats.

The health of our rivers is extremely important to all of us 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods. Additionally, maintaining wetlands is a critical flood management practice.

California has the resources to protect our water quality, wildlife, and flood management wetlands.

We must rely on established science and use California's legal authority to stop proposals that divert water from our delta areas. California needs to safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks for your sincere consideration,

Shirlee Jack
Sierra Madre, CA

II.7.53 LETTER I-SHIRLEE JACK-1 — SHIRLEE JACK — DATED JANUARY 6, 2020

II.7.53.1 RESPONSE TO COMMENT I-SHIRLEE JACK-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. DEIR Appendix A, Initial Study for the Proposed Long-Term Operations of the State Water Project,” analyzed the potential impacts of the project related to flooding. DEIR Appendix A, Section 3.10, “Hydrology,” concluded that there would be no impact related to flooding as surface water flows would remain within the historical range of operations and there would be no construction of new or modification of existing SWP facilities or disturbance of wetlands. The DEIR analyzes potential impacts of the project on Delta hydrology, water quality, and aquatic biological resources and concluded, based on scientific analysis, that no significant adverse impacts would occur.

From: [Karen Jacques \(threegables1819@gmail.com\) Sent You a Personal Message](#)
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Wednesday, December 18, 2019 5:57:20 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project. Your current operations proposal puts the Delta and the species (including endangered species) that inhabit it at risk. Your proposal also threatens the access of environmental justice committees in the Delta to clean water and will likely increase the toxic algae blooms that are currently occurring in the Delta, in part due of adequate flows through the Delta.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities. Your proposal doesn't appear to consider this.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable.

California needs to operate it's water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species. Thank you.

Sincerely,

Karen Jacques
1209 T St
Sacramento, CA 95811
threegables1819@gmail.com
(916) 452-2631

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

1-1

II.7.54 LETTER I-KAREN JACQUES-1 — KAREN JACQUES — DATED DECEMBER 18, 2019

II.7.54.1 RESPONSE TO COMMENT I-KAREN JACQUES-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. The DEIR has analyzed the potential impacts of the project to Delta water quality and aquatic biological resources (including endangered species) and concluded, based on scientific analysis, that no significant adverse impacts would occur. As discussed in Master Response 15, “Environmental Justice,” there is no requirement as a part of compliance with CEQA to analyze the extent that an environmental impact might disproportionately impact low-income or minority populations. The Proposed Project, however, will not have any significant environmental impacts under CEQA. DEIR Chapter 4.3, “Surface Water Quality,” demonstrates that the project will comply with water quality standards. The potential for the project to result in increased harmful algal blooms is analyzed within DEIR Section 4.4 (Pages 4-152 and 4-167). The analysis suggests that there would be little difference between the Proposed Project and Existing Conditions scenarios in the potential for velocity conditions which are a key factor in the frequency of harmful algal blooms.

From: Kevin
To: LTO
Subject: Pumping Water South
Date: Saturday, November 30, 2019 9:42:39 AM

For decades I have been a boater and a fisherman, plying the waters of the Delta, San Francisco Bay, and the Pacific Ocean outside the Golden Gate. Last summer while driving back to the Bay Area through the San Joaquin Valley, I saw billboards with pictures of a salmon with a red circle and line going through the fish with the words, "fish or people?" Let the fish go extinct, send us your water!

Following the complete collapse of the Chinook [King] salmon and closing of numerous fishing seasons, I was indeed livid. It is only through increased water flows by stopping the pumps currently diverting water, the work of our fisheries to hatch fry, and the hard work of recreating the destroyed spawning grounds has this noble fishery even survived. Thankfully Governor Brown failed in his twin tunnel idea, but now Governor Newsome, a champion of fighting for gay rights and the environmental noble goals of our state, has somehow turned his back on science and has not gotten the message.....WE NEED **MORE WATER, OUR NORTHERN CALIFORNIA WATER, TO FLOW THROUGH THE DELTA!! NOT LESS.**

1-1

I cannot believe we would destroy our eco system and drive our treasured chinook salmon and many other species into extinction for farmers who decided to grow crops in a desert. Now that they've sucked all the water out of their aquifers, they want to destroy our once robust waterways so they can continue to profit on their farms. It's not fish vs people, it's the environment vs dollars. You can always find ways to make money, but you can't reverse extinction.

Don't turn your back Governor on the well documented science and the meager rebounding of our Delta eco system. You only get one chance to save what's left of it, and let me tell you as a fisherman, it has gone tremendously downhill even in my time.....and the older fisherman tell tales of our once healthy Delta and Bay that defy belief. We have almost completely destroyed it as it is.

KEEP OUR WATER HERE!!

Sincerely,

Kevin Jarvis
425 Vick Drive
Santa Cruz, CA

II.7.55 LETTER I-KEVIN JARVIS-1 — KEVIN JARVIS — DATED NOVEMBER 30, 2019

II.7.55.1 RESPONSE TO COMMENT I-KEVIN JARVIS-1-1

As noted in DEIR Chapter 3.1.1, "Project Purpose and Objectives," DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR addresses potential impacts to aquatic biological resources (including salmon) and their habitats. The DEIR concluded that, based on scientific analysis, the proposed long-term operations of the SWP would not result in significant impact to such resources. This discussion is found in DEIR Chapters 4.2, "Hydrology," 4.3, "Surface Water Quality," and 4.4, "Aquatic Biological Resources." DEIR Chapter 5, "Alternatives to the Proposed Project," analyzed alternatives to the project, some of which include increased freshwater flows through the Delta during specific times of the year to benefit aquatic species. DWR has selected Refined Alternative 2b as its preferred alternative, as described in FEIR Part III, Chapter 5.3, "Refined Alternative 2b - Proposed Project with Dedicated Water for Delta Outflow from SWP." Please see Master Response 23, "Impact Significance (Salmonids)," for more information on impacts to salmonids.

Letter I-Alden Jenks-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region. Short-sighted and short-term profits should not be given higher priority than the health of our water and this estuary in particular.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Alden Jenks
Oakland, CA

II.7.56 LETTER I-ALDEN JENKS-1 — ALDEN JENKS — DATED JANUARY 6, 2020

II.7.56.1 RESPONSE TO COMMENT I-ALDEN JENKS-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The DEIR analyzes potential impacts of the project on the physical environment, including water quality and Delta health, and concluded, based on scientific analysis, that no significant impacts would result.

Letter I-Claire Joaquin-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

California's redwood forests along the coast were almost completely decimated, altering the weather patterns inland.

No trees means drier air, hotter valleys, more fires, more droughts. The new plan for "thinning" forests is ill-advised.

Logged forests dry out faster, burn easier and much hotter.

Rivers are critical for water supply, but without trees in our forests, the rivers will silt up and dry up.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Claire Joaquin
Pollock Pines, CA

II.7.57 LETTER I-CLAIRE JOAQUIN-1 — CLAIRE JOAQUIN — DATED JANUARY 6, 2020

II.7.57.1 RESPONSE TO COMMENT I-CLAIRE JOAQUIN-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Comments regarding historic changes to forests and related impacts on weather patterns, droughts, and siltation are noted, but do not require a response. Forest “thinning”, logging, or removal of trees are not an element of the Proposed Project or any of the alternatives.

From: [P Johansen \(pyjn@sbcglobal.net\) Sent You a Personal Message](mailto:pyjn@sbcglobal.net)
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Wednesday, December 18, 2019 6:22:14 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem. This is unacceptable.

Sustainable and habitat protective water practices **MUST** be put into place!

California needs to operate its water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species. Thank you.

Sincerely,

P Johansen
2066 Camel Ln Apt 8
Walnut Creek, CA 94596
pyjn@sbcglobal.net
(925) 930-2908

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This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

II.7.58 LETTER I-P JOHANSEN-1 — P JOHANSEN — DATED DECEMBER 18, 2019

II.7.58.1 RESPONSE TO COMMENT I-P JOHANSEN-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. The DEIR analyzes the potential impacts of the Proposed Project, and concluded, based on scientific analysis, that impacts to water quality and aquatic biological resources and their habitats would be less than significant. The Refined Alternative 2b described in FEIR Part III, Chapter 5.3, includes refinements and additional actions that would further improve conditions for aquatic biological resources. DWR’s commitment to habitat protection is also demonstrated by the list of habitat improvement projects being undertaken separate to the long-term operations of the SWP, as summarized in Table 4.6-1b in DEIR Chapter 4.6.1, “Cumulative Impacts.”

Letter I-Jonathan Johnsen-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Protect the circle of life! Every species contributes to the human lifeline. Our descendants may not have a future.

Thanks so much for your time.

Jonathan Johnsen
Rodeo, CA

II.7.59 LETTER I-JONATHAN JOHNSEN-1 — JONATHAN JOHNSEN — DATED JANUARY 6, 2020

II.7.59.1 RESPONSE TO COMMENT I-JONATHAN JOHNSEN-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The DEIR analyzes potential impacts of the project on biological resources and concluded, based on scientific analysis, that no significant impacts would result.

From: [JP/Ann](#)
To: [LTO](#)
Subject: Draft Water Conversion
Date: Tuesday, December 17, 2019 3:08:17 PM

Please let Governor Newsom know that we do not support diversion of more Sacramento-San Joaquin delta water to the agri-corp farming interests. In particular, Westlands - once an arid "desert" - does not need more water to grow almonds and pistachios which the U. S. does not need, or want. It's all good for the export dollars, but it results in the decline of the delta, salt water intrusion for households using the water and environmental impact to the S.F Bay and the Pacific Ocean. The country at the other end of the state, A.K.A. Southern California, should not take more of our delta water for its swimming pools and green grass. This draft is nothing but a quid pro quo for the vote of the farming and SoCal lobbyists. Thank you, John Paul Jones

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II.7.60 LETTER I-JOHN PAUL JONES-1 — JOHN PAUL JONES — DATED DECEMBER 17, 2019

II.7.60.1 RESPONSE TO COMMENT I-JOHN PAUL JONES-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. DEIR Chapter 4, “Environmental Setting and Impact Analysis,” analyzed potential impacts of the project and concluded, based on scientific analysis, that long-term operations of the SWP would not have any significant environmental impacts.

II.7.60.2 RESPONSE TO COMMENT I-JOHN PAUL JONES-1-2

The DEIR analyzed the proposed long-term operations of the SWP and concluded that it would not result in exceeding existing water quality limits. This discussion is found in DEIR Chapter 4.3, “Surface Water Quality.”

II.7.60.3 RESPONSE TO COMMENT I-JOHN PAUL JONES-1-3

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The issue of reducing reliance on the Delta to meet California’s future water needs is addressed in Master Response 7, “Delta Reform Act,” under the subheading “Reduced Reliance on the Delta.”

From: [pearl.louise.karrer](#)
To: [LTO](#)
Cc: plk37@comcast.net
Subject: NO on sending more Delta water south!
Date: Wednesday, December 11, 2019 5:01:14 PM
Importance: High

Attention: You Chen Chou, Department of Water Resources:

We're responding to the upcoming issue of whether to increase the flow of Delta water to farmers in the south. We have visited Bethel Island over a 40 year period and have noticed a definite degradation of water quality in the sloughs that network the San Joaquin and Sacramento Rivers. Salt water is intruding, water weeds are flourishing with decreased water levels. The health of the Delta needs more water, not less.

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Millions of Californians depend on the Delta as a source of fresh water. This need far outweighs sending more water south for farming, where agriculture has a mismanaged history: such as planting water intense crops in arid areas (almonds, cotton, alfalfa, much for export); over-pumping the aquifer (causing subsidence).

1-2

Please work for ways to add water and restore the health of the Delta. Generations will thank you,

Sincerely,

H. E., Pearl & Anne Karrer
Palo Alto, California

Erik, Linda & Roxy Karrer
Los Altos, California

II.7.61 LETTER I-KARRER-1 — KARRER — DATED DECEMBER 11, 2019

II.7.61.1 RESPONSE TO COMMENT I-KARRER-1-1

The DEIR addresses potential impacts to hydrology and water quality, including salinity, invasive species and water levels. The DEIR concluded that, based on scientific analysis, the proposed long-term operations of the SWP would not result in significant impacts. This discussion is found in DEIR Chapters 4.2, "Hydrology," and 4.3, "Surface Water Quality." DEIR Chapter 5, "Alternatives to the Proposed Project," analyzed alternatives to the project, some of which include increased freshwater flows through the Delta during specific times of the year to benefit aquatic species. DWR has selected Refined Alternative 2b as its preferred alternative, as described in FEIR Part III, Chapter 5.3, "Refined Alternative 2b - Proposed Project with Dedicated Water for Delta Outflow from SWP." Past degradation of the Delta is acknowledged in Master Response 4, "Legal Standards," under the subheading, "Treatment of Historical Conditions."

II.7.61.2 RESPONSE TO COMMENT I-KARRER-1-2

As noted in DEIR Chapter 3.1.1, "Project Purpose and Objectives," DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The list of cumulative projects identified in DEIR Chapter 4.6.1, "Cumulative Impacts" includes a range of water quality, habitat improvement, and invasive species control projects, which demonstrates that DWR and other agencies are committed to restoring the health of the Delta. However, these are separate actions to the Proposed Project assessed in the DEIR. Please refer to Master Response 5, "Treatment of Habitat Restoration," and Master Response 8, "Other State Efforts," for information regarding efforts to improve the Delta Estuary.

From: [Kathy](#)
To: [LTO](#)
Subject: Water Resources usage in the Sacramento-San Joaquin River Delta
Date: Wednesday, December 4, 2019 10:27:34 AM

The best way to preserve the health of the Delta is to pour more water, not less, through it. Please re-examine the environmental analysis recommendations of our water usage. Northern California needs more water flowing through the Delta to improve the quality of Northern California drinking water; and preserve/protect imperiled fish and other wildlife.

I am a native Californian, my home has had water restrictions for several years, and water usage has affected my household. I have never seen surplus water last. California has limited water, and its usage should be 'to provide basic water resources for the current people, fish, wildlife, and ecosystems'. If water in the Delta has further restrictions, current users in both Northern and Southern California will be greatly hurt in the future. The ecosystem will be damaged, probably forever, and businesses along our waterways (restaurants, bait stores, parks and other recreation areas) damaged or destroyed.

I grew up in California, and when driving through the Central Valley for the past 70 years, there were farms and fields. Now, there are acres and acres of almond trees, which historically did not exist. Many of them are mere twigs, usually what has been pruned from grown trees, cut back in winter. Almond trees require lots and lots of water. They are now there for the profit motive, many farmers probably sending almonds abroad, rather than for consumption in the U.S. Yes, the U.S. is a capitalist country, but its citizens require water to drink, for wildlife, and stable ecosystems, more than they require profit for exporting almonds to China.

Northern California provides water to the Delta-Mendota canal and the California Aqueduct both going South. Most of the water from the Colorado river goes to Southern California. We do not need to send every available ounce of water to Southern California, only to see the population expand more and more, encroaching into the desert. There has to be an end to population growth in California. Sending more water South will inevitably be a temporary measure. Expansion will continue, putting more and more people and farms, workers and residents in peril during the certain-to-come next, and subsequent droughts. Yes, there will be more droughts. Water is a limited resource. Please think through this type of calamity. If we keep expanding, using more and more water at the expense of Northern California's quality of life, fish, and ecosystems, it will only imperil the new almond farms and residents who will come in to occupy the expanded area, as well as those existing throughout the state now. There will not be enough water for this type of growth in the future dry years for both Northern and Southern California!

II.7.62 LETTER I-KATHY-1 — KATHY — DATED DECEMBER 4, 2019

II.7.62.1 RESPONSE TO COMMENT I-KATHY-1-1

The DEIR addresses potential impacts to water quality and wildlife, including special-status species. The DEIR concluded that, based on scientific analysis, the proposed long-term operations of the SWP would not result in significant impacts. This discussion is found in DEIR Chapters 4.3, "Surface Water Quality," and 4.4, "Aquatic Biological Resources." DEIR Chapter 5, "Alternatives to the Proposed Project," analyzed alternatives to the project, some of which include increased freshwater flows through the Delta during specific times of the year to benefit aquatic species. DWR has selected Refined Alternative 2b as its preferred alternative, as described in FEIR Part III, Chapter 5.3, "Refined Alternative 2b - Proposed Project with Dedicated Water for Delta Outflow from SWP." The relationship between SWP water deliveries and population growth is discussed in DEIR Chapter 4.6.2, "Growth-Inducing Impacts." The issue of reducing reliance on the Delta to meet California's future water needs is addressed in Master Response 7, "Delta Reform Act," under the subheading "Reduced Reliance on the Delta." Please see Master Response 24, "Drought Conditions" for more information on drought conditions.

Letter I-Theresa Kellerman-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Aligning with Trump's views of natural resources and protected areas is frightening. This is not what California is about, and as the most innovative state, we need to be looking for, investing in, and modeling innovative solutions that both protect our environment and serve the needs of the state. As a state that other states take a cue from, if California stops working toward protecting the environment, then the rest of the country will follow suit. Destruction of wildlife areas has damaging effects that last forever, creating tragic ripple effects everywhere and to everyone around it. Once the animals are extinct and the fertile lands are cemented, they're gone and there is no getting them back. Being ok with this is not representative of California. As elected and appointed representatives of California, I urge you to do what represents California's true values- don't align with Trump's attacks on environment by rolling back protections, and instead create and invest in innovative solutions to support the needs of our population without destroying the environment that all in California depend on economically and recreationally.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Theresa Kellerman

West Sacramento, CA

II.7.63 LETTER I-THERESA KELLERMAN-1 — THERESA KELLERMAN — DATED JANUARY 6, 2020

II.7.63.1 RESPONSE TO COMMENT I-THERESA KELLERMAN-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Comments regarding California setting an example for other states is noted but do not require a response. No direct response is required.

From: [William Kelley](#)
To: [LTO](#)
Subject: Gov. Newsom's Delta water plan
Date: Sunday, November 24, 2019 3:29:09 PM

I am writing this email to state that I do not support any plans to increase pumping water out of the Delta. I live in the Southern San Joaquin Valley. It is very important to me to keep the delta healthy. Please revisit the findings of your draft EIR. Please do not increase pumping, save the fish, and focus on water conservation in the San Joaquin Valley.

1-1

- William Kelley

<This Message was scanned by Barracuda Spam and Virus Filtering System>

II.7.64 LETTER I-WILLIAM KELLY-1 — WILLIAM KELLY — DATED NOVEMBER 24, 2019

II.7.64.1 RESPONSE TO COMMENT I-WILLIAM KELLY-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The issue of reducing reliance on the Delta to meet California’s future water needs via increased water conservation or other means is addressed in Master Response 7, “Delta Reform Act.” With regards to water conservation efforts statewide, please refer to Master Response 6, “Demand Management/Conservation Measures.”

The DEIR concluded that the proposed long-term operations of the SWP would not result in significant impacts to Delta health or fish. This discussion is found in DEIR Chapters 4.2, “Hydrology,” 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources.” Past degradation of the Delta is discussed in Master Response 4, “Legal Standards,” under the subheading, “Treatment of Historical Conditions.”

Letter I-Judith Kirk-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

How our own CA Dept of Water Resources can kill the biggest estuary on the Pacific coast, GOING ALONG WITH TRUMP'S ant-science EPA, is shocking. Clearly there is collusion with Westlands and Big Ag. Your job is to protect, not to harm.

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Judith Kirk
Redwood City, CA

II.7.65 LETTER I-JUDITH KIRK-1 — JUDITH KIRK — DATED JANUARY 6, 2020

II.7.65.1 RESPONSE TO COMMENT I-JUDITH KIRK-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The DEIR analyzes potential impacts of the project on Delta hydrology, water quality and aquatic biological resources and concluded, based on scientific analysis, that no significant impacts would result. As discussed in Master Response 3, “The CEQA Process,” the DEIR, as published by DWR, reflects input received from responsible agencies, trustee agencies, various other agencies, and the general public, in accordance with CEQA. The lead agency (DWR) will utilize its discretion, based on substantial evidence presented in the EIR, when making decisions on the project.

Letter I-Barbara Kluger-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to use your position(s) of power to protect the San Francisco Bay-Delta Estuary from the Trump administration's profit-driven scheme to increase water diversions in the region.

The only solutions to California water wars that have ever been successful have been put together by representatives of local stakeholders, never by federal rulings that try to bypass involvement of stakeholders.

Predictably, the Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

Further, it's entirely unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to the regional environment, to me, one of the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the political and legal tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thank you so for your time an FCC consideration.

Barbara Kluger
Oakland, CA

II.7.66 LETTER I-BARBARA KLUGER-1 — BARBARA KLUGER — DATED JANUARY 6, 2020

II.7.66.1 RESPONSE TO COMMENT I-BARBARA KLUGER-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As discussed in Master Response 3, “The CEQA Process,” the DEIR, as published by DWR, reflects input received from responsible agencies, trustee agencies, various other agencies and local stakeholders, and the general public, in accordance with CEQA.

From: [Ellen Koivisto \(offstage@earthlink.net\) Sent You a Personal Message](mailto:Ellen.Koivisto@earthlink.net)
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Wednesday, December 18, 2019 5:45:31 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project. The so-called plan is one for biosphere ruin, it caters (yet again) to corporate interests at the expense of the people of California and the biosphere that supports us here, and this proposal has been beautifully timed to coincide with the holidays in yet another attempt to screw over citizens. If the plan is sooooooo good for CA, why try to hide it like this? The answer is because it is not good at all.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse, as is the intention of the proposal. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable. It is stupid. It is anti-life.

California needs to operate it's water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species. Thank you.

Sincerely,

Ellen Koivisto
1556 Great Hwy Apt 101
San Francisco, CA 94122
offstage@earthlink.net
(415) 555-1212

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

II.7.67 LETTER I-ELLEN KOIVISTO-1 — ELLEN KOIVISTO — DATED DECEMBER 18, 2019

II.7.67.1 RESPONSE TO COMMENT I-ELLEN KOIVISTO-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The SWP serves more than 20 million Californians, as well as providing water for agriculture and industry. Please see Master Response 19, “Public Review Period,” regarding the timing of the DEIR release. The DEIR has analyzed the potential impacts of the project on the environment, and concluded, based on scientific analysis, that no significant adverse impacts would occur.

From: [Lori Koon](#)
To: [LTO](#)
Subject: Water in the delta
Date: Sunday, November 24, 2019 11:52:53 AM

We must pour more water through the Ca Delta rather than less. The Newsom draft gives Trump what he wants.
Destroy our natural world and all species in it.
Please have the governor rewrite the water draft to support birds and fish.
Thank you,
Lori Koon
275 Lexington St A
San Francisco
Sent from my iPad

| 1-1

II.7.68 LETTER I-LORI KOON-1 — LORI KOON — DATED NOVEMBER 24, 2019

II.7.68.1 RESPONSE TO COMMENT I-LORI KOON-1-1

The DEIR addresses potential impacts to birds and fish and concluded, based on scientific analysis, that the proposed long-term operations of the SWP would not result in significant impacts. This discussion is found in DEIR Appendix A, Section 3.4.2, "Terrestrial Biological Resources," and in DEIR Chapter 4.4, "Aquatic Biological Resources." DEIR Chapter 5, "Alternatives to the Proposed Project," analyzed alternatives to the project, some of which include increased freshwater flows through the Delta during specific times of the year to benefit aquatic species. DWR has selected Refined Alternative 2b as its preferred alternative, as described in FEIR Part III, Chapter 5.3, "Refined Alternative 2b - Proposed Project with Dedicated Water for Delta Outflow from SWP." Please see Master Response 10, "Climate Change" for more discussion of climate change.

From: [Lorrin M Koran](#)
To: [LTO](#)
Subject: Pumping more water south from the Delta
Date: Monday, November 25, 2019 3:50:34 PM

Dear Governor Newsome,

Please do not degrade the Delta to supply more water to farmers in the South. Damaging fisheries and wildlife habitat in the North to raise the income of farmers in the South is poor service to all who live in the Bay Area, and those whose livelihoods are earned in the many neighboring counties that benefit from the current distribution patterns of Northern CA water.

Surely, it would be better public policy for the state to take the same monies and invest it in helping the farmers in the South irrigate more efficiently, using Israeli technologies, for example, to make better use of the water they already have.

Farmers are vital to the state, but clearly they have not invested, nor has the state invested in making the most efficient use of their already existing water supplies.

Lorrin Koran, M.D.

1-1

II.7.69 LETTER I-LORRIN KORAN-1 — LORRIN KORAN — DATED NOVEMBER 25, 2019

II.7.69.1 RESPONSE TO COMMENT I-LORRIN KORAN-1-1

As noted in DEIR Chapter 3.1.1, "Project Purpose and Objectives," DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR addresses potential impacts to Delta health, fisheries, and wildlife habitat and concluded that, based on scientific analysis, the proposed long-term operations of the SWP would not result in significant impacts. This discussion is found in DEIR Chapters 4.2, "Hydrology," 4.3, "Surface Water Quality," and 4.4, "Aquatic Biological Resources." The issue of reducing reliance on the Delta to meet California's future water needs via methods such as irrigation efficiency is addressed in Master Response 7, "Delta Reform Act" under the subheading, "Reducing Reliance on the Delta." With regards to water conservation efforts statewide, please refer to Master Response 6, "Demand Management/Conservation Measures."

Letter I-Don Kreuter-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Please help protect our clean water. Not only for people but to protect: endangered wildlife, nature, habitats, the wilderness, California and our planet!

Billions of dollars of annual water recreation, fishing license fees, resort and hotel fees will also be lost without clean water.

NO life can exist without clean water!

Make America Green again for future generations to enjoy!

Thanks so much for your time.

Don Kreuter
Mammoth Lakes, CA

II.7.70 LETTER I-DON KREUTER-1 — DON KREUTER — DATED JANUARY 6, 2020

II.7.70.1 RESPONSE TO COMMENT I-DON KREUTER-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Impacts to recreation are analyzed in DEIR Appendix A, “Initial Study to the Proposed Long-Term Operations of the State Water Project.” The DEIR analyzes potential impacts of the project on the physical environment, including water quality (DEIR Chapter 4.3) and aquatic biological resources (DEIR Chapter 4.4). The DEIR concluded, based on scientific analysis, that no significant impacts to the physical environment would result from DWR’s proposed long-term operation of the SWP.

Letter I-Kay L.-1

January 6, 2020

Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

Isn't it counter-intuitive to weaken protections for the NorCal Bay-Delta Estuary? Doesn't the protection of our water resources and our marine wildlife take precedence over corporate greed???

Under the corrupt administration in DC, so many of our respected government agencies (here's looking at you, FWS) have become nothing but agencies that cut back protecting our environment so corrupt officials (here's looking at you, pretend-president and GOP) can stuff their pockets with corporate bribes.

That's why I fully support the NRDC's petition as follows:

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Kay L.

San Leandro, CA

II.7.71 LETTER I-KAY L.-1 — KAY L. — DATED JANUARY 6, 2020

II.7.71.1 RESPONSE TO COMMENT I-KAY L.-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The DEIR analyzes potential impacts of the project on water quality and aquatic biological resources and concluded, based on scientific analysis, that no significant impacts would result.

From: [Philip Lefcourt \(niceboy97@aol.com\)](mailto:niceboy97@aol.com) Sent You a Personal Message
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Wednesday, December 18, 2019 6:23:10 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

No exportation of our water from The Delta! No removal of protections for Delta salmon or any other imperiled species in the Delta! I hope this is clear enough for you.

I strongly protest the Department of Water Resources's revision in its proposed operations plan for the State Water Project!

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable.

California needs to operate its water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species.

Signed,
Philip A. Lefcourt
330 Cordova Street
Unit 134
Pasadena, California 91101

Sincerely,

Philip Lefcourt
330 Cordova Street, Unit 134
Pasadena, CA 91101
niceboy97@aol.com
(626) 372-9115

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

II.7.72 LETTER I-PHILIP LEFCOURT-1 — PHILIP LEFCOURT — DATED DECEMBER 18, 2019

II.7.72.1 RESPONSE TO COMMENT I-PHILIP LEFCOURT-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The Proposed Project would comply with all applicable laws, contractual obligations, and agreements. The DEIR analyzed the potential impacts of the Proposed Project, and concluded, based on scientific analysis, that impacts to aquatic biological resources, including salmon and other special-status species, would be less than significant. The Refined Alternative 2b described in FEIR Part III, Chapter 5.3 includes refinements and additional actions that would further improve conditions for aquatic biological resources.

From: [shelly.levinthal](#)
To: [LTO](#)
Subject: Delta water proposal
Date: Monday, December 2, 2019 8:32:43 PM

As an Oakland homeowner for the past 40 years and a person who is concerned about the Governors proposal for the Delta.

Why, in our wonderful state that cares SO much about pollution ,would the current proposal would even be suggested as it appears it would threaten the quality of the drinking water for Northern California. Unless I am misinformed why would our Governor even suggest this proposal...is POLITICS obscuring his vision...we have too much of that with our President and partisan politics....let's do what's best for the people ...and our water...

If I am misinformed kindly provide data otherwise.

I hope this can also be sent to Governor Newsom
Sincerely,
Shelly Levinthal

1-1

II.7.73 LETTER I-SHELLY LEVINTHAL-1 — SHELLY LEVINTHAL — DATED DECEMBER 2, 2019

II.7.73.1 RESPONSE TO COMMENT I-SHELLY LEVINTHAL-1-1

The DEIR analyzed potential impacts to water quality and concluded, based on scientific analysis, that the proposed long-term operations of the SWP would not result in exceeding existing water quality limits. This discussion is found in DEIR Chapter 4.3, "Surface Water Quality." As noted in DEIR Chapter 3.1.1, "Project Purpose and Objectives," DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions.

From: [Eleanor Lewis \(eleanor_lewis@stanfordalumni.org\) Sent You a Personal Message](#)
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Friday, January 3, 2020 9:56:02 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

I am extremely concerned about protecting the health and the ecosystem in the bay delta. And I don't want more water diverted to agricultural interests that need to make their operations more efficient and working in harmony with the available natural resources. Let's not destroy California's riches. I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable.

California needs to operate its water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species. Thank you.

Sincerely,

Eleanor Lewis
141 24th Ave Apt 1
San Mateo, CA 94403
eleanor_lewis@stanfordalumni.org
(510) 209-7377

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

1-1

II.7.74 LETTER I-ELEANOR LEWIS-1 — ELEANOR LEWIS — DATED JANUARY 3, 2020

II.7.74.1 RESPONSE TO COMMENT I-ELEANOR LEWIS-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The SWP serves more than 20 million Californians, as well as providing water for agriculture and industry. The DEIR addresses potential impacts to aquatic biological resources and their habitats. The DEIR concluded that, based on scientific analysis, the proposed long-term operations of the SWP would not result in significant impact to such resources. This discussion is found in DEIR Chapters 4.2, “Hydrology,” 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources.”

The issue of reducing reliance on the Delta to meet California’s future water needs via water conservation, or changes to irrigation practices is addressed in Master Response 7, “Delta Reform Act,” under the subheading, “Reduced Reliance on the Delta.” For information regarding water conservation efforts, please refer to Master Response 6, “Demand Management/Conservation Measures.”

For information regarding water conservation efforts, please refer to Master Response 6, “Demand Management/Conservation Measures.”

Letter I-Sherman Lewis-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

Please protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region, which would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

The California Department of Water Resources should not propose a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. You should prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

Say no to Big Water.

Use science and your legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Sherman Lewis
Hayward, CA

II.7.75 LETTER I-SHERMAN LEWIS-1 — SHERMAN LEWIS — DATED DECEMBER 19, 2019

II.7.75.1 RESPONSE TO COMMENT I-SHERMAN LEWIS-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Please note that the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions.

II.7.75.2 RESPONSE TO COMMENT I-SHERMAN LEWIS-1-2

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The SWP serves more than 20 million Californians, as well as providing water for agriculture and industry. Please see Master Response 7, “Delta Reform Act,” for discussion of DWR’s obligations under the Act.

From: [Sherman Lewis \(sherman@csuhayward.us\)](mailto:sherman@csuhayward.us) Sent You a Personal Message
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Thursday, December 19, 2019 8:38:03 AM

Dear CA Department of Water Resources,

Dear Mr. Chao:

You should revise your plan for the State Water Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

You need to implement water management in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species.

Not mega agribusiness.

Sincerely,

Sherman Lewis
2787 Hillcrest Ave
Hayward, CA 94542
sherman@csuhayward.us
(510) 538-3692

1-1

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

II.7.76 LETTER I-SHERMAN LEWIS-2 — SHERMAN LEWIS — JANUARY 6, 2020

II.7.76.1 RESPONSE TO COMMENT I-SHERMAN LEWIS-2-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The SWP serves more than 20 million Californians, as well as providing water for agriculture and industry. Please see Master Response 7, “Delta Reform Act,” for discussion of DWR’s obligations under the Act.

From: [Steve Lewis](#)
To: [LTO](#)
Subject: Newsoms delta water plan
Date: Saturday, December 14, 2019 12:19:47 PM

I agree with editorials that slam the governors delta water plan. He should be implementing a more environmentally friendly solution and not sending more water to the south. I've driven through southern California and am amazed by all the wasted water and green lawns I see in such a dry area. SoCal would not have a water shortage problem if they conserved their portion of California's water supply. They live in a desert and should landscape and irrigate accordingly, like everyone else in the state.

1-1

Steve Lewis
Castro Valley

II.7.77 LETTER I-STEVE LEWIS-1 — STEVE LEWIS — DATED DECEMBER 14, 2019

II.7.77.1 RESPONSE TO COMMENT I-STEVE LEWIS-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The issue of reducing reliance on the Delta to meet California’s future water needs via water conservation, or changes to irrigation practices is addressed in Master Response 7, “Delta Reform Act,” under the subheading, “Reduced Reliance on the Delta.” For information regarding water conservation efforts, please refer to Master Response 6, “Demand Management/Conservation Measures.”

You Chen Chou

12/14/19

California Department of Water Resources

P.O. Box 942826

Sacramento, ca. 94236

Dear Mr. Chou

I have sent you this letter to protest the Governor's Delta water flow proposal. I agree with and support environmentalists and scientists who argue that sending more water to the south is a bad idea. More water should be saved for the delta and not sent south to areas that waste water. Southern California would have enough water if they acted in a responsible manner and conserved water rather than wasting it on keeping their lawns and yards green in a desert like environment. They need to learn how to landscape and irrigate responsibly. That would allow enough water for their farmers to produce the food that they want to grow and eat.

2-1

Thank you,

Steve Lewis

II.7.78 LETTER I-STEVE LEWIS-2 — STEVE LEWIS — DATED DECEMBER 14, 2019

II.7.78.1 RESPONSE TO COMMENT I-STEVE LEWIS-2-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The issue of reducing reliance on the Delta to meet California’s future water needs via water conservation or changes to irrigation and landscaping practices is addressed in Master Response 7, “Delta Reform Act,” under the subheading, “Reduced Reliance on the Delta.”

Letter I-Allen Lilleberg-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

The entire ecosystem is dying off one system after another. Everything is connected to everything else. At least that's what I taught kids in the high school environmental studies classes. Our entire planet with everything on it is facing catastrophic failure to thrive. I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Allen Lilleberg
Napa, CA

II.7.79 LETTER I-ALLEN LILLEBERG-1 — ALLEN LILLEBERG — DATED JANUARY 6, 2020

II.7.79.1 RESPONSE TO COMMENT I-ALLEN LILLEBERG-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Comments regarding the interconnectedness of ecosystems is acknowledged but do not require a response.

From: [alan linzer](#)
To: [LTO](#)
Subject: RE: Delta water
Date: Wednesday, November 27, 2019 12:52:55 PM

You Chen Chou:

I think it is imperative that environmental concerns take precedence when considering plans for Delta water. Without the proper care of the QUALITY of our environment, water in this case, all the other "people" concerns are secondary. Without that water quality - of which a healthy fish problem are a good indication - the health of our population/planet is compromised.

Please do not ignore the science that says increasing the water diversion for ag is not sustainable.

Thank you,
Alan Linzer
14649 Big Basin Way
Boulder Creek, CA 95006

1-1

II.7.80 LETTER I-ALAN LINZER-1 — ALAN LINZER — DATED NOVEMBER 27, 2019

II.7.80.1 RESPONSE TO COMMENT I-ALAN LINZER-1-1

The DEIR analyzed the effects of the proposed long-term operations of the SWP and alternatives on a wide range of environmental concerns with specific focus on hydrology, water quality and aquatic biology. The DEIR concluded that, based on scientific analysis, the proposed long-term operations of the SWP would not result in significant adverse impact to these resources. This discussion is found in DEIR Chapters 4.2, “Hydrology,” 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources.”

From: [Charles Little \(barcaabuelo@gmail.com\)](mailto:barcaabuelo@gmail.com) Sent You a Personal Message
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Wednesday, December 18, 2019 11:16:05 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

You have got to be kidding! You want to send even more water to the huge corporations that own the largest farm acreage in the San Joaquin Valley, and worse yet, to the banks and corporations owning Westlands? And you want to do this, knowing the health of the Delta and Bay will be further impaired, the ecosystem further degraded, and aquatic life moved to the brink of extinction!

Come on, revise the Department of Water Resources' proposed operations plan for the State Water Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable.

California needs to operate its water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthening protections for California's native fish and wildlife species. Thank you.

Sincerely,

Charles Little
126 Meernaa Ave
Fairfax, CA 94930
barcaabuelo@gmail.com
(415) 342-2720

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

1-1

II.7.81 LETTER I-CHARLES LITTLE-1 — CHARLES LITTLE — DATED DECEMBER 18, 2019

II.7.81.1 RESPONSE TO COMMENT I-CHARLES LITTLE-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The SWP serves more than 20 million Californians, as well as providing water for agriculture and industry. The DEIR has analyzed the potential impacts of the project on the Delta water quality and aquatic resources, and concluded, based on scientific analysis, that no significant adverse impacts would occur.

Letter I-Denise Louie-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

My family and I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard endangered salmon and Delta smelt, other wildlife species, and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy. My household averages 14 gallons of tap water per person per day. We harvest rainwater for many purposes, including laundry. We use greywater for landscaping and toilet flushing. Because we are aware of negative human impacts on the environment and because all species lives matter.

Please help protect the San Francisco Bay-Delta estuary from both the Trump Administration and agricultural water districts.

Thanks so much for your time.

Denise Louie
San Francisco, CA

II.7.82 LETTER I-DENISE LOUIE-1 — DENISE LOUIE — DATED JANUARY 6, 2020

II.7.82.1 RESPONSE TO COMMENT I-DENISE LOUIE-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Comments regarding personal efforts at water conservation and awareness of environmental issues are acknowledged but do not require a response. The DEIR analyzes potential impacts of the project on the physical environment, including Delta hydrology and aquatic biological resources and concluded, based on scientific analysis, that no significant impacts would result. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions.

Letter I-Judy Lukasiewicz-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I request that you do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's thoughtless scheme to increase water diversions in that important marine region.

The Trump administration's proposal would drive native species to extinction, greatly decrease water quality, and threaten thousands of fishing jobs.

It's unacceptable that our own California Department of Water Resources has mistakenly proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please immediately reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months. So much depends on conserving/protecting our natural waterways and conserving/protecting estuaries for pollution control and survival of important species, including humans.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for their clean drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the profit-driven, anti-environmental protection, and mistaken Trump administration in order to protect our water quality and wildlife. A balance must be maintained for survival.

The state must rely on established science and use its legal authority to stop this ignorance-based proposal and safeguard struggling salmon along with all of the communities and economies that rely on the Bay-Delta Estuary.

By immediately investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can (and must) reduce water diversions from the Bay-Delta while sustaining our economy.

Please join Californians...help protect and restore the San Francisco Bay-Delta estuary!

Thank you.

Judy Lukasiewicz
Santa Cruz, CA

II.7.83 LETTER I-JUDY LUKASIEWICZ-1 — JUDY LUKASIEWICZ — DATED JANUARY 6, 2020

II.7.83.1 RESPONSE TO COMMENT I-JUDY LUKASIEWICZ-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Comments about the general importance of conserving and protecting the natural environment and estuaries are acknowledged but do not require a response. The DEIR analyzes potential impacts of the project on the physical environment, including Delta hydrology and aquatic biological resources and concluded, based on scientific analysis, that no significant impacts would result.

From: [Linda Page](#)
To: [LTO](#)
Subject: California Water Supply
Date: Sunday, December 1, 2019 2:15:08 PM

Robert G. MacLean, MD
8545 Carmel Valley Road
Carmel, California 93923
(831) 626-4882

December 1, 2019

Chen Chou
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236

Re: California Water Shortage

Dear Mr. Chou:

To help correct the California water shortage, we must stop the massive loss of water from our two large open canals in the Central Valley. Many thousands of acre feet are lost due to evaporation and probably some from seepage. Covering the canals, the evaporated water will condense back into the flow and not be lost. Better still would be large pipes that can stop the seepage loss also. The goal is that all usable water put in at the Delta will arrive at its use spot with no loss.

We're spending billions on bullet trains and underwater tunnels, so we should be happy to spend big money on projects that have immediate success.

Very truly yours,

Robert G. MacLean

RGM:lp

Cc: Governor Gavin Newsom
1303 10th Street, Suite 1173
Sacramento, CA 95814

II.7.84 LETTER I-ROBERT MACLEAN-1 — ROBERT MACLEAN — DATED DECEMBER 1, 2019

II.7.84.1 RESPONSE TO COMMENT I-ROBERT MACLEAN-1-1

The construction of new facilities such as canal covers or replacement of canals with pipes to reduce evaporation and/or seepage is not an element of the Proposed Project or any of the alternatives.

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Robert G. MacLean, MD
8545 Carmel Valley Road
Carmel, California 93923

(831) 626-4882

624-4037 (Room 308)

December 1, 2019

Chen Chou
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236

Re: California Water Shortage

Dear Mr. Chou:

To help correct the California water shortage, we must stop the massive loss of water from our two large open canals in the Central Valley. Many thousands of acre feet are lost due to evaporation and probably some from seepage. Covering the canals, the evaporated water will condense back into the flow and not be lost. Better still would be large pipes that can stop the seepage loss also. The goal is that all usable water put in at the Delta will arrive at its use spot with no loss.

2-1

We're spending billions on bullet trains and underwater tunnels, so we should be happy to spend big money on projects that have immediate success.

Very truly yours,

Robert G. MacLean MD
Robert G. MacLean

RGM:lp

Cc: Governor Gavin Newsom
1303 10th Street, Suite 1173
Sacramento, CA 95814

II.7.85 LETTER I-ROBERT MACLEAN-2 — ROBERT MACLEAN — DATED DECEMBER 1, 2019

II.7.85.1 RESPONSE TO COMMENT I-ROBERT MACLEAN-2-1

The construction of new facilities such as canal covers or replacement of canals with pipes to reduce evaporation and/or seepage is not an element of the Proposed Project or any of the alternatives.

Letter I-Bonnie Macraith-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I am 74 years old, a life-long resident of Northern California. I care deeply about the Bay-Delta Estuary. It absolutely must be protected to maintain its ecological integrity. It provides Life to the salmon, wildlife even the orcas. Please stand up to the Trump administration and safeguard our waterways!!

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Bonnie Macraith
Arcata, CA

II.7.86 LETTER I-BONNIE MACRAITH-1 — BONNIE MACRAITH — DATED JANUARY 6, 2020

II.7.86.1 RESPONSE TO COMMENT I-BONNIE MACRAITH-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The DEIR analyzes potential impacts of the project on aquatic biological resources, including direct impacts to salmon and indirect impacts on predator species such as killer whale. The DEIR concluded, based on scientific analysis, that no significant adverse impacts would occur as a result of project implementation.

Letter I-Josh Michels-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region. We need plans that foster ecological diversity while maximizing the utility of scarce water resources. When we fail to support valuable ecological diversity we find systems that we rely on no longer support us.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Josh Michels
Berkeley, CA

II.7.87 LETTER I-JOSH MICHELS-1 — JOSH MICHELS — DATED JANUARY 6, 2020

II.7.87.1 RESPONSE TO COMMENT I-JOSH MICHELS-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Comments expressing general concern for ecological diversity are acknowledged but do not require a response. The DEIR analyzes potential impacts of the project on aquatic biological resources and concluded, based on scientific analysis, that no significant adverse impacts would occur as a result of project implementation.

Letter I-Fritz Milas-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region. This plan needs a thorough environmental study in order to prevent catastrophic consequences. The Delta is a very fragile eco system and is dependent on a steady flow of fresh water into its system. Further diversion may cause a lot of unintended consequences. So, please reconsider not approving this plan.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Fritz Milas
Long Beach, CA

II.7.88 LETTER I-FRITZ MILAS-1 — FRITZ MILAS — DATED JANUARY 6, 2020

II.7.88.1 RESPONSE TO COMMENT I-FRITZ MILAS-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The DEIR is a thorough analysis of environmental impacts of the long-term operations of the SWP and meets CEQA requirements for the evaluation of impacts.

Letter I-Renée Milburn-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I am so very discouraged about the state of our earth. How could this have happened to paradise? The human race has irrevocably harmed our precious planet. Whatever can be done must be tried. Earth needs to have a chance to heal itself. I am afraid it is just too late though.

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Renée Milburn
Wrightwood, CA

II.7.89 LETTER I-RENEE MILBURN-1 — RENEE MILBURN — DATED JANUARY 6, 2020

II.7.89.1 RESPONSE TO COMMENT I-RENEE MILBURN-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Comments expressing general concern for the state of the planet are acknowledged but do not require a response.

From: [Bruce Mitchell](#)
To: [LTO](#)
Subject: Water diversion to Southern California Farmers
Date: Sunday, November 24, 2019 4:48:52 PM

My wife and I oppose any increase in water diverted to Southern California regardless of the purpose or use that water is put.

1-1

Southern California can do a better job of conserving the water they currently use.

My wife and I vote.

Bruce D. Mitchell
98 Alpine Avenue
Los Gatos, CA 95030

II.7.90 LETTER I-BRUCE MITCHELL-1 — BRUCE MITCHELL — DATED NOVEMBER 24, 2019

II.7.90.1 RESPONSE TO COMMENT I-BRUCE MITCHELL-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. DEIR Chapter 4, “Environmental Setting and Impact Analysis,” analyzed potential impacts of the project and concluded, based on scientific analysis, that long-term operations of the SWP would not have any significant environmental impacts. With regards to conserving water, please refer to Master Response 6, “Demand Management/Conservation Measures.”

From: [connie mitchell](#)
To: [LTO](#)
Subject: Governor's Delta Water Proposal Is Not Good
Date: Sunday, November 24, 2019 1:05:48 PM

DELTA H2O PROPOSAL

I have grown up in California & lived in Northern California most of my life. I find that not everyone can live here especially with the housing shortages, the need for companies not wanting to leave the Bay Area, nor southern California wanting to stop their growth either. No matter how you look at it we can't please farmers nor builders, but H2O is our most precious resource as are the endangered species living in the Delta. I do not want ANY of the WATER to be DIVERTED to SOUTHERN CALIFORNIA. It is time that we stop building in places & stop the sprawling of the south & of the north. We cannot contain more people moving out here. Move business elsewhere; their headquarters can stay here, but their expansions can go elsewhere where people need jobs in other states where there is more room to grow.

1-1

Constance W. Mitchell
Los Gatos, Ca.

I

II.7.91 LETTER I-CONSTANCE MITCHELL-1 — CONSTANCE MITCHELL — DATED NOVEMBER 24, 2019

II.7.91.1 RESPONSE TO COMMENT I-CONSTANCE MITCHELL-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The relationship between SWP water deliveries and population growth is discussed in DEIR Chapter 4.6.2, “Growth-Inducing Impacts.”

Letter I-Marilyn Morrish-1

From: [Marilyn Morrish \(mmorinda@aol.com\) Sent You a Personal Message](mailto:mmorinda@aol.com)
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Wednesday, December 18, 2019 8:05:11 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project.

I am disturbed that this proposal is only being open to the public for a short time and during the holiday season.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable.

California needs to operate its water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species. Thank you.

Sincerely,

Marilyn Morrish
1867 Glen View Dr
Walnut Creek, CA 94595
mmorinda@aol.com
(925) 472-0533

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

1-1

II.7.92 LETTER I-MARILYN MORRISH-1 — MARILYN MORRISH — DATED DECEMBER 18, 2019

II.7.92.1 RESPONSE TO COMMENT I-MARILYN MORRISH-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. Master Response 19, “Public Review Period,” provides discussion relating to the length and timing of the DEIR public review period.

Letter I-Linda Newton-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

For so many years we in the State of California have worked hard to conserve our water, preserve clean water, preserve our fish populations, and make our state more livable for the increasing number of people living here. Allowing the undoing of these is very upsetting!

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Linda Newton
Richmond, CA

II.7.93 LETTER I-LINDA NEWTON-1 — LINDA NEWTON — DATED JANUARY 6, 2020

II.7.93.1 RESPONSE TO COMMENT I-LINDA NEWTON-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As stated in DEIR Chapter 3.3.1, “Project Purpose and Objectives,” DWR would operate the SWP in accordance with all applicable laws, water contracts, and agreements.

From: [Alice Nguyen \(medicilorenzo@yahoo.com\) Sent You a Personal Message](#)
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Wednesday, December 18, 2019 7:02:45 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

DWR's proposed operations plan for the State Water Project will further degrade the San Francisco Bay-Delta estuary and is therefore unacceptable.

The Bay-Delta ecosystem already suffers from severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal is a big give-away to mega-agribusinesses at the expense of a healthy Bay-Delta ecosystem. It will only exacerbate current problems stemming from low freshwater flows by further increasing freshwater diversions and reducing flows through the estuary. Salmon and other threatened fish will be further imperiled by these reduced flows.

DWR needs to modify its plan to be consistent with the Delta Reform Act and strengthen protections for California's native fish and wildlife species. Thank you.

Sincerely,

Alice Nguyen
4270 Pearl Ave
San Jose, CA 95136
medicilorenzo@yahoo.com
(888) 888-8888

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

II.7.94 LETTER I-Alice NGUYEN-1 — ALICE NGUYEN — DATED DECEMBER 18, 2019

II.7.94.1 RESPONSE TO COMMENT I-Alice NGUYEN-1-1

The DEIR addresses potential impacts to aquatic biological resources (including salmon) and their habitats. The DEIR concluded that, based on scientific analysis, the proposed long-term operations of the SWP would not result in significant impact to such resources. This discussion is found in DEIR Chapters 4.2, “Hydrology,” 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources.” Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Refined Alternative 2b would include a behavioral modification barrier at Georgiana Slough to minimize emigrating juvenile Chinook Salmon entrance into the Central Delta; include additional Spring-run Chinook Salmon loss thresholds to manage OMR and minimize entrainment at the SWP export facilities; and include additional adaptive management actions not originally included in the DEIR Proposed Project, all of which would further minimize impacts below those identified in the DEIR.

DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The SWP serves more than 20 million Californians, as well as providing water for agriculture and industry.

The issue of consistency with the Delta Reform Act is addressed in Master Response 7, “Delta Reform Act.”

From: [Vince Nicastro \(vnicaastro58@gmail.com\) Sent You a Personal Message](mailto:vnicaastro58@gmail.com)
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Wednesday, December 18, 2019 6:51:32 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

At this crucial time in our environment, with the threat of climate catastrophe bearing down on us it is important to strengthen ecosystems like the California Delta.

I know from working with the different water districts the amount of waste and short sided use of our most valued resource, water by the agriculture companies has along history of abuse and misuse.

I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable.

California needs to operate its water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species. Thank you.

Sincerely,

Vince Nicastro
200 Dominy Rd
Lone Pine, CA 93545
vnicaastro58@gmail.com
(760) 876-4282

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

II.7.95 LETTER I-VINCE NICASTRO-1 — VINCE NICASTRO — DATED DECEMBER 18, 2019

II.7.95.1 RESPONSE TO COMMENT I-VINCE NICASTRO-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The SWP serves more than 20 million Californians, as well as providing water for agriculture and industry. The issue of water use or waste by agricultural or other end-users of SWP-provided water is outside the scope of the proposed project and DEIR analysis.

From: [Ralph Nichols \(randynichols@yahoo.com\)](mailto:randynichols@yahoo.com) Sent You a Personal Message
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Thursday, December 19, 2019 9:35:03 AM

Dear CA Department of Water Resources,

Dear Mr. Chao:

I trust the Sierra Club's assessment that the proposed plan for the Delta are ill advised and harmful to wildlife and the ecosystem. We are at a time in the history of the planet where we must be extremely vigilant in safeguarding precious resources that sustain the planet and whose loss could trigger drastic consequences for our population.

I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable.

California needs to operate its water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species. Thank you.

Sincerely,

Ralph Nichols
2718 Piedmont Ave Apt 9
Montrose, CA 91020
randynichols@yahoo.com
(818) 248-5555

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

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II.7.96 LETTER I-RALPH NICHOLS-1 — RALPH NICHOLS — DATED DECEMBER 19, 2019

II.7.96.1 RESPONSE TO COMMENT I-RALPH NICHOLS-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. The commenter’s opinion regarding safeguarding of resources that sustain the planet are noted.

Letter I-Melody O'Neill-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

Is it not bad enough that we are saddled with a President that ignores natural resource preservation and species protection, now I must spend time addressing what I always believed to be a "safe" space for these issues. CALIFORNIA LEGISLATION AND LEGISLATORS WHOM I ASSISTED IN ELECTING. What's up with the California Department of Water Resources????? Provide some oversight and leadership Governor Newsom. The ecology that supports salmon that in turn supports Orca's and fishing jobs, as well as drinking water is essential. WILDLIFE AND WATER RESOURCES ARE ESSENTIAL. Step up and keep California a beacon of light for the globe and keep Californians proud to be a part of it.

I NOW URGE you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Melody O'Neill
San Bernardino, CA

II.7.97 LETTER I-MELODY O'NEILL-1 — MELODY O'NEILL — DATED JANUARY 6, 2020

II.7.97.1 RESPONSE TO COMMENT I-MELODY O'NEILL-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. DEIR Chapter 4.4, “Aquatic Biological Resources,” contains an analysis of the impacts of the project on aquatic biological resources, including direct impacts to salmon and indirect impacts to killer whale. DEIR Chapter 4.3, “Surface Water Quality,” contains an analysis of impacts of the project on water quality. The DEIR concluded, based on scientific analysis, that no significant adverse impacts would occur as a result of project implementation.

From: gregorrlinda@comcast.net
To: [LTO](#)
Subject: govenor"s draft environmental report on delta pumping
Date: Thursday, November 28, 2019 5:10:40 PM

Dear sir,

I believe that private equity funds and other opportunistic investor’s, especially in almonds, have taken advantage of central valley water supplies for the last several years – to the detriment of other agricultural and residential uses and the water flow in the Sacramento Delta. I support the state Department of Water Resources and Department of Fish and Wildlife in their findings that more water should be flowing through the delta not less. I hope we will not establish a permanent contracts with some of the valley and southern California water districts that gives them water rights that cannot be sustained, especially in a drought prone future. We need to look carefully into water conservation, aquifer stewardship, and new sources of water (e.g. reclamation of brackish water) for California.



1-1

Thank you,

Gregory Orr
Fremont, CA 94536

II.7.98 LETTER I-GREGORY ORR-1 — GREGORY ORR — DATED NOVEMBER 28, 2019

II.7.98.1 RESPONSE TO COMMENT I-GREGORY ORR-1-1

As discussed in DEIR Chapter 3.1.4, “Description of Existing SWP Water Service Contracts,” DWR has water contracts to deliver water to Public Water Agencies located south of the Delta. DEIR Chapter 5, “Alternatives to the Proposed Project,” analyzed alternatives to the project, some of which include increased freshwater flows through the Delta during specific times of the year to benefit aquatic species. DWR has selected Refined Alternative 2b as its preferred alternative, as described in FEIR Part III, Chapter 5.3, “Refined Alternative 2b - Proposed Project with Dedicated Water for Delta Outflow from SWP.” The issue of reducing reliance on the Delta to meet California’s future water needs via methods such as water conservation, aquifer stewardship, or new sources of water is addressed in Master Response 7, “Delta Reform Act,” under the subheading “Reduced Reliance on the Delta”, and in Master Response 6, “Demand Management/Conservation Measures.” Please see Master Response 8, “Other State Efforts,” under the subheading “Water Supply Contract Extensions” for more information on water supply contracts.

II.7.99 LETTER I-DAVID OSTERAAS-1 — DAVID OSTERAAS — DATED DECEMBER 19, 2019

II.7.99.1 RESPONSE TO COMMENT I-DAVID OSTERAAS-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. Discussion of the relationship between DWR’s proposed long-term operations of the SWP and Reclamation’s proposed long-term operations of the CVP is provided in Master Response 22, “Relationship to CVP Operations.” Please also see Master Response 13, “2019 Federal Biological Opinions,” for a comparison of the federal operations and the Proposed Project. Comments regarding the Trump and Newsom administrations are not relevant to the DEIR.

Letter I-Sheryl Patton-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

We know what happens when any element within an Ecological system or the wildlife within a habitat is removed or compromised. As evidenced by the reintroduction of wolves in Yellow Stone after years of absence due to their eradication. With reintroduction of wolves the failing ecosystem had a resurgence, a healthy balance was returned. This is of critical concern for everyone; humans, animals, birds and fish.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Sheryl Patton
Placerville, CA

II.7.100 LETTER I-SHERYL PATTON-1 — SHERYL PATTON — DATED JANUARY 6, 2020

II.7.100.1 RESPONSE TO COMMENT I-SHERYL PATTON-1-1

Please see “Form Letter Response – NRDC,” in FEIR Part II.1.2. Comments expressing general concern regarding ecosystem balance are noted but do not require a response. The DEIR analyzes potential environmental impacts of the project and concluded, based on scientific analysis, that no significant adverse impacts would occur as a result of project implementation.

Letter I-Karen Phillips-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary! We need this delicate wetland area to protect against flooding and for wildlife habitat.

Thanks so much for your time. I hope you do the right thing and leave a legacy you will be proud of.

Karen Phillips
Granite Bay, CA

II.7.101 LETTER I-KAREN PHILLIPS-1 — KAREN PHILLIPS — DATED JANUARY 6, 2020

II.7.101.1 RESPONSE TO COMMENT I-KAREN PHILLIPS-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. DEIR Appendix A, Initial Study for the Proposed Long-Term Operations of the State Water Project,” analyzed the potential impacts of the project related to flooding. DEIR Appendix A, Section 3.10, “Hydrology,” concluded that there would be no impact related to flooding as surface water flows would remain within the historical range of operations and there would be no construction of new or modification of existing SWP facilities. The DEIR analyzes potential impacts of the project on Delta hydrology, water quality, and aquatic biological resources and concluded, based on scientific analysis, that no significant adverse impacts would occur.

From: [Joel Pitney](#)
To: [LTO](#)
Subject: Suggest that NO increase of DELTA WATER BE PUMPED SOUTH
Date: Monday, November 25, 2019 8:32:14 AM

I 1-1

Joel Pitney

II.7.102 LETTER I-JOEL PITNEY-1 — JOEL PITNEY — DATED NOVEMBER 25, 2019

II.7.102.1 RESPONSE TO COMMENT I-JOEL PITNEY-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR analyzed the Proposed Project and alternatives and concluded that long-term operations of the SWP would not result in significant adverse impacts.

From: [LYNN PRICE](#)
To: [LTO](#)
Subject: THE WATER GRAB
Date: Monday, November 25, 2019 7:27:49 PM

A big NO to the Governor's proposed plan to increase water south to farmers and S California, sharply decreasing the amount of water now flowing through the Delta. If anything, the Delta needs INCREASED water flow, not decreased. The Delta is important to California and the whole country - fishing, farmland, recreation and the economy as a whole depend on it.

The last thing the Delta needs is to have its water diverted to satisfy corporate water interests in the southern half of the state (and I speak as one who grew up in Los Angeles)!

Keep the Delta water healthy and flowing. It's the right thing to do.

Yours sincerely,
Lynn E. Price
S.F. Bay Area

II.7.103 LETTER I-LYNN PRICE-1 — LYNN PRICE — DATED NOVEMBER 25, 2019

II.7.103.1 RESPONSE TO COMMENT I-LYNN PRICE-1-1

As noted in DEIR Chapter 3.1.1, "Project Purpose and Objectives," DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR addresses potential impacts to Delta hydrology and health and concluded, based on scientific analysis, that the proposed long-term operations of the SWP would not result in significant impacts. This discussion is found in DEIR Chapters 4.2, "Hydrology," 4.3, "Surface Water Quality," and 4.4, "Aquatic Biological Resources." DEIR Chapter 5, "Alternatives to the Proposed Project," analyzed alternatives to the project, some of which include increased freshwater flows through the Delta during specific times of the year to benefit aquatic species. DWR has selected Refined Alternative 2b as its preferred alternative, as described in FEIR Part III, Chapter 5.3, "Refined Alternative 2b - Proposed Project with Dedicated Water for Delta Outflow from SWP."

Letter I-Nora Privitera-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling improved water use efficiency, and sustainable farming practices such as planting cover crops, and reducing tillage, California can reduce water diversions from the Bay-Delta while sustaining our economy, including California's agricultural economy, without jeopardizing the health of the Delta ecosystem, the salmon fishing industry, and the many and varied species that depend on the Delta for their survival.

The Trump Administration's proposal is a political decision that does not take the long term health of the Delta into consideration. Rather it's an award to big agribusinesses that have refused to employ sustainable farming practices and that have no interest in the needs of others who depend on the Delta's water supply.

Decisions on the distribution of water must be based on sound science, not the whims of a few powerful industries.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Nora Privitera

Oakland, CA

II.7.104 LETTER I-NORA PRIVITERA-1 — NORA PRIVITERA — DATED JANUARY 6, 2020

II.7.104.1 RESPONSE TO COMMENT I-NORA PRIVITERA-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Please see Master Response 6, “Demand Management/Conservation Measures,” and Master Response 7, “Delta Reform Act,” for discussion of issues relating to water recycling, improved water use efficiency, and more sustainable farming practices. As discussed in DEIR Chapter 3.1.4, “Description of Existing SWP Water Service Contracts,” DWR has water contracts to deliver water to Public Water Agencies located south of the Delta. The proposed long-term operations of the SWP does not include any changes to these contracts. As discussed in Master Response 3, “The CEQA Process,” the DEIR, as published by DWR, reflects input received from responsible agencies, trustee agencies, various other agencies, and the general public, in accordance with CEQA. The lead agency (DWR) will utilize its discretion, based on substantial evidence presented in the EIR, when making decisions on the project.

Letter I-Gary Ranz-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Our small family has provided a conservation easement on two waterways, Independence Creek and Little Truckee River, in northern Sierra Nevada. We've done our small part & now the state needs to do their part. Please consider wisely with all parties involve including all flora & fauna.

Thanks so much for your time.

Gary Ranz
Lafayette, CA

II.7.105 LETTER I-GARY RANZ-1 — GARY RANZ — DATED JANUARY 6, 2020

II.7.105.1 RESPONSE TO COMMENT I-GARY RANZ-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Comments describing personal commitments to conservation are acknowledged but do not require a response. The DEIR analyzes potential environmental impacts of the project and concluded, based on scientific analysis, that no significant adverse impacts would occur.

Letter I-D. Rincon-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

no clean water no farms.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

D. Rincon
Fresno, CA

II.7.106 LETTER I-D. RINCON-1 — D. RINCON — DATED JANUARY 6, 2020

II.7.106.1 RESPONSE TO COMMENT I-D. RINCON-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. DEIR Chapter 4.3, “Surface Water Quality,” analyzes potential impacts to water quality and concluded, based on scientific analysis, that no significant adverse impacts would occur as a result of the project.

From: [diana.rizza](#)
To: [LTO](#)
Subject: Newsom's water plan
Date: Sunday, November 24, 2019 6:47:18 PM

Please re-examine the environmental analysis of the Govenors plan for increased water pumping south to farmers which will decrease the water flow through the Delta.

I do not believe that Newsom's plan will benefit anyone of the in the long run nor the Delta itself, as per the state Water Resources Control Board and state Department of Fish and Wildlife predict.

Diana Rizza

1-1

Sent from my iPhone

II.7.107 LETTER I-DIANA RIZZA-1 — DIANA RIZZA — DATED NOVEMBER 24, 2019

II.7.107.1 RESPONSE TO COMMENT I-DIANA RIZZA-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR addresses potential impacts to Delta hydrology or other environmental resources. The DEIR concluded, based on scientific analysis, that no significant adverse impacts would occur. This discussion is found in DEIR Chapters 4.2, “Hydrology,” 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources.”

Letter I-Rachel Robson-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Long ago, against all reason, oh so many water ways, deltas, rivers, were reduced, eliminated and or polluted with stuff most cannot imagine, such as plutonium in the Savannah river back East. I've studied waters throughout the US and I am shocked but not surprised by the gravity of harms. Deltas and swamps used to naturally protect lands in storms, now they are gone, or poisoned. It seems a rare thing for a politician to stand up for water, why? Clean, healthy water is fundamental to Everything, not only humans, and there is nothing that can replace such. CA has been locked into water disputes seemingly forever. Moreover, fracking went large in this state against all reason even as it failed to make sense, it damaged lands and waters such that some areas of our Delta cities have waters the people cannot drink. Reservoirs are poisoned from dumped fracking chemicals. Water is a precious natural resource we cannot do without, all of us, human, fish, other wild life. We are the Pacific Flyway, host to oh so many migrating birds. I'm shocked that CA Dept of Water peoples are not stepping up. That would seem to indicate corruption, and corrupt practices are not a new thing regarding water. My family is Native. Historically, we never poisoned waters, such a thing was unthinkable and should still be unthinkable, as well as imagining restricting the natural flow of waters. Nothing can live without water. This issue is literally life or death. Don't kill our Delta waters! We've spent so many decades trying to heal them, protect them and not for nothing. What could be more basic, needful, than a functional estuary that waters and feeds CA's vast wildlife and peoples!

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Rachel Robson
Berkeley, CA

II.7.108 LETTER I-RACHEL ROBSON-1 — RACHEL ROBSON — DATED JANUARY 6, 2020

II.7.108.1 RESPONSE TO COMMENT I-RACHEL ROBSON-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The existing condition of the Delta is acknowledged and discussed further in Master Response 4, “Legal Standards.” Hydraulic fracturing, or “fracking,” is not an element of the Proposed Project or any of the alternatives. DEIR Chapter 4.3, “Surface Water Quality,” analyzes potential impacts of the project on water quality and concluded, based on scientific analysis, that no significant adverse impacts would occur. Similarly, DEIR Chapter 4.4, “Aquatic Biological Resources,” concluded that no significant impacts to fish or aquatic species would result from the proposed project. Impacts to migrating birds were analyzed in DEIR Appendix A, “Initial Study of the Long-Term Operation of the State Water Project.” DEIR Appendix A, Section 3.4.2, “Terrestrial Biological Resources,” concluded that there would be no significant adverse effects, either directly or through habitat modification, on terrestrial wildlife species such as migratory birds, or on federally protected wetlands or riparian habitat.

From: [BigJim](#)
To: [LTO](#)
Subject: Water management- Ca delta
Date: Wednesday, November 27, 2019 2:53:43 PM

I would like to express my concern for future water usage regarding the flow through the delta. I am 77 years old and have seen the continuous deterioration of the water resources from the San Joaquin and Sacramento rivers through my years.

I am against any more water being sent south to the southern farmers until water storage is built that will support more withdrawals from the supplying rivers.

Governor Newsom's plan that mimics President Trump's will only deteriorate the water quality more when support for water quality and fishing resources is in decline as is. New water storage has been virtually non-existent when it could/should have been built. All there are is more studies and no action. Lead time take time plus very weather dependent to fill storage reservoirs. Late is getting later.

Thank you for your considerations,

James Roscoe
Antioch, Ca
Bigjim91@comcast.net

Sent from my iPad



II.7.109 LETTER I-JAMES ROSCOE-1 — JAMES ROSCOE — DATED NOVEMBER 27, 2019

II.7.109.1 RESPONSE TO COMMENT I-JAMES ROSCOE-1-1

The construction of new facilities is not an element of the Proposed Project or any of the alternatives. The DEIR addresses potential impacts to Delta water quality and concluded, based on scientific analysis, that the proposed long-term operations of the SWP would not result in significant impacts. This discussion is found in DEIR Chapter 4.3, "Surface Water Quality." Past degradation of the Delta is discussed in Master Response 4, "Legal Standards," under the subheading, "Treatment of Historical Conditions."

Letter I-Stewart Rosen-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region. We need to increase water flow for the endangered salmon and other water species. Water diversion is not the answer. The answer lies and having farmers adopt more water saving techniques like they do in Israel. There is a lot of water that's wasted to evaporation. We must protect what little nature we have left. We must not waste any more water as it is becoming more and more of the scarcity. Absolutely no more water Divergence!

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Stewart Rosen
Boonville, CA

II.7.110 LETTER I-STEWART ROSEN-1 — STEWART ROSEN — DATED JANUARY 6, 2020

II.7.110.1 RESPONSE TO COMMENT I-STEWART ROSEN-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. Please see Master Response 6, “Demand Management/Conservation Measures,” and Master Response 7, “Delta Reform Act,” for discussion of issues relating to more water efficient farming practices.

Letter I-Stewart Rosen-2

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region. We need to increase water flow for the endangered salmon and other water species. Water diversion is not the answer. The answer lies and having farmers adopt more water saving techniques like they do in Israel. There is a lot of water that's wasted to evaporation. We must protect what little nature we have left. We must not waste any more water as it is becoming more and more of the scarcity. Absolutely no more water Divergence!

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Stewart Rosen
Boonville, CA

II.7.111 LETTER I-STEWART ROSEN-2 — STEWART ROSEN — DATED JANUARY 6, 2020

II.7.111.1 RESPONSE TO COMMENT I-STEWART ROSEN-2-1

This is an exact duplicate of Response to Comment I-Stewart Rosen-1. Please see that Response to Comment, above.

From: [Stewart Rosen \(yellow634634@gmail.com\)](mailto:yellow634634@gmail.com) Sent You a Personal Message
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Thursday, December 19, 2019 12:53:20 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable. PLEASE increase water flow for fish

California needs to operate it's water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species. FARMERS need to be more water efficient as in Isreal.

3-1

Thank you.
Stewart Rosen

Sincerely,

Stewart Rosen
PO Box 24
Boonville, CA 95415
yellow634634@gmail.com
(415) 215-4161

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

II.7.112 LETTER I-STEWART ROSEN-3 — STEWART ROSEN — DATED DECEMBER 19, 2019

II.7.112.1 RESPONSE TO COMMENT I-STEWART ROSEN-3-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. The issue of reducing reliance on the Delta to meet California’s future water needs via methods such more water-efficient agricultural methods is addressed in Master Response 7, “Delta Reform Act,” under the subheading “Reduced Reliance on the Delta.” Please also see Master Response 6, “Demand Management/Conservation Measures.”

Letter I-Suellen Rowlison R.N.-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

AS A 30 YEAR RESIDENT OF SANTA CLARA COUNTY, ONE OF THE NINE COUNTIES SURROUNDING THE SAN FRANCISCO BAY DELTA, I URGE YOU TO PROTECT IT FROM WATER GRABS WHILE BALANCING NEEDS OF AGRICULTURE AND URBAN CUSTOMERS. I NOW LIVE IN BUTTE COUNTY, HOME OF LAKE OROVILLE AND THE STATE WATER PROJECT.

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Suellen Rowlison R.N.
Chico, CA

II.7.113 LETTER I-SUELLEN ROWLISON R.N.-1 — SUELLEN ROWLISON R.N. — DATED JANUARY 6, 2020

II.7.113.1 RESPONSE TO COMMENT I-SUELLEN ROWLISON R.N.-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions.

Letter I-Linda Savidge-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

U MUST REGULATE CORPETATIONS FROM POLLUTING OUR AIR, WATER AND THE GROUND THAT GROWS OUR FOOD WITH POLLUTED WATER. MY SISTER LIVED IN UPPER STATE NY AND THE CORPS SENCE 1968 POLLUTED THE WATER AND GROUND WITH THEIR WAIST AND THEIR WERE MORE CANCER CENTERS IN THAT AREA BC OF RELATED CORPERATIONS POLLUTION. MY SISTER DIE IN 2009 FROM CANCER. WHY DO WE HAVE GOVERNMENT OFFICALS IF THEY DONT PROTECT US FROM CORPERATIONS ALLOWED TO POLLUTE OUR PRODUCTS THAT WE USE DAILY, OUR DRINKING WATER OUR AIR AND OUR FOOD WE EAT. HOW CAN WE TRUST OUR GOVERNMENT TO DO THE RIGHT THING IF THEY ARE CORRUPTED BY GREED? DO UR JOBS!!!!!!

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Linda Savidge
M.way, CA

II.7.114 LETTER I-LINDA SAVIDGE-1 — LINDA SAVIDGE — DATED JANUARY 6, 2020

II.7.114.1 RESPONSE TO COMMENT I-LINDA SAVIDGE-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As discussed in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue long-term operations of the SWP consistent with applicable laws, water contracts, and agreements. DEIR Chapter 4.3, “Surface Water Quality,” analyzes potential impacts of the project on water quality and concluded, based on scientific analysis, that no significant adverse impacts would occur.

Letter I-Laurel Sebastian-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

As an environmental scientist and youth educator in the Bay Area, I work everyday to study and teach students about the health and perils of the SF Bay. Students are working hard to take care of the bay and switch the trend away from pollution and degradation. Please do your part to be leaders for future generations.

We urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Laurel Sebastian
Oakland, CA

II.7.115 LETTER I-LAUREL SEBASTIAN-1 — LAUREL SEBASTIAN — DATED JANUARY 6, 2020

II.7.115.1 RESPONSE TO COMMENT I-LAUREL SEBASTIAN-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The DEIR Chapter 4.3, “Surface Water Quality,” analyzes potential impacts to Delta water quality and concluded, based on scientific analysis, that no significant adverse impacts would occur as a result of the project.

From: [Susan Shawl](#)
To: [LTO](#)
Subject: Diverting water
Date: Wednesday, December 4, 2019 9:46:50 PM

Please do NOT divert any more water to the delta when we have a growing population in the state and the people need it.

Tell the farmers to do “no till” farming practices as a way to save water.

Our environment depends on the water for people and salmon to continue to sustain itself.

Susan Shawl

1-1

II.7.116 LETTER I-SUSAN SHAWL-1 — SUSAN SHAWL — DATED DECEMBER 4, 2019

II.7.116.1 RESPONSE TO COMMENT I-SUSAN SHAWL-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The issue of reducing reliance on the Delta to meet California’s future water needs via changes to farming practices or other means is addressed in Master Response 7, “Delta Reform Act.” The DEIR concluded that the proposed long-term operations of the SWP would not result in significant impacts to hydrology, water quality, or aquatic biological resources (including salmon). This discussion is found in DEIR Chapters 4.2, “Hydrology,” 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources.” The relationship between SWP water deliveries and population growth is discussed in DEIR Chapter 4.6.2, “Growth-Inducing Impacts.” Please see Master Response 23, “Impact Significance (Salmonids)” for more information on impacts to salmonids. For information regarding water conservation efforts, please refer to Master Response 6, “Demand Management/Conservation Measures.”

From: [Tim Shearer](#)
To: [LTO](#)
Subject: Delta Water plan
Date: Sunday, November 24, 2019 9:30:14 AM

As a California resident, I'd like to side with President Trump & Gov. Newsome's Intention to distribute more water to California farmers. I don't believe the effect on Chinook Salmon will be catastrophic.

1-1

Sincerely,
Tim Shearer
Ridgecrest, CA

Get [Outlook for iOS](#)

II.7.117 LETTER I-TIM SHEARER-1 — TIM SHEARER — DATED NOVEMBER 24, 2019

II.7.117.1 RESPONSE TO COMMENT I-TIM SHEARER-1-1

The comment's support for distribution of water for farmers is noted. DEIR Chapter 4.4, "Aquatic Biological Resources," discusses the potential impacts of the proposed long-term operations of the SWP on salmon and concluded, based on scientific analysis, that impacts would be less than significant.

From: [Mellon, Erin@DWR](mailto:Mellon,Erin@DWR)
To: [Chao, You Chen@DWR](mailto:Chao,YouChen@DWR); [Wilkinson, Chris@DWR](mailto:Wilkinson,Chris@DWR)
Subject: FW: feedback on DEIR for LT Op of CA SWP
Date: Friday, December 20, 2019 11:14:24 AM

Hey – did you guys help out with the advertisements placed for the LTO? I think he intended to email LTO@water but I'm worried the ad was incorrect.

From: Tom Shoup <tom_shoup@yahoo.com>
Date: Friday, December 20, 2019 at 10:58 AM
To: "Mellon, Erin@DWR" <Erin.Mellon@water.ca.gov>
Subject: Re: feedback on DEIR for LT Op of CA SWP

Hi Erin,

Thanks very much for following up like this. The address published in the Mercury News, around 24 Nov I think, was LOT@water.ca.gov. That's the address which bounced. I'll forward the full returned message with diagnostic information in a separate e-mail immediately after sending this.

Thanks again and Season's Greetings,

Tom Shoup
Los Altos, CA

On Friday, December 20, 2019, 7:00:05 AM PST, Mellon, Erin@DWR <erin.mellon@water.ca.gov> wrote:

Hi Tom - thanks for sending your comments. Could you tell me what email address you tried emailing so we can attempt to correct the issue?

-Erin

From: Tom Shoup <tom_shoup@yahoo.com>
Sent: Thursday, December 19, 2019 7:35:59 PM
To: Mellon, Erin@DWR <Erin.Mellon@water.ca.gov>
Subject: feedback on DEIR for LT Op of CA SWP

Dear Ms. Mellon:

I'd originally sent this feedback to the e-mail address which was listed in the San Jose Mercury news but that e-mail bounced. I saw your e-mail on the DWR webpage which had the link for the DEIR related to long-term operation of the SWP so I hope you'll pass this feedback on to the appropriate person.

Regards,

Tom Shoup

Dear DWR:

This feedback applies to the Draft Environmental Impact Report for Long-Term Operation of the California State Water Project, State Clearinghouse No. 2019049121.

1. The no project alternative clearly describes increased harm through entrainment of multiple species of fish if this project is implemented.
2. The goal of the project appears to be an increase of 200TAF of water of which 30 - 60% is due to SWP use.

Despite a diligent effort on my part, I don't see any consideration of water conservation at point of use as a means to maintain or increase flow through the Delta as well as making more water available for human consumption and commercial use. The four alternatives described in section 5 of the DEIR do not include conservation but describe various time-of-year pumping scenarios as well as various uses of physical barriers to provide an annual increase in water taken by the SWP.

Because there is no consideration of conservation as an alternative to the proposed project, I think this DEIR is deficient and should be amended to include conservation of water at point of use as an alternative in section 5.

Very truly yours,

Thomas A. Shoup
Los Altos, CA

1-1

1-2

II.7.118 LETTER I-TOM SHOUP-1 — TOM SHOUP — DATED DECEMBER 20, 2019

II.7.118.1 RESPONSE TO COMMENT I-TOM SHOUP-1-1

The DEIR addresses potential impacts to aquatic biological resources, including from entrainment, and concluded, based on scientific analysis, that the proposed long-term operations of the SWP would not result in a significant impact. This discussion is found in DEIR Chapter 4.4, “Aquatic Biological Resources.”

II.7.118.2 RESPONSE TO COMMENT I-TOM SHOUP-1-2

DEIR Chapter 5, “Alternatives to the Proposed Project,” describes and analyzed potential impacts from a range of feasible alternatives to the Proposed Project that would meet the key objectives of the project. The issue of reducing reliance on the Delta to meet California’s future water needs via increased water conservation is addressed in Master Response 7, “Delta Reform Act.” With regards to water conservation efforts statewide, please refer to Master Response 6, “Demand Management/Conservation Measures.”

Please see Master Response 3, “The CEQA Process,” for more information on the development of alternatives.

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Letter I-Edward & Beatrice Simpson-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

We speak for the San Francisco Bay-Delta Estuary...a living eco system essential and irreplaceable.

Water MUST NOT be diverted for more human use! It is time people learn, if they have any brain cells, that there are consequences to humans because of humans. We must stop the insatiable use of natural systems for a species gone amok -- namely we homo sapiens.

Do not add to the misery. Protect this Estuary.

Thank you.

Edward and Beatrice Simpson

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Edward & Beatrice Simpson
South Pasadena, CA

II.7.119 LETTER I-EDWARD & BEATRICE SIMPSON-1 — EDWARD & BEATRICE SIMPSON — DATED JANUARY 6, 2020

II.7.119.1 RESPONSE TO COMMENT I-EDWARD & BEATRICE SIMPSON-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions.

Letter I-Sue Stack-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal is not in our best interest.

Please prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months. Think in terms of catching and storing rainwater in southern California. Storm run-off could become a new source of irrigation water.

The health of northern California rivers is extremely important to me.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Sue Stack
Newcastle, CA

II.7.120 LETTER I-SUE STACK-1 — SUE STACK — DATED JANUARY 6, 2020

II.7.120.1 RESPONSE TO COMMENT I-SUE STACK-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Please see Master Response 6, “Demand Management/Conservation Measures,” and Master Response 7, “Delta Reform Act,” for discussion of issues relating to reducing reliance on the Delta through use of alternative water supplies such as rainwater storage. As discussed in Master Response 3, “The CEQA Process,” DWR has selected Refined Alternative 2b as its preferred alternative in the FEIR, which includes additional freshwater flows compared to the Proposed Project.

Letter I-Steven Stansbery-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

Please do not allow degradation of the Bay-Delta estuary.

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Steven Stansbery
Woodland Hills, CA

II.7.121 LETTER I-STEVEN STANSBERY-1 — STEVEN STANSBERY — DATED JANUARY 6, 2020

II.7.121.1 RESPONSE TO COMMENT I-STEVEN STANSBERY-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. The DEIR Chapter 4.3, “Surface Water Quality,” analyzes potential impacts to Delta water quality and concluded, based on scientific analysis, that no significant adverse impacts would occur as a result of the project.

Letter I-Regina Stefaniak-1

From: [Regina Stefaniak \(rcstefaniak@earthlink.net\)](mailto:rcstefaniak@earthlink.net) Sent You a Personal Message
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Thursday, December 19, 2019 7:09:12 AM

Dear CA Department of Water Resources,

Dear Mr. Chao:

I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable.

California needs to operate its water management systems in a manner that conforms to the overarching policy of the Delta Reform Act to reduce downstream reliance on Delta water and to strengthen protections for California's native fish and wildlife species. As we confront the imminent global catastrophe of the loss of a million species of plants and animals in the near future as a result of human activity it behooves each of us to do anything we can to assist the survival of each and every species at risk. Our own species will not survive without the rich biodiversity of the planet. It is incumbent on you at the DWR to act to preserve our native Delta species. Extinction is forever. Stop diverting northern California Delta water to big Ag to convert to almonds for export abroad. Stop pouring water into a bottomless hole in the desert. It is entirely too wasteful. Thank you.

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Sincerely,

Regina Stefaniak
2507 Rose Walk
Berkeley, CA 94708
rcstefaniak@earthlink.net
(510) 848-7127

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

II.7.122 LETTER I-REGINA STEFANIAK-1 — REGINA STEFANIAK — DATED DECEMBER 19, 2019

II.7.122.1 RESPONSE TO COMMENT I-REGINA STEFANIAK-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The SWP serves more than 20 million Californians, as well as providing water for agriculture and industry. The issue of reducing reliance on the Delta to meet California’s future water needs via methods such more water-efficient agricultural methods or use of recycled water is addressed in Master Response 7, “Delta Reform Act,” under the subheading “Reduced Reliance on the Delta.” Please also see Master Response 6, “Demand Management/Conservation Measures.” The DEIR analyzed the potential impacts of the Proposed Project, and concluded, based on scientific analysis, that impacts to aquatic biological resources, including salmon and other special-status species, would be less than significant. Refined Alternative 2b described in FEIR Part III, Chapter 5.3 includes refinements and additional actions that would further improve conditions for aquatic biological resources.

From: [June Steiner](#)
To: [LTO](#)
Subject: Newsom's Delta Proposal
Date: Sunday, November 24, 2019 11:21:12 AM

Dear Gov Newsom and the CA Dept of water Resources. I strongly vote against the present proposal draft to send more water south and threaten the health of the Delta and the quality of water provided to citizens of CA. I am an active voting citizen and an elder who understands the wisdom of protecting the Delta and the future of CA residents. Thank you for listening.

June Steiner, PhD
1462 Luning DR
San Jose, CA 96118

Sent from my iPhone

II.7.123 LETTER I-JUNE STEINER-1 — JUNE STEINER — DATED NOVEMBER 24, 2019

II.7.123.1 RESPONSE TO COMMENT I-JUNE STEINER-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR concluded, based on scientific analysis, that the proposed long-term operations of the SWP would not result in significant impacts to water quality or Delta health. This discussion is found in DEIR Chapters 4.2, “Hydrology,” and 4.3, “Surface Water Quality.”

Letter I-Katherine S Stewart-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I worked on anadromous fish research for the USFS in the 1970's. In those days there were healthy runs through the Delta. Now the status of salmon and steelhead is dire. I urge you to protect the San Francisco Bay-Delta Estuary from the Trump administration's proposal to increase water diversions in the region. The current head of the Dept of Agriculture should recuse himself due to his prior employment by the Westlands water districts which would benefit from the recent proposals, while fisheries would be further harmed.

The California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. This is just wrong.

Established science proves that instead it needs to increase the amount of water flowing through the estuary during the critical winter and spring months.

The agencies also must institute more effective local and regional water recycling and improved water use efficiency.

Thanks for considering my comments. I hope you make decisions that will sustain fish runs long into the future.

Katherine S Stewart
San Diego, CA

II.7.124 LETTER I-KATHERINE S STEWART-1 — KATHERINE S STEWART — DATED JANUARY 6, 2020

II.7.124.1 RESPONSE TO COMMENT I-KATHERINE S STEWART-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Master Response 4, “Legal Standards,” provides discussion regarding the existing condition of the Delta. The DEIR Chapter 4.4, “Aquatic Biological Resources,” analyzes potential impacts to anadromous fish and other species and concluded, based on scientific analysis, that no significant adverse impacts would occur as a result of the project. Please note that the lead agency for long-term operations of the SWP is DWR, and CDFW is a responsible agency. The Department of Agriculture has no decision-making role on the project.

Letter I-John D Stickle D.C.-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I write to Strongly urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region. This has never been done because it is clearly a very bad choice and does nothing for our environment.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs. The Trump administration is all about Corporate Interests, not the health, safety or needs of what best serves California and Californians.

And it's Absolutely unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta.

Please Reverse Course and prioritize Increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods. Not to mention the many ecosystems that rely on this water. It is crucial to animals, fish, birds and more.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife. Please do Not give in to the Trump Administration.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary. Enough of the Trump disdain for truth,

science and bad choices for our One Planet.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your consideration of my comments and thoughts.

John D Stickle D.C.
Kelseyville, CA

II.7.125 LETTER I-JOHN D STICKLE D.C.-1 — JOHN D STICKLE D.C. — DATED JANUARY 6, 2020

II.7.125.1 RESPONSE TO COMMENT I-JOHN D STICKLE D.C.-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. DEIR Chapter 4.4, “Aquatic Biological Resources,” analyzed potential impacts of the project and concluded that no significant impacts to fish or aquatic species would result. Impacts to terrestrial biological resources, including birds, were analyzed in DEIR Appendix A, “Initial Study of the Long-Term Operation of the State Water Project.” DEIR Appendix A, Section 3.4.2, “Terrestrial Biological Resources,” concluded that there would be no significant adverse effects, either directly or through habitat modification, on terrestrial wildlife species.

From: [Ruth Stoner Muzzin \(rmuzzin@friedmanspring.com\)](mailto:rmuzzin@friedmanspring.com) Sent You a Personal Message
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Wednesday, December 18, 2019 6:11:36 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable.

California needs to operate its water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species.

Local governments and water agencies throughout the state have been working hard to reduce their reliance on unsustainable Delta exports. Important gains have been made, but they are not enough. Implementing the proposed operations plan would reverse the good that has been done, further devastating the Bay-Delta ecosystem.

The economic vitality of my own home community on the San Mateo coast is intertwined with the vitality of salmon populations in the ocean. The vitality of the various salmon runs is inextricably bound to the health of the Delta, including all of the other species that inhabit that unique ecosystem. Impairing one system inevitably results in injury to all.

Thank you for considering my views on this issue that is of critical importance for all Californians.

Sincerely,

Ruth Stoner Muzzin
PO Box 370761
Montara, CA 94037
rmuzzin@friedmanspring.com
(650) 563-9613

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

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II.7.126 LETTER I-RUTH STONER MUZZIN-1 — RUTH STONER MUZZIN — DATED DECEMBER 18, 2019

II.7.126.1 RESPONSE TO COMMENT I-RUTH STONER MUZZIN-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. DWR’s obligations under the Delta Reform Act to reduce reliance on the Delta are discussed in Master Response 7, “Delta Reform Act.” Please see Master Response 1, “Scope of Analysis,” for discussion of the geographic scope of environmental impacts analyzed within the DEIR. DEIR Chapter 4.4, “Aquatic Biological Resources,” analyzed potential impacts to salmonids and other aquatic species, and concluded, based on scientific analysis, that impacts would be less than significant.

Letter I-Shelley Stroh-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

The importance of this beautiful and vital ecosystem extends far beyond the Bay Area.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Shelley Stroh
Lake Isabella, CA

II.7.127 LETTER I-SHELLEY STROHM-1 — SHELLEY STROHM — DATED JANUARY 6, 2020

II.7.127.1 RESPONSE TO COMMENT I-SHELLEY STROHM-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Master Response 1, “Scope of Analysis,” provides discussion regarding the geographic scope of the DEIR.

Letter I-Dianna Suarez-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

Please keep going with the original plan to increase the flow of water through the delta. Salmon species, and especially the Delta smelt, are going extinct. This is a failure of our management; meaning not enough water is going through the Delta now and decreasing it further is insane. Please get on the right track and do something that will actually help the fish Don't stand feebly by and watch our natural heritage be compromised and devastated by greedy people who think only of themselves instead of future generations and all our relations.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Dianna Suarez
Colfax, CA

II.7.128 LETTER I-DIANNA SUAREZ-1 — DIANNA SUAREZ — DATED JANUARY 6, 2020

II.7.128.1 RESPONSE TO COMMENT I-DIANNA SUAREZ-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As discussed in Master Response 3, “The CEQA Process,” DWR has selected Refined Alternative 2b as its preferred alternative in the FEIR, which includes additional freshwater flows compared to the Proposed Project analyzed in the DEIR. Master Response 12, “Delta Outflow,” provides additional information on changes in Delta outflows as a result of Refined Alternative 2b. Master Response 4, “Legal Standards,” provides discussion regarding the existing condition of the Delta in relation to special-status species.

Letter I-Deborah Symes-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

Recently, at an event of the San Joaquin River Parkway Trust near Fresno, we learned of remarkable progress, in only a few years, of a state project to restore native salmon to their former habitat on the upper river. Some of the salmon have returned this fall to create redds in our area, and others were caught earlier this year by fishermen out of Bodega Bay in northern CA. These thrilling developments, against all odds, symbolize the hope and hazard facing us in our handling of the climate and political threats to the San Francisco Bay Delta.

We rely on you, as responsible state officials, to act in the interest of all Californians and protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region. That proposal, if not blocked, will likely cause extinction of native species, worsen water quality, and threaten thousands of jobs in the fishing industry.

Although we expected no better from Trump, his corrupt administration and cronies in the Westlands Water District, it is totally unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. We call on you to face the reality of climate change and its implications for further agricultural expansion, as well as the fact that much recent agricultural expansion is on marginal or unsuitable land (e.g. Westlands and some areas of Kern County).

This land will not continue to be farmed because, despite all the money the public has sunk into infrastructure to support farming, the water rights of a portion of the agricultural industry will be more profitable when sold off to southern CA land developers than poured on any crop. In that regard, it is also imperative that the state of CA engage in critical assessments of the sustainability of allowing continued housing sprawl into desert areas north and east of LA in a state facing increasing water scarcity.

None of the disclosed or hidden scheming to grab more northern CA water for profiteering at public expense justifies the environmental degradation and probable loss of species that would result from the proposed weakening of protections for fish and accompanying increase in diversions. Please reconsider, reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry in CA, OR and WA for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife. Relying on established science and CA environmental law, including the CA Constitution and Public Trust Doctrine, you have the authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy. So do it for all Californians, including our children and grandchildren.

Governor Newsom and our responsible state agencies: please act now to protect and restore the San Francisco Bay-Delta estuary!

Thank you.

Deborah Symes

Fresno, CA

II.7.129 LETTER I-DEBORAH SYMES-1 — DEBORAH SYMES — DATED JANUARY 6, 2020

II.7.129.1 RESPONSE TO COMMENT I-DEBORAH SYMES-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Comments regarding recent success in upper river habitat restoration projects are acknowledged but do not require a response. Please see Master Response 10, “Climate Change,” for discussion of the climate change projections and timeframes that were included as part of the DEIR and FEIR analysis. Agricultural expansion is not an element of the Proposed Project or any of the alternatives. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. As discussed in DEIR Chapter 4.6.2, “Growth-Inducing Impacts,” the project would not directly or indirectly cause or allow population growth or “housing sprawl.” Please see Master Response 6, “Demand Management/Conservation Measures,” and Master Response 7, “Delta Reform Act,” for discussion of issues relating to reducing reliance on the Delta through use of alternative water supplies. Please also see Master Response 14, “Public Trust.”

Letter I-Kathleen Tandy-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

The delta estuary is a wonderful resource for northern California. I go birding at Grizzly Island and love the panoply of birds that I see there. It is a unique resource that needs to be protected.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Kathleen Tandy
Oakland, CA

II.7.130 LETTER I-KATHLEEN TANDY-1 — KATHLEEN TANDY — DATED JANUARY 6, 2020

II.7.130.1 RESPONSE TO COMMENT I-KATHLEEN TANDY-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Impacts to terrestrial biological resources, including birds, were analyzed in DEIR Appendix A, “Initial Study of the Long-Term Operation of the State Water Project.” DEIR Appendix A, Section 3.4.2, “Terrestrial Biological Resources,” concluded that there would be no significant adverse effects, either directly or through habitat modification, on birds or other terrestrial wildlife species.

From: [Marvin Tarbox](#)
To: [LTO](#)
Cc: mtarbox@pacbell.net
Subject: latest water bills
Date: Monday, November 25, 2019 4:56:54 PM

Northern CA and the delta come first. let southern ca control population. Big farmers expansion? when is enough???

1-1

II.7.131 LETTER I-MARVIN TARBOX-1 — MARVIN TARBOX — DATED NOVEMBER 25, 2019

II.7.131.1 RESPONSE TO COMMENT I-MARVIN TARBOX-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. DEIR Chapter 4, “Environmental Setting and Impact Analysis,” analyzed potential impacts of the project and concluded, based on scientific analysis, that long-term operations of the SWP would not have any significant environmental impacts.



Public Meeting for the Draft Environmental Impact Report for the Long-Term Operation of the California State Water Project

Name: ROGER THIBAULT Organization: MEMBER RESTORE THE DELTA (if any)
Address (optional): 1408 LAKWOOD DR W. SACO CA 95691
City State Zip

Comments I oppose ANYTHING THAT FACILITATES TAKING MORE WATER FROM THE DELTA WHOSE VERY HEALTH IS ENDANGERED FROM LACK OF WATER. THESE WEAKENED EIR'S WILL ONLY FACILITATE TAKING MORE WATER VIA THE TUNNEL, SENDING FRESH WATER SOUTH WHILE INCREASED FARM DRAINAGE INTO THE DELTA WILL ONLY TURN IT INTO THE TOILET BOWL OF CA, WE HAVE LOST 2/3 OF THE FISHERY IN

1-1

Continue overleaf if needed

California Department of Water Resources invites you to provide specific comments on the DEIR.

THE DELTA IS MY LIFETIME. PLEASE HAND IN DURING THE MEETING. IT IS ESSENTIAL TO THE DELTA, ITS COMMUNITIES AND THOSE COMMUNITIES THAT
Thank you!

1-2

Public Meeting for the Draft Environmental Impact Report for the Long-Term Operation of the California State Water Project

Comments (cont.) DEPENDED ON FISHING TO MAINTAIN ENOUGH WATER TO SUSTAIN THE CHAIN OF LIFE IN DELTA/BAY WATERS. THE ENVIRONMENT OF NORTHERN CA. AND THE DELTA SPECIFICALLY SHOULD NOT BE FOR SALE TO THE HIGHEST BIDDER. IT APPEARS THAT CORPORATE BAY HAS MORE sway than the RESIDENTS AND VOTERS. REMEMBER THE PEOPLE OF CA VOTED AGAINST THE PERIPHERAL CANAL AND THE TUNNEL ARE NOTHING BUT THE CANAL BURIED BY WEAKENING OF THE EIR OR "ADJUSTING" THAT WOULD TAKE ANY MORE WATER FROM THE DELTA IS AGAINST THE ENVIRONMENT AND THE WIVES OF THE VOTERS. THE DELTA AND BAY NEED JUST CHEAP TRICKS MORE WATER! NOT LESS

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II.7.132 LETTER I-ROGER THIBAUT-1 — ROGER THIBAUT — DATED DECEMBER 12, 2019

II.7.132.1 RESPONSE TO COMMENT I-ROGER THIBAUT-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. Discussion of the water tunnel project is provided in Master Response 26, “One-Tunnel Delta Conveyance Project.” The DEIR analyzed potential impacts to water quality and Delta health and concluded, based on scientific analysis, that the proposed long-term operations of the SWP would not result in exceeding existing water quality limits and that no significant adverse impacts would occur. This discussion is found in DEIR Chapter 4.3, “Surface Water Quality.”

II.7.132.2 RESPONSE TO COMMENT I-ROGER THIBAUT-1-2

The DEIR analyzed potential impacts to aquatic resources (including fisheries) and concluded, based on scientific analysis, that the proposed long-term operations of the SWP would not result in significant adverse impacts. This discussion is provided in DEIR Chapter 4.4, “Aquatic Biological Resources.”

II.7.132.3 RESPONSE TO COMMENT I-ROGER THIBAUT-1-3

Please see Master Response 26, “One-Tunnel Delta Conveyance Project,” for discussion of a one-tunnel project.

II.7.132.4 RESPONSE TO COMMENT I-ROGER THIBAUT-1-4

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR analyzed potential impacts to hydrology and concluded, based on scientific analysis, that the proposed long-term operations of the SWP would not result in significant adverse impacts. This discussion is found in DEIR Chapters 4.2, “Hydrology,” 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources.”

Letter I-Gary Thorne-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

Please don't allow the federal government to divert more water from the San Francisco Bay-Delta Estuary. The delta's health is more important to our society than the value of the crops it supports.

Gary Thorne
Yorba Linda, CA

II.7.133 LETTER I-GARY THORNE-1 — GARY THORNE — DATED JANUARY 6, 2020

II.7.133.1 RESPONSE TO COMMENT I-GARY THORNE-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions.

Letter I-Linda Tiffany-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region. The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

It's also unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

Please rely on established science and use its legal authority to stop this reckless proposal. It is essential that California invests in sustainable local and regional water supply projects like water recycling and improved local water use efficiency. Diverting is a poor 20th century strategy that wastes our water. We need fewer wasteful and destructive diversions to preserve and wisely use what we have in the face of overdevelopment, big agri-business and fracking, the biggest threat to our water supply!

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Linda Tiffany
Berkeley, CA

II.7.134 LETTER I-LINDA TIFFANY-1 — LINDA TIFFANY — DATED JANUARY 6, 2020

II.7.134.1 RESPONSE TO COMMENT I-LINDA TIFFANY-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. Hydraulic fracturing, or “fracking,” is not an element of the Proposed Project or any of the alternatives.

Letter I-Cornelia Twitchell-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

The steps you take now will affect generations to come. The proposals put forward by the Trump administration are not forward thinking - they are backward thinking. Given climate change and reduced snowfall and other factors that affect our waterways, please look ahead to the next 50 or 100 years and think how hard it will be to bring back our estuaries if they are obliterated by shortsighted policies put forward by Trump's administration.

Thanks so much for your time.

Cornelia Twitchell
San Francisco, A

II.7.135 LETTER I-CORNELIA TWITCHELL-1 — CORNELIA TWITCHELL — DATED JANUARY 6, 2020

II.7.135.1 RESPONSE TO COMMENT I-CORNELIA TWITCHELL-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Please also see Master Response 10, “Climate Change,” for discussion of the climate change projections and timeframes that were included as part of the DEIR and FEIR analysis.

Letter I-Amy Van Syoc-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

Living on the North Coast (Sonoma/Mendocino border) we are reminded daily of the ecological collapse that has transpired here with the loss of bull kelp, starvation of abalone, urchin explosion, starfish decline, and how these are all tied together. And the salmon, crab, whales, they are also all tied to delta flow. DO NOT short change our environment. We see what can happen and the impact on all walks of life here. I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Amy Van Syoc
Stewarts Point, CA

II.7.136 LETTER I-AMY VAN SYOC-1 — AMY VAN SYOC — DATED JANUARY 6, 2020

II.7.136.1 RESPONSE TO COMMENT I-AMY VAN SYOC-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As discussed in Master Response 3, “The CEQA Process,” DWR has selected Refined Alternative 2b as its preferred alternative in the FEIR, which includes additional freshwater flows compared to the Proposed Project analyzed in the DEIR. Master Response 12, “Delta Outflow,” provides additional information on changes in Delta outflows as a result of the Proposed Project and Refined Alternative 2b. Master Response 4, “Legal Standards” provides discussion regarding the existing condition of the Delta.

From: [Jerry Veiluva](#)
To: [LTO; Daniel Borenstein](#)
Subject: Governor's Delta Water Proposal
Date: Tuesday, November 26, 2019 3:39:41 PM

Dear You Chen Chou,

The most important goal of any water plan should not be to decrease the amount of water that flows through the Sacramento-San Joaquin Delta System. If this means sending less water south so be it, after all the water is here in its natural state.

1-1

Regards
Gerald Veiluva
4910 Desmond St
Oakland, CA 94618

II.7.137 LETTER I-GERALD VEILUVA-1 — GERALD VEILUVA — DATED NOVEMBER 26, 2019

II.7.137.1 RESPONSE TO COMMENT I-GERALD VEILUVA-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. DEIR Chapter 4, “Environmental Setting and Impact Analysis,” analyzed potential impacts of the project and concluded, based on scientific analysis, that long-term operations of the SWP would not have any significant environmental impacts.

November 26, 2019

You Chen Chou
California Department of Water Resources
P.O. Box 942836
Sacramento Ca 94236

Re: Governor's Delta Water Proposal

Dear You Chen Chou:

The primary goal of any water plan should not be to decrease the amount of water that flows through the Sacramento-San Joaquin River Delta system. It must remain Healthy which in my opinion and that of many experts means keeping more water in the delta. If this means sending less water south so be it, after all the water is in the delta in its natural state.

2-1

Sincerely,



Gerald Veiluva
4910 Desmond St.
Oakland, Ca 94618

II.7.138 LETTER I-GERALD VEILUVA-2 — GERALD VEILUVA — DATED NOVEMBER 26, 2019

II.7.138.1 RESPONSE TO COMMENT I-GERALD VEILUVA-2-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR concluded, based on scientific analysis, that the proposed long-term operations of the SWP would not result in significant impacts to hydrology or water quality. This discussion is found in DEIR Chapters 4.2, “Hydrology,” and 4.3, “Surface Water Quality.”

From: philvrankovich@comcast.net
To: [LTO](#)
Subject: Governor's Delta water proposal
Date: Sunday, December 1, 2019 12:23:35 PM

The governor's a delta water plan will significantly increase water going to farmers to the detriment of the estuary's health and will degrade the quality of water for Northern California residents. The state Water Resource Board and Department of Fish and Wildlife need to re-examine their environmental analysis before any decision is made. We should be doing everything in our power to ensure the quality of water in the Delta.

1-1

Phil Vrankovich
1690 Arrowhead Dr.
Oakland, Ca.
Sent from Xfinity Connect Mobile App

II.7.139 LETTER I-PHIL VRANKOVICH-1 — PHIL VRANKOVICH — DATED DECEMBER 1, 2019

II.7.139.1 RESPONSE TO COMMENT I-PHIL VRANKOVICH-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR analyzed potential impacts to water quality and Delta health and concluded, based on scientific analysis, that the proposed long-term operations of the SWP would not result in exceeding existing water quality limits and that no significant adverse impacts would occur. This discussion is found in DEIR Chapter 4.3, “Surface Water Quality.”

Letter I-Penelope Ward-1

From: [Penelope Ward \(penelope.ward@verizon.net\)](mailto:penelope.ward@verizon.net) Sent You a Personal Message
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Wednesday, December 18, 2019 6:23:28 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable.

California needs to operate its water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species. Agriculture must get more efficient in its use of water and or change crops. Cleaning and recycling water to be used for agriculture, rather than fresh water needs to increase dramatically. Push these changes that don't jeopardize the health of the delta. Thank you.

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1-1
|

Sincerely,

Penelope Ward
1401 Bonnell Dr
Topanga, CA 90290
penelope.ward@verizon.net
(310) 455-3215

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

II.7.140 LETTER I-PENELOPE WARD-1 — PENELOPE WARD — DATED DECEMBER 18, 2019

II.7.140.1 RESPONSE TO COMMENT I-PENELOPE WARD-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. The issue of reducing reliance on the Delta to meet California’s future water needs via methods such more water-efficient agricultural methods or use of recycled water is addressed in Master Response 7, “Delta Reform Act,” under the subheading “Reduced Reliance on the Delta.” Please also see Master Response 6, “Demand Management/Conservation Measures.”

From: [Weaver, Jeffrey](#)
To: [LTO](#)
Subject: Long-Term Operations Draft EIR CalSim II Modeling
Date: Tuesday, November 26, 2019 9:48:07 AM

Is the CalSim II modeling for the Existing Condition and Proposed Project evaluated in the November 21 Long-Term Operations DEIR available for public review?

1-1

Thank you,
Jeff

Jeffrey Weaver, PE
Office Principal

HDR
2379 Gateway Oaks Drive, Suite 200
Sacramento, CA 95833
D 916.679.8732 **M** 916.217.2829
jeffrey.weaver@hdrinc.com

hdrinc.com/follow-us

II.7.141 LETTER I-JEFFREY WEAVER-1 — JEFFREY WEAVER — DATED NOVEMBER 26, 2019

II.7.141.1 RESPONSE TO COMMENT I-JEFFREY WEAVER-1-1

The CalSim II modeling results for the Existing Condition and Proposed Project are presented in DEIR Appendix C, “Hydrology Model Results,” and additional information about the models and assumptions are presented in DEIR Appendix H, “CalSim II and DSM2 Model Descriptions and Assumptions.” Please see Master Response 20, “Best Available Science,” under the subheading “Summaries of Models Used.”

From: [Sharon](#)
To: [LTO](#)
Subject: Delta water proposal
Date: Tuesday, November 26, 2019 10:35:29 AM

The issues around our water policy vis a vis the Delta may be complicated politically, but there is no question the Delta needs utmost protection. Unequivocally! Farmers need to be part of the solution, thinking out-of-the box, using updated technology and in every way cooperating with the highest-priority approach - which is to protect the Delta fully. Decisions cannot be made to protect the farmers who have created an agricultural zone in a desert which NEVER had enough water for sustainability. These are critical times for environmental actions. If you do not back full-throated support of the Delta I, who have always been a fan, will never vote for you again. Nor will my husband. Show the leadership you are capable of and do the right thing.
Sharon and Bill Whitten

1-1

II.7.142 LETTER I-SHARON AND BILL WHITTEN-1 — SHARON AND BILL WHITTEN — DATED NOVEMBER 26, 2019

II.7.142.1 RESPONSE TO COMMENT I-SHARON AND BILL WHITTEN-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The issue of reducing reliance on the Delta to meet California’s future water needs by requiring new technology or other solutions by farmers is addressed in Master Response 7, “Delta Reform Act,” under the subheading, “Reduced Reliance on the Delta.” For information regarding water conservation efforts, please refer to Master Response 6, “Demand Management/Conservation Measures.”

Dear Sir:

560 Fountain Ave.
Pacific Grove, Ca 93950
11/27/29

I know it's quite impossible to ever claim that the Delta & Sacramento area have the second number of salmon as the Columbia but, please, do what you can to save the Delta for what small number are left. I'm for a few more fish and a few less almonds on my breakfast cereal.

Thank you,

Beverly W. Williams

II.7.143 LETTER I-BEVERLY WILLIAMS-1 — BEVERLY WILLIAMS — DATED NOVEMBER 27, 2019

II.7.143.1 RESPONSE TO COMMENT I-BEVERLY WILLIAMS-1-1

DEIR Chapter 4.4, “Aquatic Biological Resources,” addresses potential impacts to aquatic biological resources, including salmon. The DEIR concluded that, based on scientific analysis, that the proposed long-term operations of the SWP would not result in significant impact on these resources. Please see Master Response 23, “Impact Significance (Salmonids)” for more discussion of impacts to salmon.

Letter I-Katie Wilsker-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I am a science teacher from Southern California and I teach about California's waterways and environmental protections. My students are proud of California's long history of caring for our land and species when other states don't always offer the same levels of protection, and we urge you to continue to protect the San Francisco Bay-Delta Estuary from plans to increase water diversions in the region. Water is key to the ecosystems in the Bay Area and diversions will have a significant impact outside of the estuary as well.

The Trump administration's proposal would likely drive native species toward extinction, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Katie Wilsker
Woodland Hills, CA

II.7.144 LETTER I-KATIE WILSKER-1 — KATIE WILSKER — DATED JANUARY 6, 2020

II.7.144.1 RESPONSE TO COMMENT I-KATIE WILSKER-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As discussed in Master Response 3, “The CEQA Process,” DWR has selected Refined Alternative 2b as its preferred alternative in the FEIR, which includes additional freshwater flows compared to the Proposed Project analyzed in the DEIR. Master Response 12, “Delta Outflow,” provides additional information on changes in Delta outflows as a result of the Proposed Project and Refined Alternative 2b.

Letter I-Susan Worden-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary! This is extremely important and has far-reaching consequences. We live in the Delta and don't want to move because the Sacramento River communities are left in the dust to benefit Big Ag.

Thanks so much for your time.

Susan Worden
Rio Vista, CA

II.7.145 LETTER I-SUSAN WORDEN-1 — SUSAN WORDEN — DATED JANUARY 6, 2020

II.7.145.1 RESPONSE TO COMMENT I-SUSAN WORDEN-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions.

Letter I-Susan Worden-2

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Susan Worden
Rio Vista, CA

II.7.146 LETTER I-SUSAN WORDEN-2 — SUSAN WORDEN — DATED JANUARY 6, 2020

II.7.146.1 RESPONSE TO COMMENT I-SUSAN WORDEN-2-1

This is an exact duplicate of Response to Comment I-Susan Worden-1. Please see that Response to Comment, above.

Letter I-Melinda Wright-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

While considering policy on the San Francisco Bay-Delta Estuary, please keep two concepts foremost: sustainability and biodiversity.

It is unacceptable that the California Department of Water Resources has proposed a plan to weaken protections for salmon and allow increased diversions by big ag interests. We are watching the indispensable and irreplaceable delta ecosystem being destroyed. We are watching the ongoing extinction of salmon. We absolutely must reverse course.

Stop ignoring science. Never collude with the rogue administration in DC to ignore the overwhelming public interest in protecting the health of our rivers and delta.

We need sustainable water use in California, and land use is going to have to change. Dominance of water policy by Westlands and big ag is completely unacceptable.

California has the tools and creativity to reduce water diversions from the Bay-Delta while sustaining our economy. What we need is the political will from our leaders.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Melinda Wright
Groveland, CA

II.7.147 LETTER I-MELINDA WRIGHT-1 — MELINDA WRIGHT — DATED JANUARY 6, 2020

II.7.147.1 RESPONSE TO COMMENT I-MELINDA WRIGHT-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. In accordance with CEQA, the lead agency (DWR) will utilize its own judgement, based on substantial evidence presented in the EIR, when making decisions on the project.

From: [Linda Wuy](#)
To: [LTO](#)
Subject: Governor's Delta Water Proposal
Date: Wednesday, January 1, 2020 3:22:48 PM

As a California resident and citizen of the world, I am deeply concerned about your proposal for the Sacramento/San Joaquin Delta. Scientific study after study by state and federal scientists over the years says that water flows must INCREASE to maintain the health of the ecosystem, not decreasing it by sending more water South. Ignoring the science of the Delta is deplorable for a governor who routinely attacks our Pychopath-in-Charge Trump for not accepting scientists' conclusions on the threat of climate change.

1-1

Don't become a mini-Trump and do damage that will never be undone. Do the right thing.

Respectfully,
Linda Wuy

--

Linda Wuy
510-710-3050 cell

II.7.148 LETTER I-LINDA WUY-1 — LINDA WUY — DATED JANUARY 1, 2020

II.7.148.1 RESPONSE TO COMMENT I-LINDA WUY-1-1

As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The DEIR addresses potential impacts to Delta health and concluded that, based on scientific analysis, the proposed long-term operations of the SWP would not result in significant impacts. This discussion is found in DEIR Chapters 4.2, “Hydrology,” 4.3, “Surface Water Quality,” and 4.4, “Aquatic Biological Resources.” DEIR Chapter 5, “Alternatives to the Proposed Project,” analyzed alternatives to the project, some of which include increased freshwater flows through the Delta during specific times of the year to benefit aquatic species. Refined Alternative 2b is further described in FEIR Part III, Chapter 5.3, “Refined Alternative 2b - Proposed Project with Dedicated Water for Delta Outflow from SWP.” Please see Master Response 10, “Climate Change,” for more discussion of climate change.

From: [Tynan Wyatt \(tynanwyatt@aol.com\) Sent You a Personal Message](mailto:tynanwyatt@aol.com)
To: [LTO](#)
Subject: LTO of SWP Project - public comment
Date: Sunday, December 29, 2019 2:09:23 PM

Dear CA Department of Water Resources,

Dear Mr. Chao:

Farmers will always want more water. If they aren't growing citrus or stone fruit then it'll be cotton and alfalfa or the next thirstiest, but more lucrative, crop. This "solution" will only bring the delta smelt that much closer to extinction while degrading the level of this already compromised habitat.

I strongly urge the Department of Water Resources to revise its proposed operations plan for the State Water Project.

For years, the Bay-Delta ecosystem has been severely depleted of freshwater flows that has led to the loss of natural habitat for species and reduced the livelihood of residents in Delta communities.

This current proposal will only make things worse. DWR is proposing to increase freshwater exports, reduce flows through the Bay-Delta estuary, and weaken protections for salmon and other imperiled fish in an already vulnerable ecosystem.

This is unacceptable.

California needs to operate its water management systems in a manner that is in accordance with the Delta Reform Act's policy of reducing reliance on the Delta and strengthens protections for California's native fish and wildlife species. Thank you.

Sincerely,

Tynan Wyatt
434 D St
Chula Vista, CA 91910
tynanwyatt@aol.com
(661) 555-5555

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Sierra Club. Please contact Lillian Miller at core.help@sierraclub.org or (415) 977-5500 for more information.

1-1

II.7.149 LETTER I-TYNAN WYATT-1 — TYNAN WYATT — DATED DECEMBER 29, 2019

II.7.149.1 RESPONSE TO COMMENT I-TYNAN WYATT-1-1

Please see Master Response 28, “Form Letter Response – Sierra Club,” in FEIR Part II.1.28. As noted in DEIR Chapter 3.1.1, “Project Purpose and Objectives,” DWR intends to continue ongoing, long-term SWP operations consistent with applicable laws, contractual obligations, and agreements. The DEIR does not include specific water delivery objectives. The project objectives, which reference the need to optimize water supply, do not require that water exports will be increased. Further, please note the FEIR identifies Refined Alternative 2b as the preferred alternative. Under Refined Alternative 2b, the total amount of SWP water exported from the Delta would generally remain the same as under Existing Conditions. The SWP serves more than 20 million Californians, as well as providing water for agriculture and industry. The issue of water demand by agricultural or other end-users of SWP-provided water is outside the scope of the proposed project and DEIR analysis. Please also see Master Response 6, “Demand Management/Conservation Measures.”

Letter I-Mark Zhou-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please, this is our planet Earth and don't let Trump get away with his ways for his own profit. When will the political figures finally stop thinking about their own profits, like fossil fuels sponsors, and realize it is going to be too late to act about the environment? There is nothing they don't already know about climate change and the science is crystal clear, but they don't care for they think only for themselves and their party. When there are so many corrupt people in the government denying climate change, it is going to be too late when they finally start realizing the importance of our home, compared to their profit.

Thanks so much for your time.

Mark Zhou
Pleasanton, CA

II.7.150 LETTER I-MARK ZHOU-1 — MARK ZHOU — DATED JANUARY 6, 2020

II.7.150.1 RESPONSE TO COMMENT I-MARK ZHOU-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Please see Master Response 10, “Climate Change,” for discussion of the climate change sensitivity analysis undertaken as part of the DEIR and FEIR.

Letter I-Carol Zimmerman-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

Human interference--to accommodate our wish to earn \$\$\$ at any cost--has already damaged the Bay-Delta Estuary. Have we not learned a lesson from past mistakes?

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

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California has the tools it needs to fight back against the Trump administration and protect our water quality and wildlife.

The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Carol Zimmerman
Palo Alto, CA

II.7.151 LETTER I-CAROL ZIMMERMAN-1 — CAROL ZIMMERMAN — DATED JANUARY 6, 2020

II.7.151.1 RESPONSE TO COMMENT I-CAROL ZIMMERMAN-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Master Response 4, “Legal Standards” provides discussion regarding the existing condition of the Delta.

Letter I-Catherine Zukowski-1

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I moved from Chicago, which has an abundance of water, 11 years ago to make my home in Los Angeles. Water shortages were never an issue growing up in the midwest. I have been made acutely aware of the extreme importance of protecting and maintaining the natural environment, especially water resources. One of the things that made California home was that the California government and its citizens lead the nation on sustainable environmental policies. We cannot allow the Trump administration to threaten Northern Californian's drinking water and the salmon survival in the estuary. This Administration has proven that sound science is not a part of their policies. Trump has a personal vendetta, in my opinion against California. Our officials must protect what is left of the natural environment.

I urge you to do everything you can to protect the San Francisco Bay-Delta Estuary from the Trump administration's reckless scheme to increase water diversions in the region.

The Trump administration's proposal would likely drive native species extinct, worsen water quality, and threaten thousands of fishing jobs.

And it's unacceptable that the California Department of Water Resources has proposed a similar plan to weaken protections for salmon and other endangered species in the Bay-Delta. Please reverse course and prioritize increasing the amount of water flowing through the estuary during the critical winter and spring months.

The health of our rivers is extremely important to me, the 25 million Californians who depend on the delta for drinking water, and the thousands of people who depend on the fishing industry for their livelihoods.

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The state must rely on established science and use its legal authority to stop this reckless proposal and safeguard salmon and all of the communities and economies that rely on the Bay-Delta Estuary.

By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Catherine Zukowski
Los Angeles, CA

II.7.152 LETTER I-CATHERINE ZUKOWSKI-1 — CATHERINE ZUKOWSKI — DATED JANUARY 6, 2020

II.7.152.1 RESPONSE TO COMMENT I-CATHERINE ZUKOWSKI-1-1

Please see Master Response 27, “Form Letter Response – NRDC,” in FEIR Part II.1.27. Potential environmental impacts from proposed long-term operations of the SWP were analyzed in the DEIR which concluded, based on scientific analysis, that impacts would be less than significant. The statement regarding California leading the nation on sustainable environmental policies is noted but does not require a response.

Letter I-Catherine Zukowski-2

January 6, 2020

Dear Director of California's Department of Water Resources Karla Nemeth

Cc: Director of California's Department of Fish and Wildlife Charlton Bonham

Cc: Secretary of California's Natural Resources Wade Crowfoot

Cc: Governor Gavin Newsom

I moved from Chicago, which has an abundance of water, 11 years ago to make my home in Los Angeles. Water shortages were never an issue growing up in the midwest. I have been made acutely aware of the extreme importance of protecting and maintaining the natural environment, especially water resources. One of the things that made California home was that the California government and its citizens lead the nation on sustainable environmental policies. We cannot allow the Trump administration to threaten Northern Californian's drinking water and the salmon survival in the estuary. This Administration has proven that sound science is not a part of their policies. Trump has a personal vendetta, in my opinion against California. Our officials must protect what is left of the natural environment.

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By investing in sustainable local and regional water supply projects like water recycling and improved water use efficiency, California can reduce water diversions from the Bay-Delta while sustaining our economy.

Please help protect and restore the San Francisco Bay-Delta estuary!

Thanks so much for your time.

Catherine Zukowski
Los Angeles, CA

**II.7.153 LETTER I-CATHERINE ZUKOWSKI-2 — CATHERINE ZUKOWSK2 — DATED
JANUARY 6, 2020**

II.7.153.1 RESPONSE TO COMMENT I-CATHERINE ZUKOWSKI-2-1

This is an exact duplicate of Response to Comment I-Catherine Zukowski-1. Please see that Response to Comment, above.