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## **Supplemental Modeling Results for New Alternatives**

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### B.1 Alternative 4A CALSIM II Sensitivity Analysis

#### B.1.1 Introduction

Given the similarities between the Alternative 4A included in the REIR/EIS, and the Alternative 4 of the draft EIR/EIS, a brief sensitivity analysis was performed using Alternative 4 CALSIM II models to understand if the incremental changes associated with Alternative 4A would be consistent with the incremental changes found for the Alternative 4 when compared to the No Action Alternative. This section summarizes the sensitivity analysis performed for Alternative 4A using CALSIM II models. It includes a summary of the CALSIM II assumptions and presents key CALSIM II model results from the sensitivity analysis.

#### B.1.2 Alternative 4A vs. Alternative 4

As described in Section 4 of the REIR/EIS, Alternative 4A is a dual conveyance alternative with proposed north Delta diversion (3 intakes of 3,000 cfs each), and existing south Delta intakes consistent with the Alternative 4 in the Draft EIR/EIS. Operational components of the water conveyance facilities under Alternative 4A would be similar, but not identical, to those described under Scenario H in Chapter 3, Section 3.6.4.2 of the Draft EIR/EIS. In contrast to the Scenario H operations proposed for Alternative 4 in the Draft EIR/EIS, under Alternative 4A, the decision tree process would not be used to determine the outflow criteria to be applied at the start of new operations. Instead, Alternative 4A includes a new criterion for spring outflow to specifically avoid unacceptable effects on longfin smelt, and also includes the Fall X2 requirements in the FWS (2008) BiOp. Thus, Alternative 4A operational criteria is similar to Alternative 4, and would fall within the range of Alternative 4 H3 and H4 decision tree outcomes.

Alternative 4A includes new facilities including north Delta intakes and the permanent head of Old River barrier, which would be operated based on the proposed operating criteria for each of these facilities, consistent with Alternative 4. Additionally, Alternative 4A includes a new minimum flow criterion at Rio Vista from January through August consistent with Alternative 4. All other criteria included in the FWS (2008) and NMFS (2009) BiOps and State Water Resources Control Board Water Right Decision 1641 (D-1641), including Fall X2, the E:I ratio, and operations of the Delta Cross Channel gates and the Suisun Marsh Salinity Control Gates will continue to be complied with as part of the continued operations of the CVP and SWP.

Alternative 4A would not include operational elements associated with Fremont Weir modifications as they would be assumed to occur as part of the No Action Alternative as may be required by the existing NMFS (2009) BiOp. Alternative 4A, further, only includes a limited portion of the tidal habitat restoration considered under the Conservation Measure 4 (CM4) of the draft BDCP that could affect the operations. In contrast to the 65,000 acres of tidal habitat restoration considered in the Alternative 4 from draft EIR/EIS, Alternative 4A would include less than 200 acres beyond the

1 tidal habitat restoration required under the existing FWS (2008) BiOp, which would also be part of  
2 the No Action Alternative.

### 3 **B.1.3 Modeling Approach**

4 For this sensitivity analysis, Alternative 4A was assumed to be represented by the Alternative 4 H3  
5 and H4 scenarios modified from the draft EIR/EIS, as two bookends. Table B-1 summarizes the  
6 differences between Alternative 4 and Alternative 4A that would potentially affect the CVP–SWP  
7 operations, and associated CALSIM II modeling assumption for the Alternative 4A sensitivity  
8 analysis. A full description of the CALSIM II modeling, and the assumptions used for Alternative 4  
9 are included in the Appendix 5A *Modeling Technical Appendix* of the draft EIR/EIS.

10 Alternative 4 H3 and H4 CALSIM II models from the draft EIR/EIS were modified to include  
11 following specific changes to represent Alternative 4A in this sensitivity analysis.

- 12 • ANN used in CALSIM II to simulate flow–salinity relationship in the Delta under Alternative 4  
13 was modified to be consistent with the No Action Alternative, which does not include any effects  
14 associated with tidal habitat restoration in the Delta.
- 15 • Fremont Weir notch was not included consistent with the No Action Alternative.
- 16 • Assumed D-1641 agricultural salinity compliance location on the Sacramento River at Threemile  
17 Slough was reverted back to Emmaton location consistent with the No Action Alternative.

18 All the remaining CALSIM II assumptions for Alternative 4A remained consistent with Alternative 4  
19 including the assumptions related to the water supply allocation and reservoir balancing. These  
20 sensitivity runs did not include any additional refinements.

21 **Table B-1. Differences between Alternative 4 and Alternative 4A that Potentially Affect the CVP–SWP**  
22 **Operations**

	Alternative 4	Alternative 4A	CALSIM II Assumption for Alternative 4A Sensitivity Analysis
Spring Delta Outflow beyond D-1641 requirements	Included as part of Alternative 4 decision tree scenario H4	Included; outflow requirement within the range of Alternative 4 decision tree scenarios H3 and H4	Modeled as two scenarios with Alternative 4 H3 and H4 Delta outflow criteria as bookends
Fremont Weir modification, and operations	Included as part of CM2	Not included; considered as part of the No Action Alternative	Not included
Tidal habitat restoration	Included as part of CM4 (25,000 acres at ELT and 65,000 acres at LLT)	Less than 200 acres beyond 8,000 acres required under FWS (2008) BiOp	Not included
Shift of D-1641 Emmaton water quality compliance location to Threemile Slough	Included as part of Alternative 4 in the Draft EIR/EIS	Not included	Not included

23

1 Alternative 4A sensitivity analysis CALSIM II models were simulated for both Early Long-term (ELT)  
 2 and Late Long-term (LLT) conditions. ELT conditions represent projected climate change (Q5) at  
 3 about year 2025 and a sea level rise assumption of 15 cm at the Golden Gate Bridge. Similarly, LLT  
 4 conditions represent projected climate change (Q5) at about year 2060 and a sea level rise  
 5 assumption of 45 cm.

6 For the Alternative 4A sensitivity analysis Alternative 4 CALSIM II models from draft EIR/EIS were  
 7 used as is, without including any recent updates to the CALSIM II since the draft EIR/EIS was  
 8 completed, to remain consistent with the draft EIR/EIS modeling.

9 This approach allowed in verifying if the draft EIR/EIS modeling could be used to inform Alternative  
 10 4A impact analysis in the REIR/EIS.

## 11 **B.1.4 Results**

12 A representative set of key CALSIM II results from this sensitivity analysis are included in this  
 13 section for both ELT (Figures B-1 – B-36) and LLT (Figures B-35 – B-72) conditions. Results  
 14 presented include:

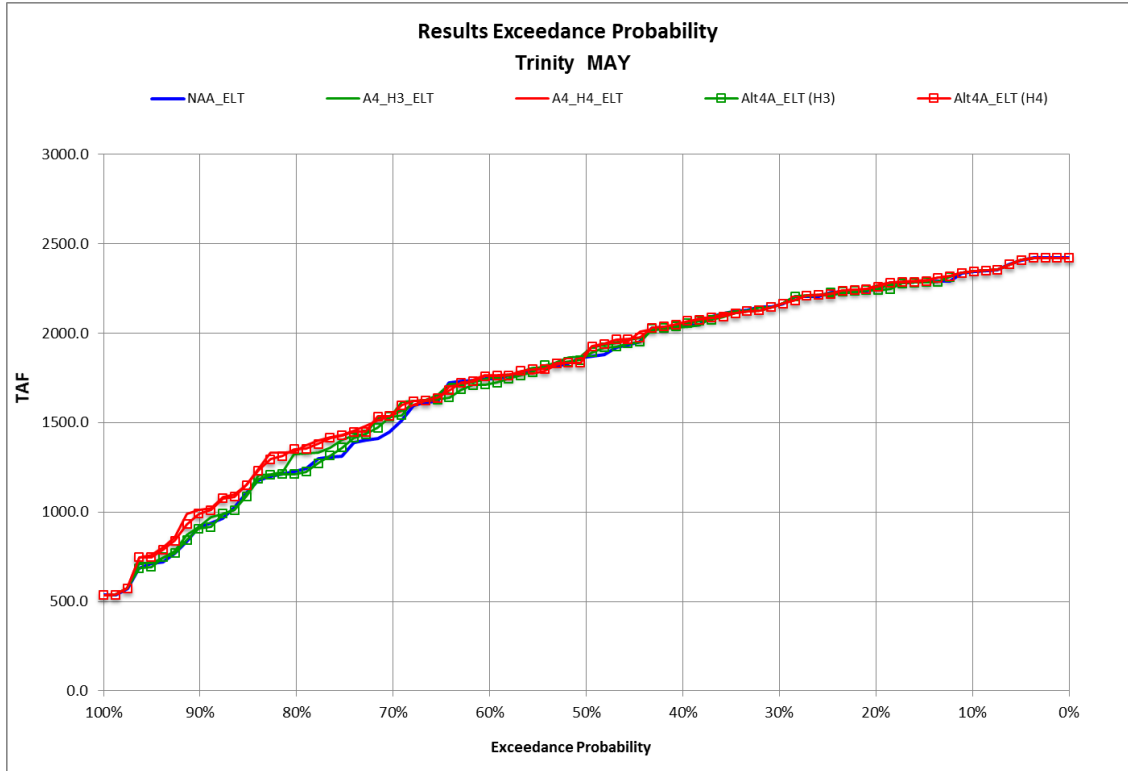
- 15 • Probability of exceedance plots of end of May and end of September storage conditions for  
 16 Trinity, Shasta, Oroville, Folsom and San Luis (CVP and SWP portions) reservoirs.
- 17 • Monthly flows averaged by water year type (wet and dry) for key locations on Trinity River,  
 18 Sacramento River, Feather River, American River, San Joaquin River, Delta Outflow and  
 19 Combined Old and Middle River flows.
- 20 • Probability of exceedance plots of the spring and fall average X2 conditions
- 21 • Probability of exceedance plots of the annual total Delta exports
- 22 • Long-term average proportion Delta exports from the north and south intakes

23 Each figure includes five (5) scenarios as summarized below:

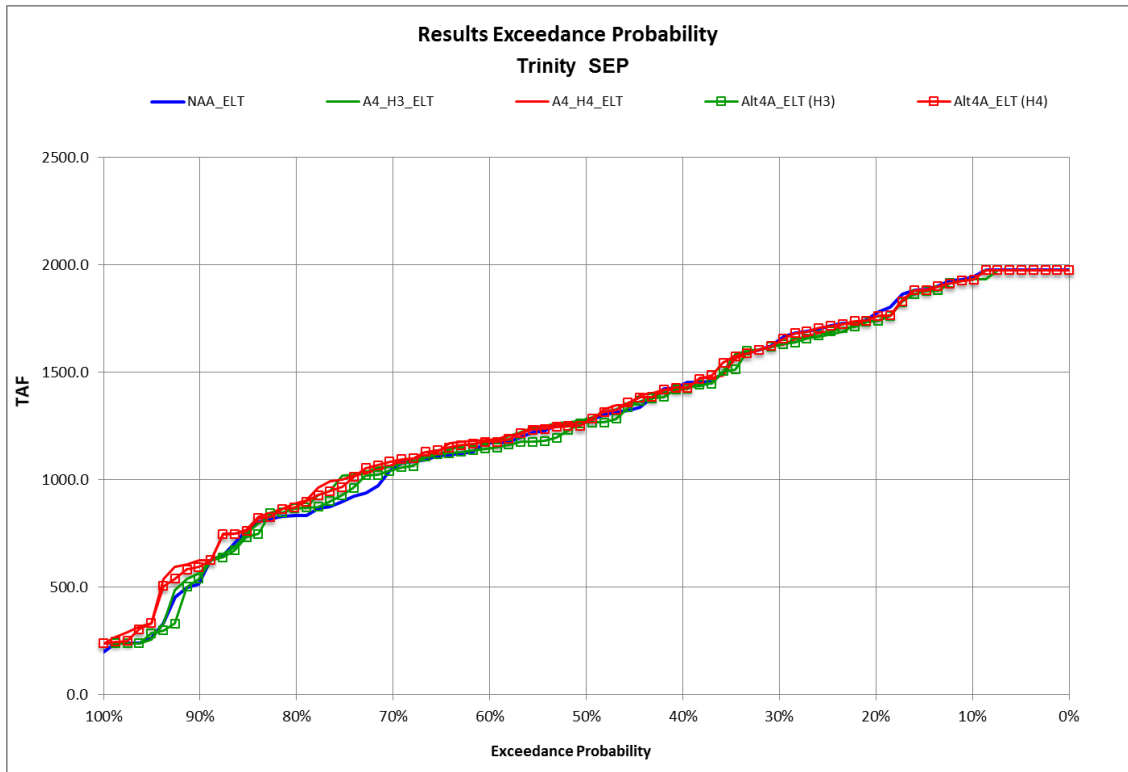
- 24 1. NAA: No Action Alternative
- 25 2. A4\_H3: Draft EIR/EIS Alternative 4 H3
- 26 3. A4\_H4: Draft EIR/EIS Alternative 4 H4
- 27 4. Alt4A (H3): Draft EIR/EIS Alternative 4 H3 without CM2, without CM4 and without shift in  
 28 Emmaton compliance to Threemile Slough
- 29 5. Alt4A (H4): Draft EIR/EIS Alternative 4 H4 without CM2, without CM4 and without shift in  
 30 Emmaton compliance to Threemile Slough

31 As shown in the figures Alt4A (H3) and Alt4A (H4) CALSIM II results are generally similar to A4\_H3  
 32 and A4\_H4, respectively. The results indicate that the incremental changes for Alt4A (H3) and Alt4A  
 33 (H4) when compared to the No Action Alternative are trending similar to A4\_H3 and A4\_H4, at both  
 34 ELT and LLT.

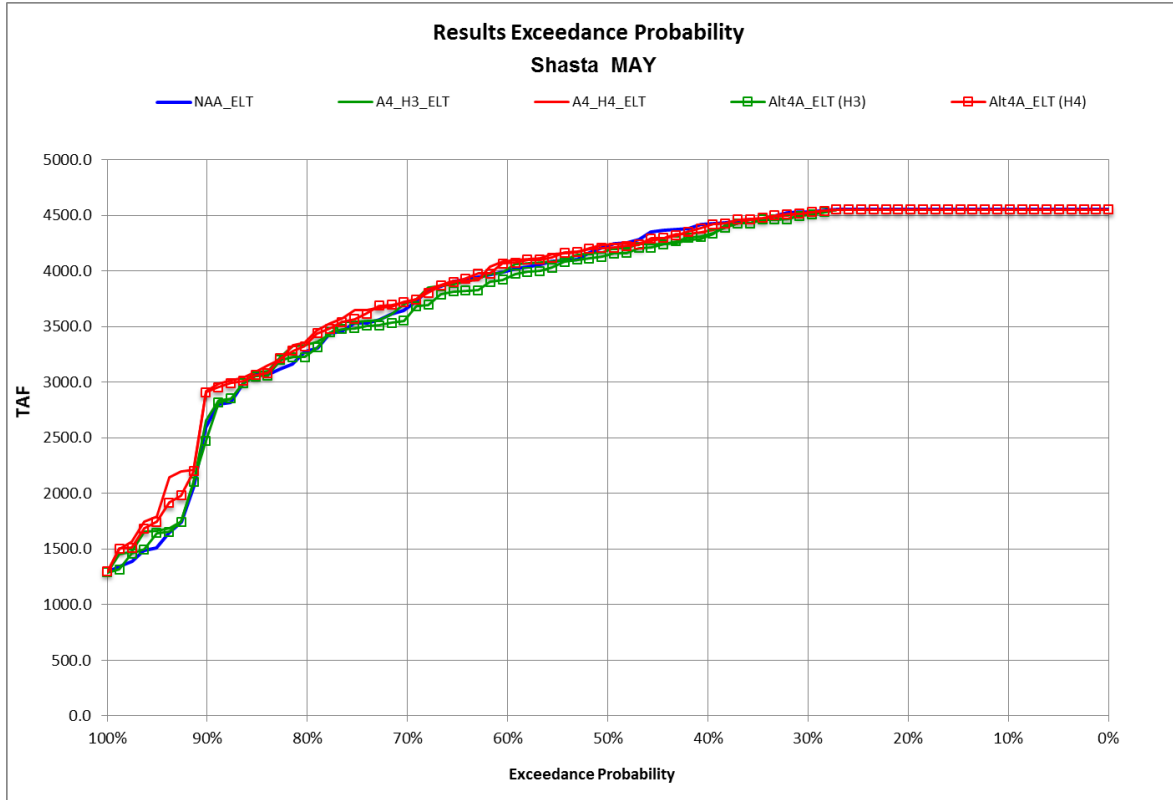




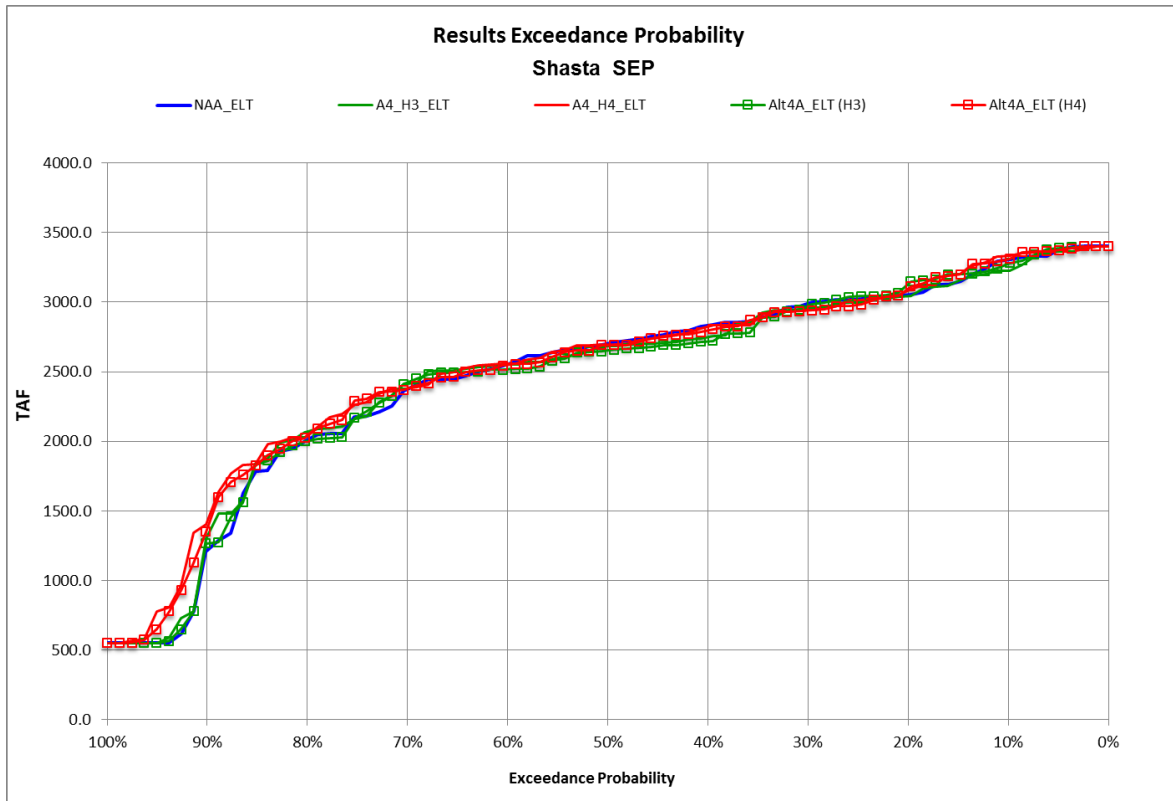
1  
2 **Figure 1. Storage Exceedance Probability for Trinity, End of May (ELT).**



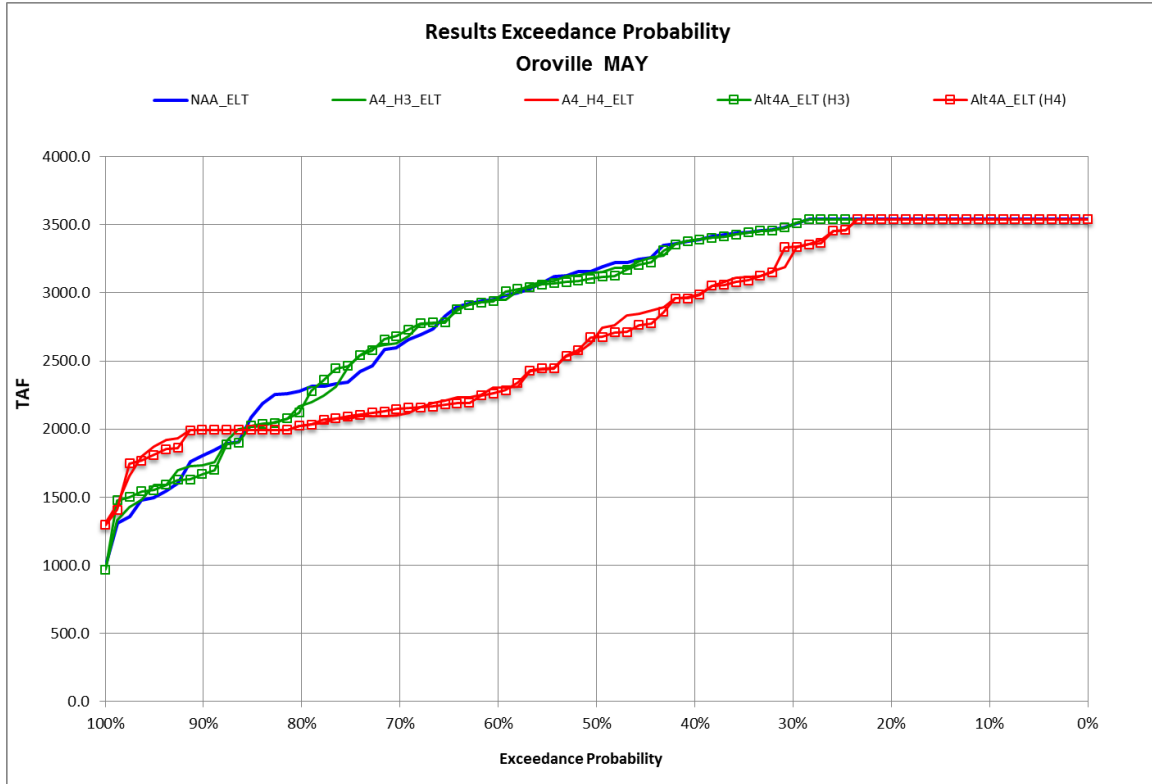
3  
4 **Figure 2. Storage Exceedance Probability for Trinity, End of September (ELT).**



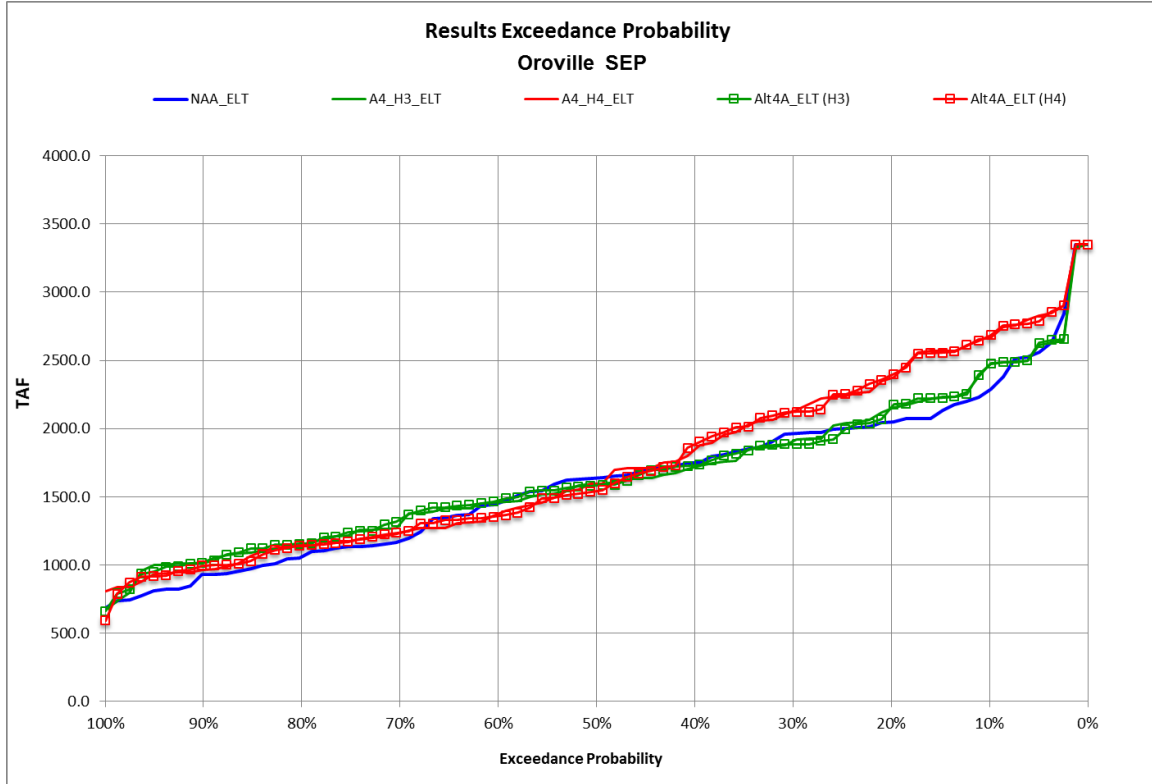
1  
2 **Figure 3. Storage Exceedance Probability for Shasta, End of May (ELT).**



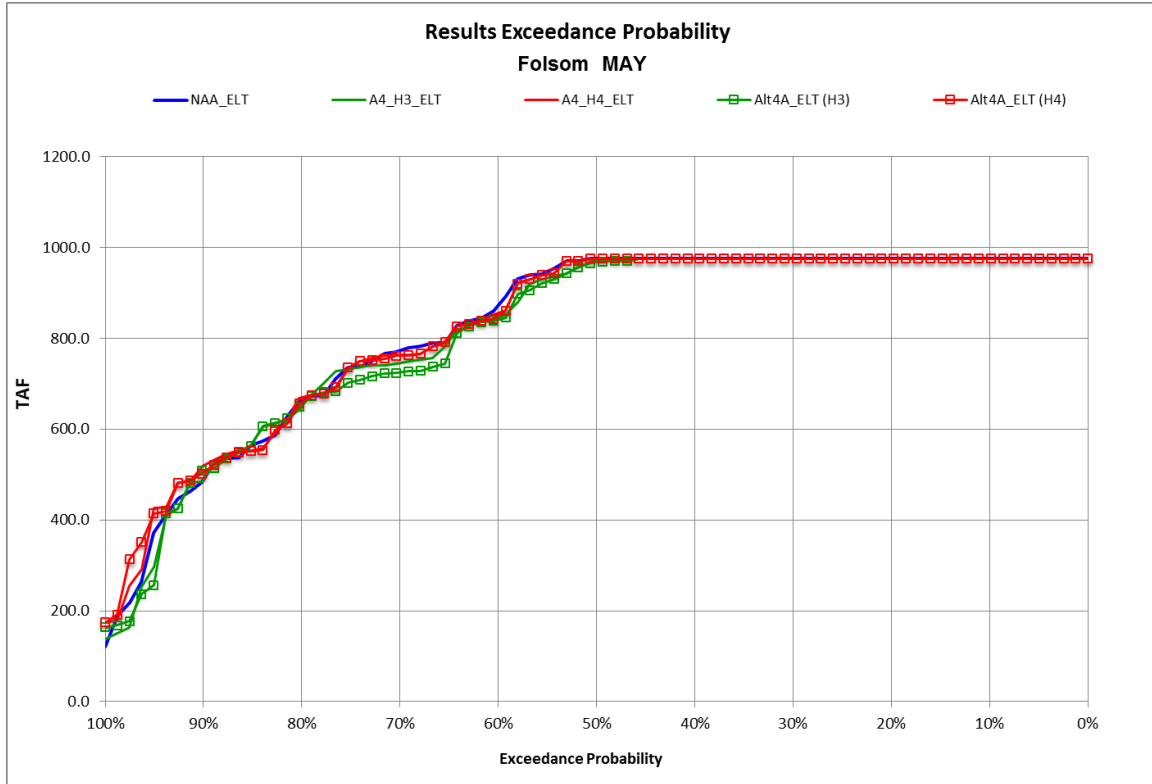
3  
4 **Figure 4. Storage Exceedance Probability for Shasta, End of September (ELT).**



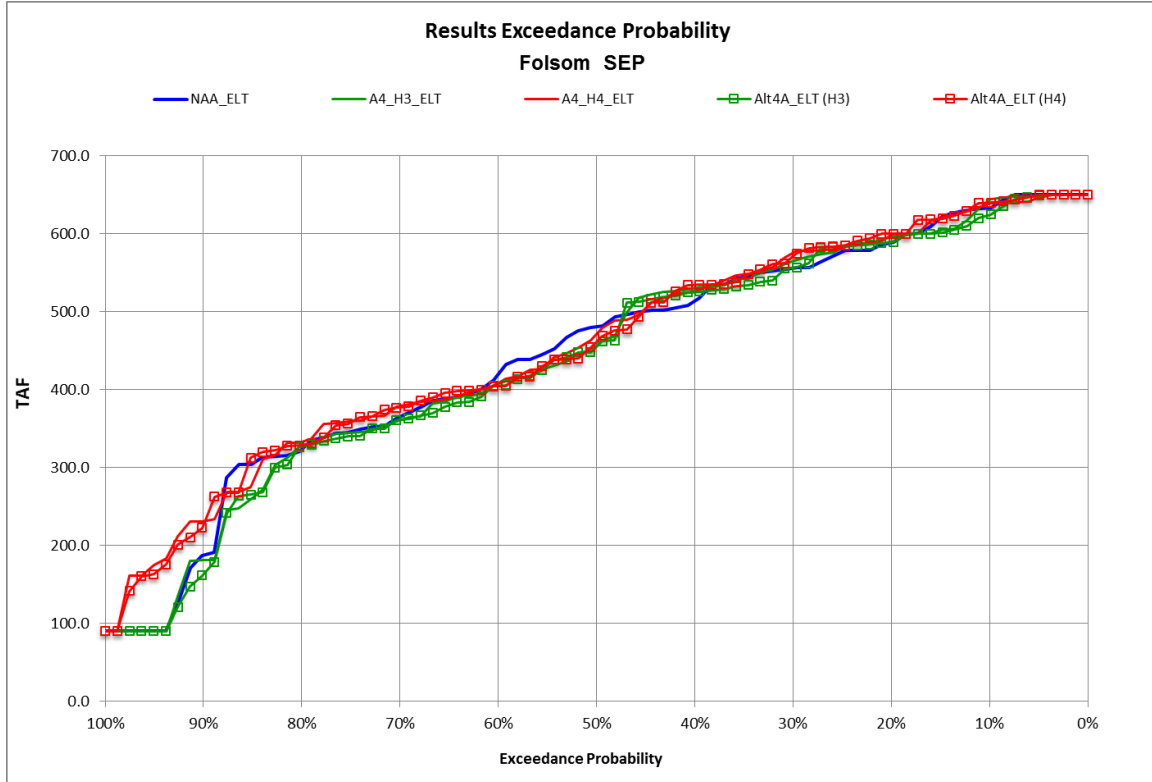
1  
2 **Figure 5. Storage Exceedance Probability for Oroville, End of May (ELT).**



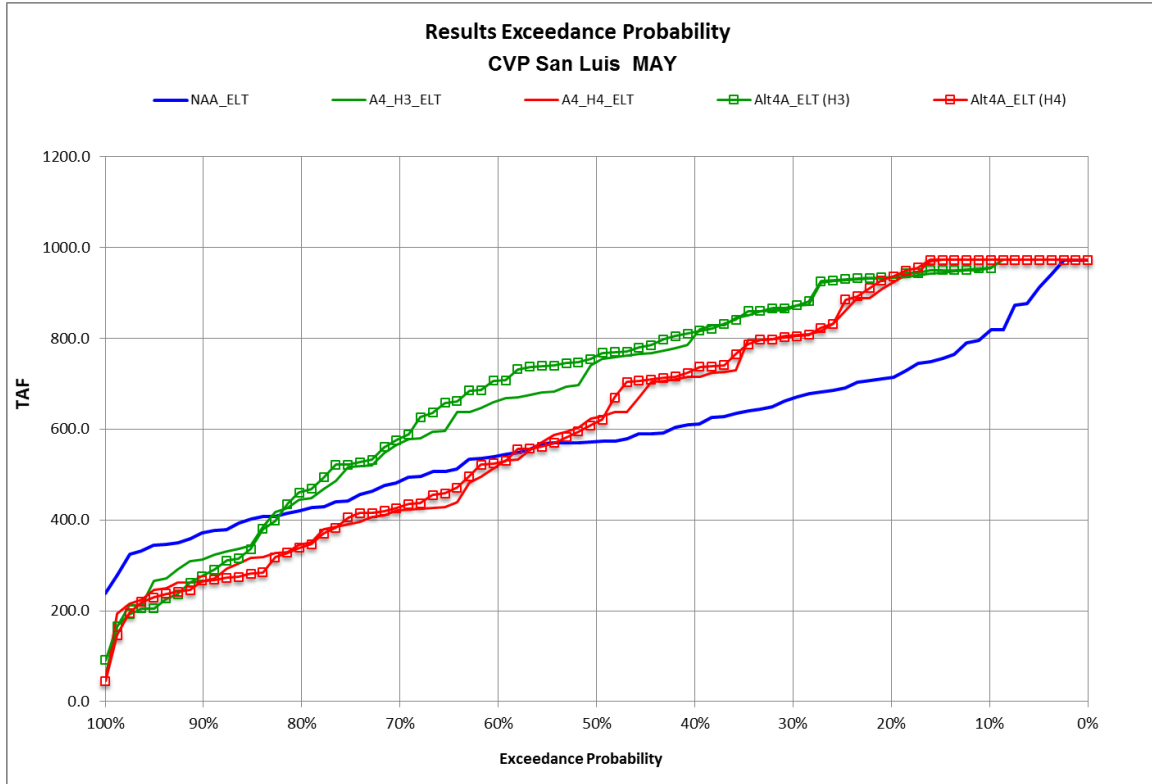
3  
4 **Figure 6. Storage Exceedance Probability for Oroville, End of September (ELT).**



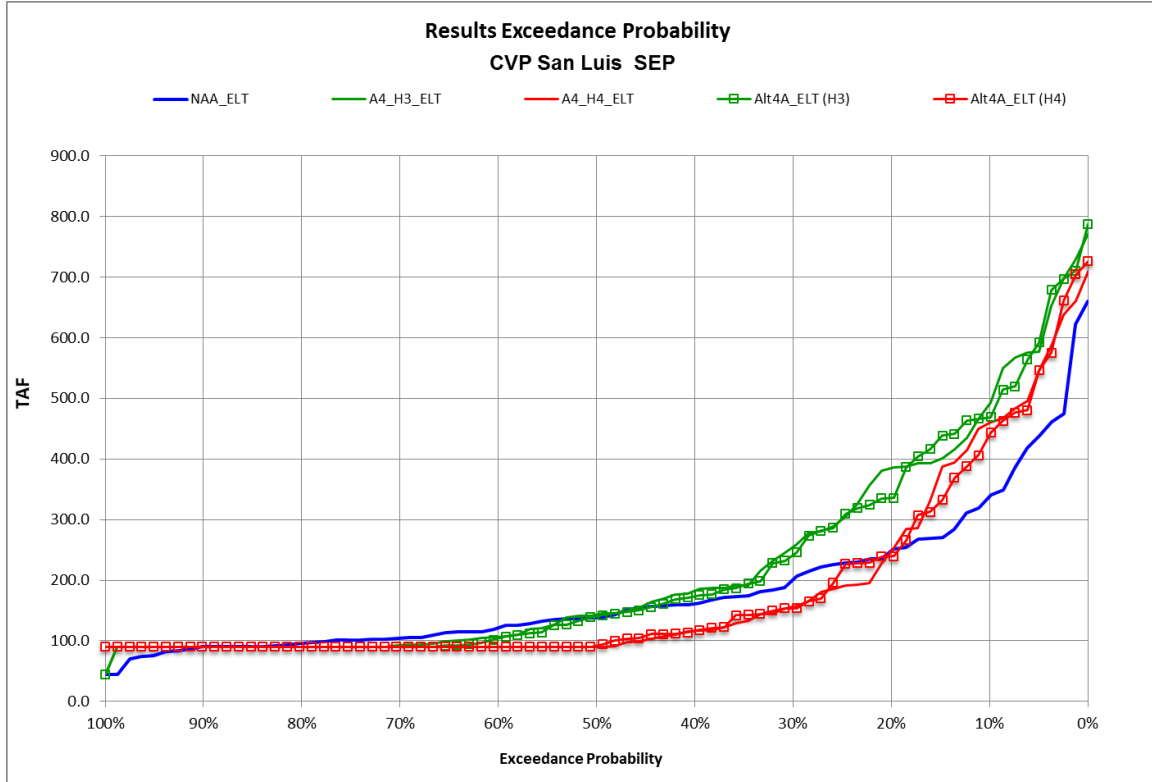
1  
2 **Figure 7. Storage Exceedance Probability for Folsom, End of May (ELT).**



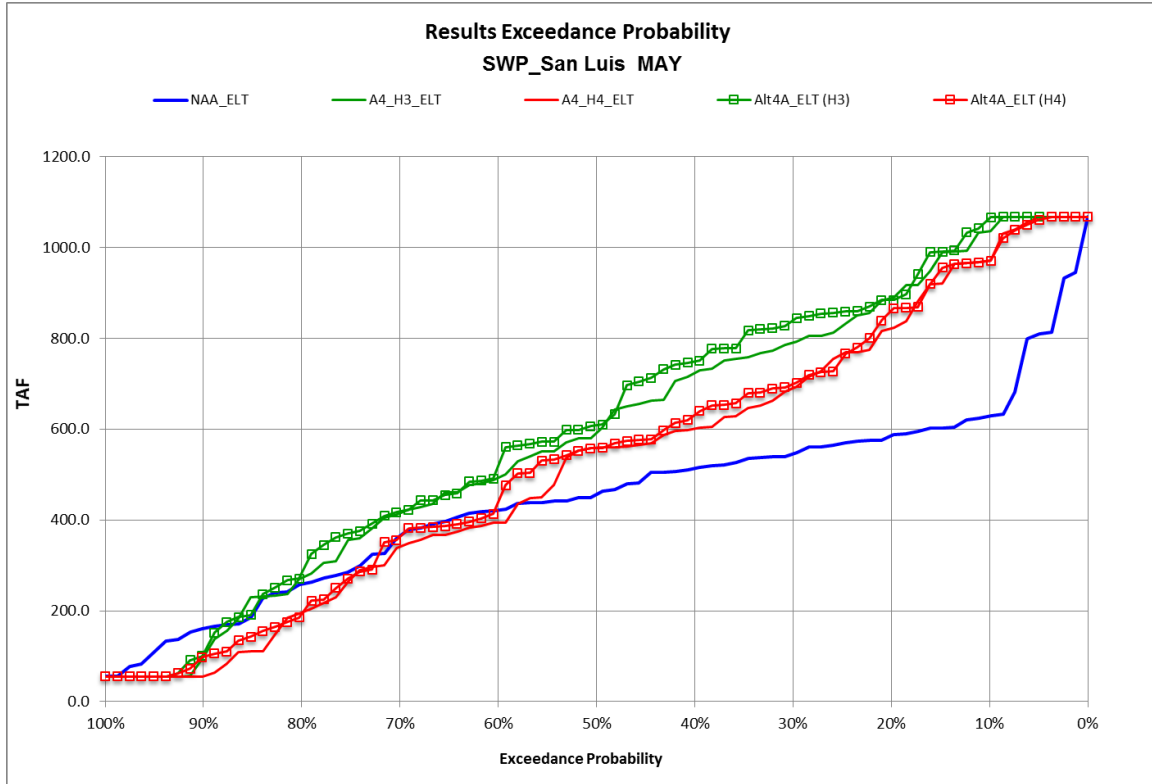
3  
4 **Figure 8. Storage Exceedance Probability for Folsom, End of September (ELT).**



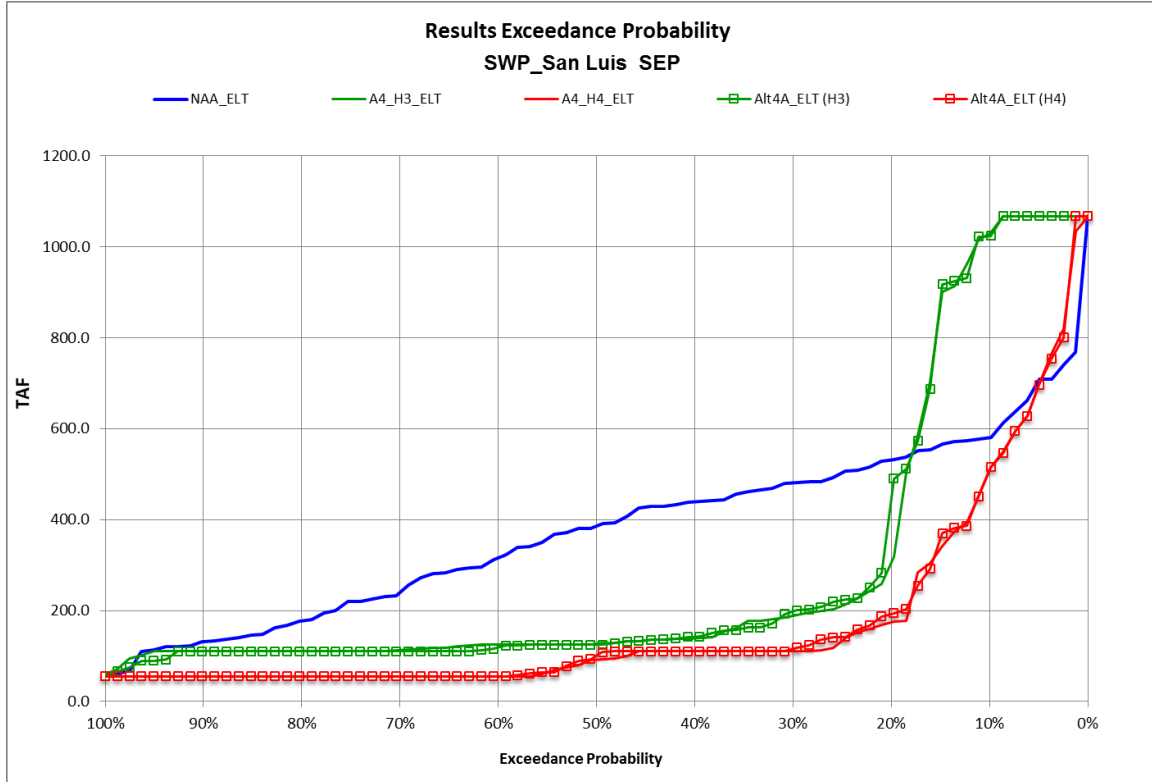
1  
2 **Figure 9. Storage Exceedance Probability for CVP San Luis, End of May (ELT).**



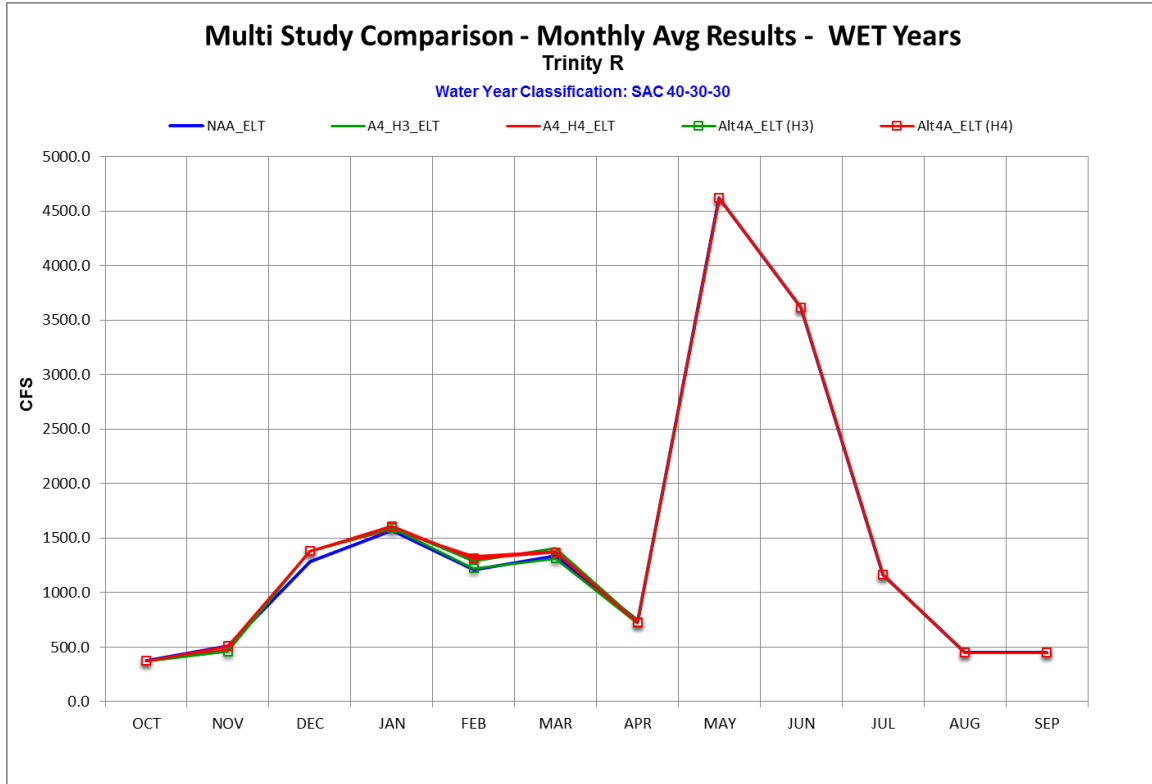
3  
4 **Figure 10. Storage Exceedance Probability for CVP San Luis, End of September (ELT).**



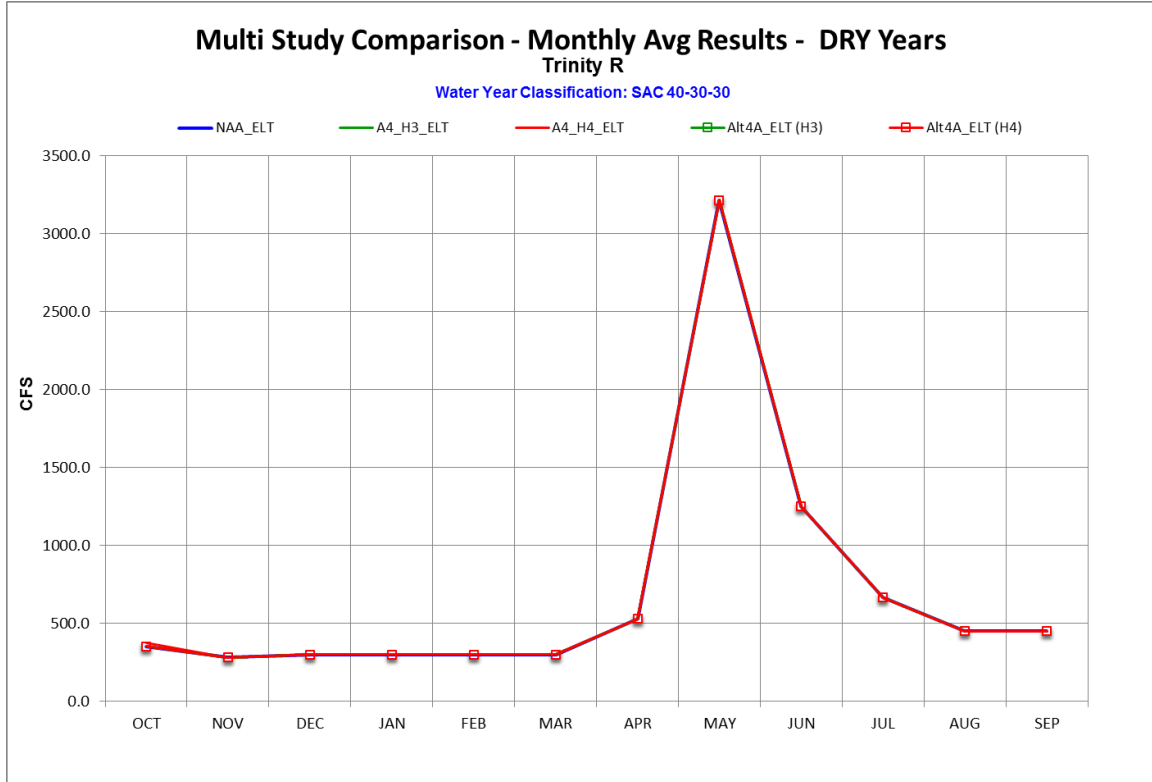
1  
2 **Figure 11. Storage Exceedance Probability for SWP San Luis, End of May (ELT).**



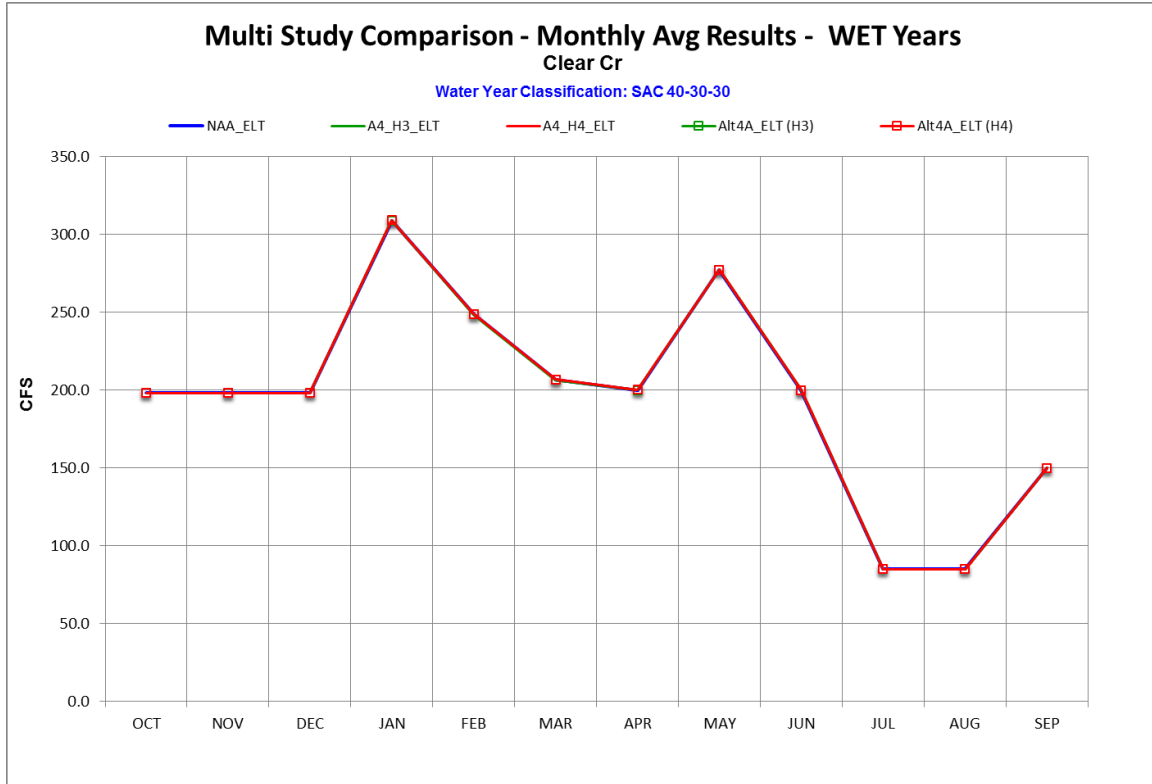
3  
4 **Figure 12. Storage Exceedance Probability for CVP San Luis, End of September (ELT).**



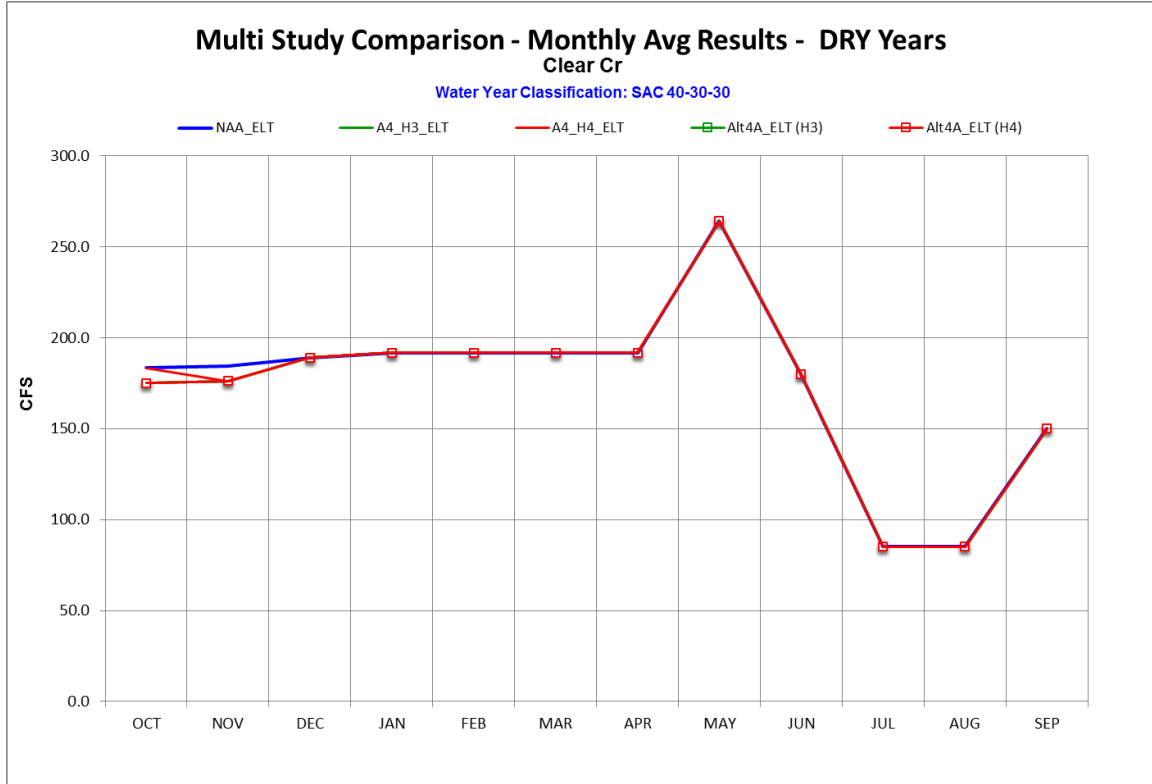
1  
2 **Figure 13. Monthly Average Flow for Trinity River in Wet Years (ELT).**



3  
4 **Figure 14. Monthly Average Flow for Trinity River in Dry Years (ELT).**

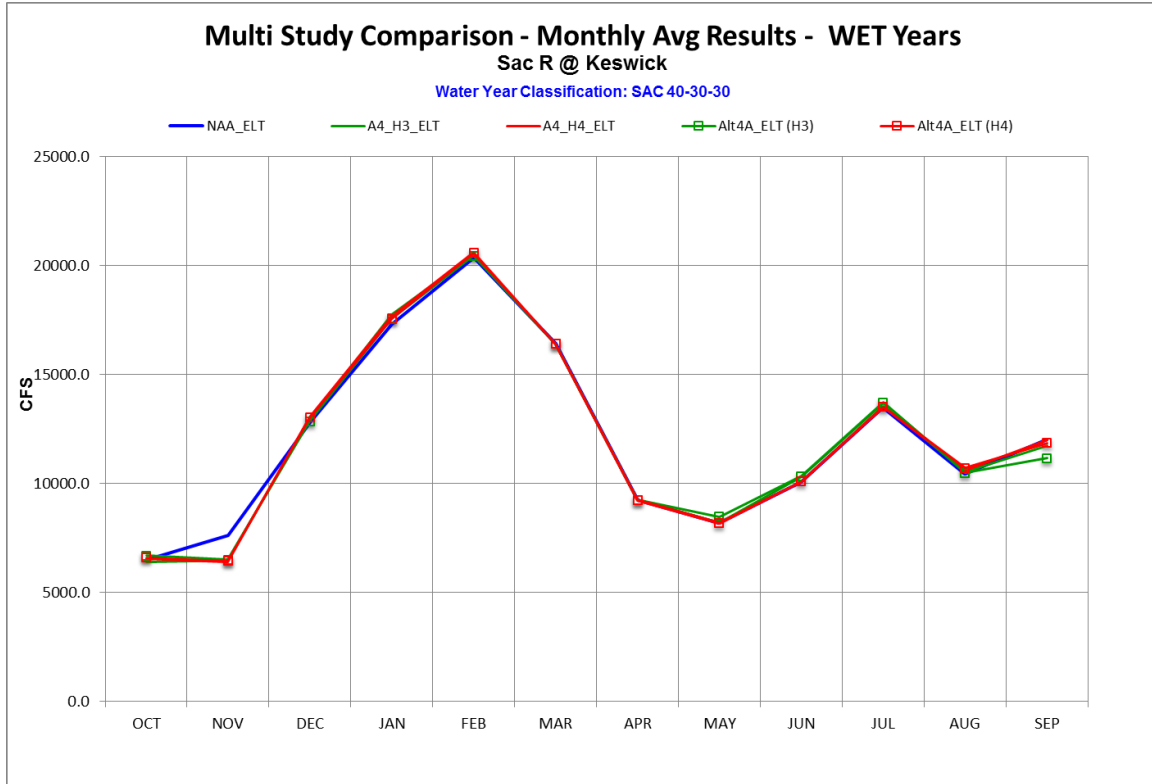


1  
2 **Figure 15. Monthly Average Flow for Clear Creek in Wet Years (ELT).**

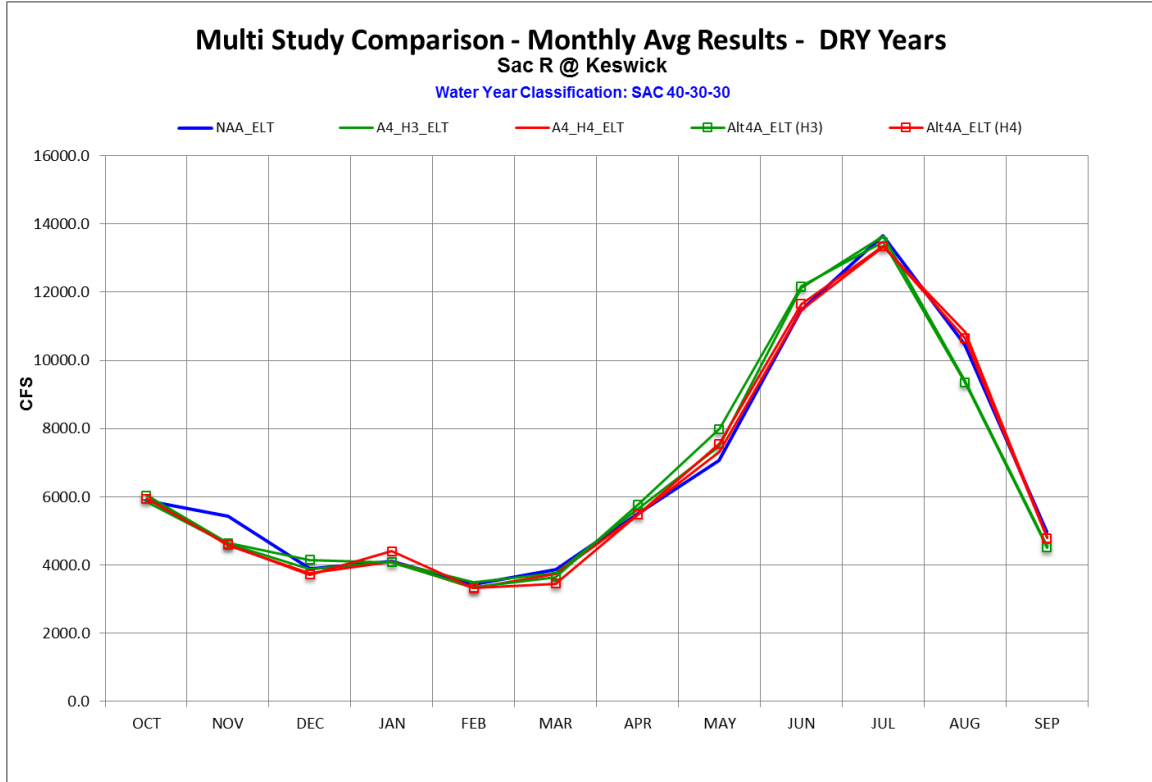


3  
4 **Figure 16. Monthly Average Flow for Clear Creek in Dry Years (ELT).**

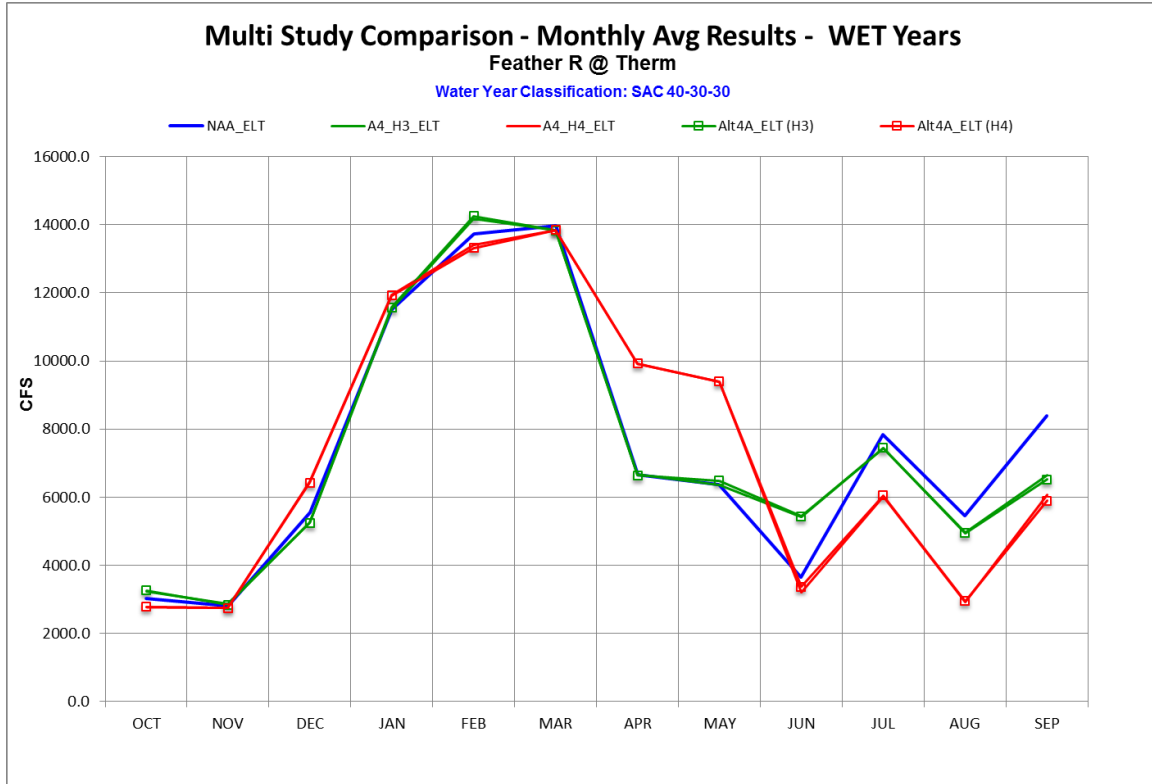




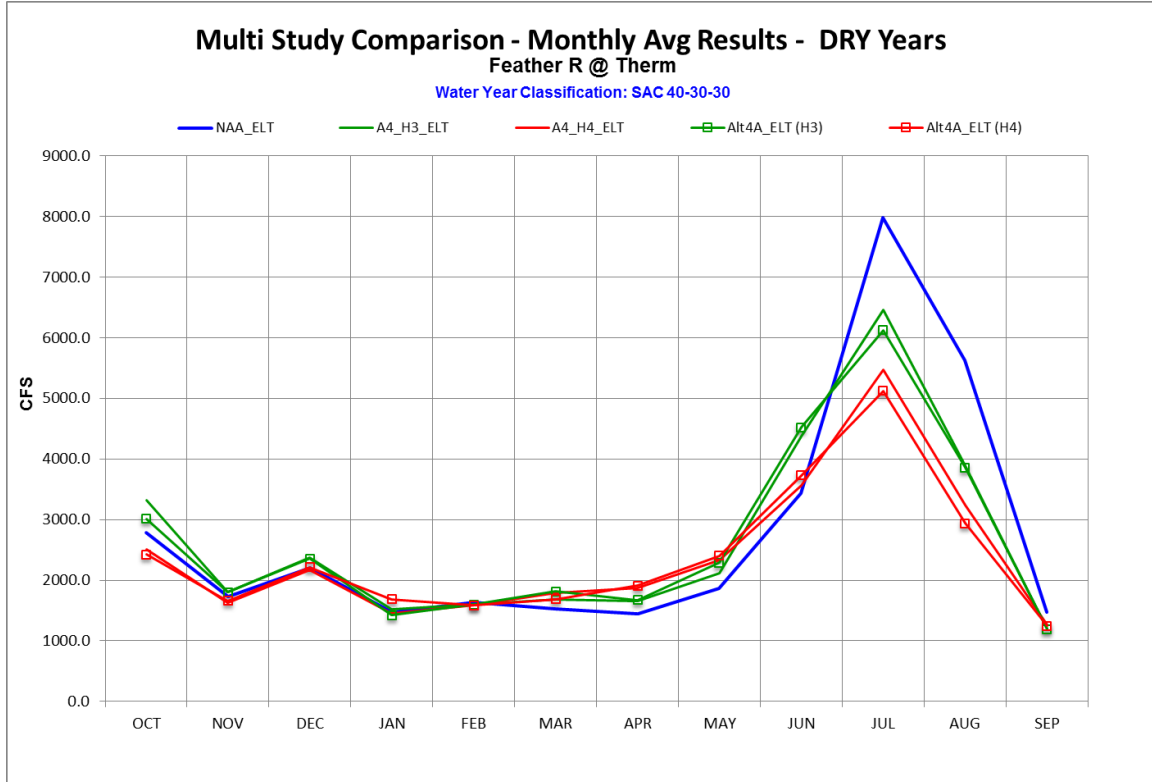
1  
 2 **Figure 17. Monthly Average Flow for Sacramento River at Keswick in Wet Years (ELT).**



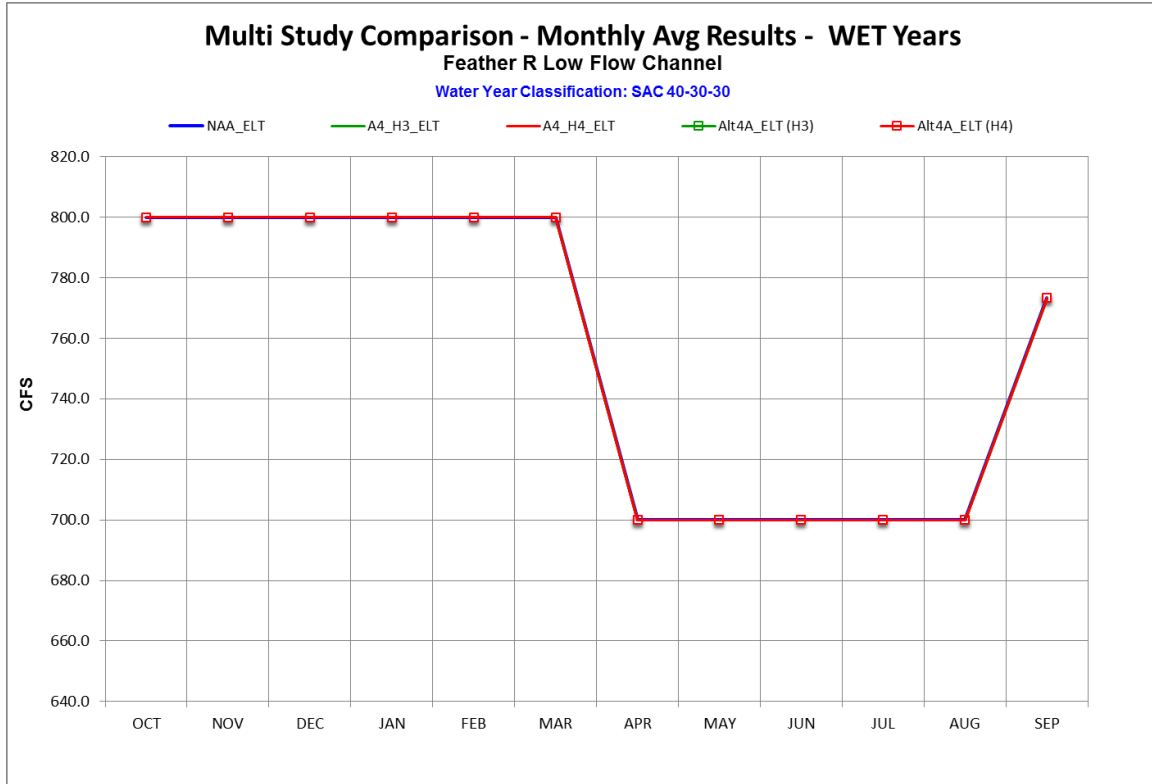
3  
 4 **Figure 18. Monthly Average Flow for Sacramento River at Keswick in Dry Years (ELT).**



1  
 2 **Figure 19. Monthly Average Flow for Feather River at Thermalito in Wet Years (ELT).**

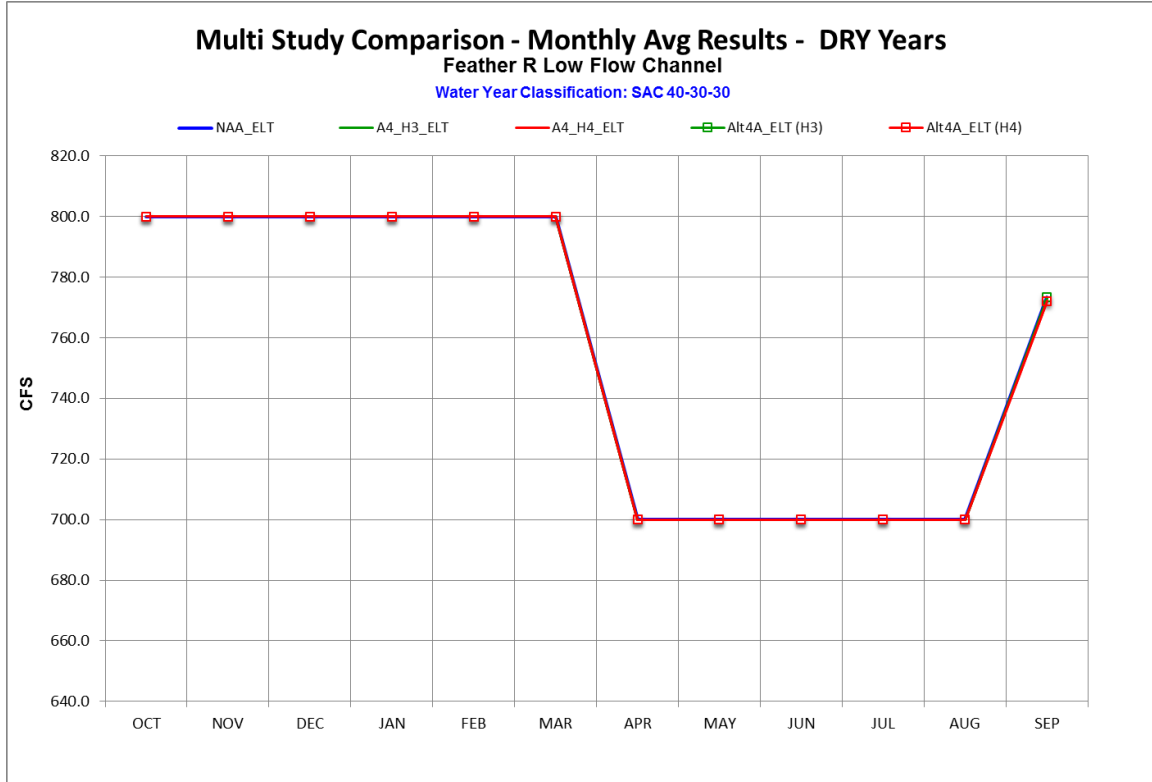


3  
 4 **Figure 20. Monthly Average Flow for Feather River at Thermalito in Dry Years (ELT).**



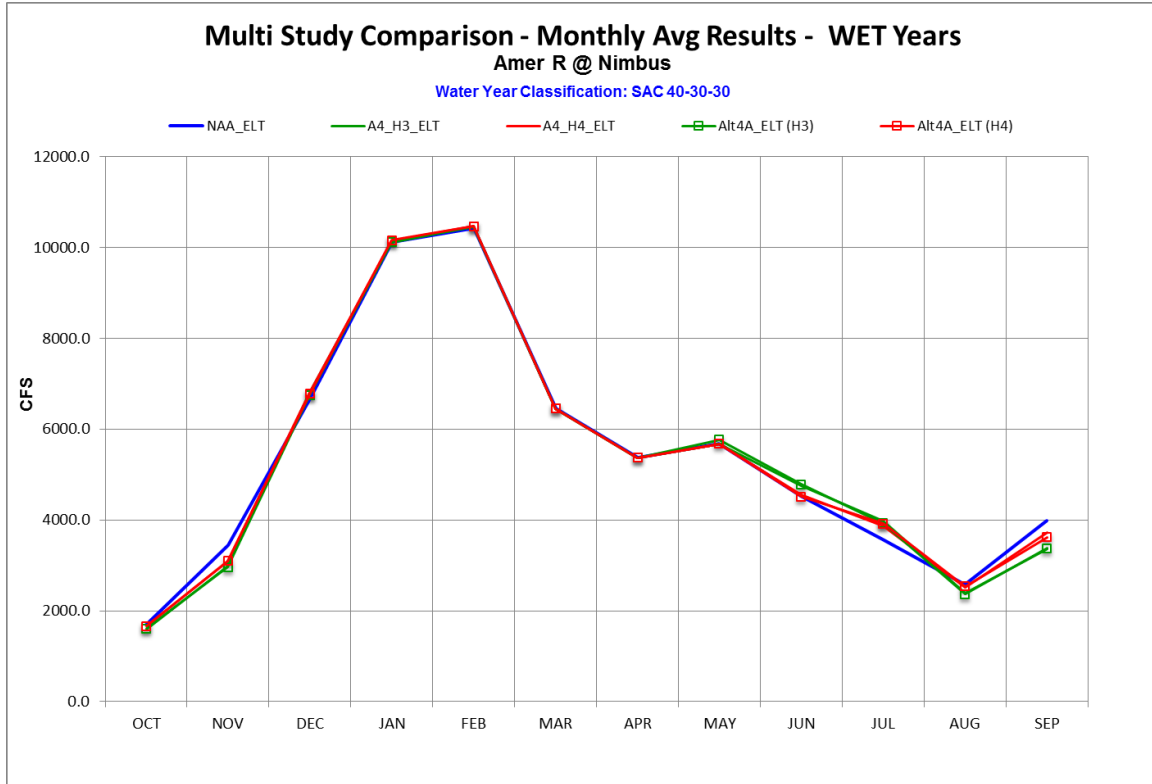
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2

Figure 21. Monthly Average Flow for Feather River Low Flow Channel in Wet Years (ELT).

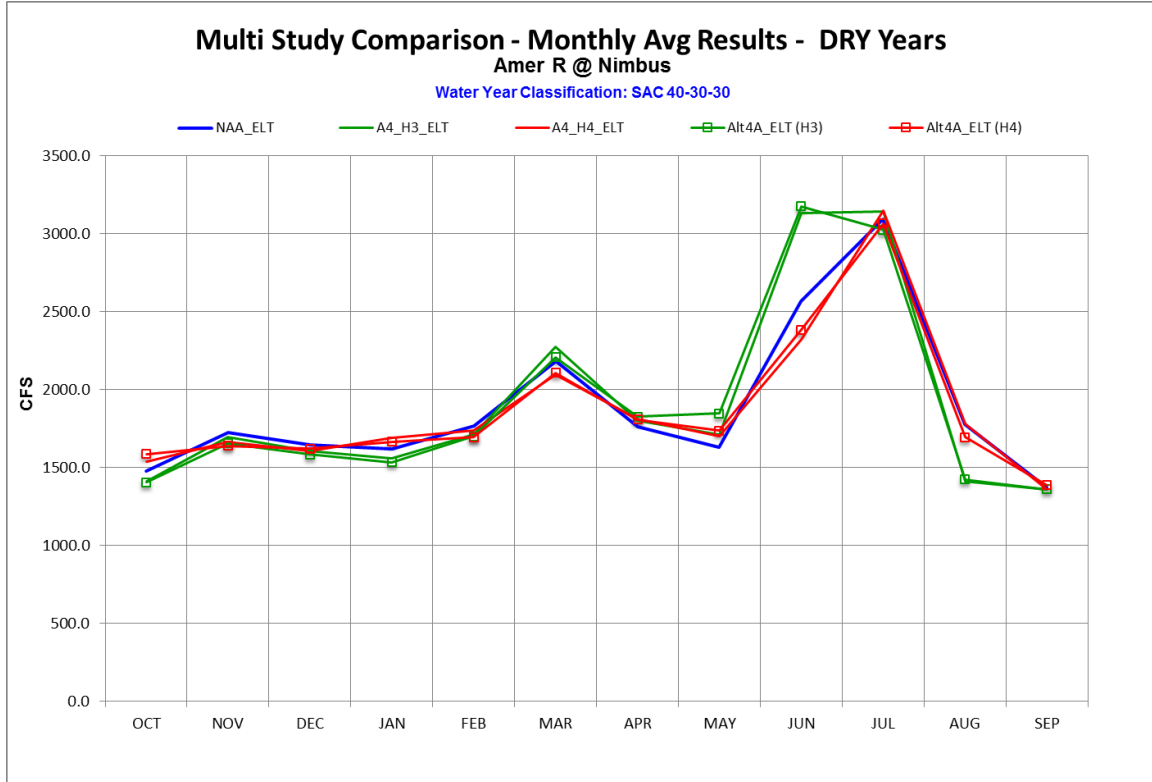


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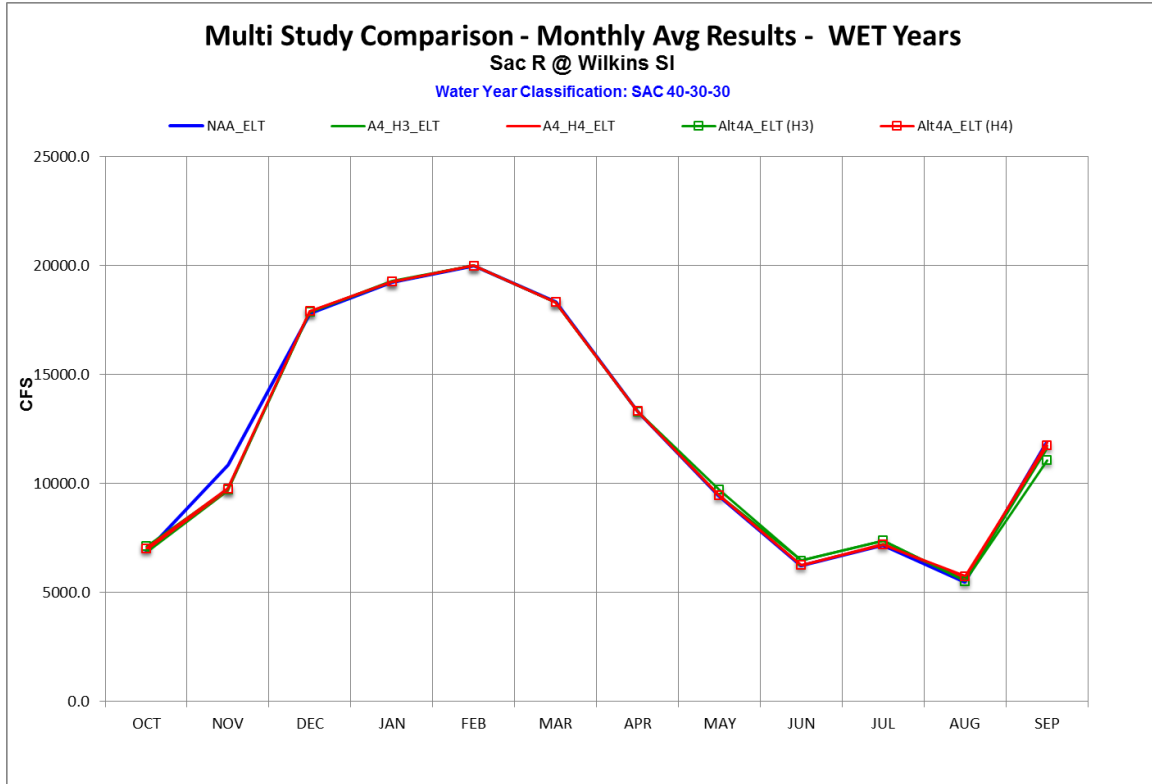
Figure 22. Monthly Average Flow for Feather River Low Flow Channel in Dry Years (ELT).



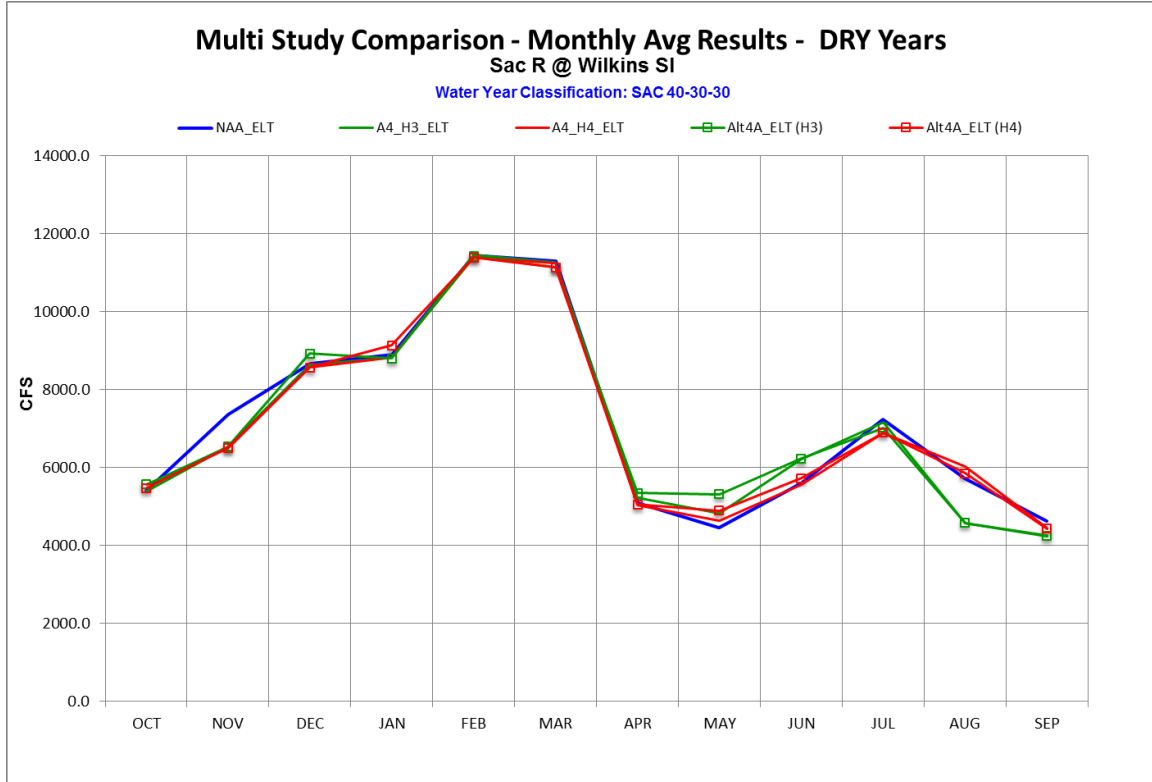
1  
2 **Figure 23. Monthly Average Flow for American River at Nimbus in Wet Years (ELT).**



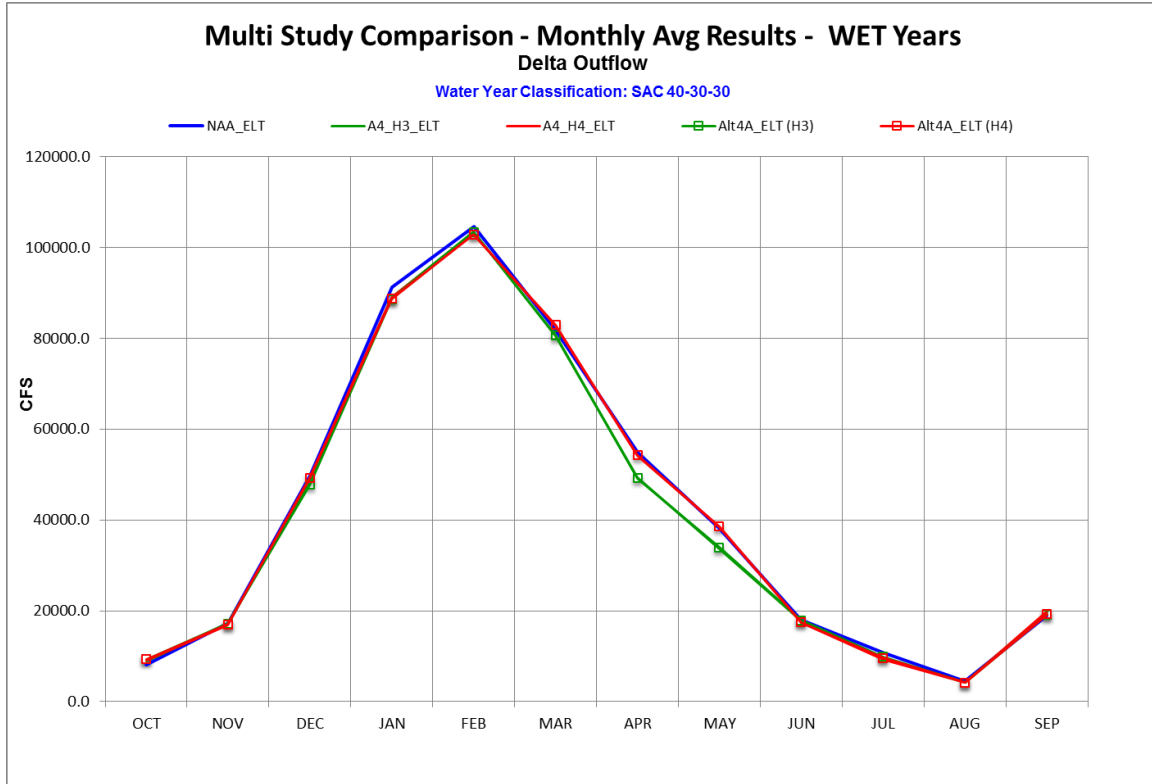
3  
4 **Figure 24. Monthly Average Flow for American River at Nimbus in Dry Years (ELT).**



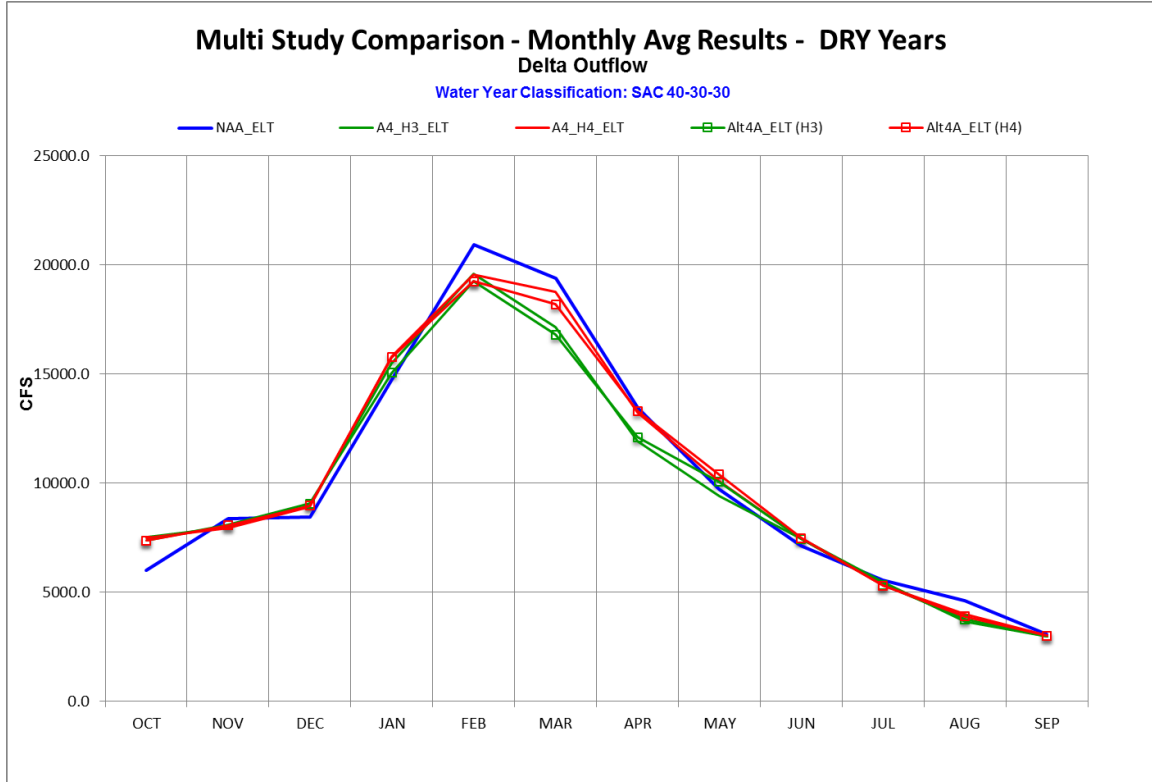
1  
 2 **Figure 25. Monthly Average Flow for Sacramento River at Wilkins Slough in Wet Years (ELT).**



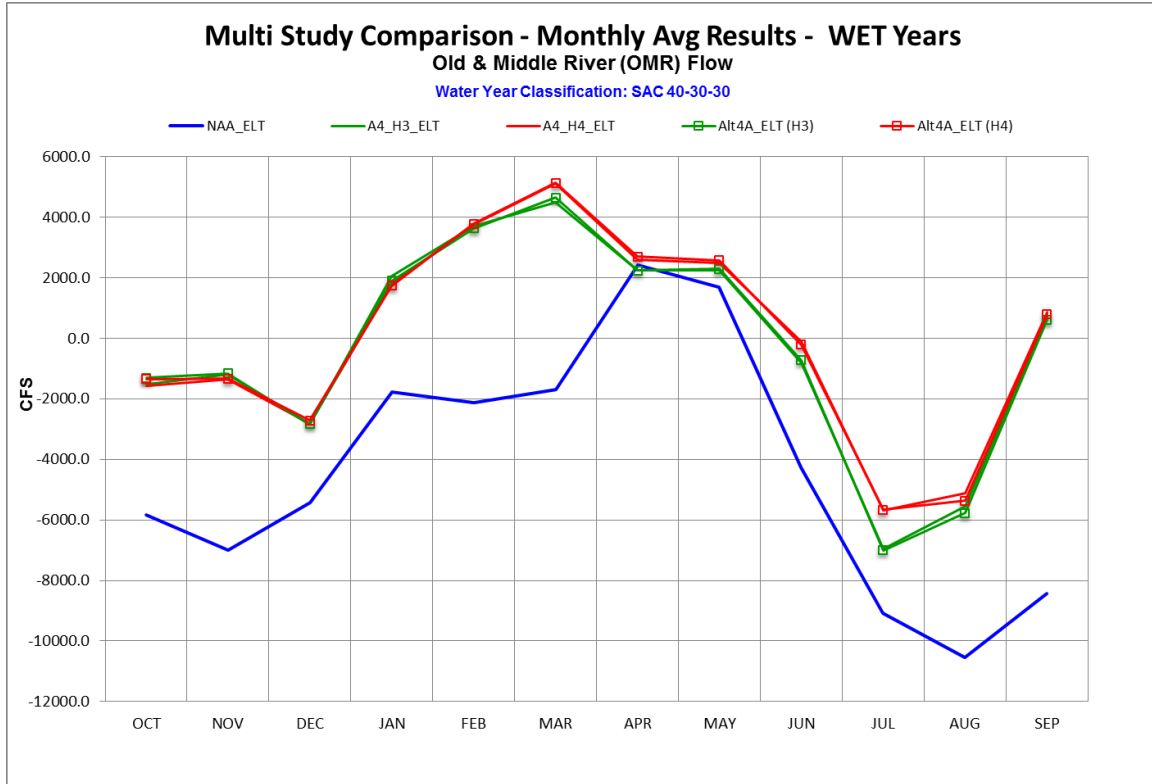
3  
 4 **Figure 26. Monthly Average Flow for Sacramento River at Wilkins Slough in Dry Years (ELT).**



1  
2 **Figure 27. Monthly Average Flow for Delta Outflow in Wet Years (ELT).**

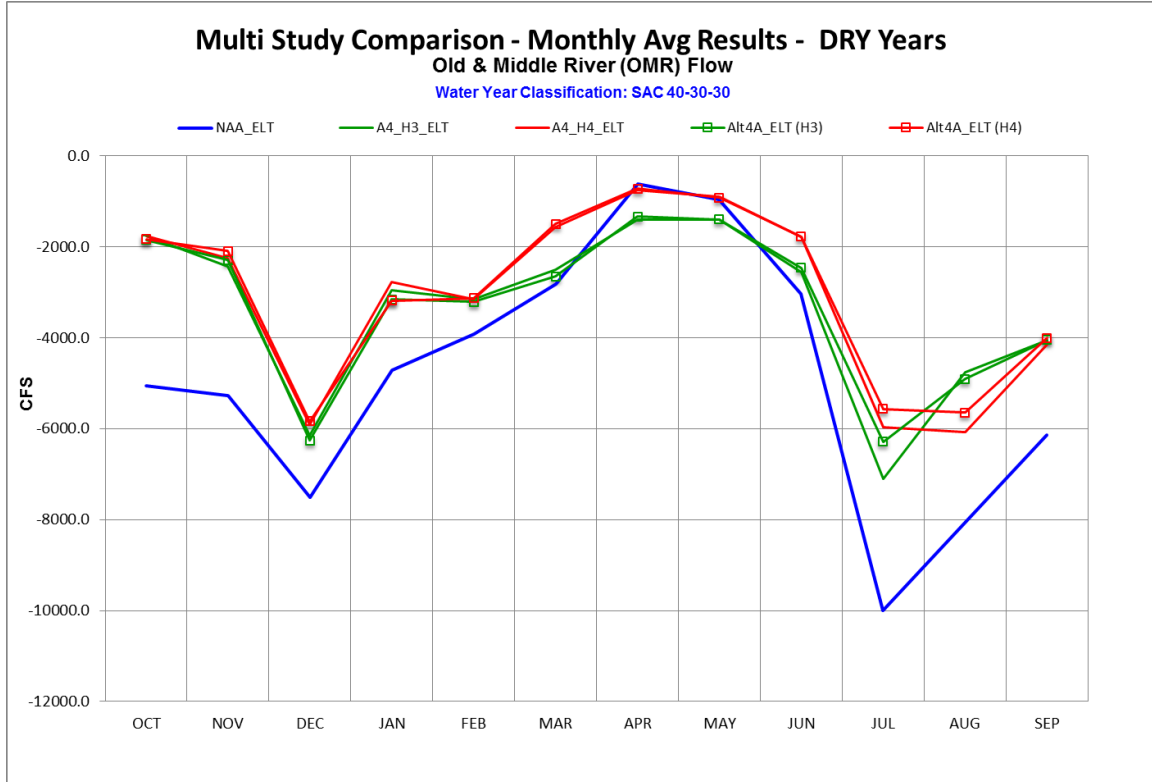


3  
4 **Figure 28. Monthly Average Flow for Delta Outflow in Dry Years (ELT).**



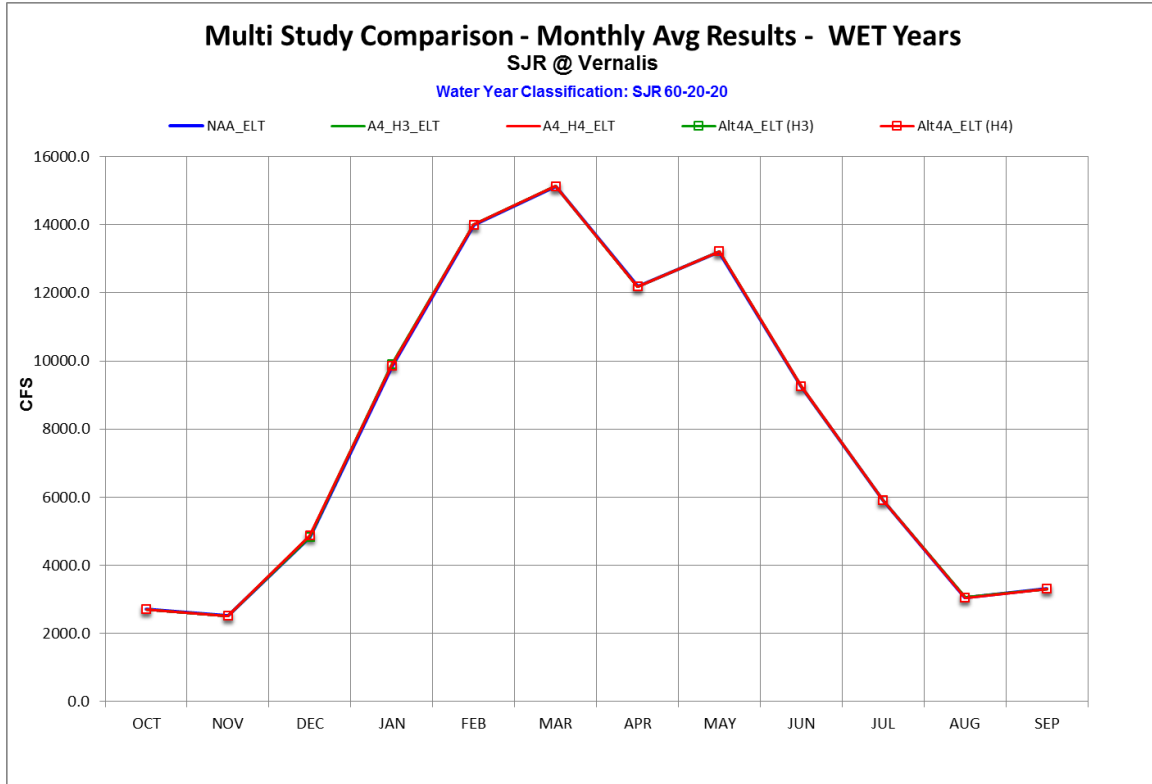
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Figure 29. Monthly Average Flow for Old and Middle River Flow in Wet Years (ELT).

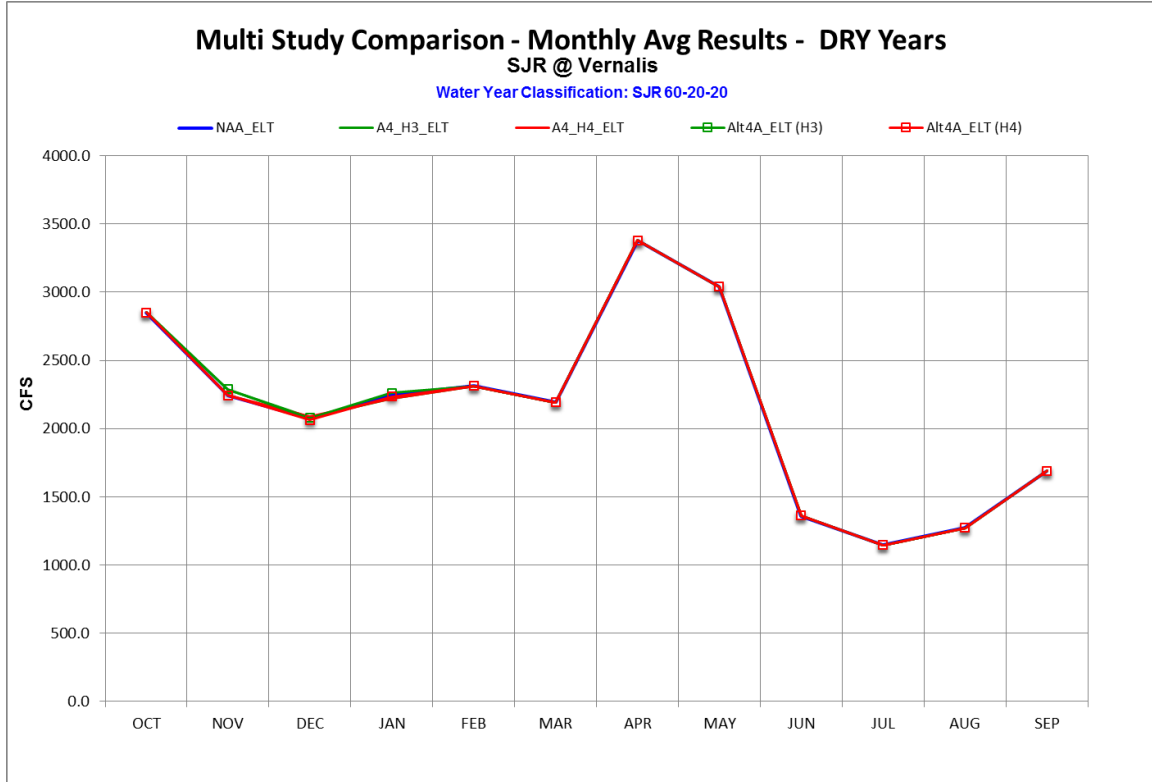


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Figure 30. Monthly Average Flow for Old and Middle River Flow in Dry Years (ELT).

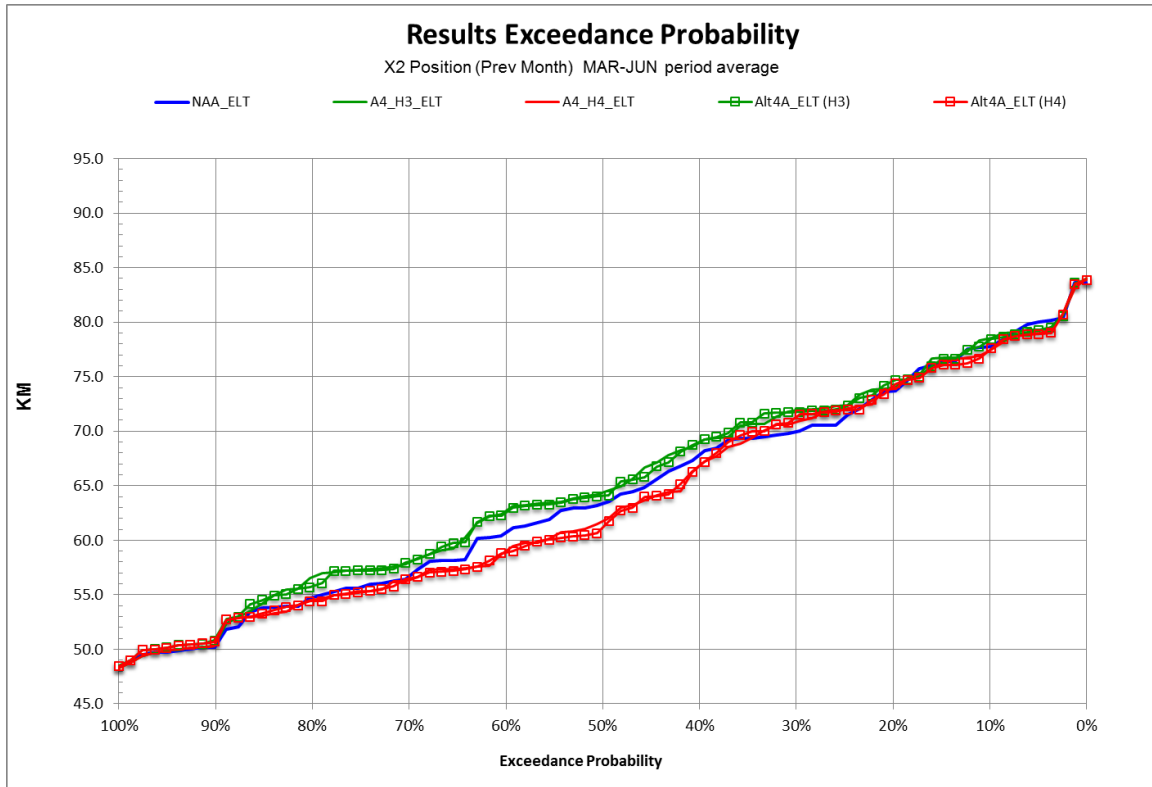


1  
2 **Figure 31. Monthly Average Flow for San Joaquin River at Vernalis in Wet Years (ELT).**

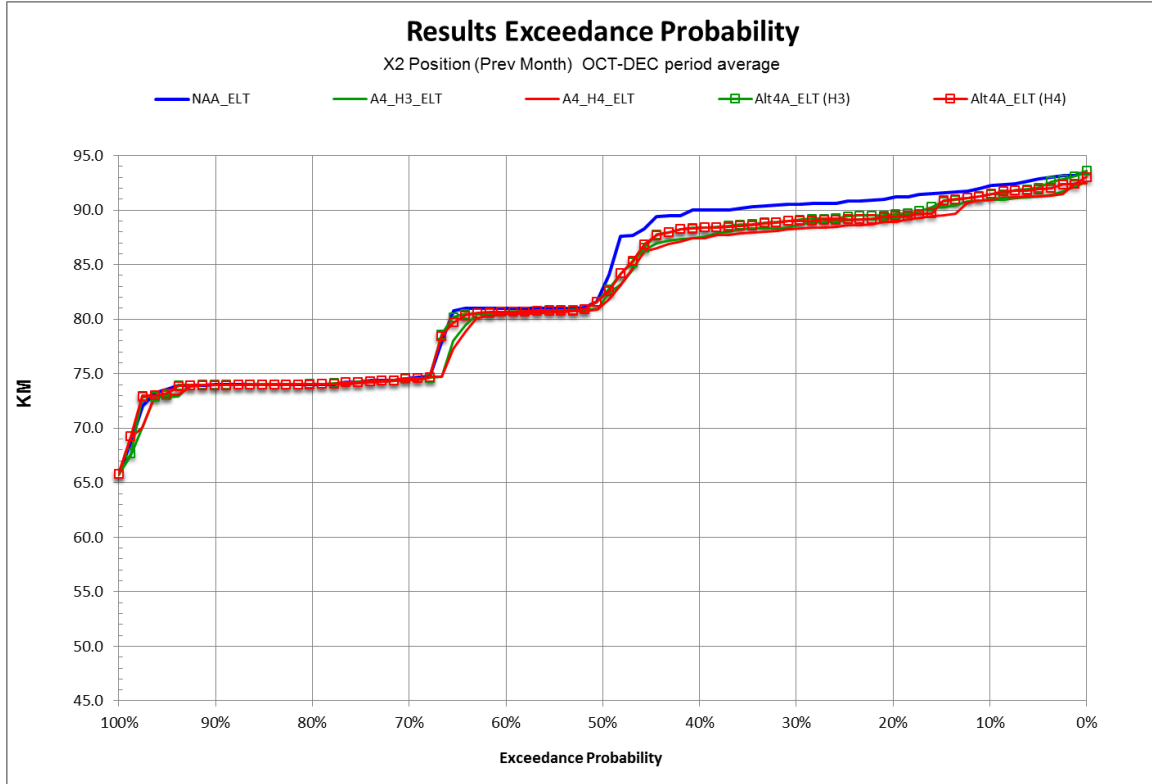


3  
4 **Figure 32. Monthly Average Flow for San Joaquin River at Vernalis in Dry Years (ELT).**

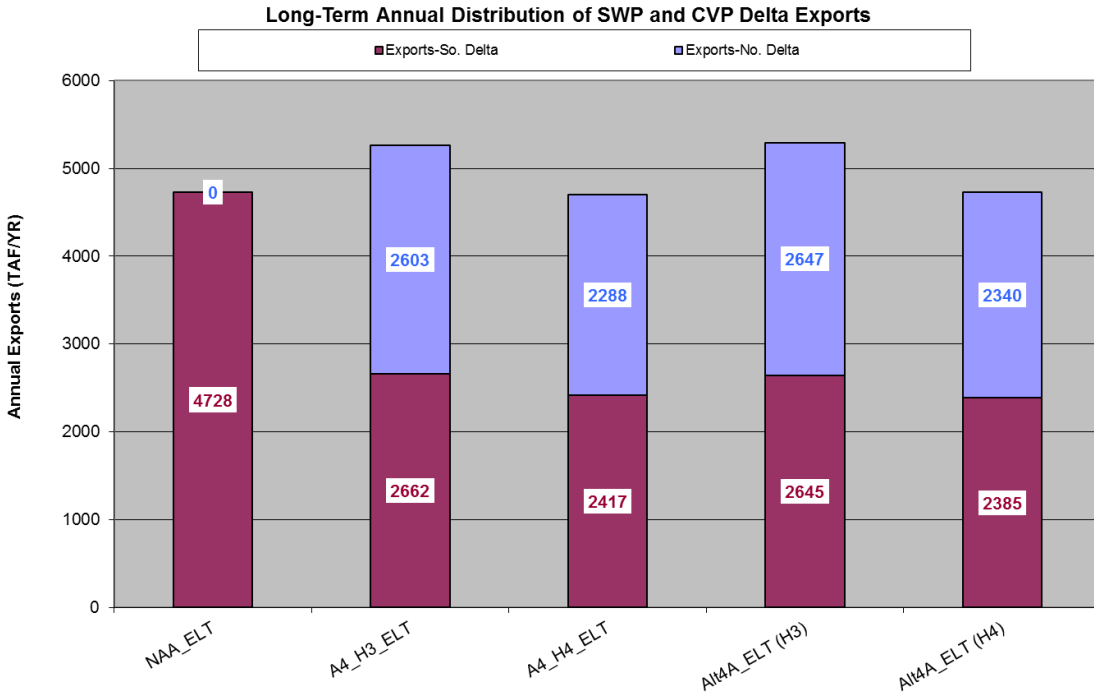




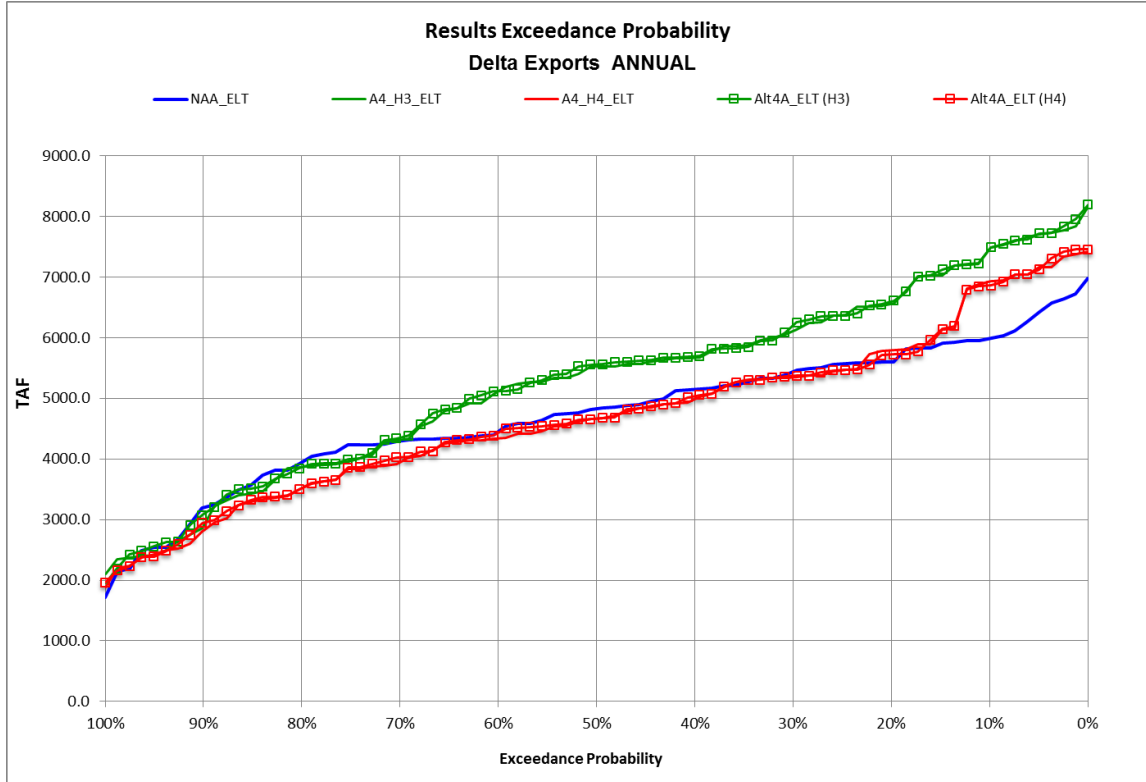
1  
2 **Figure 33. Average Spring (Feb – Jun) X2 Exceedance Probability (ELT).**



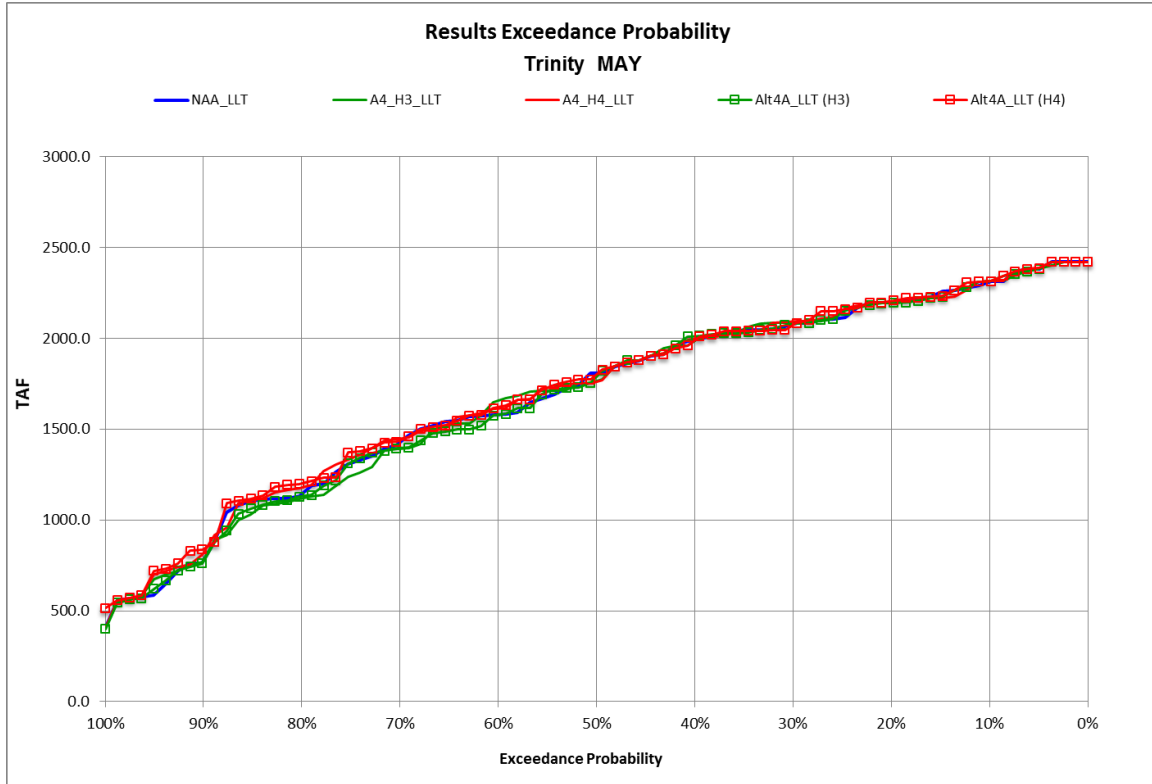
3  
4 **Figure 34. Average Fall (Sep – Nov) X2 Exceedance Probability (ELT).**



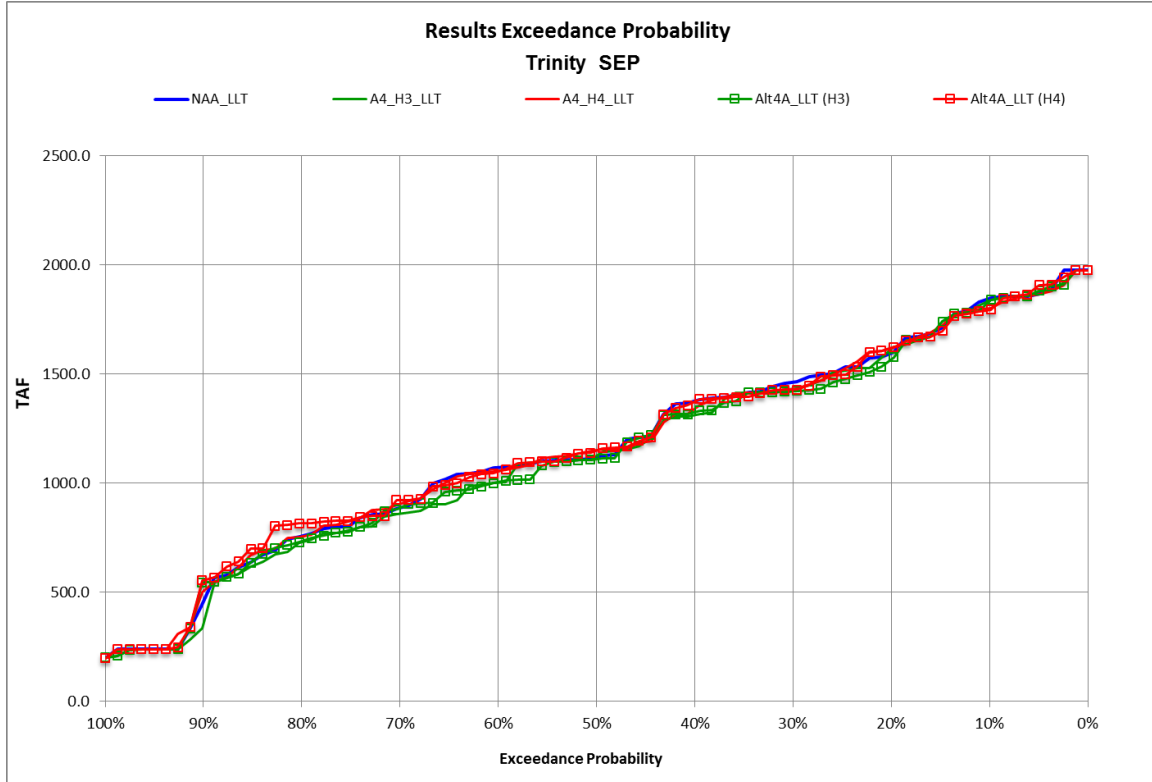
1  
2 **Figure 35. Long-term Annual Distribution of SWP and CVP North and South Delta Exports (ELT).**



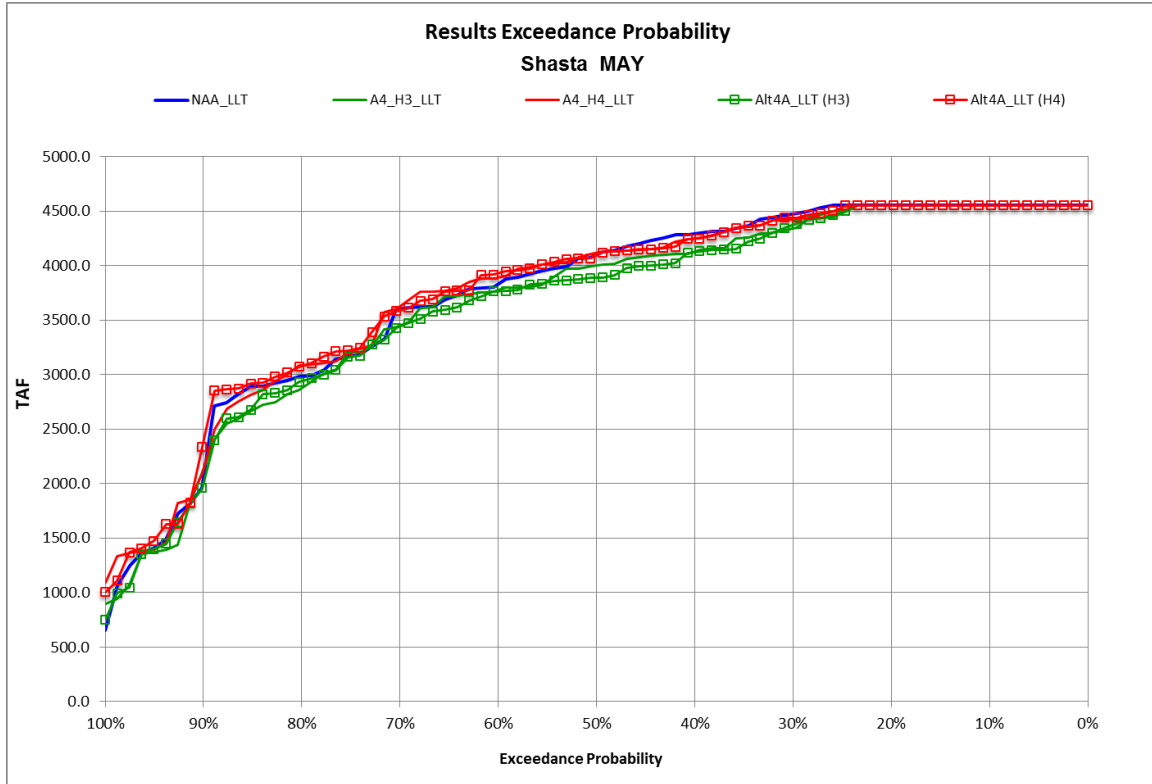
3  
4 **Figure 36. Annual Exceedance Probability of Delta Exports (ELT).**



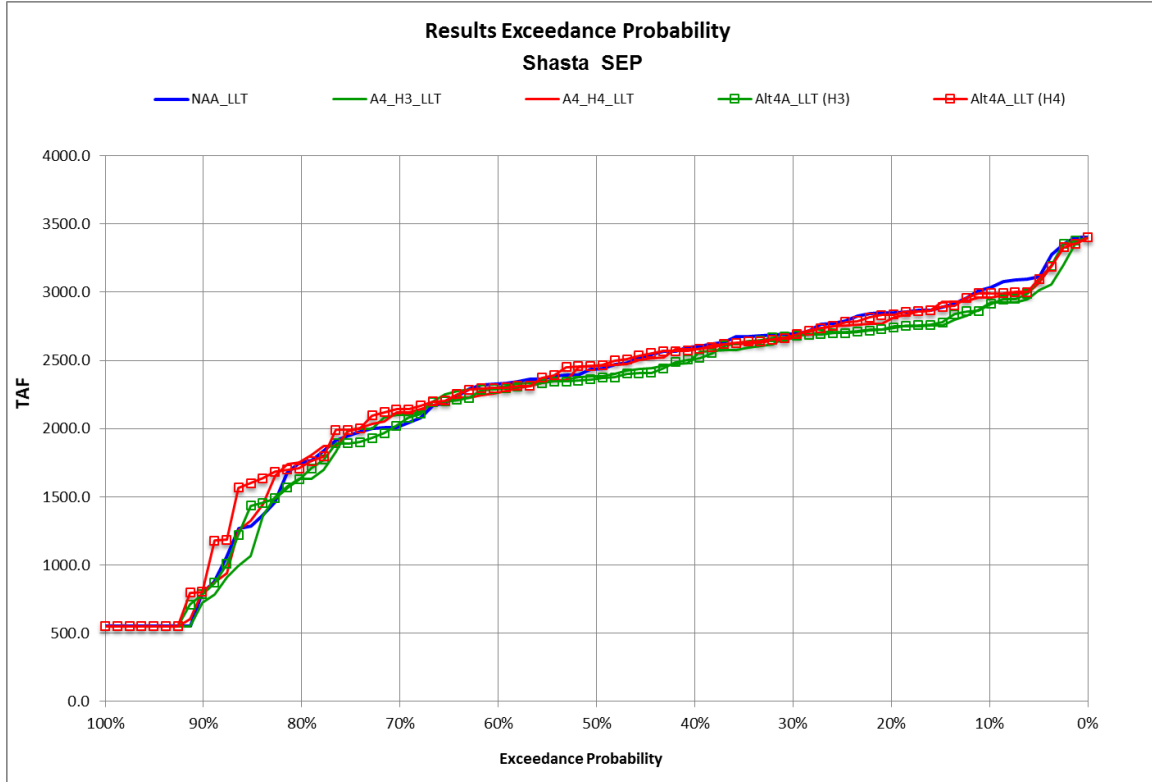
1  
2 **Figure 37. Storage Exceedance Probability for Trinity, End of May (LLT).**



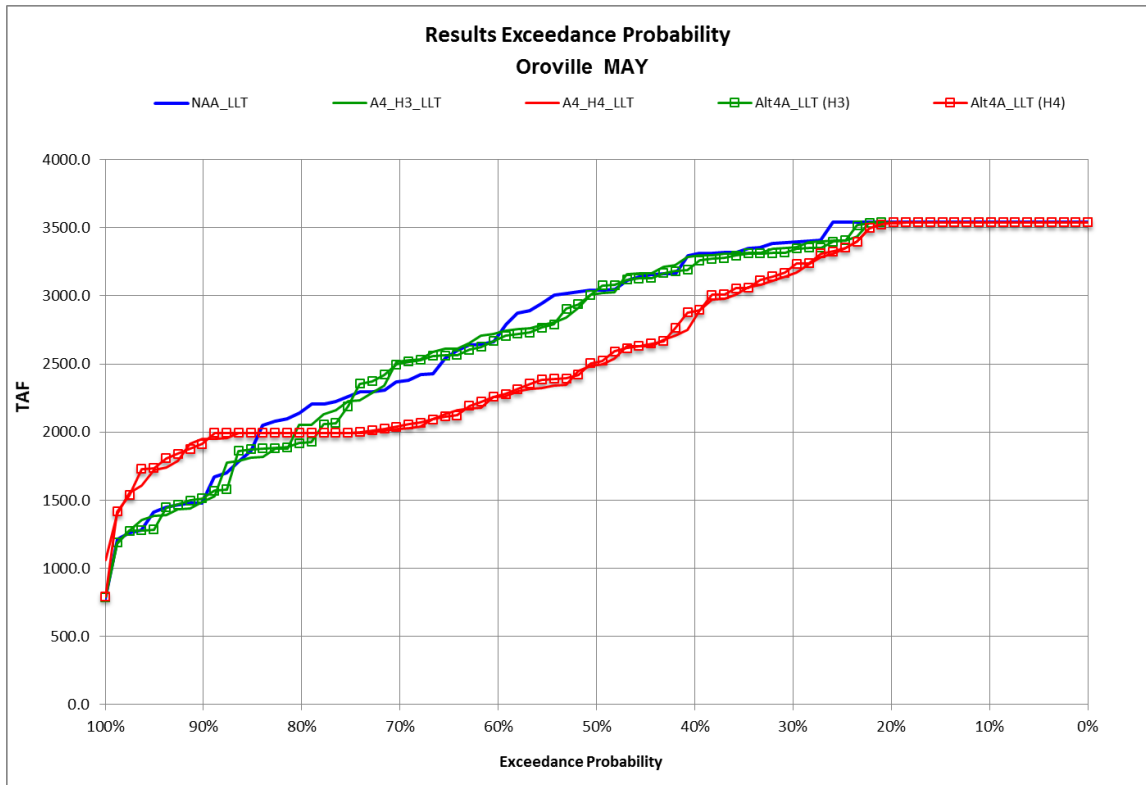
3  
4 **Figure 38. Storage Exceedance Probability for Trinity, End of September (LLT).**



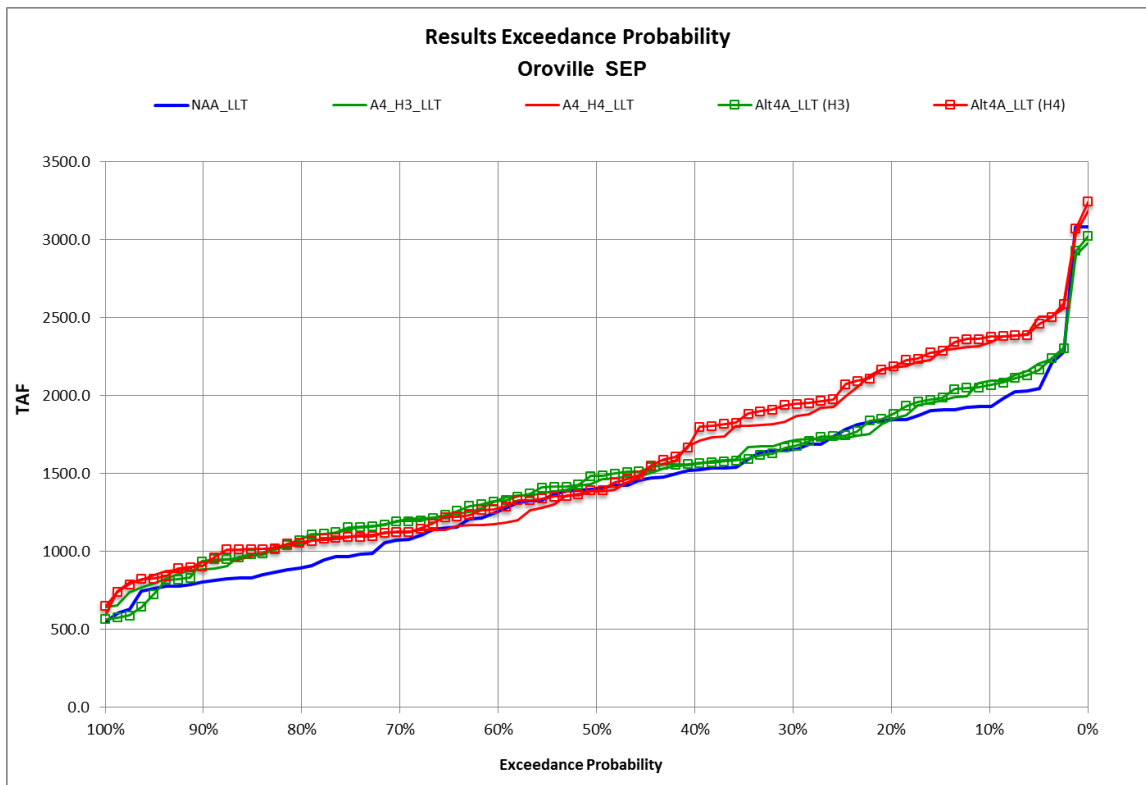
1  
2 **Figure 39. Storage Exceedance Probability for Shasta, End of May (LLT).**



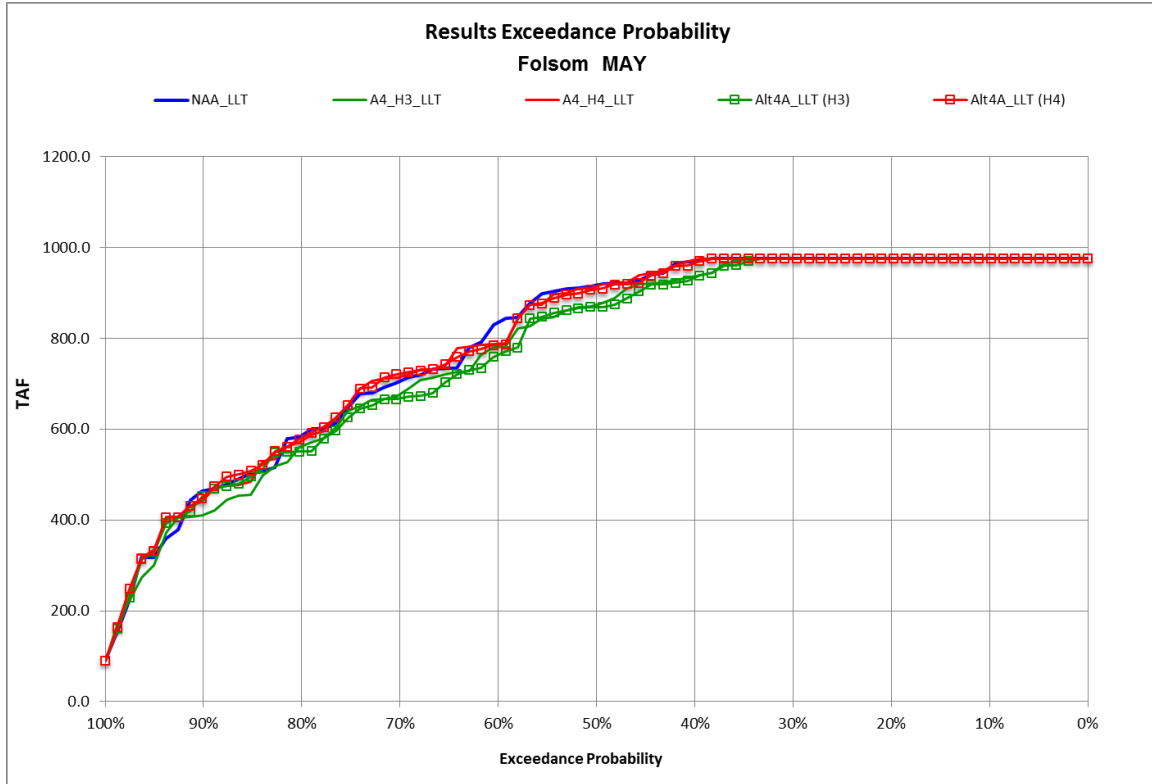
3  
4 **Figure 40. Storage Exceedance Probability for Shasta, End of September (LLT).**



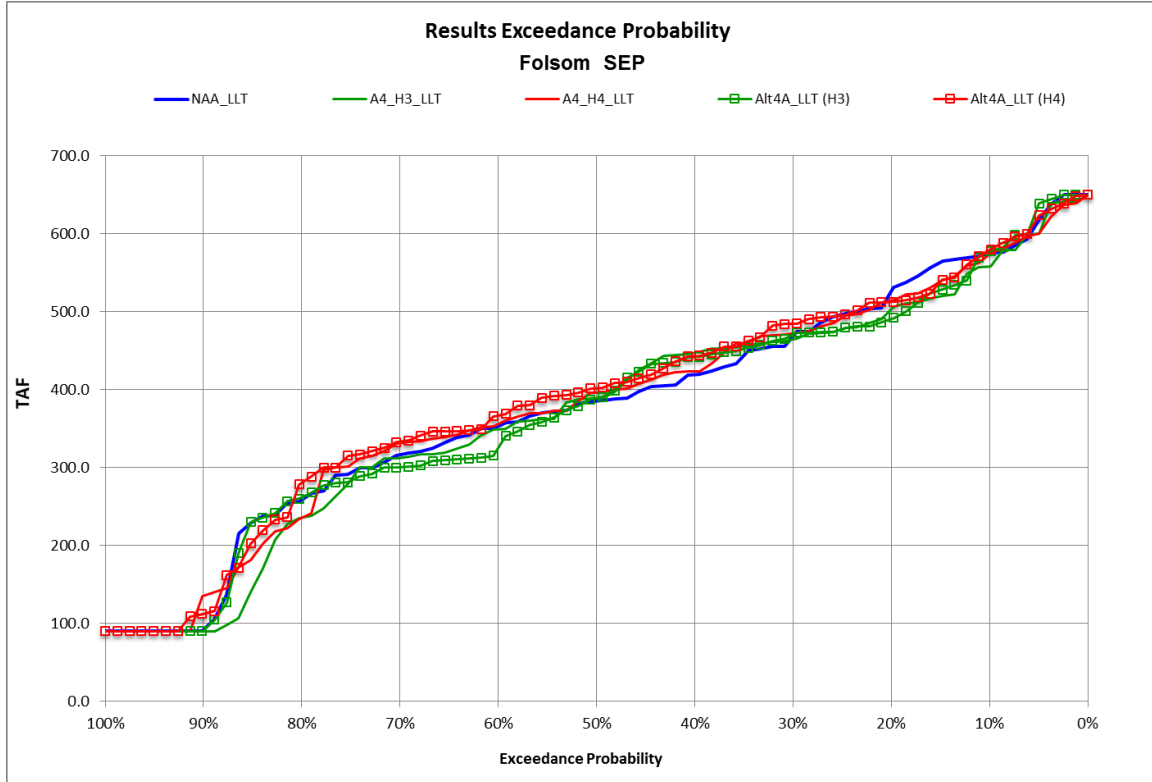
1  
2 **Figure 41. Storage Exceedance Probability for Oroville, End of May (LLT).**



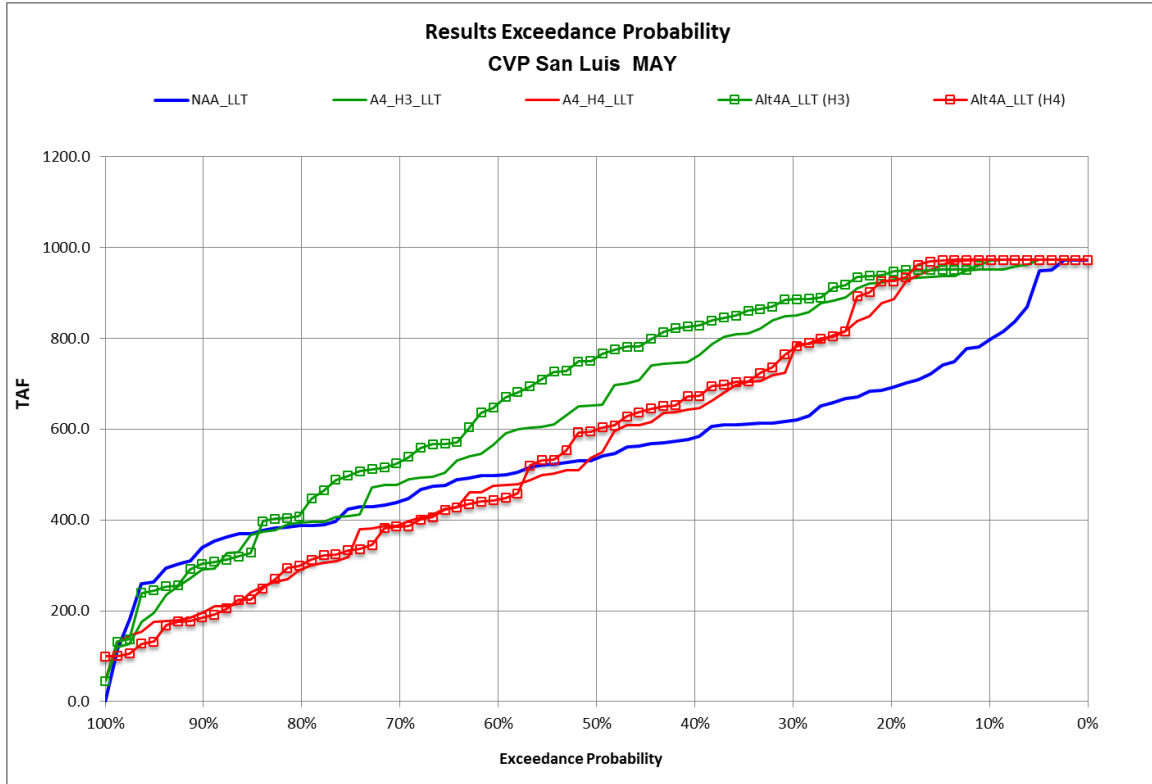
3  
4 **Figure 42. Storage Exceedance Probability for Oroville, End of September (LLT).**



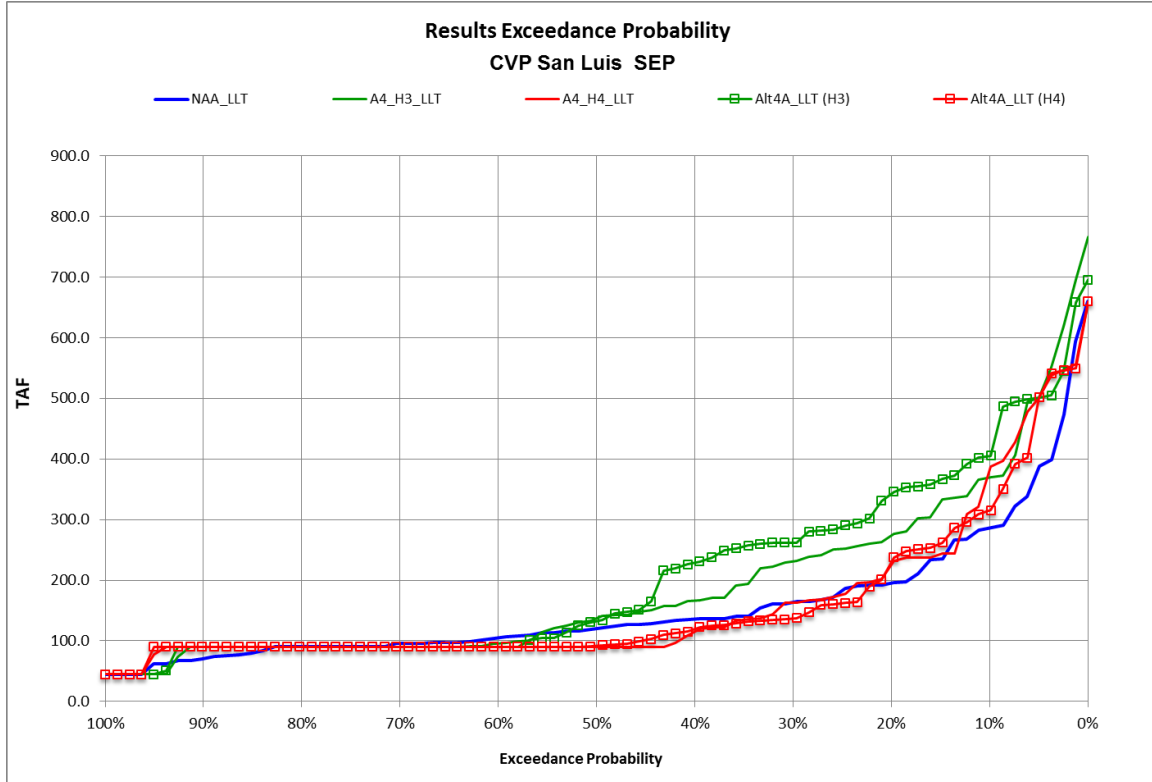
1  
2 **Figure 43. Storage exceedance probability for Folsom, End of May (LLT).**



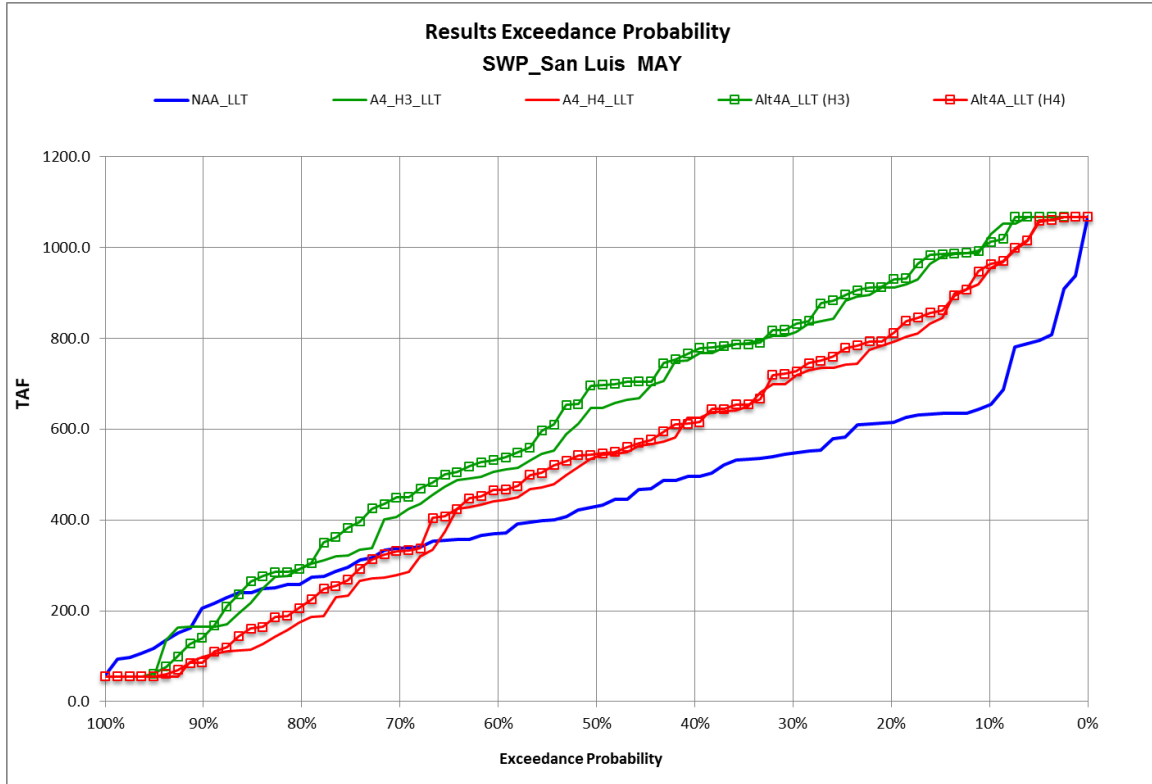
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4 **Figure 44. Storage Exceedance Probability for Folsom, End of September (LLT).**



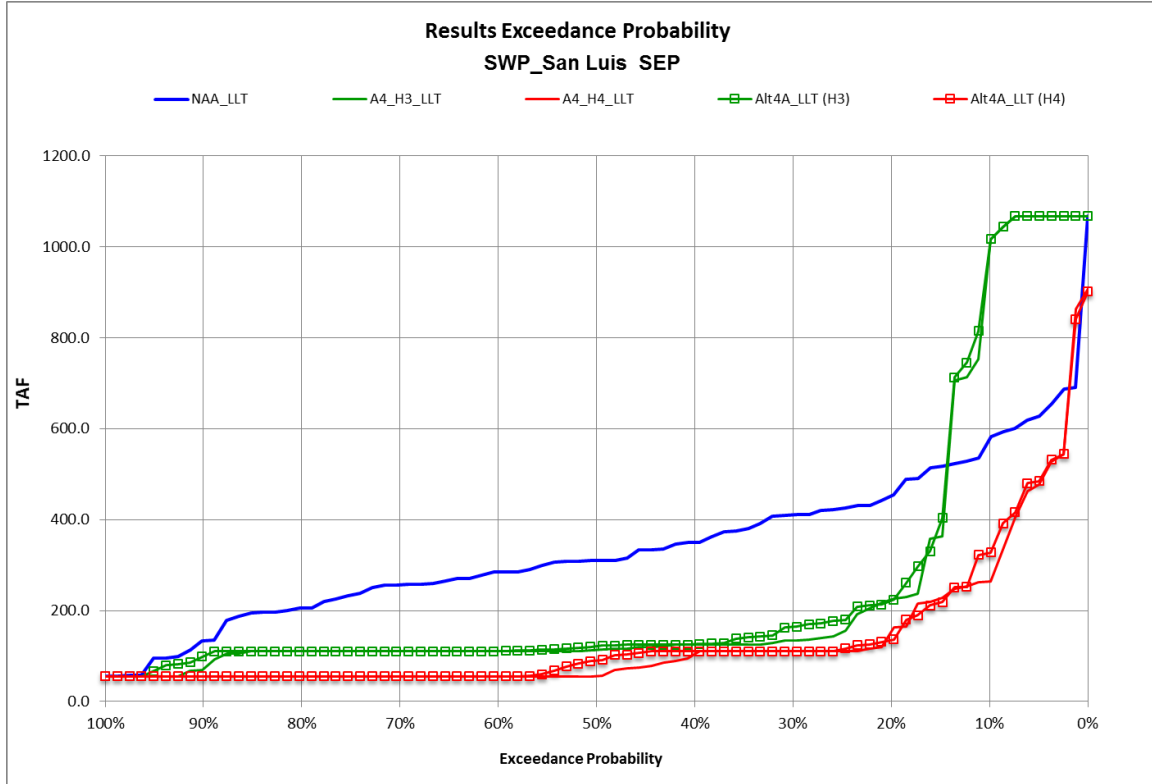
1  
2 **Figure 45. Storage Exceedance Probability for CVP San Luis, End of May (LLT).**



3  
4 **Figure 46. Storage Exceedance Probability for CVP San Luis, End of September (LLT).**

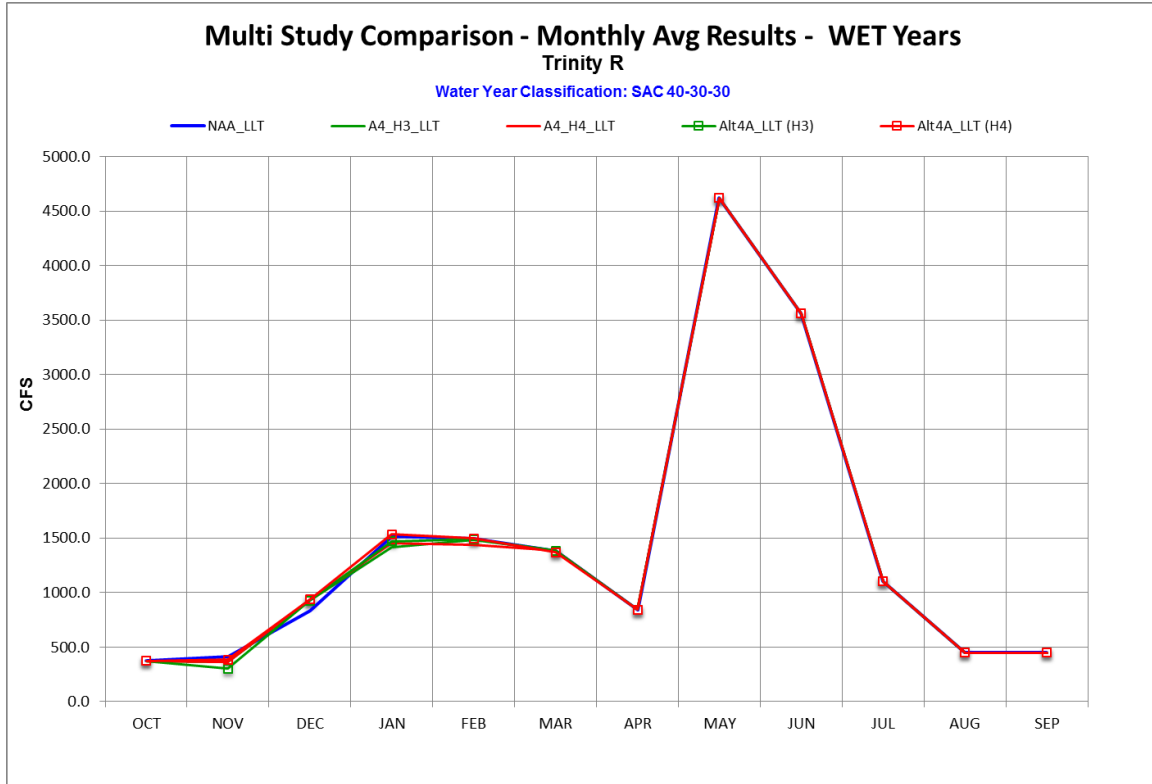


1  
2 **Figure 47. Storage Exceedance Probability for SWP San Luis, End of May (LLT).**

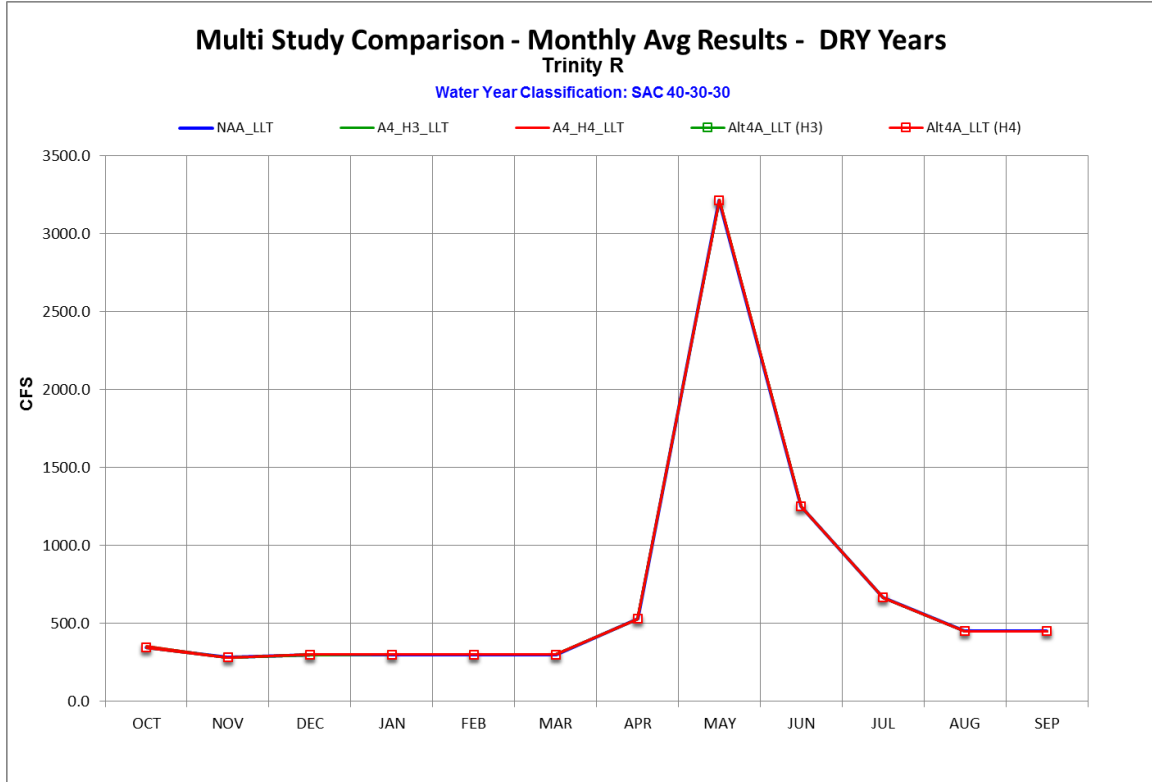


3  
4 **Figure 48. Storage Exceedance Probability for CVP San Luis, End of September (LLT).**

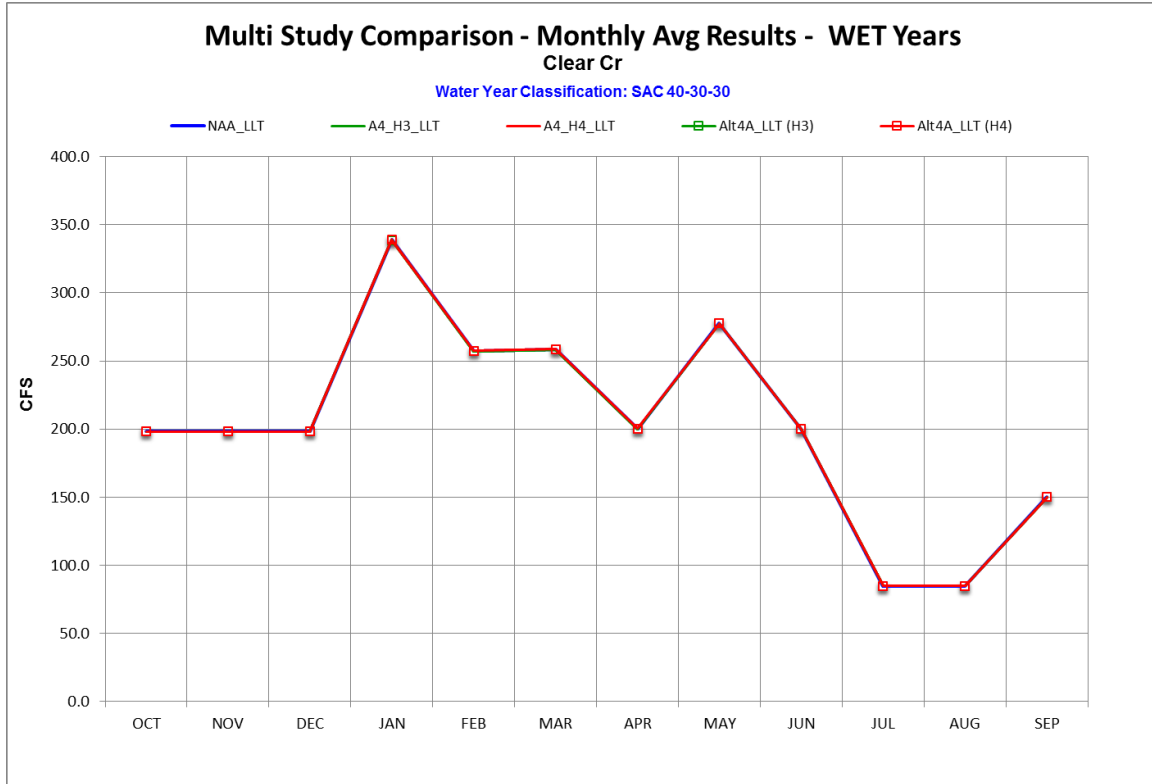




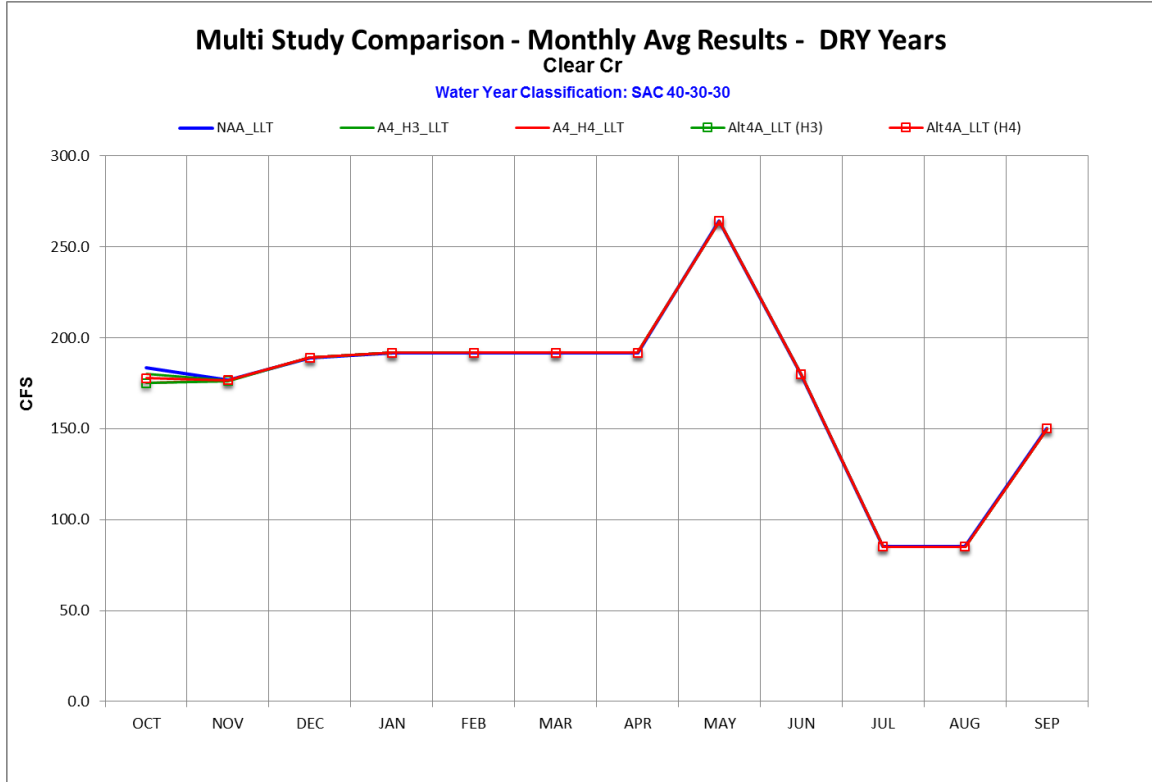
1  
2 **Figure 49. Monthly Average Flow for Trinity River in Wet Years (LLT).**



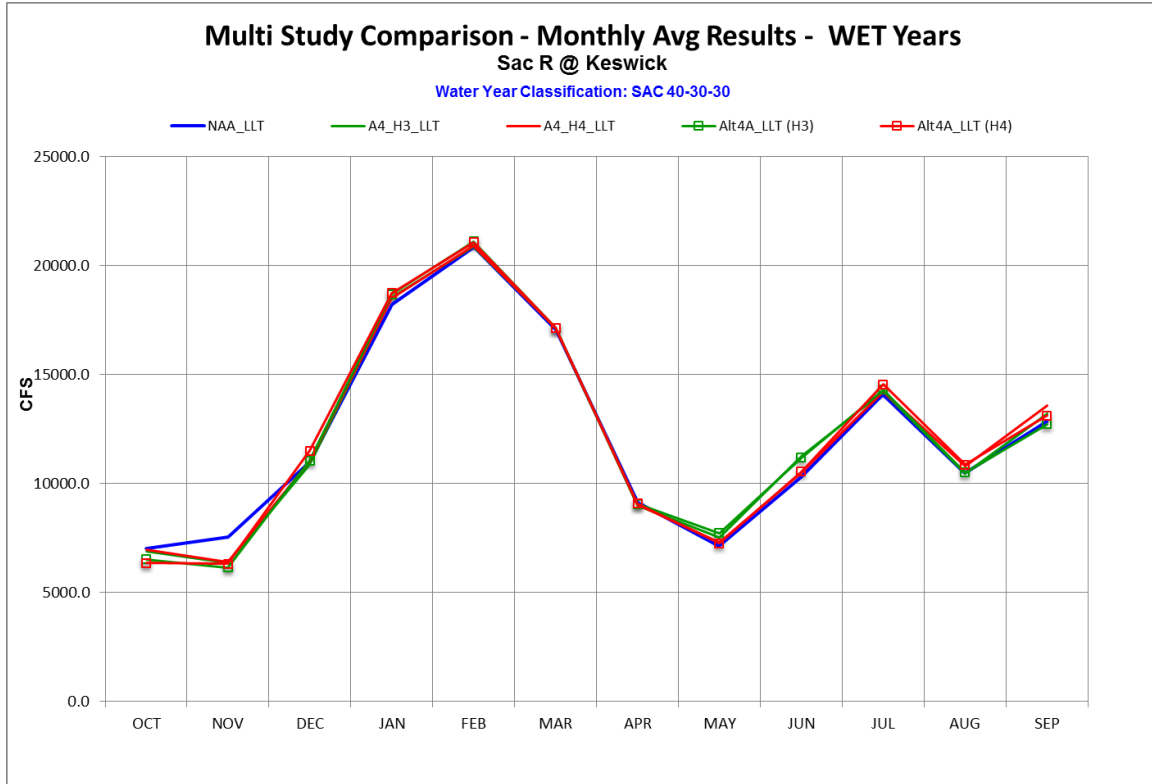
3  
4 **Figure 50. Monthly Average Flow for Trinity River in Dry Years (LLT).**



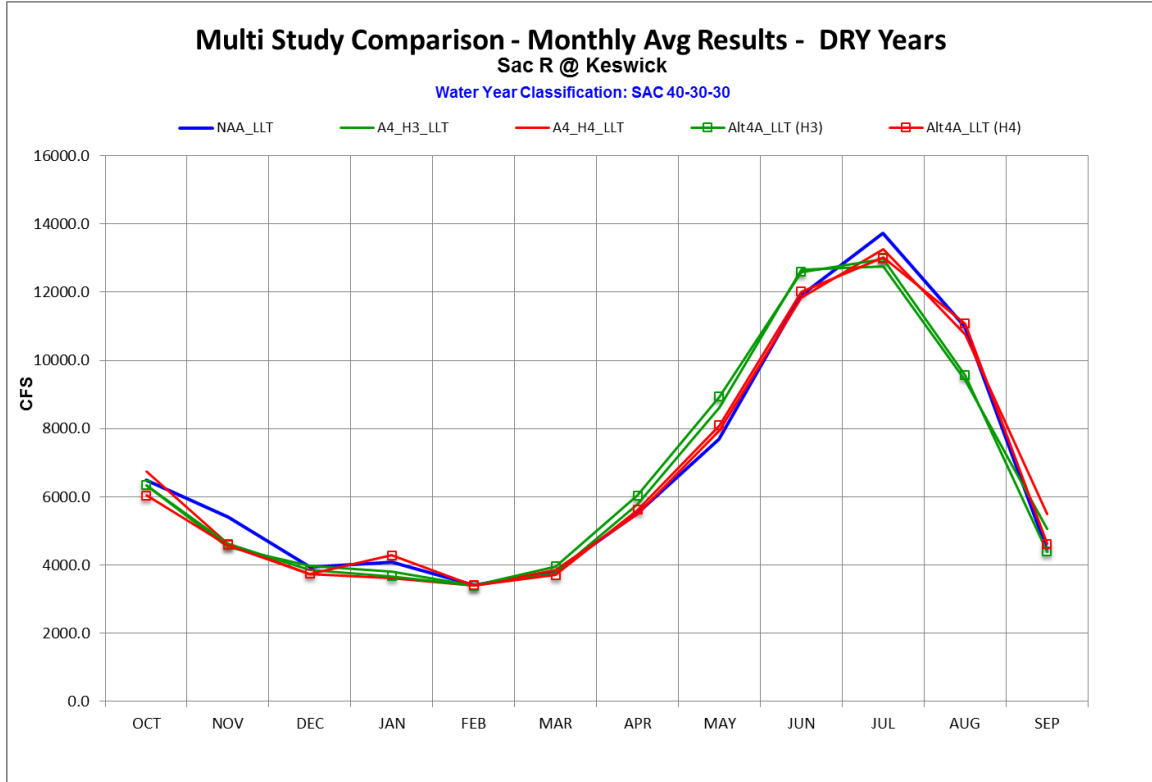
1  
2 **Figure 51. Monthly Average Flow for Clear Creek in Wet Years (LLT).**



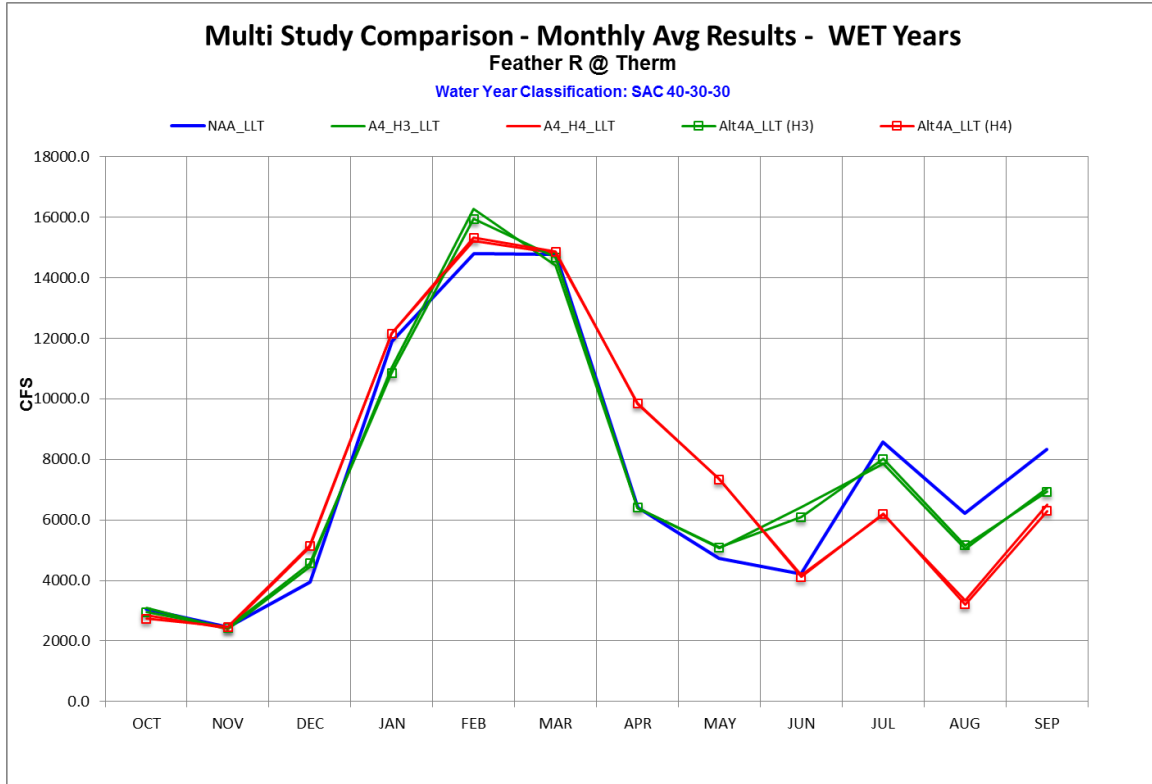
3  
4 **Figure 52. Monthly Average Flow for Clear Creek in Dry Years (LLT).**



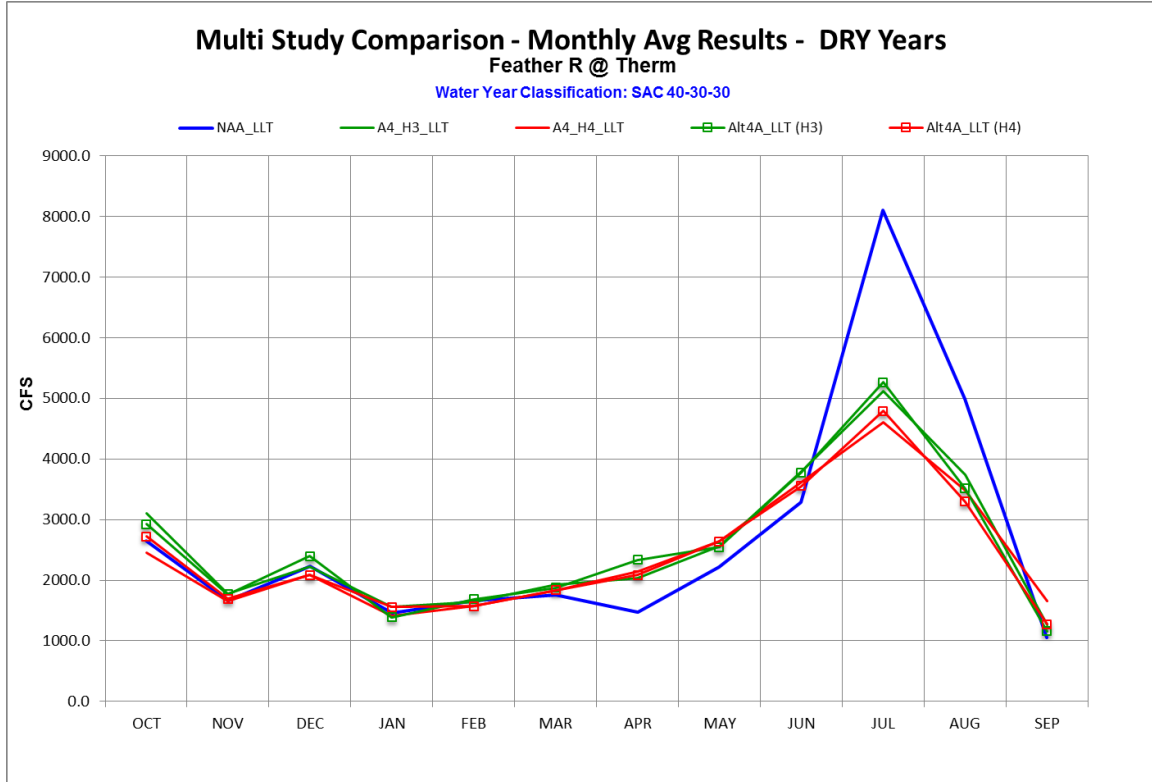
1  
 2 **Figure 53. Monthly Average Flow for Sacramento River at Keswick in Wet Years (LLT).**



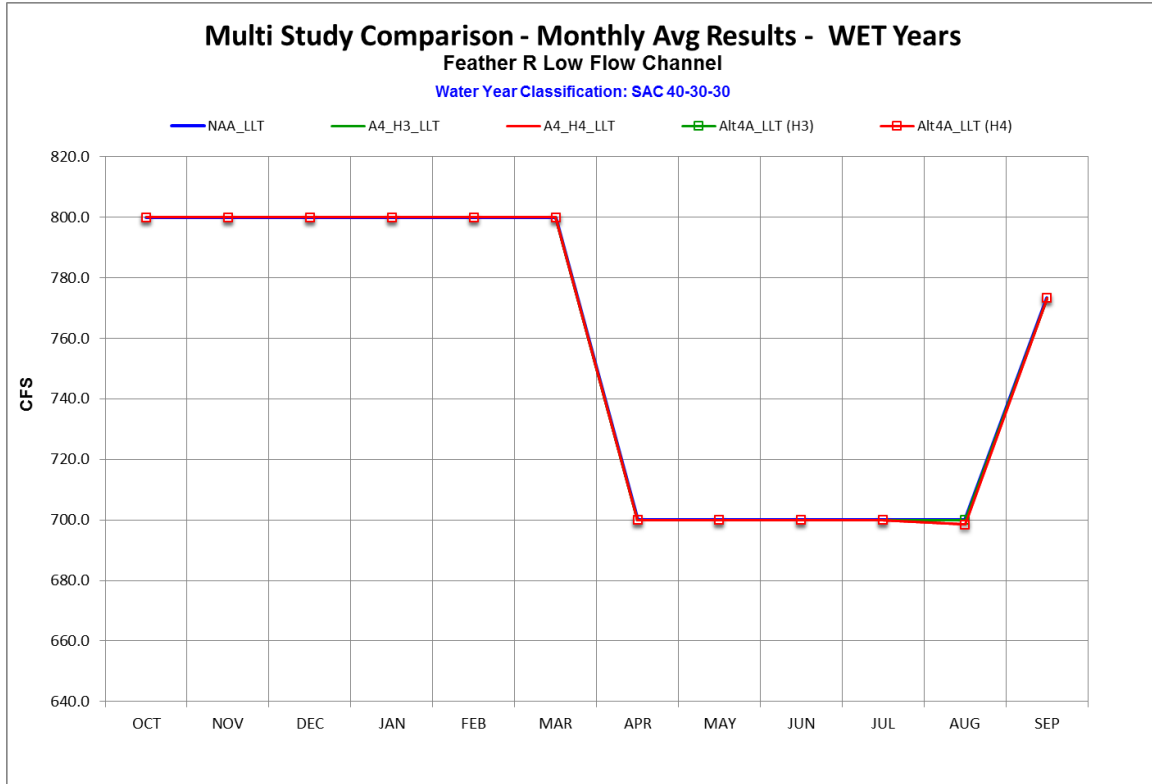
3  
 4 **Figure 54. Monthly Average Flow for Sacramento River at Keswick in Dry Years (LLT).**



1  
2 **Figure 55. Monthly Average Flow for Feather River at Thermalito in Wet Years (LELT).**

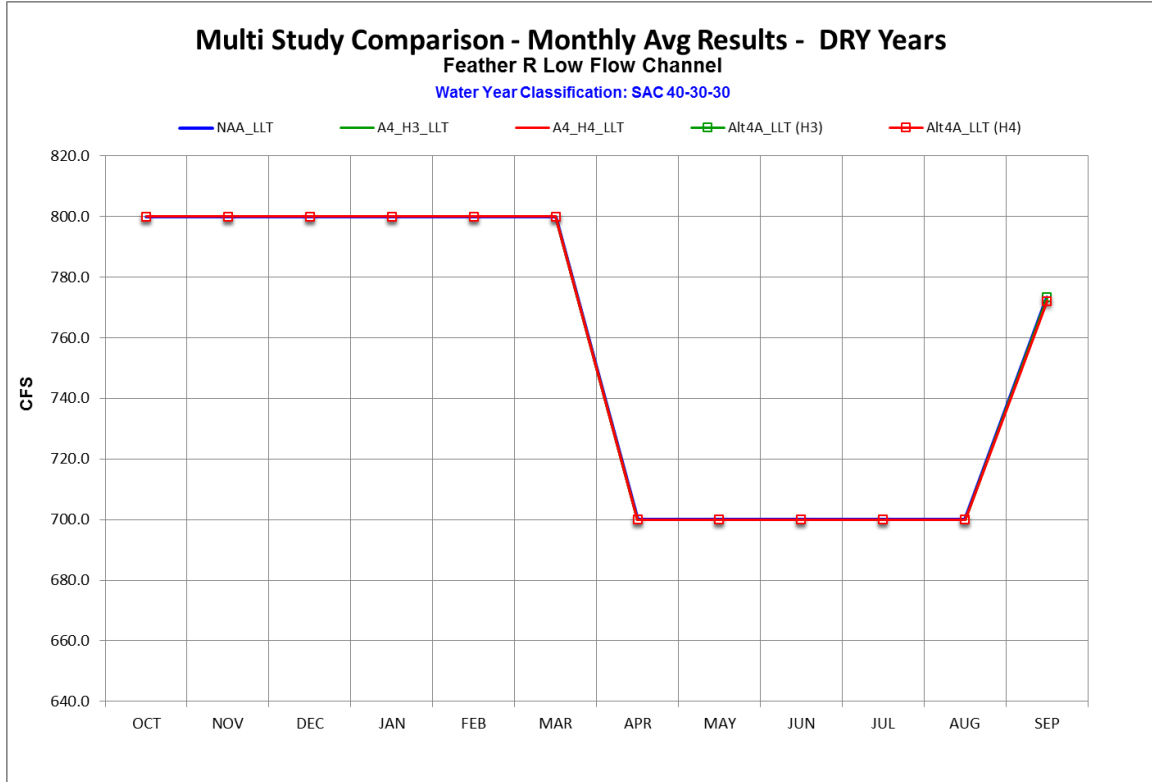


3  
4 **Figure 56. Monthly Average Flow for Feather River at Thermalito in Dry Years (LLT).**



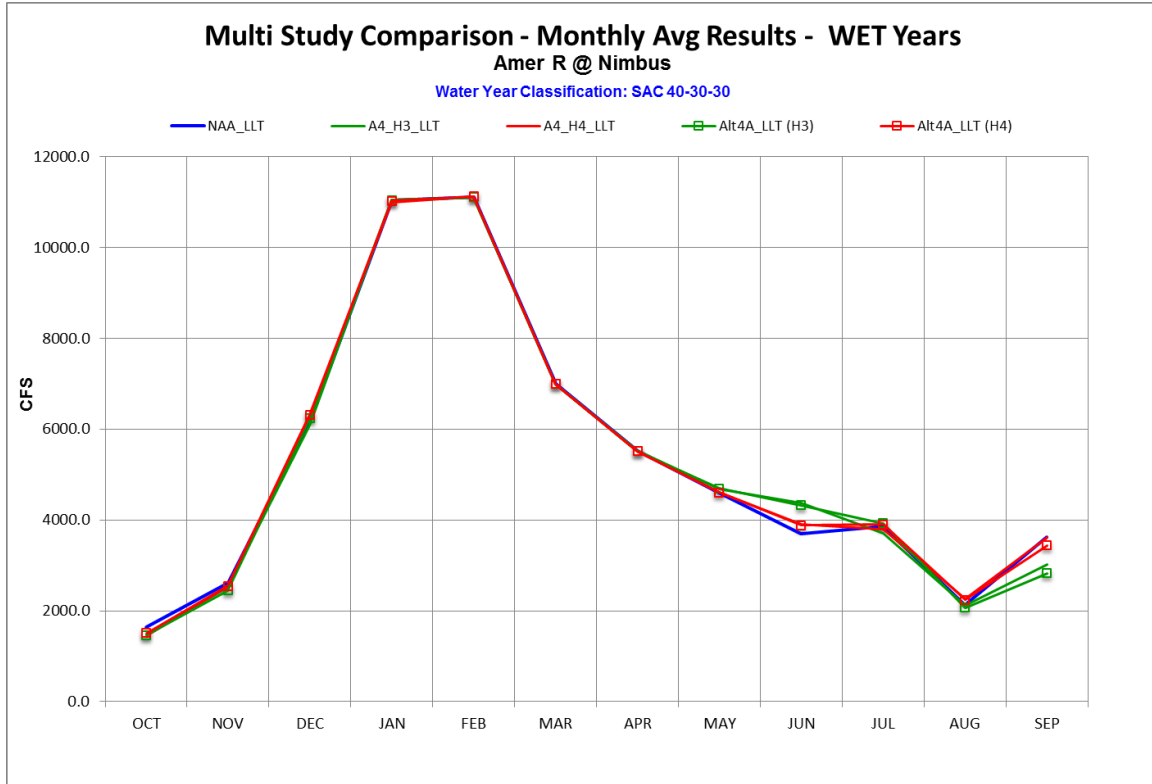
1  
2

Figure 57. Monthly Average Flow for Feather River Low Flow Channel in Wet Years (LLT).

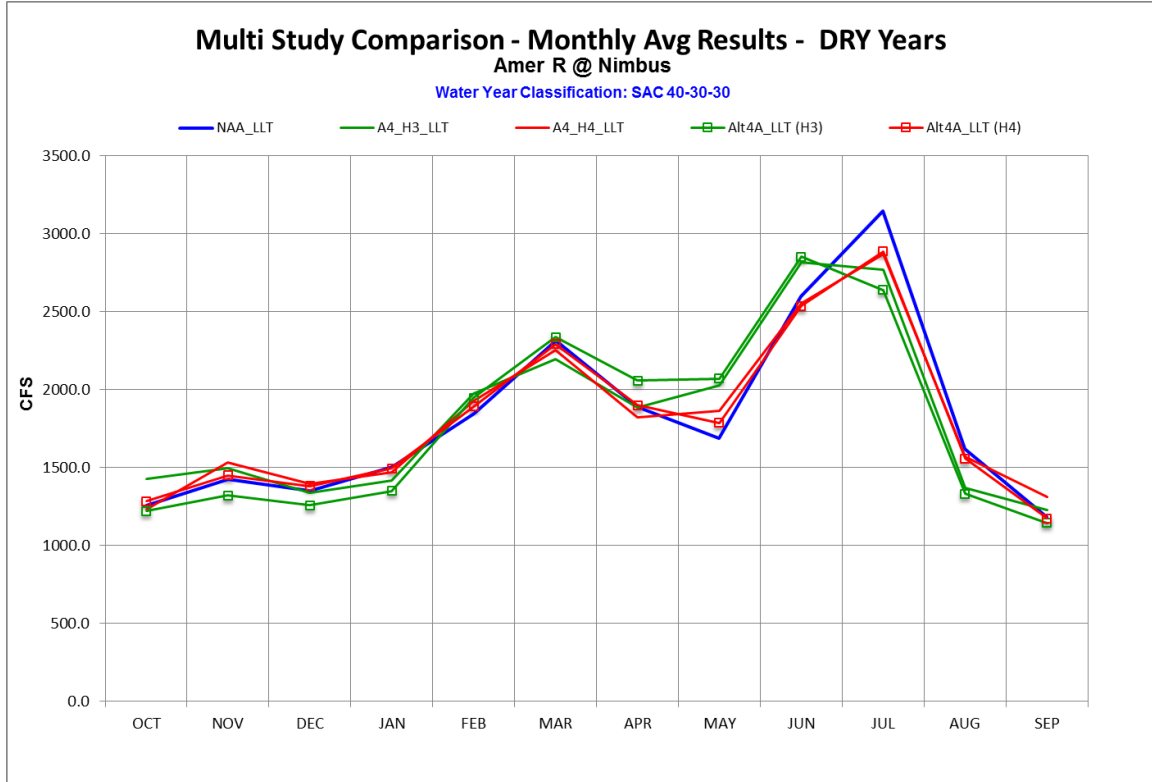


3  
4

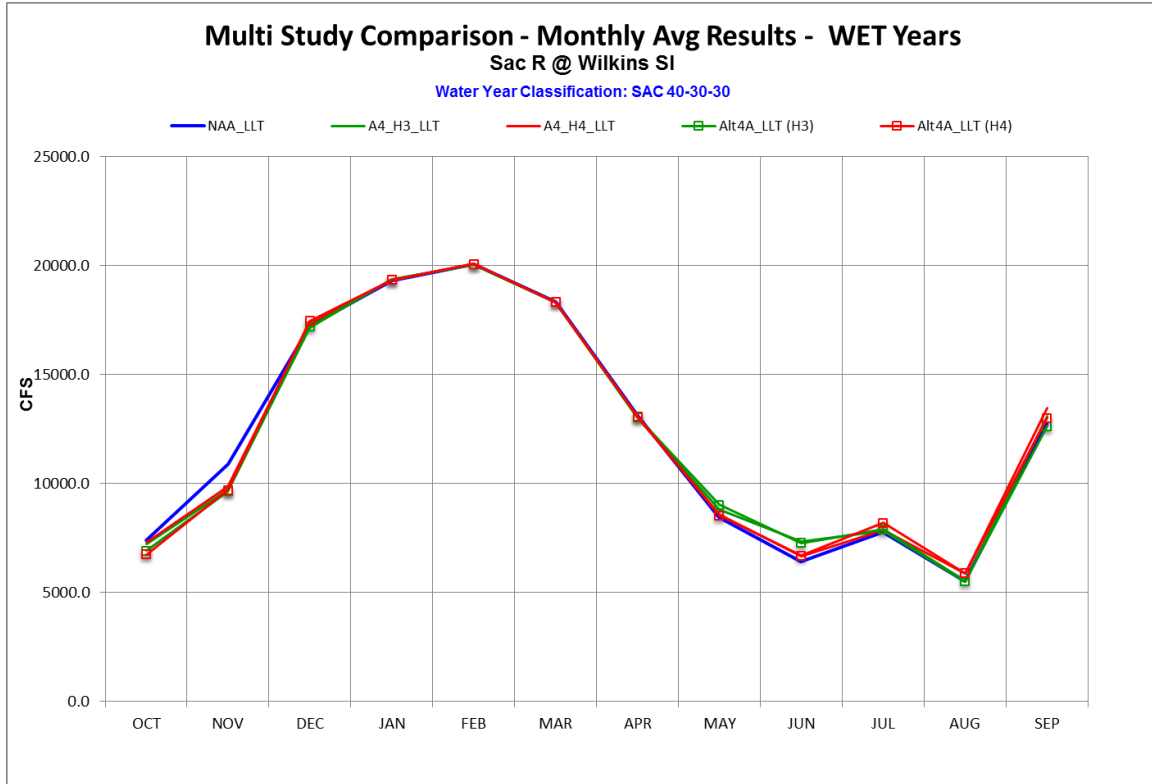
Figure 58. Monthly Average Flow for Feather River Low Flow Channel in Dry Years (LLT).



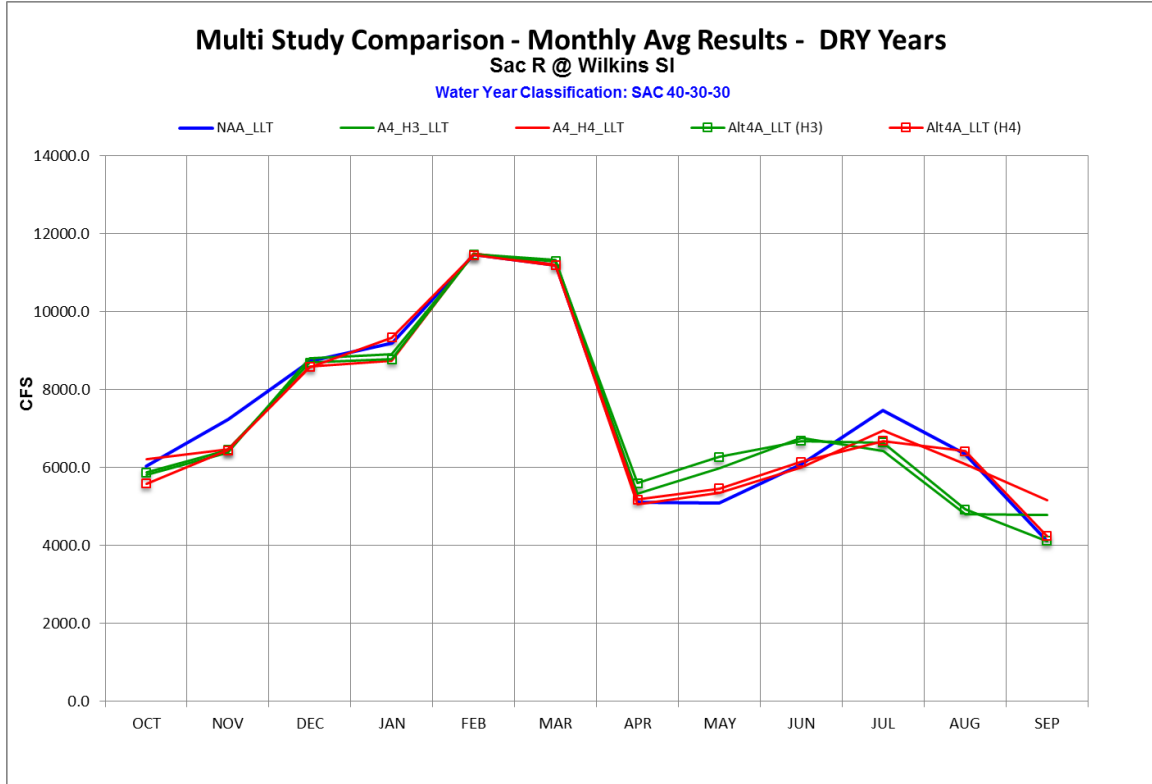
1  
 2 **Figure 59. Monthly Average Flow for American River at Nimbus in Wet Years (LLT).**



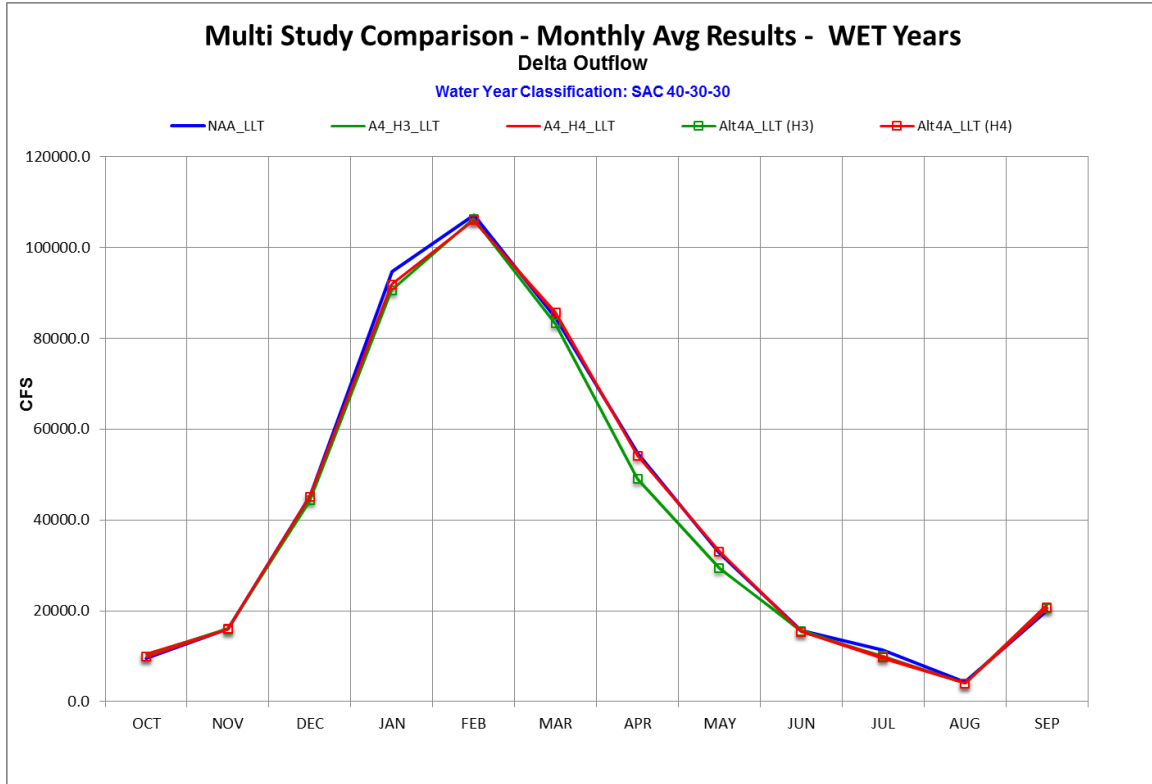
3  
 4 **Figure 60. Monthly Average Flow for American River at Nimbus in Dry Years (LLT).**



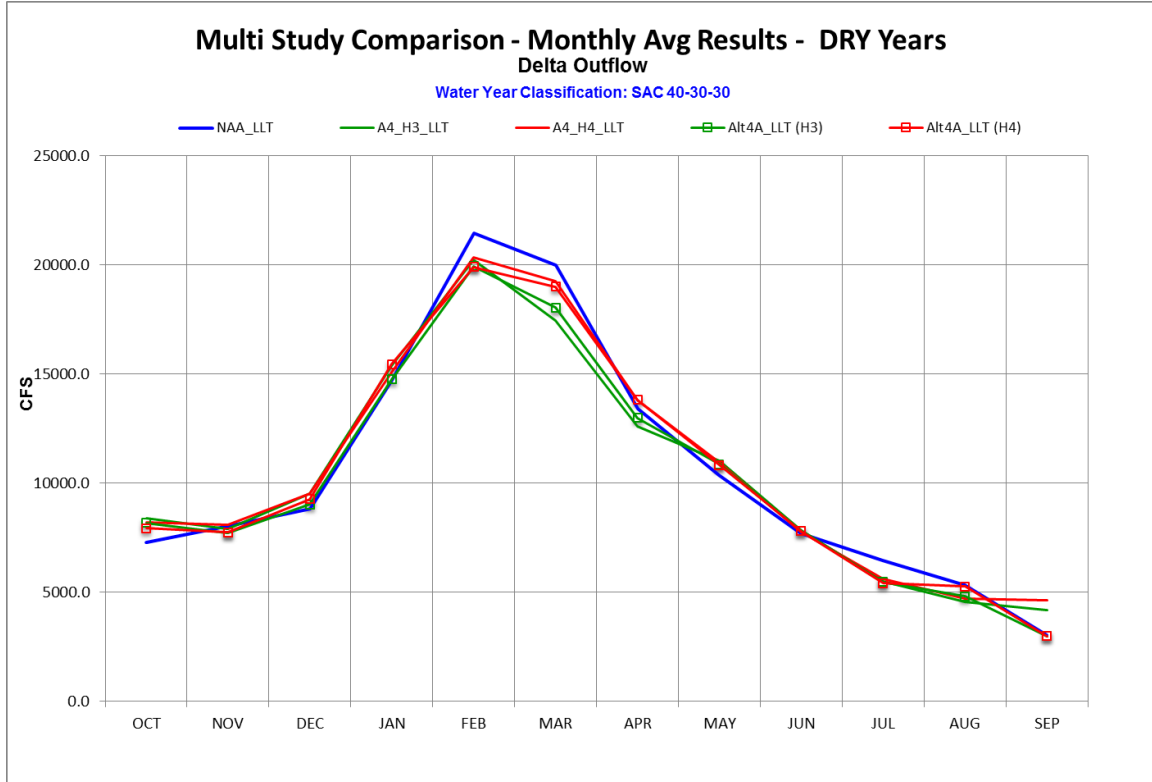
1  
 2 **Figure 61. Monthly Average Flow for Sacramento River at Wilkins Slough in Wet Years (LLT).**



3  
 4 **Figure 62. Monthly Average Flow for Sacramento River at Wilkins Slough in Dry Years (LLT).**

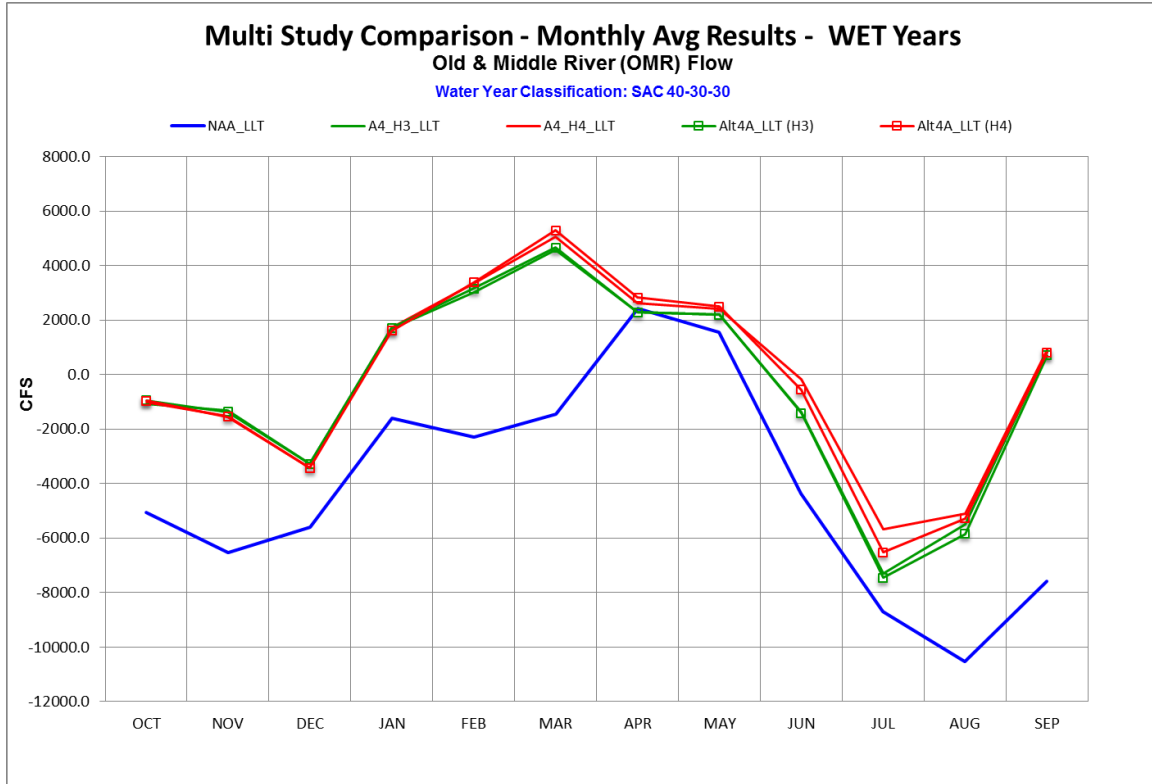


1  
2 **Figure 63. Monthly Average Flow for Delta Outflow in Wet Years (LLT).**

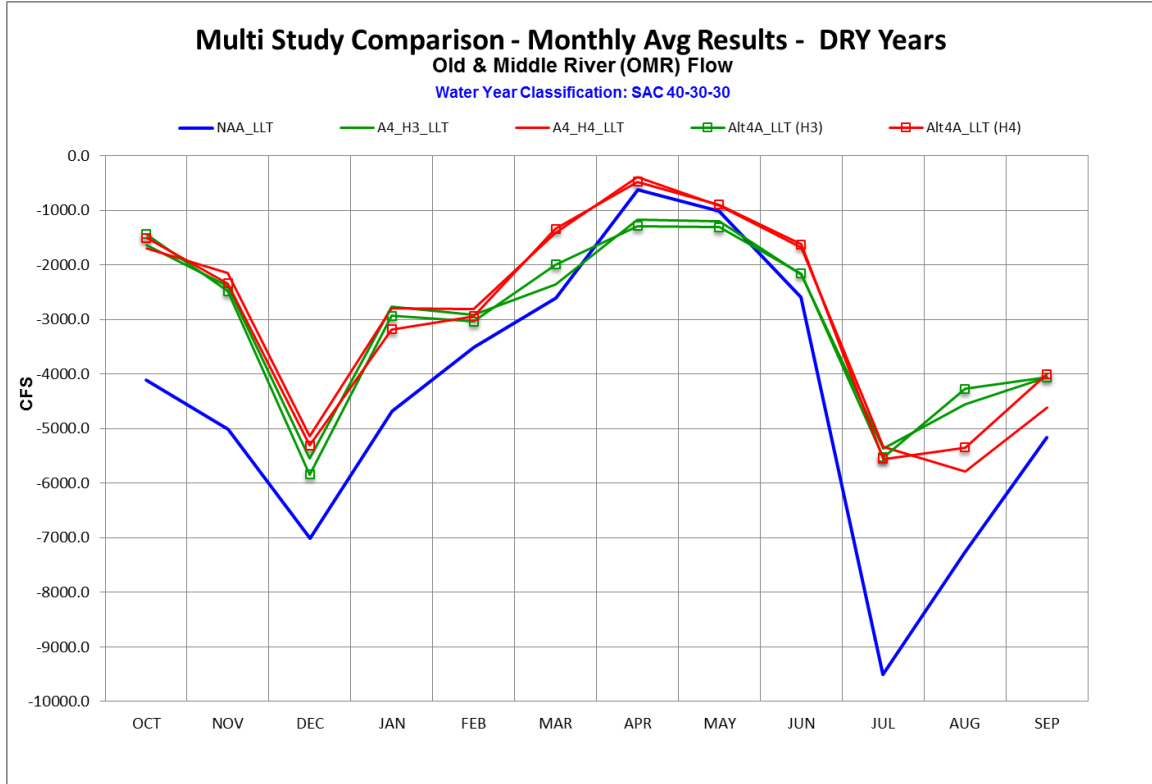


3  
4 **Figure 64. Monthly Average Flow for Delta Outflow in Dry Years (LLT).**

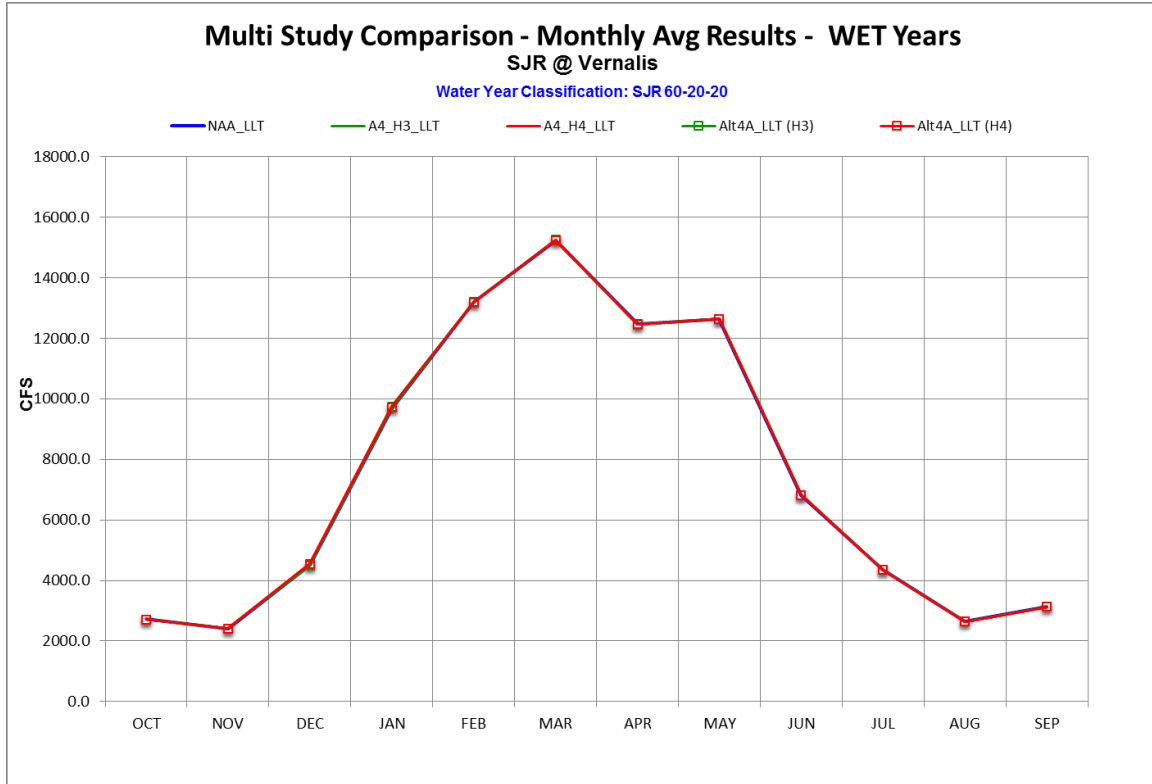




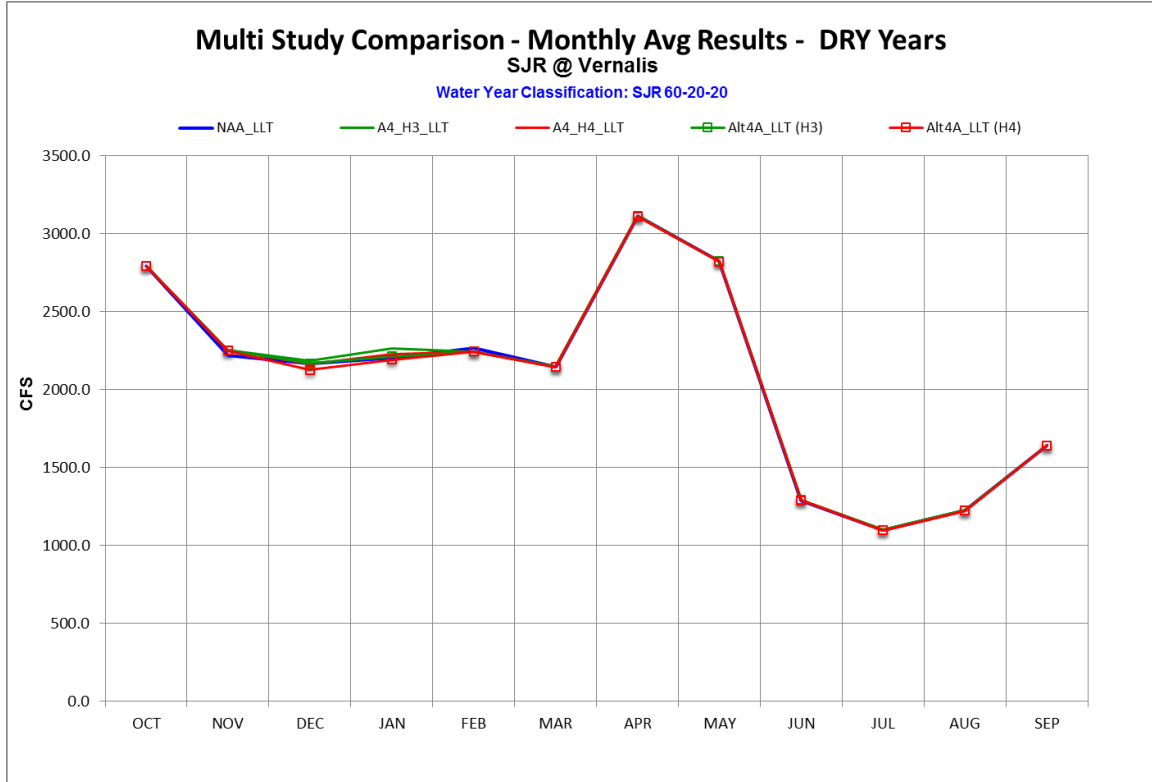
1  
2 **Figure 65. Monthly Average Flow for Old and Middle River Flow in Wet Years (LLT).**



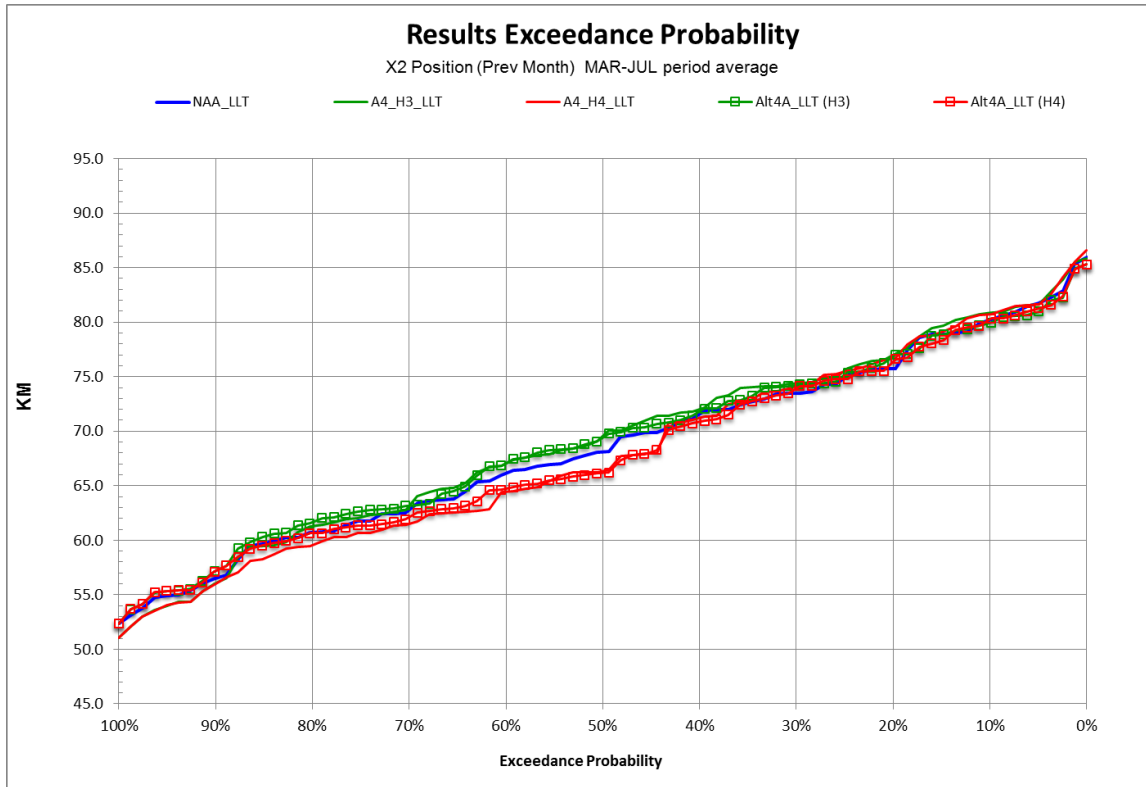
3  
4 **Figure 66. Monthly Average Flow for Old and Middle River Flow in Dry Years (LLT).**



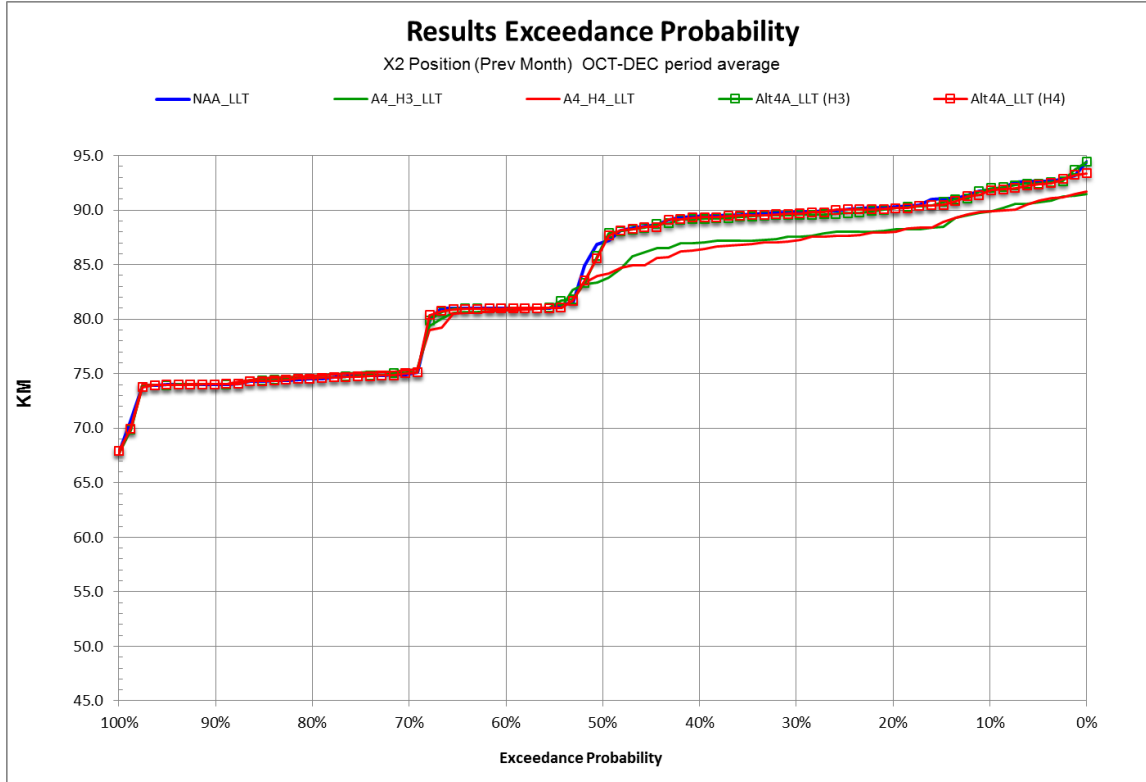
1  
2 **Figure 67. Monthly Average Flow for San Joaquin River at Vernalis in Wet Years (LLT).**



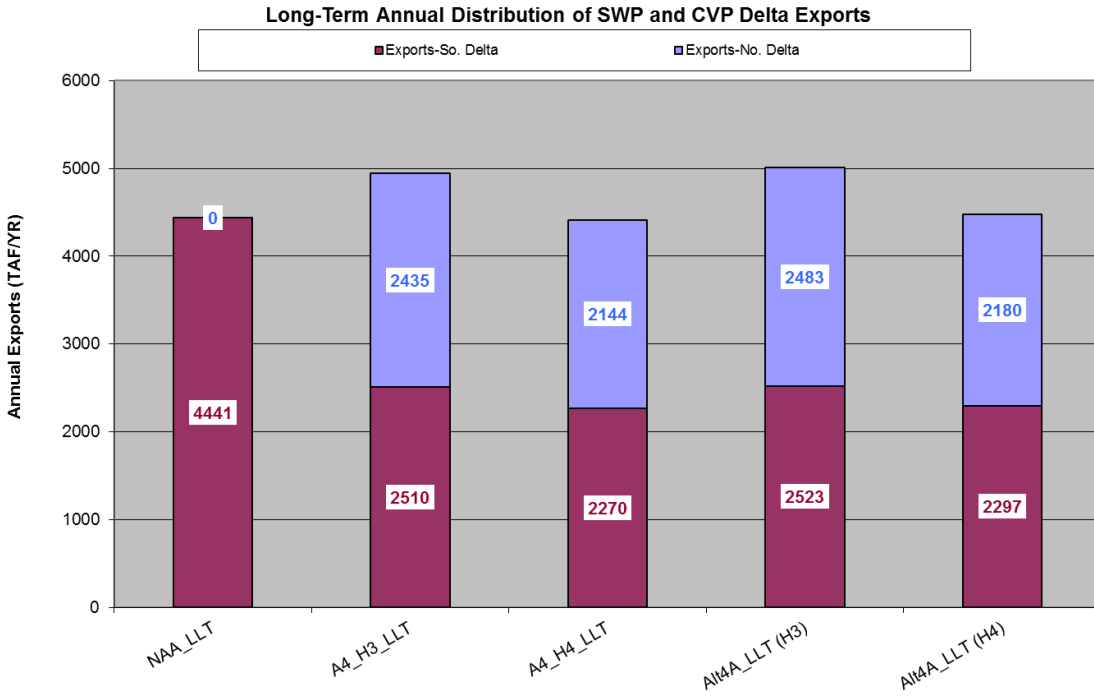
3  
4 **Figure 68. Monthly Average Flow for San Joaquin River at Vernalis in Dry Years (LLT).**



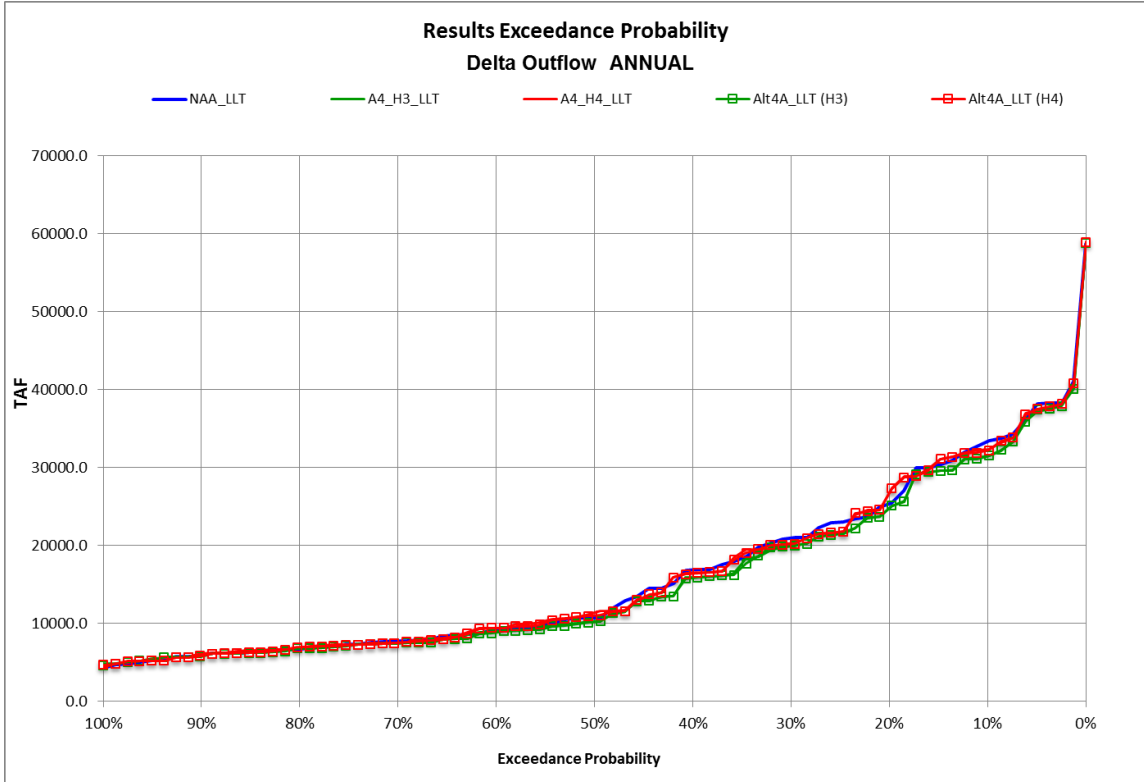
1  
2 **Figure 69. Average Spring (Feb – Jun) X2 Exceedance Probability (LLT).**



3  
4 **Figure 70. Average Fall (Sep – Nov) X2 Exceedance Probability (LLT).**



1  
2 **Figure 71. Long-term Annual Distribution of SWP and CVP North and South Delta Exports (LLT).**



3  
4 **Figure 72. Annual Exceedance Probability of Delta Exports (LLT).**

## 1 B.2 Chapter 5, Water Supply

### 2 B.2.1 Alternative 4A

3 Table B.1-1. Water Supply Summary Table for Alternative 4A

Location	Parameter	Units	Existing Condition	No Action Alternative (ELT)	Alternative 4 H3 (ELT)	Alternative 4 H4 (ELT)
Trinity Lake	End of Sep Storage	TAF	1,393	1,274	1,282	1,298
Shasta Lake	End of Sep Storage	TAF	2,723	2,474	2,476	2,522
Lake Oroville	End of Sep Storage	TAF	2,054	1,624	1,663	1,739
Folsom Lake	End of Sep Storage	TAF	525	446	441	453
CVP North-of-Delta AG Deliveries	Annual (Mar-Feb)	TAF	234	187	194	191
CVP South-of-Delta AG Deliveries	Annual (Mar-Feb)	TAF	967	848	949	910
CVP North-of-Delta M&I Deliveries	Annual (Mar-Feb)	TAF	210	391	395	393
CVP South-of-Delta M&I Deliveries	Annual (Mar-Feb)	TAF	118	112	116	115
CVP Settlement Contractors Deliveries	Dry and Critical Annual (Mar-Feb)	TAF	1,823	1,804	1,814	1,823
CVP Exchange Contractors Deliveries	Dry and Critical Annual (Mar-Feb)	TAF	814	814	814	814
CVP Level 2 Refuge Deliveries	Dry and Critical Annual (Mar-Feb)	TAF	397	389	387	389
Total CVP South-of-Delta Deliveries (including AG, M&I, Exchange & Refuge)	Annual (Mar-Feb)	TAF	2,233	2,083	2,189	2,150
Total CVP Deliveries (including AG, M&I, Settlement, Exchange & Refuge)	Annual (Mar-Feb)	TAF	4,649	4,659	4,782	4,738
Total SWP Contractors Deliveries (including FRSA, Table A, A56 and A21)	Annual (Jan-Dec)	TAF	3,736	3,500	3,909	3,404
SWP South-of-Delta Contractors Deliveries (including Table A, A56 and A21)	Annual (Jan-Dec)	TAF	2,707	2,488	2,886	2,391
Total SWP Contractors Table A Deliveries (including A56)	Annual (Jan-Dec)	TAF	2,629	2,514	2,847	2,328
SWP Contractors South-of-Delta Table A Deliveries (including A56)	Annual (Jan-Dec)	TAF	2,576	2,446	2,769	2,264
SWP Contractors A21 Deliveries	Annual (Jan-Dec)	TAF	158	52	127	138
SWP FRSA Deliveries	Dry and Critical Annual (Jan-Dec)	TAF	899	856	859	868
Delta Outflow	Annual (Oct-Sep)	TAF	15,533	16,157	15,590	16,138
Delta Exports	Annual (Oct-Sep)	TAF	5,144	4,728	5,265	4,705
Exports at North Delta Diversion Intakes	Annual (Oct-Sep)	%	0	0	49	49
Exports at South Delta Intakes	Annual (Oct-Sep)	%	100	100	51	51

Note: "ELT" (Early Long-Term) indicates Alternatives that are simulated with 2025 climate change and sea level rise.

4

5

1 **Table B.1-2. Water Supply Summary Table for Alternative 4A**

Location	Parameter	Units	No Action Alternative (ELT)	Alternative 4 H3 (ELT)	Alternative 4 H4 (ELT)
<b>Differences from Existing Conditions</b>					
Trinity Lake	End of Sep Storage	TAF	-119	-112	-95
Shasta Lake	End of Sep Storage	TAF	-249	-247	-201
Lake Oroville	End of Sep Storage	TAF	-430	-391	-315
Folsom Lake	End of Sep Storage	TAF	-80	-84	-72
CVP North-of-Delta AG Deliveries	Annual (Mar-Feb)	TAF	-47	-40	-43
CVP South-of-Delta AG Deliveries	Annual (Mar-Feb)	TAF	-120	-19	-58
CVP North-of-Delta M&I Deliveries	Annual (Mar-Feb)	TAF	181	184	183
CVP South-of-Delta M&I Deliveries	Annual (Mar-Feb)	TAF	-6	-1	-3
CVP Settlement Contractors Deliveries	Dry and Critical Annual (Mar-Feb)	TAF	-18	-8	1
CVP Exchange Contractors Deliveries	Dry and Critical Annual (Mar-Feb)	TAF	0	0	0
CVP Level 2 Refuge Deliveries	Dry and Critical Annual (Mar-Feb)	TAF	-8	-10	-8
Total CVP South-of-Delta Deliveries (including AG, M&I, Exchange & Refuge)	Annual (Mar-Feb)	TAF	-150	-44	-83
Total CVP Deliveries (including AG, M&I, Settlement, Exchange & Refuge)	Annual (Mar-Feb)	TAF	9	133	88
Total SWP Contractors Deliveries (including FRSA, Table A, A56 and A21)	Annual (Jan-Dec)	TAF	-236	173	-332
SWP South-of-Delta Contractors Deliveries (including Table A, A56 and A21)	Annual (Jan-Dec)	TAF	-219	179	-316
Total SWP Contractors Table A Deliveries (including A56)	Annual (Jan-Dec)	TAF	-114	219	-301
SWP Contractors South-of-Delta Table A Deliveries (including A56)	Annual (Jan-Dec)	TAF	-129	193	-312
SWP Contractors A21 Deliveries	Annual (Jan-Dec)	TAF	-106	-31	-20
SWP FRSA Deliveries	Dry and Critical Annual (Jan-Dec)	TAF	-44	-40	-31
Delta Outflow	Annual (Oct-Sep)	TAF	625	58	605
Delta Exports	Annual (Oct-Sep)	TAF	-416	121	-439
Exports at North Delta Diversion Intakes	Annual (Oct-Sep)	%	0	49	49
Exports at South Delta Intakes	Annual (Oct-Sep)	%	0	-49	-49

Location	Parameter	Units	No Action Alternative (ELT)	Alternative 4 H3 (ELT)	Alternative 4 H4 (ELT)
<b>Percent Differences from Existing Conditions</b>					
Trinity Lake	End of Sep Storage	%	-9	-8	-7
Shasta Lake	End of Sep Storage	%	-9	-9	-7
Lake Oroville	End of Sep Storage	%	-21	-19	-15
Folsom Lake	End of Sep Storage	%	-15	-16	-14
CVP North-of-Delta AG Deliveries	Annual (Mar-Feb)	%	-20	-17	-18
CVP South-of-Delta AG Deliveries	Annual (Mar-Feb)	%	-12	-2	-6
CVP North-of-Delta M&I Deliveries	Annual (Mar-Feb)	%	86	88	87
CVP South-of-Delta M&I Deliveries	Annual (Mar-Feb)	%	-5	-1	-2
CVP Settlement Contractors Deliveries	Dry and Critical Annual (Mar-Feb)	%	-1	0	0
CVP Exchange Contractors Deliveries	Dry and Critical Annual (Mar-Feb)	%	0	0	0
CVP Level 2 Refuge Deliveries	Dry and Critical Annual (Mar-Feb)	%	-2	-3	-2
Total CVP South-of-Delta Deliveries (including AG, M&I, Exchange & Refuge)	Annual (Mar-Feb)	%	-7	-2	-4
Total CVP Deliveries (including AG, M&I, Settlement, Exchange & Refuge)	Annual (Mar-Feb)	%	0	3	2
Total SWP Contractors Deliveries (including FRSA, Table A, A56 and A21)	Annual (Jan-Dec)	%	-6	5	-9
SWP South-of-Delta Contractors Deliveries (including Table A, A56 and A21)	Annual (Jan-Dec)	%	-8	7	-12
Total SWP Contractors Table A Deliveries (including A56)	Annual (Jan-Dec)	%	-4	8	-11
SWP Contractors South-of-Delta Table A Deliveries (including A56)	Annual (Jan-Dec)	%	-5	8	-12
SWP Contractors A21 Deliveries	Annual (Jan-Dec)	%	-67	-20	-13
SWP FRSA Deliveries	Dry and Critical Annual (Jan-Dec)	%	-5	-4	-3
Delta Outflow	Annual (Oct-Sep)	%	4	0	4
Delta Exports	Annual (Oct-Sep)	%	-8	2	-9
Exports at North Delta Diversion Intakes	Annual (Oct-Sep)	%	-	-	-
Exports at South Delta Intakes	Annual (Oct-Sep)	%	0	-49	-49
Note: "ELT" (Early Long-Term) indicates Alternatives that are simulated with 2025 climate change and sea level rise.					

1 **Table B.1-3. Water Supply Summary Table for Alternative 4A**

Location	Parameter	Units	Alternative 4 H3 (ELT)	Alternative 4 H4 (ELT)
<b>Differences from No Action Alternative (ELT)</b>				
Trinity Lake	End of Sep Storage	TAF	8	24
Shasta Lake	End of Sep Storage	TAF	2	48
Lake Oroville	End of Sep Storage	TAF	39	115
Folsom Lake	End of Sep Storage	TAF	-4	8
CVP North-of-Delta AG Deliveries	Annual (Mar-Feb)	TAF	8	5
CVP South-of-Delta AG Deliveries	Annual (Mar-Feb)	TAF	101	62
CVP North-of-Delta M&I Deliveries	Annual (Mar-Feb)	TAF	4	2
CVP South-of-Delta M&I Deliveries	Annual (Mar-Feb)	TAF	4	3
CVP Settlement Contractors Deliveries	Dry and Critical Annual (Mar-Feb)	TAF	10	19
CVP Exchange Contractors Deliveries	Dry and Critical Annual (Mar-Feb)	TAF	0	0
CVP Level 2 Refuge Deliveries	Dry and Critical Annual (Mar-Feb)	TAF	-2	0
Total CVP South-of-Delta Deliveries (including AG, M&I, Exchange & Refuge)	Annual (Mar-Feb)	TAF	106	66
Total CVP Deliveries (including AG, M&I, Settlement, Exchange & Refuge)	Annual (Mar-Feb)	TAF	123	79
Total SWP Contractors Deliveries (including FRSA, Table A, A56 and A21)	Annual (Jan-Dec)	TAF	409	-96
SWP South-of-Delta Contractors Deliveries (including Table A, A56 and A21)	Annual (Jan-Dec)	TAF	398	-97
Total SWP Contractors Table A Deliveries (including A56)	Annual (Jan-Dec)	TAF	333	-186
SWP Contractors South-of-Delta Table A Deliveries (including A56)	Annual (Jan-Dec)	TAF	323	-182
SWP Contractors A21 Deliveries	Annual (Jan-Dec)	TAF	75	86
SWP FRSA Deliveries	Dry and Critical Annual (Jan-Dec)	TAF	3	12
Delta Outflow	Annual (Oct-Sep)	TAF	-567	-19
Delta Exports	Annual (Oct-Sep)	TAF	537	-23
Exports at North Delta Diversion Intakes	Annual (Oct-Sep)	%	49	49
Exports at South Delta Intakes	Annual (Oct-Sep)	%	-49	-49
<b>Percent Differences from No Action Alternative (ELT)</b>				
Trinity Lake	End of Sep Storage	%	1	2
Shasta Lake	End of Sep Storage	%	0	2
Lake Oroville	End of Sep Storage	%	2	7
Folsom Lake	End of Sep Storage	%	-1	2
CVP North-of-Delta AG Deliveries	Annual (Mar-Feb)	%	4	3
CVP South-of-Delta AG Deliveries	Annual (Mar-Feb)	%	12	7
CVP North-of-Delta M&I Deliveries	Annual (Mar-Feb)	%	1	1
CVP South-of-Delta M&I Deliveries	Annual (Mar-Feb)	%	4	3
CVP Settlement Contractors Deliveries	Dry and Critical Annual (Mar-Feb)	%	1	1
CVP Exchange Contractors Deliveries	Dry and Critical Annual (Mar-Feb)	%	0	0
CVP Level 2 Refuge Deliveries	Dry and Critical Annual (Mar-Feb)	%	-1	0
Total CVP South-of-Delta Deliveries (including AG, M&I, Exchange & Refuge)	Annual (Mar-Feb)	%	5	3
Total CVP Deliveries (including AG, M&I, Settlement, Exchange & Refuge)	Annual (Mar-Feb)	%	3	2
Total SWP Contractors Deliveries (including FRSA, Table A, A56 and A21)	Annual (Jan-Dec)	%	12	-3
SWP South-of-Delta Contractors Deliveries (including Table A, A56 and A21)	Annual (Jan-Dec)	%	16	-4
Total SWP Contractors Table A Deliveries (including A56)	Annual (Jan-Dec)	%	13	-7
SWP Contractors South-of-Delta Table A Deliveries (including A56)	Annual (Jan-Dec)	%	13	-7
SWP Contractors A21 Deliveries	Annual (Jan-Dec)	%	143	164
SWP FRSA Deliveries	Dry and Critical Annual (Jan-Dec)	%	0	1
Delta Outflow	Annual (Oct-Sep)	%	-4	0
Delta Exports	Annual (Oct-Sep)	%	11	0
Exports at North Delta Diversion Intakes	Annual (Oct-Sep)	%	-	-
Exports at South Delta Intakes	Annual (Oct-Sep)	%	-49	-49
Note: "ELT" (Early Long-Term) indicates Alternatives that are simulated with 2025 climate change and sea level rise.				



1 **B.2.2 Alternative 2D and 5A**

2 **Table B.1-4. Water Supply Summary Table for Alternative 2D and Alternative 5A**

Location	Parameter	Units	Existing Condition	No Action Alternative (ELT)	Alternative 2D (ELT)	Alternative 5A (ELT)
Trinity Lake	End of Sep Storage	TAF	1,393	1,274	1,274	1,272
Shasta Lake	End of Sep Storage	TAF	2,723	2,474	2,484	2,465
Lake Oroville	End of Sep Storage	TAF	2,054	1,624	1,681	1,713
Folsom Lake	End of Sep Storage	TAF	525	446	438	439
CVP North-of-Delta AG Deliveries	Annual (Mar-Feb)	TAF	234	187	194	190
CVP South-of-Delta AG Deliveries	Annual (Mar-Feb)	TAF	967	848	958	958
CVP North-of-Delta M&I Deliveries	Annual (Mar-Feb)	TAF	210	391	394	392
CVP South-of-Delta M&I Deliveries	Annual (Mar-Feb)	TAF	118	112	117	116
CVP Settlement Contractors Deliveries	Dry and Critical Annual (Mar-Feb)	TAF	1,823	1,804	1,812	1,816
CVP Exchange Contractors Deliveries	Dry and Critical Annual (Mar-Feb)	TAF	814	814	814	814
CVP Level 2 Refuge Deliveries	Dry and Critical Annual (Mar-Feb)	TAF	397	389	387	391
Total CVP South-of-Delta Deliveries (including AG, M&I, Exchange & Refuge)	Annual (Mar-Feb)	TAF	2,233	2,083	2,198	2,198
Total CVP Deliveries (including AG, M&I, Settlement, Exchange & Refuge)	Annual (Mar-Feb)	TAF	4,649	4,659	4,790	4,785
Total SWP Contractors Deliveries (including FRSA, Table A, A56 and A21)	Annual (Jan-Dec)	TAF	3,736	3,500	4,019	3,836
SWP South-of-Delta Contractors Deliveries (including Table A, A56 and A21)	Annual (Jan-Dec)	TAF	2,707	2,488	2,995	2,812
Total SWP Contractors Table A Deliveries (including A56)	Annual (Jan-Dec)	TAF	2,629	2,514	2,911	2,790
SWP Contractors South-of-Delta Table A Deliveries (including A56)	Annual (Jan-Dec)	TAF	2,576	2,446	2,831	2,713
SWP Contractors A21 Deliveries	Annual (Jan-Dec)	TAF	158	52	174	110
SWP FRSA Deliveries	Dry and Critical Annual (Jan-Dec)	TAF	899	856	859	865
Delta Outflow	Annual (Oct-Sep)	TAF	15,533	16,157	15,460	15,683
Delta Exports	Annual (Oct-Sep)	TAF	5,144	4,728	5,389	5,183
Exports at North Delta Diversion Intakes	Annual (Oct-Sep)	%	0	0	57	25
Exports at South Delta Intakes	Annual (Oct-Sep)	%	100	100	43	75
Note: "ELT" (Early Long-Term) indicates Alternatives that are simulated with 2025 climate change and sea level rise.						

1 **Table B.1-5. Water Supply Summary Table Differences from Existing Conditions for Alternative 2D and Alternative 5A**

<b>Location</b>	<b>Parameter</b>	<b>Units</b>	<b>No Action Alternative (ELT)</b>	<b>Alternative 2D (ELT)</b>	<b>Alternative 5A (ELT)</b>
<b>Differences from Existing Conditions</b>					
Trinity Lake	End of Sep Storage	TAF	-119	-120	-122
Shasta Lake	End of Sep Storage	TAF	-249	-238	-258
Lake Oroville	End of Sep Storage	TAF	-430	-373	-341
Folsom Lake	End of Sep Storage	TAF	-80	-87	-86
CVP North-of-Delta AG Deliveries	Annual (Mar-Feb)	TAF	-47	-40	-44
CVP South-of-Delta AG Deliveries	Annual (Mar-Feb)	TAF	-120	-10	-10
CVP North-of-Delta M&I Deliveries	Annual (Mar-Feb)	TAF	181	184	182
CVP South-of-Delta M&I Deliveries	Annual (Mar-Feb)	TAF	-6	-1	-2
CVP Settlement Contractors Deliveries	Dry and Critical Annual (Mar-Feb)	TAF	-18	-10	-7
CVP Exchange Contractors Deliveries	Dry and Critical Annual (Mar-Feb)	TAF	0	0	0
CVP Level 2 Refuge Deliveries	Dry and Critical Annual (Mar-Feb)	TAF	-8	-10	-6
Total CVP South-of-Delta Deliveries (including AG, M&I, Exchange & Refuge)	Annual (Mar-Feb)	TAF	-150	-35	-35
Total CVP Deliveries (including AG, M&I, Settlement, Exchange & Refuge)	Annual (Mar-Feb)	TAF	9	141	135
Total SWP Contractors Deliveries (including FRSA, Table A, A56 and A21)	Annual (Jan-Dec)	TAF	-236	283	101
SWP South-of-Delta Contractors Deliveries (including Table A, A56 and A21)	Annual (Jan-Dec)	TAF	-219	288	105
Total SWP Contractors Table A Deliveries (including A56)	Annual (Jan-Dec)	TAF	-114	282	161
SWP Contractors South-of-Delta Table A Deliveries (including A56)	Annual (Jan-Dec)	TAF	-129	256	138
SWP Contractors A21 Deliveries	Annual (Jan-Dec)	TAF	-106	15	-49
SWP FRSA Deliveries	Dry and Critical Annual (Jan-Dec)	TAF	-44	-40	-34
Delta Outflow	Annual (Oct-Sep)	TAF	625	-73	150
Delta Exports	Annual (Oct-Sep)	TAF	-416	246	39
Exports at North Delta Diversion Intakes	Annual (Oct-Sep)	%	0	57	25
Exports at South Delta Intakes	Annual (Oct-Sep)	%	0	-57	-25

Location	Parameter	Units	No Action Alternative (ELT)	Alternative 2D (ELT)	Alternative 5A (ELT)
<b>Percent Differences from Existing Conditions</b>					
Trinity Lake	End of Sep Storage	%	-9	-9	-9
Shasta Lake	End of Sep Storage	%	-9	-9	-9
Lake Oroville	End of Sep Storage	%	-21	-18	-17
Folsom Lake	End of Sep Storage	%	-15	-17	-16
CVP North-of-Delta AG Deliveries	Annual (Mar-Feb)	%	-20	-17	-19
CVP South-of-Delta AG Deliveries	Annual (Mar-Feb)	%	-12	-1	-1
CVP North-of-Delta M&I Deliveries	Annual (Mar-Feb)	%	86	88	87
CVP South-of-Delta M&I Deliveries	Annual (Mar-Feb)	%	-5	-1	-1
CVP Settlement Contractors Deliveries	Dry and Critical Annual (Mar-Feb)	%	-1	-1	0
CVP Exchange Contractors Deliveries	Dry and Critical Annual (Mar-Feb)	%	0	0	0
CVP Level 2 Refuge Deliveries	Dry and Critical Annual (Mar-Feb)	%	-2	-2	-1
Total CVP South-of-Delta Deliveries (including AG, M&I, Exchange & Refuge)	Annual (Mar-Feb)	%	-7	-2	-2
Total CVP Deliveries (including AG, M&I, Settlement, Exchange & Refuge)	Annual (Mar-Feb)	%	0	3	3
Total SWP Contractors Deliveries (including FRSA, Table A, A56 and A21)	Annual (Jan-Dec)	%	-6	8	3
SWP South-of-Delta Contractors Deliveries (including Table A, A56 and A21)	Annual (Jan-Dec)	%	-8	11	4
Total SWP Contractors Table A Deliveries (including A56)	Annual (Jan-Dec)	%	-4	11	6
SWP Contractors South-of-Delta Table A Deliveries (including A56)	Annual (Jan-Dec)	%	-5	10	5
SWP Contractors A21 Deliveries	Annual (Jan-Dec)	%	-67	10	-31
SWP FRSA Deliveries	Dry and Critical Annual (Jan-Dec)	%	-5	-4	-4
Delta Outflow	Annual (Oct-Sep)	%	4	0	1
Delta Exports	Annual (Oct-Sep)	%	-8	5	1
Exports at North Delta Diversion Intakes	Annual (Oct-Sep)	%	-	-	-
Exports at South Delta Intakes	Annual (Oct-Sep)	%	0	-57	-25
Note: "ELT" (Early Long-Term) indicates Alternatives that are simulated with 2025 climate change and sea level rise.					

## 1 B.3 Chapter 6, Surface Water

### 2 B.3.1 Alternative 4A

3 Table B.2-1. Surface Water Summary Table for Alternative 4A

Location	Parameter	Units	Existing Condition	No Action Alternative (ELT)	Alternative 4 H3 (ELT)	Alternative 4 H4 (ELT)
Shasta Lake	Number of months within 10 TAF of the flood curve in October through June		218	184	187	189
Lake Oroville	Number of months within 10 TAF of the flood curve in October through June		240	174	176	179
Folsom Lake	Number of months within 10 TAF of the flood curve in October through June		361	312	308	322
Sacramento River at Bend Bridge	Wet Years January Flow	CFS	27,694	29,008	29,439	29,343
Sacramento River at Bend Bridge	Wet Years February Flow	CFS	29,943	32,387	32,528	32,642
Sacramento River at Bend Bridge	Wet Years March Flow	CFS	24,855	25,319	25,328	25,328
Sacramento River at Bend Bridge	Average of Top 10% Monthly Flows	CFS	32,352	33,841	34,214	34,166
Sacramento River at Freeport	Wet Years January Flow	CFS	50,800	51,801	50,112	50,459
Sacramento River at Freeport	Wet Years February Flow	CFS	57,222	58,786	57,253	57,076
Sacramento River at Freeport	Wet Years March Flow	CFS	49,436	50,217	48,131	48,097
Sacramento River at Freeport	Average of Top 10% Monthly Flows	CFS	60,876	62,018	60,463	60,686
San Joaquin River at Vernalis	Wet Years January Flow	CFS	9,089	9,838	9,884	9,838
San Joaquin River at Vernalis	Wet Years February Flow	CFS	12,750	14,001	14,000	14,001
San Joaquin River at Vernalis	Wet Years March Flow	CFS	14,374	15,127	15,129	15,126
San Joaquin River at Vernalis	Average of Top 10% Monthly Flows	CFS	16,782	17,438	17,439	17,436
Sacramento River upstream of Walnut Grove	Wet Years January Flow	CFS	50,961	51,963	42,922	43,191
Sacramento River upstream of Walnut Grove	Wet Years February Flow	CFS	57,314	58,879	48,669	48,520
Sacramento River upstream of Walnut Grove	Wet Years March Flow	CFS	49,416	50,198	39,664	41,212
Sacramento River upstream of Walnut Grove	Average of Top 10% Monthly Flows	CFS	60,949	62,098	52,180	52,458

<b>Location</b>	<b>Parameter</b>	<b>Units</b>	<b>Existing Condition</b>	<b>No Action Alternative (ELT)</b>	<b>Alternative 4 H3 (ELT)</b>	<b>Alternative 4 H4 (ELT)</b>
Trinity River below Lewiston Reservoir	Wet Years May Flow	CFS	4,636	4,620	4,620	4,620
Trinity River below Lewiston Reservoir	Average of Top 10% Monthly Flows	CFS	4,304	4,489	4,524	4,519
American River below Nimbus	Wet Years January Flow	CFS	8,806	10,113	10,103	10,150
American River below Nimbus	Wet Years February Flow	CFS	9,294	10,422	10,460	10,473
American River below Nimbus	Wet Years March Flow	CFS	6,089	6,454	6,454	6,454
American River below Nimbus	Average of Top 10% Monthly Flows	CFS	10,967	12,012	12,045	12,028
Feather River below Thermalito	Wet Years January Flow	CFS	11,257	11,528	11,518	11,948
Feather River below Thermalito	Wet Years February Flow	CFS	12,466	13,732	14,169	13,400
Feather River below Thermalito	Wet Years March Flow	CFS	12,895	13,977	13,839	13,841
Feather River below Thermalito	Average of Top 10% Monthly Flows	CFS	15,192	15,685	15,756	17,105
Fremont Weir Spills	Wet Years January Flow	CFS	20,528	23,036	25,157	25,199
Fremont Weir Spills	Wet Years February Flow	CFS	23,869	28,177	30,301	29,848
Fremont Weir Spills	Wet Years March Flow	CFS	15,897	17,336	19,288	19,340
Fremont Weir Spills	Average of Top 10% Monthly Flows	CFS	21,509	24,185	26,144	26,325
Old and Middle River	October Flow	CFS	-7,568	-5,248	-1,700	-1,679
Old and Middle River	November Flow	CFS	-7,592	-5,970	-2,143	-2,106
Old and Middle River	December Flow	CFS	-6,513	-6,464	-4,906	-4,780
Old and Middle River	January Flow	CFS	-3,449	-3,373	-1,042	-1,167
Old and Middle River	February Flow	CFS	-3,158	-3,006	-323	-283
Old and Middle River	March Flow	CFS	-2,758	-2,691	337	1,080
Old and Middle River	April Flow	CFS	843	715	132	628
Old and Middle River	May Flow	CFS	353	262	101	480
Old and Middle River	June Flow	CFS	-3,780	-3,632	-1,922	-1,300
Old and Middle River	July Flow	CFS	-9,715	-9,110	-6,777	-5,760
Old and Middle River	August Flow	CFS	-9,283	-8,861	-5,602	-5,557
Old and Middle River	September Flow	CFS	-8,236	-7,423	-2,019	-1,792

## Notes:

- <sup>1</sup> "ELT" (Early Long-Term) indicates Alternatives that are simulated with 2025 climate change and sea level rise.
- <sup>2</sup> Water year types are determined by San Joaquin River Basin 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999) for San Joaquin River flows at Vernalis and by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999) for all other flows.

1 **Table B.2-2. Surface Water Summary Table Differences from Existing Conditions for Alternative 4A**

Location	Parameter	Units	No Action Alternative (ELT)	Alternative 4 H3 (ELT)	Alternative 4 H4 (ELT)
<b>Differences from Existing Conditions</b>					
Shasta Lake	Number of months within 10 TAF of the flood curve in October through June	TAF	-34	-31	-29
Lake Oroville	Number of months within 10 TAF of the flood curve in October through June	TAF	-66	-64	-61
Folsom Lake	Number of months within 10 TAF of the flood curve in October through June	TAF	-49	-53	-39
Sacramento River at Bend Bridge	Wet Years January Flow	CFS	1,314	1,745	1,648
Sacramento River at Bend Bridge	Wet Years February Flow	CFS	2,444	2,585	2,699
Sacramento River at Bend Bridge	Wet Years March Flow	CFS	464	472	473
Sacramento River at Bend Bridge	Average of Top 10% Monthly Flows	CFS	1,489	1,862	1,813
Sacramento River at Freeport	Wet Years January Flow	CFS	1,001	-688	-342
Sacramento River at Freeport	Wet Years February Flow	CFS	1,564	32	-146
Sacramento River at Freeport	Wet Years March Flow	CFS	780	-1,305	-1,339
Sacramento River at Freeport	Average of Top 10% Monthly Flows	CFS	1,142	-412	-189
San Joaquin River at Vernalis	Wet Years January Flow	CFS	749	795	749
San Joaquin River at Vernalis	Wet Years February Flow	CFS	1,251	1,249	1,250
San Joaquin River at Vernalis	Wet Years March Flow	CFS	753	755	752
San Joaquin River at Vernalis	Average of Top 10% Monthly Flows	CFS	656	657	655
Sacramento River upstream of Walnut Grove	Wet Years January Flow	CFS	1,002	-8,039	-7,770
Sacramento River upstream of Walnut Grove	Wet Years February Flow	CFS	1,565	-8,645	-8,794
Sacramento River upstream of Walnut Grove	Wet Years March Flow	CFS	783	-9,752	-8,204
Sacramento River upstream of Walnut Grove	Average of Top 10% Monthly Flows	CFS	1,149	-8,770	-8,492
Trinity River below Lewiston Reservoir	Wet Years May Flow	CFS	-16	-16	-16
Trinity River below Lewiston Reservoir	Average of Top 10% Monthly Flows	CFS	185	220	215
American River below Nimbus	Wet Years January Flow	CFS	1,306	1,297	1,344
American River below Nimbus	Wet Years February Flow	CFS	1,129	1,167	1,180
American River below Nimbus	Wet Years March Flow	CFS	365	365	365
American River below Nimbus	Average of Top 10% Monthly Flows	CFS	1,045	1,078	1,061
Feather River below Thermalito	Wet Years January Flow	CFS	270	261	690
Feather River below Thermalito	Wet Years February Flow	CFS	1,266	1,703	934
Feather River below Thermalito	Wet Years March Flow	CFS	1,082	944	946
Feather River below Thermalito	Average of Top 10% Monthly Flows	CFS	493	563	1,912
Fremont Weir Spills	Wet Years January Flow	CFS	2,508	4,629	4,671
Fremont Weir Spills	Wet Years February Flow	CFS	4,308	6,432	5,979
Fremont Weir Spills	Wet Years March Flow	CFS	1,439	3,390	3,442
Fremont Weir Spills	Average of Top 10% Monthly Flows	CFS	2,676	4,635	4,816
Old and Middle River	October Flow	CFS	2,320	5,868	5,888
Old and Middle River	November Flow	CFS	1,622	5,449	5,486

Location	Parameter	Units	No Action Alternative (ELT)	Alternative 4 H3 (ELT)	Alternative 4 H4 (ELT)
Old and Middle River	December Flow	CFS	49	1,607	1,732
Old and Middle River	January Flow	CFS	75	2,407	2,282
Old and Middle River	February Flow	CFS	151	2,834	2,875
Old and Middle River	March Flow	CFS	67	3,095	3,838
Old and Middle River	April Flow	CFS	-128	-711	-215
Old and Middle River	May Flow	CFS	-91	-253	127
Old and Middle River	June Flow	CFS	148	1,858	2,480
Old and Middle River	July Flow	CFS	605	2,938	3,954
Old and Middle River	August Flow	CFS	423	3,682	3,727
Old and Middle River	September Flow	CFS	813	6,217	6,445
<b>Percent Differences from Existing Conditions</b>					
Shasta Lake	Percent increase in number of months within 10 TAF of the flood curve in October through June with respect to the total number of October-June months	%	-5	-4	-4
Lake Oroville	Percent increase in number of months within 10 TAF of the flood curve in October through June with respect to the total number of October-June months	%	-9	-9	-8
Folsom Lake	Percent increase in number of months within 10 TAF of the flood curve in October through June with respect to the total number of October-June months	%	-7	-7	-5
Sacramento River at Bend Bridge	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (100,000 cfs)	%	1	2	2
Sacramento River at Freeport	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (110,000 cfs)	%	1	0	0
San Joaquin River at Vernalis	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (52,000 cfs)	%	1	1	1
Sacramento River upstream of Walnut Grove	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (110,000 cfs)	%	1	-8	-8
Trinity River below Lewiston Reservoir	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (6,000 cfs)	%	3	4	4
American River below Nimbus	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (152,000 cfs)	%	1	1	1
Feather River below Thermalito	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (210,000 cfs)	%	0	0	1
Fremont Weir Spills	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (343,000 cfs)	%	1	1	1
Notes:					
1 "ELT" (Early Long-Term) indicates Alternatives that are simulated with 2025 climate change and sea level rise.					
2 Water year types are determined by San Joaquin River Basin 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999) for San Joaquin River flows at Vernalis and by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999) for all other flows.					
3 Channel capacities reported in Sacramento-San Joaquin Comprehensive Study (U.S. Army Corps of Engineers 2002) are used where applicable. Channel capacity of Trinity River below Lewiston Reservoir is assumed as 6,000 cfs, which is consistent with model input.					

1 **Table B.2-3. Surface Water Summary Table Differences from No Action Alternative (ELT) for Alternative 4A**

Location	Parameter	Units	Alternative 4 H3 (ELT)	Alternative 4 H4 (ELT)
<b>Differences from No Action Alternative (ELT)</b>				
Shasta Lake	Number of months within 10 TAF of the flood curve in October through June	TAF	3	5
Lake Oroville	Number of months within 10 TAF of the flood curve in October through June	TAF	2	5
Folsom Lake	Number of months within 10 TAF of the flood curve in October through June	TAF	-4	10
Sacramento River at Bend Bridge	Wet Years January Flow	CFS	431	334
Sacramento River at Bend Bridge	Wet Years February Flow	CFS	142	256
Sacramento River at Bend Bridge	Wet Years March Flow	CFS	8	9
Sacramento River at Bend Bridge	Average of Top 10% Monthly Flows	CFS	373	324
Sacramento River at Freeport	Wet Years January Flow	CFS	-1,689	-1,343
Sacramento River at Freeport	Wet Years February Flow	CFS	-1,533	-1,710
Sacramento River at Freeport	Wet Years March Flow	CFS	-2,085	-2,119
Sacramento River at Freeport	Average of Top 10% Monthly Flows	CFS	-1,555	-1,332
San Joaquin River at Vernalis	Wet Years January Flow	CFS	45	0
San Joaquin River at Vernalis	Wet Years February Flow	CFS	-2	-1
San Joaquin River at Vernalis	Wet Years March Flow	CFS	2	-1
San Joaquin River at Vernalis	Average of Top 10% Monthly Flows	CFS	1	-2
Sacramento River upstream of Walnut Grove	Wet Years January Flow	CFS	-9,041	-8,772
Sacramento River upstream of Walnut Grove	Wet Years February Flow	CFS	-10,210	-10,359
Sacramento River upstream of Walnut Grove	Wet Years March Flow	CFS	-10,534	-8,987
Sacramento River upstream of Walnut Grove	Average of Top 10% Monthly Flows	CFS	-9,919	-9,641
Trinity River below Lewiston Reservoir	Wet Years May Flow	CFS	0	0
Trinity River below Lewiston Reservoir	Average of Top 10% Monthly Flows	CFS	35	30
American River below Nimbus	Wet Years January Flow	CFS	-10	38
American River below Nimbus	Wet Years February Flow	CFS	38	51
American River below Nimbus	Wet Years March Flow	CFS	0	0
American River below Nimbus	Average of Top 10% Monthly Flows	CFS	34	16
Feather River below Thermalito	Wet Years January Flow	CFS	-9	420
Feather River below Thermalito	Wet Years February Flow	CFS	436	-332
Feather River below Thermalito	Wet Years March Flow	CFS	-138	-136
Feather River below Thermalito	Average of Top 10% Monthly Flows	CFS	70	1,419
Fremont Weir Spills	Wet Years January Flow	CFS	2,121	2,163
Fremont Weir Spills	Wet Years February Flow	CFS	2,124	1,672
Fremont Weir Spills	Wet Years March Flow	CFS	1,951	2,003
Fremont Weir Spills	Average of Top 10% Monthly Flows	CFS	1,960	2,140
Old and Middle River	October Flow	CFS	3,548	3,568
Old and Middle River	November Flow	CFS	3,827	3,864
Old and Middle River	December Flow	CFS	1,558	1,684



Location	Parameter	Units	Alternative 4 H3 (ELT)	Alternative 4 H4 (ELT)
Old and Middle River	January Flow	CFS	2,332	2,207
Old and Middle River	February Flow	CFS	2,683	2,723
Old and Middle River	March Flow	CFS	3,028	3,771
Old and Middle River	April Flow	CFS	-583	-87
Old and Middle River	May Flow	CFS	-161	219
Old and Middle River	June Flow	CFS	1,709	2,332
Old and Middle River	July Flow	CFS	2,333	3,349
Old and Middle River	August Flow	CFS	3,259	3,304
Old and Middle River	September Flow	CFS	5,404	5,632
<b>Percent Differences from No Action Alternative (ELT)</b>				
Shasta Lake	Percent increase in number of months within 10 TAF of the flood curve in October through June with respect to the total number of October-June months	%	0	1
Lake Oroville	Percent increase in number of months within 10 TAF of the flood curve in October through June with respect to the total number of October-June months	%	0	1
Folsom Lake	Percent increase in number of months within 10 TAF of the flood curve in October through June with respect to the total number of October-June months	%	-1	1
Sacramento River at Bend Bridge	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (100,000 cfs)	%	0	0
Sacramento River at Freeport	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (110,000 cfs)	%	-1	-1
San Joaquin River at Vernalis	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (52,000 cfs)	%	0	0
Sacramento River upstream of Walnut Grove	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (110,000 cfs)	%	-9	-9
Trinity River below Lewiston Reservoir	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (6,000 cfs)	%	1	1
American River below Nimbus	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (152,000 cfs)	%	0	0
Feather River below Thermalito	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (210,000 cfs)	%	0	1
Fremont Weir Spills	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (343,000 cfs)	%	1	1
Notes:				
<sup>1</sup> "ELT" (Early Long-Term) indicates Alternatives that are simulated with 2025 climate change and sea level rise. <sup>2</sup> Water year types are determined by San Joaquin River Basin 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999) for San Joaquin River flows at Vernalis and by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999) for all other flows. <sup>3</sup> Channel capacities reported in Sacramento-San Joaquin Comprehensive Study (U.S. Army Corps of Engineers 2002) are used where applicable. Channel capacity of Trinity River below Lewiston Reservoir is assumed as 6,000 cfs, which is consistent with model input.				

1 **Table B.2-4. Surface Water Summary Table for Alternative 4A - Number of Years Where Storage is within 10 TAF of the Flood Curve**

Location	Parameter	Units	Existing Condition	No Action Alternative (ELT)	Alternative 4 H3 (ELT)	Alternative 4 H4 (ELT)
Shasta Lake	October	TAF	19	11	6	9
Shasta Lake	November	TAF	20	10	10	11
Shasta Lake	December	TAF	24	20	27	26
Shasta Lake	January	TAF	32	29	30	30
Shasta Lake	February	TAF	35	35	36	35
Shasta Lake	March	TAF	32	31	32	31
Shasta Lake	April	TAF	20	16	16	16
Shasta Lake	May	TAF	28	24	23	23
Shasta Lake	June	TAF	8	8	7	8
Lake Oroville	October	TAF	10	2	2	2
Lake Oroville	November	TAF	9	3	2	3
Lake Oroville	December	TAF	16	10	10	14
Lake Oroville	January	TAF	33	19	21	21
Lake Oroville	February	TAF	40	32	33	37
Lake Oroville	March	TAF	46	41	44	44
Lake Oroville	April	TAF	27	26	26	24
Lake Oroville	May	TAF	32	24	24	20
Lake Oroville	June	TAF	27	17	14	14
Folsom Lake	October	TAF	3	2	2	3
Folsom Lake	November	TAF	38	11	15	15
Folsom Lake	December	TAF	33	27	26	30
Folsom Lake	January	TAF	47	38	40	38
Folsom Lake	February	TAF	49	54	56	55
Folsom Lake	March	TAF	46	51	49	51
Folsom Lake	April	TAF	53	52	51	52
Folsom Lake	May	TAF	48	44	42	44
Folsom Lake	June	CFS	44	33	27	34
Notes: "ELT" (Early Long-Term) indicates Alternatives that are simulated with 2025 climate change and sea level rise						

2

1 **Table B.2-5. Surface Water Summary Table for Alternative 4A - Number of Years where Storage is within 10 TAF of the Flood Curve - Differences**  
 2 **from Existing Condition**

Location	Parameter	Units	No Action Alternative (ELT)	Alternative 4 H3 (ELT)	Alternative 4 H4 (ELT)
Shasta Lake	October	TAF	-8	-13	-10
Shasta Lake	November	TAF	-10	-10	-9
Shasta Lake	December	TAF	-4	3	2
Shasta Lake	January	TAF	-3	-2	-2
Shasta Lake	February	TAF	0	1	0
Shasta Lake	March	TAF	-1	0	-1
Shasta Lake	April	TAF	-4	-4	-4
Shasta Lake	May	TAF	-4	-5	-5
Shasta Lake	June	TAF	0	-1	0
Lake Oroville	October	TAF	-8	-8	-8
Lake Oroville	November	TAF	-6	-7	-6
Lake Oroville	December	TAF	-6	-6	-2
Lake Oroville	January	TAF	-14	-12	-12
Lake Oroville	February	TAF	-8	-7	-3
Lake Oroville	March	TAF	-5	-2	-2
Lake Oroville	April	TAF	-1	-1	-3
Lake Oroville	May	TAF	-8	-8	-12
Lake Oroville	June	TAF	-10	-13	-13
Folsom Lake	October	TAF	-1	-1	0
Folsom Lake	November	TAF	-27	-23	-23
Folsom Lake	December	TAF	-6	-7	-3
Folsom Lake	January	TAF	-9	-7	-9
Folsom Lake	February	TAF	5	7	6
Folsom Lake	March	TAF	5	3	5
Folsom Lake	April	TAF	-1	-2	-1
Folsom Lake	May	TAF	-4	-6	-4
Folsom Lake	June	CFS	-11	-17	-10

3

1 **Table B.2-6. Surface Water Summary Table for Alternative 4A - Number of Years where Storage is within 10 TAF of the Flood Curve -**  
 2 **Differences from No Action Alternative (ELT)**

Location	Parameter	Units	Alternative 4 H3 (ELT)	Alternative 4 H4 (ELT)
Shasta Lake	October	TAF	-5	-2
Shasta Lake	November	TAF	0	1
Shasta Lake	December	TAF	7	6
Shasta Lake	January	TAF	1	1
Shasta Lake	February	TAF	1	0
Shasta Lake	March	TAF	1	0
Shasta Lake	April	TAF	0	0
Shasta Lake	May	TAF	-1	-1
Shasta Lake	June	TAF	-1	0
Lake Oroville	October	TAF	0	0
Lake Oroville	November	TAF	-1	0
Lake Oroville	December	TAF	0	4
Lake Oroville	January	TAF	2	2
Lake Oroville	February	TAF	1	5
Lake Oroville	March	TAF	3	3
Lake Oroville	April	TAF	0	-2
Lake Oroville	May	TAF	0	-4
Lake Oroville	June	TAF	-3	-3
Folsom Lake	October	TAF	0	1
Folsom Lake	November	TAF	4	4
Folsom Lake	December	TAF	-1	3
Folsom Lake	January	TAF	2	0
Folsom Lake	February	TAF	2	1
Folsom Lake	March	TAF	-2	0
Folsom Lake	April	TAF	-1	0
Folsom Lake	May	TAF	-2	0
Folsom Lake	June	TAF	-6	1

Note: "ELT" (Early Long-Term) indicates Alternatives that are simulated with 2025 climate change and sea level rise.

## 1 B.3.2 Alternative 2D and 5A

2 Table B.2-7. Surface Water Summary Table for Alternative 2D and Alternative 5A

Location	Parameter	Units	Existing Condition	No Action Alternative (ELT)	Alternative 2D (ELT)	Alternative 5A (ELT)
Shasta Lake	Number of months within 10 TAF of the flood curve in October through June		218	184	181	187
Lake Oroville	Number of months within 10 TAF of the flood curve in October through June		240	174	177	182
Folsom Lake	Number of months within 10 TAF of the flood curve in October through June		361	312	305	307
Sacramento River at Bend Bridge	Wet Years January Flow	CFS	27,694	29,008	29,550	29,065
Sacramento River at Bend Bridge	Wet Years February Flow	CFS	29,943	32,387	32,555	32,505
Sacramento River at Bend Bridge	Wet Years March Flow	CFS	24,855	25,319	25,323	25,318
Sacramento River at Bend Bridge	Average of Top 10% Monthly Flows	CFS	32,352	33,841	34,290	34,004
Sacramento River at Freeport	Wet Years January Flow	CFS	50,800	51,801	50,170	50,357
Sacramento River at Freeport	Wet Years February Flow	CFS	57,222	58,786	57,400	57,561
Sacramento River at Freeport	Wet Years March Flow	CFS	49,436	50,217	48,080	48,303
Sacramento River at Freeport	Average of Top 10% Monthly Flows	CFS	60,876	62,018	60,535	60,598
San Joaquin River at Vernalis	Wet Years January Flow	CFS	9,089	9,838	9,905	9,861
San Joaquin River at Vernalis	Wet Years February Flow	CFS	12,750	14,001	13,998	13,999
San Joaquin River at Vernalis	Wet Years March Flow	CFS	14,374	15,127	15,127	15,118
San Joaquin River at Vernalis	Average of Top 10% Monthly Flows	CFS	16,782	17,438	17,426	17,424
Sacramento River upstream of Walnut Grove	Wet Years January Flow	CFS	50,961	51,963	39,663	47,800
Sacramento River upstream of Walnut Grove	Wet Years February Flow	CFS	57,314	58,879	45,744	54,682
Sacramento River upstream of Walnut Grove	Wet Years March Flow	CFS	49,416	50,198	37,819	45,291
Sacramento River upstream of Walnut Grove	Average of Top 10% Monthly Flows	CFS	60,949	62,098	49,153	57,850
Trinity River below Lewiston Reservoir	Wet Years May Flow	CFS	4,636	4,620	4,620	4,620

Location	Parameter	Units	Existing Condition	No Action Alternative (ELT)	Alternative 2D (ELT)	Alternative 5A (ELT)
Trinity River below Lewiston Reservoir	Average of Top 10% Monthly Flows	CFS	4,304	4,489	4,528	4,500
American River below Nimbus	Wet Years January Flow	CFS	8,806	10,113	10,111	10,159
American River below Nimbus	Wet Years February Flow	CFS	9,294	10,422	10,473	10,454
American River below Nimbus	Wet Years March Flow	CFS	6,089	6,454	6,454	6,454
American River below Nimbus	Average of Top 10% Monthly Flows	CFS	10,967	12,012	12,036	12,023
Feather River below Thermalito	Wet Years January Flow	CFS	11,257	11,528	11,597	11,755
Feather River below Thermalito	Wet Years February Flow	CFS	12,466	13,732	14,159	14,430
Feather River below Thermalito	Wet Years March Flow	CFS	12,895	13,977	13,730	14,237
Feather River below Thermalito	Average of Top 10% Monthly Flows	CFS	15,192	15,685	15,879	15,733
Fremont Weir Spills	Wet Years January Flow	CFS	20,528	23,036	25,273	24,805
Fremont Weir Spills	Wet Years February Flow	CFS	23,869	28,177	30,183	30,237
Fremont Weir Spills	Wet Years March Flow	CFS	15,897	17,336	19,220	19,499
Fremont Weir Spills	Average of Top 10% Monthly Flows	CFS	21,509	24,185	26,210	25,978
Old and Middle River	October Flow	CFS	-7,568	-5,248	-1,656	-4,074
Old and Middle River	November Flow	CFS	-7,592	-5,970	-2,030	-3,831
Old and Middle River	December Flow	CFS	-6,513	-6,464	-4,575	-6,411
Old and Middle River	January Flow	CFS	-3,449	-3,373	-10	-3,010
Old and Middle River	February Flow	CFS	-3,158	-3,006	778	-2,270
Old and Middle River	March Flow	CFS	-2,758	-2,691	1,051	-1,968
Old and Middle River	April Flow	CFS	843	715	500	688
Old and Middle River	May Flow	CFS	353	262	402	380
Old and Middle River	June Flow	CFS	-3,780	-3,632	-1,630	-3,486
Old and Middle River	July Flow	CFS	-9,715	-9,110	-6,346	-7,930
Old and Middle River	August Flow	CFS	-9,283	-8,861	-5,197	-6,873
Old and Middle River	September Flow	CFS	-8,236	-7,423	-1,815	-3,282

## Notes:

<sup>1</sup> "ELT" (Early Long-Term) indicates Alternatives that are simulated with 2025 climate change and sea level rise.

<sup>2</sup> Water year types are determined by San Joaquin River Basin 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999) for San Joaquin River flows at Vernalis and by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999) for all other flows.

1 **Table B.2-8. Surface Water Summary Table for Alternative 2D and Alternative 5A - Differences from Existing Conditions**

<b>Location</b>	<b>Parameter</b>	<b>Units</b>	<b>No Action Alternative (ELT)</b>	<b>Alternative 2D (ELT)</b>	<b>Alternative 5A (ELT)</b>
Shasta Lake	Number of months within 10 TAF of the flood curve in October through June	TAF	-34	-37	-31
Lake Oroville	Number of months within 10 TAF of the flood curve in October through June	TAF	-66	-63	-58
Folsom Lake	Number of months within 10 TAF of the flood curve in October through June	TAF	-49	-56	-54
Sacramento River at Bend Bridge	Wet Years January Flow	CFS	1,314	1,856	1,371
Sacramento River at Bend Bridge	Wet Years February Flow	CFS	2,444	2,612	2,562
Sacramento River at Bend Bridge	Wet Years March Flow	CFS	464	467	463
Sacramento River at Bend Bridge	Average of Top 10% Monthly Flows	CFS	1,489	1,938	1,652
Sacramento River at Freeport	Wet Years January Flow	CFS	1,001	-630	-443
Sacramento River at Freeport	Wet Years February Flow	CFS	1,564	179	339
Sacramento River at Freeport	Wet Years March Flow	CFS	780	-1,357	-1,134
Sacramento River at Freeport	Average of Top 10% Monthly Flows	CFS	1,142	-340	-278
San Joaquin River at Vernalis	Wet Years January Flow	CFS	749	816	772
San Joaquin River at Vernalis	Wet Years February Flow	CFS	1,251	1,248	1,248
San Joaquin River at Vernalis	Wet Years March Flow	CFS	753	752	744
San Joaquin River at Vernalis	Average of Top 10% Monthly Flows	CFS	656	644	642
Sacramento River upstream of Walnut Grove	Wet Years January Flow	CFS	1,002	-11,298	-3,161
Sacramento River upstream of Walnut Grove	Wet Years February Flow	CFS	1,565	-11,570	-2,632
Sacramento River upstream of Walnut Grove	Wet Years March Flow	CFS	783	-11,597	-4,125
Sacramento River upstream of Walnut Grove	Average of Top 10% Monthly Flows	CFS	1,149	-11,796	-3,099
Trinity River below Lewiston Reservoir	Wet Years May Flow	CFS	-16	-16	-16
Trinity River below Lewiston Reservoir	Average of Top 10% Monthly Flows	CFS	185	224	196
American River below Nimbus	Wet Years January Flow	CFS	1,306	1,305	1,353
American River below Nimbus	Wet Years February Flow	CFS	1,129	1,179	1,161
American River below Nimbus	Wet Years March Flow	CFS	365	365	365
American River below Nimbus	Average of Top 10% Monthly Flows	CFS	1,045	1,069	1,055

<b>Location</b>	<b>Parameter</b>	<b>Units</b>	<b>No Action Alternative (ELT)</b>	<b>Alternative 2D (ELT)</b>	<b>Alternative 5A (ELT)</b>
Feather River below Thermalito	Wet Years January Flow	CFS	270	340	497
Feather River below Thermalito	Wet Years February Flow	CFS	1,266	1,693	1,964
Feather River below Thermalito	Wet Years March Flow	CFS	1,082	835	1,342
Feather River below Thermalito	Average of Top 10% Monthly Flows	CFS	493	687	540
Fremont Weir Spills	Wet Years January Flow	CFS	2,508	4,744	4,277
Fremont Weir Spills	Wet Years February Flow	CFS	4,308	6,314	6,367
Fremont Weir Spills	Wet Years March Flow	CFS	1,439	3,323	3,601
Fremont Weir Spills	Average of Top 10% Monthly Flows	CFS	2,676	4,701	4,469
Old and Middle River	October Flow	CFS	2,320	5,912	3,493
Old and Middle River	November Flow	CFS	1,622	5,563	3,762
Old and Middle River	December Flow	CFS	49	1,937	102
Old and Middle River	January Flow	CFS	75	3,439	438
Old and Middle River	February Flow	CFS	151	3,936	888
Old and Middle River	March Flow	CFS	67	3,809	790
Old and Middle River	April Flow	CFS	-128	-343	-156
Old and Middle River	May Flow	CFS	-91	48	27
Old and Middle River	June Flow	CFS	148	2,150	294
Old and Middle River	July Flow	CFS	605	3,368	1,785
Old and Middle River	August Flow	CFS	423	4,086	2,410
Old and Middle River	September Flow	CFS	813	6,421	4,954
<b>Percent Differences from Existing Conditions</b>					
Shasta Lake	Percent increase in number of months within 10 TAF of the flood curve in October through June with respect to the total number of October-June months	%	-5	-5	-4
Lake Oroville	Percent increase in number of months within 10 TAF of the flood curve in October through June with respect to the total number of October-June months	%	-9	-9	-8



Location	Parameter	Units	No Action Alternative (ELT)	Alternative 2D (ELT)	Alternative 5A (ELT)
Folsom Lake	Percent increase in number of months within 10 TAF of the flood curve in October through June with respect to the total number of October-June months	%	-7	-8	-7
Sacramento River at Bend Bridge	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (100,000 cfs)	%	1	2	2
Sacramento River at Freeport	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (110,000 cfs)	%	1	0	0
San Joaquin River at Vernalis	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (52,000 cfs)	%	1	1	1
Sacramento River upstream of Walnut Grove	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (110,000 cfs)	%	1	-11	-3
Trinity River below Lewiston Reservoir	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (6,000 cfs)	%	3	4	3
American River below Nimbus	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (152,000 cfs)	%	1	1	1
Feather River below Thermalito	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (210,000 cfs)	%	0	0	0
Fremont Weir Spills	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (343,000 cfs)	%	1	1	1
Notes:					
1 "ELT" (Early Long-Term) indicates Alternatives that are simulated with 2025 climate change and sea level rise.					
2 Water year types are determined by San Joaquin River Basin 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999) for San Joaquin River flows at Vernalis and by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999) for all other flows.					
3 Channel capacities reported in Sacramento-San Joaquin Comprehensive Study (U.S. Army Corps of Engineers 2002) are used where applicable. Channel capacity of Trinity River below Lewiston Reservoir is assumed as 6,000 cfs, which is consistent with model input.					

1 **Table B.2-9. Surface Water Summary Table Differences from No Action Alternative (ELT) for Alternative 2D and Alternative 5A**

Location	Parameter	Units	Alternative 2D (ELT)	Alternative 5A (ELT)
<b>Differences from No Action Alternative (ELT)</b>				
Shasta Lake	Number of months within 10 TAF of the flood curve in October through June	TAF	-3	3
Lake Oroville	Number of months within 10 TAF of the flood curve in October through June	TAF	3	8
Folsom Lake	Number of months within 10 TAF of the flood curve in October through June	TAF	-7	-5
Sacramento River at Bend Bridge	Wet Years January Flow	CFS	542	57
Sacramento River at Bend Bridge	Wet Years February Flow	CFS	168	119
Sacramento River at Bend Bridge	Wet Years March Flow	CFS	3	-1
Sacramento River at Bend Bridge	Average of Top 10% Monthly Flows	CFS	449	163
Sacramento River at Freeport	Wet Years January Flow	CFS	-1,631	-1,444
Sacramento River at Freeport	Wet Years February Flow	CFS	-1,385	-1,225
Sacramento River at Freeport	Wet Years March Flow	CFS	-2,137	-1,914
Sacramento River at Freeport	Average of Top 10% Monthly Flows	CFS	-1,483	-1,420
San Joaquin River at Vernalis	Wet Years January Flow	CFS	67	23
San Joaquin River at Vernalis	Wet Years February Flow	CFS	-3	-3
San Joaquin River at Vernalis	Wet Years March Flow	CFS	0	-9
San Joaquin River at Vernalis	Average of Top 10% Monthly Flows	CFS	-12	-14
Sacramento River upstream of Walnut Grove	Wet Years January Flow	CFS	-12,300	-4,163
Sacramento River upstream of Walnut Grove	Wet Years February Flow	CFS	-13,135	-4,197
Sacramento River upstream of Walnut Grove	Wet Years March Flow	CFS	-12,379	-4,908
Sacramento River upstream of Walnut Grove	Average of Top 10% Monthly Flows	CFS	-12,945	-4,249
Trinity River below Lewiston Reservoir	Wet Years May Flow	CFS	0	0
Trinity River below Lewiston Reservoir	Average of Top 10% Monthly Flows	CFS	39	11
American River below Nimbus	Wet Years January Flow	CFS	-1	46
American River below Nimbus	Wet Years February Flow	CFS	51	32

<b>Location</b>	<b>Parameter</b>	<b>Units</b>	<b>Alternative 2D (ELT)</b>	<b>Alternative 5A (ELT)</b>
American River below Nimbus	Wet Years March Flow	CFS	0	0
American River below Nimbus	Average of Top 10% Monthly Flows	CFS	24	11
Feather River below Thermalito	Wet Years January Flow	CFS	70	227
Feather River below Thermalito	Wet Years February Flow	CFS	427	698
Feather River below Thermalito	Wet Years March Flow	CFS	-248	260
Feather River below Thermalito	Average of Top 10% Monthly Flows	CFS	194	47
Fremont Weir Spills	Wet Years January Flow	CFS	2,236	1,769
Fremont Weir Spills	Wet Years February Flow	CFS	2,006	2,060
Fremont Weir Spills	Wet Years March Flow	CFS	1,884	2,162
Fremont Weir Spills	Average of Top 10% Monthly Flows	CFS	2,025	1,793
Old and Middle River	October Flow	CFS	3,592	1,173
Old and Middle River	November Flow	CFS	3,940	2,139
Old and Middle River	December Flow	CFS	1,889	53
Old and Middle River	January Flow	CFS	3,363	363
Old and Middle River	February Flow	CFS	3,785	736
Old and Middle River	March Flow	CFS	3,742	723
Old and Middle River	April Flow	CFS	-215	-27
Old and Middle River	May Flow	CFS	140	118
Old and Middle River	June Flow	CFS	2,002	146
Old and Middle River	July Flow	CFS	2,763	1,180
Old and Middle River	August Flow	CFS	3,664	1,988
Old and Middle River	September Flow	CFS	5,608	4,141
<b>Percent Differences from No Action Alternative (ELT)</b>				
Shasta Lake	Percent increase in number of months within 10 TAF of the flood curve in October through June with respect to the total number of October-June months	%	0	0
Lake Oroville	Percent increase in number of months within 10 TAF of the flood curve in October through June with respect to the total number of October-June months	%	0	1

<b>Location</b>	<b>Parameter</b>	<b>Units</b>	<b>Alternative 2D (ELT)</b>	<b>Alternative 5A (ELT)</b>
Folsom Lake	Percent increase in number of months within 10 TAF of the flood curve in October through June with respect to the total number of October-June months	%	-1	-1
Sacramento River at Bend Bridge	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (100,000 cfs)		0	0
Sacramento River at Freeport	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (110,000 cfs)	%	-1	-1
San Joaquin River at Vernalis	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (52,000 cfs)	%	0	0
Sacramento River upstream of Walnut Grove	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (110,000 cfs)	%	-12	-4
Trinity River below Lewiston Reservoir	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (6,000 cfs)	%	1	0
American River below Nimbus	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (152,000 cfs)	%	0	0
Feather River below Thermalito	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (210,000 cfs)	%	0	0
Fremont Weir Spills	Percent Increase in Average of Top 10% Monthly Flows with respect to the Channel Capacity (343,000 cfs)	%	1	1
<p>Notes:</p> <p><sup>1</sup> "ELT" (Early Long-Term) indicates Alternatives that are simulated with 2025 climate change and sea level rise.</p> <p><sup>2</sup> Water year types are determined by San Joaquin River Basin 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999) for San Joaquin River flows at Vernalis and by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999) for all other flows.</p> <p><sup>3</sup> Channel capacities reported in Sacramento-San Joaquin Comprehensive Study (U.S. Army Corps of Engineers 2002) are used where applicable. Channel capacity of Trinity River below Lewiston Reservoir is assumed as 6,000 cfs, which is consistent with model input.</p>				

1

1 **Table B.2-10. Surface Water Summary Table for Alternative 2D and Alternative 5A– Number of Years where Storage is within 10 TAF of the**  
 2 **Flood Curve**

Location	Parameter	Units	Existing Condition	No Action Alternative (ELT)	Alternative 2D (ELT)	Alternative 5A (ELT)
Shasta Lake	October	TAF	19	11	7	8
Shasta Lake	November	TAF	20	10	8	10
Shasta Lake	December	TAF	24	20	28	25
Shasta Lake	January	TAF	32	29	30	30
Shasta Lake	February	TAF	35	35	35	35
Shasta Lake	March	TAF	32	31	32	32
Shasta Lake	April	TAF	20	16	16	16
Shasta Lake	May	TAF	28	24	20	24
Shasta Lake	June	TAF	8	8	5	7
Lake Oroville	October	TAF	10	2	2	2
Lake Oroville	November	TAF	9	3	2	3
Lake Oroville	December	TAF	16	10	10	9
Lake Oroville	January	TAF	33	19	21	23
Lake Oroville	February	TAF	40	32	33	35
Lake Oroville	March	TAF	46	41	44	44
Lake Oroville	April	TAF	27	26	26	26
Lake Oroville	May	TAF	32	24	24	24
Lake Oroville	June	TAF	27	17	15	16
Folsom Lake	October	TAF	3	2	2	1
Folsom Lake	November	TAF	38	11	16	15
Folsom Lake	December	TAF	33	27	26	26
Folsom Lake	January	TAF	47	38	41	38
Folsom Lake	February	TAF	49	54	56	55
Folsom Lake	March	TAF	46	51	49	49
Folsom Lake	April	TAF	53	52	50	52
Folsom Lake	May	TAF	48	44	40	43
Folsom Lake	June	CFS	44	33	25	28

Notes: "ELT" (Early Long-Term) indicates Alternatives that are simulated with 2025 climate change and sea level rise.

1 **Table B.2-11. Surface Water Summary Table for Alternative 2D and Alternative 5A– Number of Years where Storage is within 10 TAF of the**  
 2 **Flood Curve - Differences from Existing Condition**

Location	Parameter	Units	No Action Alternative (ELT)	Alternative 2D (ELT)	Alternative 5A (ELT)
Shasta Lake	October	TAF	-8	-12	-11
Shasta Lake	November	TAF	-10	-12	-10
Shasta Lake	December	TAF	-4	4	1
Shasta Lake	January	TAF	-3	-2	-2
Shasta Lake	February	TAF	0	0	0
Shasta Lake	March	TAF	-1	0	0
Shasta Lake	April	TAF	-4	-4	-4
Shasta Lake	May	TAF	-4	-8	-4
Shasta Lake	June	TAF	0	-3	-1
Lake Oroville	October	TAF	-8	-8	-8
Lake Oroville	November	TAF	-6	-7	-6
Lake Oroville	December	TAF	-6	-6	-7
Lake Oroville	January	TAF	-14	-12	-10
Lake Oroville	February	TAF	-8	-7	-5
Lake Oroville	March	TAF	-5	-2	-2
Lake Oroville	April	TAF	-1	-1	-1
Lake Oroville	May	TAF	-8	-8	-8
Lake Oroville	June	TAF	-10	-12	-11
Folsom Lake	October	TAF	-1	-1	-2
Folsom Lake	November	TAF	-27	-22	-23
Folsom Lake	December	TAF	-6	-7	-7
Folsom Lake	January	TAF	-9	-6	-9
Folsom Lake	February	TAF	5	7	6
Folsom Lake	March	TAF	5	3	3
Folsom Lake	April	TAF	-1	-3	-1
Folsom Lake	May	TAF	-4	-8	-5
Folsom Lake	June	CFS	-11	-19	-16

Note: "ELT" (Early Long-Term) indicates Alternatives that are simulated with 2025 climate change and sea level rise.

1 **Table B.2-12. Surface Water Summary Table for Alternative 2D and Alternative 5A - Number of Years where Storage is within 10 TAF of the**  
 2 **Flood Curve - Differences from No Action Alternative (ELT)**

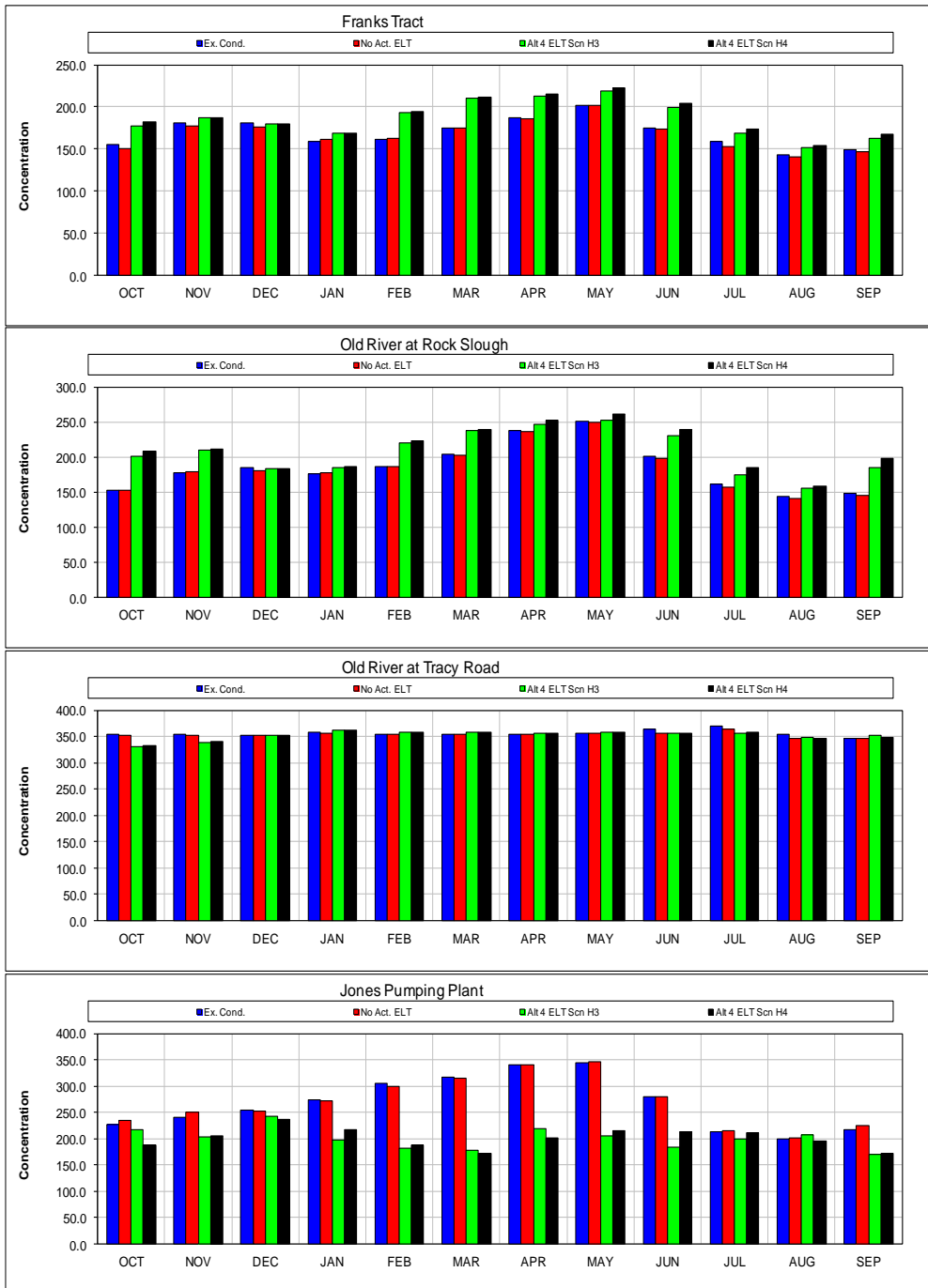
Location	Parameter	Units	Alternative 2D (ELT)	Alternative 5A (ELT)
Shasta Lake	October	TAF	-4	-3
Shasta Lake	November	TAF	-2	0
Shasta Lake	December	TAF	8	5
Shasta Lake	January	TAF	1	1
Shasta Lake	February	TAF	0	0
Shasta Lake	March	TAF	1	1
Shasta Lake	April	TAF	0	0
Shasta Lake	May	TAF	-4	0
Shasta Lake	June	TAF	-3	-1
Lake Oroville	October	TAF	0	0
Lake Oroville	November	TAF	-1	0
Lake Oroville	December	TAF	0	-1
Lake Oroville	January	TAF	2	4
Lake Oroville	February	TAF	1	3
Lake Oroville	March	TAF	3	3
Lake Oroville	April	TAF	0	0
Lake Oroville	May	TAF	0	0
Lake Oroville	June	TAF	-2	-1
Folsom Lake	October	TAF	0	-1
Folsom Lake	November	TAF	5	4
Folsom Lake	December	TAF	-1	-1
Folsom Lake	January	TAF	3	0
Folsom Lake	February	TAF	2	1
Folsom Lake	March	TAF	-2	-2
Folsom Lake	April	TAF	-2	0
Folsom Lake	May	TAF	-4	-1
Folsom Lake	June	TAF	-8	-5

Note: "ELT" (Early Long-Term) indicates Alternatives that are simulated with 2025 climate change and sea level rise.

1 **B.4 Chapter 8, Water Quality**

2 **B.4.1 Alternatives 4A, 2D, and 5A**

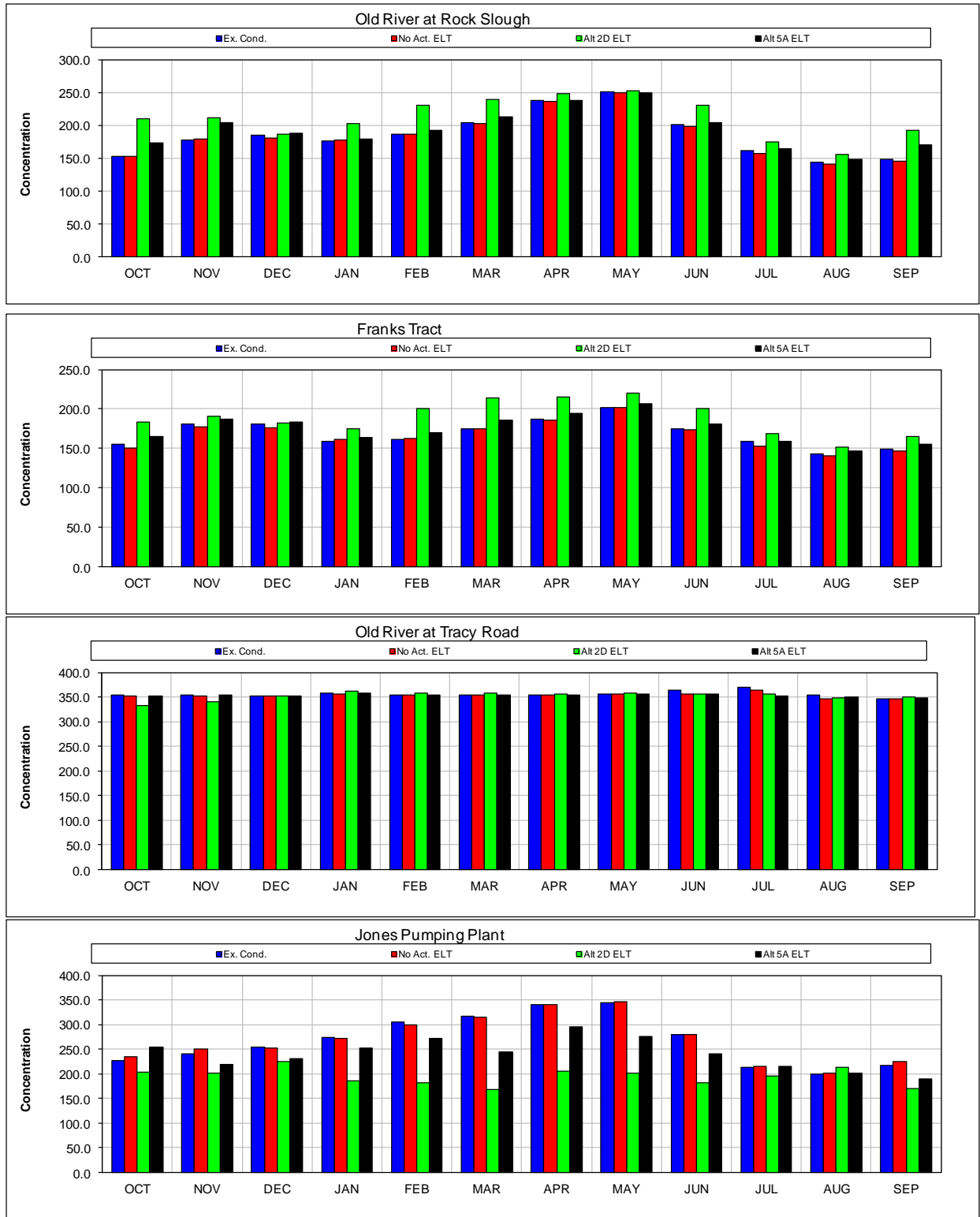
3 **Figure Bo-1. Long-term Average Estimated Boron Concentrations at Franks Tract, Old River at Rock Slough, Jones Pumping Plant, and Old River at Tracy Road for Existing Conditions, the No Action**  
 4 **Alternative ELT, and Alternative 4A ELT.**  
 5



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1 **Figure Bo-2. Long-term Average Estimated Boron Concentrations at Franks Tract, Old River at Rock**  
 2 **Slough, Jones Pumping Plant, and Old River at Tracy Road for Existing Conditions, the No Action**  
 3 **Alternative ELT, Alternative 2D ELT, and Alternative 5A ELT.**



4

1 **Table Bo-1. Flow-Boron Concentration Regression for San Joaquin River at Vernalis.**

$B_0 = B_1(\text{annual flow}^{B_2})$	
$B_1$	8876
$B_2$	-0.403

Scenario	Flow	Concentration (ug/L)	% Change in Flow		Change in Concentration (ug/L)		% Change in Concentration	
			Alt - EC	Alt - NA ELT	Alt - EC	Alt - NA ELT	Alt - EC	Alt - NA ELT
Existing Conditions	4237	307	--	--	--	--	--	--
No Action ELT	4183	308	-1.3%	--	1.6	--	0.5%	--
Alt 4A - H3	4188	308	-1.2%	0.1%	1.4	-0.1	0.5%	0.0%
Alt 4A - H4	4185	308	-1.2%	0.0%	1.5	-0.1	0.5%	0.0%
Alt 2D	4187	308	-1.2%	0.0%	1.5	-0.1	0.5%	0.0%
Alt 5A	4187	308	-1.2%	0.0%	1.5	-0.1	0.5%	0.0%

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1 **Table Bo-2. Period Average Change in Boron Concentrations (µg/L) for No Action Alternative ELT**  
 2 **Relative to Existing Conditions.**

Boron	Location	Period <sup>a</sup>	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Annual Avg. Change	
			Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	
No Act. ELT	Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	-1	-1	-1	0	0	-1	-1	-1	2	1	0
				(0%)	(0%)	(-1%)	(-1%)	(-1%)	(-0%)	(-0%)	(-1%)	(-0%)	(-1%)	(2%)	(1%)	(-0%)
		DROUGHT	0	0	-1	-1	-2	-2	-1	-1	-1	-1	1	5	1	0
				(0%)	(0%)	(-1%)	(-1%)	(-1%)	(-2%)	(-1%)	(-1%)	(-1%)	(1%)	(4%)	(1%)	(-0%)
		SJR at Buckley Cove	ALL	-8	-4	-23	-17	-12	-12	-15	-16	-30	-36	-39	-16	-19
				(-2%)	(-1%)	(-7%)	(-5%)	(-4%)	(-4%)	(-4%)	(-4%)	(-8%)	(-10%)	(-11%)	(-4%)	(-5%)
	DROUGHT	-11	-11	-33	-31	-21	-21	-31	-32	-57	-53	-74	-25	-33		
			(-3%)	(-3%)	(-9%)	(-9%)	(-6%)	(-6%)	(-9%)	(-9%)	(-15%)	(-16%)	(-7%)	(-9%)		
	Franks Tract	ALL	-4	-4	-5	2	2	-1	-1	0	0	-1	-6	-3	-2	
			(-3%)	(-2%)	(-3%)	(1%)	(1%)	(-0%)	(-1%)	(0%)	(-1%)	(-4%)	(-2%)	(-2%)	(-1%)	
	DROUGHT	6	10	1	2	-2	-5	-4	-2	0	-5	-2	4	0		
			(4%)	(5%)	(1%)	(2%)	(-1%)	(-4%)	(-3%)	(-1%)	(0%)	(-3%)	(-1%)	(3%)	(0%)	
	Old R. at Rock Slough	ALL	0	2	-5	2	-1	-2	-2	-2	-2	-4	-2	-2	-1	
			(0%)	(1%)	(-3%)	(1%)	(-0%)	(-1%)	(-1%)	(-1%)	(-1%)	(-3%)	(-2%)	(-2%)	(-1%)	
	DROUGHT	10	18	2	0	-9	-10	-7	-2	0	-2	2	5	1		
			(6%)	(10%)	(1%)	(0%)	(-6%)	(-6%)	(-4%)	(-1%)	(-0%)	(-2%)	(1%)	(3%)	(0%)	
	Western Delta	Sac. R. at Emmaton	ALL	-4	-11	2	1	1	1	1	3	5	4	8	-5	0
				(-2%)	(-4%)	(1%)	(1%)	(1%)	(1%)	(1%)	(2%)	(3%)	(2%)	(5%)	(-3%)	(0%)
DROUGHT		1	-3	12	5	3	0	-1	2	3	7	17	21	6		
			(0%)	(-1%)	(5%)	(4%)	(2%)	(-0%)	(-1%)	(2%)	(2%)	(4%)	(10%)	(9%)	(3%)	
SJR at Antioch		ALL	-45	-59	-13	2	4	2	0	2	5	-3	4	-30	-11	
			(-11%)	(-11%)	(-3%)	(1%)	(2%)	(1%)	(0%)	(1%)	(3%)	(-1%)	(1%)	(-9%)	(-4%)	
DROUGHT		-23	-49	-1	11	9	0	-1	4	5	-1	9	18	-2		
			(-5%)	(-8%)	(-0%)	(5%)	(6%)	(0%)	(-1%)	(2%)	(3%)	(-0%)	(3%)	(5%)	(-1%)	
Sac. R. at Mallard Island		ALL	-64	-79	-15	1	6	4	2	4	12	-2	8	-52	-14	
			(-8%)	(-9%)	(-2%)	(0%)	(3%)	(3%)	(1%)	(2%)	(4%)	(-0%)	(2%)	(-9%)	(-3%)	
DROUGHT		-59	-90	-8	8	17	3	1	3	4	-2	13	14	-8		
			(-7%)	(-8%)	(-1%)	(2%)	(6%)	(2%)	(1%)	(1%)	(1%)	(-0%)	(3%)	(2%)	(-2%)	
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-4	0	0	1	6	2	-2	-1	-5	-6	-4	-3	-1	
			(-3%)	(0%)	(-0%)	(1%)	(4%)	(1%)	(-2%)	(-1%)	(-3%)	(-4%)	(-3%)	(-2%)	(-1%)	
	DROUGHT	-4	4	1	0	2	3	3	2	-5	-4	-1	-1	0		
			(-3%)	(3%)	(1%)	(0%)	(1%)	(3%)	(2%)	(2%)	(-3%)	(-3%)	(-1%)	(-1%)	(-0%)	
	Contra Costa PP #1	ALL	-10	-2	4	-1	7	5	-5	0	-8	-6	-10	-3	-2	
			(-6%)	(-1%)	(2%)	(-0%)	(4%)	(2%)	(-2%)	(-0%)	(-3%)	(-3%)	(-6%)	(-2%)	(-1%)	
	DROUGHT	0	16	2	1	-7	-15	-10	4	-4	-4	-6	2	-2		
			(0%)	(9%)	(1%)	(0%)	(-5%)	(-9%)	(-5%)	(2%)	(-2%)	(-2%)	(-3%)	(1%)	(-1%)	
	Banks PP	ALL	2	8	-2	0	-3	-6	-4	-1	-2	-3	-4	-1	-1	
			(1%)	(4%)	(-1%)	(-0%)	(-1%)	(-2%)	(-1%)	(-0%)	(-1%)	(-1%)	(-2%)	(-1%)	(-1%)	
	DROUGHT	10	18	0	-1	-11	-20	-15	-8	-5	2	3	6	-2		
			(5%)	(9%)	(-0%)	(-1%)	(-6%)	(-9%)	(-6%)	(-3%)	(-2%)	(1%)	(2%)	(4%)	(-1%)	
Jones PP	ALL	8	10	-3	-1	-6	-2	0	1	1	3	3	9	2		
		(3%)	(4%)	(-1%)	(-0%)	(-2%)	(-1%)	(0%)	(0%)	(0%)	(1%)	(1%)	(4%)	(1%)		
DROUGHT	14	25	-1	-7	-21	-10	-3	2	-1	11	16	6	3			
		(7%)	(11%)	(-0%)	(-3%)	(-7%)	(-3%)	(-1%)	(1%)	(-0%)	(7%)	(9%)	(3%)	(1%)		

3 ALL: Water years 1976–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water  
 4 years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water  
 5 year hydrologic classification index).  
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1 **Table Bo-3. Period Average Boron Concentrations (µg/L) and Frequency of Exceedance of Objectives**  
 2 **for Existing Conditions, the No Action Alternative ELT, and Alternative 4A ELT.**

Boron	Location	Period <sup>a</sup>	Period Average Concentration µg/L				Lowest Applicable Human Health Criterion/Objective (2000 µg/L) <sup>b</sup>				Other Relevant Threshold (500 µg/L) <sup>c</sup>			
			Ex. Cond.	No Act. ELT	Alt. 4A H3 ELT	Alt. 4A H4 ELT	Frequency of Criterion/Objective Exceedance (%)				Frequency of Criterion/Objective Exceedance (%)			
							Ex. Cond.	No Act. ELT	Alt. 4A H3 ELT	Alt. 4A H4 ELT	Ex. Cond.	No Act. ELT	Alt. 4A H3 ELT	Alt. 4A H4 ELT
Delta Interior	Moke. R. (SF) at Staten Island	All	124	124	135	136	0	0	0	0	0	0	0	0
		Drought	130	130	140	141	0	0	0	0	0	0	0	0
	SJR at Buckley Cove	All	349	330	335	335	0	0	0	0	0	0	0	0
		Drought	356	322	333	335	0	0	0	0	0	0	0	0
	Franks Tract	All	169	167	186	188	0	0	0	0	0	0	0	0
		Drought	149	150	154	155	0	0	0	0	0	0	0	0
Old R. at Rock Slough	All	185	184	207	212	0	0	0	0	0	0	0	0	
	Drought	157	157	166	169	0	0	0	0	0	0	0	0	
Western Delta	Sac. R. at Emmaton	All	162	162	163	164	0	0	0	0	0	0	0	0
		Drought	180	186	181	182	0	0	0	0	0	0	0	0
	SJR at Antioch	All	269	259	253	254	0	0	0	0	12	7	3	3
		Drought	296	295	278	277	0	0	0	0	18	13	5	5
Sac. R. at Mallard Island	All	439	424	411	412	0	0	0	0	31	26	29	29	
	Drought	518	510	488	487	0	0	0	0	38	35	43	42	
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	All	132	131	113	113	0	0	0	0	0	0	0	0
		Drought	134	134	113	113	0	0	0	0	0	0	0	0
	Contra Costa PP #1	All	197	195	217	223	0	0	0	0	0	0	0	0
		Drought	175	174	182	185	0	0	0	0	0	0	0	0
	Banks PP	All	229	227	183	179	0	0	0	0	0	0	0	0
		Drought	201	200	188	178	0	0	0	0	0	0	0	0
	Jones PP	All	268	270	200	201	0	0	0	0	0	0	0	0
		Drought	248	251	213	218	0	0	0	0	0	0	0	0

<sup>a</sup> ALL: Water years 1975–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

<sup>b</sup> USEPA-recommended human health advisory levels for long-term exposure of children through drinking water supplies (USEPA 2008b).

<sup>c</sup> Ayers and Westcot (1994) threshold for crop sensitivity to boron. (Ayers, R., and D. Westcot. 1994. Water Quality for Agriculture. FOA Irrigation and Drainage Paper.)



Table Bo-4. Period Average Change in Boron Concentrations (µg/L) for Alternative 4A Scenario H3 ELT Relative to Existing Conditions and the No Action Alternative ELT.

Boron	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change		
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	
Alt 4 ELT Scn H3	Delta Interior	Moke. R. (SF) at Staten Island	ALL	11	10	10	9	3	4	8	9	8	9	10	11	9	9	8	9	16	16	16	17	17	15	11	10	11	11
				(9%)	(9%)	(8%)	(8%)	(3%)	(4%)	(6%)	(7%)	(6%)	(7%)	(8%)	(9%)	(7%)	(7%)	(6%)	(7%)	(12%)	(12%)	(12%)	(13%)	(14%)	(12%)	(9%)	(8%)	(8%)	(8%)
		SJR at Buckley Cove	ALL	-8	0	-7	-2	-19	3	-7	10	-6	6	-6	6	-10	5	-11	5	-25	5	-28	8	-24	14	-17	-1	-14	5
				(-2%)	(0%)	(-2%)	(-1%)	(-6%)	(1%)	(-2%)	(3%)	(-2%)	(2%)	(-2%)	(2%)	(-3%)	(1%)	(-3%)	(1%)	(-7%)	(2%)	(-8%)	(2%)	(-7%)	(4%)	(-5%)	(-0%)	(-4%)	(2%)
		Franks Tract	ALL	22	26	6	11	-1	4	9	8	32	31	35	36	26	27	18	18	25	26	9	15	8	11	13	16	17	19
				(14%)	(17%)	(3%)	(6%)	(-0%)	(2%)	(6%)	(5%)	(20%)	(19%)	(20%)	(20%)	(14%)	(15%)	(9%)	(9%)	(14%)	(15%)	(6%)	(10%)	(6%)	(8%)	(9%)	(11%)	(10%)	(11%)
	Old R. at Rock Slough	ALL	48	48	32	30	-2	3	9	8	33	34	34	36	10	12	1	3	30	32	12	17	11	14	37	40	21	23	
			(32%)	(31%)	(18%)	(17%)	(-1%)	(2%)	(5%)	(4%)	(18%)	(18%)	(17%)	(18%)	(4%)	(5%)	(1%)	(1%)	(15%)	(16%)	(8%)	(11%)	(8%)	(10%)	(25%)	(27%)	(12%)	(12%)	
	Western Delta	Sac. R. at Emraton	ALL	-29	-25	-37	-26	-3	-5	-2	-3	2	1	4	4	8	7	13	10	12	7	15	11	21	13	5	10	1	0
				(-12%)	(-11%)	(-15%)	(-11%)	(-2%)	(-3%)	(-1%)	(-2%)	(2%)	(1%)	(4%)	(3%)	(7%)	(6%)	(9%)	(7%)	(8%)	(5%)	(10%)	(7%)	(13%)	(8%)	(2%)	(5%)	(0%)	(0%)
		SJR at Antioch	ALL	-105	-60	-138	-80	-40	-27	-13	-15	12	8	23	22	21	20	18	16	16	11	5	8	19	15	-19	12	-17	-6
				(-25%)	(-16%)	(-27%)	(-18%)	(-11%)	(-7%)	(-7%)	(-8%)	(8%)	(5%)	(16%)	(14%)	(13%)	(13%)	(9%)	(8%)	(8%)	(5%)	(2%)	(3%)	(7%)	(6%)	(-5%)	(4%)	(-6%)	(-2%)
		Sac. R. at Mallard Island	ALL	-143	-79	-165	-87	-58	-43	-27	-28	1	-5	15	11	17	15	20	16	15	2	12	13	27	19	-39	13	-27	-13
				(-19%)	(-11%)	(-18%)	(-10%)	(-8%)	(-6%)	(-8%)	(-9%)	(0%)	(-2%)	(10%)	(7%)	(10%)	(9%)	(7%)	(6%)	(5%)	(1%)	(3%)	(3%)	(6%)	(4%)	(-7%)	(2%)	(-6%)	(-3%)
		NBA at Barker Slough PP	ALL	-19	-15	-13	-13	-9	-9	-13	-14	-16	-22	-15	-17	-17	-15	-19	-18	-28	-23	-33	-27	-29	-25	-22	-20	-20	-18
				(-14%)	(-12%)	(-10%)	(-10%)	(-8%)	(-8%)	(-11%)	(-11%)	(-13%)	(-16%)	(-12%)	(-13%)	(-13%)	(-12%)	(-15%)	(-14%)	(-20%)	(-17%)	(-22%)	(-19%)	(-20%)	(-18%)	(-16%)	(-15%)	(-15%)	(-14%)
		Contra Costa PP #1	ALL	39	49	39	41	11	7	0	1	26	19	35	30	26	31	-4	-3	20	28	15	20	3	13	19	22	19	22
				(22%)	(30%)	(22%)	(23%)	(6%)	(4%)	(0%)	(1%)	(14%)	(10%)	(17%)	(14%)	(11%)	(14%)	(-1%)	(-1%)	(9%)	(13%)	(8%)	(12%)	(2%)	(8%)	(11%)	(13%)	(10%)	(11%)
Banks PP		ALL	-23	-25	-28	-36	-35	-33	-54	-54	-67	-64	-96	-90	-100	-96	-62	-60	-42	-40	-13	-10	-10	-6	-22	-21	-46	-45	
			(-12%)	(-13%)	(-13%)	(-16%)	(-17%)	(-16%)	(-26%)	(-26%)	(-28%)	(-27%)	(-37%)	(-35%)	(-35%)	(-34%)	(-20%)	(-20%)	(-15%)	(-14%)	(-6%)	(-5%)	(-6%)	(-3%)	(-12%)	(-12%)	(-20%)	(-20%)	
Jones PP	ALL	-11	-19	-39	-49	-12	-9	-77	-76	-124	-118	-139	-137	-123	-123	-140	-141	-96	-97	-13	-16	8	6	-46	-55	-68	-69		
		(-5%)	(-8%)	(-16%)	(-19%)	(-5%)	(-4%)	(-28%)	(-28%)	(-41%)	(-39%)	(-44%)	(-43%)	(-36%)	(-36%)	(-41%)	(-41%)	(-34%)	(-35%)	(-6%)	(-7%)	(4%)	(3%)	(-21%)	(-24%)	(-25%)	(-26%)		
Major Diversions (Pumping Stations)	Jones PP	DROUGHT	2	-12	-13	-38	-1	0	-52	-45	-69	-48	-113	-103	-79	-76	-114	-116	-34	-34	18	7	23	7	11	5	-35	-38	
			(1%)	(-5%)	(-6%)	(-15%)	(-0%)	(0%)	(-20%)	(-18%)	(-23%)	(-17%)	(-35%)	(-33%)	(-24%)	(-23%)	(-35%)	(-35%)	(-16%)	(-16%)	(11%)	(4%)	(13%)	(4%)	(5%)	(2%)	(-14%)	(-15%)	

<sup>a</sup> ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Bo-5. Period Average Change in Boron Concentrations (µg/L) for Alternative 4A Scenario H4 ELT Relative to Existing Conditions and the No Action Alternative ELT.

Boron	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	11	11	9	9	4	4	8	8	7	9	10	10	9	9	8	9	19	19	21	22	17	15	11	10	11	11		
			(10%)	(9%)	(8%)	(8%)	(3%)	(4%)	(6%)	(6%)	(5%)	(6%)	(8%)	(8%)	(7%)	(7%)	(6%)	(7%)	(14%)	(14%)	(16%)	(17%)	(14%)	(12%)	(10%)	(9%)	(9%)	(9%)		
	SJR at Buckley Cove	ALL	-8	0	-7	-2	-19	4	-6	10	-6	6	-6	6	-10	5	-11	5	-25	6	-24	11	-21	17	-16	-1	-13	6		
			(-2%)	(0%)	(-2%)	(-1%)	(-6%)	(1%)	(-2%)	(3%)	(-2%)	(2%)	(-2%)	(2%)	(-3%)	(2%)	(-3%)	(1%)	(-7%)	(2%)	(-7%)	(4%)	(-6%)	(5%)	(-5%)	(-0%)	(-4%)	(2%)		
	Franks Tract	ALL	27	31	6	11	-2	3	9	8	34	32	36	37	28	29	21	21	29	31	14	21	11	14	18	21	19	21		
			(17%)	(20%)	(3%)	(6%)	(-1%)	(2%)	(6%)	(5%)	(21%)	(20%)	(21%)	(21%)	(15%)	(16%)	(11%)	(10%)	(17%)	(18%)	(9%)	(13%)	(8%)	(10%)	(12%)	(14%)	(11%)	(13%)		
	Old R. at Rock Slough	ALL	57	56	33	31	-2	4	10	8	36	37	36	37	16	17	10	12	39	41	23	27	15	17	51	53	27	28		
			(37%)	(37%)	(19%)	(17%)	(-1%)	(2%)	(6%)	(5%)	(19%)	(20%)	(18%)	(18%)	(7%)	(7%)	(4%)	(5%)	(19%)	(21%)	(14%)	(17%)	(10%)	(12%)	(34%)	(36%)	(15%)	(15%)		
	Western Delta	Sac. R. at Ermaton	ALL	-25	-22	-36	-24	-1	-3	-2	-3	2	1	5	4	4	3	10	7	14	10	25	21	25	17	7	12	2	2	
				(-11%)	(-10%)	(-14%)	(-10%)	(-0%)	(-2%)	(-2%)	(-3%)	(2%)	(1%)	(4%)	(3%)	(3%)	(3%)	(7%)	(5%)	(10%)	(6%)	(16%)	(14%)	(16%)	(10%)	(3%)	(6%)	(1%)	(1%)	
		SJR at Antioch	ALL	-101	-56	-138	-80	-41	-28	-14	-16	12	8	24	22	19	19	15	14	18	12	13	17	27	23	-16	14	-15	-4	
				(-24%)	(-15%)	(-27%)	(-18%)	(-11%)	(-8%)	(-7%)	(-8%)	(7%)	(5%)	(16%)	(15%)	(12%)	(12%)	(8%)	(7%)	(9%)	(6%)	(5%)	(7%)	(10%)	(9%)	(-5%)	(4%)	(-6%)	(-2%)	
Sac. R. at Mallard Island		ALL	-139	-75	-161	-82	-59	-44	-31	-31	0	-6	15	11	11	9	9	4	14	2	20	22	34	25	-37	15	-27	-12		
			(-18%)	(-11%)	(-18%)	(-10%)	(-8%)	(-6%)	(-9%)	(-10%)	(-0%)	(-3%)	(10%)	(7%)	(6%)	(5%)	(3%)	(2%)	(5%)	(1%)	(5%)	(5%)	(8%)	(6%)	(-6%)	(3%)	(-6%)	(-3%)		
Major Diversions (Pumping Stations)		NBA at Barker Slough PP	ALL	-19	-15	-13	-13	-9	-9	-13	-14	-16	-22	-15	-17	-17	-15	-19	-18	-28	-23	-32	-26	-29	-24	-22	-19	-19	-18	
				(-14%)	(-12%)	(-10%)	(-10%)	(-8%)	(-8%)	(-11%)	(-11%)	(-12%)	(-16%)	(-12%)	(-13%)	(-13%)	(-12%)	(-15%)	(-14%)	(-20%)	(-17%)	(-22%)	(-19%)	(-20%)	(-17%)	(-16%)	(-14%)	(-15%)	(-14%)	
		Contra Costa PP #1	ALL	51	62	42	44	13	9	0	1	30	23	45	40	31	36	7	7	31	39	28	33	6	15	28	32	26	28	
				(30%)	(37%)	(23%)	(25%)	(7%)	(5%)	(0%)	(0%)	(17%)	(12%)	(22%)	(19%)	(13%)	(16%)	(3%)	(3%)	(14%)	(18%)	(15%)	(19%)	(3%)	(10%)	(17%)	(19%)	(13%)	(15%)	
		Banks PP	ALL	-19	-21	-41	-49	-27	-25	-63	-63	-73	-70	-101	-95	-81	-78	-97	-96	-63	-61	-3	-1	2	6	-30	-29	-50	-48	
				(-10%)	(-11%)	(-19%)	(-22%)	(-13%)	(-12%)	(-30%)	(-30%)	(-30%)	(-29%)	(-39%)	(-37%)	(-28%)	(-27%)	(-32%)	(-32%)	(-22%)	(-22%)	(-2%)	(-0%)	(1%)	(4%)	(-17%)	(-16%)	(-22%)	(-21%)	
	Jones PP	ALL	-40	-48	-36	-45	-18	-15	-57	-56	-119	-113	-144	-142	-140	-141	-129	-130	-67	-68	-1	-4	-4	-7	-45	-54	-67	-68		
			(-18%)	(-20%)	(-15%)	(-18%)	(-7%)	(-6%)	(-21%)	(-21%)	(-39%)	(-38%)	(-46%)	(-45%)	(-41%)	(-41%)	(-37%)	(-38%)	(-24%)	(-24%)	(-0%)	(-2%)	(-2%)	(-3%)	(-21%)	(-24%)	(-25%)	(-25%)		

<sup>a</sup> ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

**Table Bo-6. Period Average Percentage Changes in Available Assimilative Capacity under Alternative 4A Scenario H3 ELT, Relative to Existing Conditions and No Action Alternative ELT, Based on the 500 µg/L Agricultural Objective.**

Boron	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change		
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	
Alt 4 ELT Scn H3	Delta Interior	Moke. R. (SF) at Staten Island	All	-3	-3	-2	-2	-1	-1	-2	-3	-2	-3	-3	-3	-2	-2	-2	-2	-4	-4	-4	-5	-4	-4	-3	-3	-3	-3
		Drought	-3	-3	-2	-2	-1	-1	-1	-2	-1	-2	-3	-3	-2	-2	-2	-2	-5	-5	-7	-6	-5	-4	-3	-3	-3	-3	-
		SJR at Buckley Cove	All	5	0	4	1	12	-2	4	-6	4	-3	4	-4	7	-3	8	-3	18	-3	19	-4	17	-8	12	1	9	-3
		Drought	7	0	9	1	22	0	14	-7	8	-5	7	-6	15	-6	15	-6	36	-6	16	-12	21	-19	19	0	15	-	
		Franks Tract	All	-6	-8	-2	-3	0	-1	-3	-2	-10	-9	-11	-11	-8	-9	-6	-6	-8	-8	-3	-4	-2	-3	-4	-5	-5	-6
		Drought	-4	-2	2	5	1	1	-1	0	-1	-2	-2	-3	-2	-3	-2	-2	-2	-3	-3	1	-1	-1	-2	-3	-2	-1	-
		Old R. at Rock Slough	All	-14	-14	-10	-9	1	-1	-3	-2	-11	-11	-12	-12	-4	-4	-1	-1	-10	-11	-4	-5	-3	-4	-11	-11	-7	-7
		Drought	-9	-7	-6	-1	0	1	-2	-2	-1	-3	-2	-5	1	-1	-2	-2	-4	-4	-2	-2	-2	-2	-3	-2	-3	-2	-
Western Delta	Sac. R. at Emmaton	All	11	9	15	10	1	2	0	1	0	0	-1	-1	-2	-2	-4	-3	-3	-2	-4	-3	-6	-4	-2	-3	0	0	
		Drought	19	19	28	26	-2	3	1	2	0	1	0	0	0	-1	-2	-1	-2	-1	-8	-6	-9	-4	-10	-2	0	-	
	SJR at Antioch	All	-	48	-	-	34	21	4	5	-4	-2	-7	-6	-6	-6	-6	-5	-6	-4	-2	-3	-8	-6	12	-6	7	2	
		Drought	-	-	-	-	-	-	8	13	1	4	-1	-1	-1	-1	-2	-1	-2	0	-5	-5	-15	-12	-32	-18	9	-	
	Sac. R. at Mallard Island	All	-	-	-	-	-	-	15	16	0	2	-4	-3	-5	-4	-9	-7	-8	-1	-14	-16	-46	-37	-	-	44	17	
		Drought	-	-	-	-	-	-	47	62	3	12	-2	-1	-2	-2	-5	-4	-4	-1	-79	-81	-100	-100	-	-	-	-	
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	All	5	4	3	3	2	2	4	4	4	6	4	5	5	4	5	5	8	6	9	7	8	7	6	5	5	5	
		Drought	9	7	4	5	2	2	2	2	3	3	3	4	4	5	5	6	8	7	10	9	10	10	9	9	6	-	
	Contra Costa PP #1	All	-12	-15	-12	-13	-4	-2	0	0	-8	-6	-12	-10	-10	-11	2	1	-7	-10	-5	-6	-1	-4	-6	-7	-6	-7	
		Drought	-9	-9	-10	-5	2	2	1	1	-3	-5	-1	-5	1	-2	1	2	-3	-4	-2	-3	1	-1	-2	-1	-2	-	
	Banks PP	All	8	8	10	13	12	11	19	19	26	24	40	37	47	44	31	30	19	18	4	3	3	2	7	6	17	16	
		Drought	-3	0	5	12	4	4	2	2	1	-3	19	11	24	17	14	11	-1	-3	5	5	-7	-6	-2	0	4	-	
	Jones PP	All	4	7	15	20	5	4	34	33	64	59	76	74	77	78	91	91	44	44	4	6	-3	-2	16	20	29	30	
		Drought	-1	5	5	15	0	0	22	18	34	21	62	54	46	43	66	69	12	12	-6	-2	-7	-2	-4	-2	14	-	

<sup>a</sup> ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

**NOTES:**  
 -- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.  
 -- Water Quality Objective is the 500 µg/L agricultural criterion.



**Table Bo-7. Period Average Percentage Changes in Available Assimilative Capacity under Alternative 4A Scenario H4 ELT, Relative to Existing Conditions and No Action Alternative ELT, Based on the 500 µg/L Agricultural Objective.**

Boron	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
			Alt 4 ELT Scn H4																									
Delta Interior	Moke. R. (SF) at Staten Island	All	-3	-3	-2	-2	-1	-1	-2	-2	-2	-2	-3	-3	-2	-2	-2	-2	-5	-5	-6	-6	-4	-4	-3	-3	-3	-3
		Drought	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-2	-3	-2	-2	-2	-2	-6	-6	-9	-8	-5	-4	-3	-2	-3
	SJR at Buckley Cove	All	5	0	4	1	11	-2	4	-6	4	-3	4	-4	7	-3	8	-3	18	-3	17	-6	15	-9	12	0	9	-3
		Drought	7	0	8	1	22	-1	14	-7	8	-5	7	-6	14	-7	15	-7	35	-7	12	-15	14	-23	19	0	14	-
	Franks Tract	All	-8	-9	-2	-3	1	-1	-3	-2	-10	-9	-11	-11	-9	-9	-7	-7	-9	-9	-4	-6	-3	-4	-5	-6	-6	-6
		Drought	-3	-1	3	7	2	2	-1	0	-2	-2	-2	-3	-3	-4	-4	-4	-4	-4	-4	0	-1	-2	-2	-4	-2	-2
	Old R. at Rock Slough	All	-16	-16	-10	-10	1	-1	-3	-3	-12	-12	-12	-13	-6	-7	-4	-5	-13	-14	-7	-8	-4	-5	-14	-15	-9	-9
		Drought	-9	-6	-5	1	1	2	-3	-3	-1	-3	-3	-5	-4	-5	-5	-5	-7	-7	-4	-4	-3	-3	-4	-2	-4	-
Western Delta	Sac. R. at Emmaton	All	9	8	14	9	0	1	1	1	-1	0	-1	-1	-1	-1	-3	-2	-4	-3	-7	-6	-7	-5	-2	-4	-1	-1
		Drought	21	21	30	28	-5	0	1	3	0	1	0	0	-1	-1	-2	-2	-3	-2	-11	-9	-11	-6	-9	0	-1	-
	SJR at Antioch	All	-	45	-	-	34	21	5	5	-4	-2	-7	-6	-5	-5	-5	-4	-6	-4	-5	-7	-11	-10	11	-8	7	2
		Drought	-	-	-	-	-	-	9	13	1	4	-1	-1	-1	-2	-3	-2	-3	-1	-6	-6	-19	-15	-33	-20	9	-
	Sac. R. at Mallard Island	All	-	-	-	-	-	-	17	18	0	2	-4	-3	-3	-3	-4	-2	-8	-1	-25	-26	-57	-50	-	-	44	16
		Drought	-	-	-	-	-	-	61	76	3	12	-2	-1	-2	-2	-5	-3	-5	-3	-98	-98	-100	-100	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	All	5	4	3	3	2	2	4	4	4	6	4	5	5	4	5	5	8	6	9	7	8	7	6	5	5	5
		Drought	9	7	4	6	2	2	2	2	3	3	3	4	4	5	5	6	8	7	10	9	10	9	9	9	9	6
	Contra Costa PP #1	All	-16	-18	-13	-14	-4	-3	0	0	-10	-7	-15	-14	-12	-13	-3	-3	-11	-14	-9	-10	-2	-4	-9	-10	-9	-9
		Drought	-8	-8	-9	-4	3	4	1	2	-2	-4	-1	-5	-4	-6	-3	-2	-6	-7	-5	-6	-1	-2	-2	-2	-3	-
	Banks PP	All	6	7	14	18	9	9	22	22	28	27	42	39	38	36	49	48	28	27	1	0	-1	-2	9	9	18	18
		Drought	-1	2	7	14	4	4	8	8	4	1	25	16	29	21	26	23	9	7	8	9	-7	-7	-5	-3	8	-
	Jones PP	All	15	18	14	18	7	6	25	25	61	57	79	77	88	89	83	84	30	31	0	1	1	2	16	20	29	30
		Drought	13	19	12	23	2	2	7	4	31	19	55	47	58	55	60	62	1	0	-14	-11	-10	-5	-5	-3	12	-

<sup>a</sup> ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

**NOTES:**  
 -- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.  
 -- Water Quality Objective is the 500 µg/L agricultural criterion.

**Table Bo-8. Period Average Boron Concentrations (µg/L) and Frequency of Exceedance of Objectives for Existing Conditions, the No Action Alternative ELT, Alternative 2D ELT, and Alternative 5A ELT.**

Boron	Location	Period <sup>a</sup>	Period Average Concentration µg/L				Lowest Applicable Human Health Criterion/Objective (2000 µg/L) <sup>b</sup>				Other Relevant Threshold (500 µg/L) <sup>c</sup>			
			Frequency of Criterion/Objective Exceedance (%)				Frequency of Criterion/Objective Exceedance (%)							
			Ex. Cond.	No Act. ELT	Alt. 2D	Alt. 5A	Ex. Cond.	No Act. ELT	Alt. 2D	Alt. 5A	Ex. Cond.	No Act. ELT	Alt. 2D	Alt. 5A
Delta Interior	Moke. R. (SF) at Staten Island	All	124	124	136	132	0	0	0	0	0	0	0	0
		Drought	130	130	141	139	0	0	0	0	0	0	0	0
	SJR at Buckley Cove	All	349	330	335	331	0	0	0	0	0	0	0	0
		Drought	356	322	333	327	0	0	0	0	0	0	0	0
	Franks Tract	All	169	167	189	175	0	0	0	0	0	0	0	0
		Drought	149	150	154	151	0	0	0	0	0	0	0	0
Old R. at Rock Slough	All	185	184	211	194	0	0	0	0	0	0	0	0	
	Drought	157	157	166	161	0	0	0	0	0	0	0	0	
Western Delta	Sac. R. at Emmaton	All	162	162	163	162	0	0	0	0	0	0	0	0
		Drought	180	186	181	182	0	0	0	0	0	0	0	0
	SJR at Antioch	All	269	259	255	254	0	0	0	0	12	11	4	7
		Drought	296	295	277	281	0	0	0	0	18	17	7	8
	Sac. R. at Mallard Island	All	439	424	413	416	0	0	0	0	31	27	28	28
		Drought	518	510	488	492	0	0	0	0	38	37	42	42
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	All	132	131	113	112	0	0	0	0	0	0	0	0
		Drought	134	134	113	113	0	0	0	0	0	0	0	0
	Contra Costa PP #1	All	197	195	222	205	0	0	0	0	0	0	0	0
		Drought	175	174	182	178	0	0	0	0	0	0	0	0
	Banks PP	All	229	227	175	201	0	0	0	0	0	0	0	0
		Drought	201	200	188	192	0	0	0	0	0	0	0	0
	Jones PP	All	268	270	195	241	0	0	0	0	0	0	0	0
		Drought	248	251	213	234	0	0	0	0	0	0	0	0

<sup>a</sup> ALL: Water years 1975–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

<sup>b</sup> USEPA-recommended human health advisory levels for long-term exposure of children through drinking water supplies (USEPA 2008b).

<sup>c</sup> Ayers and Westcot (1994) threshold for crop sensitivity to boron. (Ayers, R., and D. Westcot. 1994. *Water Quality for Agriculture*. FOA Irrigation and Drainage Paper.)



Table Bo-9. Period Average Change in Boron Concentrations (µg/L) for Alternative 2D ELT Relative to Existing Conditions and the No Action Alternative ELT.

Boron	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change				
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT			
Alt 2D ELT	Delta Interior	Moke. R. (SF) at Staten Island	ALL	12	12	10	10	4	5	10	11	9	10	11	11	10	10	8	9	16	17	17	17	17	15	11	10	11	11		
			DROUGHT	(10%)	(10%)	(9%)	(9%)	(3%)	(4%)	(7%)	(8%)	(6%)	(8%)	(9%)	(9%)	(8%)	(8%)	(6%)	(7%)	(12%)	(13%)	(12%)	(13%)	(14%)	(12%)	(10%)	(9%)	(9%)	(9%)		
		SJR at Buckley Cove	ALL	-8	0	-7	-2	-19	4	-6	11	-6	6	-6	6	-10	5	-11	5	-25	5	-28	8	-24	14	-16	-1	-14	5		
			DROUGHT	(-2%)	(0%)	(-2%)	(-1%)	(-6%)	(1%)	(-2%)	(3%)	(-2%)	(2%)	(-2%)	(2%)	(-3%)	(1%)	(-3%)	(1%)	(-7%)	(1%)	(-8%)	(2%)	(-7%)	(5%)	(-5%)	(-0%)	(-4%)	(2%)		
		Franks Tract	ALL	29	33	10	14	1	6	16	14	40	38	38	39	28	29	19	18	25	26	9	15	8	11	16	19	20	22		
			DROUGHT	(19%)	(22%)	(5%)	(8%)	(1%)	(3%)	(10%)	(9%)	(25%)	(23%)	(22%)	(22%)	(15%)	(16%)	(9%)	(9%)	(14%)	(15%)	(6%)	(10%)	(6%)	(8%)	(11%)	(13%)	(12%)	(13%)		
	Old R. at Rock Slough	ALL	58	57	34	32	1	6	26	25	43	44	36	37	11	13	2	3	30	32	12	17	11	14	44	46	26	27			
		DROUGHT	(38%)	(38%)	(19%)	(18%)	(0%)	(3%)	(15%)	(14%)	(23%)	(23%)	(18%)	(18%)	(5%)	(5%)	(1%)	(1%)	(15%)	(16%)	(8%)	(11%)	(8%)	(10%)	(30%)	(32%)	(14%)	(15%)			
	Western Delta	Sac. R. at Ermaton	ALL	-26	-22	-36	-25	-3	-5	-1	-3	2	1	5	4	8	7	14	11	12	7	16	12	21	13	5	11	1	1		
			DROUGHT	(-11%)	(-10%)	(-14%)	(-10%)	(-2%)	(-3%)	(-1%)	(-2%)	(2%)	(1%)	(5%)	(4%)	(7%)	(6%)	(10%)	(8%)	(8%)	(5%)	(10%)	(8%)	(13%)	(8%)	(3%)	(5%)	(1%)	(1%)		
		SJR at Antioch	ALL	-101	-56	-135	-76	-39	-27	-10	-12	17	13	27	25	23	22	19	17	17	12	7	10	20	16	-18	12	-15	-4		
			DROUGHT	(-24%)	(-15%)	(-26%)	(-17%)	(-10%)	(-7%)	(-5%)	(-6%)	(10%)	(8%)	(18%)	(17%)	(15%)	(15%)	(10%)	(9%)	(8%)	(6%)	(3%)	(4%)	(8%)	(6%)	(-5%)	(4%)	(-5%)	(-1%)		
		Sac. R. at Mallard Island	ALL	-140	-77	-163	-84	-57	-42	-26	-26	3	-2	17	13	18	16	21	17	15	3	14	15	28	19	-39	12	-26	-11		
			DROUGHT	(-18%)	(-11%)	(-18%)	(-10%)	(-8%)	(-6%)	(-8%)	(-8%)	(2%)	(-1%)	(12%)	(9%)	(11%)	(9%)	(7%)	(6%)	(5%)	(1%)	(3%)	(4%)	(6%)	(4%)	(-7%)	(2%)	(-6%)	(-3%)		
		Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-19	-15	-13	-13	-9	-9	-13	-14	-16	-22	-15	-17	-17	-15	-19	-18	-28	-23	-33	-27	-29	-25	-22	-20	-20	-18	
				DROUGHT	(-14%)	(-12%)	(-10%)	(-10%)	(-8%)	(-8%)	(-11%)	(-11%)	(-12%)	(-16%)	(-12%)	(-13%)	(-13%)	(-12%)	(-15%)	(-14%)	(-20%)	(-17%)	(-22%)	(-19%)	(-21%)	(-18%)	(-16%)	(-15%)	(-15%)	(-14%)	
			Contra Costa PP #1	ALL	51	61	48	50	15	12	8	9	40	33	42	37	29	34	-3	-3	21	29	15	21	3	13	24	27	24	27	
				DROUGHT	(29%)	(37%)	(27%)	(28%)	(8%)	(6%)	(4%)	(4%)	(22%)	(17%)	(21%)	(18%)	(13%)	(15%)	(-1%)	(-1%)	(9%)	(13%)	(8%)	(12%)	(2%)	(8%)	(14%)	(16%)	(12%)	(14%)	
			Banks PP	ALL	-29	-31	-41	-48	-37	-36	-64	-64	-84	-81	-112	-106	-104	-101	-68	-67	-44	-42	-15	-12	-18	-13	-30	-29	-54	-52	
				DROUGHT	(-15%)	(-16%)	(-19%)	(-22%)	(-18%)	(-17%)	(-30%)	(-30%)	(-35%)	(-34%)	(-43%)	(-41%)	(-36%)	(-36%)	(-22%)	(-22%)	(-16%)	(-15%)	(-8%)	(-6%)	(-10%)	(-8%)	(-17%)	(-17%)	(-24%)	(-23%)	
	Jones PP		ALL	-24	-31	-40	-49	-29	-26	-88	-87	-125	-119	-148	-146	-136	-137	-143	-143	-97	-98	-17	-20	15	12	-45	-54	-73	-75		
			DROUGHT	(-10%)	(-13%)	(-16%)	(-20%)	(-11%)	(-10%)	(-32%)	(-32%)	(-41%)	(-40%)	(-47%)	(-46%)	(-40%)	(-40%)	(-41%)	(-41%)	(-35%)	(-35%)	(-8%)	(-9%)	(7%)	(6%)	(-21%)	(-24%)	(-27%)	(-28%)		
					ALL	-12	-26	-12	-38	-1	0	-41	-34	-70	-49	-112	-103	-85	-82	-115	-118	-33	-33	19	8	32	16	10	4	-35	-38
					DROUGHT	(-5%)	(-11%)	(-5%)	(-15%)	(-0%)	(0%)	(-16%)	(-13%)	(-23%)	(-18%)	(-35%)	(-33%)	(-26%)	(-25%)	(-35%)	(-36%)	(-15%)	(-15%)	(11%)	(4%)	(18%)	(8%)	(5%)	(2%)	(-14%)	(-15%)

<sup>a</sup> ALL: Water years 1976–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

**Table Bo-10. Period Average Change in Boron Concentrations (µg/L) for Alternative 5A ELT Relative to Existing Conditions and the No Action Alternative ELT.**

Boron	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Alt 5A ELT	Delta Interior	Moke. R. (SF) at Staten Island	ALL	7	7	7	7	2	3	5	5	4	6	7	8	6	6	6	7	14	14	13	14	13	11	10	9	8	8	
				(6%)	(6%)	(6%)	(6%)	(2%)	(3%)	(3%)	(4%)	(3%)	(4%)	(6%)	(6%)	(5%)	(5%)	(5%)	(5%)	(10%)	(11%)	(9%)	(10%)	(11%)	(9%)	(9%)	(8%)	(6%)	(6%)	
		DROUGHT	8	8	6	6	2	3	1	2	1	3	8	10	5	6	5	7	17	19	22	21	18	13	12	11	9	9		
				(7%)	(7%)	(5%)	(5%)	(1%)	(2%)	(1%)	(2%)	(1%)	(2%)	(5%)	(7%)	(4%)	(5%)	(4%)	(5%)	(13%)	(14%)	(17%)	(16%)	(14%)	(10%)	(10%)	(9%)	(7%)	(7%)	
		SJR at Buckley Cove	ALL	-8	0	-5	0	-23	0	-16	0	-13	0	-12	0	-16	0	-16	0	-30	0	-30	5	-28	10	-15	1	-18	1	
				(-2%)	(-0%)	(-1%)	(-0%)	(-7%)	(0%)	(-5%)	(0%)	(-4%)	(-0%)	(-4%)	(-0%)	(-4%)	(-0%)	(-4%)	(0%)	(-8%)	(0%)	(-9%)	(2%)	(-8%)	(3%)	(-4%)	(0%)	(-5%)	(0%)	
	DROUGHT	-11	0	-11	0	-35	-2	-31	0	-21	0	-22	0	-32	-1	-32	0	-55	2	-34	19	-41	34	-23	2	-29	4			
			(-3%)	(0%)	(-3%)	(-0%)	(-10%)	(-1%)	(-9%)	(0%)	(-6%)	(-0%)	(-6%)	(-0%)	(-9%)	(-0%)	(-9%)	(0%)	(-15%)	(1%)	(-10%)	(7%)	(-12%)	(12%)	(-6%)	(1%)	(-8%)	(1%)		
	Franks Tract	ALL	10	14	6	11	2	7	5	3	9	7	11	11	7	8	6	6	6	7	0	6	3	6	6	8	6	8		
			(6%)	(9%)	(4%)	(6%)	(1%)	(4%)	(3%)	(2%)	(6%)	(4%)	(6%)	(6%)	(4%)	(4%)	(3%)	(3%)	(3%)	(4%)	(-0%)	(4%)	(2%)	(4%)	(4%)	(6%)	(3%)	(5%)		
	DROUGHT	14	8	5	-6	3	2	0	-2	-2	0	-4	1	-3	1	-1	0	3	3	-3	1	4	6	10	6	2	2			
			(8%)	(4%)	(2%)	(-3%)	(2%)	(1%)	(0%)	(-1%)	(-2%)	(-0%)	(-3%)	(1%)	(-2%)	(1%)	(-1%)	(0%)	(2%)	(2%)	(-2%)	(1%)	(3%)	(4%)	(7%)	(4%)	(1%)	(1%)		
	Old R. at Rock Slough	ALL	22	21	26	25	2	7	3	1	5	6	8	10	1	2	-1	1	3	5	2	6	5	7	23	25	8	10		
			(14%)	(14%)	(15%)	(14%)	(1%)	(4%)	(1%)	(1%)	(3%)	(3%)	(4%)	(5%)	(0%)	(1%)	(-0%)	(0%)	(2%)	(3%)	(1%)	(4%)	(3%)	(5%)	(16%)	(17%)	(4%)	(5%)		
	DROUGHT	28	18	26	8	6	4	0	0	-10	-1	-10	0	-11	-5	-3	-1	5	5	4	7	8	7	11	6	5	4			
			(18%)	(11%)	(15%)	(4%)	(4%)	(2%)	(-0%)	(-0%)	(-7%)	(-1%)	(-6%)	(-0%)	(-7%)	(-3%)	(-2%)	(-0%)	(3%)	(4%)	(3%)	(5%)	(6%)	(5%)	(7%)	(4%)	(3%)	(3%)		
	Western Delta	Sac. R. at Emmaton	ALL	-16	-12	-19	-8	-5	-8	-1	-2	0	-1	1	0	2	1	6	3	6	1	10	6	13	6	0	6	0	-1	
				(-7%)	(-5%)	(-7%)	(-3%)	(-3%)	(-4%)	(-0%)	(-1%)	(0%)	(-1%)	(1%)	(0%)	(2%)	(1%)	(4%)	(2%)	(4%)	(1%)	(7%)	(4%)	(8%)	(3%)	(0%)	(3%)	(-0%)	(-0%)	
		DROUGHT	-29	-30	-31	-28	-6	-17	-1	-7	1	-3	0	0	0	1	4	2	4	1	24	18	27	10	25	4	2	-4		
				(-10%)	(-11%)	(-10%)	(-9%)	(-2%)	(-7%)	(-1%)	(-5%)	(0%)	(-2%)	(-0%)	(-0%)	(-0%)	(0%)	(3%)	(1%)	(3%)	(0%)	(15%)	(11%)	(16%)	(5%)	(11%)	(2%)	(1%)	(-2%)	
		SJR at Antioch	ALL	-68	-22	-93	-35	-37	-25	-5	-7	4	0	8	6	7	6	7	5	9	3	3	6	10	6	-26	4	-15	-4	
				(-16%)	(-6%)	(-18%)	(-8%)	(-10%)	(-7%)	(-2%)	(-3%)	(2%)	(-0%)	(5%)	(4%)	(4%)	(4%)	(3%)	(4%)	(2%)	(1%)	(2%)	(4%)	(2%)	(7%)	(1%)	(-6%)	(-2%)		
		DROUGHT	-80	-56	-115	-66	-48	-47	-13	-24	0	-10	0	0	0	1	3	-1	3	3	7	8	28	20	31	14	-15	-14		
				(-16%)	(-12%)	(-19%)	(-12%)	(-10%)	(-10%)	(-6%)	(-11%)	(-0%)	(-6%)	(0%)	(-0%)	(0%)	(1%)	(2%)	(-0%)	(1%)	(-1%)	(3%)	(3%)	(10%)	(7%)	(8%)	(3%)	(-5%)	(-5%)	
Sac. R. at Mallard Island		ALL	-107	-43	-128	-49	-49	-34	-11	-12	1	-5	7	3	7	5	12	8	17	4	10	12	17	8	-47	5	-22	-8		
			(-14%)	(-6%)	(-14%)	(-6%)	(-7%)	(-5%)	(-3%)	(-4%)	(1%)	(-2%)	(5%)	(2%)	(4%)	(3%)	(4%)	(3%)	(5%)	(1%)	(3%)	(3%)	(4%)	(2%)	(-8%)	(1%)	(-5%)	(-2%)		
DROUGHT		-133	-74	-171	-81	-71	-63	-25	-32	2	-16	3	0	5	4	6	3	3	-1	15	17	32	19	22	8	-26	-18			
			(-15%)	(-9%)	(-16%)	(-8%)	(-8%)	(-7%)	(-6%)	(-8%)	(1%)	(-5%)	(2%)	(0%)	(3%)	(2%)	(2%)	(1%)	(1%)	(-0%)	(3%)	(4%)	(7%)	(4%)	(3%)	(1%)	(-5%)	(-4%)		
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-20	-16	-13	-14	-10	-9	-14	-15	-17	-22	-15	-17	-18	-15	-19	-18	-28	-23	-33	-27	-30	-25	-23	-20	-18			
			(-15%)	(-12%)	(-11%)	(-11%)	(-8%)	(-8%)	(-11%)	(-12%)	(-13%)	(-16%)	(-12%)	(-13%)	(-14%)	(-12%)	(-15%)	(-14%)	(-20%)	(-17%)	(-22%)	(-19%)	(-21%)	(-18%)	(-17%)	(-15%)	(-15%)	(-14%)		
	DROUGHT	-31	-26	-16	-21	-7	-8	-8	-8	-11	-12	-12	-15	-15	-18	-20	-23	-30	-25	-35	-31	-36	-34	-32	-31	-21	-21			
			(-21%)	(-19%)	(-13%)	(-16%)	(-6%)	(-7%)	(-6%)	(-7%)	(-9%)	(-10%)	(-9%)	(-12%)	(-12%)	(-14%)	(-15%)	(-17%)	(-21%)	(-18%)	(-24%)	(-21%)	(-24%)	(-23%)	(-22%)	(-21%)	(-16%)	(-16%)		
	Contra Costa PP #1	ALL	15	25	23	25	16	12	3	4	9	2	18	13	6	11	-3	-3	-3	5	-1	5	-3	6	13	16	8	10		
			(8%)	(15%)	(13%)	(14%)	(8%)	(6%)	(1%)	(2%)	(5%)	(1%)	(9%)	(6%)	(2%)	(5%)	(-1%)	(-1%)	(-1%)	(2%)	(-0%)	(3%)	(-2%)	(4%)	(7%)	(10%)	(4%)	(5%)		
	DROUGHT	25	24	33	17	0	-1	5	4	-8	0	-14	1	-12	-3	-8	-11	-1	2	5	8	-1	5	6	4	3	4			
			(13%)	(13%)	(18%)	(8%)	(0%)	(-1%)	(3%)	(3%)	(-5%)	(-0%)	(-8%)	(0%)	(-7%)	(-2%)	(-4%)	(-6%)	(-1%)	(2%)	(3%)	(5%)	(-0%)	(3%)	(4%)	(2%)	(1%)	(2%)		
	Banks PP	ALL	-16	-18	-24	-32	-1	0	-24	-24	-35	-32	-36	-30	-66	-62	-42	-41	-36	-34	-21	-19	-11	-6	-16	-15	-27	-26		
			(-8%)	(-9%)	(-11%)	(-14%)	(-1%)	(0%)	(-11%)	(-11%)	(-14%)	(-13%)	(-14%)	(-12%)	(-23%)	(-22%)	(-14%)	(-14%)	(-13%)	(-12%)	(-11%)	(-10%)	(-6%)	(-4%)	(-9%)	(-9%)	(-12%)	(-11%)		
	DROUGHT	-5	-15	-17	-35	-1	-1	-1	0	-8	4	-33	-13	-46	-31	-18	-10	-2	3	-7	-9	10	7	10	3	-10	-8			
			(-3%)	(-8%)	(-8%)	(-16%)	(-0%)	(-0%)	(-0%)	(0%)	(-4%)	(2%)	(-14%)	(-6%)	(-18%)	(-13%)	(-7%)	(-4%)	(-1%)	(1%)	(-4%)	(-5%)	(7%)	(4%)	(6%)	(2%)	(-5%)	(-4%)		
Jones PP	ALL	26	19	-22	-31	-24	-21	-21	-20	-34	-28	-73	-70	-45	-46	-69	-70	-39	-40	3	0	2	-1	-26	-35	-27	-29			
		(12%)	(8%)	(-9%)	(-13%)	(-9%)	(-8%)	(-8%)	(-7%)	(-11%)	(-9%)	(-23%)	(-22%)	(-13%)	(-13%)	(-20%)	(-20%)	(-14%)	(-14%)	(1%)	(-0%)	(1%)	(-0%)	(-12%)	(-16%)	(-10%)	(-11%)			
DROUGHT	38	23	-25	-50	-2	-1	-8	-1	-26	-5	-79	-70	-36	-33	-65	-67	-20	-19	10	-1	25	9	9	2	-15	-18				
		(17%)	(10%)	(-11%)	(-20%)	(-1%)	(-0%)	(-3%)	(-0%)	(-9%)	(-2%)	(-25%)	(-23%)	(-11%)	(-10%)	(-20%)	(-20%)	(-9%)	(-9%)	(6%)	(-0%)	(14%)	(5%)	(4%)	(1%)	(-6%)	(-7%)			

<sup>a</sup> ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

**Table Bo-11. Period Average Percentage Changes in Available Assimilative Capacity under Alternative 2D ELT, Relative to Existing Conditions and No Action Alternative ELT, Based on the 500 µg/L Agricultural Objective.**

Boron	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT		
			Alt 2D ELT																											
Delta Interior	Moke. R. (SF) at Staten Island	All	-1	-1	-1	-1	0	0	-1	-1	0	-1	-1	-1	-1	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
		Drought	-1	-1	0	0	0	0	0	0	0	0	0	-1	-1	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
	SJR at Buckley Cove	All	0	0	0	0	1	0	0	-1	0	0	0	0	1	0	1	0	2	0	2	0	1	-1	1	0	1	0	1	0
		Drought	1	0	1	0	2	0	1	-1	1	-1	1	-1	1	-1	1	-1	3	-1	2	-2	2	-3	2	0	1	0	1	-
	Franks Tract	All	-2	-2	-1	-1	0	0	-1	-1	-2	-2	-2	-2	-2	-2	-1	-1	-1	-1	0	-1	0	-1	-1	-1	-1	-1	-1	-1
		Drought	-1	0	0	1	0	0	0	0	0	0	0	-1	0	-1	0	0	-1	-1	0	0	0	0	0	0	-1	0	0	-
Old R. at Rock Slough	All	-3	-3	-2	-2	0	0	-1	-1	-2	-2	-2	-2	-1	-1	0	0	-2	-2	-1	-1	-1	-1	-2	-2	-1	-1	-1	-1	
	Drought	-2	-1	-1	0	0	0	0	0	0	0	-1	0	-1	0	0	0	0	-1	-1	0	0	0	0	-1	0	-1	0	-	
Western Delta	Sac. R. at Emmaton	All	1	1	2	1	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	0	-1	-1	-1	-1	0	-1	0	0	0	
		Drought	3	3	3	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	-2	-1	-2	-1	-1	0	-1	0	-	
	SJR at Antioch	All	6	3	9	5	2	2	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	-1	-1	1	-1	1	0	0	
		Drought	7	6	11	7	3	3	1	2	0	1	0	0	0	0	0	0	0	0	-1	-1	-2	-2	-2	-1	1	-1	-	
	Sac. R. at Mallard Island	All	11	6	15	7	4	3	2	2	0	0	-1	-1	-1	-1	-1	-1	-1	0	-1	-1	-2	-1	3	-1	2	1	1	
		Drought	14	8	22	11	6	5	3	3	0	1	0	0	0	0	-1	0	0	0	-1	-1	-3	-2	-2	-1	2	-	-	
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	All	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	
		Drought	2	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	2	1	2	2	2	2	2	2	2	2	1	-
	Contra Costa PP #1	All	-3	-3	-3	-3	-1	-1	0	0	-2	-2	-2	-2	-2	-2	0	0	-1	-2	-1	-1	0	-1	-1	-1	-1	-1	-1	-1
		Drought	-2	-2	-2	-1	0	0	0	0	-1	-1	0	-1	0	0	0	0	-1	-1	0	-1	0	0	0	0	0	0	0	-
	Banks PP	All	2	2	2	3	2	2	4	4	5	5	6	6	6	6	4	4	3	2	1	1	1	1	2	2	3	3	3	
		Drought	-1	0	1	2	1	1	1	1	0	0	3	2	3	2	2	2	-1	-1	1	1	-1	-1	0	0	1	-	-	
	Jones PP	All	1	2	2	3	2	1	5	5	7	7	9	9	8	8	9	9	6	6	1	1	-1	-1	3	3	4	4	4	
		Drought	1	1	1	2	0	0	2	2	4	3	7	6	5	5	7	7	2	2	-1	0	-2	-1	-1	0	2	-	-	

<sup>a</sup> ALL: Water years 1975–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

**NOTES:**  
 -- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.  
 -- Water Quality Objective is the 500 µg/L agricultural criterion.



**Table Bo-12. Period Average Percentage Changes in Available Assimilative Capacity under Alternative 5A ELT, Relative to Existing Conditions and No Action Alternative ELT, based on the 500 µg/L Agricultural Objective.**

Boron	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change		
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	
			Alt 5A ELT																										
Delta Interior	Moke. R. (SF) at Staten Island	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	0	0	0	0
		Drought	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	0	-
	SJR at Buckley Cove	All	0	0	0	0	1	0	1	0	1	0	1	0	1	0	1	0	2	0	2	0	2	-1	1	0	1	0	
		Drought	1	0	1	0	2	0	2	0	1	0	1	0	2	0	2	0	3	0	2	-1	2	-2	1	0	2	-	
	Franks Tract	All	-1	-1	0	-1	0	0	0	0	0	0	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Drought	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	
	Old R. at Rock Slough	All	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	-1	-1	0	-1
		Drought	-2	-1	-1	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	-1	0	0	-
Western Delta	Sac. R. at Emmaton	All	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-1	0	0	0	0	0	
		Drought	2	2	2	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	0	0	-	
	SJR at Antioch	All	4	1	6	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	2	0	1	0	
		Drought	5	4	8	5	3	3	1	1	0	1	0	0	0	0	0	0	0	0	0	-2	-1	-2	-1	-2	-1	1	-
	Sac. R. at Mallard Island	All	9	3	12	4	4	3	1	1	0	0	0	0	0	0	-1	0	-1	0	-1	-1	-1	-1	3	0	1	1	
		Drought	12	6	19	8	7	6	2	2	0	1	0	0	0	0	0	0	0	0	-1	-1	-2	-1	-2	-1	2	-	
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	
		Drought	2	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	2	1	2	2	2	2	2	2	1	-
	Contra Costa PP #1	All	-1	-1	-1	-1	-1	-1	0	0	0	0	-1	-1	0	-1	0	0	0	0	0	0	0	0	0	-1	-1	0	-1
		Drought	-1	-1	-2	-1	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	-
	Banks PP	All	1	1	1	2	0	0	1	1	2	2	2	2	4	4	2	2	2	2	1	1	1	0	1	1	2	1	
		Drought	0	1	1	2	0	0	0	0	0	0	2	1	3	2	1	1	0	0	0	0	-1	0	-1	0	1	-	
	Jones PP	All	-1	-1	1	2	1	1	1	1	2	2	4	4	3	3	4	4	2	2	0	0	0	0	1	2	2	2	
		Drought	-2	-1	1	3	0	0	0	0	2	0	5	4	2	2	4	4	1	1	-1	0	-1	0	0	0	1	-	

<sup>a</sup> ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

**NOTES:**  
 -- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.  
 -- Water Quality Objective is the 500 µg/L agricultural criterion.

1 **Table Br-1. Period Average Bromide Concentrations and Frequency of Exceedance of Objectives for Existing Conditions, the No Action**  
 2 **Alternative ELT, and Alternative 4A ELT. Calculation of Bromide Concentrations was Based on a Mass Balance Approach.**

Bromide	Location	Period <sup>a</sup>	Period Average Concentration µg/L				Lowest Applicable Human Health Criterion/Objective (50 µg/L) <sup>b</sup>				Lowest Applicable Aquatic Life Criterion/Objective (100 µg/L) <sup>c</sup>			
			Period Average Concentration µg/L				Frequency of Criterion/Objective Exceedance (%)				Frequency of Criterion/Objective Exceedance (%)			
			Ex. Cond.	No Act. ELT	Alt. 4A H3 ELT	Alt. 4A H4 ELT	Ex. Cond.	No Act. ELT	Alt. 4A H3 ELT	Alt. 4A H4 ELT	Ex. Cond.	No Act. ELT	Alt. 4A H3 ELT	Alt. 4A H4 ELT
Delta Interior	Moke. R. (SF) at Staten Island	All	50	49	63	64	47	49	71	70	1	1	4	4
		Drought	51	51	64	64	52	53	75	75	0	0	2	2
	SJR at Buckley Cove	All	259	243	245	245	100	100	100	100	100	100	100	100
		Drought	272	243	246	247	100	100	100	100	100	100	100	100
	Franks Tract	All	598	546	433	421	99	98	100	100	82	84	88	88
		Drought	737	726	598	576	100	97	100	100	78	78	82	82
Old R. at Rock Slough	All	520	480	397	388	99	100	100	100	91	92	92	93	
	Drought	622	614	521	503	100	100	100	100	90	88	87	92	
Western Delta	Sac. R. at Emmaton	All	1,284	1,287	1,162	1,186	82	84	86	84	72	77	75	74
		Drought	1,800	1,972	1,829	1,842	98	98	98	98	93	95	93	93
	SJR at Antioch	All	3,798	3,543	3,056	3,059	98	98	100	100	93	95	98	97
		Drought	4,896	4,910	4,432	4,397	100	100	100	100	100	100	100	100
Sac. R. at Mallard Island	All	8,926	8,600	8,131	8,113	98	98	100	100	91	92	94	94	
	Drought	11,315	11,201	10,706	10,666	100	100	100	100	100	100	100	100	
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	All	51	50	30	30	49	38	0	0	0	1	0	0
		Drought	54	54	31	31	55	55	0	0	0	0	0	0
	Contra Costa PP #1	All	501	465	406	392	100	100	100	100	96	95	96	95
		Drought	608	592	514	490	100	100	100	100	98	97	97	97
	Banks PP	All	415	388	237	217	100	100	84	79	100	100	71	66
		Drought	490	474	341	303	100	100	95	87	100	100	88	78
	Jones PP	All	387	364	225	218	100	100	84	81	100	100	74	74
		Drought	446	433	309	306	100	100	98	97	100	100	90	90

Notes:  
<sup>a</sup> ALL: Water years 1975–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).  
<sup>b</sup> CALFED Drinking Water Program goal for bromide of 50 µg/L as a long-term average as applied to municipal drinking water intakes drawing water from the Delta.  
<sup>c</sup> Minimum bromide concentration believed to be sufficient to meet currently established drinking water criteria for disinfection byproducts.

3



1 **Table Br-2. Period Average Bromide Concentrations and Frequency of Exceedance of Objectives for Existing Conditions, the No Action**  
 2 **Alternative ELT, and Alternative 4A ELT. Calculation of Bromide Concentrations was Based on a EC-Chloride-Bromide Relationship.**

Bromide	Location	Period <sup>a</sup>	Period Average Concentration µg/L				Lowest Applicable Human Health Criterion/Objective (50 µg/L) <sup>b</sup>				Lowest Applicable Aquatic Life Criterion/Objective (100 µg/L) <sup>c</sup>			
			Period Average Concentration µg/L				Frequency of Criterion/Objective Exceedance (%)				Frequency of Criterion/Objective Exceedance (%)			
			Ex. Cond.	No Act. ELT	Alt. 4A H3 ELT	Alt. 4A H4 ELT	Ex. Cond.	No Act. ELT	Alt. 4A H3 ELT	Alt. 4A H4 ELT	Ex. Cond.	No Act. ELT	Alt. 4A H3 ELT	Alt. 4A H4 ELT
Delta Interior	Moke. R. (SF) at Staten Island	All	65	65	70	70	97	98	98	98	3	2	5	5
		Drought	68	67	72	72	100	100	100	100	3	2	7	5
	SJR at Buckley Cove	All	405	353	361	362	100	99	99	99	89	87	87	87
		Drought	542	456	473	476	100	100	100	100	100	100	100	100
	Franks Tract	All	420	384	310	305	100	100	100	100	76	70	80	80
		Drought	535	535	449	437	100	100	100	100	93	85	97	95
	Old R. at Rock Slough	All	378	348	297	297	100	100	100	100	86	81	85	87
		Drought	476	473	414	408	100	100	100	100	98	97	98	98
Western Delta	Sac. R. at Emmaton	All	903	915	828	846	100	100	100	100	69	71	70	69
		Drought	1,273	1,426	1,336	1,344	100	100	100	100	90	92	90	90
	SJR at Antioch	All	2,648	2,480	2,154	2,156	100	100	100	100	82	83	88	86
		Drought	3,507	3,586	3,259	3,229	100	100	100	100	98	98	100	100
	Sac. R. at Mallard Island	All	6,182	5,922	5,584	5,559	100	100	100	100	87	88	89	88
		Drought	8,211	8,227	7,899	7,841	100	100	100	100	100	100	100	100
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	All	66	66	57	57	100	100	100	100	1	1	0	0
		Drought	65	66	57	57	100	100	100	100	0	0	0	0
	Contra Costa PP #1	All	422	388	343	341	100	100	100	100	95	91	97	97
		Drought	500	488	435	425	100	100	100	100	98	97	98	100
	Banks PP	All	356	329	231	216	100	99	99	99	91	89	69	67
		Drought	469	449	337	301	100	100	100	100	100	100	93	83
	Jones PP	All	381	356	250	249	100	99	98	98	92	89	70	72
		Drought	507	483	350	358	100	100	100	100	100	100	92	93

Notes:  
<sup>a</sup> ALL: Water years 1975–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).  
<sup>b</sup> CALFED Drinking Water Program goal for bromide of 50 µg/L as a long-term average as applied to municipal drinking water intakes drawing water from the Delta.  
<sup>c</sup> Minimum bromide concentration believed to be sufficient to meet currently established drinking water criteria for disinfection byproducts.

1 **Table Br-3. Period Average Bromide Concentrations and Frequency of Exceedance of Objectives for Existing Conditions, the No Action**  
 2 **Alternative ELT, and Alternatives 2D and 5A ELT. Calculation of Bromide Concentrations was Based on a Mass Balance Approach.**

Bromide	Location	Period <sup>a</sup>	Period Average Concentration µg/L				Lowest Applicable Human Health Criterion/Objective (50 µg/L) <sup>b</sup>				Lowest Applicable Aquatic Life Criterion/Objective (100 µg/L) <sup>c</sup>			
			Period Average Concentration µg/L				Frequency of Criterion/Objective Exceedance (%)				Frequency of Criterion/Objective Exceedance (%)			
			Ex. Cond.	No Act. ELT	Alt. 2D ELT	Alt. 5A ELT	Ex. Cond.	No Act. ELT	Alt. 2D ELT	Alt. 5A ELT	Ex. Cond.	No Act. ELT	Alt. 2D ELT	Alt. 5A ELT
Delta Interior	Moke. R. (SF) at Staten Island	All	50	49	64	59	47	49	73	66	1	1	5	2
		Drought	51	51	64	62	52	53	75	73	0	0	2	0
	SJR at Buckley Cove	All	259	243	245	243	100	100	100	100	100	100	100	100
		Drought	272	243	246	243	100	100	100	100	100	100	100	100
	Franks Tract	All	598	546	434	499	99	98	100	100	82	84	89	89
		Drought	737	726	593	655	100	97	100	100	78	78	82	82
Old R. at Rock Slough	All	520	480	399	450	99	100	100	100	91	92	93	94	
	Drought	622	614	517	569	100	100	100	100	90	88	88	88	
Western Delta	Sac. R. at Emmaton	All	1,284	1,287	1,161	1,238	82	84	88	85	72	77	76	77
		Drought	1,800	1,972	1,819	1,873	98	98	98	98	93	95	93	95
	SJR at Antioch	All	3,798	3,543	3,062	3,319	98	98	100	99	93	95	98	97
		Drought	4,896	4,910	4,419	4,563	100	100	100	100	100	100	100	100
	Sac. R. at Mallard Island	All	8,926	8,600	8,141	8,392	98	98	100	99	91	92	94	93
		Drought	11,315	11,201	10,694	10,809	100	100	100	100	100	100	100	100
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	All	51	50	30	29	49	38	0	0	0	1	0	0
		Drought	54	54	31	30	55	55	0	0	0	0	0	0
	Contra Costa PP #1	All	501	465	411	446	100	100	100	100	96	95	96	97
		Drought	608	592	510	561	100	100	100	100	98	97	97	97
	Banks PP	All	415	388	224	304	100	100	76	95	100	100	67	87
		Drought	490	474	334	399	100	100	93	97	100	100	88	92
	Jones PP	All	387	364	220	304	100	100	80	95	100	100	71	92
		Drought	446	433	315	379	100	100	98	98	100	100	92	93

Notes:

<sup>a</sup> ALL: Water years 1975–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

<sup>b</sup> CALFED Drinking Water Program goal for bromide of 50 µg/L as a long-term average as applied to municipal drinking water intakes drawing water from the Delta.

<sup>c</sup> Minimum bromide concentration believed to be sufficient to meet currently established drinking water criteria for disinfection byproducts.

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1 **Table Br-4. Period Average Bromide Concentrations and Frequency of Exceedance of Objectives for Existing Conditions, the No Action**  
 2 **Alternative ELT, and Alternatives 2D and 5A ELT. Calculation of Bromide Concentrations was based on a EC-Chloride-Bromide Relationship.**

Bromide	Location	Period <sup>a</sup>	Period Average Concentration µg/L				Lowest Applicable Human Health Criterion/Objective (50 µg/L) <sup>b</sup>				Lowest Applicable Aquatic Life Criterion/Objective (100 µg/L) <sup>c</sup>			
			Period Average Concentration µg/L				Frequency of Criterion/Objective Exceedance (%)				Frequency of Criterion/Objective Exceedance (%)			
			Ex. Cond.	No Act. ELT	Alt. 2D ELT	Alt. 5A ELT	Ex. Cond.	No Act. ELT	Alt. 2D ELT	Alt. 5A ELT	Ex. Cond.	No Act. ELT	Alt. 2D ELT	Alt. 5A ELT
Delta Interior	Moke. R. (SF) at Staten Island	All	65	65	71	69	97	98	98	98	3	2	6	3
		Drought	68	67	73	71	100	100	100	100	3	2	8	3
	SJR at Buckley Cove	All	405	353	361	355	100	99	99	99	89	87	86	87
		Drought	542	456	473	463	100	100	100	100	100	100	100	100
	Franks Tract	All	420	384	312	352	100	100	100	100	76	70	81	77
		Drought	535	535	447	483	100	100	100	100	93	85	97	93
Old R. at Rock Slough	All	378	348	301	328	100	100	100	100	86	81	87	84	
	Drought	476	473	412	439	100	100	100	100	98	97	98	98	
Western Delta	Sac. R. at Emmaton	All	903	915	826	883	100	100	100	100	69	71	70	72
		Drought	1,273	1,426	1,329	1,366	100	100	100	100	90	92	90	92
	SJR at Antioch	All	2,648	2,480	2,157	2,344	100	100	100	100	82	83	89	86
		Drought	3,507	3,586	3,251	3,358	100	100	100	100	98	98	100	98
Sac. R. at Mallard Island	All	6,182	5,922	5,591	5,832	100	100	100	100	87	88	89	88	
	Drought	8,211	8,227	7,892	8,003	100	100	100	100	100	100	100	100	
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	All	66	66	57	57	100	100	100	100	1	1	0	0
		Drought	65	66	57	57	100	100	100	100	0	0	0	0
	Contra Costa PP #1	All	422	388	352	372	100	100	100	100	95	91	97	96
		Drought	500	488	433	462	100	100	100	100	98	97	98	98
	Banks PP	All	356	329	224	270	100	99	98	99	91	89	67	74
		Drought	469	449	332	384	100	100	100	100	100	100	88	95
	Jones PP	All	381	356	246	306	100	99	98	100	92	89	69	82
		Drought	507	483	354	421	100	100	100	100	100	100	93	97

Notes:

<sup>a</sup> ALL: Water years 1975–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

<sup>b</sup> CALFED Drinking Water Program goal for bromide of 50 µg/L as a long-term average as applied to municipal drinking water intakes drawing water from the Delta.

<sup>c</sup> Minimum bromide concentration believed to be sufficient to meet currently established drinking water criteria for disinfection byproducts.

3

1 **Table Br-5. Estimated Bromide Concentrations at San Joaquin River at Antioch and Sacramento River**  
 2 **at Mallard Island for February through April of Wet and Above Normal Water Year Types (i.e., Periods**  
 3 **of Historically Acceptable Water Quality for Withdrawal) Using the Mass-Balance Modeling Approach.**

	Water Year Type	San Joaquin River at Antioch			Sac. River at Mallard Island	
		Bromide Concentration (µg/L)			Bromide Concentration (µg/L)	
		Feb	Mar	Apr	Feb	Mar
Existing Conditions	Wet	83	104	133	132	109
	Above Normal	91	92	112	263	94
No Action Alternative ELT	Wet	86	105	139	117	119
	Above Normal	92	93	115	208	85
Alternative 2D ELT	Wet	133	154	182	143	144
	Above Normal	150	153	175	219	113
Alternative 4 H3 ELT	Wet	120	146	178	142	146
	Above Normal	138	149	172	232	114
Alternative 4 H4 ELT	Wet	121	150	150	142	146
	Above Normal	139	149	143	229	110
Alternative 5A ELT	Wet	98	119	157	130	132
	Above Normal	110	114	144	262	102

4

5 **Table Br-6. Estimated Bromide Concentrations at San Joaquin River at Antioch and Sacramento River**  
 6 **at Mallard Island for February through April of Wet and Above Normal Water Year Types (i.e., Periods**  
 7 **of Historically Acceptable Water Quality for Withdrawal) Using the EC to Chloride and Chloride to**  
 8 **Bromide Modeling Approach.**

	Water Year Type	San Joaquin River at Antioch			Sac. River at Mallard Island	
		Bromide Concentration (µg/L)			Bromide Concentration (µg/L)	
		Feb	Mar	Apr	Feb	Mar
Existing Conditions	Wet	84	82	76	68	68
	Above Normal	98	88	89	74	67
No Action Alternative ELT	Wet	80	77	74	67	69
	Above Normal	95	82	84	74	65
Alternative 2D ELT	Wet	107	87	81	78	74
	Above Normal	170	143	124	95	81
Alternative 4 H3 ELT	Wet	93	86	81	74	74
	Above Normal	147	138	122	88	79
Alternative 4 H4 ELT	Wet	93	86	75	75	74
	Above Normal	148	137	118	88	79
Alternative 5A ELT	Wet	84	81	79	70	71
	Above Normal	102	91	99	78	68

9

1 **Table CI-1. Number of Years Bay-Delta Water Quality Control Plan 150 mg/L Objective Exceeded at**  
 2 **Contra Costa Canal Pumping Plant #1 for Existing Conditions, No Action Alternative ELT, and**  
 3 **Alternatives 2D, 4A, and 5A ELT.**

<b>Scenario</b>	<b>Total Number of Years</b>	<b># of Years when Standards are Violated</b>	<b>% of Years when Standards are Violated</b>
Existing Conditions	15	1	6.7
No Action Alternative ELT	15	0	0
Alternative 2D ELT	15	0	0
Alternative 4 H3 ELT	15	0	0
Alternative 4 H4 ELT	15	0	0
Alternative 5A ELT	15	0	0

4  
5

**Table CI-2. Period Average Chloride Concentrations and Frequency of Exceedance of Objectives for Existing Conditions, the No Action Alternative ELT, and Alternatives 2D, 4A, and 5A ELT. Calculation of Chloride Concentrations was Based on a Mass Balance Approach.**

Chloride	Location	Period <sup>a</sup>	Period Average Concentration mg/L						Lowest Applicable Human Health Criterion/Objective (250 mg/L) <sup>b</sup>					
			Ex. Cond.	No Act. ELT	Alt 2D ELT	Alt 4A H3 ELT	Alt 4A H4 ELT	Alt 5A ELT	Frequency of Criterion/Objective Exceedance (%)					
									Ex. Cond.	No Act. ELT	Alt 2D ELT	Alt 4A H3 ELT	Alt 4A H4 ELT	Alt 5A ELT
Delta Interior	Moke. R. (SF) at Staten Island	All	16	16	20	20	20	18	0	0	0	0	0	0
		Drought	17	17	20	20	20	20	0	0	0	0	0	0
	SJR at Buckley Cove	All	83	78	78	78	78	78	0	0	0	0	0	0
		Drought	87	77	78	79	78	77	0	0	0	0	0	0
	Franks Tract	All	174	159	128	141	133	146	34	24	18	19	15	22
		Drought	213	210	172	182	172	189	47	40	37	37	28	38
Old R. at Rock Slough	All	152	141	118	128	122	132	28	19	13	13	11	18	
	Drought	180	178	150	158	150	165	42	32	28	28	23	33	
Western Delta	Sac. R. at Emmaton	All	369	370	334	376	379	356	44	41	39	38	38	40
		Drought	516	565	522	545	539	537	55	60	57	57	55	57
	SJR at Antioch	All	1,087	1,015	878	976	966	951	66	70	65	65	65	68
		Drought	1,401	1,405	1,264	1,317	1,294	1,306	82	85	82	82	82	82
	Sac. R. at Mallard Island	All	2,552	2,459	2,328	2,466	2,448	2,399	85	86	86	86	86	86
		Drought	3,234	3,201	3,057	3,132	3,110	3,090	100	100	100	100	100	100
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	All	17	17	11	11	11	11	0	0	0	0	0	0
		Drought	18	18	11	11	11	11	0	0	0	0	0	0
	Contra Costa PP #1	All	146	136	122	130	122	131	24	17	13	13	12	17
		Drought	176	172	149	157	147	163	37	28	22	23	22	30
	Banks PP	All	123	116	67	74	70	91	4	6	2	2	2	4
		Drought	144	139	99	103	93	117	7	12	2	2	2	5
	Jones PP	All	117	110	67	74	68	92	1	3	0	0	0	1
		Drought	133	129	95	98	93	113	0	5	0	0	0	2

Notes:  
<sup>a</sup> ALL: Water years 1976–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).  
<sup>b</sup> State maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

**Table CI-3. Period Average Chloride Concentrations and Frequency of Exceedance of Objectives for Existing Condition, the No Action Alternative ELT, and Alternatives 2D, 4A, and 5A ELT. Calculation of Chloride Concentrations was Based on EC-Chloride Relationship.**

Chloride	Location	Period <sup>a</sup>	Period Average Concentration mg/L						Lowest Applicable Human Health Criterion/Objective (250 mg/L) <sup>b</sup>					
			Ex. Cond.	No Act. ELT	Alt 2D ELT	Alt 4A H3 ELT	Alt 4A H4 ELT	Alt 5A ELT	Frequency of Criterion/Objective Exceedance (%)					
									Ex. Cond.	No Act. ELT	Alt 2D ELT	Alt 4A H3 ELT	Alt 4A H4 ELT	Alt 5A ELT
Delta Interior	Moke. R. (SF) at Staten Island	All	18	18	20	20	20	20	0	0	0	0	0	0
		Drought	19	19	21	21	21	20	0	0	0	0	0	0
	SJR at Buckley Cove	All	116	101	103	103	103	101	0	0	0	0	0	0
		Drought	155	130	135	135	136	132	0	0	0	0	0	0
	Franks Tract	All	120	110	89	89	87	101	14	14	6	6	6	9
		Drought	153	153	128	128	125	138	22	23	12	12	13	17
Old R. at Rock Slough	All	108	99	86	85	85	94	4	6	2	2	4	5	
	Drought	136	135	118	118	117	125	7	13	2	2	7	8	
Western Delta	Sac. R. at Emmaton	All	258	261	236	237	242	252	36	32	32	32	33	31
		Drought	364	407	380	382	384	390	50	53	52	52	52	53
	SJR at Antioch	All	757	708	616	615	616	670	61	63	59	59	56	60
		Drought	1,002	1,025	929	931	922	960	80	80	77	77	75	75
	Sac. R. at Mallard Island	All	1,766	1,692	1,597	1,595	1,588	1,666	77	80	82	82	81	81
		Drought	2,346	2,350	2,255	2,257	2,240	2,286	98	98	98	98	98	98
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	All	19	19	16	16	16	16	0	0	0	0	0	0
		Drought	19	19	16	16	16	16	0	0	0	0	0	0
	Contra Costa PP #1	All	120	111	101	98	98	106	5	7	4	2	3	6
		Drought	143	140	124	124	121	132	8	12	3	3	3	10
	Banks PP	All	102	94	64	66	62	77	1	2	0	0	0	0
		Drought	134	128	95	96	86	110	2	2	0	0	0	0
	Jones PP	All	109	102	70	71	71	87	0	0	0	0	0	1
		Drought	145	138	101	100	102	120	0	0	0	0	0	0

Notes:  
<sup>a</sup> ALL: Water years 1976–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).  
<sup>b</sup> State maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

**Table CI-4. Period Average Change in Chloride Concentrations (mg/L) for the No Action Alternative ELT, Relative to Existing Conditions. Calculation of Chloride Concentrations was Based on a Mass Balance Approach.**

Chloride	Location	Period <sup>a</sup>	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Annual Avg. Change		
			Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.		
No Act. ELT	Delta Interior	Moke R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	1	0	0		
				(1%)	(1%)	(-1%)	(-1%)	(-2%)	(-0%)	(-0%)	(-1%)	(-1%)	(-2%)	(4%)	(1%)	(-0%)	
		DROUGHT	0	0	0	0	-1	-1	0	0	0	0	0	2	0	0	
				(0%)	(1%)	(-2%)	(-1%)	(-3%)	(-4%)	(-3%)	(-2%)	(-3%)	(2%)	(12%)	(3%)	(-0%)	
		SJR at Buckley Cove	ALL	-2	-1	-6	-5	-3	-3	-4	-4	-4	-9	-10	-11	-4	-5
				(-3%)	(-2%)	(-8%)	(-6%)	(-4%)	(-4%)	(-5%)	(-5%)	(-10%)	(-12%)	(-12%)	(-5%)	(-7%)	
	DROUGHT	-3	-3	-9	-9	-6	-6	-9	-9	-9	-16	-15	-21	-7	-9		
			(-4%)	(-4%)	(-11%)	(-10%)	(-7%)	(-7%)	(-10%)	(-10%)	(-18%)	(-17%)	(-22%)	(-8%)	(-11%)		
	Franks Tract	ALL	-40	-54	-34	8	2	2	1	1	1	1	-26	-18	-20	-15	
			(-14%)	(-14%)	(-12%)	(5%)	(3%)	(5%)	(3%)	(2%)	(3%)	(-14%)	(-8%)	(-7%)	(-8%)		
	DROUGHT	5	8	-11	19	11	5	1	4	10	-50	-50	11	-3			
			(2%)	(2%)	(-3%)	(9%)	(17%)	(17%)	(6%)	(14%)	(19%)	(-16%)	(-16%)	(3%)	(-1%)		
	Old R. at Rock Slough	ALL	-30	-40	-31	10	2	1	0	1	1	1	-20	-17	-13	-11	
			(-12%)	(-13%)	(-12%)	(6%)	(3%)	(3%)	(2%)	(1%)	(1%)	(-13%)	(-9%)	(-5%)	(-7%)		
	DROUGHT	3	17	-12	23	8	3	1	2	7	-39	-43	4	-2			
			(1%)	(5%)	(-4%)	(12%)	(11%)	(7%)	(3%)	(6%)	(16%)	(-16%)	(-16%)	(1%)	(-1%)		
Western Delta	Sac. R. at Emmaton	ALL	-29	-77	10	11	8	8	6	2	19	30	70	-48	1		
			(-3%)	(-9%)	(2%)	(7%)	(12%)	(29%)	(16%)	(2%)	(9%)	(9%)	(15%)	(-6%)	(0%)		
	DROUGHT	-2	-29	59	45	32	15	8	33	40	59	156	173	49			
			(-0%)	(-2%)	(8%)	(20%)	(30%)	(34%)	(17%)	(19%)	(13%)	(13%)	(26%)	(15%)	(10%)		
	SJR at Antioch	ALL	-324	-370	-73	14	25	27	18	5	45	-14	43	-269	-73		
			(-15%)	(-15%)	(-5%)	(2%)	(9%)	(24%)	(13%)	(1%)	(8%)	(-1%)	(3%)	(-13%)	(-7%)		
DROUGHT	-178	-325	-16	85	98	46	23	49	63	-12	70	144	4				
		(-7%)	(-11%)	(-1%)	(10%)	(24%)	(28%)	(11%)	(9%)	(8%)	(-1%)	(4%)	(6%)	(0%)			
Sac. R. at Mallard Island	ALL	-450	-489	-84	4	51	62	41	26	111	-13	92	-467	-93			
		(-10%)	(-10%)	(-3%)	(0%)	(5%)	(14%)	(5%)	(2%)	(6%)	(-0%)	(3%)	(-11%)	(-4%)			
DROUGHT	-422	-567	-51	62	167	72	43	35	47	-23	130	118	-33				
		(-8%)	(-9%)	(-1%)	(3%)	(10%)	(10%)	(4%)	(2%)	(2%)	(-1%)	(3%)	(2%)	(-1%)			
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-1	0	0	0	2	1	-1	0	-2	-2	-1	-1	0		
			(-8%)	(1%)	(1%)	(2%)	(11%)	(4%)	(-5%)	(-2%)	(-8%)	(-9%)	(-7%)	(-4%)	(-2%)		
	DROUGHT	-1	2	1	0	1	1	1	1	1	-2	-1	0	0	0		
			(-7%)	(11%)	(6%)	(2%)	(4%)	(7%)	(6%)	(4%)	(-8%)	(-6%)	(-2%)	(-1%)	(0%)		
	Contra Costa PP #1	ALL	-40	-25	-28	-15	18	3	0	1	0	-6	-30	-1	-10		
			(-16%)	(-10%)	(-12%)	(-8%)	(23%)	(5%)	(-0%)	(1%)	(1%)	(-5%)	(-15%)	(-0%)	(-7%)		
	DROUGHT	-37	23	5	18	15	5	1	2	6	-14	-65	-18	-5			
			(-12%)	(8%)	(2%)	(8%)	(18%)	(10%)	(1%)	(6%)	(14%)	(-7%)	(-21%)	(-7%)	(-3%)		
	Banks PP	ALL	-17	-21	-21	4	5	1	1	0	0	-13	-21	-8	-8		
			(-11%)	(-11%)	(-11%)	(3%)	(6%)	(1%)	(1%)	(0%)	(0%)	(-13%)	(-14%)	(-5%)	(-6%)		
	DROUGHT	-8	14	-11	18	11	0	0	0	1	-21	-48	-11	-5			
			(-4%)	(6%)	(-5%)	(10%)	(12%)	(-0%)	(-1%)	(0%)	(2%)	(-14%)	(-21%)	(-5%)	(-3%)		
Jones PP	ALL	-12	-15	-14	2	1	0	0	0	1	-13	-17	-9	-6			
		(-8%)	(-8%)	(-9%)	(1%)	(1%)	(0%)	(0%)	(0%)	(1%)	(-12%)	(-12%)	(-6%)	(-5%)			
DROUGHT	4	18	-6	8	-1	-1	0	1	3	-24	-40	-6	-4				
		(2%)	(9%)	(-3%)	(6%)	(-1%)	(-2%)	(-0%)	(1%)	(5%)	(-15%)	(-19%)	(-3%)	(-3%)			

<sup>a</sup> ALL: Water years 1976–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).



**Table CI-5. Period Average Change in Chloride Concentrations (mg/L) for the No Action Alternative ELT Relative to Existing Conditions. Calculation of Chloride Concentrations was Based on EC-Chloride Relationship.**

Chloride			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Avg. Chang	
No Act. ELT	Location	Period <sup>a</sup>	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	
Delta Interior	Moke R. (SF) at Staten Island	ALL	0 (0%)	0 (0%)	0 (-1%)	0 (-1%)	0 (-1%)	0 (-0%)	0 (0%)	0 (-0%)	0 (-0%)	0 (-0%)	0 (1%)	0 (1%)	0 (-0%)	
		DROUGHT	0 (-0%)	0 (0%)	0 (-1%)	0 (-1%)	0 (-2%)	0 (-2%)	-1 (-1%)	0 (-1%)	0 (-1%)	0 (-1%)	0 (0%)	0 (2%)	0 (1%)	0 (-1%)
	SJR at Buckley Cove	ALL	-8 (-8%)	-11 (-10%)	-25 (-18%)	-25 (-16%)	-19 (-13%)	-15 (-11%)	-12 (-12%)	-11 (-13%)	-10 (-10%)	-14 (-13%)	-17 (-15%)	-11 (-11%)	-15 (-13%)	
		DROUGHT	-14 (-11%)	-18 (-13%)	-35 (-21%)	-39 (-19%)	-26 (-12%)	-21 (-10%)	-20 (-12%)	-18 (-14%)	-30 (-23%)	-26 (-23%)	-34 (-28%)	-16 (-12%)	-25 (-16%)	
	Franks Tract	ALL	-20 (-10%)	-28 (-12%)	-24 (-12%)	-3 (-3%)	-2 (-4%)	-1 (-2%)	0 (-1%)	0 (-4%)	-1 (1%)	0 (1%)	-18 (-8%)	-11 (-6%)	-10 (-8%)	
		DROUGHT	12 (5%)	15 (6%)	-6 (-2%)	9 (5%)	10 (14%)	4 (10%)	-1 (-2%)	2 (7%)	9 (21%)	-31 (-15%)	-33 (-15%)	9 (4%)	0 (-0%)	
	Old R. at Rock Slough	ALL	-14 (-9%)	-20 (-10%)	-20 (-11%)	-2 (-1%)	-5 (-6%)	-2 (-4%)	-3 (-5%)	-3 (-7%)	0 (-1%)	-14 (-14%)	-12 (-9%)	-7 (-5%)	-8 (-8%)	
		DROUGHT	9 (5%)	18 (8%)	-5 (-2%)	12 (7%)	3 (3%)	-1 (-1%)	-3 (-5%)	0 (0%)	5 (14%)	-24 (-15%)	-28 (-15%)	4 (2%)	-1 (-1%)	
	Western Delta	Sac. R. at Emmaton	ALL	-14 (-2%)	-39 (-7%)	2 (1%)	3 (2%)	4 (6%)	8 (24%)	5 (15%)	1 (1%)	12 (7%)	25 (11%)	52 (16%)	-20 (-4%)	3 (1%)
			DROUGHT	16 (2%)	3 (0%)	40 (8%)	37 (19%)	29 (26%)	18 (40%)	8 (22%)	29 (25%)	43 (17%)	51 (15%)	120 (27%)	131 (17%)	44 (12%)
		SJR at Antioch	ALL	-218 (-15%)	-226 (-15%)	-86 (-8%)	-10 (-2%)	11 (4%)	28 (23%)	19 (17%)	6 (2%)	34 (7%)	0 (-0%)	29 (3%)	-165 (-11%)	-48 (-6%)
			DROUGHT	-88 (-5%)	-165 (-9%)	-43 (-3%)	63 (9%)	86 (22%)	58 (36%)	26 (18%)	55 (15%)	78 (11%)	17 (1%)	61 (5%)	125 (7%)	23 (2%)
Sac. R. at Mallard Island		ALL	-411 (-13%)	-385 (-13%)	-158 (-7%)	-23 (-2%)	27 (3%)	80 (18%)	61 (12%)	37 (4%)	106 (7%)	25 (1%)	70 (3%)	-322 (-11%)	-74 (-4%)	
		DROUGHT	-324 (-9%)	-386 (-10%)	-131 (-4%)	45 (2%)	156 (11%)	127 (19%)	77 (11%)	95 (7%)	109 (5%)	31 (1%)	119 (4%)	137 (4%)	5 (0%)	
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	0 (-3%)	0 (-1%)	0 (-0%)	0 (1%)	1 (7%)	0 (2%)	-1 (-2%)	0 (-1%)	0 (-2%)	0 (-3%)	0 (-2%)	0 (-1%)	0 (-0%)	
		DROUGHT	0 (-2%)	0 (2%)	0 (1%)	0 (1%)	0 (2%)	1 (4%)	1 (4%)	0 (3%)	0 (-3%)	0 (-2%)	0 (-0%)	0 (-0%)	0 (1%)	
	Contra Costa PP #1	ALL	-24 (-15%)	-15 (-9%)	-19 (-10%)	-19 (-10%)	16 (15%)	-15 (-16%)	-8 (-10%)	-2 (-3%)	-3 (-6%)	-5 (-6%)	-21 (-15%)	-3 (-2%)	-10 (-8%)	
		DROUGHT	-19 (-10%)	18 (10%)	5 (2%)	8 (4%)	8 (8%)	1 (1%)	-5 (-6%)	4 (7%)	3 (7%)	-9 (-7%)	-43 (-19%)	-11 (-7%)	-3 (-2%)	
	Banks PP	ALL	-10 (-9%)	-11 (-9%)	-16 (-11%)	-6 (-4%)	-4 (-4%)	-5 (-6%)	-5 (-6%)	-5 (-7%)	-2 (-3%)	-7 (-10%)	-14 (-14%)	-5 (-5%)	-8 (-7%)	
		DROUGHT	-3 (-2%)	12 (8%)	-10 (-5%)	8 (5%)	1 (1%)	-11 (-8%)	-10 (-8%)	-6 (-3%)	-2 (-12%)	-12 (-20%)	-31 (-20%)	-6 (-5%)	-6 (-4%)	
	Jones PP	ALL	-6 (-6%)	-8 (-7%)	-15 (-10%)	-12 (-8%)	-11 (-9%)	-6 (-5%)	-5 (-5%)	-4 (-6%)	4 (6%)	-4 (-5%)	-10 (-10%)	-4 (-4%)	-7 (-6%)	
		DROUGHT	3 (3%)	13 (9%)	-11 (-6%)	-12 (-6%)	-19 (-10%)	-10 (-5%)	-5 (-3%)	-4 (-4%)	1 (1%)	-11 (-10%)	-22 (-15%)	-4 (-3%)	-7 (-5%)	

<sup>a</sup> ALL: Water years 1976–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

**Table CI-6. Period Average Change in Chloride Concentrations (mg/L) for Alternative 4A-H3 ELT Relative to Existing Conditions and the No Action Alternative ELT. Calculation of Chloride Concentrations was Based on a Mass Balance Approach.**

Chloride	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change		
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	
Alt 4 ELT Scn H3	Delta Interior	Moke R. (SF) at Staten Island	ALL	4	4	3	3	1	2	3	3	3	3	4	4	3	3	3	3	6	6	5	6	5	5	4	3	4	4
			DROUGHT	(31%)	(29%)	(27%)	(25%)	(11%)	(13%)	(15%)	(16%)	(15%)	(17%)	(23%)	(24%)	(22%)	(22%)	(19%)	(20%)	(31%)	(33%)	(29%)	(32%)	(40%)	(34%)	(29%)	(26%)	(24%)	(24%)
		SJR at Buckley Cove	ALL	-2	0	-2	-1	-5	1	-2	2	-2	1	-2	1	-3	1	-3	1	-7	1	-11	0	-10	1	-5	0	-5	1
			DROUGHT	(-3%)	(0%)	(-2%)	(-1%)	(-7%)	(1%)	(-3%)	(3%)	(-3%)	(2%)	(-2%)	(2%)	(-4%)	(1%)	(-4%)	(1%)	(-8%)	(2%)	(-12%)	(-0%)	(-11%)	(1%)	(-5%)	(0%)	(-6%)	(1%)
		Franks Tract	ALL	-84	-44	-213	-159	-112	-78	-39	-47	-5	-7	8	6	8	6	5	4	7	5	-51	-25	-38	-20	-44	-24	-47	-32
			DROUGHT	(-29%)	(-17%)	(-56%)	(-49%)	(-38%)	(-30%)	(-25%)	(-28%)	(-8%)	(-11%)	(22%)	(15%)	(20%)	(16%)	(12%)	(9%)	(12%)	(9%)	(-27%)	(-15%)	(-17%)	(-10%)	(-15%)	(-9%)	(-27%)	(-20%)
	Old R. at Rock Slough	ALL	-41	-12	-161	-121	-99	-68	-35	-45	-3	-5	7	5	2	1	0	0	8	8	-36	-16	-30	-13	-24	-11	-34	-23	
		DROUGHT	(-17%)	(-6%)	(-52%)	(-45%)	(-38%)	(-30%)	(-23%)	(-28%)	(-5%)	(-7%)	(14%)	(11%)	(4%)	(2%)	(1%)	(0%)	(15%)	(14%)	(-24%)	(-16%)	(-8%)	(-10%)	(-5%)	(-23%)	(-16%)		
	Western Delta	Sac. R. at Emmonson	ALL	-280	-251	-300	-224	-40	-50	-33	-44	-13	-21	5	-4	9	3	20	18	16	-4	71	42	137	67	-8	40	-35	-38
			DROUGHT	(-33%)	(-31%)	(-34%)	(-27%)	(-9%)	(-11%)	(-22%)	(-27%)	(-20%)	(-28%)	(15%)	(-10%)	(24%)	(7%)	(16%)	(15%)	(7%)	(-2%)	(22%)	(12%)	(29%)	(12%)	(-1%)	(5%)	(-9%)	(-10%)
		SJR at Antioch	ALL	-870	-546	-991	-622	-288	-215	-187	-201	-64	-89	15	-12	20	1	18	13	-3	-48	-47	-33	113	70	-252	18	-211	-139
			DROUGHT	(-39%)	(-29%)	(-41%)	(-30%)	(-20%)	(-15%)	(-31%)	(-32%)	(-24%)	(-31%)	(13%)	(-8%)	(14%)	(1%)	(5%)	(4%)	(-0%)	(-8%)	(-4%)	(-3%)	(8%)	(5%)	(-12%)	(1%)	(-19%)	(-14%)
Sac. R. at Millard Island		ALL	-1085	-635	-1100	-611	-360	-278	-261	-264	-76	-126	66	4	94	54	88	62	33	-78	47	59	237	144	-405	62	-227	-134	
		DROUGHT	(-23%)	(-15%)	(-22%)	(-14%)	(-11%)	(-9%)	(-16%)	(-16%)	(-8%)	(-13%)	(14%)	(1%)	(13%)	(7%)	(6%)	(4%)	(2%)	(-4%)	(2%)	(2%)	(7%)	(4%)	(-10%)	(2%)	(-9%)	(-5%)	
Major Divisions (Pumping Stations)	NBA at Barker Slough PP	ALL	-6	-5	-4	-4	-3	-3	-4	-5	-7	-5	-6	-5	-6	-6	-6	-9	-8	-11	-9	-10	-8	-7	-6	-6	-6		
		DROUGHT	(-36%)	(-31%)	(-28%)	(-29%)	(-23%)	(-24%)	(-29%)	(-31%)	(-32%)	(-39%)	(-31%)	(-34%)	(-35%)	(-31%)	(-38%)	(-36%)	(-46%)	(-41%)	(-49%)	(-44%)	(-46%)	(-42%)	(-39%)	(-36%)	(-37%)	(-36%)	
	Contra Costa PP #1	ALL	-10	-8	-5	-7	-2	-3	-2	-2	-3	-4	-4	-5	-6	-7	-7	-10	-8	-11	-10	-11	-10	-10	-10	-7	-7		
		DROUGHT	(-46%)	(-43%)	(-31%)	(-38%)	(-17%)	(-21%)	(-18%)	(-19%)	(-23%)	(-26%)	(-25%)	(-30%)	(-31%)	(-35%)	(-36%)	(-41%)	(-48%)	(-43%)	(-50%)	(-47%)	(-49%)	(-48%)	(-47%)	(-46%)	(-38%)	(-38%)	
	Banks PP	ALL	-33	6	-59	-35	-110	-81	-50	-35	2	-16	6	3	6	6	-2	8	8	-20	-13	-41	-10	-25	-24	-26	-16		
		DROUGHT	(-14%)	(3%)	(-24%)	(-15%)	(-46%)	(-39%)	(-28%)	(-21%)	(3%)	(12%)	(6%)	(12%)	(12%)	(-3%)	(-3%)	(14%)	(13%)	(-16%)	(-11%)	(-20%)	(-6%)	(-12%)	(-11%)	(-18%)	(-12%)		
	Jones PP	ALL	-50	-38	-100	-85	-53	-39	-55	-56	-41	-41	-44	-44	-37	-37	-42	-42	-33	-34	-31	-18	-33	-16	-58	-49	-48	-42	
		DROUGHT	(-33%)	(-27%)	(-54%)	(-50%)	(-35%)	(-28%)	(-48%)	(-48%)	(-51%)	(-51%)	(-57%)	(-57%)	(-46%)	(-46%)	(-52%)	(-52%)	(-48%)	(-49%)	(-28%)	(-18%)	(-23%)	(-13%)	(-37%)	(-34%)	(-41%)	(-36%)	

<sup>a</sup> ALL: Water years 1976–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

**Table CI-7. Period Average Change in Chloride Concentrations (mg/L) for Alternative 4A-H3 ELT Relative to Existing Conditions and the No Action Alternative ELT. Calculation of Chloride Concentrations was Based on EC-Chloride Relationship.**

Chloride	Location	Period *	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change				
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	
Alt 4 ELT Scn H3	Delta Interior	Moke R. (SF) at Staten Island	ALL	1 (8%)	1 (8%)	1 (8%)	1 (8%)	1 (4%)	1 (5%)	2 (10%)	3 (11%)	3 (11%)	3 (11%)	3 (13%)	3 (13%)	2 (11%)	2 (11%)	1 (8%)	1 (9%)	2 (10%)	2 (10%)	1 (7%)	1 (7%)	1 (8%)	1 (7%)	1 (7%)	1 (8%)	2 (9%)	2 (9%)		
			DROUGHT	1 (8%)	1 (8%)	1 (7%)	1 (7%)	1 (3%)	1 (4%)	1 (5%)	1 (6%)	1 (4%)	1 (5%)	1 (10%)	1 (13%)	1 (7%)	1 (8%)	1 (9%)	1 (12%)	1 (13%)	1 (11%)	1 (10%)	1 (9%)	1 (6%)	1 (7%)	1 (6%)	1 (7%)	1 (6%)	1 (7%)	1 (8%)	
		SJR at Buckley Cove	ALL	-8 (-8%)	0 (-0%)	-12 (-11%)	-1 (-1%)	-21 (-15%)	5 (4%)	-20 (-13%)	5 (3%)	-13 (-9%)	6 (-8%)	-11 (-9%)	5 (-4%)	-18 (-18%)	-6 (-7%)	-9 (-12%)	1 (2%)	-6 (-4%)	4 (-9%)	-4 (-4%)	-9 (-5%)	5 (-11%)	5 (-16%)	-11 (-13%)	5 (-21%)	-12 (-12%)	-0 (-0%)	-13 (-13%)	2 (4%)
			DROUGHT	-14 (-8%)	0 (-0%)	-19 (-13%)	-1 (-1%)	-33 (-19%)	2 (2%)	-32 (-14%)	7 (4%)	-14 (-6%)	12 (6%)	-12 (-4%)	9 (-20%)	-32 (-8%)	-12 (-9%)	-15 (-3%)	3 (-17%)	3 (-7%)	2 (-34%)	2 (-16%)	-23 (-11%)	7 (16%)	-12 (-13%)	14 (-21%)	-16 (-13%)	18 (-12%)	-16 (-0%)	0 (-13%)	5 (4%)
		Franks Tract	ALL	-51 (-27%)	-31 (-19%)	-128 (-55%)	-100 (-49%)	-81 (-39%)	-57 (-31%)	-37 (-28%)	-34 (-26%)	-7 (-11%)	-4 (-7%)	3 (8%)	4 (10%)	5 (16%)	5 (17%)	2 (6%)	3 (11%)	3 (7%)	2 (8%)	2 (-27%)	2 (-14%)	2 (-17%)	2 (-9%)	2 (-13%)	2 (-9%)	2 (-13%)	2 (-7%)	2 (-26%)	2 (-19%)
			DROUGHT	-29 (-12%)	-41 (-17%)	-106 (-39%)	-121 (-43%)	-57 (-21%)	-51 (-19%)	-25 (-14%)	-34 (-18%)	-6 (-8%)	-16 (-19%)	5 (4%)	6 (9%)	6 (24%)	6 (16%)	6 (31%)	7 (9%)	5 (13%)	6 (4%)	7 (13%)	5 (9%)	5 (-79%)	5 (-48%)	5 (-45%)	5 (-12%)	5 (22%)	5 (13%)	5 (-24%)	5 (-16%)
	Old R. at Rock Slough	ALL	-23 (-15%)	-9 (-6%)	-94 (-50%)	-74 (-44%)	-70 (-39%)	-33 (-31%)	-33 (-25%)	-31 (-24%)	-8 (-8%)	-1 (-2%)	2 (4%)	4 (8%)	-1 (-2%)	2 (3%)	-3 (7%)	0 (0%)	5 (12%)	5 (13%)	5 (-23%)	5 (-11%)	5 (-16%)	5 (-8%)	5 (-16%)	5 (-8%)	5 (-19%)	5 (-21%)	5 (-15%)		
		DROUGHT	-1 (-1%)	-10 (-5%)	-74 (-34%)	-92 (-39%)	-48 (-21%)	-43 (-19%)	-17 (-10%)	-29 (-16%)	-17 (-9%)	-11 (-12%)	4 (5%)	4 (6%)	4 (-2%)	4 (3%)	4 (9%)	4 (9%)	4 (32%)	4 (16%)	4 (-37%)	4 (-26%)	4 (-21%)	4 (-8%)	4 (10%)	4 (8%)	4 (10%)	4 (8%)	4 (-18%)	4 (-12%)	
	Western Delta	Sac. R. at Enmatton	ALL	-189 (-33%)	-175 (-31%)	-197 (-36%)	-158 (-31%)	-39 (-12%)	-41 (-13%)	-31 (-24%)	-34 (-26%)	-17 (-24%)	-21 (-28%)	3 (9%)	5 (12%)	7 (20%)	7 (4%)	1 (17%)	1 (16%)	1 (8%)	1 (2%)	1 (26%)	1 (14%)	1 (31%)	1 (13%)	1 (2%)	1 (6%)	1 (6%)	1 (-8%)	1 (-9%)	
			DROUGHT	-218 (-28%)	-234 (-29%)	-229 (-29%)	-232 (-30%)	-10 (-2%)	-50 (-9%)	-30 (-16%)	-68 (-29%)	-11 (-10%)	-40 (-10%)	-40 (-12%)	-5 (-18%)	-6 (-9%)	6 (28%)	6 (14%)	6 (51%)	6 (30%)	6 (67%)	6 (24%)	6 (186%)	6 (135%)	6 (205%)	6 (85%)	6 (169%)	6 (38%)	6 (18%)	6 (-26%)	
		SJR at Antioch	ALL	-586 (-40%)	-368 (-29%)	-641 (-43%)	-415 (-33%)	-241 (-17%)	-155 (-13%)	-184 (-33%)	-154 (-32%)	-76 (-30%)	-86 (-33%)	11 (9%)	-17 (-12%)	18 (-1%)	-1 (-14%)	22 (10%)	22 (6%)	10 (2%)	-23 (-5%)	-15 (-2%)	-15 (-9%)	-15 (-9%)	96 (9%)	67 (6%)	-130 (-9%)	35 (3%)	-141 (-19%)	-93 (-13%)	
			DROUGHT	-553 (-30%)	-465 (-27%)	-635 (-33%)	-470 (-27%)	-221 (-15%)	-177 (-12%)	-185 (-26%)	-248 (-32%)	-77 (-19%)	-182 (-34%)	31 (19%)	-27 (-12%)	27 (6%)	10 (22%)	8 (6%)	7 (22%)	7 (6%)	7 (11%)	7 (-1%)	7 (6%)	7 (5%)	7 (20%)	7 (15%)	7 (14%)	7 (7%)	7 (-7%)	7 (-9%)	
Sac. R. at Mallard Island		ALL	-864 (-28%)	-453 (-17%)	-849 (-29%)	-465 (-18%)	-366 (-16%)	-208 (-10%)	-251 (-20%)	-228 (-18%)	-114 (-14%)	-141 (-17%)	72 (16%)	-8 (-1%)	98 (7%)	38 (12%)	112 (8%)	75 (5%)	70 (-2%)	-36 (3%)	66 (2%)	41 (9%)	214 (6%)	144 (6%)	-241 (-8%)	81 (3%)	-171 (-10%)	-97 (-6%)			
		DROUGHT	-850 (-23%)	-526 (-16%)	-927 (-24%)	-541 (-18%)	-384 (-8%)	-254 (-12%)	-323 (-17%)	-368 (-7%)	-97 (-20%)	-253 (-11%)	132 (4%)	4 (1%)	160 (22%)	83 (14%)	193 (6%)	98 (7%)	142 (8%)	34 (2%)	218 (8%)	187 (7%)	393 (14%)	274 (9%)	275 (8%)	138 (4%)	-89 (-4%)	-94 (-4%)			
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-2 (-11%)	-2 (-9%)	-2 (-11%)	-2 (-10%)	-2 (-11%)	-3 (-10%)	-4 (-17%)	-4 (-18%)	-4 (-20%)	-4 (-25%)	-4 (-18%)	-4 (-20%)	-4 (-18%)	-4 (-13%)	-4 (-13%)	-2 (-12%)	-2 (-10%)	-2 (-11%)	-2 (-9%)	-2 (-10%)	-2 (-8%)	-2 (-10%)	-2 (-8%)	-2 (-10%)	-2 (-9%)	-3 (-14%)	-3 (-14%)		
		DROUGHT	-3 (-15%)	-2 (-13%)	-2 (-12%)	-3 (-14%)	-1 (-8%)	-2 (-9%)	-2 (-11%)	-2 (-11%)	-2 (-14%)	-3 (-16%)	-3 (-14%)	-3 (-18%)	-3 (-15%)	-3 (-18%)	-3 (-15%)	-3 (-17%)	-2 (-13%)	-2 (-11%)	-2 (-12%)	-2 (-10%)	-2 (-12%)	-2 (-11%)	-2 (-12%)	-2 (-11%)	-2 (-12%)	-2 (-13%)	-2 (-14%)		
	Contra Costa PP #1	ALL	-19 (-12%)	5 (4%)	-33 (-21%)	-18 (-13%)	-83 (-45%)	-64 (-39%)	-56 (-30%)	-37 (-22%)	2 (2%)	-14 (-11%)	-11 (-5%)	-4 (-8%)	-3 (-5%)	-3 (-8%)	-5 (-20%)	-11 (-17%)	2 (4%)	5 (11%)	5 (-13%)	-6 (-8%)	-29 (-7%)	-8 (-10%)	-8 (-9%)	-15 (-10%)	-12 (-9%)	-22 (-19%)	-13 (-11%)		
		DROUGHT	0 (-0%)	19 (11%)	-13 (-7%)	-31 (-15%)	-60 (-35%)	-65 (-36%)	-32 (-18%)	-39 (-22%)	12 (3%)	4 (3%)	-1 (-3%)	-3 (-6%)	-4 (-1%)	-4 (-8%)	0 (-20%)	-4 (-13%)	9 (20%)	6 (13%)	6 (-33%)	6 (-20%)	6 (-33%)	6 (-17%)	6 (-2%)	6 (4%)	6 (-13%)	6 (-11%)			
	Banks PP	ALL	-30 (-27%)	-20 (-19%)	-57 (-43%)	-45 (-38%)	-67 (-47%)	-51 (-40%)	-65 (-47%)	-58 (-44%)	-34 (-33%)	-30 (-30%)	-35 (-40%)	-29 (-36%)	-24 (-30%)	-11 (-14%)	-5 (-8%)	-7 (-13%)	-8 (-8%)	-7 (-13%)	-7 (-24%)	-7 (-24%)	-7 (-33%)	-7 (-25%)	-7 (-31%)	-7 (-20%)	-7 (-32%)	-7 (-29%)	-7 (-35%)	-7 (-30%)	
		DROUGHT	-7 (-5%)	-4 (-3%)	-48 (-31%)	-59 (-36%)	-65 (-36%)	-55 (-32%)	-38 (-22%)	-46 (-13%)	-17 (-13%)	-18 (-48%)	-65 (-44%)	-54 (-41%)	-44 (-37%)	-22 (-21%)	-16 (-16%)	4 (6%)	6 (9%)	6 (-62%)	6 (-57%)	6 (-37%)	6 (-22%)	6 (-14%)	6 (-10%)	6 (-14%)	6 (-28%)	6 (-28%)			
	Jones PP	ALL	-28 (-26%)	-21 (-21%)	-55 (-43%)	-47 (-39%)	-40 (-18%)	-24 (-41%)	-62 (-35%)	-49 (-37%)	-55 (-48%)	-43 (-48%)	-61 (-34%)	-55 (-31%)	-30 (-40%)	-26 (-37%)	-31 (-42%)	-27 (-45%)	-26 (-16%)	-30 (-11%)	-13 (-19%)	-9 (-19%)	-9 (-19%)	-9 (-19%)	-9 (-10%)	-9 (-27%)	-9 (-24%)	-9 (-34%)	-9 (-30%)		
		DROUGHT	-24 (-18%)	-27 (-20%)	-43 (-29%)	-56 (-35%)	-31 (-17%)	-21 (-12%)	-83 (-44%)	-72 (-40%)	-69 (-36%)	-50 (-29%)	-101 (-52%)	-91 (-49%)	-30 (-25%)	-50 (-46%)	-25 (-42%)	-46 (-30%)	-19 (-30%)	-20 (-31%)	-20 (-32%)	-20 (-24%)	-20 (-32%)	-20 (-20%)	-20 (-3%)	-20 (-1%)	-20 (-31%)	-20 (-28%)			

<sup>a</sup> ALL: Water years 1976–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

**Table CI-8. Period Average Change in Chloride Concentrations (mg/L) for Alternative 4A-H4 ELT Relative to Existing Conditions and the No Action Alternative ELT. Calculation of Chloride Concentrations was Based on a Mass Balance Approach.**

Chloride	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT		
Alt 4 ELT Scn H4	Delta Interior	Moke R. (SF) at Staten Island	ALL	4	4	3	3	1	2	3	3	3	3	4	4	3	3	3	3	7	7	7	8	6	5	4	4	4	4	
			DROUGHT	(32%)	(31%)	(26%)	(25%)	(12%)	(13%)	(14%)	(15%)	(14%)	(16%)	(22%)	(22%)	(20%)	(21%)	(18%)	(20%)	(37%)	(38%)	(39%)	(43%)	(40%)	(35%)	(32%)	(30%)	(25%)	(26%)	
		SJR at Buckley Cove	ALL	3	3	2	2	1	1	1	1	2	1	2	3	4	2	3	3	3	7	8	10	10	6	5	4	3	4	4
			DROUGHT	(24%)	(24%)	(19%)	(18%)	(8%)	(11%)	(7%)	(9%)	(4%)	(7%)	(14%)	(19%)	(12%)	(15%)	(15%)	(18%)	(39%)	(43%)	(62%)	(59%)	(45%)	(30%)	(26%)	(22%)	(22%)	(22%)	
		Franks Tract	ALL	-2	0	-2	-1	-5	1	-2	2	-2	1	-2	1	-3	1	-3	1	-7	1	-10	1	-10	1	-5	0	-4	1	
			DROUGHT	(-3%)	(0%)	(-2%)	(-1%)	(-7%)	(1%)	(-3%)	(3%)	(-3%)	(2%)	(-2%)	(2%)	(-4%)	(3%)	(-7%)	(4%)	(-7%)	(3%)	(-14%)	(5%)	(-15%)	(2%)	(-18%)	(6%)	(-8%)	(-0%)	(-9%)
	Western Delta	Sac. R. at Emmaton	ALL	-82	-43	-213	-159	-118	-84	-42	-50	-5	-2	8	6	7	6	5	4	7	5	-72	-46	-54	-36	-41	-21	-50	-35	
			DROUGHT	(-26%)	(-17%)	(-56%)	(-48%)	(-40%)	(-32%)	(-27%)	(-30%)	(-8%)	(-11%)	(21%)	(15%)	(20%)	(16%)	(12%)	(9%)	(12%)	(9%)	(-37%)	(-28%)	(-23%)	(-17%)	(-14%)	(-7%)	(-29%)	(-22%)	
		SJR at Antioch	ALL	-81	-67	-207	-215	-92	-80	-20	-39	-8	-19	2	-2	4	3	7	3	11	0	-146	-96	-80	-30	40	29	-46	-43	
			DROUGHT	(-17%)	(-18%)	(-47%)	(-48%)	(-25%)	(-22%)	(-10%)	(-18%)	(-12%)	(-24%)	(8%)	(-7%)	(19%)	(12%)	(23%)	(8%)	(20%)	(1%)	(-47%)	(-37%)	(-25%)	(-11%)	(11%)	(8%)	(-22%)	(-20%)	
		NBA at Barker Slough PP	ALL	-39	-10	-160	-120	-104	-73	-37	-47	-3	-4	7	6	3	2	2	2	10	9	-54	-34	-46	-29	-23	-10	-37	-26	
			DROUGHT	(-16%)	(-5%)	(-52%)	(-45%)	(-40%)	(-32%)	(-24%)	(-29%)	(-4%)	(-6%)	(15%)	(11%)	(6%)	(4%)	(4%)	(4%)	(18%)	(17%)	(-35%)	(-26%)	(-24%)	(-17%)	(-9%)	(-4%)	(-24%)	(-18%)	
Major Divisions (Pumping Stations)	Delta Interior	Old R. at Rock Slough	ALL	-17	-21	-155	-171	-82	-71	-8	-31	-7	-15	1	-2	3	2	7	5	11	4	-115	-76	-76	-32	35	31	-34	-31	
			DROUGHT	(-6%)	(-7%)	(-44%)	(-47%)	(-26%)	(-23%)	(-4%)	(-16%)	(-10%)	(-19%)	(2%)	(-5%)	(9%)	(6%)	(21%)	(14%)	(25%)	(8%)	(-48%)	(-38%)	(-27%)	(-14%)	(12%)	(11%)	(-19%)	(-18%)	
		Contra Costa PP #1	ALL	-269	-239	-293	-216	-28	-37	-37	-48	-14	-22	4	-4	8	0	13	11	23	3	118	88	151	81	-6	41	-28	-29	
			DROUGHT	(-32%)	(-29%)	(-33%)	(-27%)	(-6%)	(-8%)	(-24%)	(-29%)	(-21%)	(-29%)	(15%)	(-11%)	(15%)	(-1%)	(10%)	(9%)	(10%)	(1%)	(36%)	(25%)	(32%)	(15%)	(-1%)	(5%)	(-7%)	(-8%)	
		Jones PP	ALL	-861	-537	-990	-620	-292	-218	-195	-209	-72	-97	9	-18	8	-10	-5	-11	-6	-51	-19	-5	153	110	-255	15	-210	-138	
			DROUGHT	(-39%)	(-29%)	(-40%)	(-30%)	(-20%)	(-16%)	(-32%)	(-34%)	(-27%)	(-33%)	(8%)	(-13%)	(6%)	(-6%)	(-2%)	(-3%)	(-1%)	(-8%)	(-2%)	(0%)	(10%)	(7%)	(-12%)	(1%)	(-19%)	(-14%)	
	Major Divisions (Pumping Stations)	NBA at Barker Slough PP	ALL	-919	-741	-1073	-748	-198	-181	-234	-319	-70	-169	19	-27	17	-6	42	-7	40	-23	44	56	350	280	273	129	-142	-146	
			DROUGHT	(-34%)	(-30%)	(-35%)	(-27%)	(-10%)	(-9%)	(-28%)	(-34%)	(-17%)	(-33%)	(12%)	(-13%)	(9%)	(-3%)	(8%)	(-1%)	(5%)	(-3%)	(3%)	(3%)	(21%)	(16%)	(11%)	(5%)	(-10%)	(-10%)	
		Banks PP	ALL	-1066	-615	-1073	-583	-362	-278	-269	-292	-87	-138	55	-8	30	-11	-10	-36	29	-82	107	120	281	189	-401	66	-232	-139	
			DROUGHT	(-23%)	(-15%)	(-22%)	(-13%)	(-11%)	(-9%)	(-17%)	(-17%)	(-9%)	(-14%)	(12%)	(-1%)	(4%)	(-1%)	(-1%)	(-3%)	(2%)	(-4%)	(4%)	(4%)	(8%)	(5%)	(-9%)	(2%)	(-9%)	(-6%)	
		Jones PP	ALL	-1216	-794	-1317	-750	-312	-262	-429	-491	-75	-241	87	15	106	63	64	29	58	11	192	215	439	310	179	61	-185	-153	
			DROUGHT	(-23%)	(-16%)	(-22%)	(-14%)	(-7%)	(-6%)	(-18%)	(-20%)	(-5%)	(-14%)	(12%)	(2%)	(10%)	(6%)	(3%)	(1%)	(2%)	(0%)	(5%)	(6%)	(12%)	(8%)	(4%)	(1%)	(-6%)	(-5%)	
Major Divisions (Pumping Stations)	Contra Costa PP #1	ALL	-6	-5	-4	-4	-3	-3	-4	-5	-7	-5	-6	-6	-6	-6	-6	-9	-8	-11	-9	-9	-8	-7	-6	-6	-6			
		DROUGHT	(-36%)	(-31%)	(-28%)	(-29%)	(-22%)	(-23%)	(-29%)	(-31%)	(-32%)	(-34%)	(-31%)	(-34%)	(-35%)	(-32%)	(-38%)	(-37%)	(-46%)	(-42%)	(-48%)	(-43%)	(-45%)	(-41%)	(-38%)	(-36%)	(-37%)	(-35%)		
	Banks PP	ALL	-10	-9	-5	-7	-2	-3	-2	-2	-3	-4	-4	-5	-5	-6	-7	-7	-10	-8	-11	-10	-11	-10	-10	-10	-7	-7		
		DROUGHT	(-47%)	(-43%)	(-33%)	(-39%)	(-16%)	(-20%)	(-17%)	(-19%)	(-24%)	(-27%)	(-26%)	(-31%)	(-31%)	(-35%)	(-38%)	(-41%)	(-48%)	(-43%)	(-49%)	(-46%)	(-47%)	(-47%)	(-46%)	(-45%)	(-38%)	(-38%)		
	Jones PP	ALL	-30	10	-62	-38	-111	-82	-59	-44	0	-18	8	5	7	7	1	0	10	10	-30	-24	-68	-38	-29	-28	-30	-20		
		DROUGHT	(-12%)	(5%)	(-25%)	(-17%)	(-47%)	(-39%)	(-33%)	(-27%)	(0%)	(-18%)	(15%)	(10%)	(13%)	(14%)	(2%)	(1%)	(18%)	(17%)	(-25%)	(-20%)	(-33%)	(-22%)	(-14%)	(-13%)	(-21%)	(-15%)		
Major Divisions (Pumping Stations)	NBA at Barker Slough PP	ALL	-4	33	-40	-63	-129	-134	-38	-56	7	-8	-2	-6	2	1	4	1	11	5	-73	-60	-132	-67	-6	11	-33	-29		
		DROUGHT	(1%)	(13%)	(-13%)	(-20%)	(-43%)	(-44%)	(-17%)	(-24%)	(8%)	(-8%)	(-4%)	(-12%)	(5%)	(3%)	(10%)	(3%)	(26%)	(10%)	(-40%)	(-35%)	(-42%)	(-27%)	(-3%)	(5%)	(-19%)	(-17%)		
	Jones PP	ALL	-53	-35	-111	-90	-99	-78	-81	-84	-37	-42	-38	-39	-29	-30	-32	-22	-22	-53	-39	-71	-50	-68	-60	-58	-50			
		DROUGHT	(-32%)	(-24%)	(-55%)	(-50%)	(-52%)	(-46%)	(-56%)	(-59%)	(-45%)	(-46%)	(-56%)	(-56%)	(-41%)	(-42%)	(-44%)	(-44%)	(-33%)	(-33%)	(-50%)	(-43%)	(-47%)	(-39%)	(-41%)	(-38%)	(-47%)	(-43%)		
	Jones PP	ALL	-28	-20	-92	-106	-93	-82	-62	-80	-12	-22	-34	-34	-31	-30	-23	-23	-12	-13	-116	-95	-130	-82	-13	-2	-54	-49		
		DROUGHT	(-14%)	(-10%)	(-41%)	(-44%)	(-41%)	(-37%)	(-43%)	(-43%)	(-13%)	(-22%)	(-51%)	(-51%)	(-47%)	(-47%)	(-39%)	(-39%)	(-23%)	(-24%)	(-79%)	(-76%)	(-57%)	(-46%)	(-7%)	(-1%)	(-37%)	(-35%)		
Jones PP	ALL	-71	-59	-101	-87	-59	-45	-43	-45	-38	-38	-45	-46	-43	-43	-39	-39	-23	-24	-42	-29	-48	-31	-48	-39	-50	-44			
	DROUGHT	(-47%)	(-42%)	(-55%)	(-51%)	(-38%)	(-32%)	(-38%)	(-39%)	(-46%)	(-47%)	(-60%)	(-60%)	(-53%)	(-53%)	(-48%)	(-48%)	(-34%)	(-35%)	(-38%)	(-30%)	(-34%)	(-25%)	(-31%)	(-27%)	(-43%)	(-40%)			

<sup>a</sup> ALL: Water years 1976–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

**Table CI-9. Period Average Change in Chloride Concentrations (mg/L) for Alternative 4A-H4 ELT Relative to Existing Conditions and the No Action Alternative ELT. Calculation of Chloride Concentrations was Based on EC-Chloride Relationship.**

Chloride	Location	Period *	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT		
Alt 4 ELT Scn H4	Delta Interior	Moke R. (SF) at Staten Island	ALL	1 (9%)	1 (8%)	1 (8%)	1 (8%)	1 (4%)	1 (5%)	2 (9%)	2 (10%)	2 (9%)	3 (11%)	3 (12%)	3 (12%)	2 (11%)	2 (11%)	1 (9%)	2 (9%)	2 (12%)	2 (10%)	2 (10%)	2 (9%)	1 (7%)	1 (7%)	1 (6%)	1 (6%)	2 (9%)	2 (9%)	
			DROUGHT	1 (7%)	1 (7%)	1 (6%)	1 (6%)	1 (3%)	1 (4%)	1 (5%)	1 (5%)	1 (2%)	1 (4%)	1 (8%)	1 (11%)	1 (7%)	1 (8%)	1 (9%)	1 (10%)	1 (14%)	1 (15%)	1 (14%)	1 (13%)	1 (9%)	1 (7%)	1 (6%)	1 (6%)	1 (7%)	1 (8%)	1 (8%)
		SJR at Buckley Cove	ALL	-8 (-8%)	0 (-0%)	-12 (-11%)	-1 (-1%)	-20 (-15%)	5 (4%)	-21 (4%)	4 (3%)	-13 (-9%)	6 (6%)	-11 (-8%)	5 (4%)	-18 (-12%)	-6 (-9%)	-9 (-12%)	1 (2%)	-6 (-6%)	4 (5%)	-7 (-8%)	7 (7%)	-10 (-9%)	7 (7%)	-12 (-10%)	0 (-0%)	-12 (-11%)	3 (3%)	3 (3%)
			DROUGHT	-14 (-8%)	0 (-0%)	-18 (-13%)	-1 (-1%)	-32 (-19%)	3 (2%)	-32 (4%)	7 (4%)	-14 (-6%)	12 (6%)	-12 (-9%)	9 (4%)	-33 (-20%)	-13 (-9%)	-15 (-12%)	3 (3%)	-22 (-17%)	8 (8%)	-8 (-7%)	18 (20%)	-10 (-9%)	23 (27%)	-16 (-12%)	0 (0%)	-19 (-12%)	6 (4%)	6 (4%)
		Franks Tract	ALL	-49 (-26%)	-30 (-18%)	-126 (-55%)	-99 (-46%)	-84 (-40%)	-84 (-32%)	-99 (-29%)	-84 (-27%)	-99 (-11%)	-84 (-7%)	-99 (8%)	-84 (10%)	-99 (20%)	-84 (21%)	-99 (10%)	-84 (15%)	-99 (9%)	-84 (8%)	-99 (-37%)	-84 (-26%)	-99 (-22%)	-84 (-15%)	-99 (-11%)	-84 (-5%)	-99 (-27%)	-84 (-21%)	-99 (-21%)
			DROUGHT	-33 (-15%)	-46 (-19%)	-124 (-46%)	-139 (-49%)	-69 (-26%)	-64 (-24%)	-22 (-12%)	-31 (-17%)	-7 (-9%)	-17 (-20%)	5 (2%)	1 (2%)	8 (27%)	9 (29%)	10 (32%)	8 (24%)	13 (32%)	5 (10%)	-9 (-46%)	-6 (-36%)	-52 (-23%)	-19 (-10%)	34 (14%)	24 (10%)	-28 (-18%)	-28 (-18%)	-28 (-18%)
	Old R. at Rock Slough	ALL	-20 (-13%)	-5 (-4%)	-92 (-49%)	-72 (-43%)	-73 (-40%)	-52 (-33%)	-33 (-25%)	-32 (-24%)	-5 (-7%)	-1 (-1%)	4 (8%)	6 (12%)	6 (7%)	6 (13%)	6 (4%)	5 (12%)	7 (19%)	8 (20%)	-34 (-33%)	-20 (-23%)	-29 (-23%)	-18 (-15%)	-8 (-5%)	0 (-0%)	-23 (-21%)	-15 (-15%)		
		DROUGHT	-4 (-2%)	-13 (-6%)	-89 (-41%)	-107 (-46%)	-62 (-29%)	-56 (-25%)	-9 (-12%)	-21 (-10%)	-9 (-13%)	-12 (16%)	-4 (7%)	9 (16%)	12 (27%)	11 (26%)	11 (38%)	11 (26%)	15 (38%)	9 (21%)	-75 (-46%)	-51 (-37%)	-22 (-26%)	-29 (-15%)	29 (13%)	29 (13%)	-19 (-14%)	-19 (-14%)		
	Western Delta	Sac. R. at Emmaton	ALL	-181 (-32%)	-167 (-30%)	-191 (-35%)	-152 (-30%)	-29 (-9%)	-31 (-10%)	-29 (-26%)	-31 (-26%)	-34 (-26%)	-37 (-30%)	-18 (9%)	-22 (-12%)	3 (-14%)	5 (-1%)	5 (13%)	8 (11%)	12 (11%)	20 (4%)	8 (40%)	6 (26%)	3 (34%)	1 (16%)	2 (2%)	6 (6%)	6 (-6%)	8 (-8%)	
			DROUGHT	-244 (-31%)	-260 (-33%)	-247 (-32%)	-250 (-32%)	21 (4%)	-19 (-4%)	-40 (-20%)	-77 (-33%)	-17 (-34%)	-46 (-34%)	13 (18%)	-5 (-13%)	12 (46%)	4 (17%)	4 (31%)	5 (12%)	5 (22%)	7 (32%)	33 (72%)	18 (45%)	23 (52%)	11 (20%)	11 (20%)	148 (19%)	17 (8%)	20 (6%)	-23 (-6%)
		SJR at Antioch	ALL	-579 (-39%)	-361 (-29%)	-638 (-43%)	-413 (-33%)	-240 (-16%)	-154 (-16%)	-171 (-34%)	-161 (-33%)	-85 (-36%)	-96 (-36%)	3 (2%)	-25 (-17%)	9 (-8%)	-10 (3%)	6 (0%)	0 (1%)	4 (-6%)	-30 (7%)	5 (10%)	5 (6%)	129 (12%)	100 (9%)	-129 (-9%)	35 (3%)	-141 (-19%)	-92 (-13%)	
			DROUGHT	-610 (-33%)	-521 (-30%)	-700 (-37%)	-534 (-31%)	-190 (-13%)	-146 (-10%)	-204 (-29%)	-268 (-34%)	-94 (-24%)	-180 (-37%)	29 (18%)	-29 (-13%)	29 (16%)	-2 (17%)	2 (2%)	65 (10%)	10 (2%)	71 (10%)	-6 (-1%)	77 (6%)	60 (5%)	313 (24%)	252 (19%)	266 (15%)	141 (7%)	-79 (-8%)	-102 (-10%)
Sac. R. at Mallard Island		ALL	-855 (-28%)	-444 (-17%)	-841 (-29%)	-456 (-18%)	-366 (-16%)	-208 (-10%)	-276 (-22%)	-253 (-17%)	-136 (-19%)	-163 (-19%)	54 (12%)	-25 (-5%)	58 (11%)	-3 (4%)	38 (0%)	1 (3%)	46 (4%)	-59 (6%)	116 (10%)	91 (7%)	257 (10%)	187 (7%)	-236 (-10%)	86 (3%)	-178 (-10%)	-104 (-6%)		
		DROUGHT	-923 (-25%)	-599 (-18%)	-999 (-26%)	-613 (-18%)	-343 (-11%)	-212 (-7%)	-406 (-21%)	-451 (-23%)	-150 (-11%)	-306 (-20%)	130 (20%)	3 (0%)	134 (18%)	57 (7%)	163 (4%)	68 (4%)	148 (7%)	39 (2%)	250 (9%)	219 (16%)	458 (8%)	339 (16%)	271 (8%)	134 (4%)	-106 (-5%)	-110 (-5%)		
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-2 (-11%)	-2 (-9%)	-2 (-11%)	-2 (-10%)	-2 (-11%)	-3 (-10%)	-3 (-17%)	-3 (-18%)	-4 (-20%)	-4 (-25%)	-4 (-18%)	-4 (-20%)	-4 (-18%)	-4 (-16%)	-4 (-13%)	-3 (-12%)	-3 (-10%)	-3 (-9%)	-2 (-10%)	-2 (-9%)	-2 (-10%)	-2 (-8%)	-2 (-10%)	-2 (-8%)	-1 (-14%)	-3 (-14%)		
		DROUGHT	-3 (-15%)	-2 (-13%)	-2 (-12%)	-3 (-14%)	-1 (-8%)	-2 (-9%)	-2 (-10%)	-3 (-11%)	-3 (-14%)	-3 (-16%)	-3 (-15%)	-3 (-18%)	-4 (-15%)	-4 (-17%)	-4 (-13%)	-4 (-11%)	-3 (-11%)	-3 (-10%)	-2 (-11%)	-2 (-10%)	-2 (-11%)	-2 (-10%)	-2 (-12%)	-2 (-11%)	-2 (-13%)	-3 (-13%)		
	Contra Costa PP #1	ALL	-14 (-9%)	10 (7%)	-34 (-21%)	-19 (-13%)	-82 (-45%)	-63 (-39%)	-62 (-34%)	-44 (-26%)	3 (2%)	-13 (11%)	-9 (8%)	0 (0%)	9 (9%)	-6 (6%)	-4 (6%)	6 (13%)	9 (20%)	-17 (32%)	-12 (20%)	-45 (-32%)	-25 (-21%)	-15 (-11%)	-12 (-9%)	-12 (-9%)	-23 (-19%)	-13 (-12%)		
		DROUGHT	5 (2%)	24 (14%)	-19 (-10%)	-37 (-18%)	-96 (-42%)	-101 (-43%)	-43 (-24%)	-51 (8%)	9 (0%)	0 (-3%)	-2 (-10%)	-3 (-7%)	7 (17%)	12 (30%)	2 (3%)	13 (29%)	10 (20%)	-45 (-35%)	-36 (-31%)	-89 (-40%)	-46 (-26%)	-3 (-2%)	9 (5%)	-21 (-15%)	-18 (-13%)			
	Banks PP	ALL	-31 (-28%)	-21 (-21%)	-63 (-48%)	-52 (-43%)	-67 (-46%)	-51 (-40%)	-71 (-55%)	-70 (-53%)	-39 (-38%)	-35 (-35%)	-36 (-42%)	-31 (-38%)	-35 (-38%)	-22 (-26%)	-17 (-22%)	-15 (-20%)	-14 (-19%)	-12 (-16%)	-19 (-29%)	-19 (-29%)	-43 (-36%)	-29 (-29%)	-42 (-42%)	-33 (-33%)	-30 (-30%)	-31 (-39%)	-32 (-34%)	
		DROUGHT	-16 (-12%)	-13 (-10%)	-53 (-35%)	-65 (-40%)	-74 (-41%)	-64 (-37%)	-68 (-40%)	-76 (-41%)	-25 (-18%)	-26 (-19%)	-26 (-57%)	-26 (-53%)	-60 (-46%)	-50 (-39%)	-41 (-39%)	-35 (-30%)	-9 (-13%)	-8 (-7%)	-73 (-72%)	-61 (-50%)	-78 (-58%)	-47 (-38%)	-4 (-2%)	2 (2%)	-48 (-36%)	-42 (-33%)		
	Jones PP	ALL	-47 (-43%)	-40 (-39%)	-57 (-44%)	-49 (-40%)	-43 (-29%)	-27 (-20%)	-50 (-33%)	-38 (-27%)	-38 (-32%)	-49 (-32%)	-53 (-47%)	-53 (-47%)	-37 (-32%)	-32 (-29%)	-26 (-24%)	-21 (-20%)	-15 (-14%)	-19 (-24%)	-20 (-24%)	-16 (-25%)	-15 (-20%)	-23 (-25%)	-19 (-21%)	-19 (-18%)	-38 (-35%)	-31 (-30%)		
		DROUGHT	-56 (-42%)	-60 (-44%)	-59 (-40%)	-72 (-45%)	-44 (-24%)	-33 (-19%)	-48 (-25%)	-48 (-20%)	-36 (-29%)	-55 (-21%)	-37 (-47%)	-80 (-44%)	-80 (-44%)	-42 (-32%)	-38 (-29%)	-34 (-37%)	-24 (-29%)	0 (-0%)	-35 (-33%)	-24 (-25%)	-43 (-29%)	-43 (-16%)	6 (5%)	10 (8%)	-43 (-29%)	-36 (-26%)		

<sup>a</sup> ALL: Water years 1976–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).



**Table CI-10. No Action Alternative ELT Percent use of Assimilative Capacity Available under Existing Conditions Relative to the 250 mg/L Secondary MCL. Calculation of Chloride Concentrations was Based on a Mass Balance Approach.**

Chloride	Location	Period <sup>a</sup>	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Annual Avg. Change	
			Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	-1	0	0
	SJR at Buckley Cove	ALL	1	1	4	3	2	2	3	3	5	6	7	3	3	3
		DROUGHT	2	2	6	5	3	4	5	5	10	9	14	4	6	6
	Franks Tract	ALL	-	-	-	-9	-1	-1	-1	-1	-1	45	89	-	19	19
		DROUGHT	-	-	-	-42	-6	-2	-1	-2	-5	-	-	-	8	8
Old R. at Rock Slough	ALL	-	-	-	-10	-1	-1	-1	0	0	20	28	-	12	12	
	DROUGHT	-	-	-	-39	-5	-1	0	-1	-3	-	-	-	3	3	
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-11	-4	-4	-3	-1	-70	-	-	-	-	
		DROUGHT	-	-	-	-100	-23	-7	-4	-46	-	-	-	-	-	
	SJR at Antioch	ALL	-	-	-	-	-	-20	-17	-	-	-	-	-	-	
		DROUGHT	-	-	-	-	-	-52	-44	-	-	-	-	-	-	
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	
Major Diversions (Pur Stations)	NBA at Barker Slough PP	ALL	1	0	0	0	-1	0	0	0	1	1	1	0	0	
		DROUGHT	1	-1	0	0	0	0	0	0	0	1	1	0	0	0
	Contra Costa PP #1	ALL	-	-	-	21	-11	-1	0	0	0	5	66	3	10	
		DROUGHT	-	-	-	-59	-9	-2	0	-1	-3	20	-	-	7	
	Banks PP	ALL	21	45	35	-3	-3	0	0	0	0	9	21	10	6	
		DROUGHT	15	-58	45	-22	-7	0	0	0	-1	20	-	22	4	
	Jones PP	ALL	12	23	15	-1	0	0	0	0	-1	9	16	10	5	
		DROUGHT	-5	-38	8	-6	0	1	0	-1	-1	25	89	9	3	

<sup>a</sup> ALL: Water years 1975–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.
- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

**Table CI-11. No Action Alternative ELT Percent Use of Assimilative Capacity Available under Existing Conditions Relative to the 250 mg/L Secondary MCL. Calculation of Chloride Concentrations was Based on EC-Chloride Relationship.**

Chloride			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Annual Avg. Chan
No Act. ELT	Location	Period <sup>a</sup>	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0
	SJR at Buckley Cove	ALL	5	8	23	29	18	14	8	6	7	10	12	8	11
		DROUGHT	11	16	42	-	78	60	24	14	25	19	26	14	26
	Franks Tract	ALL	32	-	58	3	1	0	0	1	0	15	13	18	8
		DROUGHT	-63	-	-	-13	-6	-2	0	-1	-4	82	-	-56	0
	Old R. at Rock Slough	ALL	15	32	29	2	3	1	1	2	0	9	9	7	6
		DROUGHT	-14	-52	25	-15	-2	0	2	0	-3	27	48	-6	1
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-3	-2	-4	-3	-1	-19	-96	-	-	-
		DROUGHT	-	-	-	-66	-20	-9	-4	-22	-100	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-22	-14	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-66	-24	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pump Stations)	NBA at Barker Slough PP	ALL	0	0	0	0	-1	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0
	Contra Costa PP #1	ALL	26	16	28	28	-11	9	5	1	1	3	19	2	7
		DROUGHT	35	-30	-22	-20	-6	-1	3	-2	-2	7	-	15	3
	Banks PP	ALL	7	10	15	6	3	3	3	3	1	4	9	3	5
		DROUGHT	2	-12	14	-10	-1	9	8	4	1	8	33	6	5
	Jones PP	ALL	5	7	15	13	9	5	3	3	-2	3	7	3	5
		DROUGHT	-3	-13	16	20	31	18	4	3	0	8	22	3	6

<sup>a</sup> ALL: Water years 1975–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.
- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

**Table CI-12. Alternative 4A-H3 ELT Percent Use of Assimilative Capacity Available under Existing Conditions and No Action Alternative ELT Relative to the 250 mg/L Secondary MCL. Calculation of Chloride Concentrations was Based on a Mass Balance Approach.**

Chloride	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT		
Alt 4 ELT Scn H3	Delta Interior	Moke R. (SF) at Staten Island	ALL	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	-1	-1	-1	-1	-3	-3	-2	-2	-2	-2	-1	-1	-2	-2	
		DROUGHT	-1	-1	-1	-1	0	-1	-1	-1	-1	-1	-1	-2	-2	-1	-1	-1	-1	-3	-3	-4	-3	-3	-2	-2	-1	-1	-2	-
	SJR at Buckley Cove	ALL	1	0	1	0	3	-1	1	-1	1	-1	1	-1	2	-1	2	-1	5	-1	7	0	6	0	3	0	3	0	3	0
		DROUGHT	2	0	2	0	6	0	4	-1	2	-1	2	-1	4	-2	4	-2	8	-2	9	0	12	-1	4	0	5	0	5	-
	Franks Tract	ALL	-	-	-	-	-	-	41	55	2	3	-4	-3	-4	-3	-3	-2	-3	-3	89	30	-	52	-	-	61	35	61	35
		DROUGHT	-	-	-	-	-	-	49	-	3	10	-1	1	-2	-1	-3	-1	-6	-1	-	-	-	-	-	-	-	-	-	-
	Old R. at Rock Slough	ALL	-	29	-	-	-	-	36	51	2	3	-3	-3	-1	0	0	0	-4	-4	37	14	51	18	-	55	35	35	21	
		DROUGHT	-	-	-	-	-	-	25	-	4	9	0	1	0	1	-2	-1	-5	-2	-	-	-	-	-	-	-	41	-	-
	Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	34	51	7	12	-2	2	-4	-2	-15	-14	-57	44	-	-	-	-	-	-	-	-	-
			DROUGHT	-	-	-	-	-	-	-	-	4	34	-5	3	-8	-4	-91	-83	-	-	-	-	-	-	-	-	-	-	-
SJR at Antioch		ALL	-	-	-	-	-	-	-	-	-	-	-	-11	11	-18	-2	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-22	63	-61	-32	-	-	-	-	-	-	-	-	-	-	-	-
Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	3	2	2	2	1	1	2	2	2	3	2	2	2	2	3	3	4	3	5	4	4	4	3	3	3	3	3	
		DROUGHT	4	4	2	3	1	1	1	1	1	2	2	2	2	2	2	3	3	4	4	5	4	5	5	4	4	3	-	-
	Contra Costa PP #1	ALL	-	-13	-	-	-	-	71	41	-1	10	-3	-2	-3	-3	1	1	-4	-4	16	10	89	14	77	72	26	14	26	14
		DROUGHT	-	-	-	-	-	-	79	-	-7	3	0	3	1	1	0	1	-5	-2	78	48	-	-	-	-78	36	-	-	-
	Banks PP	ALL	60	33	-	-	-	96	61	67	20	24	20	21	20	20	12	12	8	8	28	17	55	28	76	60	41	33	41	33
		DROUGHT	26	10	-	-	-	42	82	5	13	16	16	14	13	7	7	0	1	94	62	-	64	65	35	40	40	-	-	-
	Jones PP	ALL	51	35	-	-	56	36	41	42	24	25	25	25	22	22	25	25	18	19	22	12	30	13	61	47	36	30	36	30
		DROUGHT	58	67	-	-	40	29	48	59	13	12	20	19	13	13	20	20	7	8	62	30	-	45	14	5	34	34	-	-

<sup>a</sup> ALL: Water years 1975–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.





**Table CI-14. Alternative 4A-H4 ELT Percent Use of Assimilative Capacity Available under Existing Conditions and No Action Alternative ELT Relative to the 250 mg/L Secondary MCL. Calculation of Chloride Concentrations was Based on a Mass Balance Approach.**

Chloride	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change				
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	
Alt 4 ELT Scn H4	Delta Interior	Moke R. (SF) at Staten Island	ALL	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	-1	-1	-1	-1	-3	-3	-3	-3	-2	-2	-2	-2	-2	-2	-2	-2
		DROUGHT	-1	-1	-1	-1	0	-1	-1	-1	0	-1	-1	-2	-1	-1	-1	-1	-1	-3	-3	-4	-4	-3	-2	-1	-1	-2	-	-	-
		SJR at Buckley Cove	ALL	1	0	1	0	3	-1	1	-1	1	-1	1	-1	2	-1	2	-1	4	-1	6	0	6	-1	3	0	3	-1	-	-
		DROUGHT	2	0	2	0	5	0	4	-1	2	-1	2	-1	4	-2	4	-2	8	-2	8	-1	11	-2	4	0	5	-	-	-	
		Franks Tract	ALL	-	-	-	-	-	-	45	58	3	4	-4	-3	-4	-3	-3	-2	-3	-3	-	54	-	92	-	-	65	39	-	-
		DROUGHT	-	-	-	-	-	-	44	-	4	11	-1	1	-2	-1	-3	-1	-5	0	-	-	-	-	-	-	-	-	-	-	
	Old R. at Rock Slough	ALL	-	24	-	-	-	-	38	53	1	2	-3	-3	-2	-1	-1	-1	-5	-5	54	28	77	38	-	49	38	23	-	-	
	DROUGHT	-	-	-	-	-	-	13	86	4	9	0	1	-1	-1	-3	-2	-5	-2	-	-	-	-	-	-	-	48	-	-		
	Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	38	55	8	13	-2	2	-3	0	-10	-8	-83	-42	-	-	-	-	-	-	-	-	-	-
			DROUGHT	-	-	-	-	-	-	-	-	6	38	-5	2	-6	-2	-82	-67	-	-	-	-	-	-	-	-	-	-	-	-
		SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-	-6	16	-8	11	-	-	-	-	-	-	-	-	-	-	-	-	-
			DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-21	64	-32	20	-	-	-	-	-	-	-	-	-	-	-	-	-
Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	3	2	2	2	1	1	2	2	2	3	2	2	2	2	3	3	4	3	5	4	4	3	3	3	3	3	3	3	
		DROUGHT	4	4	2	3	1	1	1	1	1	2	2	2	2	2	3	3	4	4	5	4	5	5	4	4	3	-	-	-	
	Contra Costa PP #1	ALL	-	-21	-	-	-	-	83	52	0	12	-4	-3	-4	-4	-1	0	-5	-5	24	18	-	50	90	84	29	18	-	-	
		DROUGHT	-	-	-	-	-	-	-	-	-4	5	1	3	-1	-1	-2	-1	-5	-3	-	74	-	-	-	-88	45	-	-		
	Banks PP	ALL	62	35	-	-	-	95	73	79	22	26	21	21	16	17	18	18	12	12	36	25	71	41	84	67	46	37	-	-	
		DROUGHT	53	33	-	-	-	77	-	7	15	19	19	16	16	12	12	6	7	-	76	-	-	26	4	51	-	-			
	Jones PP	ALL	73	54	-	-	62	41	32	34	22	23	26	26	25	25	23	23	13	13	30	19	44	25	51	38	38	31	-	-	
		DROUGHT	-	-	-	-	61	49	26	35	7	6	18	17	17	17	18	18	1	2	74	40	-	35	-6	-13	35	-	-		

<sup>a</sup> ALL: Water years 1975–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.
- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

**Table CI-15. Alternative 4A-H4 ELT Percent Use of Assimilative Capacity Available under Existing Conditions and No Action Alternative ELT Relative to the 250 mg/L Secondary MCL. Calculation of Chloride Concentrations was Based on EC-Chloride Relationship.**

Chloride	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change		
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	
			Alt 4 ELT Scn H4																										
Delta Interior	Moke R. (SF) at Staten Island	ALL	-1	-1	-1	-1	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	-1	-1		
		DROUGHT	0	0	0	0	0	0	0	-1	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	-1	-1	
	SJR at Buckley Cove	ALL	5	0	9	1	18	-4	24	-4	12	-5	9	-4	12	4	6	-1	4	-3	5	-4	7	-4	8	0	9	-2	
		DROUGHT	11	0	16	1	39	-2	85	-9	42	-20	35	-16	39	12	12	-2	19	-5	6	-11	8	-14	14	0	20	-5	
	Franks Tract	ALL	80	36	-	-	-	91	34	30	4	2	-1	-2	-3	-3	-2	-2	-2	-2	39	21	35	20	35	14	25	16	
		DROUGHT	-	-	-	-	-	-	32	51	4	10	-2	0	-4	-4	-5	-4	-6	-2	-	94	-	33	-100	-100	29	29	
Old R. at Rock Slough	ALL	20	5	-	88	-	58	29	27	3	0	-2	-3	-2	-3	-1	-2	-4	-4	23	12	24	13	8	0	16	10		
	DROUGHT	6	24	-	-	-	-	12	32	5	7	-2	-2	-5	-6	-5	-5	-7	-4	85	45	85	25	-46	-43	17	16		
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	28	31	10	13	-2	2	-2	0	-7	-7	-31	-15	-100	-100	-	-	-	-	-		
		DROUGHT	-	-	-	-	-	-	70	-	12	41	-6	2	-6	-2	-41	-24	-100	-	-	-	-	-	-	-	-		
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-2	25	-7	8	-	-	-	-	-	-	-	-	-	-	-	-	
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-33	98	-22	3	-	-	-	-	-	-	-	-	-	-	-	-	
Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Major Diversions (Pump Stations)	NBA at Barker Slough PP	ALL	1	1	1	1	1	1	1	2	2	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	
		DROUGHT	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	
	Contra Costa PP #1	ALL	15	-9	37	18	-	72	94	51	-2	11	5	-3	0	-5	3	2	-3	-4	10	7	41	19	14	11	18	10	
		DROUGHT	-8	-32	31	86	-	-	-	-	-8	0	1	2	-4	-7	-3	-1	-6	-5	37	28	-	65	3	-10	20	16	
	Banks PP	ALL	22	14	53	40	63	42	68	59	26	23	22	19	13	10	14	11	7	6	15	10	29	18	25	21	27	21	
		DROUGHT	14	11	54	75	-	81	87	-	22	23	65	51	49	38	29	24	5	4	49	38	83	38	4	-2	41	35	
	Jones PP	ALL	33	27	47	38	43	24	51	34	40	28	46	39	23	20	15	12	8	10	12	9	17	10	16	13	27	21	
		DROUGHT	48	53	59	83	65	42	81	51	91	46	-	-	37	31	32	28	0	0	25	16	42	17	-5	-8	40	32	

<sup>a</sup> ALL: Water years 1975–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.
- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.



**Table CI-17. Period Average Change in Chloride Concentrations (mg/L) for Alternative 2D ELT Relative to Existing Conditions and the No Action Alternative ELT. Calculation of Chloride Concentrations was Based on EC-Chloride Relationship.**

Chloride	Location	Period *	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
			Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT		
Alt 2D ELT	Delta Interior	Moke R. (SF) at Staten Island	ALL	1	1	2	1	1	1	3	3	3	3	3	3	2	2	1	1	2	2	1	1	1	1	1	1	2	2	
				(9%)	(9%)	(9%)	(9%)	(4%)	(5%)	(12%)	(13%)	(12%)	(13%)	(14%)	(14%)	(12%)	(12%)	(8%)	(9%)	(10%)	(10%)	(7%)	(7%)	(8%)	(7%)	(7%)	(6%)	(10%)	(10%)	
		DROUGHT	1	1	1	1	1	1	1	2	1	2	2	3	3	1	2	2	2	2	2	2	2	2	1	1	1	1	1	2
			(7%)	(7%)	(7%)	(7%)	(3%)	(4%)	(6%)	(7%)	(4%)	(6%)	(10%)	(13%)	(7%)	(9%)	(8%)	(9%)	(13%)	(13%)	(11%)	(11%)	(9%)	(6%)	(7%)	(6%)	(8%)	(8%)	(8%)	
		SJR at Buckley Cove	ALL	-8	0	-12	-1	-20	5	-22	3	-13	6	-11	5	-18	-6	-9	1	-7	4	-9	5	-11	6	-12	0	-13	2	
				(-8%)	(-0%)	(-11%)	(-1%)	(-15%)	(5%)	(-13%)	(3%)	(-9%)	(4%)	(-8%)	(4%)	(-10%)	(-7%)	(-12%)	(2%)	(-7%)	(4%)	(-9%)	(6%)	(-11%)	(6%)	(-11%)	(-0%)	(-11%)	(2%)	
	DROUGHT	-14	0	-19	-1	-32	2	-32	7	-14	12	-12	9	-32	-12	-15	3	-23	7	-12	14	-15	19	-16	0	-20	5			
		(-11%)	(-0%)	(-13%)	(-1%)	(-19%)	(2%)	(-15%)	(4%)	(-6%)	(6%)	(-6%)	(4%)	(-20%)	(-8%)	(-12%)	(3%)	(-18%)	(7%)	(-10%)	(16%)	(-12%)	(22%)	(-12%)	(-0%)	(-13%)	(4%)			
	Franks Tract	ALL	-51	-32	-126	-99	-80	-56	-33	-30	-3	0	3	4	5	6	2	3	3	3	3	-36	-18	-27	-14	-25	-14	-31	-21	
			(-27%)	(-19%)	(-55%)	(-48%)	(-38%)	(-30%)	(-25%)	(-23%)	(-5%)	(-1%)	(9%)	(10%)	(17%)	(18%)	(7%)	(11%)	(8%)	(6%)	(6%)	(-28%)	(-16%)	(-10%)	(-13%)	(-8%)	(-26%)	(-19%)		
	DROUGHT	-29	-42	-106	-121	-58	-52	-27	-36	-7	-17	5	2	6	7	8	5	13	5	-83	-52	-47	-14	22	12	-25	-25			
		(-13%)	(-17%)	(-39%)	(-43%)	(-22%)	(-20%)	(-15%)	(-19%)	(-9%)	(-20%)	(14%)	(4%)	(21%)	(23%)	(25%)	(17%)	(32%)	(9%)	(-39%)	(-29%)	(-21%)	(-7%)	(9%)	(5%)	(-16%)	(-16%)			
Old R. at Rock Slough	ALL	-22	-8	-92	-73	-68	-47	-21	-19	-3	2	1	3	-1	2	-3	0	5	5	-25	-12	-21	-9	-12	-5	-22	-13			
		(-15%)	(-6%)	(-49%)	(-43%)	(-38%)	(-30%)	(-16%)	(-15%)	(-4%)	(3%)	(3%)	(7%)	(-1%)	(4%)	(-6%)	(1%)	(12%)	(13%)	(-25%)	(-13%)	(-17%)	(-8%)	(-8%)	(-3%)	(-20%)	(-13%)			
DROUGHT	-1	-10	-73	-91	-49	-43	-19	-31	-9	-12	3	4	0	3	4	4	12	7	-63	-39	-43	-15	18	14	-18	-17				
	(-1%)	(-5%)	(-34%)	(-39%)	(-21%)	(-20%)	(-11%)	(-17%)	(-10%)	(-3%)	(5%)	(6%)	(0%)	(6%)	(10%)	(9%)	(33%)	(16%)	(-39%)	(-28%)	(-23%)	(-9%)	(10%)	(7%)	(-13%)	(-13%)				
Western Delta	Sac. R. at Emmaton	ALL	-191	-177	-197	-158	-40	-42	-31	-34	-17	-21	4	-5	7	1	15	14	15	2	59	35	103	51	10	30	-22	-25		
			(-33%)	(-32%)	(-36%)	(-31%)	(-13%)	(-13%)	(-24%)	(-26%)	(-24%)	(-28%)	(11%)	(-11%)	(19%)	(3%)	(17%)	(16%)	(8%)	(1%)	(26%)	(14%)	(31%)	(13%)	(2%)	(6%)	(-8%)	(-10%)		
	DROUGHT	-224	-240	-239	-242	-16	-56	-31	-69	-12	-41	12	-5	14	6	60	30	69	26	191	140	204	84	165	34	16	-28			
		(-29%)	(-30%)	(-31%)	(-31%)	(-3%)	(-10%)	(-16%)	(-30%)	(-11%)	(-29%)	(28%)	(-9%)	(38%)	(13%)	(50%)	(21%)	(28%)	(9%)	(58%)	(37%)	(46%)	(15%)	(21%)	(4%)	(4%)	(-7%)			
	SJR at Antioch	ALL	-589	-371	-639	-413	-242	-156	-162	-152	-72	-83	11	-17	17	-2	21	15	12	-22	-6	-6	103	74	-137	28	-140	-92		
			(-40%)	(-29%)	(-43%)	(-33%)	(-24%)	(-17%)	(-31%)	(-28%)	(-31%)	(-28%)	(9%)	(-11%)	(15%)	(-1%)	(2%)	(8%)	(6%)	(2%)	(-4%)	(-1%)	(-1%)	(10%)	(7%)	(-9%)	(2%)	(-19%)	(-13%)	
	DROUGHT	-561	-473	-644	-479	-232	-189	-188	-251	-78	-164	30	-27	34	8	80	26	79	2	83	66	265	204	253	129	-73	-96			
		(-31%)	(-27%)	(-34%)	(-27%)	(-16%)	(-13%)	(-26%)	(-32%)	(-20%)	(-34%)	(19%)	(-12%)	(24%)	(5%)	(21%)	(6%)	(12%)	(0%)	(7%)	(5%)	(21%)	(15%)	(14%)	(7%)	(-7%)	(-9%)			
	Sac. R. at Mallard Island	ALL	-868	-457	-850	-465	-365	-207	-245	-223	-109	-136	75	-5	96	35	109	72	71	-35	81	56	224	154	-248	74	-169	-95		
			(-28%)	(-17%)	(-29%)	(-18%)	(-16%)	(-10%)	(-19%)	(-18%)	(-13%)	(-16%)	(17%)	(-1%)	(19%)	(6%)	(12%)	(8%)	(5%)	(-2%)	(4%)	(3%)	(9%)	(6%)	(-8%)	(3%)	(-10%)	(-6%)		
	DROUGHT	-861	-537	-940	-554	-395	-265	-323	-368	-101	-256	134	7	155	78	187	92	151	43	228	197	401	282	271	134	-91	-96			
		(-23%)	(-16%)	(-25%)	(-16%)	(-12%)	(-9%)	(-17%)	(-18%)	(-7%)	(-16%)	(20%)	(1%)	(21%)	(10%)	(13%)	(6%)	(7%)	(2%)	(8%)	(7%)	(14%)	(9%)	(8%)	(4%)	(-4%)	(-4%)			
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-2	-2	-2	-2	-2	-3	-4	-4	-6	-4	-4	-4	-3	-3	-2	-2	-2	-2	-2	-2	-2	-1	-1	-3	-3			
			(-11%)	(-9%)	(-11%)	(-10%)	(-11%)	(-10%)	(-17%)	(-18%)	(-20%)	(-25%)	(-18%)	(-20%)	(-18%)	(-16%)	(-14%)	(-13%)	(-10%)	(-11%)	(-9%)	(-10%)	(-8%)	(-10%)	(-9%)	(-10%)	(-14%)	(-14%)		
	DROUGHT	-3	-2	-3	-1	-2	-2	-2	-3	-3	-3	-4	-4	-3	-4	-3	-3	-3	-2	-2	-2	-2	-2	-2	-2	-2	-3			
		(-15%)	(-13%)	(-12%)	(-14%)	(-8%)	(-9%)	(-11%)	(-11%)	(-14%)	(-16%)	(-14%)	(-18%)	(-15%)	(-18%)	(-15%)	(-17%)	(-13%)	(-11%)	(-12%)	(-10%)	(-12%)	(-11%)	(-12%)	(-12%)	(-13%)	(-14%)			
	Contra Costa PP #1	ALL	-18	6	-32	-17	-76	-57	-45	-26	14	-2	-10	5	-2	6	-13	-11	3	5	-11	-6	-31	-10	-15	-12	-20	-10		
			(-11%)	(4%)	(-20%)	(-12%)	(-42%)	(-35%)	(-24%)	(-16%)	(13%)	(-2%)	(-11%)	(6%)	(-3%)	(8%)	(-9%)	(-16%)	(5%)	(12%)	(-13%)	(-7%)	(-22%)	(-9%)	(-10%)	(-9%)	(-16%)	(-9%)		
	DROUGHT	0	19	-13	-31	-79	-84	-33	-41	12	3	-2	-3	-2	4	-8	11	7	-35	-26	-76	-33	-5	6	-19	-16				
		(-0%)	(11%)	(-7%)	(-15%)	(-35%)	(-36%)	(-16%)	(-19%)	(11%)	(3%)	(-3%)	(-4%)	(-3%)	(3%)	(-6%)	(-12%)	(23%)	(15%)	(-27%)	(-22%)	(-34%)	(-19%)	(-3%)	(4%)	(-13%)	(-11%)			
	Banks PP	ALL	-32	-22	-61	-50	-68	-52	-71	-65	-37	-33	-38	-33	-25	-20	-11	-5	-6	-4	-25	-18	-37	-24	-38	-33	-37	-30		
			(-28%)	(-21%)	(-47%)	(-42%)	(-47%)	(-41%)	(-51%)	(-49%)	(-36%)	(-34%)	(-44%)	(-40%)	(-30%)	(-26%)	(-14%)	(-8%)	(-7%)	(-7%)	(-35%)	(-27%)	(-37%)	(-27%)	(-35%)	(-32%)	(-37%)	(-32%)		
	DROUGHT	-6	-3	-48	-59	-66	-56	-56	-63	-17	-19	-70	-59	-47	-37	-23	-16	8	10	-62	-50	-66	-35	-19	-13	-39	-33			
		(-5%)	(-2%)	(-31%)	(-36%)	(-36%)	(-33%)	(-32%)	(-35%)	(-13%)	(-14%)	(-52%)	(-48%)	(-36%)	(-31%)	(-21%)	(-16%)	(11%)	(14%)	(-61%)	(-56%)	(-42%)	(-28%)	(-14%)	(-10%)	(-29%)	(-26%)			
Jones PP	ALL	-33	-27	-53	-44	-40	-25	-70	-57	-55	-44	-62	-56	-32	-28	-30	-25	-26	-30	-16	-12	-16	-6	-28	-23	-38	-31			
		(-30%)	(-26%)	(-41%)	(-37%)	(-27%)	(-19%)	(-46%)	(-41%)	(-44%)	(-38%)	(-52%)	(-49%)	(-36%)	(-33%)	(-39%)	(-35%)	(-42%)	(-45%)	(-20%)	(-15%)	(-16%)	(-7%)	(-26%)	(-23%)	(-35%)	(-31%)			
DROUGHT	-35	-38	-42	-55	-31	-20	-60	-49	-70	-51	-100	-91	-35	-30	-51	-47	-19	-20	-36	-25	-36	-13	-6	-2	-43	-37				
	(-26%)	(-28%)	(-28%)	(-34%)	(-17%)	(-12%)	(-32%)	(-27%)	(-30%)	(-37%)	(-49%)	(-49%)	(-23%)	(-23%)	(-45%)	(-43%)	(-30%)	(-31%)	(-34%)	(-26%)	(-24%)	(-4%)	(-4%)	(-2%)	(-30%)	(-37%)				

<sup>a</sup> ALL: Water years 1976–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).



**Table CI-18. Alternative 2D ELT Percent Use of Assimilative Capacity Available under Existing Conditions and No Action Alternative ELT Relative to the 250 mg/L Secondary MCL. Calculation of Chloride Concentrations was Based on a Mass Balance Approach.**

Chloride	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-2	-2	-2	-1	-1	-1	-2	-2	-1	-2	-2	-2	-2	-1	-1	-3	-3	-2	-3	-2	-2	-2	-1	-2	-2	
		DROUGHT	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	-1	-1	-1	-1	-3	-3	-4	-4	-3	-2	-2	-1	-2
	SJR at Buckley Cove	ALL	1	0	1	0	3	-1	1	-1	1	-1	1	-1	2	-1	2	-1	5	-1	7	0	6	-1	3	0	3	0
		DROUGHT	2	0	2	0	6	0	4	-1	2	-1	2	-1	4	-2	4	-2	8	-2	9	0	12	-2	4	0	5	-
	Franks Tract	ALL	-	-	-	-	-	-	38	51	1	2	-4	-3	-4	-3	-3	-2	-4	-3	95	34	-	56	-	-	60	34
		DROUGHT	-	-	-	-	-	-	54	-	4	10	-1	1	-2	-1	-3	-1	-6	-1	-	-	-	-	-	-	-	-
Old R. at Rock Slough	ALL	-	28	-	-	-	-	30	44	0	1	-4	-3	-1	-1	0	0	-4	-4	40	17	53	20	-	64	34	20	
	DROUGHT	-	-	-	-	-	-	29	-	4	9	0	1	0	0	-2	-1	-5	-2	-	-	-	-	-	-	43	-	
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	34	51	7	12	-2	2	-4	-1	-15	-14	-55	51	-	-	-	-	-	-	-	
		DROUGHT	-	-	-	-	-	-	-	-	4	35	-5	3	-7	-3	-90	-81	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-12	10	-17	0	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-22	62	-55	-20	-	-	-	-	-	-	-	-	-	-	-	-
Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	3	2	2	2	1	1	2	2	2	3	2	2	2	2	3	3	4	3	5	4	4	4	3	3	3	3
		DROUGHT	4	4	2	3	1	1	1	1	1	1	2	2	2	2	2	3	3	4	4	5	4	5	5	4	4	3
	Contra Costa PP #1	ALL	-	-13	-	-	-	-	62	34	-4	7	-4	-3	-4	-4	1	1	-4	-4	15	10	96	19	79	73	24	13
		DROUGHT	-	-	-	-	-	-	86	-	-6	3	1	3	1	1	0	1	-5	-2	84	54	-	-	-	-61	38	-
	Banks PP	ALL	64	36	-	-	-	97	68	73	23	27	23	24	20	21	12	12	8	8	30	19	63	35	85	68	44	36
		DROUGHT	23	7	-	-	-	-	62	-	5	13	18	18	12	12	7	7	-1	-1	93	62	-	80	65	35	42	-
	Jones PP	ALL	59	41	-	-	61	40	44	46	24	25	27	27	24	25	25	25	18	19	25	14	26	9	58	44	37	31
		DROUGHT	74	83	-	-	39	29	31	40	13	13	20	19	15	14	20	21	7	8	66	34	-	25	17	8	33	-

<sup>a</sup> ALL: Water years 1975–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.
- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

**Table CI-19. Alternative 2D ELT Percent Use of Assimilative Capacity Available under Existing Conditions and No Action Alternative ELT Relative to the 250 mg/L Secondary MCL. Calculation of Chloride Concentrations was Based on EC-Chloride Relationship.**

Chloride	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT		
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-1	-1	-1	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	-1	-1	
		DROUGHT	-1	-1	0	0	0	0	-1	-1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	-1	-1
	SJR at Buckley Cove	ALL	5	0	9	1	18	-4	25	-3	12	-4	10	-4	12	4	5	-1	4	-2	7	-3	8	-3	8	0	9	-2	-2	
		DROUGHT	11	0	17	1	40	-2	85	-9	42	-20	35	-15	38	12	12	-2	19	-5	9	-9	11	-12	14	0	21	-4	-4	
	Franks Tract	ALL	83	39	-	-	-	85	29	25	2	0	-2	-2	-2	-3	-1	-2	-2	-1	30	13	27	13	42	20	24	15	15	
		DROUGHT	-	-	-	-	-	-	38	58	4	10	-3	-1	-3	-3	-3	-3	-6	-2	-	74	-	24	-100	-100	26	26	26	
	Old R. at Rock Slough	ALL	23	8	-	89	98	53	18	16	1	-1	-1	-2	0	-1	1	0	-2	-2	17	7	17	7	12	5	15	9	9	
		DROUGHT	2	19	-	-	-	-	25	47	5	7	-2	-2	0	-2	-2	-2	-6	-3	71	35	73	17	-30	-25	16	15	15	
	Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	25	28	10	12	-2	2	-3	-1	-10	-9	-23	-5	-100	-100	-	-	-	-	-	-	-	-
			DROUGHT	-	-	-	-	-	56	-	8	36	-6	3	-6	-3	-45	-30	-100	-	-	-	-	-	-	-	-	-	-	-
SJR at Antioch		ALL	-	-	-	-	-	-	-	-	-	-	-9	17	-13	2	-	-	-	-	-	-	-	-	-	-	-	-	-	
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-35	92	-32	-10	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	1	1	1	1	1	1	1	2	2	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		DROUGHT	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1
	Contra Costa PP #1	ALL	20	-5	35	16	-	65	68	31	-10	2	6	-3	1	-3	7	6	-1	-3	7	4	28	8	14	11	15	7	7	
		DROUGHT	1	-25	22	73	-	-	83	-	-8	-2	1	2	1	-1	2	4	-5	-4	29	20	-	47	6	-7	18	14	14	
	Banks PP	ALL	23	15	52	38	64	43	63	55	25	22	23	20	15	12	6	3	3	2	14	10	25	14	27	23	25	19	19	
		DROUGHT	5	3	48	69	96	71	71	90	15	17	60	46	39	28	16	11	-4	-5	42	31	70	28	16	10	34	27	27	
	Jones PP	ALL	24	18	44	34	40	22	71	52	45	33	48	41	20	17	17	14	14	16	10	7	11	4	19	16	27	21	21	
		DROUGHT	30	34	42	63	46	26	-	69	-	64	-	-	30	25	37	33	10	11	26	16	35	11	5	2	41	33	33	

<sup>a</sup> ALL: Water years 1975–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.
- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

**Table CI-20. Period Average Change in Chloride Concentrations (mg/L) for Alternative 5A Relative to Existing Conditions and the No Action Alternative ELT. Calculation of Chloride Concentrations was Based on a Mass Balance Approach.**

Chloride	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change		
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	
			Alt 5A ELT			2	2	2	2	1	1	2	2	2	2	3	3	2	2	2	2	5	5	4	5	4	4	3	3
Delta Interior	Moke R (SF) at Staten Island	ALL	(20%)	(19%)	(20%)	(18%)	(7%)	(9%)	(8%)	(9%)	(8%)	(10%)	(16%)	(16%)	(15%)	(15%)	(14%)	(15%)	(26%)	(28%)	(23%)	(26%)	(31%)	(26%)	(28%)	(26%)	(17%)	(18%)	
		DROUGHT	3	3	2	2	1	1	0	1	0	1	3	3	2	2	2	2	2	6	7	7	7	6	4	4	4	3	3
	SJR at Buckley Cove	ALL	(-3%)	(-0%)	(-2%)	(-0%)	(-8%)	(-0%)	(-6%)	(0%)	(-4%)	(-0%)	(-4%)	(-0%)	(-5%)	(-0%)	(-5%)	(-0%)	(-10%)	(-0%)	(-12%)	(-1%)	(-12%)	(0%)	(-5%)	(0%)	(-7%)	(-6%)	
		DROUGHT	-3	0	-3	0	-10	-1	-9	0	-6	0	-6	0	-9	0	-9	0	-16	0	-16	-1	-20	1	-7	0	-9	0	
	Franks Tract	ALL	(-19%)	(-6%)	(-26%)	(-13%)	(-22%)	(-12%)	(-6%)	(-11%)	(0%)	(-3%)	(11%)	(5%)	(11%)	(7%)	(5%)	(3%)	(2%)	(-1%)	(-23%)	(-11%)	(-14%)	(-7%)	(-15%)	(-8%)	(-16%)	(-8%)	
		DROUGHT	-29	-35	-100	-108	-35	-23	-9	-29	2	-9	3	-2	3	1	3	-1	6	-4	-102	-52	-51	-1	28	18	-23	-20	
	Old R. at Rock Slough	ALL	(-13%)	(-0%)	(-21%)	(-10%)	(-21%)	(-10%)	(-5%)	(-11%)	(-1%)	(-4%)	(6%)	(3%)	(2%)	(1%)	(1%)	(0%)	(1%)	(0%)	(-22%)	(-10%)	(-13%)	(-5%)	(-11%)	(-6%)	(-13%)	(-6%)	
		DROUGHT	-1	-4	-65	-81	-22	-10	0	-23	-2	-10	0	-3	-1	-2	0	6	-1	-78	-39	-45	-2	27	23	-15	-13		
	Western Delta	Sac. R. at Emmaton	ALL	(-17%)	(-15%)	(-17%)	(-9%)	(-10%)	(-12%)	(-8%)	(-14%)	(-4%)	(18%)	(5%)	(23%)	(6%)	(10%)	(8%)	(12%)	(3%)	(22%)	(12%)	(21%)	(5%)	(-3%)	(3%)	(-4%)	(-4%)	
			DROUGHT	-239	-236	-227	-197	-46	-105	-14	-59	8	-24	10	-5	14	6	52	18	49	9	211	152	233	77	201	28	21	-28
		SJR at Antioch	ALL	(-25%)	(-12%)	(-26%)	(-13%)	(-17%)	(-12%)	(-12%)	(-14%)	(-7%)	(-15%)	(17%)	(-5%)	(15%)	(2%)	(2%)	(0%)	(7%)	(-1%)	(1%)	(2%)	(5%)	(2%)	(-13%)	(-1%)	(-13%)	(-6%)
			DROUGHT	-628	-450	-772	-446	-296	-279	-115	-200	0	-98	24	-22	29	6	40	-9	31	-32	47	58	245	175	253	109	-95	-99
Sac. R. at Mallard Island		ALL	(-17%)	(-8%)	(-17%)	(-8%)	(-9%)	(-6%)	(-6%)	(-7%)	(-1%)	(-6%)	(15%)	(1%)	(12%)	(6%)	(6%)	(4%)	(8%)	(2%)	(3%)	(4%)	(5%)	(2%)	(-11%)	(0%)	(-6%)	(-2%)	
		DROUGHT	-976	-554	-1090	-523	-410	-359	-203	-265	18	-149	67	-5	115	72	67	33	43	-4	141	164	314	184	182	64	-144	-112	
Major Diversions (Pumping Stations)		NBA at Barker Slough PP	ALL	(-38%)	(-33%)	(-29%)	(-30%)	(-23%)	(-24%)	(-30%)	(-32%)	(-33%)	(-40%)	(-32%)	(-34%)	(-36%)	(-32%)	(-38%)	(-37%)	(-46%)	(-42%)	(-49%)	(-44%)	(-47%)	(-43%)	(-40%)	(-37%)	(-38%)	(-36%)
			DROUGHT	-10	-9	-5	-7	-2	-3	-2	-2	-3	-4	-4	-5	-5	-6	-5	-6	-6	-9	-8	-11	-9	-10	-8	-7	-6	-6
		Contra Costa PP #1	ALL	(-16%)	(0%)	(-12%)	(-2%)	(-21%)	(-10%)	(-7%)	(1%)	(14%)	(-7%)	(6%)	(1%)	(4%)	(5%)	(0%)	(-1%)	(-0%)	(-1%)	(-12%)	(-8%)	(-19%)	(-5%)	(-8%)	(-7%)	(-11%)	(-4%)
			DROUGHT	-7	29	-8	-32	-53	-58	24	6	4	-11	-1	-6	-1	-2	0	-2	5	-1	-41	-28	-82	-17	0	18	-13	-9
		Banks PP	ALL	(-19%)	(-10%)	(-29%)	(-21%)	(-25%)	(-16%)	(-19%)	(-21%)	(-16%)	(-21%)	(-19%)	(-20%)	(-32%)	(-33%)	(-39%)	(-41%)	(-48%)	(-44%)	(-50%)	(-47%)	(-51%)	(-50%)	(-47%)	(-46%)	(-38%)	(-39%)
			DROUGHT	-7	1	-43	-57	-33	-22	-5	-22	-2	-12	-13	-13	-14	-23	-24	-14	-14	-12	-41	-28	-58	-37	-50	-42	-32	-25
	Jones PP	ALL	(-9%)	(-1%)	(-24%)	(-17%)	(-24%)	(-16%)	(-18%)	(-19%)	(-14%)	(-15%)	(-30%)	(-30%)	(-17%)	(-17%)	(-26%)	(-26%)	(-21%)	(-22%)	(-21%)	(-10%)	(-19%)	(-8%)	(-29%)	(-24%)	(-21%)	(-16%)	
		DROUGHT	4	1	-38	-56	-19	-13	-12	-19	-7	-6	-25	-24	-11	-11	-20	-21	-9	-12	-53	-29	-46	-6	-1	5	-20	-16	

<sup>a</sup> ALL: Water years 1976–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).



**Table CI-21. Period Average Change in Chloride Concentrations (mg/L) for Alternative 5A ELT Relative to Existing Conditions and the No Action Alternative ELT. Calculation of Chloride Concentrations was Based on EC-Chloride Relationship.**

Chloride	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
			Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT	Ex. Condi.	No Act. ELT		
Alt 5A ELT	Delta Interior	Moke R. (SF) at Staten Island	ALL	1	1	1	1	0	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
			DROUGHT	(5%)	(5%)	(6%)	(6%)	(3%)	(3%)	(5%)	(6%)	(5%)	(7%)	(9%)	(9%)	(8%)	(8%)	(6%)	(7%)	(9%)	(9%)	(6%)	(6%)	(7%)	(5%)	(6%)	(6%)	(6%)	(6%)	(6%)
		SJR at Buckley Cove	ALL	1	1	1	1	0	0	0	0	0	1	2	2	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1
			DROUGHT	(6%)	(6%)	(6%)	(6%)	(2%)	(3%)	(1%)	(2%)	(1%)	(2%)	(7%)	(10%)	(6%)	(7%)	(7%)	(7%)	(12%)	(13%)	(10%)	(9%)	(8%)	(6%)	(7%)	(6%)	(6%)	(6%)	(6%)
		Franks Tract	ALL	-8	0	-11	0	-25	1	-26	-1	-19	0	-15	0	-13	0	-10	0	-11	-1	-12	3	-13	4	-11	0	-14	0	
			DROUGHT	(-8%)	(0%)	(-10%)	(0%)	(-18%)	(1%)	(-16%)	(-0%)	(-13%)	(-0%)	(-11%)	(-0%)	(-12%)	(-0%)	(-11%)	(0%)	(-11%)	(-3%)	(-12%)	(4%)	(-10%)	(1%)	(-12%)	(6%)	(-12%)	(0%)	
	Western Delta	Sac. R. at Emmaton	ALL	-14	0	-18	0	-36	-1	-40	0	-26	0	-21	0	-21	-1	-18	0	-29	1	-17	9	-20	14	-15	1	-23	2	
			DROUGHT	(-11%)	(0%)	(-13%)	(-0%)	(-21%)	(-1%)	(-19%)	(-0%)	(-12%)	(0%)	(-10%)	(-0%)	(-13%)	(-0%)	(-14%)	(0%)	(-22%)	(1%)	(-15%)	(10%)	(-16%)	(16%)	(-11%)	(1%)	(-15%)	(2%)	
		SJR at Antioch	ALL	-30	-11	-55	-28	-46	-22	-18	-15	-6	-4	-1	0	1	1	0	1	0	-1	-31	-12	-21	-8	-24	-13	-19	-9	
			DROUGHT	(-16%)	(-6%)	(-24%)	(-14%)	(-22%)	(-12%)	(-13%)	(-11%)	(-10%)	(-6%)	(-11%)	(-10%)	(3%)	(4%)	(-1%)	(3%)	(-1%)	(-2%)	(-24%)	(-11%)	(-6%)	(-13%)	(-6%)	(-13%)	(-6%)	(-6%)	
		Old R. at Rock Slough	ALL	-12	-24	-56	-71	-26	-20	-17	-26	-1	-11	2	-2	1	2	2	0	7	-1	-68	-37	-33	0	24	14	-15	-15	
			DROUGHT	(-5%)	(-10%)	(-21%)	(-25%)	(-10%)	(-8%)	(-9%)	(-14%)	(-1%)	(-13%)	(5%)	(-4%)	(4%)	(5%)	(8%)	(1%)	(17%)	(-3%)	(-32%)	(-20%)	(-15%)	(0%)	(10%)	(6%)	(-10%)	(-10%)	
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-15	0	-34	-14	-37	-17	-16	-15	-9	-5	-3	-1	4	-1	-3	0	0	0	-22	-8	-16	-5	-11	-4	-14	-6		
		DROUGHT	(-10%)	(-0%)	(-18%)	(-8%)	(-21%)	(-10%)	(-12%)	(-11%)	(-12%)	(-7%)	(-6%)	(-3%)	(-8%)	(-2%)	(-6%)	(0%)	(-1%)	(0%)	(-22%)	(-10%)	(-13%)	(-4%)	(-8%)	(-3%)	(-13%)	(-6%)		
	Contra Costa PP #1	ALL	6	-2	-32	-50	-16	-11	-9	-21	-9	-12	-5	-4	-7	-4	0	0	6	1	-51	-27	-30	-1	21	17	-10	-10		
		DROUGHT	(3%)	(-1%)	(-15%)	(-21%)	(-7%)	(-5%)	(-5%)	(-11%)	(-10%)	(-13%)	(-7%)	(-6%)	(-13%)	(-8%)	(0%)	(0%)	(16%)	(2%)	(-32%)	(-20%)	(-16%)	(-1%)	(11%)	(9%)	(-8%)	(-7%)		
	Banks PP	ALL	-97	-83	-93	-54	-37	-39	-16	-19	-7	-11	5	-4	7	2	9	8	20	7	59	35	79	27	1	21	-6	-9		
		DROUGHT	(-17%)	(-15%)	(-17%)	(-11%)	(-12%)	(-12%)	(-12%)	(-15%)	(-10%)	(-13%)	(-7%)	(-6%)	(-13%)	(-4%)	(10%)	(9%)	(11%)	(4%)	(26%)	(14%)	(24%)	(7%)	(0%)	(4%)	(-2%)	(-3%)		
	Jones PP	ALL	-147	-163	-136	-139	-39	-79	-17	-54	2	-26	12	-5	12	4	46	17	54	12	173	123	192	72	166	35	27	-17		
		DROUGHT	(-19%)	(-20%)	(-18%)	(-18%)	(-8%)	(-15%)	(-9%)	(-23%)	(2%)	(-19%)	(28%)	(-9%)	(34%)	(10%)	(39%)	(11%)	(22%)	(4%)	(53%)	(32%)	(43%)	(13%)	(21%)	(4%)	(7%)	(-4%)		
	SJR at Antioch	ALL	-360	-141	-397	-172	-199	-113	-82	-72	-30	-40	19	-9	22	3	12	6	36	3	24	24	66	37	-156	9	-87	-39		
		DROUGHT	(-24%)	(-11%)	(-27%)	(-14%)	(-19%)	(-12%)	(-17%)	(-15%)	(-12%)	(-16%)	(16%)	(-6%)	(20%)	(2%)	(5%)	(2%)	(8%)	(1%)	(3%)	(6%)	(3%)	(-11%)	(1%)	(-11%)	(-5%)			
	Sac. R. at Mallard Island	ALL	-398	-309	-475	-310	-245	-202	-112	-176	-9	-95	36	-22	31	5	58	3	59	-19	78	60	229	167	239	115	-42	-65		
		DROUGHT	(-22%)	(-18%)	(-25%)	(-18%)	(-17%)	(-14%)	(-16%)	(-23%)	(-2%)	(-20%)	(22%)	(-10%)	(22%)	(3%)	(15%)	(1%)	(9%)	(-2%)	(6%)	(5%)	(18%)	(12%)	(13%)	(6%)	(-4%)	(-6%)		
NBA at Barker Slough PP	ALL	-638	-227	-598	-213	-285	-127	-106	-83	-25	-53	88	8	102	41	99	62	157	51	129	105	160	90	-284	37	-100	-26			
	DROUGHT	(-21%)	(-8%)	(-20%)	(-8%)	(-13%)	(-6%)	(-8%)	(-7%)	(-3%)	(-6%)	(20%)	(2%)	(20%)	(7%)	(11%)	(6%)	(11%)	(3%)	(6%)	(5%)	(6%)	(4%)	(-10%)	(1%)	(-6%)	(-2%)			
Contra Costa PP #1	ALL	-719	-395	-772	-387	-383	-252	-195	-240	16	-140	119	-8	138	61	158	63	126	17	201	170	344	225	254	117	-59	-64			
	DROUGHT	(-12%)	(-12%)	(-20%)	(-11%)	(-12%)	(-8%)	(-10%)	(-12%)	(1%)	(-9%)	(18%)	(-1%)	(19%)	(8%)	(11%)	(4%)	(6%)	(1%)	(7%)	(6%)	(12%)	(7%)	(3%)	(-3%)	(-3%)	(-3%)			
Banks PP	ALL	-2	-2	-2	-2	-2	-2	-3	-4	-4	-6	-4	-4	-4	-3	-3	-3	-2	-2	-2	-2	-2	-2	-2	-2	-2	-3			
	DROUGHT	(-12%)	(-9%)	(-11%)	(-10%)	(-11%)	(-11%)	(-17%)	(-18%)	(-20%)	(-25%)	(-18%)	(-20%)	(-18%)	(-16%)	(-14%)	(-13%)	(-13%)	(-11%)	(-12%)	(-9%)	(-10%)	(-9%)	(-10%)	(-9%)	(-10%)	(-14%)			
Jones PP	ALL	-3	-2	-2	-3	-1	-2	-2	-2	-3	-3	-3	-4	-3	-4	-3	-3	-3	-2	-2	-2	-2	-2	-2	-2	-2	-3			
	DROUGHT	(-15%)	(-13%)	(-12%)	(-14%)	(-8%)	(-9%)	(-11%)	(-11%)	(-14%)	(-16%)	(-15%)	(-18%)	(-15%)	(-19%)	(-15%)	(-17%)	(-14%)	(-11%)	(-12%)	(-11%)	(-12%)	(-11%)	(-11%)	(-12%)	(-12%)	(-13%)			
Contra Costa PP #1	ALL	-22	2	-15	0	-36	-17	-23	-4	6	-10	-17	-3	-8	0	-4	-2	-3	0	-10	-5	-26	-6	-9	-7	-14	-4			
	DROUGHT	(-14%)	(1%)	(-9%)	(-0%)	(-20%)	(-11%)	(-12%)	(-3%)	(5%)	(-8%)	(-19%)	(-4%)	(-11%)	(-0%)	(-6%)	(-3%)	(-7%)	(-1%)	(-12%)	(-6%)	(-19%)	(-5%)	(-7%)	(-5%)	(-12%)	(-4%)			
Banks PP	ALL	1	21	1	-17	-40	-45	13	5	-4	-13	-8	-9	-8	-3	-4	-9	3	0	-26	-17	-56	-13	1	12	-11	-7			
	DROUGHT	(1%)	(12%)	(0%)	(-8%)	(-17%)	(-19%)	(6%)	(2%)	(-4%)	(-11%)	(-10%)	(-12%)	(-11%)	(-5%)	(-8%)	(-14%)	(7%)	(0%)	(-21%)	(-15%)	(-25%)	(-7%)	(0%)	(7%)	(-8%)	(-5%)			
Banks PP	ALL	-18	-8	-32	-21	-34	-18	-31	-25	-18	-14	-18	-13	-29	-24	-12	-7	-10	-8	-26	-19	-37	-23	-28	-23	-24	-17			
	DROUGHT	(-16%)	(-8%)	(-25%)	(-18%)	(-24%)	(-14%)	(-22%)	(-19%)	(-17%)	(-14%)	(-21%)	(-16%)	(-35%)	(-30%)	(-16%)	(-10%)	(-15%)	(-13%)	(-35%)	(-28%)	(-37%)	(-26%)	(-26%)	(-22%)	(-24%)	(-18%)			
Jones PP	ALL	-2	1	-24	-36	-28	-18	-12	-20	-11	-13	-36	-25	-42	-33	-13	-7	2	3	-51	-39	-63	-33	-10	-3	-24	-18			
	DROUGHT	(-1%)	(1%)	(-16%)	(-22%)	(-16%)	(-11%)	(-7%)	(-11%)	(-8%)	(-9%)	(-27%)	(-20%)	(-33%)	(-27%)	(-12%)	(-7%)	(2%)	(5%)	(-30%)	(-43%)	(-41%)	(-26%)	(-7%)	(-3%)	(-18%)	(-14%)			
Jones PP	ALL	-5	1	-28	-20	-27	-11	-28	-16	-24	-13	-40	-34	-19	-15	-22	-18	-12	-16	-12	-7	-15	-5	-26	-21	-22	-15			
	DROUGHT	(-5%)	(1%)	(-22%)	(-16%)	(-18%)	(-8%)	(-18%)	(-11%)	(-19%)	(-11%)	(-34%)	(-30%)	(-22%)	(-17%)	(-29%)	(-24%)	(-19%)	(-23%)	(-14%)	(-9%)	(-15%)	(-5%)	(-24%)	(-21%)	(-20%)	(-14%)			
Jones PP	ALL	8	5	-24	-37	-23	-12	-27	-15	-27	-8	-73	-63	-22	-17	-35	-31	-11	-12	-32	-21	-27	-5	0	4	-24	-18			
	DROUGHT	(6%)	(4%)	(-16%)	(-23%)	(-13%)	(-7%)	(-14%)	(-8%)	(-24%)	(-5%)	(-38%)	(-34%)	(-22%)	(-13%)	(-31%)	(-29%)	(-18%)	(-20%)	(-30%)	(-22%)	(-18%)	(-4%)	(0%)	(3%)	(-17%)	(-13%)			

<sup>a</sup> ALL: Water years 1976–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

**Table CI-22. Alternative 5A ELT Percent Use of Assimilative Capacity Available under Existing Conditions and No Action Alternative ELT Relative to the 250 mg/L Secondary MCL. Calculation of Chloride Concentrations was Based on a Mass Balance Approach.**

Chloride	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change				
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT			
Alt 5A ELT	Delta Interior	Moke R. (SF) at Staten Island	ALL	-1	-1	-1	-1	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2	-2	-2	-1	-1	-1	-1
		DROUGHT	-1	-1	-1	-1	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-2	-2	-2	-2	-1	-	-
		SJR at Buckley Cove	ALL	1	0	1	0	4	0	3	0	2	0	2	0	3	0	3	0	5	0	7	0	7	0	3	0	3	0	3	0
		DROUGHT	2	0	2	0	6	0	5	0	3	0	4	0	6	0	6	0	10	0	10	1	13	-1	4	0	6	0	6	-	
		Franks Tract	ALL	-	-	-	-	-	-	11	21	0	1	-2	-1	-2	-1	-1	-1	-1	0	76	21	-	36	-	-	37	15	37	15
		DROUGHT	-	-	-	-	-	-	20	-	-1	5	-1	1	-1	-1	-2	0	-3	2	-	-	-	-	-	-	63	-	63	-	
Old R. at Rock Slough	ALL	-	2	-	-	-	97	8	20	1	1	-1	-1	-1	0	0	0	0	0	33	11	43	11	-	65	20	8	65	20		
	DROUGHT	-	-	-	-	-	-	0	64	1	6	0	1	0	1	-1	0	-3	1	-	78	-	12	-	-	21	-	21	-		
Western Delta	Sac. R. at Emmatton	ALL	-	-	-	-	-	-	12	26	2	6	-2	2	-4	-1	-9	-8	-98	-94	-	-	-	-	-	-	-	-	-	-	
		DROUGHT	-	-	-	-	-	-	57	-	-6	22	-5	3	-7	-3	-71	-47	-	-	-	-	-	-	-	-	-	-	-	-	
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-14	7	-20	-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-28	51	-56	-22	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	3	2	2	2	1	1	2	2	2	3	2	2	2	2	3	3	4	3	5	4	4	4	4	3	3	3	3	3	
		DROUGHT	4	4	2	3	1	1	1	1	1	2	2	2	2	2	3	3	4	4	5	4	5	4	5	4	4	4	3	-	
	Contra Costa PP #1	ALL	-	-2	-	22	-	49	19	-2	-7	4	-2	0	-1	-1	0	0	0	0	12	7	85	12	51	46	15	4	15	4	
		DROUGHT	-	-	-	-	-	-	-77	-45	-2	7	1	3	0	1	0	1	-3	0	61	34	-	-	-	-100	18	-	18	-	
	Banks PP	ALL	38	14	-	55	78	32	24	28	8	11	7	8	13	13	8	8	6	6	29	18	58	30	61	46	26	18	26	18	
		DROUGHT	13	-2	-	-	-	61	6	35	1	8	7	7	9	9	2	3	0	1	75	47	-	68	35	10	25	-	25	-	
	Jones PP	ALL	13	1	68	36	38	20	16	17	7	7	13	13	8	8	13	13	8	8	17	7	25	8	47	34	18	13	18	13	
		DROUGHT	-6	-1	77	-	25	16	10	18	4	4	15	14	6	6	12	12	5	6	55	24	-	7	1	-7	17	-	17	-	

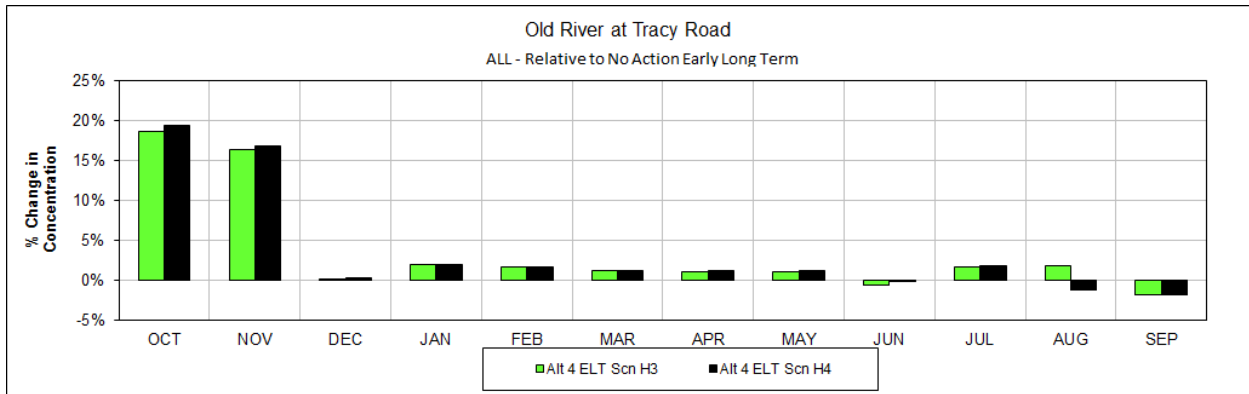
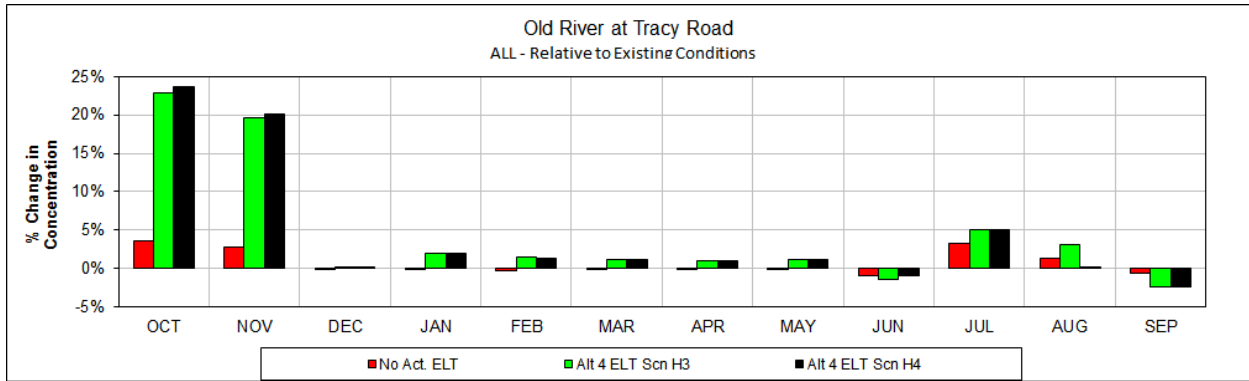
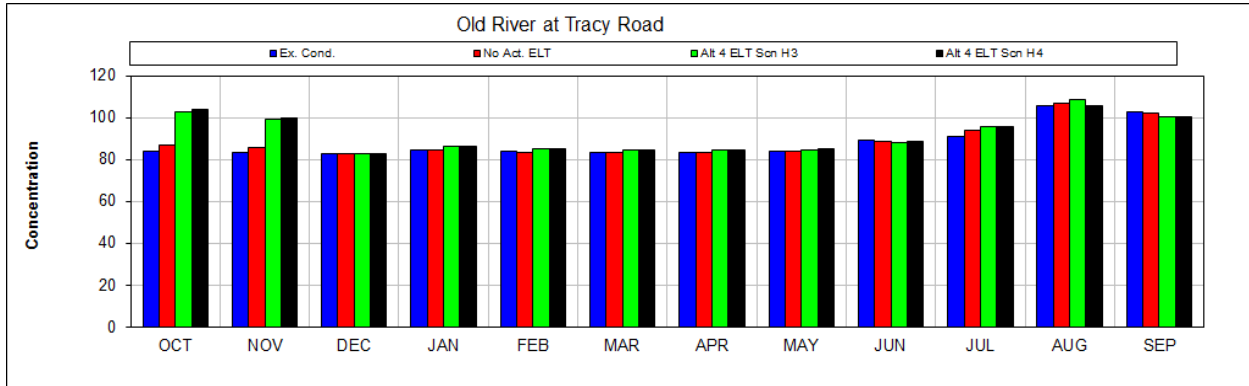
<sup>a</sup> ALL: Water years 1975–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

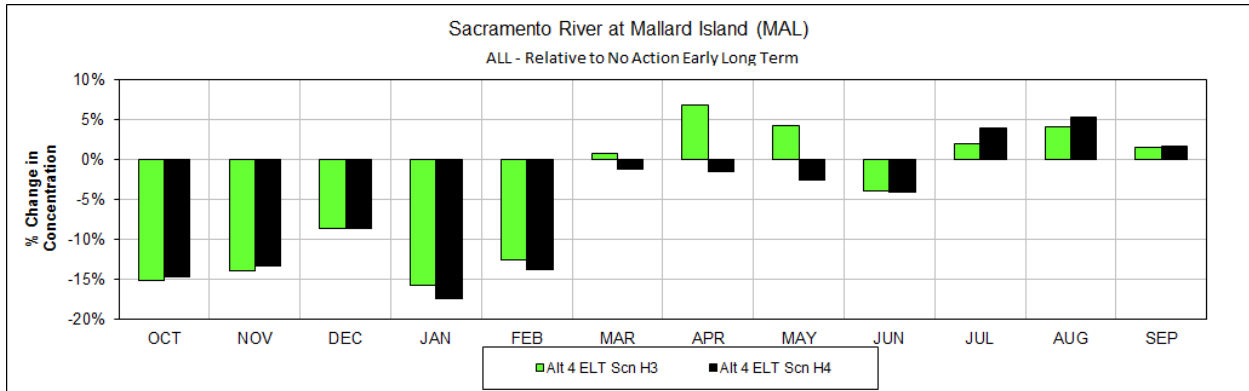
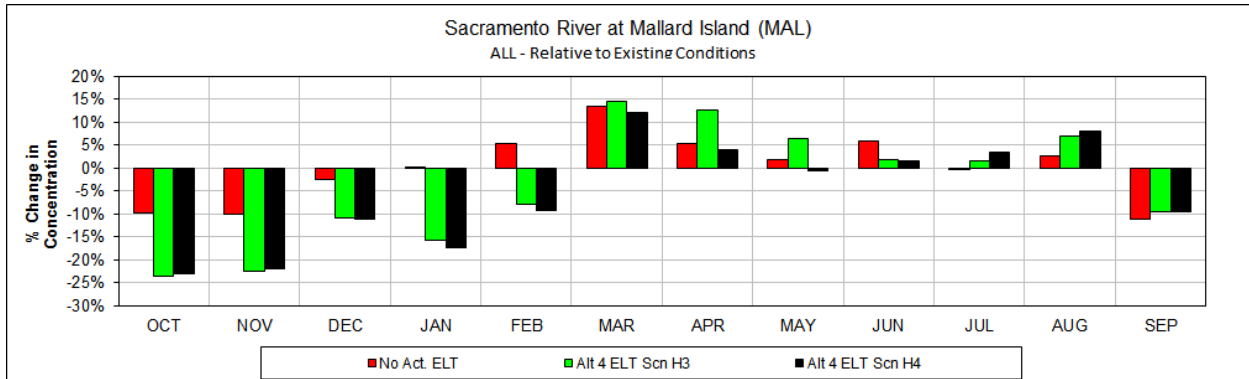
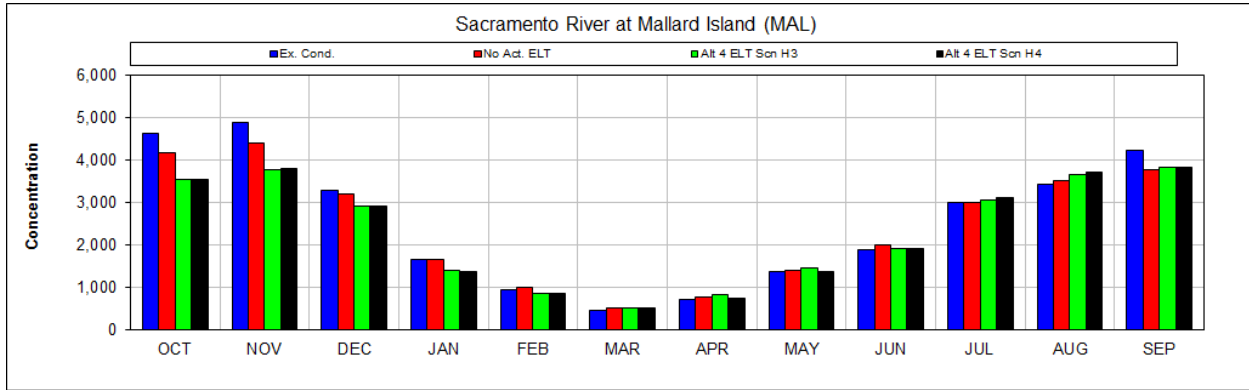
- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.
- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.



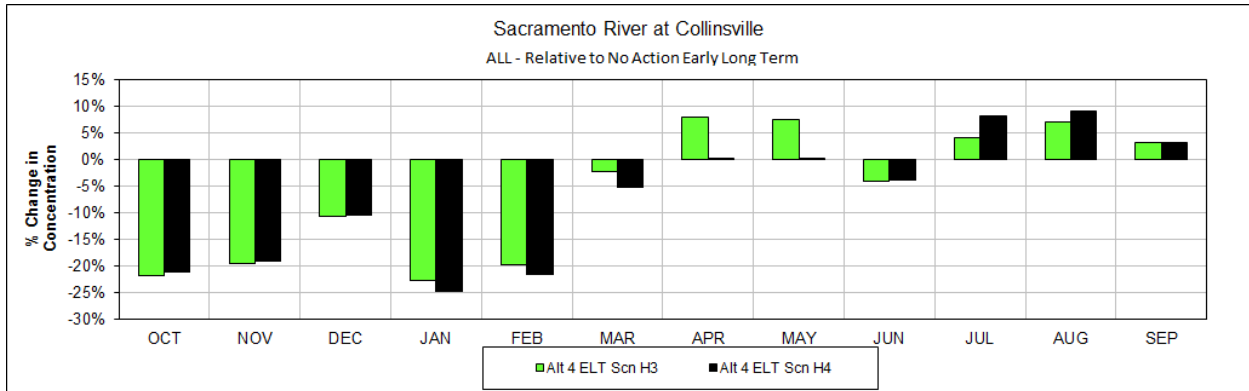
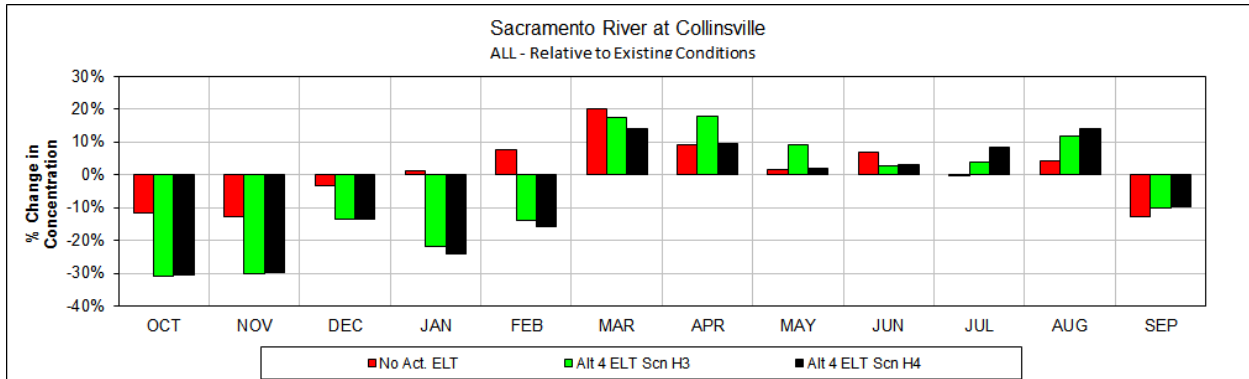
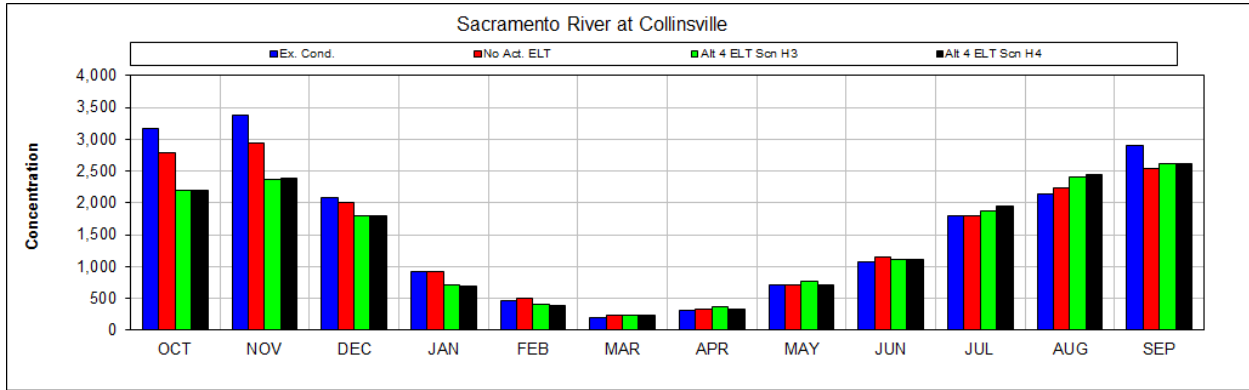
**Figure CI-1. Long-term Average Estimated Chloride Concentrations at Old River at Tracy Road, and Change Relative to Existing Conditions and the No Action Alternative ELT, for Alternative 4A H3–H4 ELT (mg/L).**



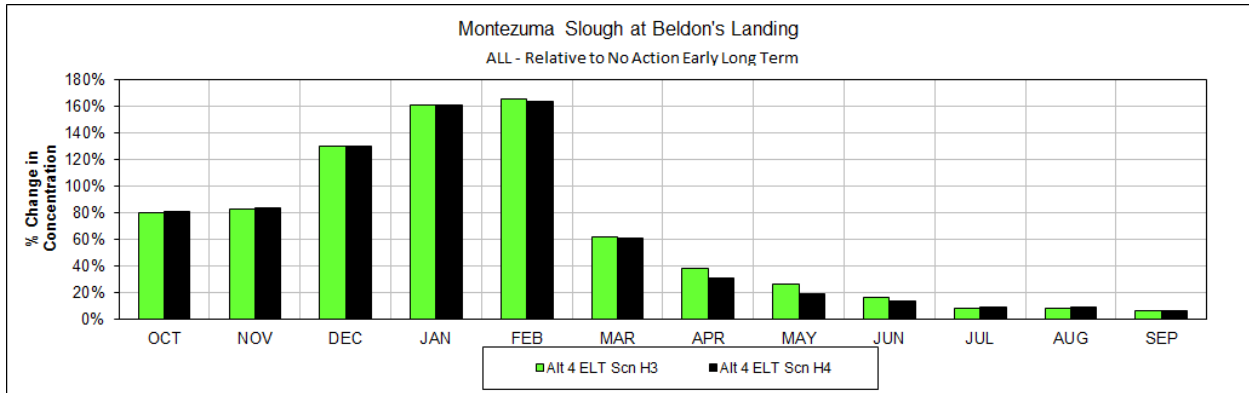
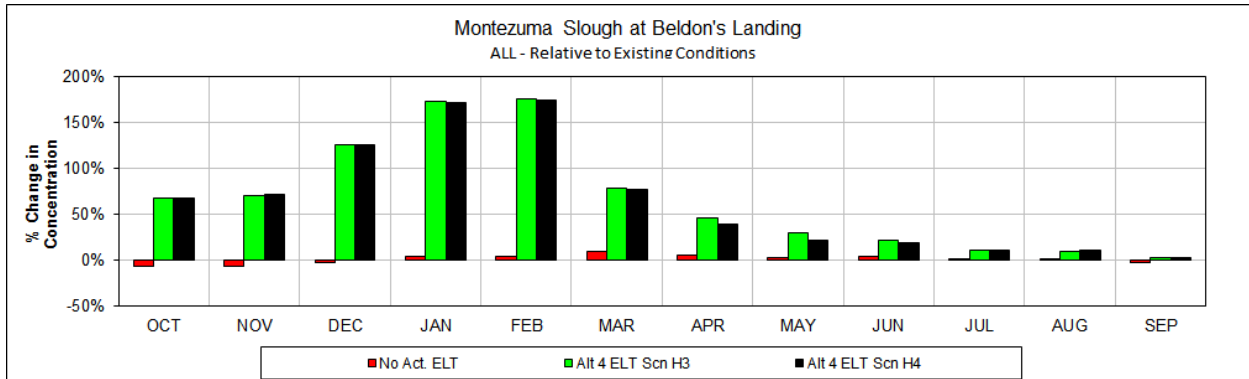
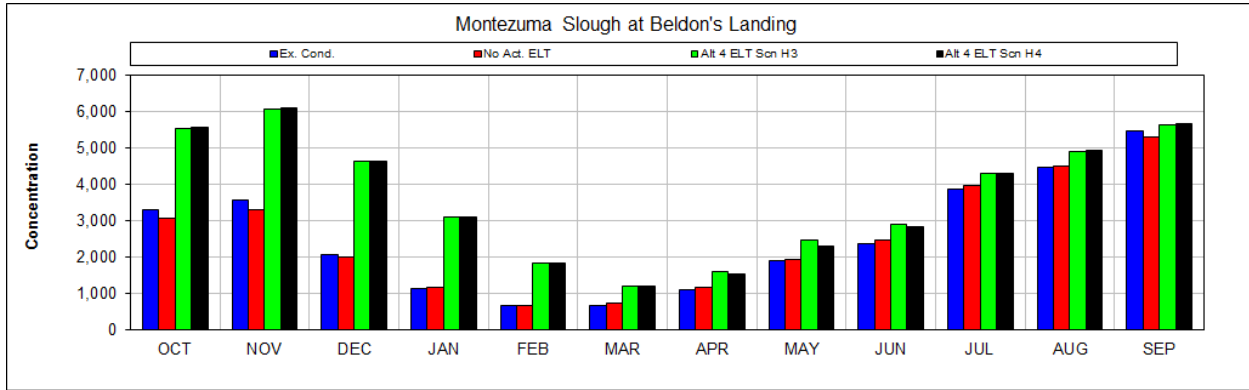
**Figure CI-2. Long-term Average Estimated Chloride Concentrations at Sacramento River at Mallard Island, and Change Relative to Existing Conditions and the No Action Alternative ELT, for Alternative 4A H3–H4 ELT (mg/L).**



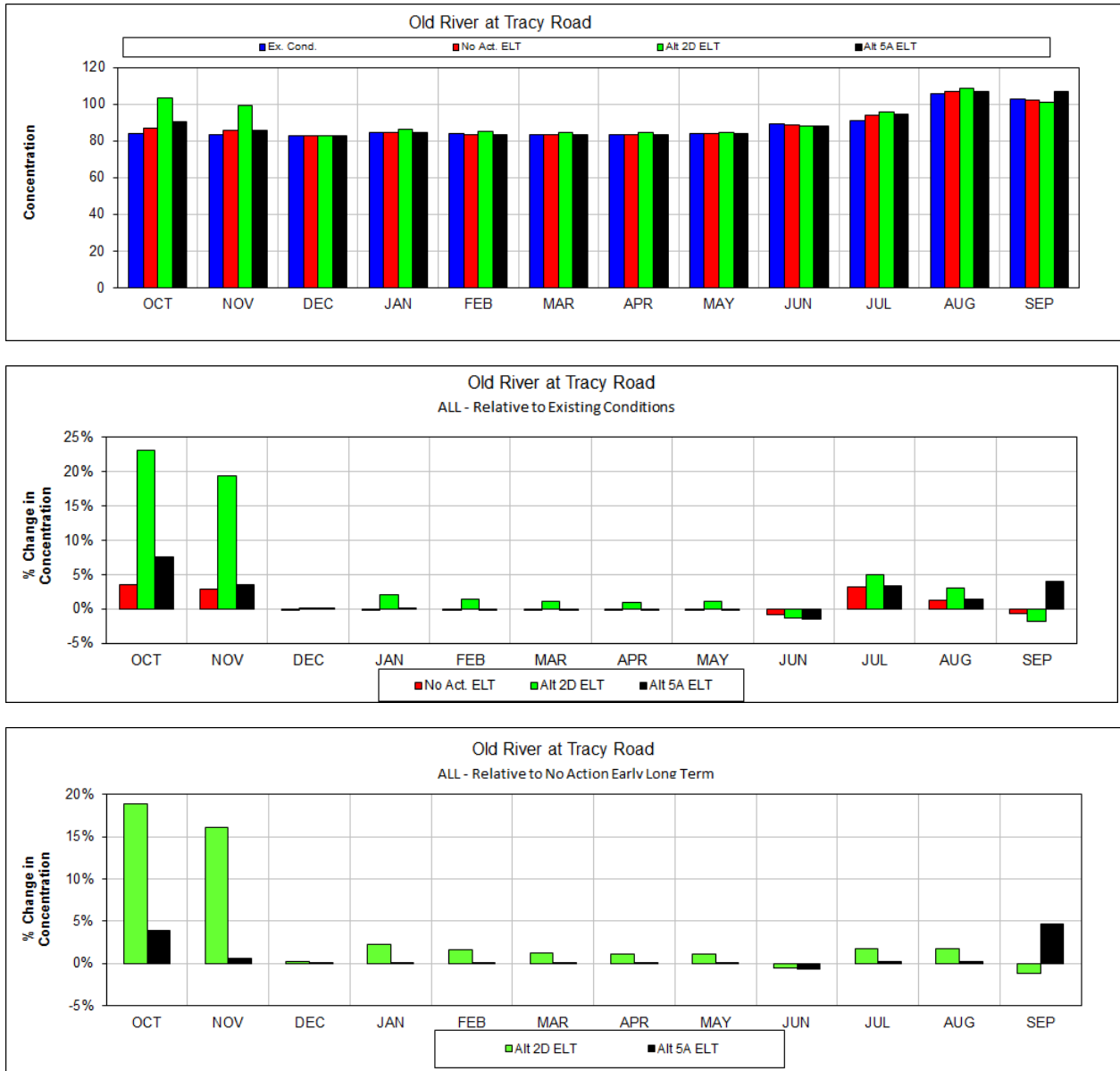
**Figure CI-3. Long-term Average Estimated Chloride Concentrations at Sacramento River at Collinsville, and Change Relative to Existing Conditions and the No Action Alternative ELT, for Alternative 4A H3-H4 ELT (mg/L).**



**Figure CI-4. Long-term Average Estimated Chloride Concentrations at Montezuma Slough at Beldon’s Landing, and Change Relative to Existing Conditions and the No Action Alternative ELT, for Alternative 4A H3–H4 ELT (mg/L).**

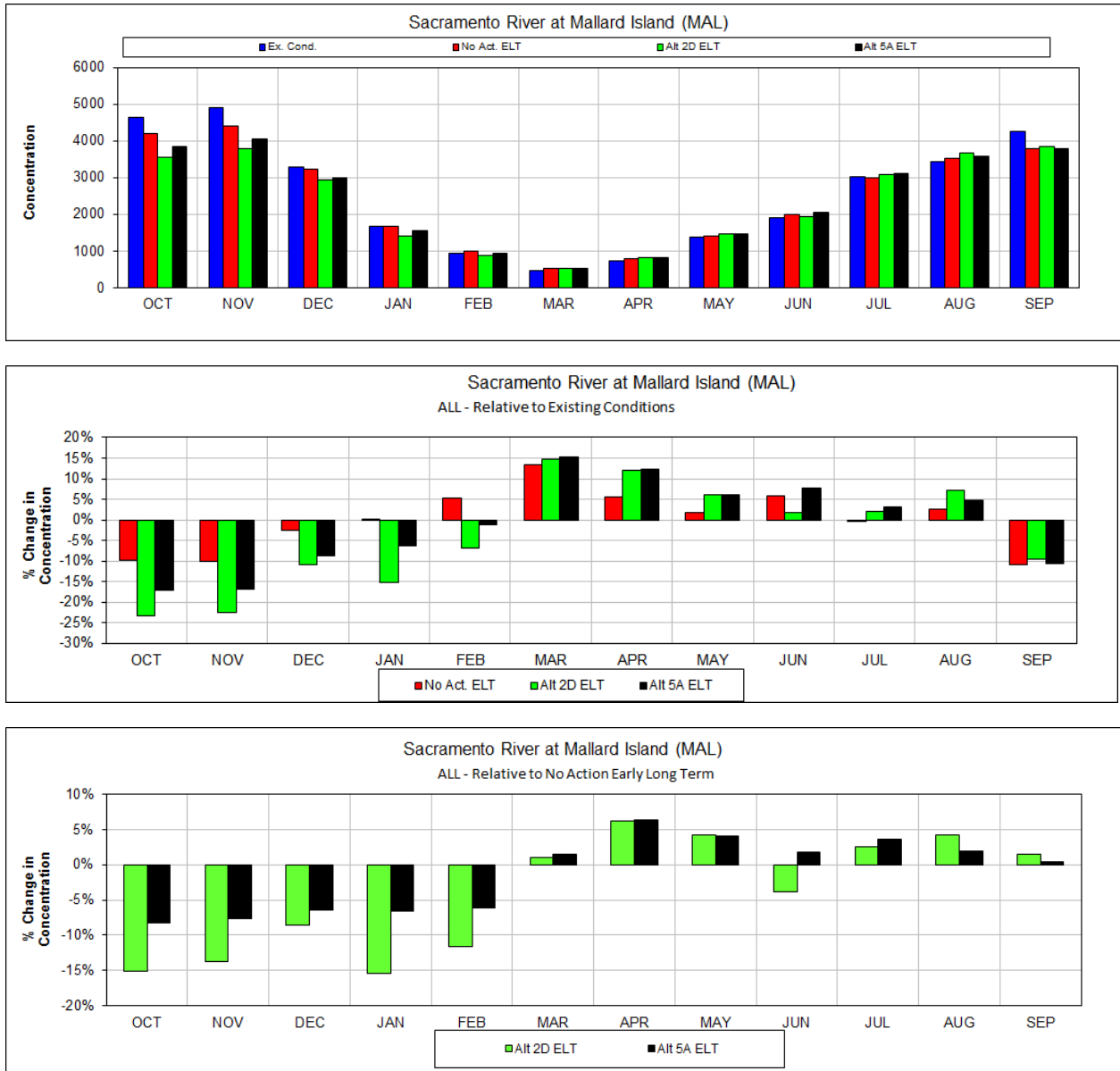


**Figure CI-5. Long-term Average Estimated Chloride Concentrations at Old River at Tracy Road, and Change Relative to Existing Conditions and the No Action Alternative ELT, for Alternatives 2D and 5A ELT (mg/L).**

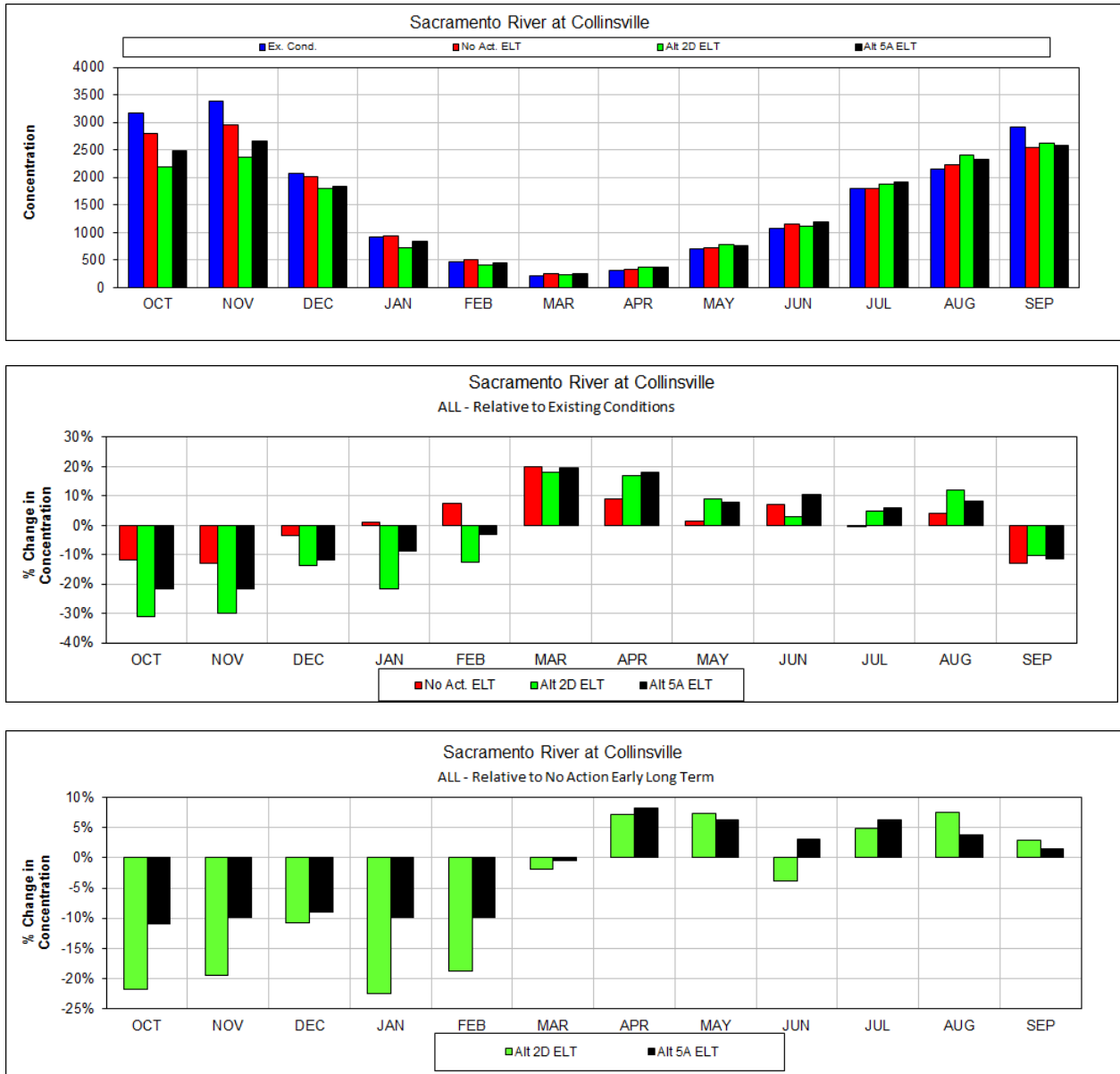




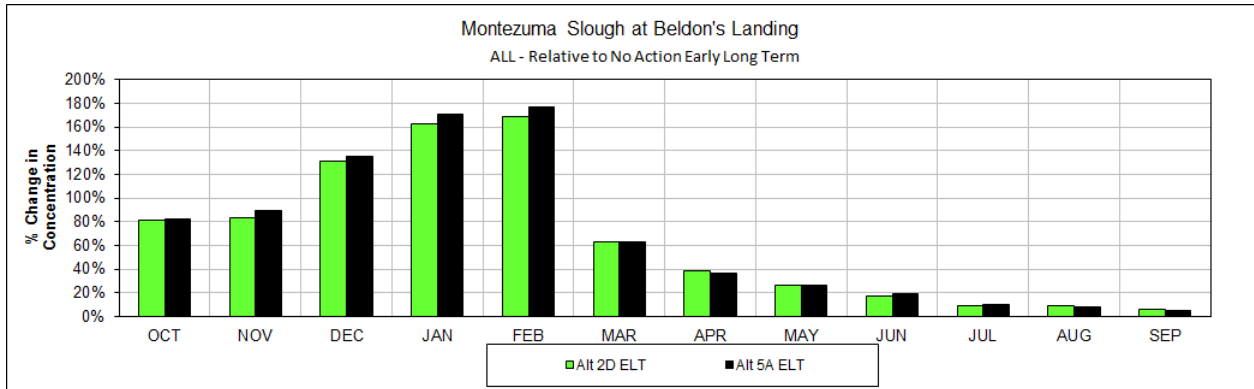
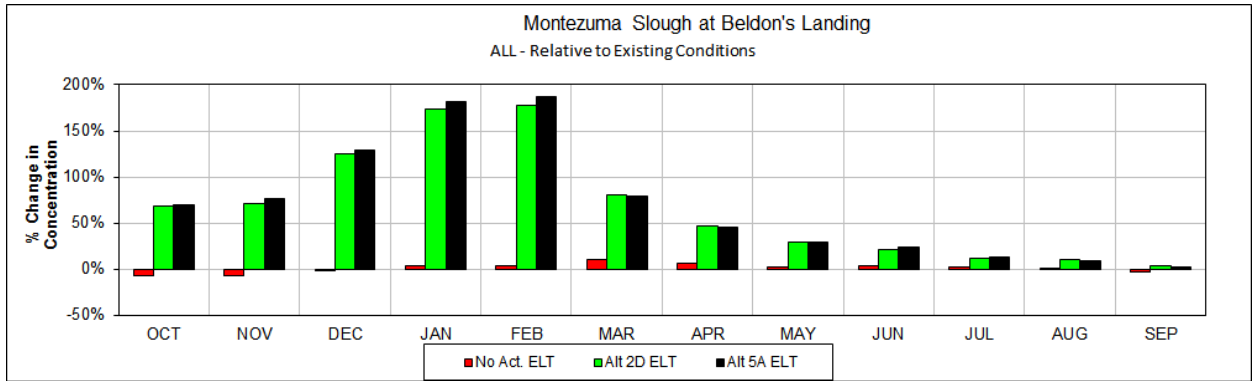
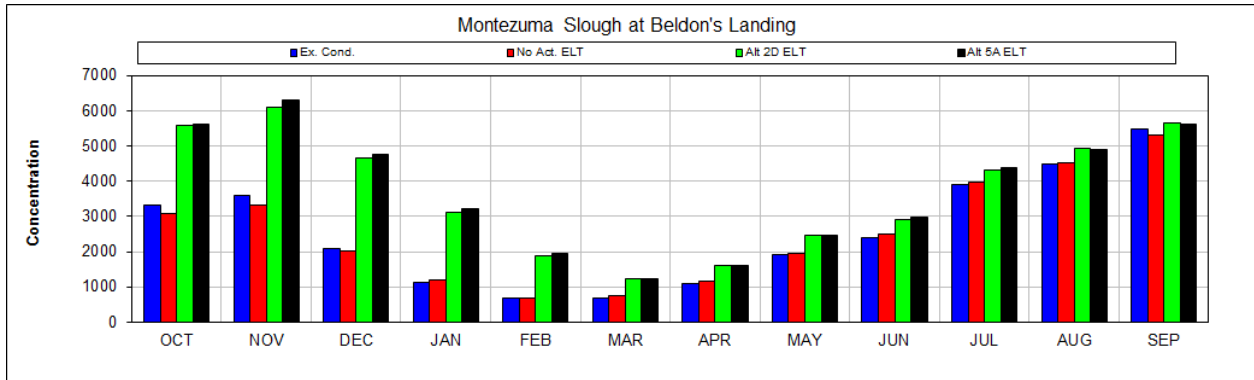
**Figure CI-6. Long-term Average Estimated Chloride Concentrations at Sacramento River at Mallard Island, and Change Relative to Existing Conditions and the No Action Alternative ELT, for Alternatives 2D and 5A ELT (mg/L).**



**Figure CI-7. Long-term Average Estimated Chloride Concentrations at Sacramento River at Collinsville, and Change Relative to Existing Conditions and the No Action Alternative ELT, for Alternatives 2D and 5A ELT (mg/L).**



**Figure CI-8. Long-term Average Estimated Chloride Concentrations at Montezuma Slough at Beldon’s Landing, and Change Relative to Existing Conditions and the No Action Alternative ELT, for Alternatives 2D and 5A ELT (mg/L).**



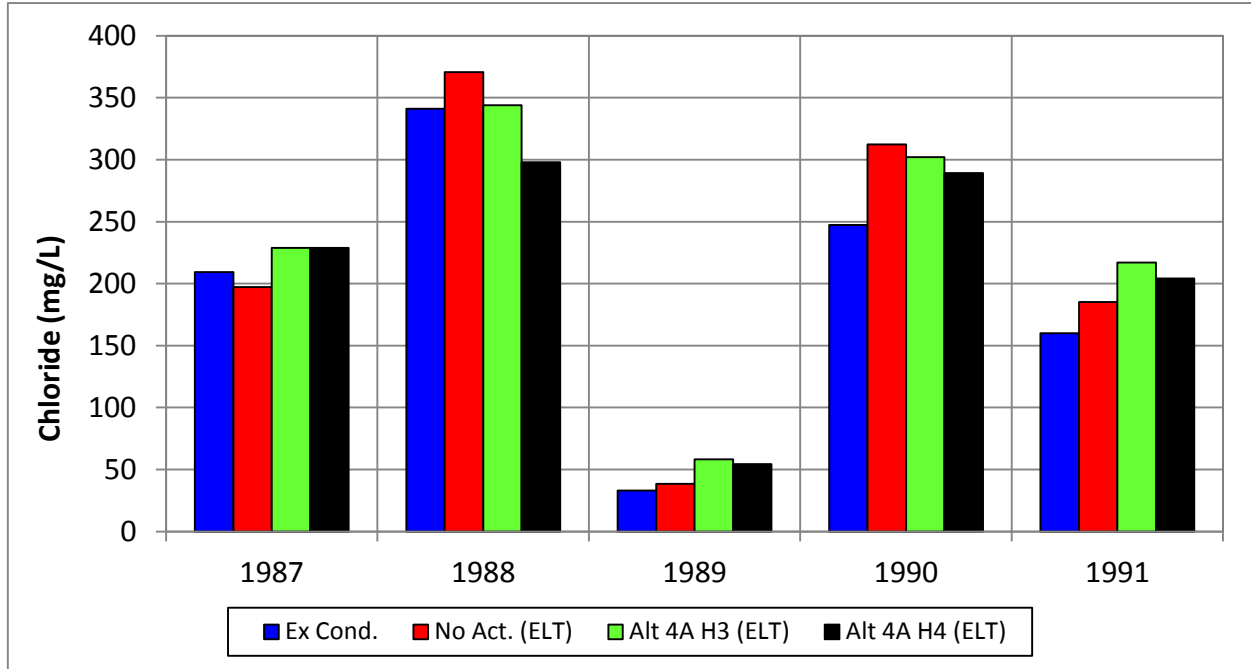


Figure CI-9. Modeled Chloride Concentrations in the San Joaquin River at Antioch for April of drought Years (1987–1991) using the Mass Balance Approach.

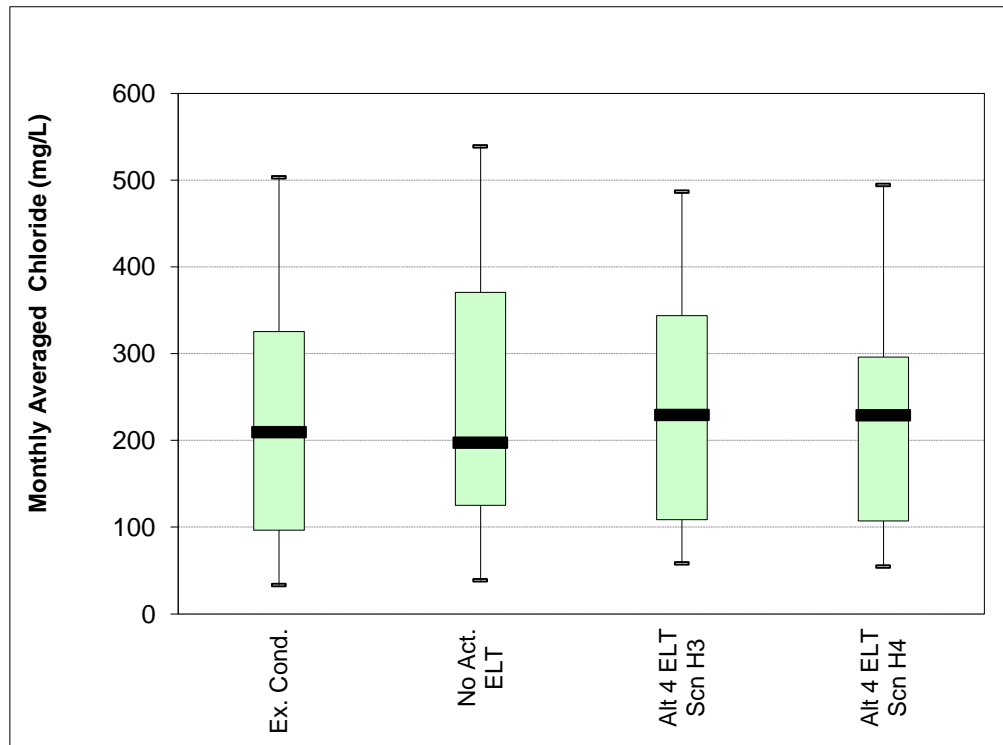


Figure CI-10. Modeled chloride Concentration Box-and-Whisker Plot for the San Joaquin River at Antioch for April of Dry and Critical Water Years using the Mass Balance Approach.

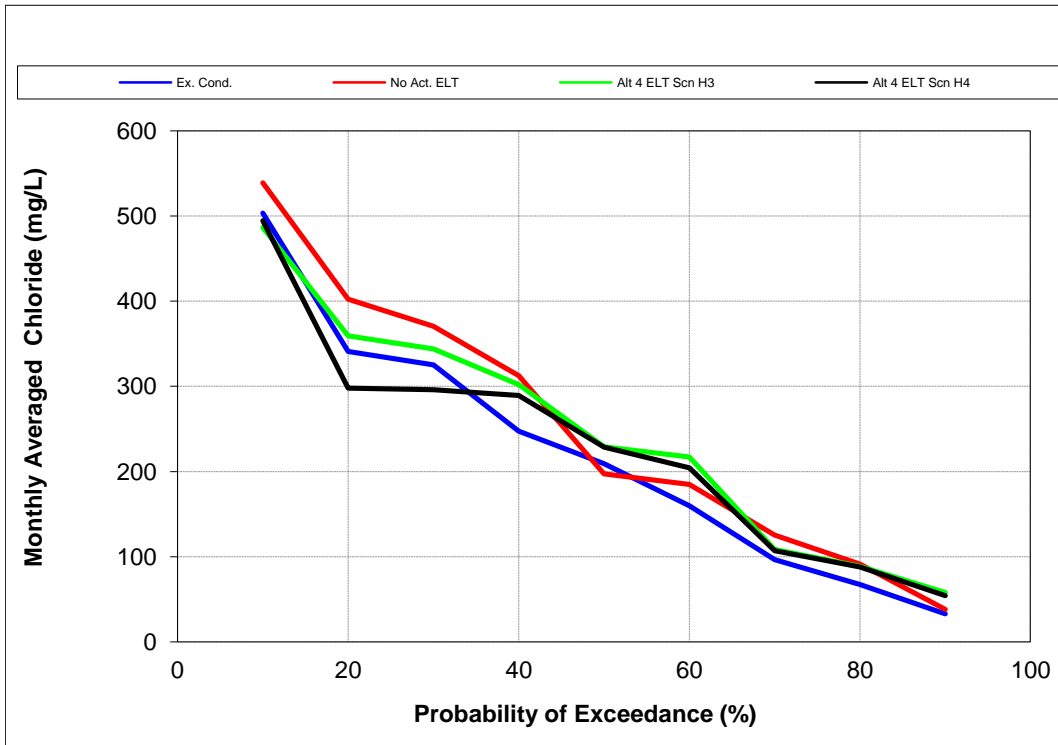


Figure CI-11. Modeled Chloride Concentration Exceedance Plot for the San Joaquin River at Antioch for April of Dry and Critical Water Years using the Mass Balance Approach.

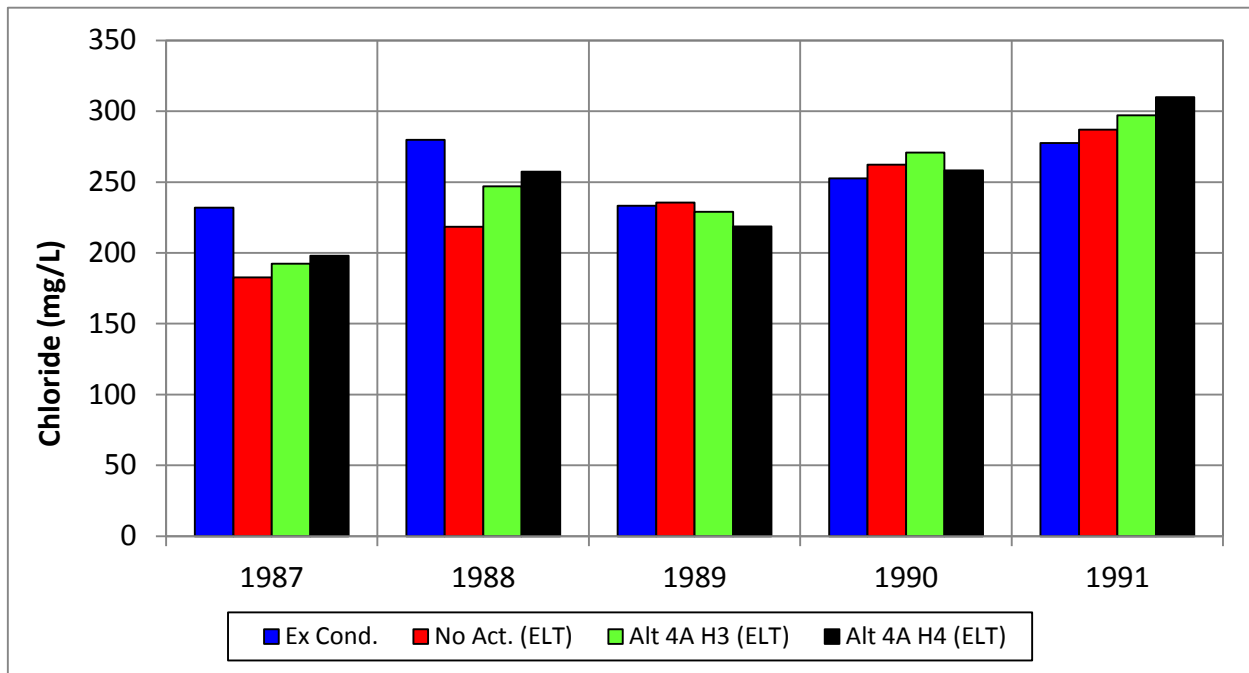


Figure CI-12. Modeled Chloride Concentrations at Contra Costa Pumping Plant #1 for September of Drought Years (1987–1991) using the Mass Balance Approach.

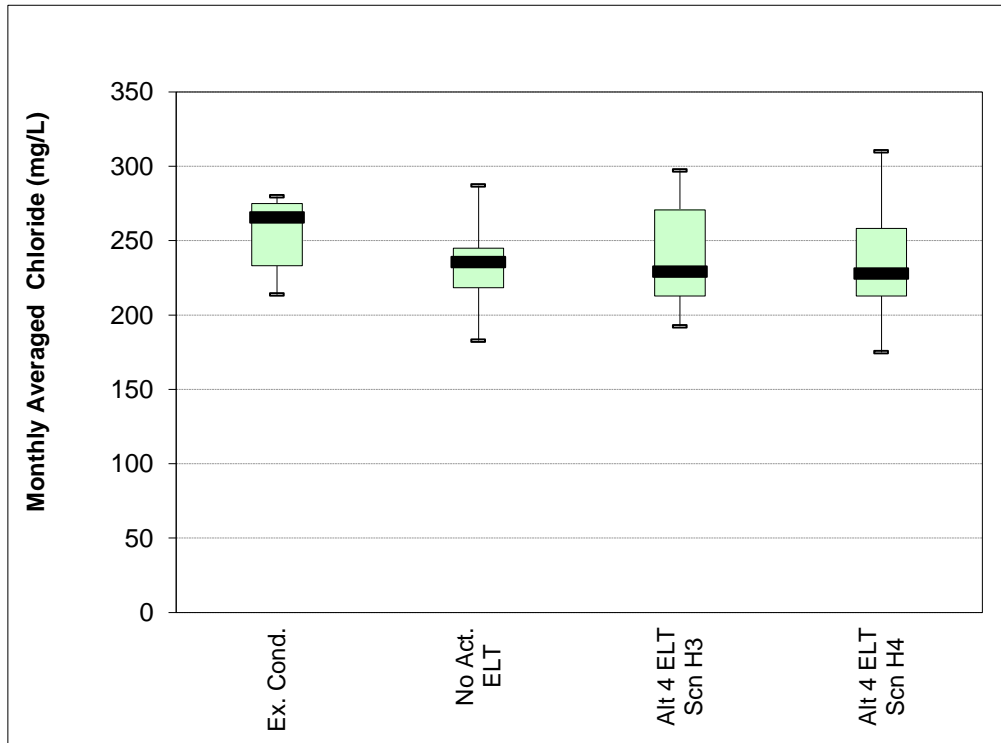


Figure CI-13. Modeled Chloride Concentration Box-and-Whisker Plot for Contra Costa Pumping Plant #1 for September of Dry and Critical Water Years using the Mass Balance Approach.

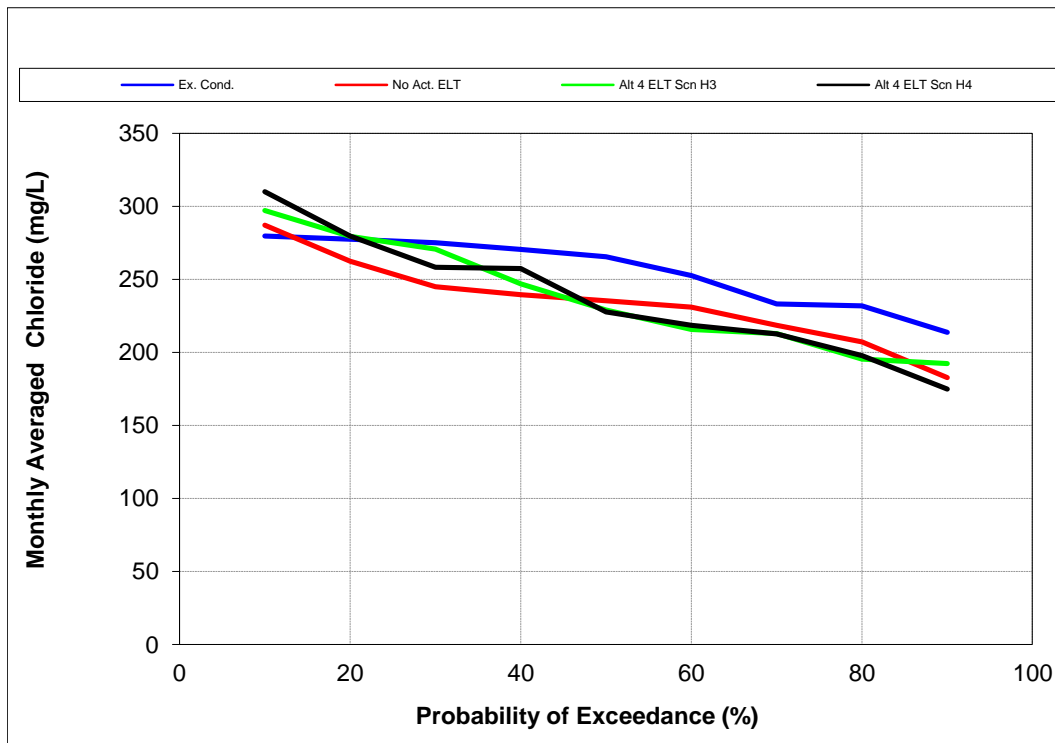


Figure CI-14. Modeled Chloride Concentration Exceedance Plot for Contra Costa Pumping Plant #1 for September of Dry and Critical Water Years using the Mass Balance Approach.

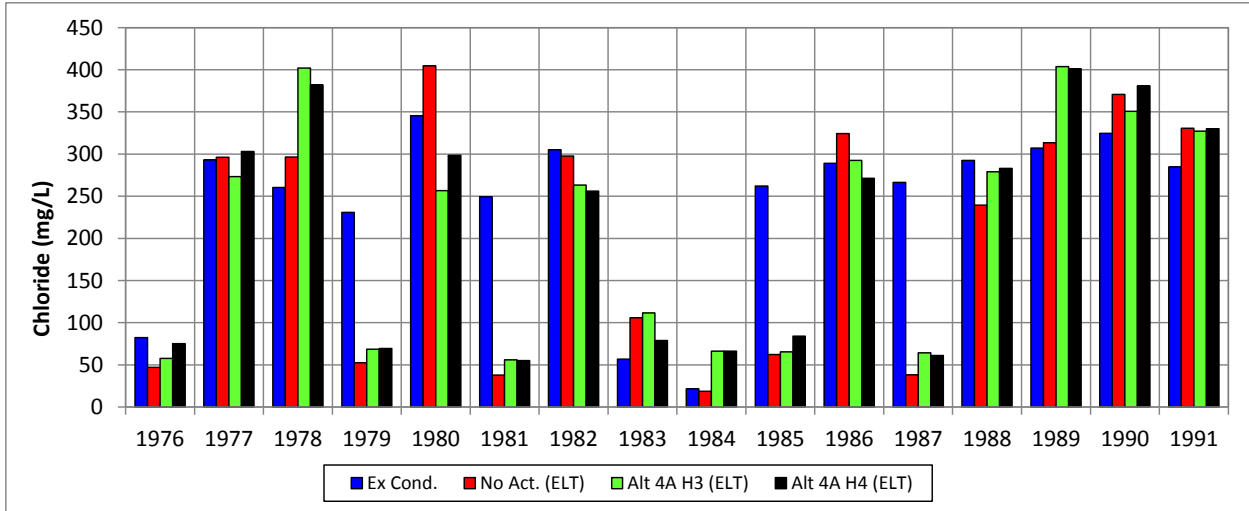


Figure CI-15. Modeled Chloride Concentrations for Contra Costa Pumping Plant #1 for October of all Modeled Years using the Mass Balance Approach.

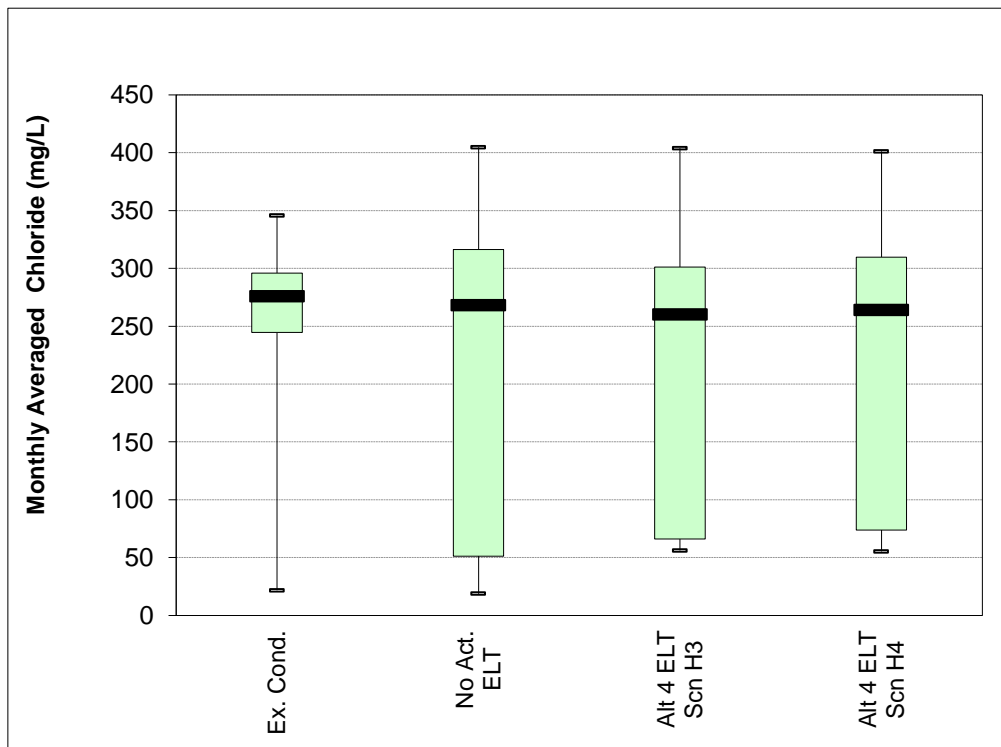


Figure CI-16. Modeled Chloride Concentration Box-and-Whisker Plot for Contra Costa Pumping Plant #1 for October of all Modeled Years using the Mass Balance Approach.

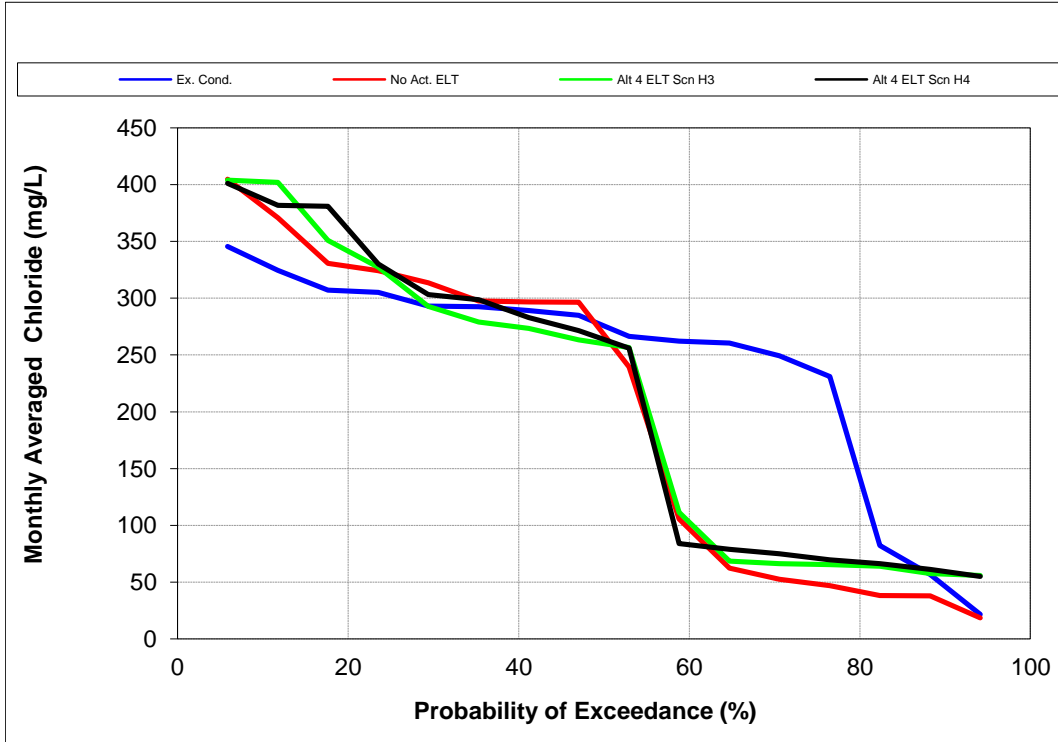


Figure CI-17. Modeled Chloride Concentration Exceedance Plot for Contra Costa Pumping Plant #1 for October of all Modeled Years using the Mass Balance Approach.

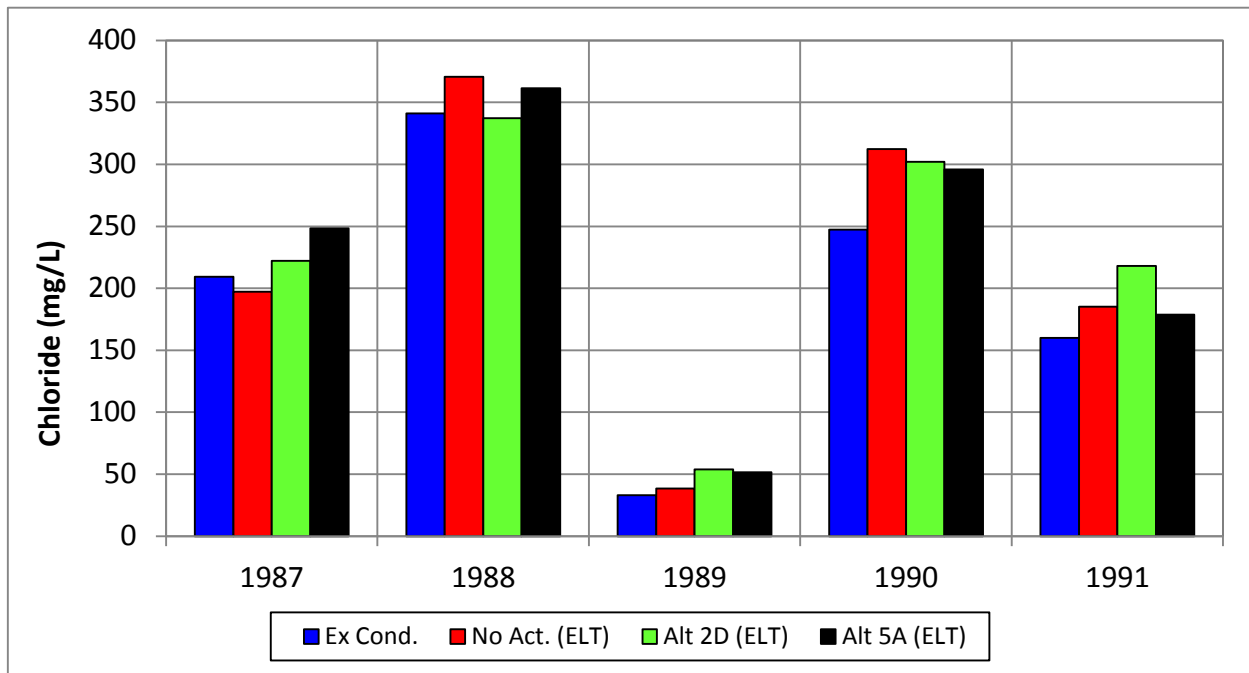


Figure CI-18. Modeled Chloride Concentrations in the San Joaquin River at Antioch for April of Drought Years (1987–1991) using the Mass Balance Approach.



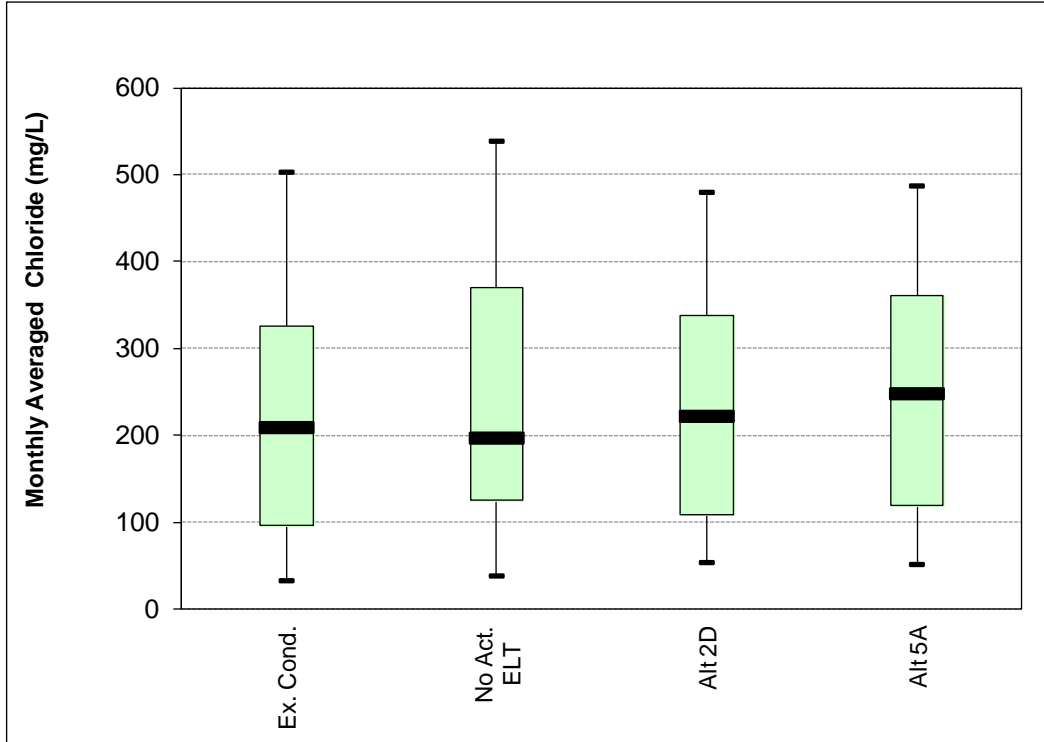


Figure CI-19. Modeled Chloride Concentration Box-and-Whisker Plot for the San Joaquin River at Antioch for April of Dry and Critical Water Years using the Mass Balance Approach.

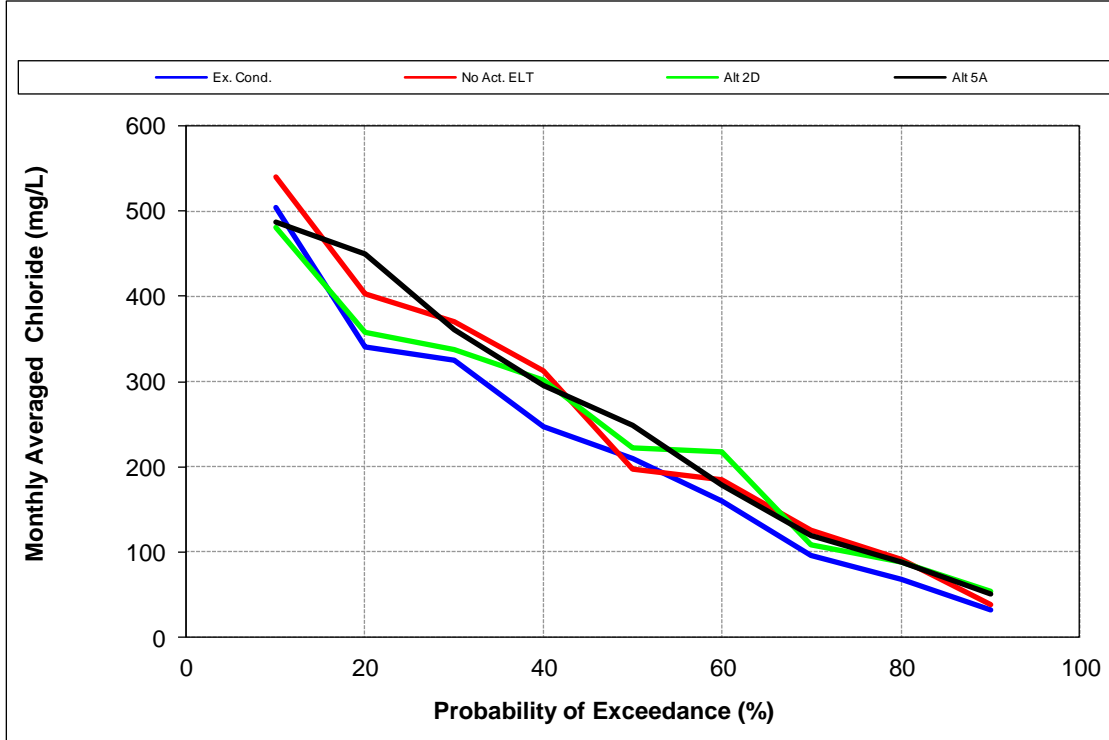


Figure CI-20. Modeled Chloride Concentration Exceedance Plot for the San Joaquin River at Antioch for April of Dry and Critical Water Years using the Mass Balance Approach.

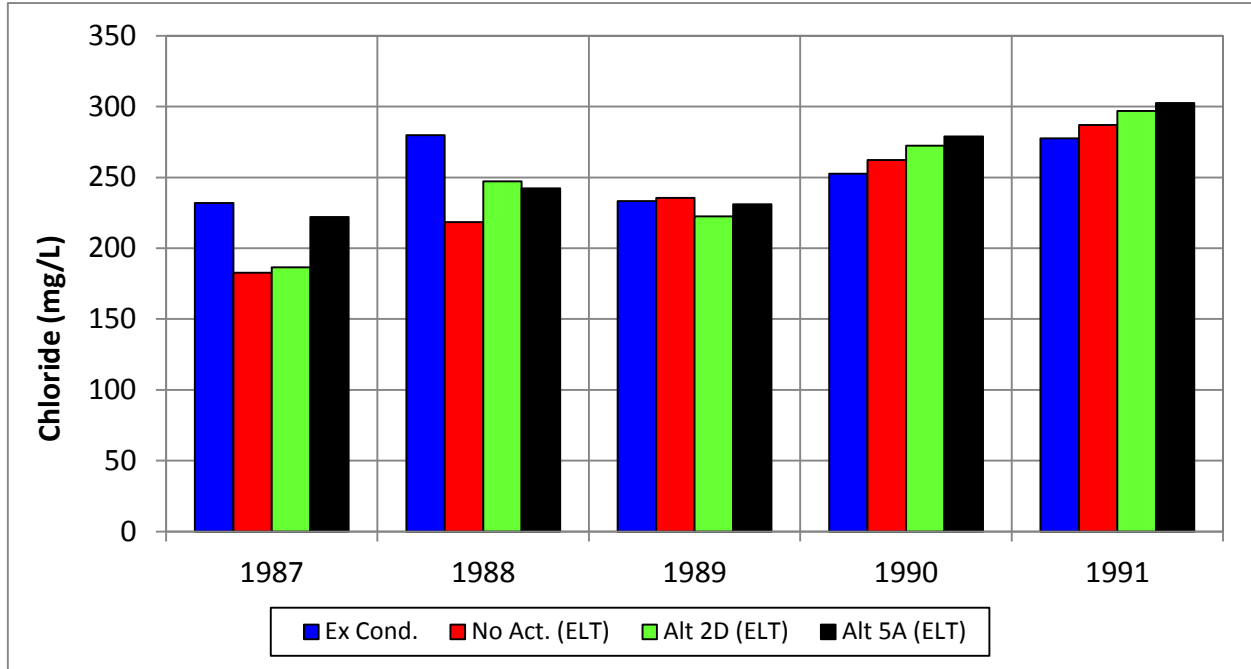


Figure CI-21. Modeled Chloride Concentrations at Contra Costa Pumping Plant #1 for September of Drought Years (1987–1991) using the Mass Balance Approach.

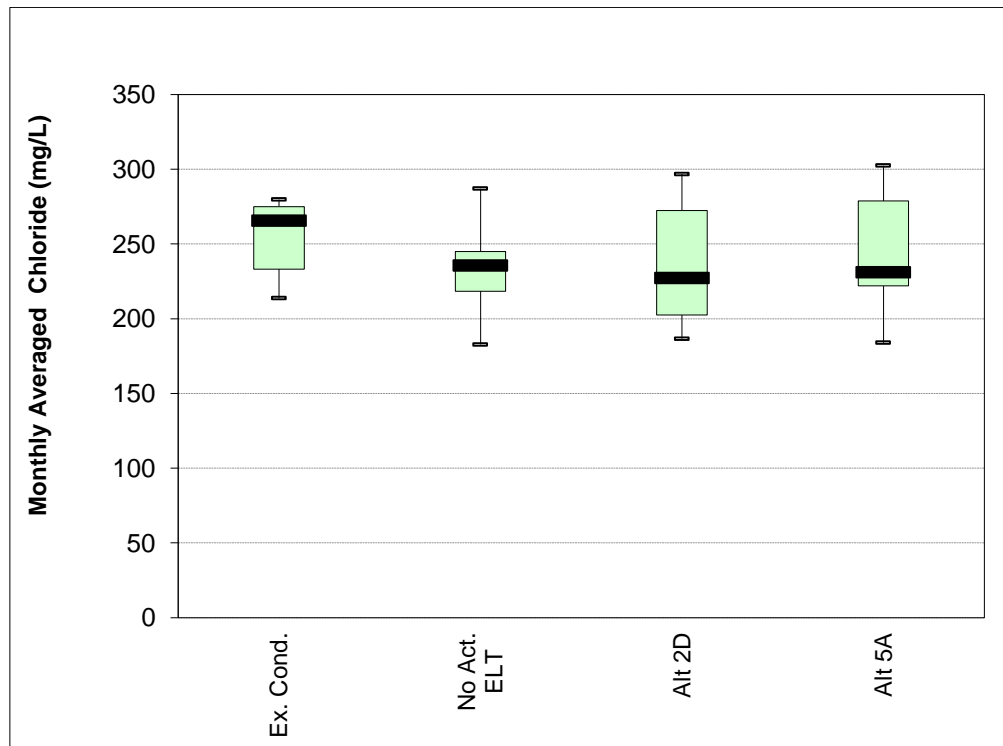


Figure CI-22. Modeled Chloride Concentration Box-and-Whisker Plot for Contra Costa Pumping Plant #1 for September of Dry and Critical Water Years using the Mass Balance Approach.

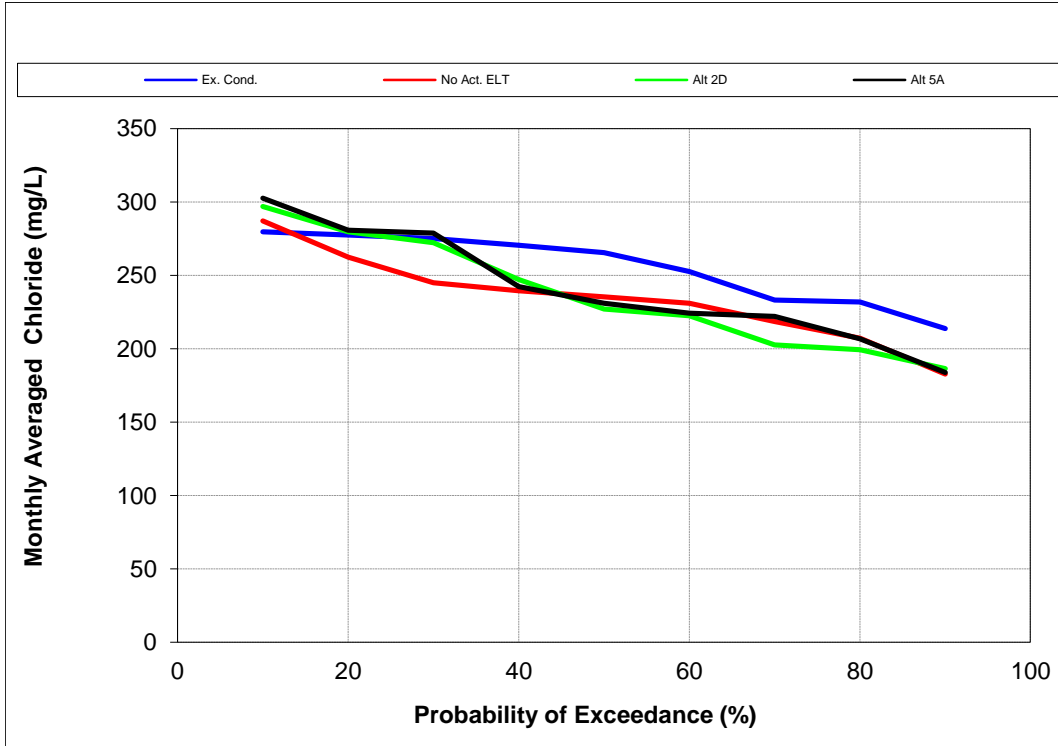


Figure CI-23. Modeled Chloride Concentration Exceedance Plot for Contra Costa Pumping Plant #1 for September of Dry and Critical Water Years using the Mass Balance Approach.

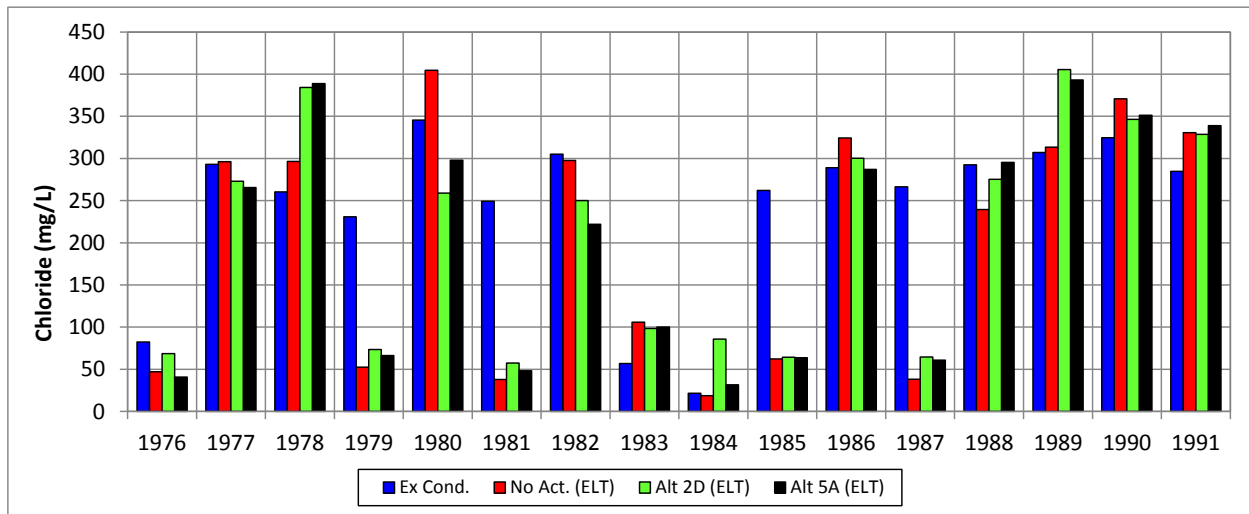


Figure CI-24. Modeled Chloride Concentrations for Contra Costa Pumping Plant #1 for October of all Modeled Years using the Mass Balance Approach.

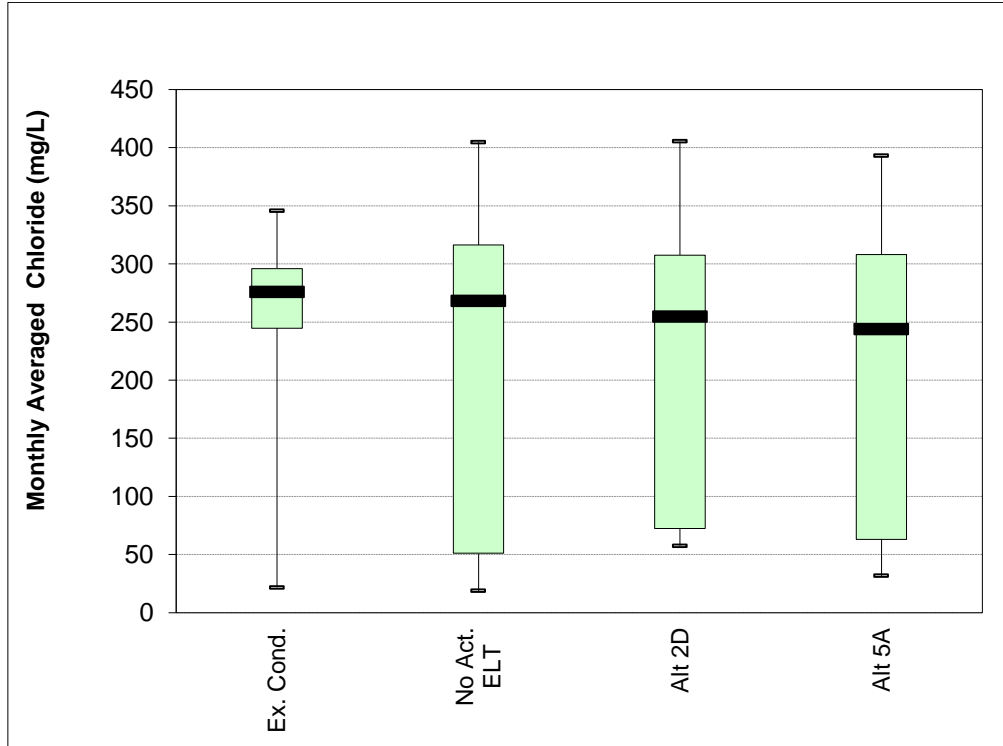


Figure CI-25. Modeled Chloride Concentration Box-and-Whisker Plot for Contra Costa Pumping Plant #1 for October of all Modeled Years using the Mass Balance Approach.

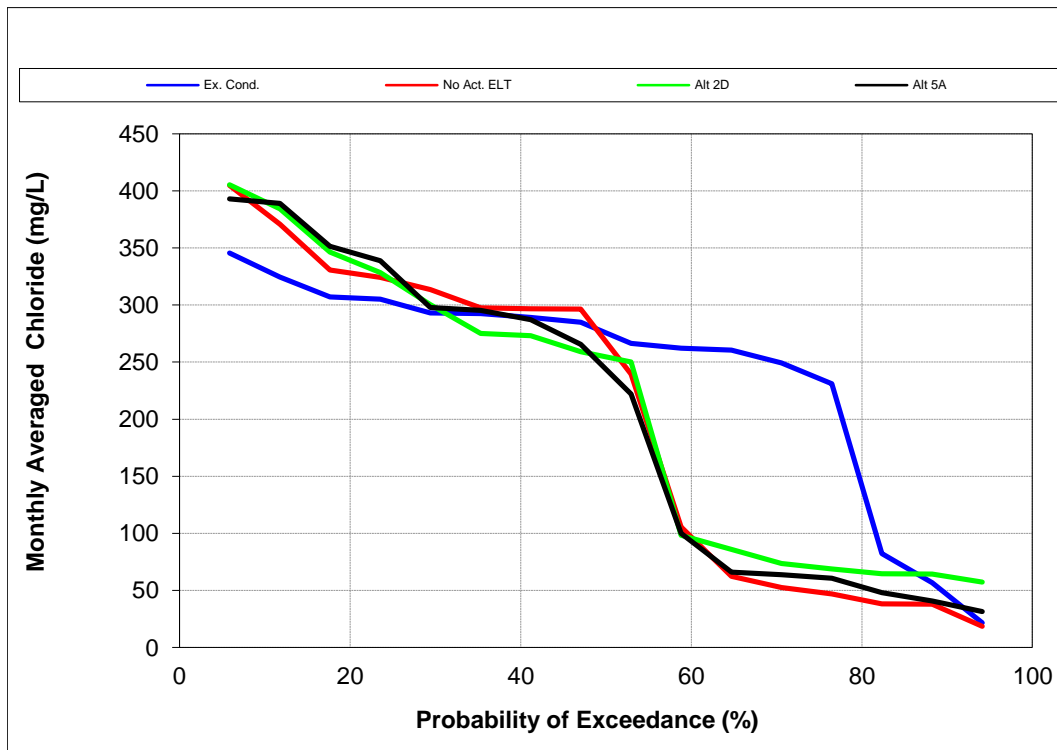
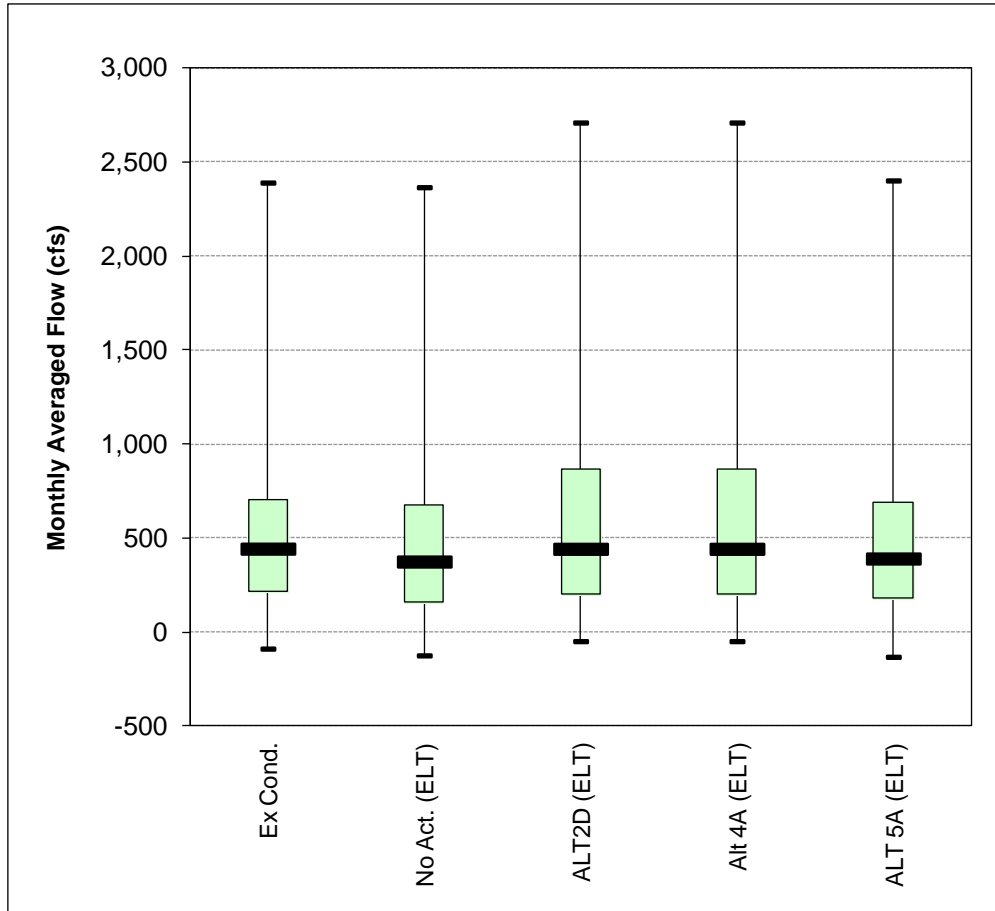


Figure CI-26. Modeled Chloride Concentration Exceedance Plot for Contra Costa Pumping Plant #1 for October of all Modeled Years using the Mass Balance Approach.



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**Figure DO-1. Monthly Average Flow in the San Joaquin River at Stockton for May–October of Dry and Critical Water Year Types for Existing Conditions, No Action (ELT) and Alternatives 2D, 4A, and 5A. Shown are the Maximum, 75th Percentile, Median, 25th Percentile, and Minimum Flows.**

1 **Table EC-1. Number of Days Delta Locations Exceed Bay-Delta Water Quality Control Plan Objectives, and Number of Days out of Compliance,**  
 2 **for Existing Conditions, the No Action Alternative ELT, and Alternative 4A ELT.**

Location <sup>a</sup>	# of Days Objective Applicable	# of Days Objective Exceeded <sup>b</sup>				% of Days Objective Exceeded <sup>b</sup>				# of Days Out of Compliance <sup>c</sup>				% of Days Out of Compliance <sup>c</sup>			
		Ex. Cond.	No Act. ELT	Alt 4A H3 ELT	Alt 4A H4 ELT	Ex. Cond.	No Act. ELT	Alt 4A H3 ELT	Alt 4A H4 ELT	Ex. Cond.	No Act. ELT	Alt 4A H3 ELT	Alt 4A H4 ELT	Ex. Cond.	No Act. ELT	Alt 4A H3 ELT	Alt 4A H4 ELT
Sacramento River at Emmaton (AGR)	2,176	120	278	363	381	6	13	17	18	233	466	563	600	11	21	26	28
San Joaquin River at Jersey Point (AGR)	2,176	415	419	336	265	19	19	15	12	623	601	544	447	29	28	25	21
S. Fork Mokelumne River at Terminous (AGR)	2,176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at San Andreas Landing (AGR)	2,176	14	6	53	0	1	0	2	0	27	19	92	0	1	1	4	0
San Joaquin River at Vernalis (AGR)	5,842	163	146	146	145	3	2	2	2	424	407	407	406	7	7	7	7
San Joaquin River at Brandt Bridge (AGR)	5,842	188	174	170	170	3	3	3	3	449	435	431	431	8	7	7	7
Old River near Middle River (AGR)	5,842	183	169	173	172	3	3	3	3	444	430	434	433	8	7	7	7
Old River at Tracy Bridge (AGR)	5,842	250	216	224	227	4	4	4	4	569	506	485	488	10	9	8	8
San Joaquin River at Jersey Point (F&W)	671	0	19	0	0	0	3	0	0	0	19	0	0	0	3	0	0
San Joaquin River at Prisoners Point (F&W)	671	38	10	126	148	6	1	17	20	64	10	145	165	10	1	20	23

Notes:

<sup>a</sup> (AGR) = for the protection of agricultural beneficial uses; (F&W) = for the protection of fish and wildlife beneficial uses.

<sup>b</sup> Number of days the Bay-Delta Water Quality Control Plan EC objective was exceeded at the location.

<sup>c</sup> Number of days the EC at the location was out of compliance with the Bay-Delta Water Quality Control Plan EC objective. Days out of compliance was determined according to Table 2, footnote 2, which states: "Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period. The averaging period commences with the first day of the time period for the applicable objective. If the objective is not met on the last day of the averaging period, all days in the averaging period are considered out of compliance."

1 **Table EC-2: Period Average EC Levels at Bay-Delta Water Quality Control Plan Compliance Locations and Frequency of Exceedance of Bay-**  
 2 **Delta Water Quality Control Plan Objectives for Banks and Jones Pumping Plants for Existing Conditions, the No Action Alternative, and**  
 3 **Alternative 4A ELT.**

Location		Period <sup>a</sup>	Period Average Electrical Conductivity ( $\mu\text{mhos/cm}$ )				Bay-Delta Water Quality Control Plan objective (1,000 $\mu\text{mhos/cm}$ ) <sup>b</sup>			
			Ex. Cond.	No Act. ELT	Alt 4A H3 ELT	Alt 4A H4 ELT	Frequency of Criterion/Objective Exceedance (%)			
							Ex. Cond.	No Act. ELT	Alt 4A H3 ELT	Alt 4A H4 ELT
Western Delta	Sac. R. at Emmaton	All	1,069	1,082	995	1,013	-	-	-	-
		Drought	1,449	1,603	1,512	1,521	-	-	-	-
	SJR at Jersey Point	All	1,135	1,040	836	828	-	-	-	-
		Drought	1,410	1,414	1,203	1,179	-	-	-	-
Interior Delta	S.F. Moke. R. Term.	All	203	203	214	214	-	-	-	-
		Drought	209	208	218	218	-	-	-	-
	SJR at San. and. Landing	All	395	386	372	370	-	-	-	-
		Drought	470	487	482	472	-	-	-	-
Southern Delta	SJR at Vernalis	All	581	559	560	559	-	-	-	-
		Drought	718	691	691	692	-	-	-	-
	SJR at Brandt Bridge	All	586	565	565	565	-	-	-	-
		Drought	726	699	698	698	-	-	-	-
	Old River at Middle River	All	586	566	567	567	-	-	-	-
		Drought	726	700	701	702	-	-	-	-
	Old River at Tracy Bridge	All	597	573	580	579	-	-	-	-
		Drought	737	702	705	704	-	-	-	-
SJR	SJR at Prisoners Pt.	All	440	417	412	413	-	-	-	-
		Drought	508	503	499	495	-	-	-	-
Export Area	Banks PP	All	530	502	397	379	1	3	1	0
		Drought	646	625	511	470	2	3	2	0
	Jones PP	All	555	530	414	414	0	1	0	1
		Drought	683	660	525	532	0	0	0	0

## Notes:

<sup>a</sup> ALL: Water years 1976–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

<sup>b</sup> A 1,000  $\mu\text{mhos/cm}$  objective, as a monthly average of mean daily EC, applies to the Banks and Jones pumping plants year-round. Compliance with EC objectives for other locations in the table is assessed on a different time-step and, thus, is summarized in a separate table in this Appendix.

1 **Table EC-3: Period Average EC Levels (mS/cm) for the Sacramento River at Collinsville for Existing**  
 2 **Conditions, the No Action Alternative, and Alternative 4A ELT.**

	<b>Ex. Cond.</b>	<b>No Act. ELT</b>	<b>Alt 4A H3 ELT</b>	<b>Alt 4A H4 ELT</b>
<b>JAN</b>	2.7	2.7	2.1	2.0
<b>FEB</b>	1.7	1.7	1.4	1.3
<b>MAR</b>	0.9	1.1	1.0	1.0
<b>APR</b>	1.0	1.1	1.2	1.1
<b>MAY</b>	1.9	1.9	2.1	2.0
<b>JUN</b>	3.2	3.4	3.4	3.4
<b>JUL</b>	4.5	4.6	4.8	5.0
<b>AUG</b>	5.6	5.8	6.3	6.4
<b>SEP</b>	7.3	6.4	6.7	6.7
<b>OCT</b>	7.7	6.7	5.2	5.2
<b>NOV</b>	7.4	6.4	4.9	4.9
<b>DEC</b>	5.2	4.8	4.3	4.3

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4 **Table EC-4: Period Average EC Levels (mS/cm) for Montezuma Slough at National Steele, Suisun Marsh**  
 5 **for Existing Conditions, the No Action Alternative, and Alternative 4A ELT.**

	<b>Ex. Cond.</b>	<b>No Act. ELT</b>	<b>Alt 4A H3 ELT</b>	<b>Alt 4A H4 ELT</b>
<b>JAN</b>	2.7	2.7	3.0	3.0
<b>FEB</b>	1.7	1.8	2.0	1.9
<b>MAR</b>	1.3	1.6	1.5	1.4
<b>APR</b>	1.6	1.8	1.5	1.4
<b>MAY</b>	2.7	2.8	2.1	2.0
<b>JUN</b>	4.2	4.5	3.0	2.9
<b>JUL</b>	6.3	6.5	4.1	4.3
<b>AUG</b>	7.8	8.0	5.5	5.6
<b>SEP</b>	9.8	9.1	6.5	6.5
<b>OCT</b>	7.2	6.4	5.6	5.6
<b>NOV</b>	7.1	6.3	5.4	5.3
<b>DEC</b>	4.9	4.7	4.9	5.0

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1 **Table EC-5: Period Average EC Levels (mS/cm) for Montezuma Slough near Beldon Landing, Suisun**  
 2 **Marsh for Existing Conditions, the No Action Alternative, and Alternative 4A ELT.**

	<b>Ex. Cond.</b>	<b>No Act. ELT</b>	<b>Alt 4A H3 ELT</b>	<b>Alt 4A H4 ELT</b>
<b>JAN</b>	3.3	3.3	8.2	8.2
<b>FEB</b>	2.1	2.1	5.5	5.4
<b>MAR</b>	2.5	2.8	4.5	4.4
<b>APR</b>	2.9	3.2	4.3	4.1
<b>MAY</b>	4.3	4.5	5.8	5.4
<b>JUN</b>	6.2	6.6	7.7	7.4
<b>JUL</b>	9.0	9.3	10.0	10.1
<b>AUG</b>	11.0	11.1	12.2	12.3
<b>SEP</b>	13.1	12.6	13.5	13.6
<b>OCT</b>	7.8	7.1	12.1	12.2
<b>NOV</b>	7.6	6.8	11.6	11.7
<b>DEC</b>	5.1	4.8	10.5	10.5

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4 **Table EC-6: Period Average EC Levels (mS/cm) for Chadbourne Slough near Sunrise Duck Club, Suisun**  
 5 **Marsh for Existing Conditions, the No Action Alternative, and Alternative 4A ELT.**

	<b>Ex. Cond.</b>	<b>No Act. ELT</b>	<b>Alt 4A H3 ELT</b>	<b>Alt 4A H4 ELT</b>
<b>JAN</b>	7.1	7.1	10.2	10.2
<b>FEB</b>	4.8	4.9	7.5	7.4
<b>MAR</b>	3.8	4.1	5.8	5.7
<b>APR</b>	3.6	4.0	5.5	5.3
<b>MAY</b>	4.9	5.1	6.6	6.2
<b>JUN</b>	7.0	7.2	8.5	8.1
<b>JUL</b>	9.7	9.9	10.9	10.8
<b>AUG</b>	11.7	11.7	13.0	13.1
<b>SEP</b>	13.7	13.3	14.4	14.5
<b>OCT</b>	12.3	11.2	13.6	13.6
<b>NOV</b>	11.2	10.3	13.1	13.1
<b>DEC</b>	9.4	8.8	12.2	12.2

6

- 1 **Table EC-7: Period Average EC Levels (mS/cm) for Suisun Slough 300 Feet South of Volanti Slough,**  
 2 **Suisun Marsh for Existing Conditions, the No Action Alternative, and Alternative 4A ELT.**

	<b>Ex. Cond.</b>	<b>No Act. ELT</b>	<b>Alt 4A H3 ELT</b>	<b>Alt 4A H4 ELT</b>
<b>JAN</b>	6.4	6.4	8.7	8.6
<b>FEB</b>	4.4	4.4	6.0	5.9
<b>MAR</b>	3.7	4.0	4.9	4.8
<b>APR</b>	3.5	3.9	4.9	4.6
<b>MAY</b>	4.8	5.0	6.6	6.2
<b>JUN</b>	6.7	7.0	8.8	8.5
<b>JUL</b>	9.4	9.7	11.5	11.5
<b>AUG</b>	11.5	11.5	13.8	13.9
<b>SEP</b>	13.6	13.2	14.8	14.9
<b>OCT</b>	11.5	10.6	13.1	13.2
<b>NOV</b>	10.3	9.5	12.4	12.4
<b>DEC</b>	8.4	7.8	11.2	11.2

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1 Table EC-8A. Period Average Change in EC Levels for Alternative 4A-H3 ELT Relative to Existing Conditions and the No Action Alternative ELT.

Electrical Conductivity		Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change		
Alt 4 ELT	Scn H3			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.
Western Delta	Sac. R. at Emmaton	ALL	-661 (-30%)	-613 (-29%)	-691 (-33%)	-554 (-28%)	-135 (-11%)	-143 (-11%)	-110 (-18%)	-121 (-19%)	-60 (-15%)	-76 (-18%)	15 (5%)	-16 (-5%)	29 (10%)	8 (3%)	58 (12%)	53 (11%)	58 (7%)	10 (1%)	206 (21%)	119 (11%)	364 (27%)	179 (12%)	44 (2%)	115 (6%)	-74 (-7%)	-87 (-8%)		
		DROUGHT	-765 (-26%)	-821 (-28%)	-805 (-28%)	-815 (-28%)	-34 (-2%)	-175 (-9%)	-107 (-13%)	-239 (-24%)	-39 (-7%)	-145 (-22%)	45 (14%)	-17 (-4%)	52 (18%)	24 (7%)	210 (36%)	107 (16%)	234 (23%)	84 (7%)	651 (49%)	474 (31%)	720 (42%)	299 (14%)	594 (4%)	134 (4%)	63 (4%)	-91 (-6%)		
	SJR at Jersey Point	ALL	-888 (-46%)	-579 (-35%)	-1152 (-52%)	-813 (-44%)	-503 (-30%)	-348 (-23%)	-273 (-32%)	-250 (-30%)	-92 (-20%)	-100 (-22%)	5 (2%)	-13 (-4%)	17 (6%)	9 (3%)	8 (2%)	7 (2%)	7 (1%)	-18 (-3%)	-284 (-20%)	-169 (-13%)	-128 (-8%)	-84 (-6%)	-303 (-15%)	-87 (-5%)	-299 (-26%)	-204 (-20%)		
		DROUGHT	-762 (-33%)	-825 (-35%)	-953 (-37%)	-831 (-34%)	-376 (-17%)	-313 (-15%)	-239 (-22%)	-332 (-28%)	-94 (-17%)	-185 (-29%)	19 (6%)	-26 (-7%)	27 (10%)	16 (6%)	64 (16%)	14 (3%)	75 (11%)	-26 (-3%)	-526 (-24%)	-338 (-17%)	-40 (-2%)	127 (7%)	327 (14%)	194 (8%)	-207 (-15%)	-210 (-15%)		
Interior Delta	S. Fork Moke. R. Term.	ALL	9 (5%)	8 (4%)	10 (5%)	9 (5%)	5 (3%)	6 (3%)	14 (6%)	15 (6%)	14 (6%)	16 (7%)	18 (8%)	18 (7%)	14 (4%)	14 (7%)	9 (5%)	10 (5%)	11 (6%)	11 (6%)	8 (4%)	8 (4%)	9 (5%)	7 (4%)	7 (4%)	6 (3%)	11 (5%)	11 (5%)		
		DROUGHT	8 (4%)	8 (4%)	8 (4%)	8 (4%)	2 (2%)	3 (2%)	5 (3%)	7 (4%)	6 (4%)	10 (5%)	16 (7%)	20 (8%)	9 (4%)	11 (5%)	10 (5%)	11 (7%)	14 (8%)	15 (6%)	12 (6%)	11 (5%)	9 (4%)	7 (4%)	7 (3%)	7 (4%)	9 (4%)	10 (5%)		
	SJR at San And. Landing	ALL	-34 (-7%)	-27 (-5%)	-202 (-32%)	-170 (-29%)	-116 (-20%)	-85 (-15%)	-80 (-14%)	-56 (-13%)	-2 (-4%)	-9 (-3%)	7 (3%)	7 (3%)	7 (7%)	18 (8%)	12 (5%)	18 (9%)	12 (5%)	15 (7%)	29 (8%)	26 (0%)	1 (7%)	25 (8%)	33 (9%)	36 (9%)	48 (10%)	53 (-6%)	-23 (-4%)	
		DROUGHT	31 (5%)	-34 (-5%)	-130 (-18%)	-196 (-25%)	-33 (-4%)	-46 (-6%)	-28 (-5%)	-54 (-10%)	-1 (-0%)	-25 (-7%)	14 (6%)	11 (4%)	16 (7%)	19 (8%)	27 (11%)	21 (9%)	52 (20%)	32 (12%)	-45 (-9%)	0 (-0%)	46 (8%)	63 (12%)	199 (31%)	142 (21%)	12 (3%)	-6 (-1%)		
Southern Delta	SJR at Vernalis	ALL	-12 (-2%)	0 (0%)	-39 (-7%)	0 (-0%)	-44 (-8%)	0 (-0%)	-62 (-8%)	3 (0%)	-26 (-4%)	0 (0%)	-29 (-4%)	0 (0%)	-19 (-4%)	0 (0%)	-19 (0%)	0 (0%)	16 (3%)	0 (0%)	12 (2%)	0 (0%)	-10 (-2%)	0 (0%)	-20 (-4%)	0 (0%)	-21 (-4%)	0 (0%)		
		DROUGHT	-35 (-6%)	0 (0%)	-46 (-7%)	0 (-0%)	-55 (-8%)	0 (-0%)	-78 (-9%)	0 (-0%)	-9 (-1%)	0 (-0%)	-20 (-2%)	0 (0%)	-18 (-3%)	0 (0%)	-16 (-3%)	0 (0%)	-7 (-1%)	0 (0%)	-6 (-1%)	0 (0%)	-8 (-1%)	0 (0%)	-8 (-4%)	0 (0%)	-22 (-4%)	0 (0%)		
	SJR at Brant Bridge	ALL	-13 (-3%)	0 (-0%)	-37 (-6%)	0 (0%)	-44 (-6%)	1 (0%)	-63 (-8%)	-1 (0%)	-28 (-4%)	1 (0%)	-28 (-4%)	-1 (-0%)	-21 (-5%)	-3 (-1%)	-19 (-4%)	-1 (-0%)	16 (3%)	0 (0%)	9 (1%)	1 (-0%)	-8 (-1%)	1 (0%)	-19 (-3%)	0 (0%)	-21 (-4%)	0 (0%)		
		DROUGHT	-34 (-6%)	0 (-0%)	-46 (-7%)	0 (0%)	-55 (-7%)	1 (0%)	-78 (-9%)	-2 (0%)	-14 (-2%)	2 (0%)	-20 (-2%)	-2 (-0%)	-21 (-3%)	-7 (-1%)	-16 (-3%)	-1 (-0%)	-6 (-1%)	0 (-0%)	-18 (-3%)	4 (1%)	-9 (-1%)	4 (1%)	-20 (-3%)	0 (0%)	-28 (-4%)	0 (0%)		
	Old River at Middle River	ALL	-10 (-2%)	4 (1%)	-36 (-6%)	0 (0%)	-44 (-6%)	0 (0%)	-57 (-8%)	7 (1%)	-26 (-4%)	2 (0%)	-26 (-4%)	2 (0%)	-15 (-3%)	4 (1%)	-17 (-4%)	1 (0%)	16 (3%)	0 (-0%)	13 (2%)	0 (0%)	-8 (-1%)	0 (0%)	-19 (-4%)	0 (0%)	-19 (-3%)	0 (0%)		
		DROUGHT	-31 (-5%)	3 (1%)	-45 (-7%)	0 (0%)	-55 (-8%)	0 (0%)	-72 (-9%)	4 (0%)	-12 (-1%)	1 (0%)	-17 (-2%)	2 (0%)	-9 (-2%)	6 (1%)	-13 (-2%)	2 (0%)	-7 (0%)	0 (0%)	-4 (-1%)	1 (0%)	-7 (-1%)	0 (0%)	-21 (-3%)	0 (0%)	-24 (-3%)	2 (0%)		
	Old River at Tracy Bridge	ALL	3 (1%)	22 (4%)	-20 (-4%)	12 (2%)	-43 (-6%)	0 (-0%)	-39 (-5%)	22 (3%)	-19 (-3%)	13 (2%)	-19 (-3%)	8 (1%)	22 (5%)	-12 (-3%)	6 (1%)	-4 (-1%)	-4 (-1%)	-14 (-2%)	-4 (-3%)	-4 (-2%)	-14 (-3%)	-16 (-3%)	-17 (-0%)	-1 (-3%)	-15 (-3%)	3 (0%)	-16 (1%)	7 (1%)
		DROUGHT	4 (1%)	35 (6%)	-28 (-4%)	21 (3%)	-53 (-8%)	0 (0%)	-59 (-8%)	13 (2%)	-16 (-2%)	2 (0%)	-8 (-1%)	12 (3%)	20 (6%)	35 (17%)	-7 (1%)	7 (1%)	-55 (-9%)	-8 (-1%)	-83 (-13%)	-47 (-8%)	-71 (-11%)	-26 (-4%)	-27 (-4%)	-4 (-1%)	-32 (-4%)	3 (0%)		
SJR	SJR at Prisoners Point	ALL	-28 (-6%)	-4 (-1%)	-173 (-29%)	-140 (-25%)	-161 (-26%)	-110 (-11%)	-57 (-9%)	-44 (-6%)	24 (10%)	42 (12%)	35 (10%)	53 (17%)	35 (11%)	54 (17%)	14 (4%)	29 (12%)	35 (16%)	44 (9%)	-36 (-9%)	0 (0%)	-26 (-6%)	2 (0%)	1 (3%)	16 (6%)	-28 (-6%)	-5 (-1%)		
		DROUGHT	8 (1%)	-30 (-5%)	-122 (-19%)	-185 (-26%)	-102 (-14%)	-85 (-12%)	-40 (-7%)	-60 (-9%)	26 (6%)	28 (7%)	76 (20%)	106 (30%)	62 (17%)	86 (26%)	44 (14%)	50 (17%)	46 (13%)	36 (13%)	-122 (-22%)	-63 (-13%)	-68 (-11%)	0 (0%)	82 (14%)	72 (12%)	-9 (-2%)	-4 (-1%)		
Export Area	Banks PP	ALL	-112 (-20%)	-76 (-14%)	-209 (-33%)	-189 (-28%)	-242 (-36%)	-184 (-30%)	-234 (-33%)	-212 (-24%)	-130 (-25%)	-115 (-25%)	-138 (-25%)	-117 (-25%)	-114 (-25%)	-94 (-10%)	-42 (-9%)	-21 (-5%)	-35 (-9%)	-28 (-7%)	-88 (-20%)	-63 (-16%)	-119 (-15%)	-70 (-15%)	-132 (-24%)	-115 (-21%)	-133 (-25%)	-105 (-21%)		
		DROUGHT	-24 (-4%)	-14 (-2%)	-177 (-25%)	-219 (-28%)	-229 (-28%)	-194 (-25%)	-134 (-17%)	-163 (-20%)	-59 (-10%)	-64 (-10%)	-228 (-35%)	-190 (-31%)	-188 (-30%)	-153 (-26%)	-83 (-15%)	-61 (-12%)	14 (3%)	21 (5%)	-229 (-43%)	-187 (-38%)	-205 (-28%)	-97 (-16%)	-88 (-10%)	-45 (-7%)	-134 (-21%)	-114 (-18%)		
	Jones PP	ALL	-101 (-18%)	-78 (-15%)	-204 (-33%)	-174 (-29%)	-143 (-20%)	-114 (-14%)	-226 (-32%)	-182 (-27%)	-99 (-34%)	-169 (-29%)	-230 (-36%)	-206 (-36%)	-115 (-24%)	-98 (-27%)	-120 (-27%)	-101 (-24%)	-101 (-25%)	-114 (-28%)	-52 (-11%)	-37 (-8%)	-89 (-13%)	-34 (-7%)	-119 (-22%)	-105 (-20%)	-141 (-25%)	-115 (-22%)		
		DROUGHT	-84 (-13%)	-96 (-15%)	-162 (-23%)	-207 (-28%)	-110 (-13%)	-72 (-9%)	-293 (-41%)	-252 (-39%)	-240 (-41%)	-174 (-39%)	-353 (-51%)	-318 (-49%)	-104 (-16%)	-88 (-14%)	-178 (-31%)	-164 (-29%)	-69 (-17%)	-72 (-18%)	-124 (-22%)	-85 (-17%)	-166 (-24%)	-87 (-14%)	-16 (-3%)	-4 (-1%)	-158 (-23%)	-135 (-20%)		

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4 <sup>a</sup> ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

1 **Table EC-8B. Period Average Change in EC Levels for Alternative 4A-H4 ELT Relative to Existing Conditions and the No Action Alternative ELT.**

Electrical Conductivity		Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 4 ELT	Scn H4			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Western Delta	Sac. R. at Emmaton	ALL	-632	-584	-669	-532	-103	-111	-120	-131	-65	-81	14	-17	20	0	41	36	73	26	317	230	400	214	51	122	-56	-69	
		DROUGHT	(-29%)	(-27%)	(-32%)	(-27%)	(-8%)	(-9%)	(-20%)	(-21%)	(-16%)	(-19%)	(5%)	(-6%)	(7%)	(-0%)	(9%)	(7%)	(9%)	(3%)	(33%)	(22%)	(30%)	(14%)	(2%)	(6%)	(-5%)	(-6%)	
	SJR at Jersey Point	ALL	-872	-562	-1154	-815	-525	-370	-279	-257	-99	-106	-2	-20	13	4	2	1	-1	-26	-371	-256	-113	-70	-287	-71	-307	-212	
		DROUGHT	(-45%)	(-34%)	(-52%)	(-44%)	(-31%)	(-24%)	(-32%)	(-31%)	(-22%)	(-23%)	(-1%)	(-6%)	(5%)	(1%)	(0%)	(-0%)	(-4%)	(-26%)	(-20%)	(-7%)	(-5%)	(-14%)	(-4%)	(-27%)	(-20%)		
	Interior Delta	S. Fork Moke. R. Term.	ALL	9	9	9	9	5	6	12	13	15	17	17	14	14	10	13	14	11	11	9	8	7	7	11	11		
			DROUGHT	(5%)	(5%)	(5%)	(5%)	(2%)	(3%)	(5%)	(6%)	(5%)	(6%)	(6%)	(8%)	(8%)	(7%)	(7%)	(5%)	(5%)	(7%)	(7%)	(6%)	(6%)	(5%)	(4%)	(4%)	(4%)	(5%)
SJR at San And. Landing		ALL	-32	-25	-197	-166	-122	-91	-65	-61	-11	-9	9	8	17	19	15	18	33	31	-27	-3	20	23	59	64	-25	-16	
		DROUGHT	(-6%)	(-5%)	(-31%)	(-28%)	(-21%)	(-16%)	(-15%)	(-15%)	(-4%)	(-3%)	(4%)	(4%)	(7%)	(8%)	(6%)	(7%)	(13%)	(12%)	(-7%)	(-1%)	(5%)	(5%)	(11%)	(12%)	(-6%)	(-4%)	
Southern Delta		SJR at Vernalis	ALL	-12	0	-38	0	-44	0	-65	0	-26	0	-29	0	-19	0	-19	0	16	0	12	1	-9	1	-20	0	-21	0
			DROUGHT	(-2%)	(0%)	(-7%)	(0%)	(-6%)	(-0%)	(-9%)	(0%)	(-4%)	(-0%)	(-4%)	(-0%)	(-5%)	(-0%)	(-4%)	(-0%)	(-3%)	(-0%)	(2%)	(0%)	(-6%)	(0%)	(-4%)	(-0%)	(-4%)	(0%)
	SJR at Brandt Bridge	ALL	-13	0	-37	0	-44	1	-66	-4	-29	0	-29	-1	-21	-4	-19	-1	16	0	8	1	-7	2	-19	0	-22	0	
		DROUGHT	(-3%)	(-0%)	(-6%)	(0%)	(-6%)	(0%)	(-6%)	(0%)	(-4%)	(0%)	(-4%)	(-0%)	(-4%)	(-0%)	(-4%)	(-0%)	(3%)	(-0%)	(1%)	(0%)	(-1%)	(0%)	(-4%)	(-0%)	(-4%)	(-0%)	
	Old River at Middle River	ALL	-9	4	-36	0	-44	0	-59	4	-26	2	-26	1	-15	4	-17	1	15	0	13	1	-7	1	-19	0	-19	1	
		DROUGHT	(-2%)	(1%)	(-6%)	(0%)	(-6%)	(0%)	(-8%)	(1%)	(-4%)	(0%)	(-4%)	(0%)	(-3%)	(1%)	(-4%)	(0%)	(3%)	(-0%)	(2%)	(0%)	(-1%)	(0%)	(-4%)	(-0%)	(-3%)	(0%)	
Old River at Tracy Bridge	ALL	6	25	-20	12	-44	-1	-41	19	-20	12	-19	9	4	24	-12	6	-2	-2	-16	-18	-28	-12	-18	-1	-17	6		
	DROUGHT	(1%)	(5%)	(-3%)	(2%)	(-6%)	(-0%)	(-5%)	(3%)	(-3%)	(2%)	(-3%)	(1%)	(1%)	(1%)	(-3%)	(1%)	(-0%)	(-0%)	(-3%)	(-3%)	(-5%)	(-2%)	(-3%)	(-0%)	(-3%)	(1%)		
SJR	SJR at Prisoners Point	ALL	-22	3	-171	-138	-168	-116	-61	-47	26	45	43	62	48	67	23	38	45	53	-60	-24	-45	-17	11	26	-27	-4	
		DROUGHT	(-4%)	(1%)	(-29%)	(-24%)	(-27%)	(-20%)	(-12%)	(-9%)	(7%)	(12%)	(13%)	(19%)	(14%)	(21%)	(7%)	(13%)	(15%)	(19%)	(-14%)	(-6%)	(-10%)	(-4%)	(2%)	(5%)	(-6%)	(-1%)	
	Banks PP	ALL	-116	-81	-237	-196	-239	-182	-275	-253	-148	-134	-143	-122	-90	-74	-99	-77	-60	-53	-103	-78	-156	-107	-143	-125	-151	-123	
		DROUGHT	(-21%)	(-15%)	(-37%)	(-33%)	(-35%)	(-29%)	(-42%)	(-40%)	(-28%)	(-26%)	(-30%)	(-27%)	(-19%)	(-16%)	(-23%)	(-19%)	(-15%)	(-14%)	(-24%)	(-19%)	(-30%)	(-22%)	(-26%)	(-23%)	(-28%)	(-25%)	
	Jones PP	ALL	-169	-146	-208	-178	-155	-99	-182	-138	-188	-148	-227	-203	-140	-122	-100	-82	-62	-75	-74	-59	-93	-58	-98	-83	-141	-116	
		DROUGHT	(-30%)	(-27%)	(-33%)	(-30%)	(-22%)	(-15%)	(-26%)	(-21%)	(-30%)	(-25%)	(-38%)	(-36%)	(-29%)	(-23%)	(-20%)	(-18%)	(-16%)	(-13%)	(-18%)	(-16%)	(-13%)	(-18%)	(-12%)	(-18%)	(-16%)	(-25%)	(-22%)
Export Area	Banks PP	ALL	-200	-212	-218	-264	-154	-116	-167	-126	-195	-128	-317	-282	-149	-132	-156	-141	-3	-6	-123	-84	-151	-72	21	34	-151	-128	
		DROUGHT	(-31%)	(-32%)	(-31%)	(-35%)	(-19%)	(-15%)	(-20%)	(-16%)	(-23%)	(-17%)	(-37%)	(-34%)	(-23%)	(-21%)	(-27%)	(-25%)	(-1%)	(-2%)	(-22%)	(-16%)	(-22%)	(-12%)	(3%)	(5%)	(-22%)	(-19%)	

2 <sup>a</sup> ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

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1 **Table EC-9. Number of Days Delta Locations Exceed Bay-Delta Water Quality Control Plan Objectives, and Number of Days out of Compliance,**  
 2 **for Existing Conditions, the No Action Alternative ELT, and Alternatives 2D and 5A ELT.**

Location <sup>a</sup>	# of Days Objective Applicable	# of Days Objective Exceeded <sup>b</sup>				% of Days Objective Exceeded <sup>b</sup>				# of Days Out of Compliance <sup>c</sup>				% of Days Out of Compliance <sup>c</sup>			
		Ex. Cond.	No Act. ELT	Alt 2D ELT	Alt 5A ELT	Ex. Cond.	No Act. ELT	Alt 2D ELT	Alt 5A ELT	Ex. Cond.	No Act. ELT	Alt 2D ELT	Alt 5A ELT	Ex. Cond.	No Act. ELT	Alt 2D ELT	Alt 5A ELT
Sacramento River at Emmaton / Three Mile Slough nr. Sacramento River (AGR) <sup>d</sup>	2,176	120	278	16	26	6	13	1	1	233	466	81	78	11	21	4	4
Sacramento River at Emmaton (AGR)	2,176	120	278	349	380	6	13	16	17	233	466	547	602	11	21	25	28
San Joaquin River at Jersey Point (AGR)	2,176	415	419	352	416	19	19	16	19	623	601	560	624	29	28	26	29
S. Fork Mokelumne River at Terminous (AGR)	2,176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at San Andreas Landing (AGR)	2,176	14	6	23	20	1	0	1	1	27	19	36	33	1	1	2	2
San Joaquin River at Vernalis (AGR)	5,842	163	146	146	146	3	2	2	2	424	407	407	407	7	7	7	7
San Joaquin River at Brandt Bridge (AGR)	5,842	188	174	170	174	3	3	3	3	449	435	431	435	8	7	7	7
Old River near Middle River (AGR)	5,842	183	169	173	169	3	3	3	3	444	430	434	430	8	7	7	7
Old River at Tracy Bridge (AGR)	5,842	250	216	224	198	4	4	4	3	569	506	485	459	10	9	8	8
San Joaquin River at Jersey Point (F&W)	671	0	19	0	31	0	3	0	4	0	19	0	44	0	3	0	6
San Joaquin River at Prisoners Point (F&W)	671	38	10	130	49	6	1	18	7	64	10	149	74	10	1	20	10

Notes:

<sup>a</sup> (AGR) = for the protection of agricultural beneficial uses; (F&W) = for the protection of fish and wildlife beneficial uses.

<sup>b</sup> Number of days the Bay-Delta Water Quality Control Plan EC objective was exceeded at the location.

<sup>c</sup> Number of days the EC at the location was out of compliance with the Bay-Delta Water Quality Control Plan EC objective. Days out of compliance was determined according to Table 2, footnote 2, which states: "Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period. The averaging period commences with the first day of the time period for the applicable objective. If the objective is not met on the last day of the averaging period, all days in the averaging period are considered out of compliance."

<sup>d</sup> Data for Existing Conditions and No Action ELT are for Sacramento River at Emmaton, per the definition of these baselines. Data for the project alternative is for Three Mile Slough, per the description of the alternative.

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1 **Table EC-10: Period Average EC Levels at Bay-Delta Water Quality Control Plan Compliance Locations and Frequency of Exceedance of Bay-**  
 2 **Delta Water Quality Control Plan Objectives for Banks and Jones Pumping Plants for Existing Conditions, the No Action Alternative, and**  
 3 **Alternatives 2D and 5A ELT.**

Location		Period <sup>a</sup>	Period Average Electrical Conductivity ( $\mu\text{mhos/cm}$ )				Bay-Delta Water Quality Control Plan objective (1,000 $\mu\text{mhos/cm}$ ) <sup>b</sup>			
			Ex. Cond.	No Act. ELT	Alt 2D ELT	Alt 5A ELT	Ex. Cond.	No Act. ELT	Alt 2D ELT	Alt 5A ELT
Western Delta	Sac. R. at Emmaton	All	1,069	1,082	994	1,050	-	-	-	-
		Drought	1,449	1,603	1,506	1,543	-	-	-	-
	SJR at Jersey Point	All	1,135	1,040	839	949	-	-	-	-
		Drought	1,410	1,414	1,198	1,279	-	-	-	-
Interior Delta	S.F. Moke. R. Term.	All	203	203	214	210	-	-	-	-
		Drought	209	208	218	216	-	-	-	-
	SJR at San. And. Landing	All	395	386	373	397	-	-	-	-
		Drought	470	487	481	502	-	-	-	-
Southern Delta	SJR at Vernalis	All	581	559	559	559	-	-	-	-
		Drought	718	691	691	692	-	-	-	-
	SJR at Brandt Bridge	All	586	565	564	565	-	-	-	-
		Drought	726	699	698	699	-	-	-	-
	Old River at Middle River	All	586	566	567	565	-	-	-	-
		Drought	726	700	701	700	-	-	-	-
Old River at Tracy Bridge	All	597	573	580	573	-	-	-	-	
	Drought	737	702	704	698	-	-	-	-	
SJR	SJR at Prisoners Pt.	All	440	417	413	417	-	-	-	-
		Drought	508	503	498	498	-	-	-	-
Export Area	Banks PP	All	530	502	387	438	1	3	0	1
		Drought	646	625	505	559	2	3	0	2
	Jones PP	All	555	530	410	475	0	1	0	2
		Drought	683	660	529	596	0	0	0	2

Notes:  
<sup>a</sup> ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).  
<sup>b</sup> A 1,000  $\mu\text{mhos/cm}$  objective, as a monthly average of mean daily EC, applies to the Banks and Jones pumping plants year-round. Compliance with EC objectives for other locations in the table is assessed on a different time-step and, thus, is summarized in a separate table in this Appendix.

1 **Table EC-11: Period Average EC Levels (mS/cm) for the Sacramento River at Collinsville for Existing**  
 2 **Conditions, the No Action Alternative, and Alternatives 2D and 5A ELT.**

	<b>Ex. Cond.</b>	<b>No Act. ELT</b>	<b>Alt 2D ELT</b>	<b>Alt 5A ELT</b>
<b>JAN</b>	2.7	2.7	2.1	2.4
<b>FEB</b>	1.7	1.7	1.4	1.6
<b>MAR</b>	0.9	1.1	1.0	1.1
<b>APR</b>	1.0	1.1	1.2	1.2
<b>MAY</b>	1.9	1.9	2.1	2.1
<b>JUN</b>	3.2	3.4	3.4	3.6
<b>JUL</b>	4.5	4.6	4.8	4.9
<b>AUG</b>	5.6	5.8	6.3	6.1
<b>SEP</b>	7.3	6.4	6.7	6.6
<b>OCT</b>	7.7	6.7	5.2	5.9
<b>NOV</b>	7.4	6.4	4.9	5.7
<b>DEC</b>	5.2	4.8	4.3	4.4

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5 **Table EC-12: Period Average EC Levels (mS/cm) for Montezuma Slough at National Steele, Suisun**  
 6 **Marsh for Existing Conditions, the No Action Alternative, and Alternatives 2D and 5A ELT.**

	<b>Ex. Cond.</b>	<b>No Act. ELT</b>	<b>Alt 2D ELT</b>	<b>Alt 5A ELT</b>
<b>JAN</b>	2.7	2.7	3.1	3.3
<b>FEB</b>	1.7	1.8	2.0	2.1
<b>MAR</b>	1.3	1.6	1.5	1.5
<b>APR</b>	1.6	1.8	1.5	1.5
<b>MAY</b>	2.7	2.8	2.2	2.1
<b>JUN</b>	4.2	4.5	3.0	3.0
<b>JUL</b>	6.3	6.5	4.2	4.2
<b>AUG</b>	7.8	8.0	5.5	5.2
<b>SEP</b>	9.8	9.1	6.6	6.3
<b>OCT</b>	7.2	6.4	5.7	6.0
<b>NOV</b>	7.1	6.3	5.4	6.0
<b>DEC</b>	4.9	4.7	4.9	5.0

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8

1 **Table EC-13: Period Average EC Levels (mS/cm) for Montezuma Slough near Beldon Landing, Suisun**  
 2 **Marsh for Existing Conditions, the No Action Alternative, and Alternatives 2D and 5A ELT.**

	<b>Ex. Cond.</b>	<b>No Act. ELT</b>	<b>Alt 2D ELT</b>	<b>Alt 5A ELT</b>
<b>JAN</b>	3.3	3.3	8.3	8.8
<b>FEB</b>	2.1	2.1	5.5	6.0
<b>MAR</b>	2.5	2.8	4.5	4.7
<b>APR</b>	2.9	3.2	4.3	4.3
<b>MAY</b>	4.3	4.5	5.8	5.8
<b>JUN</b>	6.2	6.6	7.7	7.9
<b>JUL</b>	9.0	9.3	10.1	10.4
<b>AUG</b>	11.0	11.1	12.3	12.1
<b>SEP</b>	13.1	12.6	13.5	13.4
<b>OCT</b>	7.8	7.1	12.2	12.4
<b>NOV</b>	7.6	6.8	11.6	12.4
<b>DEC</b>	5.1	4.8	10.5	10.9

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5 **Table EC-14: Period Average EC Levels (mS/cm) for Chadbourne Slough near Sunrise Duck Club, Suisun**  
 6 **Marsh For Existing Conditions, the No Action Alternative, and Alternatives 2D and 5A ELT.**

	<b>Ex. Cond.</b>	<b>No Act. ELT</b>	<b>Alt 2D ELT</b>	<b>Alt 5A ELT</b>
<b>JAN</b>	7.1	7.1	10.2	10.8
<b>FEB</b>	4.8	4.9	7.5	8.1
<b>MAR</b>	3.8	4.1	5.8	6.1
<b>APR</b>	3.6	4.0	5.5	5.6
<b>MAY</b>	4.9	5.1	6.6	6.6
<b>JUN</b>	7.0	7.2	8.5	8.6
<b>JUL</b>	9.7	9.9	10.9	11.2
<b>AUG</b>	11.7	11.7	13.1	13.1
<b>SEP</b>	13.7	13.3	14.4	14.4
<b>OCT</b>	12.3	11.2	13.6	13.8
<b>NOV</b>	11.2	10.3	13.1	13.7
<b>DEC</b>	9.4	8.8	12.2	12.7

7



- 1 **Table EC-15: Period Average EC Levels (mS/cm) for Suisun Slough 300 Feet South of Volanti Slough,**  
 2 **Suisun Marsh for Existing Conditions, the No Action Alternative, and Alternatives 2D and 5A ELT.**

	<b>Ex. Cond.</b>	<b>No Act. ELT</b>	<b>Alt 2D ELT</b>	<b>Alt 5A ELT</b>
<b>JAN</b>	6.4	6.4	8.7	9.3
<b>FEB</b>	4.4	4.4	6.0	6.5
<b>MAR</b>	3.7	4.0	5.0	5.1
<b>APR</b>	3.5	3.9	4.9	4.9
<b>MAY</b>	4.8	5.0	6.6	6.6
<b>JUN</b>	6.7	7.0	8.8	9.1
<b>JUL</b>	9.4	9.7	11.5	11.9
<b>AUG</b>	11.5	11.5	13.8	13.7
<b>SEP</b>	13.6	13.2	14.8	14.7
<b>OCT</b>	11.5	10.6	13.2	13.5
<b>NOV</b>	10.3	9.5	12.4	13.2
<b>DEC</b>	8.4	7.8	11.3	11.7

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Table EC-16. Period Average Change in EC Levels for Alternative 2D ELT Relative to Existing Conditions and the No Action Alternative ELT.

Electrical Conductivity		Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 2D ELT				Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Western Delta	Sac. R. at Emmaton	ALL	-668	-620	-692	-555	-140	-148	-108	-119	-60	-76	17	-14	28	7	57	52	55	8	209	123	364	179	37	108	-75	-88	
		DROUGHT	(-31%)	(-29%)	(-33%)	(-28%)	(-11%)	(-12%)	(-18%)	(-19%)	(-15%)	(-18%)	(6%)	(-5%)	(10%)	(3%)	(12%)	(11%)	(7%)	(1%)	(22%)	(12%)	(27%)	(12%)	(2%)	(5%)	(-7%)	(-8%)	
	SJR at Jersey Point	ALL	-787	-843	-838	-848	-55	-195	-110	-242	-41	-147	45	-17	51	22	210	106	241	91	669	492	716	295	580	120	57	-97	
		DROUGHT	(-27%)	(-28%)	(-29%)	(-29%)	(-3%)	(-10%)	(-13%)	(-25%)	(-7%)	(-22%)	(14%)	(-4%)	(17%)	(7%)	(36%)	(15%)	(23%)	(8%)	(50%)	(33%)	(41%)	(14%)	(20%)	(4%)	(4%)	(-6%)	(-6%)
	Interior Delta	S. Fork Moke. R. Term.	ALL	-889	-579	-1142	-802	-502	-347	-266	-243	-83	-90	6	-12	17	9	8	7	10	-14	-283	-168	-121	-78	-317	-101	-297	-202
			DROUGHT	(-46%)	(-35%)	(-52%)	(-43%)	(-30%)	(-23%)	(-31%)	(-29%)	(-18%)	(-20%)	(2%)	(-4%)	(6%)	(3%)	(2%)	(2%)	(2%)	(-2%)	(-20%)	(-13%)	(-8%)	(-5%)	(-15%)	(-5%)	(-26%)	(-19%)
SJR at San And. Landing		ALL	-768	-831	-956	-834	-394	-331	-246	-339	-95	-186	19	-26	27	17	65	15	82	-19	-553	-364	-40	127	321	188	-211	-215	
		DROUGHT	(-33%)	(-35%)	(-37%)	(-34%)	(-18%)	(-16%)	(-22%)	(-29%)	(-17%)	(-29%)	(6%)	(-7%)	(10%)	(6%)	(16%)	(3%)	(12%)	(-2%)	(-25%)	(-18%)	(-2%)	(7%)	(13%)	(7%)	(-15%)	(-15%)	
Southern Delta		SJR at Vernalis	ALL	10	9	10	10	5	6	16	17	16	17	19	20	15	15	9	10	11	11	8	8	9	7	7	6	11	11
			DROUGHT	(5%)	(5%)	(5%)	(5%)	(3%)	(3%)	(7%)	(7%)	(6%)	(7%)	(9%)	(9%)	(7%)	(7%)	(5%)	(5%)	(6%)	(6%)	(4%)	(4%)	(5%)	(6%)	(4%)	(3%)	(5%)	(5%)
	SJR at Brandt Bridge	ALL	8	8	8	8	4	5	8	9	7	10	17	21	10	11	10	11	14	15	12	12	9	7	7	7	10	10	
		DROUGHT	(4%)	(4%)	(4%)	(4%)	(2%)	(3%)	(3%)	(4%)	(3%)	(4%)	(7%)	(9%)	(4%)	(5%)	(5%)	(5%)	(7%)	(8%)	(6%)	(6%)	(5%)	(4%)	(4%)	(3%)	(5%)	(5%)	(6%)
	Old River at Middle River	ALL	-32	-25	-196	-185	-113	-82	-58	-51	-9	-6	9	9	17	19	13	16	30	27	-7	17	34	36	49	53	-22	-13	
		DROUGHT	(-6%)	(-5%)	(-31%)	(-28%)	(-19%)	(-15%)	(-13%)	(-12%)	(-3%)	(-2%)	(4%)	(4%)	(7%)	(8%)	(5%)	(6%)	(12%)	(11%)	(-2%)	(5%)	(8%)	(9%)	(9%)	(10%)	(-6%)	(-3%)	
SJR	SJR at Prisoners Point	ALL	29	-36	-125	-192	-37	-50	-32	-58	-1	-25	15	12	18	21	28	22	53	33	-50	-5	43	60	199	142	12	-6	
		DROUGHT	(5%)	(-5%)	(-17%)	(-24%)	(-5%)	(-7%)	(-6%)	(-10%)	(-0%)	(-7%)	(6%)	(5%)	(7%)	(9%)	(11%)	(9%)	(21%)	(12%)	(-9%)	(-1%)	(8%)	(11%)	(31%)	(20%)	(2%)	(-1%)	(-1%)
	Old River at Tracy Bridge	ALL	-12	0	-38	0	-44	0	-70	-5	-26	0	-29	0	-19	0	-19	0	16	0	12	0	-10	0	-20	0	-22	0	
		DROUGHT	(-2%)	(0%)	(-7%)	(0%)	(-6%)	(0%)	(-9%)	(-1%)	(-4%)	(-0%)	(-4%)	(0%)	(-4%)	(-0%)	(-4%)	(0%)	(3%)	(0%)	(2%)	(0%)	(-2%)	(0%)	(-4%)	(0%)	(-4%)	(0%)	(-4%)
	Banks PP	ALL	-35	0	-46	0	-55	0	-78	0	-9	0	-20	0	-18	0	-16	0	-7	0	-8	0	-8	0	-22	0	-27	0	
		DROUGHT	(-6%)	(0%)	(-7%)	(0%)	(-6%)	(0%)	(-9%)	(0%)	(-1%)	(-0%)	(-2%)	(0%)	(-3%)	(0%)	(-3%)	(0%)	(-1%)	(0%)	(-1%)	(0%)	(-1%)	(0%)	(-4%)	(0%)	(-4%)	(0%)	(-4%)
Export Area	SJR at Prisoners Point	ALL	-13	0	-37	0	-44	1	-71	-8	-29	0	-28	-1	-21	-3	-19	-1	16	0	9	1	-8	1	-19	0	-22	-1	
		DROUGHT	(-3%)	(-0%)	(-6%)	(0%)	(-6%)	(0%)	(-9%)	(-1%)	(-4%)	(0%)	(-4%)	(-0%)	(-5%)	(-1%)	(-4%)	(-0%)	(3%)	(0%)	(1%)	(0%)	(-1%)	(0%)	(-3%)	(0%)	(-4%)	(0%)	(-4%)
	Old River at Middle River	ALL	-34	0	-46	0	-55	1	-78	-2	-14	2	-20	-2	-21	-7	-16	-1	-6	0	-17	4	-9	4	-20	0	-28	0	
		DROUGHT	(-6%)	(-0%)	(-7%)	(0%)	(-7%)	(0%)	(-9%)	(-0%)	(-1%)	(0%)	(-2%)	(-0%)	(-3%)	(-1%)	(-3%)	(-0%)	(-1%)	(0%)	(-3%)	(1%)	(-1%)	(1%)	(-3%)	(0%)	(-4%)	(0%)	(-4%)
	Jones PP	ALL	-10	4	-36	0	-44	0	-64	0	-27	1	-26	2	-15	4	-17	1	16	0	13	0	-8	0	-19	0	-20	1	
		DROUGHT	(-2%)	(1%)	(-6%)	(0%)	(-6%)	(0%)	(-9%)	(-0%)	(-4%)	(0%)	(-4%)	(0%)	(-3%)	(1%)	(-4%)	(0%)	(3%)	(-0%)	(2%)	(0%)	(-1%)	(0%)	(-4%)	(-0%)	(-3%)	(0%)	(-3%)
SJR	SJR at Prisoners Point	ALL	-31	3	-45	0	-55	0	-72	4	-12	1	-17	2	-9	6	-13	2	-7	0	-4	1	-7	0	-21	0	-25	2	
		DROUGHT	(-5%)	(1%)	(-7%)	(0%)	(-6%)	(0%)	(-8%)	(0%)	(-1%)	(0%)	(-2%)	(0%)	(-2%)	(1%)	(-2%)	(0%)	(-1%)	(0%)	(-1%)	(0%)	(-1%)	(0%)	(-3%)	(0%)	(-3%)	(0%)	(-3%)
	Old River at Tracy Bridge	ALL	3	22	-21	12	-44	-1	-42	19	-20	12	-19	8	3	22	-12	6	-3	-4	-16	-18	-1	-14	3	-17	7		
		DROUGHT	(1%)	(4%)	(-4%)	(2%)	(-6%)	(-0%)	(-5%)	(3%)	(-3%)	(2%)	(-3%)	(1%)	(1%)	(5%)	(1%)	(-1%)	(-1%)	(-1%)	(-3%)	(-3%)	(-3%)	(-3%)	(1%)	(-3%)	(1%)	(-3%)	(1%)
	Banks PP	ALL	4	36	-28	22	-53	0	-59	13	-17	1	-6	12	20	36	-7	7	-55	-7	-87	-51	-78	-33	-29	-6	-33	2	
		DROUGHT	(1%)	(6%)	(-4%)	(3%)	(-6%)	(0%)	(-6%)	(1%)	(-2%)	(0%)	(-1%)	(1%)	(3%)	(6%)	(-1%)	(1%)	(-9%)	(-1%)	(-13%)	(-8%)	(-11%)	(-5%)	(-4%)	(-1%)	(-4%)	(0%)	(-4%)
Export Area	SJR at Prisoners Point	ALL	-26	-1	-169	-136	-154	-102	-49	-35	24	43	36	54	38	57	14	30	36	44	-44	-8	-29	-1	1	16	-27	-3	
		DROUGHT	(-5%)	(0%)	(-28%)	(-24%)	(-25%)	(-18%)	(-9%)	(-7%)	(6%)	(12%)	(11%)	(18%)	(11%)	(18%)	(5%)	(10%)	(12%)	(16%)	(-11%)	(-2%)	(-6%)	(-0%)	(0%)	(3%)	(-6%)	(-1%)	(-1%)
	Banks PP	ALL	8	-30	-118	-181	-103	-86	-44	-64	25	27	75	106	67	91	43	50	47	36	-130	-71	-74	-6	81	70	-10	-5	
		DROUGHT	(1%)	(-5%)	(-18%)	(-25%)	(-14%)	(-12%)	(-7%)	(-10%)	(6%)	(7%)	(19%)	(30%)	(19%)	(27%)	(14%)	(17%)	(17%)	(13%)	(-23%)	(-14%)	(-12%)	(-1%)	(13%)	(11%)	(-2%)	(-1%)	(-1%)
	Jones PP	ALL	-120	-85	-228	-188	-246	-189	-261	-239	-150	-135	-155	-135	-101	-81	-40	-19	-25	-18	-93	-69	-142	-93	-147	-129	-142	-115	
		DROUGHT	(-21%)	(-16%)	(-36%)	(-32%)	(-36%)	(-30%)	(-40%)	(-37%)	(-28%)	(-26%)	(-32%)	(-29%)	(-22%)	(-18%)	(-9%)	(-5%)	(-6%)	(-5%)	(-22%)	(-17%)	(-27%)	(-19%)	(-27%)	(-24%)	(-27%)	(-24%)	(-23%)
Jones PP	ALL	-21	-11	-177	-218	-232	-197	-194	-223	-61	-66	-250	-212	-166	-132	-85	-63	27	34	-224	-182	-231	-123	-67	-44	-140	-120		
	DROUGHT	(-3%)	(-2%)	(-25%)	(-29%)	(-29%)	(-25%)	(-25%)	(-28%)	(-9%)	(-10%)	(-39%)	(-35%)	(-26%)	(-22%)	(-16%)	(-12%)	(6%)	(8%)	(-42%)	(-37%)	(-32%)	(-20%)	(-10%)	(-7%)	(-22%)	(-19%)	(-19%)	
Jones PP	ALL	-122	-99	-193	-162	-147	-91	-260	-216	-212	-172	-236	-212	-122	-105	-115	-97	-99	-112	-63	-49	-55	-20	-114	-100	-145	-120		
	DROUGHT	(-22%)	(-18%)	(-31%)	(-27%)	(-21%)	(-14%)	(-37%)	(-33%)	(-34%)	(-30%)	(-40%)	(-37%)	(-25%)	(-23%)	(-26%)	(-23%)	(-25%)	(-28%)	(-14%)	(-11%)	(-11%)	(-4%)	(-21%)	(-19%)	(-26%)	(-23%)	(-23%)	
Jones PP	ALL	-124	-136	-158	-204	-109	-71	-212	-171	-246	-180	-352	-318	-122	-106	-181	-167	-66	-69	-132	-93	-125	-47	-21	-8	-154	-131		
	DROUGHT	(-19%)	(-21%)	(-23%)	(-27%)	(-13%)	(-9%)	(-25%)	(-21%)	(-29%)	(-23%)	(-41%)	(-39%)	(-19%)	(-17%)	(-32%)	(-30%)	(-17%)	(-17%)	(-24%)	(-18%)	(-18%)	(-8%)	(-3%)	(-1%)	(-23%)	(-20%)	(-20%)	

<sup>a</sup> ALL: Water years 1976–1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

**Table EC-17. Period Average Change in EC Levels for Alternative 5A ELT Relative to Existing Conditions and the No Action Alternative ELT.**

Electrical Conductivity		Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
Alt 5A ELT				Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Western Delta	Sac. R. at Emmaton	ALL	-338	-290	-325	-188	-127	-135	-56	-67	-23	-39	19	-13	28	8	36	31	75	28	209	123	280	94	4	75	-18	-31			
		DROUGHT	(-15%)	(-14%)	(-16%)	(-10%)	(-10%)	(-11%)	(-9%)	(-11%)	(-6%)	(-9%)	(7%)	(-4%)	(10%)	(3%)	(7%)	(6%)	(9%)	(3%)	(22%)	(12%)	(21%)	(6%)	(0%)	(4%)	(-2%)	(-3%)			
	SJR at Jersey Point	ALL	-475	-166	-618	-279	-348	-193	-139	-117	-42	-49	8	-10	12	3	-6	-7	9	-16	-200	-85	-101	-58	-336	-120	-186	-91			
		DROUGHT	(-24%)	(-10%)	(-28%)	(-15%)	(-21%)	(-13%)	(-16%)	(-14%)	(-9%)	(-11%)	(3%)	(-3%)	(4%)	(1%)	(-2%)	(-2%)	(2%)	(-3%)	(-14%)	(-6%)	(-7%)	(-4%)	(-16%)	(-6%)	(-16%)	(-9%)			
	Interior Delta	S. Fork Moke. R. Term.	ALL	6	6	7	7	3	4	7	8	7	9	12	13	10	10	7	8	10	10	6	6	7	6	7	6	7	8		
			DROUGHT	(3%)	(3%)	(4%)	(4%)	(2%)	(2%)	(3%)	(4%)	(3%)	(4%)	(6%)	(6%)	(5%)	(5%)	(4%)	(4%)	(5%)	(5%)	(3%)	(3%)	(4%)	(3%)	(4%)	(3%)	(4%)	(3%)	(4%)	
SJR at San And. Landing		ALL	23	29	-30	2	-43	-12	-21	-17	-8	-6	0	1	3	2	5	15	12	-4	20	41	43	46	51	2	11				
		DROUGHT	(4%)	(6%)	(-5%)	(0%)	(-7%)	(-2%)	(-5%)	(-4%)	(-3%)	(-2%)	(0%)	(-0%)	(0%)	(1%)	(1%)	(2%)	(6%)	(5%)	(-1%)	(6%)	(10%)	(10%)	(9%)	(10%)	(0%)	(3%)			
Southern Delta		SJR at Vernalis	ALL	-12	0	-38	0	-44	0	-68	-3	-26	0	-28	0	-19	0	-18	1	12	-3	12	1	-9	1	-20	0	-22	0		
			DROUGHT	(-2%)	(0%)	(-7%)	(0%)	(-6%)	(0%)	(-9%)	(-0%)	(-4%)	(-0%)	(-4%)	(0%)	(-4%)	(0%)	(-4%)	(0%)	(2%)	(-1%)	(2%)	(0%)	(-2%)	(0%)	(-4%)	(0%)	(-4%)	(0%)		
	SJR at Brant Bridge	ALL	-13	0	-37	0	-45	0	-66	-3	-29	0	-27	0	-18	0	-18	1	12	-3	8	1	-8	1	-18	0	-22	0			
		DROUGHT	(-3%)	(0%)	(-6%)	(0%)	(-6%)	(0%)	(-9%)	(-0%)	(-4%)	(-0%)	(-4%)	(0%)	(-4%)	(0%)	(-4%)	(0%)	(2%)	(-1%)	(1%)	(0%)	(-1%)	(0%)	(-3%)	(0%)	(-3%)	(0%)	(-4%)	(0%)	
	Old River at Middle River	ALL	-13	0	-36	0	-44	0	-66	-3	-28	0	-28	0	-18	0	-18	1	12	-3	13	0	-7	1	-18	0	-21	0			
		DROUGHT	(-3%)	(0%)	(-6%)	(0%)	(-6%)	(0%)	(-9%)	(-0%)	(-4%)	(-0%)	(-4%)	(0%)	(-4%)	(0%)	(-4%)	(0%)	(2%)	(-1%)	(2%)	(0%)	(-1%)	(0%)	(-3%)	(0%)	(-4%)	(0%)			
Old River at Tracy Bridge	ALL	-13	6	-29	3	-43	0	-62	-2	-32	0	-27	0	-19	0	-18	1	-2	-2	-12	-14	-16	0	-8	10	-23	0				
	DROUGHT	(-3%)	(1%)	(-5%)	(1%)	(-6%)	(0%)	(-8%)	(-0%)	(-4%)	(0%)	(-4%)	(0%)	(-4%)	(0%)	(-4%)	(0%)	(-0%)	(-0%)	(-2%)	(-2%)	(-3%)	(0%)	(-1%)	(2%)	(-4%)	(0%)				
SJR	SJR at Prisoners Point	ALL	0	25	-37	-4	-82	-31	-39	-26	-22	-3	-13	6	-9	10	-7	9	2	10	-44	-8	-21	7	-2	13	-23	1			
		DROUGHT	(0%)	(5%)	(-6%)	(-1%)	(-13%)	(-5%)	(-8%)	(-5%)	(-6%)	(-1%)	(-4%)	(2%)	(-3%)	(3%)	(-2%)	(3%)	(1%)	(4%)	(-11%)	(-2%)	(-5%)	(2%)	(-0%)	(3%)	(-5%)	(0%)			
Export Area	Banks PP	ALL	-72	-36	-125	-85	-122	-65	-112	-90	-66	-52	-69	-48	-111	-91	-48	-26	-36	-30	-92	-67	-134	-86	-109	-91	-91	-64			
		DROUGHT	(-13%)	(-7%)	(-20%)	(-14%)	(-18%)	(-10%)	(-17%)	(-14%)	(-12%)	(-10%)	(-14%)	(-10%)	(-24%)	(-21%)	(-11%)	(-6%)	(-9%)	(-8%)	(-21%)	(-17%)	(-25%)	(-18%)	(-20%)	(-17%)	(-17%)	(-13%)			
	Jones PP	ALL	-19	5	-109	-79	-98	-42	-101	-58	-90	-50	-148	-124	-71	-54	-83	-65	-42	-56	-41	-26	-53	-18	-101	-86	-80	-54			
		DROUGHT	(-3%)	(1%)	(-17%)	(-13%)	(-14%)	(-7%)	(-14%)	(-9%)	(-14%)	(-9%)	(-25%)	(-22%)	(-15%)	(-12%)	(-19%)	(-15%)	(-11%)	(-14%)	(-9%)	(-6%)	(-10%)	(-4%)	(-18%)	(-16%)	(-14%)	(-10%)			
			ALL	29	17	-95	-141	-81	-43	-94	-53	-95	-29	-256	-221	-78	-61	-125	-111	-40	-43	-115	-76	-96	-17	1	14	-87	-64		
			DROUGHT	(4%)	(3%)	(-14%)	(-19%)	(-10%)	(-6%)	(-11%)	(-7%)	(-11%)	(-4%)	(-30%)	(-27%)	(-12%)	(-10%)	(-22%)	(-20%)	(-10%)	(-11%)	(-21%)	(-14%)	(-15%)	(-3%)	(0%)	(2%)	(-13%)	(-10%)		

<sup>a</sup> ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

**Table Hg-1. Modeled Mercury Concentrations in Water for Existing Conditions, No Action Alternative ELT, and Alternatives 2D, 4A, and 5A ELT.**

Source	Location	Period *	Period Average Concentration (ng/L)					
			Existing Conditions	No Action ELT	Alt. 2D ELT	Alt. 4H3 ELT	Alt. 4H4 ELT	Alt. 5A-ELT
Delta Interior	Mokelumne River (SF) at Staten Island	All	5.2	5.2	5.4	5.4	5.4	5.3
		Drought	4.6	4.7	4.8	4.8	4.8	4.8
	San Joaquin River at Buckley Cove	All	7.5	7.6	7.6	7.6	7.6	7.6
		Drought	7.3	7.5	7.6	7.6	7.6	7.6
	Franks Tract	All	4.9	4.9	5.2	5.2	5.2	5.0
		Drought	4.4	4.5	4.6	4.6	4.6	4.5
	Old River at Rock Slough	All	5.1	5.1	5.4	5.4	5.5	5.2
		Drought	4.6	4.6	4.7	4.7	4.8	4.6
Western Delta	Sacramento River at Emmaton	All	4.4	4.4	4.5	4.5	4.5	4.5
		Drought	4.5	4.5	4.5	4.5	4.5	4.5
	San Joaquin River at Antioch	All	5.1	5.1	5.2	5.2	5.2	5.1
		Drought	4.9	5.0	4.9	4.9	4.9	4.9
	Sacramento River at Mallard Island	All	5.7	5.6	5.7	5.7	5.7	5.6
		Drought	5.9	5.9	5.9	5.9	5.9	5.9
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough Pumping Plant	All	4.3	4.3	4.2	4.2	4.2	4.2
		Drought	4.3	4.3	4.2	4.2	4.2	4.2
	Contra Costa Pumping Plant #1	All	5.1	5.1	5.4	5.4	5.5	5.2
		Drought	4.7	4.7	4.8	4.8	4.9	4.7
	Banks Pumping Plant	All	5.7	5.7	5.0	5.1	5.0	5.3
		Drought	5.1	5.1	5.0	5.0	4.9	5.0
	Jones Pumping Plant	All	6.2	6.3	5.3	5.3	5.3	5.9
		Drought	5.9	5.9	5.4	5.4	5.5	5.7

Notes:

\* All: Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index)

ELT = early long term

ng/L = nanogram per liter

SF = south fork

**Table Hg-2. Modeled Methylmercury Concentrations in Water for Existing Conditions, No Action Alternative ELT, and Alternatives 2D, 4A, and 5A ELT.**

Source	Location	Period *	Period Average Concentration (ng/L)					
			Existing Conditions	No Action ELT	Alt 2D ELT	Alt 4H3 ELT	Alt 4H4 ELT	Alt 5A-ELT
Delta Interior	Mokelumne River (SF) at Staten Island	All	0.135	0.135	0.145	0.144	0.144	0.141
		Drought	0.121	0.122	0.128	0.128	0.128	0.127
	San Joaquin River at Buckley Cove	All	0.159	0.163	0.162	0.162	0.162	0.163
		Drought	0.161	0.168	0.166	0.166	0.166	0.169
	Franks Tract	All	0.117	0.117	0.124	0.123	0.124	0.120
		Drought	0.109	0.109	0.112	0.112	0.113	0.111
Old River at Rock Slough	All	0.121	0.122	0.128	0.128	0.130	0.125	
	Drought	0.113	0.114	0.118	0.118	0.119	0.116	
Western Delta	Sacramento River at Emmaton	All	0.103	0.103	0.105	0.105	0.105	0.104
		Drought	0.101	0.101	0.102	0.102	0.102	0.101
	San Joaquin River at Antioch	All	0.102	0.103	0.109	0.108	0.109	0.105
		Drought	0.093	0.093	0.096	0.096	0.097	0.095
	Sacramento River at Mallard Island	All	0.082	0.083	0.087	0.087	0.087	0.084
		Drought	0.072	0.072	0.074	0.074	0.074	0.074
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough Pumping Plant	All	0.112	0.112	0.105	0.105	0.105	0.105
		Drought	0.113	0.113	0.105	0.105	0.105	0.105
	Contra Costa Pumping Plant #1	All	0.129	0.128	0.134	0.133	0.135	0.131
		Drought	0.121	0.121	0.124	0.124	0.125	0.123
	Banks Pumping Plant	All	0.133	0.134	0.121	0.123	0.122	0.128
		Drought	0.128	0.129	0.126	0.126	0.123	0.128
	Jones Pumping Plant	All	0.138	0.140	0.124	0.125	0.126	0.134
		Drought	0.134	0.136	0.130	0.130	0.132	0.133

Notes:

\* All: Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index)

ELT = early long term

ng/L = nanogram per liter

SF = south fork

**Table Hg-3. Mercury Concentrations in 350-mm Largemouth Bass Fillets, and Comparisons to Benchmark for Existing Conditions and No Action Alternative ELT. Equation 1.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Mercury (mg/kg ww)		% Change In Mercury Concentrations Compared to Baseline <sup>b</sup>		Exceedance Quotients <sup>b</sup>	
			EX	NAA-ELT	EX	EX	NAA-ELT	
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	0.516	0.515	-0.23	2.2	2.1	
		Drought	0.456	0.458	0.45	1.9	1.9	
	San Joaquin River at Buckley Cove	All	0.624	0.644	3.15	2.6	2.7	
		Drought	0.635	0.666	4.79	2.6	2.8	
	Franks Tract	All	0.437	0.438	0.20	1.8	1.8	
		Drought	0.400	0.402	0.44	1.7	1.7	
Old River at Rock Slough	All	0.454	0.457	0.52	1.9	1.9		
	Drought	0.420	0.423	0.70	1.8	1.8		
Western Delta	Sacramento River at Emmaton	All	0.375	0.376	0.30	1.6	1.6	
		Drought	0.368	0.366	-0.39	1.5	1.5	
	SJR at Antioch	All	0.374	0.377	0.66	1.6	1.6	
		Drought	0.336	0.336	-0.15	1.4	1.4	
	Sacramento River at Mallard Island	All	0.289	0.292	0.96	1.2	1.2	
		Drought	0.249	0.249	0.07	1.0	1.0	
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough Pumping Plant	All	0.417	0.414	-0.58	1.7	1.7	
		Drought	0.420	0.419	-0.03	1.7	1.7	
	Contra Costa Pumping Plant #1	All	0.488	0.486	-0.50	2.0	2.0	
		Drought	0.453	0.453	-0.10	1.9	1.9	
	Banks Pumping Plant	All	0.507	0.511	0.95	2.1	2.1	
		Drought	0.484	0.490	1.41	2.0	2.0	
	Jones Pumping Plant	All	0.531	0.537	1.18	2.2	2.2	
		Drought	0.514	0.522	1.70	2.1	2.2	

Notes:

<sup>a</sup> All: Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index)

<sup>b</sup> All concentrations exceed TMDL guidance concentration of 0.24 mg/kg ww Hg.

Alt. - alternative

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA-ELT - No Action Alternative Early Long Term

ww - wet weight

**Table Hg-4. Mercury Concentrations in 350-mm Largemouth Bass Fillets, and Comparisons to Benchmark for Existing Conditions and No Action Alternative ELT. Equation 2.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Mercury (mg/kg ww)		% Change In Mercury Concentrations Compared to Baseline <sup>b</sup>		Exceedance Quotients <sup>b</sup>	
			EX	NAA-ELT	EX	EX	NAA-ELT	
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	0.768	0.765	-0.32	3.2	3.2	
		Drought	0.645	0.649	0.64	2.7	2.7	
	San Joaquin River at Buckley Cove	All	1.003	1.048	4.46	4.2	4.4	
		Drought	1.027	1.097	6.80	4.3	4.6	
	Franks Tract	All	0.607	0.609	0.28	2.5	2.5	
		Drought	0.537	0.540	0.62	2.2	2.2	
Old River at Rock Slough	All	0.642	0.646	0.73	2.7	2.7		
	Drought	0.574	0.580	0.98	2.4	2.4		
Western Delta	Sacramento River at Emmaton	All	0.490	0.492	0.42	2.0	2.0	
		Drought	0.477	0.474	-0.54	2.0	2.0	
	SJR at Antioch	All	0.488	0.493	0.93	2.0	2.1	
		Drought	0.420	0.419	-0.21	1.8	1.7	
	Sacramento River at Mallard Island	All	0.340	0.345	1.35	1.4	1.4	
		Drought	0.275	0.275	0.10	1.1	1.1	
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough Pumping Plant	All	0.568	0.563	-0.81	2.4	2.3	
		Drought	0.573	0.573	-0.04	2.4	2.4	
	Contra Costa Pumping Plant #1	All	0.709	0.704	-0.71	3.0	2.9	
		Drought	0.639	0.638	-0.14	2.7	2.7	
	Banks Pumping Plant	All	0.747	0.757	1.33	3.1	3.2	
		Drought	0.700	0.714	1.98	2.9	3.0	
	Jones Pumping Plant	All	0.798	0.811	1.67	3.3	3.4	
		Drought	0.762	0.780	2.39	3.2	3.3	

Notes:

<sup>a</sup> All: Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index)

<sup>b</sup> All concentrations exceed TMDL guidance concentration of 0.24 mg/kg ww Hg.

Alt. - alternative

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA-ELT - No Action Alternative Early Long Term

ww - wet weight

**Table Hg-5. Mercury Concentrations in 350-mm Largemouth Bass Fillets, and Comparisons to Baseline Conditions and Benchmark for Alternative 4-H3 ELT. Equation 1.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Mercury (mg/kg, ww)	% Change In Mercury Concentrations Compared to Baseline <sup>b</sup>		Exceedance Quotients <sup>c</sup>
			Alt. 4H3-ELT	EX	NAA-ELT	Alt. 4H3-ELT
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	0.56	8	8	2.3
		Drought	0.48	6	6	2.0
	San Joaquin River at Buckley Cove	All	0.64	2	-1	2.7
		Drought	0.66	3	-1	2.7
	Franks Tract	All	0.46	6	6	1.9
		Drought	0.42	4	4	1.7
Old River at Rock Slough	All	0.48	7	6	2.0	
	Drought	0.44	5	4	1.8	
Western Delta	Sacramento River at Emmaton	All	0.39	3	3	1.6
		Drought	0.37	1	1	1.5
	SJR at Antioch	All	0.40	7	6	1.7
		Drought	0.35	3	3	1.4
	Sacramento River at Mallard Island	All	0.31	6	5	1.3
Drought		0.26	3	3	1.1	
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough PP	All	0.38	-8	-7	1.6
		Drought	0.39	-8	-8	1.6
	Contra Costa Pumping Plant #1	All	0.51	4	5	2.1
		Drought	0.47	3	3	1.9
	Banks Pumping Plant	All	0.46	-8	-9	1.9
		Drought	0.48	-1	-3	2.0
	Jones Pumping Plant	All	0.47	-11	-12	2.0
		Drought	0.49	-4	-6	2.1

**Notes:**

<sup>a</sup> All: Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

<sup>b</sup> % change indicates a negative change (increased concentrations) relative to baseline when values are positive and a positive change (lowered concentrations) relative to baseline when values are negative.

<sup>c</sup> Exceedance Quotient - All concentrations exceed total maximum daily load guidance concentration of 0.24 mg/kg ww Hg.

Alt. - alternative

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA - No Action Alternative

ww - wet weight



**Table Hg-6. Mercury Concentrations in 350-mm Largemouth Bass Fillets, and Comparisons to Baseline Conditions and Benchmark for Alternative 4-H3 ELT. Equation 2.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Mercury (mg/kg, ww)	% Change In Mercury Concentrations Compared to Baseline <sup>b</sup>		Exceedance Quotients <sup>c</sup>
			Alt. 4H3-ELT	EX	NAA-ELT	Alt. 4H3-ELT
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	0.86	11	12	3.6
		Drought	0.70	9	8	2.9
	San Joaquin River at Buckley Cove	All	1.03	4	0	4.4
		Drought	1.07	7	0	4.6
	Franks Tract	All	0.66	10	10	2.8
		Drought	0.57	7	6	2.4
	Old River at Rock Slough	All	0.70	12	11	3.0
		Drought	0.61	9	8	2.6
Western Delta	Sacramento River at Emmaton	All	0.51	4	4	2.1
		Drought	0.48	2	2	2.0
	SJR at Antioch	All	0.54	11	10	2.3
		Drought	0.44	5	6	1.8
	Sacramento River at Mallard Island	All	0.37	9	8	1.6
		Drought	0.29	5	5	1.2
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough PP	All	0.51	0	1	2.4
		Drought	0.51	0	0	2.4
	Contra Costa Pumping Plant #1	All	0.75	9	9	3.2
		Drought	0.67	6	7	2.8
	Banks Pumping Plant	All	0.66	1	0	3.2
		Drought	0.69	2	0	3.0
	Jones Pumping Plant	All	0.68	2	0	3.4
		Drought	0.72	2	0	3.3

**Notes:**

<sup>a</sup> All: Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

<sup>b</sup> % change indicates a negative change (increased concentrations) relative to baseline when values are positive and a positive change (lowered concentrations) relative to baseline when values are negative.

<sup>c</sup> Exceedance Quotient - All concentrations exceed total maximum daily load guidance concentration of 0.24 mg/kg ww Hg.

Alt. - alternative

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA - No Action Alternative

ww - wet weight

**Table Hg-7. Mercury Concentrations in 350-mm Largemouth Bass Fillets, and Comparisons to Baseline Conditions and Benchmark for Alternative 4-H4 ELT. Equation 1.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Mercury (mg/kg, ww)	% Change In Mercury Concentrations Compared to Baseline <sup>b</sup>		Exceedance Quotients <sup>c</sup>
			Alt. 4H4-ELT	EX	NAA-ELT	Alt. 4H4-ELT
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	0.86	8	8	2.324
		Drought	0.70	6	6	2.016
	San Joaquin River at Buckley Cove	All	1.03	2	-1	2.650
		Drought	1.07	3	-2	2.731
	Franks Tract	All	0.67	7	7	1.949
		Drought	0.57	5	4	1.750
Old River at Rock Slough	All	0.72	8	8	2.049	
	Drought	0.62	6	5	1.858	
Western Delta	Sacramento River at Emmaton	All	0.49	3	3	1.612
		Drought	0.54	1	2	1.552
	SJR at Antioch	All	0.44	7	7	1.675
		Drought	0.37	4	4	1.456
	Sacramento River at Mallard Island	All	0.29	7	6	1.286
Drought		0.51	4	4	1.076	
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough PP	All	0.77	-8	-7	1.604
		Drought	0.68	-8	-8	1.606
	Contra Costa Pumping Plant #1	All	0.65	6	7	2.157
		Drought	0.66	5	5	1.974
	Banks Pumping Plant	All	0.69	-9	-10	1.914
		Drought	0.74	-4	-5	1.932
	Jones Pumping Plant	All	0.00	-10	-11	1.987
		Drought	1.07	-2	-4	2.094

**Notes:**

<sup>a</sup> All: Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

<sup>b</sup> % change indicates a negative change (increased concentrations) relative to baseline when values are positive and a positive change (lowered concentrations) relative to baseline when values are negative.

<sup>c</sup> Exceedance Quotient - All concentrations exceed total maximum daily load guidance concentration of 0.24 mg/kg ww Hg.

Alt. - alternative

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA - No Action Alternative

ww - wet weight

**Table Hg-8. Mercury Concentrations in 350-mm Largemouth Bass Fillets, and Comparisons to Baseline Conditions and Benchmark for Alternative 4-H4 ELT. Equation 2.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Mercury (mg/kg, ww)	% Change In Mercury Concentrations Compared to Baseline <sup>b</sup>		Exceedance Quotients <sup>c</sup>
			Alt. 4H4-ELT	EX	NAA-ELT	Alt. 4H4-ELT
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	0.86	0	0	3.2
		Drought	0.70	0	-1	2.7
	San Joaquin River at Buckley Cove	All	1.03	0	-4	4.2
		Drought	1.07	0	-6	4.3
	Franks Tract	All	0.67	0	0	2.5
		Drought	0.57	0	-1	2.2
Old River at Rock Slough	All	0.72	0	-1	2.7	
	Drought	0.62	0	-1	2.4	
Western Delta	Sacramento River at Emmaton	All	0.49	0	0	2.0
		Drought	0.54	-1	0	2.0
	SJR at Antioch	All	0.44	0	-1	2.0
		Drought	0.37	0	0	1.7
	Sacramento River at Mallard Island	All	0.29	0	-1	1.4
Drought		0.51	0	0	1.1	
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough PP	All	0.77	-11	-10	2.1
		Drought	0.68	-11	-11	2.1
	Contra Costa Pumping Plant #1	All	0.65	-1	0	2.9
		Drought	0.66	0	0	2.7
	Banks Pumping Plant	All	0.69	-13	-14	2.7
		Drought	0.74	-6	-8	2.7
	Jones Pumping Plant	All	0.00	-15	-16	2.8
		Drought	1.07	-6	-8	3.0

**Notes:**

<sup>a</sup> All: Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

<sup>b</sup> % change indicates a negative change (increased concentrations) relative to baseline when values are positive and a positive change (lowered concentrations) relative to baseline when values are negative.

<sup>c</sup> Exceedance Quotient - All concentrations exceed total maximum daily load guidance concentration of 0.24 mg/kg ww Hg.

Alt. - alternative

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA - No Action Alternative

ww - wet weight

**Table Hg-9. Alternative 4A-H3 ELT Use of Assimilative Capacity for Mercury Available under Existing Conditions and the No Action Alternative ELT Relative to the 25 ng/L Ecological Risk Benchmark.**

Mercury	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change		
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	
			Alt 4 ELT Scn H3																										
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-1	-1	-1	-1	-1	-1	-1	-2	-1	-2	-2	-2	-2	-2	-2	-3	-3	-1	-1	0	-1	0	-1	-1	-1	-1
		DROUGHT	0	0	-1	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-2	-2	-1	-1	-1	0	0	0	-1	-
	SJR at Buckley Cove	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-2	-1	-2	-1	0	0	-1	0	-
		DROUGHT	0	0	0	0	-1	0	-1	0	0	0	0	0	-1	0	-1	0	-1	0	-5	-4	-5	-3	-1	0	-1	0	-
	Franks Tract	ALL	-2	-2	-2	-2	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2	-1	-1	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1
		DROUGHT	-1	-1	-1	-1	-1	0	0	0	0	0	0	-1	0	-1	0	-1	-1	-1	-1	0	0	0	0	0	0	-1	-
	Old R. at Rock Slough	ALL	-3	-3	-4	-3	-1	-1	-1	-1	-2	-2	-2	-2	-1	-1	0	0	-2	-2	-1	-1	-1	-1	0	0	-2	-2	-2
		DROUGHT	-2	-1	-3	-1	-1	0	0	0	0	-1	-1	-1	0	0	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	-1	-
Western Delta	Sac. R. at Emmaton	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	0	-1	0	0	-	
	SJR at Antioch	ALL	1	0	0	0	0	0	0	0	-1	-1	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	-1	-1	
		DROUGHT	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	0	0	-	
	Sac. R. at Mallard Island	ALL	2	1	1	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	0	-1	-1	-1	-1	1	-1	0	0	
		DROUGHT	2	1	2	1	1	1	1	1	0	1	0	0	-1	0	0	0	0	0	0	-1	-1	-1	-1	-1	0	0	-
Major Diversions (Pur Stations)	NBA at Barker Slough PP	ALL	1	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	
		DROUGHT	1	1	0	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	-	
	Contra Costa PP #1	ALL	-3	-3	-3	-3	-2	-2	-1	-1	-1	-1	-2	-1	-2	-2	0	0	-1	-2	-1	-2	0	-1	-1	-2	-2	-2	
		DROUGHT	-2	-1	-2	-1	-1	-1	0	0	-1	-1	0	-1	0	-1	0	0	-1	-1	-1	-1	0	0	0	0	-1	-	
	Banks PP	ALL	2	2	1	2	2	2	4	4	5	5	7	7	7	7	4	5	3	3	0	0	1	0	1	1	3	3	
		DROUGHT	-1	0	0	2	0	0	0	0	0	-1	3	2	3	3	2	2	-1	-1	0	0	-1	-1	0	0	0	-	
	Jones PP	ALL	1	1	2	3	0	0	5	5	10	9	11	11	9	10	11	11	7	7	1	1	0	0	3	4	5	5	
		DROUGHT	0	1	0	2	0	0	3	3	5	4	8	8	6	6	8	9	2	2	-1	-1	-1	0	-1	0	2	-	

<sup>a</sup> ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative ELT (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative ELT). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.



**Table Hg-11. Mercury Concentrations in 350-mm Largemouth Bass Fillets, and Comparisons to Baseline Conditions and Benchmark for Alternative 2D. Equation 1.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Mercury (mg/kg, ww)	% Change In Mercury Concentrations Compared to Baseline <sup>b</sup>		Exceedance Quotients <sup>c</sup>
			Alt. 2D-ELT	EX	NAA-ELT	Alt. 2D-ELT
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	0.56	9	9	2.3
		Drought	0.48	6	6	2.0
	San Joaquin River at Buckley Cove	All	0.64	2	-1	2.7
		Drought	0.66	3	-1	2.7
	Franks Tract	All	0.47	6	6	1.9
		Drought	0.42	4	4	1.7
Old River at Rock Slough	All	0.49	7	6	2.0	
	Drought	0.44	5	4	1.8	
Western Delta	Sacramento River at Emmaton	All	0.39	3	3	1.6
		Drought	0.37	1	1	1.5
	SJR at Antioch	All	0.40	7	7	1.7
		Drought	0.35	3	3	1.4
	Sacramento River at Mallard Island	All	0.31	7	6	1.3
Drought		0.26	3	3	1.1	
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough PP	All	0.38	-8	-7	1.6
		Drought	0.39	-8	-8	1.6
	Contra Costa Pumping Plant #1	All	0.51	5	6	2.1
		Drought	0.47	3	3	1.9
	Banks Pumping Plant	All	0.46	-10	-11	1.9
		Drought	0.48	-1	-3	2.0
Jones Pumping Plant	All	0.47	-12	-13	1.9	
	Drought	0.49	-4	-6	2.1	

## Notes:

- <sup>a</sup> All: Water years 1976-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).
- <sup>b</sup> % change indicates a negative change (increased concentrations) relative to baseline when values are positive and a positive change (lowered concentrations) relative to baseline when values are negative.
- <sup>c</sup> Exceedance Quotient - All concentrations exceed total maximum daily load guidance concentration of 0.24 mg/kg ww Hg.

Alt. - alternative

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA-ELT - No Action Alternative - Early Long Term

ww - wet weight

**Table Hg-12. Mercury Concentrations in 350-mm Largemouth Bass Fillets, and Comparisons to Baseline Conditions and Benchmark for Alternative 2D. Equation 2.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Mercury (mg/kg, ww)	% Change In Mercury Concentrations Compared to Baseline <sup>b</sup>		Exceedance Quotients <sup>c</sup>
			Alt. 2D-ELT	EX	NAA-ELT	Alt. 2D-ELT
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	0.86	13	13	3.6
		Drought	0.70	9	8	2.9
	San Joaquin River at Buckley Cove	All	1.03	5	0	4.4
		Drought	1.08	8	1	4.6
	Franks Tract	All	0.66	9	9	2.8
		Drought	0.57	6	5	2.4
Old River at Rock Slough	All	0.71	10	9	2.9	
	Drought	0.61	7	6	2.6	
Western Delta	Sacramento River at Emmaton	All	0.51	4	4	2.1
		Drought	0.48	1	2	2.0
	SJR at Antioch	All	0.54	10	9	2.2
		Drought	0.44	5	5	1.8
	Sacramento River at Mallard Island	All	0.37	9	8	1.6
		Drought	0.29	5	5	1.2
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough PP	All	0.51	0	1	2.4
		Drought	0.51	0	0	2.4
	Contra Costa Pumping Plant #1	All	0.76	7	8	3.2
		Drought	0.67	5	5	2.8
	Banks Pumping Plant	All	0.64	1	0	3.2
		Drought	0.69	2	0	3.0
	Jones Pumping Plant	All	0.67	2	0	3.4
		Drought	0.72	2	0	3.3

## Notes:

- <sup>a</sup> All: Water years 1976-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).
- <sup>b</sup> % change indicates a negative change (increased concentrations) relative to baseline when values are positive and a positive change (lowered concentrations) relative to baseline when values are negative.
- <sup>c</sup> Exceedance Quotient - All concentrations exceed total maximum daily load guidance concentration of 0.24 mg/kg ww Hg.

Alt. - alternative

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA-ELT - No Action Alternative - Early Long Term

ww - wet weight

**Table Hg-13. Mercury Concentrations in 350-mm Largemouth Bass Fillets, and Comparisons to Baseline Conditions and Benchmark for Alternative 5A. Equation 1.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Mercury (mg/kg, ww)	% Change In Mercury Concentrations Compared to Baseline <sup>b</sup>		Exceedance Quotients <sup>c</sup>
			Alt. 5A-ELT	EX	NAA-ELT	Alt. 5A-ELT
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	0.82	5	5	2.3
		Drought	0.69	5	5	2.0
	San Joaquin River at Buckley Cove	All	1.05	3	0	2.7
		Drought	1.11	5	1	2.8
	Franks Tract	All	0.63	3	3	1.9
		Drought	0.56	2	2	1.7
Old River at Rock Slough	All	0.67	4	3	2.0	
	Drought	0.60	3	2	1.8	
Western Delta	Sacramento River at Emmaton	All	0.48	1	1	1.6
		Drought	0.51	0	1	1.5
	SJR at Antioch	All	0.43	3	3	1.6
		Drought	0.35	2	2	1.4
	Sacramento River at Mallard Island	All	0.28	3	2	1.2
Drought		0.51	2	2	1.1	
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough PP	All	0.73	-8	-7	1.6
		Drought	0.65	-8	-8	1.6
	Contra Costa Pumping Plant #1	All	0.70	2	3	2.1
		Drought	0.70	2	2	1.9
	Banks Pumping Plant	All	0.75	-5	-5	2.0
		Drought	0.75	0	-1	2.0
Jones Pumping Plant	All	0.00	-4	-5	2.1	
	Drought	1.11	-1	-3	2.1	

## Notes:

- <sup>a</sup> All: Water years 1976-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).
- <sup>b</sup> % change indicates a negative change (increased concentrations) relative to baseline when values are positive and a positive change (lowered concentrations) relative to baseline when values are negative.
- <sup>c</sup> Exceedance Quotient - All concentrations exceed total maximum daily load guidance concentration of 0.24 mg/kg ww Hg.

Alt. - alternative

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA-ELT - No Action Alternative - Early Long Term

ww - wet weight



**Table Hg-14. Mercury Concentrations in 350-mm Largemouth Bass Fillets, and Comparisons to Baseline Conditions and Benchmark for Alternative 5A. Equation 2.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Mercury (mg/kg, ww)	% Change In Mercury Concentrations Compared to Baseline <sup>b</sup>		Exceedance Quotients <sup>c</sup>
			Alt. 5A-ELT	EX	NAA-ELT	Alt. 5A-ELT
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	0.82	0	0	3.2
		Drought	0.69	0	-1	2.7
	San Joaquin River at Buckley Cove	All	1.05	0	-4	4.2
		Drought	1.11	0	-6	4.3
	Franks Tract	All	0.63	0	0	2.5
		Drought	0.56	0	-1	2.2
Old River at Rock Slough	All	0.67	0	-1	2.7	
	Drought	0.60	0	-1	2.4	
Western Delta	Sacramento River at Emmaton	All	0.48	0	0	2.0
		Drought	0.51	-1	0	2.0
	SJR at Antioch	All	0.43	0	-1	2.0
		Drought	0.35	0	0	1.7
	Sacramento River at Mallard Island	All	0.28	0	-1	1.4
		Drought	0.51	0	0	1.1
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough PP	All	0.73	-11	-10	2.1
		Drought	0.65	-11	-11	2.1
	Contra Costa Pumping Plant #1	All	0.70	-1	0	2.9
		Drought	0.70	0	0	2.7
	Banks Pumping Plant	All	0.75	-14	-15	2.7
		Drought	0.75	-2	-4	2.9
	Jones Pumping Plant	All	0.00	-16	-18	2.8
		Drought	1.11	-6	-8	3.0

## Notes:

- <sup>a</sup> All: Water years 1976-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).
- <sup>b</sup> % change indicates a negative change (increased concentrations) relative to baseline when values are positive and a positive change (lowered concentrations) relative to baseline when values are negative.
- <sup>c</sup> Exceedance Quotient - All concentrations exceed total maximum daily load guidance concentration of 0.24 mg/kg ww Hg.

Alt. - alternative

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA-ELT - No Action Alternative - Early Long Term

ww - wet weight





**Table N-1. Period Average Nitrate-N Concentrations and Frequency of Exceedance of Objectives/Criteria for Existing Conditions, the No Action Alternative ELT, and Alternative 4A ELT.**

NitrateAlt 4 ELT Scn H3-H4	Location	Period <sup>a</sup>	Period Average Concentration mg/L-N				Lowest Applicable Human Health Criterion/Objective (10 mg/L-N) <sup>b</sup>				Lowest Applicable Aquatic Life Criterion/Objective (N/A) <sup>c</sup>				Other Relevant Threshold (5 mg/L-N) <sup>d</sup>			
			Frequency of Criterion/Objective Exceedance (%)				Frequency of Criterion/Objective Exceedance (%)				Frequency of Criterion/Objective Exceedance (%)							
			Ex. Cond.	No Act. ELT	Alt 4A H3 ELT	Alt 4A H4 ELT	Ex. Cond.	No Act. ELT	Alt 4A H3 ELT	Alt 4A H4 ELT	Ex. Cond.	No Act. ELT	Alt 4A H3 ELT	Alt 4A H4 ELT	Ex. Cond.	No Act. ELT	Alt 4A H3 ELT	Alt 4A H4 ELT
Delta Interior	Moke. R. (SF) at Staten Island	All	0.29	0.29	0.34	0.35	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.30	0.30	0.35	0.35	0	0	0	0	-	-	-	-	0	0	0	0
	SJR at Buckley Cove	All	1.44	1.35	1.37	1.38	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	1.45	1.31	1.36	1.37	0	0	0	0	-	-	-	-	0	0	0	0
	Franks Tract	All	0.36	0.36	0.49	0.50	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.24	0.25	0.29	0.30	0	0	0	0	-	-	-	-	0	0	0	0
Old R. at Rock Slough	All	0.46	0.45	0.60	0.63	0	0	0	0	-	-	-	-	0	0	0	0	
	Drought	0.31	0.31	0.37	0.39	0	0	0	0	-	-	-	-	0	0	0	0	
Western Delta	Sac. R. at Emmaton	All	0.20	0.20	0.23	0.24	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.19	0.19	0.21	0.21	0	0	0	0	-	-	-	-	0	0	0	0
	SJR at Antioch	All	0.27	0.27	0.35	0.35	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.19	0.19	0.22	0.22	0	0	0	0	-	-	-	-	0	0	0	0
	Sac. R. at Mallard Island	All	0.19	0.19	0.24	0.24	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.15	0.15	0.16	0.17	0	0	0	0	-	-	-	-	0	0	0	0
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	All	0.27	0.27	0.19	0.19	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.27	0.27	0.19	0.19	0	0	0	0	-	-	-	-	0	0	0	0
	Contra Costa PP #1	All	0.51	0.51	0.64	0.67	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.38	0.38	0.44	0.45	0	0	0	0	-	-	-	-	0	0	0	0
	Banks PP	All	0.70	0.70	0.50	0.49	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.56	0.55	0.51	0.46	0	0	0	0	-	-	-	-	0	0	0	0
	Jones PP	All	0.92	0.93	0.62	0.62	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.79	0.81	0.67	0.69	0	0	0	0	-	-	-	-	0	0	0	0

<sup>a</sup> ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).  
<sup>b</sup> Drinking water maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.  
<sup>c</sup> Ayers and Westcot (1985). Recommended goals for sensitive crops.

**Table N-2. Period Average Change in Nitrate-N Concentrations (mg/L-N) for the No Action Alternative ELT, Relative to Existing Conditions.**

Nitrate	Location	Period <sup>a</sup>	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Annual Avg. Change	
			Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.
No Act. ELT	Delta Interior	Moke. R. (SF) at Staten Island	ALL	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	
				(1%)	(-0%)	(-0%)	(-1%)	(-1%)	(0%)	(-1%)	(-0%)	(-1%)	(-4%)	(2%)	(-2%)	(-1%)
		DROUGHT	0.00	0.00	0.00	0.00	-0.02	-0.02	-0.01	0.00	-0.01	0.00	0.02	0.00	0.00	0.00
				(1%)	(-0%)	(-1%)	(-1%)	(-2%)	(-3%)	(-3%)	(-2%)	(-2%)	(2%)	(13%)	(-0%)	(-1%)
		SJR at Buckley Cove	ALL	-0.04	-0.03	-0.12	-0.09	-0.06	-0.05	-0.05	-0.04	-0.11	-0.15	-0.15	-0.09	-0.09
				(-3%)	(-2%)	(-8%)	(-5%)	(-4%)	(-4%)	(-5%)	(-4%)	(-9%)	(-11%)	(-12%)	(-6%)	(-6%)
	DROUGHT	-0.06	-0.06	-0.17	-0.16	-0.09	-0.09	-0.11	-0.07	-0.20	-0.21	-0.36	-0.14	-0.14		
			(-3%)	(-4%)	(-11%)	(-9%)	(-5%)	(-6%)	(-9%)	(-8%)	(-16%)	(-19%)	(-25%)	(-10%)	(-10%)	
	Franks Tract	ALL	0.01	0.03	0.01	0.00	0.01	-0.01	0.00	0.00	-0.01	-0.02	-0.01	-0.01	0.00	
			(5%)	(12%)	(3%)	(1%)	(1%)	(-1%)	(-1%)	(0%)	(-2%)	(-8%)	(-5%)	(-11%)	(-0%)	
	DROUGHT	0.03	0.06	0.02	0.00	-0.03	-0.03	-0.02	-0.01	0.00	0.00	0.01	0.00	0.00		
			(16%)	(34%)	(11%)	(-0%)	(-6%)	(-9%)	(-6%)	(-3%)	(-2%)	(1%)	(10%)	(0%)	(1%)	
Old R. at Rock Slough	ALL	0.03	0.05	0.00	0.00	-0.01	-0.01	0.00	0.00	-0.01	-0.02	-0.01	-0.02	0.00		
		(12%)	(19%)	(-0%)	(0%)	(-2%)	(-1%)	(-1%)	(-1%)	(-2%)	(-6%)	(-4%)	(-14%)	(-0%)		
DROUGHT	0.06	0.10	0.03	-0.02	-0.08	-0.06	-0.03	0.00	0.00	0.01	0.03	0.00	0.00			
		(26%)	(52%)	(12%)	(-5%)	(-15%)	(-11%)	(-5%)	(-1%)	(-1%)	(3%)	(18%)	(1%)	(1%)		
Western Delta	Sac. R. at Emmaton	ALL	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00		
			(2%)	(4%)	(1%)	(-0%)	(0%)	(1%)	(1%)	(5%)	(6%)	(3%)	(3%)	(-1%)	(2%)	
	DROUGHT	0.01	0.02	0.01	0.00	0.00	-0.01	-0.01	0.00	0.00	0.00	0.01	0.00	0.00		
			(4%)	(10%)	(3%)	(-1%)	(-1%)	(-3%)	(-3%)	(-2%)	(-2%)	(3%)	(9%)	(-0%)	(1%)	
	SJR at Antioch	ALL	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	
			(3%)	(8%)	(2%)	(0%)	(1%)	(-1%)	(-1%)	(1%)	(1%)	(-5%)	(-2%)	(-4%)	(0%)	
DROUGHT	0.01	0.03	0.01	0.00	-0.01	-0.02	-0.01	-0.01	0.00	0.00	0.01	0.00	0.00			
		(7%)	(21%)	(7%)	(-1%)	(-4%)	(-6%)	(-5%)	(-3%)	(-3%)	(2%)	(7%)	(-0%)	(0%)		
Sac. R. at Mallard Island	ALL	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
		(4%)	(8%)	(2%)	(0%)	(-0%)	(-1%)	(-1%)	(2%)	(2%)	(-2%)	(-2%)	(-0%)	(1%)		
DROUGHT	0.01	0.02	0.01	0.00	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00			
		(7%)	(19%)	(7%)	(-1%)	(-5%)	(-5%)	(-4%)	(-3%)	(-2%)	(1%)	(4%)	(-0%)	(0%)		
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-0.02	0.00	0.00	0.01	0.05	0.01	-0.02	-0.01	-0.02	-0.02	-0.02	0.00	0.00	
			(-6%)	(-0%)	(-0%)	(1%)	(11%)	(4%)	(-5%)	(-2%)	(-7%)	(-9%)	(-8%)	(0%)	(-1%)	
	DROUGHT	-0.02	0.00	0.00	0.00	0.02	0.02	0.02	0.01	-0.02	-0.01	-0.01	0.00	0.00		
			(-6%)	(-0%)	(1%)	(0%)	(4%)	(7%)	(5%)	(4%)	(-7%)	(-6%)	(-2%)	(0%)	(0%)	
	Contra Costa PP #1	ALL	-0.01	0.05	0.06	0.01	0.04	-0.01	-0.03	0.00	-0.03	-0.03	-0.04	-0.02	0.00	
			(-4%)	(29%)	(19%)	(1%)	(5%)	(-1%)	(-4%)	(0%)	(-5%)	(-7%)	(-12%)	(-16%)	(-0%)	
	DROUGHT	0.04	0.10	0.03	-0.01	-0.07	-0.09	-0.05	0.02	-0.02	-0.01	0.00	0.00	0.00		
			(12%)	(59%)	(9%)	(-2%)	(-11%)	(-15%)	(-7%)	(5%)	(-5%)	(-3%)	(1%)	(2%)	(-1%)	
	Banks PP	ALL	0.02	0.06	0.01	0.00	-0.02	-0.03	-0.01	0.00	-0.01	-0.01	-0.02	-0.03	0.00	
			(4%)	(10%)	(2%)	(-0%)	(-2%)	(-3%)	(-1%)	(-1%)	(-1%)	(-3%)	(-5%)	(-9%)	(-1%)	
	DROUGHT	0.06	0.09	0.01	-0.02	-0.07	-0.10	-0.06	-0.02	-0.02	0.02	0.04	-0.01	-0.01		
			(13%)	(21%)	(3%)	(-3%)	(-8%)	(-11%)	(-7%)	(-4%)	(-3%)	(7%)	(16%)	(-6%)	(-1%)	
Jones PP	ALL	0.06	0.08	0.00	-0.01	-0.03	-0.01	0.00	0.00	0.01	0.02	0.02	0.05	0.02		
		(7%)	(10%)	(-0%)	(-1%)	(-2%)	(-1%)	(0%)	(0%)	(1%)	(3%)	(4%)	(8%)	(2%)		
DROUGHT	0.09	0.16	0.00	-0.04	-0.10	-0.05	-0.01	0.01	0.00	0.07	0.12	0.01	0.02			
		(13%)	(24%)	(0%)	(-4%)	(-7%)	(-3%)	(-1%)	(1%)	(-0%)	(24%)	(31%)	(3%)	(3%)		

<sup>a</sup> ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

**Table N-3. No Action Alternative ELT use of Assimilative Capacity Available under Existing Conditions Relative to the 10 mg/L-N MCL.**

Nitrate	Location	Period <sup>a</sup>	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Annual Avg. Change	
			Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.
No Act. ELT	Delta Interior	Moke. R. (SF) at Staten Island	ALL	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	
			DROUGHT	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.1	0.0	-0.2	0.0	0.0
		SJR at Buckley Cove	ALL	0.5	0.3	1.4	1.0	0.7	0.6	0.6	0.4	1.2	1.8	2.3	1.1	1.0
			DROUGHT	0.7	0.8	2.1	2.0	1.1	1.1	1.2	0.8	2.3	2.4	4.2	1.7	1.7
		Franks Tract	ALL	-0.1	-0.3	-0.1	0.0	-0.1	0.1	0.0	0.0	0.1	0.2	0.1	0.1	0.0
			DROUGHT	-0.3	-0.6	-0.2	0.0	0.3	0.4	0.2	0.1	0.0	0.0	-0.1	0.0	0.0
	Old R. at Rock Slough	ALL	-0.3	-0.5	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.2	0.1	0.2	0.0	
		DROUGHT	-0.6	-1.0	-0.3	0.2	0.9	0.6	0.3	0.0	0.0	-0.1	-0.3	0.0	0.0	
	Western Delta	Sac. R. at Emmaton	ALL	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0
			DROUGHT	-0.1	-0.2	-0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	-0.1	0.0	0.0
		SJR at Antioch	ALL	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
			DROUGHT	-0.1	-0.3	-0.1	0.0	0.2	0.2	0.1	0.1	0.0	0.0	-0.1	0.0	0.0
Sac. R. at Mallard Island		ALL	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	
		DROUGHT	-0.1	-0.2	-0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	0.2	0.0	0.0	-0.1	-0.5	-0.1	0.2	0.1	0.2	0.2	0.2	0.0	0.0	
		DROUGHT	0.2	0.0	0.0	0.0	-0.2	-0.2	-0.2	-0.1	0.2	0.1	0.1	0.0	0.0	
	Contra Costa PP #1	ALL	0.1	-0.5	-0.6	-0.1	-0.5	0.1	0.4	0.0	0.3	0.3	0.4	0.2	0.0	
		DROUGHT	-0.4	-1.1	-0.3	0.1	0.7	1.0	0.5	-0.2	0.2	0.1	0.0	0.0	0.0	
	Banks PP	ALL	-0.2	-0.7	-0.1	0.0	0.2	0.3	0.1	0.0	0.1	0.1	0.2	0.3	0.0	
		DROUGHT	-0.7	-1.0	-0.1	0.2	0.8	1.2	0.7	0.2	0.2	-0.2	-0.4	0.1	0.1	
	Jones PP	ALL	-0.6	-0.9	0.0	0.1	0.3	0.1	0.0	0.0	-0.1	-0.2	-0.2	-0.5	-0.2	
		DROUGHT	-0.9	-1.8	0.0	0.5	1.2	0.5	0.1	-0.1	0.0	-0.7	-1.2	-0.1	-0.2	

<sup>a</sup> ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.
- Regulatory objective is the drinking water maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.



**Table N-4. Period Average Change in Nitrate-N Concentrations (mg/L-N) for Alternative 4A-H3 ELT Relative to Existing Conditions and the No Action Alternative ELT.**

Nitrate	Location	Period *	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change		
			Ex. Condit.	No Act ELT	Ex. Condit.	No Act ELT	Ex. Condit.	No Act ELT	Ex. Condit.	No Act ELT	Ex. Condit.	No Act ELT	Ex. Condit.	No Act ELT	Ex. Condit.	No Act ELT	Ex. Condit.	No Act ELT	Ex. Condit.	No Act ELT	Ex. Condit.	No Act ELT	Ex. Condit.	No Act ELT	Ex. Condit.	No Act ELT	Ex. Condit.	No Act ELT	
Delta Interior	Moke R. (SF) at Staten Island	ALL	0.05	0.05	0.00	0.00	0.01	0.01	0.06	0.06	0.09	0.10	0.09	0.09	0.08	0.08	0.05	0.05	0.08	0.08	0.06	0.06	0.08	0.08	0.00	0.00	0.05	0.05	
		DROUGHT	(22%)	(21%)	(-0%)	(0%)	(4%)	(4%)	(12%)	(13%)	(14%)	(16%)	(22%)	(22%)	(21%)	(21%)	(17%)	(18%)	(31%)	(32%)	(27%)	(32%)	(42%)	(39%)	(-1%)	(1%)	(18%)	(19%)	
			0.04	0.04	0.00	0.00	0.01	0.01	0.03	0.04	0.04	0.06	0.08	0.09	0.04	0.05	0.03	0.04	0.08	0.09	0.09	0.08	0.09	0.07	0.00	0.00	0.04	0.05	
	SJR at Buckley Cove	ALL	-0.04	0.00	-0.04	-0.02	-0.10	0.02	-0.04	0.04	-0.06	-0.01	-0.04	0.01	-0.05	0.00	-0.04	0.00	-0.09	0.02	-0.09	0.06	-0.10	0.09	-0.09	0.00	-0.07	0.02	
		DROUGHT	(-3%)	(0%)	(-3%)	(-1%)	(-7%)	(1%)	(-3%)	(3%)	(-4%)	(-0%)	(-3%)	(1%)	(-4%)	(0%)	(-4%)	(0%)	(-7%)	(2%)	(-7%)	(5%)	(-6%)	(7%)	(-6%)	(0%)	(-5%)	(1%)	
			-0.06	0.00	-0.08	-0.01	-0.17	0.00	-0.12	0.05	-0.12	-0.03	-0.08	0.01	-0.10	0.00	-0.07	0.01	-0.16	0.04	-0.02	0.19	-0.08	0.28	-0.13	0.02	-0.10	0.05	
	Franks Tract	ALL	0.21	0.20	0.25	0.22	0.11	0.10	0.09	0.08	0.20	0.19	0.17	0.18	0.10	0.10	0.05	0.05	0.11	0.12	0.07	0.10	0.07	0.08	0.07	0.08	0.12	0.12	
		DROUGHT	(104%)	(92%)	(115%)	(92%)	(36%)	(32%)	(19%)	(18%)	(32%)	(31%)	(29%)	(30%)	(18%)	(19%)	(11%)	(11%)	(27%)	(29%)	(28%)	(40%)	(37%)	(44%)	(41%)	(40%)	(34%)	(34%)	
			0.11	0.08	0.13	0.08	0.06	0.04	0.03	0.03	0.04	0.06	0.03	0.07	0.02	0.05	0.02	0.02	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.00	0.05	0.05	
	Old R. at Rock Slough	ALL	0.32	0.30	0.35	0.31	0.09	0.10	0.09	0.08	0.20	0.21	0.16	0.17	0.03	0.03	0.00	0.00	0.13	0.14	0.08	0.10	0.08	0.09	0.18	0.20	0.14	0.14	
		DROUGHT	(139%)	(114%)	(138%)	(99%)	(25%)	(25%)	(15%)	(15%)	(27%)	(22%)	(23%)	(4%)	(5%)	(-0%)	(0%)	(25%)	(27%)	(27%)	(35%)	(38%)	(45%)	(142%)	(183%)	(31%)	(31%)		
			0.19	0.14	0.23	0.13	0.06	0.03	0.05	0.07	0.01	0.09	0.03	0.09	-0.03	0.00	0.01	0.01	0.06	0.07	0.07	0.06	0.08	0.05	0.00	0.00	0.06	0.06	
Western Delta	Sac. R. at Emmaton	ALL	0.07	0.06	0.06	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.02	0.05	0.03	0.04	0.04	0.05	0.04	0.02	0.02	0.04	0.03	
		DROUGHT	(38%)	(35%)	(39%)	(33%)	(11%)	(10%)	(6%)	(6%)	(8%)	(8%)	(10%)	(9%)	(13%)	(12%)	(17%)	(11%)	(22%)	(15%)	(30%)	(27%)	(33%)	(29%)	(19%)	(20%)	(18%)	(16%)	
			0.04	0.03	0.04	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.02	0.02	0.03	0.02	0.00	0.00	0.01	0.01	
	SJR at Antioch	ALL	0.11	0.11	0.14	0.13	0.07	0.07	0.07	0.07	0.12	0.12	0.11	0.12	0.08	0.08	0.05	0.04	0.08	0.07	0.06	0.07	0.05	0.05	0.03	0.04	0.08	0.08	
		DROUGHT	(69%)	(64%)	(87%)	(74%)	(30%)	(28%)	(19%)	(19%)	(27%)	(28%)	(28%)	(28%)	(21%)	(23%)	(16%)	(14%)	(25%)	(24%)	(27%)	(33%)	(31%)	(34%)	(26%)	(41%)	(30%)	(30%)	
			0.07	0.05	0.07	0.04	0.04	0.03	0.02	0.03	0.02	0.03	0.01	0.03	0.01	0.02	0.00	0.01	0.01	0.01	0.02	0.02	0.03	0.02	0.00	0.00	0.03	0.03	
	Sac. R. at Mallard Island	ALL	0.07	0.07	0.09	0.08	0.04	0.04	0.04	0.04	0.06	0.06	0.06	0.06	0.05	0.05	0.03	0.03	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.05	0.05	
		DROUGHT	(56%)	(51%)	(70%)	(58%)	(26%)	(24%)	(16%)	(16%)	(20%)	(21%)	(21%)	(22%)	(18%)	(19%)	(15%)	(12%)	(24%)	(21%)	(25%)	(27%)	(21%)	(24%)	(25%)	(25%)	(25%)	(24%)	
			0.04	0.04	0.05	0.03	0.03	0.02	0.02	0.02	0.01	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.01	0.00	0.00	0.01	0.01	
	Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-0.08	-0.06	0.00	0.00	-0.02	-0.02	-0.08	-0.09	-0.15	-0.20	-0.11	-0.12	-0.12	-0.10	-0.08	-0.07	-0.11	-0.09	-0.11	-0.09	-0.15	-0.12	0.00	0.00	-0.08	-0.08
			DROUGHT	(-29%)	(-24%)	(1%)	(1%)	(-8%)	(-8%)	(-23%)	(-25%)	(-31%)	(-38%)	(-29%)	(-31%)	(-34%)	(-31%)	(-34%)	(-33%)	(-43%)	(-38%)	(-49%)	(-44%)	(-51%)	(-47%)	(2%)	(2%)	(-30%)	(-30%)
				-0.12	-0.11	0.00	0.00	-0.01	-0.01	-0.05	-0.05	-0.10	-0.11	-0.08	-0.11	-0.10	-0.12	-0.08	-0.09	-0.12	-0.10	-0.12	-0.11	-0.17	-0.17	0.00	0.00	-0.08	-0.08
Contra Costa PP #1		ALL	0.27	0.29	0.32	0.26	0.22	0.16	0.04	0.03	0.16	0.12	0.14	0.15	0.07	0.10	-0.03	-0.03	0.09	0.12	0.09	0.11	0.04	0.09	0.10	0.12	0.13	0.13	
		DROUGHT	(84%)	(92%)	(170%)	(109%)	(67%)	(41%)	(5%)	(5%)	(19%)	(14%)	(17%)	(18%)	(8%)	(12%)	(-5%)	(-5%)	(14%)	(21%)	(24%)	(33%)	(13%)	(29%)	(81%)	(115%)	(24%)	(25%)	
			0.18	0.14	0.21	0.11	0.09	0.07	0.00	0.01	0.07	0.14	0.00	0.09	-0.04	0.00	-0.02	-0.04	0.04	0.06	0.06	0.07	0.05	0.04	0.00	0.00	0.05	0.06	
Banks PP		ALL	-0.11	-0.13	-0.08	-0.14	-0.11	-0.12	-0.28	-0.28	-0.41	-0.39	-0.50	-0.48	-0.41	-0.40	-0.17	-0.17	-0.18	-0.17	-0.04	-0.03	-0.04	-0.02	-0.09	-0.06	-0.20	-0.20	
		DROUGHT	(-20%)	(-23%)	(-14%)	(-22%)	(-19%)	(-21%)	(-36%)	(-35%)	(-36%)	(-35%)	(-45%)	(-47%)	(-43%)	(-42%)	(-24%)	(-23%)	(-21%)	(-20%)	(-8%)	(-5%)	(-9%)	(-4%)	(-31%)	(-24%)	(-29%)	(-29%)	
			0.06	-0.01	-0.01	-0.11	0.02	0.01	-0.02	0.00	-0.02	0.05	-0.32	-0.21	-0.32	-0.26	-0.13	-0.11	0.02	0.04	-0.01	-0.02	0.18	0.14	-0.01	0.00	-0.05	-0.04	
Jones PP		ALL	(-4%)	(-10%)	(-18%)	(-26%)	(-2%)	(-2%)	(-36%)	(-35%)	(-49%)	(-48%)	(-54%)	(-54%)	(-42%)	(-42%)	(-48%)	(-48%)	(-48%)	(-48%)	(-11%)	(-13%)	(11%)	(7%)	(-44%)	(-48%)	(-32%)	(-33%)	
		DROUGHT	0.05	-0.04	0.01	-0.16	0.02	0.02	-0.27	-0.22	-0.35	-0.25	-0.51	-0.28	-0.27	-0.32	-0.33	-0.14	-0.14	0.12	0.05	0.18	0.06	0.02	0.01	-0.13	-0.15		
			(7%)	(-5%)	(1%)	(-19%)	(2%)	(2%)	(-25%)	(-22%)	(-25%)	(-19%)	(-42%)	(-40%)	(-25%)	(-24%)	(-41%)	(-41%)	(-24%)	(-24%)	(43%)	(15%)	(47%)	(12%)	(6%)	(3%)	(-16%)	(-18%)	

<sup>a</sup> ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

**Table N-5. Period Average Change in Nitrate-N Concentrations (mg/L-N) for Alternative 4A-H4 ELT Relative to Existing Conditions and the No Action Alternative ELT.**

Nitrate	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
			Ek. Cond.	No Act. ELT	Ek. Cond.	No Act. ELT	Ek. Cond.	No Act. ELT	Ek. Cond.	No Act. ELT	Ek. Cond.	No Act. ELT	Ek. Cond.	No Act. ELT	Ek. Cond.	No Act. ELT	Ek. Cond.	No Act. ELT	Ek. Cond.	No Act. ELT	Ek. Cond.	No Act. ELT	Ek. Cond.	No Act. ELT	Ek. Cond.	No Act. ELT	Ek. Cond.	No Act. ELT		
Alt 4 ELT Scn H4	Delta Interior	Moke, R. (SF) at Staten Island	ALL	0.05 (24%)	0.05 (23%)	0.00 (-0%)	0.00 (-0%)	0.01 (4%)	0.01 (4%)	0.05 (11%)	0.06 (12%)	0.08 (13%)	0.09 (15%)	0.09 (20%)	0.09 (20%)	0.07 (19%)	0.07 (19%)	0.04 (16%)	0.04 (17%)	0.09 (36%)	0.09 (37%)	0.08 (38%)	0.08 (43%)	0.08 (43%)	0.08 (40%)	0.00 (-1%)	0.00 (2%)	0.05 (18%)	0.06 (19%)	
			DROUGHT	0.04 (18%)	0.04 (17%)	0.00 (-1%)	0.00 (-1%)	0.01 (3%)	0.01 (3%)	0.02 (5%)	0.03 (6%)	0.03 (6%)	0.04 (13%)	0.04 (17%)	0.07 (12%)	0.08 (15%)	0.07 (14%)	0.07 (16%)	0.04 (39%)	0.04 (42%)	0.09 (62%)	0.10 (59%)	0.11 (52%)	0.11 (52%)	0.10 (52%)	0.07 (34%)	0.00 (-1%)	0.00 (-1%)	0.05 (15%)	0.05 (16%)
		SJR at Buckley Cove	ALL	-0.04 (-3%)	0.00 (0%)	-0.04 (-3%)	-0.02 (-1%)	-0.10 (-6%)	0.02 (2%)	-0.04 (-3%)	0.05 (3%)	-0.06 (-4%)	-0.01 (-0%)	-0.04 (-3%)	0.01 (1%)	-0.05 (-4%)	0.00 (0%)	-0.04 (-4%)	0.00 (0%)	-0.09 (-7%)	0.02 (2%)	-0.07 (-5%)	0.08 (7%)	-0.08 (-5%)	0.11 (8%)	-0.08 (-6%)	0.11 (0%)	-0.09 (-6%)	0.00 (-4%)	0.02 (2%)
			DROUGHT	-0.06 (-3%)	0.00 (0%)	-0.08 (-4%)	-0.01 (-1%)	-0.17 (-10%)	0.01 (0%)	-0.12 (-7%)	0.05 (3%)	-0.12 (-7%)	-0.03 (-2%)	-0.08 (-6%)	0.01 (1%)	-0.10 (-8%)	0.01 (0%)	-0.07 (-6%)	0.01 (1%)	-0.16 (-12%)	0.05 (5%)	0.02 (2%)	0.23 (26%)	0.02 (1%)	0.23 (26%)	-0.01 (-1%)	0.34 (31%)	-0.13 (-9%)	0.01 (1%)	-0.09 (-6%)
		Franks Tract	ALL	0.23 (114%)	0.22 (104%)	0.25 (113%)	0.22 (90%)	0.11 (36%)	0.10 (32%)	0.09 (19%)	0.09 (18%)	0.09 (34%)	0.09 (32%)	0.21 (30%)	0.20 (31%)	0.18 (19%)	0.18 (20%)	0.18 (13%)	0.18 (13%)	0.13 (32%)	0.14 (34%)	0.13 (43%)	0.14 (58%)	0.11 (51%)	0.13 (59%)	0.10 (51%)	0.11 (81%)	0.11 (102%)	0.09 (38%)	0.10 (38%)
			DROUGHT	0.11 (54%)	0.08 (32%)	0.14 (51%)	0.08 (35%)	0.06 (29%)	0.04 (12%)	0.04 (10%)	0.04 (10%)	0.04 (8%)	0.07 (19%)	0.07 (13%)	0.03 (8%)	0.07 (19%)	0.07 (13%)	0.05 (8%)	0.07 (19%)	0.04 (19%)	0.04 (29%)	0.06 (31%)	0.07 (41%)	0.06 (49%)	0.06 (36%)	0.06 (4%)	0.06 (3%)	0.00 (24%)	0.00 (23%)	
	Old R. at Rock Slough	ALL	0.37 (180%)	0.34 (132%)	0.35 (133%)	0.30 (97%)	0.10 (26%)	0.10 (27%)	0.09 (16%)	0.09 (16%)	0.21 (26%)	0.22 (29%)	0.17 (24%)	0.18 (24%)	0.06 (8%)	0.06 (8%)	0.03 (5%)	0.03 (6%)	0.17 (32%)	0.18 (35%)	0.14 (48%)	0.16 (57%)	0.11 (53%)	0.16 (60%)	0.11 (201%)	0.12 (252%)	0.25 (38%)	0.27 (38%)		
		DROUGHT	0.18 (60%)	0.12 (43%)	0.24 (124%)	0.14 (47%)	0.06 (28%)	0.04 (14%)	0.07 (18%)	0.08 (24%)	0.01 (2%)	0.09 (19%)	0.04 (7%)	0.10 (20%)	0.10 (7%)	0.04 (13%)	0.05 (14%)	0.04 (15%)	0.05 (37%)	0.05 (39%)	0.10 (68%)	0.10 (60%)	0.11 (57%)	0.10 (33%)	0.11 (33%)	0.09 (3%)	0.07 (2%)	0.00 (27%)	0.00 (26%)	
	Western Delta	Sac. R. at Emmaton	ALL	0.08 (43%)	0.07 (40%)	0.06 (39%)	0.06 (34%)	0.02 (11%)	0.02 (6%)	0.02 (8%)	0.02 (8%)	0.03 (10%)	0.03 (10%)	0.02 (7%)	0.02 (10%)	0.02 (6%)	0.01 (3%)	0.03 (4%)	0.02 (3%)	0.06 (10%)	0.04 (29%)	0.04 (26%)	0.07 (32%)	0.06 (26%)	0.06 (32%)	0.06 (2%)	0.06 (2%)	0.02 (3%)	0.02 (10%)	0.04 (9%)
			DROUGHT	0.03 (18%)	0.03 (14%)	0.04 (26%)	0.02 (14%)	0.02 (10%)	0.01 (6%)	0.01 (4%)	0.01 (3%)	0.01 (4%)	0.01 (2%)	0.01 (5%)	0.01 (3%)	0.01 (6%)	0.01 (4%)	0.01 (6%)	0.01 (8%)	0.01 (6%)	0.01 (8%)	0.02 (10%)	0.04 (29%)	0.03 (26%)	0.04 (32%)	0.03 (2%)	0.03 (2%)	0.00 (3%)	0.00 (10%)	0.02 (9%)
		SJR at Antioch	ALL	0.13 (78%)	0.12 (72%)	0.14 (85%)	0.13 (72%)	0.07 (31%)	0.07 (28%)	0.07 (20%)	0.07 (19%)	0.13 (28%)	0.12 (27%)	0.12 (28%)	0.12 (29%)	0.08 (20%)	0.08 (22%)	0.05 (16%)	0.08 (14%)	0.08 (28%)	0.08 (26%)	0.09 (40%)	0.09 (47%)	0.08 (45%)	0.09 (46%)	0.09 (47%)	0.07 (47%)	0.07 (52%)	0.04 (33%)	0.05 (33%)
			DROUGHT	0.06 (39%)	0.05 (29%)	0.07 (54%)	0.04 (27%)	0.04 (22%)	0.03 (10%)	0.03 (12%)	0.03 (6%)	0.03 (11%)	0.02 (6%)	0.04 (11%)	0.01 (4%)	0.03 (7%)	0.03 (12%)	0.02 (6%)	0.03 (5%)	0.02 (6%)	0.02 (13%)	0.03 (13%)	0.03 (27%)	0.03 (25%)	0.03 (35%)	0.03 (26%)	0.05 (3%)	0.04 (3%)	0.00 (16%)	0.00 (16%)
Sac. R. at Mallard Island		ALL	0.08 (64%)	0.08 (58%)	0.08 (58%)	0.07 (55%)	0.04 (24%)	0.04 (24%)	0.04 (17%)	0.04 (17%)	0.06 (21%)	0.06 (21%)	0.06 (22%)	0.06 (22%)	0.04 (14%)	0.04 (15%)	0.03 (11%)	0.02 (11%)	0.05 (24%)	0.05 (22%)	0.05 (34%)	0.06 (36%)	0.06 (33%)	0.06 (33%)	0.04 (32%)	0.05 (32%)	0.03 (27%)	0.03 (27%)		
		DROUGHT	0.05 (38%)	0.04 (29%)	0.05 (46%)	0.03 (23%)	0.03 (21%)	0.02 (13%)	0.02 (13%)	0.03 (14%)	0.03 (14%)	0.01 (5%)	0.01 (11%)	0.01 (6%)	0.01 (11%)	0.01 (3%)	0.01 (5%)	0.01 (6%)	0.01 (9%)	0.01 (13%)	0.01 (13%)	0.01 (22%)	0.01 (13%)	0.01 (13%)	0.02 (22%)	0.02 (17%)	0.02 (2%)	0.02 (2%)	0.00 (12%)	0.00 (12%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-0.08 (-29%)	-0.08 (-24%)	0.00 (1%)	0.00 (1%)	-0.02 (-8%)	-0.02 (-8%)	-0.08 (-23%)	-0.09 (-24%)	-0.15 (-31%)	-0.20 (-37%)	-0.11 (-29%)	-0.11 (-31%)	-0.12 (-34%)	-0.12 (-31%)	-0.10 (-35%)	-0.10 (-33%)	-0.08 (-43%)	-0.08 (-39%)	-0.08 (-49%)	-0.08 (-43%)	-0.09 (-50%)	-0.09 (-46%)	-0.11 (-2%)	-0.09 (2%)	-0.11 (-30%)	-0.09 (-29%)		
		DROUGHT	-0.13 (-39%)	-0.11 (-35%)	0.00 (1%)	0.00 (2%)	-0.01 (-6%)	-0.01 (-7%)	-0.05 (-15%)	-0.05 (-15%)	-0.10 (-23%)	-0.11 (-26%)	-0.10 (-24%)	-0.11 (-29%)	-0.10 (-31%)	-0.12 (-34%)	-0.12 (-35%)	-0.08 (-38%)	-0.09 (-38%)	-0.12 (-45%)	-0.10 (-41%)	-0.12 (-50%)	-0.11 (-47%)	-0.11 (-53%)	-0.17 (-3%)	-0.16 (3%)	0.00 (-29%)	0.00 (-29%)		
	Contra Costa PP #1	ALL	0.35 (106%)	0.36 (116%)	0.34 (102%)	0.29 (119%)	0.22 (69%)	0.16 (42%)	0.04 (6%)	0.04 (5%)	0.19 (22%)	0.15 (16%)	0.19 (23%)	0.19 (24%)	0.09 (10%)	0.12 (15%)	0.01 (1%)	0.00 (1%)	0.14 (22%)	0.17 (29%)	0.16 (43%)	0.18 (53%)	0.18 (22%)	0.18 (39%)	0.12 (125%)	0.12 (167%)	0.15 (32%)	0.17 (32%)		
		DROUGHT	0.17 (53%)	0.13 (36%)	0.21 (117%)	0.10 (36%)	0.10 (34%)	0.07 (23%)	0.07 (0%)	0.01 (3%)	0.01 (3%)	0.05 (7%)	0.12 (20%)	0.10 (2%)	0.10 (19%)	0.03 (4%)	0.07 (12%)	0.02 (5%)	0.02 (0%)	0.09 (24%)	0.10 (30%)	0.10 (44%)	0.11 (48%)	0.10 (26%)	0.11 (25%)	0.08 (6%)	0.01 (5%)	0.00 (19%)	0.00 (20%)	
	Banks PP	ALL	-0.08 (-14%)	-0.10 (-18%)	-0.14 (-25%)	-0.21 (-32%)	-0.07 (-11%)	-0.08 (-11%)	-0.33 (-41%)	-0.32 (-41%)	-0.45 (-51%)	-0.43 (-50%)	-0.53 (-59%)	-0.50 (-59%)	-0.33 (-41%)	-0.32 (-40%)	-0.29 (-35%)	-0.28 (-35%)	-0.27 (-40%)	-0.27 (-39%)	-0.26 (-39%)	0.02 (4%)	0.03 (7%)	0.05 (12%)	0.07 (16%)	-0.13 (-31%)	-0.10 (-31%)	-0.21 (-48%)	-0.21 (-40%)	
		DROUGHT	0.04 (7%)	-0.03 (-5%)	-0.03 (-7%)	-0.13 (-23%)	0.03 (6%)	0.02 (3%)	-0.12 (-19%)	-0.10 (-17%)	-0.09 (-10%)	-0.02 (-3%)	-0.41 (-43%)	-0.30 (-36%)	-0.38 (-41%)	-0.32 (-36%)	-0.32 (-37%)	-0.24 (-35%)	-0.21 (-35%)	-0.24 (-17%)	-0.21 (-14%)	-0.10 (-19%)	-0.08 (-14%)	-0.05 (-19%)	-0.07 (-14%)	0.22 (88%)	0.18 (61%)	0.01 (9%)	0.02 (18%)	-0.09 (-17%)
	Jones PP	ALL	-0.19 (-24%)	-0.25 (-29%)	-0.13 (-16%)	-0.21 (-23%)	-0.05 (-6%)	-0.05 (-6%)	-0.31 (-26%)	-0.30 (-26%)	-0.67 (-47%)	-0.64 (-45%)	-0.72 (-56%)	-0.71 (-56%)	-0.54 (-48%)	-0.54 (-48%)	-0.36 (-44%)	-0.36 (-44%)	-0.29 (-34%)	-0.29 (-34%)	-0.29 (-0%)	-0.29 (-3%)	-0.29 (-3%)	-0.29 (-5%)	-0.29 (-5%)	-0.02 (-45%)	-0.02 (-49%)	-0.01 (-32%)	-0.01 (-33%)	
		DROUGHT	-0.15 (-22%)	-0.23 (-31%)	-0.10 (-14%)	-0.26 (-31%)	0.01 (1%)	0.01 (1%)	-0.08 (-7%)	-0.04 (-3%)	-0.30 (-22%)	-0.20 (-15%)	-0.48 (-37%)	-0.44 (-35%)	-0.37 (-32%)	-0.36 (-32%)	-0.29 (-36%)	-0.29 (-37%)	0.00 (0%)	0.00 (0%)	0.26 (94%)	0.19 (58%)	0.21 (57%)	0.21 (19%)	0.10 (9%)	0.04 (6%)	0.02 (13%)	-0.10 (-15%)		

<sup>a</sup> ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).



**Table N-6. Alternative 4-H3 ELT Use of Assimilative Capacity Available under Existing Conditions and the No Action Alternative ELT Relative to the 10 mg/L-N MCL.**

Nitrate	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT		
Alt 4 ELT Scn H3	Delta Interior	Moke. R. (SF) at Staten Island	ALL	-0.5	-0.5	0.0	0.0	-0.1	-0.1	-0.6	-0.7	-0.9	-1.0	-1.0	-1.0	-0.8	-0.8	-0.5	-0.5	-0.8	-0.8	-0.6	-0.6	-0.8	-0.8	0.0	0.0	-0.5	-0.6	
		DROUGHT	-0.4	-0.4	0.0	0.0	-0.1	-0.1	-0.3	-0.4	-0.5	-0.6	-0.8	-1.0	-0.5	-0.6	-0.4	-0.4	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.7	0.0	0.0	-0.5	-	
	SJR at Buckley Cove	ALL	0.5	0.0	0.5	0.2	1.2	-0.2	0.5	-0.5	0.8	0.1	0.5	-0.1	0.6	0.0	0.4	0.0	1.0	-0.2	1.1	-0.7	1.2	-1.1	1.1	0.0	0.8	0.8	-0.2	
		DROUGHT	0.7	0.0	1.0	0.2	2.0	-0.1	1.4	-0.5	1.4	0.3	1.0	-0.1	1.1	-0.1	0.7	-0.1	1.8	-0.5	0.3	-2.1	0.9	-3.1	1.5	-0.2	1.1	-		
	Franks Tract	ALL	-2.1	-2.0	-2.5	-2.3	-1.2	-1.1	-0.9	-0.9	-2.1	-2.1	-1.8	-1.9	-1.0	-1.1	-0.5	-0.5	-1.1	-1.2	-0.8	-1.0	-0.7	-0.8	-0.7	-0.8	-0.7	-0.8	-1.3	-1.3
		DROUGHT	-1.2	-0.8	-1.4	-0.8	-0.6	-0.4	-0.3	-0.3	-0.4	-0.7	-0.3	-0.7	-0.3	-0.5	-0.2	-0.2	-0.4	-0.5	-0.4	-0.4	-0.6	-0.4	0.0	0.0	-0.5	-		
	Old R. at Rock Slough	ALL	-3.3	-3.0	-3.6	-3.2	-1.0	-1.0	-0.9	-0.9	-2.1	-2.3	-1.7	-1.8	-0.3	-0.4	0.0	0.0	-1.4	-1.5	-0.8	-1.0	-0.8	-0.9	-1.8	-2.0	-1.5	-1.5		
		DROUGHT	-2.0	-1.4	-2.4	-1.4	-0.6	-0.4	-0.5	-0.7	-0.1	-1.0	-0.3	-0.9	0.3	0.0	-0.1	-0.1	-0.7	-0.7	-0.6	-0.8	-0.5	0.0	0.0	-0.7	-			
Western Delta	Sac. R. at Emmaton	ALL	-0.7	-0.6	-0.6	-0.6	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.2	-0.5	-0.4	-0.4	-0.4	-0.5	-0.4	-0.2	-0.2	-0.4	-0.3		
		DROUGHT	-0.4	-0.3	-0.4	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.3	-0.2	0.0	0.0	-0.1	-		
	SJR at Antioch	ALL	-1.2	-1.1	-1.4	-1.3	-0.7	-0.7	-0.7	-0.7	-1.3	-1.3	-1.2	-1.2	-0.8	-0.9	-0.5	-0.4	-0.8	-0.7	-0.6	-0.7	-0.5	-0.5	-0.3	-0.4	-0.8	-0.8		
		DROUGHT	-0.7	-0.5	-0.7	-0.4	-0.4	-0.3	-0.2	-0.3	-0.2	-0.4	-0.1	-0.3	-0.1	-0.2	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.3	-0.2	0.0	0.0	-0.3	-		
	Sac. R. at Mallard Island	ALL	-0.7	-0.7	-0.9	-0.8	-0.4	-0.4	-0.4	-0.4	-0.6	-0.6	-0.6	-0.6	-0.5	-0.5	-0.3	-0.3	-0.5	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.5	-0.5		
		DROUGHT	-0.5	-0.4	-0.5	-0.3	-0.3	-0.2	-0.2	-0.2	-0.1	-0.3	0.0	-0.1	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2	-0.1	0.0	0.0	-0.2	-		
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	0.8	0.6	0.0	0.0	0.2	0.2	0.9	0.9	1.6	2.1	1.1	1.3	1.2	1.0	0.8	0.8	1.1	0.9	1.2	0.9	1.5	1.3	0.0	0.0	0.9	0.8		
		DROUGHT	1.3	1.1	0.0	0.0	0.1	0.1	0.5	0.5	1.0	1.2	0.9	1.1	1.0	1.2	0.9	1.0	1.2	1.0	1.2	1.1	1.8	1.7	0.0	0.0	0.8	-		
	Contra Costa PP #1	ALL	-2.8	-3.0	-3.2	-2.7	-2.2	-1.6	-0.4	-0.3	-1.8	-1.4	-1.6	-1.6	-0.7	-1.1	0.3	0.3	-1.0	-1.3	-0.9	-1.2	-0.5	-0.9	-1.0	-1.2	-1.3	-1.3		
		DROUGHT	-1.8	-1.4	-2.1	-1.1	-1.0	-0.7	0.0	-0.1	-0.7	-1.5	0.0	-1.0	0.5	0.0	0.3	0.5	-0.4	-0.6	-0.6	-0.7	-0.5	-0.4	0.0	0.0	-0.5	-		
	Banks PP	ALL	1.1	1.4	0.9	1.5	1.2	1.3	3.1	3.0	4.6	4.4	5.6	5.3	4.6	4.4	1.9	1.8	2.0	1.9	0.4	0.3	0.4	0.2	0.9	0.6	2.2	2.1		
		DROUGHT	-0.6	0.1	0.2	1.2	-0.2	-0.1	0.2	0.0	0.2	-0.5	3.5	2.3	3.5	2.8	1.4	1.1	-0.2	-0.4	0.1	0.3	-1.9	-1.5	0.1	0.0	0.5	-		
	Jones PP	ALL	0.3	0.9	1.7	2.6	0.2	0.2	4.8	4.7	8.2	7.8	7.9	7.8	5.2	5.2	4.3	4.3	4.5	4.6	0.7	0.8	-0.7	-0.4	2.7	3.2	3.2	3.4		
		DROUGHT	-0.5	0.4	-0.1	1.7	-0.2	-0.2	3.0	2.5	4.0	2.8	6.4	5.8	3.1	3.0	3.5	3.6	1.5	1.5	-1.2	-0.5	-1.8	-0.6	-0.3	-0.1	1.4	-		

<sup>a</sup> ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.
- Regulatory objective is the drinking water maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

**Table N-7. Alternative 4-H4 ELT use of assimilative capacity available under Existing Conditions and the No Action Alternative ELT relative to the 10 mg/L-N MCL.**

Nitrate	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change		
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	
Alt 4 ELT Scn H4	Delta Interior	Moke. R. (SF) at Staten Island	ALL	-0.5	-0.5	0.0	0.0	-0.1	-0.1	-0.6	-0.6	-0.9	-1.0	-0.9	-0.9	-0.7	-0.7	-0.4	-0.4	-0.9	-1.0	-0.8	-0.9	-0.8	-0.8	0.0	0.0	-0.6	-0.6
		DROUGHT	-0.4	-0.4	0.0	0.0	-0.1	-0.1	-0.3	-0.3	-0.3	-0.5	-0.7	-0.9	-0.5	-0.6	-0.4	-0.4	-1.0	-1.0	-1.1	-1.1	-1.0	-0.7	0.0	0.0	-0.5	-	
		SJR at Buckley Cove	ALL	0.5	0.0	0.5	0.2	1.2	-0.3	0.5	-0.5	0.8	0.1	0.5	-0.1	0.6	0.0	0.4	0.0	1.0	-0.2	0.8	-0.9	1.0	-1.3	1.1	0.0	0.7	-0.3
		DROUGHT	0.7	0.0	0.9	0.1	2.0	-0.1	1.4	-0.5	1.4	0.3	1.0	-0.1	1.1	-0.1	0.7	-0.1	1.8	-0.5	-0.2	-2.6	0.2	-3.8	1.5	-0.2	1.0	-	
		Franks Tract	ALL	-2.4	-2.3	-2.5	-2.2	-1.2	-1.1	-0.9	-0.9	-2.2	-2.2	-1.9	-1.9	-1.1	-1.2	-0.6	-0.6	-1.4	-1.4	-1.2	-1.4	-1.0	-1.1	-0.9	-1.0	-1.4	-1.4
		DROUGHT	-1.1	-0.8	-1.4	-0.8	-0.6	-0.4	-0.4	-0.4	-0.4	-0.4	-0.7	-0.3	-0.7	-0.5	-0.7	-0.4	-0.4	-0.6	-0.7	-0.6	-0.6	-0.8	-0.6	0.0	0.0	-0.6	-
	Old R. at Rock Slough	ALL	-3.8	-3.5	-3.6	-3.1	-1.0	-1.0	-1.0	-0.9	-2.3	-2.4	-1.8	-1.9	-0.6	-0.7	-0.3	-0.3	-1.8	-1.9	-1.4	-1.6	-1.2	-1.3	-2.6	-2.8	-1.8	-1.8	
	DROUGHT	-1.9	-1.3	-2.4	-1.4	-0.7	-0.4	-0.7	-0.9	-0.1	-1.0	-0.4	-1.0	-0.4	-0.7	-0.5	-0.5	-1.0	-1.1	-1.1	-1.0	-1.0	-0.7	0.0	0.0	-0.8	-		
	Western Delta	Sac. R. at Emmaton	ALL	-0.8	-0.7	-0.6	-0.6	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.3	-0.2	-0.6	-0.4	-0.7	-0.6	-0.6	-0.6	-0.2	-0.2	-0.4	-0.4
		DROUGHT	-0.3	-0.3	-0.4	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.2	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.4	-0.3	-0.4	-0.3	0.0	0.0	-0.2	-
		SJR at Antioch	ALL	-1.3	-1.3	-1.4	-1.3	-0.7	-0.7	-0.7	-0.7	-1.3	-1.3	-1.2	-1.3	-0.8	-0.8	-0.5	-0.4	-0.9	-0.8	-0.9	-0.9	-0.7	-0.8	-0.4	-0.5	-0.9	-0.9
		DROUGHT	-0.7	-0.5	-0.7	-0.5	-0.4	-0.3	-0.3	-0.3	-0.2	-0.4	-0.1	-0.3	-0.2	-0.3	-0.1	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.5	-0.4	0.0	0.0	-0.3	-
Sac. R. at Mallard Island		ALL	-0.8	-0.8	-0.8	-0.7	-0.4	-0.4	-0.4	-0.4	-0.7	-0.7	-0.6	-0.6	-0.4	-0.4	-0.3	-0.2	-0.5	-0.5	-0.6	-0.6	-0.4	-0.5	-0.3	-0.3	-0.5	-0.5	
DROUGHT		-0.5	-0.4	-0.5	-0.3	-0.3	-0.2	-0.2	-0.3	-0.1	-0.3	0.0	-0.1	0.0	-0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	0.0	0.0	-0.2	-	
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	0.8	0.6	0.0	0.0	0.2	0.2	0.9	0.9	1.6	2.1	1.1	1.3	1.2	1.0	0.8	0.8	1.1	0.9	1.1	0.9	1.4	1.2	0.0	0.0	0.8	0.8	
		DROUGHT	1.3	1.1	0.0	0.0	0.1	0.1	0.5	0.5	1.0	1.2	0.9	1.1	1.0	1.2	0.9	1.0	1.2	1.0	1.2	1.1	1.7	1.7	0.0	0.0	0.8	-	
	Contra Costa PP #1	ALL	-3.6	-3.7	-3.5	-2.9	-2.3	-1.7	-0.4	-0.4	-2.1	-1.6	-2.0	-2.1	-1.0	-1.3	-0.1	0.0	-1.5	-1.8	-1.6	-1.9	-0.8	-1.2	-1.5	-1.7	-1.7	-1.7	
		DROUGHT	-1.7	-1.3	-2.1	-1.1	-1.0	-0.7	0.0	-0.1	-0.5	-1.2	-0.1	-1.1	-0.3	-0.8	-0.2	0.0	-0.9	-1.1	-1.1	-1.1	-0.8	-0.8	-0.1	0.0	-0.7	-	
	Banks PP	ALL	0.8	1.1	1.5	2.2	0.7	0.8	3.5	3.5	5.1	4.9	5.9	5.6	3.7	3.5	3.1	3.1	2.9	2.8	-0.2	-0.4	-0.5	-0.7	1.4	1.1	2.3	2.2	
		DROUGHT	-0.4	0.3	0.4	1.4	-0.3	-0.2	1.2	1.0	1.0	0.3	4.5	3.3	4.2	3.5	2.5	2.3	1.1	0.9	0.5	0.7	-2.3	-1.8	-0.1	-0.2	1.0	-	
	Jones PP	ALL	2.0	2.7	1.4	2.3	0.6	0.6	3.5	3.4	7.8	7.4	8.2	8.1	6.0	6.1	3.9	3.9	3.2	3.2	0.0	0.2	0.1	0.3	2.8	3.3	3.2	3.4	
		DROUGHT	1.6	2.5	1.1	2.9	-0.1	-0.1	0.9	0.4	3.5	2.3	5.6	5.0	4.1	4.0	3.1	3.2	0.0	0.0	-2.6	-2.0	-2.2	-1.0	-0.4	-0.3	1.1	-	

<sup>a</sup> ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.
- Regulatory objective is the drinking water maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

**Table N-8. Period average nitrate-N concentrations and frequency of exceedance of objectives/criteria for Existing Conditions, the No Action Alternative ELT, Alternative 2D ELT, and Alternative 5A ELT.**

Nitrate Alt 2D and Alt 5A ELT	Location	Period <sup>a</sup>	Period Average Concentration mg/L-N				Lowest Applicable Human Health Criterion/Objective (10 mg/L-N) <sup>b</sup>				Lowest Applicable Aquatic Life Criterion/Objective (N/A) <sup>c</sup>				Other Relevant Threshold (5 mg/L-N) <sup>d</sup>			
							Frequency of Criterion/Objective Exceedance (%)				Frequency of Criterion/Objective Exceedance (%)				Frequency of Criterion/Objective Exceedance (%)			
			Ex. Cond.	No Act. ELT	Alt. 2D ELT	Alt. 5A ELT	Ex. Cond.	No Act. ELT	Alt. 2D ELT	Alt. 5A ELT	Ex. Cond.	No Act. ELT	Alt. 2D ELT	Alt. 5A ELT	Ex. Cond.	No Act. ELT	Alt. 2D ELT	Alt. 5A ELT
Delta Interior	Moke. R. (SF) at Staten Island	All	0.29	0.29	0.35	0.33	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.30	0.30	0.35	0.34	0	0	0	0	-	-	-	-	0	0	0	0
	SJR at Buckley Cove	All	1.44	1.35	1.37	1.36	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	1.45	1.31	1.36	1.34	0	0	0	0	-	-	-	-	0	0	0	0
	Franks Tract	All	0.36	0.36	0.50	0.41	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.24	0.25	0.29	0.27	0	0	0	0	-	-	-	-	0	0	0	0
Old R. at Rock Slough	All	0.46	0.45	0.62	0.51	0	0	0	0	-	-	-	-	0	0	0	0	
	Drought	0.31	0.31	0.37	0.34	0	0	0	0	-	-	-	-	0	0	0	0	
Western Delta	Sac. R. at Emmaton	All	0.20	0.20	0.24	0.21	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.19	0.19	0.21	0.20	0	0	0	0	-	-	-	-	0	0	0	0
	SJR at Antioch	All	0.27	0.27	0.36	0.30	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.19	0.19	0.22	0.21	0	0	0	0	-	-	-	-	0	0	0	0
	Sac. R. at Mallard Island	All	0.19	0.19	0.25	0.21	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.15	0.15	0.16	0.16	0	0	0	0	-	-	-	-	0	0	0	0
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	All	0.27	0.27	0.19	0.19	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.27	0.27	0.19	0.19	0	0	0	0	-	-	-	-	0	0	0	0
	Contra Costa PP #1	All	0.51	0.51	0.66	0.57	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.38	0.38	0.44	0.41	0	0	0	0	-	-	-	-	0	0	0	0
	Banks PP	All	0.70	0.70	0.46	0.58	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.56	0.55	0.51	0.52	0	0	0	0	-	-	-	-	0	0	0	0
	Jones PP	All	0.92	0.93	0.59	0.80	0	0	0	0	-	-	-	-	0	0	0	0
		Drought	0.79	0.81	0.66	0.74	0	0	0	0	-	-	-	-	0	0	0	0

<sup>a</sup> ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).  
<sup>b</sup> Drinking water maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.  
<sup>c</sup> Ayers and Westcot (1985). Recommended goals for sensitive crops.

**Table N-9. Period Average Change in Nitrate-N Concentrations (mg/L-N) for Alternative 2D ELT Relative to Existing Conditions and the No Action Alternative ELT.**

Nitrate	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
			Alt 2D ELT			0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1
Delta Interior	Moke, R. (SF) at Staten Island	ALL	(26%)	(25%)	(1%)	(1%)	(4%)	(5%)	(14%)	(15%)	(16%)	(18%)	(23%)	(23%)	(22%)	(23%)	(17%)	(18%)	(32%)	(33%)	(29%)	(33%)	(42%)	(39%)	(-1%)	(2%)	(19%)	(20%)		
		DROUGHT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	
	SJr at Buckley Cove	ALL	(19%)	(18%)	(-1%)	(-1%)	(3%)	(4%)	(7%)	(8%)	(6%)	(9%)	(16%)	(20%)	(12%)	(15%)	(13%)	(15%)	(35%)	(38%)	(50%)	(47%)	(49%)	(32%)	(-1%)	(-1%)	(15%)	(16%)		
		DROUGHT	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1	0.0	-0.1	0.0	-0.1	0.1	-0.1	0.1	-0.1	0.0		
	Franks Tract	ALL	(-3%)	(0%)	(-3%)	(-1%)	(-6%)	(2%)	(-3%)	(3%)	(-4%)	(-0%)	(-3%)	(1%)	(-4%)	(0%)	(-4%)	(0%)	(-7%)	(2%)	(-7%)	(5%)	(-6%)	(7%)	(-6%)	(0%)	(-5%)	(1%)		
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Old R. at Rock Slough	ALL	0.2	0.2	-0.3	-0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	-0.2	-0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
		DROUGHT	(21%)	####	(124%)	(100%)	(39%)	(35%)	(27%)	(25%)	(39%)	(38%)	(31%)	(32%)	(19%)	(20%)	(12%)	(12%)	(27%)	(29%)	(29%)	(41%)	(37%)	(44%)	(74%)	(65%)	(39%)	(39%)		
	Western Delta	Sac. R. at Emraton	ALL	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
			DROUGHT	(57%)	(35%)	(90%)	(34%)	(28%)	(16%)	(10%)	(11%)	(9%)	(16%)	(8%)	(19%)	(8%)	(15%)	(7%)	(10%)	(19%)	(21%)	(28%)	(27%)	(39%)	(27%)	(2%)	(2%)	(21%)	(19%)	
		SJr at Antioch	ALL	0.4	0.4	0.4	0.3	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
			DROUGHT	(64%)	####	(138%)	(101%)	(28%)	(28%)	(32%)	(32%)	(31%)	(33%)	(22%)	(23%)	(5%)	(5%)	(+0%)	(1%)	(25%)	(27%)	(28%)	(36%)	(39%)	(45%)	(177%)	(223%)	(36%)	(37%)	
Sac. R. at Mallard Island		ALL	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		DROUGHT	(49%)	(46%)	(44%)	(38%)	(11%)	(10%)	(7%)	(7%)	(9%)	(9%)	(11%)	(10%)	(14%)	(13%)	(18%)	(13%)	(23%)	(15%)	(31%)	(27%)	(32%)	(23%)	(24%)	(20%)	(24%)	(18%)		
NBA at Barker Slough PP		ALL	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	
		DROUGHT	(69%)	(63%)	(81%)	(67%)	(28%)	(26%)	(19%)	(24%)	(25%)	(26%)	(20%)	(25%)	(26%)	(20%)	(21%)	(16%)	(14%)	(25%)	(23%)	(26%)	(29%)	(22%)	(25%)	(28%)	(28%)	(28%)		
Contra Costa PP #1		ALL	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
		DROUGHT	(84%)	(78%)	(97%)	(83%)	(33%)	(31%)	(25%)	(24%)	(33%)	(32%)	(32%)	(32%)	(23%)	(25%)	(17%)	(15%)	(26%)	(24%)	(28%)	(35%)	(30%)	(34%)	(42%)	(47%)	(34%)	(34%)		
Banks PP		ALL	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		DROUGHT	(40%)	(30%)	(54%)	(27%)	(22%)	(14%)	(9%)	(11%)	(6%)	(11%)	(4%)	(11%)	(4%)	(10%)	(2%)	(5%)	(6%)	(9%)	(18%)	(16%)	(27%)	(18%)	(2%)	(2%)	(14%)	(13%)		
Jones PP	ALL	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1		
	DROUGHT	(29%)	(24%)	(1%)	(1%)	(-8%)	(-8%)	(-23%)	(-25%)	(-31%)	(-37%)	(-29%)	(-31%)	(-34%)	(-31%)	(-34%)	(-33%)	(-43%)	(-38%)	(-48%)	(-44%)	(-51%)	(-47%)	(2%)	(2%)	(-30%)	(-30%)			
Major Divisions (Pumping Stations)	NBA at Barker Slough PP	ALL	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	0.0	0.0	-0.1	-0.1	
		DROUGHT	(-29%)	(-24%)	(1%)	(1%)	(-8%)	(-8%)	(-23%)	(-25%)	(-31%)	(-37%)	(-29%)	(-31%)	(-34%)	(-31%)	(-34%)	(-33%)	(-43%)	(-38%)	(-48%)	(-44%)	(-51%)	(-47%)	(2%)	(2%)	(-30%)	(-30%)		
	Contra Costa PP #1	ALL	0.3	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.3	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.2	
		DROUGHT	(39%)	(35%)	(1%)	(2%)	(-6%)	(-7%)	(-15%)	(-15%)	(-23%)	(-26%)	(-24%)	(-29%)	(-31%)	(-34%)	(-35%)	(-38%)	(-45%)	(-41%)	(-50%)	(-47%)	(-55%)	(-54%)	(3%)	(3%)	(-29%)	(-29%)		
	Banks PP	ALL	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
		DROUGHT	(108%)	####	(197%)	(130%)	(57%)	(41%)	(12%)	(11%)	(30%)	(24%)	(21%)	(22%)	(9%)	(14%)	(-4%)	(-4%)	(15%)	(21%)	(24%)	(34%)	(13%)	(29%)	(106%)	(144%)	(30%)	(30%)		
	Jones PP	ALL	-0.1	-0.2	-0.1	-0.2	-0.1	-0.1	-0.3	-0.3	-0.5	-0.5	-0.6	-0.6	-0.4	-0.4	-0.2	-0.2	-0.2	-0.2	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2		
		DROUGHT	(-26%)	(-29%)	(-25%)	(-32%)	(-21%)	(-23%)	(-43%)	(-42%)	(-45%)	(-44%)	(-56%)	(-55%)	(-44%)	(-43%)	(-26%)	(-26%)	(-22%)	(-21%)	(-10%)	(-7%)	(-20%)	(-15%)	(-46%)	(-40%)	(-35%)	(-34%)		
	Jones PP	ALL	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	-0.5	-0.5	-0.7	-0.7	-0.7	-0.7	-0.5	-0.5	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.1	-0.1	-0.1	-0.1	-0.3	-0.3	-0.3	
		DROUGHT	(-13%)	(-19%)	(-20%)	(-27%)	(-13%)	(-13%)	(-42%)	(-41%)	(-49%)	(-48%)	(-58%)	(-57%)	(-47%)	(-47%)	(-49%)	(-49%)	(-49%)	(-49%)	(-14%)	(-17%)	(16%)	(12%)	(-44%)	(-48%)	(-35%)	(-37%)		
	Jones PP	ALL	0.0	-0.1	0.0	-0.2	0.0	0.0	-0.2	-0.2	-0.4	-0.3	-0.6	-0.5	-0.3	-0.3	-0.1	-0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	-0.1	-0.1		
		DROUGHT	(-4%)	(-14%)	(1%)	(-18%)	(2%)	(2%)	(-20%)	(-16%)	(-26%)	(-20%)	(-42%)	(-40%)	(-28%)	(-27%)	(-41%)	(-23%)	(-23%)	(44%)	(16%)	(67%)	(20%)	(6%)	(3%)	(-16%)	(-18%)			

<sup>a</sup> ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).



**Table N-11. Alternative 2D ELT Use of Assimilative Capacity Available under Existing Conditions and the No Action Alternative ELT Relative to the 10 mg/L-N MCL.**

Nitrate	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT		
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-0.6	-0.5	0.0	0.0	-0.1	-0.1	-0.7	-0.8	-1.1	-1.1	-1.0	-1.0	-0.8	-0.9	-0.5	-0.5	-0.8	-0.9	-0.6	-0.7	-0.8	-0.8	0.0	0.0	-0.6	-0.6		
		DROUGHT	-0.4	-0.4	0.0	0.0	-0.1	-0.1	-0.3	-0.4	-0.5	-0.7	-0.9	-1.0	-0.5	-0.6	-0.4	-0.4	-0.9	-0.9	-0.9	-0.9	-0.7	-0.7	-0.9	-0.7	0.0	0.0	-0.5	-
	SJR at Buckley Cove	ALL	0.5	0.0	0.5	0.2	1.2	-0.3	0.5	-0.6	0.8	0.1	0.5	-0.1	0.6	0.0	0.4	0.0	1.0	-0.2	1.0	-0.7	1.2	-1.1	1.1	0.0	0.8	-0.2	-	
		DROUGHT	0.7	0.0	1.0	0.2	2.0	-0.1	1.4	-0.5	1.4	0.3	1.0	-0.1	1.1	-0.1	0.7	-0.1	1.8	-0.5	0.2	-2.1	0.7	-3.3	1.5	-0.2	1.1	-	-	
	Franks Tract	ALL	-2.5	-2.4	-2.7	-2.5	-1.3	-1.2	-1.3	-1.2	-2.6	-2.5	-2.0	-2.0	-1.1	-1.1	-0.5	-0.5	-1.2	-1.2	-0.8	-1.0	-0.7	-0.8	-0.8	-0.9	-1.5	-1.5	-	-
		DROUGHT	-1.2	-0.8	-1.4	-0.8	-0.6	-0.4	-0.3	-0.3	-0.4	-0.7	-0.3	-0.7	-0.3	-0.5	-0.2	-0.2	-0.4	-0.5	-0.4	-0.4	-0.6	-0.5	0.0	0.0	-0.5	-	-	-
	Old R. at Rock Slough	ALL	-3.9	-3.6	-3.7	-3.2	-1.1	-1.1	-1.9	-1.9	-2.7	-2.8	-1.8	-1.8	-0.4	-0.4	0.0	0.0	-1.4	-1.5	-0.8	-1.0	-0.8	-0.9	-2.3	-2.4	-1.7	-1.7	-	-
		DROUGHT	-2.0	-1.4	-2.4	-1.4	-0.6	-0.4	-0.5	-0.7	-0.1	-1.0	-0.3	-0.9	0.2	-0.1	-0.1	-0.1	-0.7	-0.7	-0.7	-0.6	-0.8	-0.5	0.0	0.0	-0.7	-	-	-
Western Delta	Sac. R. at Emmaton	ALL	-0.9	-0.8	-0.7	-0.6	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.3	-0.5	-0.4	-0.5	-0.4	-0.5	-0.4	-0.2	-0.2	-0.4	-0.4	-	-	
		DROUGHT	-0.4	-0.3	-0.4	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.3	-0.2	0.0	0.0	-0.2	-	-	-
	SJR at Antioch	ALL	-1.4	-1.4	-1.6	-1.5	-0.8	-0.8	-0.9	-0.9	-1.6	-1.5	-1.4	-1.4	-0.9	-0.9	-0.5	-0.5	-0.8	-0.8	-0.6	-0.7	-0.5	-0.5	-0.4	-0.4	-0.9	-0.9	-	-
		DROUGHT	-0.7	-0.5	-0.7	-0.4	-0.4	-0.3	-0.2	-0.3	-0.2	-0.4	-0.1	-0.3	-0.1	-0.2	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	-0.4	-0.3	0.0	0.0	-0.3	-	-	-
	Sac. R. at Mallard Island	ALL	-0.9	-0.8	-1.0	-0.9	-0.5	-0.4	-0.5	-0.5	-0.7	-0.8	-0.7	-0.7	-0.5	-0.5	-0.3	-0.3	-0.6	-0.5	-0.4	-0.5	-0.3	-0.3	-0.2	-0.2	-0.6	-0.5	-	-
		DROUGHT	-0.5	-0.4	-0.5	-0.3	-0.3	-0.2	-0.2	-0.2	-0.1	-0.3	0.0	-0.1	0.0	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2	-0.1	0.0	0.0	-0.2	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	0.8	0.6	0.0	0.0	0.2	0.2	0.9	0.9	1.6	2.1	1.1	1.3	1.2	1.0	0.8	0.8	1.1	0.9	1.2	0.9	1.5	1.3	0.0	0.0	0.9	0.8	-	-
		DROUGHT	1.3	1.1	0.0	0.0	0.1	0.1	0.5	0.5	1.0	1.2	0.9	1.1	1.0	1.2	0.9	1.0	1.2	1.0	1.2	1.1	1.8	1.7	0.0	0.0	0.8	-	-	-
	Contra Costa PP #1	ALL	-3.5	-3.7	-3.7	-3.2	-2.2	-1.6	-0.8	-0.8	-2.9	-2.4	-1.9	-1.9	-0.9	-1.2	0.3	0.3	-1.0	-1.3	-0.9	-1.2	-0.5	-0.9	-1.3	-1.5	-1.6	-1.6	-	-
		DROUGHT	-1.8	-1.4	-2.1	-1.1	-1.0	-0.7	0.0	-0.1	-0.8	-1.5	0.0	-1.0	0.3	-0.1	0.2	0.4	-0.5	-0.7	-0.6	-0.7	-0.5	-0.5	0.0	0.0	-0.6	-	-	-
	Banks PP	ALL	1.5	1.8	1.6	2.2	1.3	1.4	3.7	3.6	5.8	5.5	6.6	6.2	4.6	4.5	2.1	2.0	2.1	2.0	0.5	0.4	0.8	0.6	1.4	1.1	2.6	2.6	-	-
		DROUGHT	-0.6	0.1	0.2	1.2	-0.2	0.0	0.6	0.4	0.4	-0.4	3.9	2.7	3.1	2.4	1.4	1.2	-0.5	-0.7	-0.1	0.1	-1.7	-1.3	0.1	0.0	0.5	-	-	-
	Jones PP	ALL	1.1	1.7	1.8	2.7	1.3	1.3	5.6	5.5	8.2	7.9	8.5	8.3	5.8	5.9	4.4	4.4	4.6	4.6	0.9	1.1	-1.0	-0.8	2.7	3.2	3.6	3.7	-	-
		DROUGHT	0.3	1.2	-0.1	1.7	-0.2	-0.2	2.4	1.9	4.1	2.9	6.4	5.8	3.5	3.4	3.6	3.6	1.4	1.4	-1.2	-0.5	-2.2	-1.0	-0.2	-0.1	1.4	-	-	-

<sup>a</sup> ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.
- Regulatory objective is the drinking water maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.



**Table N-12. Alternative 5A ELT use of Assimilative Capacity Available under Existing Conditions and the No Action Alternative ELT Relative to the 10 mg/L-N MCL.**

Nitrate	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT		
Alt 5A ELT	Delta Interior	Moke. R. (SF) at Staten Island	ALL	-0.3	-0.3	0.0	0.0	-0.1	-0.1	-0.3	-0.4	-0.5	-0.6	-0.7	-0.7	-0.5	-0.5	-0.3	-0.4	-0.7	-0.7	-0.4	-0.5	-0.6	-0.6	0.0	0.0	-0.4	-0.4	
		DROUGHT	-0.3	-0.3	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.3	-0.6	-0.8	-0.4	-0.5	-0.3	-0.3	-0.8	-0.9	-0.8	-0.8	-0.9	-0.6	-0.6	0.0	0.0	-0.4	-	
	SJR at Buckley Cove	ALL	0.5	0.0	0.3	0.0	1.4	0.0	1.0	0.0	0.7	0.0	0.6	0.0	0.6	0.0	0.4	0.0	1.2	0.0	1.3	-0.5	1.5	-0.8	0.9	-0.2	0.9	-0.1	-	
		DROUGHT	0.7	0.0	0.8	0.0	2.1	0.1	2.0	0.0	1.1	0.1	1.1	0.0	1.3	0.1	0.8	0.0	2.3	-0.1	0.8	-1.5	1.6	-2.5	1.3	-0.4	1.3	-	-	
	Franks Tract	ALL	-1.1	-1.0	-1.3	-1.0	-0.8	-0.7	-0.4	-0.3	-0.5	-0.5	-0.5	-0.6	-0.3	-0.4	-0.2	-0.2	-0.3	-0.4	-0.2	-0.4	-0.3	-0.4	-0.3	-0.4	-0.3	-0.4	-0.5	-0.5
		DROUGHT	-1.1	-0.7	-1.2	-0.6	-0.5	-0.3	-0.1	-0.1	0.2	-0.1	0.3	-0.1	0.1	-0.1	0.0	0.0	-0.1	-0.2	-0.3	-0.3	-0.5	-0.3	0.0	0.0	-0.3	-	-	
	Old R. at Rock Slough	ALL	-1.6	-1.3	-2.1	-1.6	-0.7	-0.7	-0.2	-0.2	-0.2	-0.4	-0.4	-0.5	0.0	-0.1	0.0	0.0	-0.2	-0.3	-0.2	-0.4	-0.4	-0.5	-1.0	-1.2	-0.6	-0.6	-	
		DROUGHT	-1.7	-1.1	-2.2	-1.1	-0.6	-0.3	0.0	-0.2	0.9	0.0	0.6	0.0	0.6	0.3	0.1	0.0	-0.2	-0.3	-0.5	-0.4	-0.7	-0.4	0.0	0.0	-0.3	-	-	
Western Delta	Sac. R. at Emmaton	ALL	-0.3	-0.3	-0.3	-0.2	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	-0.2	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	
		DROUGHT	-0.3	-0.2	-0.4	-0.2	-0.2	-0.1	0.0	-0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	-0.1	-0.1	-0.3	-0.1	0.0	0.0	-0.1	-	-	
	SJR at Antioch	ALL	-0.6	-0.5	-0.7	-0.5	-0.4	-0.4	-0.3	-0.3	-0.4	-0.3	-0.4	-0.4	-0.2	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	-0.3	-0.3	
		DROUGHT	-0.6	-0.5	-0.7	-0.4	-0.3	-0.2	-0.1	-0.1	0.0	-0.1	0.1	-0.1	0.1	-0.1	0.1	0.0	0.0	0.0	-0.1	-0.1	-0.3	-0.2	0.0	0.0	-0.2	-	-	
Sac. R. at Mallard Island	ALL	-0.4	-0.3	-0.4	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.2	-0.1	-0.1	-0.1	0.0	-0.1	0.0	-0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	
	DROUGHT	-0.4	-0.3	-0.5	-0.3	-0.3	-0.2	-0.1	-0.1	0.0	-0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-	-	
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	0.8	0.7	0.0	0.0	0.2	0.2	0.9	1.0	1.6	2.2	1.2	1.3	1.2	1.0	0.8	0.8	1.1	0.9	1.2	0.9	1.5	1.3	0.0	0.0	0.9	0.8		
		DROUGHT	1.3	1.1	0.0	0.0	0.1	0.2	0.5	0.5	1.0	1.2	0.9	1.1	1.1	1.2	0.9	1.0	1.2	1.0	1.2	1.1	1.8	1.8	0.0	0.0	0.8	-	-	
	Contra Costa PP #1	ALL	-1.3	-1.5	-1.9	-1.4	-1.6	-1.0	-0.2	-0.2	-0.5	0.0	-0.6	-0.7	0.0	-0.4	0.1	0.1	0.1	-0.3	-0.1	-0.3	0.0	-0.5	-0.7	-0.9	-0.6	-0.6		
		DROUGHT	-1.6	-1.2	-2.1	-1.0	-0.7	-0.5	-0.1	-0.2	0.7	-0.1	0.9	-0.1	0.6	0.1	0.3	0.5	0.1	-0.1	-0.4	-0.5	-0.4	-0.4	0.0	0.0	-0.3	-	-	
	Banks PP	ALL	0.9	1.1	1.0	1.7	-0.4	-0.3	1.4	1.4	2.4	2.1	2.1	1.8	3.1	2.9	1.3	1.3	1.7	1.6	0.9	0.8	0.4	0.1	0.8	0.5	1.3	1.2		
		DROUGHT	0.4	1.1	0.8	1.8	-0.3	-0.2	0.0	-0.2	0.5	-0.2	2.0	0.8	2.5	1.8	0.6	0.3	0.1	-0.1	-0.2	0.0	-1.1	-0.7	0.1	0.0	0.4	-	-	
	Jones PP	ALL	-1.8	-1.2	1.1	2.0	1.2	1.2	1.2	1.2	2.3	1.9	4.2	4.1	2.0	2.0	2.2	2.2	1.8	1.9	-0.2	0.0	-0.2	0.0	1.5	2.0	1.3	1.4		
		DROUGHT	-2.4	-1.5	1.3	3.1	-0.1	-0.1	0.4	-0.1	1.6	0.4	4.7	4.1	1.6	1.5	2.2	2.2	0.8	0.8	-0.7	0.0	-1.7	-0.5	0.0	0.1	0.6	-	-	

<sup>a</sup> ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.
- Regulatory objective is the drinking water maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

**Table DOC-1. Period Average DOC Concentration with 2, 3, and 4 mg/L Frequency of Exceedance for Alternative 4A ELT.**

Dissolved Organic Carbon Alt 4A ELT	Location	Period <sup>a</sup>	Period Average Concentration mg/L				Lowest Applicable Human Health Criterion/Objective (2.0 mg/L) <sup>b</sup>				Other Relevant Threshold (3.0 mg/L) <sup>c</sup>				Other Relevant Threshold (4.0 mg/L) <sup>d</sup>			
			Frequency of Criterion/Objective Exceedance (%)				Frequency of Criterion/Objective Exceedance (%)				Frequency of Criterion/Objective Exceedance (%)							
			Ex. Cond.	No Act. ELT	Alt 4A H3 ELT	Alt 4A H4 ELT	Ex. Cond.	No Act. ELT	Alt 4A H3 ELT	Alt 4A H4 ELT	Ex. Cond.	No Act. ELT	Alt 4A H3 ELT	Alt 4A H4 ELT	Ex. Cond.	No Act. ELT	Alt 4A H3 ELT	Alt 4A H4 ELT
Delta Interior	Moke. R. (SF) at Staten Island	All	3.2	3.2	3.5	3.5	100	100	100	100	43	42	57	58	19	19	26	26
		Drought	3.4	3.3	3.6	3.6	100	100	100	100	45	45	58	62	27	25	28	32
	SJR at Buckley Cove	All	3.9	3.8	3.8	3.8	100	100	100	100	93	92	90	90	30	25	21	20
		Drought	4.3	4.1	4.0	4.0	100	100	100	100	98	98	95	95	55	42	30	30
	Franks Tract	All	3.1	3.1	3.3	3.4	100	100	100	100	40	41	49	53	19	18	20	22
		Drought	3.1	3.1	3.2	3.3	100	100	100	100	40	38	45	48	22	20	22	27
	Old R. at Rock Slough	All	3.5	3.5	3.7	3.8	100	100	100	100	52	54	66	70	30	29	32	34
		Drought	3.5	3.5	3.6	3.8	100	100	100	100	47	47	58	62	32	30	35	35
Western Delta	Sac. R. at Emmaton	All	2.6	2.6	2.7	2.7	93	93	98	98	16	17	18	18	8	8	8	8
		Drought	2.7	2.7	2.8	2.8	97	100	100	100	28	30	28	28	12	12	12	13
	SJR at Antioch	All	2.8	2.8	3.0	3.0	98	97	100	100	30	31	37	39	14	13	13	14
		Drought	2.8	2.8	2.9	3.0	100	100	100	100	30	30	33	37	17	15	15	15
	Sac. R. at Mallard Island	All	2.6	2.6	2.7	2.7	98	96	99	100	19	18	22	21	7	7	6	7
		Drought	2.6	2.6	2.6	2.7	100	100	100	100	22	20	20	20	12	12	8	10
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	All	2.7	2.6	2.5	2.5	98	96	97	95	19	17	16	16	9	8	2	2
		Drought	2.8	2.7	2.6	2.6	100	100	100	100	22	23	20	20	13	10	3	5
	Contra Costa PP #1	All	3.6	3.6	3.8	3.9	100	100	100	100	52	52	69	72	32	30	35	38
		Drought	3.7	3.6	3.8	3.9	100	100	100	100	45	48	63	63	35	32	38	42
	Banks PP	All	3.8	3.8	3.4	3.4	100	100	97	95	64	69	59	59	33	35	27	26
		Drought	4.1	4.1	3.9	3.7	100	100	100	97	57	68	77	72	42	43	42	33
	Jones PP	All	3.8	3.8	3.3	3.4	100	100	95	93	71	79	61	59	26	29	19	19
		Drought	3.9	4.0	3.8	4.0	100	100	100	98	72	88	85	83	35	35	32	38

<sup>a</sup> ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

<sup>b</sup> Minimum EPA action threshold to require a drinking water utility to employ treatment to achieve a reduction in TOC.

<sup>c</sup> CALFED Drinking Water Program established goal for TOC as a long-term average as applied to municipal drinking water intakes drawing water from the Delta (CALFED 2000).

<sup>d</sup> Minimum TOC believed sufficient to meet currently established drinking water criteria for DBPs (CUWA 1998, ES2).



**Table DOC-2. Period Average DOC Concentration with 2, 3, and 4 mg/L Frequency of Exceedance for Alternatives 2D and 5A ELT.**

Dissolved Organic Carbon Alt 2D/5A	Location	Period <sup>a</sup>	Period Average Concentration mg/L				Lowest Applicable Human Health Criterion/Objective (2.0 mg/L) <sup>b</sup>				Other Relevant Threshold (3.0 mg/L) <sup>c</sup>				Other Relevant Threshold (4.0 mg/L) <sup>d</sup>			
			Frequency of Criterion/Objective Exceedance (%)				Frequency of Criterion/Objective Exceedance (%)				Frequency of Criterion/Objective Exceedance (%)							
			Ex. Cond.	No Act. ELT	Alt 2D ELT	Alt 5A ELT	Ex. Cond.	No Act. ELT	Alt 2D ELT	Alt 5A ELT	Ex. Cond.	No Act. ELT	Alt 2D ELT	Alt 5A ELT	Ex. Cond.	No Act. ELT	Alt 2D ELT	Alt 5A ELT
Delta Interior	Moke. R. (SF) at Staten Island	All	3.2	3.2	3.5	3.4	100	100	100	100	43	42	58	53	19	19	24	23
		Drought	3.4	3.3	3.6	3.6	100	100	100	100	45	45	58	57	27	25	30	28
	SJR at Buckley Cove	All	3.9	3.8	3.8	3.8	100	100	100	100	93	92	90	91	30	25	20	22
		Drought	4.3	4.1	4.0	4.0	100	100	100	100	98	98	95	98	55	42	30	33
	Franks Tract	All	3.1	3.1	3.4	3.2	100	100	100	100	40	41	50	45	19	18	20	20
		Drought	3.1	3.1	3.2	3.2	100	100	100	100	40	38	45	43	22	20	22	22
Old R. at Rock Slough	All	3.5	3.5	3.7	3.6	100	100	100	100	52	54	66	60	30	29	32	29	
	Drought	3.5	3.5	3.7	3.6	100	100	100	100	47	47	57	57	32	30	35	30	
Western Delta	Sac. R. at Emmaton	All	2.6	2.6	2.7	2.6	93	93	98	97	16	17	19	16	8	8	8	8
		Drought	2.7	2.7	2.8	2.8	97	100	100	100	28	30	28	28	12	12	12	12
	SJR at Antioch	All	2.8	2.8	3.0	2.9	98	97	100	100	30	31	36	33	14	13	14	13
		Drought	2.8	2.8	2.9	2.9	100	100	100	100	30	30	32	32	17	15	15	15
Sac. R. at Mallard Island	All	2.6	2.6	2.7	2.6	98	96	99	100	19	18	23	19	7	7	6	6	
	Drought	2.6	2.6	2.6	2.6	100	100	100	100	22	20	20	22	12	12	8	8	
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	All	2.7	2.6	2.5	2.5	98	96	97	96	19	17	16	17	9	8	2	2
		Drought	2.8	2.7	2.6	2.6	100	100	100	100	22	23	20	22	13	10	3	3
	Contra Costa PP #1	All	3.6	3.6	3.8	3.7	100	100	100	100	52	52	69	59	32	30	35	32
		Drought	3.7	3.6	3.8	3.7	100	100	100	100	45	48	63	60	35	32	38	33
	Banks PP	All	3.8	3.8	3.3	3.6	100	100	91	96	64	69	56	64	33	35	26	28
		Drought	4.1	4.1	3.9	4.1	100	100	98	97	57	68	77	80	42	43	42	43
	Jones PP	All	3.8	3.8	3.3	3.6	100	100	92	97	71	79	61	73	26	29	18	23
		Drought	3.9	4.0	3.8	3.9	100	100	98	98	72	88	87	90	35	35	28	30

<sup>a</sup> ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

<sup>b</sup> Minimum EPA action threshold to require a drinking water utility to employ treatment to achieve a reduction in TOC.

<sup>c</sup> CALFED Drinking Water Program established goal for TOC as a long-term average as applied to municipal drinking water intakes drawing water from the Delta (CALFED 2000).

<sup>d</sup> Minimum TOC believed sufficient to meet currently established drinking water criteria for DBPs (CUWA 1998, ES2).

**Table P-1. Seasonal Average Flows on the San Joaquin River at Vernalis and Relative Percent Change by Alternative.**

	Flows (cfs)		Winter		Summer	
	Winter	Summer	Change Relative to EC	Change Relative to NA ELT	Change Relative to EC	Change Relative to NA ELT
Existing Conditions	4,696	3,910	--	--	--	--
No Action Alternative ELT	4,857	3,701	3%	--	-5%	--
Alternative 2D ELT	4,866	3,702	4%	0%	-5%	0%
Alternative 4 H3 ELT	4,868	3,703	4%	0%	-5%	0%
Alternative 4 H4 ELT	4,860	3,702	4%	0%	-5%	0%
Alternative 5A ELT	4,866	3,703	4%	0%	-5%	0%

**Table P-2. Seasonal Average Flows on the Sacramento River at Freeport and Relative Percent Change by Alternative.**

	Flows (cfs)		Winter		Summer	
	Winter	Summer	Change Relative to EC	Change Relative to NA ELT	Change Relative to EC	Change Relative to NA ELT
Existing Conditions	28,073	17,117	--	--	--	--
No Action Alternative ELT	28,312	16,970	1%	--	-1%	--
Alternative 2D ELT	27,176	16,670	-3%	-4%	-3%	-2%
Alternative 4 H3 ELT	27,133	16,724	-3%	-4%	-2%	-1%
Alternative 4 H4 ELT	27,168	16,544	-3%	-4%	-3%	-3%
Alternative 5A ELT	27,257	16,691	-3%	-4%	-2%	-2%

**Table P-3. Seasonal Average Flows on the Feather River at Thermalito and Relative Percent Change by Alternative.**

	Flows (cfs)		Winter		Summer	
	Winter	Summer	Change Relative to EC	Change Relative to NA ELT	Change Relative to EC	Change Relative to NA ELT
Existing Conditions	4,885	4,017	--	--	--	--
No Action Alternative ELT	4,657	4,410	-5%	--	10%	--
Alternative 2D ELT	4,769	4,332	-2%	2%	8%	-2%
Alternative 4 H3 ELT	4,721	4,367	-3%	1%	9%	-1%
Alternative 4 H4 ELT	4,804	4,299	-2%	3%	7%	-3%
Alternative 5A ELT	4,804	4,294	-2%	3%	7%	-3%

**Table P-4. Seasonal Average Flows on the American River at Nimbus and Relative Percent Change by Alternative.**

	Flows (cfs)		Winter		Summer	
	Winter	Summer	Change Relative to EC	Change Relative to NA ELT	Change Relative to EC	Change Relative to NA ELT
Existing Conditions	3,941	3,058	--	--	--	--
No Action Alternative ELT	4,132	2,731	5%	--	-11%	--
Alternative 2D ELT	4,101	2,753	4%	-1%	-10%	1%
Alternative 4 H3 ELT	4,107	2,747	4%	-1%	-10%	1%
Alternative 4 H4 ELT	4,130	2,727	5%	0%	-11%	0%
Alternative 5A ELT	4,104	2,751	4%	-1%	-10%	1%

**Table Se-1. Modeled Selenium Concentrations in Water for Existing Conditions, No Action Alternative (ELT), and Alternatives 2D, 4A, and 5A ELT.**

Source	Location	Period *	Period Average Concentration (µg/L)					
			Existing Conditions	No Action Alternative ELT	Alternative 2D ELT	Alternative 4A-H3 ELT	Alternative 4A-H4 ELT	Alternative 5A ELT
Delta Interior	Mokelumne River (SF) at Staten Island	All	0.09	0.09	0.09	0.09	0.09	0.09
		Drought	0.09	0.09	0.09	0.09	0.09	0.09
	San Joaquin River at Buckley Cove	All	0.41	0.39	0.40	0.40	0.40	0.39
		Drought	0.39	0.36	0.38	0.38	0.38	0.37
	Franks Tract	All	0.14	0.14	0.17	0.17	0.17	0.15
		Drought	0.10	0.10	0.11	0.11	0.11	0.10
Old River at Rock Slough	All	0.16	0.16	0.20	0.19	0.20	0.17	
	Drought	0.10	0.11	0.12	0.12	0.12	0.11	
Western Delta	Sacramento River at Emmaton	All	0.10	0.10	0.12	0.11	0.11	0.11
		Drought	0.09	0.09	0.10	0.10	0.10	0.10
	San Joaquin River at Antioch	All	0.12	0.12	0.14	0.14	0.14	0.13
		Drought	0.10	0.10	0.10	0.10	0.10	0.10
	Sacramento River at Mallard Island	All	0.11	0.11	0.13	0.12	0.12	0.12
		Drought	0.10	0.10	0.10	0.10	0.10	0.10
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough Pumping Plant	All	0.10	0.10	0.11	0.11	0.11	0.11
		Drought	0.09	0.09	0.10	0.10	0.10	0.10
	Contra Costa Pumping Plant #1	All	0.14	0.14	0.18	0.18	0.19	0.16
		Drought	0.11	0.11	0.12	0.12	0.13	0.11
	Banks Pumping Plant	All	0.21	0.21	0.15	0.16	0.16	0.18
		Drought	0.15	0.15	0.15	0.15	0.14	0.14
	Jones Pumping Plant	All	0.28	0.29	0.19	0.19	0.19	0.25
		Drought	0.24	0.24	0.19	0.20	0.20	0.22

Notes:

\* All: Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index)

ELT - Early Long Term

µg/L - microgram per liter

SF - South Fork

Table Se-2a. Annual Average Selenium Concentrations in Biota for Existing Conditions, No Action Alternative (ELT), and Alternative 4A-H3 ELT.

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Selenium (mg/kg, dw <sup>b</sup> )											
			Whole-body Fish			Bird Eggs (Invertebrate Diet)			Bird Eggs (Fish Diet)			Fish Fillets (ww)		
			EX	NAA-ELT	Alt. 4H3-ELT	EX	NAA-ELT	Alt. 4H3-ELT	EX	NAA-ELT	Alt. 4H3-ELT	EX	NAA-ELT	Alt. 4H3-ELT
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	1.82	1.82	1.82	2.70	2.70	2.70	3.27	3.27	3.27	0.60	0.60	0.60
		Drought	2.46	2.46	2.46	3.66	3.66	3.66	4.42	4.42	4.42	0.86	0.86	0.86
	San Joaquin River at Buckley Cove	All	1.90	1.89	1.90	2.82	2.82	2.82	3.42	3.41	3.41	0.64	0.64	0.64
		Drought	2.39	2.39	2.39	3.55	3.56	3.55	4.30	4.31	4.30	0.83	0.83	0.83
	Franks Tract	All	1.84	1.84	1.85	2.73	2.73	2.75	3.31	3.31	3.33	0.61	0.61	0.62
		Drought	2.46	2.46	2.45	3.65	3.65	3.65	4.42	4.42	4.41	0.86	0.86	0.86
Old River at Rock Slough	All	1.84	1.84	1.86	2.74	2.74	2.76	3.32	3.32	3.34	0.62	0.61	0.62	
	Drought	2.45	2.45	2.45	3.65	3.65	3.64	4.41	4.41	4.40	0.86	0.86	0.85	
Western Delta	Sacramento River at Emmaton	All	1.82	1.82	1.83	2.71	2.71	2.72	3.28	3.28	3.29	0.61	0.61	0.61
		Drought	2.46	2.46	2.45	3.66	3.66	3.65	4.42	4.42	4.42	0.86	0.86	0.86
	SJR at Antioch	All	1.83	1.83	1.84	2.72	2.72	2.73	3.29	3.29	3.31	0.61	0.61	0.61
		Drought	2.46	2.46	2.45	3.65	3.65	3.65	4.42	4.42	4.42	0.86	0.86	0.86
	Sacramento River at Mallard Island	All	1.82	1.83	1.83	2.71	2.72	2.72	3.28	3.29	3.30	0.61	0.61	0.61
		Drought	2.46	2.46	2.45	3.65	3.65	3.65	4.42	4.42	4.42	0.86	0.86	0.86
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough PP	All	1.82	1.82	1.82	2.71	2.71	2.71	3.28	3.28	3.28	0.61	0.61	0.61
		Drought	2.46	2.46	2.45	3.66	3.66	3.65	4.42	4.42	4.42	0.86	0.86	0.86
	Contra Costa Pumping Plant #1	All	1.84	1.84	1.85	2.73	2.74	2.75	3.31	3.31	3.33	0.61	0.61	0.62
		Drought	2.45	2.45	2.44	3.65	3.65	3.64	4.41	4.41	4.40	0.86	0.86	0.85
	Banks Pumping Plant	All	1.86	1.86	1.85	2.77	2.77	2.75	3.35	3.35	3.32	0.62	0.62	0.62
		Drought	2.43	2.44	2.44	3.62	3.62	3.62	4.38	4.38	4.38	0.85	0.85	0.85
	Jones Pumping Plant	All	1.88	1.88	1.86	2.79	2.79	2.76	3.38	3.38	3.34	0.63	0.63	0.62
		Drought	2.41	2.41	2.42	3.59	3.59	3.60	4.34	4.34	4.36	0.84	0.84	0.84

**Notes:**

<sup>a</sup> All: Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index)

<sup>b</sup> Dry weight, except as noted for fish fillets

Alt. - alternative

dw - dry weight

ELT - Early Long Term

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA-ELT - No Action Alternative Early Long Term

ww - wet weight

**Table Se-2b. Annual Average Selenium Concentrations in Biota for Existing Conditions, No Action Alternative (ELT), and Alternative 4A-H4 ELT.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Selenium (mg/kg, dw <sup>b</sup> )											
			Whole-body Fish			Bird Eggs (Invertebrate Diet)			Bird Eggs (Fish Diet)			Fish Fillets (ww)		
			EX	NAA-ELT	Alt. 4H4-ELT	EX	NAA-ELT	Alt. 4H4-ELT	EX	NAA-ELT	Alt. 4H4-ELT	EX	NAA-ELT	Alt. 4H4-ELT
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	1.82	1.82	1.82	2.70	2.70	2.70	3.27	3.27	3.27	0.60	0.60	0.60
		Drought	2.46	2.46	2.46	3.66	3.66	3.66	4.42	4.42	4.42	0.86	0.86	0.86
	San Joaquin River at Buckley Cove	All	1.90	1.89	1.90	2.82	2.82	2.82	3.42	3.41	3.41	0.64	0.64	0.64
		Drought	2.39	2.39	2.39	3.55	3.56	3.55	4.30	4.31	4.30	0.83	0.83	0.83
	Franks Tract	All	1.84	1.84	1.85	2.73	2.73	2.75	3.31	3.31	3.33	0.61	0.61	0.62
		Drought	2.46	2.46	2.45	3.65	3.65	3.64	4.42	4.42	4.41	0.86	0.86	0.86
Old River at Rock Slough	All	1.84	1.84	1.86	2.74	2.74	2.76	3.32	3.32	3.34	0.62	0.61	0.62	
	Drought	2.45	2.45	2.44	3.65	3.65	3.64	4.41	4.41	4.40	0.86	0.86	0.85	
Western Delta	Sacramento River at Emmaton	All	1.82	1.82	1.83	2.71	2.71	2.72	3.28	3.28	3.29	0.61	0.61	0.61
		Drought	2.46	2.46	2.45	3.66	3.66	3.65	4.42	4.42	4.42	0.86	0.86	0.86
	SJR at Antioch	All	1.83	1.83	1.84	2.72	2.72	2.73	3.29	3.29	3.31	0.61	0.61	0.61
		Drought	2.46	2.46	2.45	3.65	3.65	3.65	4.42	4.42	4.42	0.86	0.86	0.86
	Sacramento River at Mallard Island	All	1.82	1.83	1.83	2.71	2.72	2.72	3.28	3.29	3.30	0.61	0.61	0.61
		Drought	2.46	2.46	2.45	3.65	3.65	3.65	4.42	4.42	4.42	0.86	0.86	0.86
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough PP	All	1.82	1.82	1.82	2.71	2.71	2.71	3.28	3.28	3.28	0.61	0.61	0.61
		Drought	2.46	2.46	2.45	3.66	3.66	3.65	4.42	4.42	4.42	0.86	0.86	0.86
	Contra Costa Pumping Plant #1	All	1.84	1.84	1.85	2.73	2.74	2.76	3.31	3.31	3.34	0.61	0.61	0.62
		Drought	2.45	2.45	2.44	3.65	3.65	3.63	4.41	4.41	4.40	0.86	0.86	0.85
	Banks Pumping Plant	All	1.86	1.86	1.85	2.77	2.77	2.74	3.35	3.35	3.32	0.62	0.62	0.62
		Drought	2.43	2.44	2.44	3.62	3.62	3.63	4.38	4.38	4.39	0.85	0.85	0.85
	Jones Pumping Plant	All	1.88	1.88	1.86	2.79	2.79	2.76	3.38	3.38	3.34	0.63	0.63	0.62
		Drought	2.41	2.41	2.42	3.59	3.59	3.60	4.34	4.34	4.36	0.84	0.84	0.84

**Notes:**

<sup>a</sup> All: Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index)

<sup>b</sup> Dry weight, except as noted for fish fillets

Alt. - alternative

dw - dry weight

ELT - Early Long Term

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA-ELT - No Action Alternative Early Long Term

ww - wet weight

**Table Se-2c. Annual Average Selenium Concentrations in Biota for Existing Conditions, No Action Alternative (ELT), and Alternative 2D ELT.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Selenium (mg/kg, dw <sup>b</sup> )											
			Whole-body Fish			Bird Eggs (Invertebrate Diet)			Bird Eggs (Fish Diet)			Fish Fillets (ww)		
			EX	NAA-ELT	Alt. 2D-ELT	EX	NAA-ELT	Alt. 2D-ELT	EX	NAA-ELT	Alt. 2D-ELT	EX	NAA-ELT	Alt. 2D-ELT
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	1.82	1.82	1.82	2.70	2.70	2.70	3.27	3.27	3.27	0.60	0.60	0.60
		Drought	2.46	2.46	2.46	3.66	3.66	3.66	4.42	4.42	4.42	0.86	0.86	0.86
	San Joaquin River at Buckley Cove	All	1.90	1.89	1.90	2.82	2.82	2.82	3.42	3.41	3.41	0.64	0.64	0.64
		Drought	2.39	2.39	2.39	3.55	3.56	3.55	4.30	4.31	4.30	0.83	0.83	0.83
	Franks Tract	All	1.84	1.84	1.85	2.73	2.73	2.75	3.31	3.31	3.33	0.61	0.61	0.62
		Drought	2.46	2.46	2.45	3.65	3.65	3.65	4.42	4.42	4.41	0.86	0.86	0.86
Old River at Rock Slough	All	1.84	1.84	1.86	2.74	2.74	2.76	3.32	3.32	3.34	0.62	0.61	0.62	
	Drought	2.45	2.45	2.45	3.65	3.65	3.64	4.41	4.41	4.40	0.86	0.86	0.85	
Western Delta	Sacramento River at Emmaton	All	1.82	1.82	1.83	2.71	2.71	2.72	3.28	3.28	3.29	0.61	0.61	0.61
		Drought	2.46	2.46	2.45	3.66	3.66	3.65	4.42	4.42	4.42	0.86	0.86	0.86
	SJR at Antioch	All	1.83	1.83	1.84	2.72	2.72	2.74	3.29	3.29	3.31	0.61	0.61	0.61
		Drought	2.46	2.46	2.45	3.65	3.65	3.65	4.42	4.42	4.42	0.86	0.86	0.86
	Sacramento River at Mallard Island	All	1.82	1.83	1.83	2.71	2.72	2.73	3.28	3.29	3.30	0.61	0.61	0.61
		Drought	2.46	2.46	2.45	3.65	3.65	3.65	4.42	4.42	4.42	0.86	0.86	0.86
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough PP	All	1.82	1.82	1.82	2.71	2.71	2.71	3.28	3.28	3.28	0.61	0.61	0.61
		Drought	2.46	2.46	2.45	3.66	3.66	3.65	4.42	4.42	4.42	0.86	0.86	0.86
	Contra Costa Pumping Plant #1	All	1.84	1.84	1.85	2.73	2.74	2.76	3.31	3.31	3.33	0.61	0.61	0.62
		Drought	2.45	2.45	2.44	3.65	3.65	3.64	4.41	4.41	4.40	0.86	0.86	0.85
	Banks Pumping Plant	All	1.86	1.86	1.84	2.77	2.77	2.74	3.35	3.35	3.32	0.62	0.62	0.61
		Drought	2.43	2.44	2.44	3.62	3.62	3.62	4.38	4.38	4.38	0.85	0.85	0.85
	Jones Pumping Plant	All	1.88	1.88	1.85	2.79	2.79	2.76	3.38	3.38	3.34	0.63	0.63	0.62
		Drought	2.41	2.41	2.42	3.59	3.59	3.60	4.34	4.34	4.36	0.84	0.84	0.84

**Notes:**

<sup>a</sup> All: Water years 1976-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index)

<sup>b</sup> Dry weight, except as noted for fish fillets

Alt. - alternative

dw - dry weight

ELT - Early Long Term

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA-ELT - No Action Alternative Early - Long Term

ww - wet weight

**Table Se-2d. Annual Average Selenium Concentrations in Biota for Existing Conditions, No Action Alternative (ELT), and Alternative 5A ELT.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Selenium (mg/kg, dw <sup>b</sup> )											
			Whole-body Fish			Bird Eggs (Invertebrate Diet)			Bird Eggs (Fish Diet)			Fish Fillets (ww)		
			EX	NAA-ELT	Alt. 5A-ELT	EX	NAA-ELT	Alt. 5A-ELT	EX	NAA-ELT	Alt. 5A-ELT	EX	NAA-ELT	Alt. 5A-ELT
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	1.82	1.82	1.82	2.70	2.70	2.70	3.27	3.27	3.27	0.60	0.60	0.60
		Drought	2.46	2.46	2.46	3.66	3.66	3.66	4.42	4.42	4.42	0.86	0.86	0.86
	San Joaquin River at Buckley Cove	All	1.90	1.89	1.90	2.82	2.82	2.82	3.42	3.41	3.41	0.64	0.64	0.64
		Drought	2.39	2.39	2.39	3.55	3.56	3.56	4.30	4.31	4.30	0.83	0.83	0.83
	Franks Tract	All	1.84	1.84	1.84	2.73	2.73	2.74	3.31	3.31	3.31	0.61	0.61	0.61
		Drought	2.46	2.46	2.45	3.65	3.65	3.65	4.42	4.42	4.42	0.86	0.86	0.86
Old River at Rock Slough	All	1.84	1.84	1.85	2.74	2.74	2.75	3.32	3.32	3.33	0.62	0.61	0.62	
	Drought	2.45	2.45	2.45	3.65	3.65	3.64	4.41	4.41	4.41	0.86	0.86	0.86	
Western Delta	Sacramento River at Emmaton	All	1.82	1.82	1.82	2.71	2.71	2.71	3.28	3.28	3.28	0.61	0.61	0.61
		Drought	2.46	2.46	2.46	3.66	3.66	3.65	4.42	4.42	4.42	0.86	0.86	0.86
	SJR at Antioch	All	1.83	1.83	1.83	2.72	2.72	2.73	3.29	3.29	3.30	0.61	0.61	0.61
		Drought	2.46	2.46	2.45	3.65	3.65	3.65	4.42	4.42	4.42	0.86	0.86	0.86
	Sacramento River at Mallard Island	All	1.82	1.83	1.83	2.71	2.72	2.72	3.28	3.29	3.29	0.61	0.61	0.61
		Drought	2.46	2.46	2.45	3.65	3.65	3.65	4.42	4.42	4.42	0.86	0.86	0.86
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough PP	All	1.82	1.82	1.82	2.71	2.71	2.71	3.28	3.28	3.28	0.61	0.61	0.61
		Drought	2.46	2.46	2.46	3.66	3.66	3.65	4.42	4.42	4.42	0.86	0.86	0.86
	Contra Costa Pumping Plant #1	All	1.84	1.84	1.84	2.73	2.74	2.74	3.31	3.31	3.32	0.61	0.61	0.62
		Drought	2.45	2.45	2.45	3.65	3.65	3.64	4.41	4.41	4.41	0.86	0.86	0.85
	Banks Pumping Plant	All	1.86	1.86	1.85	2.77	2.77	2.76	3.35	3.35	3.33	0.62	0.62	0.62
		Drought	2.43	2.44	2.44	3.62	3.62	3.63	4.38	4.38	4.39	0.85	0.85	0.85
	Jones Pumping Plant	All	1.88	1.88	1.87	2.79	2.79	2.78	3.38	3.38	3.37	0.63	0.63	0.63
		Drought	2.41	2.41	2.42	3.59	3.59	3.59	4.34	4.34	4.35	0.84	0.84	0.84

**Notes:**

<sup>a</sup> All: Water years 1976-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index)

<sup>b</sup> Dry weight, except as noted for fish fillets

Alt. - alternative

dw - dry weight

ELT - Early Long Term

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA-ELT - No Action Alternative Early - Long Term

ww - wet weight



**Table Se-3. Selenium Concentrations in Biota and Comparisons to Benchmarks for Existing Conditions and No Action Alternative (ELT).**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Selenium (mg/kg, dw) <sup>b</sup>								Exceedance Quotients <sup>c</sup>															
			Whole-body Fish		Bird Eggs (Invert Diet)		Bird Eggs (Fish Diet)		Fish Fillets (ww)		Whole-body Fish				Bird Eggs (Invert Diet)				Bird Eggs (Fish Diet)				Fish Fillets (ww)			
			Level of Concern <sup>d</sup>		Toxicity Level <sup>e</sup>		Level of Concern <sup>d</sup>		Toxicity Level <sup>e</sup>		Level of Concern <sup>d</sup>		Toxicity Level <sup>e</sup>		Level of Concern <sup>d</sup>		Toxicity Level <sup>e</sup>		Level of Concern <sup>d</sup>		Toxicity Level <sup>e</sup>		Advisory Tissue Level <sup>f</sup>			
			EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT		
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	1.82	1.82	2.70	2.70	3.27	3.27	0.60	0.60	0.45	0.45	0.22	0.22	0.45	0.45	0.27	0.27	0.54	0.54	0.33	0.33	0.24	0.24		
		Drought	2.46	2.46	3.66	3.66	4.42	4.42	0.86	0.86	0.61	0.61	0.30	0.30	0.61	0.61	0.37	0.37	0.74	0.74	0.44	0.44	0.34	0.34		
	San Joaquin River at Buckley Cove	All	1.90	1.89	2.82	2.82	3.42	3.41	0.64	0.64	0.47	0.47	0.23	0.23	0.47	0.47	0.28	0.28	0.57	0.57	0.34	0.34	0.25	0.25		
		Drought	2.39	2.39	3.55	3.56	4.30	4.31	0.83	0.83	0.60	0.60	0.29	0.30	0.59	0.59	0.36	0.36	0.72	0.72	0.43	0.43	0.33	0.33		
	Franks Tract	All	1.84	1.84	2.73	2.73	3.31	3.31	0.61	0.61	0.46	0.46	0.23	0.23	0.46	0.46	0.27	0.27	0.55	0.55	0.33	0.33	0.24	0.24		
		Drought	2.46	2.46	3.65	3.65	4.42	4.42	0.86	0.86	0.61	0.61	0.30	0.30	0.61	0.61	0.37	0.37	0.74	0.74	0.44	0.44	0.34	0.34		
Old River at Rock Slough	All	1.84	1.84	2.74	2.74	3.32	3.32	0.62	0.61	0.46	0.46	0.23	0.23	0.46	0.46	0.27	0.27	0.55	0.55	0.33	0.33	0.25	0.25			
	Drought	2.45	2.45	3.65	3.65	4.41	4.41	0.86	0.86	0.61	0.61	0.30	0.30	0.61	0.61	0.36	0.36	0.74	0.74	0.44	0.44	0.34	0.34			
Western Delta	Sacramento River at Emmaton	All	1.82	1.82	2.71	2.71	3.28	3.28	0.61	0.61	0.46	0.46	0.22	0.22	0.45	0.45	0.27	0.27	0.55	0.55	0.33	0.33	0.24	0.24		
		Drought	2.46	2.46	3.66	3.66	4.42	4.42	0.86	0.86	0.61	0.61	0.30	0.30	0.61	0.61	0.37	0.37	0.74	0.74	0.44	0.44	0.34	0.34		
	SJR at Antioch	All	1.83	1.83	2.72	2.72	3.29	3.29	0.61	0.61	0.46	0.46	0.23	0.23	0.45	0.45	0.27	0.27	0.55	0.55	0.33	0.33	0.24	0.24		
		Drought	2.46	2.46	3.65	3.65	4.42	4.42	0.86	0.86	0.61	0.61	0.30	0.30	0.61	0.61	0.37	0.37	0.74	0.74	0.44	0.44	0.34	0.34		
	Sacramento River at Mallard Island	All	1.82	1.83	2.71	2.72	3.28	3.29	0.61	0.61	0.46	0.46	0.23	0.23	0.45	0.45	0.27	0.27	0.55	0.55	0.33	0.33	0.24	0.24		
		Drought	2.46	2.46	3.65	3.65	4.42	4.42	0.86	0.86	0.61	0.61	0.30	0.30	0.61	0.61	0.37	0.37	0.74	0.74	0.44	0.44	0.34	0.34		
Major Diversions (Pu Stations)	North Bay Aqueduct at Barker Slough PP	All	1.82	1.82	2.71	2.71	3.28	3.28	0.61	0.61	0.46	0.46	0.22	0.22	0.45	0.45	0.27	0.27	0.55	0.55	0.33	0.33	0.24	0.24		
		Drought	2.46	2.46	3.66	3.66	4.42	4.42	0.86	0.86	0.61	0.61	0.30	0.30	0.61	0.61	0.37	0.37	0.74	0.74	0.44	0.44	0.34	0.34		
	Contra Costa Pumping Plant #1	All	1.84	1.84	2.73	2.74	3.31	3.31	0.61	0.61	0.46	0.46	0.23	0.23	0.46	0.46	0.27	0.27	0.55	0.55	0.33	0.33	0.24	0.25		
		Drought	2.45	2.45	3.65	3.65	4.41	4.41	0.86	0.86	0.61	0.61	0.30	0.30	0.61	0.61	0.36	0.36	0.74	0.74	0.44	0.44	0.34	0.34		
	Banks Pumping Plant	All	1.86	1.86	2.77	2.77	3.35	3.35	0.62	0.62	0.47	0.47	0.23	0.23	0.46	0.46	0.28	0.28	0.56	0.56	0.34	0.33	0.25	0.25		
		Drought	2.43	2.44	3.62	3.62	4.38	4.38	0.85	0.85	0.61	0.61	0.30	0.30	0.60	0.60	0.36	0.36	0.73	0.73	0.44	0.44	0.34	0.34		
	Jones Pumping Plant	All	1.88	1.88	2.79	2.79	3.38	3.38	0.63	0.63	0.47	0.47	0.23	0.23	0.47	0.47	0.28	0.28	0.56	0.56	0.34	0.34	0.25	0.25		
		Drought	2.41	2.41	3.59	3.59	4.34	4.34	0.84	0.84	0.60	0.60	0.30	0.30	0.60	0.60	0.36	0.36	0.72	0.72	0.43	0.43	0.34	0.34		

**Notes:**

<sup>a</sup> All: Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

<sup>b</sup> Dry weight, except as noted for fish fillets.

<sup>c</sup> Exceedance Quotient = tissue concentration/benchmark

<sup>d</sup> Level of Concern for fish tissue (lower end of range) = 4 mg/kg dw (Beckon et al. 2008)

<sup>e</sup> Toxicity Level for fish tissue = 9 mg/kg dw (Beckon et al. 2008)

<sup>f</sup> Level of Concern for bird eggs (lower end of range) = 6 mg/kg dw (Beckon et al. 2008)

<sup>g</sup> Toxicity Level for bird eggs = 10 mg/kg dw (Beckon et al. 2008)

<sup>h</sup> Advisory Tissue Level = 2.5 mg/kg ww (OEHA 2008)

All - alternative

dw - dry weight

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA-ELT - No Action Alternative Early Long Term

ww - wet weight

**Table Se-4a. Selenium Concentrations in Biota and Comparisons to Baseline Conditions and Benchmarks for Alternative 4A-H3 ELT.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Selenium (mg/kg, dw <sup>b</sup> )				% Change In Selenium Concentrations Compared to Baseline <sup>c</sup>								Exceedance Quotients <sup>d</sup>						
			Whole-body Fish	Bird Eggs (Invert. Diet)	Bird Eggs (Fish Diet)	Fish Fillets (ww)	Whole-body Fish		Bird Eggs (Invert. Diet)		Bird Eggs (Fish Diet)		Fish Fillets (ww)		Whole-body Fish		Bird Eggs (Invert. Diet)		Bird Eggs (Fish Diet)		Fish Fillets (ww)
			AR. 4H3-ELT	AR. 4H3-ELT	AR. 4H3-ELT	AR. 4H3-ELT	EX	NAA_ELT	EX	NAA_ELT	EX	NAA_ELT	EX	NAA_ELT	EX	NAA_ELT	LOC <sup>e</sup>	TL <sup>f</sup>	LOC <sup>e</sup>	TL <sup>h</sup>	LOC <sup>e</sup>
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	1.82	2.70	3.27	0.60	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.45	0.22	0.45	0.27	0.54	0.33	0.24
		Drought	2.46	3.66	4.42	0.86	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	0.61	0.30	0.61	0.37	0.74	0.44	0.34
	San Joaquin River at Buckley Cove	All	1.90	2.82	3.41	0.64	-0.07	0.10	-0.07	0.10	-0.07	0.10	-0.08	0.11	0.47	0.23	0.47	0.28	0.57	0.34	0.25
		Drought	2.39	3.55	4.30	0.83	0.05	-0.14	0.05	-0.14	0.05	-0.14	0.06	-0.16	0.60	0.30	0.59	0.36	0.72	0.43	0.33
	Franks Tract	All	1.85	2.75	3.33	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.73	0.74	0.46	0.23	0.46	0.27	0.55	0.33	0.25
		Drought	2.45	3.65	4.41	0.86	-0.22	-0.20	-0.22	-0.20	-0.22	-0.20	-0.25	-0.23	0.61	0.30	0.61	0.36	0.74	0.44	0.34
Old River at Rock Slough	All	1.86	2.76	3.34	0.62	0.59	0.60	0.59	0.60	0.59	0.60	0.70	0.72	0.46	0.23	0.46	0.28	0.56	0.33	0.25	
	Drought	2.45	3.64	4.40	0.85	-0.28	-0.26	-0.28	-0.26	-0.28	-0.26	-0.32	-0.30	0.61	0.30	0.61	0.36	0.73	0.44	0.34	
Western Delta	Sacramento River at Emmaton	All	1.83	2.72	3.29	0.61	0.33	0.29	0.33	0.29	0.33	0.29	0.39	0.35	0.46	0.23	0.45	0.27	0.55	0.33	0.24
		Drought	2.45	3.65	4.42	0.86	-0.11	-0.10	-0.11	-0.10	-0.11	-0.10	-0.13	-0.12	0.61	0.30	0.61	0.37	0.74	0.44	0.34
	SJR at Antioch	All	1.84	2.73	3.31	0.61	0.49	0.48	0.49	0.48	0.49	0.48	0.58	0.57	0.46	0.23	0.46	0.27	0.55	0.33	0.24
		Drought	2.45	3.65	4.42	0.86	-0.13	-0.12	-0.13	-0.12	-0.13	-0.12	-0.15	-0.14	0.61	0.30	0.61	0.36	0.74	0.44	0.34
	Sacramento River at Mallard Island	All	1.83	2.72	3.30	0.61	0.34	0.33	0.34	0.33	0.34	0.33	0.41	0.39	0.46	0.23	0.45	0.27	0.55	0.33	0.24
		Drought	2.45	3.65	4.42	0.86	-0.09	-0.08	-0.09	-0.08	-0.09	-0.08	-0.10	-0.09	0.61	0.30	0.61	0.37	0.74	0.44	0.34
Major Diversions (Pumping Station)	North Bay Aqueduct at Barker Slough PP	All	1.82	2.71	3.28	0.61	0.16	0.19	0.16	0.19	0.16	0.19	0.19	0.23	0.46	0.23	0.45	0.27	0.55	0.33	0.24
		Drought	2.45	3.65	4.42	0.86	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.10	-0.10	0.61	0.30	0.61	0.37	0.74	0.44	0.34
	Contra Costa Pumping Plant #1	All	1.85	2.75	3.33	0.62	0.71	0.64	0.71	0.64	0.71	0.64	0.85	0.76	0.46	0.23	0.46	0.28	0.56	0.33	0.25
		Drought	2.44	3.64	4.40	0.85	-0.27	-0.25	-0.27	-0.25	-0.27	-0.25	-0.31	-0.29	0.61	0.30	0.61	0.36	0.73	0.44	0.34
	Banks Pumping Plant	All	1.85	2.75	3.32	0.62	-0.82	-0.79	-0.82	-0.79	-0.82	-0.79	-0.97	-0.94	0.46	0.23	0.46	0.27	0.55	0.33	0.25
		Drought	2.44	3.62	4.38	0.85	0.06	0.01	0.06	0.01	0.06	0.01	0.07	0.02	0.61	0.30	0.60	0.36	0.73	0.44	0.34
	Jones Pumping Plant	All	1.86	2.76	3.34	0.62	-1.12	-1.14	-1.12	-1.14	-1.12	-1.14	-1.33	-1.35	0.46	0.23	0.46	0.28	0.56	0.33	0.25
		Drought	2.42	3.60	4.36	0.84	0.43	0.44	0.43	0.44	0.43	0.44	0.49	0.50	0.61	0.30	0.60	0.36	0.73	0.44	0.34

**Notes:**

<sup>a</sup> All Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

<sup>b</sup> Dry weight, except as noted for fish fillets.

<sup>c</sup> % change indicates a negative change (increased concentrations) relative to baseline when values are positive and a positive change (lowered concentrations) relative to baseline when values are negative.

<sup>d</sup> Exceedance Quotient = tissue concentration/benchmark

<sup>e</sup> Level of Concern for fish tissue (lower end of range) = 4 mg/kg dw (Beckon et al. 2008)

<sup>f</sup> Toxicity Level for fish tissue = 8.1 mg/kg dw (USEPA 2014)

<sup>g</sup> Level of Concern for bird eggs (lower end of range) = 6 mg/kg dw (Beckon et al. 2008)

<sup>h</sup> Toxicity Level for bird eggs = 10 mg/kg dw (Beckon et al. 2008)

<sup>i</sup> Advisory Tissue Level = 2.5 mg/kg ww (OEHA 2008)

Alt. - alternative

dw - dry weight

ELT - Early Long Term

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA-ELT - No Action Alternative Early Long Term

ww - wet weight

**Table Se-4b. Selenium Concentrations in Biota and Comparisons to Baseline Conditions and Benchmarks for Alternative 4A-H4 ELT.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Selenium (mg/kg, dw <sup>b</sup> )				% Change In Selenium Concentrations Compared to Baseline <sup>c</sup>								Exceedance Quotients <sup>d</sup>												
			Whole-body Fish		Bird Eggs (Invert. Diet)		Bird Eggs (Fish Diet)		Fish Fillets (ww)		Whole-body Fish		Bird Eggs (Invert. Diet)		Bird Eggs (Fish Diet)		Fish Fillets (ww)		Whole-body Fish		Bird Eggs (Invert. Diet)		Bird Eggs (Fish Diet)		Fish Fillets (ww)		
			Alt. 4H4-ELT	Alt. 4H4-ELT	Alt. 4H4-ELT	Alt. 4H4-ELT	EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT	LOC <sup>e</sup>	TL <sup>f</sup>	LOC <sup>e</sup>	TL <sup>f</sup>	LOC <sup>e</sup>	TL <sup>f</sup>	LOC <sup>e</sup>	TL <sup>f</sup>	
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	1.82	2.70	3.27	0.60	0.037	0.038	0.037	0.038	0.037	0.038	0.037	0.038	0.044	0.045	0.454	0.224	0.450	0.270	0.545	0.327	0.242				
		Drought	2.46	3.66	4.42	0.86	-0.019	-0.018	-0.019	-0.018	-0.019	-0.018	-0.019	-0.018	-0.021	-0.020	0.614	0.303	0.609	0.366	0.737	0.442	0.343				
	San Joaquin River at Buckley Cove	All	1.90	2.82	3.41	0.64	-0.059	0.105	-0.059	0.105	-0.059	0.105	-0.059	0.105	-0.069	0.124	0.474	0.234	0.470	0.282	0.569	0.341	0.254				
		Drought	2.39	3.55	4.30	0.83	0.033	-0.153	0.033	-0.153	0.033	-0.153	0.033	-0.153	0.038	-0.174	0.597	0.295	0.592	0.355	0.717	0.430	0.332				
	Franks Tract	All	1.85	2.75	3.33	0.62	0.666	0.669	0.666	0.669	0.666	0.669	0.666	0.669	0.793	0.796	0.462	0.228	0.458	0.275	0.555	0.333	0.247				
		Drought	2.45	3.64	4.41	0.86	-0.252	-0.230	-0.252	-0.230	-0.252	-0.230	-0.252	-0.230	-0.286	-0.262	0.612	0.302	0.607	0.364	0.735	0.441	0.342				
	Old River at Rock Slough	All	1.86	2.76	3.34	0.62	0.683	0.695	0.683	0.695	0.683	0.695	0.683	0.695	0.812	0.826	0.464	0.229	0.460	0.276	0.557	0.334	0.248				
		Drought	2.44	3.64	4.40	0.85	-0.338	-0.316	-0.338	-0.316	-0.338	-0.316	-0.338	-0.316	-0.384	-0.359	0.611	0.302	0.606	0.364	0.733	0.440	0.341				
Western Delta	Sacramento River at Emmaton	All	1.83	2.72	3.29	0.61	0.343	0.305	0.343	0.305	0.343	0.305	0.409	0.364	0.457	0.226	0.453	0.272	0.548	0.329	0.243						
		Drought	2.45	3.65	4.42	0.86	-0.125	-0.114	-0.125	-0.114	-0.125	-0.114	-0.142	-0.129	0.614	0.303	0.609	0.365	0.736	0.442	0.343						
	SJR at Antioch	All	1.84	2.73	3.31	0.61	0.514	0.504	0.514	0.504	0.514	0.504	0.612	0.600	0.460	0.227	0.456	0.273	0.551	0.331	0.245						
		Drought	2.45	3.65	4.42	0.86	-0.149	-0.136	-0.149	-0.136	-0.149	-0.136	-0.170	-0.155	0.613	0.303	0.608	0.365	0.736	0.442	0.343						
	Sacramento River at Mallard Island	All	1.83	2.72	3.30	0.61	0.352	0.337	0.352	0.337	0.352	0.337	0.420	0.402	0.458	0.226	0.454	0.272	0.549	0.330	0.244						
		Drought	2.45	3.65	4.42	0.86	-0.094	-0.087	-0.094	-0.087	-0.094	-0.087	-0.107	-0.099	0.613	0.303	0.608	0.365	0.736	0.442	0.343						
Major Diversions (Pumping Station)	North Bay Aqueduct at Barker Slough PP	All	1.82	2.71	3.28	0.61	0.161	0.194	0.161	0.194	0.161	0.194	0.231	0.231	0.456	0.225	0.452	0.271	0.547	0.328	0.243						
		Drought	2.45	3.65	4.42	0.86	-0.091	-0.090	-0.091	-0.090	-0.091	-0.090	-0.103	-0.103	0.614	0.303	0.609	0.365	0.736	0.442	0.343						
	Contra Costa Pumping Plant #1	All	1.85	2.76	3.34	0.62	0.854	0.783	0.854	0.783	0.854	0.783	1.017	0.932	0.463	0.229	0.460	0.276	0.556	0.334	0.247						
		Drought	2.44	3.63	4.40	0.85	-0.333	-0.312	-0.333	-0.312	-0.333	-0.312	-0.379	-0.355	0.611	0.302	0.606	0.363	0.733	0.440	0.341						
	Banks Pumping Plant	All	1.85	2.74	3.32	0.62	-0.870	-0.841	-0.870	-0.841	-0.870	-0.841	-1.033	-0.998	0.461	0.228	0.457	0.274	0.554	0.332	0.246						
		Drought	2.44	3.63	4.39	0.85	0.163	0.117	0.163	0.117	0.163	0.117	0.185	0.133	0.610	0.301	0.605	0.363	0.731	0.439	0.340						
	Jones Pumping Plant	All	1.86	2.76	3.34	0.62	-1.128	-1.148	-1.128	-1.148	-1.128	-1.148	-1.338	-1.361	0.464	0.229	0.460	0.276	0.557	0.334	0.248						
		Drought	2.42	3.60	4.36	0.84	0.408	0.423	0.408	0.423	0.408	0.423	0.465	0.482	0.605	0.299	0.600	0.360	0.726	0.436	0.338						

**Notes:**

<sup>a</sup> All: Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

<sup>b</sup> Dry weight, except as noted for fish fillets.

<sup>c</sup> % change indicates a negative change (increased concentrations) relative to baseline when values are positive and a positive change (lowered concentrations) relative to baseline when values are negative.

<sup>d</sup> Exceedance Quotient = tissue concentration/benchmark

<sup>e</sup> Level of Concern for fish tissue (lower end of range) = 4 mg/kg dw (Beckon et al. 2008)

<sup>f</sup> Toxicity Level for fish tissue = 8.1 mg/kg dw (USEPA 2014)

<sup>g</sup> Level of Concern for bird eggs (lower end of range) = 6 mg/kg dw (Beckon et al. 2008)

<sup>h</sup> Toxicity Level for bird eggs = 10 mg/kg dw (Beckon et al. 2008)

<sup>i</sup> Advisory Tissue Level = 2.5 mg/kg ww (OEHA 2008)

Alt. - alternative

dw - dry weight

ELT - Early Long Term

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA-ELT - No Action Alternative Early Long Term

ww - wet weight

**Table Se-4c. Selenium Concentrations in Biota and Comparisons to Baseline Conditions and Benchmarks for Alternative 2D ELT.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Selenium (mg/kg, dw <sup>b</sup> )				% Change In Selenium Concentrations Compared to Baseline <sup>c</sup>								Exceedance Quotients <sup>d</sup>						
			Whole-body Fish Alt. 2D-ELT	Bird Eggs (Invert. Diet) Alt. 2D-ELT	2D ELT Alt. 2D-ELT	Fish Fillets (ww) Alt. 2D-ELT	Whole-body Fish		Bird Eggs (Invert. Diet)		Bird Eggs (Fish Diet)		Fish Fillets (ww)		Whole-body Fish		Bird Eggs (Invert. Diet)		Bird Eggs (Fish Diet)		Fish Fillets (ww)
							EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT	LOC <sup>e</sup>	TL <sup>f</sup>	LOC <sup>g</sup>	TL <sup>h</sup>	LOC <sup>g</sup>	TL <sup>h</sup>	ATL <sup>i</sup>
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	1.82	2.70	3.27	0.60	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.45	0.22	0.45	0.27	0.54	0.33	0.24
		Drought	2.46	3.66	4.42	0.86	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	0.61	0.30	0.61	0.37	0.74	0.44	0.34
	San Joaquin River at Buckley Cove	All	1.90	2.82	3.41	0.64	-0.07	0.10	-0.07	0.10	-0.07	0.10	-0.08	0.12	0.47	0.23	0.47	0.28	0.57	0.34	0.25
		Drought	2.39	3.55	4.30	0.83	0.05	-0.14	0.05	-0.14	0.05	-0.14	0.05	-0.16	0.60	0.29	0.59	0.36	0.72	0.43	0.33
	Franks Tract	All	1.85	2.75	3.33	0.62	0.68	0.68	0.68	0.68	0.68	0.68	0.81	0.81	0.46	0.23	0.46	0.28	0.55	0.33	0.25
		Drought	2.45	3.65	4.41	0.86	-0.22	-0.20	-0.22	-0.20	-0.22	-0.20	-0.25	-0.23	0.61	0.30	0.61	0.36	0.74	0.44	0.34
	Old River at Rock Slough	All	1.86	2.76	3.34	0.62	0.67	0.68	0.67	0.68	0.67	0.68	0.79	0.81	0.46	0.23	0.46	0.28	0.56	0.33	0.25
		Drought	2.45	3.64	4.40	0.85	-0.29	-0.27	-0.29	-0.27	-0.29	-0.27	-0.33	-0.30	0.61	0.30	0.61	0.36	0.73	0.44	0.34
Western Delta	Sacramento River at Emmaton	All	1.83	2.72	3.29	0.61	0.35	0.32	0.35	0.32	0.35	0.32	0.42	0.38	0.46	0.23	0.45	0.27	0.55	0.33	0.24
		Drought	2.45	3.65	4.42	0.86	-0.12	-0.10	-0.12	-0.10	-0.12	-0.10	-0.13	-0.12	0.61	0.30	0.61	0.37	0.74	0.44	0.34
	SJR at Antioch	All	1.84	2.74	3.31	0.61	0.54	0.53	0.54	0.53	0.54	0.53	0.64	0.63	0.46	0.23	0.46	0.27	0.55	0.33	0.25
		Drought	2.45	3.65	4.42	0.86	-0.14	-0.12	-0.14	-0.12	-0.14	-0.12	-0.16	-0.14	0.61	0.30	0.61	0.36	0.74	0.44	0.34
	Sacramento River at Mallard Island	All	1.83	2.73	3.30	0.61	0.38	0.37	0.38	0.37	0.38	0.37	0.45	0.44	0.46	0.23	0.45	0.27	0.55	0.33	0.24
		Drought	2.45	3.65	4.42	0.86	-0.09	-0.08	-0.09	-0.08	-0.09	-0.08	-0.10	-0.09	0.61	0.30	0.61	0.37	0.74	0.44	0.34
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough PP	All	1.82	2.71	3.28	0.61	0.16	0.19	0.16	0.19	0.16	0.19	0.19	0.23	0.46	0.23	0.45	0.27	0.55	0.33	0.24
		Drought	2.45	3.65	4.42	0.86	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.10	-0.10	0.61	0.30	0.61	0.37	0.74	0.44	0.34
	Contra Costa Pumping Plant #1	All	1.85	2.76	3.33	0.62	0.79	0.72	0.79	0.72	0.79	0.72	0.94	0.86	0.46	0.23	0.46	0.28	0.56	0.33	0.25
		Drought	2.44	3.64	4.40	0.85	-0.28	-0.26	-0.28	-0.26	-0.28	-0.26	-0.32	-0.29	0.61	0.30	0.61	0.36	0.73	0.44	0.34
	Banks Pumping Plant	All	1.84	2.74	3.32	0.61	-1.01	-0.98	-1.01	-0.98	-1.01	-0.98	-1.20	-1.17	0.46	0.23	0.46	0.27	0.55	0.33	0.25
		Drought	2.44	3.62	4.38	0.85	0.06	0.01	0.06	0.01	0.06	0.01	0.07	0.02	0.61	0.30	0.60	0.36	0.73	0.44	0.34
	Jones Pumping Plant	All	1.85	2.76	3.34	0.62	-1.23	-1.25	-1.23	-1.25	-1.23	-1.25	-1.46	-1.48	0.46	0.23	0.46	0.28	0.56	0.33	0.25
		Drought	2.42	3.60	4.36	0.84	0.44	0.45	0.44	0.45	0.44	0.45	0.50	0.51	0.61	0.30	0.60	0.36	0.73	0.44	0.34

Notes:

- <sup>a</sup> All: Water years 1976-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).
- <sup>b</sup> Dry weight, except as noted for fish fillets.
- <sup>c</sup> % change indicates a negative change (increased concentrations) relative to baseline when values are positive and a positive change (lowered concentrations) relative to baseline when values are negative.
- <sup>d</sup> Exceedance Quotient = tissue concentration/benchmark
- <sup>e</sup> Level of Concern for fish tissue (lower end of range) = 4 mg/kg dw (Beckon et al. 2008)
- <sup>f</sup> Toxicity Level for fish tissue = 8.1 mg/kg dw (USEPA 2014)
- <sup>g</sup> Level of Concern for bird eggs (lower end of range) = 6 mg/kg dw (Beckon et al. 2008)
- <sup>h</sup> Toxicity Level for bird eggs = 10 mg/kg dw (Beckon et al. 2008)
- <sup>i</sup> Advisory Tissue Level = 2.5 mg/kg ww (OEHA 2008)

Alt. - alternative  
dw - dry weight  
ELT - Early Long Term  
EX - Existing Conditions  
mg/kg - milligram per kilogram  
NAA-ELT - No Action Alternative Early - Long Term  
ww - wet weight

**Table Se-4d. Selenium Concentrations in Biota and Comparisons to Baseline Conditions and Benchmarks for Alternative 5A ELT.**

Source	Location	Period <sup>a</sup>	Estimated Concentrations of Selenium (mg/kg, dw <sup>b</sup> )				% Change In Selenium Concentrations Compared to Baseline <sup>c</sup>								Exceedance Quotients <sup>d</sup>							
			Whole-body Fish	Bird Eggs (Invert. Diet)	2D ELT	Fish Fillets (ww)	Whole-body Fish		Bird Eggs (Invert. Diet)		Bird Eggs (Fish Diet)		Fish Fillets (ww)		Whole-body Fish		Bird Eggs (Invert. Diet)		Bird Eggs (Fish Diet)		Fish Fillets (ww)	
			Alt. 5A-ELT	Alt. 5A-ELT	Alt. 5A-ELT	Alt. 5A-ELT	EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT	EX	NAA-ELT	LOC <sup>e</sup>	TL <sup>f</sup>	LOC <sup>g</sup>	TL <sup>h</sup>	LOC <sup>g</sup>	TL <sup>h</sup>	ATL <sup>i</sup>	
Delta Interior	Mokelumne River (South Fork) at Staten Island	All	1.82	2.70	3.27	0.60	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.45	0.22	0.45	0.27	0.54	0.33	0.24	
		Drought	2.46	3.66	4.42	0.86	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.01	0.61	0.30	0.61	0.37	0.74	0.44	0.34	
	San Joaquin River at Buckley Cove	All	1.90	2.82	3.41	0.64	-0.14	0.03	-0.14	0.03	-0.14	0.03	-0.16	0.03	0.47	0.23	0.47	0.28	0.57	0.34	0.25	
		Drought	2.39	3.56	4.30	0.83	0.13	-0.05	0.13	-0.05	0.13	-0.05	0.15	-0.06	0.60	0.30	0.59	0.36	0.72	0.43	0.33	
	Franks Tract	All	1.84	2.74	3.31	0.61	0.25	0.25	0.25	0.25	0.25	0.25	0.30	0.30	0.46	0.23	0.46	0.27	0.55	0.33	0.25	
		Drought	2.45	3.65	4.42	0.86	-0.11	-0.09	-0.11	-0.09	-0.11	-0.09	-0.13	-0.10	0.61	0.30	0.61	0.36	0.74	0.44	0.34	
	Old River at Rock Slough	All	1.85	2.75	3.33	0.62	0.23	0.24	0.23	0.24	0.23	0.24	0.27	0.28	0.46	0.23	0.46	0.27	0.55	0.33	0.25	
		Drought	2.45	3.64	4.41	0.86	-0.12	-0.09	-0.12	-0.09	-0.12	-0.09	-0.13	-0.11	0.61	0.30	0.61	0.36	0.73	0.44	0.34	
Western Delta	Sacramento River at Emmaton	All	1.82	2.71	3.28	0.61	0.17	0.14	0.17	0.14	0.17	0.14	0.21	0.16	0.46	0.23	0.45	0.27	0.55	0.33	0.24	
		Drought	2.46	3.65	4.42	0.86	-0.08	-0.07	-0.08	-0.07	-0.08	-0.07	-0.10	-0.08	0.61	0.30	0.61	0.37	0.74	0.44	0.34	
	SJR at Antioch	All	1.83	2.73	3.30	0.61	0.21	0.20	0.21	0.20	0.21	0.20	0.25	0.24	0.46	0.23	0.45	0.27	0.55	0.33	0.24	
		Drought	2.45	3.65	4.42	0.86	-0.09	-0.08	-0.09	-0.08	-0.09	-0.08	-0.10	-0.09	0.61	0.30	0.61	0.37	0.74	0.44	0.34	
	Sacramento River at Mallard Island	All	1.83	2.72	3.29	0.61	0.15	0.13	0.15	0.13	0.15	0.13	0.17	0.16	0.46	0.23	0.45	0.27	0.55	0.33	0.24	
		Drought	2.45	3.65	4.42	0.86	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.07	-0.06	0.61	0.30	0.61	0.37	0.74	0.44	0.34	
Major Diversions (Pumping Stations)	North Bay Aqueduct at Barker Slough PP	All	1.82	2.71	3.28	0.61	0.14	0.17	0.14	0.17	0.14	0.17	0.16	0.20	0.46	0.23	0.45	0.27	0.55	0.33	0.24	
		Drought	2.46	3.65	4.42	0.86	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.10	-0.10	0.61	0.30	0.61	0.37	0.74	0.44	0.34	
	Contra Costa Pumping Plant #1	All	1.84	2.74	3.32	0.62	0.35	0.28	0.35	0.28	0.35	0.28	0.42	0.34	0.46	0.23	0.46	0.27	0.55	0.33	0.25	
		Drought	2.45	3.64	4.41	0.85	-0.12	-0.09	-0.12	-0.09	-0.12	-0.09	-0.13	-0.11	0.61	0.30	0.61	0.36	0.73	0.44	0.34	
	Banks Pumping Plant	All	1.85	2.76	3.33	0.62	-0.47	-0.44	-0.47	-0.44	-0.47	-0.44	-0.55	-0.52	0.46	0.23	0.46	0.28	0.56	0.33	0.25	
		Drought	2.44	3.63	4.39	0.85	0.13	0.08	0.13	0.08	0.13	0.08	0.14	0.09	0.61	0.30	0.60	0.36	0.73	0.44	0.34	
	Jones Pumping Plant	All	1.87	2.78	3.37	0.63	-0.39	-0.41	-0.39	-0.41	-0.39	-0.41	-0.46	-0.49	0.47	0.23	0.46	0.28	0.56	0.34	0.25	
		Drought	2.42	3.59	4.35	0.84	0.17	0.19	0.17	0.19	0.17	0.19	0.19	0.21	0.60	0.30	0.60	0.36	0.72	0.43	0.34	

**Notes:**

<sup>a</sup> All: Water years 1976-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

<sup>b</sup> Dry weight, except as noted for fish fillets.

<sup>c</sup> % change indicates a negative change (increased concentrations) relative to baseline when values are positive and a positive change (lowered concentrations) relative to baseline when values are negative.

<sup>d</sup> Exceedance Quotient = tissue concentration/benchmark

<sup>e</sup> Level of Concern for fish tissue (lower end of range) = 4 mg/kg dw (Beckon et al. 2008)

<sup>f</sup> Toxicity Level for fish tissue = 8.1 mg/kg dw (USEPA 2014)

<sup>g</sup> Level of Concern for bird eggs (lower end of range) = 6 mg/kg dw (Beckon et al. 2008)

<sup>h</sup> Toxicity Level for bird eggs = 10 mg/kg dw (Beckon et al. 2008)

<sup>i</sup> Advisory Tissue Level = 2.5 mg/kg ww (OEHHA 2008)

Alt. - alternative

dw - dry weight

ELT - Early Long Term

EX - Existing Conditions

mg/kg - milligram per kilogram

NAA-ELT - No Action Alternative Early - Long Term

ww - wet weight

1 **Table Se-5. Annual Average Selenium Concentrations in Whole-Body Sturgeon**

Location	Period <sup>a</sup>	Estimated Concentrations of Selenium in Whole-body Sturgeon (mg/kg, dw)					
		Existing Conditions	No Action Alternative	Alternative 2D ELT	Alternative 4A-H3 ELT	Alternative 4A-H4 ELT	Alternative 5A ELT
San Joaquin River at Antioch	All	4.71	4.73	5.64	5.54	5.59	5.05
	Drought	6.82	6.87	7.31	7.30	7.35	7.14
Sacramento River at Mallard Island	All	4.38	4.41	4.98	4.92	4.93	4.60
	Drought	6.93	6.96	7.25	7.24	7.27	7.16

Notes:

dw - dry weight

ELT - Early Long Term

mg/kg - milligram per kilogram

<sup>a</sup> All: Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5-consecutive-year (Water Years 1987-1991) drought period consisting of dry and critical water-year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

2

3

4 **Table Se-6. Percent Change in Average Annual Selenium Concentrations in Whole-Body Sturgeon**  
5 **Relative to Existing Conditions and the No Action Alternative (ELT).**

Location	Period <sup>a</sup>	NAA ELT	Alternative 2D ELT		Alternative 4A-H3 ELT		Alternative 4A-H4 ELT		Alternative 5A ELT	
		EX	EX	NAA ELT	EX	NAA ELT	EX	NAA ELT	EX	NAA ELT
San Joaquin River at Antioch	All	0.32	19.6	19.3	17.6	17.2	18.6	18.2	7.3	6.9
	Drought	0.65	7.1	6.38	6.9	6.25	7.8	7.07	4.6	3.92
Sacramento River at Mallard Island	All	0.49	13.5	13.0	12.2	11.6	12.4	11.9	5.0	4.5
	Drought	0.38	4.5	4.14	4.4	4.04	4.8	4.44	3.2	2.85

Notes:

dw - dry weight

ELT - Early Long Term

<sup>a</sup> All: Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5-consecutive-year (Water Years 1987-1991) drought period consisting of dry and critical water-year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

6

1 **Table Se-7. Comparison of Annual Average Selenium Concentrations in Whole-Body Sturgeon to**  
 2 **Toxicity Thresholds<sup>a</sup> for Existing Conditions, the No Action Alternative (ELT), and Alternatives 2D, 4A,**  
 3 **and 5A ELT.**

Location	Period <sup>b</sup>	Existing Conditions		No Action Alternative ELT		Alternative 2D ELT		Alternative 4A-H3 ELT		Alternative 4A-H4 ELT		Alternative 5A ELT	
		Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
San Joaquin River at Antioch	All	0.94	0.59	0.95	0.59	1.1	0.70	1.1	0.69	1.1	0.70	1.0	0.63
	Drought	1.4	0.85	1.4	0.86	1.5	0.91	1.5	0.91	1.5	0.92	1.4	0.89
Sacramento River at Mallard Island	All	0.88	0.55	0.88	0.55	1.00	0.62	0.98	0.61	0.99	0.62	0.92	0.58
	Drought	1.4	0.87	1.4	0.87	1.4	0.91	1.4	0.91	1.5	0.91	1.4	0.89

## Notes:

dw - dry weight

ELT - Early Long Term

mg/kg - milligram per kilogram

<sup>a</sup> Toxicity thresholds are those reported in Presser and Luoma (2013): Low = 5 mg/kg, dw and High = 8 mg/kg, dw<sup>b</sup> All: Water years 1975–1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5-consecutive-year (Water Years 1987–1991) drought period consisting of dry and critical water-year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

1 **Table Se-8a. Alternative 4A-H3 ELT use of Assimilative Capacity Available under Existing Conditions and the No Action Alternative (ELT)**  
 2 **Relative to the 1.3 µg/L Ecological Risk Benchmark.**

Selenium	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT		
			Alt 4 ELT Scn H3																											
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	SJR at Buckley Cove	ALL	1	0	1	0	3	-1	-1	-3	0	-2	0	-2	1	-1	0	-2	2	-1	2	-2	1	-3	2	0	1	-1	-	
		DROUGHT	2	0	2	0	4	0	0	-4	0	-4	-1	-3	1	-3	1	-3	4	-2	-1	-5	-2	-6	3	0	1	-	-	
	Franks Tract	ALL	-3	-3	-4	-4	-2	-2	-2	-2	-4	-4	-4	-4	-3	-4	-3	-3	-3	-3	-1	-2	-1	-1	-1	-2	-3	-3	-	
		DROUGHT	-2	-1	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	-1	-	-
Old R. at Rock Slough	ALL	-5	-5	-6	-6	-2	-2	-2	-1	-4	-4	-5	-5	-2	-2	-1	-1	-3	-4	-1	-2	-1	-1	-4	-4	-3	-3	-		
	DROUGHT	-3	-2	-4	-3	-1	-1	-1	-1	-1	-1	-1	-2	-1	-1	-1	-2	-1	-2	-1	-1	-1	0	0	0	0	-1	-	-	
Western Delta	Sac. R. at Emmaton	ALL	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-1	-2	-1	-1	-1	-1	-1	0	0	0	-1	-1	-	
		DROUGHT	-1	0	-1	0	-1	0	0	0	0	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	-	-
	SJR at Antioch	ALL	-2	-2	-2	-2	-1	-1	-1	-1	-2	-2	-3	-3	-3	-3	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-2	-2	-
		DROUGHT	-1	-1	-1	-1	-1	0	0	0	0	0	-1	-1	-1	-1	0	-1	0	-1	0	0	0	0	0	0	0	-1	-	-
Sac. R. at Mallard Island	ALL	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	-2	-2	-1	-2	-1	-1	-1	-1	0	-1	0	0	-1	-1	-	-	
	DROUGHT	0	0	-1	0	0	0	0	0	0	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	-	-	
Major Diversions (Pur Stations)	NBA at Barker Slough PP	ALL	0	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	0	0	0	0	0	-1	-	
		DROUGHT	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-	-
	Contra Costa PP #1	ALL	-5	-5	-6	-5	-4	-3	-2	-1	-3	-3	-6	-3	-4	-5	-1	-2	-3	-3	-2	-2	-1	-1	-2	-2	-3	-3	-	
		DROUGHT	-3	-2	-4	-2	-2	-1	0	0	-1	-1	-1	-2	-1	-2	-1	-1	-1	-2	-1	-1	0	0	0	0	0	-1	-	-
	Banks PP	ALL	2	3	2	3	3	3	5	5	7	7	11	10	13	12	9	8	4	4	1	0	1	0	1	2	1	5	4	
		DROUGHT	0	1	0	2	0	0	0	0	0	-2	3	1	4	2	2	1	-1	-2	-1	-1	-1	-1	0	0	0	-	-	
	Jones PP	ALL	1	2	3	5	1	1	10	10	18	17	21	20	19	19	22	22	11	11	2	2	0	0	5	6	9	9	-	
		DROUGHT	-1	1	0	3	0	0	6	5	11	7	17	15	13	12	16	17	1	1	-2	-1	-2	0	-1	0	4	-	-	

3 **NOTES:**

4 <sup>a</sup> All: Water years 1975-1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5-consecutive-year (Water Years 1987-1991) drought period consisting of  
 5 dry and critical water-year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).  
 6  
 7



1 **Table Se-8b. Alternative 4A-H4 ELT use of Assimilative Capacity Available under Existing Conditions and the No Action Alternative (ELT)**  
 2 **Relative to the 1.3 µg/L Ecological Risk Benchmark.**

Selenium	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change		
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	
Alt 4 ELT Scn H4	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SJR at Buckley Cove	ALL	1	0	1	0	3	-1	-1	-3	0	-2	0	-2	1	-1	0	-2	2	-1	1	-3	1	-3	2	0	1	-2	
		DROUGHT	2	0	2	0	4	0	0	-4	0	-4	-1	-3	1	-3	1	-3	4	-2	-3	-7	-4	-8	3	0	1	-	
	Franks Tract	ALL	-4	-4	-4	-4	-2	-2	-2	-2	-4	-4	-4	-4	-3	-4	-3	-3	-3	-4	-2	-2	-1	-1	-2	-2	-3	-3	
		DROUGHT	-2	-1	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	-2	-1	-1	-1	-1	0	0	0	0	-1	-
Old R. at Rock Slough	ALL	-6	-6	-6	-6	-2	-2	-2	-2	-5	-5	-5	-5	-2	-3	-2	-2	-4	-5	-2	-3	-1	-1	-5	-5	-4	-4		
	DROUGHT	-3	-2	-4	-3	-1	-1	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2	-2	-2	-1	-1	0	0	0	0	-2	-	
Western Delta	Sac. R. at Emmaton	ALL	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
		DROUGHT	-1	0	-1	-1	-1	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	-
	SJR at Antioch	ALL	-2	-2	-2	-2	-1	-1	-1	-1	-2	-2	-3	-3	-2	-3	-2	-2	-2	-2	-2	-2	-2	-1	-1	-1	-1	-2	-2
		DROUGHT	-1	-1	-1	-1	-1	-1	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	-
Sac. R. at Mallard Island	ALL	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	-2	-2	-1	-1	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
	DROUGHT	0	0	-1	0	0	0	0	0	0	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	-	
Major Diversions (Pur Stations)	NBA at Barker Slough PP	ALL	0	0	0	0	0	0	0	0	0	0	-1	0	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	-1	
		DROUGHT	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	-	
	Contra Costa PP #1	ALL	-6	-6	-6	-5	-4	-3	-2	-2	-3	-3	-7	-5	-5	-5	-2	-2	-4	-4	-3	-3	-1	-2	-3	-3	-4	-4	
		DROUGHT	-3	-2	-4	-2	-2	-1	0	0	-1	-1	-1	-2	-2	-3	-2	-2	-2	-2	-1	-1	0	0	0	0	-2	-	
	Banks PP	ALL	2	2	3	4	2	2	6	6	8	7	12	11	10	10	12	12	6	6	-1	-1	0	-1	3	2	5	5	
		DROUGHT	0	1	1	2	-1	0	1	1	1	-1	4	2	5	3	4	3	1	0	0	-2	-2	0	-1	1	-		
	Jones PP	ALL	4	5	3	4	1	1	8	7	18	16	21	21	22	22	20	21	8	8	1	1	1	1	5	6	9	9	
		DROUGHT	3	4	2	5	0	0	2	1	11	7	15	14	15	14	15	16	-1	-1	-3	-2	-1	0	-1	-1	4	-	

3 **NOTES:**

4 <sup>a</sup> All: Water years 1975–1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5-consecutive-year (Water Years 1987–1991) drought period  
 5 consisting of dry and critical water-year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).  
 6

7

1 **Table Se-8c. Alternative 2D ELT use of Assimilative Capacity Available under Existing Conditions and the No Action Alternative (ELT) Relative**  
 2 **to the 1.3 µg/L Ecological Risk Benchmark.**

Selenium	Alt 2D ELT	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change				
				Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	
				<b>Delta Interior</b>	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
	SJR at Buckley Cove	ALL	1	0	1	0	2	-1	-1	-3	0	-2	0	-2	1	-1	0	-2	2	-1	2	-2	1	-3	2	0	1	1	-1	-1		
		DROUGHT	2	0	2	0	4	0	0	-4	0	-4	-1	-3	1	-3	1	-3	4	-2	-2	-6	-2	-7	3	0	1	1	-	-		
	Franks Tract	ALL	-4	-4	-5	-4	-2	-2	-2	-2	-4	-4	-5	-5	-4	-4	-3	-3	-3	-3	-1	-2	-1	-1	-2	-2	-3	-3	-3	-3		
		DROUGHT	-2	-1	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	-	-	-	
	Old R. at Rock Slough	ALL	-6	-6	-7	-6	-2	-2	-3	-3	-5	-5	-5	-5	-2	-2	-1	-1	-3	-4	-1	-2	-1	-1	-4	-5	-3	-3	-3	-3		
		DROUGHT	-3	-2	-4	-3	-1	-1	-1	-1	-1	-1	-1	-2	-1	-2	-1	-2	-1	-2	-1	-1	-1	0	0	0	0	-1	-	-	-	
<b>Western Delta</b>	Sac. R. at Emmaton	ALL	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-1	-2	-1	-1	-1	-1	-1	0	-1	-1	-1	-1	-1		
		DROUGHT	-1	0	-1	0	-1	0	0	0	0	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
	SJR at Antioch	ALL	-2	-2	-3	-3	-1	-1	-2	-1	-3	-2	-3	-3	-3	-3	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-2	-2	-2	-2	
		DROUGHT	-1	-1	-1	-1	-1	0	0	0	0	0	-1	-1	-1	-1	0	-1	0	-1	0	0	0	0	0	0	0	0	-1	-	-	
	Sac. R. at Mallard Island	ALL	-1	-1	-2	-2	-1	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2	-1	-2	-1	-1	-1	-1	0	-1	0	-1	-1	-1	-1	-1	
		DROUGHT	0	0	-1	0	0	0	0	0	0	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
<b>Major Diversions (Pur Stations)</b>	NBA at Barker Slough PP	ALL	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	0	0	0	0	0	0	0	-1	-1	
		DROUGHT	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	-	-
	Contra Costa PP #1	ALL	-6	-6	-7	-6	-4	-3	-2	-1	-4	-3	-7	-4	-5	-5	-2	-2	-3	-3	-2	-2	-1	-1	-2	-3	-4	-3	-4	-3	-3	
		DROUGHT	-3	-2	-4	-2	-2	-1	0	0	-1	-1	-1	-2	-1	-2	-1	-1	-1	-2	-1	-1	0	0	0	0	0	-1	-	-	-	-
	Banks PP	ALL	3	3	3	4	3	3	6	6	9	9	13	12	14	13	10	10	5	4	1	0	1	1	3	2	6	5	5	5	5	
		DROUGHT	0	1	0	2	0	0	1	0	0	-2	4	1	3	2	2	1	-2	-2	-1	-1	-1	-1	0	0	0	0	0	0	-	-
	Jones PP	ALL	2	3	3	5	3	3	11	10	18	17	22	21	22	22	22	22	11	11	2	2	-1	-1	5	6	9	10	10	10		
		DROUGHT	0	2	0	3	0	0	5	4	12	7	17	15	13	13	17	17	1	1	-2	-1	-2	-1	-1	0	4	4	4	4	-	

NOTES:

<sup>a</sup> All: Water years 1975–1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5-consecutive-year (Water Years 1987–1991) drought period consisting of dry and critical water-year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

1 **Table Se-8d. Alternative 5A ELT use of Assimilative Capacity Available under Existing Conditions and the No Action Alternative (ELT) Relative**  
 2 **to the 1.3 µg/L Ecological Risk Benchmark.**

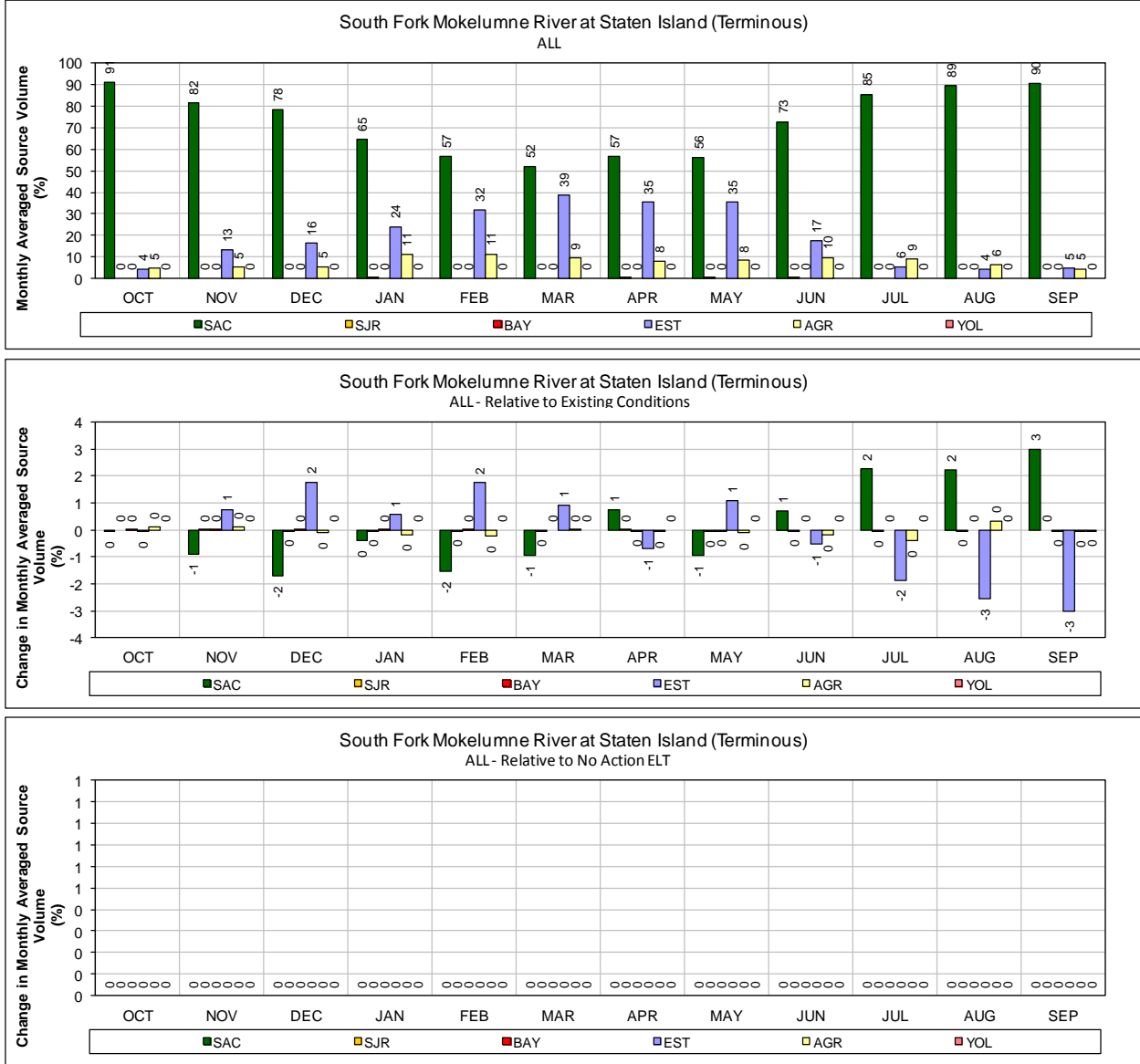
Selenium	Location	Period <sup>a</sup>	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT		
Alt 5A ELT	Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
			DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
		SJR at Buckley Cove	ALL	1	0	1	0	3	0	2	0	2	0	2	0	2	0	2	0	3	0	2	-1	2	-2	2	0	2	0	0
			DROUGHT	1	0	2	0	5	0	4	0	3	0	3	0	4	0	4	0	6	0	0	-4	0	-5	3	-1	3	-	-
		Franks Tract	ALL	-2	-1	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	0	0	-1	-1	-1	-1	-1
			DROUGHT	-2	-1	-2	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Old R. at Rock Slough	ALL	-2	-2	-4	-3	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	-1	0	-1	0	0	-2	-2	-1	-1	-1	
		DROUGHT	-3	-2	-4	-2	-1	-1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	-1	-	
	Western Delta	Sac. R. at Emmaton	ALL	0	0	-1	-1	-1	0	0	0	-1	0	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	0
			DROUGHT	-1	0	-1	0	0	0	0	0	0	0	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
		SJR at Antioch	ALL	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	0	0	0	0	-1	-1	-1
			DROUGHT	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sac. R. at Mallard Island		ALL	0	0	-1	-1	-1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Major Diversions (Pur Stations)	NBA at Barker Slough PP	ALL	0	0	0	0	0	0	0	0	0	-1	0	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	
		DROUGHT	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	-
	Contra Costa PP #1	ALL	-2	-2	-3	-3	-3	-2	-1	-1	-1	-1	-4	-2	-1	-2	0	0	0	0	0	0	0	-1	-1	-2	-1	-1	-1	
		DROUGHT	-3	-2	-4	-2	-2	-1	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	-1	-
	Banks PP	ALL	2	2	2	3	-1	-1	2	2	4	4	4	4	8	8	6	6	4	4	4	2	1	1	0	2	1	3	3	
		DROUGHT	1	2	1	3	-1	0	0	-1	1	-1	3	1	4	2	2	1	0	0	0	0	0	-1	-1	0	0	1	-	
	Jones PP	ALL	-3	-2	2	4	3	3	2	2	5	4	10	10	7	7	10	10	4	5	0	0	1	0	3	4	3	4	4	
		DROUGHT	-4	-2	2	6	0	0	0	-1	4	0	11	9	5	4	8	9	1	1	-1	0	-1	0	0	0	0	2	-	

NOTES:

<sup>a</sup> All: Water years 1975–1991 represent the 16-year period modeled using DSM2. Drought: Represents a 5-consecutive-year (Water Years 1987–1991) drought period consisting of dry and critical water-year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

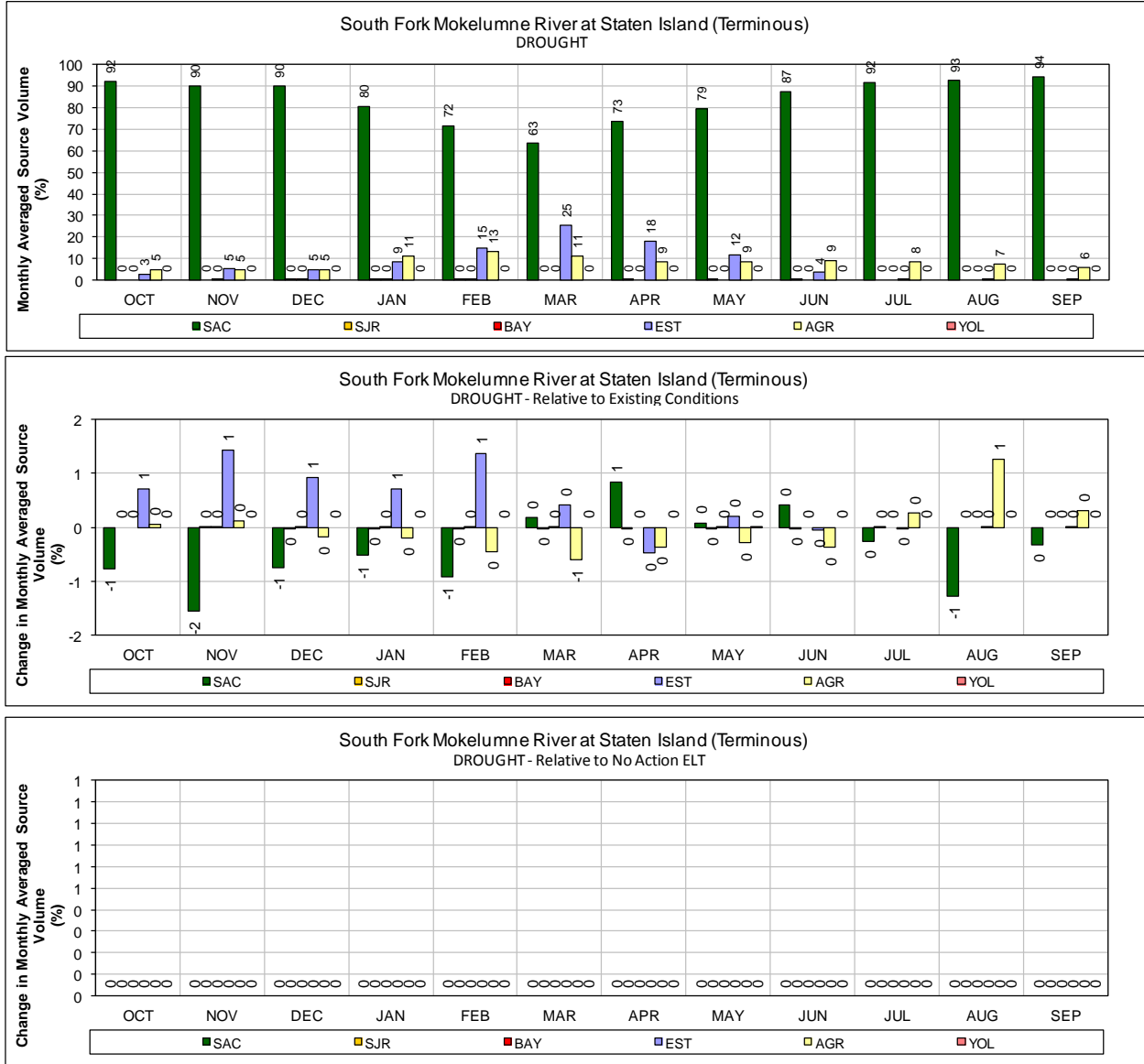
1 **B.4.2 Fingerprinting**

2 **B.4.2.1 No Action ELT**



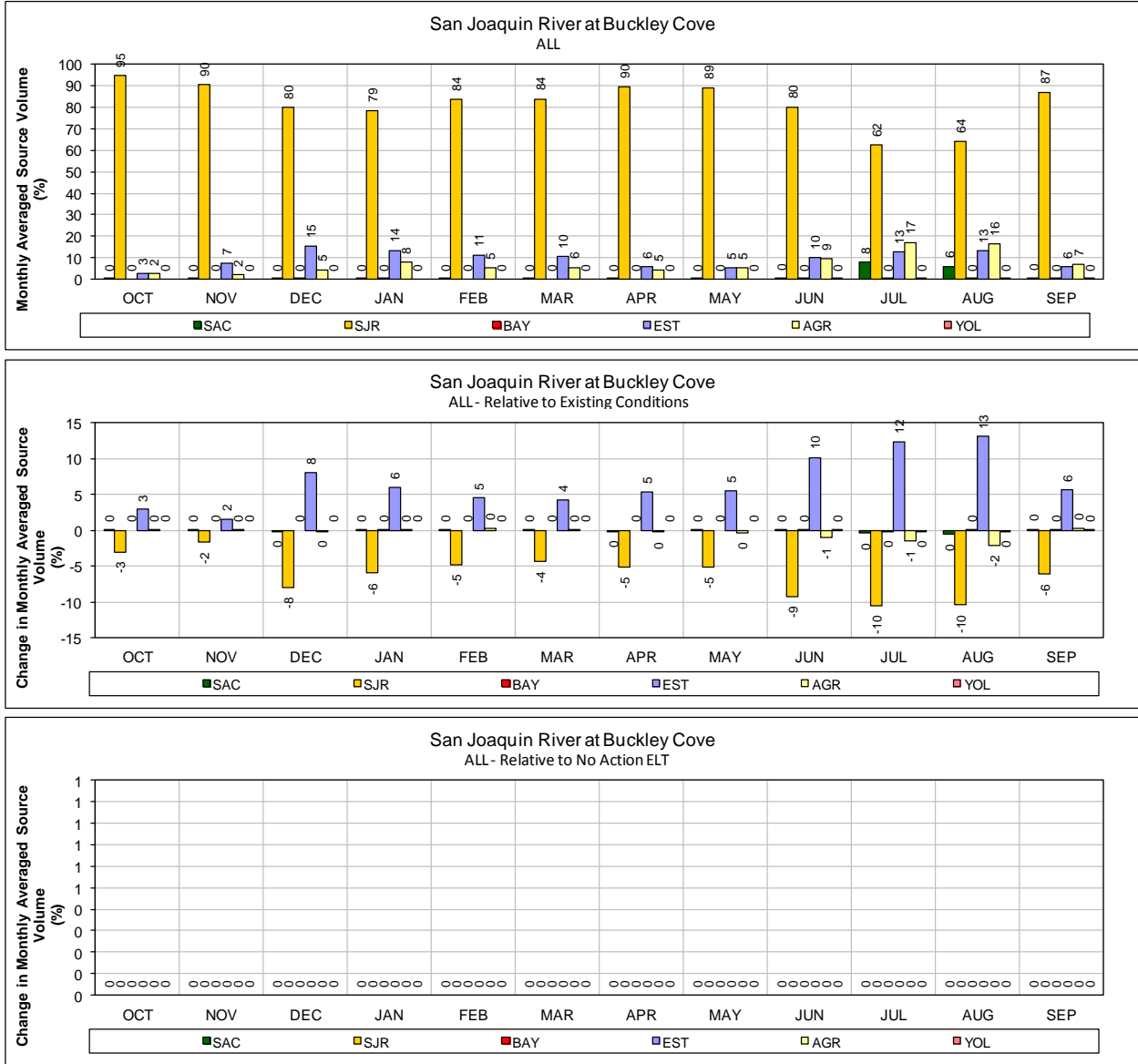
3  
 4 **Figure B.4-1. NA ELT – Mokelumne River (South Fork) at Staten Island for ALL Years (1976–1991)**

5 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 6 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 7



1  
 2 **Figure B.4-2. NA ELT – Mokelumne River (South Fork) at Staten Island for DROUGHT Years (1987–**  
 3 **1991)**

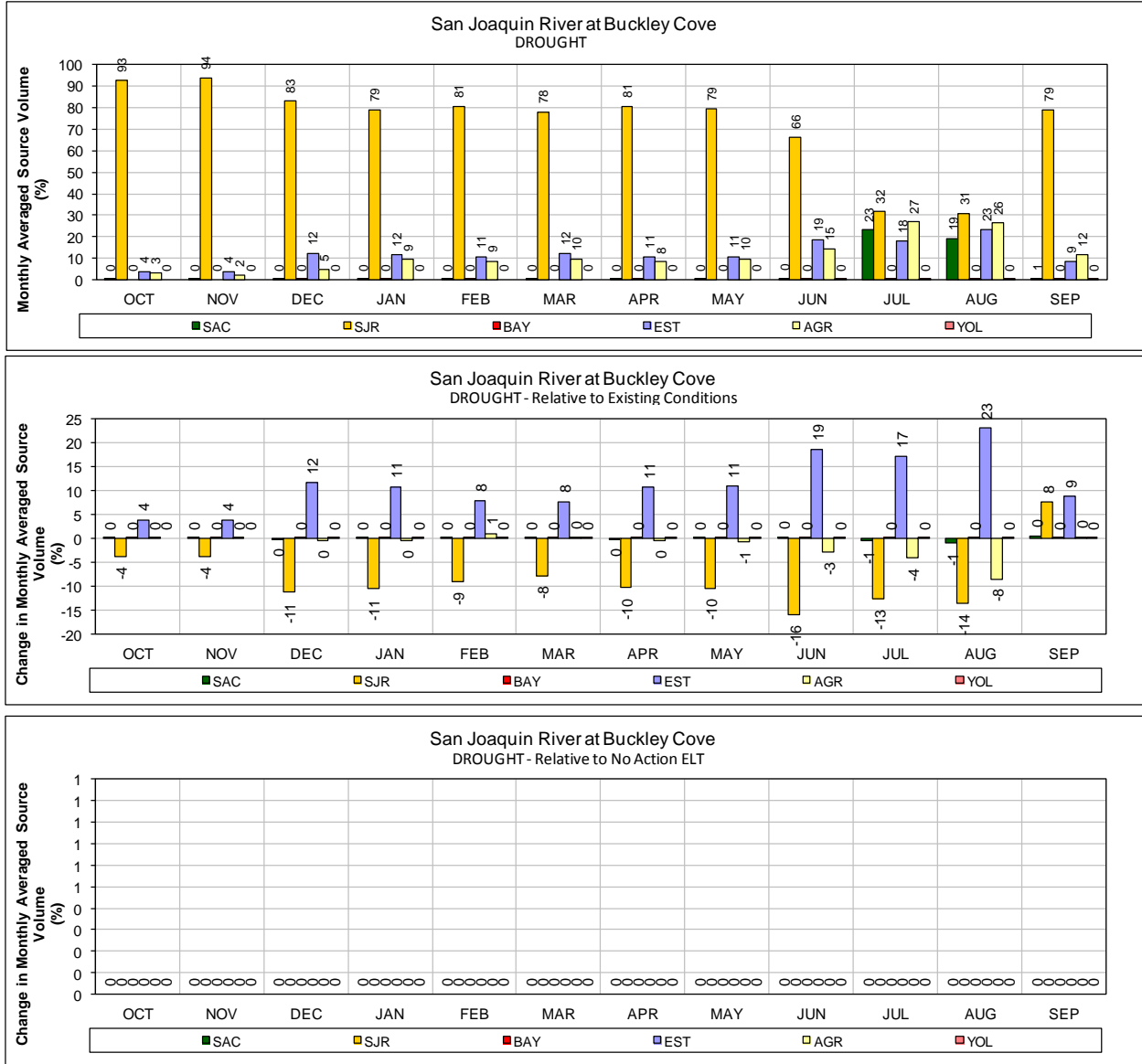
4 Monthly average source volume (top figure) and change in monthly average source volume to  
 5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 6



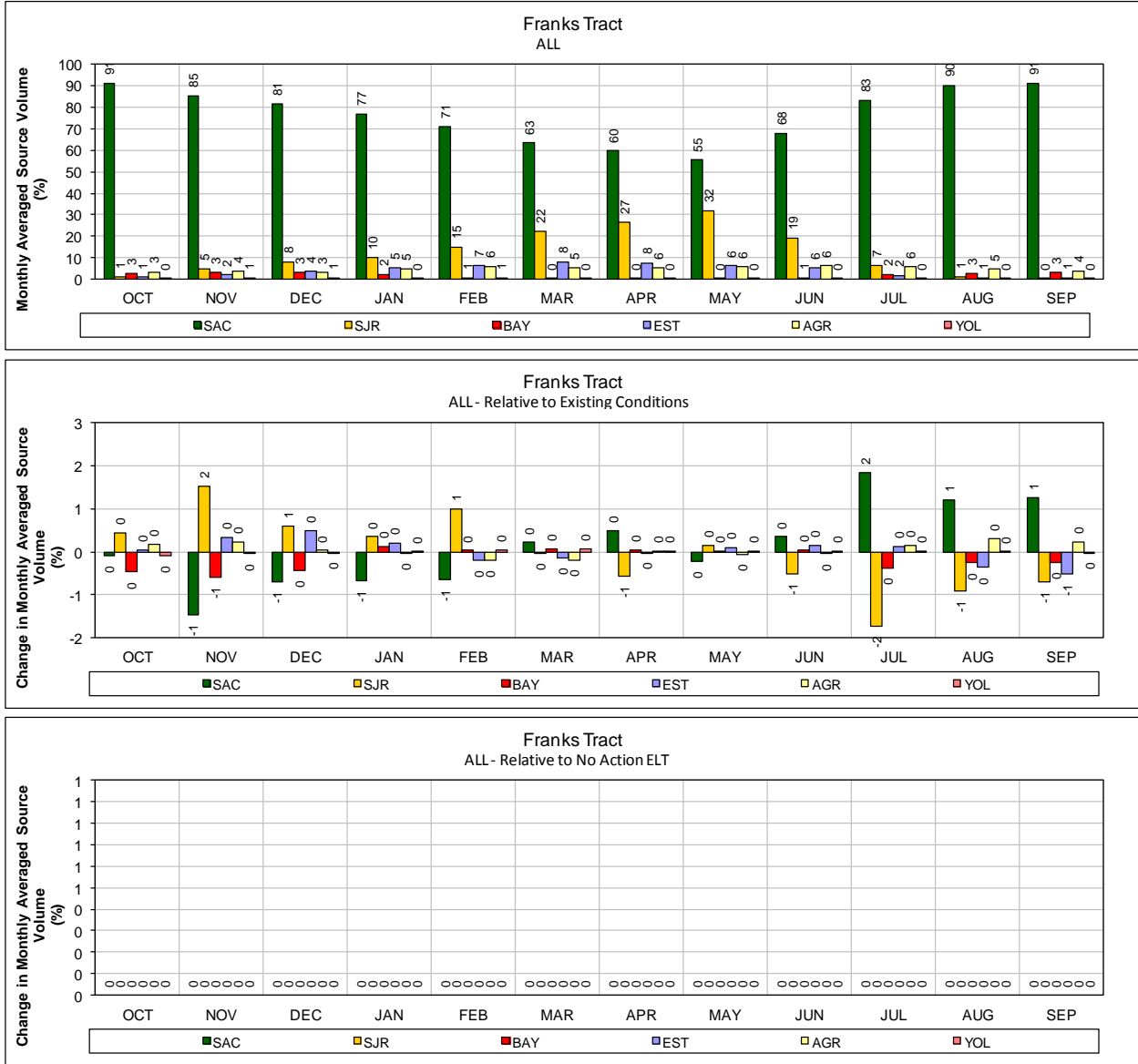
1  
2 **Figure B.4-3. NA ELT – San Joaquin River at Buckley Cove for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



1  
 2 **Figure B.4-4. NA ELT – San Joaquin River at Buckley Cove for DROUGHT Years (1987–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5

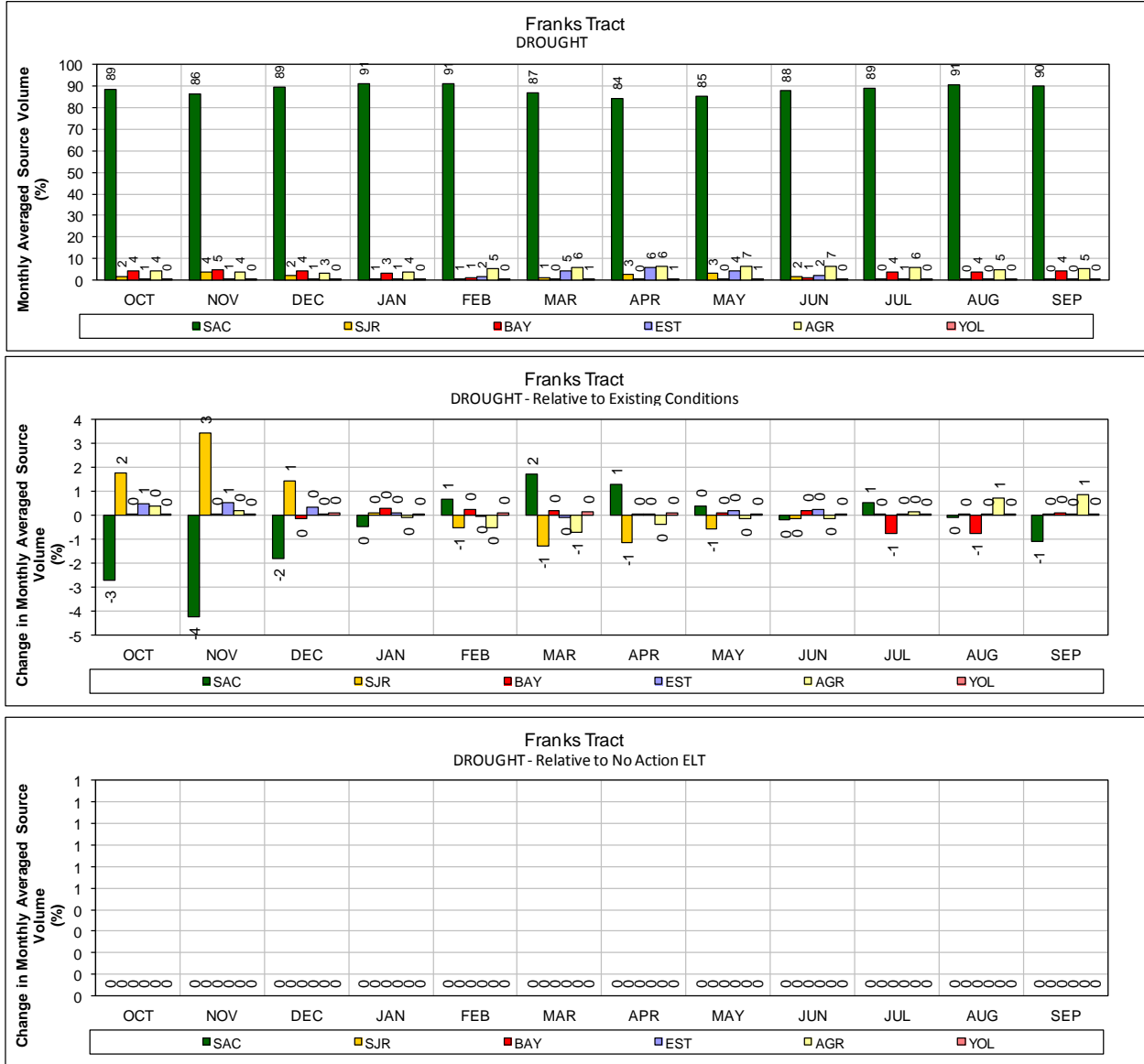


1  
2 **Figure B.4-5. NA ELT – Franks Tract for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5

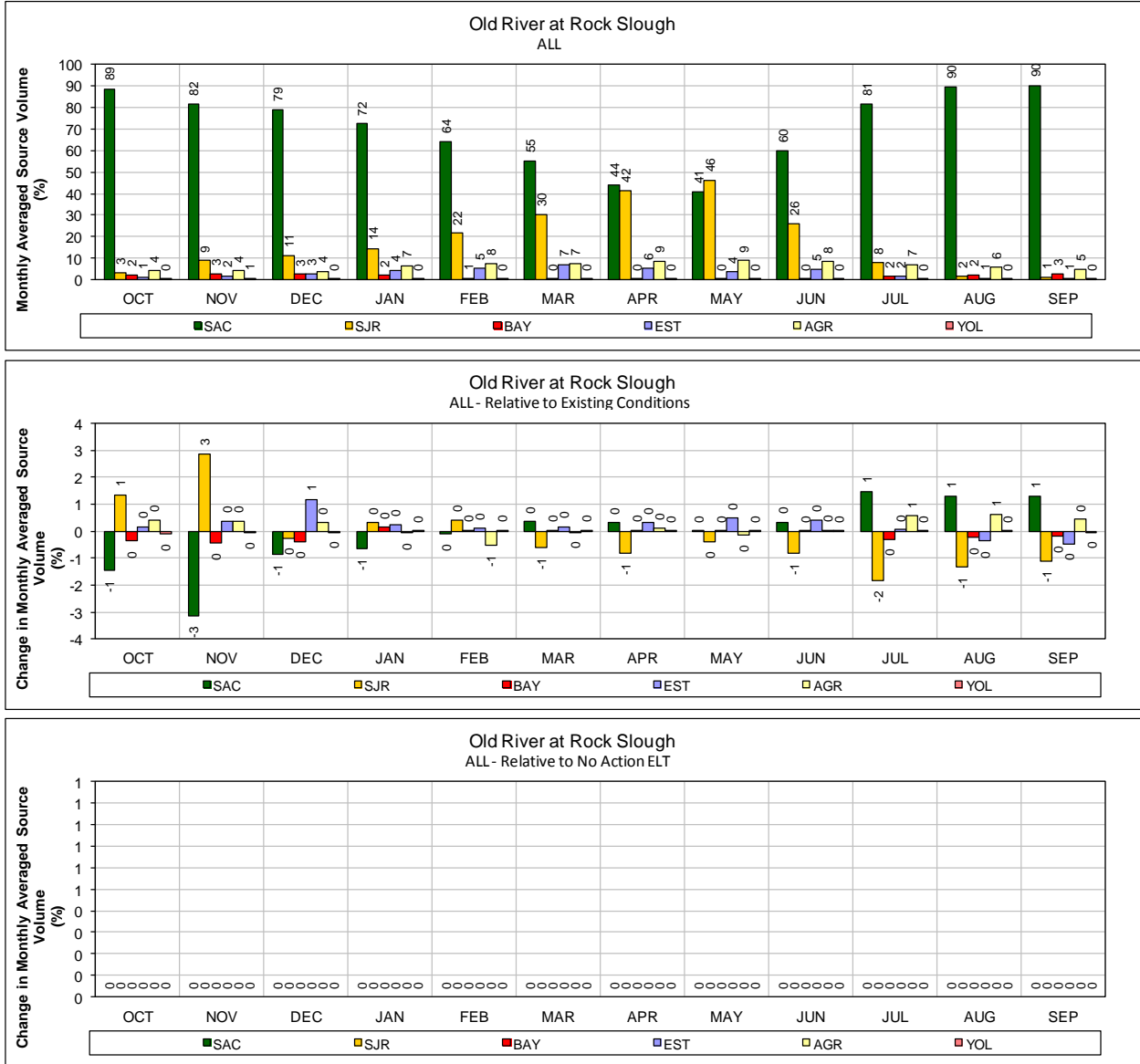




1  
2 **Figure B.4-6. NA ELT – Franks Tract for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

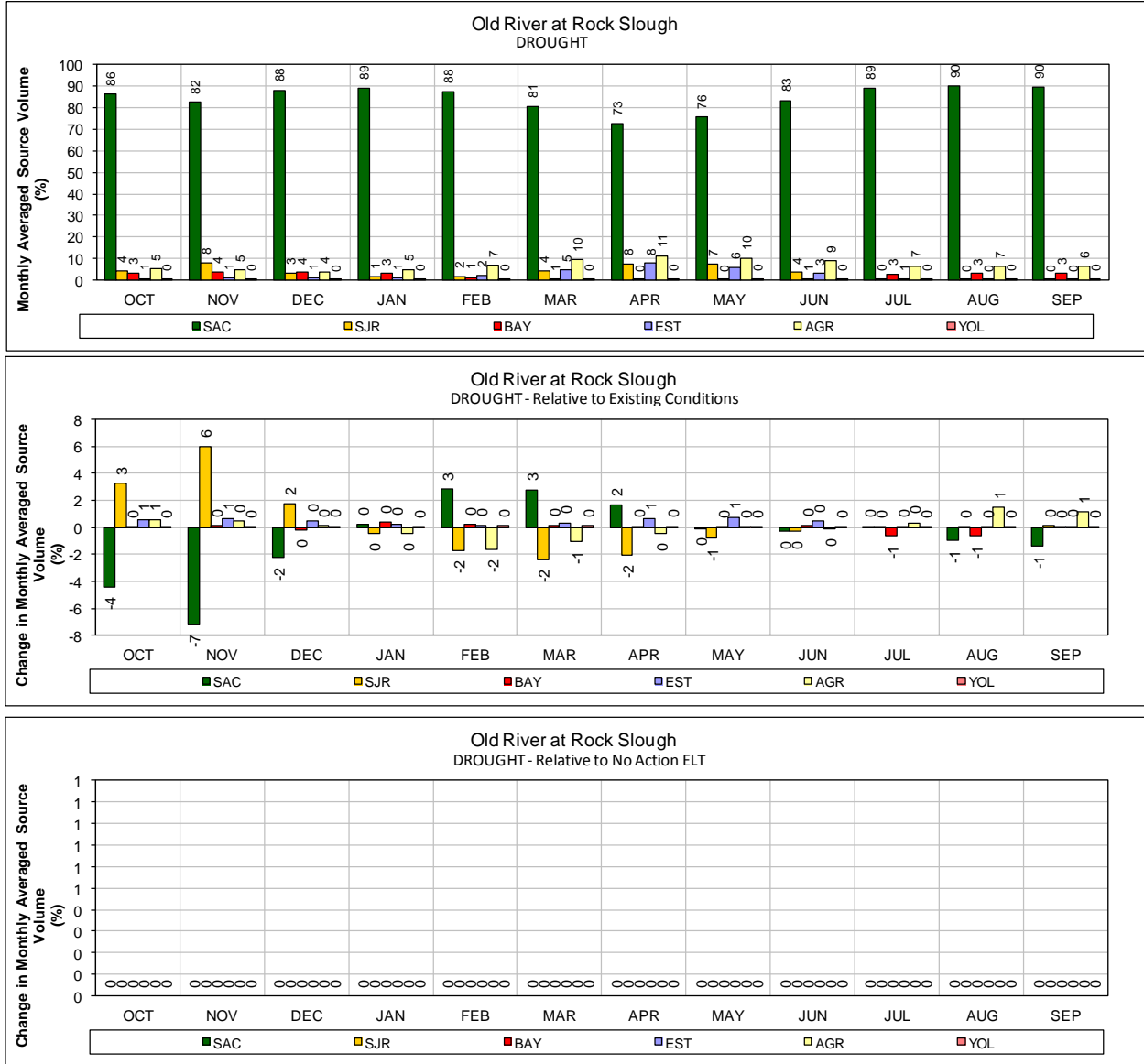
5



1  
2 **Figure B.4-7. NA ELT – Old River at Rock Slough for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

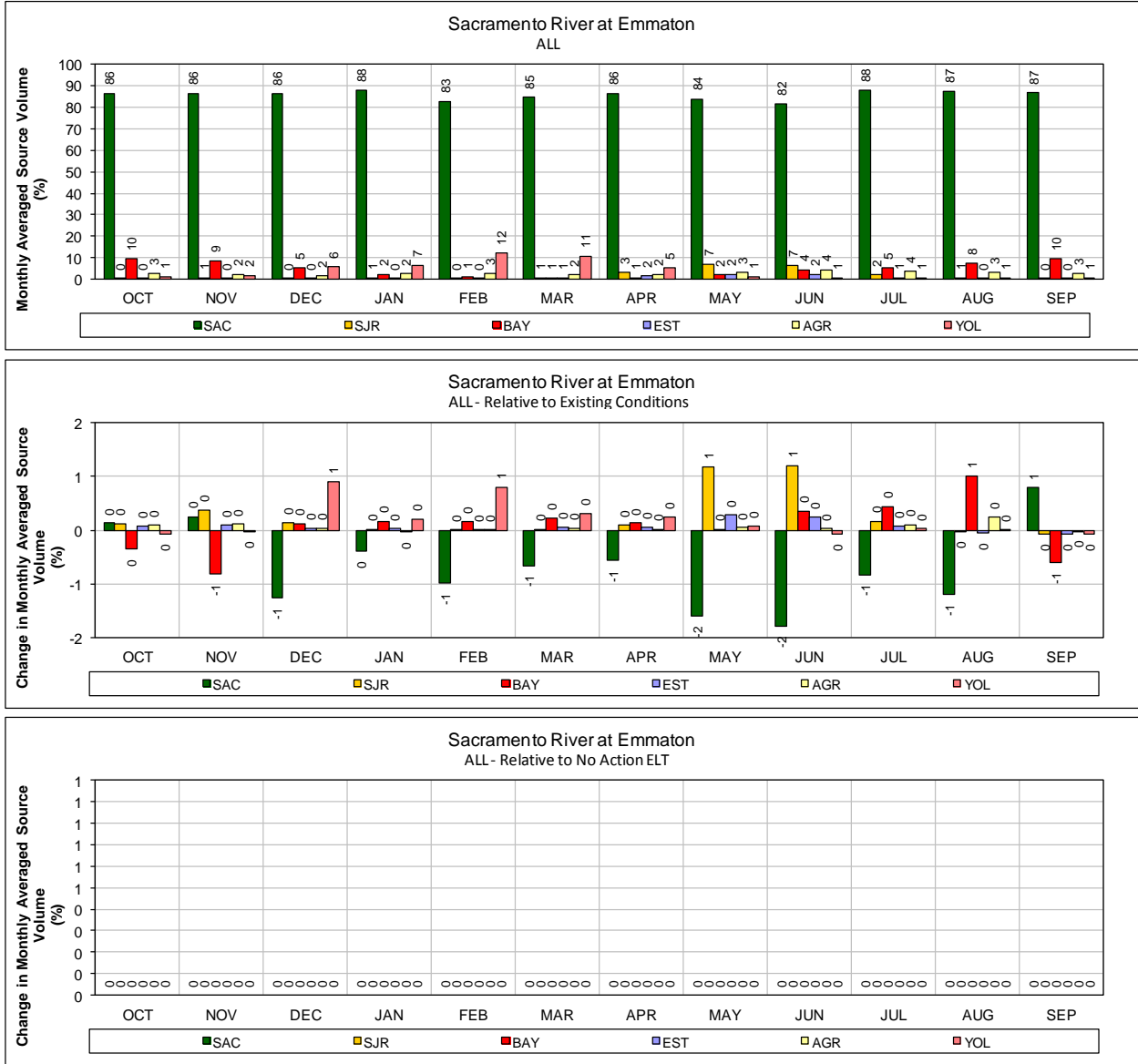
5



1  
2 **Figure B.4-8. NA ELT – Old River at Rock Slough for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

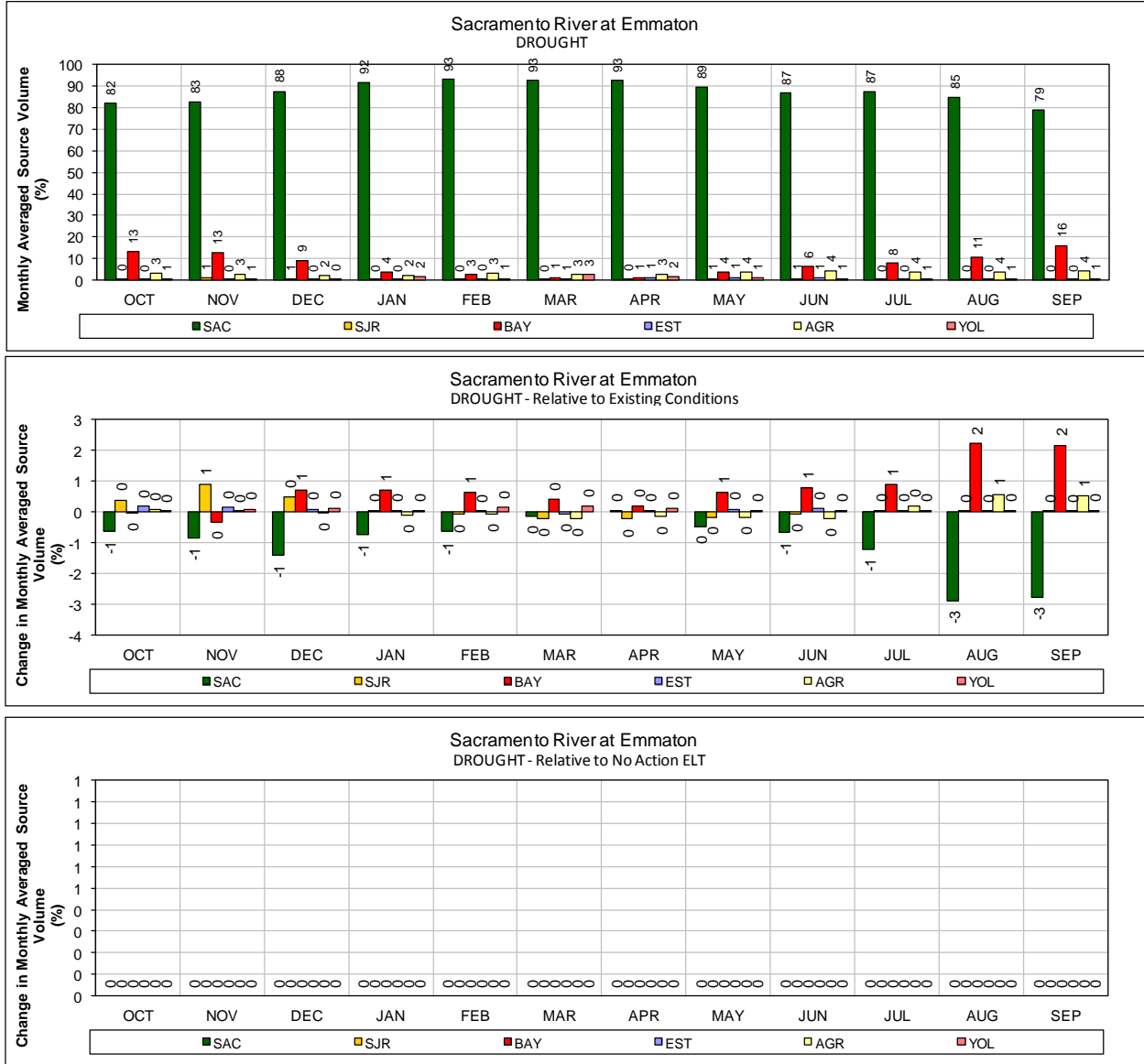
5



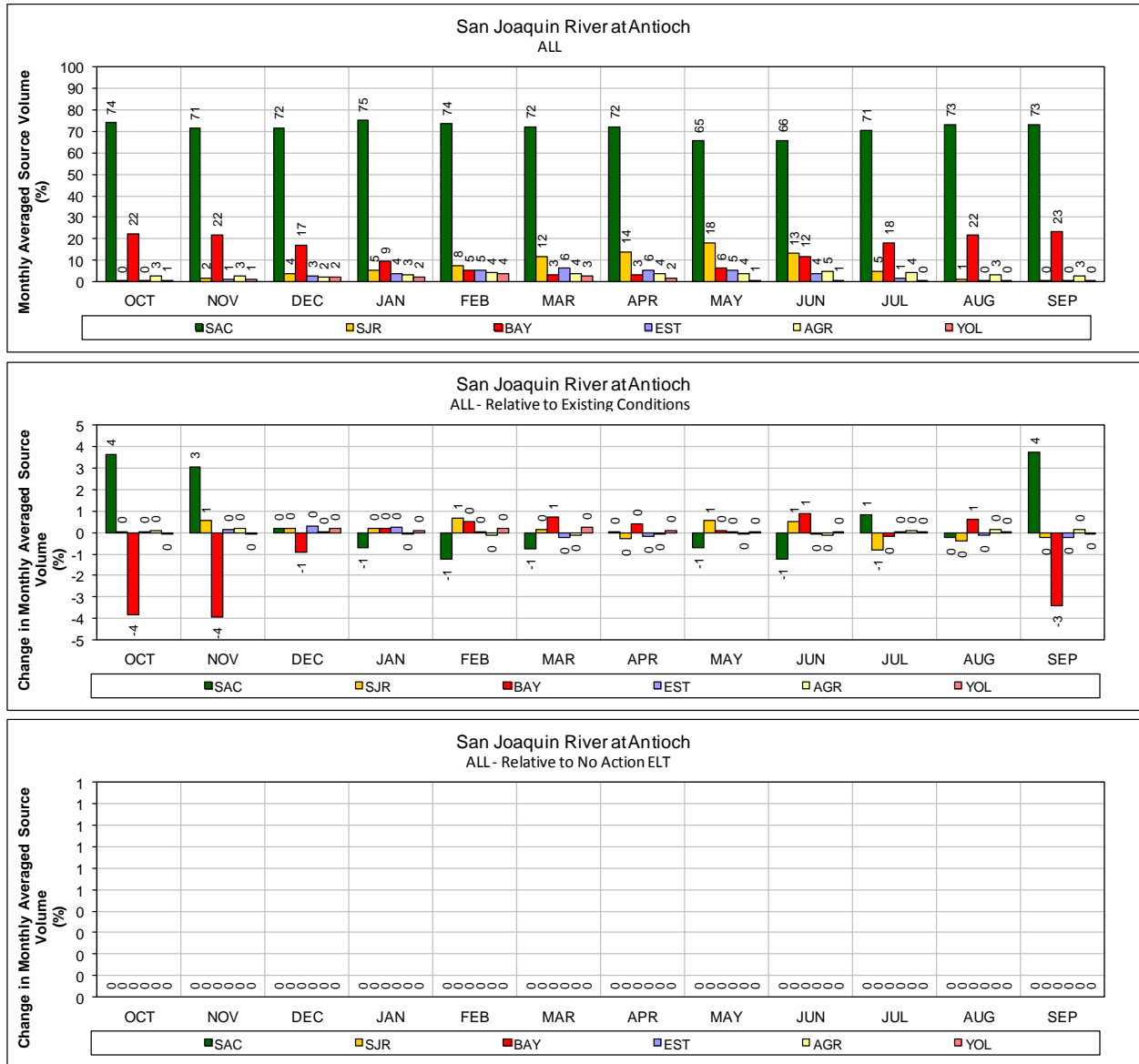
1  
2 **Figure B.4-9. NA ELT – Sacramento River at Emmatton for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



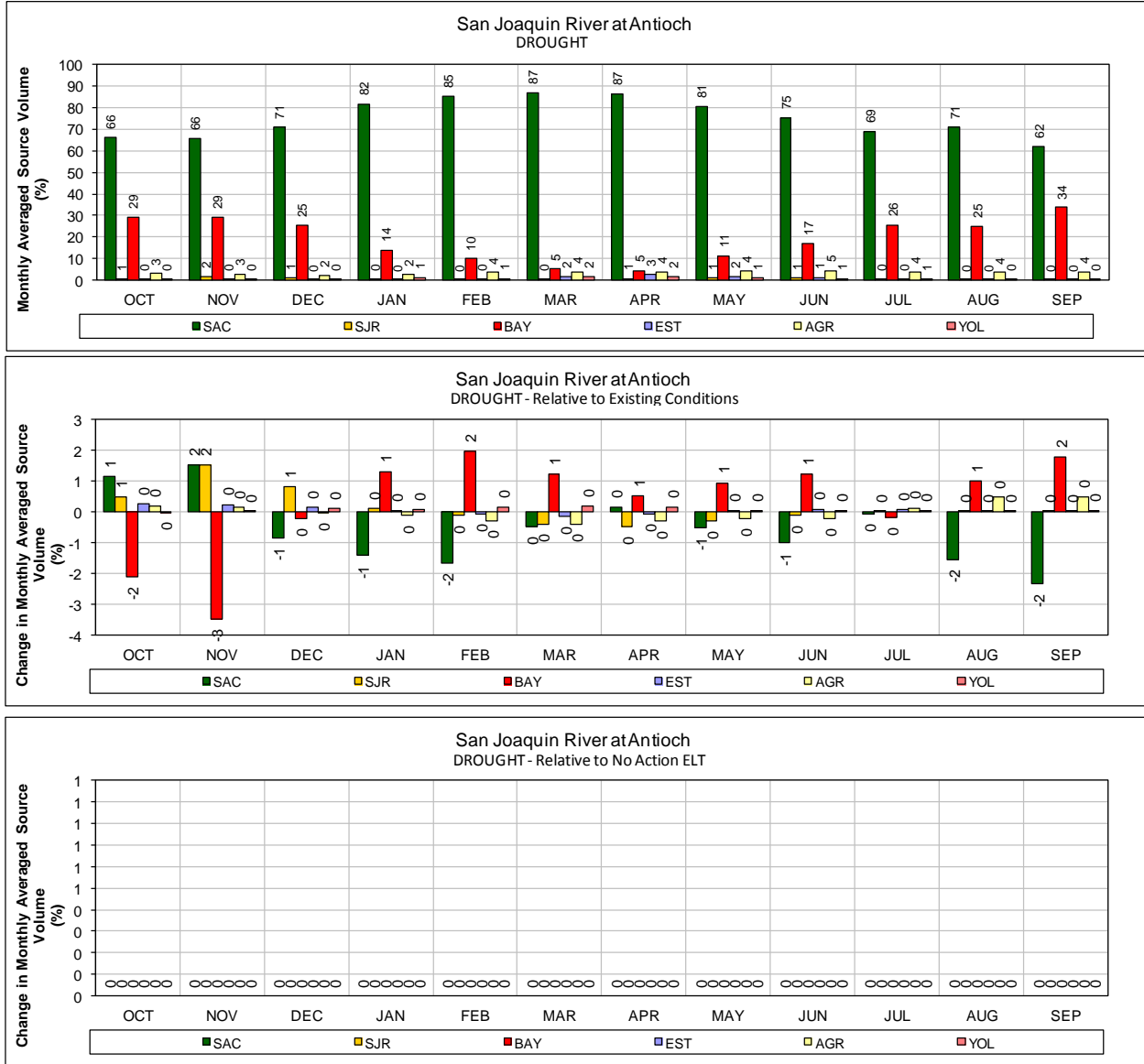
1  
 2 **Figure B.4-10. NA ELT – Sacramento River at Emmaton for DROUGHT Years (1987–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



1  
2 **Figure B.4-11. NA ELT – San Joaquin River at Antioch for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

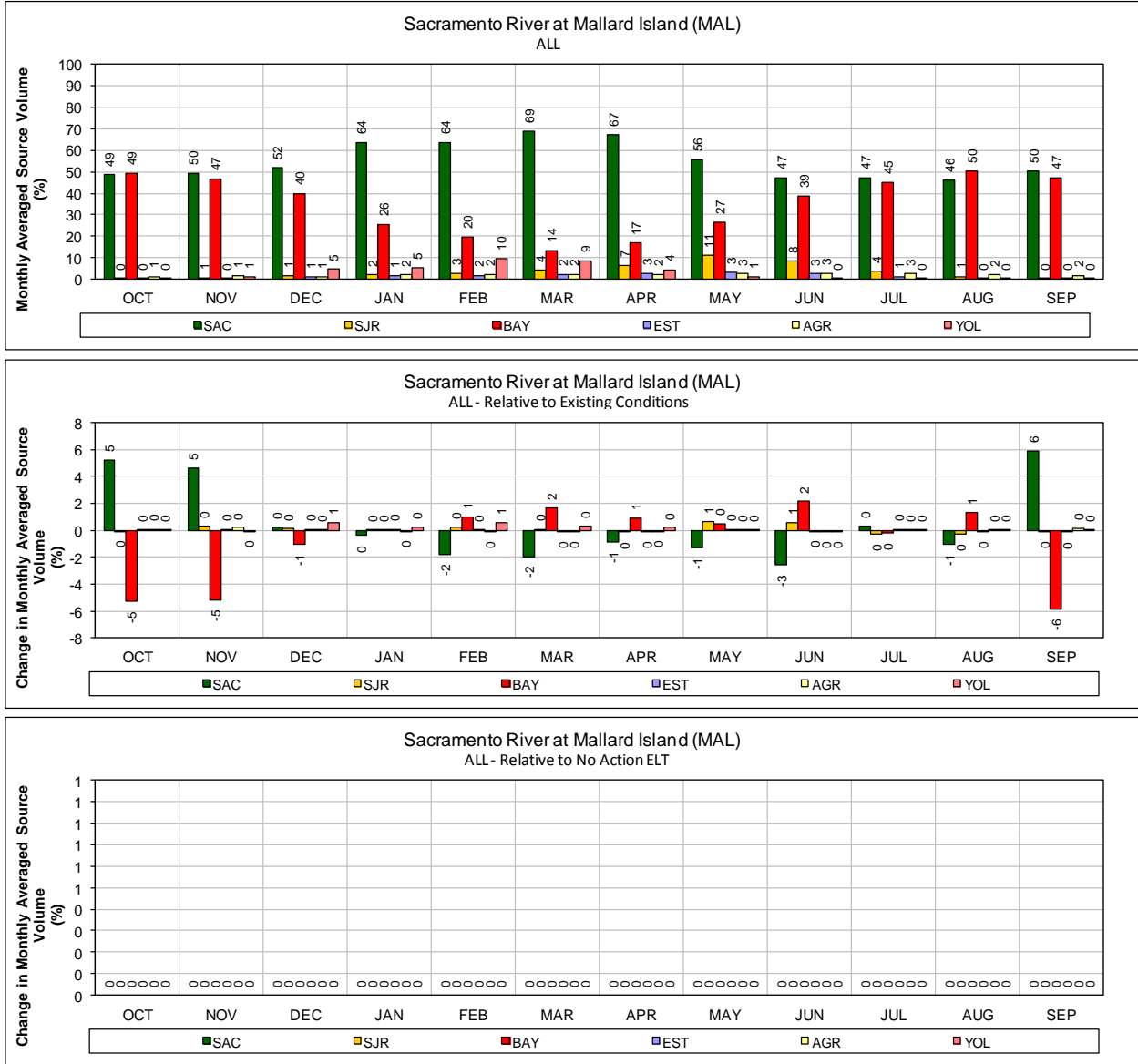
5



1  
2 **Figure B.4-12. NA ELT – San Joaquin River at Antioch for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5

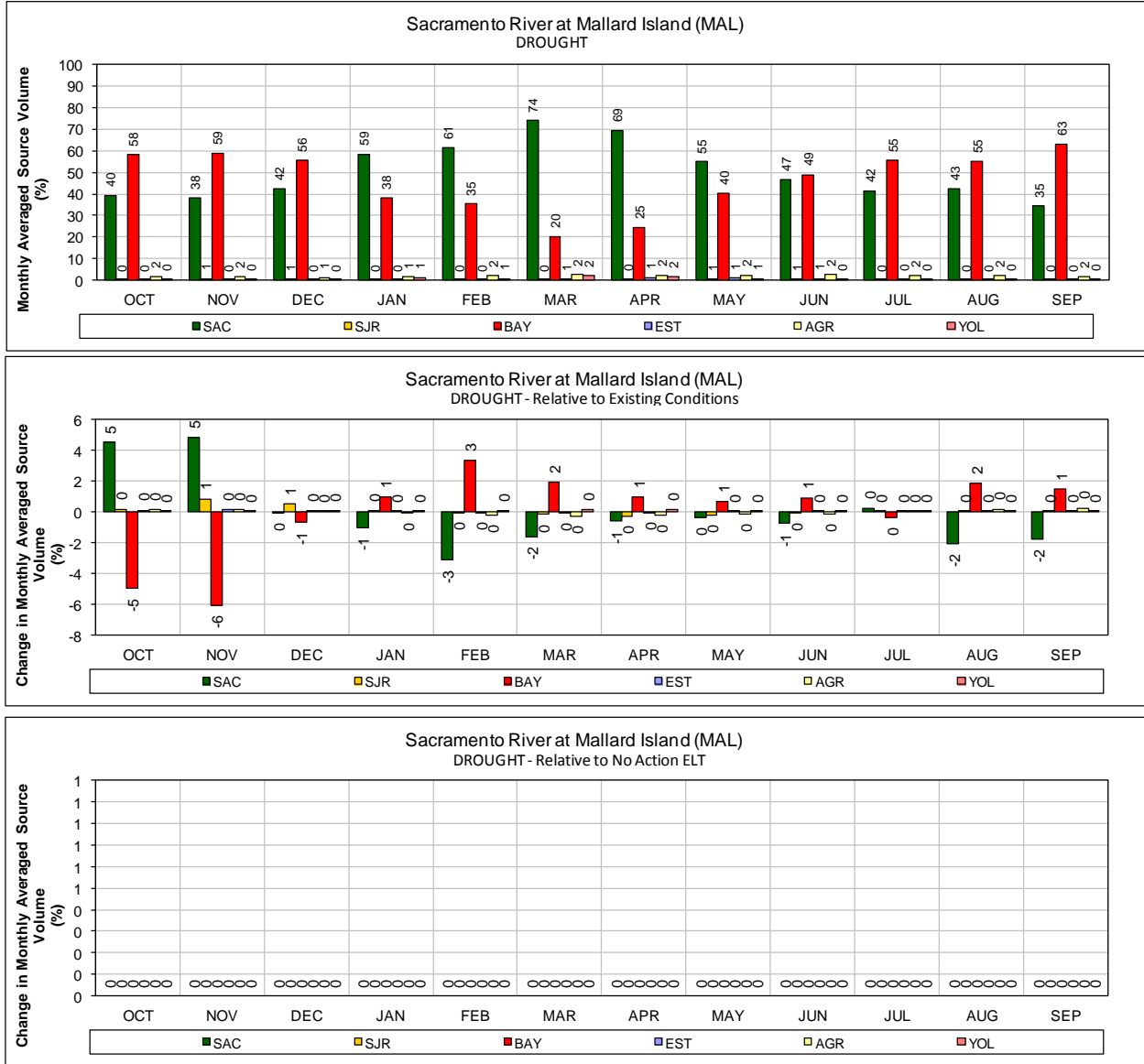


1  
2 **Figure B.4-13. NA ELT – Sacramento River at Mallard Island for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5

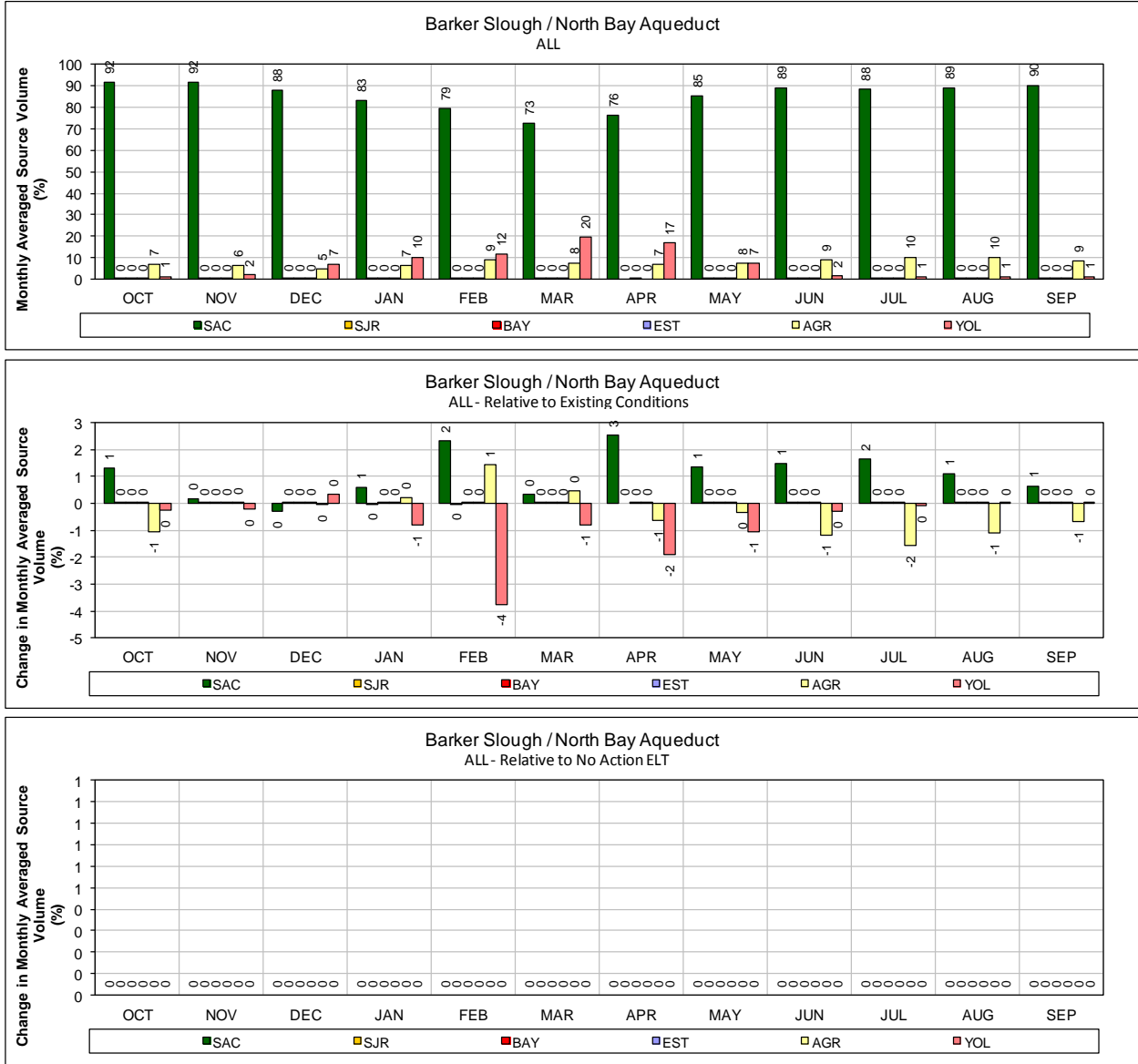




1  
2 **Figure B.4-14. NA ELT – Sacramento River at Mallard Island for DROUGHT Years (1987–1991)**

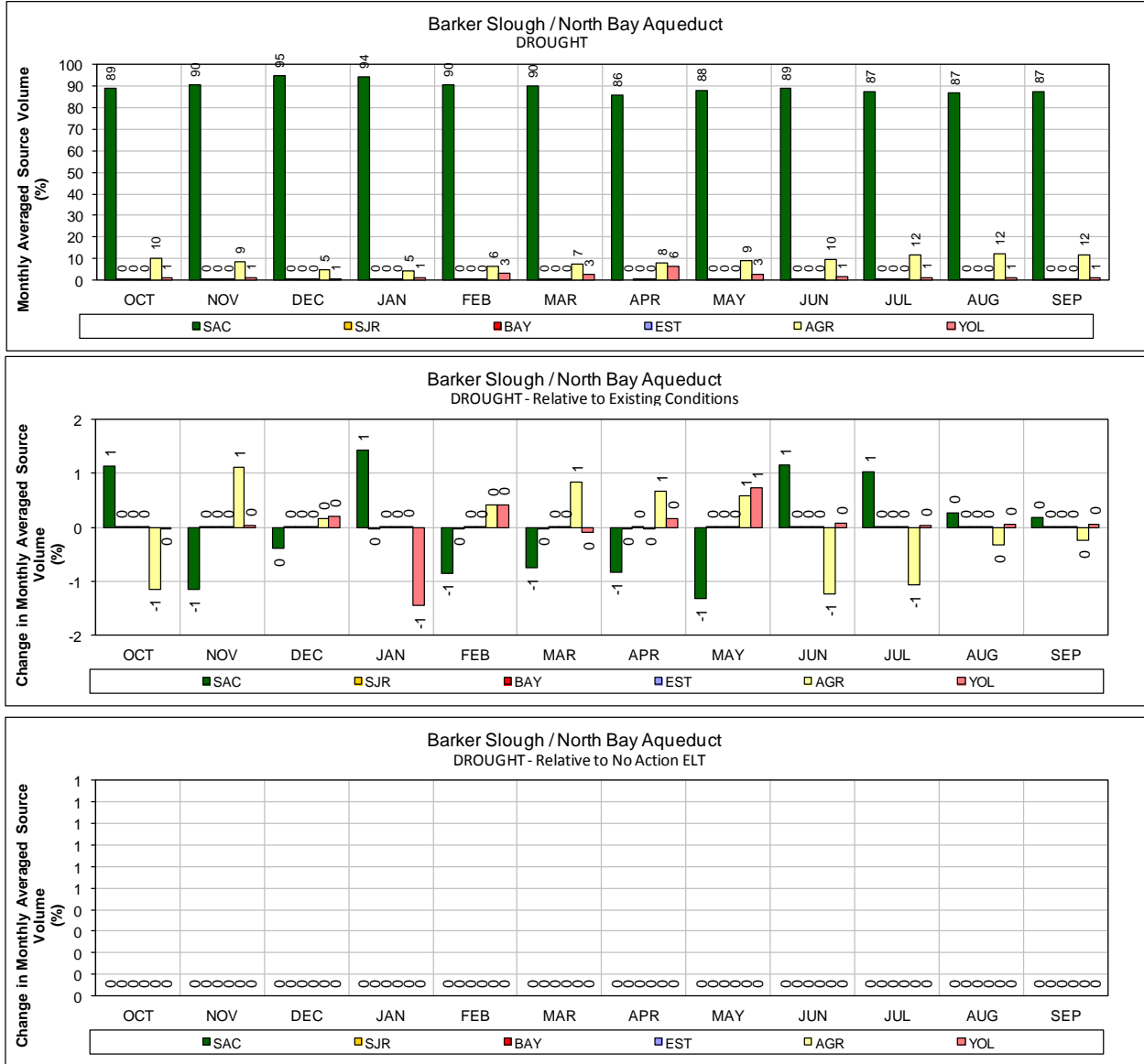
3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



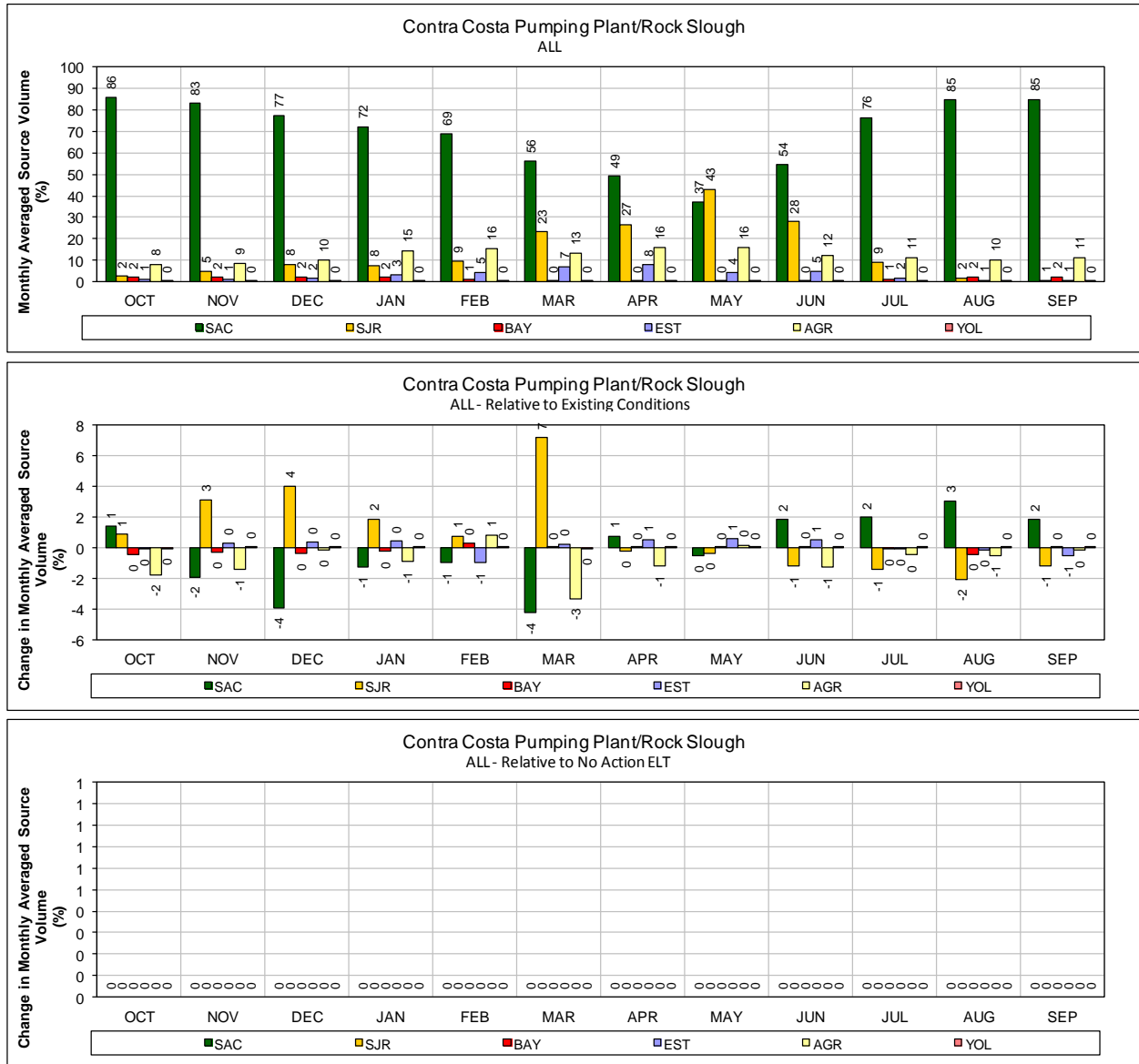
1  
2 **Figure B.4-15. NA ELT – North Bay Aqueduct at Barker Slough Pumping Plant for ALL Years (1976–**  
3 **1991)**

4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
6



1  
 2 **Figure B.4-16. NA ELT – North Bay Aqueduct at Barker Slough Pumping Plant for DROUGHT Years**  
 3 **(1987–1991)**

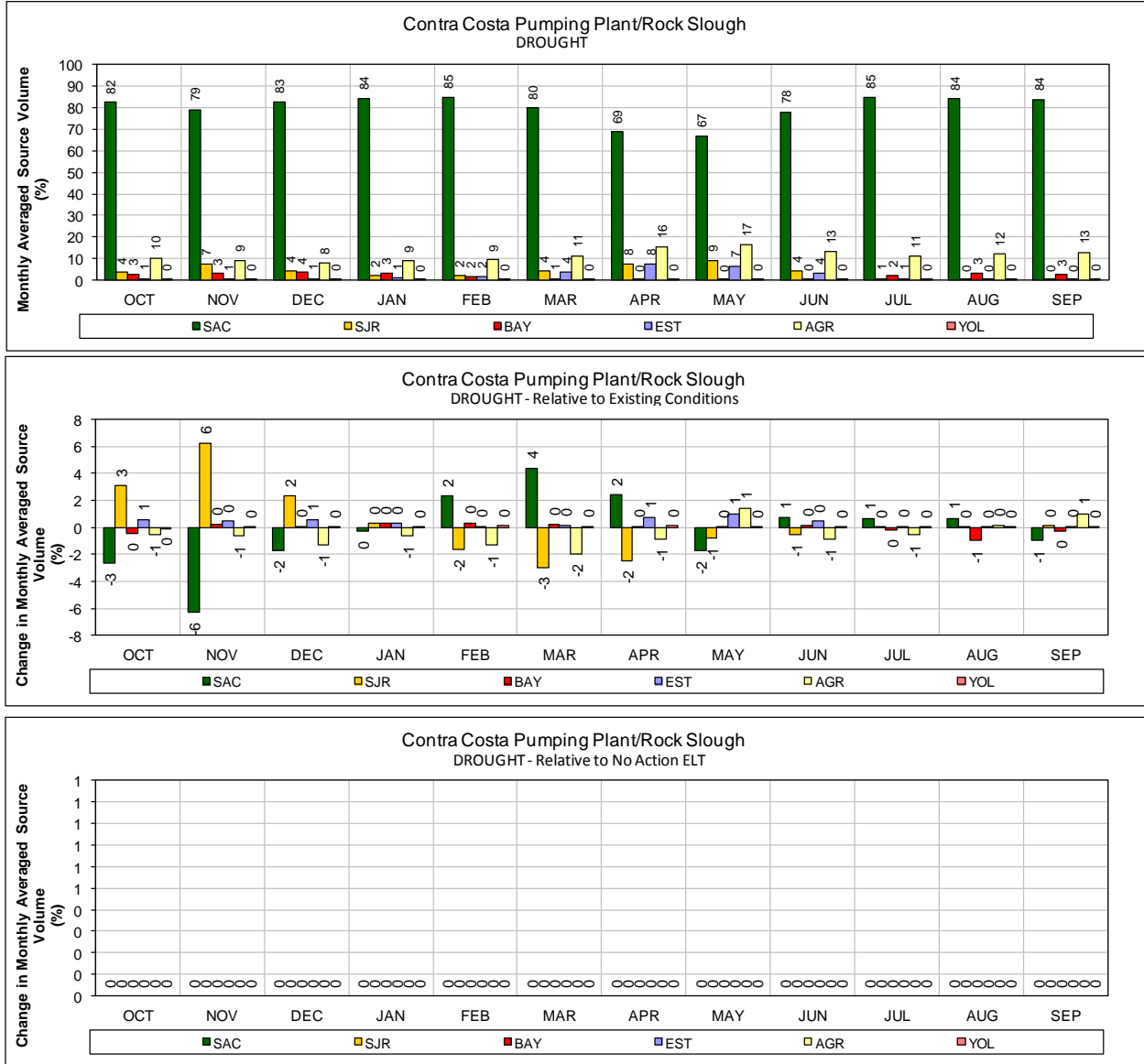
4 Monthly average source volume (top figure) and change in monthly average source volume to  
 5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 6



1  
2 **Figure B.4-17. NA ELT – Contra Costa Pumping Plant #1 for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

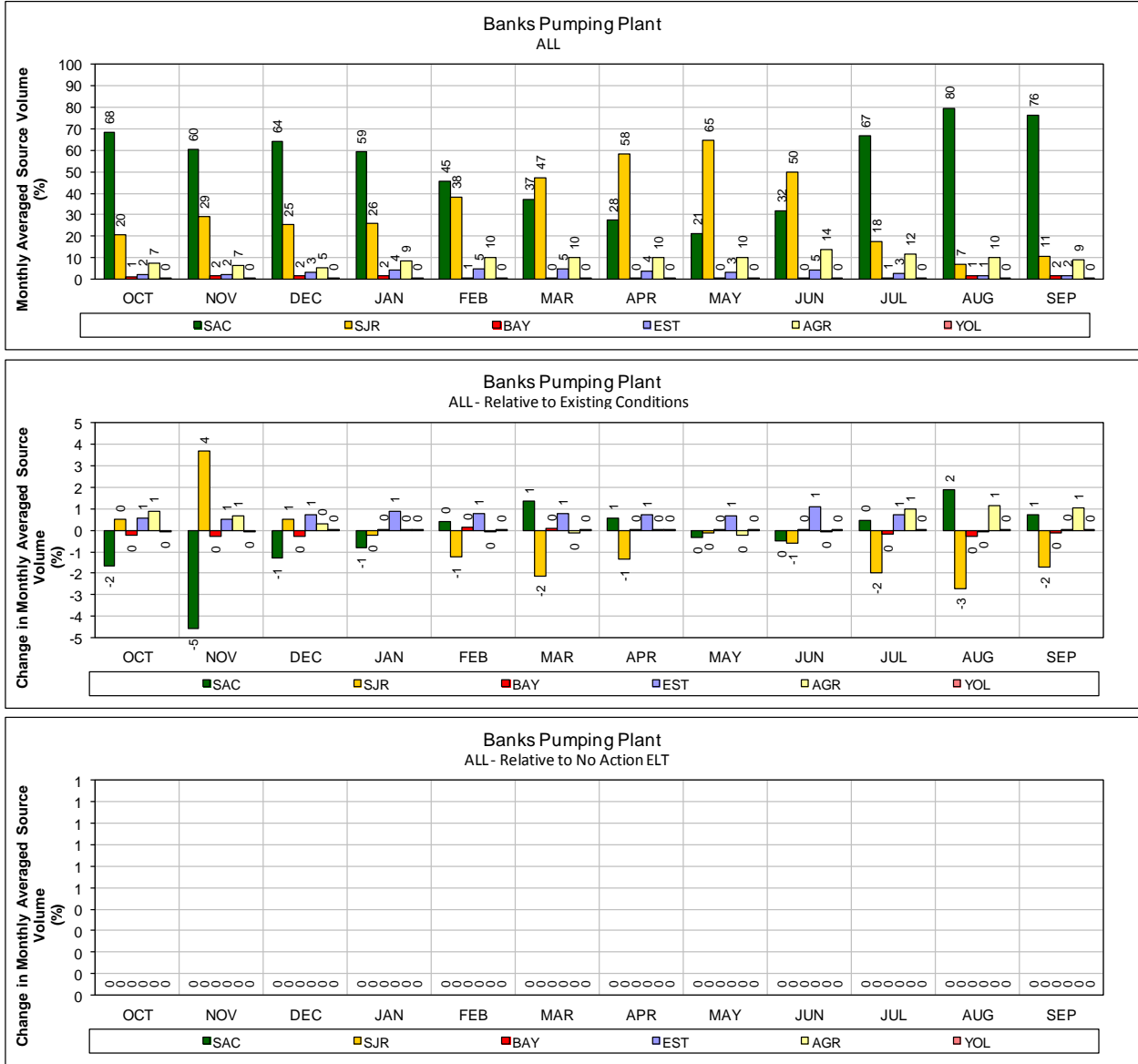
5



1  
2 **Figure B.4-18. NA ELT – Contra Costa Pumping Plant #1 for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

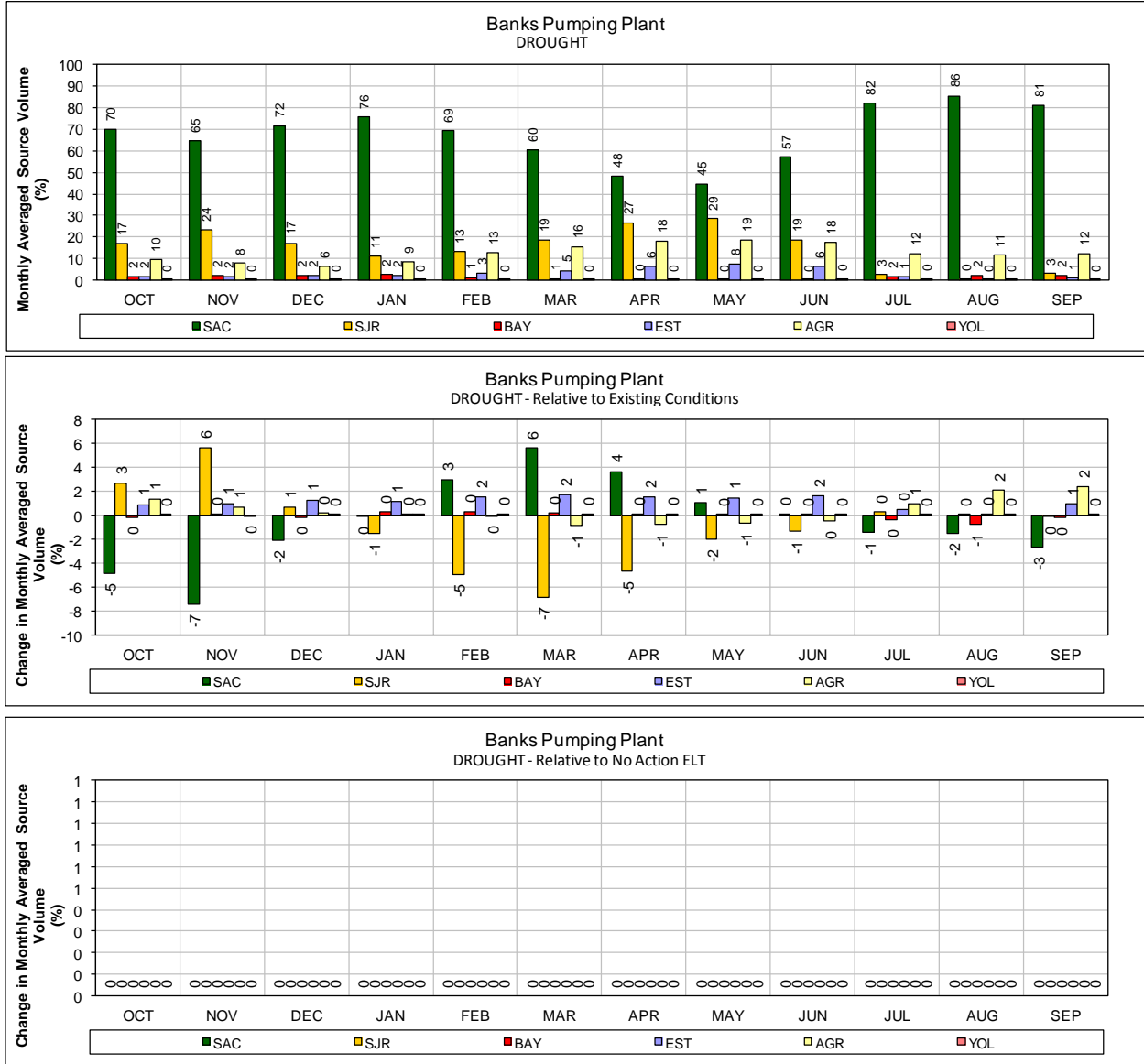
5



1  
2 **Figure B.4-19. NA ELT – Banks Pumping Plant #1 for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

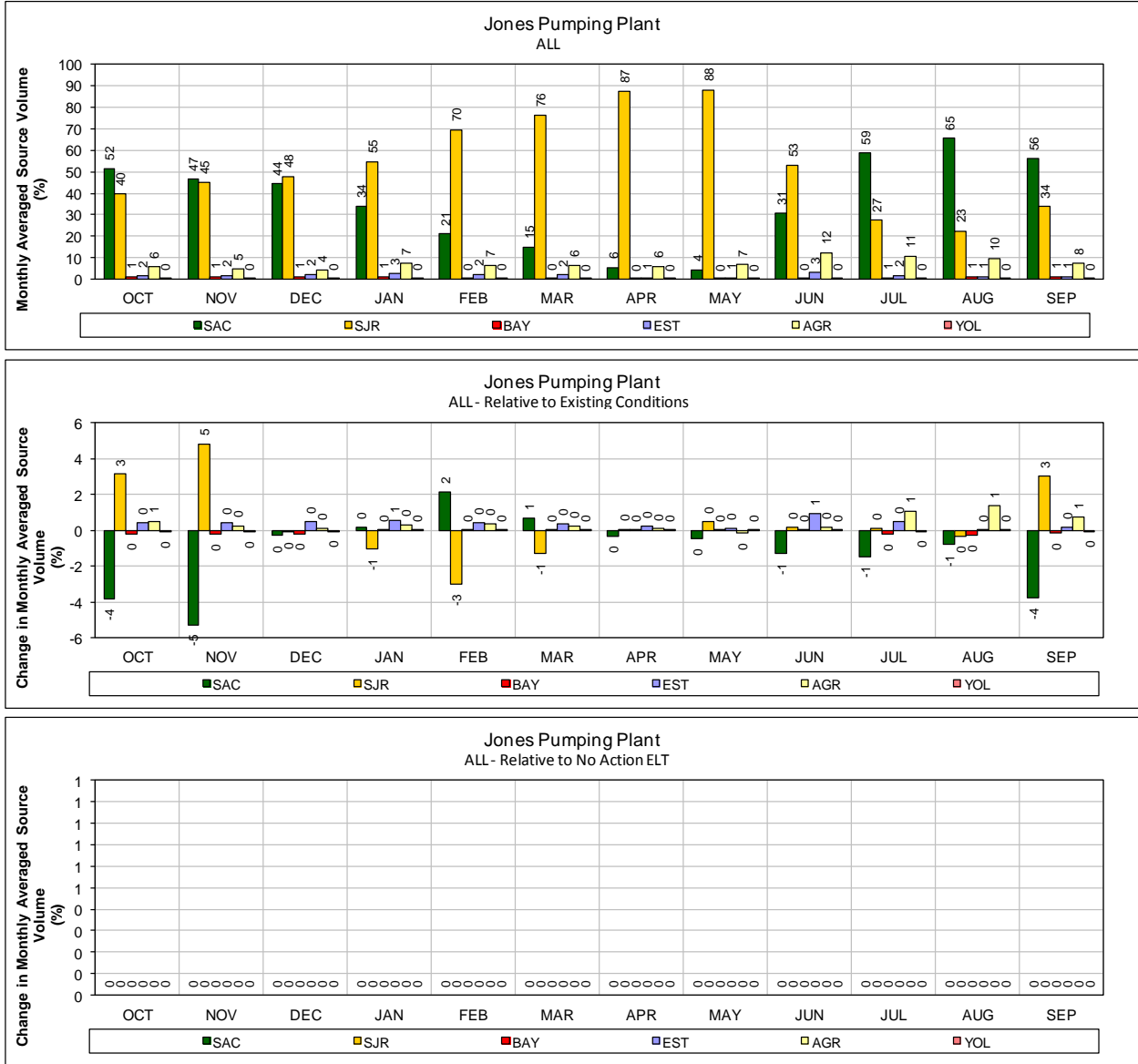
5



1  
2 **Figure B.4-20. NA ELT – Banks Pumping Plant #1 for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5

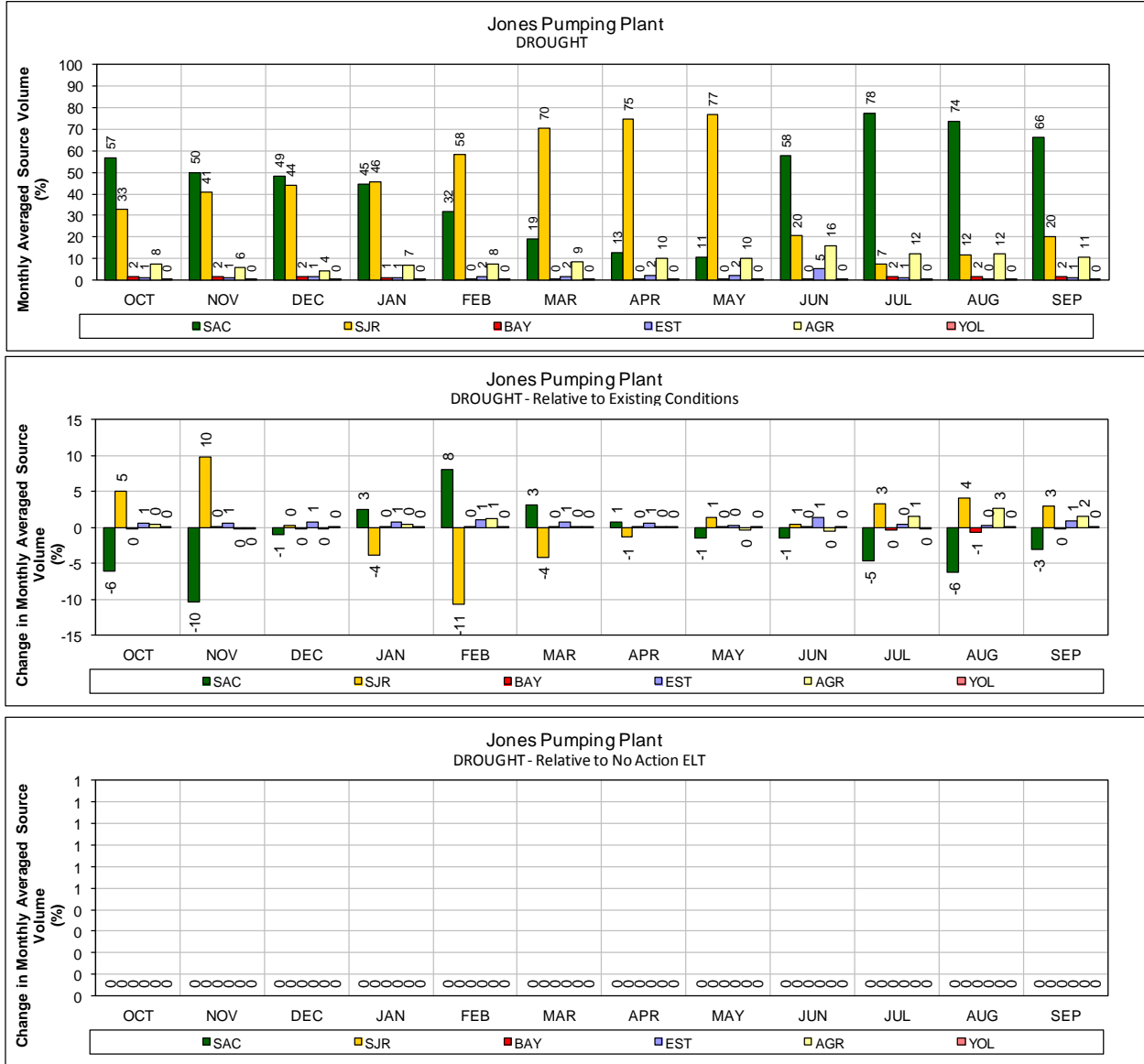


1  
2 **Figure B.4-21. NA ELT – Jones Pumping Plant for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

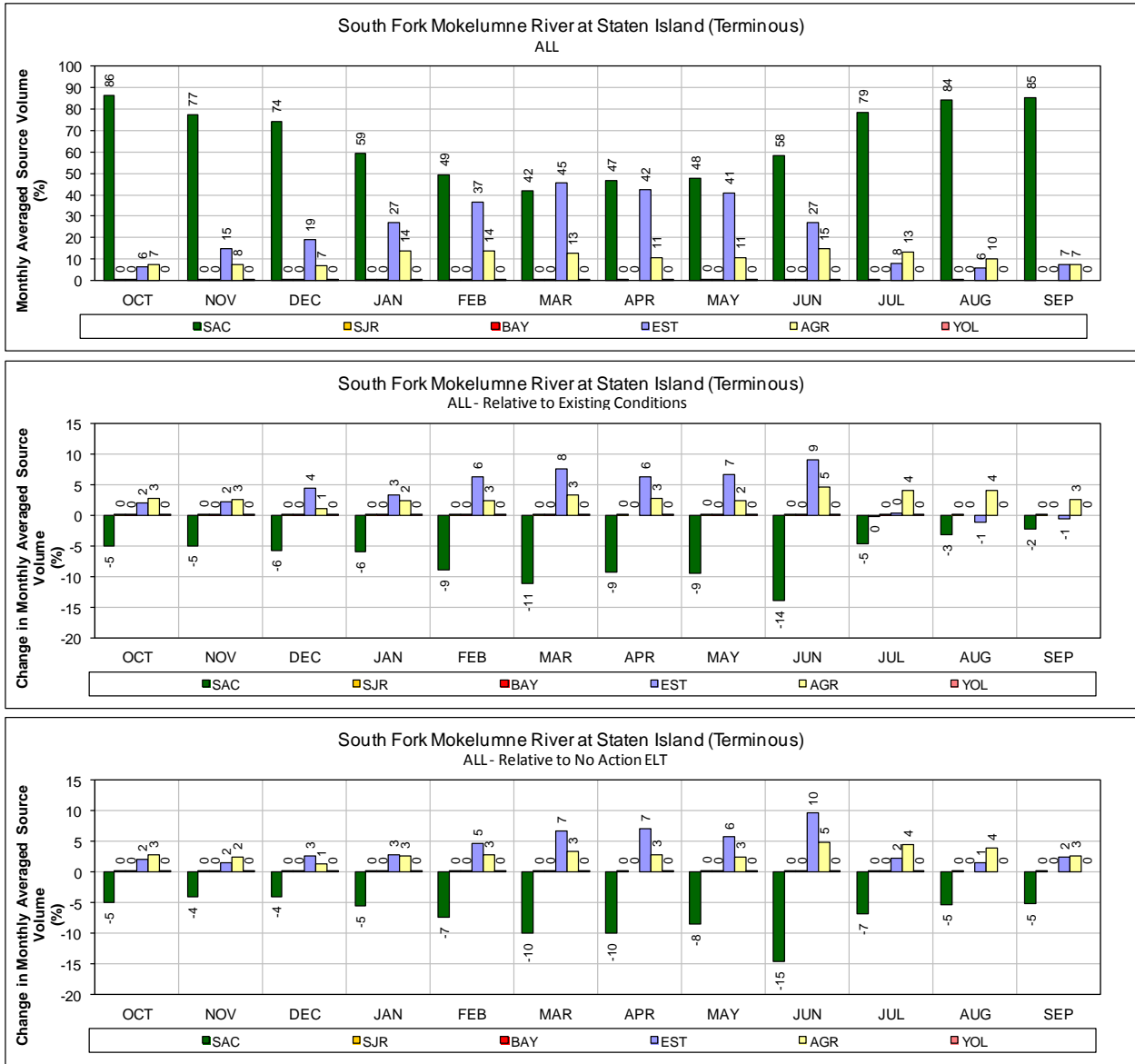
5





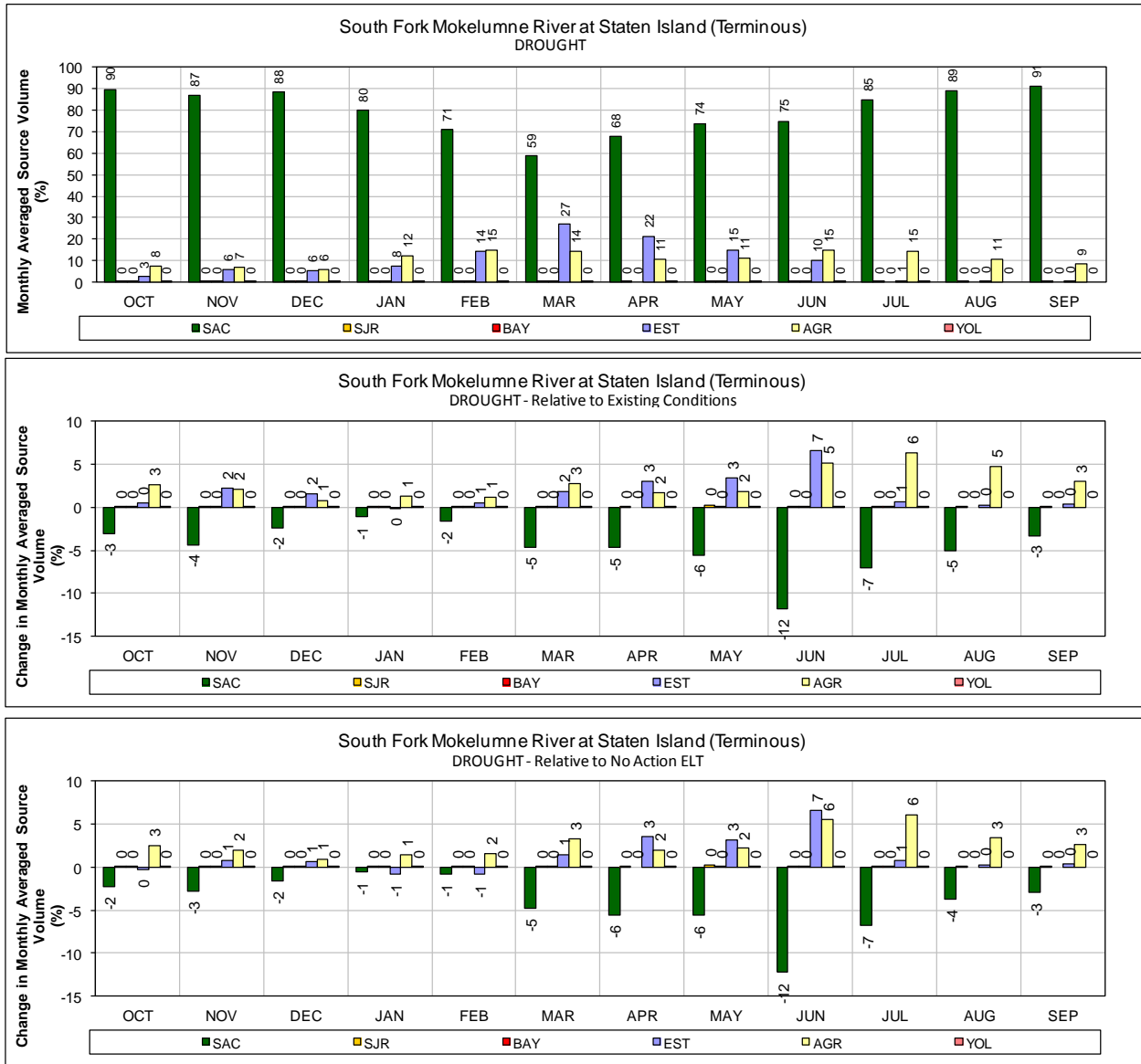
1  
 2 **Figure B.4-22. NA ELT – Jones Pumping Plant for DROUGHT Years (1987–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

1 **B.4.2.2 Alternative 4A ELT Scenario H3**



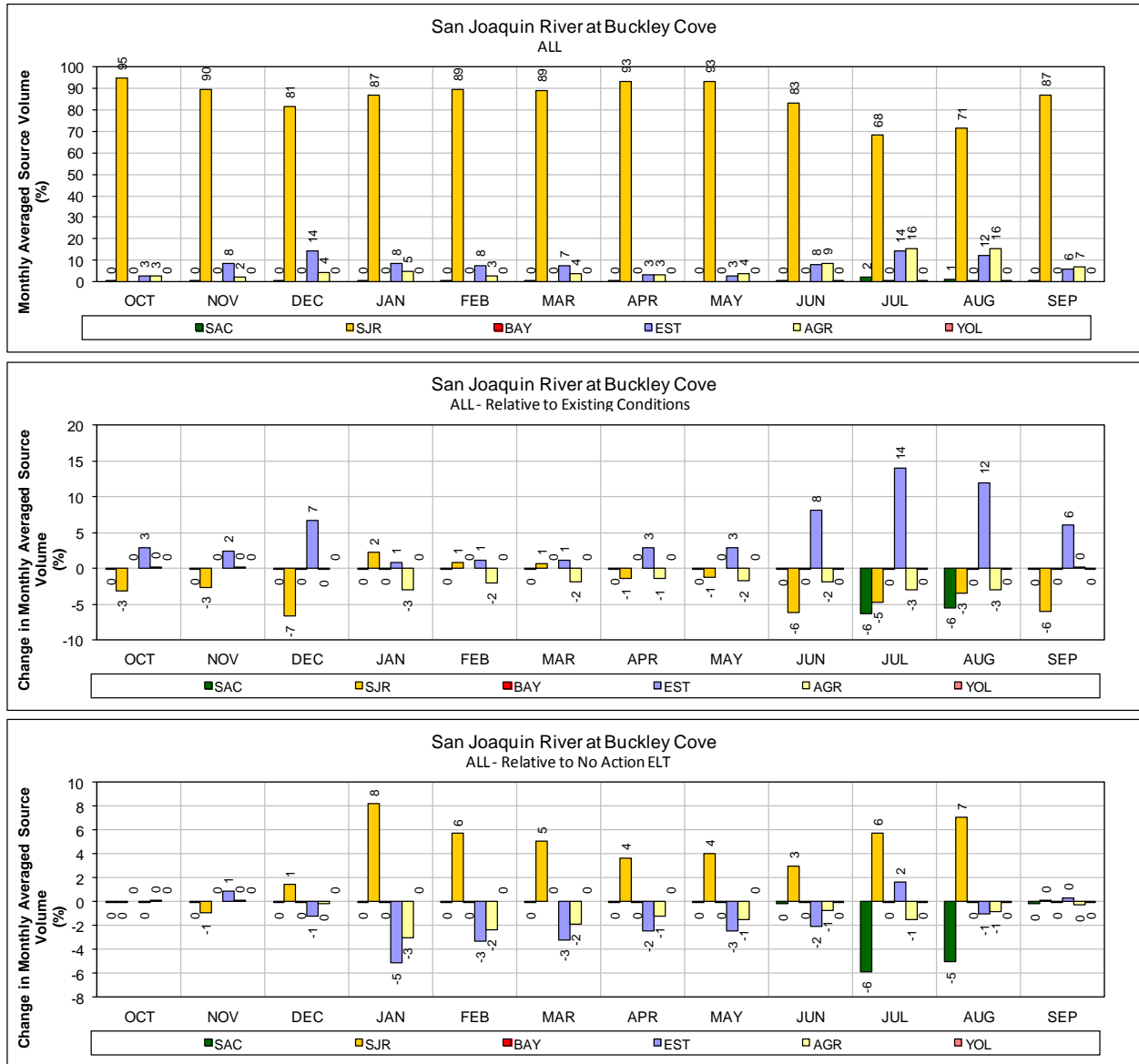
2  
3 **Figure B.4-23. ALT 4A Scenario H3 – Mokelumne River (South Fork) at Staten Island for ALL Years (1976–1991)**  
4

5 Monthly average source volume (top figure) and change in monthly average source volume relative to  
6 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
7



1  
2 **Figure B.4-24. ALT 4A Scenario H3 – Mokelumne River (South Fork) at Staten Island for DROUGHT**  
3 **Years (1987–1991)**

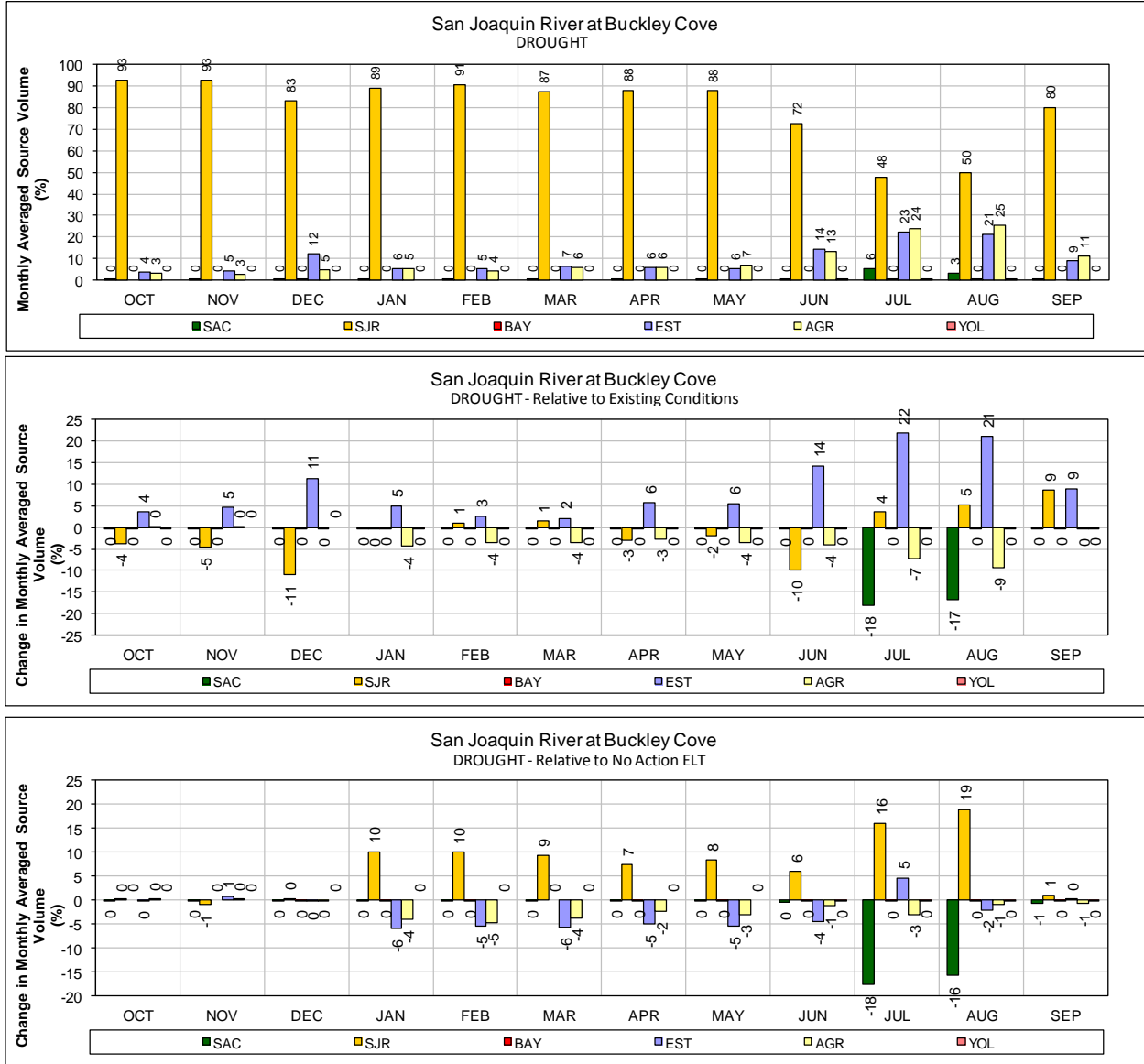
4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
6



1  
2 **Figure B.4-25. ALT 4A Scenario H3 – San Joaquin River at Buckley Cove for ALL Years (1976–1991)**

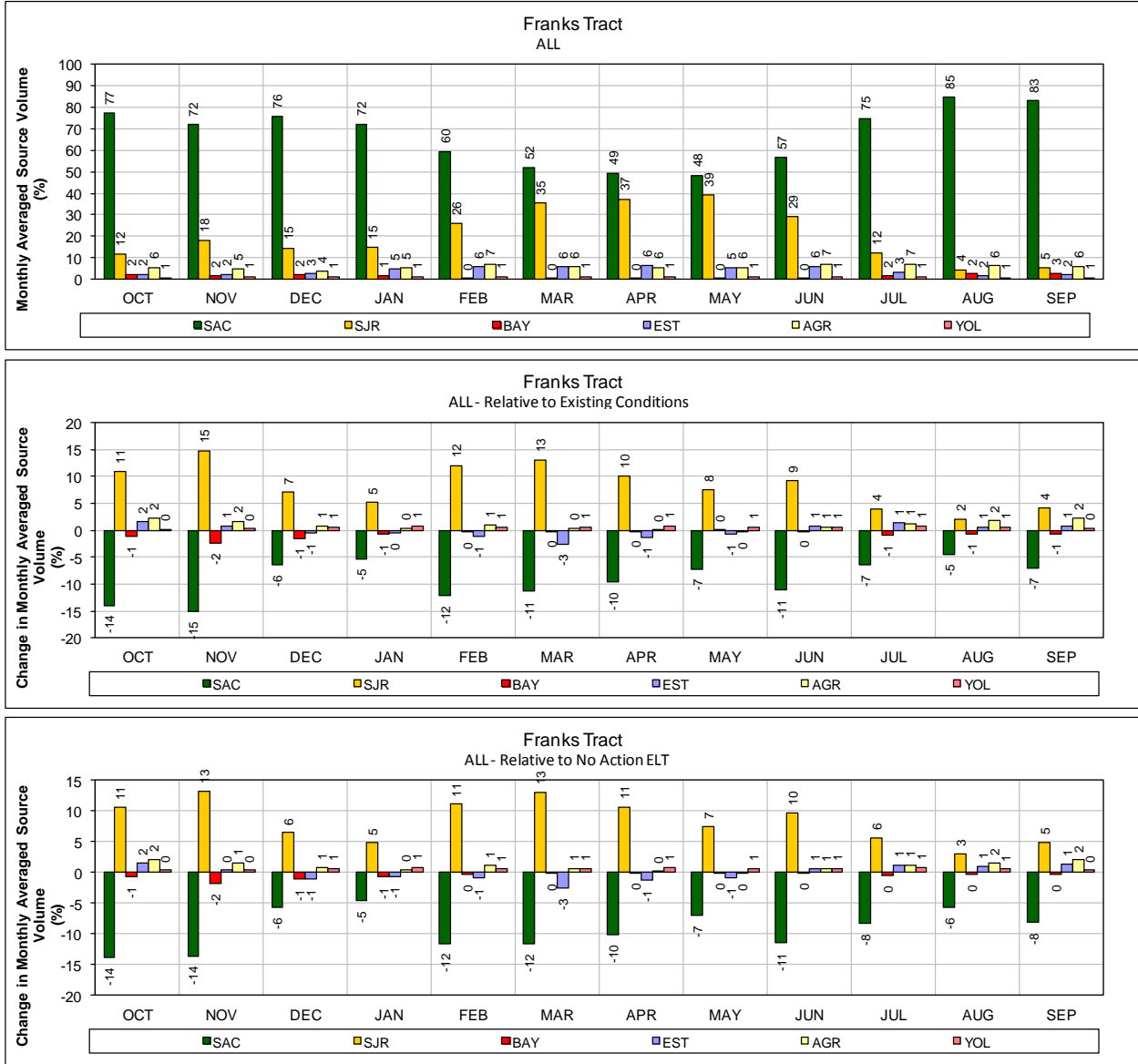
3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



1  
2 **Figure B.4-26. ALT 4A Scenario H3 – San Joaquin River at Buckley Cove for DROUGHT Years (1987–**  
3 **1991)**

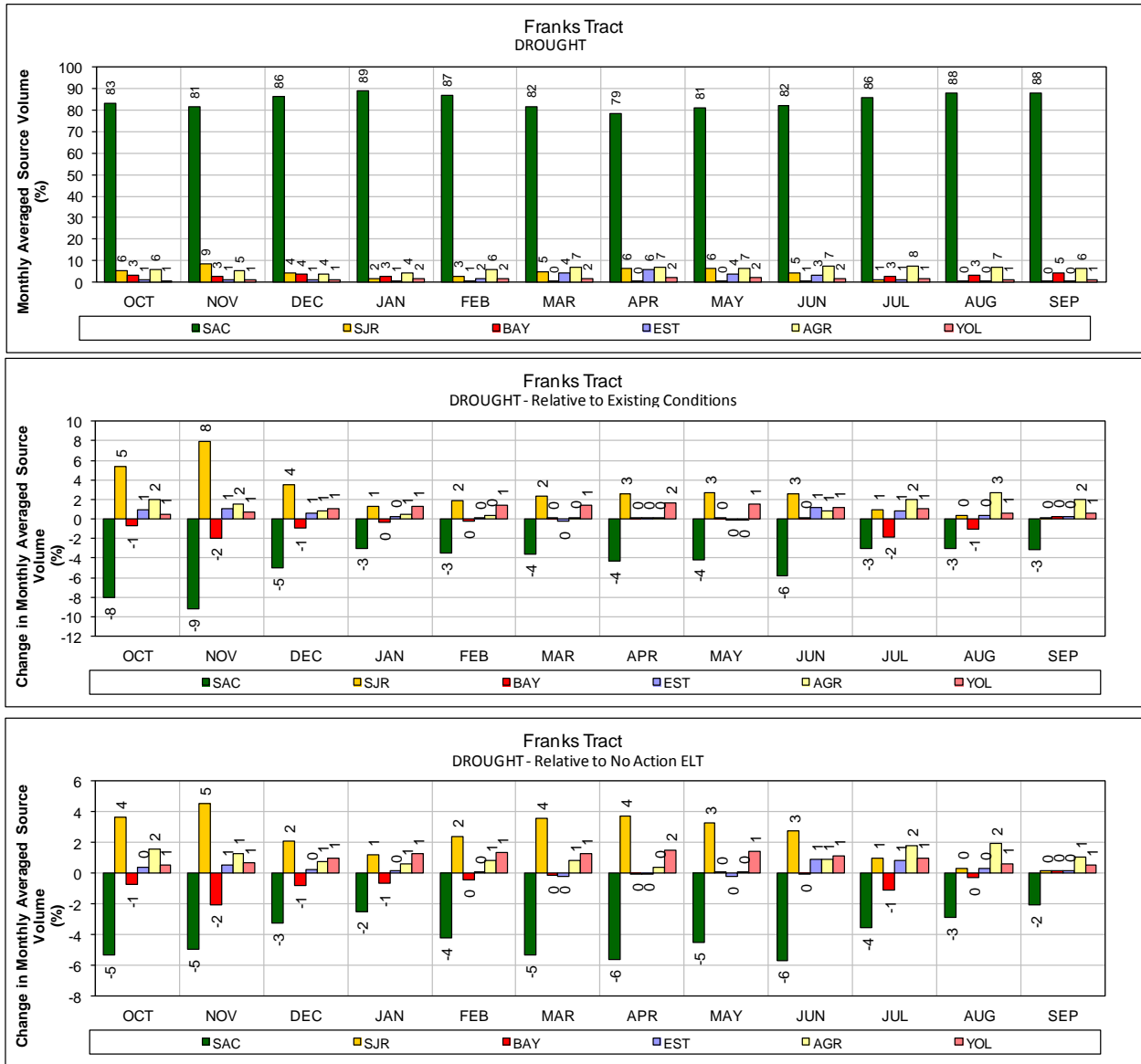
4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
6



1  
2 **Figure B.4-27. ALT 4A Scenario H3 – Franks Tract for ALL Years (1976–1991)**

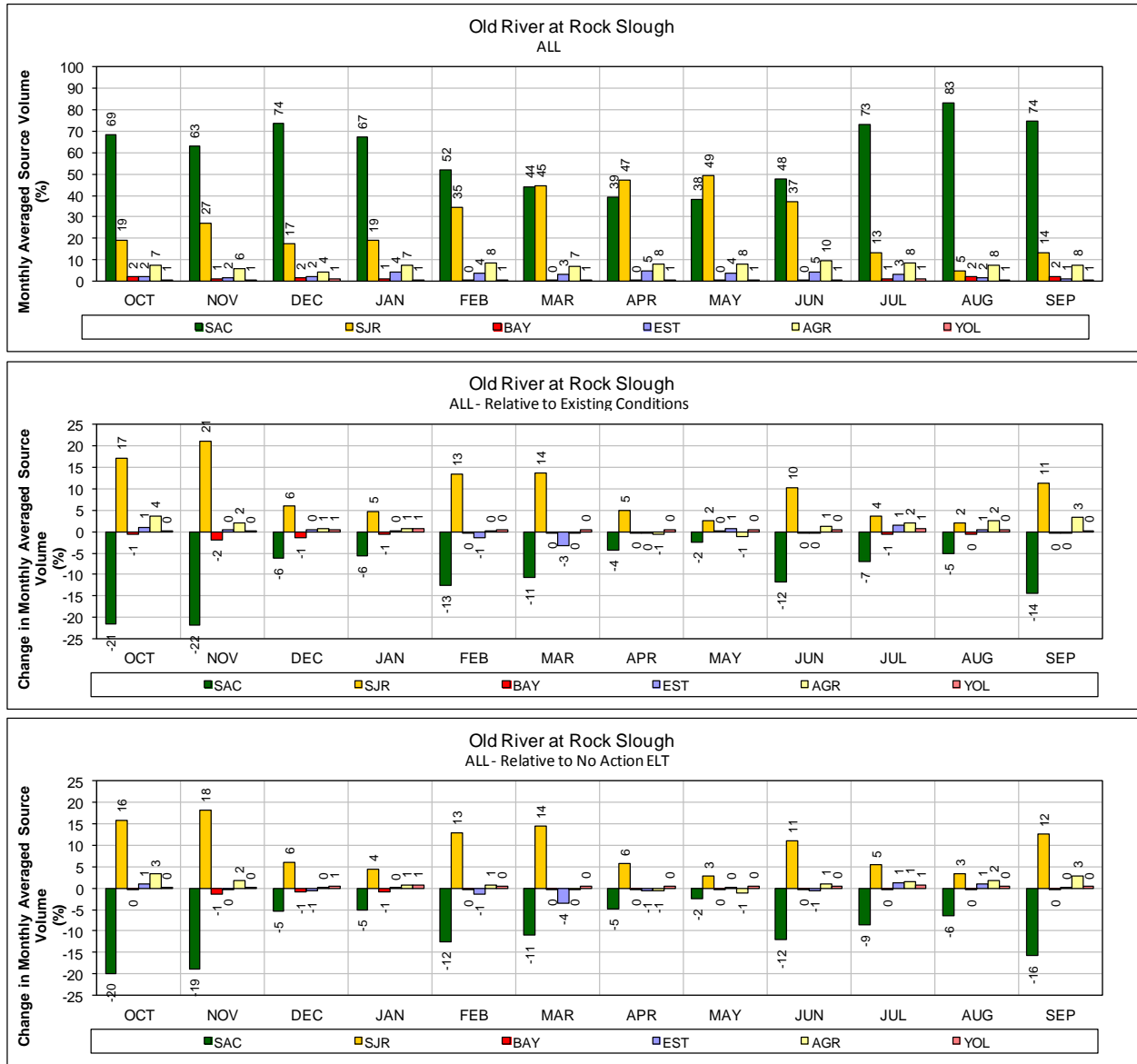
3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



1  
2 **Figure B.4-28. ALT 4A Scenario H3 – Franks Tract for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
5

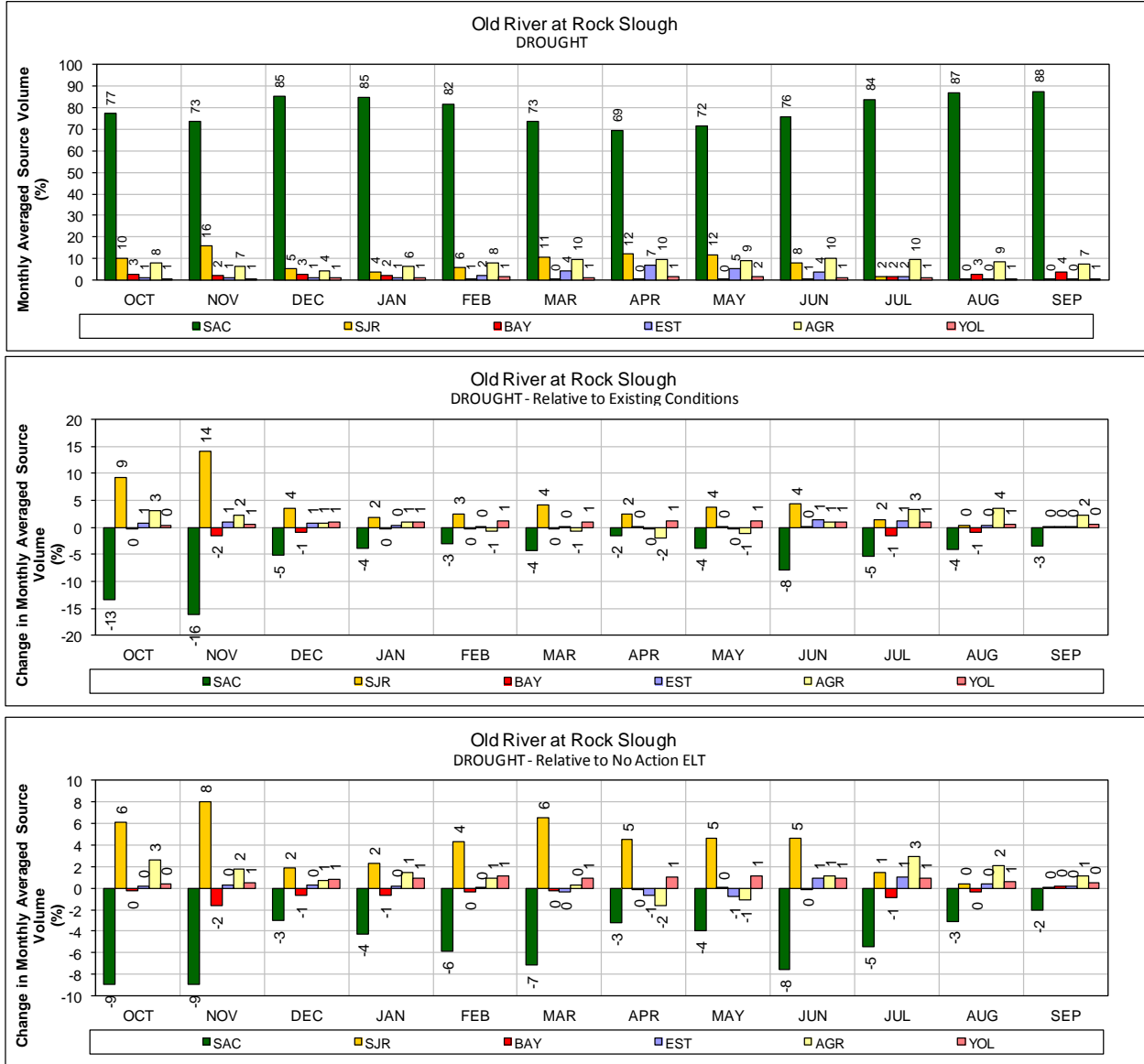


1  
2 **Figure B.4-29. ALT 4A Scenario H3 – Old River at Rock Slough for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5

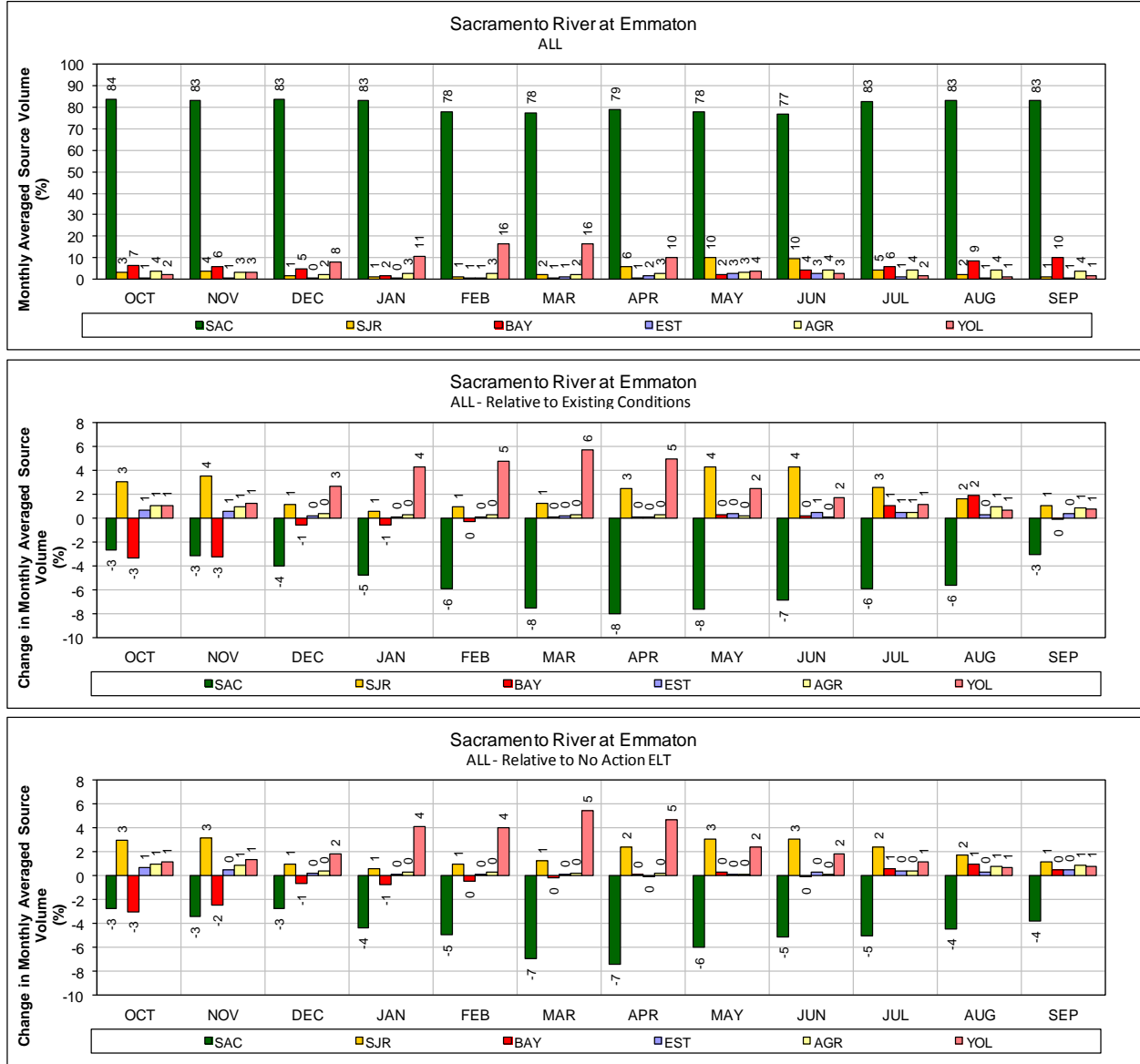




1  
2 **Figure B.4-30. ALT 4A Scenario H3 – Old River at Rock Slough for DROUGHT Years (1987–1991)**

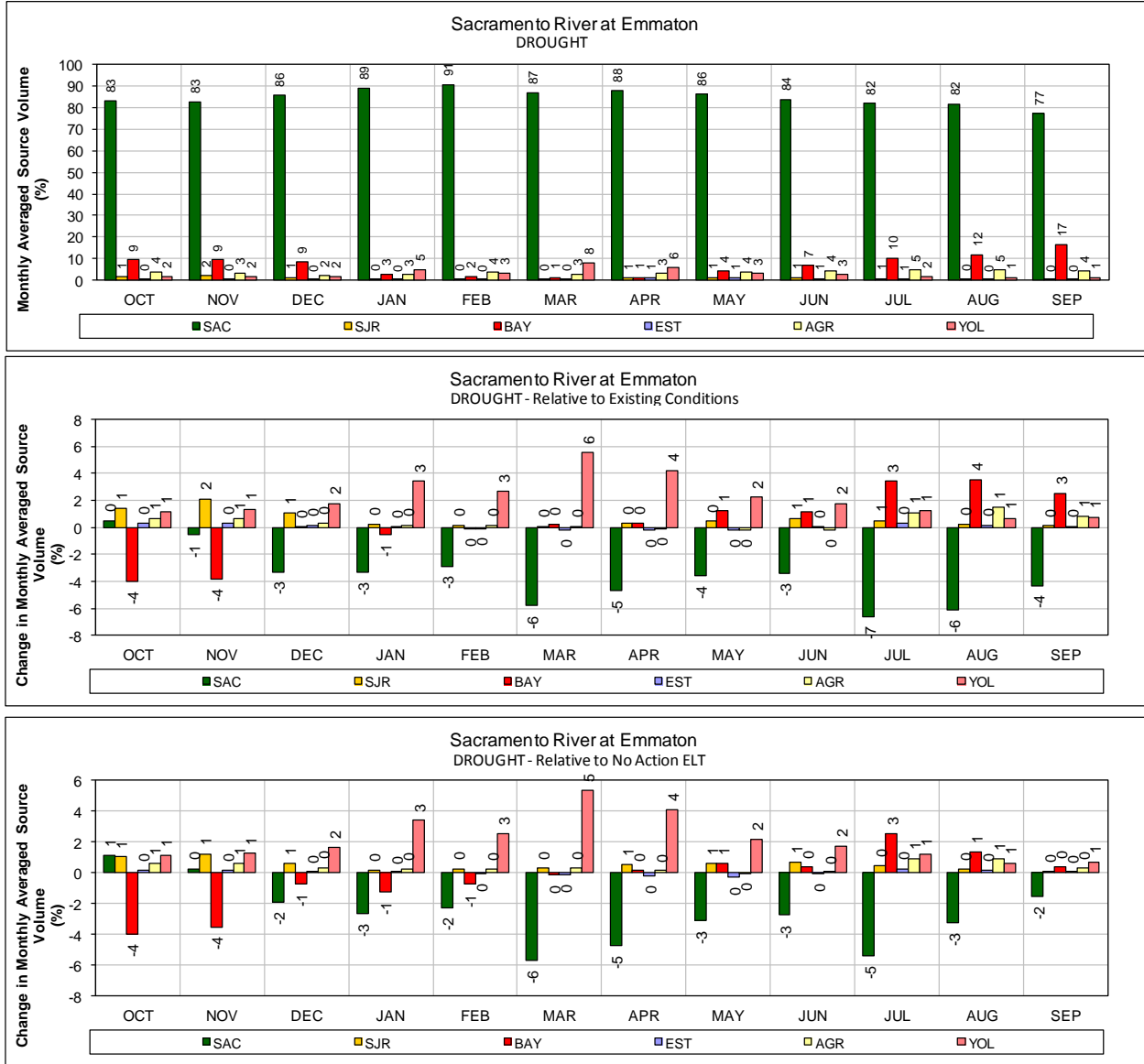
3 Monthly average source volume (top figure) and change in monthly average source volume to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



1  
2 **Figure B.4-31. ALT 4A Scenario H3 – Sacramento River at Emmaton for ALL Years (1976–1991)**

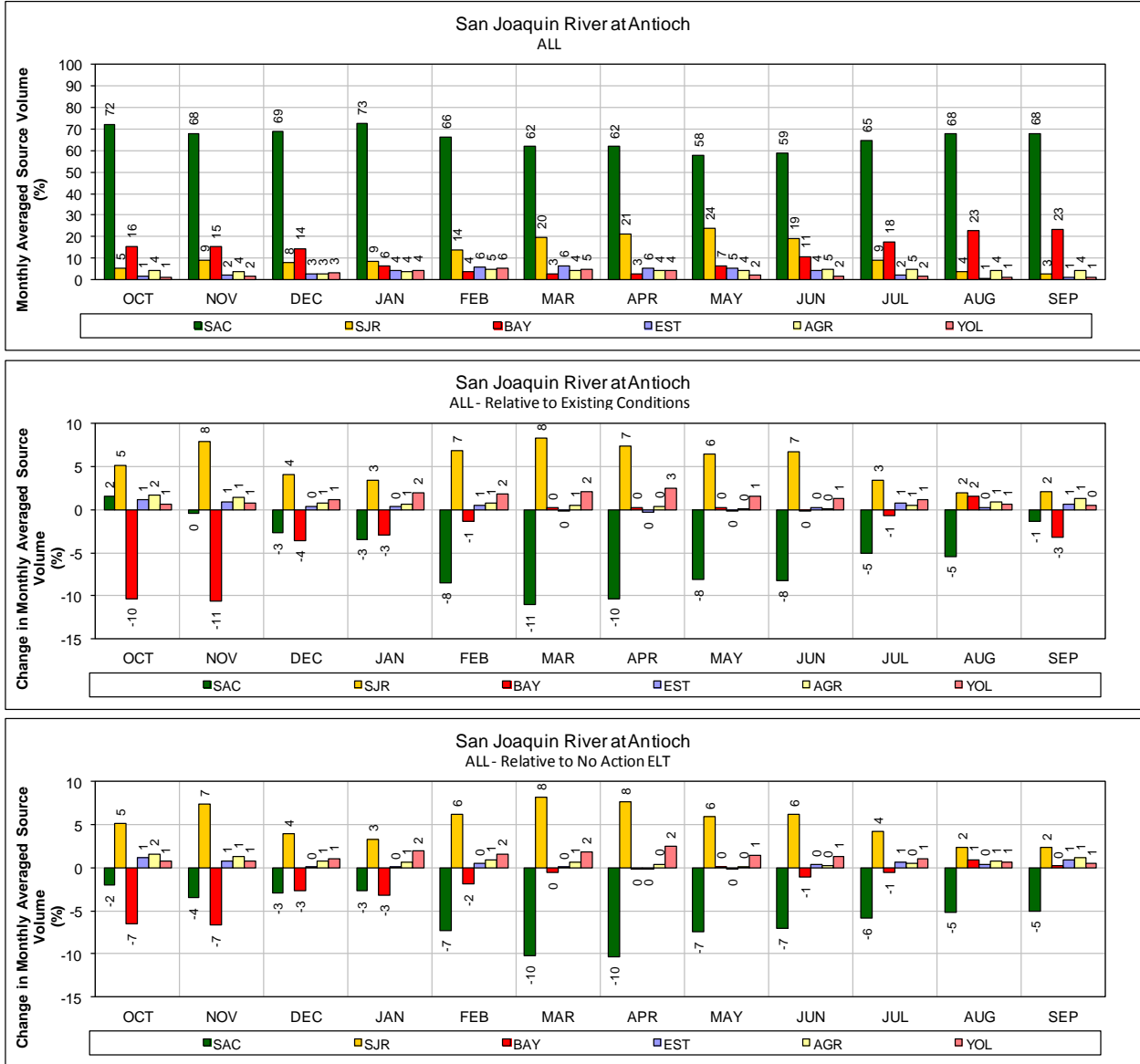
3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



1  
2 **Figure B.4-32. ALT 4A Scenario H3 – Sacramento River at Emmaton for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

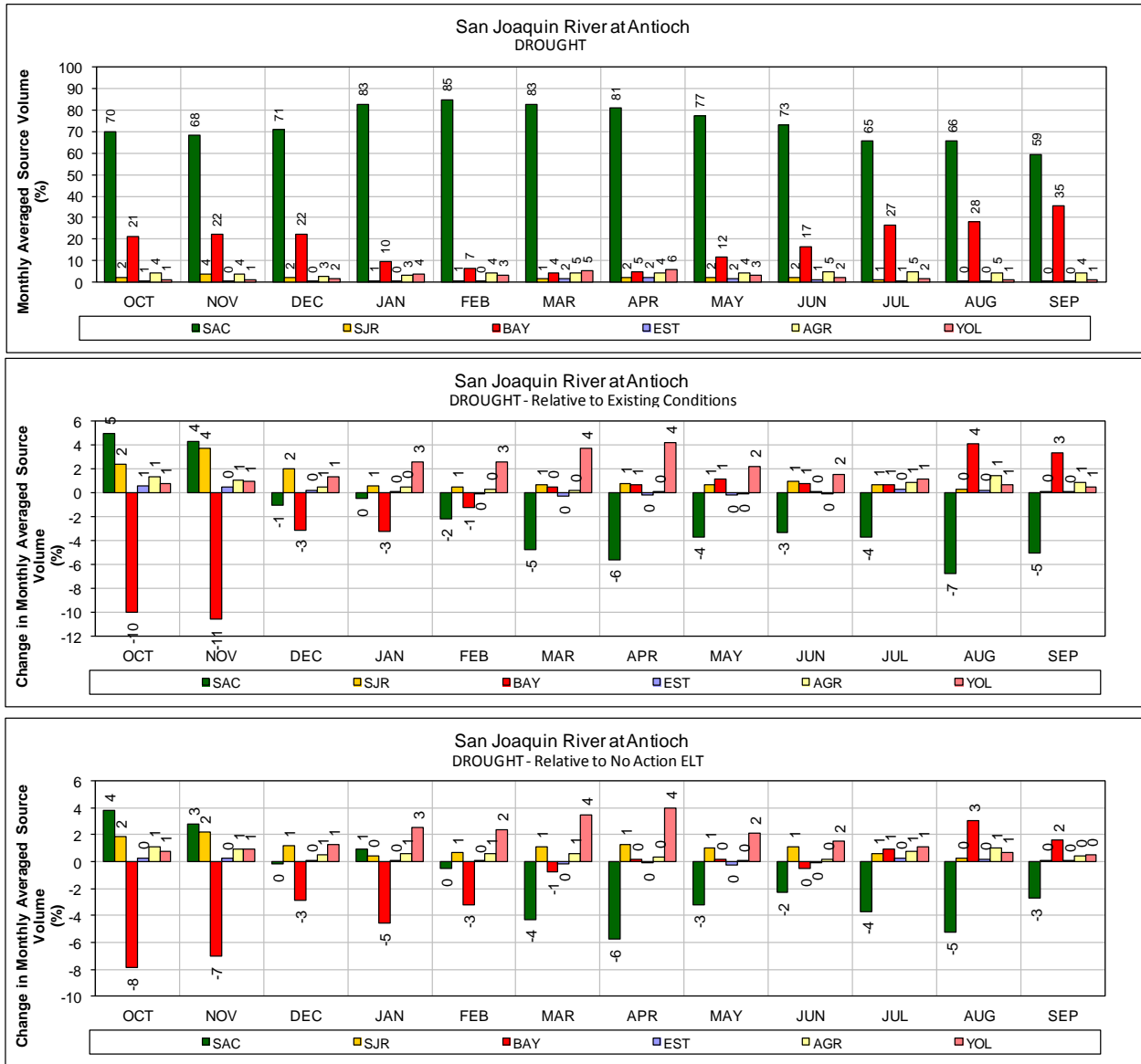
5



1  
2 **Figure B.4-33. ALT 4A Scenario H3 – San Joaquin River at Antioch for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



1  
2 **Figure B.4-34. ALT 4A Scenario H3 – San Joaquin River at Antioch for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

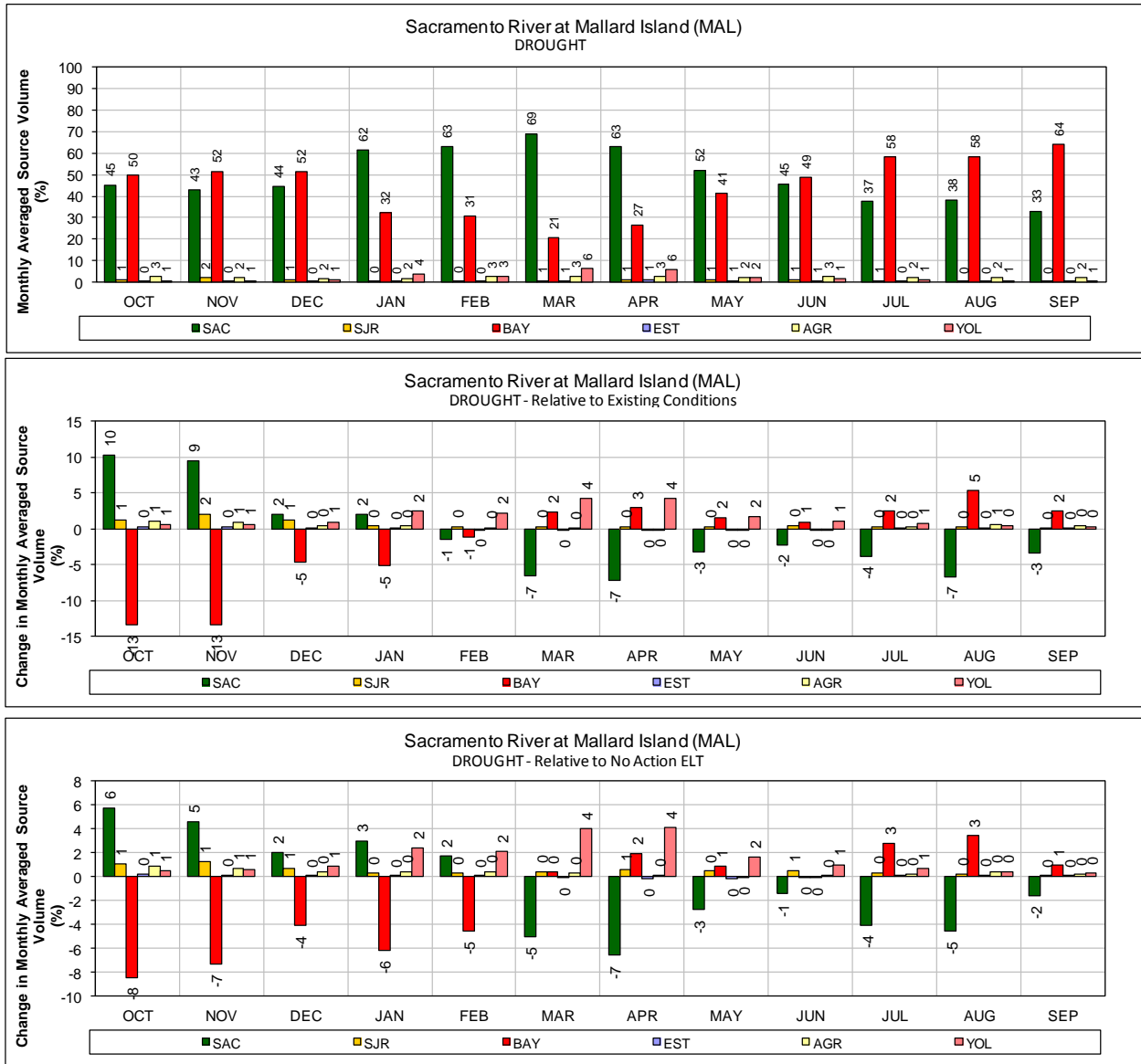
5



1  
2 **Figure B.4-35. ALT 4A Scenario H3 – Sacramento River at Mallard Island for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



1  
2 **Figure B.4-36. ALT 4A Scenario H3 – Sacramento River at Mallard Island for DROUGHT Years (1987–**  
3 **1991)**

4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
6

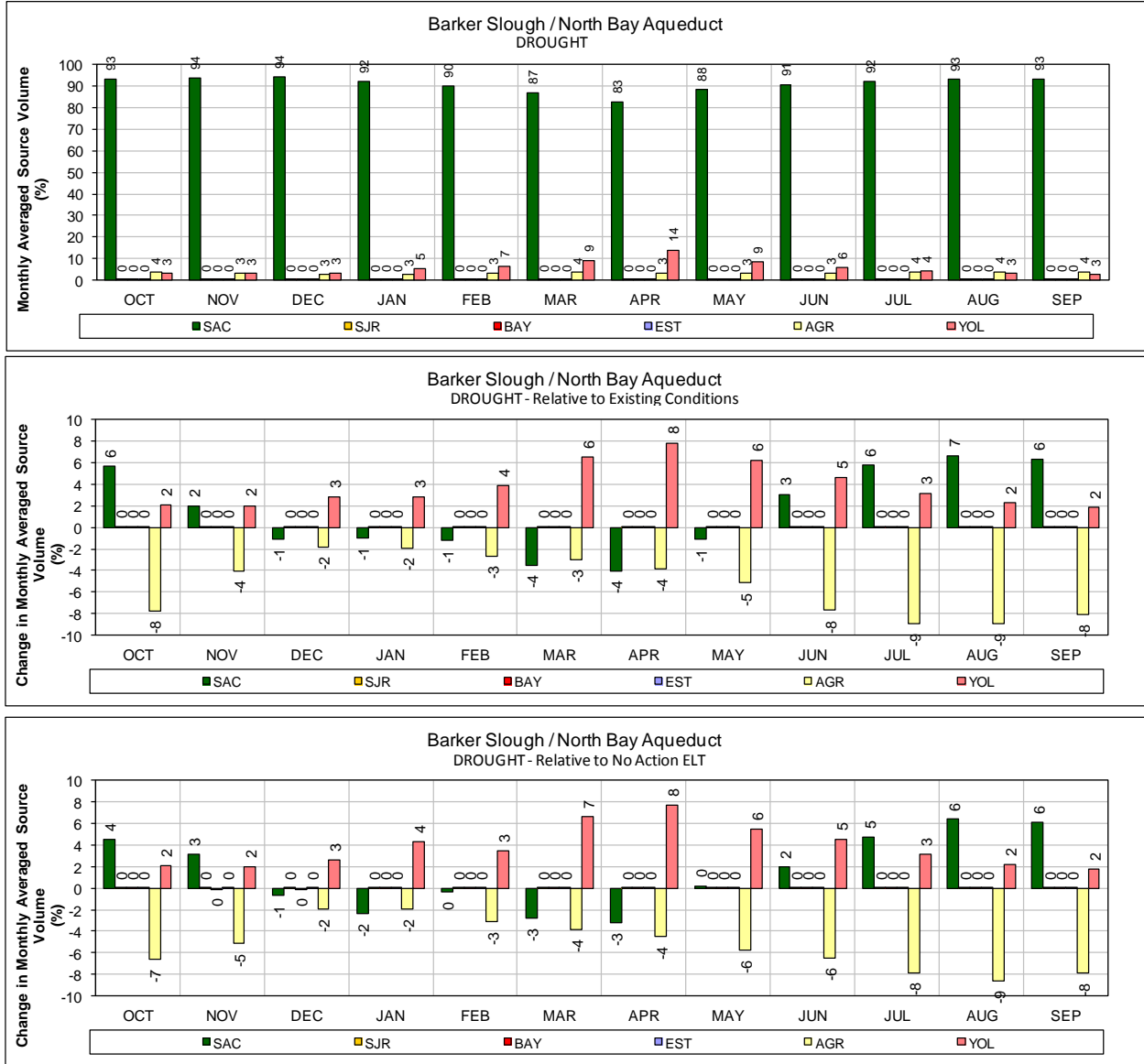


1  
2 **Figure B.4-37. ALT 4A Scenario H3 – North Bay Aqueduct at Barker Slough Pumping Plant for ALL Years (1976–1991)**

4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

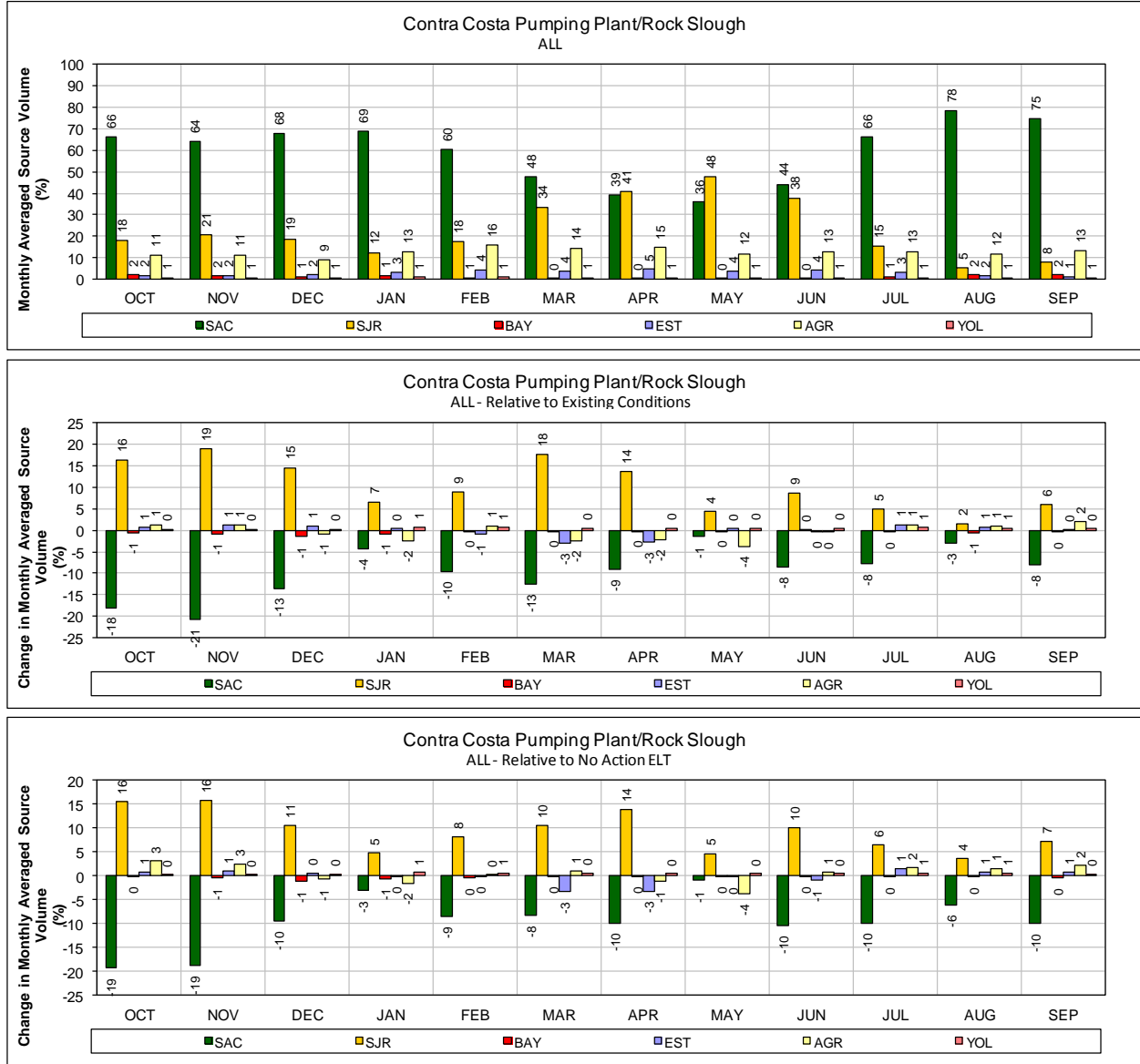
6





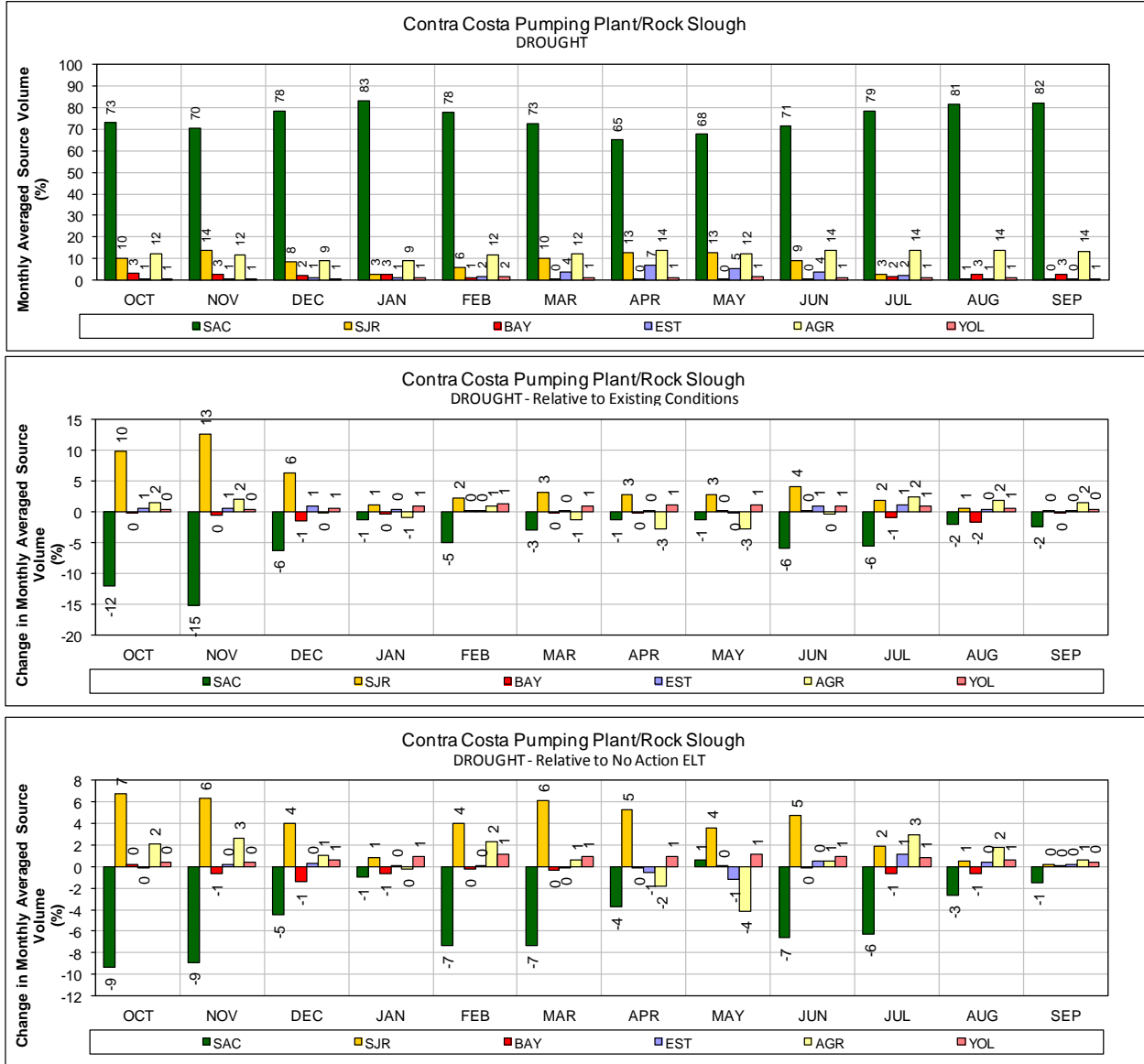
1  
 2 **Figure B.4-38. ALT 4A Scenario H3 – North Bay Aqueduct at Barker Slough Pumping Plant for**  
 3 **DROUGHT Years (1987–1991)**

4 Monthly average source volume (top figure) and change in monthly average source volume to  
 5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 6



1  
2 **Figure B.4-39. ALT 4A Scenario H3 – Contra Costa Pumping Plant #1 for ALL Years (1976–1991)**

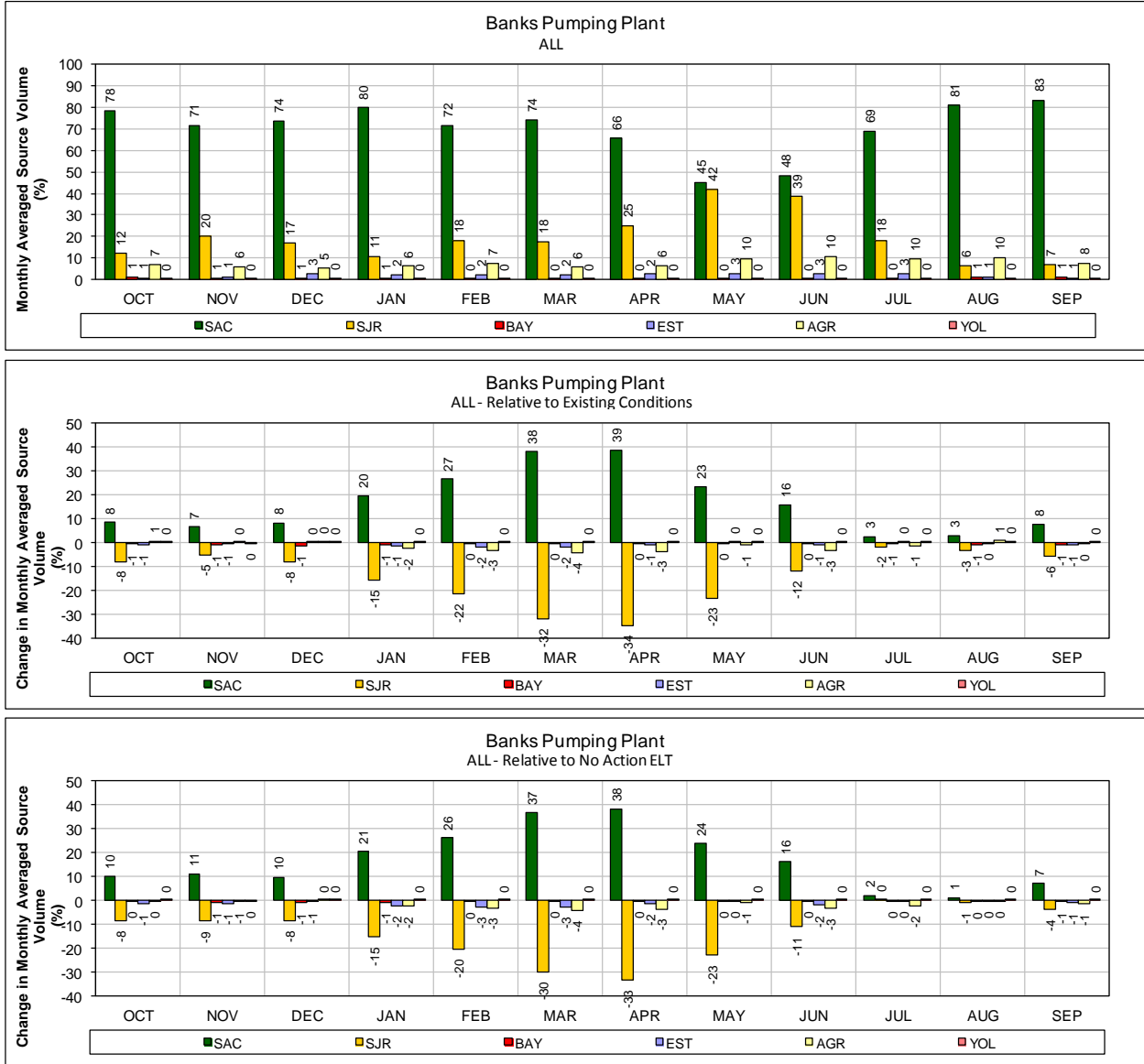
3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



1  
2 **Figure B.4-40. ALT 4A Scenario H3 – Contra Costa Pumping Plant #1 for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

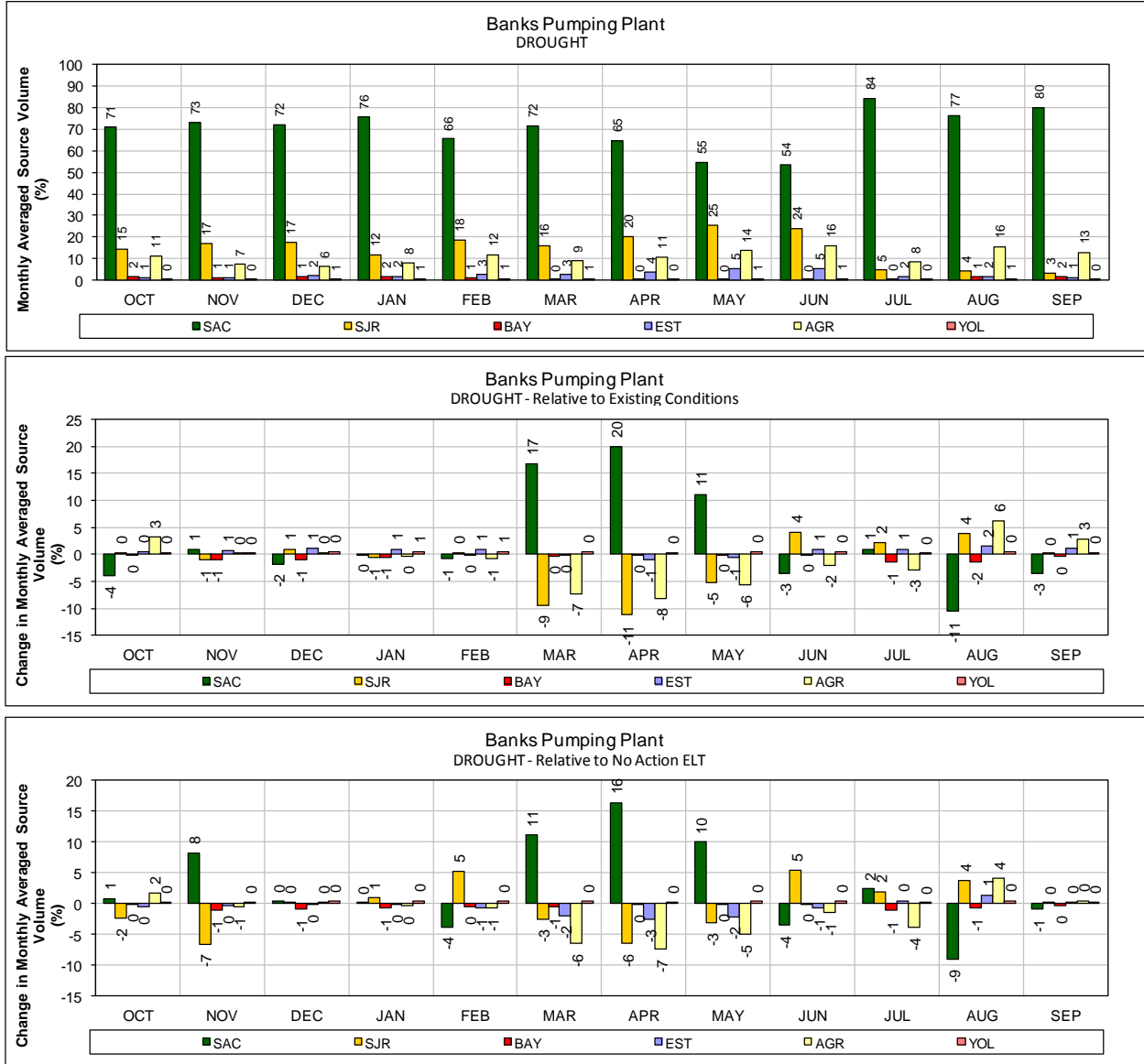
5



1  
2 **Figure B.4-41. ALT 4A Scenario H3 – Banks Pumping Plant for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

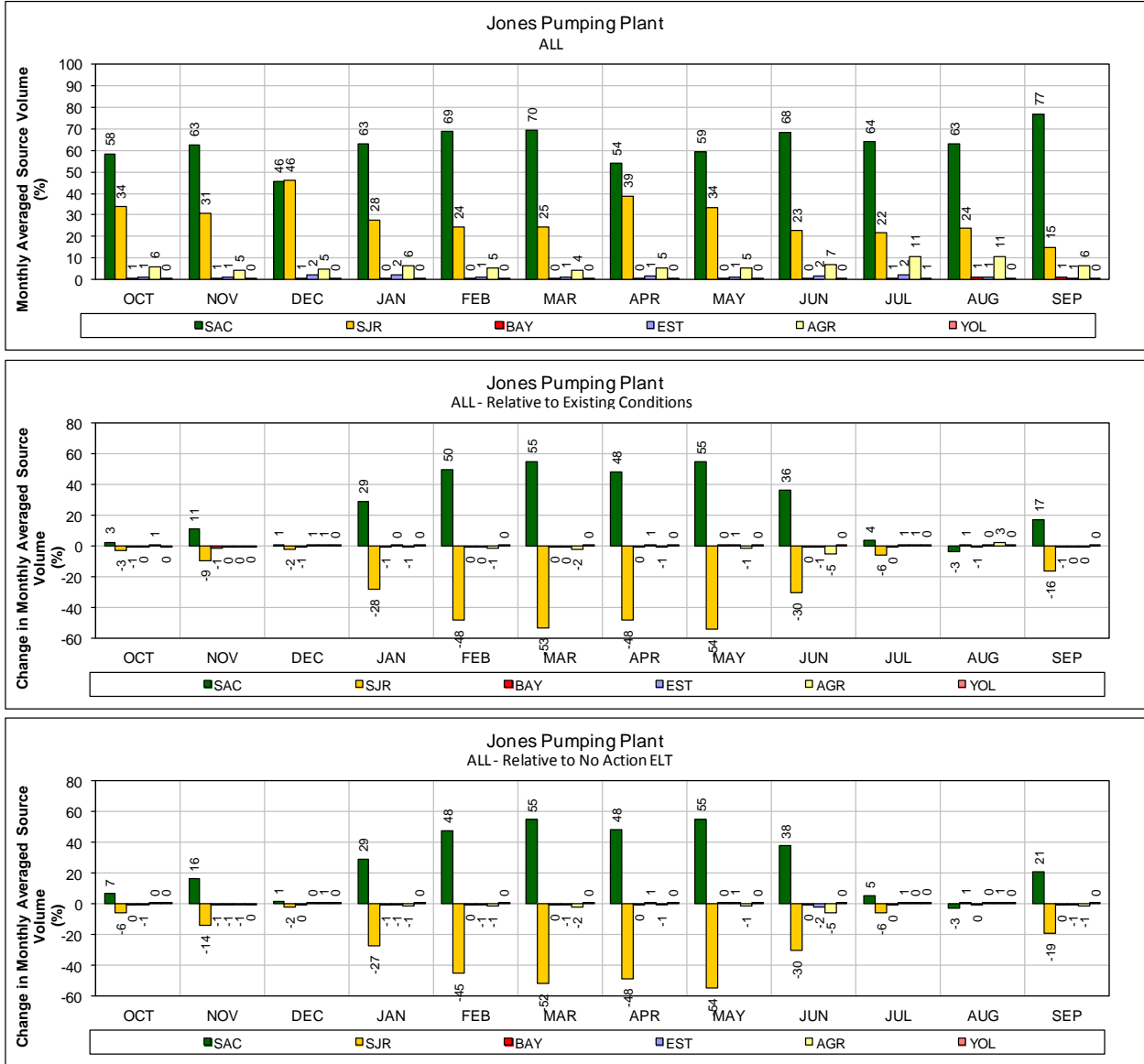
5



1  
2 **Figure B.4-42. ALT 4A Scenario H3 – Banks Pumping Plant for DROUGHT Years (1987–1991)**

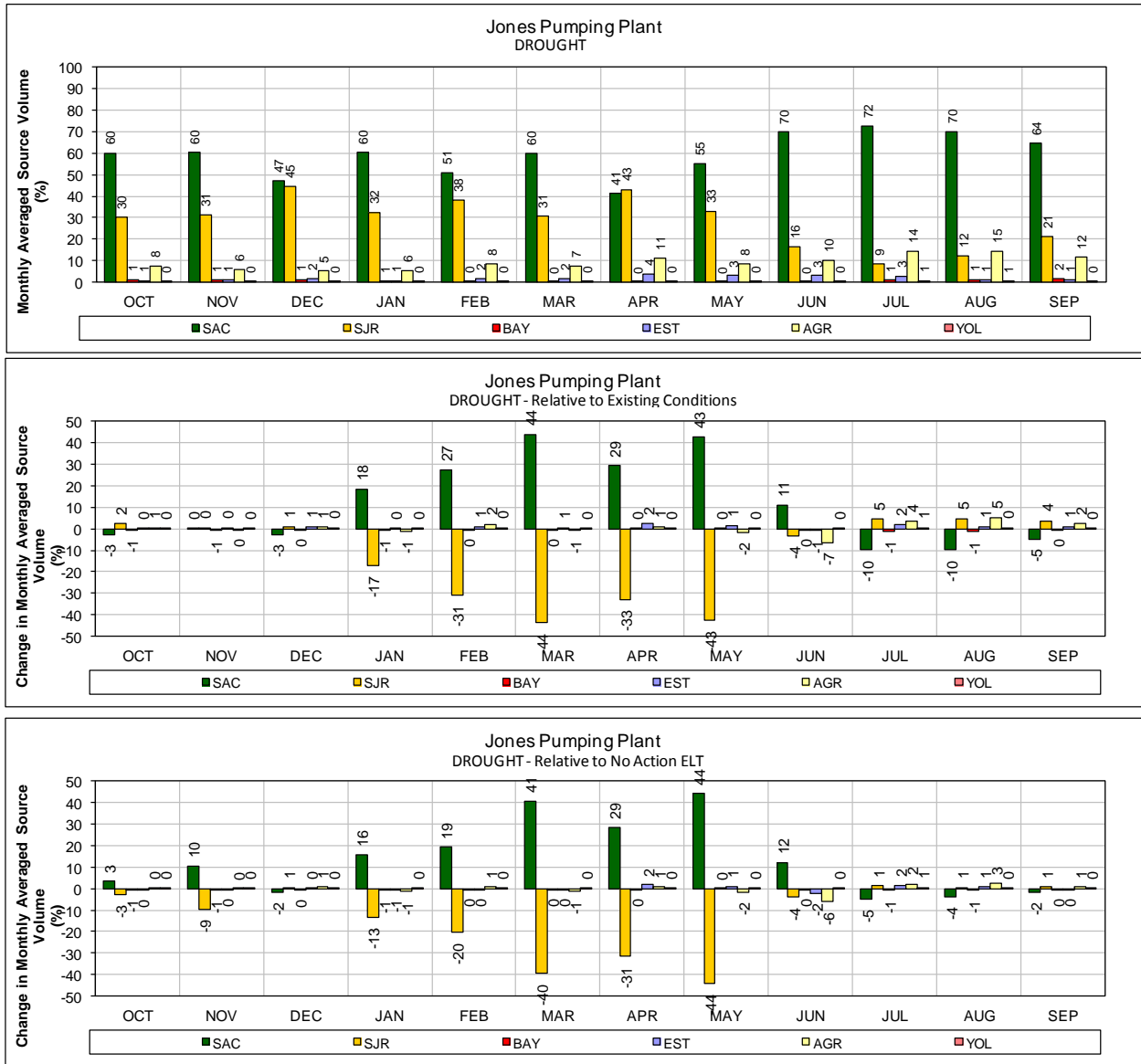
3 Monthly average source volume (top figure) and change in monthly average source volume to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



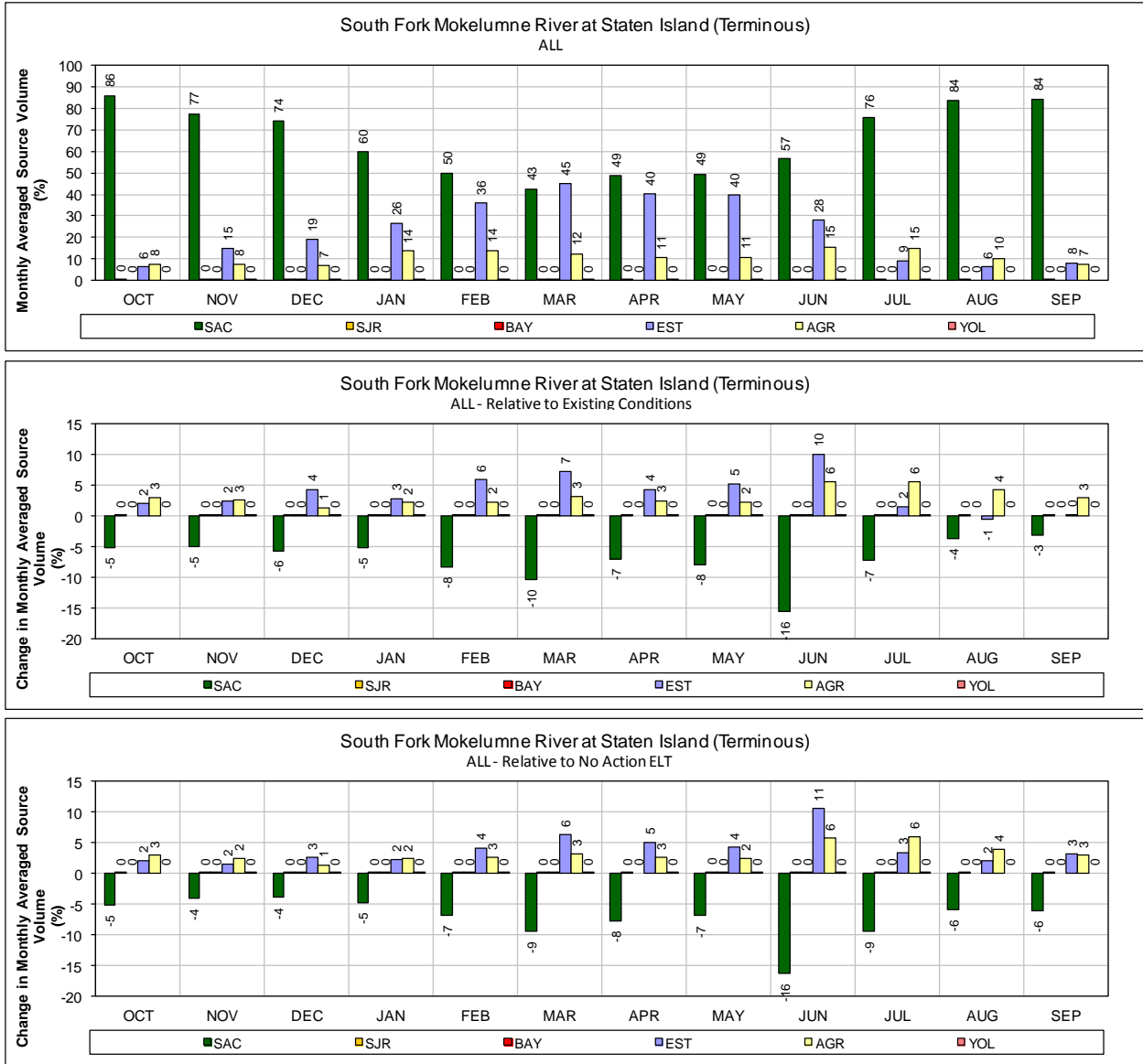
1  
2 **Figure B.4-43. ALT 4A Scenario H3 – Jones Pumping Plant for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



1  
 2 **Figure B.4-44. ALT 4A Scenario H3 – Jones Pumping Plant for DROUGHT Years (1987–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5  
 6

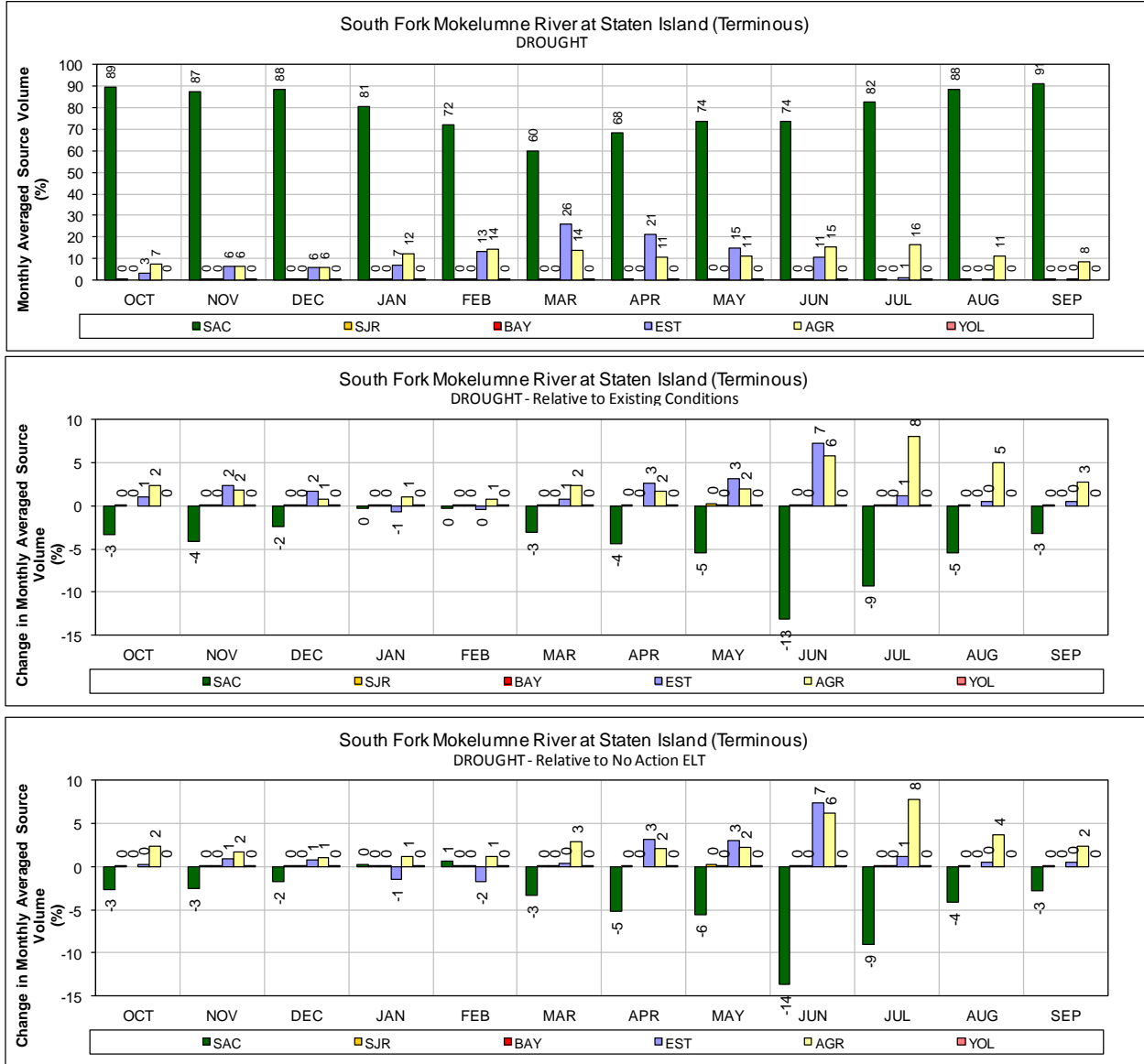
1 **B.4.2.3 Alternative 4A ELT Scenario H4**



2  
3 **Figure B.4-45. ALT 4A Scenario H4 – Mokelumne River (South Fork) at Staten Island for ALL Years (1976–1991)**

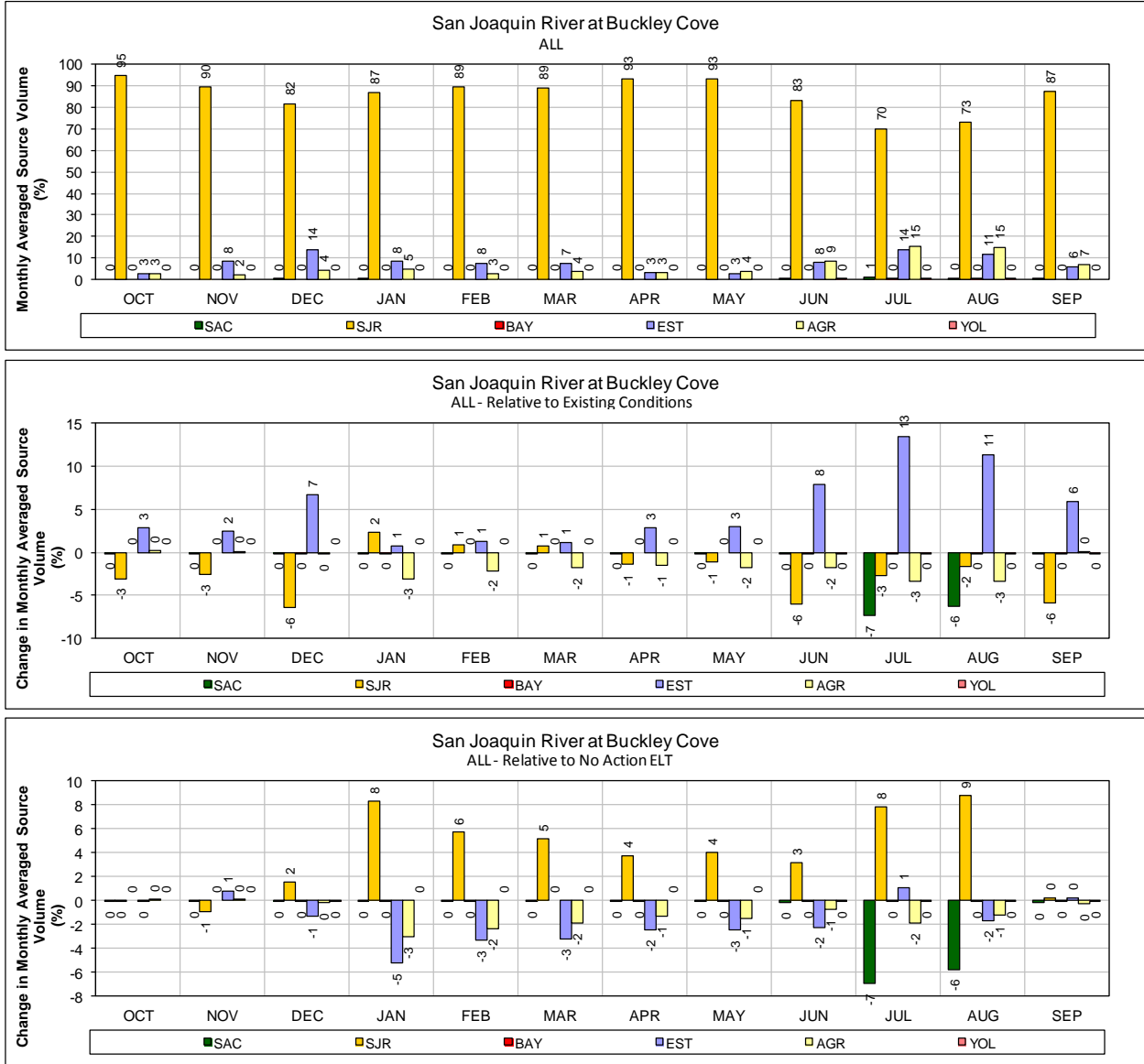
4  
5 Monthly average source volume (top figure) and change in monthly average source volume relative to  
6 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
7





1  
 2 **Figure B.4-46. ALT 4A Scenario H4 – Mokelumne River (South Fork) at Staten Island for DROUGHT**  
 3 **Years (1987–1991)**

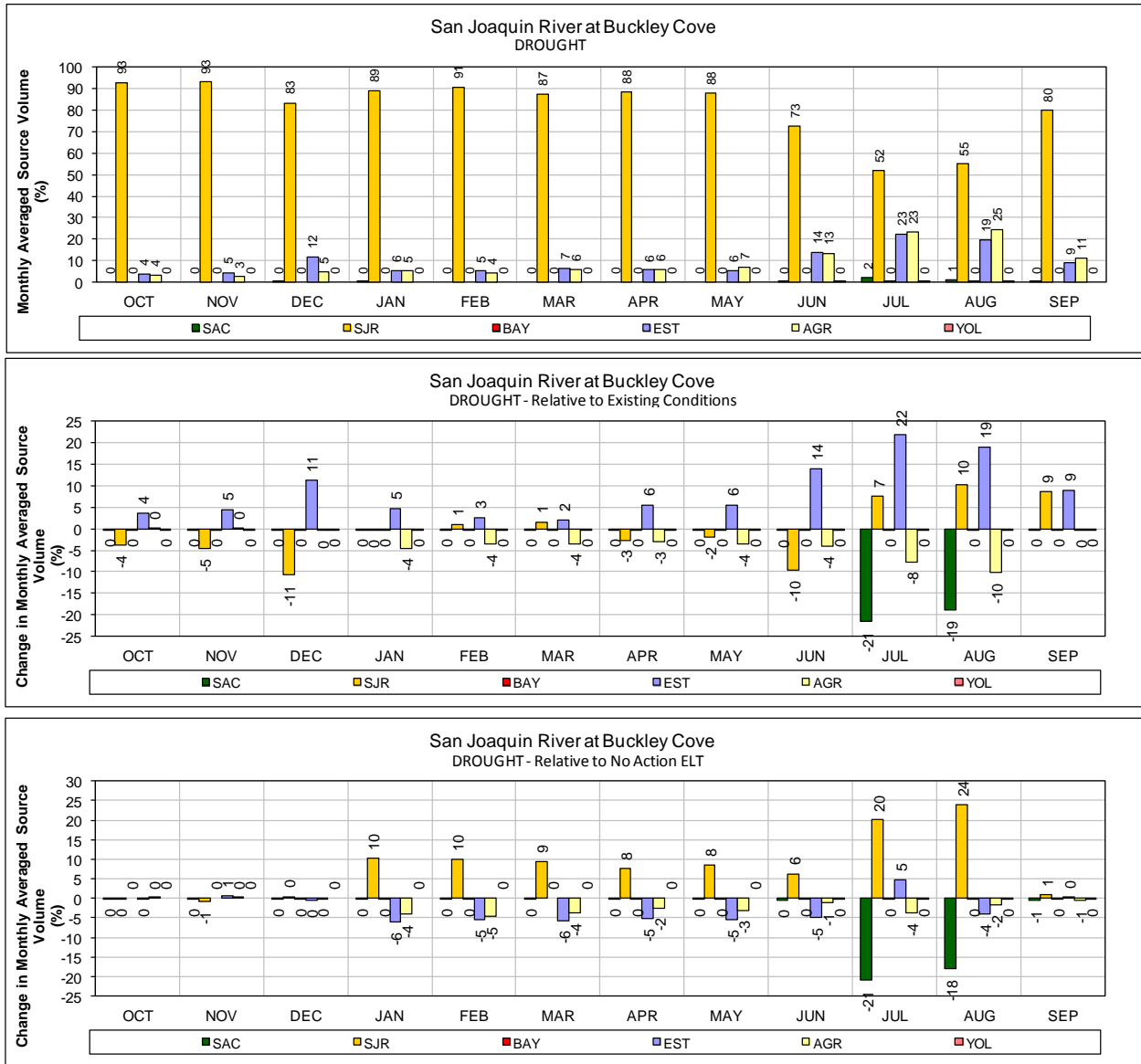
4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 6



1  
2 **Figure B.4-47. ALT 4A Scenario H4 – San Joaquin River at Buckley Cove for ALL Years (1976–1991)**

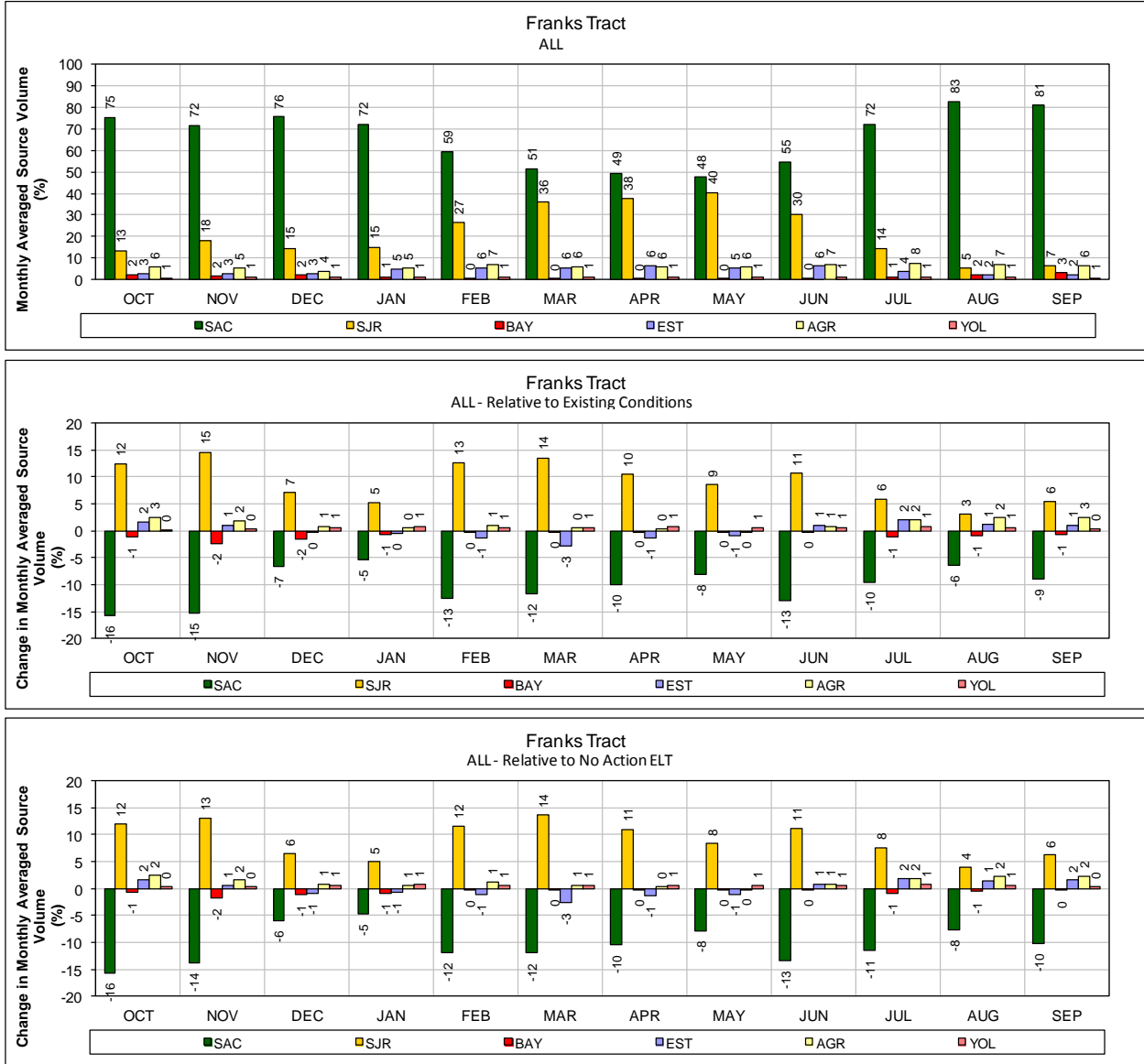
3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



1  
 2 **Figure B.4-48. ALT 4A Scenario H4 – San Joaquin River at Buckley Cove for DROUGHT Years (1987–**  
 3 **1991)**

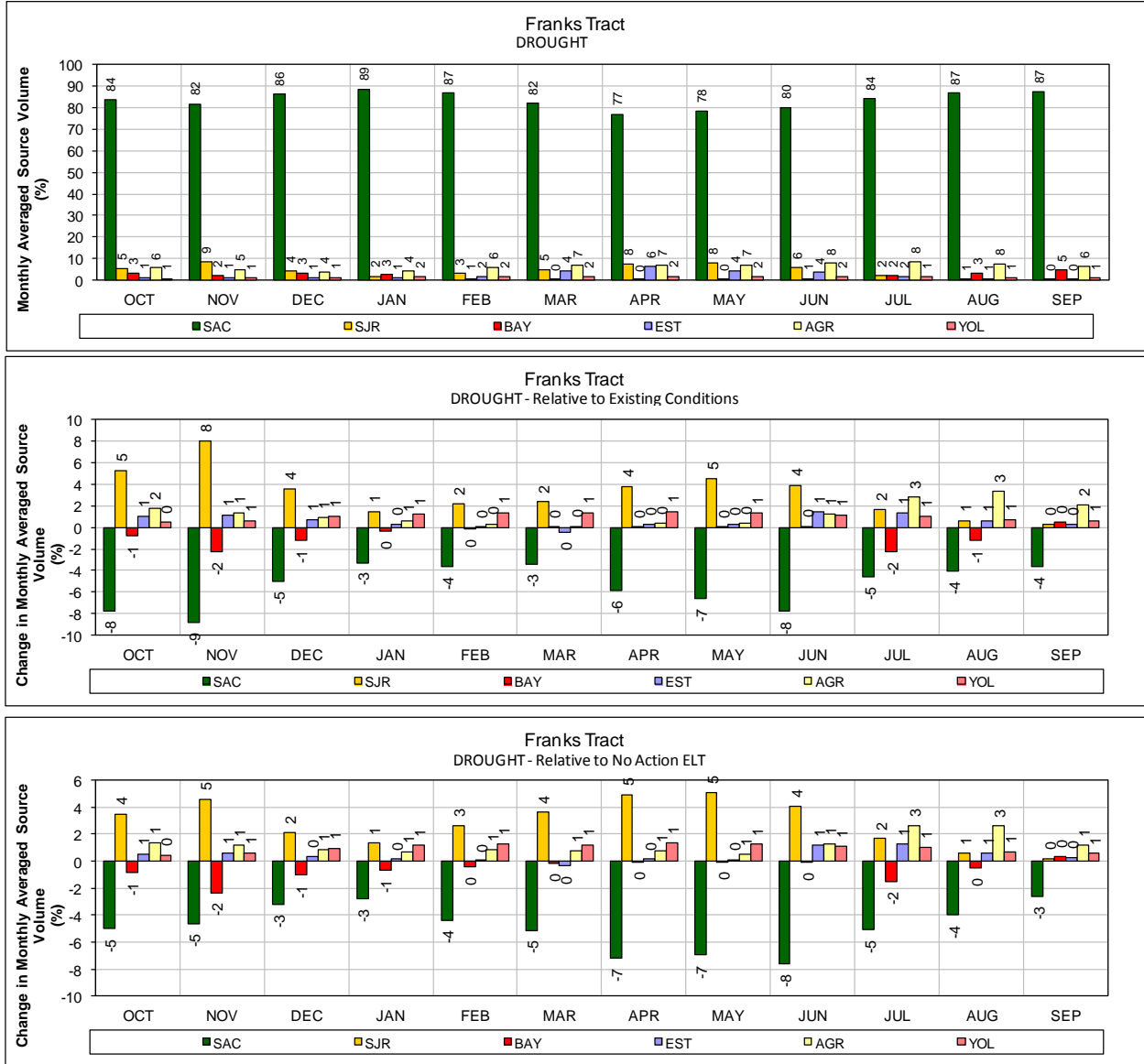
4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 6



1  
2 **Figure B.4-49. ALT 4A Scenario H4 – Franks Tract for ALL Years (1976–1991)**

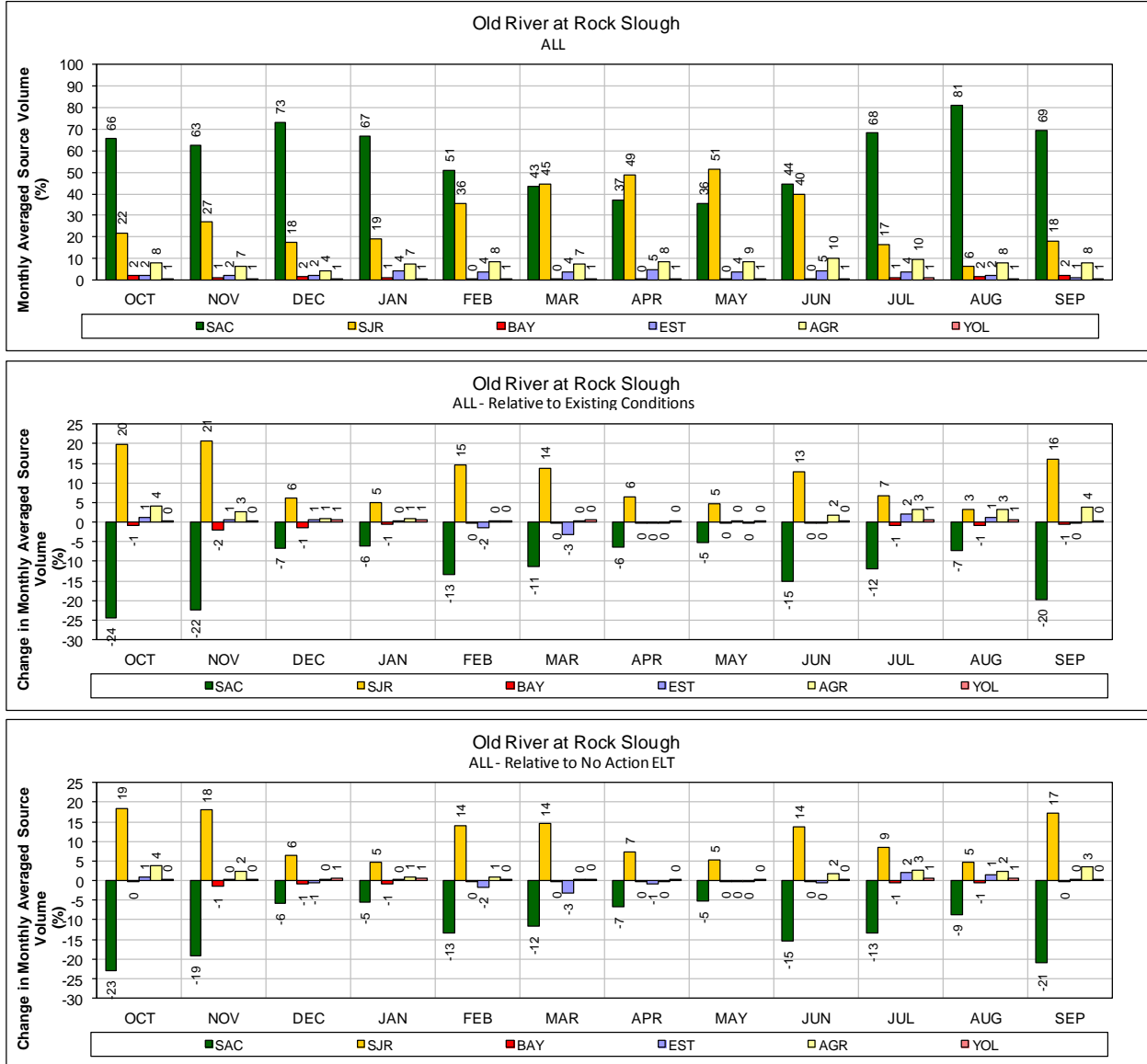
3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



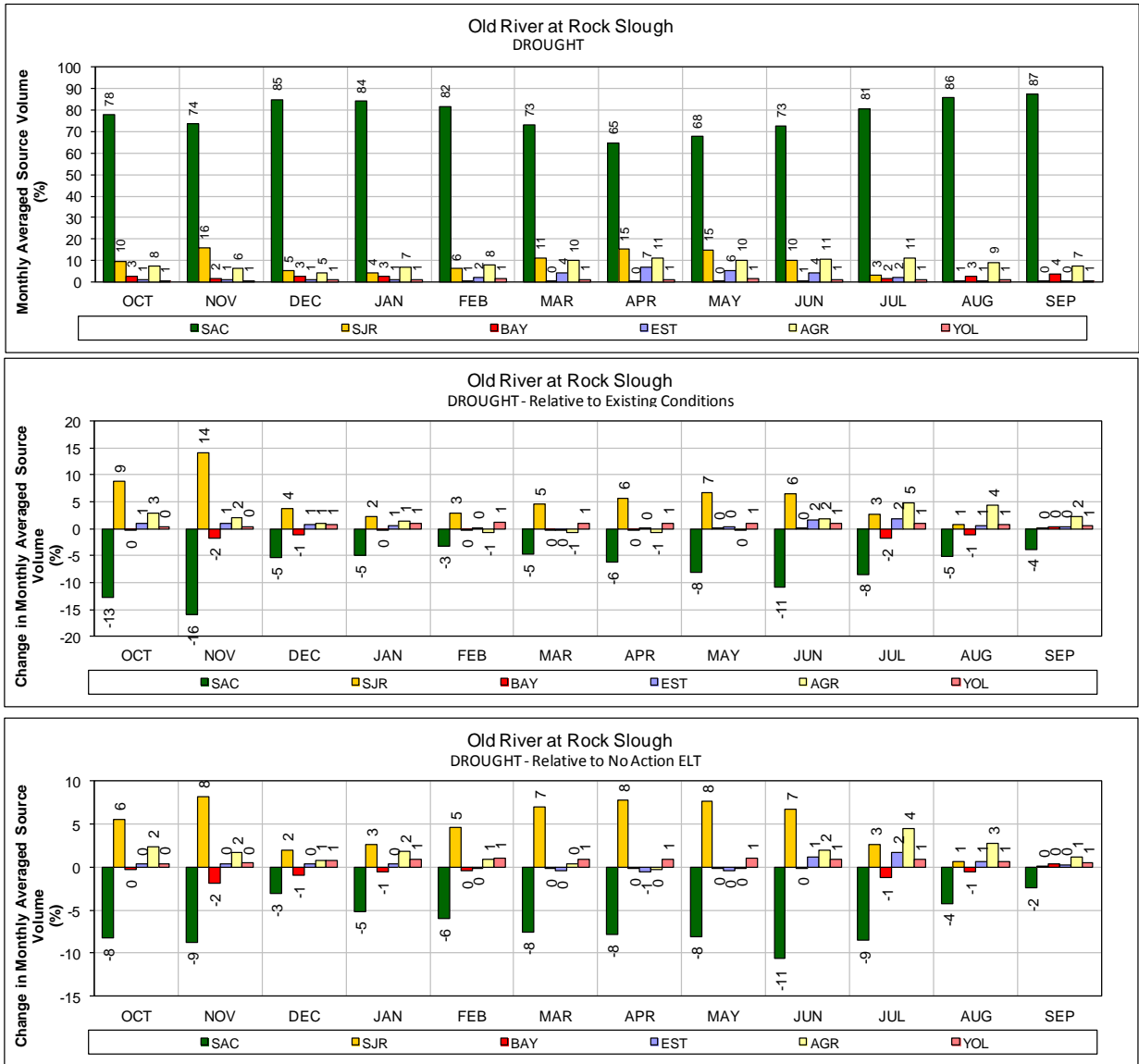
1  
2 **Figure B.4-50. ALT 4A Scenario H4 – Franks Tract for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
5



1  
2 **Figure B.4-51. ALT 4A Scenario H4 – Old River at Rock Slough for ALL Years (1976–1991)**

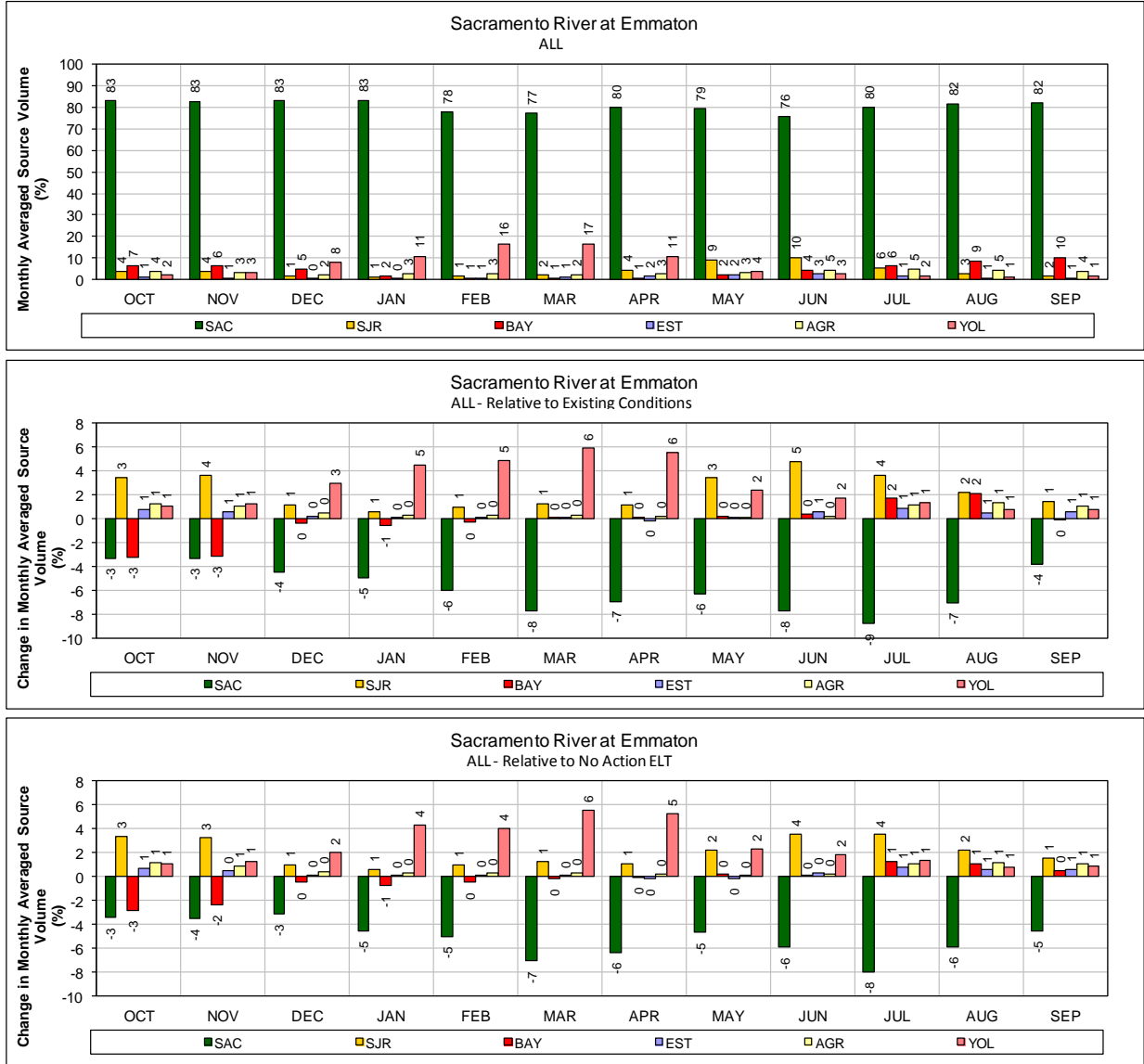
3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
5



1  
2 **Figure B.4-52. ALT 4A Scenario H4 – Old River at Rock Slough for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5

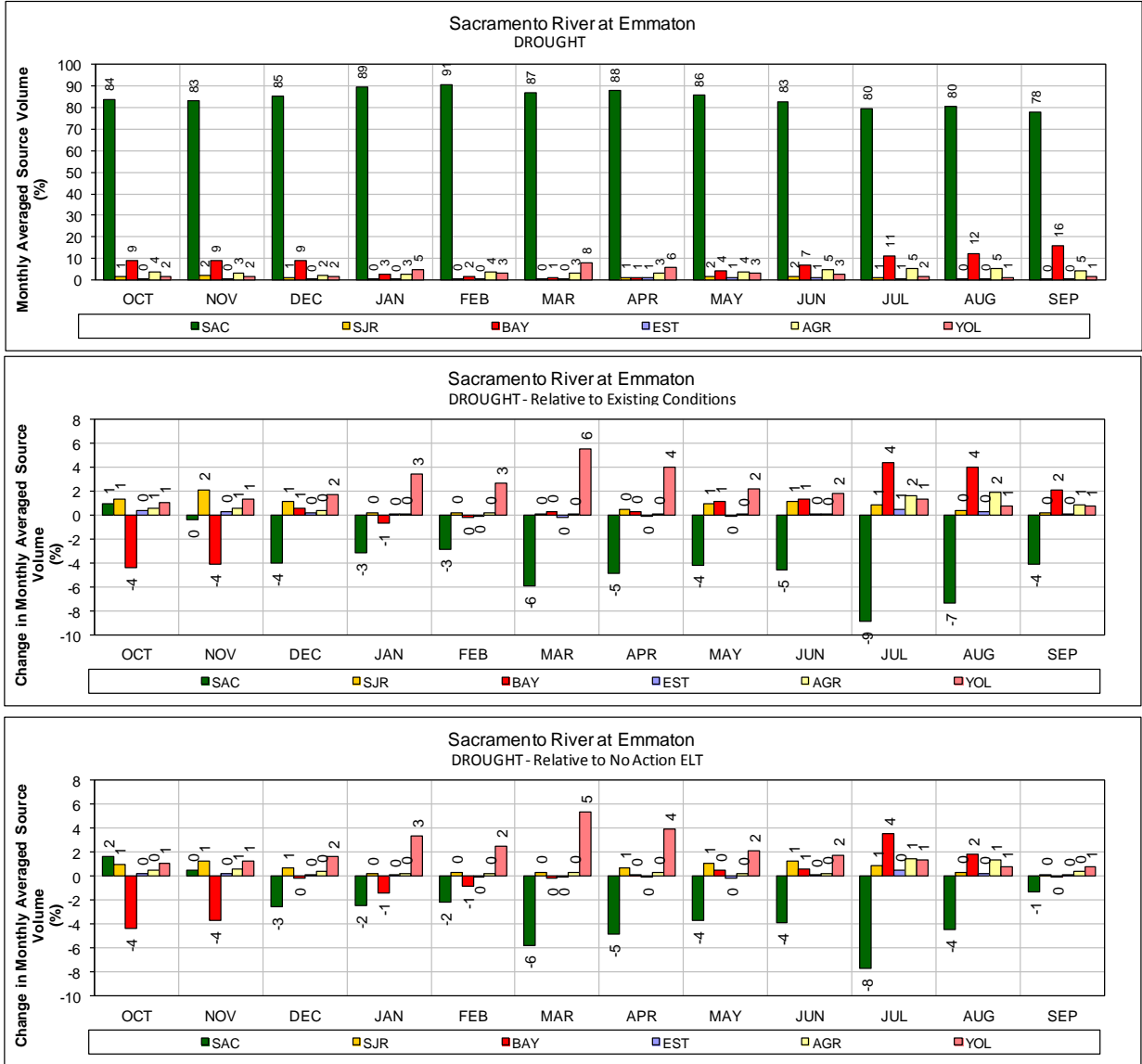


1  
2 **Figure B.4-53. ALT 4A Scenario H4 – Sacramento River at Emmaton for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5

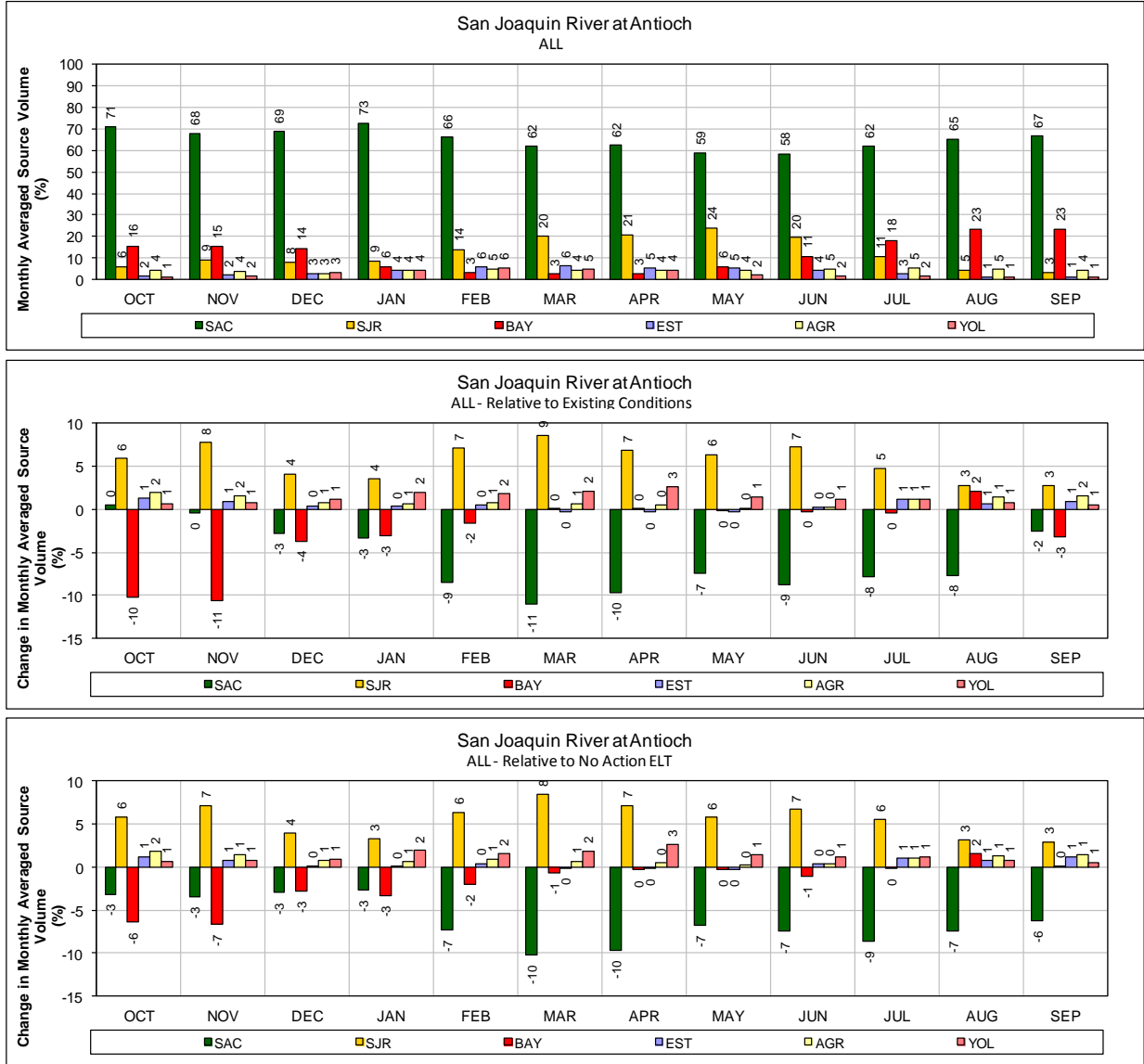




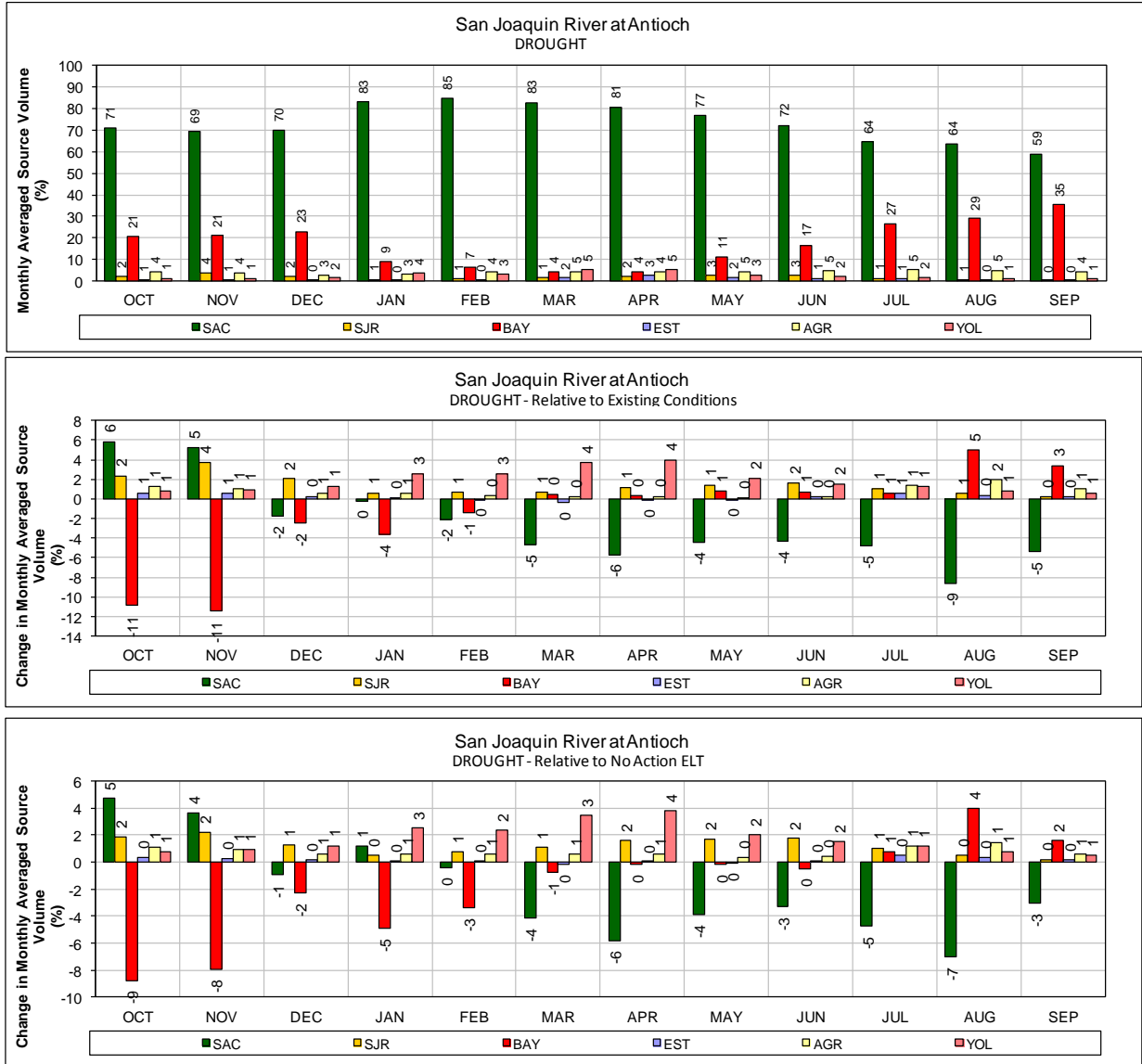
1  
2 **Figure B.4-54. ALT 4A Scenario H4 – Sacramento River at Emmaton for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



1  
 2 **Figure B.4-55. ALT 4A Scenario H4 – San Joaquin River at Antioch for ALL Years (1976–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



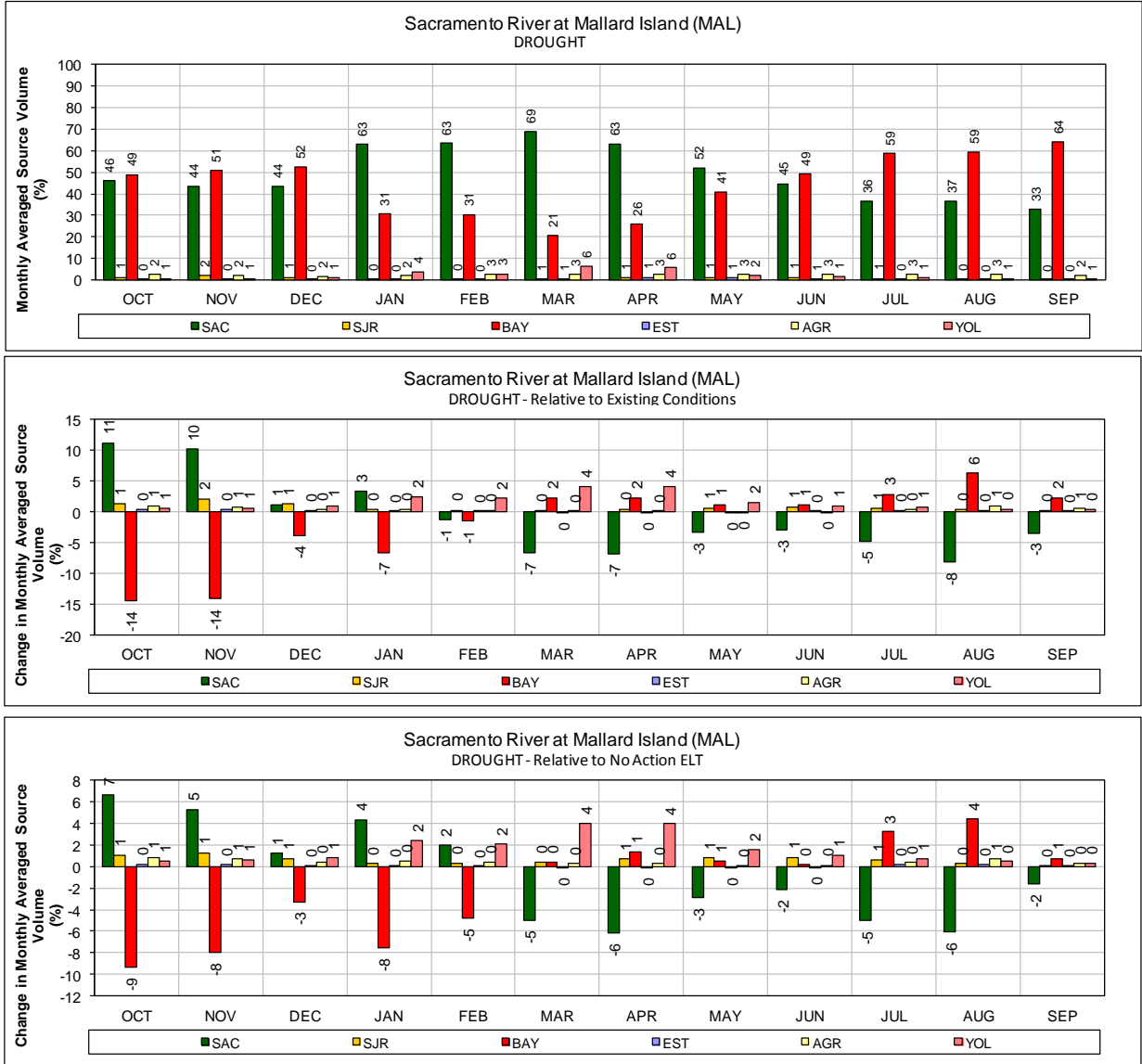
1  
2 **Figure B.4-56. ALT 4A Scenario H4 – San Joaquin River at Antioch for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5

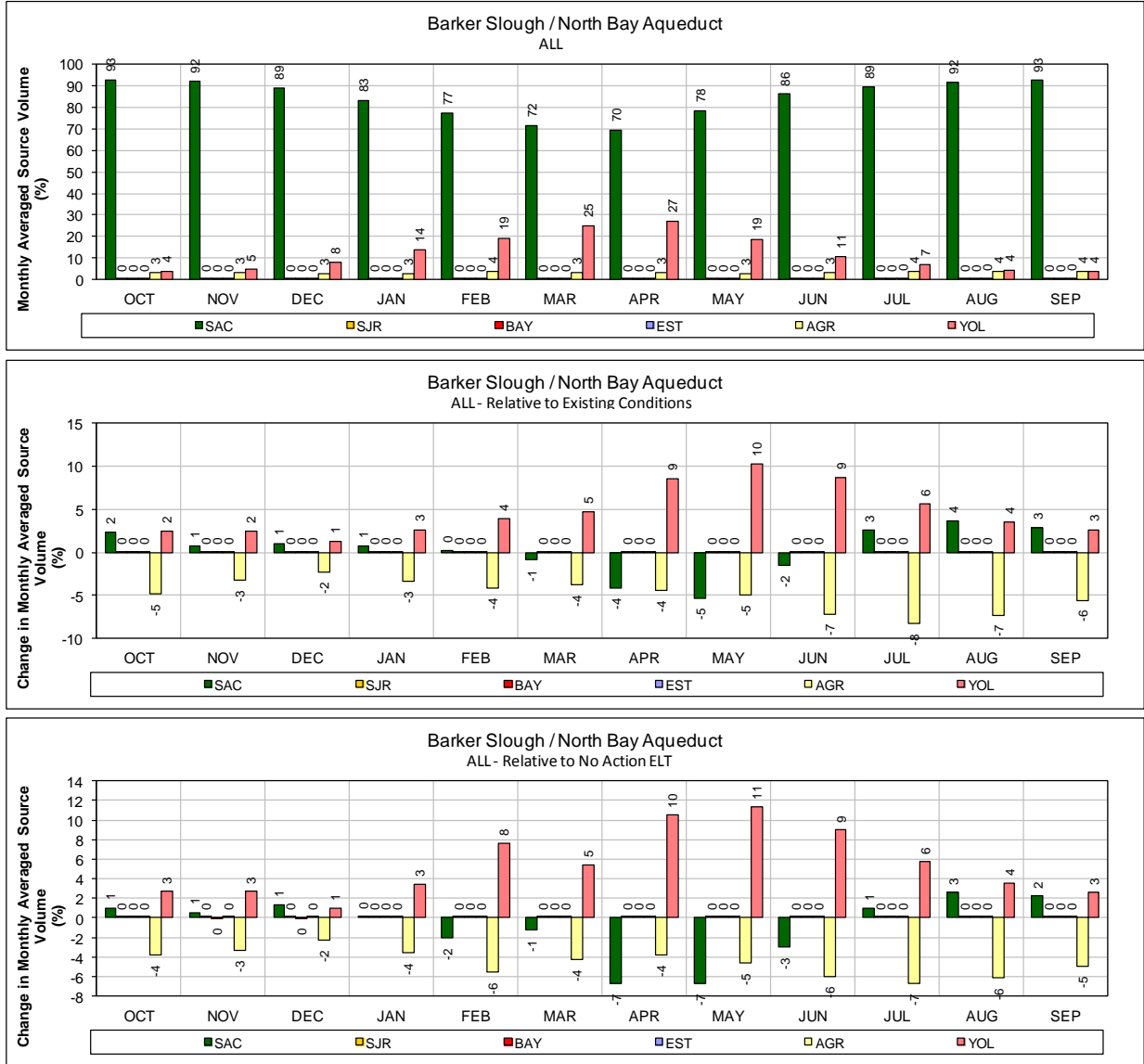


1  
 2 **Figure B.4-57. ALT 4A Scenario H4 – Sacramento River at Mallard Island for ALL Years (1976–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



1  
2 **Figure B.4-58. ALT 4A Scenario H4 – Sacramento River at Mallard Island for DROUGHT Years (1987–**  
3 **1991)**

4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
6

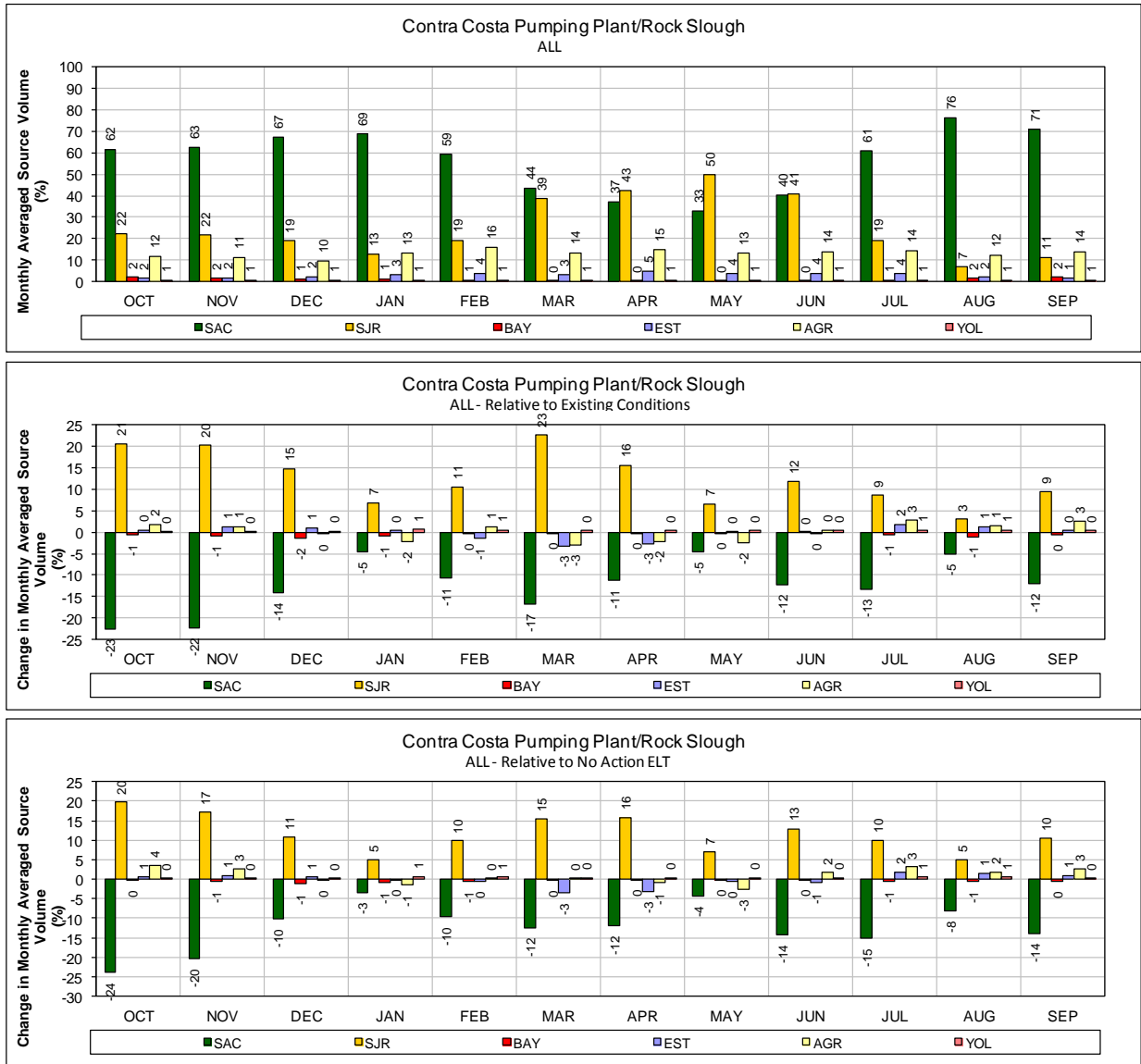


1  
 2 **Figure B.4-59. ALT 4A Scenario H4 – North Bay Aqueduct at Barker Slough Pumping Plant for ALL Years**  
 3 **(1976–1991)**

4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 6



1  
 2 **Figure B.4-60. ALT 4A Scenario H4 – North Bay Aqueduct at Barker Slough Pumping Plant for**  
 3 **DROUGHT Years (1987–1991)**  
 4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 6

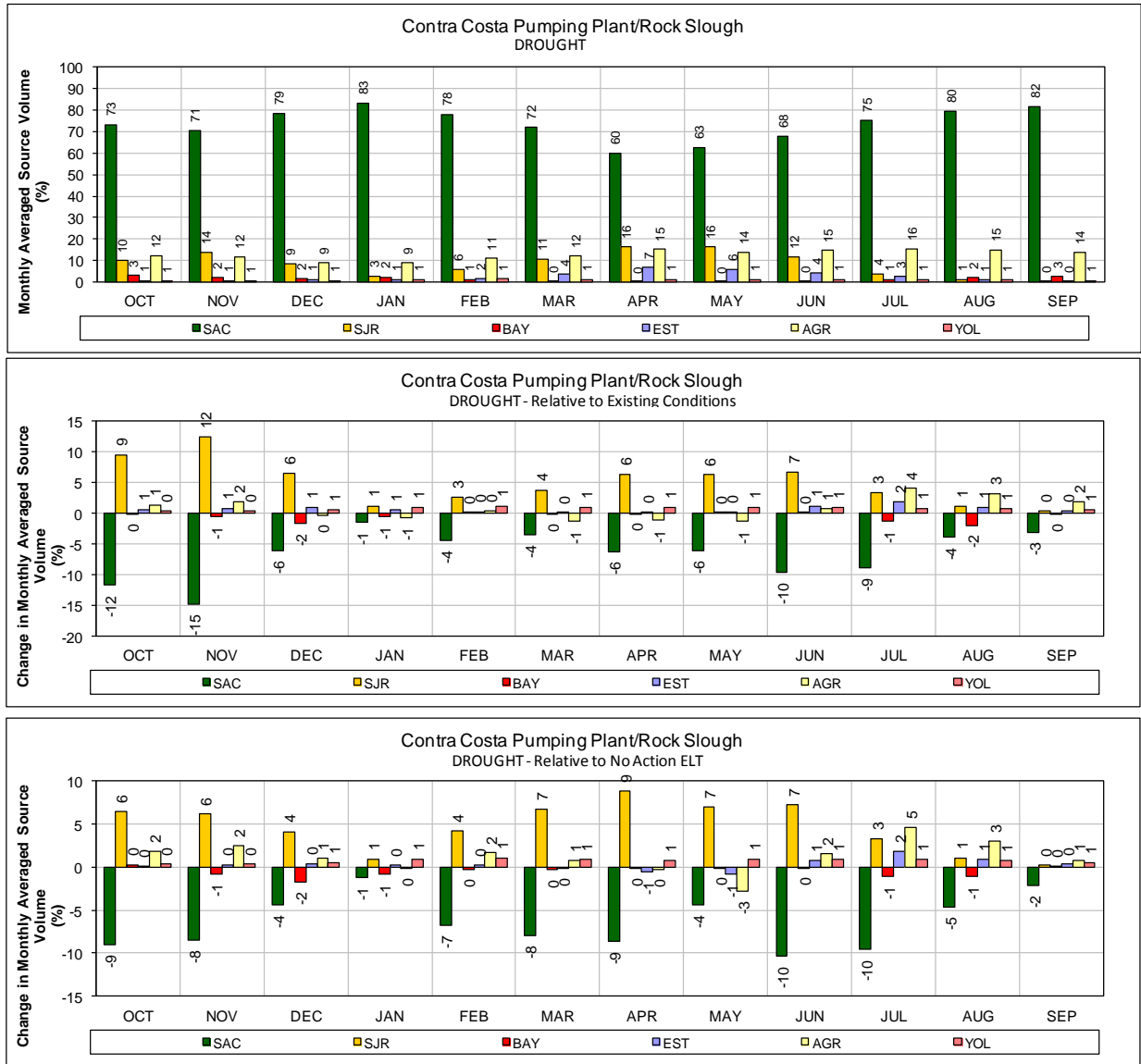


1  
2 **Figure B.4-61. ALT 4A Scenario H4 – Contra Costa Pumping Plant #1 for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5

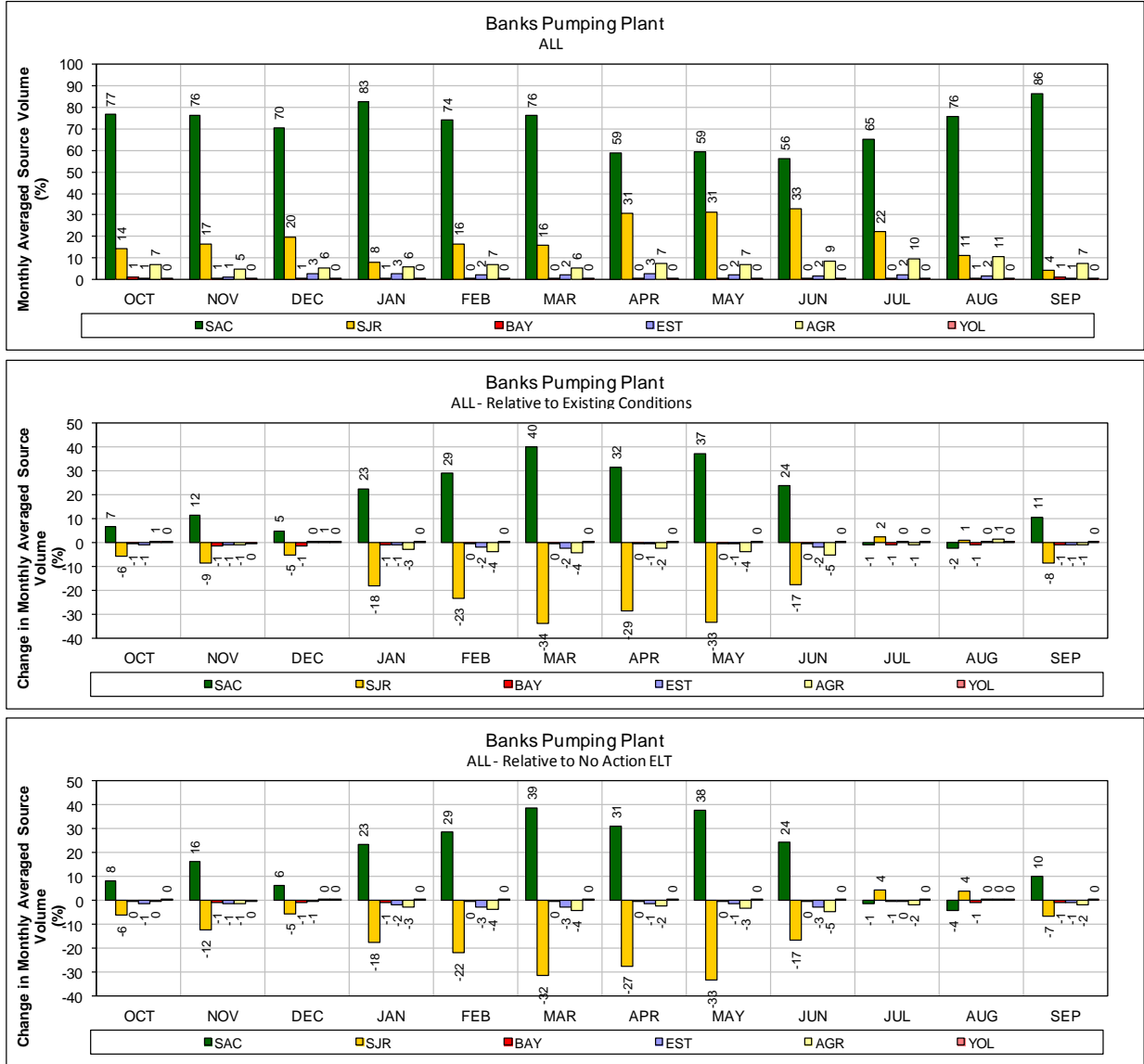




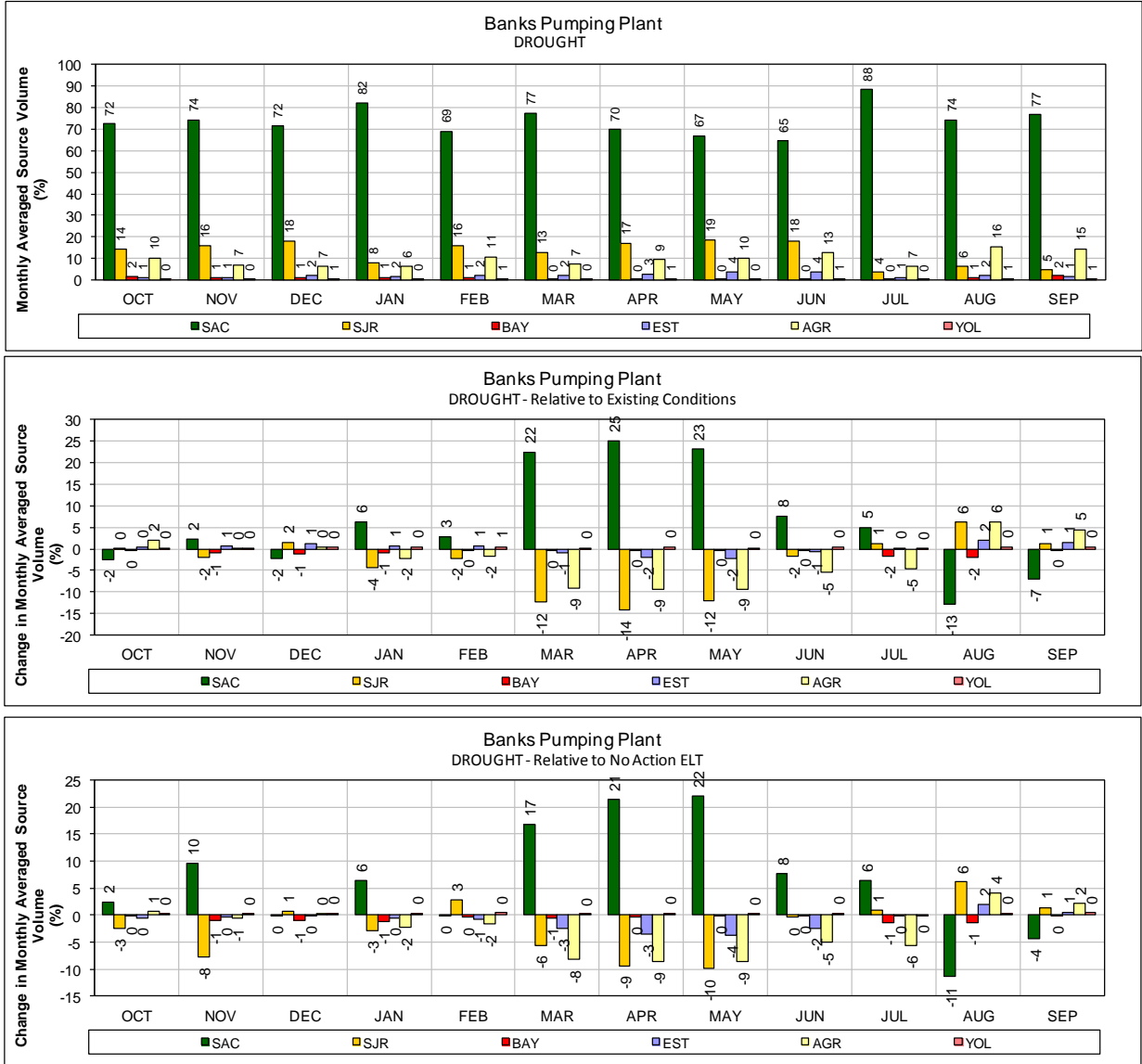
1  
2 **Figure B.4-62. ALT 4A Scenario H4 – Contra Costa Pumping Plant #1 for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

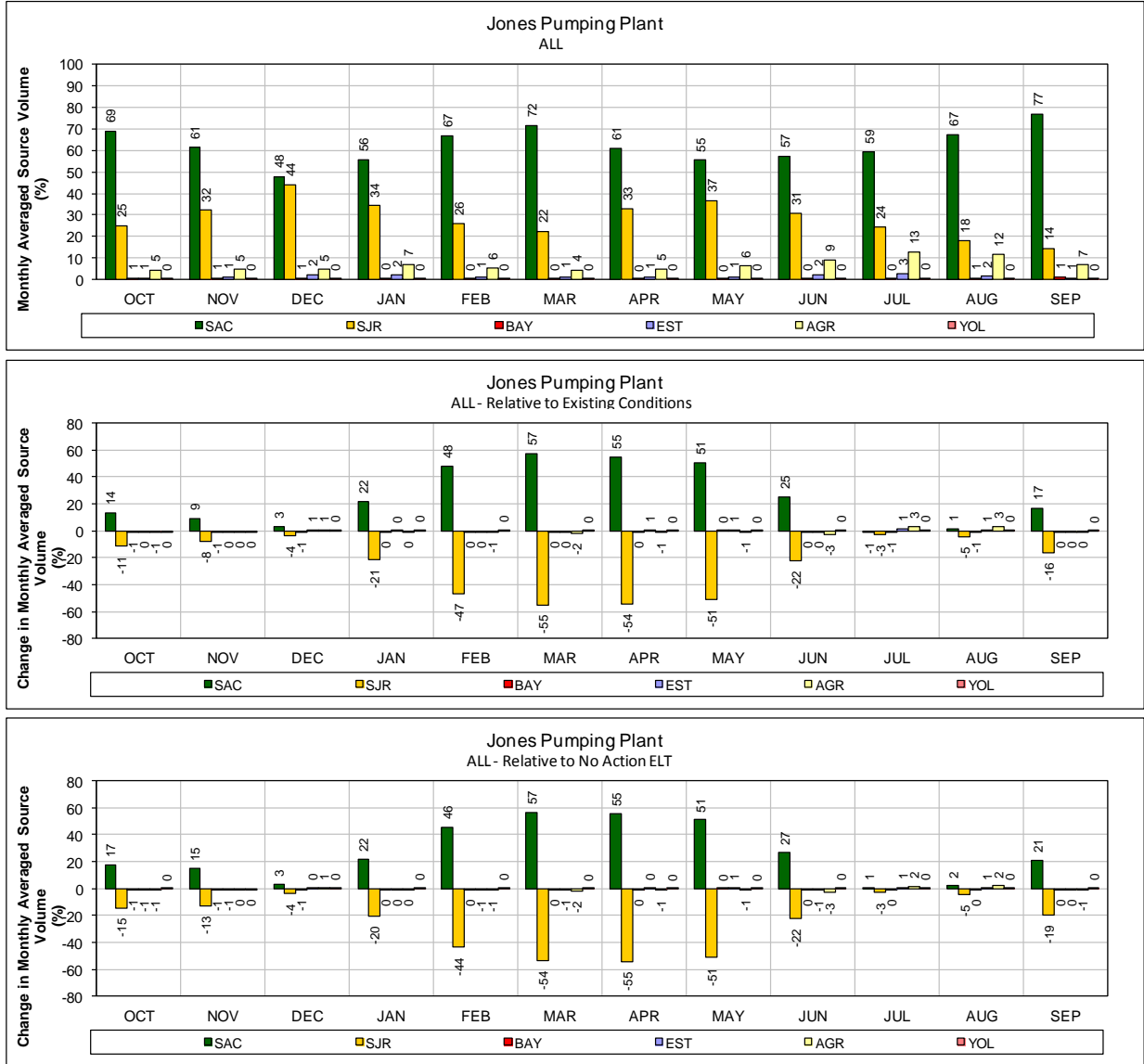
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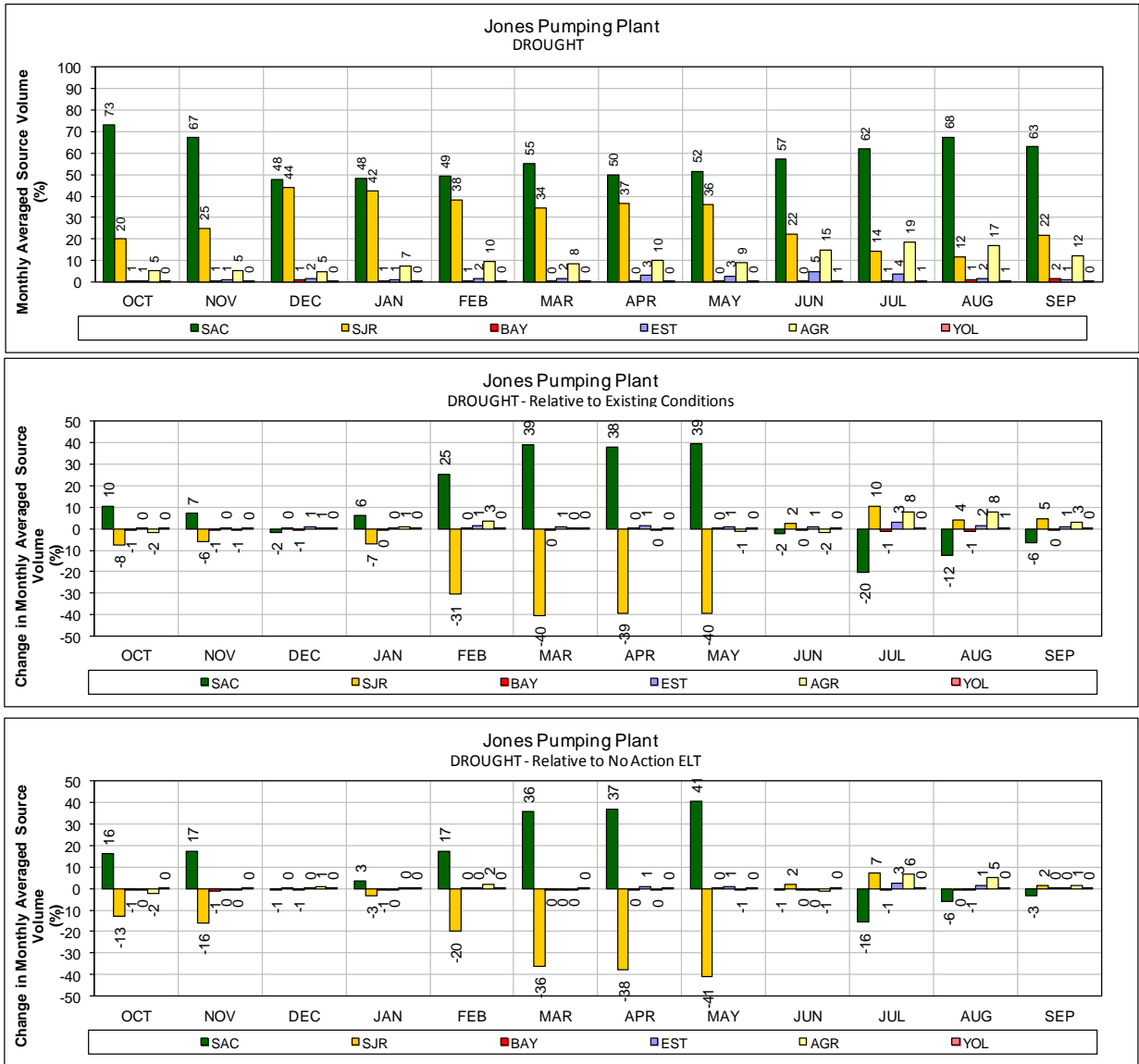
1  
 2 **Figure B.4-63. ALT 4A Scenario H4 – Banks Pumping Plant for ALL Years (1976–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



1  
 2 **Figure B.4-64. ALT 4A Scenario H4 – Banks Pumping Plant for DROUGHT Years (1987–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5

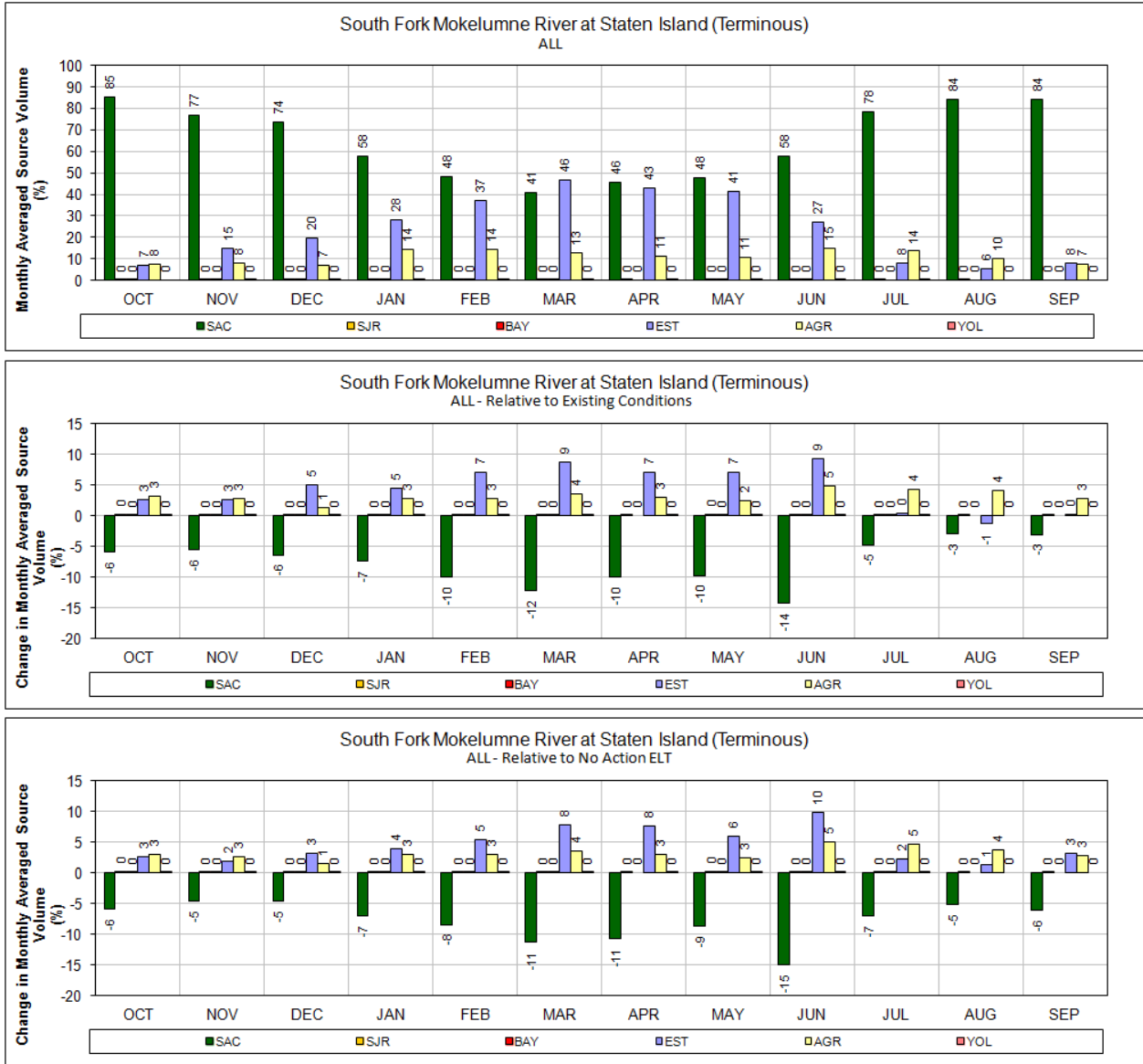


1  
 2 **Figure B.4-65. ALT 4A Scenario H4 – Jones Pumping Plant for ALL Years (1976–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



1  
 2 **Figure B.4-66. ALT 4 Scenario H4 – Jones Pumping Plant for DROUGHT Years (1987–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

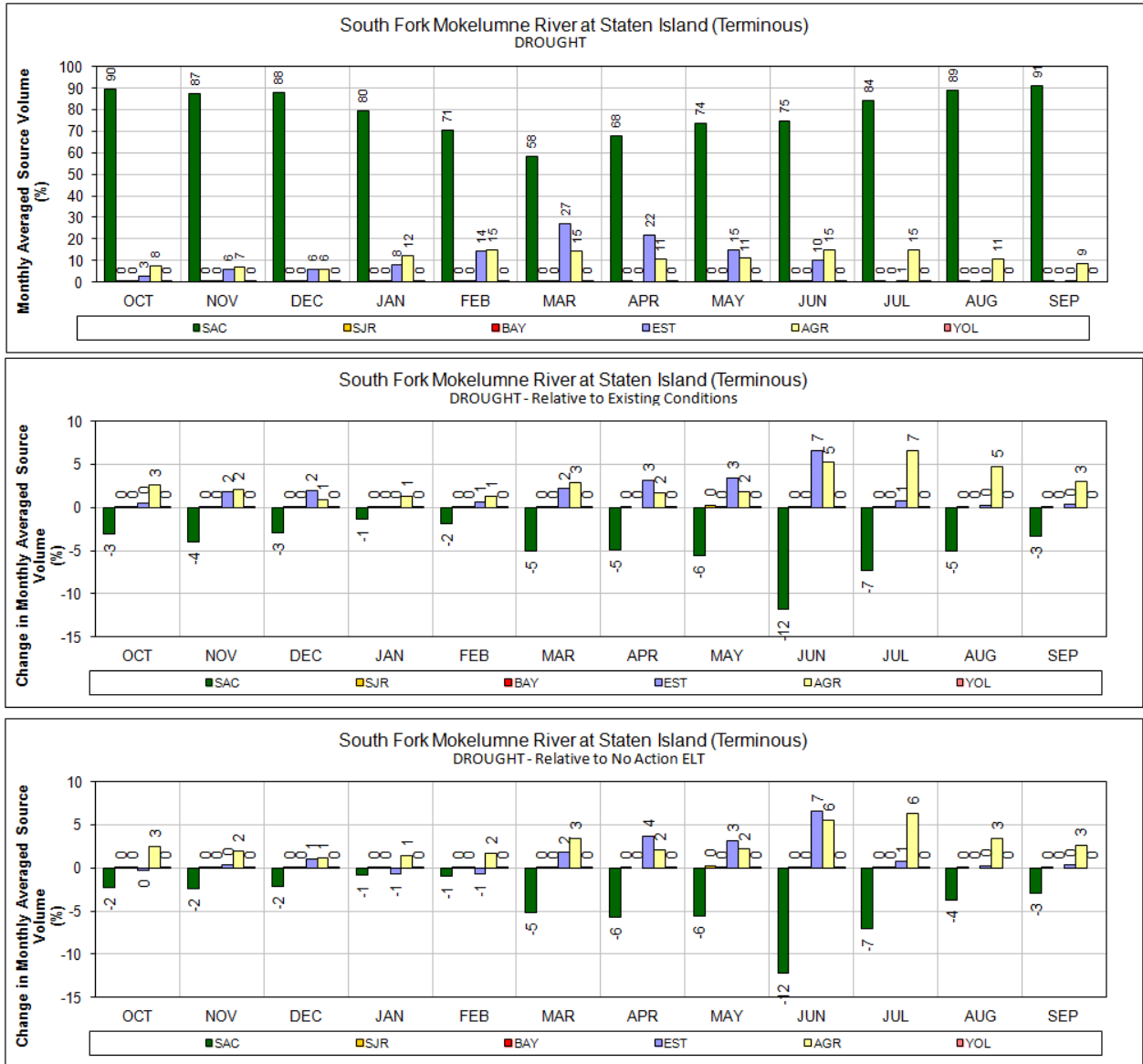
1 **B.4.2.4 Alternative 2D ELT**



2  
3 **Figure B.4-67. ALT 2D – Mokelumne River (South Fork) at Staten Island for ALL Years (1976–1991)**

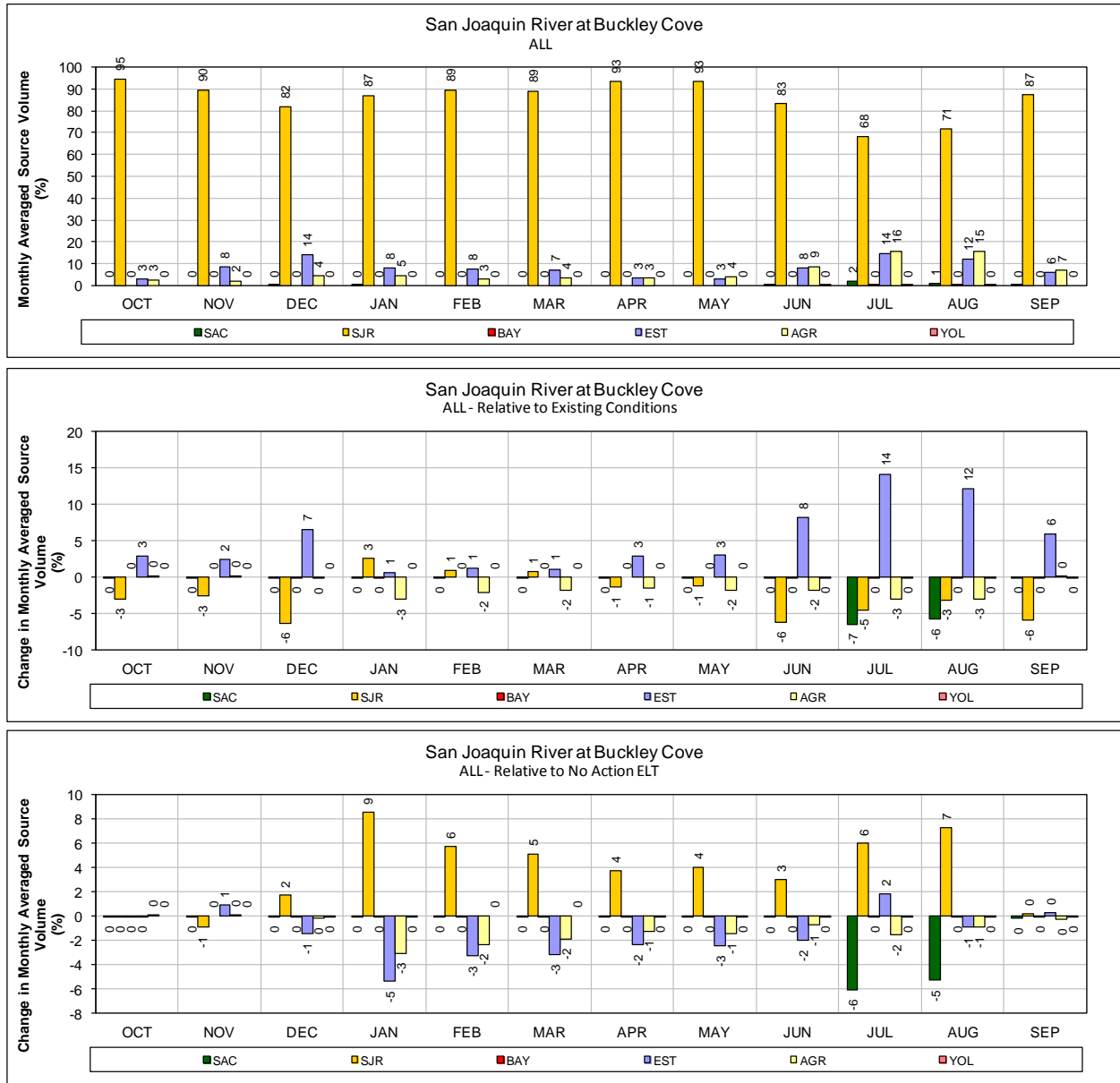
4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

6



1  
2 **Figure B.4-68. ALT 2D – Mokelumne River (South Fork) at Staten Island for DROUGHT Years (1987–**  
3 **1991)**

4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
6

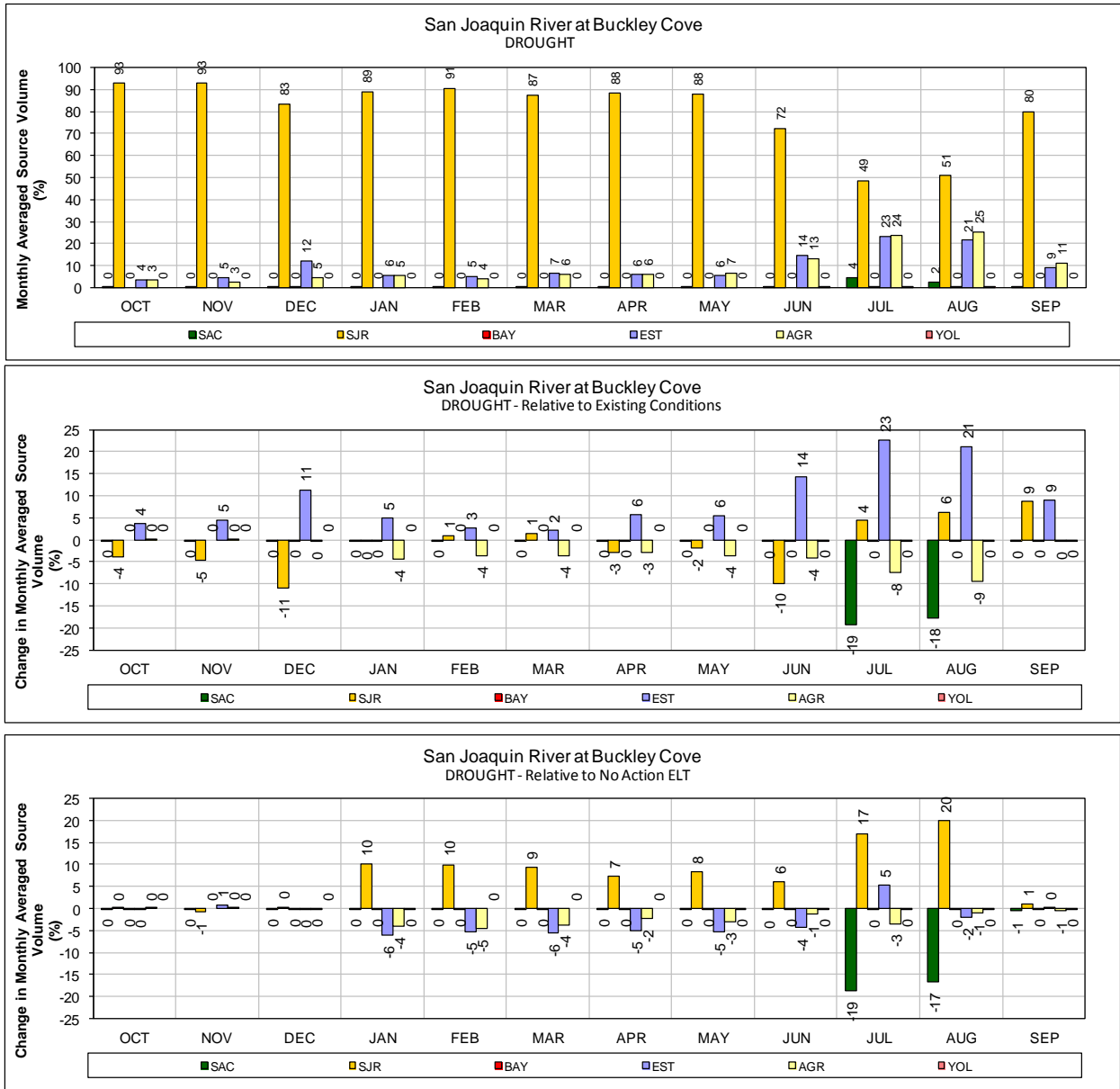


1  
2 **Figure B.4-69. ALT 2D – San Joaquin River at Buckley Cove for ALL Years (1976–1991)**

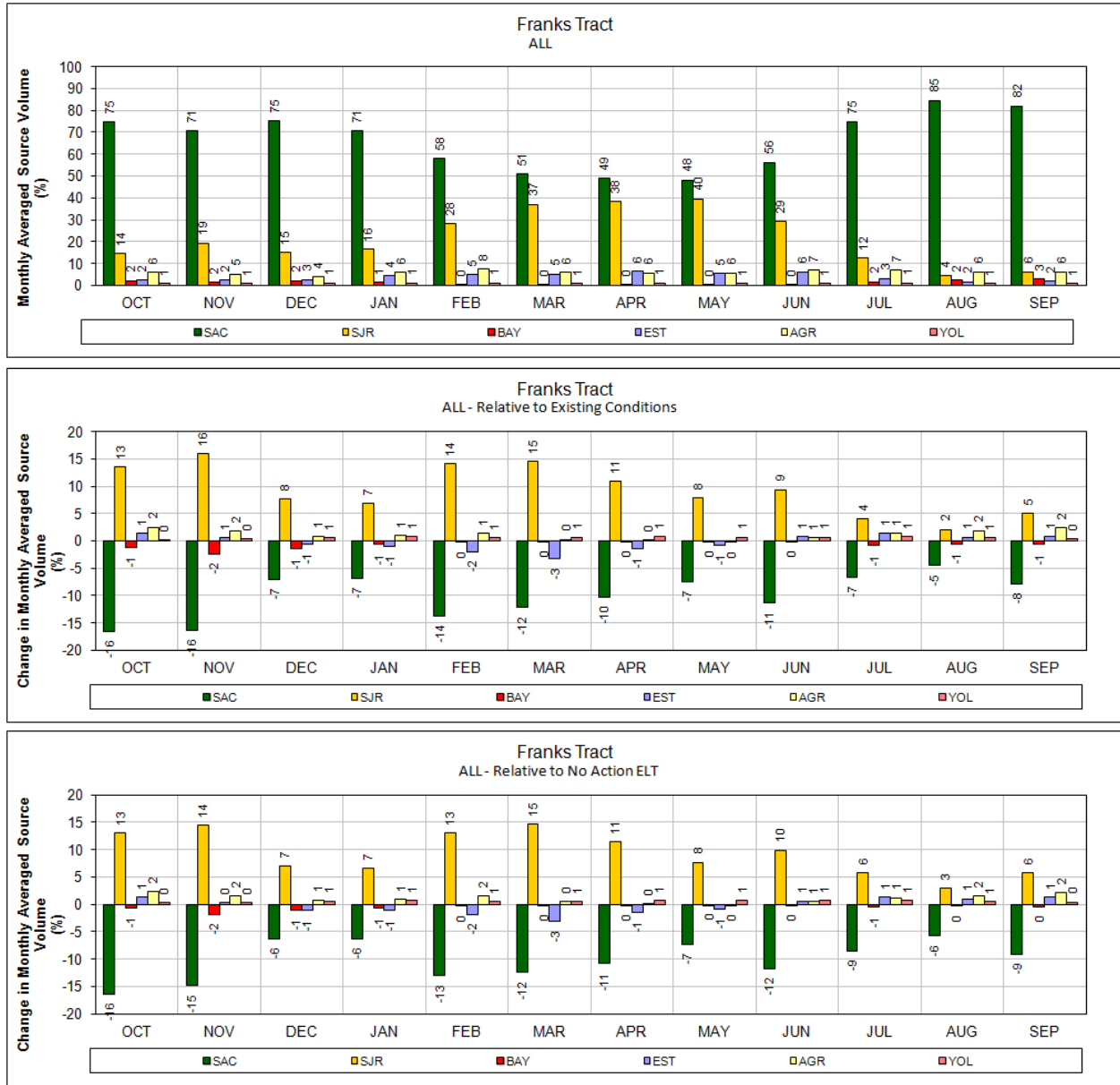
3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5





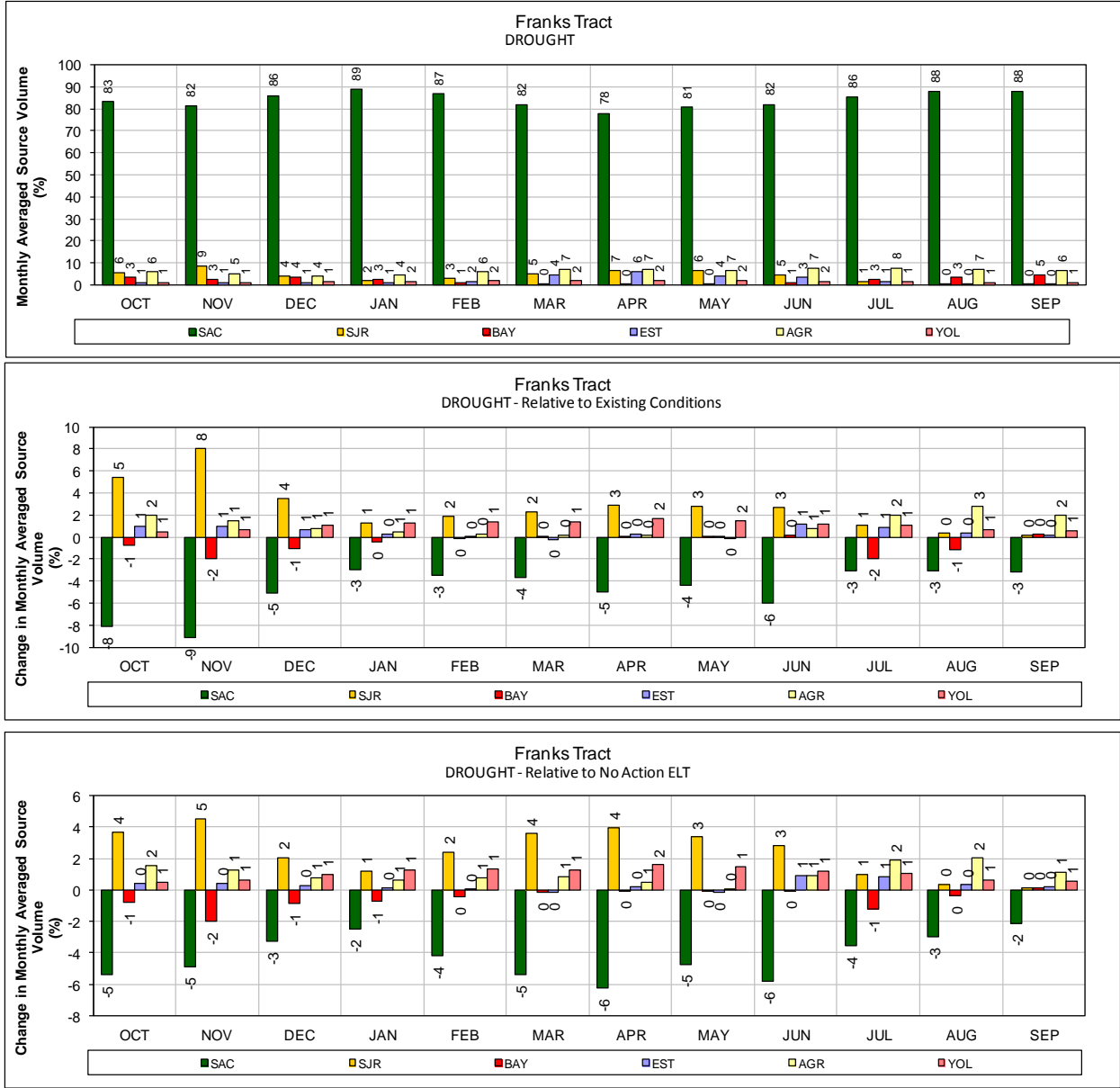
1  
 2 **Figure B.4-70. ALT 2D – San Joaquin River at Buckley Cove for DROUGHT Years (1987–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



1  
2 **Figure B.4-71. ALT 2D – Franks Tract for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

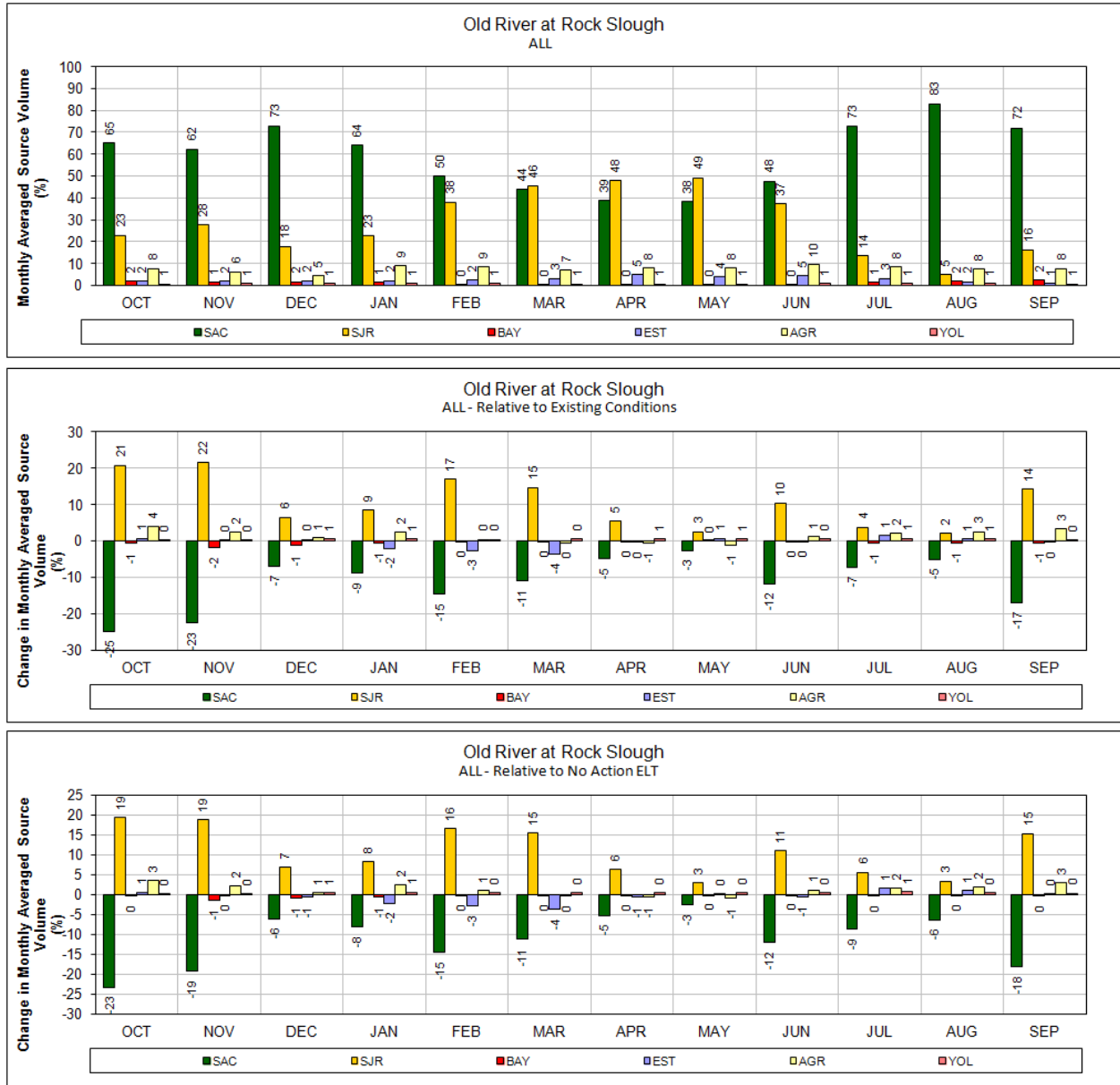
5



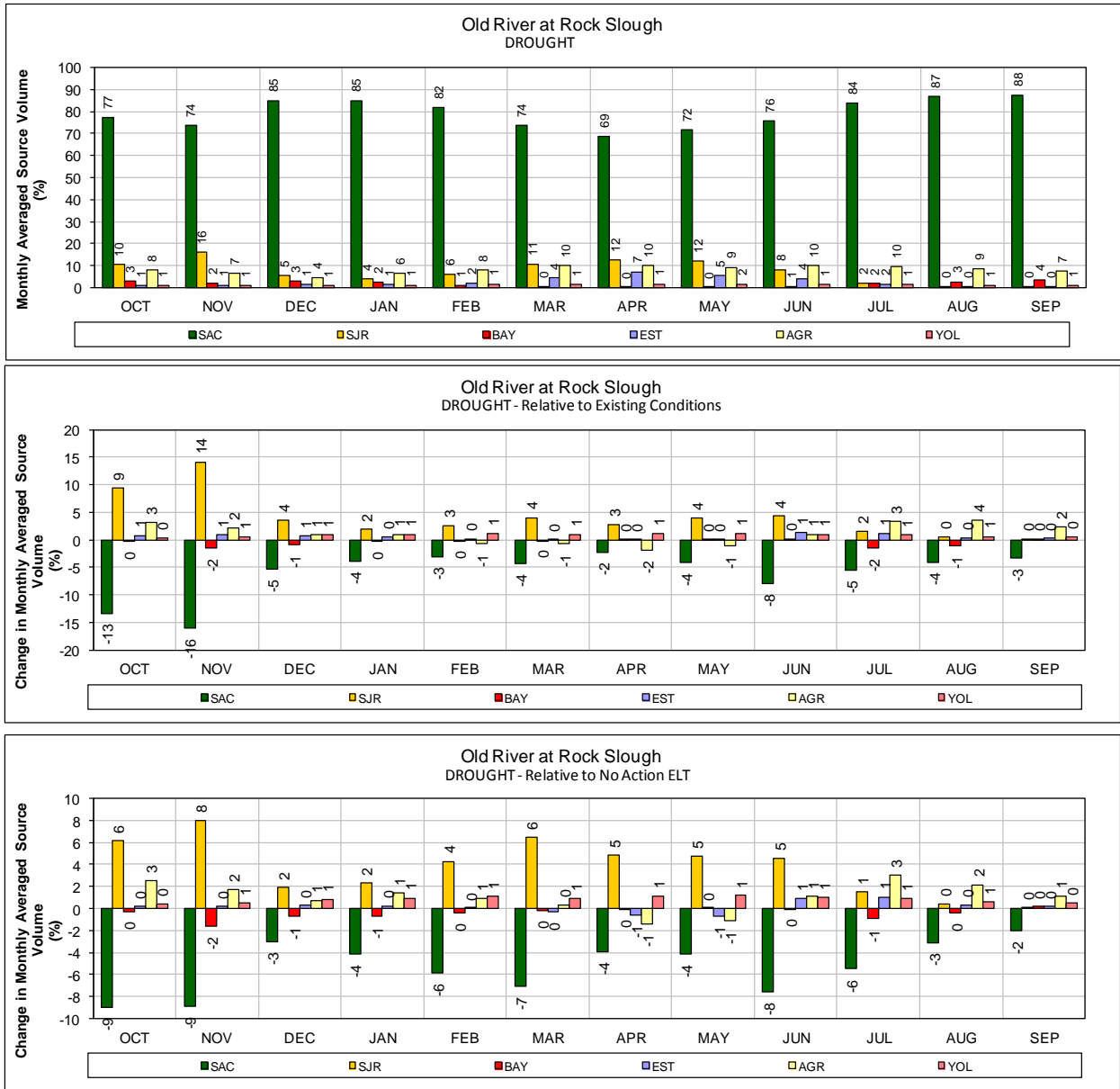
1  
2 **Figure B.4-72. ALT 2D – Franks Tract for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



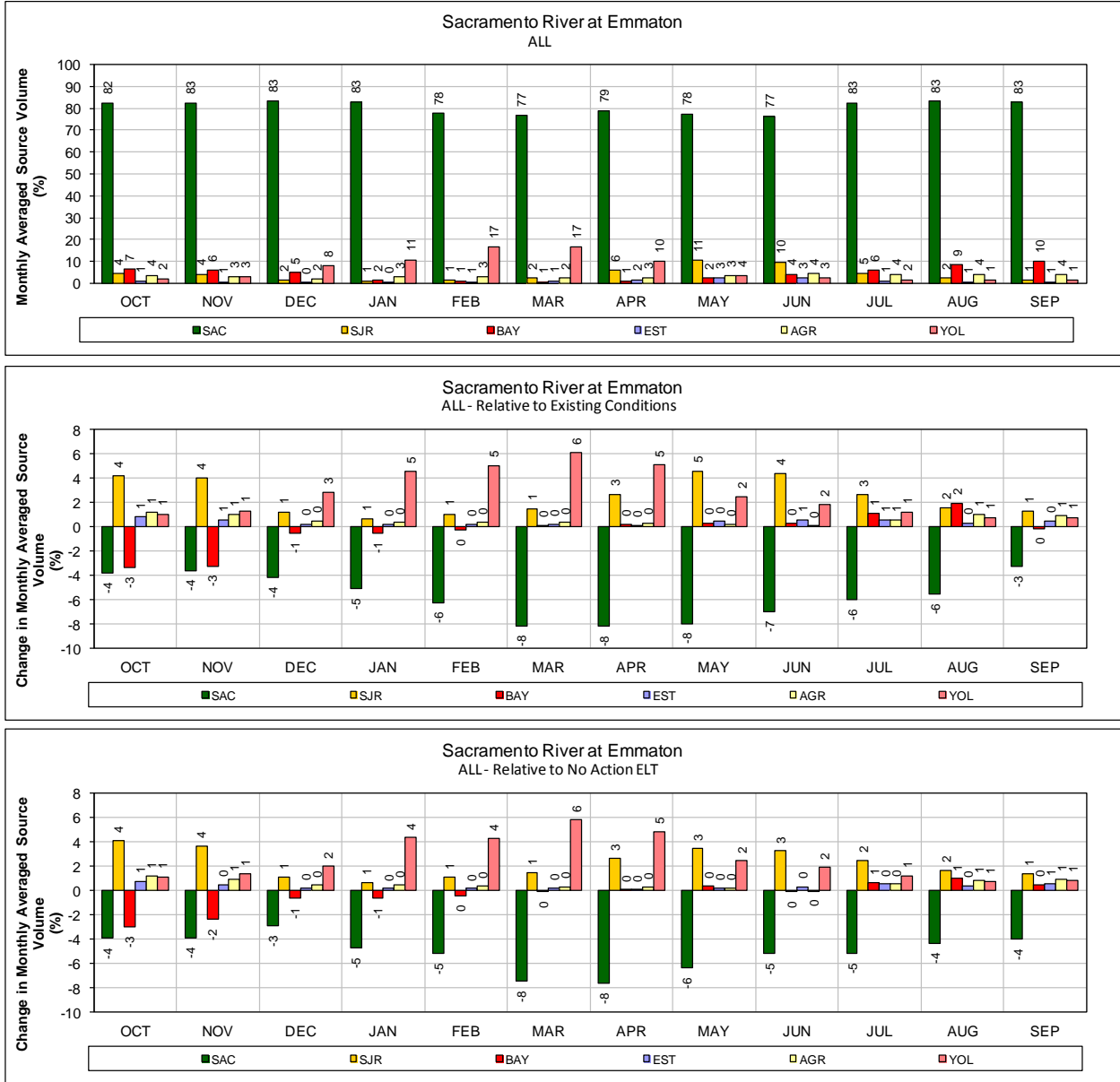
1  
 2 **Figure B.4-73. ALT 2D – Old River at Rock Slough for ALL Years (1976–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



1  
2 **Figure B.4-74. ALT 2D – Old River at Rock Slough for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

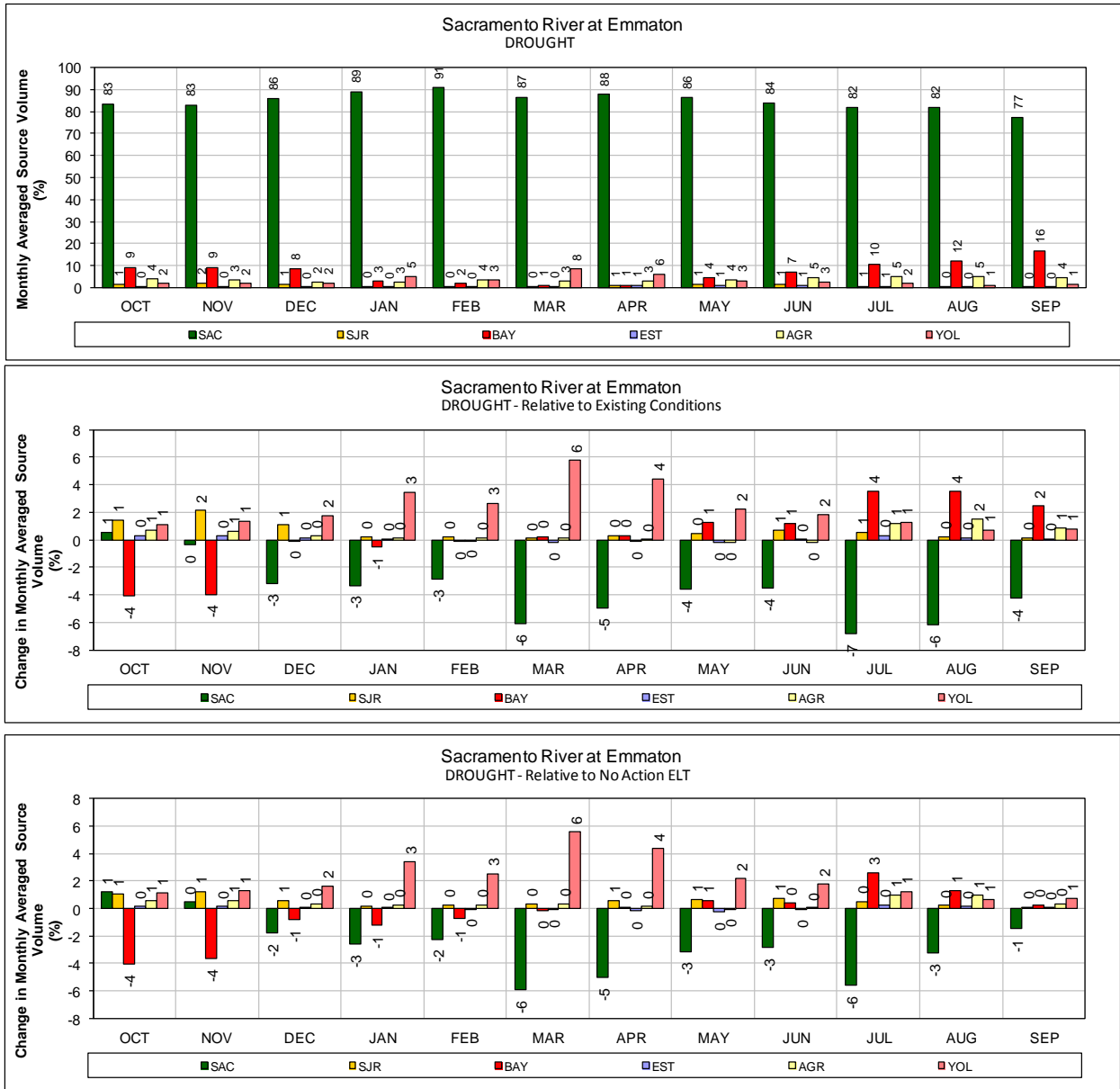
5



1  
2 **Figure B.4-75. ALT 2D – Sacramento River at Emmaton for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

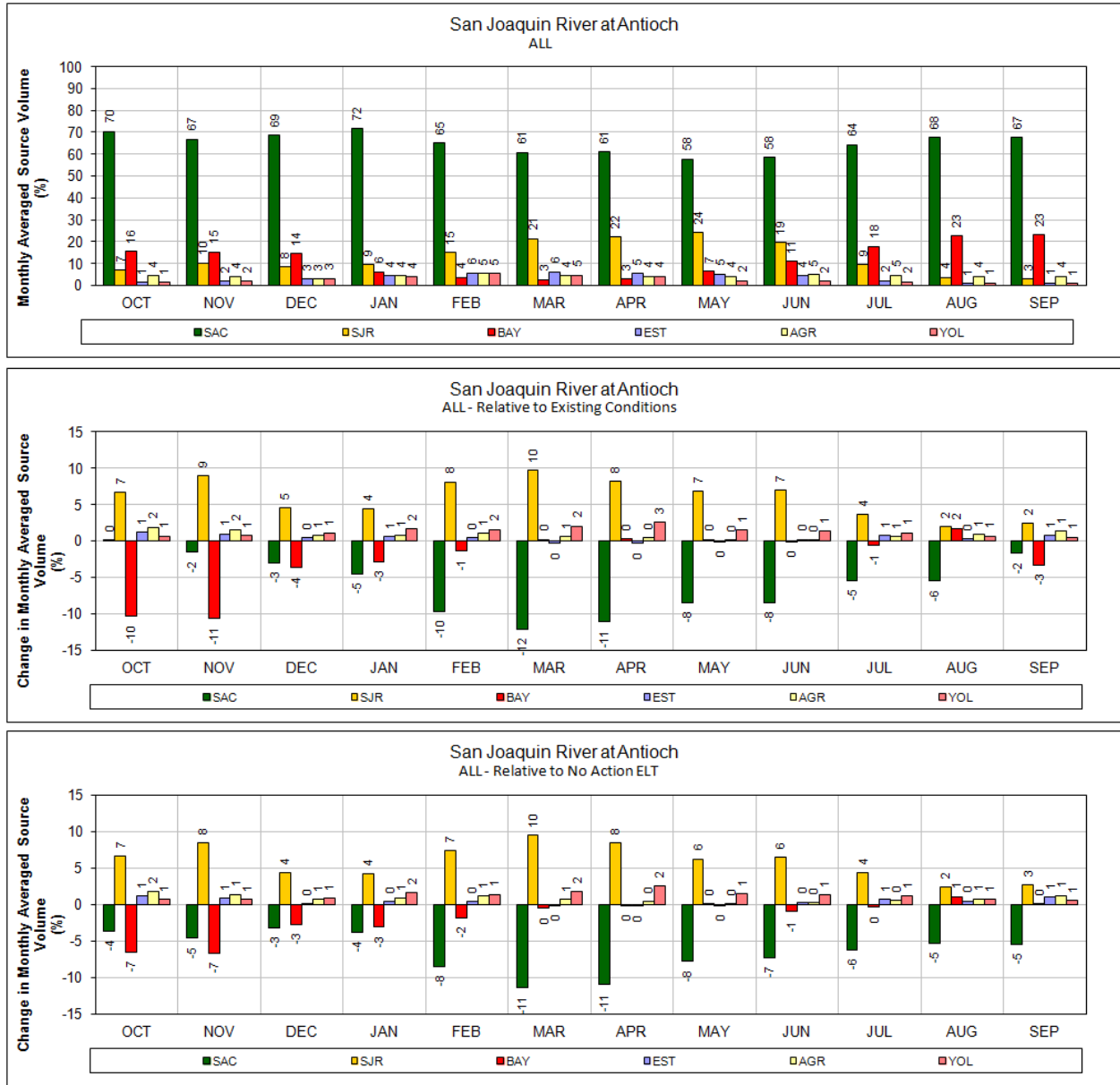
5



1  
2 **Figure B.4-76. ALT 2D – Sacramento River at Emmaton for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5

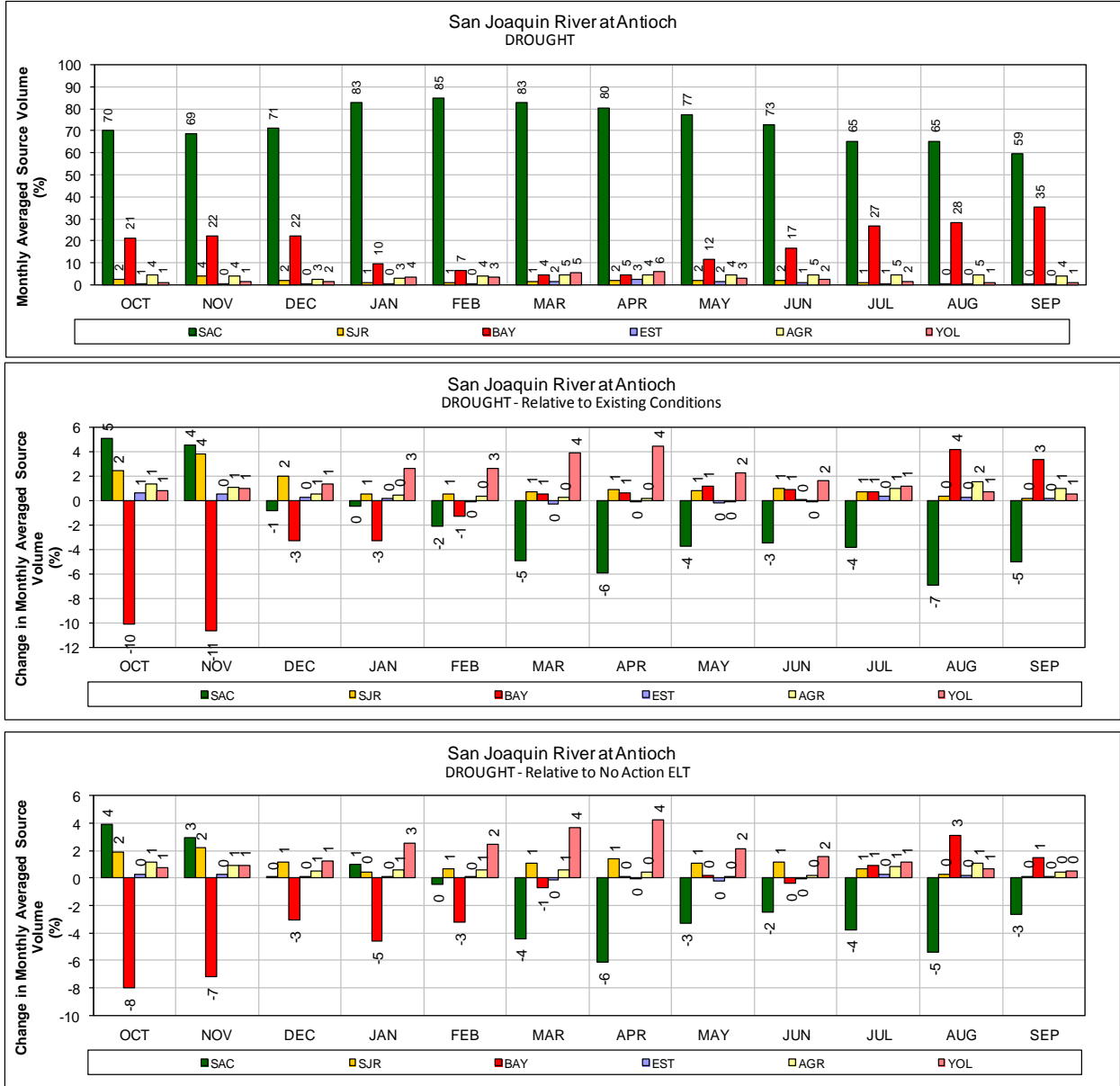


1  
2 **Figure B.4-77. ALT 2D – San Joaquin River at Antioch for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5

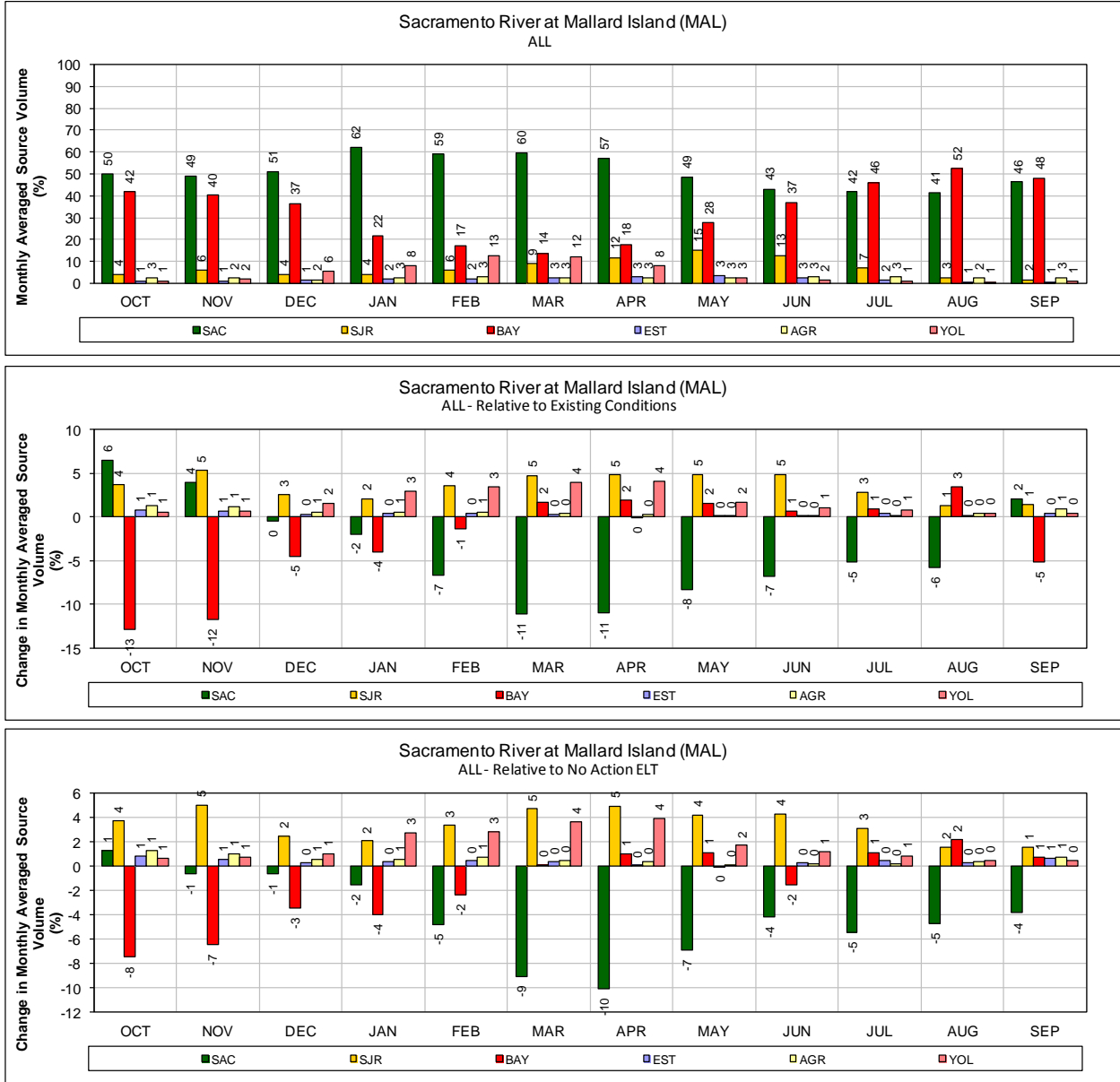




1  
2 **Figure B.4-78. ALT 2D – San Joaquin River at Antioch for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

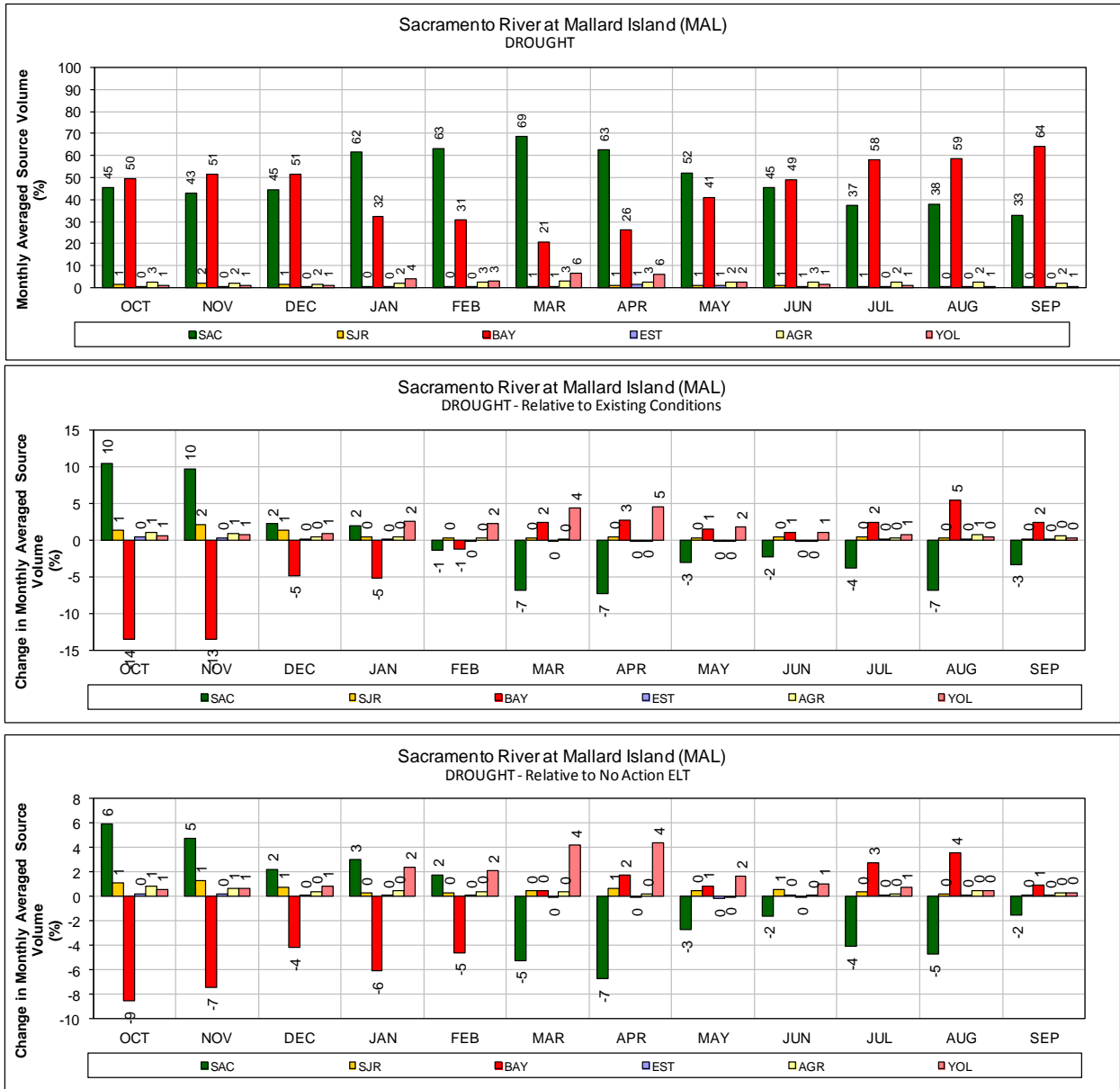
5



1  
2 **Figure B.4-79. ALT 2D – Sacramento River at Mallard Island for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

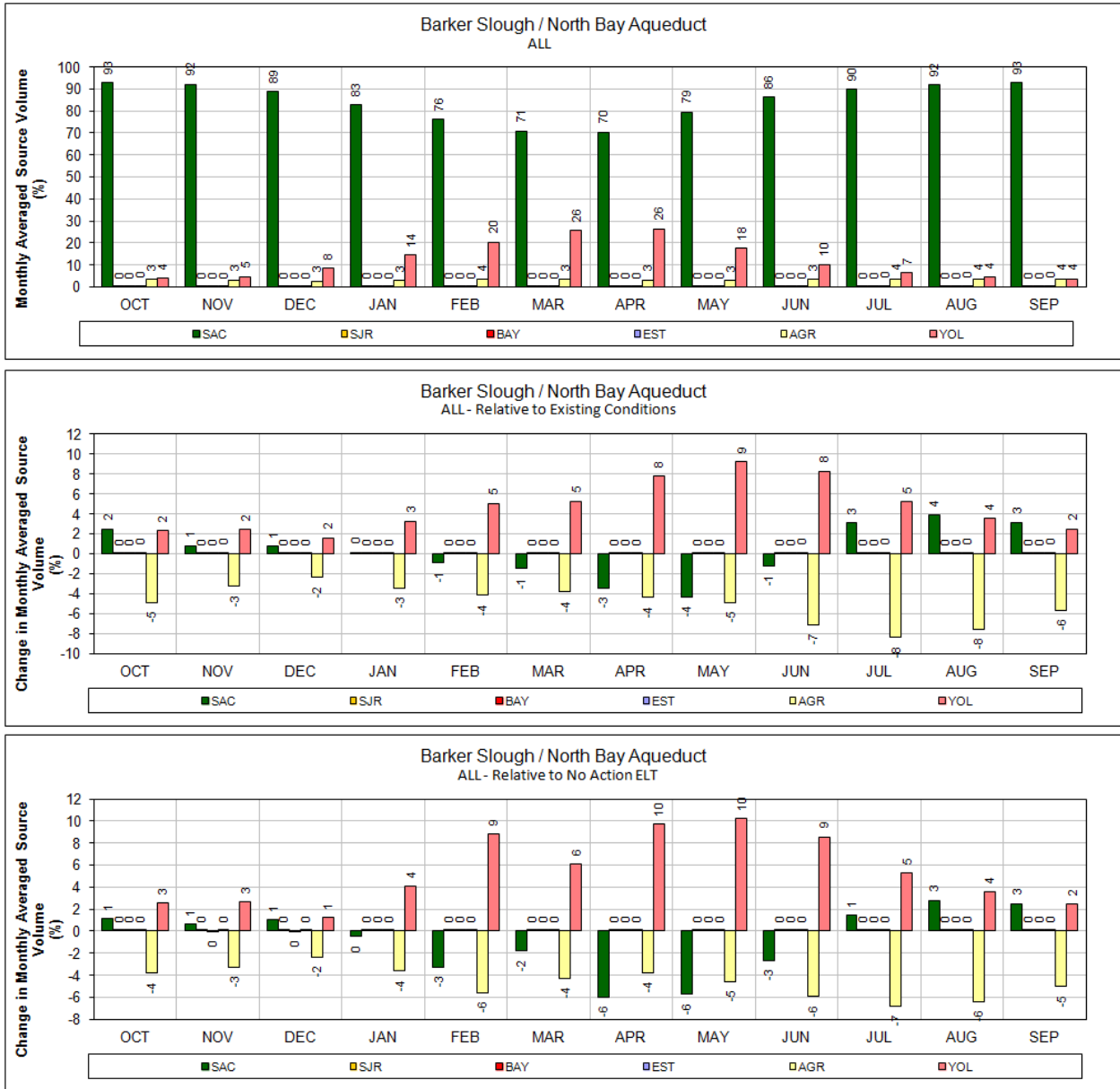
5



1  
2 **Figure B.4-80. ALT 2D – Sacramento River at Mallard Island for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



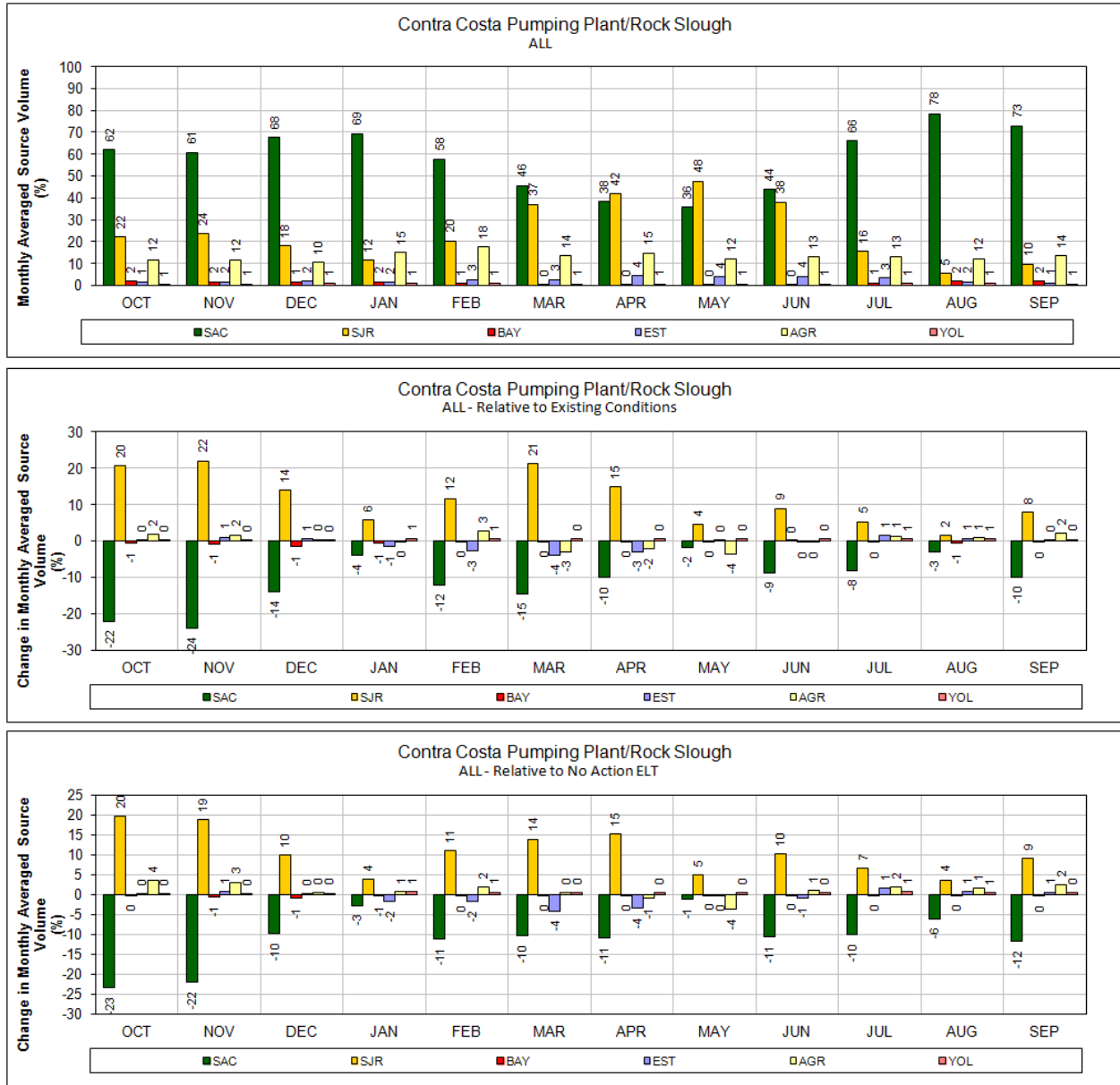
1  
 2 **Figure B.4-81. ALT 2D – North Bay Aqueduct at Barker Slough Pumping Plant for ALL Years (1976–**  
 3 **1991)**

4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 6



1  
 2 **Figure B.4-82. ALT 2D – North Bay Aqueduct at Barker Slough Pumping Plant for DROUGHT Years**  
 3 **(1987–1991)**

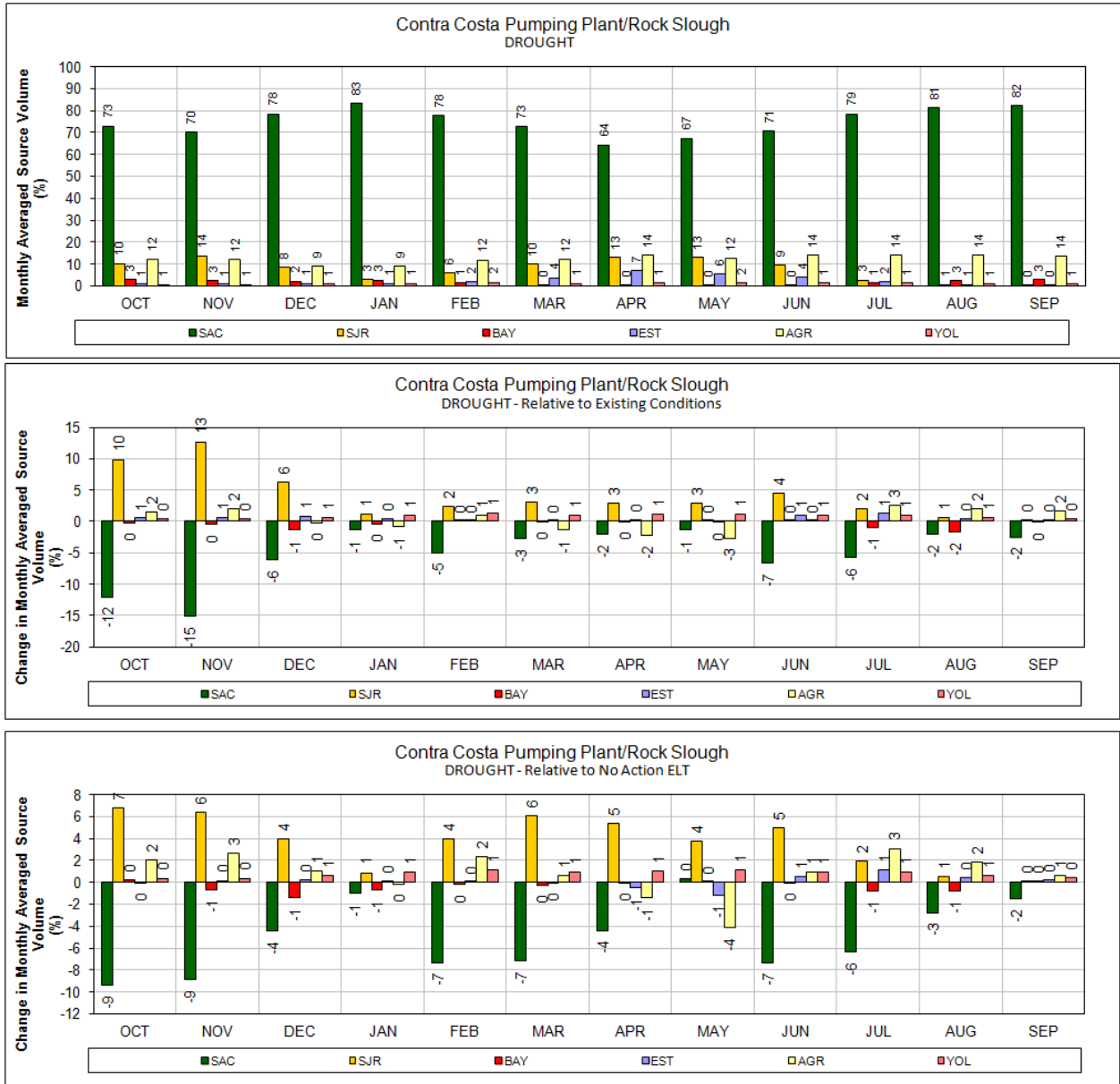
4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 6



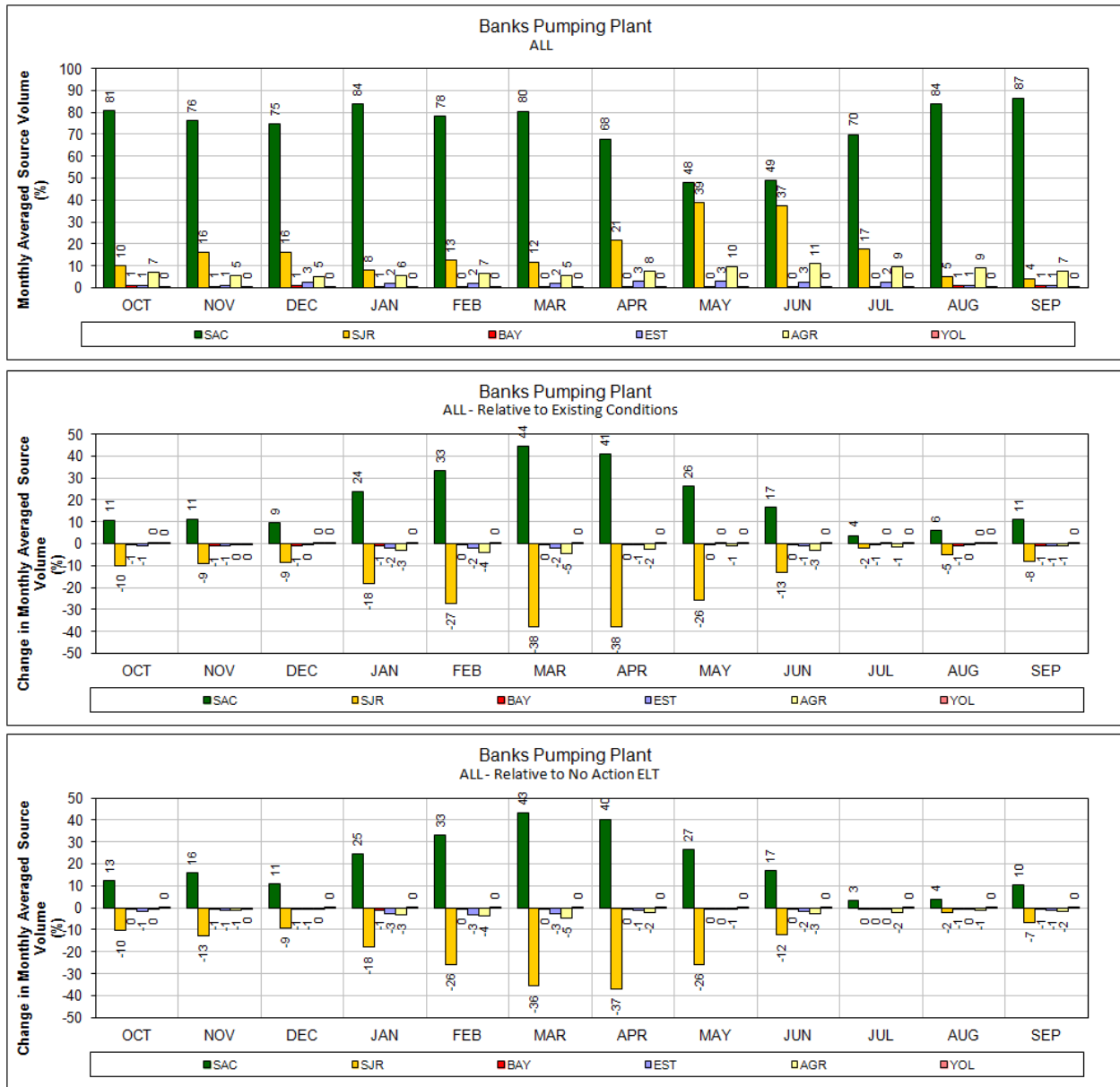
1  
2 **Figure B.4-83. ALT 2D – Contra Costa Pumping Plant #1 for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



1  
 2 **Figure B.4-84. ALT 2D – Contra Costa Pumping Plant #1 for DROUGHT Years (1987–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5

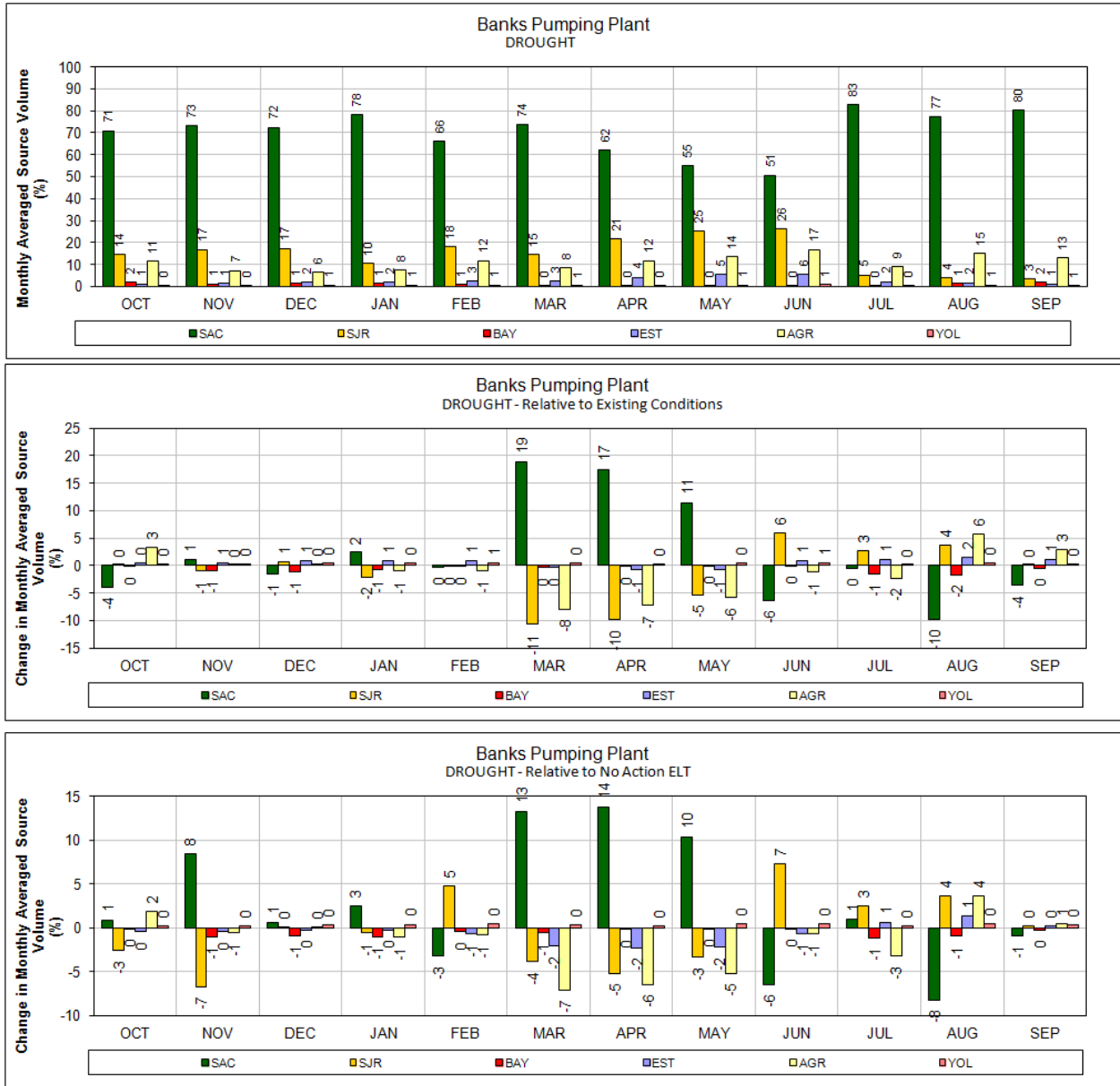


1  
2 **Figure B.4-85. ALT 2D – Banks Pumping Plant for ALL Years (1976–1991)**

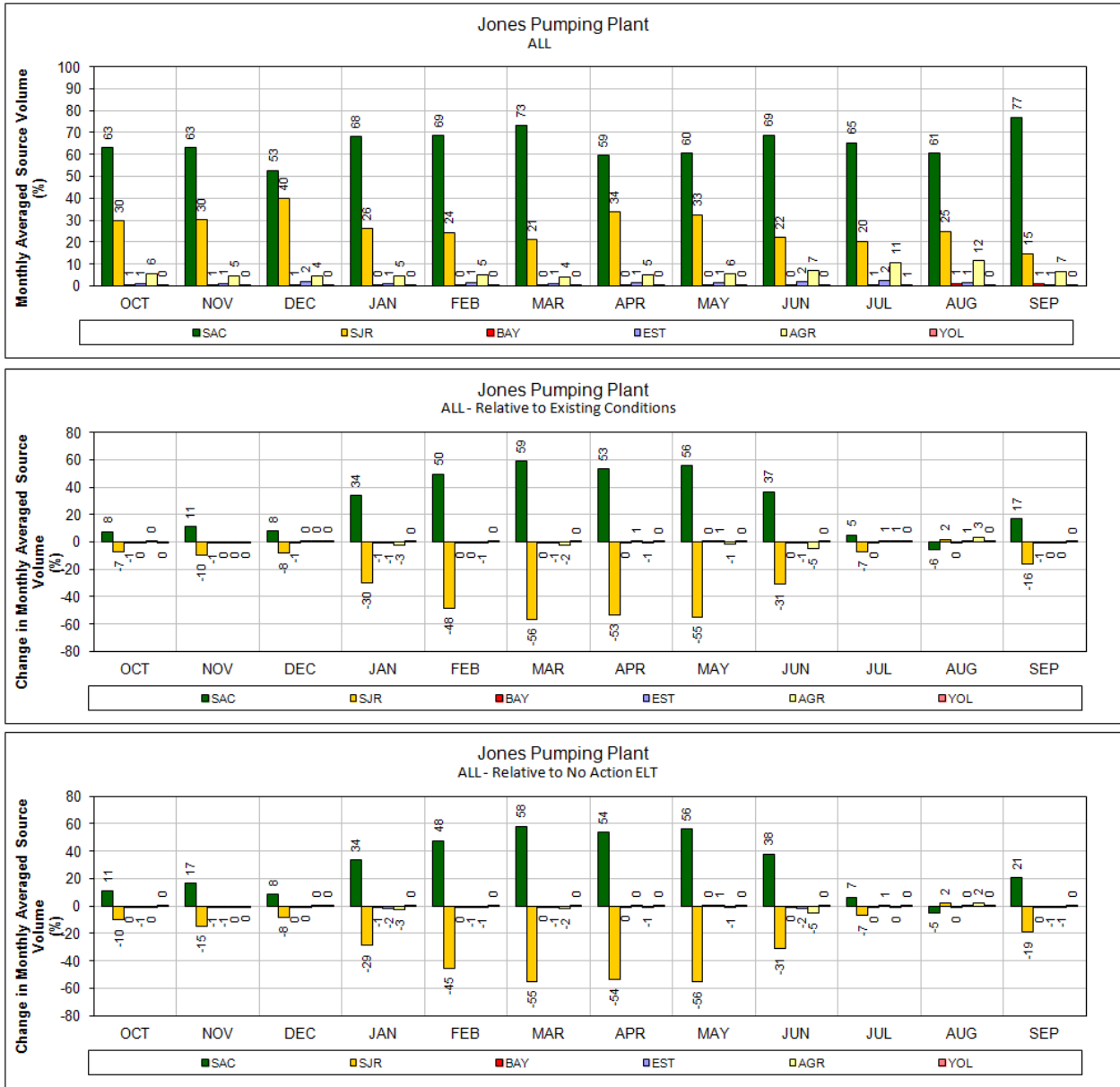
3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5





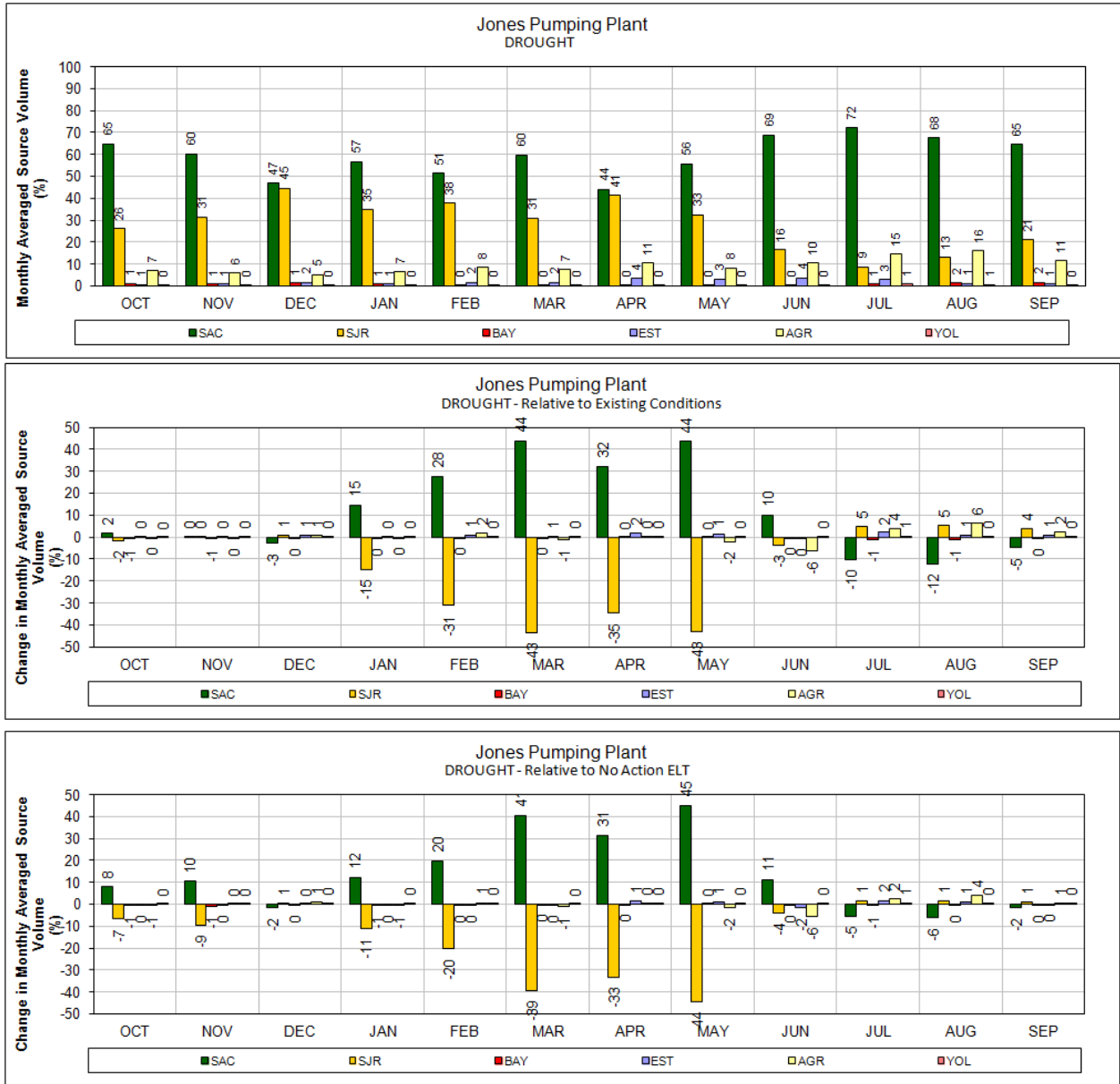
1  
 2 **Figure B.4-86. ALT 2D – Banks Pumping Plant for DROUGHT Years (1987–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



1  
2 **Figure B.4-87. ALT 2D – Jones Pumping Plant for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



1  
 2 **Figure B.4-88. ALT 2D – Jones Pumping Plant for DROUGHT Years (1987–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5

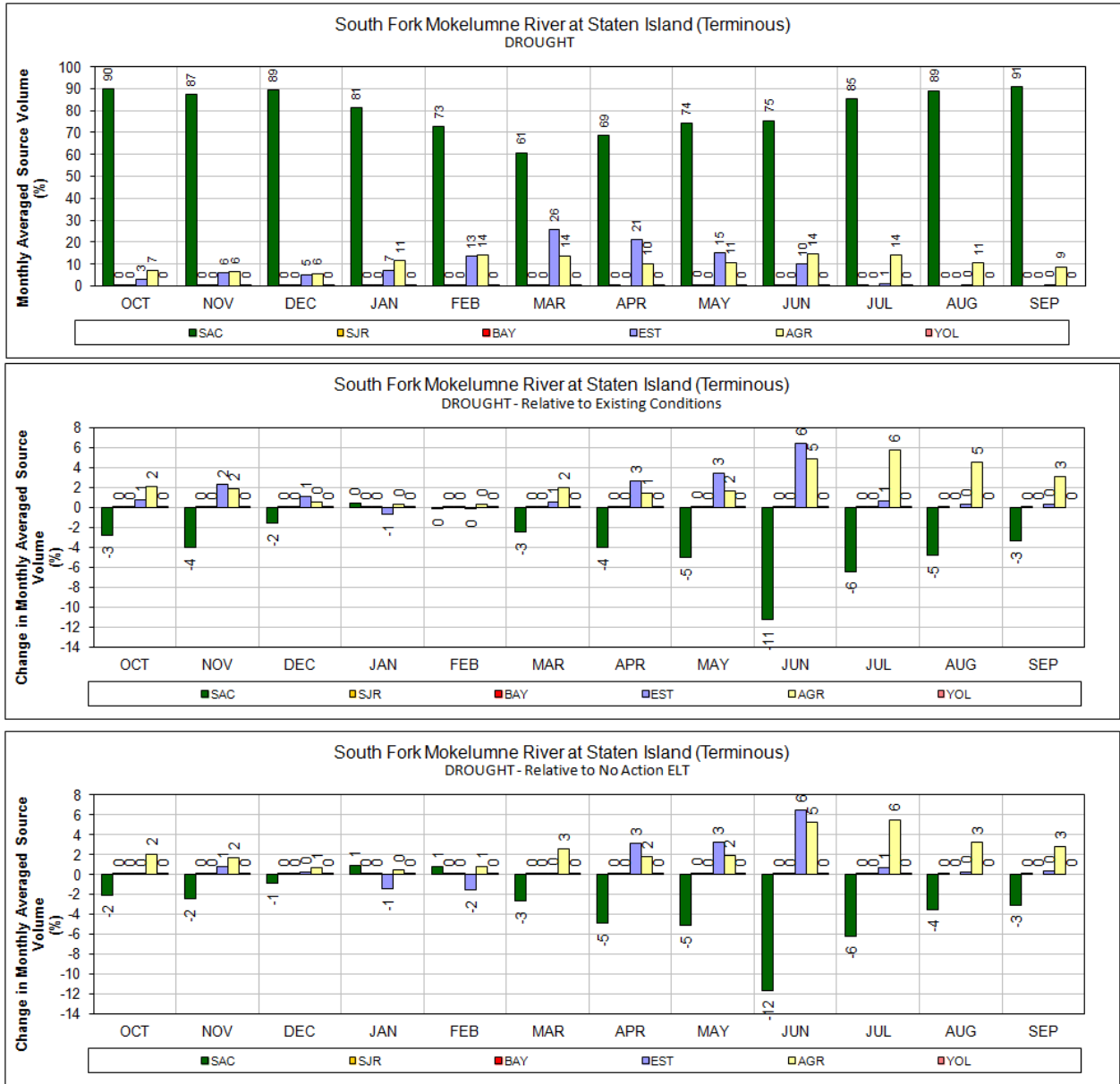
1 **B.4.2.5 Alternative 5A ELT**



2  
3 **Figure B.4-89. ALT 5A – Mokelumne River (South Fork) at Staten Island for ALL Years (1976–1991)**

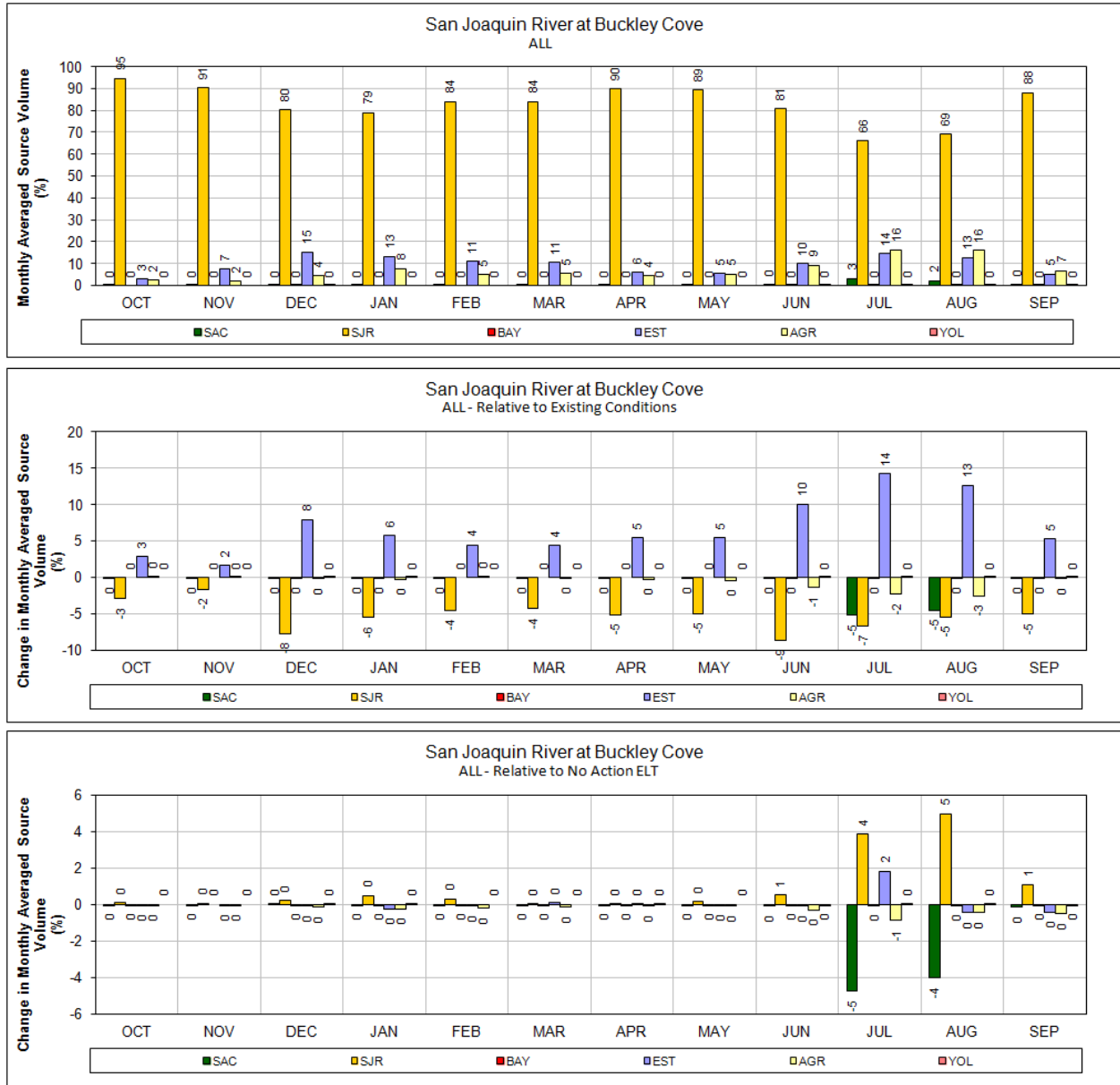
4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

6

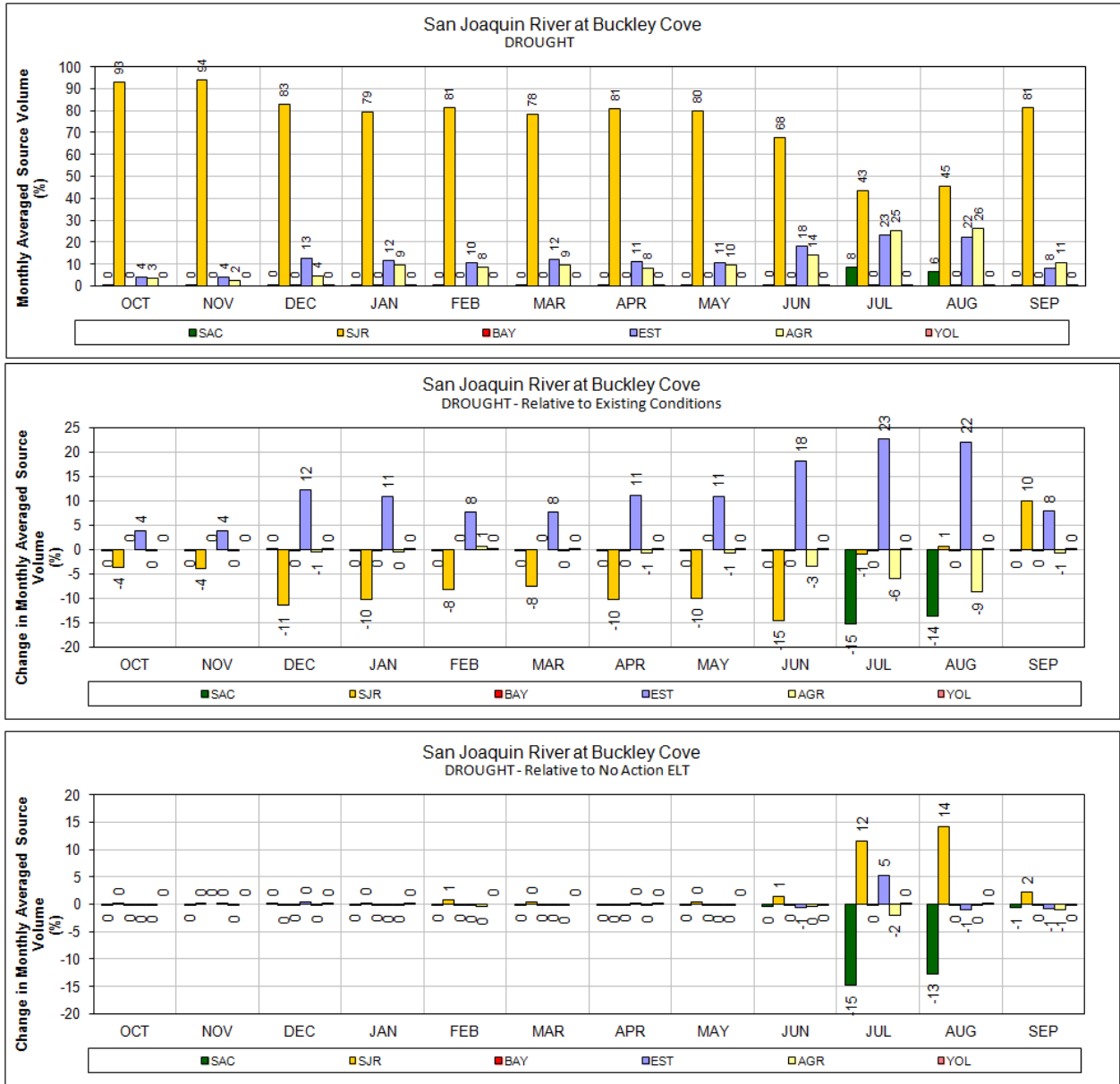


1  
2 **Figure B.4-90. ALT 5A – Mokelumne River (South Fork) at Staten Island for DROUGHT Years (1987–**  
3 **1991)**

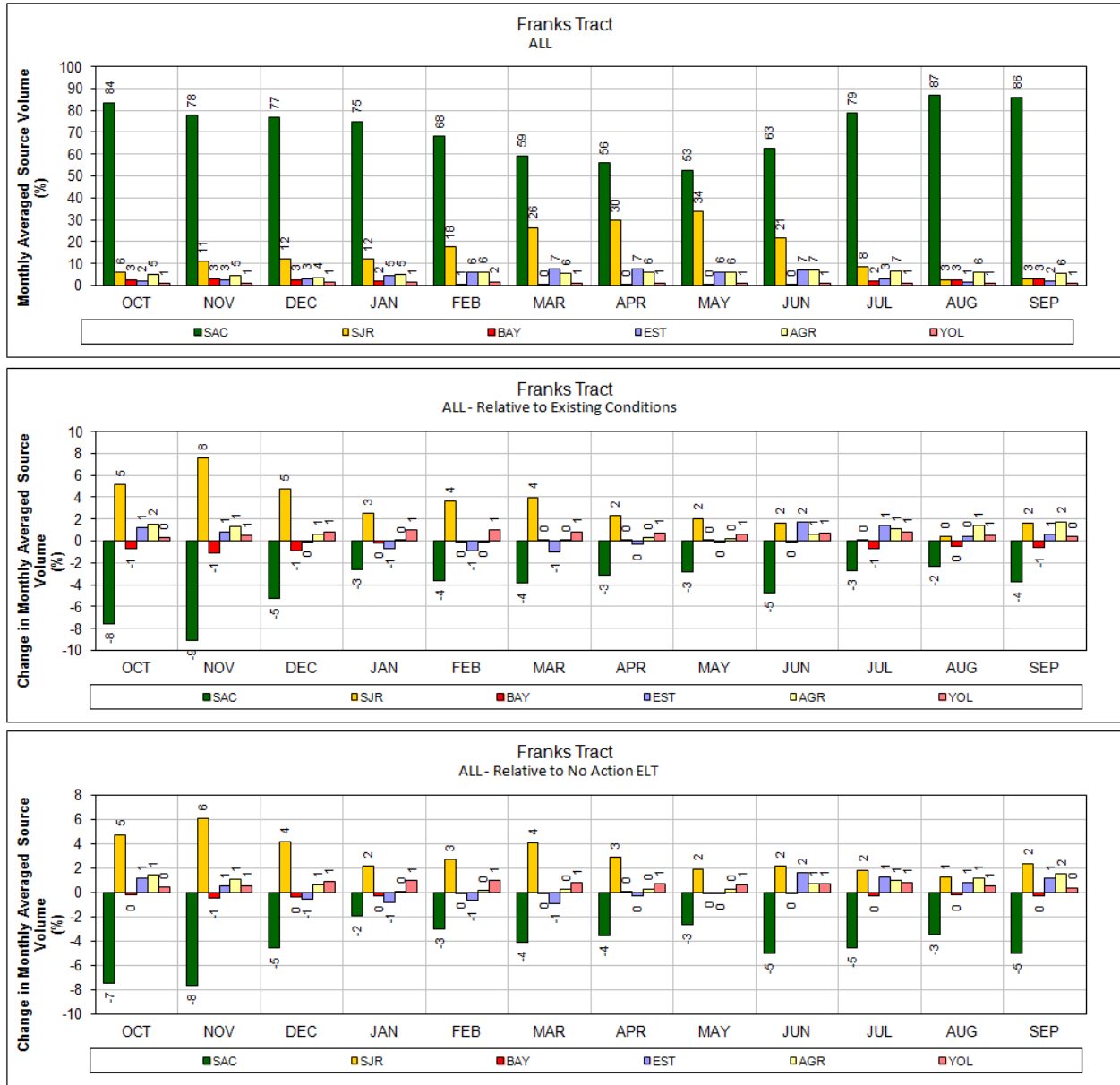
4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
6



1  
 2 **Figure B.4-91. ALT 5A – San Joaquin River at Buckley Cove for ALL Years (1976–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



1  
 2 **Figure B.4-92. ALT 5A – San Joaquin River at Buckley Cove for DROUGHT Years (1987–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5

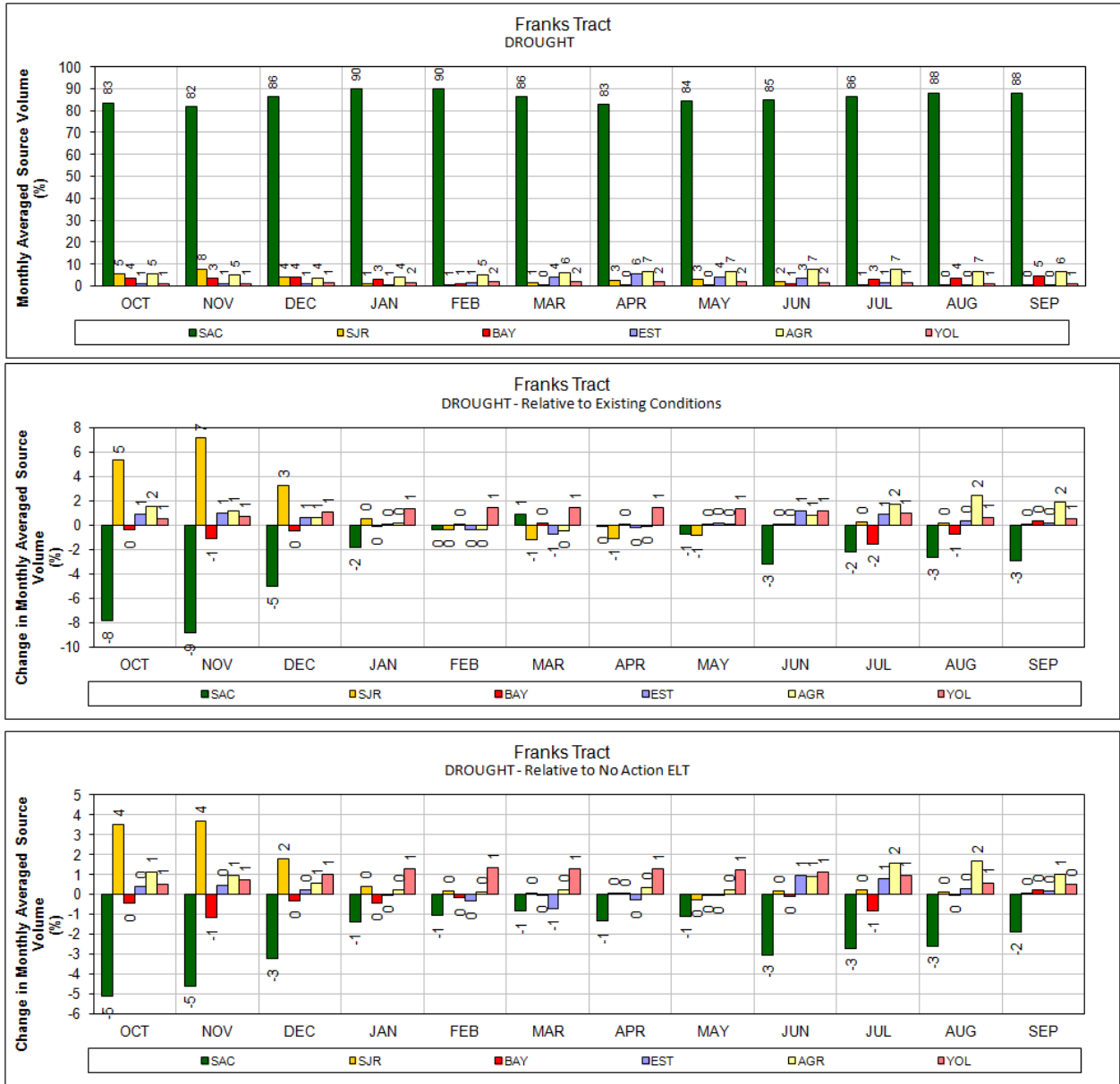


1  
2 **Figure B.4-93. ALT 5A – Franks Tract for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5

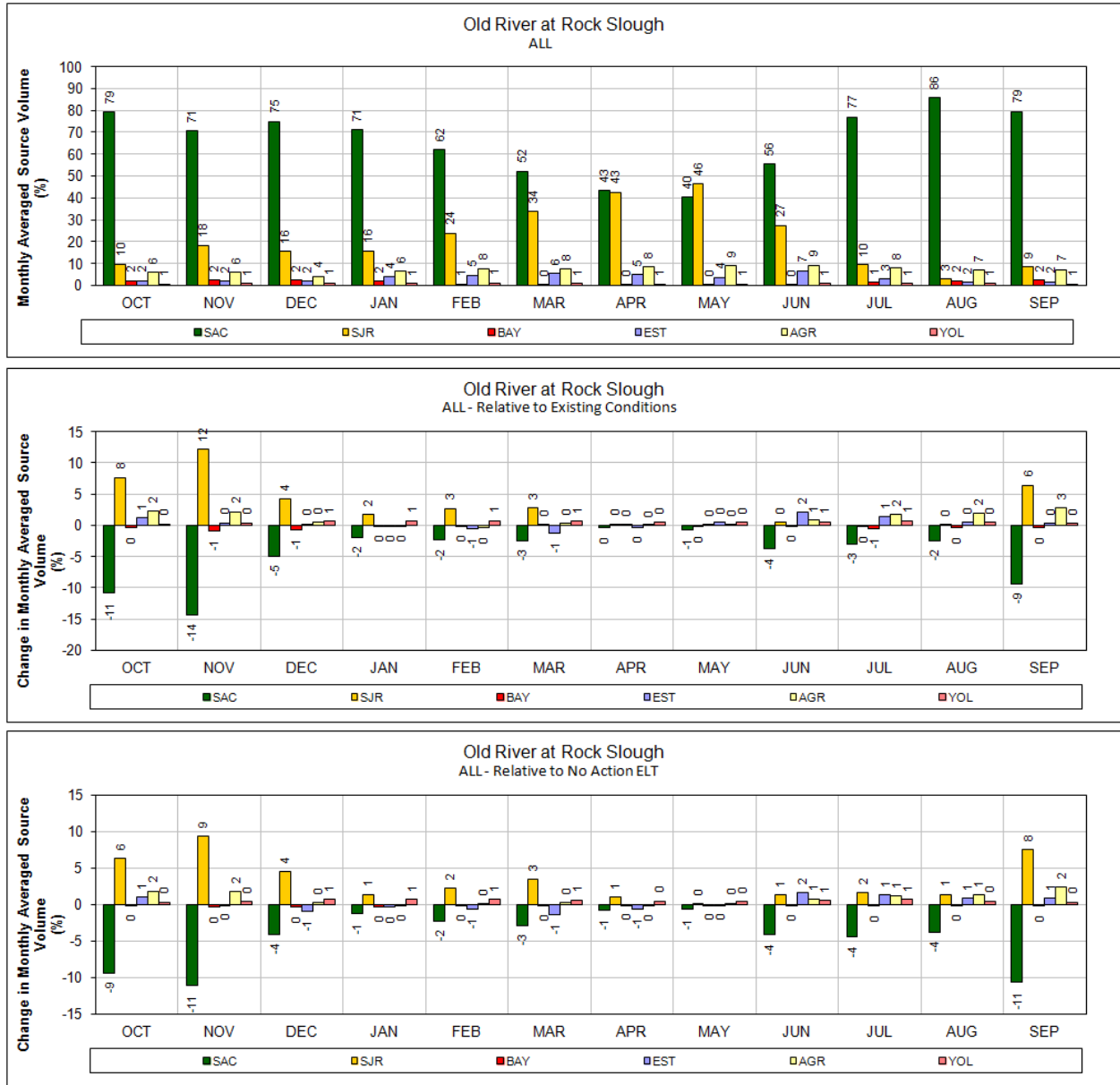




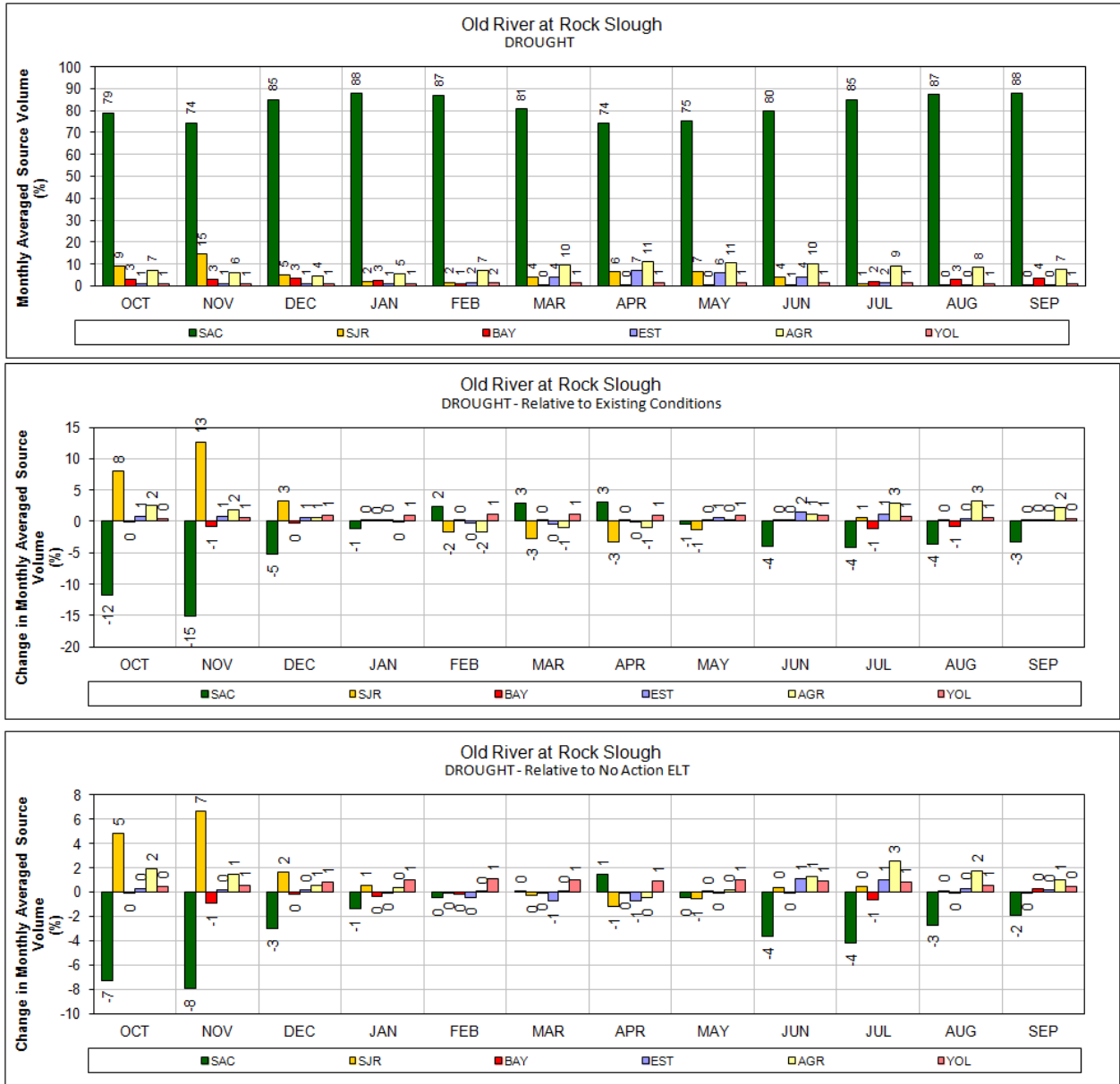
1  
2 **Figure B.4-94. ALT 5A – Franks Tract for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



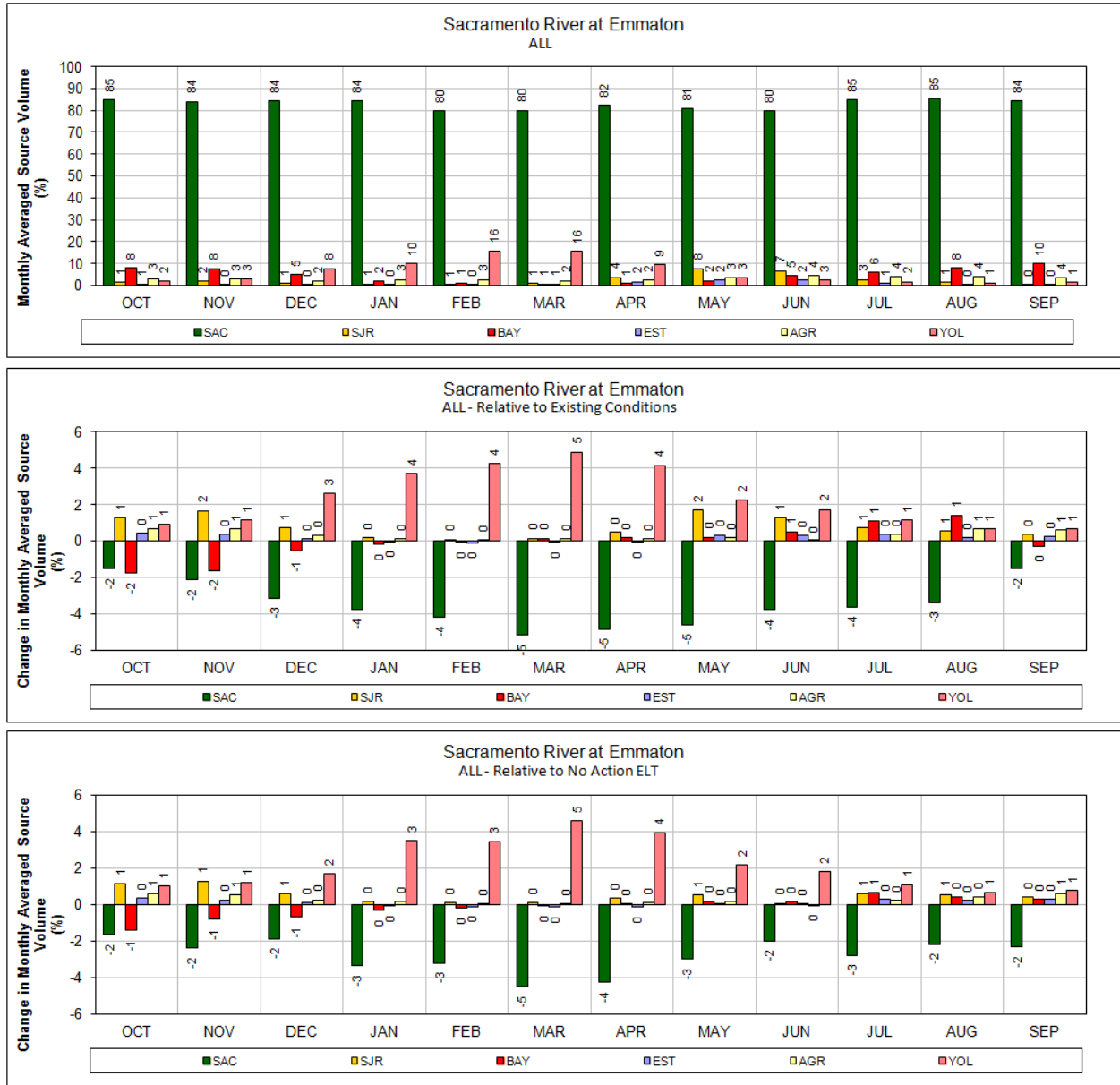
1  
 2 **Figure B.4-95. ALT 5A – Old River at Rock Slough for ALL Years (1976–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



1  
2 **Figure B.4-96. ALT 5A – Old River at Rock Slough for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

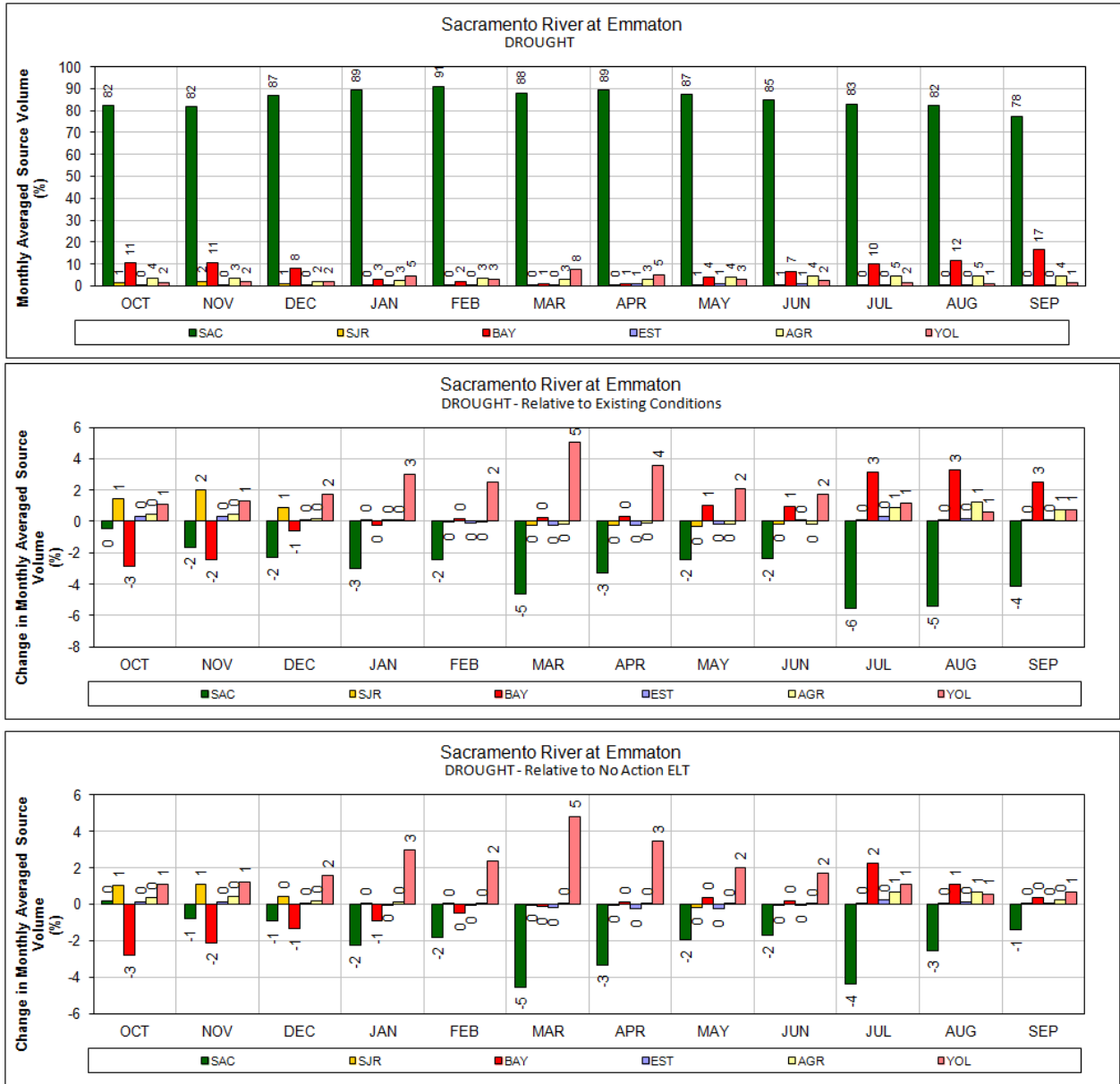
5



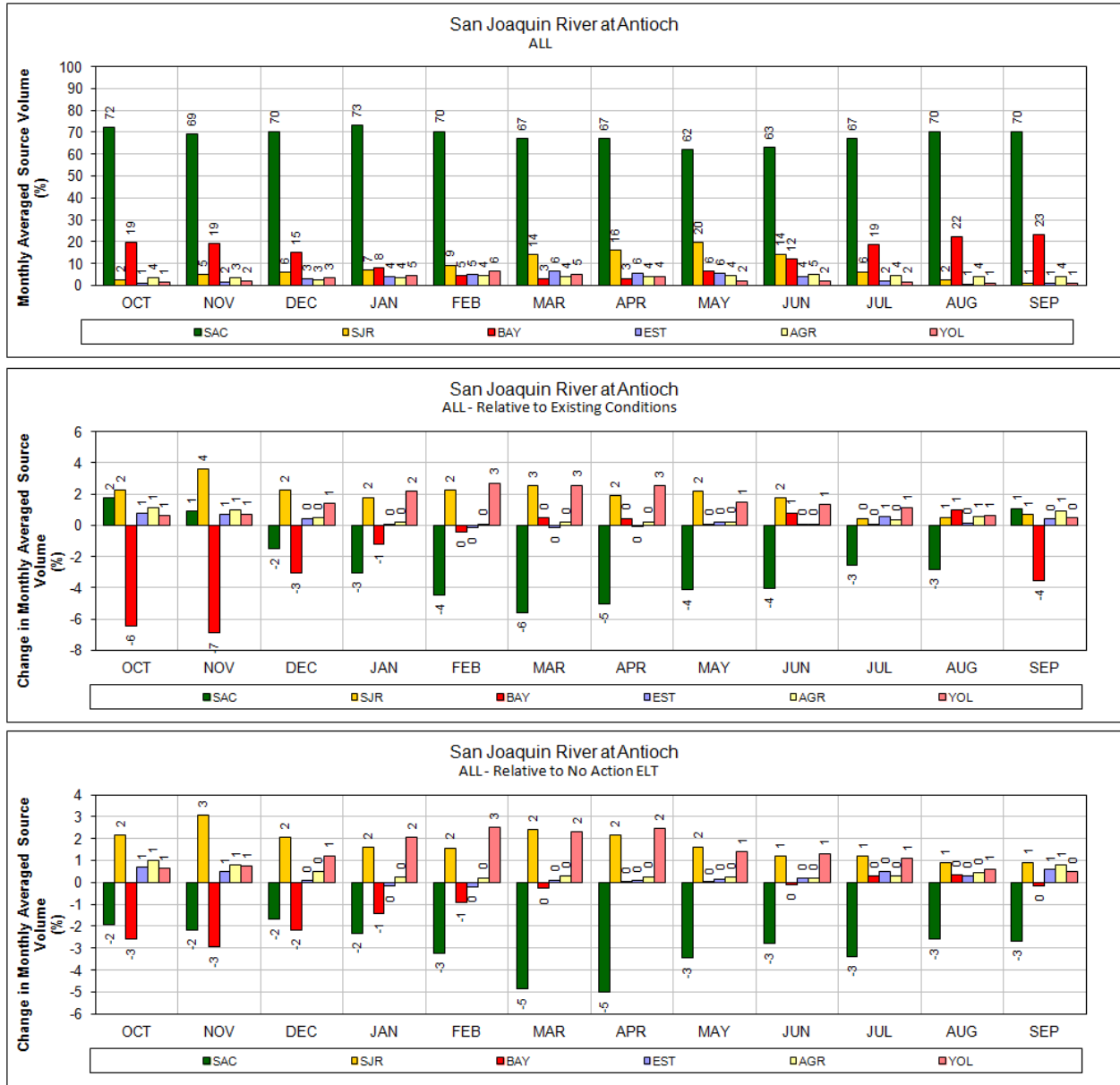
1  
2 **Figure B.4-97. ALT 5A – Sacramento River at Emmaton for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

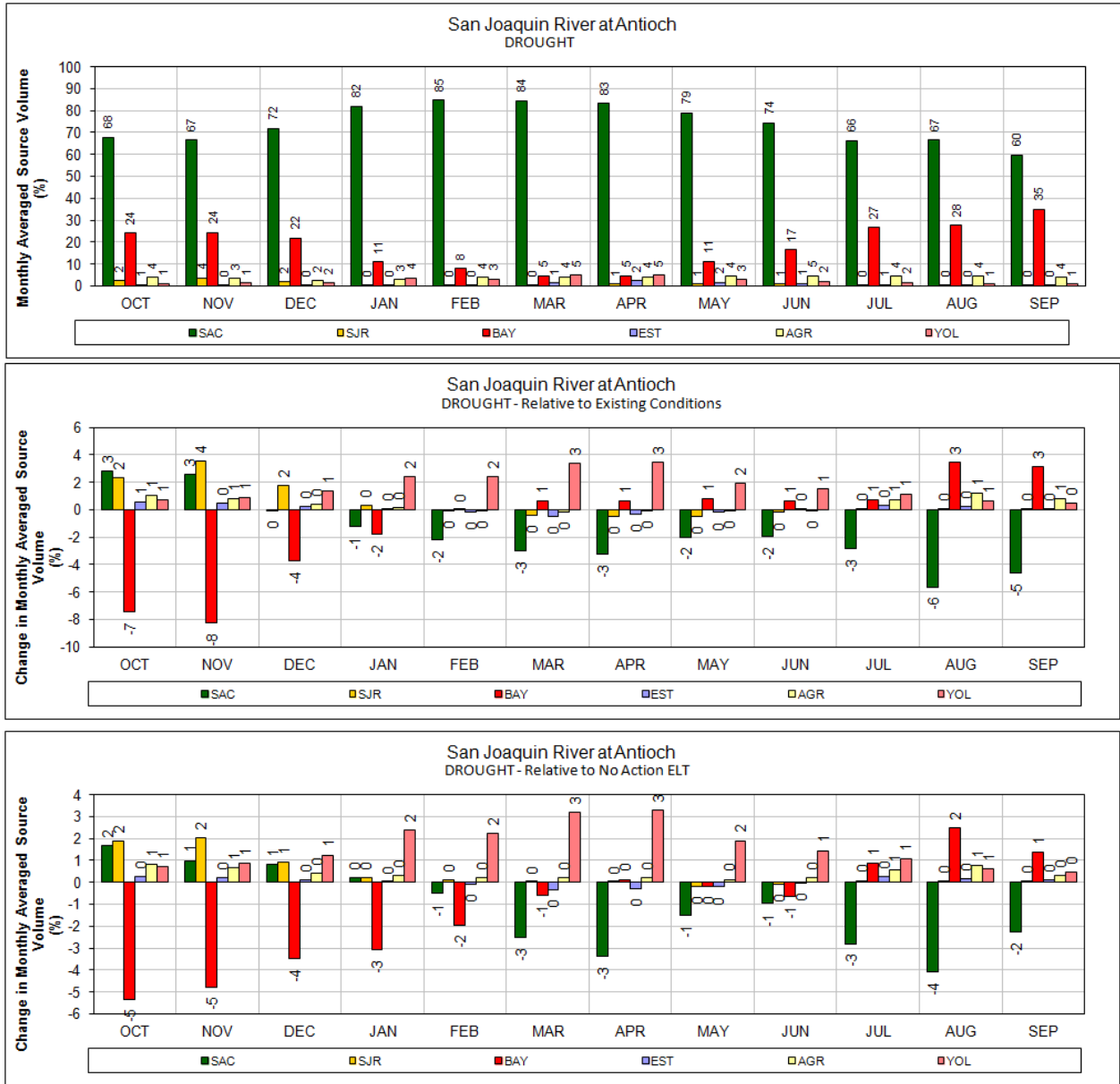
5



1  
 2 **Figure B.4-98. ALT 5A – Sacramento River at Emmaton for DROUGHT Years (1987–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



1  
 2 **Figure B.4-99. ALT 5A – San Joaquin River at Antioch for ALL Years (1976–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



1  
 2 **Figure B.4-100. ALT 5A – San Joaquin River at Antioch for DROUGHT Years (1987–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



1  
 2 **Figure B.4-101. ALT 5A – Sacramento River at Mallard Island for ALL Years (1976–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5





1  
2 **Figure B.4-102. ALT 5A – Sacramento River at Mallard Island for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



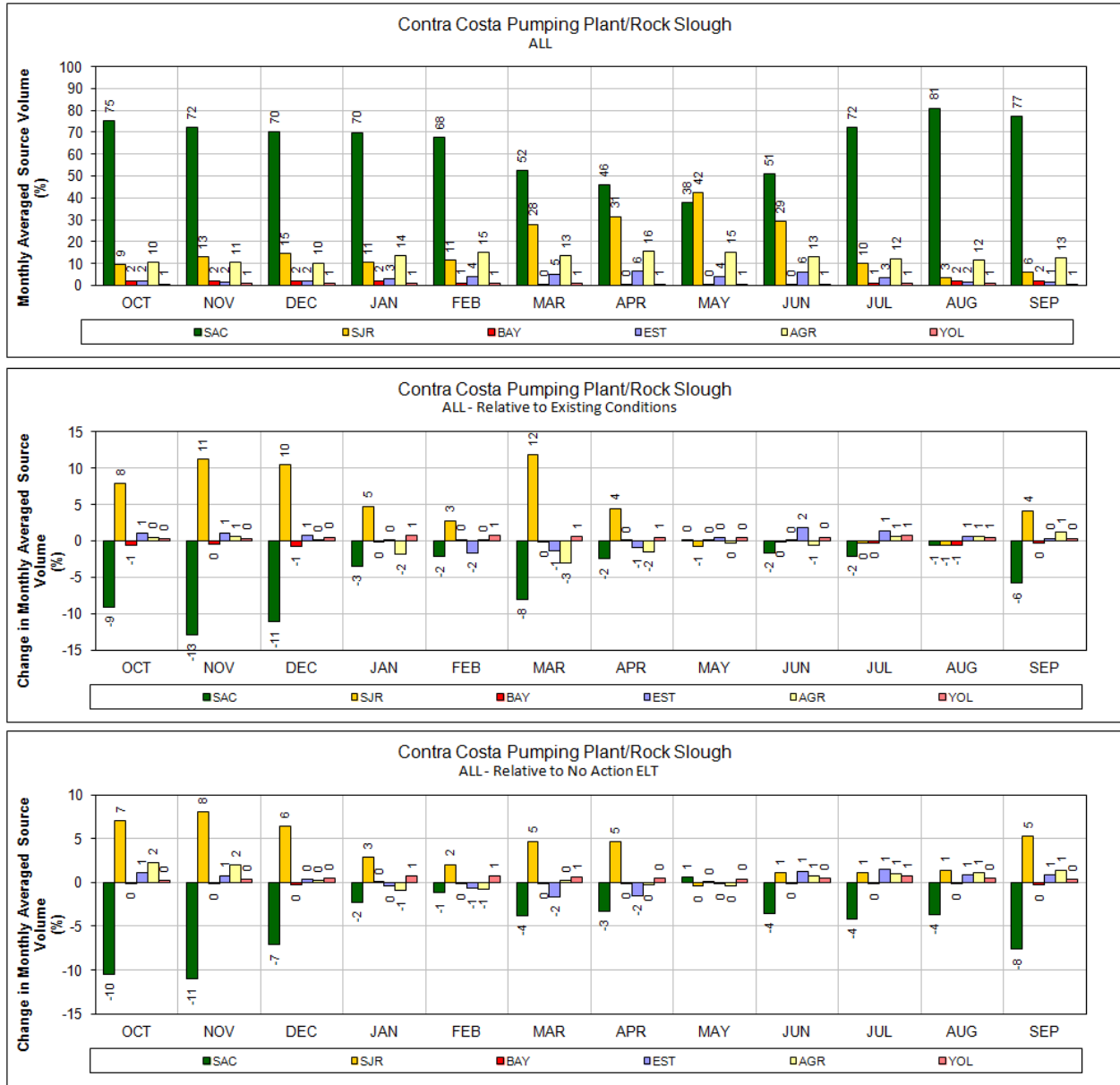
1  
2 **Figure B.4-103. ALT 5A – North Bay Aqueduct at Barker Slough Pumping Plant for ALL Years (1976–**  
3 **1991)**

4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
6



1  
2 **Figure B.4-104. ALT 5A – North Bay Aqueduct at Barker Slough Pumping Plant for DROUGHT Years**  
3 **(1987–1991)**

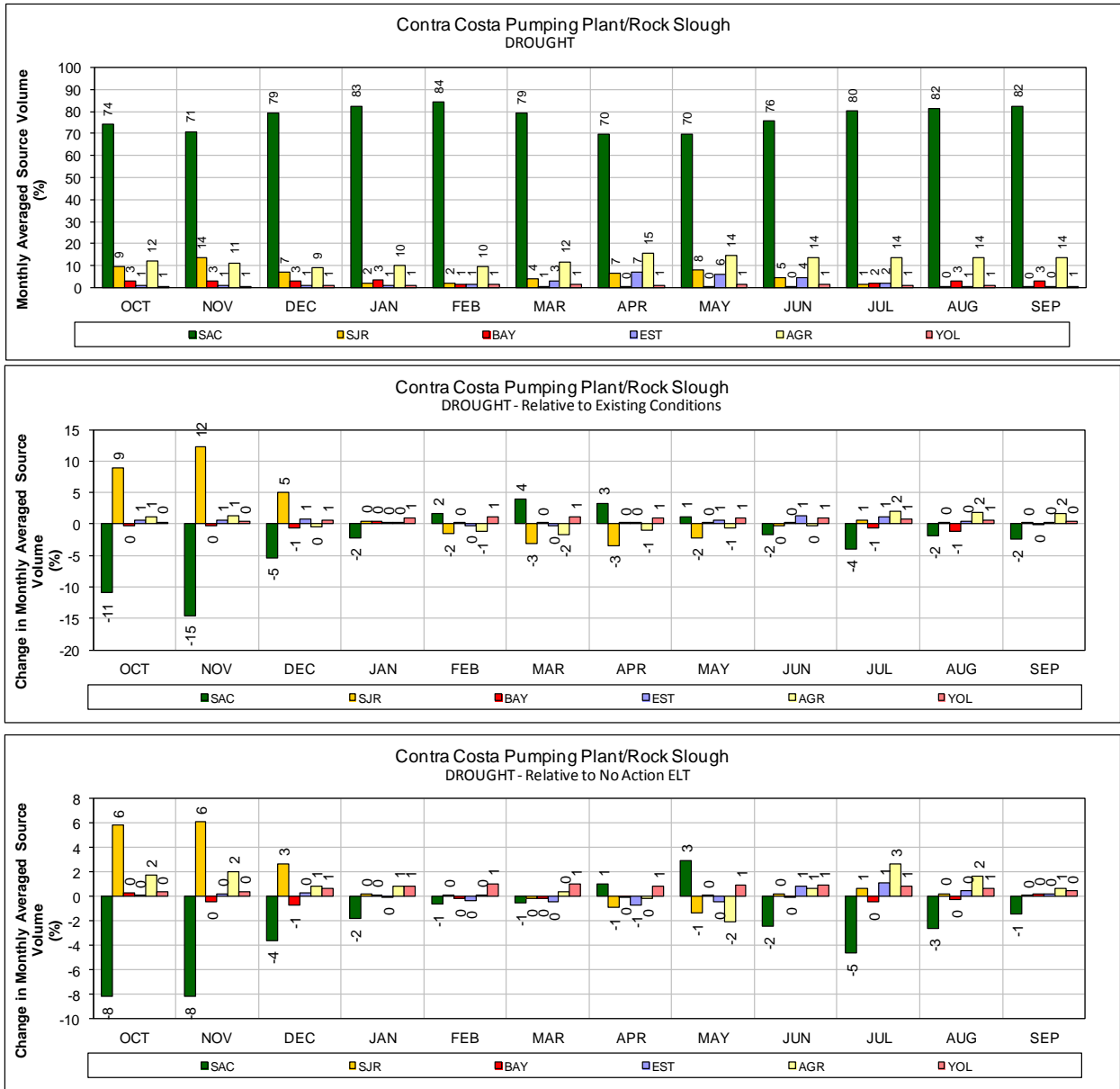
4 Monthly average source volume (top figure) and change in monthly average source volume relative to  
5 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
6



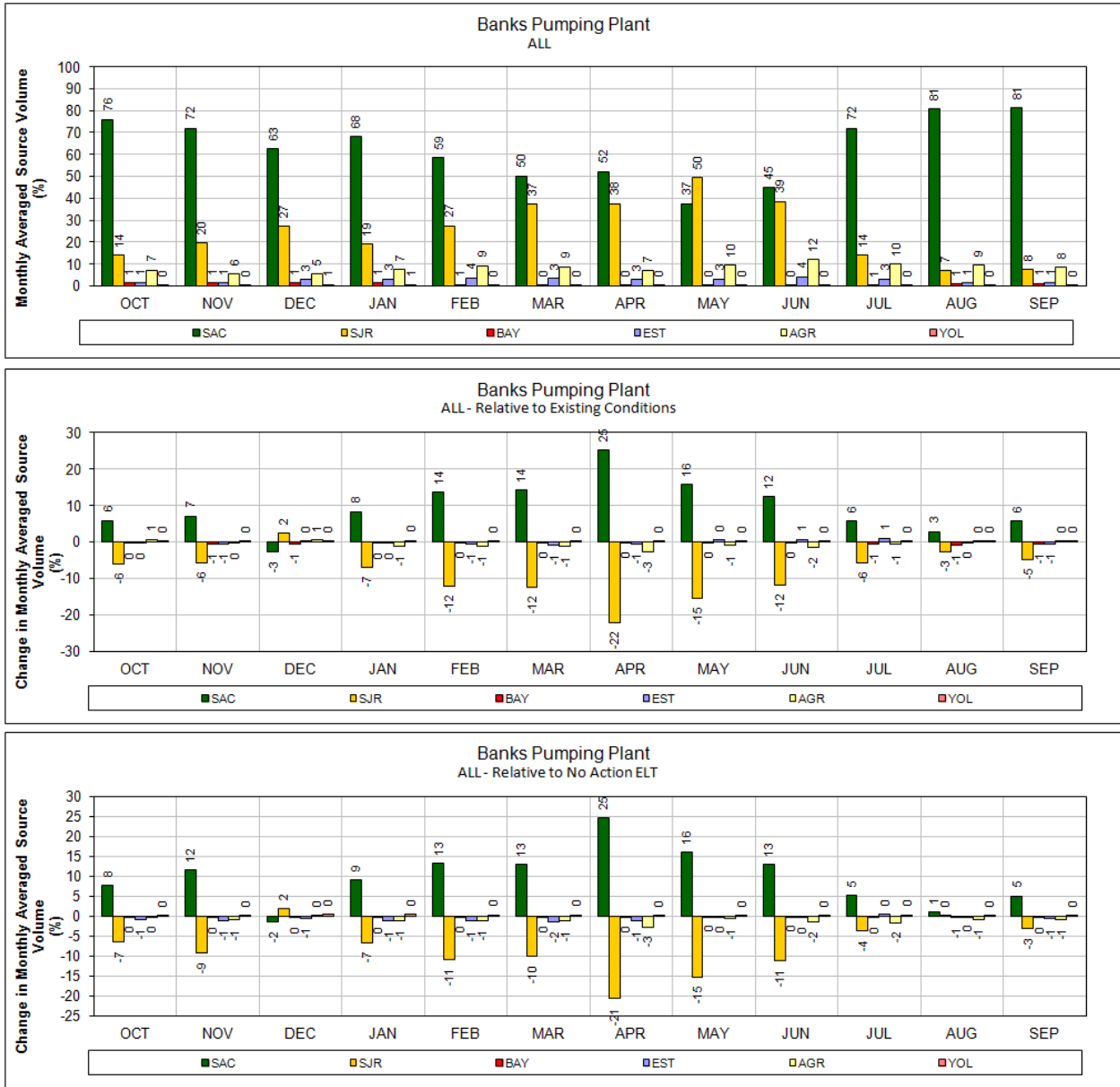
1  
2 **Figure B.4-105. ALT 5A – Contra Costa Pumping Plant #1 for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



1  
 2 **Figure B.4-106. ALT 5A – Contra Costa Pumping Plant #1 for DROUGHT Years (1987–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



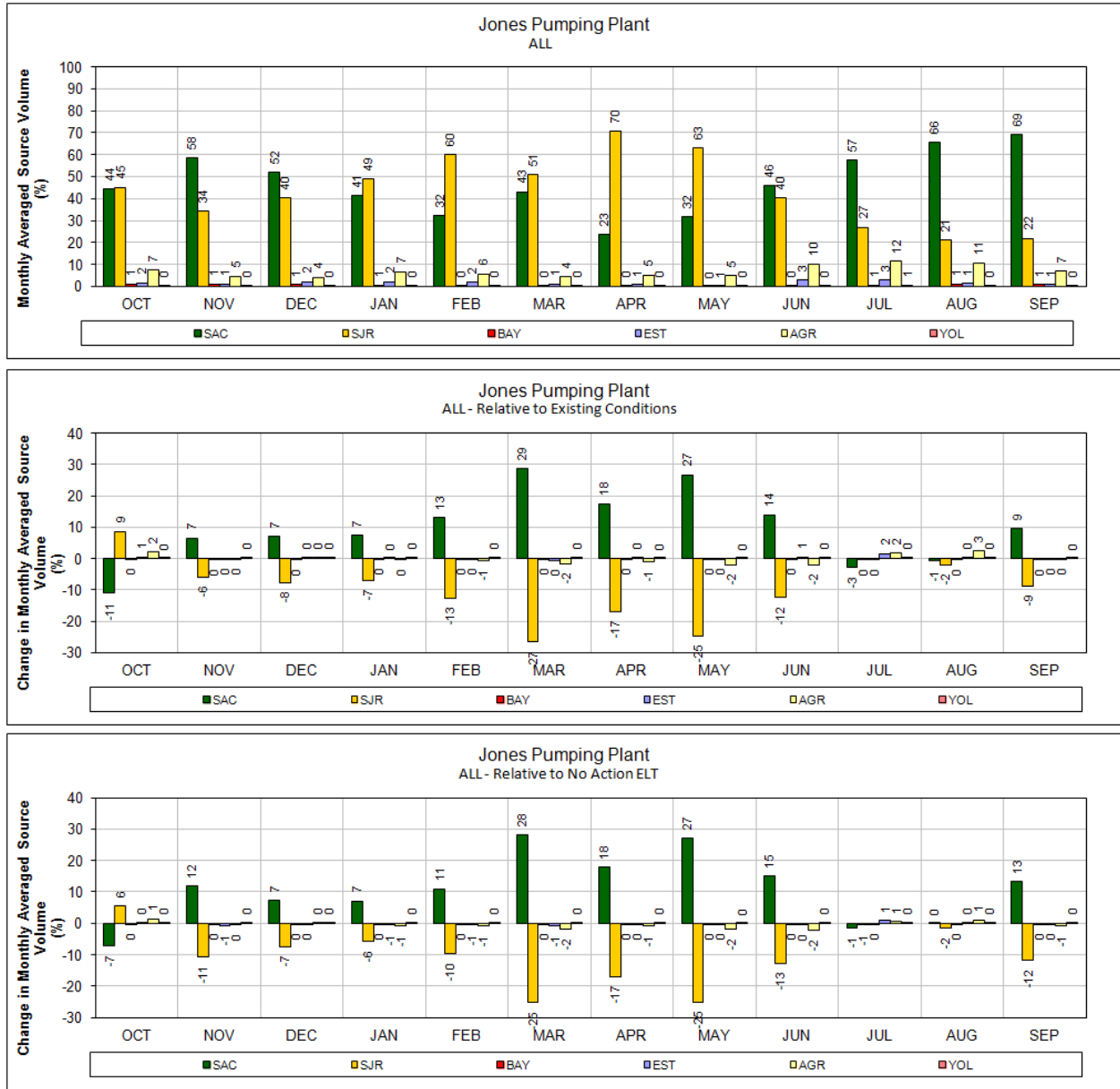
1  
 2 **Figure B.4-107. ALT 5A – Banks Pumping Plant for ALL Years (1976–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).  
 5



1  
2 **Figure B.4-108. ALT 5A – Banks Pumping Plant for DROUGHT Years (1987–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5



1  
2 **Figure B.4-109. ALT 5A – Jones Pumping Plant for ALL Years (1976–1991)**

3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5





1  
 2 **Figure B.4-110. ALT 5A – Jones Pumping Plant for DROUGHT Years (1987–1991)**  
 3 Monthly average source volume (top figure) and change in monthly average source volume relative to  
 4 Existing Conditions and No Action Alternative Early Long Term (bottom two figures).

5  
 6  
 7

## 1 B.5 Chapter 11, Fish and Aquatic Resources

2 **Table 11-1A-102. Evaluation of Coldwater Habitat Effects (Years with Carryover Storage Less than Threshold) for CALSIM-Simulated Baselines**  
 3 **and Alternatives for 1922–2003<sup>a</sup>**

Reservoir	Trinity		Shasta		Oroville		Folsom		New Melones		San Luis	
	<750		<2,000		<1,000		<250		<750		<350	
Existing	11	13%	13	16%	8	10%	5	6%	9	11%	9	11%
NAA-ELT	12	15%	16	20%	14	17%	10	12%	9	11%	17	21%
NAA	16	20%	22	27%	23	28%	15	18%	13	16%	21	26%
	<b>Value</b>	<b>Difference</b>	<b>Value</b>	<b>Difference</b>	<b>Value</b>	<b>Difference</b>	<b>Value</b>	<b>Difference</b>	<b>Value</b>	<b>Difference</b>	<b>Value</b>	<b>Difference</b>
Existing v. Alt 1 LLT	19	8	23	10	8	0	15	10	13	4	23	14
NAA v. Alt 1 LLT	19	3	23	1	8	-15	15	0	13	0	23	2
Existing v. Alt 2 LLT	19	8	22	9	14	6	20	15	13	4	45	36
NAA v. Alt 2 LLT	19	3	22	0	14	-9	20	5	13	0	45	24
Existing v. Alt 2D_ELT	13	2	16	3	6	-2	11	6	9	0	43	34
NAA ELT v. Alt 2D_ELT	13	1	16	0	6	-8	11	1	9	0	43	26
Existing v. Alt 3 LLT	18	7	20	7	8	0	15	10	13	4	25	16
NAA v. Alt 3 LLT	18	2	20	-2	8	-15	15	0	13	0	25	4
Existing v. Alt 4 LLT	18	7	23	10	14	6	19	14	13	4	51	42
NAA v. Alt 4 LLT	18	2	23	1	14	-9	19	4	13	0	51	30
Existing v. H3_ELT	13	2	15	2	5	-3	12	7	9	0	45	36
NAA-ELT v. H3_ELT	13	1	15	-1	5	-9	12	2	9	0	45	28
Existing v. H4_ELT	12	1	14	1	11	3	10	5	9	0	56	47
NAA-ELT v. H4_ELT	12	0	14	-2	11	-3	10	0	9	0	56	39
Existing v. Alt 5 LLT	18	7	22	9	14	6	18	13	21	4	37	28
NAA v. Alt 5 LLT	18	2	22	0	14	-9	18	3	21	0	37	16
Existing v. Alt 5A_ELT	13	2	17	4	7	-1	11	6	9	0	31	22
NAA_ELT v. Alt 5A_ELT	13	1	17	1	7	-7	11	1	9	0	31	14
Existing v. Alt 6 LLT	16	5	19	6	6	-2	14	9	21	4	70	61
NAA v. Alt 6 LLT	16	0	19	-3	6	-17	14	-1	21	0	70	49
Existing v. Alt 7 LLT	17	6	22	9	8	0	19	14	21	4	63	54
NAA v. Alt 7 LLT	17	1	22	0	8	-15	19	4	21	0	63	42
Existing v. Alt 8 LLT	15	4	22	9	16	8	21	16	21	4	76	67
NAA v. Alt 8 LLT	15	-1	22	0	16	-7	21	6	21	0	76	55
Existing v. Alt 9 LLT	18	7	23	10	18	10	13	8	21	4	39	30
NAA v. Alt 9 LLT	18	2	23	1	18	-5	13	-2	21	0	39	18

This table was originally in Alternative 1A, Impact AQUA-217. For purposes of the Recirculated Draft EIR/EIS, it has been temporarily relocated into Appendix B. However, it will be placed back into Alternative 1A for the Final EIR/EIS

1 **B.5.1 Alternative 4A**2 **B.5.1.1 Flow**3 **Upstream**4 **Sacramento River at Keswick**5 **Table B.7-1. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Keswick, Year-Round**

Alternative 4A_ELT: Upstream—Sacramento River at Keswick					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	16,526	17,330	17,764	17,668
	AN	8,318	7,776	8,471	8,367
	BN	4,502	4,340	4,918	4,697
	D	3,996	4,098	4,098	4,096
	C	3,491	3,794	3,516	3,509
	All	8,614	8,829	9,126	9,041
FEB	W	18,577	20,349	20,494	20,607
	AN	14,409	15,081	15,912	15,680
	BN	5,981	6,456	6,808	6,708
	D	3,684	3,447	3,506	3,324
	C	3,599	3,394	3,510	3,393
	All	10,355	11,015	11,272	11,200
MAR	W	16,200	16,399	16,408	16,408
	AN	9,131	8,662	9,205	8,963
	BN	5,200	4,306	4,472	4,380
	D	3,903	3,858	3,771	3,744
	C	3,487	3,608	3,802	3,639
	All	8,728	8,577	8,697	8,617
APR	W	9,418	9,254	9,242	9,222
	AN	6,182	5,712	5,822	5,817
	BN	5,426	4,934	5,000	5,166
	D	5,803	5,497	5,633	5,462
	C	6,472	6,343	6,313	6,254
	All	7,038	6,748	6,797	6,772
MAY	W	9,508	8,183	8,191	8,161
	AN	7,709	7,307	8,189	7,892
	BN	7,193	6,411	6,810	6,441
	D	7,349	7,075	7,496	7,314
	C	6,715	6,900	6,920	6,973
	All	7,967	7,321	7,616	7,468

Alternative 4A_ELT: Upstream—Sacramento River at Keswick					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUN	W	10,375	10,063	10,321	10,076
	AN	11,147	11,403	12,068	11,111
	BN	10,758	10,573	11,267	10,659
	D	11,224	11,464	12,141	11,482
	C	10,392	11,041	11,252	10,984
	All	10,742	10,797	11,274	10,769
JUL	W	12,779	13,477	13,698	13,541
	AN	14,056	14,541	14,615	14,651
	BN	12,965	13,195	13,673	13,224
	D	13,302	13,650	13,653	13,338
	C	12,850	12,124	12,471	11,804
	All	13,123	13,424	13,639	13,351
AUG	W	11,029	10,447	10,520	10,613
	AN	10,449	10,835	11,165	11,375
	BN	10,139	9,876	10,757	10,675
	D	10,627	10,464	9,380	10,827
	C	9,473	8,380	8,093	8,477
	All	10,476	10,108	10,049	10,470
SEP	W	9,385	12,012	11,720	12,006
	AN	5,862	9,209	7,834	8,951
	BN	5,492	5,677	5,156	5,069
	D	5,985	4,982	4,543	4,809
	C	5,563	4,827	4,717	4,791
	All	6,899	7,926	7,430	7,739
OCT	W	6,885	6,491	6,408	6,554
	AN	7,145	6,090	5,750	6,411
	BN	6,396	5,835	5,662	6,051
	D	6,128	5,899	5,862	6,038
	C	5,902	5,452	5,161	5,667
	All	6,530	6,038	5,882	6,204
NOV	W	6,672	7,620	6,493	6,397
	AN	6,224	7,357	5,716	6,092
	BN	5,088	5,926	4,553	4,774
	D	5,669	5,439	4,627	4,574
	C	4,822	4,789	4,437	4,246
	All	5,845	6,399	5,337	5,360
DEC	W	12,766	12,808	12,958	13,066
	AN	5,531	5,729	5,370	5,557
	BN	5,413	5,857	5,667	5,802
	D	4,215	3,883	3,877	3,755
	C	3,828	3,593	3,703	3,548
	All	7,267	7,278	7,255	7,290

1 **Table B.7-2. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Keswick, Year-Round**

Alternative 4A_ELT: Upstream—Sacramento River at Keswick					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	1,238 (7.5%)	434 (2.5%)	1,141 (6.9%)	337 (1.9%)
	AN	153 (1.8%)	695 (8.9%)	49 (0.6%)	591 (7.6%)
	BN	416 (9.2%)	577 (13.3%)	196 (4.3%)	357 (8.2%)
	D	103 (2.6%)	0 (0%)	101 (2.5%)	-2 (0%)
	C	26 (0.7%)	-278 (-7.3%)	19 (0.5%)	-285 (-7.5%)
	All	512 (5.9%)	297 (3.4%)	427 (5%)	212 (2.4%)
FEB	W	1,917 (10.3%)	145 (0.7%)	2,030 (10.9%)	258 (1.3%)
	AN	1,503 (10.4%)	832 (5.5%)	1,271 (8.8%)	599 (4%)
	BN	827 (13.8%)	352 (5.5%)	727 (12.2%)	253 (3.9%)
	D	-178 (-4.8%)	59 (1.7%)	-359 (-9.8%)	-123 (-3.6%)
	C	-88 (-2.5%)	116 (3.4%)	-206 (-5.7%)	-2 (0%)
	All	917 (8.9%)	258 (2.3%)	845 (8.2%)	185 (1.7%)
MAR	W	208 (1.3%)	9 (0.1%)	208 (1.3%)	9 (0.1%)
	AN	74 (0.8%)	543 (6.3%)	-167 (-1.8%)	302 (3.5%)
	BN	-728 (-14%)	166 (3.8%)	-820 (-15.8%)	74 (1.7%)
	D	-133 (-3.4%)	-88 (-2.3%)	-159 (-4.1%)	-114 (-3%)
	C	314 (9%)	194 (5.4%)	152 (4.4%)	32 (0.9%)
	All	-31 (-0.4%)	120 (1.4%)	-111 (-1.3%)	39 (0.5%)
APR	W	-176 (-1.9%)	-12 (-0.1%)	-196 (-2.1%)	-32 (-0.3%)
	AN	-360 (-5.8%)	110 (1.9%)	-365 (-5.9%)	105 (1.8%)
	BN	-426 (-7.9%)	66 (1.3%)	-261 (-4.8%)	232 (4.7%)
	D	-169 (-2.9%)	136 (2.5%)	-341 (-5.9%)	-35 (-0.6%)
	C	-159 (-2.5%)	-30 (-0.5%)	-218 (-3.4%)	-89 (-1.4%)
	All	-242 (-3.4%)	49 (0.7%)	-266 (-3.8%)	24 (0.4%)
MAY	W	-1,317 (-13.9%)	8 (0.1%)	-1,347 (-14.2%)	-21 (-0.3%)
	AN	480 (6.2%)	882 (12.1%)	183 (2.4%)	585 (8%)
	BN	-383 (-5.3%)	398 (6.2%)	-752 (-10.5%)	30 (0.5%)
	D	147 (2%)	421 (5.9%)	-34 (-0.5%)	239 (3.4%)
	C	204 (3%)	19 (0.3%)	257 (3.8%)	72 (1%)
	All	-351 (-4.4%)	295 (4%)	-499 (-6.3%)	147 (2%)
JUN	W	-54 (-0.5%)	259 (2.6%)	-299 (-2.9%)	14 (0.1%)
	AN	921 (8.3%)	665 (5.8%)	-36 (-0.3%)	-292 (-2.6%)
	BN	509 (4.7%)	693 (6.6%)	-99 (-0.9%)	86 (0.8%)
	D	917 (8.2%)	678 (5.9%)	259 (2.3%)	19 (0.2%)
	C	860 (8.3%)	211 (1.9%)	592 (5.7%)	-57 (-0.5%)
	All	532 (4.9%)	477 (4.4%)	26 (0.2%)	-28 (-0.3%)

Alternative 4A_ELT: Upstream—Sacramento River at Keswick					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	919 (7.2%)	222 (1.6%)	762 (6%)	65 (0.5%)
	AN	559 (4%)	74 (0.5%)	595 (4.2%)	109 (0.8%)
	BN	708 (5.5%)	478 (3.6%)	259 (2%)	29 (0.2%)
	D	351 (2.6%)	4 (0%)	35 (0.3%)	-312 (-2.3%)
	C	-379 (-2.9%)	347 (2.9%)	-1,046 (-8.1%)	-320 (-2.6%)
	All	516 (3.9%)	214 (1.6%)	228 (1.7%)	-74 (-0.6%)
AUG	W	-509 (-4.6%)	73 (0.7%)	-416 (-3.8%)	166 (1.6%)
	AN	716 (6.9%)	330 (3%)	926 (8.9%)	540 (5%)
	BN	617 (6.1%)	880 (8.9%)	535 (5.3%)	798 (8.1%)
	D	-1,247 (-11.7%)	-1,084 (-10.4%)	200 (1.9%)	363 (3.5%)
	C	-1,380 (-14.6%)	-287 (-3.4%)	-996 (-10.5%)	97 (1.2%)
	All	-427 (-4.1%)	-58 (-0.6%)	-7 (-0.1%)	362 (3.6%)
SEP	W	2,335 (24.9%)	-292 (-2.4%)	2,621 (27.9%)	-6 (-0.1%)
	AN	1,971 (33.6%)	-1,376 (-14.9%)	3,089 (52.7%)	-258 (-2.8%)
	BN	-336 (-6.1%)	-521 (-9.2%)	-424 (-7.7%)	-608 (-10.7%)
	D	-1,442 (-24.1%)	-439 (-8.8%)	-1,177 (-19.7%)	-174 (-3.5%)
	C	-846 (-15.2%)	-109 (-2.3%)	-772 (-13.9%)	-35 (-0.7%)
	All	531 (7.7%)	-495 (-6.2%)	840 (12.2%)	-187 (-2.4%)
OCT	W	-478 (-6.9%)	-84 (-1.3%)	-331 (-4.8%)	63 (1%)
	AN	-1,395 (-19.5%)	-340 (-5.6%)	-734 (-10.3%)	321 (5.3%)
	BN	-734 (-11.5%)	-173 (-3%)	-345 (-5.4%)	216 (3.7%)
	D	-266 (-4.3%)	-37 (-0.6%)	-90 (-1.5%)	139 (2.4%)
	C	-741 (-12.6%)	-291 (-5.3%)	-235 (-4%)	215 (3.9%)
	All	-648 (-9.9%)	-156 (-2.6%)	-325 (-5%)	166 (2.7%)
NOV	W	-180 (-2.7%)	-1,127 (-14.8%)	-276 (-4.1%)	-1,223 (-16.1%)
	AN	-508 (-8.2%)	-1,641 (-22.3%)	-132 (-2.1%)	-1,265 (-17.2%)
	BN	-534 (-10.5%)	-1,373 (-23.2%)	-314 (-6.2%)	-1,153 (-19.5%)
	D	-1,042 (-18.4%)	-812 (-14.9%)	-1,095 (-19.3%)	-865 (-15.9%)
	C	-386 (-8%)	-352 (-7.4%)	-576 (-11.9%)	-542 (-11.3%)
	All	-508 (-8.7%)	-1,062 (-16.6%)	-485 (-8.3%)	-1,039 (-16.2%)
DEC	W	192 (1.5%)	150 (1.2%)	300 (2.4%)	259 (2%)
	AN	-161 (-2.9%)	-359 (-6.3%)	26 (0.5%)	-173 (-3%)
	BN	254 (4.7%)	-190 (-3.3%)	390 (7.2%)	-55 (-0.9%)
	D	-338 (-8%)	-6 (-0.2%)	-460 (-10.9%)	-129 (-3.3%)
	C	-125 (-3.3%)	110 (3.1%)	-280 (-7.3%)	-45 (-1.3%)
	All	-12 (-0.2%)	-23 (-0.3%)	23 (0.3%)	13 (0.2%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

1 **Sacramento River Upstream of Red Bluff**2 **Table B.7-3. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round**

Alternative 4A_ELT: Upstream—Sacramento River Upstream of Red Bluff					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	28,036	29,368	29,799	29,702
	AN	16,725	16,267	16,960	16,858
	BN	9,381	9,267	9,842	9,623
	D	7,098	7,262	7,261	7,260
	C	6,143	6,497	6,222	6,216
	All	15,396	15,819	16,115	16,031
FEB	W	30,255	32,712	32,853	32,967
	AN	23,492	24,422	25,247	25,018
	BN	12,005	12,508	12,855	12,758
	D	8,947	8,785	8,843	8,662
	C	6,599	6,404	6,527	6,410
	All	18,010	18,947	19,203	19,132
MAR	W	25,004	25,473	25,481	25,482
	AN	16,599	16,222	16,753	16,522
	BN	9,333	8,438	8,598	8,532
	D	8,385	8,349	8,260	8,235
	C	5,999	6,126	6,323	6,162
	All	14,669	14,621	14,738	14,664
APR	W	15,172	15,078	15,066	15,047
	AN	10,477	9,983	10,090	10,094
	BN	8,711	8,239	8,299	8,467
	D	7,948	7,654	7,789	7,618
	C	7,742	7,628	7,600	7,546
	All	10,709	10,445	10,493	10,470
MAY	W	12,541	11,224	11,232	11,204
	AN	10,012	9,623	10,502	10,205
	BN	8,781	8,030	8,423	8,056
	D	8,677	8,424	8,841	8,661
	C	7,746	7,956	7,975	8,031
	All	9,979	9,351	9,644	9,498
JUN	W	11,905	11,591	11,849	11,606
	AN	12,001	12,227	12,882	11,927
	BN	11,464	11,304	11,988	11,387
	D	11,777	12,028	12,699	12,042
	C	10,885	11,539	11,748	11,485
	All	11,666	11,723	12,196	11,693

Alternative 4A_ELT: Upstream—Sacramento River Upstream of Red Bluff					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	13,255	13,937	14,157	14,003
	AN	14,130	14,594	14,662	14,701
	BN	13,011	13,272	13,741	13,297
	D	13,368	13,741	13,737	13,424
	C	13,005	12,344	12,632	11,972
	All	13,329	13,643	13,845	13,560
AUG	W	11,283	10,700	10,773	10,867
	AN	10,580	10,968	11,295	11,504
	BN	10,202	9,971	10,845	10,766
	D	10,747	10,610	9,524	10,971
	C	9,590	8,632	8,326	8,661
	All	10,630	10,292	10,229	10,643
SEP	W	9,856	12,494	12,202	12,488
	AN	6,280	9,634	8,255	9,369
	BN	5,821	6,038	5,510	5,423
	D	6,391	5,424	4,991	5,246
	C	5,887	5,279	5,112	5,156
	All	7,302	8,365	7,862	8,163
OCT	W	8,020	7,662	7,585	7,730
	AN	8,112	7,108	6,773	7,430
	BN	7,095	6,544	6,376	6,764
	D	6,903	6,690	6,648	6,830
	C	6,671	6,254	5,951	6,468
	All	7,432	6,971	6,815	7,139
NOV	W	9,876	10,966	9,839	9,743
	AN	8,144	9,362	7,725	8,101
	BN	6,790	7,710	6,338	6,556
	D	7,548	7,421	6,601	6,548
	C	5,811	5,805	5,456	5,261
	All	7,990	8,642	7,580	7,601
DEC	W	21,015	21,554	21,714	21,823
	AN	10,019	10,370	10,021	10,208
	BN	8,408	8,921	8,741	8,876
	D	7,292	7,044	7,046	6,925
	C	5,628	5,465	5,582	5,429
	All	11,989	12,221	12,207	12,243

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1 Table B.7-4. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

Alternative 4A_ELT: Upstream—Sacramento River Upstream of Red Bluff					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	1,762 (6.3%)	431 (1.5%)	1,666 (5.9%)	334 (1.1%)
	AN	236 (1.4%)	694 (4.3%)	133 (0.8%)	591 (3.6%)
	BN	460 (4.9%)	574 (6.2%)	241 (2.6%)	355 (3.8%)
	D	163 (2.3%)	-1 (0%)	162 (2.3%)	-2 (0%)
	C	79 (1.3%)	-275 (-4.2%)	73 (1.2%)	-281 (-4.3%)
	All	719 (4.7%)	296 (1.9%)	635 (4.1%)	212 (1.3%)
FEB	W	2,598 (8.6%)	142 (0.4%)	2,712 (9%)	256 (0.8%)
	AN	1,756 (7.5%)	825 (3.4%)	1,527 (6.5%)	596 (2.4%)
	BN	850 (7.1%)	346 (2.8%)	753 (6.3%)	250 (2%)
	D	-104 (-1.2%)	58 (0.7%)	-285 (-3.2%)	-123 (-1.4%)
	C	-72 (-1.1%)	123 (1.9%)	-189 (-2.9%)	5 (0.1%)
	All	1,193 (6.6%)	255 (1.3%)	1,122 (6.2%)	185 (1%)
MAR	W	478 (1.9%)	8 (0%)	478 (1.9%)	9 (0%)
	AN	154 (0.9%)	530 (3.3%)	-77 (-0.5%)	300 (1.8%)
	BN	-735 (-7.9%)	160 (1.9%)	-800 (-8.6%)	95 (1.1%)
	D	-125 (-1.5%)	-89 (-1.1%)	-150 (-1.8%)	-114 (-1.4%)
	C	324 (5.4%)	197 (3.2%)	163 (2.7%)	36 (0.6%)
	All	69 (0.5%)	117 (0.8%)	-5 (0%)	43 (0.3%)
APR	W	-106 (-0.7%)	-12 (-0.1%)	-125 (-0.8%)	-31 (-0.2%)
	AN	-387 (-3.7%)	107 (1.1%)	-383 (-3.7%)	112 (1.1%)
	BN	-411 (-4.7%)	61 (0.7%)	-244 (-2.8%)	228 (2.8%)
	D	-159 (-2%)	135 (1.8%)	-330 (-4.2%)	-36 (-0.5%)
	C	-142 (-1.8%)	-28 (-0.4%)	-197 (-2.5%)	-83 (-1.1%)
	All	-216 (-2%)	48 (0.5%)	-238 (-2.2%)	26 (0.2%)
MAY	W	-1,308 (-10.4%)	8 (0.1%)	-1,337 (-10.7%)	-20 (-0.2%)
	AN	490 (4.9%)	879 (9.1%)	193 (1.9%)	582 (6%)
	BN	-358 (-4.1%)	393 (4.9%)	-725 (-8.3%)	26 (0.3%)
	D	164 (1.9%)	417 (4.9%)	-16 (-0.2%)	237 (2.8%)
	C	229 (3%)	19 (0.2%)	285 (3.7%)	76 (0.9%)
	All	-335 (-3.4%)	293 (3.1%)	-481 (-4.8%)	146 (1.6%)
JUN	W	-56 (-0.5%)	259 (2.2%)	-299 (-2.5%)	15 (0.1%)
	AN	881 (7.3%)	655 (5.4%)	-74 (-0.6%)	-300 (-2.5%)
	BN	524 (4.6%)	684 (6.1%)	-77 (-0.7%)	83 (0.7%)
	D	922 (7.8%)	671 (5.6%)	264 (2.2%)	14 (0.1%)
	C	864 (7.9%)	210 (1.8%)	600 (5.5%)	-54 (-0.5%)
	All	529 (4.5%)	473 (4%)	27 (0.2%)	-30 (-0.3%)

Alternative 4A_ELT: Upstream—Sacramento River Upstream of Red Bluff					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	903 (6.8%)	221 (1.6%)	748 (5.6%)	66 (0.5%)
	AN	532 (3.8%)	67 (0.5%)	572 (4%)	107 (0.7%)
	BN	729 (5.6%)	468 (3.5%)	286 (2.2%)	25 (0.2%)
	D	369 (2.8%)	-3 (0%)	55 (0.4%)	-317 (-2.3%)
	C	-373 (-2.9%)	288 (2.3%)	-1,033 (-7.9%)	-372 (-3%)
	All	515 (3.9%)	201 (1.5%)	231 (1.7%)	-83 (-0.6%)
AUG	W	-511 (-4.5%)	73 (0.7%)	-417 (-3.7%)	167 (1.6%)
	AN	715 (6.8%)	327 (3%)	924 (8.7%)	536 (4.9%)
	BN	643 (6.3%)	873 (8.8%)	564 (5.5%)	795 (8%)
	D	-1,223 (-11.4%)	-1,086 (-10.2%)	223 (2.1%)	361 (3.4%)
	C	-1,264 (-13.2%)	-306 (-3.5%)	-930 (-9.7%)	29 (0.3%)
	All	-401 (-3.8%)	-63 (-0.6%)	12 (0.1%)	351 (3.4%)
SEP	W	2,346 (23.8%)	-292 (-2.3%)	2,632 (26.7%)	-6 (0%)
	AN	1,976 (31.5%)	-1,379 (-14.3%)	3,090 (49.2%)	-264 (-2.7%)
	BN	-311 (-5.3%)	-528 (-8.7%)	-398 (-6.8%)	-615 (-10.2%)
	D	-1,400 (-21.9%)	-433 (-8%)	-1,145 (-17.9%)	-178 (-3.3%)
	C	-774 (-13.2%)	-166 (-3.2%)	-731 (-12.4%)	-123 (-2.3%)
	All	559 (7.7%)	-504 (-6%)	861 (11.8%)	-203 (-2.4%)
OCT	W	-434 (-5.4%)	-77 (-1%)	-289 (-3.6%)	68 (0.9%)
	AN	-1,339 (-16.5%)	-335 (-4.7%)	-682 (-8.4%)	322 (4.5%)
	BN	-718 (-10.1%)	-168 (-2.6%)	-331 (-4.7%)	219 (3.4%)
	D	-255 (-3.7%)	-42 (-0.6%)	-72 (-1.1%)	140 (2.1%)
	C	-719 (-10.8%)	-302 (-4.8%)	-203 (-3%)	214 (3.4%)
	All	-618 (-8.3%)	-156 (-2.2%)	-294 (-4%)	168 (2.4%)
NOV	W	-37 (-0.4%)	-1,127 (-10.3%)	-133 (-1.3%)	-1,223 (-11.2%)
	AN	-419 (-5.1%)	-1,637 (-17.5%)	-42 (-0.5%)	-1,261 (-13.5%)
	BN	-452 (-6.7%)	-1,372 (-17.8%)	-235 (-3.5%)	-1,155 (-15%)
	D	-947 (-12.5%)	-820 (-11%)	-1,001 (-13.3%)	-874 (-11.8%)
	C	-356 (-6.1%)	-350 (-6%)	-550 (-9.5%)	-545 (-9.4%)
	All	-410 (-5.1%)	-1,062 (-12.3%)	-389 (-4.9%)	-1,041 (-12%)
DEC	W	698 (3.3%)	159 (0.7%)	808 (3.8%)	269 (1.2%)
	AN	2 (0%)	-348 (-3.4%)	188 (1.9%)	-162 (-1.6%)
	BN	333 (4%)	-180 (-2%)	468 (5.6%)	-45 (-0.5%)
	D	-246 (-3.4%)	1 (0%)	-367 (-5%)	-120 (-1.7%)
	C	-46 (-0.8%)	117 (2.1%)	-199 (-3.5%)	-36 (-0.7%)
	All	218 (1.8%)	-14 (-0.1%)	254 (2.1%)	22 (0.2%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

## 1 Sacramento River at Wilkins Slough

2 Table B.7-5. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

Alternative 4A_ELT: Upstream—Sacramento River at Wilkins Slough					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	19,145	19,250	19,275	19,267
	AN	17,084	16,521	16,611	16,596
	BN	12,521	12,322	12,640	12,592
	D	8,896	8,896	8,825	8,832
	C	7,858	8,152	7,860	7,864
	All	13,811	13,771	13,788	13,777
FEB	W	19,887	19,976	19,992	20,003
	AN	19,139	19,134	19,219	19,163
	BN	14,528	14,508	14,557	14,549
	D	11,520	11,451	11,451	11,400
	C	8,499	8,220	8,354	8,237
	All	15,359	15,327	15,373	15,339
MAR	W	18,223	18,325	18,323	18,328
	AN	17,696	17,638	17,712	17,706
	BN	12,208	11,505	11,673	11,591
	D	11,364	11,289	11,264	11,242
	C	8,101	8,201	8,386	8,232
	All	14,132	14,034	14,095	14,054
APR	W	13,392	13,312	13,315	13,299
	AN	10,264	10,038	10,063	10,101
	BN	7,152	6,795	6,847	7,032
	D	5,319	5,082	5,217	5,037
	C	4,164	4,136	4,097	4,055
	All	8,746	8,571	8,608	8,595
MAY	W	10,467	9,445	9,447	9,429
	AN	7,318	6,978	7,820	7,481
	BN	5,638	4,981	5,315	4,942
	D	4,669	4,454	4,817	4,642
	C	3,998	4,155	4,177	4,260
	All	6,962	6,452	6,716	6,571
JUN	W	6,503	6,226	6,467	6,249
	AN	5,781	5,958	6,523	5,590
	BN	5,243	5,205	5,811	5,274
	D	5,245	5,586	6,212	5,570
	C	5,141	5,753	5,957	5,724
	All	5,707	5,803	6,233	5,760

Alternative 4A_ELT: Upstream—Sacramento River at Wilkins Slough						
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT		
				H3_ELT	H4_ELT	
JUL	W	6,685	7,162	7,367	7,224	
	AN	6,971	7,307	7,304	7,369	
	BN	6,122	6,503	6,873	6,462	
	D	6,788	7,240	7,172	6,881	
	C	7,162	6,577	6,708	6,100	
	All	6,723	7,002	7,134	6,875	
AUG	W	6,287	5,492	5,548	5,657	
	AN	5,498	5,765	6,063	6,251	
	BN	5,138	4,984	5,755	5,695	
	D	5,833	5,723	4,574	6,023	
	C	5,551	4,963	4,578	4,850	
	All	5,768	5,419	5,303	5,713	
SEP	W	9,338	11,904	11,624	11,901	
	AN	5,631	8,877	7,485	8,577	
	BN	5,128	5,291	4,733	4,647	
	D	5,636	4,629	4,269	4,445	
	C	5,200	4,689	4,514	4,486	
	All	6,658	7,679	7,187	7,454	
OCT	W	7,347	6,876	6,840	6,982	
	AN	6,799	5,809	5,523	6,102	
	BN	5,987	5,344	5,196	5,584	
	D	5,688	5,411	5,386	5,555	
	C	5,641	5,205	4,902	5,351	
	All	6,421	5,892	5,764	6,063	
NOV	W	9,644	10,843	9,684	9,724	
	AN	8,210	9,465	7,845	8,229	
	BN	6,793	7,688	6,308	6,517	
	D	7,407	7,354	6,528	6,483	
	C	5,118	5,081	4,722	4,508	
	All	7,794	8,494	7,419	7,483	
DEC	W	17,881	17,819	17,877	17,919	
	AN	10,809	10,921	10,833	10,943	
	BN	8,505	8,283	8,306	8,324	
	D	8,950	8,665	8,633	8,580	
	C	6,229	5,989	6,122	5,991	
	All	11,580	11,441	11,463	11,464	

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1 Table B.7-6. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

Alternative 4A_ELT: Upstream—Sacramento River at Wilkins Slough					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	130 (0.7%)	25 (0.1%)	122 (0.6%)	17 (0.1%)
	AN	-473 (-2.8%)	90 (0.5%)	-488 (-2.9%)	75 (0.5%)
	BN	119 (1%)	318 (2.6%)	71 (0.6%)	270 (2.2%)
	D	-70 (-0.8%)	-71 (-0.8%)	-64 (-0.7%)	-64 (-0.7%)
	C	3 (0%)	-292 (-3.6%)	7 (0.1%)	-288 (-3.5%)
	All	-23 (-0.2%)	17 (0.1%)	-34 (-0.2%)	6 (0%)
FEB	W	104 (0.5%)	16 (0.1%)	115 (0.6%)	27 (0.1%)
	AN	80 (0.4%)	85 (0.4%)	24 (0.1%)	29 (0.1%)
	BN	30 (0.2%)	49 (0.3%)	22 (0.1%)	41 (0.3%)
	D	-68 (-0.6%)	0 (0%)	-119 (-1%)	-50 (-0.4%)
	C	-145 (-1.7%)	134 (1.6%)	-261 (-3.1%)	17 (0.2%)
	All	14 (0.1%)	46 (0.3%)	-21 (-0.1%)	11 (0.1%)
MAR	W	101 (0.6%)	-1 (0%)	106 (0.6%)	4 (0%)
	AN	17 (0.1%)	75 (0.4%)	11 (0.1%)	69 (0.4%)
	BN	-535 (-4.4%)	168 (1.5%)	-617 (-5.1%)	86 (0.7%)
	D	-100 (-0.9%)	-25 (-0.2%)	-122 (-1.1%)	-48 (-0.4%)
	C	285 (3.5%)	185 (2.3%)	131 (1.6%)	31 (0.4%)
	All	-37 (-0.3%)	61 (0.4%)	-78 (-0.6%)	20 (0.1%)
APR	W	-77 (-0.6%)	3 (0%)	-93 (-0.7%)	-13 (-0.1%)
	AN	-200 (-1.9%)	25 (0.3%)	-163 (-1.6%)	63 (0.6%)
	BN	-305 (-4.3%)	52 (0.8%)	-121 (-1.7%)	237 (3.5%)
	D	-103 (-1.9%)	134 (2.6%)	-283 (-5.3%)	-45 (-0.9%)
	C	-67 (-1.6%)	-39 (-1%)	-109 (-2.6%)	-81 (-2%)
	All	-138 (-1.6%)	37 (0.4%)	-152 (-1.7%)	24 (0.3%)
MAY	W	-1,019 (-9.7%)	3 (0%)	-1,038 (-9.9%)	-16 (-0.2%)
	AN	502 (6.9%)	841 (12.1%)	164 (2.2%)	503 (7.2%)
	BN	-323 (-5.7%)	334 (6.7%)	-695 (-12.3%)	-39 (-0.8%)
	D	148 (3.2%)	363 (8.2%)	-27 (-0.6%)	188 (4.2%)
	C	179 (4.5%)	22 (0.5%)	262 (6.5%)	105 (2.5%)
	All	-246 (-3.5%)	264 (4.1%)	-392 (-5.6%)	119 (1.8%)
JUN	W	-36 (-0.6%)	241 (3.9%)	-255 (-3.9%)	23 (0.4%)
	AN	742 (12.8%)	565 (9.5%)	-190 (-3.3%)	-368 (-6.2%)
	BN	568 (10.8%)	606 (11.6%)	32 (0.6%)	69 (1.3%)
	D	967 (18.4%)	626 (11.2%)	325 (6.2%)	-16 (-0.3%)
	C	817 (15.9%)	205 (3.6%)	584 (11.4%)	-29 (-0.5%)
	All	526 (9.2%)	430 (7.4%)	53 (0.9%)	-42 (-0.7%)

Alternative 4A_ELT: Upstream—Sacramento River at Wilkins Slough					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	682 (10.2%)	204 (2.9%)	539 (8.1%)	61 (0.9%)
	AN	333 (4.8%)	-3 (0%)	398 (5.7%)	61 (0.8%)
	BN	751 (12.3%)	370 (5.7%)	340 (5.5%)	-42 (-0.6%)
	D	385 (5.7%)	-68 (-0.9%)	93 (1.4%)	-360 (-5%)
	C	-453 (-6.3%)	131 (2%)	-1,061 (-14.8%)	-476 (-7.2%)
	All	411 (6.1%)	132 (1.9%)	152 (2.3%)	-127 (-1.8%)
AUG	W	-739 (-11.8%)	56 (1%)	-630 (-10%)	165 (3%)
	AN	565 (10.3%)	299 (5.2%)	752 (13.7%)	486 (8.4%)
	BN	617 (12%)	770 (15.5%)	558 (10.9%)	711 (14.3%)
	D	-1,259 (-21.6%)	-1,149 (-20.1%)	190 (3.3%)	300 (5.2%)
	C	-973 (-17.5%)	-385 (-7.8%)	-701 (-12.6%)	-113 (-2.3%)
	All	-465 (-8.1%)	-115 (-2.1%)	-55 (-1%)	294 (5.4%)
SEP	W	2,287 (24.5%)	-279 (-2.3%)	2,563 (27.4%)	-3 (0%)
	AN	1,853 (32.9%)	-1,393 (-15.7%)	2,946 (52.3%)	-300 (-3.4%)
	BN	-395 (-7.7%)	-558 (-10.6%)	-481 (-9.4%)	-645 (-12.2%)
	D	-1,367 (-24.2%)	-360 (-7.8%)	-1,191 (-21.1%)	-184 (-4%)
	C	-686 (-13.2%)	-175 (-3.7%)	-714 (-13.7%)	-203 (-4.3%)
	All	529 (7.9%)	-492 (-6.4%)	796 (12%)	-225 (-2.9%)
OCT	W	-507 (-6.9%)	-36 (-0.5%)	-364 (-5%)	106 (1.5%)
	AN	-1,276 (-18.8%)	-286 (-4.9%)	-698 (-10.3%)	293 (5%)
	BN	-790 (-13.2%)	-148 (-2.8%)	-403 (-6.7%)	240 (4.5%)
	D	-302 (-5.3%)	-25 (-0.5%)	-133 (-2.3%)	144 (2.7%)
	C	-739 (-13.1%)	-303 (-5.8%)	-290 (-5.1%)	147 (2.8%)
	All	-657 (-10.2%)	-128 (-2.2%)	-358 (-5.6%)	171 (2.9%)
NOV	W	40 (0.4%)	-1,159 (-10.7%)	80 (0.8%)	-1,119 (-10.3%)
	AN	-365 (-4.4%)	-1,620 (-17.1%)	20 (0.2%)	-1,236 (-13.1%)
	BN	-485 (-7.1%)	-1,380 (-17.9%)	-276 (-4.1%)	-1,171 (-15.2%)
	D	-880 (-11.9%)	-826 (-11.2%)	-924 (-12.5%)	-870 (-11.8%)
	C	-397 (-7.7%)	-360 (-7.1%)	-610 (-11.9%)	-574 (-11.3%)
	All	-375 (-4.8%)	-1,074 (-12.6%)	-311 (-4%)	-1,010 (-11.9%)
DEC	W	-4 (0%)	58 (0.3%)	38 (0.2%)	100 (0.6%)
	AN	24 (0.2%)	-88 (-0.8%)	134 (1.2%)	22 (0.2%)
	BN	-199 (-2.3%)	23 (0.3%)	-181 (-2.1%)	41 (0.5%)
	D	-316 (-3.5%)	-32 (-0.4%)	-370 (-4.1%)	-85 (-1%)
	C	-107 (-1.7%)	134 (2.2%)	-238 (-3.8%)	2 (0%)
	All	-117 (-1%)	22 (0.2%)	-115 (-1%)	23 (0.2%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

## 1 Sacramento River at Verona

2 Table B.7-7. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Verona, Year-Round

Alternative 4A_ELT: Upstream—Sacramento River at Verona					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	44,589	45,074	43,368	43,646
	AN	34,120	32,939	31,498	31,734
	BN	20,176	19,324	17,820	17,879
	D	14,756	14,643	14,042	13,977
	C	12,085	12,331	11,618	11,577
	All	27,583	27,430	26,185	26,298
FEB	W	49,892	50,745	49,193	48,993
	AN	39,161	39,631	38,675	38,259
	BN	26,429	25,717	23,861	24,512
	D	18,402	18,079	17,146	16,991
	C	12,822	12,387	12,073	12,003
	All	31,978	32,062	30,862	30,804
MAR	W	43,455	44,098	42,020	41,973
	AN	39,477	39,691	37,948	37,478
	BN	21,484	19,717	18,292	18,650
	D	17,868	17,411	16,398	16,497
	C	11,903	11,765	11,745	11,596
	All	28,888	28,700	27,318	27,296
APR	W	32,219	32,102	29,808	32,405
	AN	22,250	21,717	20,331	23,299
	BN	14,459	13,834	13,363	18,758
	D	11,113	10,967	11,113	10,963
	C	9,420	9,304	9,388	9,184
	All	19,759	19,488	18,522	20,638
MAY	W	26,193	23,714	23,617	26,598
	AN	17,080	16,427	18,037	20,607
	BN	11,451	10,653	11,070	13,160
	D	9,283	9,086	9,621	9,651
	C	7,125	7,408	7,148	7,276
	All	15,840	14,820	15,176	16,879
JUN	W	18,367	15,664	17,607	15,127
	AN	13,590	12,877	16,073	13,070
	BN	11,062	10,888	14,747	11,940
	D	10,429	10,702	12,174	10,717
	C	8,911	9,441	9,315	9,024
	All	13,295	12,441	14,488	12,421

Alternative 4A_ELT: Upstream—Sacramento River at Verona					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	16,253	17,144	16,859	15,269
	AN	17,488	18,014	18,091	14,880
	BN	16,698	16,823	16,747	14,944
	D	16,352	16,245	14,669	13,359
	C	14,476	13,348	10,570	10,491
	All	16,271	16,464	15,619	14,038
AUG	W	12,464	13,393	12,720	10,801
	AN	13,691	14,684	14,626	12,099
	BN	13,389	13,098	13,438	12,054
	D	14,688	13,057	10,148	10,936
	C	9,208	8,300	8,359	9,095
	All	12,813	12,713	11,919	10,985
SEP	W	14,279	22,873	20,732	20,411
	AN	10,536	18,667	15,782	15,179
	BN	9,961	10,768	8,819	8,151
	D	10,542	8,618	7,884	8,094
	C	7,764	7,264	7,287	7,653
	All	11,220	14,777	13,186	12,981
OCT	W	11,503	10,681	10,829	10,450
	AN	9,381	8,617	8,462	8,838
	BN	9,867	8,868	8,865	8,972
	D	8,681	8,515	8,949	8,284
	C	8,544	7,862	7,556	8,147
	All	9,861	9,181	9,256	9,149
NOV	W	15,307	16,176	15,027	14,880
	AN	11,792	13,177	11,449	11,655
	BN	9,852	10,676	9,186	9,245
	D	10,157	10,024	9,185	8,942
	C	7,341	7,283	6,884	6,806
	All	11,565	12,146	11,032	10,961
DEC	W	33,840	33,224	31,091	31,781
	AN	17,572	18,415	17,617	17,789
	BN	13,100	13,257	13,009	12,870
	D	12,685	12,465	12,298	12,020
	C	9,771	8,724	8,974	8,648
	All	19,752	19,506	18,670	18,782

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1 Table B.7-8. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Verona, Year-Round

Alternative 4A_ELT: Upstream—Sacramento River at Verona					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	-1,221 (-2.7%)	-1,706 (-3.8%)	-943 (-2.1%)	-1,429 (-3.2%)
	AN	-2,623 (-7.7%)	-1,441 (-4.4%)	-2,387 (-7%)	-1,205 (-3.7%)
	BN	-2,355 (-11.7%)	-1,504 (-7.8%)	-2,297 (-11.4%)	-1,445 (-7.5%)
	D	-714 (-4.8%)	-601 (-4.1%)	-779 (-5.3%)	-666 (-4.5%)
	C	-467 (-3.9%)	-713 (-5.8%)	-508 (-4.2%)	-754 (-6.1%)
	All	-1,398 (-5.1%)	-1,245 (-4.5%)	-1,286 (-4.7%)	-1,133 (-4.1%)
FEB	W	-699 (-1.4%)	-1,552 (-3.1%)	-899 (-1.8%)	-1,753 (-3.5%)
	AN	-487 (-1.2%)	-956 (-2.4%)	-903 (-2.3%)	-1,372 (-3.5%)
	BN	-2,568 (-9.7%)	-1,857 (-7.2%)	-1,917 (-7.3%)	-1,205 (-4.7%)
	D	-1,256 (-6.8%)	-932 (-5.2%)	-1,411 (-7.7%)	-1,088 (-6%)
	C	-749 (-5.8%)	-315 (-2.5%)	-819 (-6.4%)	-385 (-3.1%)
	All	-1,117 (-3.5%)	-1,200 (-3.7%)	-1,174 (-3.7%)	-1,257 (-3.9%)
MAR	W	-1,435 (-3.3%)	-2,078 (-4.7%)	-1,482 (-3.4%)	-2,124 (-4.8%)
	AN	-1,530 (-3.9%)	-1,744 (-4.4%)	-1,999 (-5.1%)	-2,213 (-5.6%)
	BN	-3,192 (-14.9%)	-1,425 (-7.2%)	-2,834 (-13.2%)	-1,066 (-5.4%)
	D	-1,470 (-8.2%)	-1,012 (-5.8%)	-1,371 (-7.7%)	-914 (-5.2%)
	C	-158 (-1.3%)	-20 (-0.2%)	-308 (-2.6%)	-169 (-1.4%)
	All	-1,570 (-5.4%)	-1,382 (-4.8%)	-1,592 (-5.5%)	-1,405 (-4.9%)
APR	W	-2,411 (-7.5%)	-2,293 (-7.1%)	186 (0.6%)	303 (0.9%)
	AN	-1,919 (-8.6%)	-1,386 (-6.4%)	1,048 (4.7%)	1,581 (7.3%)
	BN	-1,096 (-7.6%)	-471 (-3.4%)	4,300 (29.7%)	4,924 (35.6%)
	D	0 (0%)	146 (1.3%)	-150 (-1.3%)	-4 (0%)
	C	-32 (-0.3%)	84 (0.9%)	-236 (-2.5%)	-120 (-1.3%)
	All	-1,237 (-6.3%)	-966 (-5%)	879 (4.4%)	1,150 (5.9%)
MAY	W	-2,576 (-9.8%)	-96 (-0.4%)	405 (1.5%)	2,884 (12.2%)
	AN	958 (5.6%)	1,610 (9.8%)	3,527 (20.7%)	4,180 (25.4%)
	BN	-381 (-3.3%)	417 (3.9%)	1,708 (14.9%)	2,506 (23.5%)
	D	337 (3.6%)	535 (5.9%)	368 (4%)	565 (6.2%)
	C	23 (0.3%)	-260 (-3.5%)	152 (2.1%)	-132 (-1.8%)
	All	-664 (-4.2%)	356 (2.4%)	1,039 (6.6%)	2,059 (13.9%)
JUN	W	-760 (-4.1%)	1,943 (12.4%)	-3,240 (-17.6%)	-537 (-3.4%)
	AN	2,483 (18.3%)	3,196 (24.8%)	-520 (-3.8%)	193 (1.5%)
	BN	3,685 (33.3%)	3,859 (35.4%)	878 (7.9%)	1,052 (9.7%)
	D	1,746 (16.7%)	1,472 (13.8%)	289 (2.8%)	15 (0.1%)
	C	404 (4.5%)	-126 (-1.3%)	113 (1.3%)	-417 (-4.4%)
	All	1,194 (9%)	2,047 (16.5%)	-874 (-6.6%)	-20 (-0.2%)

Alternative 4A_ELT: Upstream—Sacramento River at Verona					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	606 (3.7%)	-285 (-1.7%)	-984 (-6.1%)	-1,875 (-10.9%)
	AN	603 (3.5%)	77 (0.4%)	-2,608 (-14.9%)	-3,134 (-17.4%)
	BN	50 (0.3%)	-76 (-0.4%)	-1,754 (-10.5%)	-1,879 (-11.2%)
	D	-1,683 (-10.3%)	-1,576 (-9.7%)	-2,993 (-18.3%)	-2,886 (-17.8%)
	C	-3,906 (-27%)	-2,778 (-20.8%)	-3,985 (-27.5%)	-2,857 (-21.4%)
	All	-652 (-4%)	-844 (-5.1%)	-2,233 (-13.7%)	-2,426 (-14.7%)
AUG	W	256 (2.1%)	-673 (-5%)	-1,663 (-13.3%)	-2,593 (-19.4%)
	AN	935 (6.8%)	-57 (-0.4%)	-1,593 (-11.6%)	-2,585 (-17.6%)
	BN	49 (0.4%)	340 (2.6%)	-1,335 (-10%)	-1,044 (-8%)
	D	-4,540 (-30.9%)	-2,909 (-22.3%)	-3,751 (-25.5%)	-2,120 (-16.2%)
	C	-849 (-9.2%)	59 (0.7%)	-112 (-1.2%)	796 (9.6%)
	All	-894 (-7%)	-794 (-6.2%)	-1,828 (-14.3%)	-1,728 (-13.6%)
SEP	W	6,453 (45.2%)	-2,140 (-9.4%)	6,132 (42.9%)	-2,462 (-10.8%)
	AN	5,245 (49.8%)	-2,885 (-15.5%)	4,642 (44.1%)	-3,488 (-18.7%)
	BN	-1,141 (-11.5%)	-1,949 (-18.1%)	-1,810 (-18.2%)	-2,618 (-24.3%)
	D	-2,658 (-25.2%)	-734 (-8.5%)	-2,447 (-23.2%)	-524 (-6.1%)
	C	-477 (-6.1%)	23 (0.3%)	-111 (-1.4%)	389 (5.4%)
	All	1,966 (17.5%)	-1,591 (-10.8%)	1,761 (15.7%)	-1,796 (-12.2%)
OCT	W	-674 (-5.9%)	149 (1.4%)	-1,054 (-9.2%)	-231 (-2.2%)
	AN	-919 (-9.8%)	-156 (-1.8%)	-543 (-5.8%)	220 (2.6%)
	BN	-1,002 (-10.2%)	-3 (0%)	-895 (-9.1%)	104 (1.2%)
	D	268 (3.1%)	434 (5.1%)	-397 (-4.6%)	-231 (-2.7%)
	C	-987 (-11.6%)	-305 (-3.9%)	-396 (-4.6%)	286 (3.6%)
	All	-605 (-6.1%)	74 (0.8%)	-712 (-7.2%)	-32 (-0.4%)
NOV	W	-280 (-1.8%)	-1,150 (-7.1%)	-427 (-2.8%)	-1,296 (-8%)
	AN	-343 (-2.9%)	-1,728 (-13.1%)	-138 (-1.2%)	-1,522 (-11.6%)
	BN	-666 (-6.8%)	-1,489 (-13.9%)	-608 (-6.2%)	-1,431 (-13.4%)
	D	-972 (-9.6%)	-840 (-8.4%)	-1,214 (-12%)	-1,082 (-10.8%)
	C	-457 (-6.2%)	-399 (-5.5%)	-535 (-7.3%)	-476 (-6.5%)
	All	-533 (-4.6%)	-1,114 (-9.2%)	-604 (-5.2%)	-1,185 (-9.8%)
DEC	W	-2,749 (-8.1%)	-2,133 (-6.4%)	-2,059 (-6.1%)	-1,443 (-4.3%)
	AN	45 (0.3%)	-798 (-4.3%)	217 (1.2%)	-626 (-3.4%)
	BN	-90 (-0.7%)	-248 (-1.9%)	-230 (-1.8%)	-387 (-2.9%)
	D	-387 (-3%)	-166 (-1.3%)	-665 (-5.2%)	-444 (-3.6%)
	C	-796 (-8.2%)	250 (2.9%)	-1,122 (-11.5%)	-76 (-0.9%)
	All	-1,082 (-5.5%)	-835 (-4.3%)	-971 (-4.9%)	-724 (-3.7%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

1 **Trinity River below Lewiston**2 **Table B.7-9. Mean Monthly Flows (cfs) for Model Scenarios in the Trinity River Below Lewiston, Year-Round**

Alternative 4A_ELT: Upstream—Trinity River below Lewiston					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	1,440	1,570	1,606	1,581
	AN	300	300	300	300
	BN	358	300	300	300
	D	300	300	300	300
	C	300	300	300	300
	All	671	703	714	706
FEB	W	1,056	1,209	1,288	1,333
	AN	689	773	855	843
	BN	517	559	559	559
	D	300	300	300	300
	C	300	300	300	300
	All	634	702	739	751
MAR	W	1,209	1,335	1,409	1,376
	AN	436	475	475	475
	BN	319	302	300	300
	D	300	300	300	300
	C	300	300	300	300
	All	611	654	677	667
APR	W	721	740	738	727
	AN	469	561	467	467
	BN	507	508	508	508
	D	529	529	529	529
	C	575	580	580	580
	All	584	605	590	587
MAY	W	4,636	4,620	4,620	4,620
	AN	4,462	4,450	4,450	4,450
	BN	3,774	3,763	3,763	3,763
	D	3,216	3,216	3,216	3,216
	C	2,092	1,973	1,973	1,973
	All	3,779	3,753	3,753	3,753
JUN	W	3,371	3,613	3,613	3,613
	AN	2,488	2,663	2,663	2,663
	BN	1,672	1,767	1,767	1,767
	D	1,251	1,251	1,251	1,251
	C	783	783	783	783
	All	2,108	2,226	2,226	2,226

Alternative 4A_ELT: Upstream—Trinity River below Lewiston					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	1,289	1,161	1,161	1,161
	AN	1,048	1,048	1,048	1,048
	BN	869	916	916	916
	D	667	667	667	667
	C	450	450	450	450
	All	923	890	890	890
AUG	W	450	450	450	450
	AN	450	450	450	450
	BN	450	450	450	450
	D	450	450	450	450
	C	450	413	413	413
	All	450	445	445	445
SEP	W	450	450	450	450
	AN	450	450	450	450
	BN	450	450	450	450
	D	450	450	450	450
	C	450	356	375	413
	All	450	436	439	445
OCT	W	373	373	373	373
	AN	373	337	312	373
	BN	346	346	346	346
	D	373	352	352	373
	C	373	342	342	373
	All	368	354	350	368
NOV	W	489	510	461	478
	AN	300	275	275	300
	BN	300	300	300	300
	D	300	283	283	283
	C	300	263	275	275
	All	360	354	340	349
DEC	W	1,072	1,281	1,379	1,378
	AN	300	300	300	300
	BN	300	300	300	300
	D	300	300	300	300
	C	300	300	300	300
	All	545	611	642	642

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1 Table B.7-10. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Trinity River Below Lewiston, Year-Round

Alternative 4A_ELT: Upstream—Trinity River below Lewiston					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	167 (11.6%)	37 (2.3%)	141 (9.8%)	11 (0.7%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	-58 (-16.3%)	0 (0%)	-58 (-16.3%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	43 (6.4%)	12 (1.7%)	35 (5.2%)	4 (0.5%)
FEB	W	231 (21.9%)	79 (6.5%)	277 (26.2%)	124 (10.3%)
	AN	166 (24%)	82 (10.6%)	153 (22.2%)	70 (9%)
	BN	43 (8.2%)	0 (0%)	43 (8.2%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	105 (16.5%)	37 (5.3%)	118 (18.6%)	50 (7.1%)
MAR	W	200 (16.5%)	73 (5.5%)	168 (13.9%)	41 (3.1%)
	AN	39 (8.9%)	0 (0%)	39 (8.9%)	0 (0%)
	BN	-19 (-5.8%)	-2 (-0.7%)	-19 (-5.8%)	-2 (-0.7%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	66 (10.8%)	23 (3.5%)	56 (9.1%)	13 (1.9%)
APR	W	17 (2.4%)	-2 (-0.2%)	5 (0.8%)	-13 (-1.8%)
	AN	-3 (-0.6%)	-95 (-16.9%)	-3 (-0.6%)	-95 (-16.9%)
	BN	1 (0.2%)	0 (0%)	1 (0.2%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	5 (0.9%)	0 (0%)	5 (0.9%)	0 (0%)
	All	6 (1%)	-14 (-2.4%)	2 (0.4%)	-18 (-3%)
MAY	W	-16 (-0.3%)	0 (0%)	-16 (-0.3%)	0 (0%)
	AN	-12 (-0.3%)	0 (0%)	-12 (-0.3%)	0 (0%)
	BN	-12 (-0.3%)	0 (0%)	-12 (-0.3%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	-119 (-5.7%)	0 (0%)	-119 (-5.7%)	0 (0%)
	All	-26 (-0.7%)	0 (0%)	-26 (-0.7%)	0 (0%)
JUN	W	242 (7.2%)	0 (0%)	242 (7.2%)	0 (0%)
	AN	175 (7%)	0 (0%)	175 (7%)	0 (0%)
	BN	96 (5.7%)	0 (0%)	96 (5.7%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	119 (5.6%)	0 (0%)	119 (5.6%)	0 (0%)

Alternative 4A_ELT: Upstream—Trinity River below Lewiston					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	-128 (-9.9%)	0 (0%)	-128 (-9.9%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	47 (5.4%)	0 (0%)	47 (5.4%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	-33 (-3.5%)	0 (0%)	-33 (-3.5%)	0 (0%)
AUG	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	-38 (-8.3%)	0 (0%)	-38 (-8.3%)	0 (0%)
	All	-5 (-1.2%)	0 (0%)	-5 (-1.2%)	0 (0%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	-75 (-16.7%)	19 (5.5%)	-38 (-8.3%)	57 (16%)
	All	-11 (-2.4%)	3 (0.7%)	-5 (-1.2%)	8 (1.9%)
OCT	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	-61 (-16.4%)	-25 (-7.6%)	0 (0%)	36 (10.6%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	-21 (-5.6%)	0 (0%)	0 (0%)	21 (5.9%)
	C	-31 (-8.3%)	0 (0%)	0 (0%)	31 (9.1%)
	All	-18 (-4.9%)	-4 (-1.1%)	0 (0%)	14 (4%)
NOV	W	-28 (-5.7%)	-49 (-9.7%)	-11 (-2.2%)	-32 (-6.2%)
	AN	-25 (-8.3%)	0 (0%)	0 (0%)	25 (9.1%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	-17 (-5.6%)	0 (0%)	-17 (-5.6%)	0 (0%)
	C	-25 (-8.3%)	12 (4.5%)	-25 (-8.3%)	12 (4.5%)
	All	-20 (-5.5%)	-14 (-3.9%)	-11 (-3%)	-5 (-1.3%)
DEC	W	307 (28.7%)	98 (7.6%)	307 (28.6%)	97 (7.6%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	97 (17.9%)	31 (5.1%)	97 (17.9%)	31 (5%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

## 1 Clear Creek below Whiskeytown

2 Table B.7-11. Mean Monthly Flows (cfs) for Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

Alternative 4A_ELТ: Upstream—Clear Creek below Whiskeytown					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELТ	A4A_ELТ	
				H3_ELТ	H4_ELТ
JAN	W	220	309	309	309
	AN	192	192	192	192
	BN	189	189	189	189
	D	184	192	192	192
	C	155	166	171	171
	All	193	225	225	225
FEB	W	220	249	249	249
	AN	197	196	196	196
	BN	189	189	189	189
	D	184	192	192	192
	C	155	166	171	171
	All	194	206	207	207
MAR	W	200	207	207	207
	AN	197	203	196	203
	BN	189	192	189	215
	D	186	192	192	192
	C	155	166	171	171
	All	188	194	194	199
APR	W	200	200	200	200
	AN	197	196	196	203
	BN	189	192	189	189
	D	189	192	192	192
	C	155	166	171	171
	All	189	191	191	193
MAY	W	277	277	277	277
	AN	277	277	277	277
	BN	263	269	269	269
	D	264	264	264	264
	C	211	224	224	224
	All	262	265	265	265
JUN	W	200	200	200	200
	AN	200	200	200	200
	BN	181	186	186	186
	D	180	180	180	180
	C	115	120	120	120
	All	180	181	181	181

Alternative 4A_ELT: Upstream—Clear Creek below Whiskeytown					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	85	85	85	85
	AN	85	85	85	85
	BN	85	85	85	85
	D	85	85	85	85
	C	85	99	85	85
	All	85	87	85	85
AUG	W	85	85	85	85
	AN	85	85	85	85
	BN	85	85	85	85
	D	85	85	85	85
	C	94	85	94	94
	All	86	85	86	86
SEP	W	150	150	150	150
	AN	150	150	150	150
	BN	150	150	150	150
	D	144	150	150	150
	C	133	121	108	121
	All	146	146	144	146
OCT	W	198	198	198	198
	AN	183	183	183	183
	BN	189	179	179	179
	D	175	183	175	183
	C	150	165	154	167
	All	182	185	181	185
NOV	W	198	198	198	198
	AN	185	180	180	185
	BN	184	189	189	189
	D	177	184	176	176
	C	155	158	158	158
	All	183	185	183	184
DEC	W	198	198	198	198
	AN	185	192	192	192
	BN	189	189	189	189
	D	177	189	189	189
	C	155	166	171	171
	All	184	189	190	190

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1 Table B.7-12. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

Alternative 4A_ELT: Upstream—Clear Creek below Whiskeytown					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	88 (40.1%)	0 (0%)	89 (40.2%)	0 (0%)
	AN	0 (-0.1%)	0 (0%)	0 (-0.1%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	7 (3.9%)	0 (0%)	7 (3.9%)	0 (0%)
	C	16 (10.2%)	5 (2.9%)	16 (10.2%)	5 (2.9%)
	All	32 (16.5%)	1 (0.3%)	32 (16.5%)	1 (0.3%)
FEB	W	29 (13.3%)	0 (0%)	29 (13.4%)	0 (0.1%)
	AN	-1 (-0.4%)	0 (0%)	-1 (-0.3%)	0 (0.1%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	7 (3.9%)	0 (0%)	7 (3.9%)	0 (0%)
	C	16 (10.2%)	5 (2.9%)	16 (10.2%)	5 (2.9%)
	All	13 (6.7%)	1 (0.3%)	13 (6.8%)	1 (0.4%)
MAR	W	7 (3.3%)	0 (0%)	7 (3.4%)	0 (0.1%)
	AN	-1 (-0.4%)	-7 (-3.7%)	7 (3.5%)	0 (0.1%)
	BN	0 (0%)	-3 (-1.4%)	25 (13.4%)	23 (11.8%)
	D	6 (3.2%)	0 (0%)	6 (3.2%)	0 (0%)
	C	16 (10.2%)	5 (2.9%)	16 (10.2%)	5 (2.9%)
	All	6 (3%)	-1 (-0.4%)	11 (5.9%)	5 (2.4%)
APR	W	0 (0%)	0 (0%)	0 (0.1%)	0 (0.1%)
	AN	-1 (-0.4%)	0 (0%)	7 (3.5%)	8 (3.9%)
	BN	0 (0%)	-3 (-1.4%)	0 (0%)	-3 (-1.4%)
	D	3 (1.7%)	0 (0%)	3 (1.7%)	0 (0%)
	C	16 (10.2%)	5 (2.9%)	16 (10.2%)	5 (2.9%)
	All	3 (1.5%)	0 (0.1%)	4 (2.2%)	1 (0.7%)
MAY	W	0 (0.2%)	0 (0%)	0 (0.2%)	0 (0%)
	AN	0 (0.2%)	0 (0%)	0 (0.2%)	0 (0%)
	BN	6 (2.3%)	0 (0%)	6 (2.3%)	0 (0%)
	D	0 (0.1%)	0 (0%)	0 (0.1%)	0 (0%)
	C	13 (6.4%)	0 (0%)	13 (6.4%)	0 (0%)
	All	3 (1.3%)	0 (0%)	3 (1.3%)	0 (0%)
JUN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	5 (2.6%)	0 (0%)	5 (2.6%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	5 (4.7%)	0 (0%)	5 (4.7%)	0 (0%)
	All	2 (0.9%)	0 (0%)	2 (0.9%)	0 (0%)

Alternative 4A_ELT: Upstream—Clear Creek below Whiskeytown					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	-14 (-13.8%)	0 (0%)	-14 (-13.8%)
	All	0 (0%)	-2 (-2.3%)	0 (0%)	-2 (-2.3%)
AUG	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (-0.3%)	9 (10.6%)	0 (-0.3%)	9 (10.6%)
	All	0 (-0.1%)	1 (1.6%)	0 (-0.1%)	1 (1.6%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	6 (3.8%)	0 (0%)	6 (3.8%)	0 (0%)
	C	-25 (-18.7%)	-13 (-10.3%)	-12 (-9.4%)	0 (0%)
	All	-2 (-1.7%)	-2 (-1.3%)	-1 (-0.4%)	0 (0%)
OCT	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	-11 (-5.7%)	0 (0%)	-11 (-5.7%)	0 (0%)
	D	0 (0%)	-8 (-4.5%)	8 (4.8%)	0 (0%)
	C	4 (2.8%)	-11 (-6.5%)	17 (11.1%)	2 (1.1%)
	All	-1 (-0.7%)	-3 (-1.8%)	2 (1.3%)	0 (0.1%)
NOV	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	-5 (-2.8%)	0 (0%)	0 (0%)	5 (2.9%)
	BN	6 (3.1%)	0 (0%)	6 (3.1%)	0 (0%)
	D	-1 (-0.6%)	-8 (-4.5%)	-1 (-0.6%)	-8 (-4.5%)
	C	3 (2.2%)	0 (0%)	3 (2.2%)	0 (0%)
	All	0 (0.3%)	-2 (-1%)	1 (0.7%)	-1 (-0.6%)
DEC	W	0 (0%)	0 (-0.1%)	0 (0%)	0 (-0.1%)
	AN	7 (3.6%)	0 (0%)	7 (3.6%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	12 (6.6%)	0 (0%)	12 (6.6%)	0 (0%)
	C	16 (10.2%)	5 (2.9%)	16 (10.2%)	5 (2.9%)
	All	6 (3.2%)	1 (0.4%)	6 (3.2%)	1 (0.4%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

1 Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)

2 Table B.7-13. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel),  
 3 Year-Round

Alternative 4A_ELT: Upstream—Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	800	800	800	800
	AN	800	800	800	800
	BN	800	800	800	800
	D	800	800	800	800
	C	800	800	800	800
	All	800	800	800	800
FEB	W	800	800	800	800
	AN	800	800	800	800
	BN	800	800	800	800
	D	800	800	800	800
	C	800	800	800	800
	All	800	800	800	800
MAR	W	800	800	800	800
	AN	800	800	800	800
	BN	800	800	800	800
	D	800	800	800	800
	C	800	800	800	800
	All	800	800	800	800
APR	W	700	700	700	700
	AN	700	700	700	700
	BN	700	700	700	700
	D	700	700	700	700
	C	700	700	700	700
	All	700	700	700	700
MAY	W	700	700	700	700
	AN	700	700	700	700
	BN	700	700	700	700
	D	700	700	700	700
	C	700	700	700	700
	All	700	700	700	700
JUN	W	700	700	700	700
	AN	700	700	700	700
	BN	700	700	700	700
	D	700	700	700	700
	C	700	700	700	700
	All	700	700	700	700

<b>Alternative 4A_ELT: Upstream—Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A4A_ELT</b>	
				<b>H3_ELT</b>	<b>H4_ELT</b>
JUL	W	700	700	700	700
	AN	700	700	700	700
	BN	700	700	700	700
	D	700	700	700	700
	C	700	700	700	700
	All	700	700	700	700
AUG	W	700	700	700	700
	AN	700	700	700	700
	BN	700	700	700	700
	D	700	700	700	700
	C	700	700	700	700
	All	700	700	700	700
SEP	W	773	773	773	773
	AN	773	773	773	773
	BN	773	773	773	773
	D	773	773	773	773
	C	773	773	773	773
	All	773	773	773	773
OCT	W	800	800	800	800
	AN	800	800	800	800
	BN	800	800	800	800
	D	800	800	800	800
	C	800	800	800	800
	All	800	800	800	800
NOV	W	800	800	800	800
	AN	800	800	800	800
	BN	800	800	800	800
	D	800	800	800	800
	C	800	800	800	800
	All	800	800	800	800
DEC	W	800	800	800	800
	AN	800	800	800	800
	BN	800	800	800	800
	D	800	800	800	800
	C	800	800	800	800
	All	800	800	800	800



1 **Table B.7-14. Differences (Percent Differences) between Pairs of Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-**  
 2 **Flow Channel), Year-Round**

<b>Alternative 4A_ELT: Upstream—Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS vs. H3_ELT</b>	<b>NAA_ELT vs. H3_ELT</b>	<b>EXISTING CONDITIONS vs. H4_ELT</b>	<b>NAA_ELT vs. H4_ELT</b>
JAN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
FEB	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
APR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAY	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
JUN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Alternative 4A_ELT: Upstream—Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
AUG	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	-1 (-0.1%)	-1 (-0.2%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
OCT	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
NOV	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
DEC	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

## 1 Feather River High-Flow Channel (at Thermalito Afterbay)

2 Table B.7-15. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

Alternative 4A_ELT: Upstream—Feather River High-Flow Channel (at Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	11,257	11,528	11,518	11,948
	AN	4,434	3,419	3,138	4,093
	BN	2,640	1,692	1,411	1,685
	D	1,798	1,477	1,527	1,454
	C	1,459	1,378	1,359	1,314
	All	5,277	4,970	4,886	5,187
FEB	W	12,466	13,732	14,169	13,400
	AN	7,411	5,793	7,546	6,549
	BN	3,916	2,280	2,029	3,192
	D	1,817	1,642	1,608	1,582
	C	1,611	1,467	1,442	1,487
	All	6,340	6,166	6,507	6,317
MAR	W	12,895	13,977	13,839	13,841
	AN	7,733	8,568	8,860	8,934
	BN	3,373	2,347	2,052	2,647
	D	2,017	1,521	1,679	1,795
	C	1,697	1,590	1,755	1,718
	All	6,487	6,653	6,660	6,794
APR	W	6,472	6,652	6,669	9,926
	AN	2,251	2,240	2,234	5,926
	BN	1,205	1,132	1,131	7,335
	D	1,286	1,448	1,653	1,872
	C	1,389	1,384	1,608	1,445
	All	3,073	3,150	3,233	5,889
MAY	W	7,528	6,380	6,369	9,392
	AN	3,340	3,342	4,190	7,125
	BN	1,205	1,316	1,479	3,993
	D	1,591	1,862	2,120	2,337
	C	1,574	1,877	1,694	1,737
	All	3,661	3,420	3,599	5,470
JUN	W	5,062	3,659	5,427	3,204
	AN	3,301	3,107	5,824	3,783
	BN	2,707	3,153	6,490	4,249
	D	3,134	3,432	4,378	3,569
	C	2,695	2,812	2,587	2,538
	All	3,632	3,318	5,021	3,450



Alternative 4A_ELT: Upstream—Feather River High-Flow Channel (at Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	6,490	7,835	7,444	6,030
	AN	8,757	9,434	9,550	6,325
	BN	8,981	8,936	8,575	7,167
	D	8,294	7,980	6,454	5,476
	C	6,703	6,144	3,221	3,939
	All	7,674	8,041	7,110	5,839
AUG	W	3,308	5,462	4,965	2,931
	AN	6,042	6,948	6,639	3,853
	BN	6,295	6,348	5,848	4,498
	D	7,036	5,633	3,890	3,240
	C	2,613	2,236	2,748	3,306
	All	4,935	5,396	4,800	3,456
SEP	W	2,280	8,400	6,656	6,075
	AN	2,253	7,172	5,742	4,103
	BN	2,466	3,161	1,824	1,265
	D	2,366	1,473	1,194	1,258
	C	1,421	1,451	1,814	2,203
	All	2,201	4,788	3,790	3,341
OCT	W	3,456	3,025	3,243	2,767
	AN	2,387	2,577	2,779	2,609
	BN	3,183	2,820	3,030	2,776
	D	2,688	2,786	3,323	2,507
	C	2,472	2,233	2,311	2,483
	All	2,940	2,756	3,020	2,647
NOV	W	3,292	2,812	2,878	2,748
	AN	1,824	1,915	1,916	1,739
	BN	2,101	1,950	1,930	1,793
	D	1,859	1,729	1,806	1,625
	C	1,854	1,803	1,866	2,025
	All	2,349	2,148	2,192	2,085
DEC	W	7,157	5,543	5,259	6,450
	AN	2,951	3,344	3,484	3,499
	BN	2,176	2,096	2,140	1,966
	D	2,364	2,202	2,366	2,173
	C	2,609	1,781	2,025	1,833
	All	3,973	3,349	3,358	3,638

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1 **Table B.7-16. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round**  
 2

Alternative 4A_ELT: Upstream—Feather River High-Flow Channel (at Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	261 (2.3%)	-9 (-0.1%)	690 (6.1%)	420 (3.6%)
	AN	-1,296 (-29.2%)	-281 (-8.2%)	-341 (-7.7%)	674 (19.7%)
	BN	-1,229 (-46.6%)	-282 (-16.6%)	-955 (-36.2%)	-7 (-0.4%)
	D	-272 (-15.1%)	50 (3.4%)	-344 (-19.1%)	-23 (-1.5%)
	C	-100 (-6.9%)	-19 (-1.3%)	-145 (-9.9%)	-63 (-4.6%)
All	-391 (-7.4%)	-84 (-1.7%)	-91 (-1.7%)	216 (4.4%)	
FEB	W	1,702 (13.7%)	436 (3.2%)	934 (7.5%)	-332 (-2.4%)
	AN	135 (1.8%)	1,753 (30.3%)	-862 (-11.6%)	756 (13.1%)
	BN	-1,887 (-48.2%)	-251 (-11%)	-724 (-18.5%)	912 (40%)
	D	-209 (-11.5%)	-34 (-2.1%)	-235 (-12.9%)	-60 (-3.7%)
	C	-169 (-10.5%)	-25 (-1.7%)	-124 (-7.7%)	20 (1.4%)
All	167 (2.6%)	341 (5.5%)	-23 (-0.4%)	151 (2.4%)	
MAR	W	944 (7.3%)	-138 (-1%)	946 (7.3%)	-136 (-1%)
	AN	1,128 (14.6%)	292 (3.4%)	1,202 (15.5%)	366 (4.3%)
	BN	-1,322 (-39.2%)	-295 (-12.6%)	-726 (-21.5%)	300 (12.8%)
	D	-338 (-16.8%)	158 (10.4%)	-221 (-11%)	274 (18%)
	C	58 (3.4%)	166 (10.4%)	21 (1.3%)	129 (8.1%)
All	173 (2.7%)	7 (0.1%)	306 (4.7%)	141 (2.1%)	
APR	W	196 (3%)	17 (0.3%)	3,453 (53.4%)	3,274 (49.2%)
	AN	-18 (-0.8%)	-7 (-0.3%)	3,675 (163.2%)	3,686 (164.5%)
	BN	-74 (-6.1%)	-1 (-0.1%)	6,130 (508.9%)	6,203 (548.1%)
	D	367 (28.6%)	205 (14.2%)	587 (45.6%)	424 (29.3%)
	C	219 (15.7%)	224 (16.2%)	56 (4%)	61 (4.4%)
All	160 (5.2%)	82 (2.6%)	2,816 (91.6%)	2,739 (86.9%)	
MAY	W	-1,159 (-15.4%)	-11 (-0.2%)	1,864 (24.8%)	3,013 (47.2%)
	AN	850 (25.4%)	848 (25.4%)	3,785 (113.3%)	3,783 (113.2%)
	BN	274 (22.7%)	163 (12.4%)	2,787 (231.2%)	2,676 (203.3%)
	D	529 (33.2%)	259 (13.9%)	746 (46.9%)	476 (25.6%)
	C	120 (7.6%)	-183 (-9.7%)	163 (10.4%)	-140 (-7.4%)
All	-63 (-1.7%)	179 (5.2%)	1,809 (49.4%)	2,050 (59.9%)	
JUN	W	365 (7.2%)	1,767 (48.3%)	-1,857 (-36.7%)	-455 (-12.4%)
	AN	2,523 (76.4%)	2,717 (87.4%)	482 (14.6%)	676 (21.8%)
	BN	3,783 (139.8%)	3,337 (105.8%)	1,542 (57%)	1,096 (34.8%)
	D	1,244 (39.7%)	946 (27.6%)	435 (13.9%)	136 (4%)
	C	-108 (-4%)	-225 (-8%)	-157 (-5.8%)	-274 (-9.7%)
All	1,388 (38.2%)	1,702 (51.3%)	-183 (-5%)	132 (4%)	

Alternative 4A_ELT: Upstream—Feather River High-Flow Channel (at Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	954 (14.7%)	-391 (-5%)	-461 (-7.1%)	-1,805 (-23%)
	AN	793 (9.1%)	116 (1.2%)	-2,432 (-27.8%)	-3,109 (-33%)
	BN	-406 (-4.5%)	-361 (-4%)	-1,814 (-20.2%)	-1,770 (-19.8%)
	D	-1,840 (-22.2%)	-1,526 (-19.1%)	-2,818 (-34%)	-2,504 (-31.4%)
	C	-3,482 (-51.9%)	-2,923 (-47.6%)	-2,764 (-41.2%)	-2,206 (-35.9%)
	All	-564 (-7.4%)	-931 (-11.6%)	-1,835 (-23.9%)	-2,202 (-27.4%)
AUG	W	1,657 (50.1%)	-497 (-9.1%)	-377 (-11.4%)	-2,531 (-46.3%)
	AN	596 (9.9%)	-309 (-4.5%)	-2,189 (-36.2%)	-3,095 (-44.5%)
	BN	-447 (-7.1%)	-500 (-7.9%)	-1,797 (-28.5%)	-1,851 (-29.2%)
	D	-3,147 (-44.7%)	-1,743 (-30.9%)	-3,797 (-54%)	-2,393 (-42.5%)
	C	134 (5.1%)	512 (22.9%)	692 (26.5%)	1,070 (47.9%)
	All	-135 (-2.7%)	-596 (-11%)	-1,479 (-30%)	-1,940 (-36%)
SEP	W	4,376 (191.9%)	-1,744 (-20.8%)	3,795 (166.4%)	-2,325 (-27.7%)
	AN	3,490 (154.9%)	-1,429 (-19.9%)	1,850 (82.1%)	-3,069 (-42.8%)
	BN	-642 (-26%)	-1,337 (-42.3%)	-1,201 (-48.7%)	-1,896 (-60%)
	D	-1,171 (-49.5%)	-279 (-18.9%)	-1,108 (-46.8%)	-216 (-14.6%)
	C	394 (27.7%)	363 (25%)	782 (55.1%)	751 (51.8%)
	All	1,589 (72.2%)	-998 (-20.8%)	1,140 (51.8%)	-1,447 (-30.2%)
OCT	W	-213 (-6.2%)	218 (7.2%)	-689 (-19.9%)	-258 (-8.5%)
	AN	393 (16.5%)	202 (7.8%)	222 (9.3%)	31 (1.2%)
	BN	-153 (-4.8%)	210 (7.5%)	-407 (-12.8%)	-44 (-1.6%)
	D	635 (23.6%)	537 (19.3%)	-181 (-6.7%)	-279 (-10%)
	C	-161 (-6.5%)	77 (3.5%)	12 (0.5%)	250 (11.2%)
	All	80 (2.7%)	264 (9.6%)	-294 (-10%)	-110 (-4%)
NOV	W	-415 (-12.6%)	66 (2.3%)	-545 (-16.5%)	-64 (-2.3%)
	AN	92 (5%)	1 (0%)	-85 (-4.6%)	-176 (-9.2%)
	BN	-171 (-8.1%)	-20 (-1%)	-308 (-14.7%)	-157 (-8%)
	D	-53 (-2.9%)	77 (4.5%)	-234 (-12.6%)	-104 (-6%)
	C	12 (0.7%)	63 (3.5%)	172 (9.3%)	223 (12.4%)
	All	-157 (-6.7%)	44 (2%)	-264 (-11.2%)	-63 (-2.9%)
DEC	W	-1,898 (-26.5%)	-284 (-5.1%)	-707 (-9.9%)	907 (16.4%)
	AN	534 (18.1%)	140 (4.2%)	548 (18.6%)	155 (4.6%)
	BN	-36 (-1.7%)	43 (2.1%)	-210 (-9.6%)	-130 (-6.2%)
	D	2 (0.1%)	164 (7.5%)	-190 (-8.1%)	-29 (-1.3%)
	C	-584 (-22.4%)	244 (13.7%)	-776 (-29.8%)	52 (2.9%)
	All	-615 (-15.5%)	10 (0.3%)	-335 (-8.4%)	289 (8.6%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

## 1 Feather River at Confluence with Sacramento River

2 Table B.7-17. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

Alternative 4A_ELT: Upstream—Feather River at Confluence with Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	23,533	24,852	24,851	25,262
	AN	12,430	11,755	11,475	12,431
	BN	6,499	5,658	5,377	5,655
	D	4,621	4,390	4,437	4,364
	C	3,646	3,551	3,530	3,486
	All	11,938	12,049	11,967	12,263
FEB	W	27,039	29,508	29,950	29,179
	AN	14,819	14,119	15,877	14,875
	BN	9,153	8,081	7,835	8,999
	D	4,402	4,365	4,329	4,301
	C	3,237	3,086	3,063	3,110
	All	13,744	14,212	14,556	14,364
MAR	W	24,172	25,585	25,453	25,455
	AN	19,991	21,173	21,464	21,540
	BN	8,136	7,175	6,893	7,507
	D	5,073	4,626	4,792	4,898
	C	2,933	2,695	2,895	2,927
	All	13,521	13,846	13,864	14,008
APR	W	15,897	16,056	16,081	19,335
	AN	9,832	9,733	9,733	13,422
	BN	5,401	5,232	5,238	11,437
	D	4,152	4,233	4,441	4,656
	C	3,298	3,195	3,423	3,263
	All	8,795	8,805	8,893	11,547
MAY	W	14,387	12,987	12,984	15,985
	AN	8,068	7,777	8,633	11,549
	BN	4,705	4,534	4,703	7,182
	D	3,652	3,660	3,920	4,134
	C	2,389	2,492	2,309	2,355
	All	7,697	7,198	7,382	9,237
JUN	W	10,222	7,790	9,571	7,327
	AN	6,391	5,485	8,206	6,150
	BN	4,495	4,346	7,688	5,436
	D	3,853	3,776	4,723	3,911
	C	2,782	2,678	2,449	2,389
	All	6,197	5,236	6,943	5,360

Alternative 4A_ELT: Upstream—Feather River at Confluence with Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	8,177	8,536	8,064	6,655
	AN	9,322	9,442	9,527	6,338
	BN	9,380	8,985	8,613	7,222
	D	8,290	7,690	6,164	5,169
	C	6,451	5,831	2,927	3,523
	All	8,322	8,164	7,203	5,921
AUG	W	4,923	6,656	5,922	3,897
	AN	7,080	7,790	7,425	4,720
	BN	7,235	7,098	6,628	5,303
	D	7,711	6,185	4,425	3,765
	C	2,841	2,408	2,922	3,407
	All	5,941	6,172	5,495	4,157
SEP	W	4,351	10,426	8,688	8,120
	AN	4,194	9,070	7,662	6,022
	BN	4,252	4,896	3,596	3,031
	D	4,179	3,281	2,996	3,037
	C	2,054	2,052	2,349	2,750
	All	3,937	6,490	5,491	5,043
OCT	W	4,176	3,741	3,968	3,490
	AN	2,630	2,839	3,052	2,879
	BN	3,754	3,394	3,619	3,363
	D	3,033	3,139	3,675	2,872
	C	2,938	2,701	2,780	2,940
	All	3,446	3,266	3,536	3,163
NOV	W	4,697	4,407	4,476	4,344
	AN	3,065	3,220	3,209	3,039
	BN	2,687	2,589	2,573	2,431
	D	2,342	2,284	2,362	2,176
	C	2,084	2,073	2,127	2,267
	All	3,216	3,115	3,158	3,046
DEC	W	12,409	11,909	11,629	12,819
	AN	5,193	6,005	6,148	6,164
	BN	3,079	3,342	3,390	3,217
	D	2,838	2,787	2,952	2,757
	C	2,975	2,152	2,399	2,197
	All	6,279	6,152	6,165	6,443

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1 **Table B.7-18. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Feather River at the Confluence with the**  
 2 **Sacramento River, Year-Round**

Alternative 4A_ELT: Upstream—Feather River at Confluence with Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	1,318 (5.6%)	-1 (0%)	1,729 (7.3%)	410 (1.6%)
	AN	-955 (-7.7%)	-280 (-2.4%)	1 (0%)	676 (5.8%)
	BN	-1,122 (-17.3%)	-281 (-5%)	-844 (-13%)	-3 (0%)
	D	-184 (-4%)	47 (1.1%)	-257 (-5.6%)	-26 (-0.6%)
	C	-117 (-3.2%)	-22 (-0.6%)	-160 (-4.4%)	-65 (-1.8%)
	All	29 (0.2%)	-82 (-0.7%)	324 (2.7%)	213 (1.8%)
FEB	W	2,911 (10.8%)	442 (1.5%)	2,140 (7.9%)	-330 (-1.1%)
	AN	1,058 (7.1%)	1,758 (12.4%)	57 (0.4%)	756 (5.4%)
	BN	-1,318 (-14.4%)	-246 (-3%)	-153 (-1.7%)	918 (11.4%)
	D	-73 (-1.7%)	-36 (-0.8%)	-100 (-2.3%)	-63 (-1.5%)
	C	-174 (-5.4%)	-23 (-0.7%)	-127 (-3.9%)	24 (0.8%)
	All	812 (5.9%)	344 (2.4%)	620 (4.5%)	152 (1.1%)
MAR	W	1,281 (5.3%)	-132 (-0.5%)	1,283 (5.3%)	-131 (-0.5%)
	AN	1,474 (7.4%)	291 (1.4%)	1,549 (7.8%)	367 (1.7%)
	BN	-1,243 (-15.3%)	-282 (-3.9%)	-629 (-7.7%)	332 (4.6%)
	D	-281 (-5.5%)	165 (3.6%)	-174 (-3.4%)	272 (5.9%)
	C	-38 (-1.3%)	200 (7.4%)	-6 (-0.2%)	231 (8.6%)
	All	343 (2.5%)	18 (0.1%)	487 (3.6%)	162 (1.2%)
APR	W	184 (1.2%)	25 (0.2%)	3,438 (21.6%)	3,280 (20.4%)
	AN	-99 (-1%)	0 (0%)	3,590 (36.5%)	3,689 (37.9%)
	BN	-162 (-3%)	7 (0.1%)	6,036 (111.8%)	6,205 (118.6%)
	D	289 (7%)	208 (4.9%)	505 (12.2%)	423 (10%)
	C	125 (3.8%)	228 (7.1%)	-35 (-1.1%)	68 (2.1%)
	All	98 (1.1%)	88 (1%)	2,752 (31.3%)	2,742 (31.1%)
MAY	W	-1,403 (-9.7%)	-3 (0%)	1,599 (11.1%)	2,999 (23.1%)
	AN	565 (7%)	856 (11%)	3,481 (43.1%)	3,772 (48.5%)
	BN	-1 (0%)	169 (3.7%)	2,478 (52.7%)	2,648 (58.4%)
	D	268 (7.3%)	260 (7.1%)	482 (13.2%)	474 (13%)
	C	-80 (-3.3%)	-182 (-7.3%)	-34 (-1.4%)	-137 (-5.5%)
	All	-315 (-4.1%)	184 (2.6%)	1,540 (20%)	2,039 (28.3%)
JUN	W	-651 (-6.4%)	1,781 (22.9%)	-2,894 (-28.3%)	-463 (-5.9%)
	AN	1,815 (28.4%)	2,721 (49.6%)	-241 (-3.8%)	664 (12.1%)
	BN	3,192 (71%)	3,341 (76.9%)	941 (20.9%)	1,090 (25.1%)
	D	869 (22.6%)	946 (25.1%)	58 (1.5%)	134 (3.6%)
	C	-333 (-12%)	-229 (-8.5%)	-393 (-14.1%)	-289 (-10.8%)
	All	746 (12%)	1,708 (32.6%)	-837 (-13.5%)	124 (2.4%)

Alternative 4A_ELT: Upstream—Feather River at Confluence with Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	-113 (-1.4%)	-473 (-5.5%)	-1,522 (-18.6%)	-1,881 (-22%)
	AN	205 (2.2%)	85 (0.9%)	-2,984 (-32%)	-3,104 (-32.9%)
	BN	-767 (-8.2%)	-372 (-4.1%)	-2,159 (-23%)	-1,763 (-19.6%)
	D	-2,126 (-25.6%)	-1,527 (-19.9%)	-3,121 (-37.6%)	-2,522 (-32.8%)
	C	-3,524 (-54.6%)	-2,905 (-49.8%)	-2,928 (-45.4%)	-2,308 (-39.6%)
	All	-1,119 (-13.4%)	-961 (-11.8%)	-2,401 (-28.9%)	-2,243 (-27.5%)
AUG	W	998 (20.3%)	-735 (-11%)	-1,027 (-20.9%)	-2,760 (-41.5%)
	AN	345 (4.9%)	-365 (-4.7%)	-2,361 (-33.3%)	-3,070 (-39.4%)
	BN	-608 (-8.4%)	-470 (-6.6%)	-1,933 (-26.7%)	-1,795 (-25.3%)
	D	-3,286 (-42.6%)	-1,759 (-28.4%)	-3,946 (-51.2%)	-2,419 (-39.1%)
	C	81 (2.9%)	514 (21.4%)	566 (19.9%)	999 (41.5%)
	All	-446 (-7.5%)	-678 (-11%)	-1,784 (-30%)	-2,016 (-32.7%)
SEP	W	4,337 (99.7%)	-1,738 (-16.7%)	3,769 (86.6%)	-2,307 (-22.1%)
	AN	3,468 (82.7%)	-1,408 (-15.5%)	1,828 (43.6%)	-3,048 (-33.6%)
	BN	-656 (-15.4%)	-1,301 (-26.6%)	-1,220 (-28.7%)	-1,865 (-38.1%)
	D	-1,183 (-28.3%)	-286 (-8.7%)	-1,142 (-27.3%)	-244 (-7.4%)
	C	295 (14.4%)	297 (14.5%)	696 (33.9%)	698 (34%)
	All	1,554 (39.5%)	-998 (-15.4%)	1,105 (28.1%)	-1,447 (-22.3%)
OCT	W	-208 (-5%)	227 (6.1%)	-686 (-16.4%)	-250 (-6.7%)
	AN	421 (16%)	212 (7.5%)	249 (9.5%)	40 (1.4%)
	BN	-135 (-3.6%)	225 (6.6%)	-390 (-10.4%)	-31 (-0.9%)
	D	643 (21.2%)	536 (17.1%)	-161 (-5.3%)	-268 (-8.5%)
	C	-158 (-5.4%)	79 (2.9%)	1 (0%)	239 (8.8%)
	All	91 (2.6%)	271 (8.3%)	-283 (-8.2%)	-103 (-3.1%)
NOV	W	-221 (-4.7%)	69 (1.6%)	-353 (-7.5%)	-63 (-1.4%)
	AN	145 (4.7%)	-11 (-0.3%)	-26 (-0.8%)	-181 (-5.6%)
	BN	-115 (-4.3%)	-17 (-0.6%)	-257 (-9.6%)	-159 (-6.1%)
	D	19 (0.8%)	78 (3.4%)	-167 (-7.1%)	-108 (-4.7%)
	C	43 (2%)	54 (2.6%)	183 (8.8%)	194 (9.4%)
	All	-58 (-1.8%)	42 (1.4%)	-169 (-5.3%)	-69 (-2.2%)
DEC	W	-780 (-6.3%)	-279 (-2.3%)	410 (3.3%)	910 (7.6%)
	AN	955 (18.4%)	143 (2.4%)	971 (18.7%)	158 (2.6%)
	BN	310 (10.1%)	48 (1.4%)	138 (4.5%)	-125 (-3.7%)
	D	114 (4%)	164 (5.9%)	-81 (-2.8%)	-30 (-1.1%)
	C	-576 (-19.4%)	246 (11.4%)	-778 (-26.1%)	45 (2.1%)
	All	-114 (-1.8%)	13 (0.2%)	164 (2.6%)	290 (4.7%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

## 1 American River at Nimbus Dam

2 Table B.7-19. Mean Monthly Flows (cfs) for Model Scenarios in the American River at Nimbus Dam, Year-Round

Alternative 4A_ELT: Upstream—American River at Nimbus Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	8,806	10,113	10,103	10,150
	AN	4,833	4,941	4,989	5,100
	BN	2,392	2,334	2,085	2,206
	D	1,723	1,620	1,561	1,693
	C	1,474	1,241	1,315	1,305
	All	4,502	4,865	4,825	4,904
FEB	W	9,294	10,422	10,460	10,473
	AN	6,469	7,220	7,484	7,391
	BN	4,360	4,706	4,896	4,889
	D	1,852	1,769	1,709	1,738
	C	1,185	1,073	1,120	1,151
	All	5,218	5,710	5,787	5,787
MAR	W	6,089	6,454	6,454	6,454
	AN	5,453	5,762	5,815	5,764
	BN	2,429	2,622	2,648	2,627
	D	2,191	2,184	2,277	2,098
	C	939	888	868	867
	All	3,762	3,947	3,976	3,926
APR	W	5,300	5,368	5,368	5,368
	AN	3,546	3,356	3,353	3,352
	BN	3,126	3,117	3,141	3,102
	D	1,837	1,761	1,800	1,814
	C	1,156	1,091	1,244	1,199
	All	3,306	3,271	3,306	3,296
MAY	W	6,157	5,673	5,672	5,672
	AN	3,885	3,148	3,259	3,203
	BN	2,930	2,466	2,658	2,461
	D	1,790	1,629	1,711	1,699
	C	1,182	1,319	1,332	1,129
	All	3,587	3,231	3,300	3,226
JUN	W	6,003	4,521	4,760	4,546
	AN	3,346	2,855	3,451	2,795
	BN	2,864	2,558	3,089	2,420
	D	2,506	2,564	3,131	2,320
	C	1,824	1,297	1,289	1,331
	All	3,699	3,041	3,417	2,968



Alternative 4A_ELT: Upstream—American River at Nimbus Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	4,108	3,571	3,972	3,875
	AN	4,638	4,634	4,644	4,794
	BN	4,744	4,544	4,647	4,549
	D	3,577	3,091	3,142	3,147
	C	1,784	1,670	1,693	1,514
	All	3,838	3,509	3,670	3,619
AUG	W	3,520	2,576	2,381	2,512
	AN	2,542	2,200	2,086	2,334
	BN	2,495	2,313	2,197	2,718
	D	2,613	1,779	1,412	1,779
	C	1,500	1,308	1,088	948
	All	2,707	2,115	1,905	2,131
SEP	W	4,025	3,982	3,361	3,730
	AN	2,764	2,645	2,187	2,447
	BN	2,370	1,915	1,492	1,542
	D	1,856	1,373	1,360	1,359
	C	1,164	761	703	718
	All	2,663	2,389	2,042	2,207
OCT	W	1,723	1,700	1,594	1,665
	AN	1,706	1,609	1,546	1,596
	BN	1,602	1,517	1,765	1,749
	D	1,468	1,479	1,414	1,538
	C	1,461	1,375	1,679	1,670
	All	1,605	1,559	1,589	1,642
NOV	W	3,527	3,436	2,984	3,090
	AN	3,181	3,187	2,878	2,978
	BN	2,067	1,985	1,696	1,855
	D	2,176	1,725	1,694	1,667
	C	1,994	1,707	1,653	1,702
	All	2,706	2,523	2,271	2,347
DEC	W	6,302	6,671	6,798	6,806
	AN	3,137	3,089	3,030	3,112
	BN	2,676	2,857	3,009	2,950
	D	1,741	1,643	1,606	1,609
	C	1,524	1,374	1,442	1,487
	All	3,519	3,617	3,676	3,688

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1 Table B.7-20. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the American River at Nimbus Dam, Year-Round

Alternative 4A_ELT: Upstream—American River at Nimbus Dam					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	1,297 (14.7%)	-10 (-0.1%)	1,344 (15.3%)	38 (0.4%)
	AN	156 (3.2%)	48 (1%)	268 (5.5%)	159 (3.2%)
	BN	-307 (-12.8%)	-248 (-10.6%)	-187 (-7.8%)	-128 (-5.5%)
	D	-162 (-9.4%)	-59 (-3.6%)	-30 (-1.7%)	73 (4.5%)
	C	-159 (-10.8%)	74 (6%)	-169 (-11.4%)	64 (5.2%)
	All	323 (7.2%)	-41 (-0.8%)	402 (8.9%)	39 (0.8%)
FEB	W	1,167 (12.6%)	38 (0.4%)	1,180 (12.7%)	51 (0.5%)
	AN	1,015 (15.7%)	264 (3.7%)	922 (14.3%)	172 (2.4%)
	BN	536 (12.3%)	190 (4%)	529 (12.1%)	184 (3.9%)
	D	-143 (-7.7%)	-59 (-3.3%)	-114 (-6.1%)	-30 (-1.7%)
	C	-65 (-5.5%)	46 (4.3%)	-34 (-2.8%)	78 (7.3%)
	All	569 (10.9%)	77 (1.3%)	570 (10.9%)	77 (1.4%)
MAR	W	365 (6%)	0 (0%)	365 (6%)	0 (0%)
	AN	362 (6.6%)	53 (0.9%)	311 (5.7%)	2 (0%)
	BN	219 (9%)	26 (1%)	197 (8.1%)	5 (0.2%)
	D	85 (3.9%)	92 (4.2%)	-93 (-4.2%)	-86 (-3.9%)
	C	-71 (-7.6%)	-20 (-2.3%)	-72 (-7.7%)	-21 (-2.4%)
	All	214 (5.7%)	29 (0.7%)	164 (4.4%)	-21 (-0.5%)
APR	W	68 (1.3%)	0 (0%)	68 (1.3%)	0 (0%)
	AN	-193 (-5.4%)	-3 (-0.1%)	-194 (-5.5%)	-4 (-0.1%)
	BN	15 (0.5%)	24 (0.8%)	-24 (-0.8%)	-15 (-0.5%)
	D	-38 (-2%)	39 (2.2%)	-23 (-1.3%)	53 (3%)
	C	88 (7.6%)	153 (14%)	43 (3.7%)	108 (9.9%)
	All	0 (0%)	35 (1.1%)	-10 (-0.3%)	24 (0.7%)
MAY	W	-485 (-7.9%)	-1 (0%)	-484 (-7.9%)	-1 (0%)
	AN	-626 (-16.1%)	111 (3.5%)	-682 (-17.5%)	55 (1.8%)
	BN	-273 (-9.3%)	192 (7.8%)	-469 (-16%)	-5 (-0.2%)
	D	-79 (-4.4%)	82 (5%)	-91 (-5.1%)	69 (4.3%)
	C	151 (12.7%)	13 (1%)	-52 (-4.4%)	-190 (-14.4%)
	All	-287 (-8%)	68 (2.1%)	-361 (-10.1%)	-6 (-0.2%)
JUN	W	-1,244 (-20.7%)	239 (5.3%)	-1,457 (-24.3%)	26 (0.6%)
	AN	105 (3.1%)	596 (20.9%)	-551 (-16.5%)	-60 (-2.1%)
	BN	226 (7.9%)	531 (20.8%)	-443 (-15.5%)	-138 (-5.4%)
	D	625 (25%)	566 (22.1%)	-185 (-7.4%)	-244 (-9.5%)
	C	-535 (-29.3%)	-8 (-0.6%)	-493 (-27%)	34 (2.6%)
	All	-281 (-7.6%)	377 (12.4%)	-731 (-19.8%)	-73 (-2.4%)

Alternative 4A_ELT: Upstream—American River at Nimbus Dam					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	-136 (-3.3%)	401 (11.2%)	-234 (-5.7%)	304 (8.5%)
	AN	6 (0.1%)	9 (0.2%)	156 (3.4%)	160 (3.5%)
	BN	-97 (-2%)	103 (2.3%)	-195 (-4.1%)	5 (0.1%)
	D	-435 (-12.2%)	51 (1.6%)	-430 (-12%)	55 (1.8%)
	C	-92 (-5.1%)	22 (1.3%)	-271 (-15.2%)	-157 (-9.4%)
	All	-168 (-4.4%)	160 (4.6%)	-219 (-5.7%)	110 (3.1%)
AUG	W	-1,139 (-32.4%)	-195 (-7.6%)	-1,009 (-28.7%)	-64 (-2.5%)
	AN	-456 (-17.9%)	-114 (-5.2%)	-208 (-8.2%)	134 (6.1%)
	BN	-298 (-11.9%)	-116 (-5%)	223 (8.9%)	405 (17.5%)
	D	-1,201 (-46%)	-367 (-20.6%)	-834 (-31.9%)	0 (0%)
	C	-412 (-27.4%)	-219 (-16.8%)	-553 (-36.8%)	-360 (-27.5%)
	All	-803 (-29.6%)	-211 (-10%)	-576 (-21.3%)	16 (0.8%)
SEP	W	-664 (-16.5%)	-621 (-15.6%)	-295 (-7.3%)	-253 (-6.3%)
	AN	-577 (-20.9%)	-457 (-17.3%)	-317 (-11.5%)	-198 (-7.5%)
	BN	-879 (-37.1%)	-423 (-22.1%)	-828 (-35%)	-373 (-19.5%)
	D	-496 (-26.7%)	-13 (-1%)	-497 (-26.8%)	-15 (-1.1%)
	C	-461 (-39.6%)	-58 (-7.6%)	-446 (-38.3%)	-42 (-5.6%)
	All	-621 (-23.3%)	-348 (-14.5%)	-456 (-17.1%)	-182 (-7.6%)
OCT	W	-129 (-7.5%)	-106 (-6.2%)	-58 (-3.4%)	-35 (-2.1%)
	AN	-160 (-9.4%)	-63 (-3.9%)	-110 (-6.5%)	-13 (-0.8%)
	BN	163 (10.2%)	248 (16.4%)	147 (9.2%)	233 (15.3%)
	D	-54 (-3.7%)	-65 (-4.4%)	70 (4.8%)	59 (4%)
	C	219 (15%)	304 (22.1%)	209 (14.3%)	294 (21.4%)
	All	-16 (-1%)	30 (1.9%)	37 (2.3%)	83 (5.3%)
NOV	W	-543 (-15.4%)	-452 (-13.2%)	-437 (-12.4%)	-346 (-10.1%)
	AN	-303 (-9.5%)	-309 (-9.7%)	-202 (-6.4%)	-209 (-6.5%)
	BN	-371 (-18%)	-289 (-14.6%)	-213 (-10.3%)	-131 (-6.6%)
	D	-482 (-22.2%)	-30 (-1.8%)	-509 (-23.4%)	-58 (-3.3%)
	C	-341 (-17.1%)	-54 (-3.1%)	-292 (-14.7%)	-5 (-0.3%)
	All	-436 (-16.1%)	-252 (-10%)	-359 (-13.3%)	-176 (-7%)
DEC	W	497 (7.9%)	127 (1.9%)	504 (8%)	135 (2%)
	AN	-107 (-3.4%)	-60 (-1.9%)	-25 (-0.8%)	23 (0.7%)
	BN	333 (12.5%)	152 (5.3%)	274 (10.2%)	92 (3.2%)
	D	-135 (-7.7%)	-37 (-2.3%)	-132 (-7.6%)	-35 (-2.1%)
	C	-82 (-5.4%)	68 (4.9%)	-37 (-2.5%)	112 (8.2%)
	All	157 (4.5%)	59 (1.6%)	169 (4.8%)	71 (2%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

## 1 American River at Confluence with Sacramento River

2 Table B.7-21. Mean Monthly Flows (cfs) for Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

Alternative 4A_ELT: Upstream—American River at Confluence with Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	8,748	10,031	10,021	10,068
	AN	4,806	4,895	4,944	5,054
	BN	2,326	2,246	1,997	2,117
	D	1,654	1,535	1,477	1,608
	C	1,403	1,152	1,226	1,215
	All	4,443	4,786	4,745	4,824
FEB	W	9,183	10,275	10,313	10,326
	AN	6,423	7,148	7,412	7,318
	BN	4,309	4,631	4,824	4,815
	D	1,781	1,679	1,621	1,648
	C	1,119	985	1,030	1,062
	All	5,142	5,607	5,685	5,684
MAR	W	5,980	6,304	6,303	6,303
	AN	5,365	5,641	5,692	5,642
	BN	2,340	2,503	2,527	2,506
	D	2,121	2,095	2,187	2,009
	C	865	785	764	763
	All	3,673	3,826	3,855	3,804
APR	W	5,156	5,164	5,164	5,164
	AN	3,383	3,136	3,132	3,132
	BN	2,984	2,927	2,950	2,912
	D	1,672	1,550	1,588	1,603
	C	996	886	1,040	995
	All	3,152	3,066	3,100	3,090
MAY	W	5,959	5,415	5,414	5,414
	AN	3,700	2,911	3,022	2,967
	BN	2,733	2,222	2,413	2,217
	D	1,605	1,399	1,480	1,468
	C	1,014	1,118	1,129	927
	All	3,398	2,993	3,061	2,987
JUN	W	5,743	4,206	4,445	4,231
	AN	3,103	2,562	3,158	2,502
	BN	2,631	2,274	2,803	2,137
	D	2,282	2,289	2,855	2,044
	C	1,621	1,052	1,044	1,088
	All	3,462	2,753	3,129	2,680

Alternative 4A_ELT: Upstream—American River at Confluence with Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	3,844	3,264	3,663	3,567
	AN	4,399	4,344	4,348	4,505
	BN	4,509	4,257	4,356	4,263
	D	3,347	2,807	2,852	2,864
	C	1,568	1,421	1,439	1,259
	All	3,597	3,221	3,378	3,331
AUG	W	3,295	2,304	2,106	2,237
	AN	2,313	1,921	1,807	2,054
	BN	2,265	2,035	1,918	2,439
	D	2,395	1,516	1,149	1,516
	C	1,314	1,097	893	734
	All	2,488	1,852	1,643	1,867
SEP	W	3,846	3,771	3,151	3,519
	AN	2,594	2,437	1,980	2,238
	BN	2,205	1,712	1,290	1,335
	D	1,691	1,177	1,167	1,162
	C	1,011	591	535	536
	All	2,495	2,189	1,844	2,005
OCT	W	1,607	1,561	1,458	1,528
	AN	1,597	1,481	1,421	1,468
	BN	1,472	1,364	1,617	1,602
	D	1,344	1,333	1,271	1,393
	C	1,342	1,232	1,537	1,527
	All	1,486	1,418	1,451	1,502
NOV	W	3,472	3,363	2,912	3,017
	AN	3,100	3,089	2,780	2,880
	BN	1,990	1,889	1,598	1,757
	D	2,094	1,624	1,594	1,566
	C	1,897	1,590	1,534	1,583
	All	2,632	2,430	2,177	2,253
DEC	W	6,255	6,607	6,739	6,748
	AN	3,072	3,007	2,950	3,031
	BN	2,609	2,774	2,928	2,867
	D	1,675	1,564	1,527	1,530
	C	1,443	1,278	1,346	1,390
	All	3,457	3,539	3,600	3,612

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1 **Table B.7-22. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the American River at the Confluence with the**  
 2 **Sacramento River, Year-Round**

Alternative 4A_ELT: Upstream—American River at Confluence with Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	1,274 (14.6%)	-10 (-0.1%)	1,320 (15.1%)	37 (0.4%)
	AN	138 (2.9%)	49 (1%)	249 (5.2%)	159 (3.3%)
	BN	-330 (-14.2%)	-249 (-11.1%)	-209 (-9%)	-129 (-5.7%)
	D	-178 (-10.7%)	-58 (-3.8%)	-46 (-2.8%)	73 (4.8%)
	C	-177 (-12.6%)	73 (6.4%)	-188 (-13.4%)	63 (5.5%)
	All	303 (6.8%)	-41 (-0.9%)	382 (8.6%)	38 (0.8%)
FEB	W	1,131 (12.3%)	38 (0.4%)	1,143 (12.4%)	51 (0.5%)
	AN	989 (15.4%)	264 (3.7%)	895 (13.9%)	170 (2.4%)
	BN	515 (11.9%)	193 (4.2%)	506 (11.8%)	184 (4%)
	D	-160 (-9%)	-59 (-3.5%)	-132 (-7.4%)	-31 (-1.8%)
	C	-88 (-7.9%)	45 (4.6%)	-56 (-5%)	77 (7.8%)
	All	543 (10.6%)	77 (1.4%)	543 (10.6%)	77 (1.4%)
MAR	W	324 (5.4%)	-1 (0%)	324 (5.4%)	-1 (0%)
	AN	327 (6.1%)	51 (0.9%)	277 (5.2%)	1 (0%)
	BN	187 (8%)	25 (1%)	166 (7.1%)	3 (0.1%)
	D	66 (3.1%)	93 (4.4%)	-112 (-5.3%)	-86 (-4.1%)
	C	-100 (-11.6%)	-21 (-2.6%)	-102 (-11.8%)	-22 (-2.8%)
	All	182 (5%)	29 (0.8%)	132 (3.6%)	-22 (-0.6%)
APR	W	8 (0.2%)	0 (0%)	8 (0.2%)	0 (0%)
	AN	-250 (-7.4%)	-4 (-0.1%)	-251 (-7.4%)	-4 (-0.1%)
	BN	-33 (-1.1%)	24 (0.8%)	-72 (-2.4%)	-15 (-0.5%)
	D	-84 (-5.1%)	38 (2.4%)	-69 (-4.1%)	54 (3.5%)
	C	45 (4.5%)	154 (17.3%)	-1 (-0.1%)	109 (12.3%)
	All	-52 (-1.6%)	34 (1.1%)	-62 (-2%)	25 (0.8%)
MAY	W	-545 (-9.1%)	-1 (0%)	-545 (-9.1%)	-1 (0%)
	AN	-677 (-18.3%)	111 (3.8%)	-733 (-19.8%)	55 (1.9%)
	BN	-320 (-11.7%)	191 (8.6%)	-517 (-18.9%)	-5 (-0.2%)
	D	-125 (-7.8%)	82 (5.8%)	-137 (-8.6%)	69 (4.9%)
	C	116 (11.4%)	11 (1%)	-87 (-8.6%)	-191 (-17.1%)
	All	-337 (-9.9%)	68 (2.3%)	-411 (-12.1%)	-6 (-0.2%)
JUN	W	-1,298 (-22.6%)	239 (5.7%)	-1,511 (-26.3%)	26 (0.6%)
	AN	54 (1.7%)	595 (23.2%)	-601 (-19.4%)	-61 (-2.4%)
	BN	172 (6.5%)	529 (23.3%)	-494 (-18.8%)	-138 (-6.1%)
	D	573 (25.1%)	566 (24.7%)	-237 (-10.4%)	-245 (-10.7%)
	C	-578 (-35.6%)	-8 (-0.8%)	-534 (-32.9%)	36 (3.4%)
	All	-333 (-9.6%)	376 (13.7%)	-782 (-22.6%)	-73 (-2.6%)

Alternative 4A_ELT: Upstream—American River at Confluence with Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	-182 (-4.7%)	399 (12.2%)	-277 (-7.2%)	303 (9.3%)
	AN	-50 (-1.1%)	4 (0.1%)	106 (2.4%)	161 (3.7%)
	BN	-154 (-3.4%)	98 (2.3%)	-246 (-5.5%)	6 (0.1%)
	D	-495 (-14.8%)	46 (1.6%)	-483 (-14.4%)	58 (2.1%)
	C	-129 (-8.2%)	19 (1.3%)	-309 (-19.7%)	-161 (-11.4%)
	All	-219 (-6.1%)	157 (4.9%)	-265 (-7.4%)	110 (3.4%)
AUG	W	-1,189 (-36.1%)	-198 (-8.6%)	-1,057 (-32.1%)	-67 (-2.9%)
	AN	-506 (-21.9%)	-114 (-5.9%)	-259 (-11.2%)	133 (6.9%)
	BN	-347 (-15.3%)	-117 (-5.7%)	175 (7.7%)	405 (19.9%)
	D	-1,246 (-52%)	-367 (-24.2%)	-879 (-36.7%)	0 (0%)
	C	-421 (-32%)	-204 (-18.6%)	-580 (-44.1%)	-363 (-33.1%)
	All	-845 (-34%)	-210 (-11.3%)	-621 (-25%)	14 (0.8%)
SEP	W	-694 (-18.1%)	-619 (-16.4%)	-327 (-8.5%)	-252 (-6.7%)
	AN	-614 (-23.7%)	-456 (-18.7%)	-356 (-13.7%)	-199 (-8.2%)
	BN	-915 (-41.5%)	-422 (-24.6%)	-871 (-39.5%)	-377 (-22%)
	D	-524 (-31%)	-10 (-0.8%)	-529 (-31.3%)	-15 (-1.2%)
	C	-476 (-47.1%)	-56 (-9.4%)	-475 (-47%)	-55 (-9.3%)
	All	-651 (-26.1%)	-346 (-15.8%)	-490 (-19.6%)	-185 (-8.4%)
OCT	W	-149 (-9.3%)	-103 (-6.6%)	-80 (-5%)	-34 (-2.2%)
	AN	-176 (-11%)	-60 (-4.1%)	-129 (-8.1%)	-13 (-0.9%)
	BN	145 (9.9%)	253 (18.6%)	130 (8.8%)	238 (17.4%)
	D	-72 (-5.4%)	-61 (-4.6%)	49 (3.6%)	60 (4.5%)
	C	196 (14.6%)	305 (24.8%)	185 (13.8%)	295 (23.9%)
	All	-35 (-2.4%)	33 (2.3%)	16 (1.1%)	84 (5.9%)
NOV	W	-560 (-16.1%)	-451 (-13.4%)	-455 (-13.1%)	-346 (-10.3%)
	AN	-320 (-10.3%)	-309 (-10%)	-219 (-7.1%)	-209 (-6.8%)
	BN	-392 (-19.7%)	-291 (-15.4%)	-233 (-11.7%)	-133 (-7%)
	D	-500 (-23.9%)	-30 (-1.8%)	-529 (-25.2%)	-58 (-3.6%)
	C	-363 (-19.2%)	-56 (-3.6%)	-314 (-16.6%)	-7 (-0.5%)
	All	-454 (-17.3%)	-253 (-10.4%)	-378 (-14.4%)	-177 (-7.3%)
DEC	W	484 (7.7%)	131 (2%)	493 (7.9%)	141 (2.1%)
	AN	-122 (-4%)	-57 (-1.9%)	-40 (-1.3%)	24 (0.8%)
	BN	319 (12.2%)	154 (5.6%)	258 (9.9%)	94 (3.4%)
	D	-148 (-8.8%)	-37 (-2.4%)	-145 (-8.6%)	-34 (-2.2%)
	C	-97 (-6.7%)	68 (5.3%)	-53 (-3.7%)	112 (8.8%)
	All	143 (4.1%)	61 (1.7%)	155 (4.5%)	73 (2.1%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

1 **Stanislaus River at the Confluence with the San Joaquin River**2 **Table B.7-23. Mean Monthly Flows (cfs) for Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round**

Alternative 4A_ELT: Upstream—Stanislaus River at Confluence with the San Joaquin River					
Month	Water Year Type <sup>a</sup>	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	956	968	968	968
	AN	843	911	912	912
	BN	416	382	382	382
	D	403	393	393	393
	C	314	278	278	278
	All	635	638	638	638
FEB	W	1,285	1,500	1,500	1,502
	AN	917	985	985	985
	BN	551	522	522	522
	D	562	411	410	410
	C	490	349	349	349
	All	827	847	847	848
MAR	W	2,063	2,259	2,259	2,259
	AN	1,295	1,108	1,108	1,108
	BN	732	642	642	642
	D	559	431	431	431
	C	541	445	445	444
	All	1,167	1,134	1,134	1,134
APR	W	2,054	2,047	2,047	2,047
	AN	1,719	1,605	1,605	1,605
	BN	1,494	1,344	1,344	1,344
	D	1,438	1,320	1,320	1,319
	C	823	720	720	719
	All	1,562	1,475	1,475	1,475
MAY	W	1,653	1,688	1,688	1,688
	AN	1,389	1,292	1,294	1,292
	BN	1,238	1,094	1,093	1,093
	D	1,140	1,039	1,039	1,039
	C	715	648	648	646
	All	1,271	1,211	1,211	1,210
JUN	W	1,608	1,786	1,785	1,789
	AN	1,134	1,087	1,085	1,087
	BN	663	609	607	608
	D	447	383	385	383
	C	332	308	308	307
	All	932	952	952	953



Alternative 4A_ELT: Upstream—Stanislaus River at Confluence with the San Joaquin River					
Month	Water Year Type <sup>a</sup>	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	1,064	1,070	1,069	1,069
	AN	489	456	456	456
	BN	450	427	427	427
	D	398	355	355	355
	C	337	318	318	317
	All	607	588	588	588
AUG	W	930	843	843	843
	AN	476	455	455	455
	BN	423	422	422	422
	D	387	384	384	384
	C	341	341	341	338
	All	560	530	530	529
SEP	W	1,040	965	965	965
	AN	503	477	477	477
	BN	417	413	413	413
	D	395	392	392	392
	C	324	327	327	327
	All	594	567	567	567
OCT	W	897	869	869	869
	AN	873	844	844	844
	BN	903	851	851	851
	D	984	980	980	980
	C	689	670	670	669
	All	867	840	840	840
NOV	W	426	427	427	427
	AN	580	591	591	591
	BN	341	341	341	341
	D	345	337	337	337
	C	325	311	311	311
	All	410	409	409	409
DEC	W	513	526	526	526
	AN	722	767	767	767
	BN	331	331	331	331
	D	317	310	310	310
	C	289	275	275	275
	All	450	459	459	459

<sup>a</sup> Water year type for this location was determined using the San Joaquin River Valley Index.

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1 **Table B.7-24. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Stanislaus River at the Confluence with the San**  
 2 **Joaquin River, Year-Round**

Alternative 4A_ELT: Upstream—Stanislaus River at Confluence with the San Joaquin River					
Month	Water Year Type <sup>b</sup>	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	12 (1.2%)	0 (0%)	12 (1.2%)	0 (0%)
	AN	69 (8.2%)	1 (0.1%)	70 (8.3%)	1 (0.1%)
	BN	-34 (-8.2%)	0 (0%)	-34 (-8.2%)	0 (0%)
	D	-10 (-2.4%)	0 (0%)	-10 (-2.4%)	0 (0%)
	C	-36 (-11.5%)	0 (0%)	-36 (-11.5%)	0 (0%)
	All	3 (0.5%)	0 (0%)	3 (0.5%)	0 (0%)
FEB	W	215 (16.8%)	0 (0%)	218 (16.9%)	3 (0.2%)
	AN	68 (7.4%)	0 (0%)	68 (7.4%)	0 (0%)
	BN	-30 (-5.4%)	0 (0%)	-29 (-5.3%)	0 (0%)
	D	-151 (-27%)	0 (0%)	-151 (-27%)	0 (0%)
	C	-141 (-28.8%)	0 (0%)	-141 (-28.8%)	0 (0%)
	All	20 (2.4%)	0 (0%)	21 (2.5%)	1 (0.1%)
MAR	W	196 (9.5%)	0 (0%)	196 (9.5%)	0 (0%)
	AN	-187 (-14.4%)	0 (0%)	-187 (-14.4%)	0 (0%)
	BN	-91 (-12.4%)	0 (0%)	-91 (-12.4%)	0 (0%)
	D	-127 (-22.8%)	0 (0%)	-128 (-22.8%)	0 (-0.1%)
	C	-96 (-17.7%)	0 (0%)	-96 (-17.8%)	-1 (-0.1%)
	All	-32 (-2.8%)	0 (0%)	-32 (-2.8%)	0 (0%)
APR	W	-6 (-0.3%)	0 (0%)	-6 (-0.3%)	0 (0%)
	AN	-114 (-6.6%)	0 (0%)	-114 (-6.6%)	0 (0%)
	BN	-149 (-10%)	0 (0%)	-149 (-10%)	0 (0%)
	D	-118 (-8.2%)	0 (0%)	-119 (-8.3%)	-1 (-0.1%)
	C	-103 (-12.5%)	0 (0%)	-104 (-12.6%)	-1 (-0.1%)
	All	-87 (-5.5%)	0 (0%)	-87 (-5.6%)	0 (0%)
MAY	W	35 (2.1%)	0 (0%)	35 (2.1%)	0 (0%)
	AN	-95 (-6.8%)	2 (0.1%)	-96 (-6.9%)	0 (0%)
	BN	-145 (-11.7%)	-1 (-0.1%)	-145 (-11.7%)	-1 (-0.1%)
	D	-101 (-8.8%)	0 (0%)	-102 (-8.9%)	-1 (-0.1%)
	C	-67 (-9.4%)	0 (0%)	-68 (-9.6%)	-2 (-0.2%)
	All	-60 (-4.7%)	0 (0%)	-61 (-4.8%)	0 (0%)
JUN	W	178 (11.1%)	0 (0%)	182 (11.3%)	3 (0.2%)
	AN	-49 (-4.3%)	-2 (-0.2%)	-47 (-4.1%)	0 (0%)
	BN	-56 (-8.4%)	-2 (-0.3%)	-55 (-8.3%)	-1 (-0.2%)
	D	-62 (-13.8%)	2 (0.6%)	-64 (-14.3%)	0 (0%)
	C	-23 (-7.1%)	0 (0%)	-25 (-7.6%)	-2 (-0.6%)
	All	19 (2.1%)	0 (0%)	20 (2.2%)	0 (0%)

Alternative 4A_ELT: Upstream—Stanislaus River at Confluence with the San Joaquin River					
Month	Water Year Type <sup>b</sup>	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	6 (0.5%)	0 (0%)	6 (0.5%)	0 (0%)
	AN	-33 (-6.8%)	0 (0%)	-33 (-6.8%)	0 (0%)
	BN	-23 (-5.1%)	0 (0%)	-23 (-5.1%)	0 (0%)
	D	-42 (-10.7%)	0 (0.1%)	-43 (-10.8%)	0 (0%)
	C	-18 (-5.5%)	0 (0%)	-20 (-6%)	-2 (-0.5%)
	All	-19 (-3.1%)	0 (0%)	-19 (-3.2%)	0 (-0.1%)
AUG	W	-86 (-9.3%)	0 (0%)	-86 (-9.3%)	0 (0%)
	AN	-21 (-4.4%)	0 (0%)	-21 (-4.4%)	0 (0%)
	BN	-1 (-0.2%)	0 (0%)	-1 (-0.2%)	0 (0%)
	D	-3 (-0.7%)	0 (0%)	-3 (-0.7%)	0 (0%)
	C	0 (0%)	0 (0%)	-3 (-0.8%)	-3 (-0.9%)
	All	-30 (-5.3%)	0 (0%)	-31 (-5.4%)	-1 (-0.1%)
SEP	W	-75 (-7.3%)	-1 (-0.1%)	-75 (-7.2%)	0 (0%)
	AN	-25 (-5%)	0 (0%)	-25 (-5%)	0 (0%)
	BN	-4 (-0.9%)	0 (0%)	-4 (-0.9%)	0 (0%)
	D	-3 (-0.7%)	0 (0%)	-3 (-0.7%)	0 (0%)
	C	3 (1%)	0 (0%)	3 (1%)	0 (0%)
	All	-27 (-4.6%)	0 (0%)	-27 (-4.6%)	0 (0%)
OCT	W	-28 (-3.2%)	0 (0%)	-28 (-3.2%)	0 (0%)
	AN	-29 (-3.3%)	0 (0%)	-29 (-3.3%)	0 (0%)
	BN	-52 (-5.7%)	0 (0%)	-52 (-5.7%)	0 (0%)
	D	-4 (-0.4%)	0 (0%)	-4 (-0.4%)	0 (0%)
	C	-19 (-2.8%)	0 (0%)	-19 (-2.8%)	0 (0%)
	All	-27 (-3.1%)	0 (0%)	-27 (-3.1%)	0 (0%)
NOV	W	1 (0.2%)	0 (0%)	1 (0.2%)	0 (0%)
	AN	11 (1.9%)	0 (0%)	11 (1.9%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	-8 (-2.2%)	0 (0%)	-8 (-2.2%)	0 (0%)
	C	-14 (-4.2%)	0 (0%)	-14 (-4.2%)	0 (0%)
	All	-1 (-0.3%)	0 (0%)	-1 (-0.3%)	0 (0%)
DEC	W	14 (2.7%)	0 (0%)	14 (2.7%)	0 (0%)
	AN	44 (6.2%)	0 (0%)	45 (6.2%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	-8 (-2.4%)	0 (0%)	-8 (-2.4%)	0 (0%)
	C	-14 (-4.7%)	0 (0%)	-14 (-4.7%)	0 (0%)
	All	9 (2%)	0 (0%)	9 (2%)	0 (0%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% more negative than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% more positive than flows under the baseline.

<sup>b</sup> Water year type for this location was determined using the San Joaquin River Valley Index.

1 **In Delta**2 **OMR Flow (Old and Middle Rivers)**3 **Table B.7-25. Mean Monthly Flows (cfs) for Model Scenarios in the Old and Middle Rivers, Year-Round**

Alternative 4A_ELT: In Delta—OMR Flow (Old and Middle Rivers)					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	-1,820	-1,771	2,042	1,771
	AN	-3,553	-3,483	-1,407	-1,664
	BN	-4,240	-4,309	-2,401	-2,626
	D	-4,664	-4,713	-2,959	-2,780
	C	-4,130	-3,634	-2,895	-2,914
	All	-3,449	-3,373	-1,042	-1,167
FEB	W	-2,365	-2,124	3,697	3,746
	AN	-3,274	-3,017	-22	48
	BN	-3,437	-3,142	-2,006	-2,008
	D	-3,986	-3,924	-3,151	-3,150
	C	-3,191	-3,372	-3,132	-3,031
	All	-3,158	-3,006	-323	-283
MAR	W	-1,600	-1,691	4,494	5,098
	AN	-4,251	-4,080	608	886
	BN	-4,147	-3,933	-2,075	-563
	D	-2,852	-2,826	-2,502	-1,560
	C	-2,010	-1,817	-1,866	-1,556
	All	-2,758	-2,691	337	1,080
APR	W	2,431	2,408	2,241	2,580
	AN	1,058	909	-82	517
	BN	677	497	-442	158
	D	-268	-617	-1,411	-750
	C	-950	-896	-1,239	-874
	All	843	715	132	628
MAY	W	1,651	1,685	2,246	2,484
	AN	509	549	-326	289
	BN	272	65	-611	-115
	D	-647	-961	-1,404	-901
	C	-1,019	-1,043	-1,034	-902
	All	353	262	101	480
JUN	W	-4,164	-4,271	-807	-125
	AN	-4,761	-4,624	-2,340	-1,475
	BN	-4,154	-3,577	-3,000	-2,550
	D	-3,301	-3,047	-2,556	-1,778
	C	-2,250	-2,195	-1,713	-1,495
	All	-3,780	-3,632	-1,922	-1,300

Alternative 4A_ELT: In Delta—OMR Flow (Old and Middle Rivers)					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	-8,959	-9,077	-6,949	-5,681
	AN	-9,919	-9,036	-7,337	-6,087
	BN	-10,853	-10,426	-8,553	-7,377
	D	-10,891	-9,996	-7,111	-5,969
	C	-8,058	-6,389	-3,268	-3,407
	All	-9,715	-9,110	-6,777	-5,760
AUG	W	-10,062	-10,552	-5,539	-5,126
	AN	-10,348	-10,838	-7,105	-5,522
	BN	-10,044	-9,442	-7,041	-6,850
	D	-10,122	-8,071	-4,764	-6,072
	C	-4,384	-3,725	-3,810	-4,243
	All	-9,283	-8,861	-5,602	-5,557
SEP	W	-9,317	-8,437	719	868
	AN	-9,163	-8,986	-370	662
	BN	-8,575	-8,539	-4,331	-3,923
	D	-8,081	-6,148	-4,049	-4,148
	C	-4,807	-4,276	-3,860	-3,989
	All	-8,236	-7,423	-2,019	-1,792
OCT	W	-8,347	-5,847	-1,508	-1,584
	AN	-7,643	-4,587	-1,708	-1,702
	BN	-7,804	-5,137	-1,612	-1,472
	D	-6,961	-5,057	-1,770	-1,775
	C	-6,440	-5,025	-2,104	-1,962
	All	-7,568	-5,248	-1,700	-1,679
NOV	W	-8,902	-7,002	-1,187	-1,354
	AN	-7,264	-6,221	-2,624	-2,651
	BN	-7,997	-6,175	-2,464	-2,221
	D	-7,136	-5,277	-2,436	-2,249
	C	-5,293	-4,283	-2,919	-2,840
	All	-7,592	-5,970	-2,143	-2,106
DEC	W	-5,542	-5,428	-2,833	-2,813
	AN	-6,987	-7,362	-5,631	-5,748
	BN	-7,304	-7,231	-6,078	-5,773
	D	-7,214	-7,517	-6,149	-5,922
	C	-6,166	-5,334	-5,438	-5,204
	All	-6,513	-6,464	-4,906	-4,780

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1 Table B.7-26. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Old and Middle Rivers, Year-Round

Alternative 4A_ELT: In Delta—OMR Flow (Old and Middle Rivers)					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	3,862 (212.2%)	3,813 (215.3%)	3,591 (197.3%)	3,543 (200%)
	AN	2,145 (60.4%)	2,076 (59.6%)	1,889 (53.2%)	1,820 (52.2%)
	BN	1,838 (43.4%)	1,907 (44.3%)	1,614 (38.1%)	1,683 (39.1%)
	D	1,705 (36.6%)	1,755 (37.2%)	1,884 (40.4%)	1,934 (41%)
	C	1,235 (29.9%)	739 (20.3%)	1,216 (29.4%)	720 (19.8%)
	All	2,407 (69.8%)	2,332 (69.1%)	2,282 (66.2%)	2,207 (65.4%)
FEB	W	6,062 (256.3%)	5,822 (274%)	6,111 (258.4%)	5,871 (276.3%)
	AN	3,252 (99.3%)	2,995 (99.3%)	3,322 (101.5%)	3,065 (101.6%)
	BN	1,431 (41.6%)	1,136 (36.2%)	1,429 (41.6%)	1,134 (36.1%)
	D	835 (21%)	773 (19.7%)	835 (21%)	774 (19.7%)
	C	59 (1.9%)	240 (7.1%)	160 (5%)	341 (10.1%)
	All	2,834 (89.8%)	2,683 (89.2%)	2,875 (91%)	2,723 (90.6%)
MAR	W	6,094 (380.8%)	6,185 (365.8%)	6,699 (418.6%)	6,789 (401.6%)
	AN	4,859 (114.3%)	4,688 (114.9%)	5,137 (120.8%)	4,966 (121.7%)
	BN	2,071 (49.9%)	1,857 (47.2%)	3,583 (86.4%)	3,369 (85.7%)
	D	350 (12.3%)	324 (11.5%)	1,292 (45.3%)	1,266 (44.8%)
	C	145 (7.2%)	-49 (-2.7%)	454 (22.6%)	260 (14.3%)
	All	3,095 (112.2%)	3,028 (112.5%)	3,838 (139.2%)	3,771 (140.1%)
APR	W	-190 (-7.8%)	-167 (-6.9%)	149 (6.1%)	172 (7.1%)
	AN	-1,140 (-107.7%)	-991 (-109%)	-541 (-51.2%)	-392 (-43.2%)
	BN	-1,119 (-165.3%)	-939 (-188.9%)	-519 (-76.7%)	-339 (-68.2%)
	D	-1,143 (-426.6%)	-794 (-128.6%)	-482 (-179.7%)	-132 (-21.4%)
	C	-289 (-30.4%)	-344 (-38.4%)	76 (8%)	22 (2.4%)
	All	-711 (-84.3%)	-583 (-81.5%)	-215 (-25.5%)	-87 (-12.1%)
MAY	W	595 (36%)	561 (33.3%)	833 (50.5%)	799 (47.4%)
	AN	-835 (-164%)	-875 (-159.4%)	-220 (-43.3%)	-260 (-47.3%)
	BN	-883 (-324.9%)	-676 (-1,047.2%)	-387 (-142.4%)	-180 (-278.7%)
	D	-757 (-117%)	-442 (-46%)	-254 (-39.3%)	61 (6.3%)
	C	-14 (-1.4%)	10 (1%)	117 (11.5%)	141 (13.5%)
	All	-253 (-71.5%)	-161 (-61.6%)	127 (36%)	219 (83.5%)
JUN	W	3,357 (80.6%)	3,464 (81.1%)	4,039 (97%)	4,146 (97.1%)
	AN	2,421 (50.8%)	2,284 (49.4%)	3,286 (69%)	3,149 (68.1%)
	BN	1,154 (27.8%)	577 (16.1%)	1,605 (38.6%)	1,027 (28.7%)
	D	744 (22.6%)	491 (16.1%)	1,522 (46.1%)	1,268 (41.6%)
	C	537 (23.9%)	482 (22%)	755 (33.6%)	700 (31.9%)
	All	1,858 (49.1%)	1,709 (47.1%)	2,480 (65.6%)	2,332 (64.2%)

Alternative 4A_ELT: In Delta—OMR Flow (Old and Middle Rivers)					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	2,009 (22.4%)	2,128 (23.4%)	3,277 (36.6%)	3,395 (37.4%)
	AN	2,582 (26%)	1,699 (18.8%)	3,832 (38.6%)	2,949 (32.6%)
	BN	2,300 (21.2%)	1,873 (18%)	3,476 (32%)	3,049 (29.2%)
	D	3,780 (34.7%)	2,885 (28.9%)	4,922 (45.2%)	4,027 (40.3%)
	C	4,789 (59.4%)	3,120 (48.8%)	4,650 (57.7%)	2,981 (46.7%)
	All	2,938 (30.2%)	2,333 (25.6%)	3,954 (40.7%)	3,349 (36.8%)
AUG	W	4,523 (44.9%)	5,012 (47.5%)	4,936 (49.1%)	5,425 (51.4%)
	AN	3,243 (31.3%)	3,733 (34.4%)	4,826 (46.6%)	5,316 (49%)
	BN	3,004 (29.9%)	2,402 (25.4%)	3,194 (31.8%)	2,592 (27.5%)
	D	5,358 (52.9%)	3,307 (41%)	4,051 (40%)	1,999 (24.8%)
	C	575 (13.1%)	-85 (-2.3%)	141 (3.2%)	-518 (-13.9%)
	All	3,682 (39.7%)	3,259 (36.8%)	3,727 (40.1%)	3,304 (37.3%)
SEP	W	10,036 (107.7%)	9,157 (108.5%)	10,185 (109.3%)	9,306 (110.3%)
	AN	8,793 (96%)	8,616 (95.9%)	9,825 (107.2%)	9,647 (107.4%)
	BN	4,244 (49.5%)	4,208 (49.3%)	4,652 (54.3%)	4,616 (54.1%)
	D	4,032 (49.9%)	2,098 (34.1%)	3,933 (48.7%)	2,000 (32.5%)
	C	947 (19.7%)	416 (9.7%)	818 (17%)	287 (6.7%)
	All	6,217 (75.5%)	5,404 (72.8%)	6,445 (78.2%)	5,632 (75.9%)
OCT	W	6,839 (81.9%)	4,339 (74.2%)	6,762 (81%)	4,263 (72.9%)
	AN	5,935 (77.6%)	2,879 (62.8%)	5,941 (77.7%)	2,886 (62.9%)
	BN	6,192 (79.3%)	3,524 (68.6%)	6,333 (81.1%)	3,665 (71.4%)
	D	5,191 (74.6%)	3,287 (65%)	5,186 (74.5%)	3,282 (64.9%)
	C	4,336 (67.3%)	2,920 (58.1%)	4,478 (69.5%)	3,063 (61%)
	All	5,868 (77.5%)	3,548 (67.6%)	5,888 (77.8%)	3,568 (68%)
NOV	W	7,715 (86.7%)	5,815 (83.1%)	7,548 (84.8%)	5,648 (80.7%)
	AN	4,640 (63.9%)	3,597 (57.8%)	4,614 (63.5%)	3,571 (57.4%)
	BN	5,533 (69.2%)	3,711 (60.1%)	5,775 (72.2%)	3,954 (64%)
	D	4,700 (65.9%)	2,840 (53.8%)	4,888 (68.5%)	3,028 (57.4%)
	C	2,374 (44.9%)	1,364 (31.8%)	2,453 (46.3%)	1,443 (33.7%)
	All	5,449 (71.8%)	3,827 (64.1%)	5,486 (72.3%)	3,864 (64.7%)
DEC	W	2,709 (48.9%)	2,595 (47.8%)	2,729 (49.2%)	2,616 (48.2%)
	AN	1,357 (19.4%)	1,731 (23.5%)	1,239 (17.7%)	1,614 (21.9%)
	BN	1,226 (16.8%)	1,153 (16%)	1,531 (21%)	1,458 (20.2%)
	D	1,064 (14.8%)	1,368 (18.2%)	1,292 (17.9%)	1,596 (21.2%)
	C	729 (11.8%)	-104 (-1.9%)	962 (15.6%)	130 (2.4%)
	All	1,607 (24.7%)	1,558 (24.1%)	1,732 (26.6%)	1,684 (26%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

1 **Sacramento River Downstream of North Delta Diversion Facility**2 **Table B.7-27. Mean Monthly Flows (cfs) for Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility,**  
3 **Year-Round**

Alternative 4A_ELT: In Delta—Sacramento River Downstream of North Delta Diversion Facility					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	50,961	51,963	42,922	43,191
	AN	39,863	38,966	32,114	32,437
	BN	23,781	23,111	18,670	18,900
	D	17,444	17,420	15,082	15,173
	C	14,281	14,516	12,792	12,698
	All	31,971	32,073	26,679	26,857
FEB	W	57,314	58,879	48,669	48,520
	AN	45,676	46,911	39,319	38,743
	BN	31,934	31,705	25,204	25,861
	D	21,202	21,018	17,291	17,287
	C	14,708	14,422	13,251	13,210
	All	37,116	37,671	31,223	31,197
MAR	W	49,416	50,198	39,664	41,212
	AN	44,495	45,105	35,187	35,896
	BN	24,489	23,010	16,848	18,815
	D	20,656	20,284	16,052	16,638
	C	13,245	13,045	11,959	11,808
	All	32,834	32,807	25,876	26,913
APR	W	37,809	37,883	28,473	32,441
	AN	25,979	25,393	17,877	22,323
	BN	17,752	17,248	13,809	19,780
	D	12,990	12,836	11,277	11,694
	C	10,229	10,033	9,635	9,457
	All	23,169	22,959	17,887	20,881
MAY	W	31,948	29,061	22,219	26,689
	AN	21,021	19,707	16,232	20,169
	BN	14,227	13,003	11,574	13,926
	D	10,959	10,606	10,127	10,226
	C	7,749	8,136	7,431	7,359
	All	19,175	17,837	14,707	17,113
JUN	W	23,900	19,758	15,310	14,233
	AN	16,309	15,163	13,017	11,835
	BN	13,576	13,131	13,000	11,903
	D	12,222	12,538	12,108	11,225
	C	9,884	9,829	9,185	8,983
	All	16,412	14,916	12,981	12,056



Alternative 4A_ELT: In Delta—Sacramento River Downstream of North Delta Diversion Facility					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	19,876	20,330	16,837	15,080
	AN	21,574	22,186	18,952	16,850
	BN	20,953	20,953	18,277	16,772
	D	19,272	18,670	15,479	14,086
	C	15,397	14,149	10,084	10,356
	All	19,520	19,439	16,106	14,719
AUG	W	15,816	15,882	10,355	9,898
	AN	15,877	16,585	12,652	10,955
	BN	15,643	15,243	12,500	12,435
	D	16,965	14,504	10,038	11,792
	C	10,095	9,298	8,784	9,109
	All	15,210	14,610	10,758	10,786
SEP	W	18,254	26,844	18,132	18,107
	AN	13,198	21,227	12,356	11,261
	BN	12,427	12,783	8,377	7,872
	D	12,155	9,748	7,712	7,826
	C	8,485	7,687	7,461	7,770
	All	13,751	17,065	11,772	11,588
OCT	W	13,505	12,783	9,109	9,206
	AN	11,118	10,426	8,220	8,193
	BN	11,557	10,582	8,441	8,372
	D	10,279	10,230	8,331	8,284
	C	10,073	9,389	8,070	8,107
	All	11,613	11,005	8,542	8,552
NOV	W	19,447	20,479	14,895	14,826
	AN	15,309	16,862	12,301	12,468
	BN	12,574	13,546	9,348	9,273
	D	12,868	12,499	9,474	9,261
	C	9,633	9,449	8,253	8,104
	All	14,788	15,400	11,406	11,327
DEC	W	39,708	39,335	32,728	33,360
	AN	21,663	22,698	20,165	20,349
	BN	16,678	17,171	15,568	15,255
	D	15,442	15,384	14,065	13,780
	C	11,816	10,840	10,659	10,305
	All	23,727	23,689	20,633	20,693

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1 **Table B.7-28. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios for the Sacramento River Downstream of the North Delta**  
 2 **Diversion Facility, Year-Round**

Alternative 4A_ELT: In Delta—Sacramento River Downstream of North Delta Diversion Facility					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	-8,039 (-15.8%)	-9,041 (-17.4%)	-7,770 (-15.2%)	-8,772 (-16.9%)
	AN	-7,749 (-19.4%)	-6,852 (-17.6%)	-7,426 (-18.6%)	-6,529 (-16.8%)
	BN	-5,110 (-21.5%)	-4,441 (-19.2%)	-4,881 (-20.5%)	-4,211 (-18.2%)
	D	-2,362 (-13.5%)	-2,338 (-13.4%)	-2,271 (-13%)	-2,247 (-12.9%)
	C	-1,489 (-10.4%)	-1,724 (-11.9%)	-1,583 (-11.1%)	-1,818 (-12.5%)
	All	-5,292 (-16.6%)	-5,393 (-16.8%)	-5,114 (-16%)	-5,215 (-16.3%)
FEB	W	-8,645 (-15.1%)	-10,210 (-17.3%)	-8,794 (-15.3%)	-10,359 (-17.6%)
	AN	-6,358 (-13.9%)	-7,592 (-16.2%)	-6,933 (-15.2%)	-8,168 (-17.4%)
	BN	-6,730 (-21.1%)	-6,501 (-20.5%)	-6,073 (-19%)	-5,844 (-18.4%)
	D	-3,911 (-18.4%)	-3,727 (-17.7%)	-3,914 (-18.5%)	-3,730 (-17.7%)
	C	-1,457 (-9.9%)	-1,171 (-8.1%)	-1,498 (-10.2%)	-1,212 (-8.4%)
	All	-5,892 (-15.9%)	-6,448 (-17.1%)	-5,918 (-15.9%)	-6,474 (-17.2%)
MAR	W	-9,752 (-19.7%)	-10,534 (-21%)	-8,204 (-16.6%)	-8,987 (-17.9%)
	AN	-9,309 (-20.9%)	-9,918 (-22%)	-8,600 (-19.3%)	-9,209 (-20.4%)
	BN	-7,641 (-31.2%)	-6,162 (-26.8%)	-5,674 (-23.2%)	-4,195 (-18.2%)
	D	-4,605 (-22.3%)	-4,232 (-20.9%)	-4,019 (-19.5%)	-3,646 (-18%)
	C	-1,286 (-9.7%)	-1,086 (-8.3%)	-1,437 (-10.8%)	-1,237 (-9.5%)
	All	-6,958 (-21.2%)	-6,932 (-21.1%)	-5,921 (-18%)	-5,895 (-18%)
APR	W	-9,336 (-24.7%)	-9,411 (-24.8%)	-5,368 (-14.2%)	-5,443 (-14.4%)
	AN	-8,102 (-31.2%)	-7,516 (-29.6%)	-3,656 (-14.1%)	-3,070 (-12.1%)
	BN	-3,943 (-22.2%)	-3,440 (-19.9%)	2,028 (11.4%)	2,531 (14.7%)
	D	-1,713 (-13.2%)	-1,559 (-12.1%)	-1,296 (-10%)	-1,142 (-8.9%)
	C	-594 (-5.8%)	-398 (-4%)	-772 (-7.5%)	-576 (-5.7%)
	All	-5,282 (-22.8%)	-5,071 (-22.1%)	-2,288 (-9.9%)	-2,078 (-9.1%)
MAY	W	-9,729 (-30.5%)	-6,842 (-23.5%)	-5,259 (-16.5%)	-2,372 (-8.2%)
	AN	-4,789 (-22.8%)	-3,475 (-17.6%)	-852 (-4.1%)	462 (2.3%)
	BN	-2,653 (-18.6%)	-1,429 (-11%)	-301 (-2.1%)	923 (7.1%)
	D	-832 (-7.6%)	-478 (-4.5%)	-733 (-6.7%)	-379 (-3.6%)
	C	-319 (-4.1%)	-706 (-8.7%)	-390 (-5%)	-777 (-9.6%)
	All	-4,468 (-23.3%)	-3,130 (-17.5%)	-2,062 (-10.8%)	-724 (-4.1%)
JUN	W	-8,590 (-35.9%)	-4,448 (-22.5%)	-9,667 (-40.4%)	-5,525 (-28%)
	AN	-3,291 (-20.2%)	-2,146 (-14.2%)	-4,474 (-27.4%)	-3,328 (-22%)
	BN	-576 (-4.2%)	-131 (-1%)	-1,672 (-12.3%)	-1,228 (-9.3%)
	D	-114 (-0.9%)	-430 (-3.4%)	-997 (-8.2%)	-1,313 (-10.5%)
	C	-698 (-7.1%)	-643 (-6.5%)	-901 (-9.1%)	-846 (-8.6%)
	All	-3,431 (-20.9%)	-1,935 (-13%)	-4,356 (-26.5%)	-2,860 (-19.2%)

Alternative 4A_ELT: In Delta—Sacramento River Downstream of North Delta Diversion Facility					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	-3,039 (-15.3%)	-3,493 (-17.2%)	-4,796 (-24.1%)	-5,250 (-25.8%)
	AN	-2,622 (-12.2%)	-3,234 (-14.6%)	-4,724 (-21.9%)	-5,335 (-24%)
	BN	-2,676 (-12.8%)	-2,676 (-12.8%)	-4,181 (-20%)	-4,180 (-20%)
	D	-3,793 (-19.7%)	-3,190 (-17.1%)	-5,186 (-26.9%)	-4,583 (-24.5%)
	C	-5,314 (-34.5%)	-4,065 (-28.7%)	-5,041 (-32.7%)	-3,793 (-26.8%)
	All	-3,414 (-17.5%)	-3,333 (-17.1%)	-4,802 (-24.6%)	-4,720 (-24.3%)
AUG	W	-5,461 (-34.5%)	-5,527 (-34.8%)	-5,917 (-37.4%)	-5,983 (-37.7%)
	AN	-3,225 (-20.3%)	-3,934 (-23.7%)	-4,922 (-31%)	-5,630 (-33.9%)
	BN	-3,142 (-20.1%)	-2,743 (-18%)	-3,208 (-20.5%)	-2,809 (-18.4%)
	D	-6,927 (-40.8%)	-4,466 (-30.8%)	-5,173 (-30.5%)	-2,711 (-18.7%)
	C	-1,311 (-13%)	-514 (-5.5%)	-986 (-9.8%)	-188 (-2%)
	All	-4,453 (-29.3%)	-3,852 (-26.4%)	-4,424 (-29.1%)	-3,823 (-26.2%)
SEP	W	-122 (-0.7%)	-8,712 (-32.5%)	-146 (-0.8%)	-8,736 (-32.5%)
	AN	-842 (-6.4%)	-8,871 (-41.8%)	-1,937 (-14.7%)	-9,965 (-46.9%)
	BN	-4,050 (-32.6%)	-4,406 (-34.5%)	-4,555 (-36.7%)	-4,911 (-38.4%)
	D	-4,443 (-36.6%)	-2,036 (-20.9%)	-4,329 (-35.6%)	-1,922 (-19.7%)
	C	-1,024 (-12.1%)	-227 (-3%)	-715 (-8.4%)	83 (1.1%)
	All	-1,979 (-14.4%)	-5,293 (-31%)	-2,162 (-15.7%)	-5,477 (-32.1%)
OCT	W	-4,396 (-32.5%)	-3,674 (-28.7%)	-4,299 (-31.8%)	-3,576 (-28%)
	AN	-2,898 (-26.1%)	-2,207 (-21.2%)	-2,925 (-26.3%)	-2,234 (-21.4%)
	BN	-3,116 (-27%)	-2,141 (-20.2%)	-3,186 (-27.6%)	-2,210 (-20.9%)
	D	-1,948 (-18.9%)	-1,898 (-18.6%)	-1,995 (-19.4%)	-1,945 (-19%)
	C	-2,003 (-19.9%)	-1,319 (-14%)	-1,966 (-19.5%)	-1,282 (-13.6%)
	All	-3,071 (-26.4%)	-2,463 (-22.4%)	-3,061 (-26.4%)	-2,453 (-22.3%)
NOV	W	-4,552 (-23.4%)	-5,584 (-27.3%)	-4,621 (-23.8%)	-5,654 (-27.6%)
	AN	-3,008 (-19.6%)	-4,562 (-27.1%)	-2,841 (-18.6%)	-4,395 (-26.1%)
	BN	-3,226 (-25.7%)	-4,198 (-31%)	-3,301 (-26.3%)	-4,273 (-31.5%)
	D	-3,394 (-26.4%)	-3,025 (-24.2%)	-3,607 (-28%)	-3,238 (-25.9%)
	C	-1,380 (-14.3%)	-1,196 (-12.7%)	-1,529 (-15.9%)	-1,345 (-14.2%)
	All	-3,381 (-22.9%)	-3,994 (-25.9%)	-3,460 (-23.4%)	-4,073 (-26.4%)
DEC	W	-6,980 (-17.6%)	-6,607 (-16.8%)	-6,348 (-16%)	-5,975 (-15.2%)
	AN	-1,498 (-6.9%)	-2,533 (-11.2%)	-1,314 (-6.1%)	-2,349 (-10.3%)
	BN	-1,109 (-6.7%)	-1,603 (-9.3%)	-1,423 (-8.5%)	-1,916 (-11.2%)
	D	-1,378 (-8.9%)	-1,320 (-8.6%)	-1,662 (-10.8%)	-1,604 (-10.4%)
	C	-1,157 (-9.8%)	-181 (-1.7%)	-1,511 (-12.8%)	-534 (-4.9%)
	All	-3,094 (-13%)	-3,055 (-12.9%)	-3,034 (-12.8%)	-2,996 (-12.6%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

## 1 Sacramento River at Rio Vista

2 Table B.7-29. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Rio Vista, Year-Round

Alternative 4A_ELT: In Delta—Sacramento River at Rio Vista					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	71,111	75,510	69,760	70,028
	AN	41,963	41,416	37,307	38,272
	BN	20,943	20,388	18,308	18,521
	D	14,895	15,032	13,636	13,719
	C	11,853	12,114	11,016	10,935
	All	37,268	38,556	35,310	35,579
FEB	W	80,958	87,232	80,514	79,960
	AN	52,542	53,615	50,586	49,308
	BN	30,159	30,231	26,458	27,535
	D	19,319	19,318	17,032	16,987
	C	12,247	12,074	11,488	11,461
	All	44,541	46,674	42,869	42,676
MAR	W	63,763	66,275	59,080	60,485
	AN	46,751	47,974	41,897	42,862
	BN	20,980	19,629	15,589	17,484
	D	17,656	17,341	14,771	15,259
	C	10,710	10,603	10,067	9,941
	All	36,084	36,744	32,241	33,240
APR	W	38,214	38,692	32,848	36,940
	AN	22,726	22,234	17,186	21,809
	BN	14,652	14,295	11,845	18,027
	D	10,331	10,216	9,081	9,627
	C	7,665	7,520	7,283	7,122
	All	21,333	21,306	18,012	21,138
MAY	W	26,933	24,220	18,383	22,265
	AN	17,008	15,857	12,926	16,353
	BN	10,924	9,862	8,714	10,765
	D	8,135	7,840	7,525	7,623
	C	5,305	5,656	5,146	5,085
	All	15,456	14,232	11,613	13,708
JUN	W	16,557	12,993	8,934	8,163
	AN	9,887	8,634	6,665	5,831
	BN	7,001	6,677	6,652	5,872
	D	6,020	6,250	6,006	5,380
	C	4,333	4,304	3,939	3,799
	All	9,847	8,525	6,839	6,181

Alternative 4A_ELT: In Delta—Sacramento River at Rio Vista					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	11,125	11,207	8,924	7,492
	AN	12,128	12,544	10,235	8,791
	BN	11,686	11,667	9,779	8,734
	D	10,523	10,105	8,156	6,890
	C	7,736	6,866	4,103	4,408
	All	10,740	10,604	8,388	7,311
AUG	W	8,507	8,527	4,595	4,289
	AN	8,538	9,013	6,205	5,034
	BN	8,371	8,062	6,146	6,079
	D	9,264	7,525	4,374	5,633
	C	4,390	3,823	3,710	3,828
	All	8,052	7,610	4,918	4,931
SEP	W	10,767	20,717	10,406	10,432
	AN	6,788	12,961	6,275	5,564
	BN	6,283	6,538	3,513	3,167
	D	6,116	4,432	3,014	3,112
	C	3,588	3,215	3,020	3,163
	All	7,348	11,025	5,921	5,809
OCT	W	8,718	7,867	4,943	5,081
	AN	6,183	5,518	3,656	3,768
	BN	6,258	5,416	3,918	3,840
	D	5,312	5,221	3,801	3,844
	C	5,215	4,684	3,805	3,720
	All	6,667	6,058	4,162	4,206
NOV	W	15,829	17,184	12,318	12,197
	AN	11,333	13,102	8,954	9,246
	BN	8,184	9,448	5,769	5,775
	D	8,733	8,539	5,930	5,789
	C	5,474	5,586	4,577	4,433
	All	10,793	11,671	8,172	8,126
DEC	W	43,367	44,292	40,630	41,863
	AN	19,040	20,375	18,884	19,062
	BN	13,987	15,099	13,882	13,804
	D	11,999	11,868	11,126	10,846
	C	8,131	7,341	7,372	7,047
	All	22,749	23,283	21,538	21,832

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1 **Table B.7-30. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Rio Vista, Year-Round**

Alternative 4A_ELT: In Delta—Sacramento River at Rio Vista					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	-1,351 (-1.9%)	-5,751 (-7.6%)	-1,083 (-1.5%)	-5,482 (-7.3%)
	AN	-4,656 (-11.1%)	-4,109 (-9.9%)	-3,691 (-8.8%)	-3,144 (-7.6%)
	BN	-2,635 (-12.6%)	-2,080 (-10.2%)	-2,422 (-11.6%)	-1,867 (-9.2%)
	D	-1,259 (-8.5%)	-1,396 (-9.3%)	-1,175 (-7.9%)	-1,312 (-8.7%)
	C	-837 (-7.1%)	-1,098 (-9.1%)	-917 (-7.7%)	-1,179 (-9.7%)
	All	-1,959 (-5.3%)	-3,247 (-8.4%)	-1,689 (-4.5%)	-2,978 (-7.7%)
FEB	W	-444 (-0.5%)	-6,718 (-7.7%)	-998 (-1.2%)	-7,272 (-8.3%)
	AN	-1,957 (-3.7%)	-3,029 (-5.6%)	-3,235 (-6.2%)	-4,307 (-8%)
	BN	-3,701 (-12.3%)	-3,773 (-12.5%)	-2,624 (-8.7%)	-2,696 (-8.9%)
	D	-2,287 (-11.8%)	-2,286 (-11.8%)	-2,332 (-12.1%)	-2,331 (-12.1%)
	C	-759 (-6.2%)	-586 (-4.9%)	-786 (-6.4%)	-613 (-5.1%)
	All	-1,672 (-3.8%)	-3,805 (-8.2%)	-1,865 (-4.2%)	-3,998 (-8.6%)
MAR	W	-4,683 (-7.3%)	-7,195 (-10.9%)	-3,278 (-5.1%)	-5,790 (-8.7%)
	AN	-4,854 (-10.4%)	-6,077 (-12.7%)	-3,888 (-8.3%)	-5,111 (-10.7%)
	BN	-5,390 (-25.7%)	-4,039 (-20.6%)	-3,495 (-16.7%)	-2,144 (-10.9%)
	D	-2,885 (-16.3%)	-2,570 (-14.8%)	-2,397 (-13.6%)	-2,082 (-12%)
	C	-644 (-6%)	-536 (-5.1%)	-770 (-7.2%)	-662 (-6.2%)
	All	-3,843 (-10.7%)	-4,503 (-12.3%)	-2,844 (-7.9%)	-3,504 (-9.5%)
APR	W	-5,365 (-14%)	-5,844 (-15.1%)	-1,274 (-3.3%)	-1,753 (-4.5%)
	AN	-5,540 (-24.4%)	-5,048 (-22.7%)	-917 (-4%)	-425 (-1.9%)
	BN	-2,808 (-19.2%)	-2,450 (-17.1%)	3,375 (23%)	3,733 (26.1%)
	D	-1,250 (-12.1%)	-1,134 (-11.1%)	-704 (-6.8%)	-589 (-5.8%)
	C	-382 (-5%)	-237 (-3.2%)	-543 (-7.1%)	-398 (-5.3%)
	All	-3,322 (-15.6%)	-3,294 (-15.5%)	-196 (-0.9%)	-168 (-0.8%)
MAY	W	-8,550 (-31.7%)	-5,837 (-24.1%)	-4,668 (-17.3%)	-1,955 (-8.1%)
	AN	-4,082 (-24%)	-2,931 (-18.5%)	-655 (-3.9%)	496 (3.1%)
	BN	-2,210 (-20.2%)	-1,148 (-11.6%)	-159 (-1.5%)	903 (9.2%)
	D	-609 (-7.5%)	-314 (-4%)	-512 (-6.3%)	-217 (-2.8%)
	C	-159 (-3%)	-510 (-9%)	-221 (-4.2%)	-571 (-10.1%)
	All	-3,843 (-24.9%)	-2,619 (-18.4%)	-1,748 (-11.3%)	-524 (-3.7%)
JUN	W	-7,622 (-46%)	-4,059 (-31.2%)	-8,393 (-50.7%)	-4,830 (-37.2%)
	AN	-3,222 (-32.6%)	-1,969 (-22.8%)	-4,056 (-41%)	-2,803 (-32.5%)
	BN	-349 (-5%)	-26 (-0.4%)	-1,129 (-16.1%)	-806 (-12.1%)
	D	-14 (-0.2%)	-244 (-3.9%)	-640 (-10.6%)	-870 (-13.9%)
	C	-393 (-9.1%)	-365 (-8.5%)	-534 (-12.3%)	-506 (-11.7%)
	All	-3,009 (-30.6%)	-1,687 (-19.8%)	-3,666 (-37.2%)	-2,344 (-27.5%)

Alternative 4A_ELT: In Delta—Sacramento River at Rio Vista					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	-2,201 (-19.8%)	-2,283 (-20.4%)	-3,633 (-32.7%)	-3,715 (-33.1%)
	AN	-1,893 (-15.6%)	-2,309 (-18.4%)	-3,337 (-27.5%)	-3,753 (-29.9%)
	BN	-1,907 (-16.3%)	-1,887 (-16.2%)	-2,952 (-25.3%)	-2,932 (-25.1%)
	D	-2,368 (-22.5%)	-1,950 (-19.3%)	-3,633 (-34.5%)	-3,215 (-31.8%)
	C	-3,633 (-47%)	-2,764 (-40.2%)	-3,328 (-43%)	-2,458 (-35.8%)
	All	-2,352 (-21.9%)	-2,216 (-20.9%)	-3,429 (-31.9%)	-3,293 (-31.1%)
AUG	W	-3,911 (-46%)	-3,932 (-46.1%)	-4,218 (-49.6%)	-4,239 (-49.7%)
	AN	-2,332 (-27.3%)	-2,808 (-31.2%)	-3,504 (-41%)	-3,979 (-44.1%)
	BN	-2,225 (-26.6%)	-1,916 (-23.8%)	-2,292 (-27.4%)	-1,983 (-24.6%)
	D	-4,890 (-52.8%)	-3,151 (-41.9%)	-3,631 (-39.2%)	-1,892 (-25.1%)
	C	-680 (-15.5%)	-113 (-3%)	-562 (-12.8%)	5 (0.1%)
	All	-3,134 (-38.9%)	-2,693 (-35.4%)	-3,121 (-38.8%)	-2,679 (-35.2%)
SEP	W	-361 (-3.4%)	-10,311 (-49.8%)	-335 (-3.1%)	-10,285 (-49.6%)
	AN	-513 (-7.6%)	-6,686 (-51.6%)	-1,224 (-18%)	-7,398 (-57.1%)
	BN	-2,770 (-44.1%)	-3,025 (-46.3%)	-3,116 (-49.6%)	-3,371 (-51.6%)
	D	-3,102 (-50.7%)	-1,417 (-32%)	-3,004 (-49.1%)	-1,320 (-29.8%)
	C	-568 (-15.8%)	-195 (-6.1%)	-425 (-11.8%)	-51 (-1.6%)
	All	-1,427 (-19.4%)	-5,104 (-46.3%)	-1,539 (-20.9%)	-5,216 (-47.3%)
OCT	W	-3,775 (-43.3%)	-2,923 (-37.2%)	-3,637 (-41.7%)	-2,786 (-35.4%)
	AN	-2,527 (-40.9%)	-1,861 (-33.7%)	-2,415 (-39.1%)	-1,749 (-31.7%)
	BN	-2,340 (-37.4%)	-1,498 (-27.7%)	-2,419 (-38.6%)	-1,577 (-29.1%)
	D	-1,511 (-28.5%)	-1,420 (-27.2%)	-1,468 (-27.6%)	-1,377 (-26.4%)
	C	-1,410 (-27%)	-880 (-18.8%)	-1,495 (-28.7%)	-964 (-20.6%)
	All	-2,504 (-37.6%)	-1,896 (-31.3%)	-2,461 (-36.9%)	-1,852 (-30.6%)
NOV	W	-3,511 (-22.2%)	-4,866 (-28.3%)	-3,632 (-22.9%)	-4,987 (-29%)
	AN	-2,379 (-21%)	-4,148 (-31.7%)	-2,086 (-18.4%)	-3,856 (-29.4%)
	BN	-2,415 (-29.5%)	-3,679 (-38.9%)	-2,409 (-29.4%)	-3,673 (-38.9%)
	D	-2,803 (-32.1%)	-2,609 (-30.6%)	-2,944 (-33.7%)	-2,750 (-32.2%)
	C	-897 (-16.4%)	-1,010 (-18.1%)	-1,041 (-19%)	-1,154 (-20.6%)
	All	-2,620 (-24.3%)	-3,498 (-30%)	-2,667 (-24.7%)	-3,545 (-30.4%)
DEC	W	-2,736 (-6.3%)	-3,662 (-8.3%)	-1,504 (-3.5%)	-2,429 (-5.5%)
	AN	-156 (-0.8%)	-1,491 (-7.3%)	22 (0.1%)	-1,313 (-6.4%)
	BN	-105 (-0.7%)	-1,217 (-8.1%)	-183 (-1.3%)	-1,295 (-8.6%)
	D	-873 (-7.3%)	-742 (-6.3%)	-1,153 (-9.6%)	-1,022 (-8.6%)
	C	-760 (-9.3%)	31 (0.4%)	-1,085 (-13.3%)	-294 (-4%)
	All	-1,211 (-5.3%)	-1,745 (-7.5%)	-917 (-4%)	-1,451 (-6.2%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

1 **Delta Outflow**2 **Table B.7-31. Mean Monthly Flows (cfs) for Model Scenarios at the Delta Outflow, Year-Round**

Alternative 4A_ELT: In Delta—Delta Outflow					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	85,900	91,158	89,043	89,015
	AN	49,448	48,959	46,703	47,452
	BN	22,968	22,263	22,375	22,361
	D	14,736	14,754	15,504	15,787
	C	11,343	12,173	12,035	11,936
	All	43,289	44,889	44,053	44,198
FEB	W	96,835	104,533	103,486	102,939
	AN	62,322	64,163	64,434	63,145
	BN	36,766	37,266	34,727	35,907
	D	20,916	20,936	19,589	19,539
	C	12,991	12,553	12,582	12,659
	All	52,594	55,330	54,312	54,152
MAR	W	78,956	81,693	80,579	82,847
	AN	54,171	55,754	54,610	55,977
	BN	24,029	22,522	20,621	24,431
	D	19,880	19,388	17,153	18,765
	C	11,911	11,948	11,597	11,781
	All	43,172	43,911	42,524	44,475
APR	W	54,394	54,860	49,230	54,228
	AN	31,975	31,183	25,378	31,254
	BN	21,928	21,218	18,426	26,090
	D	14,142	13,450	11,943	13,248
	C	9,053	8,881	8,635	8,830
	All	30,099	29,833	26,355	30,423
MAY	W	41,040	38,276	33,689	38,482
	AN	24,200	23,131	20,005	24,691
	BN	16,299	14,740	13,600	16,550
	D	10,488	9,737	9,412	10,089
	C	6,000	6,341	6,087	6,159
	All	22,517	21,103	18,888	21,757
JUN	W	23,451	18,080	17,768	17,471
	AN	11,801	10,177	10,825	10,686
	BN	8,004	8,067	8,824	8,336
	D	6,636	7,123	7,442	7,468
	C	5,322	5,345	5,332	5,332
	All	12,765	10,945	11,138	10,946



Alternative 4A_ELT: In Delta—Delta Outflow					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	11,441	10,817	9,549	9,206
	AN	9,431	10,657	9,217	8,517
	BN	7,151	7,613	6,897	6,704
	D	5,024	5,548	5,462	5,327
	C	4,238	4,953	4,255	4,422
	All	7,951	8,232	7,376	7,126
AUG	W	5,341	4,412	4,203	4,197
	AN	4,000	4,009	4,012	4,028
	BN	4,000	4,120	3,927	4,033
	D	4,829	4,617	3,664	4,015
	C	4,077	4,141	3,634	3,441
	All	4,618	4,308	3,926	3,993
SEP	W	9,569	18,873	19,673	19,858
	AN	3,672	11,810	11,953	12,031
	BN	3,445	3,795	3,654	3,612
	D	3,350	3,067	3,000	3,026
	C	3,000	3,000	3,000	3,130
	All	5,334	9,473	9,708	9,796
OCT	W	6,487	8,133	8,960	9,012
	AN	4,021	6,500	7,361	7,348
	BN	4,477	6,206	7,775	7,872
	D	4,157	6,017	7,548	7,486
	C	4,158	4,969	6,742	6,912
	All	4,931	6,638	7,889	7,931
NOV	W	14,232	17,346	17,248	16,913
	AN	9,683	12,410	11,239	11,403
	BN	5,865	8,694	8,045	8,247
	D	6,943	8,375	7,967	7,961
	C	5,045	5,988	5,802	5,763
	All	9,193	11,515	11,085	11,030
DEC	W	48,185	49,759	48,031	49,377
	AN	18,014	19,384	19,348	19,447
	BN	11,950	13,284	13,111	13,264
	D	8,884	8,467	8,966	8,919
	C	5,531	5,505	5,290	5,211
	All	22,714	23,546	23,042	23,487

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1 Table B.7-32. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios at the Delta Outflow, Year-Round

Alternative 4A_ELT: In Delta—Delta Outflow					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	3,144 (3.7%)	-2,114 (-2.3%)	3,115 (3.6%)	-2,143 (-2.4%)
	AN	-2,744 (-5.5%)	-2,256 (-4.6%)	-1,996 (-4%)	-1,507 (-3.1%)
	BN	-594 (-2.6%)	112 (0.5%)	-607 (-2.6%)	98 (0.4%)
	D	769 (5.2%)	751 (5.1%)	1,051 (7.1%)	1,033 (7%)
	C	693 (6.1%)	-138 (-1.1%)	593 (5.2%)	-237 (-2%)
	All	764 (1.8%)	-837 (-1.9%)	909 (2.1%)	-691 (-1.5%)
FEB	W	6,650 (6.9%)	-1,048 (-1%)	6,103 (6.3%)	-1,595 (-1.5%)
	AN	2,112 (3.4%)	271 (0.4%)	824 (1.3%)	-1,018 (-1.6%)
	BN	-2,040 (-5.5%)	-2,540 (-6.8%)	-859 (-2.3%)	-1,359 (-3.6%)
	D	-1,327 (-6.3%)	-1,347 (-6.4%)	-1,376 (-6.6%)	-1,397 (-6.7%)
	C	-408 (-3.1%)	30 (0.2%)	-332 (-2.6%)	107 (0.8%)
	All	1,718 (3.3%)	-1,018 (-1.8%)	1,558 (3%)	-1,178 (-2.1%)
MAR	W	1,624 (2.1%)	-1,113 (-1.4%)	3,891 (4.9%)	1,155 (1.4%)
	AN	439 (0.8%)	-1,144 (-2.1%)	1,806 (3.3%)	222 (0.4%)
	BN	-3,408 (-14.2%)	-1,901 (-8.4%)	403 (1.7%)	1,909 (8.5%)
	D	-2,727 (-13.7%)	-2,234 (-11.5%)	-1,115 (-5.6%)	-623 (-3.2%)
	C	-315 (-2.6%)	-352 (-2.9%)	-130 (-1.1%)	-167 (-1.4%)
	All	-647 (-1.5%)	-1,387 (-3.2%)	1,303 (3%)	563 (1.3%)
APR	W	-5,164 (-9.5%)	-5,630 (-10.3%)	-166 (-0.3%)	-633 (-1.2%)
	AN	-6,598 (-20.6%)	-5,805 (-18.6%)	-722 (-2.3%)	71 (0.2%)
	BN	-3,502 (-16%)	-2,792 (-13.2%)	4,162 (19%)	4,872 (23%)
	D	-2,199 (-15.5%)	-1,507 (-11.2%)	-894 (-6.3%)	-202 (-1.5%)
	C	-418 (-4.6%)	-246 (-2.8%)	-224 (-2.5%)	-51 (-0.6%)
	All	-3,745 (-12.4%)	-3,478 (-11.7%)	323 (1.1%)	590 (2%)
MAY	W	-7,351 (-17.9%)	-4,587 (-12%)	-2,558 (-6.2%)	206 (0.5%)
	AN	-4,195 (-17.3%)	-3,126 (-13.5%)	491 (2%)	1,560 (6.7%)
	BN	-2,699 (-16.6%)	-1,140 (-7.7%)	251 (1.5%)	1,810 (12.3%)
	D	-1,076 (-10.3%)	-325 (-3.3%)	-399 (-3.8%)	352 (3.6%)
	C	87 (1.5%)	-254 (-4%)	160 (2.7%)	-182 (-2.9%)
	All	-3,629 (-16.1%)	-2,215 (-10.5%)	-760 (-3.4%)	653 (3.1%)
JUN	W	-5,682 (-24.2%)	-311 (-1.7%)	-5,980 (-25.5%)	-609 (-3.4%)
	AN	-976 (-8.3%)	648 (6.4%)	-1,115 (-9.4%)	509 (5%)
	BN	820 (10.2%)	757 (9.4%)	332 (4.1%)	269 (3.3%)
	D	806 (12.1%)	319 (4.5%)	832 (12.5%)	345 (4.8%)
	C	10 (0.2%)	-14 (-0.3%)	10 (0.2%)	-13 (-0.2%)
	All	-1,626 (-12.7%)	193 (1.8%)	-1,818 (-14.2%)	1 (0%)

Alternative 4A_ELT: In Delta—Delta Outflow					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	-1,892 (-16.5%)	-1,268 (-11.7%)	-2,235 (-19.5%)	-1,611 (-14.9%)
	AN	-213 (-2.3%)	-1,440 (-13.5%)	-914 (-9.7%)	-2,141 (-20.1%)
	BN	-254 (-3.5%)	-715 (-9.4%)	-447 (-6.3%)	-909 (-11.9%)
	D	438 (8.7%)	-85 (-1.5%)	303 (6%)	-221 (-4%)
	C	17 (0.4%)	-698 (-14.1%)	184 (4.4%)	-531 (-10.7%)
	All	-576 (-7.2%)	-856 (-10.4%)	-825 (-10.4%)	-1,105 (-13.4%)
AUG	W	-1,138 (-21.3%)	-208 (-4.7%)	-1,144 (-21.4%)	-215 (-4.9%)
	AN	12 (0.3%)	2 (0.1%)	28 (0.7%)	19 (0.5%)
	BN	-73 (-1.8%)	-193 (-4.7%)	33 (0.8%)	-87 (-2.1%)
	D	-1,164 (-24.1%)	-953 (-20.6%)	-814 (-16.9%)	-602 (-13%)
	C	-443 (-10.9%)	-507 (-12.2%)	-637 (-15.6%)	-701 (-16.9%)
	All	-692 (-15%)	-382 (-8.9%)	-625 (-13.5%)	-315 (-7.3%)
SEP	W	10,104 (105.6%)	800 (4.2%)	10,290 (107.5%)	985 (5.2%)
	AN	8,281 (225.5%)	143 (1.2%)	8,359 (227.7%)	221 (1.9%)
	BN	208 (6%)	-142 (-3.7%)	166 (4.8%)	-184 (-4.8%)
	D	-350 (-10.5%)	-67 (-2.2%)	-325 (-9.7%)	-42 (-1.4%)
	C	0 (0%)	0 (0%)	130 (4.3%)	130 (4.3%)
	All	4,374 (82%)	236 (2.5%)	4,462 (83.7%)	323 (3.4%)
OCT	W	2,474 (38.1%)	827 (10.2%)	2,525 (38.9%)	879 (10.8%)
	AN	3,340 (83%)	861 (13.2%)	3,326 (82.7%)	848 (13%)
	BN	3,298 (73.7%)	1,568 (25.3%)	3,395 (75.8%)	1,666 (26.8%)
	D	3,391 (81.6%)	1,531 (25.4%)	3,328 (80.1%)	1,468 (24.4%)
	C	2,584 (62.1%)	1,773 (35.7%)	2,754 (66.2%)	1,943 (39.1%)
	All	2,959 (60%)	1,251 (18.9%)	3,001 (60.9%)	1,294 (19.5%)
NOV	W	3,016 (21.2%)	-98 (-0.6%)	2,681 (18.8%)	-433 (-2.5%)
	AN	1,556 (16.1%)	-1,171 (-9.4%)	1,720 (17.8%)	-1,007 (-8.1%)
	BN	2,181 (37.2%)	-649 (-7.5%)	2,383 (40.6%)	-447 (-5.1%)
	D	1,025 (14.8%)	-408 (-4.9%)	1,019 (14.7%)	-414 (-4.9%)
	C	757 (15%)	-186 (-3.1%)	718 (14.2%)	-225 (-3.8%)
	All	1,892 (20.6%)	-430 (-3.7%)	1,837 (20%)	-485 (-4.2%)
DEC	W	-154 (-0.3%)	-1,728 (-3.5%)	1,192 (2.5%)	-382 (-0.8%)
	AN	1,334 (7.4%)	-36 (-0.2%)	1,433 (8%)	63 (0.3%)
	BN	1,161 (9.7%)	-174 (-1.3%)	1,314 (11%)	-20 (-0.2%)
	D	82 (0.9%)	500 (5.9%)	35 (0.4%)	452 (5.3%)
	C	-241 (-4.4%)	-216 (-3.9%)	-320 (-5.8%)	-295 (-5.3%)
	All	327 (1.4%)	-505 (-2.1%)	773 (3.4%)	-59 (-0.3%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

## 1 San Joaquin River at Vernalis

2 Table B.7-33. Mean Monthly Flows (cfs) for Model Scenarios in the San Joaquin River at Vernalis, Year-Round

Alternative 4A_ELT: In Delta—San Joaquin River at Vernalis					
Month	Water Year Type <sup>a</sup>	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	9,089	9,838	9,884	9,838
	AN	5,447	5,781	5,809	5,786
	BN	2,326	2,291	2,298	2,310
	D	2,270	2,247	2,219	2,219
	C	1,667	1,603	1,597	1,599
	All	4,777	5,040	5,054	5,038
FEB	W	12,750	14,001	14,000	14,001
	AN	6,965	7,100	7,072	7,047
	BN	2,983	2,965	2,933	2,979
	D	2,590	2,312	2,312	2,312
	C	2,120	1,942	1,942	1,943
	All	6,388	6,699	6,688	6,691
MAR	W	14,374	15,127	15,129	15,126
	AN	6,284	6,252	6,252	6,252
	BN	2,949	2,614	2,614	2,614
	D	2,479	2,191	2,191	2,191
	C	1,813	1,689	1,689	1,688
	All	6,648	6,739	6,739	6,738
APR	W	11,955	12,185	12,189	12,185
	AN	6,014	5,970	5,970	5,970
	BN	4,490	4,161	4,162	4,161
	D	3,656	3,380	3,380	3,379
	C	1,983	1,844	1,844	1,843
	All	6,351	6,286	6,288	6,286
MAY	W	12,109	13,210	13,213	13,215
	AN	5,381	5,278	5,279	5,279
	BN	4,074	3,871	3,874	3,873
	D	3,308	3,040	3,041	3,039
	C	1,965	1,819	1,819	1,817
	All	6,148	6,347	6,348	6,348
JUN	W	11,058	9,255	9,252	9,256
	AN	2,965	2,782	2,783	2,785
	BN	2,051	1,960	1,964	1,962
	D	1,537	1,361	1,362	1,361
	C	1,020	975	976	973
	All	4,583	3,969	3,969	3,969

Alternative 4A_ELT: In Delta—San Joaquin River at Vernalis					
Month	Water Year Type <sup>a</sup>	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	7,654	5,903	5,904	5,903
	AN	1,958	1,806	1,811	1,810
	BN	1,491	1,432	1,439	1,436
	D	1,296	1,146	1,147	1,146
	C	898	869	870	867
	All	3,239	2,658	2,661	2,659
AUG	W	3,539	3,051	3,052	3,052
	AN	2,000	1,764	1,768	1,767
	BN	1,460	1,423	1,429	1,426
	D	1,375	1,272	1,272	1,272
	C	1,007	993	993	990
	All	2,072	1,858	1,860	1,859
SEP	W	3,519	3,306	3,306	3,307
	AN	2,355	2,221	2,223	2,223
	BN	1,829	1,800	1,802	1,801
	D	1,796	1,691	1,692	1,691
	C	1,402	1,392	1,392	1,391
	All	2,338	2,226	2,227	2,227
OCT	W	2,759	2,714	2,714	2,709
	AN	2,745	2,638	2,638	2,638
	BN	2,502	2,412	2,412	2,412
	D	2,945	2,849	2,849	2,849
	C	2,213	2,162	2,163	2,163
	All	2,638	2,565	2,565	2,564
NOV	W	2,534	2,516	2,516	2,516
	AN	3,182	3,232	3,254	3,240
	BN	2,150	2,180	2,222	2,222
	D	2,272	2,244	2,290	2,244
	C	1,968	1,911	1,911	1,911
	All	2,448	2,441	2,459	2,450
DEC	W	4,370	4,835	4,868	4,875
	AN	4,711	4,917	5,001	4,950
	BN	2,182	2,099	2,135	2,100
	D	2,129	2,072	2,085	2,086
	C	1,729	1,689	1,686	1,684
	All	3,219	3,366	3,399	3,385

<sup>a</sup> Water year type for this location was determined using the San Joaquin River Valley Index.

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1 Table B.7-34. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the San Joaquin River at Vernalis, Year-Round

Alternative 4A_ELT: In Delta—San Joaquin River at Vernalis					
Month	Water Year Type <sup>b</sup>	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	795 (8.7%)	45 (0.5%)	749 (8.2%)	0 (0%)
	AN	362 (6.7%)	28 (0.5%)	339 (6.2%)	4 (0.1%)
	BN	-28 (-1.2%)	7 (0.3%)	-16 (-0.7%)	19 (0.8%)
	D	-51 (-2.3%)	-28 (-1.2%)	-51 (-2.3%)	-28 (-1.2%)
	C	-70 (-4.2%)	-5 (-0.3%)	-68 (-4.1%)	-3 (-0.2%)
	All	277 (5.8%)	15 (0.3%)	261 (5.5%)	-1 (0%)
FEB	W	1,249 (9.8%)	-2 (0%)	1,250 (9.8%)	-1 (0%)
	AN	108 (1.5%)	-28 (-0.4%)	82 (1.2%)	-53 (-0.7%)
	BN	-50 (-1.7%)	-32 (-1.1%)	-4 (-0.1%)	14 (0.5%)
	D	-278 (-10.7%)	0 (0%)	-278 (-10.7%)	0 (0%)
	C	-178 (-8.4%)	0 (0%)	-177 (-8.3%)	1 (0%)
	All	300 (4.7%)	-11 (-0.2%)	303 (4.7%)	-8 (-0.1%)
MAR	W	755 (5.3%)	2 (0%)	752 (5.2%)	-1 (0%)
	AN	-33 (-0.5%)	0 (0%)	-32 (-0.5%)	0 (0%)
	BN	-335 (-11.4%)	0 (0%)	-335 (-11.4%)	0 (0%)
	D	-288 (-11.6%)	0 (0%)	-288 (-11.6%)	0 (0%)
	C	-124 (-6.8%)	0 (0%)	-124 (-6.9%)	-1 (0%)
	All	92 (1.4%)	1 (0%)	91 (1.4%)	0 (0%)
APR	W	234 (2%)	4 (0%)	230 (1.9%)	0 (0%)
	AN	-45 (-0.7%)	0 (0%)	-45 (-0.7%)	0 (0%)
	BN	-329 (-7.3%)	0 (0%)	-329 (-7.3%)	0 (0%)
	D	-277 (-7.6%)	0 (0%)	-278 (-7.6%)	-1 (0%)
	C	-139 (-7%)	0 (0%)	-140 (-7.1%)	-1 (-0.1%)
	All	-63 (-1%)	1 (0%)	-65 (-1%)	0 (0%)
MAY	W	1,104 (9.1%)	3 (0%)	1,106 (9.1%)	5 (0%)
	AN	-103 (-1.9%)	1 (0%)	-103 (-1.9%)	1 (0%)
	BN	-200 (-4.9%)	3 (0.1%)	-201 (-4.9%)	2 (0%)
	D	-268 (-8.1%)	0 (0%)	-269 (-8.1%)	-1 (0%)
	C	-145 (-7.4%)	0 (0%)	-148 (-7.5%)	-2 (-0.1%)
	All	201 (3.3%)	2 (0%)	200 (3.3%)	1 (0%)
JUN	W	-1,805 (-16.3%)	-3 (0%)	-1,801 (-16.3%)	1 (0%)
	AN	-181 (-6.1%)	1 (0%)	-180 (-6.1%)	3 (0.1%)
	BN	-86 (-4.2%)	4 (0.2%)	-89 (-4.3%)	2 (0.1%)
	D	-176 (-11.4%)	1 (0.1%)	-176 (-11.5%)	0 (0%)
	C	-45 (-4.4%)	1 (0.1%)	-47 (-4.6%)	-2 (-0.2%)
	All	-614 (-13.4%)	0 (0%)	-613 (-13.4%)	1 (0%)

Alternative 4A_ELT: In Delta—San Joaquin River at Vernalis					
Month	Water Year Type <sup>b</sup>	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	-1,750 (-22.9%)	1 (0%)	-1,751 (-22.9%)	0 (0%)
	AN	-147 (-7.5%)	5 (0.3%)	-148 (-7.5%)	4 (0.2%)
	BN	-52 (-3.5%)	8 (0.5%)	-55 (-3.7%)	4 (0.3%)
	D	-149 (-11.5%)	1 (0.1%)	-150 (-11.6%)	0 (0%)
	C	-29 (-3.2%)	1 (0.1%)	-31 (-3.5%)	-2 (-0.2%)
	All	-578 (-17.9%)	3 (0.1%)	-580 (-17.9%)	1 (0%)
AUG	W	-487 (-13.8%)	1 (0%)	-487 (-13.8%)	1 (0%)
	AN	-233 (-11.6%)	4 (0.2%)	-233 (-11.7%)	3 (0.2%)
	BN	-31 (-2.1%)	6 (0.4%)	-34 (-2.3%)	3 (0.2%)
	D	-102 (-7.5%)	1 (0.1%)	-103 (-7.5%)	0 (0%)
	C	-14 (-1.4%)	1 (0.1%)	-17 (-1.7%)	-3 (-0.3%)
	All	-212 (-10.2%)	2 (0.1%)	-213 (-10.3%)	1 (0%)
SEP	W	-213 (-6.1%)	-1 (0%)	-212 (-6%)	0 (0%)
	AN	-131 (-5.6%)	2 (0.1%)	-131 (-5.6%)	2 (0.1%)
	BN	-27 (-1.5%)	3 (0.2%)	-28 (-1.5%)	1 (0.1%)
	D	-105 (-5.8%)	0 (0%)	-105 (-5.8%)	0 (0%)
	C	-10 (-0.7%)	0 (0%)	-11 (-0.8%)	0 (0%)
	All	-111 (-4.7%)	1 (0%)	-111 (-4.7%)	1 (0%)
OCT	W	-45 (-1.6%)	0 (0%)	-50 (-1.8%)	-5 (-0.2%)
	AN	-107 (-3.9%)	0 (0%)	-107 (-3.9%)	0 (0%)
	BN	-90 (-3.6%)	1 (0%)	-90 (-3.6%)	0 (0%)
	D	-95 (-3.2%)	0 (0%)	-95 (-3.2%)	0 (0%)
	C	-50 (-2.3%)	0 (0%)	-50 (-2.3%)	0 (0%)
	All	-73 (-2.8%)	0 (0%)	-75 (-2.8%)	-1 (0%)
NOV	W	-18 (-0.7%)	0 (0%)	-17 (-0.7%)	0 (0%)
	AN	72 (2.3%)	22 (0.7%)	58 (1.8%)	8 (0.3%)
	BN	72 (3.3%)	42 (1.9%)	72 (3.3%)	42 (1.9%)
	D	18 (0.8%)	46 (2%)	-28 (-1.2%)	0 (0%)
	C	-57 (-2.9%)	0 (0%)	-57 (-2.9%)	0 (0%)
	All	12 (0.5%)	18 (0.7%)	2 (0.1%)	8 (0.3%)
DEC	W	498 (11.4%)	33 (0.7%)	505 (11.6%)	40 (0.8%)
	AN	290 (6.2%)	84 (1.7%)	239 (5.1%)	33 (0.7%)
	BN	-46 (-2.1%)	36 (1.7%)	-82 (-3.7%)	1 (0.1%)
	D	-44 (-2.1%)	13 (0.6%)	-43 (-2%)	14 (0.7%)
	C	-42 (-2.5%)	-3 (-0.2%)	-45 (-2.6%)	-6 (-0.3%)
	All	180 (5.6%)	33 (1%)	166 (5.2%)	19 (0.6%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

<sup>b</sup> Water year type for this location was determined using the San Joaquin River Valley Index.

1 **Mokelumne River at the Delta**2 **Table B.7-35. Mean Monthly Flows (cfs) for Model Scenarios in the Mokelumne River at the Delta, Year-Round**

Alternative 4A_ELT: In Delta—Mokelumne River at the Delta					
Month	Water Year Type <sup>a</sup>	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	3,071	3,389	3,389	3,634
	AN	1,707	1,759	1,759	1,876
	BN	597	622	622	617
	D	495	484	484	493
	C	280	282	282	281
	All	1,460	1,565	1,565	1,660
FEB	W	3,290	3,720	3,720	3,781
	AN	2,525	2,894	2,894	2,913
	BN	1,011	1,045	1,045	1,035
	D	695	684	684	678
	C	427	441	441	442
	All	1,809	2,014	2,014	2,033
MAR	W	3,179	3,243	3,243	3,336
	AN	1,582	1,633	1,633	1,639
	BN	1,181	1,144	1,144	1,140
	D	754	712	712	691
	C	595	581	581	580
	All	1,662	1,675	1,675	1,700
APR	W	2,819	2,748	2,748	2,694
	AN	1,619	1,529	1,529	1,424
	BN	1,243	1,164	1,164	1,068
	D	623	577	577	550
	C	340	322	322	311
	All	1,503	1,442	1,442	1,384
MAY	W	3,170	3,094	3,094	2,885
	AN	1,439	1,303	1,303	1,179
	BN	976	886	886	812
	D	406	360	360	333
	C	181	179	179	170
	All	1,463	1,392	1,392	1,289
JUN	W	1,755	1,605	1,605	1,415
	AN	851	727	727	631
	BN	471	400	400	366
	D	93	83	83	76
	C	52	48	48	44
	All	779	697	697	616



Alternative 4A_ELT: In Delta—Mokelumne River at the Delta					
Month	Water Year Type <sup>a</sup>	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	772	613	613	469
	AN	347	228	228	167
	BN	123	88	88	70
	D	7	6	6	6
	C	3	3	3	3
	All	315	239	239	183
AUG	W	703	476	476	346
	AN	328	241	241	216
	BN	112	79	79	71
	D	4	4	4	4
	C	2	2	2	2
	All	289	200	200	156
SEP	W	702	549	549	497
	AN	333	271	271	259
	BN	114	95	95	91
	D	10	9	9	9
	C	5	5	5	5
	All	291	231	231	213
OCT	W	161	152	152	147
	AN	178	178	178	180
	BN	154	148	148	144
	D	180	169	169	160
	C	117	125	125	123
	All	158	154	154	150
NOV	W	487	502	502	431
	AN	912	1,009	1,009	855
	BN	347	347	347	301
	D	380	371	371	327
	C	195	202	202	186
	All	474	497	497	429
DEC	W	1,504	1,766	1,766	1,732
	AN	1,411	1,806	1,806	1,628
	BN	447	505	505	472
	D	383	392	392	374
	C	204	217	217	209
	All	887	1,054	1,054	999

<sup>a</sup> Water year type for this location was determined using the San Joaquin River Valley Index.

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1 Table B.7-36. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Mokelumne River at the Delta, Year-Round

Alternative 4A_ELT: In Delta—Mokelumne River at the Delta					
Month	Water Year Type <sup>b</sup>	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	318 (10.3%)	0 (0%)	318 (10.3%)	0 (0%)
	AN	52 (3%)	0 (0%)	52 (3%)	0 (0%)
	BN	25 (4.2%)	0 (0%)	25 (4.2%)	0 (0%)
	D	-11 (-2.3%)	0 (0%)	-11 (-2.3%)	0 (0%)
	C	2 (0.6%)	0 (0%)	2 (0.6%)	0 (0%)
	All	106 (7.2%)	0 (0%)	106 (7.2%)	0 (0%)
FEB	W	430 (13.1%)	0 (0%)	430 (13.1%)	0 (0%)
	AN	369 (14.6%)	0 (0%)	369 (14.6%)	0 (0%)
	BN	35 (3.4%)	0 (0%)	35 (3.4%)	0 (0%)
	D	-10 (-1.5%)	0 (0%)	-10 (-1.5%)	0 (0%)
	C	15 (3.4%)	0 (0%)	15 (3.4%)	0 (0%)
	All	205 (11.3%)	0 (0%)	205 (11.3%)	0 (0%)
MAR	W	65 (2%)	0 (0%)	65 (2%)	0 (0%)
	AN	51 (3.2%)	0 (0%)	51 (3.2%)	0 (0%)
	BN	-37 (-3.2%)	0 (0%)	-37 (-3.2%)	0 (0%)
	D	-43 (-5.6%)	0 (0%)	-43 (-5.6%)	0 (0%)
	C	-14 (-2.3%)	0 (0%)	-14 (-2.3%)	0 (0%)
	All	13 (0.8%)	0 (0%)	13 (0.8%)	0 (0%)
APR	W	-71 (-2.5%)	0 (0%)	-71 (-2.5%)	0 (0%)
	AN	-90 (-5.6%)	0 (0%)	-90 (-5.6%)	0 (0%)
	BN	-79 (-6.4%)	0 (0%)	-79 (-6.4%)	0 (0%)
	D	-46 (-7.4%)	0 (0%)	-46 (-7.4%)	0 (0%)
	C	-18 (-5.3%)	0 (0%)	-18 (-5.3%)	0 (0%)
	All	-62 (-4.1%)	0 (0%)	-62 (-4.1%)	0 (0%)
MAY	W	-76 (-2.4%)	0 (0%)	-76 (-2.4%)	0 (0%)
	AN	-136 (-9.5%)	0 (0%)	-136 (-9.5%)	0 (0%)
	BN	-90 (-9.2%)	0 (0%)	-90 (-9.2%)	0 (0%)
	D	-45 (-11.2%)	0 (0%)	-45 (-11.2%)	0 (0%)
	C	-2 (-0.9%)	0 (0%)	-2 (-0.9%)	0 (0%)
	All	-71 (-4.8%)	0 (0%)	-71 (-4.8%)	0 (0%)
JUN	W	-149 (-8.5%)	0 (0%)	-149 (-8.5%)	0 (0%)
	AN	-124 (-14.6%)	0 (0%)	-124 (-14.6%)	0 (0%)
	BN	-72 (-15.2%)	0 (0%)	-72 (-15.2%)	0 (0%)
	D	-10 (-11.2%)	0 (0%)	-10 (-11.2%)	0 (0%)
	C	-4 (-7.8%)	0 (0%)	-4 (-7.8%)	0 (0%)
	All	-82 (-10.5%)	0 (0%)	-82 (-10.5%)	0 (0%)

Alternative 4A_ELT: In Delta—Mokelumne River at the Delta					
Month	Water Year Type <sup>b</sup>	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	-159 (-20.6%)	0 (0%)	-159 (-20.6%)	0 (0%)
	AN	-120 (-34.5%)	0 (0%)	-120 (-34.5%)	0 (0%)
	BN	-36 (-28.9%)	0 (0%)	-36 (-28.9%)	0 (0%)
	D	0 (-1.8%)	0 (0%)	0 (-1.8%)	0 (0%)
	C	0 (-5%)	0 (0%)	0 (-5%)	0 (0%)
	All	-76 (-24%)	0 (0%)	-76 (-24%)	0 (0%)
AUG	W	-227 (-32.3%)	0 (0%)	-227 (-32.3%)	0 (0%)
	AN	-88 (-26.7%)	0 (0%)	-88 (-26.7%)	0 (0%)
	BN	-34 (-30%)	0 (0%)	-34 (-30%)	0 (0%)
	D	0 (-2%)	0 (0%)	0 (-2%)	0 (0%)
	C	0 (-0.5%)	0 (0%)	0 (-0.5%)	0 (0%)
	All	-89 (-30.8%)	0 (0%)	-89 (-30.8%)	0 (0%)
SEP	W	-154 (-21.9%)	0 (0%)	-154 (-21.9%)	0 (0%)
	AN	-61 (-18.5%)	0 (0%)	-61 (-18.5%)	0 (0%)
	BN	-19 (-16.9%)	0 (0%)	-19 (-16.9%)	0 (0%)
	D	-1 (-10%)	0 (0%)	-1 (-10%)	0 (0%)
	C	0 (0.5%)	0 (0%)	0 (0.5%)	0 (0%)
	All	-60 (-20.7%)	0 (0%)	-60 (-20.7%)	0 (0%)
OCT	W	-9 (-5.4%)	0 (0%)	-9 (-5.4%)	0 (0%)
	AN	0 (0.2%)	0 (0%)	0 (0.2%)	0 (0%)
	BN	-6 (-4%)	0 (0%)	-6 (-4%)	0 (0%)
	D	-12 (-6.5%)	0 (0%)	-12 (-6.5%)	0 (0%)
	C	8 (7%)	0 (0%)	8 (7%)	0 (0%)
	All	-4 (-2.3%)	0 (0%)	-4 (-2.3%)	0 (0%)
NOV	W	15 (3%)	0 (0%)	15 (3%)	0 (0%)
	AN	97 (10.6%)	0 (0%)	97 (10.6%)	0 (0%)
	BN	0 (-0.1%)	0 (0%)	0 (-0.1%)	0 (0%)
	D	-9 (-2.5%)	0 (0%)	-9 (-2.5%)	0 (0%)
	C	7 (3.4%)	0 (0%)	7 (3.4%)	0 (0%)
	All	23 (4.9%)	0 (0%)	23 (4.9%)	0 (0%)
DEC	W	262 (17.4%)	0 (0%)	262 (17.4%)	0 (0%)
	AN	395 (28%)	0 (0%)	395 (28%)	0 (0%)
	BN	58 (12.9%)	0 (0%)	58 (12.9%)	0 (0%)
	D	9 (2.3%)	0 (0%)	9 (2.3%)	0 (0%)
	C	14 (6.7%)	0 (0%)	14 (6.7%)	0 (0%)
	All	167 (18.8%)	0 (0%)	167 (18.8%)	0 (0%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

<sup>b</sup> Water year type for this location was determined using the San Joaquin River Valley Index.

1 **B.5.1.2 Temperature**2 **Sacramento River at Keswick**3 **Table B.7-37. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Sacramento River at Keswick, Year-**  
4 **Round**

Alternative 4A_ELT: Sacramento River at Keswick					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	46	46	47	46
	AN	46	47	48	47
	BN	47	47	48	47
	D	47	47	48	48
	C	47	47	48	48
FEB	All	46	47	48	47
	W	45	46	47	46
	AN	46	46	47	46
	BN	46	46	47	46
	D	46	47	48	47
MAR	C	46	47	48	48
	All	46	46	47	46
	W	46	47	47	47
	AN	46	47	48	47
	BN	47	47	48	47
APR	D	47	48	49	48
	C	48	49	49	49
	All	47	47	48	47
	W	47	48	49	48
	AN	48	49	50	49
MAY	BN	48	49	50	49
	D	48	49	50	49
	C	49	50	51	50
	All	48	49	50	49
	W	49	49	50	49
JUN	AN	49	50	50	50
	BN	49	50	51	50
	D	49	50	51	50
	C	51	52	53	52
	All	49	50	51	50
JUN	W	50	50	51	50
	AN	50	50	51	50
	BN	50	50	51	50
	D	50	51	52	51
	C	53	54	55	53
All	50	51	52	51	

Alternative 4A_ELT: Sacramento River at Keswick					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	51	51	52	51
	AN	51	51	52	51
	BN	51	51	52	51
	D	51	52	54	52
	C	54	57	59	56
	All	51	52	54	52
AUG	W	52	53	54	53
	AN	52	53	55	53
	BN	52	53	55	53
	D	53	54	56	54
	C	57	60	64	58
	All	53	54	56	54
SEP	W	53	54	55	54
	AN	54	54	56	55
	BN	54	55	57	55
	D	55	57	59	56
	C	60	64	66	61
	All	55	56	58	56
OCT	W	54	55	57	55
	AN	54	55	57	55
	BN	54	56	58	55
	D	55	57	59	56
	C	56	58	60	57
	All	54	56	58	56
NOV	W	53	54	55	54
	AN	52	53	55	53
	BN	53	54	55	54
	D	53	54	56	54
	C	54	55	56	55
	All	53	54	55	54
DEC	W	49	50	50	50
	AN	49	50	51	50
	BN	50	51	52	51
	D	50	51	52	51
	C	51	51	52	51
	All	50	50	51	51

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1 **Table B.7-38. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the**  
 2 **Sacramento River at Keswick, Year-Round**

Alternative 4A_ELT: Sacramento River at Keswick					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	1.3 (2.8%)	0.8 (1.7%)	0.6 (1.3%)	0.1 (0.2%)
	AN	1.5 (3.2%)	0.8 (1.7%)	0.8 (1.7%)	0.1 (0.3%)
	BN	1.6 (3.4%)	0.9 (1.8%)	0.8 (1.7%)	0.1 (0.1%)
	D	1.5 (3.3%)	0.8 (1.7%)	0.9 (2%)	0.2 (0.4%)
	C	1.7 (3.6%)	0.9 (2%)	1.2 (2.5%)	0.4 (0.9%)
	All	1.5 (3.2%)	0.8 (1.8%)	0.8 (1.8%)	0.2 (0.3%)
FEB	W	1.5 (3.4%)	0.8 (1.7%)	0.8 (1.7%)	0 (0.1%)
	AN	1.6 (3.6%)	0.9 (2%)	0.8 (1.8%)	0.1 (0.2%)
	BN	1.5 (3.3%)	0.7 (1.6%)	0.8 (1.8%)	0 (0.1%)
	D	1.6 (3.5%)	0.8 (1.7%)	1 (2.1%)	0.1 (0.2%)
	C	1.7 (3.7%)	0.8 (1.8%)	1.1 (2.4%)	0.3 (0.5%)
	All	1.6 (3.5%)	0.8 (1.7%)	0.9 (1.9%)	0.1 (0.2%)
MAR	W	1.5 (3.2%)	0.8 (1.7%)	0.7 (1.5%)	0 (0%)
	AN	1.7 (3.6%)	0.9 (1.9%)	0.8 (1.8%)	0 (0.1%)
	BN	1.6 (3.4%)	0.9 (1.8%)	0.8 (1.7%)	0.1 (0.2%)
	D	1.6 (3.4%)	0.8 (1.7%)	0.8 (1.8%)	0.1 (0.1%)
	C	1.7 (3.5%)	0.8 (1.7%)	1 (2.1%)	0.2 (0.3%)
	All	1.6 (3.4%)	0.8 (1.8%)	0.8 (1.7%)	0.1 (0.1%)
APR	W	1.6 (3.4%)	0.9 (1.8%)	0.7 (1.6%)	0 (0%)
	AN	1.7 (3.6%)	1 (2%)	0.7 (1.5%)	0 (0%)
	BN	1.5 (3.1%)	0.8 (1.7%)	0.8 (1.6%)	0.1 (0.2%)
	D	1.5 (3%)	0.7 (1.5%)	0.8 (1.6%)	0.1 (0.2%)
	C	2 (4.1%)	1.1 (2.2%)	1.1 (2.2%)	0.2 (0.3%)
	All	1.6 (3.4%)	0.9 (1.8%)	0.8 (1.7%)	0.1 (0.1%)
MAY	W	1.6 (3.3%)	0.8 (1.5%)	0.9 (1.8%)	0 (0%)
	AN	1.2 (2.5%)	0.5 (1%)	0.6 (1.3%)	-0.1 (-0.2%)
	BN	1.4 (2.8%)	0.5 (1.1%)	0.9 (1.9%)	0.1 (0.1%)
	D	1.4 (2.9%)	0.6 (1.1%)	0.9 (1.8%)	0 (0%)
	C	2.3 (4.4%)	1.3 (2.6%)	0.8 (1.6%)	-0.1 (-0.2%)
	All	1.6 (3.2%)	0.7 (1.4%)	0.8 (1.7%)	0 (0%)
JUN	W	0.8 (1.7%)	0.4 (0.8%)	0.4 (0.9%)	0 (0%)
	AN	1 (2.1%)	0.4 (0.9%)	0.7 (1.4%)	0.1 (0.2%)
	BN	1.1 (2.2%)	0.6 (1.2%)	0.5 (1.1%)	0.1 (0.1%)
	D	2 (4%)	1.1 (2.1%)	0.9 (1.7%)	-0.1 (-0.2%)
	C	2.4 (4.5%)	1.3 (2.5%)	0.6 (1.2%)	-0.4 (-0.8%)
	All	1.4 (2.8%)	0.7 (1.4%)	0.6 (1.2%)	-0.1 (-0.1%)

Alternative 4A_ELT: Sacramento River at Keswick					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	1.1 (2.2%)	0.7 (1.4%)	0.3 (0.6%)	-0.1 (-0.1%)
	AN	1.7 (3.4%)	1.1 (2.1%)	0.5 (1%)	-0.1 (-0.2%)
	BN	1.7 (3.3%)	1 (2%)	0.6 (1.1%)	-0.1 (-0.1%)
	D	2.9 (5.7%)	1.9 (3.7%)	1.1 (2.1%)	0.1 (0.2%)
	C	5.1 (9.4%)	2.7 (4.8%)	1.4 (2.6%)	-1 (-1.7%)
	All	2.3 (4.4%)	1.4 (2.7%)	0.7 (1.4%)	-0.2 (-0.3%)
AUG	W	2.2 (4.1%)	1.3 (2.4%)	0.8 (1.6%)	0 (-0.1%)
	AN	2.3 (4.4%)	1.5 (2.9%)	0.6 (1.2%)	-0.1 (-0.2%)
	BN	2.9 (5.6%)	1.8 (3.4%)	1 (2%)	0 (-0.1%)
	D	3.3 (6.3%)	1.9 (3.4%)	1.2 (2.3%)	-0.2 (-0.4%)
	C	7.7 (13.7%)	4 (6.6%)	1.6 (2.8%)	-2.2 (-3.7%)
	All	3.4 (6.4%)	1.9 (3.5%)	1 (2%)	-0.4 (-0.8%)
SEP	W	1.9 (3.6%)	1.4 (2.6%)	0.6 (1.1%)	0.1 (0.2%)
	AN	2.7 (5%)	2.1 (3.9%)	0.9 (1.7%)	0.4 (0.7%)
	BN	3.6 (6.7%)	2.6 (4.7%)	1.6 (3%)	0.6 (1.1%)
	D	4.3 (7.8%)	2.3 (4.1%)	1.5 (2.7%)	-0.5 (-0.8%)
	C	6.2 (10.3%)	2.9 (4.5%)	0.9 (1.5%)	-2.4 (-3.8%)
	All	3.5 (6.3%)	2.1 (3.8%)	1.1 (1.9%)	-0.3 (-0.5%)
OCT	W	3.3 (6.2%)	1.9 (3.5%)	1.4 (2.6%)	0 (0%)
	AN	3 (5.6%)	1.7 (3%)	1.3 (2.5%)	0 (0%)
	BN	3.3 (6%)	2 (3.6%)	1.1 (2.1%)	-0.2 (-0.3%)
	D	3.9 (7.1%)	2.2 (4%)	1.5 (2.7%)	-0.2 (-0.4%)
	C	3.7 (6.6%)	1.9 (3.3%)	0.5 (0.9%)	-1.3 (-2.2%)
	All	3.5 (6.3%)	2 (3.5%)	1.2 (2.3%)	-0.2 (-0.4%)
NOV	W	2.3 (4.4%)	1.2 (2.3%)	1 (1.9%)	-0.1 (-0.1%)
	AN	2.3 (4.4%)	1.3 (2.4%)	1 (1.9%)	-0.1 (-0.1%)
	BN	2.4 (4.6%)	1.4 (2.6%)	0.8 (1.5%)	-0.2 (-0.4%)
	D	2.4 (4.6%)	0.8 (1.7%)	0.6 (1.3%)	0.1 (0.2%)
	C	2.3 (4.3%)	0.8 (1.7%)	0.8 (1.7%)	0.1 (0.3%)
	All	2.4 (4.5%)	0.9 (1.8%)	0.8 (1.7%)	0.1 (0.1%)
DEC	W	1.2 (2.5%)	0.8 (1.7%)	0.9 (2%)	0.2 (0.4%)
	AN	1.7 (3.5%)	0.9 (2%)	1.2 (2.5%)	0.4 (0.9%)
	BN	1.9 (3.8%)	0.8 (1.8%)	0.8 (1.8%)	0.2 (0.3%)
	D	1.8 (3.6%)	0.8 (1.7%)	0.8 (1.7%)	0 (0.1%)
	C	1.8 (3.6%)	0.9 (2%)	0.8 (1.8%)	0.1 (0.2%)
	All	1.6 (3.3%)	0.7 (1.6%)	0.8 (1.8%)	0 (0.1%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Sacramento River at Jelly's Ferry**2 **Table B.7-39. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Sacramento River at Jelly's Ferry, Year-**  
3 **Round**

Alternative 4A_ELT: Sacramento River at Jelly's Ferry					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	45	46	46	46
	AN	45	46	46	46
	BN	45	46	46	46
	D	45	46	46	46
	C	45	46	46	46
	All	45	46	46	46
FEB	W	46	47	47	47
	AN	46	47	47	47
	BN	46	47	47	47
	D	46	47	47	47
	C	47	48	48	48
	All	46	47	47	47
MAR	W	48	49	49	49
	AN	49	50	50	50
	BN	49	50	50	50
	D	50	51	51	51
	C	50	51	51	51
	All	49	50	50	50
APR	W	51	52	52	52
	AN	53	54	54	53
	BN	53	54	54	54
	D	52	53	53	53
	C	52	53	53	53
	All	52	53	53	53
MAY	W	54	56	56	56
	AN	55	56	56	56
	BN	54	56	56	56
	D	54	55	55	55
	C	55	56	56	56
	All	54	56	56	56
JUN	W	55	56	56	56
	AN	55	55	55	55
	BN	54	55	55	55
	D	54	55	55	55
	C	56	57	57	57
	All	55	56	56	56



Alternative 4A_ELT: Sacramento River at Jelly's Ferry					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	56	56	56	56
	AN	55	55	55	55
	BN	55	55	55	55
	D	55	56	56	56
	C	57	60	60	59
	All	55	56	56	56
AUG	W	56	57	57	57
	AN	56	57	57	57
	BN	56	57	57	57
	D	56	58	58	58
	C	59	63	63	61
	All	57	58	58	58
SEP	W	56	56	56	56
	AN	57	57	58	57
	BN	57	58	59	59
	D	58	60	60	60
	C	61	64	64	63
	All	58	59	59	59
OCT	W	54	56	56	56
	AN	54	56	56	56
	BN	55	56	56	56
	D	55	57	57	56
	C	56	58	58	57
	All	55	56	56	56
NOV	W	51	52	52	52
	AN	51	52	52	52
	BN	51	52	52	52
	D	51	52	52	52
	C	52	53	53	53
	All	51	52	52	52
DEC	W	47	47	47	47
	AN	47	47	47	47
	BN	47	48	48	48
	D	47	48	47	47
	C	47	48	48	48
	All	47	48	47	48

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1 **Table B.7-40. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the**  
 2 **Sacramento River at Jelly's Ferry, Year-Round**

Alternative 4A_ELT: Sacramento River at Jelly's Ferry					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	0.6 (1.4%)	0 (0.1%)	0.7 (1.4%)	0.1 (0.1%)
	AN	0.7 (1.5%)	0 (0%)	0.7 (1.6%)	0.1 (0.1%)
	BN	0.8 (1.8%)	0 (0.1%)	0.8 (1.8%)	0 (0.1%)
	D	0.8 (1.8%)	0 (0%)	0.9 (2%)	0.1 (0.2%)
	C	0.9 (2.1%)	-0.1 (-0.1%)	1.1 (2.5%)	0.1 (0.3%)
	All	0.8 (1.7%)	0 (0%)	0.8 (1.8%)	0.1 (0.2%)
FEB	W	0.8 (1.8%)	0 (0%)	0.8 (1.8%)	0 (0%)
	AN	0.8 (1.7%)	0 (0.1%)	0.8 (1.7%)	0 (0.1%)
	BN	0.9 (1.9%)	0 (0%)	0.9 (1.9%)	0 (0%)
	D	1 (2.1%)	0 (0%)	1 (2.2%)	0.1 (0.1%)
	C	1 (2.2%)	0 (0%)	1.1 (2.4%)	0.1 (0.3%)
	All	0.9 (1.9%)	0 (0%)	0.9 (2%)	0 (0.1%)
MAR	W	0.7 (1.4%)	0 (0%)	0.6 (1.4%)	0 (0%)
	AN	0.7 (1.4%)	0 (0%)	0.7 (1.4%)	0 (0%)
	BN	0.8 (1.6%)	0 (0%)	0.8 (1.6%)	0 (0%)
	D	0.8 (1.5%)	0 (0%)	0.8 (1.5%)	0 (0.1%)
	C	0.7 (1.4%)	0 (-0.1%)	0.8 (1.6%)	0 (0.1%)
	All	0.7 (1.5%)	0 (0%)	0.7 (1.5%)	0 (0%)
APR	W	0.8 (1.6%)	0 (0%)	0.8 (1.6%)	0 (0%)
	AN	0.8 (1.5%)	0 (0%)	0.8 (1.4%)	0 (-0.1%)
	BN	0.9 (1.8%)	0 (0%)	0.9 (1.7%)	0 (0%)
	D	0.8 (1.5%)	0 (-0.1%)	0.9 (1.7%)	0 (0.1%)
	C	0.9 (1.8%)	0 (0%)	1.1 (2%)	0.1 (0.3%)
	All	0.9 (1.7%)	0 (0%)	0.9 (1.7%)	0 (0%)
MAY	W	1.6 (3%)	0 (0%)	1.6 (3%)	0 (0%)
	AN	0.7 (1.4%)	-0.5 (-0.8%)	0.9 (1.6%)	-0.4 (-0.6%)
	BN	1.3 (2.4%)	-0.2 (-0.3%)	1.5 (2.7%)	0 (0%)
	D	1 (1.9%)	-0.3 (-0.5%)	1.2 (2.2%)	-0.1 (-0.2%)
	C	1.1 (1.9%)	0 (0%)	1 (1.8%)	-0.1 (-0.2%)
	All	1.2 (2.3%)	-0.2 (-0.3%)	1.3 (2.4%)	-0.1 (-0.2%)
JUN	W	0.8 (1.4%)	-0.1 (-0.2%)	0.8 (1.5%)	0 (0%)
	AN	0.6 (1.1%)	-0.2 (-0.3%)	0.9 (1.7%)	0.2 (0.3%)
	BN	0.6 (1.2%)	-0.2 (-0.3%)	0.8 (1.5%)	0 (0%)
	D	0.8 (1.5%)	-0.2 (-0.4%)	0.9 (1.7%)	-0.1 (-0.2%)
	C	0.8 (1.4%)	-0.2 (-0.4%)	0.7 (1.2%)	-0.3 (-0.6%)
	All	0.7 (1.3%)	-0.2 (-0.3%)	0.9 (1.6%)	0 (-0.1%)

Alternative 4A_ELT: Sacramento River at Jelly's Ferry					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	0.3 (0.6%)	-0.1 (-0.1%)	0.3 (0.6%)	-0.1 (-0.2%)
	AN	0.7 (1.3%)	0.1 (0.2%)	0.5 (0.9%)	-0.1 (-0.2%)
	BN	0.6 (1.2%)	-0.1 (-0.2%)	0.7 (1.3%)	-0.1 (-0.1%)
	D	1.2 (2.1%)	0.1 (0.3%)	1.2 (2.1%)	0.2 (0.3%)
	C	2.2 (3.8%)	-0.1 (-0.2%)	1.7 (2.9%)	-0.6 (-1%)
	All	0.9 (1.6%)	0 (0%)	0.8 (1.4%)	-0.1 (-0.2%)
AUG	W	1.3 (2.3%)	0 (0%)	1.2 (2.1%)	-0.1 (-0.2%)
	AN	0.9 (1.5%)	0 (0%)	0.6 (1.1%)	-0.2 (-0.4%)
	BN	1.3 (2.3%)	-0.1 (-0.2%)	1.1 (2%)	-0.3 (-0.4%)
	D	2.1 (3.8%)	0.5 (0.9%)	1.3 (2.4%)	-0.3 (-0.4%)
	C	3.3 (5.6%)	-0.2 (-0.3%)	1.9 (3.2%)	-1.6 (-2.6%)
	All	1.7 (3%)	0.1 (0.1%)	1.2 (2.2%)	-0.4 (-0.7%)
SEP	W	0.3 (0.6%)	0.1 (0.3%)	0.2 (0.4%)	0.1 (0.1%)
	AN	0.5 (0.9%)	0.8 (1.4%)	0.2 (0.3%)	0.4 (0.7%)
	BN	1.9 (3.4%)	0.7 (1.2%)	1.9 (3.3%)	0.7 (1.2%)
	D	2.6 (4.5%)	0.2 (0.3%)	2.1 (3.7%)	-0.2 (-0.4%)
	C	2.8 (4.5%)	-0.2 (-0.3%)	1.4 (2.2%)	-1.6 (-2.4%)
	All	1.5 (2.6%)	0.3 (0.5%)	1.1 (1.9%)	-0.1 (-0.1%)
OCT	W	1.4 (2.6%)	0.1 (0.1%)	1.3 (2.5%)	0 (0%)
	AN	1.3 (2.5%)	0.1 (0.1%)	1.3 (2.4%)	0 (0.1%)
	BN	1.3 (2.4%)	0 (0%)	1.2 (2.2%)	-0.1 (-0.2%)
	D	1.5 (2.8%)	0.1 (0.1%)	1.3 (2.3%)	-0.2 (-0.3%)
	C	1.4 (2.4%)	-0.3 (-0.5%)	0.8 (1.3%)	-0.9 (-1.6%)
	All	1.4 (2.6%)	0 (0%)	1.2 (2.2%)	-0.2 (-0.3%)
NOV	W	0.9 (1.8%)	-0.2 (-0.4%)	0.9 (1.8%)	-0.2 (-0.4%)
	AN	0.8 (1.6%)	-0.3 (-0.5%)	1 (1.9%)	-0.1 (-0.3%)
	BN	0.8 (1.5%)	-0.4 (-0.7%)	0.8 (1.6%)	-0.3 (-0.6%)
	D	0.9 (1.7%)	-0.1 (-0.3%)	0.8 (1.6%)	-0.2 (-0.3%)
	C	0.9 (1.8%)	-0.2 (-0.3%)	0.7 (1.4%)	-0.3 (-0.6%)
	All	0.9 (1.7%)	-0.2 (-0.4%)	0.9 (1.7%)	-0.2 (-0.4%)
DEC	W	0.5 (1.1%)	0 (0%)	0.6 (1.3%)	0.1 (0.2%)
	AN	0.7 (1.5%)	-0.2 (-0.4%)	0.8 (1.8%)	-0.1 (-0.1%)
	BN	0.7 (1.5%)	-0.1 (-0.2%)	0.8 (1.6%)	-0.1 (-0.1%)
	D	0.7 (1.5%)	-0.1 (-0.1%)	0.7 (1.5%)	-0.1 (-0.1%)
	C	0.9 (1.8%)	0 (0.1%)	0.9 (1.8%)	0 (0%)
	All	0.7 (1.5%)	-0.1 (-0.1%)	0.7 (1.5%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Sacramento River at Bend Bridge**2 **Table B.7-41. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Sacramento River at Bend Bridge, Year-Round**  
3

Alternative 4A_ELT: Sacramento River at Bend Bridge					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	45	46	46	46
	AN	45	46	46	46
	BN	45	45	45	45
	D	45	46	46	46
	C	45	46	46	46
	All	45	46	46	46
FEB	W	46	47	47	47
	AN	46	47	47	47
	BN	46	47	47	47
	D	46	47	47	47
	C	47	48	48	48
	All	46	47	47	47
MAR	W	48	49	49	49
	AN	49	50	50	50
	BN	49	50	50	50
	D	50	51	51	51
	C	50	51	51	51
	All	49	50	50	50
APR	W	51	52	52	52
	AN	53	54	54	54
	BN	53	54	54	54
	D	53	54	54	54
	C	52	53	53	54
	All	52	53	53	53
MAY	W	54	56	56	56
	AN	55	57	56	56
	BN	55	56	56	57
	D	55	56	56	56
	C	55	57	57	56
	All	55	56	56	56
JUN	W	56	57	56	57
	AN	55	56	56	56
	BN	55	56	56	56
	D	55	56	56	56
	C	57	58	57	57
	All	55	56	56	56

Alternative 4A_ELT: Sacramento River at Bend Bridge					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	56	57	57	57
	AN	55	56	56	56
	BN	55	56	56	56
	D	56	57	57	57
	C	58	60	60	60
	All	56	57	57	57
AUG	W	57	58	58	58
	AN	57	58	58	58
	BN	56	58	58	57
	D	57	59	59	58
	C	60	63	63	62
	All	57	59	59	58
SEP	W	57	57	57	57
	AN	58	58	58	58
	BN	58	59	60	60
	D	58	61	61	60
	C	62	65	64	63
	All	58	59	60	59
OCT	W	54	56	56	56
	AN	55	56	56	56
	BN	55	56	56	56
	D	55	57	57	57
	C	56	58	58	57
	All	55	56	56	56
NOV	W	51	52	51	51
	AN	51	52	51	52
	BN	51	52	52	52
	D	51	52	52	52
	C	52	53	53	53
	All	51	52	52	52
DEC	W	47	47	47	47
	AN	46	47	47	47
	BN	47	47	47	47
	D	46	47	47	47
	C	47	48	48	48
	All	47	47	47	47

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2

1 **Table B.7-42. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the**  
 2 **Sacramento River at Bend Bridge, Year-Round**

Alternative 4A_ELT: Sacramento River at Bend Bridge					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	0.6 (1.4%)	0 (0.1%)	0.7 (1.5%)	0.1 (0.1%)
	AN	0.7 (1.5%)	0 (0%)	0.7 (1.7%)	0.1 (0.1%)
	BN	0.8 (1.9%)	0 (0.1%)	0.8 (1.9%)	0 (0.1%)
	D	0.8 (1.9%)	0 (0%)	0.9 (2%)	0.1 (0.2%)
	C	1 (2.1%)	-0.1 (-0.2%)	1.1 (2.5%)	0.1 (0.2%)
	All	0.8 (1.7%)	0 (0%)	0.8 (1.8%)	0.1 (0.1%)
FEB	W	0.8 (1.8%)	0 (0%)	0.8 (1.8%)	0 (0%)
	AN	0.8 (1.8%)	0 (0.1%)	0.8 (1.8%)	0 (0.1%)
	BN	0.9 (1.9%)	0 (0%)	0.9 (1.9%)	0 (0%)
	D	1 (2.2%)	0 (0%)	1.1 (2.3%)	0.1 (0.1%)
	C	1.1 (2.2%)	0 (0%)	1.2 (2.5%)	0.1 (0.2%)
	All	0.9 (2%)	0 (0%)	0.9 (2%)	0 (0.1%)
MAR	W	0.7 (1.4%)	0 (0%)	0.7 (1.4%)	0 (0%)
	AN	0.7 (1.5%)	0 (0%)	0.7 (1.4%)	0 (0%)
	BN	0.8 (1.6%)	0 (0%)	0.8 (1.6%)	0 (0%)
	D	0.8 (1.5%)	0 (0%)	0.8 (1.6%)	0 (0.1%)
	C	0.7 (1.4%)	0 (-0.1%)	0.8 (1.6%)	0 (0.1%)
	All	0.7 (1.5%)	0 (0%)	0.7 (1.5%)	0 (0%)
APR	W	0.8 (1.6%)	0 (0%)	0.8 (1.6%)	0 (0%)
	AN	0.8 (1.5%)	0 (0%)	0.8 (1.5%)	0 (-0.1%)
	BN	0.9 (1.8%)	0 (0%)	0.9 (1.7%)	0 (0%)
	D	0.8 (1.5%)	-0.1 (-0.1%)	0.9 (1.7%)	0 (0.1%)
	C	0.9 (1.8%)	0 (0%)	1.1 (2%)	0.1 (0.2%)
	All	0.9 (1.7%)	0 (0%)	0.9 (1.7%)	0 (0%)
MAY	W	1.7 (3%)	0 (0%)	1.7 (3%)	0 (0%)
	AN	0.8 (1.4%)	-0.5 (-0.8%)	0.9 (1.6%)	-0.4 (-0.6%)
	BN	1.3 (2.4%)	-0.2 (-0.3%)	1.5 (2.8%)	0 (0%)
	D	1.1 (2%)	-0.3 (-0.5%)	1.2 (2.2%)	-0.1 (-0.2%)
	C	1.1 (2%)	0 (0%)	1 (1.8%)	-0.1 (-0.2%)
	All	1.3 (2.3%)	-0.2 (-0.3%)	1.3 (2.4%)	-0.1 (-0.2%)
JUN	W	0.8 (1.4%)	-0.1 (-0.2%)	0.9 (1.6%)	0 (0%)
	AN	0.6 (1.1%)	-0.2 (-0.3%)	1 (1.8%)	0.2 (0.3%)
	BN	0.7 (1.2%)	-0.2 (-0.4%)	0.9 (1.6%)	0 (0%)
	D	0.8 (1.5%)	-0.2 (-0.4%)	1 (1.8%)	-0.1 (-0.2%)
	C	0.8 (1.4%)	-0.2 (-0.3%)	0.7 (1.3%)	-0.3 (-0.5%)
	All	0.8 (1.4%)	-0.2 (-0.3%)	0.9 (1.6%)	0 (-0.1%)

Alternative 4A_ELT: Sacramento River at Bend Bridge					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	0.3 (0.6%)	-0.1 (-0.2%)	0.3 (0.6%)	-0.1 (-0.1%)
	AN	0.7 (1.3%)	0.1 (0.2%)	0.5 (0.9%)	-0.1 (-0.2%)
	BN	0.6 (1.2%)	-0.1 (-0.3%)	0.7 (1.3%)	-0.1 (-0.1%)
	D	1.2 (2.1%)	0.1 (0.3%)	1.2 (2.1%)	0.2 (0.3%)
	C	2.2 (3.7%)	-0.1 (-0.2%)	1.7 (3%)	-0.6 (-1%)
	All	0.9 (1.6%)	0 (0%)	0.8 (1.5%)	-0.1 (-0.2%)
AUG	W	1.4 (2.4%)	0 (0%)	1.2 (2.2%)	-0.1 (-0.2%)
	AN	0.9 (1.5%)	0 (0%)	0.6 (1.1%)	-0.3 (-0.5%)
	BN	1.3 (2.2%)	-0.1 (-0.2%)	1.1 (2%)	-0.3 (-0.5%)
	D	2.2 (3.8%)	0.6 (1%)	1.4 (2.4%)	-0.3 (-0.4%)
	C	3.3 (5.5%)	-0.2 (-0.3%)	1.9 (3.2%)	-1.5 (-2.4%)
	All	1.7 (3%)	0.1 (0.1%)	1.3 (2.2%)	-0.4 (-0.7%)
SEP	W	0.3 (0.5%)	0.1 (0.2%)	0.2 (0.4%)	0 (0.1%)
	AN	0.5 (0.9%)	0.8 (1.4%)	0.1 (0.2%)	0.4 (0.7%)
	BN	1.9 (3.4%)	0.7 (1.2%)	1.9 (3.4%)	0.7 (1.2%)
	D	2.6 (4.5%)	0.2 (0.4%)	2.2 (3.8%)	-0.2 (-0.4%)
	C	2.7 (4.4%)	-0.1 (-0.2%)	1.4 (2.3%)	-1.4 (-2.2%)
	All	1.5 (2.5%)	0.3 (0.5%)	1.1 (1.9%)	-0.1 (-0.1%)
OCT	W	1.4 (2.5%)	0.1 (0.1%)	1.3 (2.5%)	0 (0%)
	AN	1.3 (2.5%)	0.1 (0.1%)	1.3 (2.4%)	0 (0.1%)
	BN	1.4 (2.5%)	0 (0%)	1.2 (2.3%)	-0.1 (-0.2%)
	D	1.5 (2.7%)	0.1 (0.1%)	1.3 (2.3%)	-0.2 (-0.3%)
	C	1.4 (2.4%)	-0.3 (-0.5%)	0.8 (1.4%)	-0.9 (-1.5%)
	All	1.4 (2.6%)	0 (0%)	1.2 (2.2%)	-0.2 (-0.3%)
NOV	W	0.9 (1.8%)	-0.2 (-0.4%)	0.9 (1.8%)	-0.2 (-0.5%)
	AN	0.8 (1.6%)	-0.3 (-0.6%)	1 (1.9%)	-0.1 (-0.3%)
	BN	0.8 (1.6%)	-0.4 (-0.7%)	0.8 (1.6%)	-0.3 (-0.6%)
	D	0.9 (1.7%)	-0.2 (-0.3%)	0.8 (1.6%)	-0.2 (-0.4%)
	C	0.9 (1.8%)	-0.1 (-0.3%)	0.8 (1.5%)	-0.3 (-0.6%)
	All	0.9 (1.7%)	-0.2 (-0.4%)	0.9 (1.7%)	-0.2 (-0.5%)
DEC	W	0.5 (1.2%)	0 (0%)	0.6 (1.3%)	0.1 (0.2%)
	AN	0.7 (1.6%)	-0.2 (-0.4%)	0.8 (1.8%)	-0.1 (-0.1%)
	BN	0.7 (1.6%)	-0.1 (-0.2%)	0.8 (1.7%)	-0.1 (-0.1%)
	D	0.7 (1.6%)	-0.1 (-0.1%)	0.7 (1.6%)	-0.1 (-0.1%)
	C	0.9 (1.9%)	0 (0.1%)	0.9 (1.9%)	0 (0%)
	All	0.7 (1.5%)	-0.1 (-0.1%)	0.7 (1.6%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Sacramento River at Red Bluff Diversion Dam**2 **Table B.7-43. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Sacramento River at Red Bluff Diversion Dam, Year-Round**  
3

Alternative 4A_ELT: Sacramento River at Red Bluff Diversion Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	45	46	46	46
	AN	45	46	46	46
	BN	44	45	45	45
	D	44	45	46	46
	C	44	45	46	46
	All	45	45	46	46
FEB	W	46	47	47	47
	AN	46	47	47	47
	BN	46	47	47	47
	D	46	47	47	47
	C	47	48	48	48
	All	46	47	47	47
MAR	W	48	49	49	49
	AN	49	50	50	50
	BN	49	50	50	50
	D	50	51	51	51
	C	51	51	51	51
	All	49	50	50	50
APR	W	52	53	52	52
	AN	53	54	54	54
	BN	54	54	54	54
	D	54	54	54	54
	C	53	54	53	54
	All	53	54	53	53
MAY	W	55	57	56	56
	AN	56	58	56	56
	BN	56	58	56	57
	D	56	57	56	56
	C	57	58	57	56
	All	56	57	56	56
JUN	W	57	58	56	57
	AN	57	58	56	56
	BN	57	58	56	56
	D	57	58	56	56
	C	58	59	57	57
	All	57	58	56	56



Alternative 4A_ELT: Sacramento River at Red Bluff Diversion Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	58	58	57	57
	AN	57	58	56	56
	BN	57	58	56	56
	D	57	58	57	57
	C	60	62	60	60
	All	58	59	57	57
AUG	W	58	60	58	58
	AN	59	60	58	58
	BN	58	59	58	57
	D	59	60	59	58
	C	61	65	63	62
	All	59	61	59	58
SEP	W	58	58	57	57
	AN	59	59	58	58
	BN	59	60	60	60
	D	59	62	61	60
	C	63	65	64	63
	All	59	60	60	59
OCT	W	55	56	56	56
	AN	55	56	56	56
	BN	55	56	56	56
	D	55	57	57	57
	C	56	58	58	57
	All	55	57	56	56
NOV	W	50	52	51	51
	AN	50	52	51	52
	BN	51	52	52	52
	D	51	52	52	52
	C	52	53	53	53
	All	51	52	52	52
DEC	W	46	47	47	47
	AN	46	47	47	47
	BN	46	47	47	47
	D	46	47	47	47
	C	46	47	48	48
	All	46	47	47	47

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2

1 **Table B.7-44. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the**  
 2 **Sacramento River at Red Bluff Diversion Dam, Year-Round**

Alternative 4A_ELТ: Sacramento River at Red Bluff Diversion Dam					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELТ	NAA_ELТ vs. H3_ELТ	EXISTING CONDITIONS vs. H4_ELТ	NAA_ELТ vs. H4_ELТ
JAN	W	0.7 (1.6%)	0.1 (0.2%)	0.7 (1.6%)	0.1 (0.2%)
	AN	0.8 (1.8%)	0.1 (0.3%)	0.9 (1.9%)	0.2 (0.4%)
	BN	1 (2.3%)	0.2 (0.5%)	1 (2.3%)	0.2 (0.5%)
	D	1.1 (2.5%)	0.2 (0.5%)	1.2 (2.6%)	0.3 (0.6%)
	C	1.2 (2.7%)	0.1 (0.3%)	1.4 (3.1%)	0.3 (0.7%)
	All	0.9 (2.1%)	0.1 (0.3%)	1 (2.2%)	0.2 (0.4%)
FEB	W	0.7 (1.6%)	-0.1 (-0.2%)	0.7 (1.6%)	-0.1 (-0.2%)
	AN	0.8 (1.6%)	0 (-0.1%)	0.8 (1.6%)	-0.1 (-0.1%)
	BN	0.9 (1.9%)	0 (-0.1%)	0.9 (1.9%)	0 (-0.1%)
	D	1 (2.1%)	-0.1 (-0.2%)	1 (2.2%)	0 (-0.1%)
	C	0.9 (2%)	-0.1 (-0.3%)	1.1 (2.2%)	0 (-0.1%)
	All	0.8 (1.8%)	-0.1 (-0.2%)	0.9 (1.9%)	-0.1 (-0.1%)
MAR	W	0.4 (0.9%)	-0.2 (-0.5%)	0.4 (0.8%)	-0.3 (-0.5%)
	AN	0.5 (0.9%)	-0.3 (-0.5%)	0.5 (0.9%)	-0.3 (-0.5%)
	BN	0.5 (1%)	-0.3 (-0.6%)	0.5 (1%)	-0.3 (-0.6%)
	D	0.4 (0.9%)	-0.3 (-0.7%)	0.4 (0.9%)	-0.3 (-0.7%)
	C	0.3 (0.5%)	-0.5 (-0.9%)	0.3 (0.7%)	-0.4 (-0.8%)
	All	0.4 (0.9%)	-0.3 (-0.6%)	0.4 (0.9%)	-0.3 (-0.6%)
APR	W	0.4 (0.8%)	-0.4 (-0.8%)	0.4 (0.8%)	-0.4 (-0.8%)
	AN	0.3 (0.6%)	-0.5 (-1%)	0.3 (0.5%)	-0.6 (-1%)
	BN	0.3 (0.6%)	-0.7 (-1.2%)	0.3 (0.5%)	-0.7 (-1.2%)
	D	0.1 (0.1%)	-0.8 (-1.5%)	0.2 (0.3%)	-0.7 (-1.3%)
	C	0.2 (0.4%)	-0.7 (-1.3%)	0.3 (0.6%)	-0.6 (-1.1%)
	All	0.3 (0.5%)	-0.6 (-1.1%)	0.3 (0.5%)	-0.6 (-1.1%)
MAY	W	0.8 (1.4%)	-0.9 (-1.7%)	0.8 (1.4%)	-0.9 (-1.7%)
	AN	-0.3 (-0.4%)	-1.6 (-2.7%)	-0.1 (-0.2%)	-1.5 (-2.5%)
	BN	0.3 (0.5%)	-1.3 (-2.3%)	0.5 (0.8%)	-1.1 (-1.9%)
	D	0 (-0.1%)	-1.4 (-2.5%)	0.1 (0.2%)	-1.3 (-2.3%)
	C	0 (0.1%)	-1.1 (-1.9%)	0 (-0.1%)	-1.2 (-2.1%)
	All	0.3 (0.5%)	-1.2 (-2.1%)	0.3 (0.6%)	-1.2 (-2%)
JUN	W	-0.7 (-1.2%)	-1.7 (-2.9%)	-0.6 (-1.1%)	-1.6 (-2.8%)
	AN	-1 (-1.8%)	-1.9 (-3.3%)	-0.7 (-1.2%)	-1.6 (-2.7%)
	BN	-1 (-1.7%)	-1.9 (-3.3%)	-0.7 (-1.3%)	-1.7 (-3%)
	D	-0.8 (-1.5%)	-1.9 (-3.4%)	-0.7 (-1.2%)	-1.8 (-3.1%)
	C	-0.7 (-1.2%)	-1.7 (-2.9%)	-0.8 (-1.3%)	-1.8 (-3%)
	All	-0.8 (-1.4%)	-1.8 (-3.1%)	-0.7 (-1.2%)	-1.7 (-2.9%)

Alternative 4A_ELT: Sacramento River at Red Bluff Diversion Dam					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	-1.4 (-2.4%)	-1.9 (-3.2%)	-1.4 (-2.4%)	-1.9 (-3.2%)
	AN	-1 (-1.8%)	-1.7 (-2.9%)	-1.2 (-2.1%)	-1.9 (-3.2%)
	BN	-1.1 (-2%)	-2 (-3.4%)	-1.1 (-1.9%)	-1.9 (-3.3%)
	D	-0.6 (-1%)	-1.6 (-2.7%)	-0.5 (-1%)	-1.6 (-2.7%)
	C	0.6 (1%)	-1.6 (-2.6%)	0.2 (0.3%)	-2.1 (-3.4%)
	All	-0.8 (-1.4%)	-1.8 (-3%)	-0.9 (-1.6%)	-1.8 (-3.1%)
AUG	W	-0.3 (-0.5%)	-1.7 (-2.9%)	-0.4 (-0.7%)	-1.9 (-3.1%)
	AN	-0.8 (-1.3%)	-1.7 (-2.9%)	-1 (-1.7%)	-2 (-3.3%)
	BN	-0.4 (-0.7%)	-1.9 (-3.2%)	-0.6 (-1%)	-2 (-3.4%)
	D	0.6 (1%)	-1 (-1.7%)	-0.2 (-0.4%)	-1.9 (-3.1%)
	C	1.9 (3%)	-1.5 (-2.3%)	0.5 (0.8%)	-2.8 (-4.4%)
	All	0.1 (0.2%)	-1.6 (-2.6%)	-0.3 (-0.6%)	-2 (-3.4%)
SEP	W	-0.9 (-1.5%)	-1 (-1.7%)	-0.9 (-1.6%)	-1.1 (-1.8%)
	AN	-0.8 (-1.4%)	-0.4 (-0.7%)	-1.2 (-2.1%)	-0.8 (-1.4%)
	BN	0.6 (1%)	-0.7 (-1.2%)	0.6 (1%)	-0.7 (-1.2%)
	D	1.4 (2.4%)	-1.1 (-1.7%)	1 (1.7%)	-1.5 (-2.4%)
	C	2 (3.1%)	-0.8 (-1.3%)	0.7 (1.1%)	-2.1 (-3.3%)
	All	0.3 (0.5%)	-0.8 (-1.4%)	-0.1 (-0.1%)	-1.2 (-2%)
OCT	W	1.1 (2.1%)	-0.2 (-0.4%)	1.1 (2%)	-0.2 (-0.4%)
	AN	1.1 (2%)	-0.2 (-0.4%)	1.1 (2%)	-0.2 (-0.4%)
	BN	1 (1.9%)	-0.3 (-0.6%)	0.9 (1.7%)	-0.5 (-0.8%)
	D	1.3 (2.3%)	-0.2 (-0.3%)	1 (1.9%)	-0.4 (-0.7%)
	C	1.2 (2.1%)	-0.5 (-0.9%)	0.6 (1.1%)	-1.1 (-1.9%)
	All	1.1 (2.1%)	-0.3 (-0.5%)	1 (1.8%)	-0.4 (-0.8%)
NOV	W	1.1 (2.2%)	-0.1 (-0.2%)	1.1 (2.1%)	-0.1 (-0.2%)
	AN	1 (2%)	-0.1 (-0.3%)	1.1 (2.2%)	0 (0%)
	BN	1 (1.9%)	-0.2 (-0.4%)	1 (2%)	-0.2 (-0.3%)
	D	1.1 (2.1%)	0 (0%)	1 (2%)	0 (0%)
	C	1.1 (2.2%)	0 (0%)	1 (1.9%)	-0.2 (-0.3%)
	All	1.1 (2.1%)	-0.1 (-0.1%)	1.1 (2.1%)	-0.1 (-0.2%)
DEC	W	0.8 (1.7%)	0.2 (0.4%)	0.8 (1.8%)	0.3 (0.6%)
	AN	1.1 (2.3%)	0.1 (0.3%)	1.2 (2.6%)	0.2 (0.5%)
	BN	1.2 (2.6%)	0.3 (0.7%)	1.2 (2.6%)	0.4 (0.7%)
	D	1.1 (2.4%)	0.3 (0.6%)	1.1 (2.4%)	0.3 (0.6%)
	C	1.4 (3.1%)	0.5 (1.1%)	1.4 (3%)	0.5 (1.1%)
	All	1.1 (2.3%)	0.3 (0.6%)	1.1 (2.4%)	0.3 (0.7%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Sacramento River at Hamilton City**

2 **Table B.7-45. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Sacramento River at Hamilton City, Year-**  
 3 **Round**

Alternative 4A_ELT: Sacramento River at Hamilton City					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	45	46	46	46
	AN	45	46	46	46
	BN	44	45	45	45
	D	44	45	45	45
	C	44	45	45	46
	All	45	45	45	46
FEB	W	46	47	47	47
	AN	47	48	48	48
	BN	46	47	47	47
	D	47	48	48	48
	C	48	49	49	49
	All	47	48	48	48
MAR	W	49	50	50	50
	AN	51	51	51	51
	BN	51	52	52	52
	D	52	52	53	53
	C	52	53	53	53
	All	51	52	51	52
APR	W	54	54	54	54
	AN	55	56	56	56
	BN	56	57	57	57
	D	56	57	57	57
	C	56	57	57	57
	All	55	56	56	56
MAY	W	58	60	60	60
	AN	60	61	61	61
	BN	59	61	61	61
	D	59	61	60	60
	C	60	61	61	61
	All	59	61	60	61
JUN	W	61	62	62	62
	AN	61	62	61	62
	BN	60	61	61	61
	D	60	62	61	62
	C	61	62	62	62
	All	61	62	62	62

Alternative 4A_ELT: Sacramento River at Hamilton City					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	62	62	62	62
	AN	61	62	62	61
	BN	61	62	62	62
	D	61	62	62	62
	C	63	65	65	65
	All	62	63	63	63
AUG	W	62	64	64	64
	AN	62	63	63	63
	BN	62	63	63	63
	D	62	64	65	64
	C	65	68	68	67
	All	62	64	64	64
SEP	W	60	60	60	60
	AN	62	61	62	62
	BN	62	63	64	64
	D	62	65	65	65
	C	64	67	67	66
	All	62	63	63	63
OCT	W	55	57	57	57
	AN	56	57	57	57
	BN	56	57	58	57
	D	56	58	58	58
	C	57	59	59	58
	All	56	57	57	57
NOV	W	50	51	51	51
	AN	50	51	51	51
	BN	50	52	51	51
	D	51	52	52	52
	C	52	53	53	52
	All	51	52	52	52
DEC	W	46	47	47	47
	AN	46	46	46	46
	BN	45	46	46	46
	D	45	46	46	46
	C	45	46	46	46
	All	46	46	46	46

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1 **Table B.7-46. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the**  
 2 **Sacramento River at Hamilton City, Year-Round**

Alternative 4A_ELT: Sacramento River at Hamilton City					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	0.7 (1.6%)	0 (0%)	0.7 (1.7%)	0 (0.1%)
	AN	0.8 (1.8%)	0 (0%)	0.8 (1.8%)	0 (0.1%)
	BN	0.9 (2.1%)	0 (0%)	0.9 (2.1%)	0 (0%)
	D	0.9 (2.1%)	0 (0%)	1 (2.2%)	0 (0.1%)
	C	1.1 (2.4%)	-0.1 (-0.2%)	1.2 (2.6%)	0 (0%)
	All	0.9 (1.9%)	0 (0%)	0.9 (2%)	0 (0.1%)
FEB	W	0.9 (1.9%)	0 (0%)	0.9 (1.9%)	0 (0%)
	AN	0.9 (1.9%)	0 (0%)	0.9 (1.9%)	0 (0.1%)
	BN	1 (2.1%)	0 (0%)	1 (2.1%)	0 (0%)
	D	1.1 (2.4%)	0 (0%)	1.2 (2.5%)	0 (0.1%)
	C	1.2 (2.4%)	0 (0%)	1.3 (2.6%)	0.1 (0.1%)
	All	1 (2.1%)	0 (0%)	1 (2.2%)	0 (0.1%)
MAR	W	0.7 (1.3%)	0 (0%)	0.7 (1.3%)	0 (0%)
	AN	0.7 (1.4%)	0 (-0.1%)	0.7 (1.4%)	0 (0%)
	BN	0.8 (1.6%)	0 (0%)	0.8 (1.6%)	0 (0%)
	D	0.8 (1.6%)	0 (0%)	0.8 (1.6%)	0 (0%)
	C	0.7 (1.3%)	-0.1 (-0.1%)	0.8 (1.5%)	0 (0%)
	All	0.7 (1.4%)	0 (0%)	0.7 (1.5%)	0 (0%)
APR	W	0.8 (1.6%)	0 (0%)	0.8 (1.6%)	0 (0%)
	AN	0.8 (1.5%)	0 (0%)	0.8 (1.5%)	0 (-0.1%)
	BN	1 (1.8%)	0 (0%)	1 (1.7%)	0 (-0.1%)
	D	0.9 (1.5%)	-0.1 (-0.1%)	1 (1.7%)	0 (0%)
	C	0.9 (1.7%)	0 (0%)	1 (1.8%)	0.1 (0.2%)
	All	0.9 (1.6%)	0 (0%)	0.9 (1.6%)	0 (0%)
MAY	W	1.9 (3.2%)	0 (0%)	1.9 (3.2%)	0 (0%)
	AN	0.9 (1.5%)	-0.6 (-0.9%)	1.1 (1.8%)	-0.4 (-0.7%)
	BN	1.5 (2.5%)	-0.2 (-0.4%)	1.8 (3%)	0 (0%)
	D	1.2 (2.1%)	-0.3 (-0.5%)	1.4 (2.4%)	-0.1 (-0.2%)
	C	1.3 (2.1%)	0 (0%)	1.2 (2%)	-0.1 (-0.2%)
	All	1.4 (2.4%)	-0.2 (-0.3%)	1.5 (2.6%)	-0.1 (-0.2%)
JUN	W	1 (1.7%)	-0.1 (-0.2%)	1.1 (1.9%)	0 (0%)
	AN	0.7 (1.2%)	-0.3 (-0.5%)	1.2 (2%)	0.2 (0.4%)
	BN	0.8 (1.3%)	-0.3 (-0.6%)	1.1 (1.8%)	0 (0%)
	D	0.8 (1.4%)	-0.4 (-0.6%)	1.1 (1.8%)	-0.1 (-0.1%)
	C	0.8 (1.3%)	-0.2 (-0.3%)	0.8 (1.3%)	-0.2 (-0.3%)
	All	0.9 (1.4%)	-0.3 (-0.4%)	1.1 (1.8%)	0 (0%)

Alternative 4A_ELT: Sacramento River at Hamilton City					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	0.4 (0.6%)	-0.1 (-0.2%)	0.4 (0.7%)	-0.1 (-0.1%)
	AN	0.7 (1.2%)	0 (0.1%)	0.6 (1%)	-0.1 (-0.2%)
	BN	0.6 (1%)	-0.2 (-0.4%)	0.8 (1.3%)	-0.1 (-0.1%)
	D	1.1 (1.8%)	0.1 (0.2%)	1.2 (2%)	0.2 (0.4%)
	C	2.1 (3.3%)	-0.1 (-0.2%)	2 (3.1%)	-0.3 (-0.4%)
	All	0.9 (1.4%)	-0.1 (-0.1%)	0.9 (1.5%)	0 (-0.1%)
AUG	W	1.7 (2.7%)	0 (0%)	1.5 (2.5%)	-0.2 (-0.2%)
	AN	0.9 (1.4%)	-0.1 (-0.2%)	0.7 (1.1%)	-0.4 (-0.6%)
	BN	1.2 (1.9%)	-0.4 (-0.6%)	1.1 (1.8%)	-0.5 (-0.7%)
	D	2.5 (4%)	0.8 (1.3%)	1.4 (2.3%)	-0.3 (-0.4%)
	C	3.2 (4.9%)	0 (0%)	2.2 (3.5%)	-0.9 (-1.4%)
	All	1.9 (3%)	0.1 (0.1%)	1.4 (2.3%)	-0.4 (-0.6%)
SEP	W	0.1 (0.2%)	0.2 (0.3%)	0 (0%)	0 (0%)
	AN	0.3 (0.5%)	1 (1.6%)	-0.3 (-0.5%)	0.4 (0.6%)
	BN	2 (3.2%)	0.6 (1%)	2 (3.3%)	0.7 (1.1%)
	D	3 (4.8%)	0.3 (0.5%)	2.6 (4.1%)	-0.1 (-0.1%)
	C	2.6 (4%)	0 (0%)	1.9 (2.9%)	-0.7 (-1.1%)
	All	1.4 (2.3%)	0.4 (0.6%)	1.1 (1.8%)	0.1 (0.1%)
OCT	W	1.4 (2.5%)	0 (0.1%)	1.3 (2.4%)	0 (0%)
	AN	1.5 (2.7%)	0.1 (0.1%)	1.4 (2.5%)	0 (0%)
	BN	1.5 (2.7%)	0 (0.1%)	1.4 (2.5%)	-0.1 (-0.2%)
	D	1.4 (2.6%)	0 (0.1%)	1.2 (2.2%)	-0.2 (-0.3%)
	C	1.5 (2.6%)	-0.2 (-0.3%)	1.1 (1.9%)	-0.6 (-1%)
	All	1.5 (2.6%)	0 (0%)	1.3 (2.3%)	-0.1 (-0.2%)
NOV	W	1 (1.9%)	-0.2 (-0.4%)	1 (1.9%)	-0.2 (-0.4%)
	AN	1 (1.9%)	-0.2 (-0.4%)	1.1 (2.1%)	-0.1 (-0.2%)
	BN	0.9 (1.8%)	-0.3 (-0.6%)	1 (1.9%)	-0.3 (-0.5%)
	D	0.9 (1.9%)	-0.2 (-0.3%)	0.9 (1.8%)	-0.2 (-0.4%)
	C	1.1 (2.1%)	-0.1 (-0.2%)	0.9 (1.8%)	-0.2 (-0.5%)
	All	1 (1.9%)	-0.2 (-0.4%)	1 (1.9%)	-0.2 (-0.4%)
DEC	W	0.7 (1.4%)	0 (0%)	0.7 (1.6%)	0.1 (0.1%)
	AN	0.8 (1.8%)	-0.1 (-0.3%)	0.9 (2%)	-0.1 (-0.2%)
	BN	0.9 (1.9%)	-0.1 (-0.2%)	0.9 (2%)	-0.1 (-0.1%)
	D	0.8 (1.9%)	-0.1 (-0.1%)	0.8 (1.8%)	-0.1 (-0.1%)
	C	1 (2.2%)	0 (0.1%)	1 (2.1%)	0 (0%)
	All	0.8 (1.8%)	0 (-0.1%)	0.8 (1.8%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Trinity River below Lewiston Reservoir**2 **Table B.7-47. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Trinity River below Lewiston Reservoir,**  
3 **Year-Round**

Alternative 4A_ELT: Trinity River below Lewiston Reservoir					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	41	42	42	42
	AN	38	39	40	40
	BN	39	40	39	39
	D	39	40	40	39
	C	39	40	40	40
	All	39	40	40	40
FEB	W	43	44	44	44
	AN	43	44	44	44
	BN	42	43	43	43
	D	42	44	44	44
	C	43	44	44	44
	All	43	44	44	44
MAR	W	46	47	47	47
	AN	47	48	48	48
	BN	47	47	47	47
	D	48	48	49	49
	C	48	49	49	49
	All	47	48	48	48
APR	W	49	50	50	50
	AN	50	51	51	52
	BN	51	52	52	52
	D	51	52	52	52
	C	50	51	51	51
	All	50	51	51	51
MAY	W	46	47	47	47
	AN	46	47	47	47
	BN	46	48	48	48
	D	47	48	48	48
	C	49	51	51	51
	All	47	48	48	48
JUN	W	48	49	49	49
	AN	51	51	51	51
	BN	52	52	52	52
	D	52	53	52	53
	C	56	57	58	57
	All	51	52	52	52



Alternative 4A_ELT: Trinity River below Lewiston Reservoir					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	51	53	53	53
	AN	52	52	52	52
	BN	52	53	53	53
	D	51	52	52	52
	C	53	56	56	55
	All	51	53	53	53
AUG	W	52	53	52	52
	AN	51	52	51	51
	BN	52	54	53	53
	D	50	52	52	52
	C	54	60	59	57
	All	52	54	53	53
SEP	W	49	50	50	50
	AN	50	50	50	50
	BN	51	54	53	53
	D	50	53	53	53
	C	57	60	60	58
	All	51	53	52	52
OCT	W	48	50	49	49
	AN	49	51	50	51
	BN	50	52	52	52
	D	50	50	50	50
	C	51	54	53	53
	All	49	51	51	51
NOV	W	44	45	45	45
	AN	45	46	45	46
	BN	45	46	46	46
	D	44	45	45	45
	C	46	47	47	47
	All	45	46	46	46
DEC	W	41	42	42	42
	AN	39	41	40	40
	BN	40	41	40	40
	D	40	41	41	41
	C	39	40	40	40
	All	40	41	41	41

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1 **Table B.7-48. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the Trinity**  
 2 **River below Lewiston Reservoir, Year-Round**

Alternative 4A_ELT: Trinity River below Lewiston Reservoir					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	0.9 (2.3%)	0 (0%)	0.9 (2.1%)	-0.1 (-0.1%)
	AN	1.2 (3%)	0.3 (0.6%)	1.1 (3%)	0.2 (0.6%)
	BN	0.6 (1.4%)	-0.2 (-0.5%)	0.6 (1.5%)	-0.2 (-0.4%)
	D	0.9 (2.4%)	-0.2 (-0.5%)	0.7 (1.9%)	-0.4 (-1.1%)
	C	0.9 (2.3%)	-0.1 (-0.3%)	0.9 (2.2%)	-0.2 (-0.4%)
	All	0.9 (2.3%)	-0.1 (-0.2%)	0.8 (2.1%)	-0.1 (-0.3%)
FEB	W	1.2 (2.7%)	0 (0%)	1.2 (2.7%)	0 (0.1%)
	AN	1.2 (2.7%)	0.1 (0.1%)	1.2 (2.8%)	0.1 (0.2%)
	BN	1.1 (2.6%)	0 (0%)	1.1 (2.6%)	0 (0%)
	D	1.1 (2.7%)	0 (0%)	1.1 (2.7%)	0 (0%)
	C	1.1 (2.6%)	0 (0.1%)	1.1 (2.6%)	0 (0.1%)
	All	1.1 (2.7%)	0 (0%)	1.2 (2.7%)	0 (0%)
MAR	W	0.8 (1.7%)	0 (0%)	0.8 (1.7%)	0 (0%)
	AN	0.6 (1.3%)	0.2 (0.4%)	0.8 (1.6%)	0.3 (0.6%)
	BN	0.8 (1.7%)	0 (0%)	0.8 (1.7%)	0 (0%)
	D	0.4 (0.9%)	0.1 (0.2%)	0.5 (1%)	0.2 (0.3%)
	C	1 (2.1%)	0 (0%)	1.1 (2.2%)	0.1 (0.1%)
	All	0.7 (1.5%)	0 (0.1%)	0.8 (1.6%)	0.1 (0.2%)
APR	W	0.9 (1.8%)	0 (0%)	0.9 (1.7%)	0 (0%)
	AN	1 (2.1%)	0.2 (0.5%)	1.5 (3%)	0.7 (1.4%)
	BN	1.5 (2.9%)	0.1 (0.1%)	1.2 (2.3%)	-0.2 (-0.5%)
	D	0.9 (1.8%)	-0.1 (-0.2%)	0.9 (1.8%)	-0.1 (-0.3%)
	C	1 (2%)	0.2 (0.3%)	1.1 (2.3%)	0.3 (0.6%)
	All	1 (2%)	0 (0.1%)	1 (2.1%)	0.1 (0.1%)
MAY	W	1.1 (2.5%)	0 (0%)	1.1 (2.5%)	0 (0%)
	AN	1 (2.3%)	0 (0%)	0.9 (1.9%)	-0.2 (-0.3%)
	BN	1.2 (2.6%)	0.1 (0.1%)	1.2 (2.7%)	0.1 (0.2%)
	D	1.3 (2.8%)	0 (0.1%)	1.3 (2.8%)	0.1 (0.1%)
	C	1.8 (3.7%)	0 (0%)	1.7 (3.4%)	-0.2 (-0.3%)
	All	1.3 (2.7%)	0 (0%)	1.2 (2.7%)	0 (0%)
JUN	W	0.8 (1.7%)	0 (0%)	0.8 (1.7%)	0 (0%)
	AN	0.6 (1.2%)	-0.3 (-0.5%)	0.3 (0.6%)	-0.5 (-1.1%)
	BN	0.7 (1.4%)	0.1 (0.3%)	0.5 (1%)	-0.1 (-0.1%)
	D	0.2 (0.4%)	-0.4 (-0.7%)	0.9 (1.7%)	0.3 (0.6%)
	C	2.1 (3.7%)	0.2 (0.4%)	1.5 (2.7%)	-0.3 (-0.6%)
	All	0.8 (1.6%)	-0.1 (-0.1%)	0.8 (1.6%)	-0.1 (-0.1%)

Alternative 4A_ELT: Trinity River below Lewiston Reservoir					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	2 (4%)	0.1 (0.2%)	1.9 (3.7%)	0 (-0.1%)
	AN	0.4 (0.8%)	-0.4 (-0.7%)	0.7 (1.4%)	-0.1 (-0.1%)
	BN	0.9 (1.7%)	0 (-0.1%)	1.1 (2.1%)	0.2 (0.3%)
	D	0.7 (1.4%)	-0.3 (-0.6%)	0.7 (1.4%)	-0.3 (-0.6%)
	C	3 (5.6%)	0 (0%)	2.3 (4.4%)	-0.7 (-1.2%)
	All	1.5 (2.8%)	-0.1 (-0.2%)	1.4 (2.7%)	-0.2 (-0.3%)
AUG	W	0.4 (0.7%)	-0.4 (-0.8%)	0.4 (0.7%)	-0.4 (-0.8%)
	AN	0.4 (0.8%)	-0.3 (-0.5%)	0.5 (0.9%)	-0.2 (-0.4%)
	BN	1.2 (2.3%)	-0.5 (-0.9%)	1.3 (2.5%)	-0.4 (-0.7%)
	D	1.8 (3.5%)	0 (-0.1%)	1.4 (2.9%)	-0.4 (-0.7%)
	C	4.9 (9%)	-0.8 (-1.3%)	3.2 (6%)	-2.4 (-4.1%)
	All	1.5 (2.9%)	-0.4 (-0.7%)	1.2 (2.3%)	-0.7 (-1.3%)
SEP	W	0.6 (1.2%)	-0.2 (-0.4%)	0.5 (1.1%)	-0.3 (-0.5%)
	AN	0.5 (1%)	-0.1 (-0.2%)	0 (0%)	-0.6 (-1.1%)
	BN	1.8 (3.5%)	-0.6 (-1.2%)	1.7 (3.3%)	-0.7 (-1.4%)
	D	2.5 (5%)	-0.1 (-0.1%)	2.5 (4.9%)	-0.1 (-0.3%)
	C	3 (5.4%)	-0.1 (-0.2%)	1.5 (2.7%)	-1.6 (-2.7%)
	All	1.6 (3.1%)	-0.2 (-0.4%)	1.2 (2.4%)	-0.6 (-1.1%)
OCT	W	1.5 (3.2%)	-0.2 (-0.4%)	1.5 (3.2%)	-0.2 (-0.5%)
	AN	0.7 (1.4%)	-0.5 (-1%)	1.3 (2.7%)	0.1 (0.2%)
	BN	1.8 (3.5%)	0 (0%)	1.7 (3.4%)	0 (-0.1%)
	D	0.7 (1.4%)	-0.1 (-0.2%)	0.7 (1.5%)	0 (-0.1%)
	C	1.9 (3.7%)	-0.3 (-0.6%)	1.5 (3%)	-0.7 (-1.3%)
	All	1.3 (2.7%)	-0.2 (-0.4%)	1.4 (2.7%)	-0.2 (-0.3%)
NOV	W	1.1 (2.5%)	-0.1 (-0.1%)	1.1 (2.5%)	-0.1 (-0.2%)
	AN	0.7 (1.7%)	-0.1 (-0.3%)	0.8 (1.9%)	-0.1 (-0.1%)
	BN	1.3 (2.9%)	0 (0%)	1.2 (2.6%)	-0.1 (-0.3%)
	D	1 (2.2%)	-0.1 (-0.2%)	1 (2.2%)	-0.1 (-0.2%)
	C	1.4 (3%)	0.4 (0.8%)	1 (2.2%)	0 (0%)
	All	1.1 (2.5%)	0 (0%)	1 (2.3%)	-0.1 (-0.2%)
DEC	W	1 (2.3%)	-0.3 (-0.6%)	0.9 (2.1%)	-0.3 (-0.8%)
	AN	1 (2.6%)	-0.5 (-1.2%)	1.2 (3%)	-0.3 (-0.8%)
	BN	0.9 (2.3%)	-0.2 (-0.5%)	0.9 (2.1%)	-0.2 (-0.6%)
	D	0.4 (1%)	-0.1 (-0.3%)	0.4 (1.1%)	-0.1 (-0.2%)
	C	0.7 (1.7%)	0 (0.1%)	0.8 (2.2%)	0.2 (0.5%)
	All	0.8 (2%)	-0.2 (-0.5%)	0.8 (2%)	-0.2 (-0.4%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Trinity River at Douglas City**2 **Table B.7-49. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Trinity River at Douglas City, Year-Round**

Alternative 4A_ELT: Trinity River at Douglas City					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	40	41	41	41
	AN	39	39	39	39
	BN	38	39	39	39
	D	38	39	39	39
	C	39	40	40	40
	All	39	40	40	40
FEB	W	43	44	44	44
	AN	43	44	44	44
	BN	42	43	43	43
	D	43	44	44	44
	C	43	44	44	44
	All	43	44	44	44
MAR	W	46	46	46	46
	AN	47	47	47	47
	BN	47	47	47	47
	D	48	48	48	48
	C	48	49	49	49
	All	47	47	47	47
APR	W	51	51	51	51
	AN	52	52	53	53
	BN	52	53	53	53
	D	53	53	53	53
	C	52	53	53	53
	All	52	52	52	52
MAY	W	48	49	49	49
	AN	48	49	49	49
	BN	49	50	50	50
	D	49	50	50	50
	C	52	54	54	53
	All	49	50	50	50
JUN	W	51	52	52	52
	AN	54	55	55	54
	BN	55	56	56	56
	D	57	58	58	58
	C	60	61	61	61
	All	55	56	56	56

Alternative 4A_ELT: Trinity River at Douglas City					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	57	59	59	59
	AN	58	59	58	59
	BN	59	60	60	60
	D	59	60	60	60
	C	62	64	64	64
	All	59	60	60	60
AUG	W	60	61	61	61
	AN	59	60	60	60
	BN	60	61	61	61
	D	58	60	60	60
	C	61	64	64	63
	All	60	61	61	61
SEP	W	55	56	56	56
	AN	55	56	56	55
	BN	56	58	58	58
	D	55	57	57	57
	C	59	63	61	60
	All	56	58	57	57
OCT	W	50	52	52	52
	AN	51	52	52	52
	BN	52	53	53	53
	D	51	52	52	52
	C	53	54	54	54
	All	51	52	52	52
NOV	W	44	45	45	45
	AN	45	46	45	45
	BN	45	46	46	46
	D	44	45	45	45
	C	46	46	47	46
	All	44	45	45	45
DEC	W	41	42	42	42
	AN	40	41	41	41
	BN	39	40	40	40
	D	40	40	40	40
	C	39	39	39	39
	All	40	41	41	41

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2

1 **Table B.7-50. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the Trinity**  
 2 **River at Douglas City, Year-Round**

Alternative 4A_ELT: Trinity River at Douglas City					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	0.8 (1.9%)	0 (0.1%)	0.7 (1.8%)	0 (0%)
	AN	0.7 (1.9%)	0.1 (0.3%)	0.7 (1.9%)	0.1 (0.3%)
	BN	0.4 (1.1%)	-0.1 (-0.2%)	0.4 (1.1%)	-0.1 (-0.2%)
	D	0.8 (2.1%)	-0.1 (-0.3%)	0.7 (1.9%)	-0.2 (-0.5%)
	C	0.8 (2.1%)	-0.1 (-0.1%)	0.8 (2.1%)	-0.1 (-0.2%)
	All	0.7 (1.9%)	0 (-0.1%)	0.7 (1.8%)	-0.1 (-0.1%)
FEB	W	0.8 (1.8%)	0 (0%)	0.8 (1.8%)	0 (0%)
	AN	0.8 (1.9%)	0 (0%)	0.8 (1.9%)	0 (0%)
	BN	0.8 (1.9%)	0 (0%)	0.8 (1.9%)	0 (0%)
	D	0.8 (1.9%)	0 (0%)	0.8 (1.9%)	0 (0%)
	C	0.9 (2.2%)	0 (0%)	0.9 (2.2%)	0 (0%)
	All	0.8 (1.9%)	0 (0%)	0.8 (1.9%)	0 (0%)
MAR	W	0.4 (0.9%)	0 (0%)	0.4 (0.9%)	0 (0%)
	AN	0.3 (0.7%)	0 (0.1%)	0.4 (0.8%)	0.1 (0.2%)
	BN	0.4 (1%)	0 (0%)	0.4 (0.9%)	0 (0%)
	D	0.3 (0.7%)	0 (0.1%)	0.3 (0.7%)	0.1 (0.1%)
	C	0.7 (1.4%)	0 (0%)	0.7 (1.5%)	0 (0%)
	All	0.4 (0.9%)	0 (0%)	0.4 (0.9%)	0 (0.1%)
APR	W	0.6 (1.1%)	0 (0%)	0.6 (1.2%)	0 (0%)
	AN	0.6 (1.2%)	0.2 (0.4%)	0.8 (1.6%)	0.4 (0.8%)
	BN	0.8 (1.5%)	0 (0.1%)	0.7 (1.3%)	-0.1 (-0.2%)
	D	0.7 (1.3%)	-0.1 (-0.1%)	0.7 (1.3%)	-0.1 (-0.2%)
	C	0.8 (1.5%)	0.1 (0.1%)	0.9 (1.7%)	0.2 (0.3%)
	All	0.7 (1.3%)	0 (0.1%)	0.7 (1.3%)	0.1 (0.1%)
MAY	W	1.1 (2.3%)	0 (0%)	1.1 (2.3%)	0 (0%)
	AN	1 (2.1%)	0 (0%)	0.9 (1.9%)	-0.1 (-0.3%)
	BN	1.3 (2.6%)	0 (0.1%)	1.3 (2.6%)	0.1 (0.1%)
	D	1.3 (2.6%)	0 (0.1%)	1.3 (2.7%)	0 (0.1%)
	C	1.8 (3.5%)	0 (0%)	1.7 (3.2%)	-0.1 (-0.2%)
	All	1.3 (2.6%)	0 (0%)	1.2 (2.5%)	0 (0%)
JUN	W	0.7 (1.4%)	0 (0%)	0.7 (1.4%)	0 (0%)
	AN	0.7 (1.3%)	-0.2 (-0.4%)	0.5 (0.9%)	-0.5 (-0.8%)
	BN	0.7 (1.2%)	0.1 (0.2%)	0.5 (1%)	-0.1 (-0.1%)
	D	0.5 (1%)	-0.2 (-0.4%)	1 (1.7%)	0.2 (0.3%)
	C	1.7 (2.8%)	0.2 (0.3%)	1.3 (2.2%)	-0.2 (-0.3%)
	All	0.8 (1.5%)	0 (-0.1%)	0.8 (1.5%)	-0.1 (-0.1%)

Alternative 4A_ELT: Trinity River at Douglas City					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	1.9 (3.3%)	0.1 (0.1%)	1.8 (3.1%)	0 (-0.1%)
	AN	0.6 (1%)	-0.3 (-0.4%)	0.8 (1.4%)	-0.1 (-0.1%)
	BN	0.6 (1.1%)	0 (0%)	0.8 (1.3%)	0.1 (0.2%)
	D	0.8 (1.4%)	-0.2 (-0.3%)	0.8 (1.4%)	-0.2 (-0.3%)
	C	2.1 (3.4%)	0 (0%)	1.7 (2.8%)	-0.4 (-0.6%)
	All	1.3 (2.2%)	-0.1 (-0.1%)	1.2 (2.1%)	-0.1 (-0.2%)
AUG	W	0.8 (1.4%)	-0.2 (-0.4%)	0.8 (1.4%)	-0.2 (-0.4%)
	AN	0.9 (1.5%)	-0.1 (-0.2%)	0.9 (1.5%)	-0.1 (-0.2%)
	BN	1.3 (2.2%)	-0.2 (-0.4%)	1.3 (2.2%)	-0.2 (-0.3%)
	D	1.7 (2.8%)	0 (0%)	1.5 (2.5%)	-0.2 (-0.3%)
	C	3.4 (5.5%)	-0.4 (-0.6%)	2.4 (3.9%)	-1.4 (-2.2%)
	All	1.5 (2.5%)	-0.2 (-0.3%)	1.3 (2.2%)	-0.4 (-0.6%)
SEP	W	1 (1.7%)	-0.1 (-0.2%)	0.9 (1.7%)	-0.2 (-0.3%)
	AN	0.9 (1.7%)	-0.1 (-0.1%)	0.7 (1.2%)	-0.3 (-0.6%)
	BN	1.6 (2.9%)	-0.4 (-0.6%)	1.6 (2.8%)	-0.4 (-0.7%)
	D	2.1 (3.8%)	0 (-0.1%)	2.1 (3.8%)	-0.1 (-0.1%)
	C	2.4 (4.1%)	-1.3 (-2.1%)	1.2 (2%)	-2.6 (-4.1%)
	All	1.5 (2.8%)	-0.3 (-0.6%)	1.3 (2.3%)	-0.6 (-1%)
OCT	W	1.3 (2.6%)	-0.1 (-0.2%)	1.3 (2.5%)	-0.1 (-0.3%)
	AN	0.7 (1.4%)	-0.3 (-0.5%)	1.1 (2.2%)	0.1 (0.3%)
	BN	1.4 (2.7%)	0 (0%)	1.4 (2.7%)	0 (0%)
	D	0.8 (1.5%)	-0.1 (-0.1%)	0.8 (1.6%)	0 (0%)
	C	1.4 (2.7%)	-0.1 (-0.1%)	1.3 (2.4%)	-0.2 (-0.4%)
	All	1.1 (2.2%)	-0.1 (-0.2%)	1.2 (2.3%)	-0.1 (-0.1%)
NOV	W	1 (2.2%)	0 (-0.1%)	0.9 (2.1%)	0 (-0.1%)
	AN	0.9 (1.9%)	-0.1 (-0.2%)	0.8 (1.8%)	-0.1 (-0.3%)
	BN	1.1 (2.4%)	0 (0%)	1 (2.3%)	-0.1 (-0.1%)
	D	0.9 (2%)	-0.1 (-0.1%)	0.9 (2.1%)	0 (-0.1%)
	C	1 (2.3%)	0.2 (0.5%)	0.8 (1.7%)	0 (0%)
	All	1 (2.2%)	0 (0%)	0.9 (2%)	-0.1 (-0.1%)
DEC	W	0.7 (1.8%)	-0.1 (-0.2%)	0.7 (1.7%)	-0.1 (-0.3%)
	AN	0.8 (1.9%)	-0.2 (-0.6%)	0.9 (2.2%)	-0.1 (-0.3%)
	BN	0.8 (2%)	-0.1 (-0.3%)	0.8 (2%)	-0.1 (-0.3%)
	D	0.5 (1.4%)	0 (-0.1%)	0.6 (1.4%)	0 (-0.1%)
	C	0.7 (1.7%)	0 (0%)	0.8 (2%)	0.1 (0.3%)
	All	0.7 (1.7%)	-0.1 (-0.2%)	0.7 (1.8%)	-0.1 (-0.2%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Trinity River below North Fork**2 **Table B.7-51. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Trinity River below North Fork, Year-**  
3 **Round**

Alternative 4A_ELT: Trinity River below North Fork					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	40	40	40	40
	AN	38	39	39	39
	BN	38	38	38	38
	D	38	38	38	38
	C	38	39	39	39
	All	39	39	39	39
FEB	W	43	44	44	44
	AN	43	44	44	44
	BN	43	43	43	43
	D	43	43	43	43
	C	43	44	44	44
	All	43	44	44	44
MAR	W	46	46	46	46
	AN	46	47	47	47
	BN	46	47	47	47
	D	47	47	47	47
	C	48	48	48	48
	All	47	47	47	47
APR	W	53	53	53	53
	AN	54	54	54	54
	BN	54	54	54	54
	D	54	54	54	54
	C	54	55	55	55
	All	53	54	54	54
MAY	W	50	51	51	51
	AN	50	51	51	51
	BN	51	52	52	52
	D	51	53	53	53
	C	54	56	56	56
	All	51	52	52	52
JUN	W	55	56	56	56
	AN	58	59	58	58
	BN	60	60	60	60
	D	62	62	62	62
	C	63	65	65	64
	All	59	60	60	60



Alternative 4A_ELT: Trinity River below North Fork					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	63	64	64	64
	AN	63	64	64	64
	BN	65	65	65	65
	D	65	66	66	66
	C	68	69	69	69
	All	65	66	66	66
AUG	W	65	66	66	66
	AN	64	65	65	65
	BN	65	66	66	66
	D	64	65	65	65
	C	65	68	67	67
	All	65	66	66	66
SEP	W	59	60	60	60
	AN	59	60	60	60
	BN	59	61	61	61
	D	58	60	60	60
	C	61	63	63	62
	All	59	61	61	60
OCT	W	53	54	54	54
	AN	53	54	54	54
	BN	54	55	55	55
	D	53	54	53	53
	C	54	55	55	55
	All	53	54	54	54
NOV	W	44	44	44	44
	AN	44	45	45	45
	BN	44	45	45	45
	D	44	44	44	44
	C	45	46	46	46
	All	44	45	45	45
DEC	W	41	41	41	41
	AN	40	41	41	41
	BN	39	40	40	40
	D	40	40	40	40
	C	38	39	39	39
	All	40	40	40	40

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2

1 **Table B.7-52. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the Trinity**  
 2 **River below North Fork, Year-Round**

Alternative 4A_ELT: Trinity River below North Fork					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	0.6 (1.5%)	0 (0.1%)	0.6 (1.4%)	0 (0%)
	AN	0.5 (1.2%)	0 (0.1%)	0.5 (1.2%)	0 (0.1%)
	BN	0.3 (0.8%)	0 (-0.1%)	0.3 (0.8%)	0 (-0.1%)
	D	0.6 (1.6%)	0 (-0.1%)	0.6 (1.5%)	-0.1 (-0.2%)
	C	0.7 (1.8%)	0 (-0.1%)	0.7 (1.8%)	0 (-0.1%)
	All	0.6 (1.4%)	0 (0%)	0.5 (1.4%)	0 (-0.1%)
FEB	W	0.5 (1.2%)	0 (0%)	0.5 (1.2%)	0 (0%)
	AN	0.6 (1.3%)	0 (0%)	0.6 (1.3%)	0 (0%)
	BN	0.6 (1.4%)	0 (0%)	0.6 (1.3%)	0 (0%)
	D	0.5 (1.3%)	0 (0%)	0.5 (1.3%)	0 (0%)
	C	0.7 (1.7%)	0 (0%)	0.7 (1.7%)	0 (0%)
	All	0.6 (1.3%)	0 (0%)	0.6 (1.3%)	0 (0%)
MAR	W	0.2 (0.5%)	0 (0%)	0.2 (0.5%)	0 (0%)
	AN	0.2 (0.4%)	0 (0%)	0.2 (0.5%)	0 (0.1%)
	BN	0.3 (0.6%)	0 (0%)	0.3 (0.5%)	0 (0%)
	D	0.2 (0.5%)	0 (0%)	0.2 (0.5%)	0 (0%)
	C	0.4 (0.9%)	0 (0%)	0.5 (0.9%)	0 (0%)
	All	0.3 (0.6%)	0 (0%)	0.3 (0.6%)	0 (0%)
APR	W	0.3 (0.7%)	0 (0%)	0.4 (0.7%)	0 (0%)
	AN	0.4 (0.7%)	0.2 (0.3%)	0.5 (0.9%)	0.2 (0.4%)
	BN	0.4 (0.8%)	0 (0%)	0.4 (0.7%)	0 (-0.1%)
	D	0.5 (0.8%)	0 (0%)	0.4 (0.8%)	0 (-0.1%)
	C	0.6 (1%)	0 (0%)	0.6 (1.1%)	0.1 (0.1%)
	All	0.4 (0.8%)	0 (0%)	0.4 (0.8%)	0 (0.1%)
MAY	W	1 (2.1%)	0 (0%)	1.1 (2.1%)	0 (0%)
	AN	1 (2%)	0 (0%)	0.9 (1.8%)	-0.1 (-0.2%)
	BN	1.2 (2.3%)	0 (0.1%)	1.2 (2.4%)	0.1 (0.1%)
	D	1.2 (2.3%)	0 (0%)	1.2 (2.4%)	0 (0.1%)
	C	1.7 (3.1%)	0 (0%)	1.5 (2.8%)	-0.1 (-0.2%)
	All	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
JUN	W	0.6 (1%)	0 (0%)	0.6 (1%)	0 (0%)
	AN	0.7 (1.3%)	-0.1 (-0.2%)	0.6 (1%)	-0.3 (-0.5%)
	BN	0.6 (1.1%)	0 (0.1%)	0.5 (0.9%)	-0.1 (-0.1%)
	D	0.7 (1.2%)	-0.1 (-0.2%)	0.9 (1.5%)	0.1 (0.2%)
	C	1.3 (2.1%)	0.1 (0.1%)	1.1 (1.8%)	-0.1 (-0.2%)
	All	0.7 (1.3%)	0 (0%)	0.7 (1.2%)	0 (-0.1%)

Alternative 4A_ELT: Trinity River below North Fork					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	1.6 (2.6%)	0 (0.1%)	1.5 (2.5%)	0 (0%)
	AN	0.6 (1%)	-0.2 (-0.2%)	0.8 (1.2%)	0 (0%)
	BN	0.5 (0.8%)	0 (0%)	0.6 (0.9%)	0.1 (0.1%)
	D	0.8 (1.3%)	-0.1 (-0.1%)	0.8 (1.3%)	-0.1 (-0.1%)
	C	1.4 (2.1%)	0 (0%)	1.2 (1.8%)	-0.2 (-0.3%)
	All	1.1 (1.7%)	0 (0%)	1.1 (1.6%)	0 (-0.1%)
AUG	W	1 (1.5%)	-0.1 (-0.2%)	1 (1.5%)	-0.1 (-0.2%)
	AN	1 (1.6%)	-0.1 (-0.1%)	1.1 (1.6%)	-0.1 (-0.1%)
	BN	1.2 (1.9%)	-0.1 (-0.2%)	1.3 (2%)	-0.1 (-0.1%)
	D	1.5 (2.3%)	0 (0%)	1.4 (2.2%)	-0.1 (-0.2%)
	C	2.2 (3.3%)	-0.2 (-0.3%)	1.7 (2.6%)	-0.7 (-1%)
	All	1.3 (2%)	-0.1 (-0.2%)	1.2 (1.9%)	-0.2 (-0.3%)
SEP	W	1.1 (1.9%)	-0.1 (-0.1%)	1.1 (1.9%)	-0.1 (-0.1%)
	AN	1.1 (1.9%)	0 (0%)	1 (1.7%)	-0.2 (-0.3%)
	BN	1.4 (2.4%)	-0.2 (-0.3%)	1.4 (2.4%)	-0.2 (-0.3%)
	D	1.7 (2.9%)	0 (0%)	1.7 (2.9%)	0 (-0.1%)
	C	1.9 (3.1%)	-0.5 (-0.7%)	1.2 (2%)	-1.2 (-1.8%)
	All	1.4 (2.4%)	-0.1 (-0.2%)	1.3 (2.2%)	-0.3 (-0.4%)
OCT	W	1 (2%)	0 (-0.1%)	1 (1.9%)	-0.1 (-0.1%)
	AN	1 (1.8%)	0 (0%)	0.9 (1.7%)	-0.1 (-0.2%)
	BN	1.1 (2.1%)	0 (0%)	1.1 (2.1%)	0 (-0.1%)
	D	0.9 (1.7%)	0 (-0.1%)	0.8 (1.6%)	-0.1 (-0.2%)
	C	1.2 (2.2%)	-0.1 (-0.1%)	1.1 (2%)	-0.1 (-0.2%)
	All	1 (2%)	0 (-0.1%)	1 (1.9%)	-0.1 (-0.1%)
NOV	W	0.8 (1.7%)	0 (0%)	0.8 (1.7%)	0 (0%)
	AN	0.6 (1.5%)	0 (-0.1%)	0.7 (1.5%)	0 (0%)
	BN	0.9 (2%)	0 (0%)	0.9 (2%)	0 (0%)
	D	0.7 (1.6%)	0 (-0.1%)	0.7 (1.6%)	0 (-0.1%)
	C	0.9 (1.9%)	0.1 (0.2%)	0.8 (1.7%)	0 (0%)
	All	0.8 (1.8%)	0 (0%)	0.8 (1.7%)	0 (0%)
DEC	W	0.6 (1.4%)	0 (0%)	0.6 (1.4%)	0 (0%)
	AN	0.6 (1.4%)	-0.1 (-0.2%)	0.6 (1.5%)	0 (-0.1%)
	BN	0.7 (1.8%)	0 (-0.1%)	0.7 (1.7%)	-0.1 (-0.1%)
	D	0.5 (1.4%)	0 (0%)	0.5 (1.4%)	0 (0%)
	C	0.6 (1.7%)	0 (0%)	0.7 (1.8%)	0.1 (0.1%)
	All	0.6 (1.5%)	0 (0%)	0.6 (1.5%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Feather River at Fish Barrier Dam**2 **Table B.7-53. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Feather River at Fish Barrier Dam, Year-**  
3 **Round**

Alternative 4A_ELT: Feather River at Fish Barrier Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	48	49	49	49
	AN	47	49	49	49
	BN	48	49	49	49
	D	47	49	49	49
	C	48	49	49	49
	All	48	49	49	49
FEB	W	48	49	49	49
	AN	48	49	49	49
	BN	48	50	50	50
	D	49	50	50	50
	C	49	51	51	51
	All	48	50	50	50
MAR	W	49	50	50	50
	AN	49	50	50	50
	BN	50	51	51	51
	D	51	52	52	52
	C	51	52	53	53
	All	50	51	51	51
APR	W	51	51	51	51
	AN	51	52	52	51
	BN	52	53	53	52
	D	52	53	53	53
	C	52	53	53	53
	All	51	52	52	52
MAY	W	55	55	55	55
	AN	56	56	56	55
	BN	56	56	56	56
	D	56	56	56	56
	C	56	56	56	56
	All	55	56	56	55
JUN	W	57	58	57	58
	AN	58	58	58	58
	BN	58	58	57	58
	D	58	58	58	58
	C	58	58	58	58
	All	58	58	58	58

Alternative 4A_ELT: Feather River at Fish Barrier Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	61	61	61	62
	AN	61	61	61	61
	BN	61	61	61	61
	D	61	61	61	62
	C	61	62	63	62
	All	61	61	61	62
AUG	W	61	61	61	61
	AN	60	60	60	61
	BN	60	60	60	61
	D	60	61	61	61
	C	62	63	62	61
	All	61	61	61	61
SEP	W	56	55	55	56
	AN	56	55	55	56
	BN	56	56	57	59
	D	56	57	57	57
	C	58	59	58	57
	All	56	56	56	57
OCT	W	54	54	54	55
	AN	55	55	56	56
	BN	54	55	55	56
	D	54	55	55	57
	C	54	55	55	54
	All	54	55	55	56
NOV	W	52	53	53	54
	AN	53	54	54	55
	BN	53	54	54	55
	D	52	54	55	55
	C	53	54	54	53
	All	53	54	54	54
DEC	W	49	51	51	51
	AN	49	51	51	51
	BN	49	51	51	51
	D	49	51	51	51
	C	49	51	51	50
	All	49	51	51	51

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2

1 **Table B.7-54. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the Feather**  
 2 **River at Fish Barrier Dam, Year-Round**

Alternative 4A_ELT: Feather River at Fish Barrier Dam					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	1.3 (2.7%)	0 (0%)	1.4 (2.8%)	0.1 (0.1%)
	AN	1.4 (3.1%)	-0.2 (-0.3%)	1.6 (3.4%)	0 (0%)
	BN	1.2 (2.6%)	-0.2 (-0.3%)	1.2 (2.6%)	-0.2 (-0.3%)
	D	1.6 (3.4%)	-0.2 (-0.3%)	1.7 (3.6%)	0 (-0.1%)
	C	1.8 (3.8%)	0.1 (0.2%)	1.6 (3.4%)	-0.1 (-0.2%)
	All	1.4 (3%)	-0.1 (-0.2%)	1.5 (3.1%)	0 (-0.1%)
FEB	W	1.1 (2.4%)	0 (0.1%)	1.2 (2.4%)	0.1 (0.1%)
	AN	1.3 (2.7%)	0 (0%)	1.4 (3%)	0.1 (0.2%)
	BN	1.4 (2.9%)	-0.1 (-0.2%)	1.5 (3.2%)	0 (0.1%)
	D	1.5 (3%)	0 (0%)	1.4 (2.9%)	0 (-0.1%)
	C	1.7 (3.4%)	0 (-0.1%)	1.7 (3.5%)	0 (-0.1%)
	All	1.4 (2.8%)	0 (0%)	1.4 (2.9%)	0 (0.1%)
MAR	W	1 (2.1%)	0.1 (0.1%)	1 (2.1%)	0.1 (0.1%)
	AN	0.9 (1.8%)	-0.1 (-0.1%)	1.1 (2.2%)	0.1 (0.2%)
	BN	1.7 (3.5%)	0.1 (0.2%)	1.4 (2.9%)	-0.2 (-0.4%)
	D	1.2 (2.3%)	-0.1 (-0.2%)	1.1 (2.2%)	-0.2 (-0.4%)
	C	1.5 (2.8%)	0.3 (0.5%)	1.5 (3%)	0.4 (0.7%)
	All	1.2 (2.5%)	0 (0.1%)	1.2 (2.4%)	0 (0%)
APR	W	0.6 (1.1%)	0 (0.1%)	0.3 (0.6%)	-0.2 (-0.4%)
	AN	0.6 (1.2%)	0.1 (0.1%)	0 (0%)	-0.6 (-1.1%)
	BN	0.5 (0.9%)	0 (-0.1%)	-0.2 (-0.4%)	-0.7 (-1.4%)
	D	0.6 (1.1%)	-0.1 (-0.2%)	0.6 (1.1%)	-0.1 (-0.2%)
	C	1 (2%)	-0.1 (-0.1%)	1.2 (2.4%)	0.1 (0.2%)
	All	0.6 (1.2%)	0 (0%)	0.4 (0.7%)	-0.3 (-0.5%)
MAY	W	0.3 (0.6%)	0 (0%)	-0.1 (-0.3%)	-0.5 (-0.8%)
	AN	0.1 (0.2%)	-0.3 (-0.5%)	-0.6 (-1.1%)	-1 (-1.8%)
	BN	0.2 (0.4%)	-0.1 (-0.1%)	-0.4 (-0.7%)	-0.7 (-1.2%)
	D	0.2 (0.3%)	0 (0%)	0.1 (0.2%)	-0.1 (-0.1%)
	C	0.4 (0.8%)	0.1 (0.2%)	0.4 (0.7%)	0.1 (0.2%)
	All	0.3 (0.5%)	0 (-0.1%)	-0.1 (-0.2%)	-0.4 (-0.7%)
JUN	W	0.1 (0.2%)	-0.4 (-0.7%)	0.8 (1.4%)	0.2 (0.4%)
	AN	-0.2 (-0.3%)	-0.5 (-0.8%)	0.3 (0.5%)	0 (0%)
	BN	-0.5 (-0.9%)	-0.7 (-1.2%)	0 (-0.1%)	-0.2 (-0.3%)
	D	0 (0%)	-0.2 (-0.3%)	0.2 (0.3%)	0 (0%)
	C	0.4 (0.7%)	0.1 (0.2%)	0.5 (0.8%)	0.1 (0.2%)
	All	0 (0%)	-0.3 (-0.6%)	0.4 (0.7%)	0.1 (0.1%)

Alternative 4A_ELT: Feather River at Fish Barrier Dam					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	0.1 (0.2%)	0.1 (0.1%)	0.3 (0.5%)	0.3 (0.4%)
	AN	0.1 (0.1%)	0 (0%)	0.6 (1.1%)	0.6 (0.9%)
	BN	0.3 (0.4%)	0.1 (0.1%)	0.5 (0.8%)	0.3 (0.5%)
	D	0.6 (0.9%)	0.3 (0.5%)	0.8 (1.4%)	0.6 (0.9%)
	C	1.5 (2.5%)	0.7 (1.1%)	1.3 (2.2%)	0.5 (0.8%)
	All	0.4 (0.7%)	0.2 (0.3%)	0.7 (1.1%)	0.4 (0.7%)
AUG	W	-0.1 (-0.1%)	0.3 (0.5%)	0.5 (0.8%)	0.9 (1.4%)
	AN	0.2 (0.3%)	0.2 (0.3%)	1 (1.6%)	1 (1.6%)
	BN	0.4 (0.7%)	0.2 (0.2%)	1 (1.6%)	0.7 (1.2%)
	D	1 (1.6%)	0.2 (0.3%)	1.3 (2.2%)	0.5 (0.9%)
	C	0.3 (0.5%)	-0.9 (-1.4%)	-0.7 (-1.2%)	-1.9 (-3%)
	All	0.3 (0.5%)	0.1 (0.1%)	0.6 (1.1%)	0.4 (0.6%)
SEP	W	-1.1 (-2%)	0.2 (0.4%)	-0.4 (-0.7%)	1 (1.7%)
	AN	-0.8 (-1.4%)	0.3 (0.6%)	0.4 (0.8%)	1.6 (2.9%)
	BN	0.8 (1.4%)	0.8 (1.5%)	2.9 (5.3%)	3 (5.4%)
	D	1.6 (2.9%)	0.1 (0.2%)	1.3 (2.3%)	-0.2 (-0.4%)
	C	0.5 (0.8%)	-0.3 (-0.5%)	-1.2 (-2%)	-1.9 (-3.3%)
	All	0.1 (0.2%)	0.2 (0.4%)	0.6 (1%)	0.7 (1.3%)
OCT	W	0.6 (1%)	-0.1 (-0.2%)	1.9 (3.6%)	1.3 (2.4%)
	AN	0.6 (1.1%)	0.1 (0.1%)	1.4 (2.6%)	0.9 (1.7%)
	BN	0.8 (1.5%)	-0.2 (-0.4%)	2 (3.6%)	0.9 (1.6%)
	D	0.8 (1.6%)	-0.8 (-1.5%)	2.8 (5.2%)	1.1 (2%)
	C	0.7 (1.2%)	-0.5 (-0.8%)	0.1 (0.3%)	-1 (-1.7%)
	All	0.7 (1.3%)	-0.3 (-0.6%)	1.8 (3.3%)	0.8 (1.5%)
NOV	W	1.1 (2%)	0 (0%)	1.7 (3.3%)	0.7 (1.3%)
	AN	1.3 (2.4%)	0.1 (0.1%)	1.8 (3.5%)	0.6 (1.1%)
	BN	0.9 (1.7%)	-0.1 (-0.1%)	1.8 (3.5%)	0.9 (1.6%)
	D	2.2 (4.2%)	0.3 (0.6%)	2.3 (4.3%)	0.4 (0.7%)
	C	1 (1.8%)	-0.1 (-0.2%)	0.1 (0.2%)	-1 (-1.8%)
	All	1.3 (2.5%)	0.1 (0.1%)	1.6 (3.1%)	0.4 (0.7%)
DEC	W	1.8 (3.6%)	-0.1 (-0.2%)	1.8 (3.8%)	0 (-0.1%)
	AN	1.8 (3.7%)	-0.2 (-0.3%)	2.3 (4.7%)	0.3 (0.6%)
	BN	2.5 (5.2%)	0.4 (0.9%)	2.1 (4.3%)	0 (0%)
	D	2.5 (5%)	0 (0.1%)	2.3 (4.6%)	-0.2 (-0.3%)
	C	2.2 (4.5%)	0.6 (1.1%)	0.9 (1.9%)	-0.7 (-1.4%)
	All	2.1 (4.3%)	0.1 (0.2%)	1.9 (3.9%)	-0.1 (-0.2%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Feather River Low-Flow Channel (above Thermalito Afterbay)**2 **Table B.7-55. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Feather River Low-Flow Channel (above**  
3 **Thermalito Afterbay), Year-Round**

Alternative 4A_ELT: Feather River Low-Flow Channel (above Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	47	49	49	49
	AN	47	49	49	49
	BN	47	49	48	48
	D	47	49	48	48
	C	47	49	49	49
	All	47	49	49	49
FEB	W	49	50	50	50
	AN	49	50	50	50
	BN	49	50	50	50
	D	49	51	51	51
	C	50	51	51	51
	All	49	50	50	50
MAR	W	50	51	51	51
	AN	51	52	52	52
	BN	51	53	53	53
	D	52	54	54	53
	C	53	54	54	54
	All	51	53	53	53
APR	W	53	54	54	54
	AN	55	55	55	55
	BN	55	56	56	55
	D	55	56	56	56
	C	55	56	56	56
	All	55	55	55	55
MAY	W	59	60	60	60
	AN	60	61	61	61
	BN	60	61	61	60
	D	60	61	61	61
	C	60	61	61	61
	All	60	61	61	60
JUN	W	63	64	64	64
	AN	64	65	65	65
	BN	64	65	64	65
	D	64	65	65	65
	C	63	64	64	64
	All	64	65	64	65



Alternative 4A_ELT: Feather River Low-Flow Channel (above Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	68	68	68	69
	AN	67	68	68	68
	BN	67	68	68	68
	D	67	68	68	68
	C	67	69	69	69
	All	67	68	68	68
AUG	W	66	67	67	67
	AN	65	66	66	67
	BN	66	67	67	67
	D	65	67	67	67
	C	67	68	68	67
	All	66	67	67	67
SEP	W	60	60	60	60
	AN	60	60	60	61
	BN	60	61	61	63
	D	60	61	62	61
	C	61	62	62	61
	All	60	61	61	61
OCT	W	55	56	56	57
	AN	57	57	57	58
	BN	56	57	57	58
	D	56	57	57	58
	C	56	57	57	57
	All	56	57	57	58
NOV	W	52	53	53	54
	AN	53	55	55	55
	BN	53	54	54	55
	D	53	54	55	55
	C	53	54	54	53
	All	53	54	54	54
DEC	W	48	50	50	50
	AN	49	50	50	51
	BN	48	50	50	50
	D	48	50	50	50
	C	48	50	50	49
	All	48	50	50	50

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2

1 **Table B.7-56. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the Feather**  
 2 **River Low-Flow Channel (above Thermalito Afterbay), Year-Round**

Alternative 4A_ELT: Feather River Low-Flow Channel (above Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	1.3 (2.8%)	0 (0%)	1.4 (2.9%)	0.1 (0.1%)
	AN	1.5 (3.1%)	-0.1 (-0.2%)	1.6 (3.4%)	0 (0%)
	BN	1.2 (2.6%)	-0.1 (-0.3%)	1.2 (2.6%)	-0.1 (-0.3%)
	D	1.5 (3.3%)	-0.1 (-0.3%)	1.6 (3.5%)	0 (-0.1%)
	C	1.7 (3.7%)	0.1 (0.2%)	1.6 (3.3%)	-0.1 (-0.1%)
	All	1.4 (3%)	-0.1 (-0.1%)	1.5 (3.1%)	0 (0%)
FEB	W	1.2 (2.5%)	0 (0.1%)	1.2 (2.5%)	0.1 (0.1%)
	AN	1.3 (2.7%)	0 (0%)	1.4 (2.9%)	0.1 (0.1%)
	BN	1.4 (2.9%)	-0.1 (-0.1%)	1.5 (3.1%)	0 (0.1%)
	D	1.5 (3%)	0 (0%)	1.4 (2.9%)	0 (-0.1%)
	C	1.6 (3.3%)	0 (-0.1%)	1.6 (3.3%)	0 (0%)
	All	1.4 (2.8%)	0 (0%)	1.4 (2.9%)	0 (0.1%)
MAR	W	1 (2.1%)	0.1 (0.1%)	1 (2%)	0 (0.1%)
	AN	0.9 (1.8%)	0 (0%)	1 (2%)	0.1 (0.2%)
	BN	1.5 (3%)	0.1 (0.1%)	1.3 (2.5%)	-0.2 (-0.3%)
	D	1.2 (2.2%)	-0.1 (-0.2%)	1.1 (2.1%)	-0.2 (-0.3%)
	C	1.4 (2.6%)	0.2 (0.3%)	1.4 (2.7%)	0.2 (0.5%)
	All	1.2 (2.3%)	0 (0.1%)	1.2 (2.2%)	0 (0%)
APR	W	0.7 (1.2%)	0 (0.1%)	0.5 (0.9%)	-0.2 (-0.3%)
	AN	0.7 (1.3%)	0 (0.1%)	0.3 (0.5%)	-0.4 (-0.7%)
	BN	0.6 (1.1%)	0 (0%)	0.1 (0.2%)	-0.5 (-0.9%)
	D	0.8 (1.4%)	-0.1 (-0.1%)	0.7 (1.3%)	-0.1 (-0.2%)
	C	1 (1.8%)	-0.1 (-0.1%)	1.2 (2.1%)	0.1 (0.1%)
	All	0.7 (1.3%)	0 (0%)	0.5 (1%)	-0.2 (-0.4%)
MAY	W	0.8 (1.3%)	0 (0%)	0.5 (0.8%)	-0.3 (-0.5%)
	AN	0.6 (1.1%)	-0.2 (-0.3%)	0.1 (0.2%)	-0.7 (-1.1%)
	BN	0.7 (1.2%)	0 (-0.1%)	0.3 (0.5%)	-0.5 (-0.8%)
	D	0.7 (1.2%)	0 (0%)	0.7 (1.2%)	0 (-0.1%)
	C	0.9 (1.5%)	0.1 (0.1%)	0.9 (1.4%)	0.1 (0.1%)
	All	0.8 (1.3%)	0 (0%)	0.5 (0.8%)	-0.3 (-0.4%)
JUN	W	0.7 (1.2%)	-0.3 (-0.4%)	1.2 (1.9%)	0.2 (0.2%)
	AN	0.6 (1%)	-0.3 (-0.5%)	0.9 (1.5%)	0 (0%)
	BN	0.4 (0.7%)	-0.4 (-0.7%)	0.7 (1.2%)	-0.1 (-0.2%)
	D	0.8 (1.2%)	-0.1 (-0.2%)	0.9 (1.4%)	0 (0%)
	C	0.9 (1.5%)	0.1 (0.2%)	1 (1.5%)	0.1 (0.2%)
	All	0.7 (1.1%)	-0.2 (-0.3%)	1 (1.5%)	0 (0.1%)

Alternative 4A_ELT: Feather River Low-Flow Channel (above Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	0.8 (1.2%)	0 (0%)	1 (1.5%)	0.2 (0.3%)
	AN	0.9 (1.3%)	0 (0%)	1.2 (1.8%)	0.3 (0.5%)
	BN	1 (1.4%)	0 (0.1%)	1.1 (1.7%)	0.2 (0.3%)
	D	1.2 (1.7%)	0.2 (0.3%)	1.3 (2%)	0.4 (0.5%)
	C	1.9 (2.8%)	0.4 (0.6%)	1.7 (2.6%)	0.3 (0.4%)
	All	1.1 (1.6%)	0.1 (0.2%)	1.2 (1.8%)	0.3 (0.4%)
AUG	W	0.7 (1.1%)	0.2 (0.3%)	1.1 (1.6%)	0.6 (0.9%)
	AN	0.9 (1.3%)	0.1 (0.2%)	1.4 (2.1%)	0.6 (1%)
	BN	1.1 (1.6%)	0.1 (0.1%)	1.4 (2.2%)	0.5 (0.7%)
	D	1.4 (2.2%)	0.1 (0.2%)	1.7 (2.5%)	0.4 (0.5%)
	C	1 (1.5%)	-0.6 (-0.9%)	0.3 (0.5%)	-1.3 (-1.8%)
	All	1 (1.5%)	0 (0%)	1.2 (1.8%)	0.2 (0.4%)
SEP	W	-0.3 (-0.5%)	0.1 (0.2%)	0.2 (0.4%)	0.7 (1.2%)
	AN	-0.1 (-0.2%)	0.3 (0.4%)	0.8 (1.4%)	1.2 (2%)
	BN	1 (1.7%)	0.6 (1%)	2.6 (4.4%)	2.2 (3.6%)
	D	1.7 (2.9%)	0.1 (0.2%)	1.5 (2.4%)	-0.2 (-0.3%)
	C	0.8 (1.3%)	-0.2 (-0.3%)	-0.4 (-0.7%)	-1.4 (-2.3%)
	All	0.6 (0.9%)	0.2 (0.3%)	0.9 (1.5%)	0.5 (0.9%)
OCT	W	0.8 (1.4%)	-0.1 (-0.1%)	1.9 (3.4%)	1 (1.8%)
	AN	0.8 (1.4%)	0.1 (0.1%)	1.5 (2.6%)	0.8 (1.3%)
	BN	1 (1.8%)	-0.2 (-0.3%)	1.9 (3.4%)	0.7 (1.2%)
	D	1 (1.8%)	-0.6 (-1.1%)	2.5 (4.5%)	0.9 (1.6%)
	C	0.9 (1.6%)	-0.3 (-0.6%)	0.5 (0.9%)	-0.7 (-1.3%)
	All	0.9 (1.6%)	-0.2 (-0.4%)	1.8 (3.2%)	0.6 (1.1%)
NOV	W	1.1 (2.1%)	0 (0%)	1.7 (3.2%)	0.6 (1.1%)
	AN	1.3 (2.4%)	0 (0.1%)	1.7 (3.3%)	0.5 (0.9%)
	BN	1 (1.8%)	0 (-0.1%)	1.7 (3.3%)	0.8 (1.4%)
	D	2.1 (3.9%)	0.3 (0.5%)	2.1 (4%)	0.3 (0.6%)
	C	1 (1.9%)	-0.1 (-0.2%)	0.3 (0.6%)	-0.8 (-1.5%)
	All	1.3 (2.5%)	0.1 (0.1%)	1.6 (3%)	0.3 (0.6%)
DEC	W	1.7 (3.5%)	-0.1 (-0.2%)	1.8 (3.6%)	0 (-0.1%)
	AN	1.7 (3.5%)	-0.1 (-0.3%)	2.1 (4.3%)	0.3 (0.5%)
	BN	2.3 (4.7%)	0.4 (0.7%)	1.9 (3.9%)	0 (0%)
	D	2.2 (4.7%)	0 (0%)	2.1 (4.3%)	-0.2 (-0.3%)
	C	2 (4.2%)	0.5 (1%)	0.9 (2%)	-0.6 (-1.2%)
	All	2 (4.1%)	0.1 (0.2%)	1.8 (3.7%)	-0.1 (-0.2%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

## 1 Feather River High-Flow Channel (below Thermalito Afterbay)

2 Table B.7-57. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Feather River High-Flow Channel (below  
3 Thermalito Afterbay), Year-Round

Alternative 4A_ELT: Feather River High-Flow Channel (below Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	47	48	48	48
	AN	47	48	48	48
	BN	46	48	47	48
	D	46	47	47	47
	C	46	48	48	48
	All	47	48	48	48
FEB	W	49	50	50	50
	AN	49	51	51	51
	BN	49	51	51	51
	D	50	51	51	51
	C	51	52	52	52
	All	50	51	51	51
MAR	W	51	52	52	52
	AN	52	53	53	53
	BN	53	55	55	55
	D	54	55	56	56
	C	54	55	55	55
	All	53	54	54	54
APR	W	55	56	56	55
	AN	57	58	58	57
	BN	58	58	58	56
	D	57	58	59	58
	C	57	58	58	58
	All	57	57	57	57
MAY	W	61	62	62	61
	AN	63	64	63	62
	BN	63	64	64	63
	D	63	64	64	64
	C	63	65	65	65
	All	62	63	63	63
JUN	W	66	67	66	67
	AN	67	69	67	69
	BN	67	69	66	68
	D	68	69	69	69
	C	68	69	69	69
	All	67	68	67	68

Alternative 4A_ELT: Feather River High-Flow Channel (below Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	70	70	70	71
	AN	68	68	68	71
	BN	68	69	69	70
	D	68	69	70	71
	C	70	72	74	74
	All	69	70	70	71
AUG	W	70	70	70	71
	AN	67	68	69	70
	BN	68	69	70	70
	D	67	69	71	71
	C	70	72	71	72
	All	69	70	70	71
SEP	W	64	62	63	63
	AN	64	62	64	65
	BN	65	66	65	66
	D	64	65	64	64
	C	64	66	66	66
	All	64	64	64	65
OCT	W	58	60	60	60
	AN	60	61	61	61
	BN	59	61	60	61
	D	58	60	59	60
	C	59	60	60	60
	All	59	60	60	61
NOV	W	53	54	54	54
	AN	54	55	55	55
	BN	53	54	54	55
	D	53	54	54	54
	C	53	55	55	54
	All	53	54	54	54
DEC	W	48	49	49	49
	AN	48	49	49	49
	BN	47	48	49	48
	D	47	49	49	49
	C	47	48	48	47
	All	47	49	49	49

1  
2

1 **Table B.7-58. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the Feather**  
 2 **River High-Flow Channel (below Thermalito Afterbay), Year-Round**

<b>Alternative 4A_ELT: Feather River High-Flow Channel (below Thermalito Afterbay)</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS vs. H3_ELT</b>	<b>NAA_ELT vs. H3_ELT</b>	<b>EXISTING CONDITIONS vs. H4_ELT</b>	<b>NAA_ELT vs. H4_ELT</b>
JAN	W	1.2 (2.6%)	0 (-0.1%)	1.3 (2.8%)	0 (0.1%)
	AN	1.3 (2.8%)	-0.1 (-0.2%)	1.4 (3.1%)	0.1 (0.2%)
	BN	1.1 (2.4%)	-0.2 (-0.4%)	1.4 (3%)	0 (0.1%)
	D	1.4 (3%)	0.1 (0.2%)	1.4 (3.1%)	0.1 (0.3%)
	C	1.5 (3.1%)	-0.1 (-0.2%)	1.3 (2.8%)	-0.3 (-0.5%)
	All	1.3 (2.8%)	-0.1 (-0.1%)	1.4 (2.9%)	0 (0%)
FEB	W	1.2 (2.5%)	0 (0%)	1.3 (2.7%)	0.1 (0.3%)
	AN	1.4 (2.8%)	-0.2 (-0.4%)	1.6 (3.3%)	0 (0.1%)
	BN	1.6 (3.3%)	0.1 (0.1%)	1.6 (3.2%)	0 (0.1%)
	D	1.4 (2.9%)	0 (0.1%)	1.4 (2.7%)	0 (-0.1%)
	C	1.5 (3%)	0 (0%)	1.6 (3.2%)	0.1 (0.2%)
	All	1.4 (2.8%)	0 (0%)	1.5 (3%)	0.1 (0.1%)
MAR	W	1 (1.9%)	0.1 (0.1%)	1 (1.9%)	0.1 (0.2%)
	AN	0.4 (0.7%)	0 (0.1%)	0.4 (0.7%)	0 (0%)
	BN	1.5 (2.9%)	0.2 (0.4%)	1.4 (2.7%)	0.1 (0.2%)
	D	1.3 (2.4%)	0.1 (0.2%)	1.3 (2.4%)	0.1 (0.1%)
	C	1.6 (3%)	0.2 (0.4%)	1.4 (2.7%)	0.1 (0.1%)
	All	1.2 (2.2%)	0.1 (0.2%)	1.1 (2.1%)	0.1 (0.1%)
APR	W	0.7 (1.3%)	0 (0%)	-0.2 (-0.4%)	-0.9 (-1.7%)
	AN	0.9 (1.5%)	0 (0%)	-0.4 (-0.8%)	-1.3 (-2.2%)
	BN	0.5 (0.8%)	0 (0%)	-1.2 (-2.1%)	-1.7 (-2.9%)
	D	1.3 (2.3%)	0.3 (0.4%)	1 (1.7%)	-0.1 (-0.1%)
	C	1.3 (2.2%)	0.1 (0.3%)	1.3 (2.3%)	0.2 (0.3%)
	All	0.9 (1.6%)	0.1 (0.1%)	0.1 (0.1%)	-0.8 (-1.3%)
MAY	W	1.3 (2.2%)	0 (0%)	0.2 (0.3%)	-1.2 (-1.9%)
	AN	0.5 (0.8%)	-0.4 (-0.6%)	-0.9 (-1.5%)	-1.8 (-2.9%)
	BN	1.1 (1.7%)	-0.1 (-0.1%)	0 (0.1%)	-1.1 (-1.7%)
	D	1.4 (2.3%)	-0.1 (-0.1%)	1.2 (1.9%)	-0.3 (-0.5%)
	C	1.4 (2.3%)	-0.1 (-0.1%)	1.4 (2.3%)	-0.1 (-0.1%)
	All	1.2 (2%)	-0.1 (-0.1%)	0.4 (0.7%)	-0.9 (-1.4%)
JUN	W	0.5 (0.8%)	-1.1 (-1.7%)	1.3 (1.9%)	-0.4 (-0.6%)
	AN	-0.4 (-0.6%)	-1.9 (-2.7%)	1.2 (1.7%)	-0.3 (-0.4%)
	BN	-1.2 (-1.7%)	-2.4 (-3.5%)	0.3 (0.5%)	-0.9 (-1.3%)
	D	0.5 (0.8%)	-0.9 (-1.3%)	1.3 (1.8%)	-0.2 (-0.3%)
	C	1.7 (2.5%)	0.1 (0.1%)	1.7 (2.5%)	0.1 (0.1%)
	All	0.3 (0.4%)	-1.2 (-1.8%)	1.1 (1.7%)	-0.4 (-0.5%)

<b>Alternative 4A_ELT: Feather River High-Flow Channel (below Thermalito Afterbay)</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS vs. H3_ELT</b>	<b>NAA_ELT vs. H3_ELT</b>	<b>EXISTING CONDITIONS vs. H4_ELT</b>	<b>NAA_ELT vs. H4_ELT</b>
JUL	W	0.3 (0.4%)	0.3 (0.4%)	1.3 (1.9%)	1.3 (1.8%)
	AN	0.4 (0.6%)	-0.1 (-0.1%)	2.6 (3.8%)	2.1 (3%)
	BN	1.3 (1.9%)	0.3 (0.4%)	2.2 (3.2%)	1.2 (1.7%)
	D	2.4 (3.6%)	1.1 (1.6%)	3.1 (4.5%)	1.8 (2.5%)
	C	4.5 (6.5%)	2.5 (3.5%)	4 (5.8%)	2.1 (2.9%)
	All	1.6 (2.3%)	0.7 (1.1%)	2.4 (3.5%)	1.6 (2.3%)
AUG	W	0.3 (0.4%)	0.3 (0.4%)	1.5 (2.2%)	1.5 (2.1%)
	AN	1.3 (1.9%)	0.6 (0.9%)	2.4 (3.6%)	1.7 (2.5%)
	BN	1.8 (2.6%)	0.5 (0.8%)	2.4 (3.5%)	1.1 (1.6%)
	D	3.6 (5.3%)	1.5 (2.2%)	3.4 (5.1%)	1.4 (2%)
	C	1.5 (2.2%)	-0.7 (-0.9%)	2.1 (3%)	-0.1 (-0.2%)
	All	1.6 (2.3%)	0.5 (0.7%)	2.3 (3.3%)	1.2 (1.7%)
SEP	W	-1 (-1.6%)	1.2 (1.9%)	-0.3 (-0.4%)	1.9 (3.1%)
	AN	-0.4 (-0.6%)	1.5 (2.4%)	0.7 (1.2%)	2.6 (4.1%)
	BN	-0.1 (-0.1%)	-1.1 (-1.6%)	0.9 (1.4%)	-0.1 (-0.2%)
	D	0.2 (0.4%)	-0.2 (-0.4%)	-0.1 (-0.1%)	-0.5 (-0.8%)
	C	2 (3%)	0.3 (0.5%)	2.2 (3.3%)	0.5 (0.8%)
	All	0 (-0.1%)	0.4 (0.6%)	0.5 (0.7%)	0.9 (1.4%)
OCT	W	1.2 (2%)	-0.1 (-0.2%)	1.8 (3.1%)	0.5 (0.9%)
	AN	1 (1.7%)	0 (-0.1%)	1.4 (2.3%)	0.3 (0.5%)
	BN	1 (1.7%)	-0.2 (-0.4%)	1.9 (3.2%)	0.6 (1%)
	D	1.2 (2%)	-0.2 (-0.3%)	1.9 (3.3%)	0.6 (0.9%)
	C	1.5 (2.5%)	0.1 (0.2%)	1.6 (2.7%)	0.3 (0.4%)
	All	1.2 (2%)	-0.1 (-0.2%)	1.8 (3%)	0.5 (0.8%)
NOV	W	1.2 (2.2%)	0 (0.1%)	1.5 (2.8%)	0.3 (0.6%)
	AN	1.4 (2.6%)	0 (0%)	1.5 (2.8%)	0.2 (0.3%)
	BN	1.1 (2.1%)	0 (0%)	1.5 (2.8%)	0.3 (0.6%)
	D	1.7 (3.2%)	0.1 (0.1%)	1.6 (3.1%)	0 (0%)
	C	1.2 (2.2%)	0 (0%)	0.8 (1.6%)	-0.3 (-0.6%)
	All	1.3 (2.5%)	0 (0.1%)	1.4 (2.7%)	0.1 (0.2%)
DEC	W	1.4 (2.9%)	-0.1 (-0.2%)	1.4 (3%)	0 (-0.1%)
	AN	1.6 (3.3%)	-0.1 (-0.2%)	1.9 (3.9%)	0.2 (0.4%)
	BN	1.8 (3.8%)	0.2 (0.5%)	1.4 (3.1%)	-0.1 (-0.2%)
	D	1.9 (4.1%)	0.1 (0.3%)	1.7 (3.6%)	-0.1 (-0.2%)
	C	1.3 (2.7%)	-0.1 (-0.3%)	0.9 (1.8%)	-0.5 (-1.1%)
	All	1.6 (3.4%)	0 (0%)	1.5 (3.1%)	-0.1 (-0.2%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

## 1 Feather River at Gridley Dam

2 Table B.7-59. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Feather River at Gridley Dam, Year-  
3 Round

Alternative 4A_ELT: Feather River at Gridley Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	47	48	48	48
	AN	47	48	48	48
	BN	46	47	47	48
	D	46	47	47	47
	C	46	48	48	47
	All	46	48	48	48
FEB	W	49	50	50	50
	AN	49	51	51	51
	BN	50	51	51	51
	D	50	52	52	52
	C	51	52	52	53
	All	50	51	51	51
MAR	W	51	52	52	52
	AN	53	53	53	53
	BN	54	55	55	55
	D	55	56	56	56
	C	54	56	56	56
	All	53	54	54	54
APR	W	56	56	56	55
	AN	58	59	59	57
	BN	59	59	59	57
	D	59	60	60	60
	C	58	59	60	60
	All	58	58	58	57
MAY	W	61	63	63	61
	AN	64	65	64	63
	BN	64	65	65	64
	D	64	66	65	65
	C	64	66	66	66
	All	63	65	65	64
JUN	W	67	68	67	68
	AN	69	70	68	70
	BN	69	70	67	69
	D	69	71	70	70
	C	69	70	70	70
	All	68	70	68	69



Alternative 4A_ELT: Feather River at Gridley Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	70	71	71	72
	AN	69	69	69	71
	BN	69	70	70	71
	D	69	70	71	72
	C	71	73	75	75
	All	70	71	71	72
AUG	W	71	71	71	73
	AN	68	69	69	71
	BN	69	70	71	72
	D	68	70	72	72
	C	71	73	73	73
	All	69	71	71	72
SEP	W	65	62	64	64
	AN	65	63	64	66
	BN	66	67	66	67
	D	65	66	66	66
	C	66	67	67	67
	All	65	65	65	66
OCT	W	59	60	60	61
	AN	60	61	61	61
	BN	60	61	61	62
	D	59	60	60	61
	C	59	61	61	61
	All	59	61	60	61
NOV	W	53	54	54	54
	AN	54	55	55	55
	BN	53	54	54	55
	D	53	54	54	54
	C	54	55	55	54
	All	53	54	54	54
DEC	W	48	49	49	49
	AN	47	49	49	49
	BN	47	48	48	48
	D	47	48	49	48
	C	46	48	48	47
	All	47	49	49	48

1  
2

1 **Table B.7-60. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the Feather**  
 2 **River at Gridley Dam, Year-Round**

Alternative 4A_ELT: Feather River at Gridley Dam					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	1.2 (2.6%)	-0.1 (-0.1%)	1.3 (2.7%)	0 (0.1%)
	AN	1.3 (2.8%)	-0.1 (-0.2%)	1.4 (3%)	0.1 (0.1%)
	BN	1.1 (2.4%)	-0.2 (-0.5%)	1.3 (2.9%)	0 (0%)
	D	1.3 (2.9%)	0.1 (0.1%)	1.4 (3%)	0.1 (0.2%)
	C	1.5 (3.2%)	-0.1 (-0.2%)	1.3 (2.8%)	-0.2 (-0.5%)
	All	1.3 (2.7%)	-0.1 (-0.1%)	1.3 (2.9%)	0 (0%)
FEB	W	1.2 (2.5%)	0 (0%)	1.3 (2.7%)	0.1 (0.3%)
	AN	1.4 (2.9%)	-0.2 (-0.4%)	1.6 (3.3%)	0 (0%)
	BN	1.7 (3.3%)	0.1 (0.1%)	1.6 (3.3%)	0 (0.1%)
	D	1.4 (2.9%)	0 (0.1%)	1.4 (2.7%)	0 (-0.1%)
	C	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0.1%)
	All	1.4 (2.8%)	0 (0%)	1.5 (2.9%)	0 (0.1%)
MAR	W	0.9 (1.8%)	0.1 (0.1%)	1 (1.9%)	0.1 (0.2%)
	AN	0.4 (0.8%)	0.1 (0.1%)	0.4 (0.7%)	0 (0%)
	BN	1.6 (2.9%)	0.2 (0.4%)	1.4 (2.6%)	0 (0.1%)
	D	1.3 (2.3%)	0.1 (0.1%)	1.2 (2.3%)	0 (0.1%)
	C	1.5 (2.7%)	0.2 (0.3%)	1.3 (2.5%)	0.1 (0.1%)
	All	1.1 (2.1%)	0.1 (0.2%)	1.1 (2%)	0.1 (0.1%)
APR	W	0.7 (1.3%)	0 (0%)	-0.3 (-0.6%)	-1 (-1.8%)
	AN	0.9 (1.5%)	0 (0%)	-0.7 (-1.2%)	-1.6 (-2.7%)
	BN	0.6 (1%)	0 (0%)	-1.5 (-2.6%)	-2.1 (-3.6%)
	D	1.1 (2%)	0.1 (0.2%)	0.9 (1.6%)	-0.1 (-0.2%)
	C	1.1 (1.9%)	0 (0.1%)	1.2 (2%)	0.1 (0.2%)
	All	0.9 (1.5%)	0 (0.1%)	-0.1 (-0.1%)	-0.9 (-1.6%)
MAY	W	1.5 (2.4%)	0 (0%)	0.1 (0.2%)	-1.4 (-2.2%)
	AN	0.5 (0.8%)	-0.5 (-0.8%)	-1.2 (-1.9%)	-2.3 (-3.5%)
	BN	1.1 (1.7%)	-0.1 (-0.1%)	-0.2 (-0.3%)	-1.4 (-2.1%)
	D	1.3 (2.1%)	-0.1 (-0.2%)	1.1 (1.8%)	-0.3 (-0.5%)
	C	1.5 (2.2%)	0 (0%)	1.4 (2.2%)	0 (0%)
	All	1.3 (2%)	-0.1 (-0.2%)	0.3 (0.5%)	-1.1 (-1.6%)
JUN	W	0.6 (1%)	-1.3 (-1.9%)	1.8 (2.7%)	-0.1 (-0.2%)
	AN	-0.5 (-0.7%)	-2 (-2.9%)	1.3 (1.9%)	-0.2 (-0.3%)
	BN	-1.4 (-2.1%)	-2.6 (-3.8%)	0.3 (0.4%)	-0.9 (-1.3%)
	D	0.5 (0.7%)	-0.9 (-1.3%)	1.2 (1.8%)	-0.2 (-0.2%)
	C	1.7 (2.5%)	0.1 (0.2%)	1.7 (2.5%)	0.1 (0.2%)
	All	0.3 (0.4%)	-1.3 (-1.9%)	1.3 (1.9%)	-0.3 (-0.4%)

Alternative 4A_ELT: Feather River at Gridley Dam					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	0.4 (0.6%)	0.3 (0.4%)	1.4 (2.1%)	1.3 (1.9%)
	AN	0.5 (0.7%)	-0.1 (-0.1%)	2.8 (4.1%)	2.2 (3.2%)
	BN	1.4 (2%)	0.3 (0.5%)	2.4 (3.4%)	1.3 (1.8%)
	D	2.6 (3.7%)	1.2 (1.7%)	3.3 (4.8%)	1.9 (2.7%)
	C	4.7 (6.6%)	2.6 (3.6%)	4.1 (5.8%)	2 (2.8%)
	All	1.7 (2.4%)	0.8 (1.1%)	2.6 (3.7%)	1.7 (2.4%)
AUG	W	0.3 (0.4%)	0.4 (0.5%)	1.7 (2.4%)	1.8 (2.5%)
	AN	1.3 (1.9%)	0.6 (0.9%)	2.7 (3.9%)	2 (2.9%)
	BN	1.9 (2.7%)	0.5 (0.7%)	2.6 (3.8%)	1.3 (1.9%)
	D	3.8 (5.6%)	1.6 (2.3%)	3.9 (5.7%)	1.7 (2.4%)
	C	1.6 (2.3%)	-0.6 (-0.8%)	1.7 (2.4%)	-0.5 (-0.7%)
	All	1.7 (2.4%)	0.6 (0.8%)	2.5 (3.6%)	1.4 (1.9%)
SEP	W	-1.5 (-2.4%)	1.2 (1.9%)	-0.8 (-1.2%)	1.9 (3.1%)
	AN	-0.7 (-1.1%)	1.5 (2.4%)	0.4 (0.7%)	2.7 (4.2%)
	BN	0.5 (0.7%)	-0.4 (-0.6%)	1.4 (2.1%)	0.5 (0.8%)
	D	0.9 (1.4%)	-0.1 (-0.2%)	0.7 (1.1%)	-0.3 (-0.5%)
	C	1.8 (2.8%)	0.2 (0.4%)	1.8 (2.8%)	0.2 (0.4%)
	All	0 (-0.1%)	0.5 (0.8%)	0.5 (0.7%)	1 (1.6%)
OCT	W	1.2 (2%)	-0.1 (-0.2%)	1.8 (3.1%)	0.5 (0.8%)
	AN	1 (1.7%)	-0.1 (-0.1%)	1.4 (2.3%)	0.3 (0.5%)
	BN	1.1 (1.9%)	-0.2 (-0.3%)	1.9 (3.2%)	0.6 (0.9%)
	D	1.1 (1.9%)	-0.2 (-0.4%)	1.9 (3.2%)	0.5 (0.8%)
	C	1.5 (2.5%)	0 (0.1%)	1.5 (2.6%)	0.1 (0.2%)
	All	1.2 (2%)	-0.1 (-0.2%)	1.7 (3%)	0.4 (0.7%)
NOV	W	1.2 (2.2%)	0 (0%)	1.4 (2.7%)	0.3 (0.5%)
	AN	1.3 (2.5%)	0 (0.1%)	1.5 (2.8%)	0.2 (0.3%)
	BN	1.1 (2.1%)	0 (0%)	1.5 (2.7%)	0.3 (0.6%)
	D	1.7 (3.2%)	0.1 (0.1%)	1.6 (3%)	0 (0%)
	C	1.2 (2.3%)	0 (0%)	0.9 (1.6%)	-0.3 (-0.6%)
	All	1.3 (2.4%)	0 (0%)	1.4 (2.6%)	0.1 (0.2%)
DEC	W	1.4 (2.9%)	-0.1 (-0.2%)	1.4 (3%)	0 (-0.1%)
	AN	1.5 (3.3%)	-0.1 (-0.2%)	1.8 (3.8%)	0.2 (0.3%)
	BN	1.7 (3.7%)	0.2 (0.4%)	1.4 (3%)	-0.1 (-0.3%)
	D	1.9 (4%)	0.1 (0.3%)	1.7 (3.6%)	-0.1 (-0.1%)
	C	1.3 (2.7%)	-0.1 (-0.3%)	0.9 (1.9%)	-0.5 (-1%)
	All	1.5 (3.3%)	0 (0%)	1.4 (3.1%)	-0.1 (-0.2%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Feather River at Honcut Creek**2 **Table B.7-61. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Feather River at Honcut Creek, Year-**  
3 **Round**

Alternative 4A_ELT: Feather River at Honcut Creek					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	47	48	48	48
	AN	46	48	48	48
	BN	46	47	47	47
	D	45	47	47	47
	C	46	48	47	47
	All	46	48	48	48
FEB	W	49	50	50	50
	AN	49	51	51	51
	BN	50	51	51	51
	D	50	52	52	52
	C	51	53	53	53
	All	50	51	51	51
MAR	W	52	53	53	53
	AN	53	53	53	53
	BN	54	55	55	55
	D	55	56	56	56
	C	55	56	56	56
	All	53	54	55	55
APR	W	56	57	57	56
	AN	59	60	60	58
	BN	60	60	60	58
	D	60	61	61	60
	C	59	61	60	61
	All	58	59	59	58
MAY	W	62	64	64	62
	AN	65	66	65	63
	BN	65	66	66	65
	D	65	66	66	66
	C	65	67	67	67
	All	64	66	65	64
JUN	W	67	69	68	69
	AN	69	71	69	71
	BN	69	71	68	70
	D	70	71	70	71
	C	69	71	71	71
	All	69	70	69	70

Alternative 4A ELT: Feather River at Honcut Creek					
Month	Water Year Type	EXISTING CONDITIONS	NAA ELT	A4A ELT	
				H3 ELT	H4 ELT
JUL	W	71	71	72	73
	AN	69	70	70	72
	BN	69	70	71	72
	D	69	71	72	73
	C	71	73	76	75
	All	70	71	72	73
AUG	W	72	71	72	73
	AN	69	69	70	71
	BN	69	71	71	72
	D	68	71	72	73
	C	72	74	73	73
	All	70	71	72	73
SEP	W	66	63	64	65
	AN	66	63	65	66
	BN	67	67	67	68
	D	66	67	67	67
	C	66	68	68	68
	All	66	65	66	67
OCT	W	59	60	60	61
	AN	60	61	61	62
	BN	60	61	61	62
	D	59	60	60	61
	C	60	61	61	61
	All	60	61	61	61
NOV	W	53	54	54	54
	AN	54	55	55	55
	BN	53	54	54	55
	D	53	54	54	54
	C	54	55	55	54
	All	53	54	54	54
DEC	W	47	49	49	49
	AN	47	49	49	49
	BN	46	48	48	48
	D	46	48	48	48
	C	46	47	47	47
	All	47	48	48	48

1  
2

1 **Table B.7-62. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the Feather**  
 2 **River at Honcut Creek, Year-Round**

Alternative 4A_ELT: Feather River at Honcut Creek					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	1.2 (2.5%)	0 (-0.1%)	1.3 (2.7%)	0 (0.1%)
	AN	1.3 (2.8%)	-0.1 (-0.2%)	1.4 (3%)	0 (0.1%)
	BN	1.1 (2.4%)	-0.2 (-0.4%)	1.3 (2.8%)	0 (0%)
	D	1.3 (2.8%)	0.1 (0.1%)	1.3 (2.9%)	0.1 (0.2%)
	C	1.4 (3.1%)	-0.1 (-0.2%)	1.3 (2.8%)	-0.2 (-0.4%)
	All	1.2 (2.7%)	-0.1 (-0.1%)	1.3 (2.8%)	0 (0%)
FEB	W	1.2 (2.5%)	0 (0.1%)	1.3 (2.7%)	0.2 (0.3%)
	AN	1.4 (2.8%)	-0.2 (-0.4%)	1.6 (3.2%)	0 (-0.1%)
	BN	1.6 (3.3%)	0.1 (0.1%)	1.6 (3.2%)	0 (0%)
	D	1.4 (2.9%)	0 (0.1%)	1.4 (2.8%)	0 (0%)
	C	1.5 (2.9%)	0 (0%)	1.5 (2.9%)	0 (0.1%)
	All	1.4 (2.8%)	0 (0%)	1.5 (2.9%)	0.1 (0.1%)
MAR	W	0.9 (1.8%)	0.1 (0.1%)	1 (1.9%)	0.1 (0.2%)
	AN	0.4 (0.8%)	0.1 (0.1%)	0.4 (0.8%)	0 (0.1%)
	BN	1.6 (2.9%)	0.2 (0.4%)	1.3 (2.5%)	0 (0%)
	D	1.2 (2.2%)	0 (0%)	1.2 (2.2%)	0 (0%)
	C	1.4 (2.5%)	0.1 (0.3%)	1.3 (2.4%)	0 (0.1%)
	All	1.1 (2.1%)	0.1 (0.2%)	1.1 (2%)	0 (0.1%)
APR	W	0.7 (1.3%)	0 (0%)	-0.4 (-0.7%)	-1.1 (-2%)
	AN	0.9 (1.5%)	0 (0%)	-0.9 (-1.5%)	-1.8 (-3%)
	BN	0.6 (1.1%)	0 (0%)	-1.8 (-3%)	-2.5 (-4.1%)
	D	1 (1.7%)	0 (0%)	0.8 (1.4%)	-0.2 (-0.2%)
	C	1 (1.7%)	-0.1 (-0.1%)	1.1 (1.9%)	0.1 (0.1%)
	All	0.8 (1.4%)	0 (0%)	-0.2 (-0.4%)	-1 (-1.8%)
MAY	W	1.6 (2.5%)	0 (0%)	0 (0%)	-1.6 (-2.4%)
	AN	0.6 (1%)	-0.6 (-0.9%)	-1.4 (-2.1%)	-2.6 (-4%)
	BN	1.2 (1.8%)	-0.1 (-0.2%)	-0.4 (-0.6%)	-1.6 (-2.5%)
	D	1.2 (1.9%)	-0.1 (-0.2%)	1.1 (1.6%)	-0.3 (-0.5%)
	C	1.4 (2.2%)	0 (0.1%)	1.4 (2.2%)	0 (0%)
	All	1.3 (2%)	-0.1 (-0.2%)	0.2 (0.3%)	-1.2 (-1.8%)
JUN	W	0.7 (1.1%)	-1.3 (-1.9%)	2.1 (3.2%)	0.1 (0.1%)
	AN	-0.5 (-0.7%)	-2 (-2.9%)	1.3 (1.9%)	-0.2 (-0.3%)
	BN	-1.5 (-2.2%)	-2.7 (-3.8%)	0.3 (0.4%)	-0.9 (-1.3%)
	D	0.5 (0.7%)	-0.9 (-1.2%)	1.2 (1.7%)	-0.2 (-0.2%)
	C	1.7 (2.4%)	0.2 (0.2%)	1.7 (2.4%)	0.2 (0.2%)
	All	0.3 (0.4%)	-1.3 (-1.9%)	1.4 (2.1%)	-0.2 (-0.2%)

Alternative 4A_ELT: Feather River at Honcut Creek					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	0.5 (0.7%)	0.3 (0.4%)	1.6 (2.2%)	1.3 (1.9%)
	AN	0.6 (0.8%)	-0.1 (-0.1%)	2.9 (4.2%)	2.3 (3.2%)
	BN	1.5 (2.2%)	0.3 (0.5%)	2.5 (3.6%)	1.3 (1.9%)
	D	2.7 (3.9%)	1.2 (1.7%)	3.4 (5%)	1.9 (2.8%)
	C	4.7 (6.7%)	2.6 (3.5%)	4.2 (5.9%)	2 (2.8%)
	All	1.8 (2.6%)	0.8 (1.1%)	2.7 (3.9%)	1.7 (2.4%)
AUG	W	0.3 (0.5%)	0.4 (0.6%)	1.8 (2.6%)	1.9 (2.7%)
	AN	1.3 (1.9%)	0.6 (0.9%)	2.8 (4.1%)	2.2 (3.1%)
	BN	1.9 (2.8%)	0.5 (0.7%)	2.8 (4.1%)	1.4 (2%)
	D	3.9 (5.7%)	1.6 (2.2%)	4.2 (6.1%)	1.9 (2.6%)
	C	1.6 (2.2%)	-0.6 (-0.8%)	1.5 (2%)	-0.7 (-1%)
	All	1.7 (2.4%)	0.6 (0.8%)	2.6 (3.7%)	1.5 (2.1%)
SEP	W	-1.9 (-2.9%)	1.2 (2%)	-1.1 (-1.7%)	2 (3.2%)
	AN	-0.9 (-1.4%)	1.5 (2.4%)	0.3 (0.4%)	2.8 (4.3%)
	BN	0.9 (1.3%)	0 (0%)	1.8 (2.7%)	0.9 (1.3%)
	D	1.4 (2.1%)	0 (0%)	1.2 (1.8%)	-0.2 (-0.3%)
	C	1.7 (2.5%)	0.1 (0.1%)	1.5 (2.3%)	0 (-0.1%)
	All	0 (0%)	0.6 (0.9%)	0.5 (0.7%)	1.1 (1.7%)
OCT	W	1.2 (2.1%)	-0.1 (-0.2%)	1.8 (3.1%)	0.5 (0.8%)
	AN	1 (1.7%)	-0.1 (-0.2%)	1.4 (2.3%)	0.3 (0.5%)
	BN	1.1 (1.9%)	-0.2 (-0.3%)	1.8 (3.1%)	0.5 (0.8%)
	D	1.1 (1.8%)	-0.3 (-0.5%)	1.8 (3.1%)	0.5 (0.8%)
	C	1.5 (2.5%)	0 (0%)	1.5 (2.5%)	0 (0%)
	All	1.2 (2%)	-0.1 (-0.2%)	1.7 (2.9%)	0.4 (0.6%)
NOV	W	1.2 (2.2%)	0 (0%)	1.4 (2.7%)	0.3 (0.5%)
	AN	1.4 (2.6%)	0 (0.1%)	1.5 (2.8%)	0.2 (0.3%)
	BN	1.2 (2.2%)	0 (0%)	1.5 (2.7%)	0.3 (0.5%)
	D	1.6 (3.1%)	0.1 (0.2%)	1.5 (2.9%)	0 (0%)
	C	1.2 (2.3%)	0 (0.1%)	0.9 (1.6%)	-0.3 (-0.6%)
	All	1.3 (2.5%)	0 (0.1%)	1.4 (2.6%)	0.1 (0.2%)
DEC	W	1.3 (2.8%)	-0.1 (-0.2%)	1.4 (2.9%)	0 (-0.1%)
	AN	1.5 (3.2%)	-0.1 (-0.2%)	1.8 (3.7%)	0.1 (0.3%)
	BN	1.7 (3.6%)	0.2 (0.4%)	1.4 (3%)	-0.1 (-0.2%)
	D	1.8 (3.9%)	0.1 (0.3%)	1.6 (3.4%)	-0.1 (-0.2%)
	C	1.2 (2.6%)	-0.1 (-0.1%)	0.9 (1.9%)	-0.4 (-0.9%)
	All	1.5 (3.2%)	0 (0%)	1.4 (3%)	-0.1 (-0.2%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Feather River at the Confluence with the Sacramento River**2 **Table B.7-63. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Feather River at the Confluence with the**  
3 **Sacramento River, Year-Round**

Alternative 4A_ELT: Feather River at the Confluence with the Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	47	48	47	48
	AN	46	47	47	47
	BN	46	46	46	46
	D	45	46	46	46
	C	45	46	46	46
	All	46	47	47	47
FEB	W	50	51	51	51
	AN	50	51	51	51
	BN	50	51	51	51
	D	50	51	51	51
	C	51	52	52	52
	All	50	51	51	51
MAR	W	53	54	54	54
	AN	54	55	55	55
	BN	55	56	56	56
	D	55	56	56	56
	C	56	57	57	57
	All	55	55	55	55
APR	W	59	59	59	58
	AN	60	61	61	60
	BN	61	61	61	60
	D	62	63	63	63
	C	63	64	64	64
	All	61	61	61	61
MAY	W	65	66	66	65
	AN	66	68	68	66
	BN	67	68	68	67
	D	68	69	69	69
	C	68	70	70	70
	All	66	68	68	67
JUN	W	70	72	71	72
	AN	71	73	72	73
	BN	72	74	72	73
	D	73	75	74	75
	C	72	74	74	74
	All	71	73	72	73



Alternative 4A_ELT: Feather River at the Confluence with the Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	74	75	75	76
	AN	72	74	73	75
	BN	73	74	75	75
	D	73	75	75	76
	C	75	77	79	78
	All	73	75	75	76
AUG	W	73	74	75	76
	AN	71	72	73	74
	BN	72	74	74	75
	D	72	74	75	75
	C	75	77	76	76
	All	73	74	75	75
SEP	W	71	68	69	70
	AN	70	68	69	70
	BN	70	71	72	72
	D	70	72	72	72
	C	70	72	72	72
	All	70	70	71	71
OCT	W	61	62	62	62
	AN	62	63	63	63
	BN	61	63	63	63
	D	61	62	62	62
	C	62	63	63	63
	All	61	62	62	63
NOV	W	52	53	53	53
	AN	53	54	54	54
	BN	53	54	54	54
	D	52	53	53	53
	C	53	54	54	54
	All	53	53	54	54
DEC	W	47	48	48	48
	AN	47	48	48	48
	BN	46	47	47	47
	D	46	47	47	47
	C	45	46	46	46
	All	46	47	47	47

1  
2

1 **Table B.7-64. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the Feather**  
 2 **River at the Confluence with the Sacramento River, Year-Round**

Alternative 4A_ELT: Feather River at the Confluence with the Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	0.9 (1.8%)	0 (-0.1%)	0.9 (2%)	0.1 (0.1%)
	AN	0.8 (1.8%)	0 (-0.1%)	0.8 (1.8%)	0 (0%)
	BN	0.7 (1.6%)	-0.1 (-0.2%)	0.8 (1.7%)	-0.1 (-0.2%)
	D	0.9 (2%)	0 (-0.1%)	0.9 (2%)	0 (0%)
	C	1 (2.1%)	0 (-0.1%)	0.9 (2.1%)	-0.1 (-0.1%)
	All	0.9 (1.9%)	0 (-0.1%)	0.9 (1.9%)	0 (0%)
FEB	W	1 (1.9%)	0 (0.1%)	1 (2%)	0.1 (0.2%)
	AN	1 (1.9%)	0 (0.1%)	1 (1.9%)	0 (0%)
	BN	0.9 (1.8%)	0 (0%)	0.9 (1.9%)	0.1 (0.1%)
	D	1 (1.9%)	0 (0%)	1 (1.9%)	0 (0%)
	C	1 (2%)	0 (0%)	1 (2%)	0 (0%)
	All	1 (1.9%)	0 (0%)	1 (2%)	0 (0.1%)
MAR	W	0.7 (1.3%)	0 (0%)	0.7 (1.3%)	0 (0%)
	AN	0.4 (0.8%)	0 (0%)	0.4 (0.7%)	-0.1 (-0.1%)
	BN	0.8 (1.4%)	0 (0.1%)	0.7 (1.3%)	0 (0%)
	D	0.8 (1.4%)	0 (0%)	0.8 (1.5%)	0 (0.1%)
	C	0.9 (1.7%)	0 (0%)	0.9 (1.6%)	0 (-0.1%)
	All	0.7 (1.3%)	0 (0%)	0.7 (1.3%)	0 (0%)
APR	W	0.6 (1%)	0 (0%)	-0.4 (-0.6%)	-1 (-1.7%)
	AN	0.8 (1.3%)	0 (0%)	-0.4 (-0.6%)	-1.1 (-1.8%)
	BN	0.6 (1%)	0 (0%)	-1.1 (-1.8%)	-1.7 (-2.8%)
	D	0.8 (1.3%)	0 (0%)	0.7 (1.2%)	-0.1 (-0.2%)
	C	0.9 (1.3%)	-0.1 (-0.2%)	1 (1.5%)	0 (-0.1%)
	All	0.7 (1.2%)	0 (0%)	-0.1 (-0.1%)	-0.8 (-1.3%)
MAY	W	1.4 (2.1%)	0 (0%)	0.4 (0.6%)	-1 (-1.4%)
	AN	1.1 (1.7%)	-0.3 (-0.5%)	-0.1 (-0.1%)	-1.6 (-2.3%)
	BN	1.3 (1.9%)	-0.1 (-0.1%)	0.3 (0.5%)	-1 (-1.5%)
	D	1.5 (2.2%)	-0.1 (-0.2%)	1.4 (2%)	-0.3 (-0.4%)
	C	1.6 (2.4%)	0.1 (0.2%)	1.6 (2.4%)	0.1 (0.1%)
	All	1.4 (2.1%)	-0.1 (-0.1%)	0.7 (1.1%)	-0.7 (-1.1%)
JUN	W	1.3 (1.8%)	-0.7 (-1%)	2.1 (3.1%)	0.2 (0.2%)
	AN	0.6 (0.8%)	-1.3 (-1.8%)	1.8 (2.5%)	-0.1 (-0.1%)
	BN	0 (0%)	-1.9 (-2.5%)	1.2 (1.7%)	-0.6 (-0.9%)
	D	1.2 (1.6%)	-0.7 (-0.9%)	1.7 (2.4%)	-0.1 (-0.1%)
	C	1.9 (2.6%)	0.2 (0.2%)	1.9 (2.7%)	0.2 (0.3%)
	All	1 (1.4%)	-0.8 (-1.2%)	1.8 (2.5%)	-0.1 (-0.1%)

Alternative 4A_ELT: Feather River at the Confluence with the Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	1.6 (2.2%)	0.3 (0.4%)	2.4 (3.3%)	1.1 (1.5%)
	AN	1.2 (1.6%)	-0.1 (-0.1%)	2.9 (3.9%)	1.6 (2.2%)
	BN	1.8 (2.5%)	0.2 (0.3%)	2.6 (3.5%)	1 (1.3%)
	D	2.7 (3.8%)	0.9 (1.3%)	3.3 (4.6%)	1.5 (2%)
	C	4.2 (5.7%)	1.9 (2.5%)	3.9 (5.2%)	1.5 (2%)
	All	2.2 (3%)	0.6 (0.8%)	2.9 (4%)	1.3 (1.8%)
AUG	W	1.6 (2.1%)	0.5 (0.6%)	2.5 (3.4%)	1.4 (1.9%)
	AN	1.5 (2.1%)	0.4 (0.5%)	2.5 (3.5%)	1.4 (1.9%)
	BN	1.9 (2.7%)	0.3 (0.4%)	2.5 (3.5%)	0.9 (1.3%)
	D	3.5 (4.9%)	1.1 (1.4%)	3.9 (5.5%)	1.5 (2%)
	C	1.7 (2.3%)	-0.5 (-0.6%)	1.6 (2.1%)	-0.6 (-0.8%)
	All	2.1 (2.9%)	0.4 (0.6%)	2.7 (3.7%)	1 (1.4%)
SEP	W	-1.5 (-2.1%)	1.1 (1.7%)	-0.9 (-1.3%)	1.7 (2.5%)
	AN	-0.7 (-0.9%)	1.2 (1.8%)	0.3 (0.4%)	2.1 (3.2%)
	BN	1.7 (2.4%)	0.7 (1%)	2.1 (3%)	1.1 (1.6%)
	D	2.3 (3.2%)	0.1 (0.2%)	2.2 (3.2%)	0.1 (0.1%)
	C	1.4 (2%)	-0.2 (-0.3%)	1.1 (1.6%)	-0.5 (-0.7%)
	All	0.4 (0.6%)	0.7 (1%)	0.7 (1.1%)	1 (1.4%)
OCT	W	1.2 (2%)	-0.1 (-0.2%)	1.5 (2.5%)	0.2 (0.4%)
	AN	0.9 (1.5%)	-0.1 (-0.2%)	1.2 (2%)	0.2 (0.3%)
	BN	1.2 (1.9%)	-0.1 (-0.2%)	1.5 (2.4%)	0.2 (0.3%)
	D	0.9 (1.5%)	-0.2 (-0.3%)	1.3 (2.2%)	0.2 (0.4%)
	C	1.5 (2.4%)	0 (0.1%)	1.2 (1.9%)	-0.3 (-0.4%)
	All	1.1 (1.9%)	-0.1 (-0.2%)	1.4 (2.3%)	0.1 (0.2%)
NOV	W	0.9 (1.7%)	0 (0%)	0.9 (1.8%)	0 (0.1%)
	AN	1 (2%)	0 (0%)	1.1 (2.1%)	0.1 (0.2%)
	BN	1 (1.9%)	0 (0%)	1.1 (2%)	0.1 (0.2%)
	D	1.1 (2%)	0.1 (0.2%)	1 (1.9%)	0 (0%)
	C	1 (1.9%)	0.1 (0.2%)	0.9 (1.8%)	0 (0%)
	All	1 (1.9%)	0 (0.1%)	1 (1.9%)	0 (0.1%)
DEC	W	0.7 (1.5%)	-0.1 (-0.2%)	0.8 (1.7%)	0 (0%)
	AN	1.1 (2.2%)	-0.1 (-0.3%)	1.2 (2.7%)	0.1 (0.1%)
	BN	1.1 (2.5%)	0.1 (0.2%)	1 (2.1%)	-0.1 (-0.2%)
	D	1.1 (2.4%)	0.3 (0.7%)	1 (2.1%)	0.2 (0.5%)
	C	1.1 (2.3%)	0.4 (0.9%)	0.9 (1.9%)	0.2 (0.4%)
	All	1 (2.1%)	0.1 (0.2%)	0.9 (2%)	0.1 (0.1%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **American River below Nimbus Dam**2 **Table B.7-65. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the American River below Nimbus Dam,**  
3 **Year-Round**

Alternative 4A_ELT: American River below Nimbus Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	47	48	48	48
	AN	47	48	48	48
	BN	46	48	48	48
	D	47	48	48	48
	C	47	48	48	48
	All	47	48	48	48
FEB	W	48	50	50	50
	AN	48	50	50	50
	BN	47	49	49	49
	D	49	50	50	50
	C	51	52	52	52
	All	48	50	50	50
MAR	W	52	53	53	53
	AN	53	54	54	54
	BN	53	54	54	54
	D	53	55	55	55
	C	55	56	56	56
	All	53	54	54	54
APR	W	56	57	57	57
	AN	57	58	58	58
	BN	57	59	59	59
	D	59	60	60	60
	C	59	61	60	61
	All	58	59	59	59
MAY	W	60	62	62	62
	AN	61	64	63	63
	BN	61	63	63	63
	D	64	66	66	66
	C	64	66	66	66
	All	62	64	64	64
JUN	W	64	66	65	66
	AN	65	68	67	68
	BN	65	67	67	67
	D	67	68	68	69
	C	68	71	71	70
	All	66	68	67	68

Alternative 4A_ELT: American River below Nimbus Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	66	68	67	68
	AN	66	67	67	67
	BN	66	67	67	67
	D	67	68	68	68
	C	70	72	73	73
	All	67	68	68	68
AUG	W	67	68	69	68
	AN	67	69	69	69
	BN	67	69	69	68
	D	67	69	70	69
	C	70	74	74	73
	All	67	70	70	69
SEP	W	65	66	66	66
	AN	66	66	66	66
	BN	66	67	67	68
	D	66	68	68	68
	C	68	71	71	71
	All	66	67	67	67
OCT	W	58	63	63	63
	AN	59	63	64	64
	BN	58	62	63	63
	D	59	64	64	64
	C	61	64	64	64
	All	59	63	63	63
NOV	W	57	59	59	59
	AN	57	59	59	59
	BN	56	59	59	59
	D	57	59	59	59
	C	58	60	60	60
	All	57	59	59	59
DEC	W	50	51	51	51
	AN	51	52	52	52
	BN	50	51	51	51
	D	50	51	51	51
	C	50	51	51	51
	All	50	51	51	51

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1 **Table B.7-66. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the American**  
 2 **River below Nimbus Dam, Year-Round**

Alternative 4A_ELT: American River below Nimbus Dam					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	1.4 (3%)	0 (0%)	1.4 (3%)	0 (0.1%)
	AN	1.3 (2.7%)	0 (0.1%)	1.3 (2.8%)	0.1 (0.2%)
	BN	1.4 (3.1%)	0 (0%)	1.4 (3.1%)	0 (0%)
	D	1.3 (2.7%)	0 (0%)	1.3 (2.7%)	0 (0.1%)
	C	1.4 (2.9%)	0 (0%)	1.4 (3.1%)	0.1 (0.2%)
	All	1.3 (2.9%)	0 (0%)	1.4 (2.9%)	0 (0.1%)
FEB	W	1.7 (3.5%)	0 (0%)	1.7 (3.5%)	0 (0%)
	AN	1.8 (3.8%)	0 (0%)	1.8 (3.8%)	0 (0%)
	BN	1.7 (3.5%)	0 (-0.1%)	1.7 (3.5%)	0 (0%)
	D	1.6 (3.3%)	-0.1 (-0.1%)	1.7 (3.4%)	0 (0%)
	C	1.6 (3.1%)	0.2 (0.5%)	1.7 (3.4%)	0.4 (0.7%)
	All	1.7 (3.4%)	0 (0%)	1.7 (3.5%)	0.1 (0.1%)
MAR	W	1.4 (2.7%)	0 (0%)	1.4 (2.7%)	0 (0%)
	AN	1.4 (2.7%)	0 (0.1%)	1.4 (2.7%)	0 (0%)
	BN	1.3 (2.4%)	0 (0%)	1.3 (2.4%)	0 (0%)
	D	1.5 (2.9%)	-0.1 (-0.2%)	1.5 (2.9%)	-0.1 (-0.2%)
	C	1.1 (2.1%)	-0.3 (-0.5%)	1.4 (2.5%)	0 (0%)
	All	1.4 (2.6%)	-0.1 (-0.1%)	1.4 (2.7%)	0 (0%)
APR	W	1.2 (2.2%)	0 (0%)	1.2 (2.2%)	0 (0%)
	AN	1.3 (2.3%)	0 (0%)	1.3 (2.3%)	0 (0%)
	BN	1.3 (2.3%)	-0.1 (-0.1%)	1.4 (2.4%)	0 (0%)
	D	0.8 (1.4%)	0.1 (0.1%)	0.9 (1.4%)	0.1 (0.2%)
	C	1 (1.6%)	-0.6 (-1%)	1.7 (2.8%)	0.1 (0.2%)
	All	1.1 (2%)	-0.1 (-0.1%)	1.3 (2.2%)	0 (0.1%)
MAY	W	2.1 (3.5%)	0 (0%)	2.1 (3.5%)	0 (0%)
	AN	2.4 (3.9%)	-0.1 (-0.2%)	2.4 (4%)	-0.1 (-0.1%)
	BN	2 (3.2%)	-0.2 (-0.3%)	2.1 (3.5%)	0 (0%)
	D	1.9 (2.9%)	0.2 (0.2%)	1.9 (3%)	0.2 (0.3%)
	C	1.5 (2.3%)	-0.3 (-0.5%)	1.5 (2.4%)	-0.3 (-0.4%)
	All	2 (3.2%)	-0.1 (-0.1%)	2 (3.3%)	0 (0%)
JUN	W	1.7 (2.7%)	-0.2 (-0.3%)	1.8 (2.8%)	-0.1 (-0.1%)
	AN	1.5 (2.3%)	-0.6 (-0.9%)	2.3 (3.5%)	0.2 (0.3%)
	BN	1.8 (2.7%)	-0.4 (-0.5%)	2.3 (3.5%)	0.1 (0.2%)
	D	0.6 (0.9%)	-0.8 (-1.2%)	1.9 (2.8%)	0.5 (0.7%)
	C	2.6 (3.9%)	0 (0%)	2.4 (3.6%)	-0.2 (-0.3%)
	All	1.6 (2.4%)	-0.4 (-0.6%)	2.1 (3.1%)	0.1 (0.1%)

Alternative 4A_ELT: American River below Nimbus Dam					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	1 (1.5%)	-0.6 (-0.8%)	1.1 (1.7%)	-0.5 (-0.7%)
	AN	0.7 (1%)	0.1 (0.1%)	0.5 (0.8%)	-0.1 (-0.2%)
	BN	0.8 (1.1%)	-0.1 (-0.2%)	1 (1.5%)	0.1 (0.1%)
	D	1.7 (2.5%)	0.3 (0.4%)	1.6 (2.4%)	0.2 (0.3%)
	C	2.8 (4%)	0.4 (0.6%)	2.8 (4.1%)	0.4 (0.6%)
	All	1.3 (2%)	-0.1 (-0.1%)	1.4 (2.1%)	0 (-0.1%)
AUG	W	2.2 (3.2%)	0.3 (0.4%)	1.9 (2.9%)	0.1 (0.1%)
	AN	1.5 (2.2%)	0 (0.1%)	1.2 (1.8%)	-0.3 (-0.4%)
	BN	1.7 (2.6%)	0.2 (0.2%)	0.8 (1.1%)	-0.8 (-1.2%)
	D	3.1 (4.5%)	0.8 (1.1%)	2.1 (3.2%)	-0.1 (-0.2%)
	C	4.1 (5.9%)	0.3 (0.5%)	3 (4.3%)	-0.8 (-1.1%)
	All	2.5 (3.7%)	0.4 (0.5%)	1.8 (2.7%)	-0.3 (-0.4%)
SEP	W	1.1 (1.7%)	0.3 (0.5%)	1 (1.5%)	0.2 (0.3%)
	AN	0.9 (1.3%)	0.4 (0.6%)	0.7 (1%)	0.2 (0.2%)
	BN	1.4 (2.1%)	0.6 (0.9%)	1.7 (2.5%)	0.9 (1.3%)
	D	1.8 (2.8%)	0.5 (0.7%)	1.5 (2.2%)	0.1 (0.1%)
	C	2.3 (3.3%)	0 (-0.1%)	2.4 (3.4%)	0 (0%)
	All	1.5 (2.2%)	0.4 (0.5%)	1.4 (2.1%)	0.3 (0.4%)
OCT	W	4.8 (8.2%)	0.1 (0.1%)	4.8 (8.2%)	0.1 (0.2%)
	AN	4.3 (7.2%)	0.1 (0.2%)	4.3 (7.2%)	0.1 (0.2%)
	BN	4.3 (7.4%)	0.3 (0.5%)	4.2 (7.2%)	0.1 (0.2%)
	D	4.5 (7.6%)	-0.1 (-0.2%)	4.7 (7.9%)	0 (0.1%)
	C	3.6 (6%)	0 (-0.1%)	3.6 (5.9%)	-0.1 (-0.1%)
	All	4.4 (7.5%)	0.1 (0.1%)	4.4 (7.5%)	0.1 (0.1%)
NOV	W	1.9 (3.3%)	-0.2 (-0.3%)	1.9 (3.4%)	-0.1 (-0.2%)
	AN	1.9 (3.4%)	0 (-0.1%)	2 (3.6%)	0.1 (0.1%)
	BN	2.6 (4.6%)	-0.1 (-0.2%)	2.7 (4.9%)	0 (0%)
	D	2.1 (3.7%)	-0.1 (-0.1%)	2.1 (3.8%)	0 (0%)
	C	2 (3.5%)	0 (0.1%)	2.2 (3.9%)	0.3 (0.5%)
	All	2.1 (3.6%)	-0.1 (-0.2%)	2.2 (3.8%)	0 (0%)
DEC	W	1 (1.9%)	0 (0%)	1 (2%)	0 (0.1%)
	AN	1.1 (2.1%)	0.1 (0.1%)	1.1 (2.2%)	0.1 (0.2%)
	BN	1.2 (2.4%)	0 (0%)	1.2 (2.5%)	0 (0.1%)
	D	1.1 (2.1%)	0 (-0.1%)	1.1 (2.2%)	0 (0%)
	C	1.1 (2.2%)	0.1 (0.2%)	1.3 (2.6%)	0.3 (0.5%)
	All	1.1 (2.1%)	0 (0%)	1.1 (2.2%)	0.1 (0.1%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **American River at Watt Avenue**2 **Table B.7-67. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the American River at Watt Avenue, Year-**  
3 **Round**

Alternative 4A_ELT: American River at Watt Avenue					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	47	48	48	48
	AN	47	48	48	48
	BN	46	47	47	47
	D	46	47	47	47
	C	46	48	48	48
	All	46	48	48	48
FEB	W	48	50	50	50
	AN	48	50	50	50
	BN	48	49	49	49
	D	49	51	51	51
	C	51	53	53	53
	All	49	50	50	50
MAR	W	53	54	54	54
	AN	53	54	54	54
	BN	54	55	55	55
	D	54	56	56	56
	C	56	57	57	57
	All	54	55	55	55
APR	W	56	58	58	58
	AN	58	59	59	59
	BN	58	60	60	60
	D	60	61	61	61
	C	61	62	62	62
	All	58	60	60	60
MAY	W	61	63	63	63
	AN	62	65	65	65
	BN	62	65	64	65
	D	65	67	67	67
	C	66	68	67	68
	All	63	65	65	65
JUN	W	65	67	67	67
	AN	67	69	68	69
	BN	67	69	69	69
	D	69	70	69	71
	C	69	72	72	72
	All	67	69	69	69



Alternative 4A_ELT: American River at Watt Avenue					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	68	70	69	69
	AN	67	68	68	68
	BN	67	68	68	68
	D	68	70	70	70
	C	72	74	74	74
	All	68	70	70	70
AUG	W	68	70	71	70
	AN	69	70	70	70
	BN	69	71	71	70
	D	69	71	72	71
	C	71	75	75	74
	All	69	71	72	71
SEP	W	66	67	67	67
	AN	66	67	68	67
	BN	67	68	69	69
	D	67	69	69	69
	C	69	71	71	71
	All	67	68	69	68
OCT	W	59	63	63	63
	AN	60	63	63	63
	BN	59	63	63	63
	D	60	64	63	64
	C	61	64	64	64
	All	60	63	63	63
NOV	W	56	58	58	58
	AN	56	58	58	58
	BN	56	58	58	58
	D	56	58	58	58
	C	57	59	59	59
	All	56	58	58	58
DEC	W	50	51	51	51
	AN	50	51	51	51
	BN	49	50	50	50
	D	49	50	50	50
	C	49	50	50	50
	All	49	50	50	50

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2

1 **Table B.7-68. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the American**  
 2 **River at Watt Avenue, Year-Round**

Alternative 4A_ELT: American River at Watt Avenue					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	1.4 (3%)	0 (0%)	1.4 (3%)	0 (0.1%)
	AN	1.3 (2.7%)	0 (0.1%)	1.3 (2.8%)	0.1 (0.1%)
	BN	1.4 (3%)	0 (0%)	1.4 (3%)	0 (0%)
	D	1.2 (2.6%)	0 (0%)	1.2 (2.7%)	0 (0.1%)
	C	1.4 (2.9%)	0 (0.1%)	1.4 (3%)	0.1 (0.2%)
	All	1.3 (2.9%)	0 (0%)	1.3 (2.9%)	0 (0.1%)
FEB	W	1.6 (3.4%)	0 (0%)	1.7 (3.4%)	0 (0%)
	AN	1.8 (3.7%)	0 (-0.1%)	1.8 (3.7%)	0 (0%)
	BN	1.6 (3.4%)	0 (-0.1%)	1.6 (3.4%)	0 (0%)
	D	1.6 (3.2%)	0 (-0.1%)	1.6 (3.3%)	0 (0%)
	C	1.6 (3%)	0.1 (0.3%)	1.6 (3.2%)	0.2 (0.4%)
	All	1.6 (3.3%)	0 (0%)	1.7 (3.4%)	0 (0.1%)
MAR	W	1.4 (2.6%)	0 (0%)	1.4 (2.6%)	0 (0%)
	AN	1.4 (2.6%)	0 (0.1%)	1.4 (2.6%)	0 (0%)
	BN	1.2 (2.2%)	0 (0%)	1.2 (2.2%)	0 (0%)
	D	1.4 (2.6%)	-0.1 (-0.2%)	1.5 (2.7%)	-0.1 (-0.1%)
	C	1.2 (2.1%)	-0.1 (-0.2%)	1.3 (2.3%)	0 (0%)
	All	1.3 (2.5%)	0 (-0.1%)	1.3 (2.5%)	0 (0%)
APR	W	1.2 (2.2%)	0 (0%)	1.2 (2.2%)	0 (0%)
	AN	1.3 (2.3%)	0 (0%)	1.3 (2.3%)	0 (0%)
	BN	1.2 (2.1%)	-0.1 (-0.1%)	1.3 (2.2%)	0 (0%)
	D	0.9 (1.5%)	0 (0%)	0.9 (1.6%)	0 (0%)
	C	1 (1.7%)	-0.4 (-0.6%)	1.4 (2.3%)	0 (0%)
	All	1.1 (1.9%)	-0.1 (-0.1%)	1.2 (2.1%)	0 (0%)
MAY	W	2.1 (3.5%)	0 (0%)	2.1 (3.5%)	0 (0%)
	AN	2.5 (4%)	-0.2 (-0.2%)	2.6 (4.1%)	-0.1 (-0.1%)
	BN	2 (3.2%)	-0.2 (-0.4%)	2.2 (3.5%)	0 (0%)
	D	1.9 (2.9%)	0.1 (0.1%)	1.9 (3%)	0.1 (0.1%)
	C	1.5 (2.3%)	-0.2 (-0.2%)	1.7 (2.6%)	0 (0%)
	All	2 (3.2%)	-0.1 (-0.1%)	2.1 (3.3%)	0 (0%)
JUN	W	1.9 (2.9%)	-0.2 (-0.4%)	2.1 (3.2%)	-0.1 (-0.1%)
	AN	1.4 (2.1%)	-0.8 (-1.1%)	2.3 (3.5%)	0.2 (0.3%)
	BN	1.7 (2.6%)	-0.5 (-0.7%)	2.4 (3.5%)	0.2 (0.3%)
	D	0.5 (0.8%)	-0.9 (-1.3%)	1.9 (2.8%)	0.4 (0.6%)
	C	2.4 (3.5%)	0 (0%)	2.3 (3.3%)	-0.1 (-0.2%)
	All	1.6 (2.3%)	-0.5 (-0.7%)	2.2 (3.2%)	0.1 (0.2%)

Alternative 4A_ELT: American River at Watt Avenue					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	1.3 (1.9%)	-0.6 (-0.9%)	1.4 (2%)	-0.5 (-0.7%)
	AN	0.8 (1.3%)	0 (0%)	0.6 (1%)	-0.2 (-0.3%)
	BN	1 (1.5%)	-0.1 (-0.2%)	1.2 (1.8%)	0.1 (0.1%)
	D	2 (2.9%)	0.3 (0.4%)	1.9 (2.8%)	0.2 (0.3%)
	C	2.4 (3.3%)	0.2 (0.3%)	2.6 (3.6%)	0.4 (0.6%)
	All	1.5 (2.2%)	-0.1 (-0.2%)	1.5 (2.3%)	-0.1 (-0.1%)
AUG	W	2.6 (3.9%)	0.3 (0.5%)	2.4 (3.5%)	0.1 (0.1%)
	AN	1.8 (2.6%)	0.1 (0.1%)	1.4 (2.1%)	-0.3 (-0.4%)
	BN	2 (2.9%)	0.2 (0.3%)	0.9 (1.3%)	-0.9 (-1.3%)
	D	3.5 (5.1%)	0.8 (1.1%)	2.6 (3.9%)	0 (0%)
	C	3.4 (4.8%)	0.2 (0.3%)	2.8 (4%)	-0.4 (-0.5%)
	All	2.7 (4%)	0.4 (0.5%)	2.1 (3.1%)	-0.2 (-0.3%)
SEP	W	1.4 (2.1%)	0.5 (0.7%)	1.1 (1.7%)	0.2 (0.3%)
	AN	1.3 (1.9%)	0.5 (0.7%)	1 (1.5%)	0.2 (0.3%)
	BN	1.9 (2.8%)	0.7 (1%)	2 (3%)	0.8 (1.2%)
	D	1.9 (2.8%)	0.3 (0.4%)	1.7 (2.5%)	0.1 (0.1%)
	C	2 (2.9%)	0 (0%)	2.1 (3%)	0 (0%)
	All	1.7 (2.5%)	0.4 (0.6%)	1.5 (2.3%)	0.2 (0.4%)
OCT	W	3.9 (6.6%)	0.1 (0.1%)	4 (6.7%)	0.1 (0.2%)
	AN	3.6 (6%)	0 (0%)	3.6 (6%)	0.1 (0.1%)
	BN	3.6 (6.1%)	0.2 (0.4%)	3.5 (6%)	0.1 (0.2%)
	D	3.6 (6%)	-0.1 (-0.1%)	3.8 (6.3%)	0.1 (0.1%)
	C	3 (4.9%)	0 (0%)	3 (4.8%)	-0.1 (-0.1%)
	All	3.6 (6.1%)	0 (0.1%)	3.7 (6.1%)	0.1 (0.1%)
NOV	W	1.6 (2.9%)	-0.2 (-0.4%)	1.7 (3%)	-0.2 (-0.3%)
	AN	1.8 (3.1%)	-0.1 (-0.2%)	1.9 (3.4%)	0 (0.1%)
	BN	2.2 (4%)	-0.2 (-0.4%)	2.4 (4.3%)	-0.1 (-0.1%)
	D	1.8 (3.3%)	-0.1 (-0.1%)	1.8 (3.2%)	-0.1 (-0.2%)
	C	1.8 (3.2%)	0 (0.1%)	2 (3.5%)	0.2 (0.4%)
	All	1.8 (3.2%)	-0.1 (-0.3%)	1.9 (3.4%)	-0.1 (-0.1%)
DEC	W	0.9 (1.8%)	0 (0%)	1 (1.9%)	0.1 (0.1%)
	AN	1 (1.9%)	0 (0.1%)	1 (2.1%)	0.1 (0.2%)
	BN	1.1 (2.3%)	0 (0%)	1.2 (2.4%)	0 (0.1%)
	D	1 (2.1%)	-0.1 (-0.1%)	1 (2.1%)	0 (-0.1%)
	C	1 (2.2%)	0.1 (0.3%)	1.2 (2.5%)	0.3 (0.6%)
	All	1 (2%)	0 (0%)	1.1 (2.1%)	0.1 (0.1%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **American River at the Confluence with the Sacramento River**2 **Table B.7-69. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the American River at the Confluence with**  
3 **the Sacramento River, Year-Round**

Alternative 4A_ELT: American River at the Confluence with the Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	47	48	48	48
	AN	46	48	48	48
	BN	46	47	47	47
	D	46	47	47	47
	C	46	48	48	48
	All	46	47	47	47
FEB	W	48	50	50	50
	AN	48	50	50	50
	BN	48	50	49	50
	D	49	51	51	51
	C	51	53	53	53
	All	49	51	51	51
MAR	W	53	54	54	54
	AN	53	55	55	55
	BN	54	55	55	55
	D	55	56	56	56
	C	56	57	57	57
	All	54	55	55	55
APR	W	57	58	58	58
	AN	58	60	60	60
	BN	59	60	60	60
	D	61	62	62	62
	C	62	63	63	63
	All	59	60	60	60
MAY	W	61	63	63	63
	AN	63	66	66	66
	BN	63	65	65	65
	D	66	68	68	68
	C	67	68	68	68
	All	64	66	66	66
JUN	W	65	68	67	68
	AN	68	70	69	70
	BN	68	70	69	70
	D	70	71	70	71
	C	70	72	72	72
	All	68	70	69	70

Alternative 4A_ELT: American River at the Confluence with the Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	69	71	70	70
	AN	68	69	69	69
	BN	68	69	69	69
	D	69	71	71	71
	C	73	75	75	75
	All	69	71	71	71
AUG	W	69	71	72	71
	AN	69	71	71	71
	BN	70	72	72	71
	D	69	72	73	72
	C	72	75	75	75
	All	70	72	73	72
SEP	W	66	67	68	67
	AN	67	68	68	68
	BN	67	69	70	70
	D	68	69	70	70
	C	69	71	71	71
	All	67	69	69	69
OCT	W	60	63	63	63
	AN	60	63	63	63
	BN	60	63	63	63
	D	60	63	63	64
	C	62	64	64	64
	All	60	63	63	63
NOV	W	56	58	58	58
	AN	56	58	58	58
	BN	55	58	57	57
	D	56	57	57	57
	C	57	58	58	58
	All	56	58	58	58
DEC	W	49	50	50	50
	AN	49	50	50	50
	BN	48	49	49	50
	D	49	50	50	50
	C	48	49	49	49
	All	49	50	50	50

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1 **Table B.7-70. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the American**  
 2 **River at the Confluence with the Sacramento River, Year-Round**

Alternative 4A_ELT: American River at the Confluence with the Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	1.4 (3%)	0 (0%)	1.4 (3%)	0 (0%)
	AN	1.3 (2.8%)	0 (0%)	1.3 (2.9%)	0.1 (0.1%)
	BN	1.3 (2.9%)	0 (-0.1%)	1.3 (2.9%)	0 (-0.1%)
	D	1.2 (2.5%)	0 (0%)	1.2 (2.6%)	0 (0.1%)
	C	1.4 (3%)	0 (0.1%)	1.4 (3.1%)	0.1 (0.1%)
	All	1.3 (2.9%)	0 (0%)	1.3 (2.9%)	0 (0.1%)
FEB	W	1.6 (3.4%)	0 (0%)	1.6 (3.4%)	0 (0%)
	AN	1.8 (3.7%)	0 (-0.1%)	1.8 (3.7%)	0 (-0.1%)
	BN	1.6 (3.3%)	-0.1 (-0.1%)	1.6 (3.3%)	0 (-0.1%)
	D	1.6 (3.2%)	0 (0%)	1.6 (3.3%)	0 (0.1%)
	C	1.5 (2.9%)	0.1 (0.1%)	1.6 (3%)	0.1 (0.2%)
	All	1.6 (3.3%)	0 (0%)	1.6 (3.3%)	0 (0%)
MAR	W	1.3 (2.5%)	0 (0%)	1.3 (2.5%)	0 (0%)
	AN	1.3 (2.5%)	0 (0.1%)	1.3 (2.4%)	0 (0.1%)
	BN	1.1 (2.1%)	0 (0%)	1.1 (2.1%)	0 (0%)
	D	1.4 (2.5%)	-0.1 (-0.2%)	1.4 (2.7%)	-0.1 (-0.1%)
	C	1.1 (2%)	-0.1 (-0.1%)	1.2 (2.1%)	0 (0%)
	All	1.3 (2.4%)	0 (-0.1%)	1.3 (2.4%)	0 (0%)
APR	W	1.2 (2.1%)	0 (0%)	1.2 (2.1%)	0 (0%)
	AN	1.3 (2.2%)	0 (0%)	1.3 (2.2%)	0 (0%)
	BN	1.2 (2%)	-0.1 (-0.1%)	1.3 (2.1%)	0 (0%)
	D	1 (1.6%)	0 (0%)	1 (1.6%)	0 (0%)
	C	1 (1.6%)	-0.3 (-0.5%)	1.3 (2.1%)	-0.1 (-0.1%)
	All	1.1 (1.9%)	-0.1 (-0.1%)	1.2 (2%)	0 (0%)
MAY	W	2.2 (3.6%)	0 (0%)	2.2 (3.6%)	0 (0%)
	AN	2.6 (4.1%)	-0.2 (-0.2%)	2.6 (4.2%)	-0.1 (-0.1%)
	BN	2 (3.1%)	-0.2 (-0.4%)	2.2 (3.5%)	0 (0%)
	D	1.9 (2.9%)	0 (0%)	1.9 (2.9%)	0 (0.1%)
	C	1.5 (2.3%)	-0.1 (-0.2%)	1.7 (2.6%)	0.1 (0.2%)
	All	2 (3.2%)	-0.1 (-0.1%)	2.1 (3.4%)	0 (0%)
JUN	W	2 (3.1%)	-0.3 (-0.4%)	2.2 (3.4%)	-0.1 (-0.1%)
	AN	1.3 (2%)	-0.8 (-1.2%)	2.3 (3.4%)	0.2 (0.3%)
	BN	1.7 (2.5%)	-0.5 (-0.7%)	2.4 (3.5%)	0.2 (0.3%)
	D	0.6 (0.8%)	-1 (-1.3%)	1.9 (2.8%)	0.4 (0.6%)
	C	2.3 (3.3%)	0 (0%)	2.3 (3.3%)	-0.1 (-0.1%)
	All	1.6 (2.3%)	-0.5 (-0.7%)	2.2 (3.3%)	0.1 (0.2%)

Alternative 4A_ELT: American River at the Confluence with the Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	1.4 (2%)	-0.6 (-0.9%)	1.5 (2.2%)	-0.5 (-0.8%)
	AN	1 (1.4%)	0 (0%)	0.7 (1.1%)	-0.2 (-0.3%)
	BN	1.1 (1.7%)	-0.2 (-0.2%)	1.4 (2%)	0.1 (0.1%)
	D	2.1 (3%)	0.2 (0.3%)	2 (2.9%)	0.1 (0.2%)
	C	2.2 (3.1%)	0.1 (0.2%)	2.4 (3.4%)	0.3 (0.5%)
	All	1.6 (2.3%)	-0.2 (-0.2%)	1.6 (2.4%)	-0.1 (-0.1%)
AUG	W	2.9 (4.2%)	0.3 (0.5%)	2.6 (3.8%)	0.1 (0.1%)
	AN	1.9 (2.8%)	0.1 (0.1%)	1.6 (2.3%)	-0.3 (-0.4%)
	BN	2.1 (3%)	0.2 (0.3%)	1 (1.5%)	-0.9 (-1.3%)
	D	3.7 (5.3%)	0.8 (1.2%)	2.9 (4.1%)	0 (0.1%)
	C	3.1 (4.3%)	0.1 (0.2%)	2.8 (3.8%)	-0.2 (-0.3%)
	All	2.8 (4.1%)	0.4 (0.5%)	2.3 (3.3%)	-0.2 (-0.3%)
SEP	W	1.5 (2.3%)	0.5 (0.8%)	1.2 (1.8%)	0.2 (0.4%)
	AN	1.4 (2.1%)	0.5 (0.7%)	1.2 (1.7%)	0.2 (0.3%)
	BN	2.1 (3.1%)	0.7 (1%)	2.2 (3.2%)	0.8 (1.1%)
	D	2 (2.9%)	0.2 (0.3%)	1.8 (2.6%)	0.1 (0.1%)
	C	1.9 (2.7%)	0 (0%)	1.9 (2.8%)	0 (0%)
	All	1.8 (2.6%)	0.4 (0.6%)	1.6 (2.4%)	0.2 (0.4%)
OCT	W	3.5 (5.9%)	0.1 (0.1%)	3.5 (5.9%)	0.1 (0.1%)
	AN	3.2 (5.4%)	0 (0%)	3.3 (5.4%)	0.1 (0.1%)
	BN	3.2 (5.4%)	0.2 (0.3%)	3.2 (5.3%)	0.1 (0.2%)
	D	3.2 (5.3%)	-0.1 (-0.1%)	3.4 (5.6%)	0.1 (0.2%)
	C	2.7 (4.3%)	0 (0%)	2.6 (4.2%)	-0.1 (-0.1%)
	All	3.2 (5.4%)	0 (0.1%)	3.3 (5.4%)	0.1 (0.1%)
NOV	W	1.5 (2.7%)	-0.3 (-0.4%)	1.6 (2.8%)	-0.2 (-0.4%)
	AN	1.7 (3%)	-0.2 (-0.3%)	1.8 (3.3%)	0 (0%)
	BN	2 (3.7%)	-0.2 (-0.4%)	2.2 (4%)	-0.1 (-0.1%)
	D	1.7 (3%)	-0.1 (-0.1%)	1.6 (2.9%)	-0.1 (-0.2%)
	C	1.7 (3%)	0 (0.1%)	1.8 (3.2%)	0.2 (0.3%)
	All	1.7 (3%)	-0.2 (-0.3%)	1.8 (3.2%)	-0.1 (-0.1%)
DEC	W	0.9 (1.8%)	0 (0%)	0.9 (1.9%)	0 (0.1%)
	AN	0.9 (1.9%)	0 (0%)	1 (2%)	0.1 (0.2%)
	BN	1.1 (2.3%)	0 (0%)	1.1 (2.3%)	0 (0.1%)
	D	1 (2%)	0 (-0.1%)	1 (2%)	0 (-0.1%)
	C	1 (2.1%)	0.1 (0.3%)	1.2 (2.4%)	0.3 (0.6%)
	All	1 (2%)	0 (0%)	1 (2.1%)	0.1 (0.1%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Stanislaus River at Knights Ferry**2 **Table B.7-71. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Stanislaus River at Knights Ferry, Year-**  
3 **Round**

Alternative 4A_ELT: Stanislaus River at Knights Ferry					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	49	50	50	50
	AN	49	50	50	50
	BN	49	50	50	50
	D	48	50	50	50
	C	49	50	50	50
	All	49	50	50	50
FEB	W	49	50	50	50
	AN	49	50	50	50
	BN	49	51	51	51
	D	49	50	50	50
	C	50	51	51	51
	All	49	50	50	50
MAR	W	49	50	50	50
	AN	49	51	51	51
	BN	51	52	52	52
	D	51	53	53	53
	C	52	54	54	54
	All	50	52	52	52
APR	W	50	51	51	51
	AN	50	52	52	52
	BN	51	53	53	53
	D	52	53	53	53
	C	53	55	55	55
	All	51	53	53	53
MAY	W	51	53	53	53
	AN	53	54	54	54
	BN	54	56	56	56
	D	55	56	56	56
	C	56	58	58	58
	All	53	55	55	55
JUN	W	54	55	55	55
	AN	56	57	57	57
	BN	58	59	59	59
	D	59	61	61	61
	C	60	62	62	62
	All	57	58	58	58



Alternative 4A_ELT: Stanislaus River at Knights Ferry					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	57	58	58	58
	AN	59	61	61	61
	BN	60	62	62	62
	D	61	63	63	63
	C	62	64	64	64
	All	59	61	61	61
AUG	W	58	59	59	59
	AN	60	61	61	61
	BN	60	62	62	62
	D	61	63	63	63
	C	62	65	65	64
	All	60	62	62	62
SEP	W	59	60	60	60
	AN	60	62	62	62
	BN	61	63	63	63
	D	62	63	63	63
	C	63	65	65	65
	All	61	62	62	62
OCT	W	59	61	61	61
	AN	59	61	61	61
	BN	59	60	60	60
	D	58	60	60	60
	C	60	62	62	62
	All	59	61	61	61
NOV	W	56	58	58	58
	AN	56	58	58	58
	BN	56	57	57	57
	D	56	57	57	57
	C	57	59	59	59
	All	56	58	58	58
DEC	W	52	53	53	53
	AN	52	53	53	53
	BN	51	53	53	53
	D	51	52	52	52
	C	52	53	53	53
	All	51	53	53	53

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1 **Table B.7-72. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the**  
 2 **Stanislaus River at Knights Ferry, Year-Round**

Alternative 4A_ELT: Stanislaus River at Knights Ferry					
Month	Water Year Type	EXISTING CONDITIONS vs.	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs.	NAA_ELT vs. H4_ELT
		H3_ELT		H4_ELT	
JAN	W	1.4 (2.8%)	0 (0%)	1.4 (2.8%)	0 (0%)
	AN	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
	BN	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
	D	1.4 (3%)	0 (0%)	1.4 (3%)	0 (0%)
	C	1.4 (2.9%)	0 (0%)	1.4 (2.9%)	0 (0%)
	All	1.4 (2.9%)	0 (0%)	1.4 (2.9%)	0 (0%)
FEB	W	1.3 (2.6%)	0 (0%)	1.3 (2.6%)	0 (0%)
	AN	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
	BN	1.5 (3.1%)	0 (0%)	1.5 (3.1%)	0 (0%)
	D	1.5 (3.1%)	0 (0%)	1.5 (3.1%)	0 (0%)
	C	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
	All	1.4 (2.9%)	0 (0%)	1.4 (2.9%)	0 (0%)
MAR	W	1.3 (2.7%)	0 (0%)	1.3 (2.7%)	0 (0%)
	AN	1.7 (3.5%)	0 (0%)	1.7 (3.5%)	0 (0%)
	BN	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
	D	1.6 (3.2%)	0 (0%)	1.6 (3.2%)	0 (0%)
	C	1.4 (2.7%)	0 (0%)	1.4 (2.7%)	0 (0%)
	All	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
APR	W	1.5 (2.9%)	0 (0%)	1.5 (2.9%)	0 (0%)
	AN	1.6 (3.2%)	0 (0%)	1.6 (3.2%)	0 (0%)
	BN	1.7 (3.3%)	0 (0%)	1.7 (3.3%)	0 (0%)
	D	1.7 (3.2%)	0 (0%)	1.7 (3.2%)	0 (0%)
	C	1.6 (3%)	0 (0%)	1.6 (3%)	0 (0%)
	All	1.6 (3.1%)	0 (0%)	1.6 (3.1%)	0 (0%)
MAY	W	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
	AN	1.6 (3%)	0 (0%)	1.6 (3%)	0 (0%)
	BN	1.9 (3.5%)	0 (0%)	1.9 (3.5%)	0 (0%)
	D	1.8 (3.3%)	0 (0%)	1.8 (3.3%)	0 (0%)
	C	1.8 (3.3%)	0 (0%)	1.8 (3.3%)	0 (0%)
	All	1.7 (3.2%)	0 (0%)	1.7 (3.2%)	0 (0%)
JUN	W	1.5 (2.7%)	0 (0%)	1.4 (2.7%)	0 (0%)
	AN	1.6 (2.9%)	0 (0%)	1.6 (2.9%)	0 (0%)
	BN	1.9 (3.3%)	0 (0%)	1.9 (3.3%)	0 (0%)
	D	2.1 (3.5%)	0 (0%)	2.1 (3.5%)	0 (0%)
	C	2 (3.3%)	0 (0%)	2 (3.3%)	0 (0%)
	All	1.8 (3.1%)	0 (0%)	1.7 (3.1%)	0 (0%)

Alternative 4A_ELT: Stanislaus River at Knights Ferry					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	1.5 (2.6%)	0 (0%)	1.5 (2.6%)	0 (0%)
	AN	1.8 (3.1%)	0 (0%)	1.8 (3.1%)	0 (0%)
	BN	1.9 (3.2%)	0 (0%)	1.9 (3.2%)	0 (0%)
	D	2.1 (3.4%)	0 (0%)	2.1 (3.4%)	0 (0%)
	C	2.1 (3.3%)	0 (0%)	2 (3.3%)	0 (0%)
	All	1.8 (3.1%)	0 (0%)	1.8 (3.1%)	0 (0%)
AUG	W	1.6 (2.8%)	0 (0%)	1.6 (2.8%)	0 (0%)
	AN	1.7 (2.9%)	0 (0%)	1.7 (2.9%)	0 (0%)
	BN	1.8 (2.9%)	0 (0%)	1.8 (2.9%)	0 (0%)
	D	1.8 (2.9%)	0 (0%)	1.8 (2.9%)	0 (0%)
	C	2.3 (3.7%)	0 (0%)	2 (3.2%)	-0.3 (-0.4%)
	All	1.8 (3%)	0 (0%)	1.8 (2.9%)	-0.1 (-0.1%)
SEP	W	1.6 (2.7%)	0 (0%)	1.6 (2.7%)	0 (0%)
	AN	1.7 (2.8%)	0 (0%)	1.7 (2.8%)	0 (0%)
	BN	1.7 (2.8%)	0 (0%)	1.7 (2.8%)	0 (0%)
	D	1.8 (2.9%)	0 (0%)	1.8 (2.9%)	0 (0%)
	C	2.1 (3.3%)	0 (0%)	1.9 (3%)	-0.2 (-0.3%)
	All	1.8 (2.9%)	0 (0%)	1.7 (2.8%)	0 (-0.1%)
OCT	W	1.6 (2.7%)	0 (0%)	1.6 (2.7%)	0 (0%)
	AN	1.4 (2.4%)	0 (0%)	1.4 (2.4%)	0 (0%)
	BN	1.6 (2.7%)	0 (0%)	1.5 (2.6%)	0 (0%)
	D	1.6 (2.8%)	0 (0%)	1.6 (2.8%)	0 (0%)
	C	1.7 (2.8%)	0 (0%)	1.7 (2.8%)	0 (0%)
	All	1.6 (2.7%)	0 (0%)	1.6 (2.7%)	0 (0%)
NOV	W	1.5 (2.6%)	0 (0%)	1.5 (2.6%)	0 (0%)
	AN	1.4 (2.5%)	0 (0%)	1.4 (2.5%)	0 (0%)
	BN	1.5 (2.6%)	0 (0%)	1.5 (2.6%)	0 (0%)
	D	1.5 (2.6%)	0 (0%)	1.5 (2.6%)	0 (0%)
	C	1.5 (2.7%)	0 (0%)	1.5 (2.7%)	0 (0%)
	All	1.5 (2.6%)	0 (0%)	1.5 (2.6%)	0 (0%)
DEC	W	1.4 (2.7%)	0 (0%)	1.4 (2.7%)	0 (0%)
	AN	1.4 (2.7%)	0 (0%)	1.4 (2.6%)	0 (0%)
	BN	1.5 (2.8%)	0 (0%)	1.5 (2.8%)	0 (0%)
	D	1.4 (2.7%)	0 (0%)	1.4 (2.7%)	0 (0%)
	C	1.4 (2.8%)	0 (0%)	1.4 (2.8%)	0 (0%)
	All	1.4 (2.7%)	0 (0%)	1.4 (2.7%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Stanislaus River at Orange Blossom Bridge**2 **Table B.7-73. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Stanislaus River at Orange Blossom**  
3 **Bridge, Year-Round**

Alternative 4A_ELT: Stanislaus River at Orange Blossom Bridge					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	48	49	49	49
	AN	48	49	49	49
	BN	48	49	49	49
	D	47	48	48	48
	C	48	49	49	49
	All	48	49	49	49
FEB	W	49	50	50	50
	AN	49	51	51	51
	BN	49	51	51	51
	D	49	51	51	51
	C	50	52	52	52
	All	49	51	51	51
MAR	W	49	51	51	51
	AN	50	52	52	52
	BN	52	53	53	53
	D	52	54	54	54
	C	53	54	54	54
	All	51	53	53	53
APR	W	50	52	52	52
	AN	51	53	53	53
	BN	52	54	54	54
	D	53	54	54	54
	C	55	56	56	56
	All	52	54	54	54
MAY	W	53	54	54	54
	AN	54	56	56	56
	BN	55	57	57	57
	D	56	58	58	58
	C	58	60	60	60
	All	55	57	57	57
JUN	W	56	57	57	57
	AN	58	60	60	60
	BN	60	62	62	62
	D	62	65	64	65
	C	63	65	65	65
	All	59	61	61	61

Alternative 4A_ELT: Stanislaus River at Orange Blossom Bridge					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	60	61	61	61
	AN	63	65	65	65
	BN	63	65	65	65
	D	64	66	66	66
	C	65	67	67	67
	All	63	65	65	65
AUG	W	60	62	62	62
	AN	63	64	64	64
	BN	63	65	65	65
	D	64	66	66	66
	C	65	67	67	67
	All	63	64	64	64
SEP	W	60	62	62	62
	AN	63	64	64	64
	BN	63	65	65	65
	D	63	65	65	65
	C	64	66	66	66
	All	62	64	64	64
OCT	W	59	61	61	61
	AN	59	61	61	61
	BN	59	60	60	60
	D	59	60	60	60
	C	60	62	62	62
	All	59	61	61	61
NOV	W	55	56	56	56
	AN	55	56	56	56
	BN	55	56	56	56
	D	55	56	56	56
	C	56	57	57	57
	All	55	57	57	57
DEC	W	50	52	52	52
	AN	50	51	51	51
	BN	49	51	51	51
	D	50	51	51	51
	C	50	51	51	51
	All	50	51	51	51

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1 **Table B.7-74. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the**  
 2 **Stanislaus River at Orange Blossom Bridge, Year-Round**

Alternative 4A_ELT: Stanislaus River at Orange Blossom Bridge					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	1.3 (2.8%)	0 (0%)	1.3 (2.8%)	0 (0%)
	AN	1.5 (3.1%)	0 (0%)	1.5 (3.1%)	0 (0%)
	BN	1.4 (2.9%)	0 (0%)	1.4 (2.9%)	0 (0%)
	D	1.3 (2.9%)	0 (0%)	1.3 (2.9%)	0 (0%)
	C	1.3 (2.6%)	0 (0%)	1.3 (2.6%)	0 (0%)
	All	1.4 (2.8%)	0 (0%)	1.4 (2.8%)	0 (0%)
FEB	W	1.3 (2.6%)	0 (0%)	1.3 (2.6%)	0 (0%)
	AN	1.4 (2.9%)	0 (0%)	1.4 (2.9%)	0 (0%)
	BN	1.5 (3.1%)	0 (0%)	1.5 (3.1%)	0 (0%)
	D	1.6 (3.3%)	0 (0%)	1.6 (3.3%)	0 (0%)
	C	1.6 (3.1%)	0 (0%)	1.6 (3.1%)	0 (0%)
	All	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
MAR	W	1.3 (2.5%)	0 (0%)	1.3 (2.6%)	0 (0%)
	AN	1.7 (3.5%)	0 (0%)	1.7 (3.5%)	0 (0%)
	BN	1.5 (2.9%)	0 (0%)	1.5 (2.9%)	0 (0%)
	D	1.7 (3.3%)	0 (0%)	1.7 (3.3%)	0 (0%)
	C	1.5 (2.7%)	0 (0%)	1.5 (2.7%)	0 (0%)
	All	1.5 (2.9%)	0 (0%)	1.5 (2.9%)	0 (0%)
APR	W	1.5 (2.9%)	0 (0%)	1.5 (2.9%)	0 (0%)
	AN	1.6 (3.1%)	0 (0%)	1.6 (3.1%)	0 (0%)
	BN	1.8 (3.4%)	0 (0%)	1.8 (3.4%)	0 (0%)
	D	1.7 (3.3%)	0 (0%)	1.7 (3.3%)	0 (0%)
	C	1.7 (3.1%)	0 (0%)	1.7 (3.1%)	0 (0%)
	All	1.6 (3.1%)	0 (0%)	1.6 (3.1%)	0 (0%)
MAY	W	1.6 (3%)	0 (0%)	1.6 (3%)	0 (0%)
	AN	1.7 (3.1%)	0 (0%)	1.7 (3.1%)	0 (0%)
	BN	2.2 (3.9%)	0 (0%)	2.2 (3.9%)	0 (0%)
	D	2 (3.5%)	0 (0%)	2 (3.5%)	0 (0%)
	C	2 (3.4%)	0 (0%)	2 (3.4%)	0 (0%)
	All	1.8 (3.3%)	0 (0%)	1.8 (3.3%)	0 (0%)
JUN	W	1.4 (2.5%)	0 (0%)	1.4 (2.5%)	0 (0%)
	AN	1.7 (3%)	0 (0%)	1.7 (3%)	0 (0%)
	BN	2.1 (3.4%)	0 (0%)	2.1 (3.4%)	0 (0%)
	D	2.5 (4%)	0 (0%)	2.5 (4%)	0 (0%)
	C	2.1 (3.4%)	0 (0%)	2.2 (3.4%)	0 (0%)
	All	1.9 (3.2%)	0 (0%)	1.9 (3.2%)	0 (0%)

Alternative 4A_ELT: Stanislaus River at Orange Blossom Bridge					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	1.4 (2.4%)	0 (0%)	1.4 (2.4%)	0 (0%)
	AN	2 (3.3%)	0 (0%)	2 (3.3%)	0 (0%)
	BN	2 (3.2%)	0 (0%)	2 (3.2%)	0 (0%)
	D	2.3 (3.6%)	0 (0%)	2.3 (3.6%)	0 (0%)
	C	2.2 (3.4%)	0 (0%)	2.2 (3.3%)	0 (0%)
	All	1.9 (3.1%)	0 (0%)	1.9 (3.1%)	0 (0%)
AUG	W	1.8 (2.9%)	0 (0%)	1.8 (2.9%)	0 (0%)
	AN	1.8 (3%)	0 (0%)	1.8 (3%)	0 (0%)
	BN	1.7 (2.8%)	0 (0%)	1.7 (2.8%)	0 (0%)
	D	1.8 (2.8%)	0 (0%)	1.8 (2.8%)	0 (0%)
	C	2.3 (3.6%)	0 (0%)	2 (3.1%)	-0.3 (-0.4%)
	All	1.9 (3%)	0 (0%)	1.8 (2.9%)	-0.1 (-0.1%)
SEP	W	1.7 (2.8%)	0 (0%)	1.7 (2.8%)	0 (0%)
	AN	1.9 (3%)	0 (0%)	1.9 (3%)	0 (0%)
	BN	1.8 (2.9%)	0 (0%)	1.8 (2.9%)	0 (0%)
	D	1.8 (2.8%)	0 (0%)	1.8 (2.8%)	0 (0%)
	C	2.1 (3.2%)	0 (0%)	1.9 (2.9%)	-0.2 (-0.3%)
	All	1.8 (3%)	0 (0%)	1.8 (2.9%)	0 (-0.1%)
OCT	W	1.6 (2.6%)	0 (0%)	1.6 (2.6%)	0 (0%)
	AN	1.4 (2.4%)	0 (0%)	1.4 (2.4%)	0 (0%)
	BN	1.4 (2.5%)	0 (0%)	1.4 (2.5%)	0 (0%)
	D	1.6 (2.7%)	0 (0%)	1.6 (2.7%)	0 (0%)
	C	1.7 (2.8%)	0 (0%)	1.7 (2.8%)	0 (0%)
	All	1.5 (2.6%)	0 (0%)	1.5 (2.6%)	0 (0%)
NOV	W	1.4 (2.5%)	0 (0%)	1.4 (2.5%)	0 (0%)
	AN	1.3 (2.4%)	0 (0%)	1.3 (2.4%)	0 (0%)
	BN	1.4 (2.6%)	0 (0%)	1.4 (2.6%)	0 (0%)
	D	1.3 (2.5%)	0 (0%)	1.3 (2.5%)	0 (0%)
	C	1.4 (2.5%)	0 (0%)	1.4 (2.5%)	0 (0%)
	All	1.4 (2.5%)	0 (0%)	1.4 (2.5%)	0 (0%)
DEC	W	1.3 (2.7%)	0 (0%)	1.3 (2.7%)	0 (0%)
	AN	1.3 (2.6%)	0 (0%)	1.3 (2.6%)	0 (0%)
	BN	1.4 (2.8%)	0 (0%)	1.4 (2.8%)	0 (0%)
	D	1.3 (2.5%)	0 (0%)	1.3 (2.5%)	0 (0%)
	C	1.3 (2.5%)	0 (0%)	1.3 (2.5%)	0 (0%)
	All	1.3 (2.6%)	0 (0%)	1.3 (2.6%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Stanislaus River at Riverbank**2 **Table B.7-75. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Stanislaus River at Riverbank, Year-**  
3 **Round**

Alternative 4A_ELT: Stanislaus River at Riverbank					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	47	48	48	48
	AN	47	48	48	48
	BN	46	48	48	48
	D	45	47	47	47
	C	46	47	47	47
	All	46	48	48	48
FEB	W	49	51	51	51
	AN	50	51	51	51
	BN	50	51	51	51
	D	50	51	51	51
	C	51	52	52	52
	All	50	51	51	51
MAR	W	51	52	52	52
	AN	52	53	53	53
	BN	53	55	55	55
	D	54	56	56	56
	C	54	55	55	55
	All	52	54	54	54
APR	W	52	53	53	53
	AN	53	55	55	55
	BN	54	56	56	56
	D	54	56	56	56
	C	57	58	58	58
	All	54	55	55	55
MAY	W	56	57	57	57
	AN	57	59	59	59
	BN	58	60	60	60
	D	59	61	61	61
	C	60	62	62	62
	All	58	59	59	59
JUN	W	60	61	61	61
	AN	62	64	64	64
	BN	64	66	66	66
	D	66	69	69	69
	C	66	68	68	68
	All	63	65	65	65



Alternative 4A_ELT: Stanislaus River at Riverbank					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	65	67	67	67
	AN	68	70	70	70
	BN	68	70	70	70
	D	68	70	70	70
	C	68	70	70	70
	All	67	69	69	69
AUG	W	65	67	67	67
	AN	67	69	69	69
	BN	67	68	68	68
	D	68	69	69	69
	C	67	69	69	69
	All	66	68	68	68
SEP	W	64	65	65	65
	AN	66	68	68	68
	BN	66	67	67	67
	D	66	68	68	68
	C	66	68	68	68
	All	65	67	67	67
OCT	W	59	61	61	61
	AN	59	61	61	61
	BN	59	60	60	60
	D	59	60	60	60
	C	61	62	62	62
	All	60	61	61	61
NOV	W	53	55	55	55
	AN	53	54	54	54
	BN	53	54	54	54
	D	53	54	54	54
	C	54	55	55	55
	All	53	54	54	54
DEC	W	48	49	49	49
	AN	48	49	49	49
	BN	47	48	48	48
	D	47	48	48	48
	C	47	48	48	48
	All	47	49	49	49

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1 **Table B.7-76. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the**  
 2 **Stanislaus River at Riverbank, Year-Round**

Alternative 4A_ELT: Stanislaus River at Riverbank					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JAN	W	1.3 (2.8%)	0 (0%)	1.3 (2.8%)	0 (0%)
	AN	1.4 (3.1%)	0 (0%)	1.4 (3.1%)	0 (0%)
	BN	1.3 (2.7%)	0 (0%)	1.3 (2.7%)	0 (0%)
	D	1.2 (2.7%)	0 (0%)	1.2 (2.7%)	0 (0%)
	C	1.2 (2.6%)	0 (0%)	1.2 (2.6%)	0 (0%)
	All	1.3 (2.8%)	0 (0%)	1.3 (2.8%)	0 (0%)
FEB	W	1.2 (2.5%)	0 (0%)	1.2 (2.5%)	0 (0%)
	AN	1.4 (2.8%)	0 (0%)	1.4 (2.8%)	0 (0%)
	BN	1.6 (3.1%)	0 (0%)	1.6 (3.1%)	0 (0%)
	D	1.7 (3.3%)	0 (0%)	1.6 (3.3%)	0 (0%)
	C	1.6 (3.1%)	0 (0%)	1.6 (3.1%)	0 (0%)
	All	1.4 (2.9%)	0 (0%)	1.4 (2.9%)	0 (0%)
MAR	W	1.1 (2.1%)	0 (0%)	1.1 (2.1%)	0 (0%)
	AN	1.7 (3.3%)	0 (0%)	1.7 (3.3%)	0 (0%)
	BN	1.3 (2.5%)	0 (0%)	1.3 (2.5%)	0 (0%)
	D	1.7 (3.2%)	0 (0%)	1.7 (3.2%)	0 (0%)
	C	1.4 (2.6%)	0 (0%)	1.4 (2.6%)	0 (0%)
	All	1.4 (2.7%)	0 (0%)	1.4 (2.7%)	0 (0%)
APR	W	1.4 (2.7%)	0 (0%)	1.4 (2.7%)	0 (0%)
	AN	1.6 (2.9%)	0 (0%)	1.6 (2.9%)	0 (0%)
	BN	1.8 (3.4%)	0 (0%)	1.8 (3.4%)	0 (0%)
	D	1.7 (3.2%)	0 (0%)	1.7 (3.2%)	0 (0%)
	C	1.7 (3%)	0 (0%)	1.7 (3%)	0 (0%)
	All	1.6 (3%)	0 (0%)	1.6 (3%)	0 (0%)
MAY	W	1.6 (3%)	0 (0%)	1.6 (3%)	0 (0%)
	AN	1.9 (3.3%)	0 (0%)	1.9 (3.3%)	0 (0%)
	BN	2.4 (4.2%)	0 (0%)	2.4 (4.2%)	0 (0%)
	D	2.1 (3.6%)	0 (0%)	2.1 (3.6%)	0 (0%)
	C	2 (3.3%)	0 (0%)	2 (3.4%)	0 (0%)
	All	2 (3.4%)	0 (0%)	2 (3.4%)	0 (0%)
JUN	W	1.2 (2%)	0 (0%)	1.2 (2%)	0 (0%)
	AN	1.9 (3%)	0 (0%)	1.8 (3%)	0 (0%)
	BN	2 (3.1%)	0 (0%)	2 (3.1%)	0 (0%)
	D	2.3 (3.5%)	0 (0%)	2.4 (3.6%)	0 (0%)
	C	2 (3.1%)	0 (0%)	2.1 (3.1%)	0 (0%)
	All	1.8 (2.8%)	0 (0%)	1.8 (2.8%)	0 (0%)

Alternative 4A_ELT: Stanislaus River at Riverbank					
Month	Water Year Type	EXISTING CONDITIONS vs. H3_ELT	NAA_ELT vs. H3_ELT	EXISTING CONDITIONS vs. H4_ELT	NAA_ELT vs. H4_ELT
JUL	W	1.4 (2.1%)	0 (0%)	1.4 (2.1%)	0 (0%)
	AN	2 (2.9%)	0 (0%)	2 (2.9%)	0 (0%)
	BN	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
	D	2.2 (3.2%)	0 (0%)	2.2 (3.2%)	0 (0%)
	C	2 (2.9%)	0 (0%)	2 (2.9%)	0 (0%)
	All	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
AUG	W	1.8 (2.8%)	0 (0%)	1.8 (2.9%)	0 (0%)
	AN	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
	BN	1.6 (2.5%)	0 (0%)	1.6 (2.5%)	0 (0%)
	D	1.7 (2.4%)	0 (0%)	1.7 (2.4%)	0 (0%)
	C	2.1 (3.1%)	0 (0%)	1.8 (2.7%)	-0.2 (-0.4%)
	All	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (-0.1%)
SEP	W	1.7 (2.7%)	0 (0%)	1.7 (2.7%)	0 (0%)
	AN	1.9 (2.9%)	0 (0%)	1.9 (2.9%)	0 (0%)
	BN	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
	D	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
	C	1.9 (2.9%)	0 (0%)	1.7 (2.7%)	-0.2 (-0.3%)
	All	1.8 (2.8%)	0 (0%)	1.8 (2.7%)	0 (-0.1%)
OCT	W	1.4 (2.4%)	0 (0%)	1.4 (2.4%)	0 (0%)
	AN	1.3 (2.2%)	0 (0%)	1.3 (2.2%)	0 (0%)
	BN	1.2 (2.1%)	0 (0%)	1.2 (2.1%)	0 (0%)
	D	1.4 (2.3%)	0 (0%)	1.4 (2.3%)	0 (0%)
	C	1.5 (2.5%)	0 (0%)	1.5 (2.5%)	0 (0%)
	All	1.4 (2.3%)	0 (0%)	1.4 (2.3%)	0 (0%)
NOV	W	1.3 (2.4%)	0 (0%)	1.3 (2.4%)	0 (0%)
	AN	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
	BN	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
	D	1.2 (2.2%)	0 (0%)	1.2 (2.2%)	0 (0%)
	C	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
	All	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
DEC	W	1.3 (2.7%)	0 (0%)	1.3 (2.7%)	0 (0%)
	AN	1.2 (2.5%)	0 (0%)	1.2 (2.5%)	0 (0%)
	BN	1.2 (2.6%)	0 (0%)	1.2 (2.6%)	0 (0%)
	D	1.1 (2.3%)	0 (0%)	1.1 (2.3%)	0 (0%)
	C	1.1 (2.4%)	0 (0%)	1.1 (2.4%)	0 (0%)
	All	1.2 (2.5%)	0 (0%)	1.2 (2.5%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Stanislaus River at the Confluence with the San Joaquin River**2 **Table B.7-77. Mean Monthly Water Temperatures (°F) for Alternative 4A\_ELT Model Scenarios in the Stanislaus River at the Confluence with**  
3 **the San Joaquin River, Year-Round**

Alternative 4A_ELT: Stanislaus River at the Confluence with the San Joaquin River					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JAN	W	46	48	48	48
	AN	46	47	47	47
	BN	46	47	47	47
	D	45	46	46	46
	C	45	46	46	46
	All	46	47	47	47
FEB	W	50	51	51	51
	AN	50	52	52	52
	BN	50	51	51	51
	D	50	52	52	52
	C	51	53	53	53
	All	50	52	52	52
MAR	W	52	53	53	53
	AN	53	54	54	54
	BN	54	55	55	55
	D	55	57	57	57
	C	55	56	56	56
	All	54	55	55	55
APR	W	54	55	55	55
	AN	55	57	57	57
	BN	56	58	58	58
	D	57	58	58	58
	C	59	60	60	60
	All	56	57	57	57
MAY	W	59	60	60	60
	AN	60	62	62	62
	BN	60	63	63	63
	D	61	64	64	64
	C	63	65	65	65
	All	60	62	62	62
JUN	W	62	64	64	64
	AN	65	67	67	67
	BN	66	68	68	68
	D	68	70	70	70
	C	68	70	70	70
	All	65	67	67	67

Alternative 4A_ELT: Stanislaus River at the Confluence with the San Joaquin River					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A4A_ELT	
				H3_ELT	H4_ELT
JUL	W	68	69	69	69
	AN	70	72	72	72
	BN	70	71	71	71
	D	70	72	72	72
	C	70	72	72	72
	All	69	71	71	71
AUG	W	67	69	69	69
	AN	69	70	70	70
	BN	68	70	70	70
	D	69	71	71	71
	C	69	70	70	70
	All	68	70	70	70
SEP	W	65	67	67	67
	AN	67	69	69	69
	BN	67	68	68	68
	D	67	69	69	69
	C	67	68	68	68
	All	66	68	68	68
OCT	W	60	61	61	61
	AN	60	61	61	61
	BN	59	60	60	60
	D	59	61	61	61
	C	61	62	62	62
	All	60	61	61	61
NOV	W	53	54	54	54
	AN	52	53	53	53
	BN	52	53	53	53
	D	52	53	53	53
	C	53	54	54	54
	All	52	54	54	54
DEC	W	47	48	48	48
	AN	46	48	48	48
	BN	45	47	47	47
	D	45	46	46	46
	C	45	46	46	46
	All	46	47	47	47

1  
2

1 **Table B.7-78. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly Water Temperatures in the**  
 2 **Stanislaus River at the Confluence with the San Joaquin River, Year-Round**

<b>Alternative 4A_ELT: Stanislaus River at the Confluence with the San Joaquin River</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS vs. H3_ELT</b>	<b>NAA_ELT vs. H3_ELT</b>	<b>EXISTING CONDITIONS vs. H4_ELT</b>	<b>NAA_ELT vs. H4_ELT</b>
JAN	W	1.3 (2.9%)	0 (0%)	1.3 (2.9%)	0 (0%)
	AN	1.4 (3%)	0 (0%)	1.4 (3%)	0 (0%)
	BN	1.3 (2.9%)	0 (0%)	1.3 (2.9%)	0 (0%)
	D	1.2 (2.7%)	0 (0%)	1.2 (2.7%)	0 (0%)
	C	1.3 (2.9%)	0 (0%)	1.3 (2.9%)	0 (0%)
	All	1.3 (2.9%)	0 (0%)	1.3 (2.9%)	0 (0%)
FEB	W	1.2 (2.4%)	0 (0%)	1.2 (2.4%)	0 (0%)
	AN	1.4 (2.8%)	0 (0%)	1.4 (2.8%)	0 (0%)
	BN	1.5 (3.1%)	0 (0%)	1.5 (3.1%)	0 (0%)
	D	1.5 (3.1%)	0 (0%)	1.5 (3.1%)	0 (0%)
	C	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
	All	1.4 (2.8%)	0 (0%)	1.4 (2.8%)	0 (0%)
MAR	W	1 (1.9%)	0 (0%)	1 (1.9%)	0 (0%)
	AN	1.6 (3%)	0 (0%)	1.6 (3%)	0 (0%)
	BN	1.2 (2.2%)	0 (0%)	1.2 (2.2%)	0 (0%)
	D	1.6 (2.9%)	0 (0%)	1.6 (2.9%)	0 (0%)
	C	1.3 (2.3%)	0 (0%)	1.3 (2.3%)	0 (0%)
	All	1.3 (2.4%)	0 (0%)	1.3 (2.4%)	0 (0%)
APR	W	1.3 (2.4%)	0 (0%)	1.3 (2.4%)	0 (0%)
	AN	1.5 (2.7%)	0 (0%)	1.5 (2.7%)	0 (0%)
	BN	1.7 (3.1%)	0 (0%)	1.7 (3.1%)	0 (0%)
	D	1.6 (2.9%)	0 (0%)	1.6 (2.9%)	0 (0%)
	C	1.5 (2.6%)	0 (0%)	1.5 (2.6%)	0 (0%)
	All	1.5 (2.7%)	0 (0%)	1.5 (2.7%)	0 (0%)
MAY	W	1.6 (2.8%)	0 (0%)	1.6 (2.8%)	0 (0%)
	AN	2 (3.3%)	0 (0%)	2 (3.3%)	0 (0%)
	BN	2.3 (3.8%)	0 (0%)	2.3 (3.8%)	0 (0%)
	D	2.1 (3.4%)	0 (0%)	2.1 (3.4%)	0 (0%)
	C	1.9 (3%)	0 (0%)	1.9 (3%)	0 (0%)
	All	1.9 (3.2%)	0 (0%)	1.9 (3.2%)	0 (0%)
JUN	W	1.2 (1.9%)	0 (0%)	1.2 (1.9%)	0 (0%)
	AN	1.8 (2.8%)	0 (0%)	1.8 (2.8%)	0 (0%)
	BN	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
	D	1.9 (2.8%)	0 (0%)	1.9 (2.8%)	0 (0%)
	C	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
	All	1.7 (2.5%)	0 (0%)	1.7 (2.5%)	0 (0%)

<b>Alternative 4A_ELT: Stanislaus River at the Confluence with the San Joaquin River</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS vs. H3_ELT</b>	<b>NAA_ELT vs. H3_ELT</b>	<b>EXISTING CONDITIONS vs. H4_ELT</b>	<b>NAA_ELT vs. H4_ELT</b>
JUL	W	1.4 (2.1%)	0 (0%)	1.4 (2.1%)	0 (0%)
	AN	1.8 (2.5%)	0 (0%)	1.8 (2.5%)	0 (0%)
	BN	1.6 (2.3%)	0 (0%)	1.6 (2.3%)	0 (0%)
	D	1.8 (2.6%)	0 (0%)	1.8 (2.6%)	0 (0%)
	C	1.8 (2.5%)	0 (0%)	1.8 (2.5%)	0 (0%)
	All	1.7 (2.4%)	0 (0%)	1.7 (2.4%)	0 (0%)
AUG	W	1.9 (2.8%)	0 (0%)	1.9 (2.8%)	0 (0%)
	AN	1.7 (2.4%)	0 (0%)	1.7 (2.4%)	0 (0%)
	BN	1.6 (2.3%)	0 (0%)	1.6 (2.3%)	0 (0%)
	D	1.6 (2.3%)	0 (0%)	1.6 (2.3%)	0 (0%)
	C	1.9 (2.8%)	0 (0%)	1.6 (2.4%)	-0.3 (-0.4%)
	All	1.8 (2.6%)	0 (0%)	1.7 (2.5%)	-0.1 (-0.1%)
SEP	W	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
	AN	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
	BN	1.8 (2.6%)	0 (0%)	1.8 (2.6%)	0 (0%)
	D	1.7 (2.6%)	0 (0%)	1.7 (2.6%)	0 (0%)
	C	1.8 (2.7%)	0 (0%)	1.6 (2.5%)	-0.2 (-0.3%)
	All	1.8 (2.7%)	0 (0%)	1.7 (2.6%)	0 (-0.1%)
OCT	W	1.3 (2.2%)	0 (0%)	1.3 (2.2%)	0 (0%)
	AN	1.2 (2%)	0 (0%)	1.2 (2%)	0 (0%)
	BN	1.1 (1.8%)	0 (0%)	1.1 (1.8%)	0 (0%)
	D	1.3 (2.1%)	0 (0%)	1.3 (2.1%)	0 (0%)
	C	1.5 (2.4%)	0 (0%)	1.5 (2.4%)	0 (0%)
	All	1.3 (2.1%)	0 (0%)	1.3 (2.1%)	0 (0%)
NOV	W	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
	AN	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
	BN	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
	D	1.1 (2.2%)	0 (0%)	1.1 (2.2%)	0 (0%)
	C	1.2 (2.2%)	0 (0%)	1.2 (2.2%)	0 (0%)
	All	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
DEC	W	1.3 (2.7%)	0 (0%)	1.3 (2.7%)	0 (0%)
	AN	1.2 (2.5%)	0 (0%)	1.2 (2.5%)	0 (0%)
	BN	1.2 (2.7%)	0 (0%)	1.2 (2.7%)	0 (0%)
	D	1 (2.2%)	0 (0%)	1 (2.2%)	0 (0%)
	C	1.1 (2.4%)	0 (0%)	1.1 (2.4%)	0 (0%)
	All	1.2 (2.5%)	0 (0%)	1.2 (2.5%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 Table B.7-79. BDCP Pile Driving Analysis - Without Attenuation System (3-2-15)

Site	Location	Pile Type/Size	Total Piles	Number of Concurrent Pile Drivers at Site	Piles/Day	Strikes/Pile	Strikes/Day	Data Source	Attenuation from Bubble Curtain or Dewatered Cofferdam (dB)	Assumed Source Levels (dB) at 10 meters			Effective Quiet			Distance (m) to threshold Onset of Physical Injury			Behavior RMS	
										Peak	SEL	RMS	Distance to Effective Quiet (m)	Strikes to Effective Quiet re: 187 dB	Strikes to Effective Quiet re: 183 dB	Peak	Cumulative SEL dB	Fish >= 2 g		Fish < 2 g
1. Intake Cofferdam	in water	sheet pile	2,500	4	60	700	42,000	Caltrans 2014. Table I.2-3. 24-inch AZ steel sheet pile driven in water at Port of Oakland	0	205	179	189	858	5,012	1,995	<10	858	858	3,981	
2. Intake Structure Foundation	in water	42-in diameter steel	500	4	60	1,500	90,000	Caltrans 2014. Table I.2-3. 40-inch steel pipe driven in water in Alameda Estuary	0	208	180	195	1000	5,012	1,995	14	1,000	1,000	10,000	
3. SR-160 Bridge at Intake	On-land	42-inch diameter steel	150	2	30	1,200	36,000	Caltrans 2014. Table I.2-3. 48-inch steel pipe driven on land near Russian River	0	198	175	185	464	5,012	1,995	<10	464	464	2,154	
4. Control Structure at Intake	On-land	42-inch diameter steel	650	4	60	1,200	72,000	Caltrans 2014. Table I.2-3. 48-inch steel pipe driven on land near Russian River	0	198	175	185	464	5,012	1,995	<10	464	464	2,154	
5. Barge Unloading Facility	in water	18-in diameter steel	800	4	60	1,050	63,000	Caltrans 2014. Table I.2-3 20-inch steel pipe driven in water in San Joaquin River	0	208	176	187	541	5,012	1,995	14	541	541	2,929	
6. Inlet structure at Intermediate forebay	On-land	14-inch concrete or steel pipe	1,700	1	15	750	11,250	Caltrans 2014. Table I.2-3 20-inch steel pipe driven in water in San Joaquin River	0	198	171	183	251	5,012	1,995	<10	251	251	1,585	
7. Outlet structure at Intermediate forebay	On-land	14-inch concrete or steel pipe	1,700	1	15	750	11,250	Caltrans 2014. Table I.2-3 20-inch steel pipe driven in water in San Joaquin River	0	198	171	183	251	5,012	1,995	<10	251	251	1,585	
8. SR-12 Interchange	On-land	14-inch steel pipe	40	1	6	1,500	9,000	Caltrans 2014. Table I.2-3 20-inch steel pipe driven in water in San Joaquin River	0	198	171	183	251	5,012	1,995	<10	251	251	1,585	
9. Cofferdam for Modified Clifton Court forebay (CCF) embankments	In-water	Sheet piles (AZ-28-700)	22,000	4	60	700	42,000	Caltrans 2012. Table I.2-3. 24-inch AZ steel sheet pile driven at Port of Oakland	0	205	179	189	858	5,012	1,995	<10	858	858	3,981	
10. Divider wall for Modified CCF	In-water	Sheet piles (AZ-28-700)	5,000	4	60	700	42,000	Caltrans 2012. Table I.2-3. 24-inch AZ steel sheet pile driven at Port of Oakland	0	205	179	189	858	5,012	1,995	<10	858	858	3,981	
11. Siphon at North CCF Outlet	In-water	14-inch concrete or steel pipe	2,160	2	30	1,050	31,500	Caltrans 2014. Table I.2-3 20-inch steel pipe driven in water in San Joaquin River	0	208	176	187	541	5,012	1,995	14	541	541	2,929	
12. Siphon at Byron Highway	On-land	14-inch concrete or steel pipe	1,600	2	30	1,050	31,500	Caltrans 2014. Table I.2-3 20-inch steel pipe driven in water in San Joaquin River	0	198	171	183	251	5,012	1,995	<10	251	251	1,585	
13. Cofferdam for Operable Barrier at Head of Old River	In-water	Sheet piles (AZ-28-700)	550	1	15	700	10,500	Caltrans 2012. Table I.2-3. 24-inch AZ steel sheet pile driven at Port of Oakland	0	205	179	189	858	5,012	1,995	<10	858	858	3,981	
14. Foundation for Operable Barrier at Head of Old River	In-water	14-inch steel pipe or H-piles	100	1	15	1,050	15,750	Caltrans 2014. Table I.2-3 20-inch steel pipe driven in water in San Joaquin River	0	208	176	187	541	5,012	1,995	14	541	541	2,929	

Per NMFS guidance this calculation assumes that single strike SELs < 150 dB do not accumulate to cause injury (effective quiet).

Once the number of strikes to effective quiet has been exceeded increasing the number of strikes does not increase the presumed injury distance. In all cases the presumed injury distance is governed by the distance to effective quiet.

Caltrans 2014. Compendium of pile driving sound data. Sacramento, CA.





1 **B.5.2 Alternatives 2D and 5A**2 **B.5.2.1 Flow**3 **Upstream**4 **Sacramento River at Keswick**5 **Table 1. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Keswick,**  
6 **Year-Round**

Alternative 2D and 5A: Upstream—Sacramento River at Keswick					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	16,526	17,330	17,876	17,390
	AN	8,318	7,776	8,492	8,305
	BN	4,502	4,340	4,922	4,873
	D	3,996	4,098	4,118	4,201
	C	3,490	3,794	3,550	3,929
	All	8,614	8,829	9,174	9,058
FEB	W	18,577	20,349	20,522	20,469
	AN	14,409	15,081	15,851	15,502
	BN	5,981	6,456	6,920	6,704
	D	3,684	3,447	3,324	3,560
	C	3,599	3,394	3,514	3,452
	All	10,355	11,015	11,252	11,190
MAR	W	16,200	16,399	16,403	16,398
	AN	9,131	8,662	9,173	9,068
	BN	5,200	4,306	4,542	4,453
	D	3,903	3,858	3,664	3,740
	C	3,487	3,608	3,820	3,794
	All	8,728	8,577	8,682	8,663
APR	W	9,418	9,254	9,244	9,238
	AN	6,182	5,712	5,823	5,819
	BN	5,426	4,934	5,001	4,999
	D	5,803	5,497	5,620	5,601
	C	6,472	6,343	6,300	6,340
	All	7,038	6,748	6,793	6,791
MAY	W	9,508	8,183	8,301	8,164
	AN	7,709	7,307	8,462	7,878
	BN	7,193	6,411	6,924	6,551
	D	7,349	7,075	7,517	7,405
	C	6,715	6,900	7,172	6,926
	All	7,967	7,321	7,752	7,499
JUN	W	10,375	10,063	10,456	10,171
	AN	11,147	11,403	12,237	11,793
	BN	10,758	10,573	11,359	11,094
	D	11,224	11,464	12,045	11,885
	C	10,392	11,041	11,271	11,245
	All	10,742	10,797	11,339	11,099

<b>Alternative 2D and 5A: Upstream—Sacramento River at Keswick</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	12,779	13,477	13,552	13,666
	AN	14,056	14,541	14,608	14,812
	BN	12,965	13,195	13,546	13,348
	D	13,302	13,650	13,528	14,232
	C	12,849	12,124	12,319	12,245
	All	13,123	13,424	13,520	13,696
AUG	W	11,029	10,447	10,479	10,867
	AN	10,449	10,835	10,834	11,056
	BN	10,139	9,876	10,480	10,246
	D	10,627	10,464	9,343	9,904
	C	9,473	8,380	8,169	8,053
	All	10,476	10,108	9,943	10,166
SEP	W	9,385	12,012	11,365	11,972
	AN	5,862	9,209	7,551	8,599
	BN	5,492	5,677	5,132	5,136
	D	5,985	4,982	4,543	4,529
	C	5,563	4,827	4,722	4,617
	All	6,899	7,926	7,273	7,601
OCT	W	6,886	6,491	6,425	6,300
	AN	7,145	6,090	5,876	5,879
	BN	6,396	5,835	5,705	5,952
	D	6,128	5,899	5,797	5,702
	C	5,902	5,452	5,590	5,325
	All	6,530	6,038	5,962	5,905
NOV	W	6,672	7,620	6,511	6,685
	AN	6,224	7,357	5,629	6,021
	BN	5,088	5,926	4,514	4,600
	D	5,669	5,439	4,638	4,637
	C	4,822	4,789	4,431	4,373
	All	5,845	6,399	5,325	5,444
DEC	W	12,766	12,808	13,026	12,965
	AN	5,531	5,729	5,339	5,332
	BN	5,413	5,857	5,667	5,834
	D	4,215	3,883	4,233	3,981
	C	3,828	3,593	3,766	3,755
	All	7,267	7,278	7,359	7,310

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1 **Table 2. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Sacramento River**  
 2 **at Keswick, Year-Round**

Alternative 2D and 5A: Upstream—Sacramento River at Keswick					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JAN	W	1,350 (8.2%)	546 (3.1%)	864 (5.2%)	60 (0.3%)
	AN	175 (2.1%)	716 (9.2%)	-13 (-0.2%)	528 (6.8%)
	BN	420 (9.3%)	582 (13.4%)	371 (8.2%)	532 (12.3%)
	D	122 (3.1%)	20 (0.5%)	205 (5.1%)	103 (2.5%)
	C	60 (1.7%)	-244 (-6.4%)	439 (12.6%)	136 (3.6%)
	All	561 (6.5%)	346 (3.9%)	445 (5.2%)	230 (2.6%)
FEB	W	1,944 (10.5%)	173 (0.8%)	1,892 (10.2%)	120 (0.6%)
	AN	1,441 (10%)	770 (5.1%)	1,092 (7.6%)	421 (2.8%)
	BN	938 (15.7%)	464 (7.2%)	723 (12.1%)	248 (3.8%)
	D	-359 (-9.8%)	-123 (-3.6%)	-124 (-3.4%)	113 (3.3%)
	C	-84 (-2.3%)	120 (3.5%)	-147 (-4.1%)	57 (1.7%)
	All	896 (8.7%)	237 (2.2%)	834 (8.1%)	175 (1.6%)
MAR	W	203 (1.3%)	4 (0%)	199 (1.2%)	0 (0%)
	AN	42 (0.5%)	512 (5.9%)	-63 (-0.7%)	406 (4.7%)
	BN	-658 (-12.7%)	235 (5.5%)	-746 (-14.4%)	147 (3.4%)
	D	-239 (-6.1%)	-194 (-5%)	-164 (-4.2%)	-119 (-3.1%)
	C	332 (9.5%)	212 (5.9%)	306 (8.8%)	186 (5.2%)
	All	-46 (-0.5%)	105 (1.2%)	-65 (-0.7%)	86 (1%)
APR	W	-174 (-1.8%)	-10 (-0.1%)	-180 (-1.9%)	-17 (-0.2%)
	AN	-359 (-5.8%)	111 (1.9%)	-363 (-5.9%)	107 (1.9%)
	BN	-425 (-7.8%)	67 (1.4%)	-427 (-7.9%)	65 (1.3%)
	D	-182 (-3.1%)	123 (2.2%)	-202 (-3.5%)	103 (1.9%)
	C	-172 (-2.7%)	-43 (-0.7%)	-132 (-2%)	-3 (0%)
	All	-245 (-3.5%)	45 (0.7%)	-247 (-3.5%)	44 (0.6%)
MAY	W	-1,207 (-12.7%)	118 (1.4%)	-1,344 (-14.1%)	-19 (-0.2%)
	AN	753 (9.8%)	1,155 (15.8%)	170 (2.2%)	572 (7.8%)
	BN	-269 (-3.7%)	513 (8%)	-642 (-8.9%)	139 (2.2%)
	D	168 (2.3%)	442 (6.2%)	56 (0.8%)	330 (4.7%)
	C	457 (6.8%)	271 (3.9%)	211 (3.1%)	26 (0.4%)
	All	-215 (-2.7%)	431 (5.9%)	-468 (-5.9%)	178 (2.4%)
JUN	W	81 (0.8%)	394 (3.9%)	-204 (-2%)	108 (1.1%)
	AN	1,090 (9.8%)	834 (7.3%)	646 (5.8%)	390 (3.4%)
	BN	600 (5.6%)	785 (7.4%)	335 (3.1%)	520 (4.9%)
	D	822 (7.3%)	582 (5.1%)	661 (5.9%)	421 (3.7%)
	C	879 (8.5%)	230 (2.1%)	853 (8.2%)	204 (1.8%)
	All	597 (5.6%)	542 (5%)	357 (3.3%)	303 (2.8%)

Alternative 2D and 5A: Upstream—Sacramento River at Keswick					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	773 (6%)	75 (0.6%)	887 (6.9%)	190 (1.4%)
	AN	552 (3.9%)	67 (0.5%)	756 (5.4%)	271 (1.9%)
	BN	581 (4.5%)	350 (2.7%)	383 (3%)	153 (1.2%)
	D	226 (1.7%)	-122 (-0.9%)	930 (7%)	582 (4.3%)
	C	-531 (-4.1%)	195 (1.6%)	-604 (-4.7%)	121 (1%)
	All	397 (3%)	95 (0.7%)	573 (4.4%)	271 (2%)
AUG	W	-551 (-5%)	31 (0.3%)	-162 (-1.5%)	420 (4%)
	AN	385 (3.7%)	-1 (0%)	607 (5.8%)	221 (2%)
	BN	341 (3.4%)	604 (6.1%)	106 (1%)	369 (3.7%)
	D	-1,285 (-12.1%)	-1,121 (-10.7%)	-723 (-6.8%)	-560 (-5.4%)
	C	-1,304 (-13.8%)	-211 (-2.5%)	-1,420 (-15%)	-327 (-3.9%)
	All	-533 (-5.1%)	-164 (-1.6%)	-311 (-3%)	58 (0.6%)
SEP	W	1,980 (21.1%)	-647 (-5.4%)	2,587 (27.6%)	-40 (-0.3%)
	AN	1,688 (28.8%)	-1,659 (-18%)	2,737 (46.7%)	-610 (-6.6%)
	BN	-361 (-6.6%)	-546 (-9.6%)	-357 (-6.5%)	-541 (-9.5%)
	D	-1,442 (-24.1%)	-439 (-8.8%)	-1,457 (-24.3%)	-454 (-9.1%)
	C	-841 (-15.1%)	-104 (-2.2%)	-946 (-17%)	-210 (-4.3%)
	All	374 (5.4%)	-653 (-8.2%)	702 (10.2%)	-325 (-4.1%)
OCT	W	-460 (-6.7%)	-66 (-1%)	-585 (-8.5%)	-191 (-2.9%)
	AN	-1,269 (-17.8%)	-213 (-3.5%)	-1,266 (-17.7%)	-211 (-3.5%)
	BN	-692 (-10.8%)	-130 (-2.2%)	-444 (-6.9%)	117 (2%)
	D	-332 (-5.4%)	-103 (-1.7%)	-426 (-7%)	-197 (-3.3%)
	C	-312 (-5.3%)	138 (2.5%)	-577 (-9.8%)	-127 (-2.3%)
	All	-568 (-8.7%)	-77 (-1.3%)	-625 (-9.6%)	-133 (-2.2%)
NOV	W	-162 (-2.4%)	-1,109 (-14.6%)	13 (0.2%)	-935 (-12.3%)
	AN	-595 (-9.6%)	-1,728 (-23.5%)	-203 (-3.3%)	-1,337 (-18.2%)
	BN	-574 (-11.3%)	-1,413 (-23.8%)	-487 (-9.6%)	-1,326 (-22.4%)
	D	-1,031 (-18.2%)	-800 (-14.7%)	-1,032 (-18.2%)	-802 (-14.7%)
	C	-392 (-8.1%)	-358 (-7.5%)	-450 (-9.3%)	-416 (-8.7%)
	All	-520 (-8.9%)	-1,074 (-16.8%)	-401 (-6.9%)	-955 (-14.9%)
DEC	W	260 (2%)	218 (1.7%)	200 (1.6%)	158 (1.2%)
	AN	-192 (-3.5%)	-390 (-6.8%)	-199 (-3.6%)	-398 (-6.9%)
	BN	254 (4.7%)	-190 (-3.3%)	421 (7.8%)	-24 (-0.4%)
	D	18 (0.4%)	350 (9%)	-234 (-5.5%)	98 (2.5%)
	C	-62 (-1.6%)	173 (4.8%)	-74 (-1.9%)	162 (4.5%)
	All	93 (1.3%)	82 (1.1%)	44 (0.6%)	33 (0.5%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

1 **Sacramento River Upstream of Red Bluff**2 **Table 3. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River Upstream of Red**  
3 **Bluff, Year-Round**

<b>Alternative 2D and 5A: Upstream—Sacramento River Upstream of Red Bluff</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JAN	W	28,036	29,368	29,910	29,425
	AN	16,725	16,267	16,982	16,794
	BN	9,381	9,267	9,846	9,796
	D	7,098	7,262	7,277	7,361
	C	6,143	6,497	6,251	6,635
	All	15,396	15,819	16,162	16,047
FEB	W	30,255	32,712	32,880	32,831
	AN	23,492	24,422	25,186	24,838
	BN	12,005	12,508	12,966	12,752
	D	8,947	8,785	8,662	8,896
	C	6,599	6,404	6,527	6,465
	All	18,010	18,947	19,181	19,121
MAR	W	25,004	25,473	25,476	25,472
	AN	16,599	16,222	16,722	16,628
	BN	9,333	8,438	8,667	8,580
	D	8,385	8,349	8,155	8,229
	C	5,999	6,126	6,336	6,316
	All	14,669	14,621	14,722	14,706
APR	W	15,172	15,078	15,068	15,062
	AN	10,477	9,983	10,090	10,088
	BN	8,711	8,239	8,300	8,299
	D	7,948	7,654	7,777	7,756
	C	7,742	7,628	7,583	7,628
	All	10,709	10,445	10,488	10,488
MAY	W	12,541	11,224	11,342	11,206
	AN	10,012	9,623	10,775	10,194
	BN	8,781	8,030	8,538	8,166
	D	8,677	8,424	8,863	8,750
	C	7,746	7,956	8,228	7,982
	All	9,979	9,351	9,780	9,528
JUN	W	11,905	11,591	11,983	11,700
	AN	12,001	12,227	13,049	12,613
	BN	11,464	11,304	12,080	11,820
	D	11,777	12,028	12,604	12,443
	C	10,885	11,539	11,766	11,742
	All	11,666	11,723	12,260	12,023

<b>Alternative 2D and 5A: Upstream—Sacramento River Upstream of Red Bluff</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	13,255	13,937	14,010	14,127
	AN	14,129	14,594	14,654	14,865
	BN	13,011	13,272	13,614	13,419
	D	13,368	13,741	13,613	14,317
	C	13,005	12,344	12,481	12,415
	All	13,329	13,643	13,726	13,905
AUG	W	11,284	10,700	10,731	11,121
	AN	10,580	10,968	10,965	11,189
	BN	10,202	9,971	10,570	10,338
	D	10,747	10,610	9,487	10,044
	C	9,590	8,632	8,430	8,261
	All	10,630	10,292	10,128	10,342
SEP	W	9,856	12,494	11,847	12,453
	AN	6,279	9,634	7,974	9,024
	BN	5,821	6,038	5,486	5,493
	D	6,391	5,424	4,991	4,974
	C	5,887	5,279	5,135	5,014
	All	7,302	8,365	7,707	8,032
OCT	W	8,020	7,662	7,604	7,475
	AN	8,112	7,108	6,899	6,898
	BN	7,094	6,544	6,419	6,676
	D	6,903	6,690	6,582	6,497
	C	6,670	6,254	6,383	6,128
	All	7,432	6,971	6,895	6,842
NOV	W	9,876	10,966	9,857	10,034
	AN	8,144	9,362	7,636	8,029
	BN	6,791	7,710	6,298	6,383
	D	7,548	7,421	6,614	6,613
	C	5,811	5,805	5,445	5,390
	All	7,990	8,642	7,567	7,686
DEC	W	21,015	21,554	21,781	21,720
	AN	10,019	10,370	9,991	9,981
	BN	8,408	8,921	8,742	8,909
	D	7,292	7,044	7,401	7,148
	C	5,628	5,465	5,641	5,634
	All	11,989	12,221	12,311	12,262

1 **Table 4. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Sacramento River**  
 2 **Upstream of Red Bluff, Year-Round**

Alternative 2D and 5A: Upstream—Sacramento River Upstream of Red Bluff					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JAN	W	1,873 (6.7%)	542 (1.8%)	1,389 (5%)	57 (0.2%)
	AN	257 (1.5%)	715 (4.4%)	70 (0.4%)	528 (3.2%)
	BN	465 (5%)	579 (6.2%)	415 (4.4%)	529 (5.7%)
	D	179 (2.5%)	15 (0.2%)	264 (3.7%)	100 (1.4%)
	C	108 (1.8%)	-246 (-3.8%)	491 (8%)	138 (2.1%)
	All	766 (5%)	343 (2.2%)	651 (4.2%)	228 (1.4%)
FEB	W	2,625 (8.7%)	168 (0.5%)	2,576 (8.5%)	119 (0.4%)
	AN	1,694 (7.2%)	763 (3.1%)	1,347 (5.7%)	416 (1.7%)
	BN	962 (8%)	458 (3.7%)	748 (6.2%)	244 (1.9%)
	D	-285 (-3.2%)	-123 (-1.4%)	-51 (-0.6%)	111 (1.3%)
	C	-72 (-1.1%)	122 (1.9%)	-134 (-2%)	60 (0.9%)
	All	1,171 (6.5%)	234 (1.2%)	1,110 (6.2%)	173 (0.9%)
MAR	W	473 (1.9%)	3 (0%)	468 (1.9%)	-1 (0%)
	AN	123 (0.7%)	499 (3.1%)	30 (0.2%)	406 (2.5%)
	BN	-666 (-7.1%)	229 (2.7%)	-752 (-8.1%)	143 (1.7%)
	D	-230 (-2.7%)	-194 (-2.3%)	-156 (-1.9%)	-120 (-1.4%)
	C	337 (5.6%)	210 (3.4%)	317 (5.3%)	190 (3.1%)
	All	53 (0.4%)	101 (0.7%)	37 (0.2%)	85 (0.6%)
APR	W	-104 (-0.7%)	-10 (-0.1%)	-110 (-0.7%)	-16 (-0.1%)
	AN	-387 (-3.7%)	108 (1.1%)	-389 (-3.7%)	105 (1.1%)
	BN	-411 (-4.7%)	61 (0.7%)	-412 (-4.7%)	60 (0.7%)
	D	-171 (-2.2%)	123 (1.6%)	-192 (-2.4%)	102 (1.3%)
	C	-159 (-2.1%)	-45 (-0.6%)	-114 (-1.5%)	0 (0%)
	All	-220 (-2.1%)	44 (0.4%)	-221 (-2.1%)	43 (0.4%)
MAY	W	-1,198 (-9.6%)	118 (1.1%)	-1,335 (-10.6%)	-18 (-0.2%)
	AN	763 (7.6%)	1,152 (12%)	182 (1.8%)	571 (5.9%)
	BN	-243 (-2.8%)	508 (6.3%)	-615 (-7%)	136 (1.7%)
	D	185 (2.1%)	438 (5.2%)	73 (0.8%)	326 (3.9%)
	C	482 (6.2%)	272 (3.4%)	236 (3%)	27 (0.3%)
	All	-199 (-2%)	429 (4.6%)	-451 (-4.5%)	177 (1.9%)
JUN	W	78 (0.7%)	393 (3.4%)	-205 (-1.7%)	110 (0.9%)
	AN	1,047 (8.7%)	822 (6.7%)	612 (5.1%)	386 (3.2%)
	BN	616 (5.4%)	776 (6.9%)	356 (3.1%)	516 (4.6%)
	D	827 (7%)	576 (4.8%)	666 (5.7%)	415 (3.4%)
	C	881 (8.1%)	227 (2%)	858 (7.9%)	204 (1.8%)
	All	594 (5.1%)	537 (4.6%)	357 (3.1%)	300 (2.6%)



Alternative 2D and 5A: Upstream—Sacramento River Upstream of Red Bluff					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	755 (5.7%)	73 (0.5%)	873 (6.6%)	191 (1.4%)
	AN	525 (3.7%)	60 (0.4%)	735 (5.2%)	270 (1.9%)
	BN	603 (4.6%)	341 (2.6%)	408 (3.1%)	146 (1.1%)
	D	244 (1.8%)	-128 (-0.9%)	949 (7.1%)	576 (4.2%)
	C	-524 (-4%)	137 (1.1%)	-589 (-4.5%)	71 (0.6%)
	All	396 (3%)	82 (0.6%)	576 (4.3%)	262 (1.9%)
AUG	W	-552 (-4.9%)	32 (0.3%)	-163 (-1.4%)	421 (3.9%)
	AN	384 (3.6%)	-3 (0%)	609 (5.8%)	221 (2%)
	BN	368 (3.6%)	599 (6%)	136 (1.3%)	367 (3.7%)
	D	-1,260 (-11.7%)	-1,123 (-10.6%)	-703 (-6.5%)	-566 (-5.3%)
	C	-1,161 (-12.1%)	-202 (-2.3%)	-1,330 (-13.9%)	-371 (-4.3%)
	All	-502 (-4.7%)	-164 (-1.6%)	-288 (-2.7%)	50 (0.5%)
SEP	W	1,991 (20.2%)	-647 (-5.2%)	2,597 (26.3%)	-41 (-0.3%)
	AN	1,694 (27%)	-1,660 (-17.2%)	2,744 (43.7%)	-610 (-6.3%)
	BN	-334 (-5.7%)	-551 (-9.1%)	-328 (-5.6%)	-545 (-9%)
	D	-1,400 (-21.9%)	-433 (-8%)	-1,417 (-22.2%)	-450 (-8.3%)
	C	-752 (-12.8%)	-144 (-2.7%)	-872 (-14.8%)	-265 (-5%)
	All	405 (5.5%)	-658 (-7.9%)	730 (10%)	-333 (-4%)
OCT	W	-415 (-5.2%)	-58 (-0.8%)	-545 (-6.8%)	-187 (-2.4%)
	AN	-1,213 (-15%)	-209 (-2.9%)	-1,214 (-15%)	-210 (-3%)
	BN	-676 (-9.5%)	-126 (-1.9%)	-419 (-5.9%)	132 (2%)
	D	-321 (-4.6%)	-108 (-1.6%)	-406 (-5.9%)	-193 (-2.9%)
	C	-288 (-4.3%)	129 (2.1%)	-542 (-8.1%)	-126 (-2%)
	All	-537 (-7.2%)	-75 (-1.1%)	-590 (-7.9%)	-128 (-1.8%)
NOV	W	-20 (-0.2%)	-1,110 (-10.1%)	157 (1.6%)	-933 (-8.5%)
	AN	-507 (-6.2%)	-1,725 (-18.4%)	-115 (-1.4%)	-1,333 (-14.2%)
	BN	-493 (-7.3%)	-1,412 (-18.3%)	-408 (-6%)	-1,328 (-17.2%)
	D	-935 (-12.4%)	-808 (-10.9%)	-936 (-12.4%)	-809 (-10.9%)
	C	-366 (-6.3%)	-360 (-6.2%)	-421 (-7.3%)	-415 (-7.2%)
	All	-423 (-5.3%)	-1,076 (-12.4%)	-304 (-3.8%)	-956 (-11.1%)
DEC	W	766 (3.6%)	227 (1.1%)	704 (3.4%)	165 (0.8%)
	AN	-28 (-0.3%)	-378 (-3.7%)	-38 (-0.4%)	-388 (-3.7%)
	BN	334 (4%)	-180 (-2%)	501 (6%)	-13 (-0.1%)
	D	109 (1.5%)	357 (5.1%)	-143 (-2%)	104 (1.5%)
	C	13 (0.2%)	176 (3.2%)	6 (0.1%)	170 (3.1%)
	All	322 (2.7%)	90 (0.7%)	1,389 (5%)	57 (0.2%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

1 **Sacramento River at Wilkins Slough**2 **Table 5. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Wilkins Slough,**  
3 **Year-Round**

<b>Alternative 2D and 5A: Upstream—Sacramento River at Wilkins Slough</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JAN	W	19,145	19,250	19,281	19,251
	AN	17,084	16,521	16,617	16,572
	BN	12,521	12,322	12,648	12,622
	D	8,896	8,896	8,826	8,922
	C	7,858	8,152	7,889	8,270
	All	13,811	13,771	13,796	13,853
FEB	W	19,887	19,976	19,993	19,992
	AN	19,139	19,134	19,215	19,140
	BN	14,528	14,508	14,558	14,547
	D	11,520	11,451	11,398	11,452
	C	8,499	8,220	8,358	8,271
	All	15,359	15,327	15,362	15,348
MAR	W	18,223	18,325	18,323	18,324
	AN	17,696	17,638	17,704	17,706
	BN	12,208	11,505	11,742	11,645
	D	11,364	11,289	11,166	11,285
	C	8,101	8,201	8,402	8,392
	All	14,132	14,034	14,086	14,095
APR	W	13,392	13,312	13,316	13,315
	AN	10,264	10,038	10,063	10,070
	BN	7,152	6,795	6,836	6,844
	D	5,319	5,082	5,201	5,204
	C	4,164	4,136	4,082	4,129
	All	8,746	8,571	8,601	8,610
MAY	W	10,467	9,445	9,560	9,431
	AN	7,318	6,978	8,091	7,541
	BN	5,638	4,981	5,421	5,092
	D	4,669	4,454	4,843	4,739
	C	3,998	4,155	4,433	4,185
	All	6,962	6,452	6,853	6,616
JUN	W	6,503	6,226	6,593	6,338
	AN	5,781	5,958	6,676	6,305
	BN	5,243	5,205	5,901	5,671
	D	5,245	5,586	6,122	5,961
	C	5,140	5,753	5,964	5,953
	All	5,707	5,803	6,291	6,080

<b>Alternative 2D and 5A: Upstream—Sacramento River at Wilkins Slough</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	6,685	7,162	7,202	7,353
	AN	6,971	7,307	7,299	7,564
	BN	6,122	6,503	6,760	6,573
	D	6,788	7,240	7,063	7,764
	C	7,162	6,577	6,564	6,494
	All	6,723	7,002	7,017	7,215
AUG	W	6,287	5,492	5,515	5,905
	AN	5,498	5,765	5,738	5,995
	BN	5,138	4,984	5,496	5,289
	D	5,833	5,723	4,548	5,063
	C	5,551	4,963	4,746	4,564
	All	5,768	5,419	5,220	5,432
SEP	W	9,338	11,904	11,266	11,853
	AN	5,631	8,877	7,225	8,266
	BN	5,128	5,291	4,723	4,731
	D	5,636	4,629	4,270	4,236
	C	5,200	4,689	4,536	4,392
	All	6,658	7,679	7,037	7,348
OCT	W	7,347	6,876	6,866	6,719
	AN	6,799	5,809	5,641	5,622
	BN	5,987	5,344	5,237	5,500
	D	5,688	5,411	5,317	5,245
	C	5,642	5,205	5,343	5,024
	All	6,421	5,892	5,846	5,779
NOV	W	9,644	10,843	9,653	9,831
	AN	8,210	9,465	7,750	8,163
	BN	6,793	7,688	6,265	6,342
	D	7,407	7,354	6,545	6,546
	C	5,118	5,081	4,683	4,653
	All	7,794	8,494	7,386	7,512
DEC	W	17,881	17,819	17,850	17,884
	AN	10,809	10,921	10,834	10,915
	BN	8,505	8,283	8,295	8,361
	D	8,950	8,665	8,984	8,731
	C	6,229	5,989	6,188	6,181
	All	11,580	11,441	11,539	11,517

1 **Table 6. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Sacramento River**  
 2 **at Wilkins Slough, Year-Round**

Alternative 2D and 5A: Upstream—Sacramento River at Wilkins Slough					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JAN	W	136 (0.7%)	31 (0.2%)	106 (0.6%)	1 (0%)
	AN	-467 (-2.7%)	96 (0.6%)	-511 (-3%)	52 (0.3%)
	BN	127 (1%)	326 (2.6%)	101 (0.8%)	300 (2.4%)
	D	-70 (-0.8%)	-70 (-0.8%)	26 (0.3%)	26 (0.3%)
	C	31 (0.4%)	-264 (-3.2%)	413 (5.3%)	118 (1.4%)
	All	-14 (-0.1%)	26 (0.2%)	42 (0.3%)	82 (0.6%)
FEB	W	105 (0.5%)	17 (0.1%)	105 (0.5%)	16 (0.1%)
	AN	76 (0.4%)	81 (0.4%)	1 (0%)	6 (0%)
	BN	30 (0.2%)	49 (0.3%)	20 (0.1%)	39 (0.3%)
	D	-122 (-1.1%)	-53 (-0.5%)	-68 (-0.6%)	1 (0%)
	C	-141 (-1.7%)	138 (1.7%)	-228 (-2.7%)	51 (0.6%)
	All	2 (0%)	34 (0.2%)	-12 (-0.1%)	20 (0.1%)
MAR	W	100 (0.6%)	-1 (0%)	101 (0.6%)	0 (0%)
	AN	9 (0%)	67 (0.4%)	10 (0.1%)	68 (0.4%)
	BN	-466 (-3.8%)	237 (2.1%)	-563 (-4.6%)	140 (1.2%)
	D	-198 (-1.7%)	-123 (-1.1%)	-79 (-0.7%)	-4 (0%)
	C	301 (3.7%)	201 (2.4%)	292 (3.6%)	191 (2.3%)
	All	-46 (-0.3%)	52 (0.4%)	-37 (-0.3%)	61 (0.4%)
APR	W	-76 (-0.6%)	3 (0%)	-77 (-0.6%)	3 (0%)
	AN	-200 (-2%)	25 (0.2%)	-194 (-1.9%)	31 (0.3%)
	BN	-316 (-4.4%)	41 (0.6%)	-309 (-4.3%)	49 (0.7%)
	D	-118 (-2.2%)	119 (2.3%)	-116 (-2.2%)	122 (2.4%)
	C	-82 (-2%)	-55 (-1.3%)	-35 (-0.8%)	-7 (-0.2%)
	All	-145 (-1.7%)	30 (0.3%)	-136 (-1.6%)	39 (0.5%)
MAY	W	-907 (-8.7%)	116 (1.2%)	-1,036 (-9.9%)	-13 (-0.1%)
	AN	773 (10.6%)	1,113 (15.9%)	223 (3%)	562 (8.1%)
	BN	-216 (-3.8%)	440 (8.8%)	-546 (-9.7%)	111 (2.2%)
	D	174 (3.7%)	390 (8.8%)	70 (1.5%)	285 (6.4%)
	C	435 (10.9%)	279 (6.7%)	187 (4.7%)	30 (0.7%)
	All	-109 (-1.6%)	401 (6.2%)	-346 (-5%)	164 (2.5%)
JUN	W	90 (1.4%)	367 (5.9%)	-165 (-2.5%)	112 (1.8%)
	AN	895 (15.5%)	718 (12%)	524 (9.1%)	347 (5.8%)
	BN	658 (12.5%)	696 (13.4%)	429 (8.2%)	466 (9%)
	D	877 (16.7%)	536 (9.6%)	715 (13.6%)	374 (6.7%)
	C	823 (16%)	211 (3.7%)	813 (15.8%)	201 (3.5%)
	All	585 (10.2%)	489 (8.4%)	374 (6.5%)	278 (4.8%)

Alternative 2D and 5A: Upstream—Sacramento River at Wilkins Slough					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	517 (7.7%)	40 (0.6%)	669 (10%)	191 (2.7%)
	AN	329 (4.7%)	-8 (-0.1%)	593 (8.5%)	257 (3.5%)
	BN	638 (10.4%)	257 (4%)	450 (7.4%)	69 (1.1%)
	D	275 (4.1%)	-177 (-2.4%)	976 (14.4%)	524 (7.2%)
	C	-597 (-8.3%)	-12 (-0.2%)	-668 (-9.3%)	-83 (-1.3%)
	All	294 (4.4%)	15 (0.2%)	492 (7.3%)	213 (3%)
AUG	W	-772 (-12.3%)	23 (0.4%)	-382 (-6.1%)	413 (7.5%)
	AN	240 (4.4%)	-26 (-0.5%)	497 (9%)	230 (4%)
	BN	358 (7%)	512 (10.3%)	151 (2.9%)	305 (6.1%)
	D	-1,285 (-22%)	-1,174 (-20.5%)	-770 (-13.2%)	-659 (-11.5%)
	C	-805 (-14.5%)	-217 (-4.4%)	-987 (-17.8%)	-399 (-8%)
	All	-548 (-9.5%)	-199 (-3.7%)	-336 (-5.8%)	14 (0.2%)
SEP	W	1,928 (20.6%)	-638 (-5.4%)	2,515 (26.9%)	-51 (-0.4%)
	AN	1,593 (28.3%)	-1,653 (-18.6%)	2,635 (46.8%)	-611 (-6.9%)
	BN	-405 (-7.9%)	-569 (-10.7%)	-397 (-7.7%)	-561 (-10.6%)
	D	-1,366 (-24.2%)	-360 (-7.8%)	-1,400 (-24.8%)	-393 (-8.5%)
	C	-664 (-12.8%)	-152 (-3.2%)	-808 (-15.5%)	-296 (-6.3%)
	All	378 (5.7%)	-642 (-8.4%)	690 (10.4%)	-331 (-4.3%)
OCT	W	-480 (-6.5%)	-10 (-0.1%)	-627 (-8.5%)	-157 (-2.3%)
	AN	-1,159 (-17%)	-168 (-2.9%)	-1,177 (-17.3%)	-187 (-3.2%)
	BN	-750 (-12.5%)	-107 (-2%)	-487 (-8.1%)	155 (2.9%)
	D	-371 (-6.5%)	-94 (-1.7%)	-443 (-7.8%)	-166 (-3.1%)
	C	-299 (-5.3%)	138 (2.6%)	-617 (-10.9%)	-180 (-3.5%)
	All	-575 (-9%)	-46 (-0.8%)	-642 (-10%)	-113 (-1.9%)
NOV	W	9 (0.1%)	-1,190 (-11%)	187 (1.9%)	-1,012 (-9.3%)
	AN	-460 (-5.6%)	-1,715 (-18.1%)	-47 (-0.6%)	-1,302 (-13.8%)
	BN	-527 (-7.8%)	-1,423 (-18.5%)	-451 (-6.6%)	-1,346 (-17.5%)
	D	-863 (-11.6%)	-809 (-11%)	-862 (-11.6%)	-808 (-11%)
	C	-435 (-8.5%)	-399 (-7.8%)	-465 (-9.1%)	-428 (-8.4%)
	All	-408 (-5.2%)	-1,107 (-13%)	-282 (-3.6%)	-981 (-11.6%)
DEC	W	-31 (-0.2%)	31 (0.2%)	3 (0%)	66 (0.4%)
	AN	25 (0.2%)	-88 (-0.8%)	106 (1%)	-6 (-0.1%)
	BN	-210 (-2.5%)	12 (0.1%)	-144 (-1.7%)	78 (0.9%)
	D	34 (0.4%)	319 (3.7%)	-219 (-2.4%)	66 (0.8%)
	C	-41 (-0.7%)	199 (3.3%)	-47 (-0.8%)	193 (3.2%)
	All	-41 (-0.4%)	98 (0.9%)	-63 (-0.5%)	76 (0.7%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

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2

**Sacramento River at Verona**

3

**Table 7. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Verona, Year-Round**

4

<b>Alternative 2D and 5A: Upstream—Sacramento River at Verona</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JAN	W	44,589	45,074	43,432	43,559
	AN	34,120	32,939	31,681	31,312
	BN	20,175	19,324	17,820	17,780
	D	14,756	14,643	14,072	14,197
	C	12,085	12,331	11,834	11,849
	All	27,583	27,430	26,271	26,280
FEB	W	49,892	50,745	49,326	49,504
	AN	39,162	39,631	38,774	38,271
	BN	26,429	25,717	24,024	23,804
	D	18,402	18,079	17,021	17,295
	C	12,822	12,387	12,131	12,026
	All	31,979	32,062	30,927	30,917
MAR	W	43,455	44,098	41,973	42,196
	AN	39,477	39,691	38,024	38,097
	BN	21,484	19,717	18,320	18,418
	D	17,868	17,411	16,381	16,577
	C	11,903	11,765	11,738	11,681
	All	28,888	28,700	27,314	27,447
APR	W	32,219	32,102	29,828	29,798
	AN	22,250	21,717	20,331	20,342
	BN	14,459	13,834	13,353	13,359
	D	11,113	10,967	11,125	10,827
	C	9,420	9,304	9,357	9,318
	All	19,759	19,488	18,524	18,446
MAY	W	26,193	23,714	23,731	23,605
	AN	17,079	16,427	18,427	16,903
	BN	11,451	10,653	11,271	10,739
	D	9,283	9,086	9,693	9,308
	C	7,125	7,408	7,453	7,293
	All	15,840	14,820	15,364	14,902
JUN	W	18,367	15,664	18,157	16,611
	AN	13,590	12,877	16,806	14,388
	BN	11,062	10,888	15,318	12,471
	D	10,429	10,702	11,952	11,451
	C	8,911	9,441	9,424	9,478
	All	13,295	12,441	14,834	13,402

<b>Alternative 2D and 5A: Upstream—Sacramento River at Verona</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	16,253	17,144	16,090	17,853
	AN	17,488	18,014	17,769	18,912
	BN	16,698	16,823	16,316	17,811
	D	16,352	16,245	14,061	16,827
	C	14,476	13,348	10,555	11,051
	All	16,271	16,464	15,119	16,780
AUG	W	12,464	13,393	12,337	13,275
	AN	13,691	14,684	13,727	15,838
	BN	13,389	13,098	12,965	13,678
	D	14,688	13,057	10,071	11,582
	C	9,207	8,300	8,347	7,654
	All	12,813	12,713	11,566	12,525
SEP	W	14,279	22,873	20,471	19,707
	AN	10,537	18,667	15,275	14,888
	BN	9,961	10,768	8,569	8,100
	D	10,542	8,618	7,916	7,657
	C	7,764	7,264	7,306	7,114
	All	11,220	14,777	12,996	12,532
OCT	W	11,503	10,681	10,861	10,835
	AN	9,381	8,617	8,580	8,702
	BN	9,867	8,868	8,887	9,200
	D	8,681	8,515	8,824	8,594
	C	8,543	7,862	8,062	7,890
	All	9,861	9,181	9,334	9,321
NOV	W	15,307	16,176	14,980	15,201
	AN	11,792	13,177	11,383	11,748
	BN	9,852	10,676	9,144	9,235
	D	10,157	10,024	9,156	9,165
	C	7,341	7,283	6,826	6,825
	All	11,565	12,146	10,985	11,127
DEC	W	33,840	33,224	31,208	31,309
	AN	17,572	18,415	17,618	17,771
	BN	13,099	13,257	12,997	13,271
	D	12,685	12,465	12,622	12,422
	C	9,770	8,724	9,253	9,497
	All	19,752	19,506	18,817	18,910

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1 **Table 8. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Sacramento River**  
 2 **at Verona, Year-Round**

Alternative 2D and 5A: Upstream—Sacramento River at Verona					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JAN	W	-1,157 (-2.6%)	-1,642 (-3.6%)	-1,030 (-2.3%)	-1,515 (-3.4%)
	AN	-2,440 (-7.2%)	-1,258 (-3.8%)	-2,809 (-8.2%)	-1,627 (-4.9%)
	BN	-2,355 (-11.7%)	-1,504 (-7.8%)	-2,396 (-11.9%)	-1,544 (-8%)
	D	-684 (-4.6%)	-572 (-3.9%)	-559 (-3.8%)	-446 (-3%)
	C	-251 (-2.1%)	-497 (-4%)	-236 (-2%)	-482 (-3.9%)
	All	-1,313 (-4.8%)	-1,160 (-4.2%)	-1,304 (-4.7%)	-1,151 (-4.2%)
FEB	W	-566 (-1.1%)	-1,419 (-2.8%)	-388 (-0.8%)	-1,242 (-2.4%)
	AN	-388 (-1%)	-857 (-2.2%)	-890 (-2.3%)	-1,360 (-3.4%)
	BN	-2,405 (-9.1%)	-1,693 (-6.6%)	-2,625 (-9.9%)	-1,913 (-7.4%)
	D	-1,381 (-7.5%)	-1,058 (-5.9%)	-1,107 (-6%)	-783 (-4.3%)
	C	-691 (-5.4%)	-257 (-2.1%)	-796 (-6.2%)	-362 (-2.9%)
	All	-1,051 (-3.3%)	-1,134 (-3.5%)	-1,061 (-3.3%)	-1,144 (-3.6%)
MAR	W	-1,482 (-3.4%)	-2,125 (-4.8%)	-1,259 (-2.9%)	-1,902 (-4.3%)
	AN	-1,453 (-3.7%)	-1,667 (-4.2%)	-1,380 (-3.5%)	-1,594 (-4%)
	BN	-3,164 (-14.7%)	-1,397 (-7.1%)	-3,066 (-14.3%)	-1,299 (-6.6%)
	D	-1,487 (-8.3%)	-1,030 (-5.9%)	-1,291 (-7.2%)	-833 (-4.8%)
	C	-165 (-1.4%)	-27 (-0.2%)	-222 (-1.9%)	-83 (-0.7%)
	All	-1,574 (-5.4%)	-1,386 (-4.8%)	-1,441 (-5%)	-1,253 (-4.4%)
APR	W	-2,391 (-7.4%)	-2,274 (-7.1%)	-2,421 (-7.5%)	-2,303 (-7.2%)
	AN	-1,919 (-8.6%)	-1,386 (-6.4%)	-1,908 (-8.6%)	-1,375 (-6.3%)
	BN	-1,106 (-7.6%)	-481 (-3.5%)	-1,100 (-7.6%)	-475 (-3.4%)
	D	12 (0.1%)	158 (1.4%)	-286 (-2.6%)	-140 (-1.3%)
	C	-63 (-0.7%)	53 (0.6%)	-102 (-1.1%)	14 (0.2%)
	All	-1,235 (-6.2%)	-963 (-4.9%)	-1,312 (-6.6%)	-1,041 (-5.3%)
MAY	W	-2,463 (-9.4%)	17 (0.1%)	-2,588 (-9.9%)	-109 (-0.5%)
	AN	1,348 (7.9%)	2,000 (12.2%)	-176 (-1%)	476 (2.9%)
	BN	-180 (-1.6%)	618 (5.8%)	-713 (-6.2%)	85 (0.8%)
	D	409 (4.4%)	607 (6.7%)	24 (0.3%)	222 (2.4%)
	C	328 (4.6%)	44 (0.6%)	168 (2.4%)	-115 (-1.6%)
	All	-476 (-3%)	543 (3.7%)	-938 (-5.9%)	82 (0.6%)
JUN	W	-210 (-1.1%)	2,493 (15.9%)	-1,757 (-9.6%)	947 (6%)
	AN	3,216 (23.7%)	3,929 (30.5%)	798 (5.9%)	1,511 (11.7%)
	BN	4,256 (38.5%)	4,430 (40.7%)	1,408 (12.7%)	1,583 (14.5%)
	D	1,523 (14.6%)	1,250 (11.7%)	1,023 (9.8%)	749 (7%)
	C	513 (5.8%)	-17 (-0.2%)	567 (6.4%)	37 (0.4%)
	All	1,540 (11.6%)	2,394 (19.2%)	108 (0.8%)	961 (7.7%)



Alternative 2D and 5A: Upstream—Sacramento River at Verona					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	-163 (-1%)	-1,054 (-6.1%)	1,600 (9.8%)	709 (4.1%)
	AN	281 (1.6%)	-244 (-1.4%)	1,424 (8.1%)	898 (5%)
	BN	-381 (-2.3%)	-507 (-3%)	1,114 (6.7%)	988 (5.9%)
	D	-2,291 (-14%)	-2,183 (-13.4%)	474 (2.9%)	582 (3.6%)
	C	-3,921 (-27.1%)	-2,793 (-20.9%)	-3,425 (-23.7%)	-2,297 (-17.2%)
	All	-1,152 (-7.1%)	-1,344 (-8.2%)	509 (3.1%)	316 (1.9%)
AUG	W	-127 (-1%)	-1,057 (-7.9%)	811 (6.5%)	-118 (-0.9%)
	AN	36 (0.3%)	-957 (-6.5%)	2,147 (15.7%)	1,154 (7.9%)
	BN	-424 (-3.2%)	-133 (-1%)	289 (2.2%)	579 (4.4%)
	D	-4,617 (-31.4%)	-2,986 (-22.9%)	-3,106 (-21.1%)	-1,475 (-11.3%)
	C	-860 (-9.3%)	48 (0.6%)	-1,553 (-16.9%)	-646 (-7.8%)
	All	-1,247 (-9.7%)	-1,146 (-9%)	-288 (-2.3%)	-188 (-1.5%)
SEP	W	6,192 (43.4%)	-2,402 (-10.5%)	5,428 (38%)	-3,166 (-13.8%)
	AN	4,738 (45%)	-3,392 (-18.2%)	4,352 (41.3%)	-3,778 (-20.2%)
	BN	-1,391 (-14%)	-2,199 (-20.4%)	-1,861 (-18.7%)	-2,669 (-24.8%)
	D	-2,626 (-24.9%)	-703 (-8.2%)	-2,885 (-27.4%)	-962 (-11.2%)
	C	-458 (-5.9%)	42 (0.6%)	-650 (-8.4%)	-149 (-2.1%)
	All	1,776 (15.8%)	-1,781 (-12.1%)	1,312 (11.7%)	-2,245 (-15.2%)
OCT	W	-643 (-5.6%)	180 (1.7%)	-668 (-5.8%)	154 (1.4%)
	AN	-801 (-8.5%)	-37 (-0.4%)	-679 (-7.2%)	85 (1%)
	BN	-980 (-9.9%)	19 (0.2%)	-667 (-6.8%)	332 (3.7%)
	D	143 (1.7%)	309 (3.6%)	-87 (-1%)	79 (0.9%)
	C	-481 (-5.6%)	201 (2.6%)	-653 (-7.6%)	29 (0.4%)
	All	-527 (-5.3%)	152 (1.7%)	-540 (-5.5%)	140 (1.5%)
NOV	W	-327 (-2.1%)	-1,196 (-7.4%)	-106 (-0.7%)	-975 (-6%)
	AN	-409 (-3.5%)	-1,793 (-13.6%)	-44 (-0.4%)	-1,429 (-10.8%)
	BN	-708 (-7.2%)	-1,532 (-14.3%)	-617 (-6.3%)	-1,440 (-13.5%)
	D	-1,001 (-9.9%)	-869 (-8.7%)	-991 (-9.8%)	-859 (-8.6%)
	C	-515 (-7%)	-457 (-6.3%)	-516 (-7%)	-458 (-6.3%)
	All	-580 (-5%)	-1,161 (-9.6%)	-438 (-3.8%)	-1,020 (-8.4%)
DEC	W	-2,632 (-7.8%)	-2,016 (-6.1%)	-2,531 (-7.5%)	-1,915 (-5.8%)
	AN	46 (0.3%)	-797 (-4.3%)	199 (1.1%)	-644 (-3.5%)
	BN	-103 (-0.8%)	-260 (-2%)	172 (1.3%)	14 (0.1%)
	D	-63 (-0.5%)	158 (1.3%)	-263 (-2.1%)	-42 (-0.3%)
	C	-517 (-5.3%)	529 (6.1%)	-274 (-2.8%)	773 (8.9%)
	All	-935 (-4.7%)	-688 (-3.5%)	-842 (-4.3%)	-595 (-3.1%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

1 **Trinity River below Lewiston**2 **Table 9. Mean Monthly Flows (cfs) for Model Scenarios in the Trinity River Below Lewiston,**  
3 **Year-Round**

<b>Alternative 2D and 5A: Upstream—Trinity River below Lewiston</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JAN	W	1,440	1,570	1,560	1,594
	AN	300	300	375	300
	BN	358	300	300	300
	D	300	300	300	300
	C	300	300	300	300
	All	671	703	710	710
FEB	W	1,056	1,209	1,302	1,275
	AN	689	773	843	843
	BN	517	559	559	559
	D	300	300	300	300
	C	300	300	300	300
	All	634	702	741	733
MAR	W	1,209	1,335	1,409	1,370
	AN	436	475	475	475
	BN	319	302	300	300
	D	300	300	300	300
	C	300	300	300	300
	All	611	654	677	665
APR	W	721	740	738	754
	AN	469	561	467	467
	BN	507	508	508	508
	D	529	529	529	529
	C	575	580	580	580
	All	584	605	590	595
MAY	W	4,636	4,620	4,620	4,620
	AN	4,462	4,450	4,450	4,450
	BN	3,774	3,763	3,763	3,763
	D	3,216	3,216	3,216	3,216
	C	2,092	1,973	1,973	1,973
	All	3,779	3,753	3,753	3,753
JUN	W	3,371	3,613	3,613	3,613
	AN	2,488	2,663	2,663	2,663
	BN	1,672	1,767	1,767	1,767
	D	1,251	1,251	1,251	1,251
	C	783	783	783	783
	All	2,108	2,226	2,226	2,226

<b>Alternative 2D and 5A: Upstream—Trinity River below Lewiston</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	1,289	1,161	1,161	1,161
	AN	1,048	1,048	1,048	1,048
	BN	869	916	916	916
	D	667	667	667	667
	C	450	450	450	450
	All	923	890	890	890
AUG	W	450	450	450	450
	AN	450	450	450	450
	BN	450	450	450	450
	D	450	450	450	450
	C	450	413	413	413
	All	450	445	445	445
SEP	W	450	450	450	450
	AN	450	450	450	450
	BN	450	450	450	450
	D	450	450	450	450
	C	450	356	374	375
	All	450	436	439	439
OCT	W	373	373	373	373
	AN	373	337	312	342
	BN	346	346	346	346
	D	373	352	352	352
	C	373	342	342	373
	All	368	354	350	359
NOV	W	489	510	461	460
	AN	300	275	275	275
	BN	300	300	300	300
	D	300	283	283	283
	C	300	263	275	275
	All	360	354	340	340
DEC	W	1,072	1,281	1,380	1,282
	AN	300	300	300	300
	BN	300	300	300	300
	D	300	300	300	300
	C	300	300	300	300
	All	545	611	642	611

1 **Table 10. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Trinity River**  
 2 **Below Lewiston, Year-Round**

Alternative 2D and 5A: Upstream—Trinity River below Lewiston					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JAN	W	120 (8.3%)	-10 (-0.6%)	155 (10.7%)	25 (1.6%)
	AN	75 (24.9%)	75 (24.9%)	0 (0%)	0 (0%)
	BN	-58 (-16.3%)	0 (0%)	-58 (-16.3%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	39 (5.8%)	8 (1.1%)	39 (5.8%)	8 (1.1%)
FEB	W	246 (23.3%)	93 (7.7%)	218 (20.7%)	66 (5.4%)
	AN	153 (22.3%)	70 (9%)	153 (22.3%)	70 (9%)
	BN	43 (8.2%)	0 (0%)	43 (8.2%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	108 (17%)	40 (5.7%)	99 (15.6%)	31 (4.4%)
MAR	W	200 (16.5%)	73 (5.5%)	161 (13.3%)	34 (2.6%)
	AN	39 (8.9%)	0 (0%)	39 (8.9%)	0 (0%)
	BN	-19 (-5.8%)	-2 (-0.7%)	-19 (-5.8%)	-2 (-0.7%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	66 (10.8%)	23 (3.5%)	53 (8.7%)	11 (1.6%)
APR	W	16 (2.3%)	-2 (-0.3%)	32 (4.5%)	14 (1.9%)
	AN	-3 (-0.6%)	-95 (-16.9%)	-3 (-0.6%)	-95 (-16.9%)
	BN	1 (0.2%)	0 (0%)	1 (0.2%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	5 (0.9%)	0 (0%)	5 (0.9%)	0 (0%)
	All	6 (1%)	-15 (-2.4%)	11 (1.8%)	-9 (-1.6%)
MAY	W	-16 (-0.3%)	0 (0%)	-16 (-0.3%)	0 (0%)
	AN	-12 (-0.3%)	0 (0%)	-12 (-0.3%)	0 (0%)
	BN	-12 (-0.3%)	0 (0%)	-12 (-0.3%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	-119 (-5.7%)	0 (0%)	-119 (-5.7%)	0 (0%)
	All	-26 (-0.7%)	0 (0%)	-26 (-0.7%)	0 (0%)
JUN	W	242 (7.2%)	0 (0%)	242 (7.2%)	0 (0%)
	AN	175 (7%)	0 (0%)	175 (7%)	0 (0%)
	BN	96 (5.7%)	0 (0%)	96 (5.7%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	119 (5.6%)	0 (0%)	119 (5.6%)	0 (0%)

Alternative 2D and 5A: Upstream—Trinity River below Lewiston					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	-128 (-9.9%)	0 (0%)	-128 (-9.9%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	47 (5.4%)	0 (0%)	47 (5.4%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	-33 (-3.5%)	0 (0%)	-33 (-3.5%)	0 (0%)
AUG	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	-38 (-8.3%)	0 (0%)	-38 (-8.3%)	0 (0%)
	All	-5 (-1.2%)	0 (0%)	-5 (-1.2%)	0 (0%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	-76 (-16.9%)	18 (5.2%)	-75 (-16.7%)	19 (5.5%)
	All	-11 (-2.5%)	3 (0.6%)	-11 (-2.4%)	3 (0.7%)
OCT	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	-61 (-16.4%)	-25 (-7.6%)	-31 (-8.3%)	5 (1.4%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	-21 (-5.6%)	0 (0%)	-21 (-5.6%)	0 (0%)
	C	-31 (-8.3%)	0 (0%)	0 (0%)	31 (9.1%)
	All	-18 (-4.9%)	-4 (-1.1%)	-9 (-2.5%)	5 (1.5%)
NOV	W	-28 (-5.7%)	-49 (-9.7%)	-28 (-5.7%)	-49 (-9.7%)
	AN	-25 (-8.3%)	0 (0%)	-25 (-8.3%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	-17 (-5.6%)	0 (0%)	-17 (-5.6%)	0 (0%)
	C	-25 (-8.3%)	12 (4.5%)	-25 (-8.3%)	12 (4.5%)
	All	-20 (-5.5%)	-14 (-3.9%)	-20 (-5.5%)	-14 (-3.9%)
DEC	W	308 (28.7%)	98 (7.7%)	210 (19.6%)	1 (0.1%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	98 (17.9%)	31 (5.1%)	67 (12.2%)	0 (0%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

## 1 Clear Creek below Whiskeytown

2 **Table 11. Mean Monthly Flows (cfs) for Model Scenarios in Clear Creek Below Whiskeytown,**  
3 **Year-Round**

Alternative 2D and 5A: Upstream—Clear Creek below Whiskeytown					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	220	309	309	309
	AN	192	192	192	192
	BN	189	189	189	189
	D	184	192	192	192
	C	155	166	166	171
	All	193	225	225	225
FEB	W	220	249	249	249
	AN	197	196	196	196
	BN	189	189	189	189
	D	184	192	192	192
	C	155	166	166	171
	All	194	206	206	207
MAR	W	200	207	207	207
	AN	197	203	196	206
	BN	189	192	189	189
	D	186	192	192	192
	C	155	166	166	171
	All	188	194	193	195
APR	W	200	200	200	200
	AN	197	196	196	196
	BN	189	192	189	189
	D	188	192	192	192
	C	155	166	166	171
	All	189	191	191	192
MAY	W	277	277	277	277
	AN	277	277	277	277
	BN	263	269	269	269
	D	264	264	264	264
	C	211	224	224	224
	All	262	265	265	265
JUN	W	200	200	200	200
	AN	200	200	200	200
	BN	181	186	186	186
	D	180	180	180	180
	C	115	120	120	120
	All	180	181	181	181

<b>Alternative 2D and 5A: Upstream—Clear Creek below Whiskeytown</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	85	85	85	85
	AN	85	85	85	85
	BN	85	85	85	85
	D	85	85	85	85
	C	85	99	85	94
	All	85	87	85	86
AUG	W	85	85	85	85
	AN	85	85	85	85
	BN	85	85	85	85
	D	85	85	85	85
	C	94	85	94	85
	All	86	85	86	85
SEP	W	150	150	150	150
	AN	150	150	150	150
	BN	150	150	150	150
	D	144	150	150	150
	C	133	121	108	121
	All	146	146	144	146
OCT	W	198	198	198	198
	AN	183	183	183	183
	BN	189	179	179	189
	D	175	183	175	183
	C	150	165	154	167
	All	182	185	181	187
NOV	W	198	198	198	198
	AN	185	180	180	180
	BN	184	189	189	189
	D	177	184	176	176
	C	155	158	158	158
	All	183	185	183	183
DEC	W	198	198	198	198
	AN	185	192	192	192
	BN	189	189	189	189
	D	177	189	189	189
	C	155	166	166	171
	All	184	189	189	190

1 **Table 12. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Clear Creek Below**  
 2 **Whiskeytown, Year-Round**

Alternative 2D and 5A: Upstream—Clear Creek below Whiskeytown					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JAN	W	88 (40.1%)	0 (0%)	89 (40.2%)	0 (0%)
	AN	0 (-0.1%)	0 (0%)	0 (-0.1%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	7 (3.9%)	0 (0%)	7 (3.9%)	0 (0%)
	C	11 (7.1%)	0 (0%)	16 (10.2%)	5 (2.9%)
	All	31 (16.1%)	0 (0%)	32 (16.5%)	1 (0.3%)
FEB	W	29 (13.3%)	0 (0%)	29 (13.3%)	0 (0%)
	AN	-1 (-0.4%)	0 (0%)	-1 (-0.4%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	7 (3.9%)	0 (0%)	7 (3.9%)	0 (0%)
	C	11 (7.1%)	0 (0%)	16 (10.2%)	5 (2.9%)
	All	12 (6.4%)	0 (0%)	13 (6.7%)	1 (0.4%)
MAR	W	7 (3.3%)	0 (0%)	7 (3.4%)	0 (0.1%)
	AN	-1 (-0.4%)	-7 (-3.7%)	9 (4.7%)	2 (1.2%)
	BN	0 (0%)	-3 (-1.4%)	0 (0%)	-3 (-1.4%)
	D	6 (3.2%)	0 (0%)	6 (3.2%)	0 (0%)
	C	11 (7.1%)	0 (0%)	16 (10.2%)	5 (2.9%)
	All	5 (2.6%)	-2 (-0.8%)	7 (3.8%)	1 (0.3%)
APR	W	0 (0%)	0 (0%)	0 (0.1%)	0 (0.1%)
	AN	-1 (-0.4%)	0 (0%)	-1 (-0.4%)	0 (0%)
	BN	0 (0%)	-3 (-1.4%)	0 (0%)	-3 (-1.4%)
	D	3 (1.7%)	0 (0%)	3 (1.7%)	0 (0%)
	C	11 (7.1%)	0 (0%)	16 (10.2%)	5 (2.9%)
	All	2 (1.2%)	0 (-0.2%)	3 (1.6%)	0 (0.2%)
MAY	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	6 (2.2%)	0 (0%)	6 (2.2%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	13 (6.2%)	0 (0%)	13 (6.2%)	0 (0%)
	All	3 (1.1%)	0 (0%)	3 (1.1%)	0 (0%)
JUN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	5 (2.6%)	0 (0%)	5 (2.6%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	5 (4.7%)	0 (0%)	5 (4.7%)	0 (0%)
	All	2 (0.9%)	0 (0%)	2 (0.9%)	0 (0%)



Alternative 2D and 5A: Upstream—Clear Creek below Whiskeytown					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	-14 (-13.8%)	9 (10.6%)	-5 (-4.7%)
	All	0 (0%)	-2 (-2.3%)	1 (1.5%)	-1 (-0.8%)
AUG	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (-0.3%)	9 (10.6%)	-9 (-9.9%)	0 (0%)
	All	0 (0%)	1 (1.6%)	-1 (-1.6%)	0 (0%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	6 (3.8%)	0 (0%)	6 (3.8%)	0 (0%)
	C	-25 (-18.7%)	-12 (-10.3%)	-12 (-9.4%)	0 (0%)
	All	-2 (-1.7%)	-2 (-1.3%)	-1 (-0.4%)	0 (0%)
OCT	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	-11 (-5.7%)	0 (0%)	0 (0%)	11 (6%)
	D	0 (0%)	-8 (-4.5%)	8 (4.8%)	0 (0%)
	C	4 (2.8%)	-11 (-6.5%)	17 (11.1%)	2 (1.1%)
	All	-1 (-0.7%)	-3 (-1.8%)	4 (2.3%)	2 (1.1%)
NOV	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	-5 (-2.8%)	0 (0%)	-5 (-2.8%)	0 (0%)
	BN	6 (3.1%)	0 (0%)	6 (3.1%)	0 (0%)
	D	-1 (-0.6%)	-8 (-4.5%)	-1 (-0.6%)	-8 (-4.5%)
	C	3 (2.2%)	0 (0%)	3 (2.2%)	0 (0%)
	All	0 (0.3%)	-2 (-1%)	0 (0.3%)	-2 (-1%)
DEC	W	0 (0%)	0 (-0.1%)	0 (0%)	0 (-0.1%)
	AN	7 (3.6%)	0 (0%)	7 (3.6%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	12 (6.6%)	0 (0%)	12 (6.6%)	0 (0%)
	C	11 (7.1%)	0 (0%)	16 (10.2%)	5 (2.9%)
	All	5 (2.8%)	0 (0%)	6 (3.2%)	1 (0.4%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

1 Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)

2 Table 13. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River Upstream of Thermalito  
 3 Afterbay (Low-Flow Channel), Year-Round

Alternative 2D and 5A: Upstream—Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	800	800	800	800
	AN	800	800	800	800
	BN	800	800	800	800
	D	800	800	800	800
	C	800	800	800	800
	All	800	800	800	800
FEB	W	800	800	800	800
	AN	800	800	800	800
	BN	800	800	800	800
	D	800	800	800	800
	C	800	800	800	800
	All	800	800	800	800
MAR	W	800	800	800	800
	AN	800	800	800	800
	BN	800	800	800	800
	D	800	800	800	800
	C	800	800	800	800
	All	800	800	800	800
APR	W	700	700	700	700
	AN	700	700	700	700
	BN	700	700	700	700
	D	700	700	700	700
	C	700	700	700	700
	All	700	700	700	700
MAY	W	700	700	700	700
	AN	700	700	700	700
	BN	700	700	700	700
	D	700	700	700	700
	C	700	700	700	700
	All	700	700	700	700
JUN	W	700	700	700	700
	AN	700	700	700	700
	BN	700	700	700	700
	D	700	700	700	700
	C	700	700	700	700
	All	700	700	700	700

<b>Alternative 2D and 5A: Upstream—Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	700	700	700	700
	AN	700	700	700	700
	BN	700	700	700	700
	D	700	700	700	700
	C	700	700	700	700
	All	700	700	700	700
AUG	W	700	700	700	700
	AN	700	700	700	700
	BN	700	700	700	700
	D	700	700	700	700
	C	700	700	700	700
	All	700	700	700	700
SEP	W	773	773	773	773
	AN	773	773	773	773
	BN	773	773	773	773
	D	773	773	773	773
	C	773	773	773	773
	All	773	773	773	773
OCT	W	800	800	800	800
	AN	800	800	800	800
	BN	800	800	800	800
	D	800	800	800	800
	C	800	800	800	800
	All	800	800	800	800
NOV	W	800	800	800	800
	AN	800	800	800	800
	BN	800	800	800	800
	D	800	800	800	800
	C	800	800	800	800
	All	800	800	800	800
DEC	W	800	800	800	800
	AN	800	800	800	800
	BN	800	800	800	800
	D	800	800	800	800
	C	800	800	800	800
	All	800	800	800	800

1 **Table 14. Differences (Percent Differences) between Pairs of Model Scenarios in the Feather River**  
 2 **Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round**

Alternative 2D and 5A: Upstream—Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JAN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
FEB	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
APR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAY	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
JUN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Alternative 2D and 5A: Upstream—Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
AUG	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
OCT	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
NOV	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)
DEC	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

## 1 Feather River High-Flow Channel (at Thermalito Afterbay)

2 Table 15. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at Thermalito Afterbay  
3 (High-Flow Channel), Year-Round

Alternative 2D and 5A: Upstream—Feather River High-Flow Channel (at Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	11,257	11,528	11,597	11,755
	AN	4,434	3,419	3,435	2,978
	BN	2,640	1,692	1,403	1,432
	D	1,798	1,477	1,556	1,598
	C	1,459	1,378	1,538	1,182
	All	5,277	4,970	4,986	4,931
FEB	W	12,466	13,732	14,159	14,430
	AN	7,411	5,793	7,837	6,855
	BN	3,916	2,280	2,332	1,879
	D	1,817	1,642	1,612	1,737
	C	1,610	1,467	1,503	1,486
	All	6,340	6,166	6,608	6,498
MAR	W	12,895	13,977	13,730	14,237
	AN	7,733	8,568	9,096	9,024
	BN	3,373	2,347	2,039	2,193
	D	2,017	1,521	1,742	1,848
	C	1,697	1,590	1,764	1,688
	All	6,487	6,653	6,673	6,862
APR	W	6,472	6,652	6,689	6,660
	AN	2,251	2,240	2,233	2,237
	BN	1,205	1,132	1,131	1,132
	D	1,286	1,448	1,686	1,370
	C	1,389	1,384	1,591	1,505
	All	3,073	3,150	3,244	3,153
MAY	W	7,528	6,380	6,370	6,373
	AN	3,340	3,342	4,307	3,342
	BN	1,205	1,316	1,567	1,375
	D	1,591	1,862	2,165	1,887
	C	1,574	1,877	1,742	1,825
	All	3,661	3,420	3,648	3,426
JUN	W	5,062	3,659	5,852	4,581
	AN	3,301	3,107	6,415	4,354
	BN	2,707	3,153	6,965	4,340
	D	3,134	3,432	4,246	3,905
	C	2,695	2,812	2,680	2,741
	All	3,632	3,318	5,307	4,089

<b>Alternative 2D and 5A: Upstream—Feather River High-Flow Channel (at Thermalito Afterbay)</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	6,490	7,835	6,895	8,335
	AN	8,757	9,434	9,384	10,000
	BN	8,981	8,936	8,287	9,822
	D	8,294	7,980	5,975	8,032
	C	6,703	6,144	3,352	4,006
	All	7,674	8,041	6,776	8,133
AUG	W	3,308	5,462	4,689	4,969
	AN	6,042	6,948	6,160	7,883
	BN	6,295	6,348	5,696	6,590
	D	7,036	5,633	3,838	4,818
	C	2,613	2,236	2,557	2,024
	All	4,935	5,396	4,577	5,208
SEP	W	2,280	8,400	6,737	5,388
	AN	2,253	7,172	5,511	4,091
	BN	2,466	3,161	1,608	1,137
	D	2,366	1,473	1,264	1,012
	C	1,421	1,451	1,789	1,704
	All	2,201	4,788	3,756	2,973
OCT	W	3,456	3,025	3,245	3,367
	AN	2,386	2,577	2,779	2,927
	BN	3,183	2,820	3,012	3,067
	D	2,688	2,786	3,266	3,109
	C	2,472	2,233	2,381	2,543
	All	2,940	2,756	3,015	3,074
NOV	W	3,292	2,812	2,847	2,920
	AN	1,824	1,915	1,916	1,916
	BN	2,101	1,950	1,930	1,950
	D	1,859	1,729	1,764	1,773
	C	1,854	1,803	1,845	1,878
	All	2,349	2,148	2,170	2,203
DEC	W	7,157	5,543	5,339	5,578
	AN	2,951	3,344	3,479	3,217
	BN	2,176	2,096	2,135	2,324
	D	2,364	2,202	2,337	2,399
	C	2,609	1,781	2,237	2,494
	All	3,973	3,349	3,407	3,528

1 **Table 16. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Feather River at**  
 2 **Thermalito Afterbay (High-Flow Channel), Year-Round**

Alternative 2D and 5A: Upstream—Feather River High-Flow Channel (at Thermalito Afterbay)					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JAN	W	340 (3%)	70 (0.6%)	497 (4.4%)	227 (2%)
	AN	-998 (-22.5%)	17 (0.5%)	-1,455 (-32.8%)	-440 (-12.9%)
	BN	-1,237 (-46.9%)	-289 (-17.1%)	-1,207 (-45.7%)	-260 (-15.4%)
	D	-242 (-13.5%)	79 (5.4%)	-200 (-11.1%)	121 (8.2%)
	C	79 (5.4%)	161 (11.7%)	-277 (-19%)	-196 (-14.2%)
	All	-291 (-5.5%)	16 (0.3%)	-346 (-6.6%)	-39 (-0.8%)
FEB	W	1,693 (13.6%)	427 (3.1%)	1,964 (15.8%)	698 (5.1%)
	AN	426 (5.8%)	2,044 (35.3%)	-556 (-7.5%)	1,062 (18.3%)
	BN	-1,584 (-40.5%)	52 (2.3%)	-2,037 (-52%)	-401 (-17.6%)
	D	-205 (-11.3%)	-30 (-1.8%)	-80 (-4.4%)	95 (5.8%)
	C	-108 (-6.7%)	36 (2.4%)	-125 (-7.7%)	19 (1.3%)
	All	268 (4.2%)	442 (7.2%)	158 (2.5%)	332 (5.4%)
MAR	W	835 (6.5%)	-248 (-1.8%)	1,342 (10.4%)	260 (1.9%)
	AN	1,363 (17.6%)	527 (6.2%)	1,291 (16.7%)	456 (5.3%)
	BN	-1,334 (-39.6%)	-308 (-13.1%)	-1,181 (-35%)	-154 (-6.6%)
	D	-275 (-13.6%)	221 (14.5%)	-168 (-8.4%)	327 (21.5%)
	C	67 (3.9%)	174 (11%)	-9 (-0.5%)	99 (6.2%)
	All	186 (2.9%)	20 (0.3%)	375 (5.8%)	209 (3.1%)
APR	W	217 (3.3%)	38 (0.6%)	188 (2.9%)	9 (0.1%)
	AN	-18 (-0.8%)	-7 (-0.3%)	-14 (-0.6%)	-3 (-0.1%)
	BN	-74 (-6.1%)	-1 (-0.1%)	-73 (-6.1%)	0 (0%)
	D	400 (31.1%)	238 (16.5%)	84 (6.5%)	-78 (-5.4%)
	C	202 (14.6%)	208 (15%)	116 (8.4%)	122 (8.8%)
	All	171 (5.6%)	93 (3%)	80 (2.6%)	3 (0.1%)
MAY	W	-1,158 (-15.4%)	-10 (-0.2%)	-1,155 (-15.3%)	-6 (-0.1%)
	AN	967 (28.9%)	965 (28.9%)	2 (0%)	0 (0%)
	BN	361 (30%)	250 (19%)	170 (14.1%)	59 (4.4%)
	D	574 (36.1%)	303 (16.3%)	296 (18.6%)	26 (1.4%)
	C	168 (10.7%)	-135 (-7.2%)	251 (16%)	-52 (-2.7%)
	All	-14 (-0.4%)	228 (6.7%)	-235 (-6.4%)	6 (0.2%)
JUN	W	790 (15.6%)	2,192 (59.9%)	-481 (-9.5%)	922 (25.2%)
	AN	3,114 (94.3%)	3,308 (106.5%)	1,052 (31.9%)	1,247 (40.1%)
	BN	4,258 (157.3%)	3,811 (120.9%)	1,634 (60.4%)	1,187 (37.7%)
	D	1,112 (35.5%)	814 (23.7%)	771 (24.6%)	472 (13.8%)
	C	-15 (-0.6%)	-132 (-4.7%)	46 (1.7%)	-70 (-2.5%)
	All	1,675 (46.1%)	1,989 (60%)	456 (12.6%)	771 (23.2%)



Alternative 2D and 5A: Upstream—Feather River High-Flow Channel (at Thermalito Afterbay)					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	405 (6.2%)	-939 (-12%)	1,845 (28.4%)	501 (6.4%)
	AN	628 (7.2%)	-49 (-0.5%)	1,243 (14.2%)	566 (6%)
	BN	-694 (-7.7%)	-650 (-7.3%)	841 (9.4%)	885 (9.9%)
	D	-2,319 (-28%)	-2,005 (-25.1%)	-262 (-3.2%)	52 (0.7%)
	C	-3,351 (-50%)	-2,793 (-45.4%)	-2,697 (-40.2%)	-2,139 (-34.8%)
	All	-898 (-11.7%)	-1,265 (-15.7%)	458 (6%)	91 (1.1%)
AUG	W	1,381 (41.7%)	-773 (-14.2%)	1,661 (50.2%)	-494 (-9%)
	AN	118 (2%)	-788 (-11.3%)	1,841 (30.5%)	935 (13.5%)
	BN	-599 (-9.5%)	-653 (-10.3%)	295 (4.7%)	241 (3.8%)
	D	-3,198 (-45.5%)	-1,795 (-31.9%)	-2,218 (-31.5%)	-814 (-14.5%)
	C	-56 (-2.2%)	321 (14.4%)	-589 (-22.6%)	-212 (-9.5%)
	All	-357 (-7.2%)	-819 (-15.2%)	273 (5.5%)	-188 (-3.5%)
SEP	W	4,457 (195.5%)	-1,663 (-19.8%)	3,108 (136.3%)	-3,012 (-35.9%)
	AN	3,258 (144.6%)	-1,661 (-23.2%)	1,838 (81.6%)	-3,081 (-43%)
	BN	-858 (-34.8%)	-1,552 (-49.1%)	-1,329 (-53.9%)	-2,023 (-64%)
	D	-1,102 (-46.6%)	-209 (-14.2%)	-1,354 (-57.2%)	-461 (-31.3%)
	C	368 (25.9%)	338 (23.3%)	284 (20%)	253 (17.4%)
	All	1,556 (70.7%)	-1,032 (-21.5%)	772 (35.1%)	-1,816 (-37.9%)
OCT	W	-211 (-6.1%)	220 (7.3%)	-89 (-2.6%)	342 (11.3%)
	AN	393 (16.5%)	202 (7.8%)	541 (22.7%)	350 (13.6%)
	BN	-171 (-5.4%)	192 (6.8%)	-116 (-3.6%)	247 (8.8%)
	D	578 (21.5%)	480 (17.2%)	421 (15.7%)	323 (11.6%)
	C	-91 (-3.7%)	148 (6.6%)	72 (2.9%)	310 (13.9%)
	All	75 (2.6%)	259 (9.4%)	134 (4.6%)	318 (11.5%)
NOV	W	-446 (-13.5%)	35 (1.2%)	-373 (-11.3%)	108 (3.8%)
	AN	92 (5%)	1 (0%)	92 (5%)	1 (0%)
	BN	-171 (-8.2%)	-20 (-1%)	-151 (-7.2%)	0 (0%)
	D	-96 (-5.1%)	34 (2%)	-87 (-4.7%)	43 (2.5%)
	C	-9 (-0.5%)	43 (2.4%)	24 (1.3%)	75 (4.2%)
	All	-179 (-7.6%)	22 (1%)	-146 (-6.2%)	55 (2.6%)
DEC	W	-1,818 (-25.4%)	-204 (-3.7%)	-1,579 (-22.1%)	36 (0.6%)
	AN	528 (17.9%)	134 (4%)	266 (9%)	-127 (-3.8%)
	BN	-41 (-1.9%)	38 (1.8%)	148 (6.8%)	227 (10.8%)
	D	-27 (-1.1%)	135 (6.1%)	35 (1.5%)	197 (9%)
	C	-371 (-14.2%)	456 (25.6%)	-115 (-4.4%)	713 (40%)
	All	-567 (-14.3%)	58 (1.7%)	-445 (-11.2%)	179 (5.3%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

## 1 Feather River at Confluence with Sacramento River

2 Table 17. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at the Confluence with  
3 the Sacramento River, Year-Round

Alternative 2D and 5A: Upstream—Feather River at Confluence with Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	23,533	24,852	24,920	25,077
	AN	12,430	11,755	11,773	11,318
	BN	6,499	5,658	5,370	5,403
	D	4,621	4,390	4,467	4,511
	C	3,646	3,551	3,708	3,352
	All	11,938	12,049	12,064	12,011
FEB	W	27,039	29,508	29,941	30,210
	AN	14,818	14,119	16,166	15,188
	BN	9,153	8,081	8,138	7,690
	D	4,402	4,365	4,332	4,461
	C	3,237	3,086	3,124	3,109
	All	13,744	14,212	14,657	14,549
MAR	W	24,172	25,585	25,344	25,849
	AN	19,990	21,173	21,698	21,628
	BN	8,136	7,175	6,873	7,048
	D	5,073	4,626	4,859	4,971
	C	2,933	2,695	2,871	2,825
	All	13,521	13,846	13,872	14,069
APR	W	15,897	16,056	16,104	16,072
	AN	9,832	9,733	9,732	9,732
	BN	5,401	5,232	5,239	5,239
	D	4,152	4,233	4,474	4,155
	C	3,298	3,195	3,407	3,324
	All	8,796	8,805	8,905	8,813
MAY	W	14,387	12,987	12,984	12,989
	AN	8,068	7,777	8,751	7,783
	BN	4,704	4,534	4,791	4,601
	D	3,652	3,660	3,965	3,689
	C	2,389	2,492	2,358	2,444
	All	7,697	7,198	7,431	7,210
JUN	W	10,222	7,790	9,995	8,712
	AN	6,391	5,485	8,786	6,739
	BN	4,495	4,346	8,163	5,542
	D	3,853	3,776	4,591	4,251
	C	2,782	2,678	2,550	2,612
	All	6,197	5,236	7,230	6,010

<b>Alternative 2D and 5A: Upstream—Feather River at Confluence with Sacramento River</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	8,177	8,536	7,479	9,026
	AN	9,322	9,442	9,265	10,010
	BN	9,380	8,985	8,322	9,873
	D	8,290	7,690	5,685	7,749
	C	6,450	5,831	3,056	3,622
	All	8,322	8,164	6,843	8,243
AUG	W	4,923	6,656	5,572	6,122
	AN	7,080	7,790	6,851	8,721
	BN	7,236	7,098	6,414	7,352
	D	7,711	6,185	4,374	5,370
	C	2,841	2,408	2,730	2,223
	All	5,941	6,172	5,224	5,977
SEP	W	4,351	10,426	8,770	7,423
	AN	4,194	9,070	7,405	5,992
	BN	4,252	4,896	3,353	2,876
	D	4,179	3,281	3,025	2,808
	C	2,054	2,052	2,345	2,304
	All	3,937	6,490	5,444	4,675
OCT	W	4,176	3,741	3,970	4,097
	AN	2,630	2,839	3,051	3,198
	BN	3,754	3,394	3,601	3,652
	D	3,033	3,139	3,619	3,466
	C	2,938	2,701	2,851	3,003
	All	3,446	3,266	3,532	3,591
NOV	W	4,697	4,407	4,446	4,518
	AN	3,065	3,220	3,209	3,210
	BN	2,687	2,589	2,573	2,592
	D	2,342	2,284	2,319	2,327
	C	2,084	2,073	2,108	2,137
	All	3,216	3,115	3,136	3,168
DEC	W	12,409	11,909	11,710	11,949
	AN	5,193	6,005	6,142	5,883
	BN	3,079	3,342	3,385	3,575
	D	2,838	2,787	2,923	2,983
	C	2,975	2,152	2,611	2,867
	All	6,279	6,152	6,213	6,334

1 **Table 18. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Feather River at**  
 2 **the Confluence with the Sacramento River, Year-Round**

Alternative 2D and 5A: Upstream—Feather River at Confluence with Sacramento River					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JAN	W	1,387 (5.9%)	69 (0.3%)	1,544 (6.6%)	225 (0.9%)
	AN	-657 (-5.3%)	18 (0.2%)	-1,112 (-8.9%)	-437 (-3.7%)
	BN	-1,129 (-17.4%)	-288 (-5.1%)	-1,096 (-16.9%)	-255 (-4.5%)
	D	-155 (-3.3%)	76 (1.7%)	-111 (-2.4%)	120 (2.7%)
	C	61 (1.7%)	156 (4.4%)	-294 (-8.1%)	-199 (-5.6%)
	All	126 (1.1%)	15 (0.1%)	72 (0.6%)	-39 (-0.3%)
FEB	W	2,902 (10.7%)	433 (1.5%)	3,172 (11.7%)	702 (2.4%)
	AN	1,348 (9.1%)	2,047 (14.5%)	369 (2.5%)	1,069 (7.6%)
	BN	-1,014 (-11.1%)	57 (0.7%)	-1,462 (-16%)	-391 (-4.8%)
	D	-69 (-1.6%)	-32 (-0.7%)	59 (1.3%)	97 (2.2%)
	C	-113 (-3.5%)	38 (1.2%)	-128 (-4%)	23 (0.7%)
	All	912 (6.6%)	445 (3.1%)	804 (5.9%)	337 (2.4%)
MAR	W	1,172 (4.8%)	-242 (-0.9%)	1,678 (6.9%)	264 (1%)
	AN	1,707 (8.5%)	524 (2.5%)	1,637 (8.2%)	454 (2.1%)
	BN	-1,262 (-15.5%)	-301 (-4.2%)	-1,088 (-13.4%)	-127 (-1.8%)
	D	-213 (-4.2%)	233 (5%)	-102 (-2%)	345 (7.5%)
	C	-61 (-2.1%)	176 (6.5%)	-108 (-3.7%)	129 (4.8%)
	All	350 (2.6%)	26 (0.2%)	548 (4%)	223 (1.6%)
APR	W	206 (1.3%)	48 (0.3%)	174 (1.1%)	16 (0.1%)
	AN	-100 (-1%)	-1 (0%)	-100 (-1%)	-1 (0%)
	BN	-162 (-3%)	7 (0.1%)	-161 (-3%)	8 (0.1%)
	D	322 (7.8%)	241 (5.7%)	4 (0.1%)	-77 (-1.8%)
	C	109 (3.3%)	212 (6.6%)	25 (0.8%)	129 (4%)
	All	110 (1.2%)	100 (1.1%)	18 (0.2%)	8 (0.1%)
MAY	W	-1,403 (-9.7%)	-3 (0%)	-1,398 (-9.7%)	2 (0%)
	AN	683 (8.5%)	974 (12.5%)	-285 (-3.5%)	6 (0.1%)
	BN	86 (1.8%)	257 (5.7%)	-104 (-2.2%)	66 (1.5%)
	D	313 (8.6%)	305 (8.3%)	37 (1%)	29 (0.8%)
	C	-31 (-1.3%)	-134 (-5.4%)	55 (2.3%)	-48 (-1.9%)
	All	-266 (-3.5%)	233 (3.2%)	-486 (-6.3%)	12 (0.2%)
JUN	W	-226 (-2.2%)	2,205 (28.3%)	-1,510 (-14.8%)	922 (11.8%)
	AN	2,395 (37.5%)	3,301 (60.2%)	348 (5.5%)	1,254 (22.9%)
	BN	3,668 (81.6%)	3,817 (87.8%)	1,047 (23.3%)	1,196 (27.5%)
	D	738 (19.1%)	814 (21.6%)	398 (10.3%)	475 (12.6%)
	C	-232 (-8.4%)	-128 (-4.8%)	-171 (-6.1%)	-66 (-2.5%)
	All	1,033 (16.7%)	1,994 (38.1%)	-187 (-3%)	775 (14.8%)

Alternative 2D and 5A: Upstream—Feather River at Confluence with Sacramento River					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	-698 (-8.5%)	-1,058 (-12.4%)	849 (10.4%)	489 (5.7%)
	AN	-58 (-0.6%)	-178 (-1.9%)	688 (7.4%)	568 (6%)
	BN	-1,058 (-11.3%)	-663 (-7.4%)	493 (5.3%)	888 (9.9%)
	D	-2,605 (-31.4%)	-2,006 (-26.1%)	-541 (-6.5%)	58 (0.8%)
	C	-3,395 (-52.6%)	-2,776 (-47.6%)	-2,828 (-43.8%)	-2,209 (-37.9%)
	All	-1,479 (-17.8%)	-1,321 (-16.2%)	-79 (-0.9%)	79 (1%)
AUG	W	648 (13.2%)	-1,085 (-16.3%)	1,199 (24.4%)	-534 (-8%)
	AN	-229 (-3.2%)	-939 (-12.1%)	1,641 (23.2%)	931 (12%)
	BN	-821 (-11.3%)	-684 (-9.6%)	116 (1.6%)	254 (3.6%)
	D	-3,338 (-43.3%)	-1,811 (-29.3%)	-2,341 (-30.4%)	-815 (-13.2%)
	C	-110 (-3.9%)	323 (13.4%)	-617 (-21.7%)	-184 (-7.7%)
	All	-717 (-12.1%)	-948 (-15.4%)	36 (0.6%)	-196 (-3.2%)
SEP	W	4,418 (101.5%)	-1,657 (-15.9%)	3,071 (70.6%)	-3,004 (-28.8%)
	AN	3,211 (76.6%)	-1,665 (-18.4%)	1,797 (42.9%)	-3,078 (-33.9%)
	BN	-898 (-21.1%)	-1,543 (-31.5%)	-1,375 (-32.3%)	-2,020 (-41.3%)
	D	-1,154 (-27.6%)	-257 (-7.8%)	-1,371 (-32.8%)	-473 (-14.4%)
	C	291 (14.2%)	292 (14.2%)	250 (12.2%)	252 (12.3%)
	All	1,507 (38.3%)	-1,046 (-16.1%)	738 (18.7%)	-1,815 (-28%)
OCT	W	-206 (-4.9%)	230 (6.1%)	-79 (-1.9%)	356 (9.5%)
	AN	421 (16%)	212 (7.5%)	568 (21.6%)	359 (12.6%)
	BN	-153 (-4.1%)	206 (6.1%)	-102 (-2.7%)	257 (7.6%)
	D	586 (19.3%)	479 (15.3%)	434 (14.3%)	327 (10.4%)
	C	-87 (-3%)	150 (5.6%)	65 (2.2%)	303 (11.2%)
	All	86 (2.5%)	266 (8.2%)	145 (4.2%)	325 (10%)
NOV	W	-251 (-5.3%)	39 (0.9%)	-179 (-3.8%)	111 (2.5%)
	AN	145 (4.7%)	-11 (-0.3%)	146 (4.8%)	-10 (-0.3%)
	BN	-114 (-4.2%)	-16 (-0.6%)	-96 (-3.6%)	2 (0.1%)
	D	-23 (-1%)	35 (1.5%)	-15 (-0.6%)	43 (1.9%)
	C	23 (1.1%)	34 (1.6%)	52 (2.5%)	63 (3%)
	All	-80 (-2.5%)	21 (0.7%)	-47 (-1.5%)	53 (1.7%)
DEC	W	-700 (-5.6%)	-199 (-1.7%)	-460 (-3.7%)	40 (0.3%)
	AN	949 (18.3%)	137 (2.3%)	690 (13.3%)	-122 (-2%)
	BN	305 (9.9%)	43 (1.3%)	496 (16.1%)	233 (7%)
	D	85 (3%)	136 (4.9%)	146 (5.1%)	196 (7%)
	C	-364 (-12.2%)	459 (21.3%)	-108 (-3.6%)	715 (33.2%)
	All	-65 (-1%)	61 (1%)	56 (0.9%)	182 (3%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

## 1 American River at Nimbus Dam

2 **Table 19. Mean Monthly Flows (cfs) for Model Scenarios in the American River at Nimbus Dam,**  
3 **Year-Round**

<b>Alternative 2D and 5A: Upstream—American River at Nimbus Dam</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JAN	W	8,806	10,113	10,111	10,159
	AN	4,833	4,941	4,975	4,938
	BN	2,392	2,334	2,077	2,204
	D	1,723	1,620	1,532	1,582
	C	1,474	1,241	1,317	1,187
	All	4,502	4,865	4,818	4,841
FEB	W	9,294	10,422	10,473	10,454
	AN	6,469	7,220	7,534	7,388
	BN	4,360	4,706	4,752	4,817
	D	1,852	1,769	1,753	1,756
	C	1,185	1,073	1,130	1,043
	All	5,218	5,710	5,785	5,756
MAR	W	6,089	6,454	6,454	6,454
	AN	5,454	5,762	5,816	5,816
	BN	2,429	2,622	2,646	2,654
	D	2,191	2,184	2,279	2,212
	C	939	888	873	888
	All	3,762	3,947	3,977	3,966
APR	W	5,300	5,368	5,367	5,368
	AN	3,546	3,356	3,352	3,354
	BN	3,126	3,117	3,143	3,064
	D	1,837	1,761	1,842	1,740
	C	1,156	1,091	1,289	1,165
	All	3,305	3,271	3,322	3,268
MAY	W	6,157	5,673	5,672	5,672
	AN	3,885	3,148	3,384	3,171
	BN	2,930	2,466	2,715	2,569
	D	1,790	1,629	1,716	1,711
	C	1,182	1,319	1,054	1,328
	All	3,587	3,231	3,288	3,271
JUN	W	6,003	4,521	4,809	4,692
	AN	3,346	2,855	3,460	3,245
	BN	2,863	2,558	3,368	3,374
	D	2,506	2,564	3,092	2,962
	C	1,824	1,297	1,273	1,271
	All	3,699	3,041	3,471	3,375

<b>Alternative 2D and 5A: Upstream—American River at Nimbus Dam</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	4,108	3,571	3,831	3,877
	AN	4,638	4,634	4,567	4,973
	BN	4,744	4,544	4,633	4,216
	D	3,577	3,091	3,280	3,552
	C	1,784	1,670	1,939	1,744
	All	3,838	3,509	3,678	3,712
AUG	W	3,520	2,576	2,407	2,547
	AN	2,542	2,200	2,044	2,080
	BN	2,495	2,313	2,165	2,125
	D	2,613	1,779	1,414	1,409
	C	1,500	1,308	1,097	1,082
	All	2,707	2,115	1,903	1,942
SEP	W	4,025	3,982	3,375	3,444
	AN	2,764	2,645	2,100	2,305
	BN	2,370	1,915	1,459	1,523
	D	1,856	1,373	1,361	1,357
	C	1,164	761	702	881
	All	2,663	2,389	2,028	2,116
OCT	W	1,723	1,700	1,605	1,639
	AN	1,706	1,609	1,495	1,652
	BN	1,602	1,517	1,770	1,570
	D	1,468	1,479	1,366	1,422
	C	1,461	1,375	1,705	1,579
	All	1,605	1,559	1,579	1,573
NOV	W	3,527	3,436	2,934	3,029
	AN	3,181	3,187	2,866	2,920
	BN	2,067	1,985	1,707	1,814
	D	2,176	1,725	1,703	1,615
	C	1,994	1,707	1,696	1,668
	All	2,706	2,523	2,263	2,296
DEC	W	6,302	6,671	6,778	6,837
	AN	3,137	3,089	3,030	3,030
	BN	2,676	2,857	2,999	2,938
	D	1,741	1,643	1,566	1,582
	C	1,524	1,374	1,457	1,386
	All	3,519	3,617	3,661	3,663

1 **Table 20. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the American River**  
 2 **at Nimbus Dam, Year-Round**

Alternative 2D and 5A: Upstream—American River at Nimbus Dam					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JAN	W	1,305 (14.8%)	-1 (0%)	1,353 (15.4%)	46 (0.5%)
	AN	142 (2.9%)	34 (0.7%)	106 (2.2%)	-3 (-0.1%)
	BN	-315 (-13.2%)	-257 (-11%)	-188 (-7.9%)	-130 (-5.6%)
	D	-191 (-11.1%)	-88 (-5.4%)	-141 (-8.2%)	-38 (-2.3%)
	C	-157 (-10.6%)	76 (6.1%)	-287 (-19.5%)	-55 (-4.4%)
	All	316 (7%)	-47 (-1%)	339 (7.5%)	-24 (-0.5%)
FEB	W	1,179 (12.7%)	51 (0.5%)	1,161 (12.5%)	32 (0.3%)
	AN	1,065 (16.5%)	314 (4.4%)	919 (14.2%)	168 (2.3%)
	BN	392 (9%)	46 (1%)	457 (10.5%)	111 (2.4%)
	D	-99 (-5.3%)	-15 (-0.9%)	-97 (-5.2%)	-13 (-0.7%)
	C	-55 (-4.6%)	57 (5.3%)	-142 (-12%)	-31 (-2.9%)
	All	567 (10.9%)	75 (1.3%)	538 (10.3%)	46 (0.8%)
MAR	W	365 (6%)	0 (0%)	365 (6%)	0 (0%)
	AN	362 (6.6%)	53 (0.9%)	362 (6.6%)	53 (0.9%)
	BN	217 (8.9%)	24 (0.9%)	225 (9.3%)	32 (1.2%)
	D	88 (4%)	94 (4.3%)	21 (0.9%)	28 (1.3%)
	C	-66 (-7.1%)	-15 (-1.7%)	-51 (-5.4%)	0 (0%)
	All	215 (5.7%)	30 (0.8%)	204 (5.4%)	19 (0.5%)
APR	W	67 (1.3%)	0 (0%)	67 (1.3%)	0 (0%)
	AN	-193 (-5.5%)	-3 (-0.1%)	-191 (-5.4%)	-2 (0%)
	BN	18 (0.6%)	27 (0.9%)	-62 (-2%)	-53 (-1.7%)
	D	4 (0.2%)	81 (4.6%)	-97 (-5.3%)	-21 (-1.2%)
	C	134 (11.6%)	198 (18.2%)	10 (0.8%)	74 (6.8%)
	All	17 (0.5%)	51 (1.6%)	-37 (-1.1%)	-3 (-0.1%)
MAY	W	-485 (-7.9%)	-2 (0%)	-484 (-7.9%)	-1 (0%)
	AN	-501 (-12.9%)	236 (7.5%)	-714 (-18.4%)	23 (0.7%)
	BN	-215 (-7.3%)	249 (10.1%)	-361 (-12.3%)	103 (4.2%)
	D	-74 (-4.1%)	86 (5.3%)	-79 (-4.4%)	82 (5%)
	C	-128 (-10.8%)	-266 (-20.1%)	146 (12.4%)	9 (0.6%)
	All	-299 (-8.3%)	57 (1.8%)	-316 (-8.8%)	40 (1.2%)
JUN	W	-1,194 (-19.9%)	288 (6.4%)	-1,311 (-21.8%)	171 (3.8%)
	AN	114 (3.4%)	605 (21.2%)	-101 (-3%)	390 (13.7%)
	BN	505 (17.6%)	810 (31.7%)	511 (17.8%)	816 (31.9%)
	D	587 (23.4%)	528 (20.6%)	456 (18.2%)	397 (15.5%)
	C	-551 (-30.2%)	-23 (-1.8%)	-553 (-30.3%)	-26 (-2%)
	All	-228 (-6.2%)	431 (14.2%)	-324 (-8.8%)	334 (11%)



Alternative 2D and 5A: Upstream—American River at Nimbus Dam					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	-277 (-6.8%)	260 (7.3%)	-231 (-5.6%)	306 (8.6%)
	AN	-71 (-1.5%)	-68 (-1.5%)	334 (7.2%)	338 (7.3%)
	BN	-111 (-2.3%)	89 (2%)	-529 (-11.1%)	-329 (-7.2%)
	D	-297 (-8.3%)	188 (6.1%)	-26 (-0.7%)	460 (14.9%)
	C	154 (8.6%)	268 (16.1%)	-41 (-2.3%)	73 (4.4%)
	All	-160 (-4.2%)	168 (4.8%)	-126 (-3.3%)	202 (5.8%)
AUG	W	-1,114 (-31.6%)	-169 (-6.6%)	-973 (-27.6%)	-29 (-1.1%)
	AN	-498 (-19.6%)	-156 (-7.1%)	-462 (-18.2%)	-120 (-5.5%)
	BN	-330 (-13.2%)	-148 (-6.4%)	-370 (-14.8%)	-188 (-8.1%)
	D	-1,198 (-45.9%)	-364 (-20.5%)	-1,204 (-46.1%)	-370 (-20.8%)
	C	-403 (-26.9%)	-211 (-16.1%)	-418 (-27.9%)	-226 (-17.3%)
	All	-804 (-29.7%)	-213 (-10%)	-765 (-28.2%)	-173 (-8.2%)
SEP	W	-650 (-16.1%)	-608 (-15.3%)	-581 (-14.4%)	-538 (-13.5%)
	AN	-664 (-24%)	-545 (-20.6%)	-459 (-16.6%)	-340 (-12.8%)
	BN	-911 (-38.5%)	-456 (-23.8%)	-848 (-35.8%)	-392 (-20.5%)
	D	-495 (-26.7%)	-12 (-0.9%)	-499 (-26.9%)	-16 (-1.2%)
	C	-462 (-39.7%)	-59 (-7.7%)	-283 (-24.3%)	121 (15.9%)
	All	-635 (-23.8%)	-361 (-15.1%)	-547 (-20.5%)	-273 (-11.4%)
OCT	W	-118 (-6.8%)	-95 (-5.6%)	-84 (-4.9%)	-61 (-3.6%)
	AN	-212 (-12.4%)	-114 (-7.1%)	-54 (-3.2%)	43 (2.7%)
	BN	168 (10.5%)	253 (16.7%)	-32 (-2%)	53 (3.5%)
	D	-102 (-6.9%)	-113 (-7.6%)	-46 (-3.2%)	-57 (-3.9%)
	C	245 (16.8%)	330 (24%)	118 (8.1%)	204 (14.8%)
	All	-26 (-1.6%)	20 (1.3%)	-33 (-2%)	13 (0.9%)
NOV	W	-593 (-16.8%)	-502 (-14.6%)	-498 (-14.1%)	-407 (-11.8%)
	AN	-315 (-9.9%)	-321 (-10.1%)	-261 (-8.2%)	-267 (-8.4%)
	BN	-360 (-17.4%)	-278 (-14%)	-253 (-12.2%)	-171 (-8.6%)
	D	-473 (-21.7%)	-21 (-1.2%)	-562 (-25.8%)	-110 (-6.4%)
	C	-299 (-15%)	-11 (-0.6%)	-326 (-16.4%)	-39 (-2.3%)
	All	-443 (-16.4%)	-260 (-10.3%)	-410 (-15.2%)	-227 (-9%)
DEC	W	477 (7.6%)	107 (1.6%)	536 (8.5%)	166 (2.5%)
	AN	-107 (-3.4%)	-60 (-1.9%)	-107 (-3.4%)	-59 (-1.9%)
	BN	323 (12.1%)	142 (5%)	262 (9.8%)	80 (2.8%)
	D	-175 (-10%)	-78 (-4.7%)	-159 (-9.1%)	-62 (-3.7%)
	C	-67 (-4.4%)	83 (6%)	-138 (-9.1%)	12 (0.9%)
	All	142 (4%)	44 (1.2%)	144 (4.1%)	46 (1.3%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

1 **American River at Confluence with Sacramento River**2 **Table 21. Mean Monthly Flows (cfs) for Model Scenarios in the American River at the Confluence with**  
3 **the Sacramento River, Year-Round**

<b>Alternative 2D and 5A: Upstream—American River at Confluence with Sacramento River</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JAN	W	8,748	10,031	10,029	10,076
	AN	4,806	4,895	4,930	4,893
	BN	2,326	2,246	1,989	2,116
	D	1,654	1,535	1,448	1,498
	C	1,403	1,152	1,228	1,098
	All	4,443	4,786	4,739	4,762
FEB	W	9,183	10,275	10,326	10,307
	AN	6,422	7,148	7,462	7,316
	BN	4,309	4,631	4,680	4,743
	D	1,781	1,679	1,665	1,667
	C	1,119	985	1,041	955
	All	5,142	5,607	5,683	5,654
MAR	W	5,979	6,304	6,303	6,303
	AN	5,364	5,641	5,691	5,693
	BN	2,340	2,503	2,527	2,534
	D	2,121	2,095	2,189	2,122
	C	864	785	769	794
	All	3,672	3,826	3,856	3,846
APR	W	5,156	5,164	5,163	5,164
	AN	3,383	3,136	3,132	3,134
	BN	2,984	2,927	2,953	2,873
	D	1,672	1,550	1,630	1,528
	C	996	886	1,086	970
	All	3,152	3,066	3,116	3,064
MAY	W	5,959	5,415	5,413	5,414
	AN	3,700	2,911	3,148	2,934
	BN	2,733	2,222	2,471	2,325
	D	1,605	1,399	1,484	1,481
	C	1,014	1,118	851	1,127
	All	3,398	2,993	3,049	3,033
JUN	W	5,743	4,206	4,494	4,377
	AN	3,103	2,562	3,165	2,952
	BN	2,631	2,274	3,082	3,089
	D	2,282	2,289	2,816	2,685
	C	1,621	1,052	1,040	1,035
	All	3,462	2,753	3,185	3,088

<b>Alternative 2D and 5A: Upstream—American River at Confluence with Sacramento River</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	3,844	3,264	3,521	3,569
	AN	4,399	4,344	4,271	4,679
	BN	4,509	4,257	4,339	3,921
	D	3,347	2,807	2,991	3,263
	C	1,568	1,421	1,694	1,500
	All	3,597	3,221	3,387	3,422
AUG	W	3,295	2,304	2,133	2,273
	AN	2,313	1,921	1,766	1,798
	BN	2,265	2,035	1,886	1,850
	D	2,395	1,516	1,150	1,142
	C	1,314	1,097	877	866
	All	2,488	1,852	1,638	1,677
SEP	W	3,846	3,771	3,165	3,233
	AN	2,594	2,437	1,893	2,098
	BN	2,205	1,712	1,257	1,322
	D	1,691	1,177	1,168	1,164
	C	1,011	591	535	713
	All	2,495	2,189	1,830	1,917
OCT	W	1,607	1,561	1,470	1,503
	AN	1,597	1,481	1,369	1,527
	BN	1,472	1,364	1,622	1,421
	D	1,344	1,333	1,223	1,277
	C	1,342	1,232	1,564	1,436
	All	1,486	1,418	1,441	1,433
NOV	W	3,472	3,363	2,862	2,956
	AN	3,100	3,089	2,769	2,821
	BN	1,990	1,889	1,609	1,718
	D	2,094	1,624	1,604	1,515
	C	1,897	1,590	1,576	1,549
	All	2,632	2,430	2,170	2,203
DEC	W	6,255	6,607	6,719	6,777
	AN	3,072	3,007	2,950	2,950
	BN	2,609	2,774	2,918	2,855
	D	1,675	1,564	1,487	1,504
	C	1,443	1,278	1,360	1,290
	All	3,457	3,539	3,586	3,587

1 **Table 22. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the American River**  
 2 **at the Confluence with the Sacramento River, Year-Round**

Alternative 2D and 5A: Upstream—American River at Confluence with Sacramento River					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JAN	W	1,282 (14.7%)	-2 (0%)	1,329 (15.2%)	45 (0.4%)
	AN	124 (2.6%)	35 (0.7%)	87 (1.8%)	-2 (0%)
	BN	-338 (-14.5%)	-258 (-11.5%)	-211 (-9.1%)	-130 (-5.8%)
	D	-206 (-12.4%)	-87 (-5.6%)	-156 (-9.4%)	-37 (-2.4%)
	C	-176 (-12.5%)	75 (6.5%)	-305 (-21.8%)	-55 (-4.7%)
	All	296 (6.7%)	-48 (-1%)	319 (7.2%)	-24 (-0.5%)
FEB	W	1,143 (12.4%)	51 (0.5%)	1,124 (12.2%)	32 (0.3%)
	AN	1,039 (16.2%)	314 (4.4%)	893 (13.9%)	168 (2.4%)
	BN	371 (8.6%)	49 (1.1%)	434 (10.1%)	112 (2.4%)
	D	-116 (-6.5%)	-14 (-0.9%)	-114 (-6.4%)	-12 (-0.7%)
	C	-78 (-7%)	56 (5.7%)	-164 (-14.6%)	-30 (-3%)
	All	541 (10.5%)	75 (1.3%)	512 (10%)	47 (0.8%)
MAR	W	324 (5.4%)	-1 (0%)	324 (5.4%)	-1 (0%)
	AN	327 (6.1%)	51 (0.9%)	328 (6.1%)	52 (0.9%)
	BN	187 (8%)	24 (1%)	194 (8.3%)	31 (1.3%)
	D	68 (3.2%)	95 (4.5%)	1 (0.1%)	28 (1.3%)
	C	-96 (-11.1%)	-16 (-2.1%)	-70 (-8.1%)	9 (1.2%)
	All	183 (5%)	30 (0.8%)	174 (4.7%)	20 (0.5%)
APR	W	8 (0.1%)	0 (0%)	8 (0.2%)	0 (0%)
	AN	-251 (-7.4%)	-4 (-0.1%)	-249 (-7.4%)	-2 (-0.1%)
	BN	-31 (-1%)	26 (0.9%)	-110 (-3.7%)	-54 (-1.8%)
	D	-43 (-2.5%)	80 (5.2%)	-144 (-8.6%)	-21 (-1.4%)
	C	90 (9%)	199 (22.5%)	-26 (-2.6%)	83 (9.4%)
	All	-36 (-1.1%)	51 (1.6%)	-88 (-2.8%)	-2 (-0.1%)
MAY	W	-545 (-9.2%)	-2 (0%)	-545 (-9.1%)	-1 (0%)
	AN	-552 (-14.9%)	236 (8.1%)	-765 (-20.7%)	23 (0.8%)
	BN	-263 (-9.6%)	249 (11.2%)	-408 (-14.9%)	104 (4.7%)
	D	-120 (-7.5%)	86 (6.1%)	-124 (-7.7%)	82 (5.9%)
	C	-163 (-16.1%)	-267 (-23.9%)	113 (11.1%)	9 (0.8%)
	All	-349 (-10.3%)	56 (1.9%)	-365 (-10.7%)	40 (1.3%)
JUN	W	-1,249 (-21.7%)	288 (6.8%)	-1,366 (-23.8%)	171 (4.1%)
	AN	62 (2%)	602 (23.5%)	-151 (-4.9%)	390 (15.2%)
	BN	451 (17.1%)	808 (35.5%)	458 (17.4%)	815 (35.8%)
	D	534 (23.4%)	527 (23%)	404 (17.7%)	397 (17.3%)
	C	-581 (-35.9%)	-12 (-1.1%)	-587 (-36.2%)	-17 (-1.6%)
	All	-278 (-8%)	431 (15.7%)	-374 (-10.8%)	335 (12.2%)

Alternative 2D and 5A: Upstream—American River at Confluence with Sacramento River					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	-323 (-8.4%)	257 (7.9%)	-275 (-7.2%)	305 (9.3%)
	AN	-128 (-2.9%)	-73 (-1.7%)	280 (6.4%)	335 (7.7%)
	BN	-170 (-3.8%)	82 (1.9%)	-588 (-13%)	-336 (-7.9%)
	D	-357 (-10.7%)	184 (6.5%)	-84 (-2.5%)	457 (16.3%)
	C	126 (8.1%)	274 (19.3%)	-68 (-4.4%)	79 (5.6%)
	All	-210 (-5.8%)	165 (5.1%)	-175 (-4.9%)	200 (6.2%)
AUG	W	-1,162 (-35.3%)	-171 (-7.4%)	-1,022 (-31%)	-31 (-1.4%)
	AN	-547 (-23.7%)	-155 (-8.1%)	-515 (-22.3%)	-123 (-6.4%)
	BN	-379 (-16.7%)	-149 (-7.3%)	-415 (-18.3%)	-185 (-9.1%)
	D	-1,244 (-52%)	-366 (-24.1%)	-1,253 (-52.3%)	-374 (-24.7%)
	C	-437 (-33.2%)	-220 (-20%)	-448 (-34.1%)	-231 (-21.1%)
	All	-850 (-34.2%)	-215 (-11.6%)	-811 (-32.6%)	-175 (-9.5%)
SEP	W	-681 (-17.7%)	-606 (-16.1%)	-613 (-15.9%)	-538 (-14.3%)
	AN	-701 (-27%)	-543 (-22.3%)	-496 (-19.1%)	-339 (-13.9%)
	BN	-948 (-43%)	-455 (-26.6%)	-884 (-40.1%)	-390 (-22.8%)
	D	-523 (-30.9%)	-9 (-0.7%)	-527 (-31.2%)	-13 (-1.1%)
	C	-476 (-47.1%)	-56 (-9.5%)	-298 (-29.5%)	122 (20.6%)
	All	-665 (-26.6%)	-359 (-16.4%)	-577 (-23.1%)	-272 (-12.4%)
OCT	W	-137 (-8.5%)	-91 (-5.9%)	-104 (-6.5%)	-58 (-3.7%)
	AN	-227 (-14.2%)	-112 (-7.6%)	-70 (-4.4%)	46 (3.1%)
	BN	150 (10.2%)	258 (18.9%)	-51 (-3.4%)	57 (4.2%)
	D	-121 (-9%)	-109 (-8.2%)	-67 (-5%)	-56 (-4.2%)
	C	222 (16.5%)	331 (26.9%)	95 (7.1%)	204 (16.6%)
	All	-45 (-3%)	23 (1.6%)	-53 (-3.5%)	16 (1.1%)
NOV	W	-610 (-17.6%)	-501 (-14.9%)	-516 (-14.9%)	-407 (-12.1%)
	AN	-331 (-10.7%)	-320 (-10.4%)	-279 (-9%)	-268 (-8.7%)
	BN	-381 (-19.1%)	-281 (-14.9%)	-272 (-13.7%)	-171 (-9.1%)
	D	-490 (-23.4%)	-20 (-1.2%)	-580 (-27.7%)	-109 (-6.7%)
	C	-321 (-16.9%)	-14 (-0.9%)	-348 (-18.3%)	-41 (-2.6%)
	All	-462 (-17.5%)	-260 (-10.7%)	-429 (-16.3%)	-227 (-9.4%)
DEC	W	464 (7.4%)	112 (1.7%)	522 (8.3%)	170 (2.6%)
	AN	-121 (-4%)	-57 (-1.9%)	-121 (-4%)	-57 (-1.9%)
	BN	309 (11.8%)	144 (5.2%)	246 (9.4%)	82 (3%)
	D	-188 (-11.2%)	-77 (-4.9%)	-171 (-10.2%)	-60 (-3.9%)
	C	-83 (-5.7%)	83 (6.5%)	-153 (-10.6%)	12 (0.9%)
	All	129 (3.7%)	47 (1.3%)	130 (3.8%)	48 (1.4%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

1 **Stanislaus River at the Confluence with the San Joaquin River**2 **Table 23. Mean Monthly Flows (cfs) for Model Scenarios in the Stanislaus River at the Confluence with**  
3 **the San Joaquin River, Year-Round**

<b>Alternative 2D and 5A: Upstream—Stanislaus River at Confluence with the San Joaquin River</b>					
<b>Month</b>	<b>Water Year Type<sup>a</sup></b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JAN	W	956	968	968	968
	AN	843	911	912	912
	BN	416	382	382	382
	D	403	393	393	393
	C	314	278	278	278
	All	635	638	638	638
FEB	W	1,285	1,500	1,500	1,500
	AN	917	985	985	985
	BN	551	522	522	522
	D	562	411	410	410
	C	490	349	349	349
	All	827	847	847	847
MAR	W	2,063	2,259	2,259	2,259
	AN	1,295	1,108	1,108	1,108
	BN	732	642	642	642
	D	559	431	431	431
	C	541	445	445	445
	All	1,167	1,134	1,134	1,134
APR	W	2,054	2,047	2,047	2,047
	AN	1,719	1,605	1,605	1,605
	BN	1,494	1,344	1,344	1,344
	D	1,438	1,320	1,320	1,320
	C	823	720	720	721
	All	1,562	1,475	1,475	1,475
MAY	W	1,653	1,688	1,688	1,688
	AN	1,389	1,292	1,294	1,294
	BN	1,238	1,094	1,093	1,093
	D	1,140	1,039	1,040	1,040
	C	715	648	648	648
	All	1,271	1,211	1,211	1,211
JUN	W	1,608	1,786	1,785	1,786
	AN	1,134	1,087	1,085	1,085
	BN	663	609	607	607
	D	447	383	384	383
	C	332	308	308	309
	All	932	952	952	952

<b>Alternative 2D and 5A: Upstream—Stanislaus River at Confluence with the San Joaquin River</b>					
<b>Month</b>	<b>Water Year Type<sup>a</sup></b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	1,064	1,070	1,069	1,070
	AN	489	456	456	456
	BN	450	427	427	427
	D	398	355	355	355
	C	337	318	318	317
	All	607	588	588	588
AUG	W	930	843	843	843
	AN	476	455	455	455
	BN	423	422	422	422
	D	387	384	384	384
	C	341	341	341	341
	All	560	530	530	530
SEP	W	1,040	965	965	965
	AN	502	477	477	477
	BN	417	413	413	413
	D	395	392	392	392
	C	324	327	327	327
	All	595	567	567	567
OCT	W	897	869	869	869
	AN	873	844	844	844
	BN	903	851	851	851
	D	984	980	980	980
	C	689	670	670	669
	All	867	840	840	840
NOV	W	426	427	427	427
	AN	580	591	591	591
	BN	341	341	341	341
	D	345	337	337	337
	C	325	311	311	311
	All	410	409	409	409
DEC	W	512	526	526	526
	AN	722	767	767	767
	BN	331	331	331	331
	D	317	310	310	310
	C	289	275	275	275
	All	450	459	459	459

<sup>a</sup> Water year type for this location was determined using the San Joaquin River Valley Index.

1 **Table 24. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Stanislaus River**  
 2 **at the Confluence with the San Joaquin River, Year-Round**

<b>Alternative 2D and 5A: Upstream—Stanislaus River at Confluence with the San Joaquin River</b>					
<b>Month</b>	<b>Water Year Type<sup>b</sup></b>	<b>EBC1 vs A2D_ELT</b>	<b>NAA_ELT vs. A2D_ELT</b>	<b>EBC1 vs A5A_ELT</b>	<b>NAA_ELT vs. A5A_ELT</b>
JAN	W	12 (1.2%)	0 (0%)	12 (1.2%)	0 (0%)
	AN	70 (8.3%)	1 (0.1%)	69 (8.2%)	1 (0.1%)
	BN	-34 (-8.2%)	0 (0%)	-34 (-8.2%)	0 (0%)
	D	-10 (-2.4%)	0 (0%)	-10 (-2.4%)	0 (0%)
	C	-36 (-11.5%)	0 (0%)	-36 (-11.5%)	0 (0%)
	All	3 (0.5%)	0 (0%)	3 (0.5%)	0 (0%)
FEB	W	215 (16.8%)	0 (0%)	215 (16.8%)	0 (0%)
	AN	68 (7.4%)	0 (0%)	68 (7.4%)	0 (0%)
	BN	-30 (-5.4%)	0 (0%)	-30 (-5.4%)	0 (0%)
	D	-152 (-27%)	0 (0%)	-152 (-27%)	0 (0%)
	C	-141 (-28.8%)	0 (0%)	-141 (-28.8%)	0 (0%)
	All	20 (2.4%)	0 (0%)	20 (2.4%)	0 (0%)
MAR	W	196 (9.5%)	0 (0%)	196 (9.5%)	0 (0%)
	AN	-187 (-14.4%)	0 (0%)	-187 (-14.4%)	0 (0%)
	BN	-90 (-12.4%)	0 (0%)	-91 (-12.4%)	0 (0%)
	D	-127 (-22.8%)	0 (0%)	-127 (-22.8%)	0 (0%)
	C	-96 (-17.7%)	0 (0%)	-95 (-17.7%)	0 (0%)
	All	-32 (-2.8%)	0 (0%)	-32 (-2.8%)	0 (0%)
APR	W	-7 (-0.3%)	0 (0%)	-7 (-0.3%)	0 (0%)
	AN	-114 (-6.6%)	0 (0%)	-114 (-6.6%)	0 (0%)
	BN	-149 (-10%)	0 (0%)	-150 (-10%)	-1 (0%)
	D	-118 (-8.2%)	0 (0%)	-119 (-8.2%)	0 (0%)
	C	-103 (-12.5%)	0 (0%)	-102 (-12.4%)	1 (0.1%)
	All	-87 (-5.5%)	0 (0%)	-87 (-5.5%)	0 (0%)
MAY	W	35 (2.1%)	0 (0%)	35 (2.1%)	0 (0%)
	AN	-95 (-6.8%)	2 (0.1%)	-95 (-6.8%)	2 (0.1%)
	BN	-145 (-11.7%)	-1 (-0.1%)	-145 (-11.7%)	-1 (-0.1%)
	D	-101 (-8.8%)	0 (0%)	-101 (-8.8%)	0 (0%)
	C	-67 (-9.4%)	0 (0%)	-67 (-9.3%)	0 (0.1%)
	All	-60 (-4.7%)	0 (0%)	-60 (-4.7%)	0 (0%)
JUN	W	178 (11.1%)	0 (0%)	178 (11.1%)	0 (0%)
	AN	-49 (-4.3%)	-2 (-0.2%)	-49 (-4.3%)	-2 (-0.2%)
	BN	-56 (-8.4%)	-2 (-0.3%)	-55 (-8.4%)	-1 (-0.2%)
	D	-63 (-14.1%)	1 (0.3%)	-64 (-14.3%)	0 (0%)
	C	-23 (-7.1%)	0 (0%)	-23 (-6.8%)	1 (0.3%)
	All	19 (2.1%)	-1 (-0.1%)	19 (2.1%)	-1 (-0.1%)



<b>Alternative 2D and 5A: Upstream—Stanislaus River at Confluence with the San Joaquin River</b>					
<b>Month</b>	<b>Water Year Type<sup>b</sup></b>	<b>EBC1 vs A2D_ELT</b>	<b>NAA_ELT vs. A2D_ELT</b>	<b>EBC1 vs A5A_ELT</b>	<b>NAA_ELT vs. A5A_ELT</b>
JUL	W	6 (0.5%)	0 (0%)	6 (0.5%)	0 (0%)
	AN	-33 (-6.8%)	0 (0%)	-33 (-6.8%)	0 (0%)
	BN	-23 (-5.1%)	0 (0%)	-23 (-5.1%)	0 (0%)
	D	-43 (-10.7%)	0 (0.1%)	-43 (-10.7%)	0 (0.1%)
	C	-19 (-5.5%)	0 (0%)	-20 (-6%)	-1 (-0.5%)
	All	-19 (-3.1%)	0 (0%)	-19 (-3.1%)	0 (0%)
AUG	W	-86 (-9.3%)	0 (0%)	-86 (-9.3%)	0 (0%)
	AN	-21 (-4.4%)	0 (0%)	-21 (-4.4%)	0 (0%)
	BN	-1 (-0.2%)	0 (0%)	-1 (-0.2%)	0 (0%)
	D	-3 (-0.7%)	0 (0%)	-3 (-0.7%)	0 (0%)
	C	0 (0.1%)	0 (0%)	0 (-0.1%)	-1 (-0.2%)
	All	-30 (-5.3%)	0 (0%)	-30 (-5.4%)	0 (0%)
SEP	W	-75 (-7.2%)	0 (0%)	-75 (-7.2%)	0 (0%)
	AN	-25 (-5%)	0 (0%)	-25 (-5%)	0 (0%)
	BN	-4 (-0.9%)	0 (0%)	-4 (-0.9%)	0 (0%)
	D	-3 (-0.7%)	0 (0%)	-3 (-0.7%)	0 (0%)
	C	3 (0.9%)	0 (0%)	3 (0.9%)	0 (0%)
	All	-27 (-4.6%)	0 (0%)	-27 (-4.6%)	0 (0%)
OCT	W	-28 (-3.2%)	0 (0%)	-28 (-3.2%)	0 (0%)
	AN	-29 (-3.3%)	0 (0%)	-29 (-3.3%)	0 (0%)
	BN	-52 (-5.7%)	0 (0%)	-52 (-5.7%)	0 (0%)
	D	-4 (-0.4%)	0 (0%)	-4 (-0.4%)	0 (0%)
	C	-19 (-2.8%)	0 (0%)	-19 (-2.8%)	0 (0%)
	All	-27 (-3.1%)	0 (0%)	-27 (-3.1%)	0 (0%)
NOV	W	1 (0.3%)	0 (0%)	1 (0.3%)	0 (0%)
	AN	11 (1.9%)	0 (0%)	11 (1.9%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	-8 (-2.2%)	0 (0%)	-8 (-2.2%)	0 (0%)
	C	-14 (-4.2%)	0 (0%)	-14 (-4.2%)	0 (0%)
	All	-1 (-0.3%)	0 (0%)	-1 (-0.3%)	0 (0%)
DEC	W	14 (2.7%)	0 (0%)	14 (2.7%)	0 (0%)
	AN	44 (6.2%)	0 (0%)	44 (6.2%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	-8 (-2.4%)	0 (0%)	-8 (-2.4%)	0 (0%)
	C	-13 (-4.7%)	0 (0%)	-14 (-4.7%)	0 (0%)
	All	9 (2%)	0 (0%)	9 (2%)	0 (0%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

<sup>b</sup> Water year type for this location was determined using the San Joaquin River Valley Index.

1 **In Delta**2 **OMR Flow (Old and Middle Rivers)**3 **Table 25. Mean Monthly Flows (cfs) for Model Scenarios in the Old and Middle Rivers, Year-Round**

<b>Alternative 2D and 5A: In Delta—OMR Flow (Old and Middle Rivers)</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JAN	W	-1,820	-1,771	4,021	-813
	AN	-3,553	-3,483	213	-3,175
	BN	-4,240	-4,309	-2,035	-4,329
	D	-4,664	-4,713	-2,593	-4,696
	C	-4,130	-3,634	-2,729	-3,541
	All	-3,449	-3,373	-10	-3,010
FEB	W	-2,365	-2,124	5,998	-604
	AN	-3,274	-3,017	1,484	-2,242
	BN	-3,437	-3,142	-1,110	-2,723
	D	-3,986	-3,924	-3,110	-3,700
	C	-3,191	-3,372	-3,200	-3,235
	All	-3,158	-3,006	778	-2,270
MAR	W	-1,600	-1,691	5,976	-168
	AN	-4,251	-4,080	1,619	-3,333
	BN	-4,147	-3,933	-1,516	-3,416
	D	-2,852	-2,826	-2,510	-2,589
	C	-2,010	-1,817	-1,848	-1,884
	All	-2,758	-2,691	1,051	-1,968
APR	W	2,431	2,408	3,094	2,470
	AN	1,058	909	484	909
	BN	677	497	-371	500
	D	-268	-617	-1,393	-806
	C	-950	-896	-1,247	-937
	All	843	715	500	688
MAY	W	1,651	1,685	2,917	1,976
	AN	509	549	246	523
	BN	272	65	-611	45
	D	-647	-961	-1,380	-920
	C	-1,020	-1,043	-1,040	-879
	All	353	262	402	380
JUN	W	-4,164	-4,271	4	-4,086
	AN	-4,761	-4,624	-2,085	-4,483
	BN	-4,154	-3,577	-3,003	-3,713
	D	-3,301	-3,047	-2,544	-2,774
	C	-2,250	-2,195	-1,744	-1,990
	All	-3,780	-3,632	-1,630	-3,486

<b>Alternative 2D and 5A: In Delta—OMR Flow (Old and Middle Rivers)</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	-8,959	-9,077	-5,990	-8,239
	AN	-9,919	-9,036	-7,133	-8,395
	BN	-10,853	-10,426	-8,316	-9,321
	D	-10,891	-9,996	-6,694	-8,784
	C	-8,058	-6,389	-3,513	-3,889
	All	-9,715	-9,110	-6,346	-7,930
AUG	W	-10,062	-10,552	-4,986	-7,775
	AN	-10,348	-10,838	-6,405	-9,069
	BN	-10,044	-9,442	-6,457	-7,681
	D	-10,122	-8,071	-4,660	-5,852
	C	-4,384	-3,725	-3,781	-3,313
	All	-9,283	-8,861	-5,197	-6,873
SEP	W	-9,317	-8,437	941	-1,849
	AN	-9,163	-8,986	209	-2,795
	BN	-8,575	-8,539	-4,077	-4,351
	D	-8,081	-6,148	-4,058	-4,353
	C	-4,807	-4,276	-3,809	-4,022
	All	-8,236	-7,423	-1,815	-3,282
OCT	W	-8,347	-5,847	-1,391	-4,398
	AN	-7,643	-4,587	-1,732	-4,217
	BN	-7,804	-5,137	-1,602	-4,218
	D	-6,961	-5,057	-1,833	-3,309
	C	-6,440	-5,025	-1,951	-4,212
	All	-7,568	-5,248	-1,656	-4,074
NOV	W	-8,902	-7,002	-1,021	-4,313
	AN	-7,264	-6,221	-2,608	-4,013
	BN	-7,997	-6,175	-2,348	-3,638
	D	-7,136	-5,277	-2,266	-3,531
	C	-5,294	-4,283	-2,911	-3,278
	All	-7,592	-5,970	-2,030	-3,831
DEC	W	-5,542	-5,428	-1,791	-5,173
	AN	-6,987	-7,362	-5,296	-6,948
	BN	-7,304	-7,231	-5,886	-7,033
	D	-7,214	-7,517	-6,365	-7,665
	C	-6,166	-5,334	-5,673	-5,948
	All	-6,513	-6,464	-4,575	-6,411

1 **Table 26. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Old and Middle**  
 2 **Rivers, Year-Round**

Alternative 2D and 5A: In Delta—OMR Flow (Old and Middle Rivers)					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JAN	W	5,841 (321%)	5,792 (327%)	1,006 (55.3%)	958 (54.1%)
	AN	3,765 (106%)	3,696 (106.1%)	378 (10.6%)	309 (8.9%)
	BN	2,204 (52%)	2,273 (52.8%)	-90 (-2.1%)	-21 (-0.5%)
	D	2,070 (44.4%)	2,120 (45%)	-32 (-0.7%)	18 (0.4%)
	C	1,401 (33.9%)	906 (24.9%)	589 (14.3%)	93 (2.6%)
	All	3,439 (99.7%)	3,363 (99.7%)	438 (12.7%)	363 (10.8%)
FEB	W	8,363 (353.6%)	8,122 (382.3%)	1,761 (74.5%)	1,521 (71.6%)
	AN	4,758 (145.3%)	4,501 (149.2%)	1,032 (31.5%)	775 (25.7%)
	BN	2,327 (67.7%)	2,032 (64.7%)	714 (20.8%)	419 (13.3%)
	D	875 (22%)	814 (20.7%)	286 (7.2%)	224 (5.7%)
	C	-9 (-0.3%)	171 (5.1%)	-44 (-1.4%)	137 (4.1%)
	All	3,936 (124.6%)	3,785 (125.9%)	888 (28.1%)	736 (24.5%)
MAR	W	7,576 (473.5%)	7,667 (453.5%)	1,432 (89.5%)	1,523 (90.1%)
	AN	5,870 (138.1%)	5,698 (139.7%)	918 (21.6%)	746 (18.3%)
	BN	2,630 (63.4%)	2,416 (61.4%)	731 (17.6%)	517 (13.2%)
	D	342 (12%)	316 (11.2%)	263 (9.2%)	237 (8.4%)
	C	163 (8.1%)	-31 (-1.7%)	126 (6.3%)	-68 (-3.7%)
	All	3,809 (138.1%)	3,742 (139.1%)	790 (28.6%)	723 (26.9%)
APR	W	662 (27.2%)	685 (28.4%)	39 (1.6%)	62 (2.6%)
	AN	-574 (-54.3%)	-426 (-46.8%)	-149 (-14.1%)	0 (-0.1%)
	BN	-1,048 (-154.9%)	-868 (-174.7%)	-177 (-26.2%)	3 (0.5%)
	D	-1,125 (-419.8%)	-775 (-125.6%)	-538 (-200.7%)	-188 (-30.5%)
	C	-297 (-31.2%)	-352 (-39.3%)	14 (1.4%)	-41 (-4.6%)
	All	-343 (-40.7%)	-215 (-30.1%)	-156 (-18.5%)	-27 (-3.8%)
MAY	W	1,266 (76.7%)	1,232 (73.1%)	325 (19.7%)	291 (17.3%)
	AN	-263 (-51.7%)	-303 (-55.2%)	14 (2.7%)	-26 (-4.7%)
	BN	-883 (-324.9%)	-676 (-1,046.7%)	-227 (-83.5%)	-20 (-30.5%)
	D	-733 (-113.3%)	-418 (-43.5%)	-273 (-42.3%)	41 (4.3%)
	C	-20 (-2%)	4 (0.3%)	141 (13.8%)	165 (15.8%)
	All	48 (13.7%)	140 (53.4%)	27 (7.6%)	118 (45.2%)
JUN	W	4,168 (100.1%)	4,275 (100.1%)	78 (1.9%)	186 (4.4%)
	AN	2,676 (56.2%)	2,539 (54.9%)	278 (5.8%)	141 (3.1%)
	BN	1,152 (27.7%)	574 (16.1%)	441 (10.6%)	-137 (-3.8%)
	D	757 (22.9%)	503 (16.5%)	526 (15.9%)	272 (8.9%)
	C	506 (22.5%)	451 (20.6%)	260 (11.5%)	205 (9.3%)
	All	2,150 (56.9%)	2,002 (55.1%)	294 (7.8%)	146 (4%)

Alternative 2D and 5A: In Delta—OMR Flow (Old and Middle Rivers)					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	2,969 (33.1%)	3,087 (34%)	719 (8%)	838 (9.2%)
	AN	2,786 (28.1%)	1,903 (21.1%)	1,524 (15.4%)	641 (7.1%)
	BN	2,537 (23.4%)	2,110 (20.2%)	1,532 (14.1%)	1,105 (10.6%)
	D	4,197 (38.5%)	3,301 (33%)	2,107 (19.3%)	1,212 (12.1%)
	C	4,545 (56.4%)	2,876 (45%)	4,169 (51.7%)	2,500 (39.1%)
	All	3,368 (34.7%)	2,763 (30.3%)	1,785 (18.4%)	1,180 (13%)
AUG	W	5,076 (50.4%)	5,566 (52.7%)	2,288 (22.7%)	2,777 (26.3%)
	AN	3,943 (38.1%)	4,433 (40.9%)	1,280 (12.4%)	1,769 (16.3%)
	BN	3,587 (35.7%)	2,985 (31.6%)	2,363 (23.5%)	1,761 (18.7%)
	D	5,463 (54%)	3,411 (42.3%)	4,270 (42.2%)	2,219 (27.5%)
	C	603 (13.8%)	-56 (-1.5%)	1,071 (24.4%)	412 (11%)
	All	4,086 (44%)	3,664 (41.3%)	2,410 (26%)	1,988 (22.4%)
SEP	W	10,258 (110.1%)	9,379 (111.2%)	7,468 (80.2%)	6,589 (78.1%)
	AN	9,372 (102.3%)	9,195 (102.3%)	6,368 (69.5%)	6,191 (68.9%)
	BN	4,498 (52.5%)	4,462 (52.3%)	4,224 (49.3%)	4,188 (49%)
	D	4,023 (49.8%)	2,089 (34%)	3,728 (46.1%)	1,794 (29.2%)
	C	998 (20.8%)	467 (10.9%)	785 (16.3%)	254 (5.9%)
	All	6,421 (78%)	5,608 (75.5%)	4,954 (60.1%)	4,141 (55.8%)
OCT	W	6,955 (83.3%)	4,455 (76.2%)	3,949 (47.3%)	1,449 (24.8%)
	AN	5,910 (77.3%)	2,855 (62.2%)	3,426 (44.8%)	371 (8.1%)
	BN	6,203 (79.5%)	3,535 (68.8%)	3,587 (46%)	919 (17.9%)
	D	5,128 (73.7%)	3,224 (63.8%)	3,652 (52.5%)	1,749 (34.6%)
	C	4,490 (69.7%)	3,074 (61.2%)	2,228 (34.6%)	813 (16.2%)
	All	5,912 (78.1%)	3,592 (68.4%)	3,493 (46.2%)	1,173 (22.4%)
NOV	W	7,881 (88.5%)	5,981 (85.4%)	4,590 (51.6%)	2,690 (38.4%)
	AN	4,656 (64.1%)	3,613 (58.1%)	3,251 (44.8%)	2,209 (35.5%)
	BN	5,648 (70.6%)	3,827 (62%)	4,359 (54.5%)	2,537 (41.1%)
	D	4,871 (68.3%)	3,011 (57.1%)	3,606 (50.5%)	1,746 (33.1%)
	C	2,383 (45%)	1,372 (32%)	2,015 (38.1%)	1,004 (23.5%)
	All	5,563 (73.3%)	3,940 (66%)	3,762 (49.5%)	2,139 (35.8%)
DEC	W	3,751 (67.7%)	3,637 (67%)	369 (6.7%)	255 (4.7%)
	AN	1,692 (24.2%)	2,066 (28.1%)	39 (0.6%)	413 (5.6%)
	BN	1,418 (19.4%)	1,345 (18.6%)	271 (3.7%)	198 (2.7%)
	D	849 (11.8%)	1,152 (15.3%)	-451 (-6.3%)	-147 (-2%)
	C	493 (8%)	-339 (-6.4%)	218 (3.5%)	-614 (-11.5%)
	All	1,937 (29.7%)	1,889 (29.2%)	102 (1.6%)	53 (0.8%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

1 **Sacramento River Downstream of North Delta Diversion Facility**2 **Table 27. Mean Monthly Flows (cfs) for Model Scenarios for the Sacramento River Downstream of the**  
3 **North Delta Diversion Facility, Year-Round**

<b>Alternative 2D and 5A: In Delta—Sacramento River Downstream of North Delta Diversion Facility</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JAN	W	50,961	51,963	39,663	47,800
	AN	39,863	38,966	29,937	35,178
	BN	23,781	23,111	17,973	20,177
	D	17,444	17,420	14,713	16,179
	C	14,281	14,516	13,047	13,544
	All	31,971	32,073	25,165	29,283
FEB	W	57,314	58,879	45,744	54,682
	AN	45,676	46,911	37,299	43,224
	BN	31,934	31,705	23,389	27,949
	D	21,202	21,018	16,779	18,864
	C	14,708	14,422	13,267	13,550
	All	37,116	37,671	29,581	34,559
MAR	W	49,416	50,198	37,819	45,291
	AN	44,495	45,105	32,755	40,691
	BN	24,489	23,010	16,213	19,462
	D	20,656	20,284	15,687	17,865
	C	13,245	13,045	11,874	12,452
	All	32,834	32,807	24,734	29,382
APR	W	37,809	37,883	27,071	32,913
	AN	25,979	25,393	16,912	21,397
	BN	17,752	17,248	13,481	15,048
	D	12,990	12,836	11,304	11,695
	C	10,229	10,033	9,648	9,799
	All	23,169	22,959	17,253	20,138
MAY	W	31,948	29,061	20,439	26,332
	AN	21,021	19,707	15,246	17,835
	BN	14,227	13,003	11,629	12,014
	D	10,959	10,606	10,081	10,331
	C	7,749	8,136	7,449	7,748
	All	19,175	17,837	14,000	16,412
JUN	W	23,900	19,758	14,226	18,086
	AN	16,309	15,163	12,455	14,419
	BN	13,576	13,131	12,963	13,321
	D	12,222	12,538	12,026	12,287
	C	9,884	9,829	9,224	9,535
	All	16,412	14,916	12,536	14,211

<b>Alternative 2D and 5A: In Delta—Sacramento River Downstream of North Delta Diversion Facility</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	19,876	20,330	15,653	18,605
	AN	21,574	22,186	18,545	20,898
	BN	20,953	20,953	17,916	19,472
	D	19,272	18,670	14,984	17,496
	C	15,397	14,149	10,400	10,932
	All	19,520	19,439	15,547	17,722
AUG	W	15,816	15,882	9,765	12,761
	AN	15,877	16,585	11,900	14,709
	BN	15,643	15,243	11,926	13,133
	D	16,965	14,504	9,925	11,547
	C	10,095	9,298	8,746	8,042
	All	15,210	14,610	10,332	12,152
SEP	W	18,254	26,844	17,914	20,459
	AN	13,198	21,227	11,786	14,498
	BN	12,427	12,783	8,081	7,981
	D	12,155	9,748	7,723	7,703
	C	8,485	7,687	7,406	7,344
	All	13,751	17,065	11,563	12,737
OCT	W	13,505	12,783	8,841	11,033
	AN	11,118	10,426	8,206	9,066
	BN	11,557	10,582	8,395	9,626
	D	10,279	10,230	8,313	9,002
	C	10,073	9,389	7,946	8,802
	All	11,613	11,005	8,425	9,733
NOV	W	19,447	20,479	14,477	16,964
	AN	15,309	16,862	11,978	13,638
	BN	12,574	13,546	9,212	10,177
	D	12,868	12,499	9,319	10,164
	C	9,633	9,449	8,224	8,225
	All	14,788	15,400	11,165	12,547
DEC	W	39,708	39,335	31,323	35,817
	AN	21,663	22,698	19,675	21,235
	BN	16,678	17,171	15,234	16,504
	D	15,442	15,384	14,295	14,708
	C	11,816	10,840	10,911	11,291
	All	23,727	23,689	20,147	22,163

1 **Table 28. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios for the Sacramento**  
 2 **River Downstream of the North Delta Diversion Facility, Year-Round**

<b>Alternative 2D and 5A: In Delta—Sacramento River Downstream of North Delta Diversion Facility</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EBC1 vs A2D_ELT</b>	<b>NAA_ELT vs. A2D_ELT</b>	<b>EBC1 vs A5A_ELT</b>	<b>NAA_ELT vs. A5A_ELT</b>
JAN	W	-11,298 (-22.2%)	-12,300 (-23.7%)	-3,161 (-6.2%)	-4,163 (-8%)
	AN	-9,926 (-24.9%)	-9,029 (-23.2%)	-4,685 (-11.8%)	-3,788 (-9.7%)
	BN	-5,808 (-24.4%)	-5,138 (-22.2%)	-3,603 (-15.2%)	-2,934 (-12.7%)
	D	-2,730 (-15.7%)	-2,706 (-15.5%)	-1,264 (-7.2%)	-1,241 (-7.1%)
	C	-1,234 (-8.6%)	-1,469 (-10.1%)	-737 (-5.2%)	-972 (-6.7%)
	All	-6,806 (-21.3%)	-6,908 (-21.5%)	-2,688 (-8.4%)	-2,790 (-8.7%)
FEB	W	-11,570 (-20.2%)	-13,135 (-22.3%)	-2,632 (-4.6%)	-4,197 (-7.1%)
	AN	-8,377 (-18.3%)	-9,612 (-20.5%)	-2,453 (-5.4%)	-3,687 (-7.9%)
	BN	-8,545 (-26.8%)	-8,316 (-26.2%)	-3,985 (-12.5%)	-3,756 (-11.8%)
	D	-4,423 (-20.9%)	-4,239 (-20.2%)	-2,338 (-11%)	-2,154 (-10.2%)
	C	-1,441 (-9.8%)	-1,155 (-8%)	-1,158 (-7.9%)	-872 (-6%)
	All	-7,535 (-20.3%)	-8,091 (-21.5%)	-2,557 (-6.9%)	-3,112 (-8.3%)
MAR	W	-11,597 (-23.5%)	-12,379 (-24.7%)	-4,125 (-8.3%)	-4,908 (-9.8%)
	AN	-11,740 (-26.4%)	-12,349 (-27.4%)	-3,804 (-8.5%)	-4,413 (-9.8%)
	BN	-8,276 (-33.8%)	-6,797 (-29.5%)	-5,027 (-20.5%)	-3,548 (-15.4%)
	D	-4,969 (-24.1%)	-4,597 (-22.7%)	-2,791 (-13.5%)	-2,419 (-11.9%)
	C	-1,372 (-10.4%)	-1,171 (-9%)	-794 (-6%)	-594 (-4.6%)
	All	-8,100 (-24.7%)	-8,073 (-24.6%)	-3,452 (-10.5%)	-3,426 (-10.4%)
APR	W	-10,737 (-28.4%)	-10,812 (-28.5%)	-4,895 (-12.9%)	-4,970 (-13.1%)
	AN	-9,067 (-34.9%)	-8,482 (-33.4%)	-4,582 (-17.6%)	-3,996 (-15.7%)
	BN	-4,270 (-24.1%)	-3,767 (-21.8%)	-2,703 (-15.2%)	-2,200 (-12.8%)
	D	-1,686 (-13%)	-1,531 (-11.9%)	-1,295 (-10%)	-1,141 (-8.9%)
	C	-581 (-5.7%)	-385 (-3.8%)	-430 (-4.2%)	-234 (-2.3%)
	All	-5,916 (-25.5%)	-5,705 (-24.8%)	-3,031 (-13.1%)	-2,821 (-12.3%)
MAY	W	-11,509 (-36%)	-8,622 (-29.7%)	-5,616 (-17.6%)	-2,729 (-9.4%)
	AN	-5,775 (-27.5%)	-4,461 (-22.6%)	-3,186 (-15.2%)	-1,872 (-9.5%)
	BN	-2,598 (-18.3%)	-1,373 (-10.6%)	-2,213 (-15.6%)	-989 (-7.6%)
	D	-878 (-8%)	-524 (-4.9%)	-629 (-5.7%)	-275 (-2.6%)
	C	-300 (-3.9%)	-687 (-8.4%)	-1 (0%)	-388 (-4.8%)
	All	-5,174 (-27%)	-3,837 (-21.5%)	-2,763 (-14.4%)	-1,425 (-8%)
JUN	W	-9,674 (-40.5%)	-5,532 (-28%)	-5,814 (-24.3%)	-1,672 (-8.5%)
	AN	-3,854 (-23.6%)	-2,709 (-17.9%)	-1,890 (-11.6%)	-745 (-4.9%)
	BN	-613 (-4.5%)	-168 (-1.3%)	-254 (-1.9%)	190 (1.5%)
	D	-197 (-1.6%)	-512 (-4.1%)	64 (0.5%)	-251 (-2%)
	C	-659 (-6.7%)	-604 (-6.1%)	-348 (-3.5%)	-293 (-3%)
	All	-3,876 (-23.6%)	-2,380 (-16%)	-2,200 (-13.4%)	-705 (-4.7%)



Alternative 2D and 5A: In Delta—Sacramento River Downstream of North Delta Diversion Facility					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	-4,223 (-21.2%)	-4,677 (-23%)	-1,271 (-6.4%)	-1,725 (-8.5%)
	AN	-3,028 (-14%)	-3,640 (-16.4%)	-675 (-3.1%)	-1,287 (-5.8%)
	BN	-3,037 (-14.5%)	-3,036 (-14.5%)	-1,481 (-7.1%)	-1,480 (-7.1%)
	D	-4,288 (-22.3%)	-3,686 (-19.7%)	-1,776 (-9.2%)	-1,174 (-6.3%)
	C	-4,997 (-32.5%)	-3,749 (-26.5%)	-4,465 (-29%)	-3,217 (-22.7%)
	All	-3,973 (-20.4%)	-3,892 (-20%)	-1,798 (-9.2%)	-1,716 (-8.8%)
AUG	W	-6,051 (-38.3%)	-6,117 (-38.5%)	-3,055 (-19.3%)	-3,121 (-19.7%)
	AN	-3,977 (-25%)	-4,685 (-28.2%)	-1,167 (-7.4%)	-1,876 (-11.3%)
	BN	-3,716 (-23.8%)	-3,317 (-21.8%)	-2,510 (-16%)	-2,110 (-13.8%)
	D	-7,040 (-41.5%)	-4,578 (-31.6%)	-5,419 (-31.9%)	-2,957 (-20.4%)
	C	-1,349 (-13.4%)	-552 (-5.9%)	-2,053 (-20.3%)	-1,256 (-13.5%)
	All	-4,878 (-32.1%)	-4,277 (-29.3%)	-3,058 (-20.1%)	-2,457 (-16.8%)
SEP	W	-340 (-1.9%)	-8,930 (-33.3%)	2,205 (12.1%)	-6,385 (-23.8%)
	AN	-1,413 (-10.7%)	-9,441 (-44.5%)	1,300 (9.8%)	-6,729 (-31.7%)
	BN	-4,346 (-35%)	-4,702 (-36.8%)	-4,446 (-35.8%)	-4,803 (-37.6%)
	D	-4,432 (-36.5%)	-2,025 (-20.8%)	-4,452 (-36.6%)	-2,044 (-21%)
	C	-1,079 (-12.7%)	-281 (-3.7%)	-1,141 (-13.4%)	-343 (-4.5%)
	All	-2,187 (-15.9%)	-5,501 (-32.2%)	-1,014 (-7.4%)	-4,328 (-25.4%)
OCT	W	-4,664 (-34.5%)	-3,942 (-30.8%)	-2,472 (-18.3%)	-1,750 (-13.7%)
	AN	-2,912 (-26.2%)	-2,220 (-21.3%)	-2,052 (-18.5%)	-1,360 (-13%)
	BN	-3,163 (-27.4%)	-2,188 (-20.7%)	-1,932 (-16.7%)	-957 (-9%)
	D	-1,966 (-19.1%)	-1,916 (-18.7%)	-1,277 (-12.4%)	-1,228 (-12%)
	C	-2,128 (-21.1%)	-1,443 (-15.4%)	-1,271 (-12.6%)	-586 (-6.2%)
	All	-3,188 (-27.5%)	-2,580 (-23.4%)	-1,880 (-16.2%)	-1,272 (-11.6%)
NOV	W	-4,970 (-25.6%)	-6,002 (-29.3%)	-2,483 (-12.8%)	-3,515 (-17.2%)
	AN	-3,331 (-21.8%)	-4,885 (-29%)	-1,671 (-10.9%)	-3,225 (-19.1%)
	BN	-3,361 (-26.7%)	-4,333 (-32%)	-2,397 (-19.1%)	-3,369 (-24.9%)
	D	-3,550 (-27.6%)	-3,180 (-25.4%)	-2,704 (-21%)	-2,335 (-18.7%)
	C	-1,409 (-14.6%)	-1,225 (-13%)	-1,408 (-14.6%)	-1,224 (-13%)
	All	-3,623 (-24.5%)	-4,235 (-27.5%)	-2,241 (-15.2%)	-2,853 (-18.5%)
DEC	W	-8,385 (-21.1%)	-8,012 (-20.4%)	-3,891 (-9.8%)	-3,519 (-8.9%)
	AN	-1,988 (-9.2%)	-3,023 (-13.3%)	-428 (-2%)	-1,463 (-6.4%)
	BN	-1,444 (-8.7%)	-1,937 (-11.3%)	-174 (-1%)	-667 (-3.9%)
	D	-1,147 (-7.4%)	-1,089 (-7.1%)	-735 (-4.8%)	-677 (-4.4%)
	C	-905 (-7.7%)	72 (0.7%)	-525 (-4.4%)	451 (4.2%)
	All	-3,580 (-15.1%)	-3,542 (-15%)	-1,564 (-6.6%)	-1,526 (-6.4%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

1 **Sacramento River at Rio Vista**2 **Table 29. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Rio Vista,**  
3 **Year-Round**

<b>Alternative 2D and 5A: In Delta—Sacramento River at Rio Vista</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JAN	W	71,111	75,510	67,063	73,640
	AN	41,963	41,416	35,559	39,800
	BN	20,943	20,388	17,702	19,619
	D	14,895	15,032	13,320	14,604
	C	11,853	12,114	11,229	11,672
	All	37,268	38,556	34,057	37,437
FEB	W	80,958	87,232	77,869	85,656
	AN	52,542	53,615	48,958	53,247
	BN	30,159	30,231	25,135	28,629
	D	19,320	19,318	16,544	18,430
	C	12,247	12,074	11,515	11,762
	All	44,541	46,674	41,463	45,606
MAR	W	63,763	66,275	57,413	64,175
	AN	46,750	47,974	39,928	46,571
	BN	20,980	19,629	15,061	17,860
	D	17,656	17,341	14,443	16,310
	C	10,710	10,603	9,991	10,493
	All	36,084	36,744	31,251	35,328
APR	W	38,214	38,692	31,636	36,701
	AN	22,726	22,234	16,346	20,237
	BN	14,652	14,295	11,559	12,915
	D	10,331	10,216	9,107	9,414
	C	7,665	7,520	7,293	7,421
	All	21,333	21,306	17,463	19,956
MAY	W	26,933	24,220	16,842	21,950
	AN	17,008	15,857	12,069	14,325
	BN	10,924	9,862	8,764	9,100
	D	8,135	7,840	7,486	7,695
	C	5,305	5,656	5,162	5,420
	All	15,456	14,232	11,001	13,092
JUN	W	16,557	12,993	8,121	11,778
	AN	9,887	8,634	6,254	8,141
	BN	7,001	6,677	6,622	6,891
	D	6,020	6,250	5,948	6,126
	C	4,333	4,304	3,963	4,183
	All	9,847	8,525	6,507	8,060

Alternative 2D and 5A: In Delta—Sacramento River at Rio Vista					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JUL	W	11,125	11,207	7,882	9,977
	AN	12,128	12,544	9,947	11,623
	BN	11,686	11,667	9,524	10,617
	D	10,523	10,105	7,805	9,285
	C	7,736	6,866	4,329	4,689
	All	10,739	10,604	7,928	9,402
AUG	W	8,507	8,527	4,188	6,301
	AN	8,538	9,013	5,672	7,675
	BN	8,371	8,062	5,740	6,588
	D	9,264	7,525	4,302	5,465
	C	4,390	3,823	3,688	3,248
	All	8,052	7,610	4,622	5,921
SEP	W	10,767	20,717	10,242	12,477
	AN	6,788	12,961	5,863	7,793
	BN	6,283	6,538	3,293	3,219
	D	6,116	4,432	3,018	3,009
	C	3,588	3,215	2,982	2,970
	All	7,348	11,025	5,766	6,741
OCT	W	8,718	7,867	4,744	6,485
	AN	6,183	5,518	3,651	4,381
	BN	6,258	5,416	3,864	4,815
	D	5,312	5,221	3,801	4,254
	C	5,215	4,684	3,880	4,234
	All	6,667	6,058	4,100	5,073
NOV	W	15,829	17,184	11,957	14,202
	AN	11,333	13,102	8,632	10,223
	BN	8,184	9,448	5,635	6,423
	D	8,733	8,539	5,804	6,529
	C	5,473	5,586	4,632	4,506
	All	10,793	11,671	7,968	9,188
DEC	W	43,367	44,292	39,423	43,397
	AN	19,040	20,375	18,419	19,283
	BN	13,987	15,099	13,604	14,802
	D	11,999	11,868	11,365	11,684
	C	8,131	7,341	7,572	7,882
	All	22,749	23,283	21,121	22,827

1 **Table 30. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Sacramento**  
 2 **River at Rio Vista, Year-Round**

Alternative 2D and 5A: In Delta—Sacramento River at Rio Vista					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JAN	W	-4,048 (-5.7%)	-8,447 (-11.2%)	2,529 (3.6%)	-1,870 (-2.5%)
	AN	-6,404 (-15.3%)	-5,857 (-14.1%)	-2,163 (-5.2%)	-1,616 (-3.9%)
	BN	-3,240 (-15.5%)	-2,685 (-13.2%)	-1,324 (-6.3%)	-769 (-3.8%)
	D	-1,575 (-10.6%)	-1,712 (-11.4%)	-291 (-2%)	-428 (-2.8%)
	C	-624 (-5.3%)	-885 (-7.3%)	-181 (-1.5%)	-442 (-3.7%)
	All	-3,211 (-8.6%)	-4,499 (-11.7%)	169 (0.5%)	-1,119 (-2.9%)
FEB	W	-3,089 (-3.8%)	-9,364 (-10.7%)	4,698 (5.8%)	-1,576 (-1.8%)
	AN	-3,584 (-6.8%)	-4,657 (-8.7%)	705 (1.3%)	-367 (-0.7%)
	BN	-5,024 (-16.7%)	-5,096 (-16.9%)	-1,530 (-5.1%)	-1,602 (-5.3%)
	D	-2,776 (-14.4%)	-2,775 (-14.4%)	-890 (-4.6%)	-889 (-4.6%)
	C	-732 (-6%)	-559 (-4.6%)	-485 (-4%)	-312 (-2.6%)
	All	-3,078 (-6.9%)	-5,211 (-11.2%)	1,065 (2.4%)	-1,068 (-2.3%)
MAR	W	-6,351 (-10%)	-8,862 (-13.4%)	411 (0.6%)	-2,100 (-3.2%)
	AN	-6,822 (-14.6%)	-8,045 (-16.8%)	-180 (-0.4%)	-1,403 (-2.9%)
	BN	-5,918 (-28.2%)	-4,568 (-23.3%)	-3,119 (-14.9%)	-1,768 (-9%)
	D	-3,213 (-18.2%)	-2,898 (-16.7%)	-1,345 (-7.6%)	-1,030 (-5.9%)
	C	-719 (-6.7%)	-612 (-5.8%)	-217 (-2%)	-110 (-1%)
	All	-4,833 (-13.4%)	-5,493 (-14.9%)	-756 (-2.1%)	-1,415 (-3.9%)
APR	W	-6,578 (-17.2%)	-7,057 (-18.2%)	-1,513 (-4%)	-1,992 (-5.1%)
	AN	-6,380 (-28.1%)	-5,888 (-26.5%)	-2,489 (-11%)	-1,997 (-9%)
	BN	-3,094 (-21.1%)	-2,736 (-19.1%)	-1,738 (-11.9%)	-1,380 (-9.7%)
	D	-1,224 (-11.8%)	-1,109 (-10.9%)	-917 (-8.9%)	-802 (-7.8%)
	C	-372 (-4.8%)	-227 (-3%)	-244 (-3.2%)	-99 (-1.3%)
	All	-3,871 (-18.1%)	-3,843 (-18%)	-1,378 (-6.5%)	-1,350 (-6.3%)
MAY	W	-10,091 (-37.5%)	-7,378 (-30.5%)	-4,983 (-18.5%)	-2,270 (-9.4%)
	AN	-4,938 (-29%)	-3,787 (-23.9%)	-2,682 (-15.8%)	-1,531 (-9.7%)
	BN	-2,161 (-19.8%)	-1,098 (-11.1%)	-1,824 (-16.7%)	-761 (-7.7%)
	D	-649 (-8%)	-354 (-4.5%)	-440 (-5.4%)	-145 (-1.9%)
	C	-143 (-2.7%)	-494 (-8.7%)	115 (2.2%)	-236 (-4.2%)
	All	-4,454 (-28.8%)	-3,231 (-22.7%)	-2,364 (-15.3%)	-1,140 (-8%)
JUN	W	-8,436 (-51%)	-4,872 (-37.5%)	-4,778 (-28.9%)	-1,215 (-9.4%)
	AN	-3,633 (-36.7%)	-2,380 (-27.6%)	-1,746 (-17.7%)	-493 (-5.7%)
	BN	-378 (-5.4%)	-55 (-0.8%)	-109 (-1.6%)	214 (3.2%)
	D	-72 (-1.2%)	-302 (-4.8%)	106 (1.8%)	-124 (-2%)
	C	-370 (-8.5%)	-341 (-7.9%)	-149 (-3.4%)	-121 (-2.8%)
	All	-3,341 (-33.9%)	-2,019 (-23.7%)	-1,788 (-18.2%)	-466 (-5.5%)

Alternative 2D and 5A: In Delta—Sacramento River at Rio Vista					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	-3,242 (-29.1%)	-3,325 (-29.7%)	-1,147 (-10.3%)	-1,230 (-11%)
	AN	-2,181 (-18%)	-2,596 (-20.7%)	-505 (-4.2%)	-921 (-7.3%)
	BN	-2,162 (-18.5%)	-2,143 (-18.4%)	-1,069 (-9.1%)	-1,050 (-9%)
	D	-2,718 (-25.8%)	-2,300 (-22.8%)	-1,238 (-11.8%)	-820 (-8.1%)
	C	-3,407 (-44%)	-2,537 (-36.9%)	-3,047 (-39.4%)	-2,177 (-31.7%)
	All	-2,812 (-26.2%)	-2,676 (-25.2%)	-1,338 (-12.5%)	-1,202 (-11.3%)
AUG	W	-4,319 (-50.8%)	-4,339 (-50.9%)	-2,206 (-25.9%)	-2,227 (-26.1%)
	AN	-2,865 (-33.6%)	-3,341 (-37.1%)	-863 (-10.1%)	-1,338 (-14.9%)
	BN	-2,631 (-31.4%)	-2,322 (-28.8%)	-1,783 (-21.3%)	-1,474 (-18.3%)
	D	-4,962 (-53.6%)	-3,223 (-42.8%)	-3,799 (-41%)	-2,060 (-27.4%)
	C	-702 (-16%)	-135 (-3.5%)	-1,142 (-26%)	-575 (-15%)
	All	-3,430 (-42.6%)	-2,989 (-39.3%)	-2,131 (-26.5%)	-1,690 (-22.2%)
SEP	W	-525 (-4.9%)	-10,476 (-50.6%)	1,710 (15.9%)	-8,241 (-39.8%)
	AN	-925 (-13.6%)	-7,099 (-54.8%)	1,005 (14.8%)	-5,169 (-39.9%)
	BN	-2,990 (-47.6%)	-3,245 (-49.6%)	-3,064 (-48.8%)	-3,318 (-50.8%)
	D	-3,098 (-50.7%)	-1,414 (-31.9%)	-3,108 (-50.8%)	-1,423 (-32.1%)
	C	-607 (-16.9%)	-233 (-7.2%)	-619 (-17.2%)	-245 (-7.6%)
	All	-1,581 (-21.5%)	-5,259 (-47.7%)	-607 (-8.3%)	-4,284 (-38.9%)
OCT	W	-3,974 (-45.6%)	-3,123 (-39.7%)	-2,233 (-25.6%)	-1,382 (-17.6%)
	AN	-2,532 (-41%)	-1,867 (-33.8%)	-1,802 (-29.1%)	-1,136 (-20.6%)
	BN	-2,394 (-38.3%)	-1,552 (-28.7%)	-1,443 (-23.1%)	-602 (-11.1%)
	D	-1,511 (-28.4%)	-1,420 (-27.2%)	-1,058 (-19.9%)	-967 (-18.5%)
	C	-1,335 (-25.6%)	-804 (-17.2%)	-981 (-18.8%)	-450 (-9.6%)
	All	-2,566 (-38.5%)	-1,958 (-32.3%)	-1,594 (-23.9%)	-985 (-16.3%)
NOV	W	-3,872 (-24.5%)	-5,227 (-30.4%)	-1,627 (-10.3%)	-2,982 (-17.4%)
	AN	-2,701 (-23.8%)	-4,471 (-34.1%)	-1,110 (-9.8%)	-2,879 (-22%)
	BN	-2,549 (-31.1%)	-3,813 (-40.4%)	-1,761 (-21.5%)	-3,024 (-32%)
	D	-2,928 (-33.5%)	-2,734 (-32%)	-2,204 (-25.2%)	-2,010 (-23.5%)
	C	-841 (-15.4%)	-954 (-17.1%)	-967 (-17.7%)	-1,080 (-19.3%)
	All	-2,824 (-26.2%)	-3,703 (-31.7%)	-1,604 (-14.9%)	-2,482 (-21.3%)
DEC	W	-3,944 (-9.1%)	-4,869 (-11%)	30 (0.1%)	-895 (-2%)
	AN	-621 (-3.3%)	-1,956 (-9.6%)	243 (1.3%)	-1,092 (-5.4%)
	BN	-383 (-2.7%)	-1,495 (-9.9%)	814 (5.8%)	-297 (-2%)
	D	-634 (-5.3%)	-503 (-4.2%)	-315 (-2.6%)	-184 (-1.5%)
	C	-559 (-6.9%)	231 (3.2%)	-249 (-3.1%)	541 (7.4%)
	All	-1,628 (-7.2%)	-2,162 (-9.3%)	79 (0.3%)	-455 (-2%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

1 **Delta Outflow**2 **Table 31. Mean Monthly Flows (cfs) for Model Scenarios at the Delta Outflow, Year-Round**

<b>Alternative 2D and 5A: In Delta—Delta Outflow</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JAN	W	85,900	91,158	88,075	89,786
	AN	49,448	48,959	46,463	47,141
	BN	22,968	22,263	22,090	21,037
	D	14,736	14,754	15,554	14,186
	C	11,343	12,173	12,464	11,689
	All	43,289	44,889	43,735	43,784
FEB	W	96,835	104,533	102,917	104,061
	AN	62,321	64,163	64,164	64,163
	BN	36,766	37,266	34,128	35,615
	D	20,915	20,936	19,084	19,996
	C	12,991	12,553	12,541	12,277
	All	52,594	55,330	53,873	54,651
MAR	W	78,956	81,693	80,262	80,571
	AN	54,171	55,754	53,426	54,553
	BN	24,029	22,522	20,625	20,860
	D	19,880	19,388	16,772	18,288
	C	11,911	11,948	11,529	11,668
	All	43,172	43,911	42,158	42,814
APR	W	54,394	54,860	48,765	52,276
	AN	31,975	31,183	25,036	28,651
	BN	21,928	21,218	18,162	19,556
	D	14,142	13,450	11,989	12,304
	C	9,053	8,881	8,649	8,721
	All	30,099	29,833	26,124	28,084
MAY	W	41,040	38,276	32,714	35,963
	AN	24,200	23,131	19,635	21,299
	BN	16,299	14,740	13,683	13,811
	D	10,487	9,737	9,397	9,500
	C	6,000	6,341	6,098	6,188
	All	22,517	21,103	18,537	19,869
JUN	W	23,451	18,080	17,598	16,725
	AN	11,801	10,177	10,559	9,747
	BN	8,004	8,067	8,781	8,180
	D	6,636	7,123	7,389	7,205
	C	5,322	5,345	5,331	5,317
	All	12,765	10,945	11,026	10,486

<b>Alternative 2D and 5A: In Delta—Delta Outflow</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	11,441	10,817	9,402	9,965
	AN	9,430	10,657	9,022	10,034
	BN	7,151	7,613	6,819	7,255
	D	5,024	5,548	5,436	5,640
	C	4,238	4,953	4,331	4,446
	All	7,951	8,232	7,293	7,755
AUG	W	5,341	4,412	4,200	4,244
	AN	4,000	4,009	4,004	4,005
	BN	4,000	4,120	3,950	3,897
	D	4,829	4,617	3,693	4,063
	C	4,077	4,141	3,644	3,439
	All	4,618	4,308	3,936	3,992
SEP	W	9,569	18,873	19,715	19,713
	AN	3,672	11,810	11,992	11,875
	BN	3,445	3,795	3,612	3,612
	D	3,350	3,067	3,000	3,009
	C	3,000	3,000	3,000	3,000
	All	5,334	9,473	9,720	9,704
OCT	W	6,487	8,133	8,842	8,000
	AN	4,021	6,500	7,319	5,661
	BN	4,477	6,206	7,735	6,320
	D	4,157	6,017	7,467	6,721
	C	4,158	4,969	6,772	5,323
	All	4,931	6,638	7,826	6,698
NOV	W	14,232	17,346	17,032	16,892
	AN	9,683	12,410	10,904	11,668
	BN	5,864	8,694	8,045	8,189
	D	6,943	8,375	7,981	8,079
	C	5,045	5,988	5,789	5,935
	All	9,193	11,515	10,969	11,104
DEC	W	48,185	49,759	47,804	48,679
	AN	18,014	19,384	19,211	18,491
	BN	11,950	13,284	13,001	13,128
	D	8,884	8,467	8,954	8,004
	C	5,531	5,505	5,292	5,393
	All	22,714	23,546	22,928	22,928

1 **Table 32. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios at the Delta Outflow,**  
 2 **Year-Round**

Alternative 2D and 5A: In Delta—Delta Outflow					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JAN	W	2,175 (2.5%)	-3,083 (-3.4%)	3,886 (4.5%)	-1,372 (-1.5%)
	AN	-2,985 (-6%)	-2,496 (-5.1%)	-2,307 (-4.7%)	-1,818 (-3.7%)
	BN	-879 (-3.8%)	-173 (-0.8%)	-1,931 (-8.4%)	-1,225 (-5.5%)
	D	818 (5.6%)	800 (5.4%)	-549 (-3.7%)	-567 (-3.8%)
	C	1,121 (9.9%)	291 (2.4%)	346 (3%)	-484 (-4%)
	All	446 (1%)	-1,154 (-2.6%)	495 (1.1%)	-1,106 (-2.5%)
FEB	W	6,081 (6.3%)	-1,616 (-1.5%)	7,226 (7.5%)	-472 (-0.5%)
	AN	1,843 (3%)	1 (0%)	1,841 (3%)	0 (0%)
	BN	-2,639 (-7.2%)	-3,138 (-8.4%)	-1,151 (-3.1%)	-1,651 (-4.4%)
	D	-1,832 (-8.8%)	-1,852 (-8.8%)	-919 (-4.4%)	-939 (-4.5%)
	C	-450 (-3.5%)	-12 (-0.1%)	-714 (-5.5%)	-276 (-2.2%)
	All	1,280 (2.4%)	-1,456 (-2.6%)	2,058 (3.9%)	-678 (-1.2%)
MAR	W	1,307 (1.7%)	-1,430 (-1.8%)	1,615 (2%)	-1,121 (-1.4%)
	AN	-745 (-1.4%)	-2,329 (-4.2%)	382 (0.7%)	-1,202 (-2.2%)
	BN	-3,404 (-14.2%)	-1,897 (-8.4%)	-3,169 (-13.2%)	-1,662 (-7.4%)
	D	-3,108 (-15.6%)	-2,616 (-13.5%)	-1,592 (-8%)	-1,100 (-5.7%)
	C	-382 (-3.2%)	-419 (-3.5%)	-244 (-2%)	-281 (-2.3%)
	All	-1,014 (-2.3%)	-1,754 (-4%)	-358 (-0.8%)	-1,098 (-2.5%)
APR	W	-5,629 (-10.3%)	-6,095 (-11.1%)	-2,118 (-3.9%)	-2,584 (-4.7%)
	AN	-6,940 (-21.7%)	-6,147 (-19.7%)	-3,324 (-10.4%)	-2,531 (-8.1%)
	BN	-3,766 (-17.2%)	-3,057 (-14.4%)	-2,372 (-10.8%)	-1,662 (-7.8%)
	D	-2,153 (-15.2%)	-1,461 (-10.9%)	-1,838 (-13%)	-1,146 (-8.5%)
	C	-405 (-4.5%)	-232 (-2.6%)	-333 (-3.7%)	-160 (-1.8%)
	All	-3,975 (-13.2%)	-3,709 (-12.4%)	-2,015 (-6.7%)	-1,749 (-5.9%)
MAY	W	-8,326 (-20.3%)	-5,562 (-14.5%)	-5,076 (-12.4%)	-2,313 (-6%)
	AN	-4,565 (-18.9%)	-3,497 (-15.1%)	-2,901 (-12%)	-1,832 (-7.9%)
	BN	-2,616 (-16%)	-1,057 (-7.2%)	-2,488 (-15.3%)	-930 (-6.3%)
	D	-1,090 (-10.4%)	-340 (-3.5%)	-988 (-9.4%)	-237 (-2.4%)
	C	98 (1.6%)	-243 (-3.8%)	188 (3.1%)	-154 (-2.4%)
	All	-3,979 (-17.7%)	-2,566 (-12.2%)	-2,648 (-11.8%)	-1,235 (-5.9%)
JUN	W	-5,853 (-25%)	-482 (-2.7%)	-6,726 (-28.7%)	-1,355 (-7.5%)
	AN	-1,242 (-10.5%)	382 (3.8%)	-2,054 (-17.4%)	-430 (-4.2%)
	BN	777 (9.7%)	715 (8.9%)	176 (2.2%)	113 (1.4%)
	D	753 (11.4%)	266 (3.7%)	569 (8.6%)	82 (1.2%)
	C	10 (0.2%)	-14 (-0.3%)	-4 (-0.1%)	-28 (-0.5%)
	All	-1,738 (-13.6%)	82 (0.7%)	-2,279 (-17.9%)	-459 (-4.2%)



Alternative 2D and 5A: In Delta—Delta Outflow					
Month	Water Year Type	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	-2,038 (-17.8%)	-1,415 (-13.1%)	-1,476 (-12.9%)	-852 (-7.9%)
	AN	-408 (-4.3%)	-1,635 (-15.3%)	604 (6.4%)	-623 (-5.8%)
	BN	-332 (-4.6%)	-794 (-10.4%)	104 (1.5%)	-358 (-4.7%)
	D	413 (8.2%)	-111 (-2%)	616 (12.3%)	92 (1.7%)
	C	94 (2.2%)	-622 (-12.5%)	209 (4.9%)	-506 (-10.2%)
	All	-659 (-8.3%)	-939 (-11.4%)	-196 (-2.5%)	-476 (-5.8%)
AUG	W	-1,141 (-21.4%)	-211 (-4.8%)	-1,097 (-20.5%)	-167 (-3.8%)
	AN	4 (0.1%)	-5 (-0.1%)	5 (0.1%)	-4 (-0.1%)
	BN	-50 (-1.3%)	-170 (-4.1%)	-103 (-2.6%)	-222 (-5.4%)
	D	-1,135 (-23.5%)	-924 (-20%)	-766 (-15.9%)	-554 (-12%)
	C	-433 (-10.6%)	-497 (-12%)	-638 (-15.7%)	-702 (-17%)
	All	-682 (-14.8%)	-372 (-8.6%)	-626 (-13.6%)	-316 (-7.3%)
SEP	W	10,147 (106%)	843 (4.5%)	10,144 (106%)	840 (4.4%)
	AN	8,320 (226.6%)	182 (1.5%)	8,203 (223.4%)	65 (0.6%)
	BN	166 (4.8%)	-184 (-4.8%)	166 (4.8%)	-184 (-4.8%)
	D	-350 (-10.5%)	-67 (-2.2%)	-342 (-10.2%)	-59 (-1.9%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	4,386 (82.2%)	248 (2.6%)	4,370 (81.9%)	232 (2.4%)
OCT	W	2,355 (36.3%)	709 (8.7%)	1,513 (23.3%)	-133 (-1.6%)
	AN	3,298 (82%)	819 (12.6%)	1,640 (40.8%)	-839 (-12.9%)
	BN	3,259 (72.8%)	1,529 (24.6%)	1,843 (41.2%)	114 (1.8%)
	D	3,310 (79.6%)	1,450 (24.1%)	2,564 (61.7%)	704 (11.7%)
	C	2,614 (62.9%)	1,803 (36.3%)	1,164 (28%)	353 (7.1%)
	All	2,895 (58.7%)	1,188 (17.9%)	1,768 (35.8%)	61 (0.9%)
NOV	W	2,800 (19.7%)	-314 (-1.8%)	2,660 (18.7%)	-454 (-2.6%)
	AN	1,221 (12.6%)	-1,506 (-12.1%)	1,984 (20.5%)	-742 (-6%)
	BN	2,181 (37.2%)	-649 (-7.5%)	2,325 (39.6%)	-505 (-5.8%)
	D	1,038 (15%)	-394 (-4.7%)	1,136 (16.4%)	-296 (-3.5%)
	C	744 (14.8%)	-199 (-3.3%)	890 (17.7%)	-53 (-0.9%)
	All	1,776 (19.3%)	-546 (-4.7%)	1,910 (20.8%)	-412 (-3.6%)
DEC	W	-381 (-0.8%)	-1,955 (-3.9%)	494 (1%)	-1,080 (-2.2%)
	AN	1,197 (6.6%)	-174 (-0.9%)	477 (2.6%)	-894 (-4.6%)
	BN	1,051 (8.8%)	-283 (-2.1%)	1,178 (9.9%)	-156 (-1.2%)
	D	70 (0.8%)	487 (5.8%)	-880 (-9.9%)	-463 (-5.5%)
	C	-239 (-4.3%)	-213 (-3.9%)	-138 (-2.5%)	-112 (-2%)
	All	214 (0.9%)	-618 (-2.6%)	214 (0.9%)	-618 (-2.6%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

1 **San Joaquin River at Vernalis**2 **Table 33. Mean Monthly Flows (cfs) for Model Scenarios in the San Joaquin River at Vernalis,**  
3 **Year-Round**

<b>Alternative 2D and 5A: In Delta—San Joaquin River at Vernalis</b>					
<b>Month</b>	<b>Water Year Type<sup>a</sup></b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JAN	W	9,089	9,838	9,905	9,861
	AN	5,447	5,781	5,808	5,777
	BN	2,326	2,291	2,285	2,334
	D	2,270	2,247	2,246	2,260
	C	1,667	1,603	1,598	1,585
	All	4,777	5,040	5,062	5,051
FEB	W	12,750	14,001	13,998	13,999
	AN	6,965	7,100	7,065	7,126
	BN	2,983	2,965	2,935	2,927
	D	2,590	2,312	2,312	2,312
	C	2,120	1,942	1,943	1,942
	All	6,388	6,699	6,687	6,697
MAR	W	14,374	15,127	15,127	15,118
	AN	6,284	6,252	6,251	6,252
	BN	2,949	2,614	2,614	2,614
	D	2,479	2,191	2,191	2,191
	C	1,813	1,689	1,689	1,689
	All	6,648	6,739	6,738	6,736
APR	W	11,955	12,185	12,187	12,180
	AN	6,014	5,970	5,970	5,970
	BN	4,490	4,161	4,162	4,162
	D	3,656	3,380	3,380	3,380
	C	1,983	1,844	1,844	1,845
	All	6,351	6,286	6,287	6,286
MAY	W	12,109	13,210	13,196	13,181
	AN	5,381	5,278	5,279	5,279
	BN	4,074	3,871	3,874	3,874
	D	3,308	3,040	3,041	3,043
	C	1,964	1,819	1,819	1,820
	All	6,148	6,347	6,343	6,340
JUN	W	11,058	9,255	9,253	9,302
	AN	2,965	2,782	2,784	2,783
	BN	2,051	1,960	1,965	1,964
	D	1,537	1,361	1,362	1,364
	C	1,020	975	975	976
	All	4,583	3,969	3,969	3,984

<b>Alternative 2D and 5A: In Delta—San Joaquin River at Vernalis</b>					
<b>Month</b>	<b>Water Year Type<sup>a</sup></b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	7,654	5,903	5,904	5,904
	AN	1,958	1,806	1,811	1,809
	BN	1,491	1,432	1,440	1,439
	D	1,295	1,146	1,147	1,150
	C	898	869	869	868
	All	3,239	2,658	2,661	2,661
AUG	W	3,539	3,051	3,052	3,052
	AN	2,000	1,764	1,768	1,767
	BN	1,460	1,423	1,429	1,429
	D	1,375	1,272	1,273	1,275
	C	1,007	993	993	994
	All	2,072	1,858	1,860	1,860
SEP	W	3,519	3,306	3,306	3,307
	AN	2,355	2,221	2,223	2,223
	BN	1,829	1,800	1,803	1,802
	D	1,796	1,691	1,692	1,693
	C	1,402	1,392	1,392	1,392
	All	2,338	2,226	2,227	2,227
OCT	W	2,760	2,714	2,714	2,714
	AN	2,745	2,638	2,638	2,638
	BN	2,502	2,412	2,412	2,412
	D	2,945	2,849	2,850	2,849
	C	2,213	2,162	2,163	2,163
	All	2,639	2,565	2,565	2,565
NOV	W	2,534	2,516	2,516	2,516
	AN	3,182	3,232	3,204	3,201
	BN	2,150	2,180	2,222	2,224
	D	2,272	2,244	2,277	2,290
	C	1,968	1,911	1,911	1,911
	All	2,448	2,441	2,448	2,449
DEC	W	4,370	4,835	4,857	4,885
	AN	4,711	4,917	5,006	4,979
	BN	2,182	2,099	2,134	2,100
	D	2,129	2,072	2,069	2,089
	C	1,729	1,689	1,696	1,684
	All	3,219	3,366	3,395	3,394

<sup>a</sup> Water year type for this location was determined using the San Joaquin River Valley Index.

1 **Table 34. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the San Joaquin**  
 2 **River at Vernalis, Year-Round**

Alternative 2D and 5A: In Delta—San Joaquin River at Vernalis					
Month	Water Year Type <sup>b</sup>	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JAN	W	816 (9%)	67 (0.7%)	772 (8.5%)	23 (0.2%)
	AN	361 (6.6%)	27 (0.5%)	330 (6.1%)	-4 (-0.1%)
	BN	-41 (-1.8%)	-6 (-0.3%)	8 (0.4%)	43 (1.9%)
	D	-24 (-1.1%)	-1 (0%)	-10 (-0.5%)	13 (0.6%)
	C	-69 (-4.1%)	-4 (-0.3%)	-82 (-4.9%)	-17 (-1.1%)
	All	286 (6%)	23 (0.5%)	274 (5.7%)	11 (0.2%)
FEB	W	1,248 (9.8%)	-3 (0%)	1,248 (9.8%)	-3 (0%)
	AN	100 (1.4%)	-35 (-0.5%)	161 (2.3%)	26 (0.4%)
	BN	-48 (-1.6%)	-30 (-1%)	-56 (-1.9%)	-38 (-1.3%)
	D	-278 (-10.7%)	0 (0%)	-278 (-10.8%)	0 (0%)
	C	-177 (-8.4%)	1 (0%)	-178 (-8.4%)	0 (0%)
	All	299 (4.7%)	-12 (-0.2%)	309 (4.8%)	-2 (0%)
MAR	W	752 (5.2%)	0 (0%)	744 (5.2%)	-9 (-0.1%)
	AN	-33 (-0.5%)	-1 (0%)	-32 (-0.5%)	0 (0%)
	BN	-335 (-11.4%)	0 (0%)	-335 (-11.4%)	0 (0%)
	D	-288 (-11.6%)	0 (0%)	-288 (-11.6%)	0 (0%)
	C	-124 (-6.8%)	0 (0%)	-124 (-6.8%)	0 (0%)
	All	91 (1.4%)	0 (0%)	89 (1.3%)	-2 (0%)
APR	W	232 (1.9%)	2 (0%)	226 (1.9%)	-4 (0%)
	AN	-45 (-0.7%)	0 (0%)	-44 (-0.7%)	1 (0%)
	BN	-329 (-7.3%)	1 (0%)	-328 (-7.3%)	1 (0%)
	D	-277 (-7.6%)	0 (0%)	-276 (-7.5%)	1 (0%)
	C	-139 (-7%)	0 (0%)	-139 (-7%)	1 (0%)
	All	-64 (-1%)	1 (0%)	-65 (-1%)	-1 (0%)
MAY	W	1,087 (9%)	-14 (-0.1%)	1,072 (8.9%)	-29 (-0.2%)
	AN	-102 (-1.9%)	1 (0%)	-103 (-1.9%)	1 (0%)
	BN	-199 (-4.9%)	3 (0.1%)	-200 (-4.9%)	3 (0.1%)
	D	-267 (-8.1%)	1 (0%)	-265 (-8%)	3 (0.1%)
	C	-146 (-7.4%)	0 (0%)	-145 (-7.4%)	1 (0.1%)
	All	196 (3.2%)	-3 (-0.1%)	192 (3.1%)	-7 (-0.1%)
JUN	W	-1,804 (-16.3%)	-2 (0%)	-1,756 (-15.9%)	46 (0.5%)
	AN	-181 (-6.1%)	1 (0%)	-182 (-6.1%)	0 (0%)
	BN	-86 (-4.2%)	4 (0.2%)	-87 (-4.2%)	4 (0.2%)
	D	-175 (-11.4%)	1 (0.1%)	-173 (-11.3%)	3 (0.2%)
	C	-45 (-4.4%)	0 (0%)	-44 (-4.3%)	1 (0.2%)
	All	-614 (-13.4%)	1 (0%)	-599 (-13.1%)	15 (0.4%)

Alternative 2D and 5A: In Delta—San Joaquin River at Vernalis					
Month	Water Year Type <sup>b</sup>	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	-1,750 (-22.9%)	1 (0%)	-1,750 (-22.9%)	1 (0%)
	AN	-147 (-7.5%)	5 (0.3%)	-148 (-7.6%)	4 (0.2%)
	BN	-51 (-3.4%)	9 (0.6%)	-52 (-3.5%)	7 (0.5%)
	D	-148 (-11.5%)	2 (0.1%)	-146 (-11.2%)	4 (0.4%)
	C	-29 (-3.3%)	0 (0%)	-30 (-3.4%)	-1 (-0.1%)
	All	-578 (-17.8%)	3 (0.1%)	-578 (-17.9%)	3 (0.1%)
AUG	W	-487 (-13.8%)	1 (0%)	-487 (-13.8%)	1 (0%)
	AN	-233 (-11.6%)	4 (0.2%)	-234 (-11.7%)	3 (0.2%)
	BN	-30 (-2.1%)	6 (0.4%)	-31 (-2.1%)	5 (0.4%)
	D	-102 (-7.4%)	1 (0.1%)	-100 (-7.3%)	3 (0.2%)
	C	-14 (-1.4%)	0 (0%)	-14 (-1.4%)	1 (0.1%)
	All	-212 (-10.2%)	2 (0.1%)	-212 (-10.2%)	2 (0.1%)
SEP	W	-212 (-6%)	0 (0%)	-212 (-6%)	0 (0%)
	AN	-131 (-5.6%)	2 (0.1%)	-132 (-5.6%)	1 (0.1%)
	BN	-26 (-1.4%)	3 (0.2%)	-27 (-1.5%)	3 (0.1%)
	D	-104 (-5.8%)	0 (0%)	-104 (-5.8%)	1 (0.1%)
	C	-11 (-0.8%)	0 (0%)	-11 (-0.8%)	0 (0%)
	All	-111 (-4.7%)	1 (0%)	-111 (-4.7%)	1 (0%)
OCT	W	-45 (-1.6%)	0 (0%)	-45 (-1.6%)	0 (0%)
	AN	-107 (-3.9%)	0 (0%)	-107 (-3.9%)	1 (0%)
	BN	-90 (-3.6%)	1 (0%)	-90 (-3.6%)	1 (0%)
	D	-95 (-3.2%)	1 (0%)	-95 (-3.2%)	0 (0%)
	C	-50 (-2.3%)	0 (0%)	-50 (-2.3%)	0 (0%)
	All	-73 (-2.8%)	0 (0%)	-73 (-2.8%)	0 (0%)
NOV	W	-18 (-0.7%)	0 (0%)	-18 (-0.7%)	0 (0%)
	AN	22 (0.7%)	-28 (-0.9%)	19 (0.6%)	-31 (-1%)
	BN	72 (3.3%)	42 (1.9%)	73 (3.4%)	44 (2%)
	D	5 (0.2%)	33 (1.5%)	18 (0.8%)	46 (2%)
	C	-57 (-2.9%)	0 (0%)	-57 (-2.9%)	0 (0%)
	All	0 (0%)	6 (0.3%)	2 (0.1%)	8 (0.3%)
DEC	W	487 (11.1%)	21 (0.4%)	515 (11.8%)	49 (1%)
	AN	295 (6.3%)	89 (1.8%)	268 (5.7%)	62 (1.3%)
	BN	-48 (-2.2%)	35 (1.7%)	-82 (-3.7%)	1 (0.1%)
	D	-60 (-2.8%)	-3 (-0.2%)	-40 (-1.9%)	17 (0.8%)
	C	-33 (-1.9%)	6 (0.4%)	-45 (-2.6%)	-6 (-0.3%)
	All	176 (5.5%)	30 (0.9%)	175 (5.4%)	28 (0.8%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

<sup>b</sup> Water year type for this location was determined using the San Joaquin River Valley Index.

1 **Mokelumne River at the Delta**2 **Table 35. Mean Monthly Flows (cfs) for Model Scenarios in the Mokelumne River at the Delta,**  
3 **Year-Round**

<b>Alternative 2D and 5A: In Delta—Mokelumne River at the Delta</b>					
<b>Month</b>	<b>Water Year Type<sup>a</sup></b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JAN	W	3,071	3,389	3,389	3,389
	AN	1,707	1,759	1,759	1,759
	BN	597	622	622	622
	D	495	484	484	484
	C	280	282	282	282
	All	1,460	1,565	1,565	1,565
FEB	W	3,290	3,720	3,720	3,720
	AN	2,525	2,894	2,894	2,894
	BN	1,011	1,045	1,045	1,045
	D	695	684	684	684
	C	426	441	441	441
	All	1,809	2,014	2,014	2,014
MAR	W	3,179	3,243	3,243	3,243
	AN	1,582	1,633	1,633	1,633
	BN	1,181	1,144	1,144	1,144
	D	754	712	712	712
	C	595	581	581	581
	All	1,662	1,675	1,675	1,675
APR	W	2,819	2,748	2,748	2,748
	AN	1,619	1,529	1,529	1,529
	BN	1,243	1,164	1,164	1,164
	D	623	577	577	577
	C	340	322	322	322
	All	1,503	1,442	1,442	1,442
MAY	W	3,170	3,094	3,094	3,094
	AN	1,439	1,303	1,303	1,303
	BN	976	886	886	886
	D	406	360	360	360
	C	181	179	179	179
	All	1,463	1,392	1,392	1,392
JUN	W	1,755	1,605	1,605	1,605
	AN	851	727	727	727
	BN	471	400	400	400
	D	93	83	83	83
	C	52	48	48	48
	All	779	697	697	697

<b>Alternative 2D and 5A: In Delta—Mokelumne River at the Delta</b>					
<b>Month</b>	<b>Water Year Type<sup>a</sup></b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	772	613	613	613
	AN	347	228	228	228
	BN	123	88	88	88
	D	7	6	6	6
	C	3	3	3	3
	All	315	239	239	239
AUG	W	703	476	476	476
	AN	328	241	241	241
	BN	112	79	79	79
	D	4	4	4	4
	C	2	2	2	2
	All	289	200	200	200
SEP	W	702	549	549	549
	AN	333	271	271	271
	BN	114	95	95	95
	D	9	9	9	9
	C	5	5	5	5
	All	291	231	231	231
OCT	W	161	152	152	152
	AN	178	178	178	178
	BN	154	148	148	148
	D	180	169	169	169
	C	117	125	125	125
	All	158	154	154	154
NOV	W	487	502	502	502
	AN	912	1,009	1,009	1,009
	BN	347	347	347	347
	D	380	371	371	371
	C	195	202	202	202
	All	474	497	497	497
DEC	W	1,504	1,766	1,766	1,766
	AN	1,411	1,806	1,806	1,806
	BN	447	505	505	505
	D	384	392	392	392
	C	204	217	217	217
	All	887	1,054	1,054	1,054

<sup>a</sup> Water year type for this location was determined using the San Joaquin River Valley Index.

1 **Table 36. Differences<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in the Mokelumne**  
 2 **River at the Delta, Year-Round**

Alternative 2D and 5A: In Delta—Mokelumne River at the Delta					
Month	Water Year Type <sup>b</sup>	EBC1 vs A2D_ELТ	NAA_ELТ vs. A2D_ELТ	EBC1 vs A5A_ELТ	NAA_ELТ vs. A5A_ELТ
JAN	W	318 (10.3%)	0 (0%)	318 (10.3%)	0 (0%)
	AN	52 (3%)	0 (0%)	52 (3%)	0 (0%)
	BN	25 (4.2%)	0 (0%)	25 (4.2%)	0 (0%)
	D	-11 (-2.3%)	0 (0%)	-11 (-2.3%)	0 (0%)
	C	2 (0.6%)	0 (0%)	2 (0.6%)	0 (0%)
	All	106 (7.2%)	0 (0%)	106 (7.2%)	0 (0%)
FEB	W	430 (13.1%)	0 (0%)	430 (13.1%)	0 (0%)
	AN	369 (14.6%)	0 (0%)	369 (14.6%)	0 (0%)
	BN	35 (3.4%)	0 (0%)	35 (3.4%)	0 (0%)
	D	-11 (-1.5%)	0 (0%)	-11 (-1.5%)	0 (0%)
	C	15 (3.5%)	0 (0%)	15 (3.5%)	0 (0%)
	All	205 (11.3%)	0 (0%)	205 (11.3%)	0 (0%)
MAR	W	65 (2%)	0 (0%)	65 (2%)	0 (0%)
	AN	50 (3.2%)	0 (0%)	50 (3.2%)	0 (0%)
	BN	-37 (-3.2%)	0 (0%)	-37 (-3.2%)	0 (0%)
	D	-43 (-5.6%)	0 (0%)	-43 (-5.6%)	0 (0%)
	C	-14 (-2.3%)	0 (0%)	-14 (-2.3%)	0 (0%)
	All	13 (0.8%)	0 (0%)	13 (0.8%)	0 (0%)
APR	W	-71 (-2.5%)	0 (0%)	-71 (-2.5%)	0 (0%)
	AN	-90 (-5.6%)	0 (0%)	-90 (-5.6%)	0 (0%)
	BN	-79 (-6.4%)	0 (0%)	-79 (-6.4%)	0 (0%)
	D	-46 (-7.4%)	0 (0%)	-46 (-7.4%)	0 (0%)
	C	-18 (-5.3%)	0 (0%)	-18 (-5.3%)	0 (0%)
	All	-62 (-4.1%)	0 (0%)	-62 (-4.1%)	0 (0%)
MAY	W	-76 (-2.4%)	0 (0%)	-76 (-2.4%)	0 (0%)
	AN	-136 (-9.4%)	0 (0%)	-136 (-9.4%)	0 (0%)
	BN	-90 (-9.2%)	0 (0%)	-90 (-9.2%)	0 (0%)
	D	-46 (-11.2%)	0 (0%)	-46 (-11.2%)	0 (0%)
	C	-2 (-0.9%)	0 (0%)	-2 (-0.9%)	0 (0%)
	All	-71 (-4.8%)	0 (0%)	-71 (-4.8%)	0 (0%)
JUN	W	-149 (-8.5%)	0 (0%)	-149 (-8.5%)	0 (0%)
	AN	-124 (-14.6%)	0 (0%)	-124 (-14.6%)	0 (0%)
	BN	-72 (-15.2%)	0 (0%)	-72 (-15.2%)	0 (0%)
	D	-10 (-11.2%)	0 (0%)	-10 (-11.2%)	0 (0%)
	C	-4 (-8.1%)	0 (0%)	-4 (-8.1%)	0 (0%)
	All	-82 (-10.5%)	0 (0%)	-82 (-10.5%)	0 (0%)



Alternative 2D and 5A: In Delta—Mokelumne River at the Delta					
Month	Water Year Type <sup>b</sup>	EBC1 vs A2D_ELT	NAA_ELT vs. A2D_ELT	EBC1 vs A5A_ELT	NAA_ELT vs. A5A_ELT
JUL	W	-159 (-20.6%)	0 (0%)	-159 (-20.6%)	0 (0%)
	AN	-120 (-34.5%)	0 (0%)	-120 (-34.5%)	0 (0%)
	BN	-36 (-28.9%)	0 (0%)	-36 (-28.9%)	0 (0%)
	D	0 (-2%)	0 (0%)	0 (-2%)	0 (0%)
	C	0 (-2.6%)	0 (0%)	0 (-2.6%)	0 (0%)
	All	-76 (-24%)	0 (0%)	-76 (-24%)	0 (0%)
AUG	W	-227 (-32.3%)	0 (0%)	-227 (-32.3%)	0 (0%)
	AN	-88 (-26.7%)	0 (0%)	-88 (-26.7%)	0 (0%)
	BN	-34 (-30%)	0 (0%)	-34 (-30%)	0 (0%)
	D	0 (-0.2%)	0 (0%)	0 (-0.2%)	0 (0%)
	C	0 (-1.7%)	0 (0%)	0 (-1.7%)	0 (0%)
	All	-89 (-30.8%)	0 (0%)	-89 (-30.8%)	0 (0%)
SEP	W	-154 (-21.9%)	0 (0%)	-154 (-21.9%)	0 (0%)
	AN	-61 (-18.4%)	0 (0%)	-61 (-18.4%)	0 (0%)
	BN	-19 (-16.7%)	0 (0%)	-19 (-16.7%)	0 (0%)
	D	-1 (-6.6%)	0 (0%)	-1 (-6.6%)	0 (0%)
	C	0 (5.3%)	0 (0%)	0 (5.3%)	0 (0%)
	All	-60 (-20.6%)	0 (0%)	-60 (-20.6%)	0 (0%)
OCT	W	-9 (-5.4%)	0 (0%)	-9 (-5.4%)	0 (0%)
	AN	1 (0.3%)	0 (0%)	1 (0.3%)	0 (0%)
	BN	-6 (-4.1%)	0 (0%)	-6 (-4.1%)	0 (0%)
	D	-12 (-6.4%)	0 (0%)	-12 (-6.4%)	0 (0%)
	C	8 (7.1%)	0 (0%)	8 (7.1%)	0 (0%)
	All	-4 (-2.3%)	0 (0%)	-4 (-2.3%)	0 (0%)
NOV	W	15 (3%)	0 (0%)	15 (3%)	0 (0%)
	AN	97 (10.6%)	0 (0%)	97 (10.6%)	0 (0%)
	BN	0 (-0.1%)	0 (0%)	0 (-0.1%)	0 (0%)
	D	-9 (-2.5%)	0 (0%)	-9 (-2.5%)	0 (0%)
	C	7 (3.3%)	0 (0%)	7 (3.3%)	0 (0%)
	All	23 (4.9%)	0 (0%)	23 (4.9%)	0 (0%)
DEC	W	262 (17.4%)	0 (0%)	262 (17.4%)	0 (0%)
	AN	395 (28%)	0 (0%)	395 (28%)	0 (0%)
	BN	58 (12.9%)	0 (0%)	58 (12.9%)	0 (0%)
	D	9 (2.2%)	0 (0%)	9 (2.2%)	0 (0%)
	C	14 (6.8%)	0 (0%)	14 (6.8%)	0 (0%)
	All	167 (18.8%)	0 (0%)	167 (18.8%)	0 (0%)

<sup>a</sup> Red boxes indicate that flows under the alternative are more than 5% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5% greater than flows under the baseline.

<sup>b</sup> Water year type for this location was determined using the San Joaquin River Valley Index.

1 **B.5.2.2 Temperature**2 **Sacramento River at Keswick**3 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the**  
4 **Sacramento River at Keswick, Year-Round**

Alternative 2D and 5A: Sacramento River at Keswick					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	46	46	46	46
	AN	46	47	47	47
	BN	47	47	47	47
	D	47	47	47	48
	C	47	47	47	47
	All	46	47	47	47
FEB	W	45	46	46	46
	AN	46	46	46	46
	BN	46	46	46	46
	D	46	47	47	47
	C	46	47	47	47
	All	46	46	46	46
MAR	W	46	47	47	47
	AN	46	47	47	47
	BN	47	47	48	47
	D	47	48	48	48
	C	48	49	49	49
	All	47	47	47	47
APR	W	47	48	48	48
	AN	48	49	49	49
	BN	48	49	49	49
	D	48	49	49	49
	C	49	50	50	50
	All	48	49	49	49
MAY	W	49	49	49	49
	AN	49	50	50	50
	BN	49	50	50	50
	D	49	50	50	50
	C	51	52	52	52
	All	49	50	50	50
JUN	W	50	50	50	50
	AN	50	50	50	50
	BN	50	50	50	50
	D	50	51	51	51
	C	53	54	53	53
	All	50	51	51	51

<b>Alternative 2D and 5A: Sacramento River at Keswick</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	51	51	51	51
	AN	51	51	51	51
	BN	51	51	51	51
	D	51	52	52	52
	C	54	57	57	56
	All	51	52	52	52
AUG	W	52	53	53	53
	AN	52	53	53	53
	BN	52	53	53	53
	D	53	54	54	55
	C	57	60	60	60
	All	53	54	54	54
SEP	W	53	54	54	54
	AN	54	54	55	55
	BN	54	55	55	55
	D	55	57	57	57
	C	60	64	63	63
	All	55	56	56	56
OCT	W	54	55	55	55
	AN	54	55	55	55
	BN	54	56	55	56
	D	55	57	57	57
	C	56	58	58	58
	All	54	56	56	56
NOV	W	53	54	54	54
	AN	52	53	53	53
	BN	53	54	54	54
	D	53	54	54	54
	C	54	55	55	55
	All	53	54	54	54
DEC	W	49	50	50	50
	AN	49	50	50	50
	BN	50	51	51	51
	D	50	51	51	51
	C	51	51	51	51
	All	50	50	50	50

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Sacramento River at Keswick, Year-Round**

Alternative 2D and 5A: Sacramento River at Keswick					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JAN	W	0.5 (1.2%)	0 (0.1%)	0.5 (1.1%)	0 (0.1%)
	AN	0.7 (1.4%)	0 (0%)	0.6 (1.4%)	0 (0%)
	BN	0.8 (1.7%)	0.1 (0.1%)	0.8 (1.7%)	0.1 (0.1%)
	D	0.8 (1.7%)	0 (0.1%)	0.8 (1.8%)	0.1 (0.2%)
	C	0.9 (1.9%)	0.1 (0.2%)	0.9 (1.9%)	0.1 (0.3%)
	All	0.7 (1.5%)	0 (0.1%)	0.7 (1.5%)	0.1 (0.1%)
FEB	W	0.8 (1.7%)	0 (0.1%)	0.7 (1.6%)	0 (0%)
	AN	0.8 (1.8%)	0.1 (0.2%)	0.8 (1.7%)	0 (0.1%)
	BN	0.8 (1.8%)	0.1 (0.1%)	0.8 (1.8%)	0 (0.1%)
	D	0.9 (1.9%)	0 (0%)	0.9 (1.9%)	0 (0%)
	C	0.9 (1.9%)	0 (0.1%)	0.9 (1.9%)	0 (0%)
	All	0.8 (1.8%)	0 (0.1%)	0.8 (1.8%)	0 (0%)
MAR	W	0.7 (1.6%)	0 (0.1%)	0.7 (1.5%)	0 (0%)
	AN	0.9 (1.9%)	0.1 (0.2%)	0.8 (1.7%)	0 (0%)
	BN	0.8 (1.8%)	0.1 (0.3%)	0.7 (1.5%)	0 (-0.1%)
	D	0.8 (1.7%)	0 (0.1%)	0.8 (1.6%)	0 (0%)
	C	0.9 (1.8%)	0 (0%)	0.8 (1.8%)	0 (0%)
	All	0.8 (1.7%)	0.1 (0.1%)	0.7 (1.6%)	0 (0%)
APR	W	0.8 (1.7%)	0 (0.1%)	0.8 (1.6%)	0 (0%)
	AN	0.8 (1.7%)	0.1 (0.2%)	0.8 (1.6%)	0 (0.1%)
	BN	0.8 (1.6%)	0.1 (0.2%)	0.7 (1.5%)	0.1 (0.1%)
	D	0.7 (1.4%)	0 (-0.1%)	0.7 (1.4%)	0 (-0.1%)
	C	0.9 (1.9%)	0 (-0.1%)	0.9 (1.9%)	0 (0%)
	All	0.8 (1.6%)	0 (0.1%)	0.8 (1.6%)	0 (0%)
MAY	W	0.9 (1.8%)	0 (0%)	0.9 (1.8%)	0 (0%)
	AN	0.6 (1.1%)	-0.2 (-0.3%)	0.6 (1.3%)	-0.1 (-0.2%)
	BN	0.9 (1.7%)	0 (0%)	0.8 (1.7%)	0 (0%)
	D	0.8 (1.5%)	-0.1 (-0.2%)	0.8 (1.6%)	-0.1 (-0.2%)
	C	0.9 (1.8%)	0 (0%)	0.9 (1.8%)	0 (0%)
	All	0.8 (1.6%)	-0.1 (-0.1%)	0.8 (1.6%)	0 (-0.1%)
JUN	W	0.4 (0.8%)	0 (-0.1%)	0.4 (0.9%)	0 (0%)
	AN	0.6 (1.2%)	0 (0%)	0.6 (1.3%)	0.1 (0.1%)
	BN	0.5 (1%)	0 (0%)	0.5 (1%)	0 (0.1%)
	D	0.9 (1.8%)	0 (-0.1%)	0.9 (1.8%)	0 (-0.1%)
	C	0.9 (1.7%)	-0.2 (-0.3%)	0.8 (1.5%)	-0.3 (-0.5%)
	All	0.6 (1.2%)	0 (-0.1%)	0.6 (1.2%)	0 (-0.1%)

Alternative 2D and 5A: Sacramento River at Keswick					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	0.5 (1%)	0.1 (0.2%)	0.3 (0.6%)	0 (-0.1%)
	AN	0.9 (1.7%)	0.3 (0.5%)	0.7 (1.4%)	0.1 (0.2%)
	BN	0.7 (1.3%)	0.1 (0.1%)	0.6 (1.2%)	0 (0%)
	D	1.1 (2.2%)	0.1 (0.3%)	0.9 (1.7%)	-0.1 (-0.2%)
	C	2.3 (4.3%)	0 (0%)	2.2 (4.1%)	-0.1 (-0.2%)
	All	1 (1.9%)	0.1 (0.2%)	0.8 (1.6%)	0 (-0.1%)
AUG	W	1 (1.9%)	0.1 (0.2%)	0.9 (1.7%)	0 (0%)
	AN	1 (1.8%)	0.2 (0.4%)	0.8 (1.5%)	0 (0.1%)
	BN	1.3 (2.6%)	0.3 (0.5%)	1.1 (2.2%)	0.1 (0.1%)
	D	1.7 (3.2%)	0.3 (0.5%)	2 (3.7%)	0.5 (1%)
	C	3.5 (6.2%)	-0.3 (-0.4%)	3.7 (6.6%)	-0.1 (-0.1%)
	All	1.6 (3%)	0.1 (0.2%)	1.6 (2.9%)	0.1 (0.2%)
SEP	W	0.6 (1.2%)	0.1 (0.2%)	0.7 (1.4%)	0.2 (0.4%)
	AN	1.1 (2.1%)	0.6 (1%)	0.9 (1.7%)	0.3 (0.6%)
	BN	1.8 (3.4%)	0.8 (1.5%)	1.6 (2.9%)	0.6 (1%)
	D	1.9 (3.6%)	0 (0%)	2.3 (4.2%)	0.3 (0.6%)
	C	3.1 (5.1%)	-0.3 (-0.5%)	2.9 (4.8%)	-0.5 (-0.8%)
	All	1.5 (2.8%)	0.2 (0.4%)	1.5 (2.8%)	0.2 (0.4%)
OCT	W	1.4 (2.6%)	0.1 (0.1%)	1.6 (2.9%)	0.2 (0.4%)
	AN	1.3 (2.5%)	0 (0%)	1.6 (2.9%)	0.2 (0.4%)
	BN	1.2 (2.2%)	-0.1 (-0.1%)	1.3 (2.4%)	0 (0.1%)
	D	1.8 (3.4%)	0.2 (0.3%)	1.7 (3.1%)	0 (0%)
	C	1.3 (2.3%)	-0.5 (-0.8%)	1.6 (2.8%)	-0.2 (-0.3%)
	All	1.5 (2.7%)	0 (0%)	1.6 (2.9%)	0.1 (0.1%)
NOV	W	1 (2%)	-0.1 (-0.1%)	1 (2%)	-0.1 (-0.1%)
	AN	0.9 (1.7%)	-0.1 (-0.3%)	1 (1.9%)	-0.1 (-0.1%)
	BN	0.8 (1.5%)	-0.2 (-0.4%)	0.9 (1.7%)	-0.1 (-0.2%)
	D	1.1 (2.1%)	0 (0%)	1 (1.9%)	-0.1 (-0.1%)
	C	1 (1.8%)	-0.2 (-0.3%)	1.1 (2%)	-0.1 (-0.1%)
	All	1 (1.9%)	-0.1 (-0.2%)	1 (1.9%)	-0.1 (-0.1%)
DEC	W	0.5 (1.1%)	0 (0.1%)	0.5 (1.1%)	0 (0%)
	AN	0.7 (1.5%)	-0.1 (-0.3%)	0.7 (1.5%)	-0.1 (-0.3%)
	BN	0.8 (1.5%)	-0.1 (-0.3%)	0.8 (1.7%)	-0.1 (-0.1%)
	D	0.8 (1.6%)	-0.1 (-0.1%)	0.8 (1.6%)	0 (-0.1%)
	C	0.8 (1.5%)	-0.1 (-0.1%)	0.8 (1.6%)	0 (-0.1%)
	All	0.7 (1.4%)	-0.1 (-0.1%)	0.7 (1.4%)	0 (-0.1%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Sacramento River at Jelly's Ferry**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the**  
3 **Sacramento River at Jelly's Ferry, Year-Round**

Alternative 2D and 5A: Sacramento River at Jelly's Ferry					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	45	46	46	46
	AN	45	46	46	46
	BN	45	46	46	46
	D	45	46	46	46
	C	45	46	46	46
	All	45	46	46	46
FEB	W	46	47	47	47
	AN	46	47	47	47
	BN	46	47	47	47
	D	46	47	47	47
	C	47	48	48	48
	All	46	47	47	47
MAR	W	48	49	49	49
	AN	49	50	50	50
	BN	49	50	50	50
	D	50	51	51	50
	C	50	51	51	51
	All	49	50	50	50
APR	W	51	52	52	52
	AN	53	54	54	54
	BN	53	54	54	54
	D	52	53	53	53
	C	52	53	53	53
	All	52	53	53	53
MAY	W	54	56	56	56
	AN	55	56	55	56
	BN	54	56	56	56
	D	54	55	55	55
	C	55	56	56	56
	All	54	56	56	56
JUN	W	55	56	56	56
	AN	55	55	55	55
	BN	54	55	55	55
	D	54	55	55	55
	C	56	57	57	57
	All	55	56	56	56

Alternative 2D and 5A: Sacramento River at Jelly's Ferry					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JUL	W	56	56	56	56
	AN	55	55	55	55
	BN	55	55	55	55
	D	55	56	56	56
	C	57	60	60	60
	All	55	56	56	56
AUG	W	56	57	57	57
	AN	56	57	57	57
	BN	56	57	57	57
	D	56	58	59	59
	C	59	63	63	63
	All	57	58	58	58
SEP	W	56	56	56	56
	AN	57	57	58	57
	BN	57	58	59	59
	D	58	60	60	61
	C	61	64	64	64
	All	58	59	59	59
OCT	W	54	56	56	56
	AN	54	56	56	56
	BN	55	56	56	56
	D	55	57	57	57
	C	56	58	58	58
	All	55	56	56	56
NOV	W	51	52	52	52
	AN	51	52	52	52
	BN	51	52	52	52
	D	51	52	52	52
	C	52	53	53	53
	All	51	52	52	52
DEC	W	47	47	47	47
	AN	47	47	47	47
	BN	47	48	48	48
	D	47	48	48	48
	C	47	48	48	48
	All	47	48	48	48

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Sacramento River at Jelly's Ferry, Year-Round**

<b>Alternative 2D and 5A: Sacramento River at Jelly's Ferry</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS VS. A2D_ELT</b>	<b>NAA_ELT VS. A2D_ELT</b>	<b>EXISTING CONDITIONS VS. A5A_ELT</b>	<b>NAA_ELT VS. A5A_ELT</b>
JAN	W	0.6 (1.4%)	0 (0.1%)	0.6 (1.4%)	0 (0%)
	AN	0.7 (1.5%)	0 (0%)	0.7 (1.5%)	0 (0%)
	BN	0.8 (1.8%)	0 (0.1%)	0.8 (1.8%)	0 (0.1%)
	D	0.8 (1.8%)	0 (0%)	0.9 (2%)	0.1 (0.2%)
	C	1 (2.2%)	0 (0%)	1.1 (2.4%)	0.1 (0.2%)
	All	0.8 (1.7%)	0 (0.1%)	0.8 (1.8%)	0 (0.1%)
FEB	W	0.8 (1.8%)	0 (0%)	0.8 (1.7%)	0 (0%)
	AN	0.8 (1.7%)	0 (0.1%)	0.8 (1.7%)	0 (0%)
	BN	0.9 (1.9%)	0 (0.1%)	0.9 (1.9%)	0 (0%)
	D	1 (2.2%)	0 (0%)	1 (2.1%)	0 (0%)
	C	1 (2.2%)	0 (0%)	1 (2.2%)	0 (0%)
	All	0.9 (1.9%)	0 (0%)	0.9 (1.9%)	0 (0%)
MAR	W	0.7 (1.4%)	0 (0%)	0.7 (1.4%)	0 (0%)
	AN	0.7 (1.4%)	0 (0%)	0.7 (1.4%)	0 (-0.1%)
	BN	0.8 (1.6%)	0 (0%)	0.7 (1.5%)	0 (-0.1%)
	D	0.8 (1.5%)	0 (0%)	0.7 (1.5%)	0 (0%)
	C	0.7 (1.4%)	0 (-0.1%)	0.7 (1.4%)	0 (-0.1%)
	All	0.7 (1.5%)	0 (0%)	0.7 (1.4%)	0 (0%)
APR	W	0.8 (1.7%)	0 (0%)	0.8 (1.6%)	0 (0%)
	AN	0.8 (1.5%)	0 (0%)	0.8 (1.5%)	0 (0%)
	BN	0.9 (1.8%)	0 (0%)	0.9 (1.7%)	0 (0%)
	D	0.8 (1.5%)	-0.1 (-0.1%)	0.8 (1.5%)	-0.1 (-0.1%)
	C	0.9 (1.8%)	0 (0%)	0.9 (1.8%)	0 (0%)
	All	0.9 (1.6%)	0 (0%)	0.8 (1.6%)	0 (0%)
MAY	W	1.6 (2.9%)	-0.1 (-0.1%)	1.6 (3%)	0 (0%)
	AN	0.6 (1.1%)	-0.6 (-1.1%)	0.9 (1.6%)	-0.3 (-0.6%)
	BN	1.2 (2.2%)	-0.2 (-0.4%)	1.4 (2.5%)	-0.1 (-0.1%)
	D	1 (1.9%)	-0.3 (-0.5%)	1.1 (2%)	-0.2 (-0.4%)
	C	1 (1.7%)	-0.1 (-0.2%)	1 (1.9%)	0 (0%)
	All	1.2 (2.1%)	-0.2 (-0.4%)	1.3 (2.3%)	-0.1 (-0.2%)
JUN	W	0.7 (1.2%)	-0.2 (-0.3%)	0.8 (1.5%)	0 (-0.1%)
	AN	0.5 (0.9%)	-0.3 (-0.5%)	0.7 (1.3%)	-0.1 (-0.1%)
	BN	0.6 (1.1%)	-0.2 (-0.4%)	0.7 (1.3%)	-0.1 (-0.2%)
	D	0.8 (1.5%)	-0.2 (-0.4%)	0.9 (1.6%)	-0.2 (-0.3%)
	C	0.8 (1.5%)	-0.2 (-0.3%)	0.7 (1.3%)	-0.3 (-0.5%)
	All	0.7 (1.3%)	-0.2 (-0.4%)	0.8 (1.4%)	-0.1 (-0.2%)



Alternative 2D and 5A: Sacramento River at Jelly's Ferry					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	0.5 (0.9%)	0.1 (0.1%)	0.3 (0.6%)	-0.1 (-0.2%)
	AN	0.8 (1.5%)	0.2 (0.3%)	0.6 (1.1%)	0 (0%)
	BN	0.7 (1.3%)	-0.1 (-0.1%)	0.7 (1.3%)	0 (-0.1%)
	D	1.2 (2.1%)	0.1 (0.3%)	0.8 (1.4%)	-0.2 (-0.4%)
	C	2.3 (4%)	0 (0%)	2.2 (3.9%)	-0.1 (-0.1%)
	All	1 (1.8%)	0.1 (0.1%)	0.8 (1.5%)	-0.1 (-0.2%)
AUG	W	1.3 (2.4%)	0 (0.1%)	1.1 (2%)	-0.2 (-0.3%)
	AN	1 (1.8%)	0.2 (0.3%)	0.8 (1.5%)	0 (-0.1%)
	BN	1.4 (2.5%)	0 (0%)	1.3 (2.3%)	-0.1 (-0.1%)
	D	2.2 (3.8%)	0.6 (1%)	2.2 (3.9%)	0.6 (1%)
	C	3.4 (5.7%)	-0.1 (-0.2%)	3.6 (6.1%)	0.1 (0.2%)
	All	1.8 (3.1%)	0.1 (0.2%)	1.7 (3%)	0.1 (0.1%)
SEP	W	0.3 (0.6%)	0.2 (0.3%)	0.3 (0.6%)	0.2 (0.3%)
	AN	0.7 (1.2%)	0.9 (1.6%)	0.2 (0.3%)	0.4 (0.7%)
	BN	2 (3.5%)	0.8 (1.4%)	1.8 (3.2%)	0.6 (1.1%)
	D	2.6 (4.5%)	0.2 (0.4%)	2.8 (4.9%)	0.5 (0.8%)
	C	2.8 (4.6%)	-0.1 (-0.2%)	2.8 (4.5%)	-0.2 (-0.3%)
	All	1.5 (2.7%)	0.4 (0.6%)	1.5 (2.6%)	0.3 (0.5%)
OCT	W	1.4 (2.5%)	0 (0.1%)	1.5 (2.8%)	0.2 (0.3%)
	AN	1.3 (2.4%)	0 (0.1%)	1.5 (2.7%)	0.2 (0.4%)
	BN	1.3 (2.4%)	0 (0%)	1.4 (2.5%)	0 (0.1%)
	D	1.6 (2.9%)	0.1 (0.2%)	1.5 (2.7%)	0 (0%)
	C	1.3 (2.4%)	-0.4 (-0.6%)	1.5 (2.7%)	-0.2 (-0.3%)
	All	1.4 (2.5%)	0 (0%)	1.5 (2.7%)	0.1 (0.1%)
NOV	W	0.9 (1.8%)	-0.2 (-0.4%)	1 (1.9%)	-0.2 (-0.3%)
	AN	0.8 (1.6%)	-0.3 (-0.6%)	0.9 (1.8%)	-0.2 (-0.4%)
	BN	0.8 (1.5%)	-0.4 (-0.7%)	0.8 (1.7%)	-0.3 (-0.5%)
	D	0.9 (1.7%)	-0.1 (-0.2%)	0.8 (1.6%)	-0.2 (-0.3%)
	C	0.9 (1.7%)	-0.2 (-0.3%)	1 (1.9%)	-0.1 (-0.2%)
	All	0.9 (1.7%)	-0.2 (-0.4%)	0.9 (1.8%)	-0.2 (-0.4%)
DEC	W	0.5 (1.1%)	0 (0%)	0.5 (1.1%)	0 (0%)
	AN	0.7 (1.5%)	-0.2 (-0.4%)	0.7 (1.6%)	-0.1 (-0.3%)
	BN	0.7 (1.5%)	-0.1 (-0.2%)	0.8 (1.7%)	0 (-0.1%)
	D	0.8 (1.7%)	0 (0%)	0.8 (1.7%)	0 (0%)
	C	0.9 (1.9%)	0 (0.1%)	0.9 (1.9%)	0.1 (0.1%)
	All	0.7 (1.5%)	0 (-0.1%)	0.7 (1.5%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Sacramento River at Bend Bridge**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the**  
3 **Sacramento River at Bend Bridge, Year-Round**

Alternative 2D and 5A: Sacramento River at Bend Bridge					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	45	46	46	46
	AN	45	46	46	46
	BN	45	45	45	45
	D	45	46	46	46
	C	45	46	46	46
	All	45	46	46	46
FEB	W	46	47	47	47
	AN	46	47	47	47
	BN	46	47	47	47
	D	46	47	47	47
	C	47	48	48	48
	All	46	47	47	47
MAR	W	48	49	49	49
	AN	49	50	50	50
	BN	49	50	50	50
	D	50	51	51	51
	C	50	51	51	51
	All	49	50	50	50
APR	W	51	52	52	52
	AN	53	54	54	54
	BN	53	54	54	54
	D	53	54	54	54
	C	52	53	53	53
	All	52	53	53	53
MAY	W	54	56	56	56
	AN	55	57	56	56
	BN	55	56	56	56
	D	55	56	56	56
	C	55	57	56	57
	All	55	56	56	56
JUN	W	56	57	56	56
	AN	55	56	56	56
	BN	55	56	56	56
	D	55	56	56	56
	C	57	58	57	57
	All	55	56	56	56

Alternative 2D and 5A: Sacramento River at Bend Bridge					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JUL	W	56	57	57	57
	AN	55	56	56	56
	BN	55	56	56	56
	D	56	57	57	56
	C	58	60	60	60
	All	56	57	57	57
AUG	W	57	58	58	58
	AN	57	58	58	58
	BN	56	58	58	58
	D	57	59	59	59
	C	60	63	63	64
	All	57	59	59	59
SEP	W	57	57	57	57
	AN	58	58	59	58
	BN	58	59	60	59
	D	58	61	61	61
	C	62	65	65	65
	All	58	59	60	60
OCT	W	54	56	56	56
	AN	55	56	56	56
	BN	55	56	56	56
	D	55	57	57	57
	C	56	58	58	58
	All	55	56	56	56
NOV	W	51	52	51	51
	AN	51	52	51	52
	BN	51	52	52	52
	D	51	52	52	52
	C	52	53	53	53
	All	51	52	52	52
DEC	W	47	47	47	47
	AN	46	47	47	47
	BN	47	47	47	47
	D	46	47	47	47
	C	47	48	48	48
	All	47	47	47	47

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Sacramento River at Bend Bridge, Year-Round**

<b>Alternative 2D and 5A: Sacramento River at Bend Bridge</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS VS. A2D_ELT</b>	<b>NAA_ELT VS. A2D_ELT</b>	<b>EXISTING CONDITIONS VS. A5A_ELT</b>	<b>NAA_ELT VS. A5A_ELT</b>
JAN	W	0.7 (1.4%)	0 (0.1%)	0.6 (1.4%)	0 (0%)
	AN	0.7 (1.6%)	0 (0%)	0.7 (1.5%)	0 (0%)
	BN	0.8 (1.9%)	0 (0.1%)	0.8 (1.9%)	0 (0.1%)
	D	0.8 (1.9%)	0 (0%)	0.9 (2%)	0.1 (0.2%)
	C	1 (2.2%)	0 (-0.1%)	1.1 (2.5%)	0.1 (0.2%)
	All	0.8 (1.7%)	0 (0.1%)	0.8 (1.8%)	0 (0.1%)
FEB	W	0.8 (1.8%)	0 (0%)	0.8 (1.8%)	0 (0%)
	AN	0.8 (1.8%)	0 (0.1%)	0.8 (1.7%)	0 (0%)
	BN	0.9 (2%)	0 (0.1%)	0.9 (1.9%)	0 (0%)
	D	1 (2.2%)	0 (0%)	1 (2.2%)	0 (0%)
	C	1 (2.2%)	0 (0%)	1.1 (2.2%)	0 (0%)
	All	0.9 (2%)	0 (0%)	0.9 (2%)	0 (0%)
MAR	W	0.7 (1.4%)	0 (0%)	0.7 (1.4%)	0 (0%)
	AN	0.7 (1.4%)	0 (0%)	0.7 (1.4%)	0 (-0.1%)
	BN	0.8 (1.6%)	0 (0%)	0.7 (1.5%)	0 (-0.1%)
	D	0.8 (1.6%)	0 (0%)	0.7 (1.5%)	0 (0%)
	C	0.7 (1.4%)	-0.1 (-0.1%)	0.7 (1.4%)	0 (-0.1%)
	All	0.7 (1.5%)	0 (0%)	0.7 (1.4%)	0 (0%)
APR	W	0.8 (1.6%)	0 (0%)	0.8 (1.6%)	0 (0%)
	AN	0.8 (1.5%)	0 (0%)	0.8 (1.5%)	0 (0%)
	BN	0.9 (1.8%)	0 (0%)	0.9 (1.7%)	0 (0%)
	D	0.8 (1.5%)	-0.1 (-0.1%)	0.8 (1.5%)	-0.1 (-0.1%)
	C	0.9 (1.7%)	0 (0%)	0.9 (1.7%)	0 (0%)
	All	0.9 (1.6%)	0 (0%)	0.8 (1.6%)	0 (0%)
MAY	W	1.6 (2.9%)	-0.1 (-0.1%)	1.7 (3%)	0 (0%)
	AN	0.6 (1.1%)	-0.6 (-1.1%)	0.9 (1.7%)	-0.3 (-0.6%)
	BN	1.2 (2.3%)	-0.3 (-0.5%)	1.4 (2.6%)	-0.1 (-0.1%)
	D	1.1 (2%)	-0.3 (-0.5%)	1.1 (2%)	-0.2 (-0.4%)
	C	1 (1.8%)	-0.1 (-0.2%)	1.1 (1.9%)	0 (0%)
	All	1.2 (2.2%)	-0.2 (-0.4%)	1.3 (2.4%)	-0.1 (-0.2%)
JUN	W	0.7 (1.3%)	-0.2 (-0.3%)	0.8 (1.5%)	0 (-0.1%)
	AN	0.5 (0.9%)	-0.3 (-0.5%)	0.7 (1.3%)	-0.1 (-0.2%)
	BN	0.6 (1.1%)	-0.2 (-0.4%)	0.7 (1.3%)	-0.1 (-0.2%)
	D	0.8 (1.5%)	-0.2 (-0.4%)	0.9 (1.6%)	-0.2 (-0.3%)
	C	0.8 (1.4%)	-0.2 (-0.3%)	0.8 (1.3%)	-0.3 (-0.4%)
	All	0.7 (1.3%)	-0.2 (-0.4%)	0.8 (1.4%)	-0.1 (-0.2%)

Alternative 2D and 5A: Sacramento River at Bend Bridge					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	0.5 (0.9%)	0.1 (0.1%)	0.3 (0.6%)	-0.1 (-0.2%)
	AN	0.8 (1.5%)	0.2 (0.3%)	0.6 (1.1%)	0 (0%)
	BN	0.7 (1.3%)	-0.1 (-0.1%)	0.7 (1.3%)	0 (-0.1%)
	D	1.2 (2.1%)	0.2 (0.3%)	0.8 (1.3%)	-0.3 (-0.5%)
	C	2.3 (3.9%)	0 (0%)	2.2 (3.8%)	-0.1 (-0.1%)
	All	1 (1.7%)	0.1 (0.1%)	0.8 (1.4%)	-0.1 (-0.2%)
AUG	W	1.4 (2.4%)	0 (0.1%)	1.1 (2%)	-0.2 (-0.3%)
	AN	1 (1.8%)	0.1 (0.2%)	0.8 (1.5%)	-0.1 (-0.1%)
	BN	1.4 (2.4%)	0 (0%)	1.3 (2.3%)	-0.1 (-0.1%)
	D	2.2 (3.9%)	0.6 (1%)	2.2 (3.9%)	0.6 (1%)
	C	3.4 (5.6%)	-0.1 (-0.2%)	3.6 (6%)	0.1 (0.2%)
	All	1.8 (3.1%)	0.1 (0.2%)	1.7 (3%)	0.1 (0.1%)
SEP	W	0.3 (0.6%)	0.2 (0.3%)	0.3 (0.6%)	0.2 (0.3%)
	AN	0.7 (1.1%)	1 (1.7%)	0.1 (0.2%)	0.4 (0.7%)
	BN	2 (3.5%)	0.8 (1.3%)	1.8 (3.2%)	0.6 (1%)
	D	2.7 (4.6%)	0.2 (0.4%)	2.9 (5%)	0.5 (0.8%)
	C	2.8 (4.5%)	-0.1 (-0.1%)	2.7 (4.4%)	-0.1 (-0.2%)
	All	1.5 (2.6%)	0.4 (0.6%)	1.5 (2.5%)	0.3 (0.5%)
OCT	W	1.4 (2.5%)	0 (0.1%)	1.5 (2.8%)	0.2 (0.3%)
	AN	1.3 (2.4%)	0 (0.1%)	1.5 (2.7%)	0.2 (0.4%)
	BN	1.4 (2.5%)	0 (0%)	1.4 (2.5%)	0 (0.1%)
	D	1.6 (2.8%)	0.1 (0.2%)	1.5 (2.6%)	0 (0%)
	C	1.3 (2.4%)	-0.3 (-0.6%)	1.5 (2.7%)	-0.2 (-0.3%)
	All	1.4 (2.5%)	0 (0%)	1.5 (2.7%)	0.1 (0.1%)
NOV	W	0.9 (1.8%)	-0.2 (-0.5%)	1 (1.9%)	-0.2 (-0.3%)
	AN	0.8 (1.6%)	-0.3 (-0.6%)	0.9 (1.8%)	-0.2 (-0.4%)
	BN	0.8 (1.5%)	-0.4 (-0.7%)	0.9 (1.7%)	-0.3 (-0.6%)
	D	0.9 (1.7%)	-0.1 (-0.3%)	0.8 (1.7%)	-0.2 (-0.3%)
	C	0.9 (1.8%)	-0.2 (-0.3%)	1 (1.9%)	-0.1 (-0.2%)
	All	0.9 (1.7%)	-0.2 (-0.5%)	0.9 (1.8%)	-0.2 (-0.4%)
DEC	W	0.5 (1.2%)	0 (0%)	0.5 (1.2%)	0 (0%)
	AN	0.7 (1.5%)	-0.2 (-0.4%)	0.8 (1.7%)	-0.1 (-0.3%)
	BN	0.7 (1.6%)	-0.1 (-0.2%)	0.8 (1.7%)	0 (-0.1%)
	D	0.8 (1.8%)	0 (0.1%)	0.8 (1.7%)	0 (0%)
	C	0.9 (2%)	0.1 (0.1%)	0.9 (2%)	0.1 (0.1%)
	All	0.7 (1.5%)	0 (-0.1%)	0.7 (1.6%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Sacramento River at Red Bluff Diversion Dam**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the**  
3 **Sacramento River at Red Bluff Diversion Dam, Year-Round**

Alternative 2D and 5A: Sacramento River at Red Bluff Diversion Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	45	46	46	46
	AN	45	46	46	46
	BN	44	45	45	45
	D	44	45	45	45
	C	44	45	45	46
	All	45	45	45	46
FEB	W	46	47	47	47
	AN	46	47	47	47
	BN	46	47	47	47
	D	46	47	47	47
	C	47	48	48	48
	All	46	47	47	47
MAR	W	48	49	49	49
	AN	49	50	50	50
	BN	49	50	50	50
	D	50	51	51	51
	C	51	51	51	51
	All	49	50	50	50
APR	W	52	53	53	53
	AN	53	54	54	54
	BN	54	54	54	54
	D	54	54	54	54
	C	53	54	54	54
	All	53	54	54	54
MAY	W	55	57	57	57
	AN	56	58	57	57
	BN	56	58	57	58
	D	56	57	57	57
	C	57	58	58	58
	All	56	57	57	57
JUN	W	57	58	58	58
	AN	57	58	57	58
	BN	57	58	57	57
	D	57	58	58	58
	C	58	59	59	59
	All	57	58	58	58

Alternative 2D and 5A: Sacramento River at Red Bluff Diversion Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JUL	W	58	58	58	58
	AN	57	58	58	58
	BN	57	58	58	58
	D	57	58	59	58
	C	60	62	62	62
	All	58	59	59	59
AUG	W	58	60	60	60
	AN	59	60	60	59
	BN	58	59	59	59
	D	59	60	61	61
	C	61	65	65	65
	All	59	61	61	61
SEP	W	58	58	58	58
	AN	59	59	60	59
	BN	59	60	61	61
	D	59	62	62	62
	C	63	65	65	65
	All	59	60	61	61
OCT	W	55	56	56	56
	AN	55	56	56	56
	BN	55	56	56	56
	D	55	57	57	57
	C	56	58	58	58
	All	55	57	57	57
NOV	W	50	52	51	51
	AN	50	52	51	51
	BN	51	52	52	52
	D	51	52	52	52
	C	52	53	53	53
	All	51	52	52	52
DEC	W	46	47	47	47
	AN	46	47	47	47
	BN	46	47	47	47
	D	46	47	47	47
	C	46	47	47	47
	All	46	47	47	47

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Sacramento River at Red Bluff Diversion Dam, Year-Round**

Alternative 2D and 5A: Sacramento River at Red Bluff Diversion Dam					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JAN	W	0.7 (1.5%)	0 (0.1%)	0.7 (1.5%)	0 (0%)
	AN	0.7 (1.6%)	0 (0.1%)	0.7 (1.6%)	0 (0%)
	BN	0.9 (2%)	0 (0.1%)	0.9 (2%)	0 (0.1%)
	D	0.9 (2%)	0 (0%)	0.9 (2.1%)	0.1 (0.2%)
	C	1 (2.3%)	0 (-0.1%)	1.2 (2.6%)	0.1 (0.2%)
	All	0.8 (1.8%)	0 (0%)	0.8 (1.9%)	0 (0.1%)
FEB	W	0.8 (1.8%)	0 (0%)	0.8 (1.8%)	0 (0%)
	AN	0.8 (1.8%)	0 (0.1%)	0.8 (1.8%)	0 (0%)
	BN	0.9 (2%)	0 (0%)	0.9 (2%)	0 (0%)
	D	1.1 (2.3%)	0 (0%)	1.1 (2.3%)	0 (0%)
	C	1.1 (2.3%)	0 (0%)	1.1 (2.3%)	0 (0%)
	All	0.9 (2%)	0 (0%)	0.9 (2%)	0 (0%)
MAR	W	0.7 (1.4%)	0 (0%)	0.7 (1.4%)	0 (0%)
	AN	0.7 (1.4%)	0 (0%)	0.7 (1.4%)	0 (-0.1%)
	BN	0.8 (1.6%)	0 (0%)	0.7 (1.5%)	0 (-0.1%)
	D	0.8 (1.6%)	0 (0%)	0.8 (1.5%)	0 (0%)
	C	0.7 (1.4%)	-0.1 (-0.1%)	0.7 (1.4%)	-0.1 (-0.1%)
	All	0.7 (1.5%)	0 (0%)	0.7 (1.4%)	0 (0%)
APR	W	0.8 (1.6%)	0 (0%)	0.8 (1.6%)	0 (0%)
	AN	0.8 (1.5%)	0 (0%)	0.8 (1.5%)	0 (0%)
	BN	1 (1.8%)	0 (0%)	0.9 (1.7%)	0 (0%)
	D	0.8 (1.5%)	-0.1 (-0.1%)	0.8 (1.5%)	-0.1 (-0.1%)
	C	0.9 (1.7%)	0 (0%)	0.9 (1.7%)	0 (0%)
	All	0.9 (1.6%)	0 (0%)	0.9 (1.6%)	0 (0%)
MAY	W	1.6 (3%)	-0.1 (-0.1%)	1.7 (3.1%)	0 (0%)
	AN	0.7 (1.2%)	-0.7 (-1.1%)	1 (1.7%)	-0.3 (-0.6%)
	BN	1.3 (2.3%)	-0.3 (-0.5%)	1.5 (2.7%)	-0.1 (-0.2%)
	D	1.1 (2%)	-0.3 (-0.5%)	1.2 (2.1%)	-0.2 (-0.4%)
	C	1 (1.8%)	-0.1 (-0.2%)	1.1 (2%)	0 (0%)
	All	1.2 (2.2%)	-0.2 (-0.4%)	1.4 (2.4%)	-0.1 (-0.2%)
JUN	W	0.8 (1.4%)	-0.2 (-0.3%)	0.9 (1.6%)	0 (-0.1%)
	AN	0.6 (1%)	-0.3 (-0.6%)	0.8 (1.4%)	-0.1 (-0.2%)
	BN	0.7 (1.2%)	-0.3 (-0.5%)	0.8 (1.4%)	-0.2 (-0.3%)
	D	0.9 (1.5%)	-0.3 (-0.4%)	0.9 (1.6%)	-0.2 (-0.3%)
	C	0.8 (1.4%)	-0.2 (-0.3%)	0.8 (1.3%)	-0.2 (-0.4%)
	All	0.8 (1.3%)	-0.2 (-0.4%)	0.9 (1.5%)	-0.1 (-0.2%)



Alternative 2D and 5A: Sacramento River at Red Bluff Diversion Dam					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	0.5 (0.9%)	0 (0.1%)	0.3 (0.6%)	-0.1 (-0.2%)
	AN	0.8 (1.4%)	0.2 (0.3%)	0.6 (1.1%)	0 (-0.1%)
	BN	0.7 (1.3%)	-0.1 (-0.2%)	0.8 (1.3%)	-0.1 (-0.1%)
	D	1.2 (2%)	0.1 (0.2%)	0.7 (1.3%)	-0.3 (-0.5%)
	C	2.2 (3.7%)	0 (0%)	2.2 (3.6%)	-0.1 (-0.1%)
	All	1 (1.7%)	0 (0.1%)	0.8 (1.4%)	-0.1 (-0.2%)
AUG	W	1.5 (2.5%)	0 (0.1%)	1.2 (2.1%)	-0.2 (-0.4%)
	AN	1.1 (1.8%)	0.1 (0.2%)	0.9 (1.5%)	-0.1 (-0.1%)
	BN	1.4 (2.4%)	-0.1 (-0.2%)	1.3 (2.3%)	-0.1 (-0.2%)
	D	2.3 (3.9%)	0.7 (1.1%)	2.2 (3.8%)	0.6 (1%)
	C	3.3 (5.3%)	-0.1 (-0.1%)	3.5 (5.7%)	0.2 (0.3%)
	All	1.8 (3.1%)	0.1 (0.2%)	1.7 (3%)	0.1 (0.1%)
SEP	W	0.3 (0.5%)	0.2 (0.3%)	0.2 (0.4%)	0.1 (0.2%)
	AN	0.6 (1%)	1 (1.7%)	0 (0%)	0.4 (0.7%)
	BN	2 (3.5%)	0.7 (1.2%)	1.9 (3.2%)	0.6 (1%)
	D	2.8 (4.7%)	0.3 (0.5%)	3 (5%)	0.5 (0.8%)
	C	2.8 (4.5%)	0 (0%)	2.8 (4.5%)	0 (0%)
	All	1.5 (2.6%)	0.4 (0.7%)	1.5 (2.5%)	0.3 (0.5%)
OCT	W	1.4 (2.5%)	0 (0.1%)	1.5 (2.8%)	0.2 (0.3%)
	AN	1.4 (2.5%)	0 (0.1%)	1.5 (2.8%)	0.2 (0.3%)
	BN	1.4 (2.5%)	0 (0%)	1.4 (2.6%)	0 (0.1%)
	D	1.5 (2.7%)	0.1 (0.2%)	1.4 (2.6%)	0 (0%)
	C	1.4 (2.4%)	-0.3 (-0.5%)	1.5 (2.7%)	-0.1 (-0.3%)
	All	1.4 (2.5%)	0 (0%)	1.5 (2.7%)	0.1 (0.1%)
NOV	W	0.9 (1.9%)	-0.2 (-0.5%)	1 (2%)	-0.2 (-0.4%)
	AN	0.8 (1.7%)	-0.3 (-0.6%)	0.9 (1.9%)	-0.2 (-0.4%)
	BN	0.8 (1.6%)	-0.4 (-0.7%)	0.9 (1.8%)	-0.3 (-0.6%)
	D	0.9 (1.8%)	-0.1 (-0.3%)	0.9 (1.7%)	-0.2 (-0.4%)
	C	1 (1.8%)	-0.2 (-0.3%)	1 (2%)	-0.1 (-0.2%)
	All	0.9 (1.8%)	-0.2 (-0.5%)	0.9 (1.9%)	-0.2 (-0.4%)
DEC	W	0.6 (1.2%)	0 (0%)	0.6 (1.2%)	0 (0%)
	AN	0.7 (1.6%)	-0.2 (-0.4%)	0.8 (1.7%)	-0.1 (-0.3%)
	BN	0.8 (1.7%)	-0.1 (-0.2%)	0.8 (1.8%)	0 (-0.1%)
	D	0.9 (1.9%)	0 (0.1%)	0.8 (1.8%)	0 (0%)
	C	1 (2.1%)	0.1 (0.1%)	0.9 (2.1%)	0.1 (0.1%)
	All	0.8 (1.6%)	0 (-0.1%)	0.8 (1.6%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Sacramento River at Hamilton City**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the**  
3 **Sacramento River at Hamilton City, Year-Round**

Alternative 2D and 5A: Sacramento River at Hamilton City					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	45	46	46	46
	AN	45	46	46	46
	BN	44	45	45	45
	D	44	45	45	45
	C	44	45	45	46
	All	45	45	45	46
FEB	W	46	47	47	47
	AN	47	48	48	48
	BN	46	47	47	47
	D	47	48	48	48
	C	48	49	49	49
	All	47	48	48	48
MAR	W	49	50	50	50
	AN	51	51	51	51
	BN	51	52	52	52
	D	52	52	53	52
	C	52	53	53	53
	All	51	52	51	51
APR	W	54	54	54	54
	AN	55	56	56	56
	BN	56	57	57	57
	D	56	57	57	57
	C	56	57	57	57
	All	55	56	56	56
MAY	W	58	60	60	60
	AN	60	61	60	61
	BN	59	61	61	61
	D	59	61	60	60
	C	60	61	61	61
	All	59	61	60	61
JUN	W	61	62	62	62
	AN	61	62	61	61
	BN	60	61	61	61
	D	60	62	61	61
	C	61	62	62	62
	All	61	62	61	62

Alternative 2D and 5A: Sacramento River at Hamilton City					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JUL	W	62	62	62	62
	AN	61	62	62	61
	BN	61	62	62	62
	D	61	62	62	62
	C	63	65	65	65
	All	62	63	63	62
AUG	W	62	64	64	63
	AN	62	63	63	63
	BN	62	63	63	63
	D	62	64	65	64
	C	65	68	68	68
	All	62	64	64	64
SEP	W	60	60	60	60
	AN	62	61	62	62
	BN	62	63	64	64
	D	62	65	65	65
	C	64	67	67	67
	All	62	63	63	63
OCT	W	55	57	57	57
	AN	56	57	57	57
	BN	56	57	58	58
	D	56	58	58	58
	C	57	59	59	59
	All	56	57	57	58
NOV	W	50	51	51	51
	AN	50	51	51	51
	BN	50	52	51	51
	D	51	52	52	52
	C	52	53	53	53
	All	51	52	52	52
DEC	W	46	47	47	47
	AN	46	46	46	46
	BN	45	46	46	46
	D	45	46	46	46
	C	45	46	46	46
	All	46	46	46	46

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Sacramento River at Hamilton City, Year-Round**

Alternative 2D and 5A: Sacramento River at Hamilton City					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JAN	W	0.7 (1.6%)	0 (0.1%)	0.7 (1.6%)	0 (0%)
	AN	0.8 (1.8%)	0 (0%)	0.8 (1.8%)	0 (0%)
	BN	0.9 (2.1%)	0 (0%)	0.9 (2.1%)	0 (0%)
	D	1 (2.2%)	0 (0%)	1 (2.3%)	0.1 (0.1%)
	C	1.1 (2.5%)	-0.1 (-0.1%)	1.2 (2.7%)	0.1 (0.2%)
	All	0.9 (2%)	0 (0%)	0.9 (2%)	0 (0.1%)
FEB	W	0.9 (1.9%)	0 (0%)	0.9 (1.9%)	0 (0%)
	AN	0.9 (1.9%)	0 (0%)	0.9 (1.9%)	0 (0%)
	BN	1 (2.1%)	0 (0%)	1 (2.1%)	0 (0%)
	D	1.1 (2.4%)	0 (0%)	1.1 (2.4%)	0 (0%)
	C	1.2 (2.4%)	0 (-0.1%)	1.2 (2.5%)	0 (0%)
	All	1 (2.1%)	0 (0%)	1 (2.1%)	0 (0%)
MAR	W	0.7 (1.3%)	0 (0%)	0.7 (1.3%)	0 (0%)
	AN	0.7 (1.4%)	0 (-0.1%)	0.7 (1.3%)	0 (-0.1%)
	BN	0.8 (1.5%)	0 (-0.1%)	0.8 (1.5%)	0 (-0.1%)
	D	0.8 (1.6%)	0 (0%)	0.8 (1.5%)	0 (0%)
	C	0.7 (1.3%)	-0.1 (-0.2%)	0.7 (1.3%)	-0.1 (-0.1%)
	All	0.7 (1.4%)	0 (0%)	0.7 (1.4%)	0 (-0.1%)
APR	W	0.8 (1.6%)	0 (0%)	0.8 (1.5%)	0 (0%)
	AN	0.8 (1.5%)	0 (0%)	0.8 (1.5%)	0 (0%)
	BN	1 (1.8%)	0 (0%)	1 (1.7%)	0 (-0.1%)
	D	0.9 (1.5%)	-0.1 (-0.1%)	0.9 (1.6%)	-0.1 (-0.1%)
	C	0.9 (1.6%)	0 (0%)	0.9 (1.6%)	0 (0%)
	All	0.9 (1.6%)	0 (0%)	0.9 (1.6%)	0 (0%)
MAY	W	1.8 (3.1%)	-0.1 (-0.1%)	1.9 (3.2%)	0 (0%)
	AN	0.7 (1.3%)	-0.7 (-1.2%)	1.1 (1.8%)	-0.4 (-0.6%)
	BN	1.4 (2.4%)	-0.3 (-0.6%)	1.6 (2.7%)	-0.1 (-0.2%)
	D	1.2 (2.1%)	-0.3 (-0.5%)	1.3 (2.2%)	-0.3 (-0.4%)
	C	1.1 (1.9%)	-0.2 (-0.3%)	1.3 (2.1%)	0 (0%)
	All	1.4 (2.3%)	-0.3 (-0.5%)	1.5 (2.5%)	-0.1 (-0.2%)
JUN	W	0.9 (1.5%)	-0.2 (-0.4%)	1.1 (1.8%)	-0.1 (-0.1%)
	AN	0.6 (0.9%)	-0.4 (-0.7%)	0.8 (1.4%)	-0.2 (-0.3%)
	BN	0.7 (1.2%)	-0.4 (-0.7%)	0.9 (1.5%)	-0.2 (-0.4%)
	D	0.8 (1.4%)	-0.3 (-0.5%)	0.9 (1.5%)	-0.2 (-0.4%)
	C	0.8 (1.3%)	-0.2 (-0.3%)	0.8 (1.3%)	-0.2 (-0.4%)
	All	0.8 (1.3%)	-0.3 (-0.5%)	0.9 (1.6%)	-0.2 (-0.3%)

Alternative 2D and 5A: Sacramento River at Hamilton City					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	0.5 (0.9%)	0 (0%)	0.4 (0.6%)	-0.1 (-0.2%)
	AN	0.8 (1.3%)	0.1 (0.2%)	0.6 (1%)	-0.1 (-0.1%)
	BN	0.7 (1.2%)	-0.2 (-0.2%)	0.8 (1.3%)	-0.1 (-0.1%)
	D	1.2 (1.9%)	0.2 (0.3%)	0.6 (1.1%)	-0.3 (-0.6%)
	C	2.2 (3.5%)	0 (-0.1%)	2.2 (3.5%)	0 (-0.1%)
	All	1 (1.6%)	0 (0%)	0.8 (1.3%)	-0.2 (-0.2%)
AUG	W	1.7 (2.8%)	0 (0%)	1.4 (2.2%)	-0.3 (-0.5%)
	AN	1.1 (1.8%)	0.1 (0.1%)	0.9 (1.4%)	-0.1 (-0.2%)
	BN	1.3 (2.2%)	-0.2 (-0.4%)	1.4 (2.3%)	-0.2 (-0.3%)
	D	2.5 (4.1%)	0.8 (1.3%)	2.4 (3.8%)	0.6 (1%)
	C	3.2 (4.9%)	0 (0%)	3.4 (5.3%)	0.2 (0.3%)
	All	2 (3.1%)	0.2 (0.2%)	1.8 (2.9%)	0 (0%)
SEP	W	0.2 (0.3%)	0.2 (0.4%)	0.1 (0.1%)	0.1 (0.2%)
	AN	0.5 (0.8%)	1.2 (1.9%)	-0.2 (-0.3%)	0.5 (0.8%)
	BN	2.1 (3.3%)	0.7 (1.1%)	2 (3.2%)	0.6 (0.9%)
	D	3 (4.8%)	0.4 (0.6%)	3.1 (5%)	0.5 (0.8%)
	C	2.6 (4.1%)	0.1 (0.1%)	2.7 (4.2%)	0.1 (0.2%)
	All	1.5 (2.5%)	0.4 (0.7%)	1.4 (2.3%)	0.3 (0.5%)
OCT	W	1.4 (2.5%)	0 (0.1%)	1.5 (2.7%)	0.2 (0.3%)
	AN	1.5 (2.6%)	0 (0.1%)	1.6 (2.8%)	0.2 (0.3%)
	BN	1.5 (2.7%)	0 (0.1%)	1.5 (2.7%)	0 (0%)
	D	1.5 (2.6%)	0.1 (0.1%)	1.4 (2.5%)	0 (0.1%)
	C	1.4 (2.5%)	-0.2 (-0.4%)	1.6 (2.7%)	-0.1 (-0.2%)
	All	1.4 (2.6%)	0 (0%)	1.5 (2.7%)	0.1 (0.1%)
NOV	W	1 (1.9%)	-0.2 (-0.4%)	1 (2%)	-0.1 (-0.3%)
	AN	1 (1.9%)	-0.2 (-0.4%)	1 (2.1%)	-0.1 (-0.3%)
	BN	0.9 (1.8%)	-0.3 (-0.6%)	1 (1.9%)	-0.2 (-0.5%)
	D	1 (1.9%)	-0.1 (-0.3%)	0.9 (1.8%)	-0.2 (-0.3%)
	C	1.1 (2%)	-0.1 (-0.3%)	1.1 (2.1%)	-0.1 (-0.2%)
	All	1 (1.9%)	-0.2 (-0.4%)	1 (2%)	-0.2 (-0.3%)
DEC	W	0.7 (1.5%)	0 (0%)	0.7 (1.5%)	0 (0%)
	AN	0.8 (1.8%)	-0.1 (-0.3%)	0.9 (1.9%)	-0.1 (-0.2%)
	BN	0.9 (1.9%)	-0.1 (-0.2%)	0.9 (2.1%)	0 (-0.1%)
	D	1 (2.1%)	0.1 (0.1%)	0.9 (2%)	0 (0%)
	C	1 (2.3%)	0.1 (0.2%)	1 (2.3%)	0.1 (0.1%)
	All	0.8 (1.8%)	0 (0%)	0.8 (1.9%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Trinity River below Lewiston Reservoir**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the Trinity**  
3 **River below Lewiston Reservoir, Year-Round**

Alternative 2D and 5A: Trinity River below Lewiston Reservoir					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	41	42	42	42
	AN	38	39	40	40
	BN	39	40	39	39
	D	39	40	40	39
	C	39	40	40	40
	All	39	40	40	40
FEB	W	43	44	44	44
	AN	43	44	44	44
	BN	42	43	43	43
	D	42	44	44	43
	C	43	44	44	44
	All	43	44	44	44
MAR	W	46	47	47	46
	AN	47	48	48	48
	BN	47	47	47	47
	D	48	48	49	49
	C	48	49	49	49
	All	47	48	48	48
APR	W	49	50	50	50
	AN	50	51	51	51
	BN	51	52	52	52
	D	51	52	52	52
	C	50	51	51	51
	All	50	51	51	51
MAY	W	46	47	47	47
	AN	46	47	47	47
	BN	46	48	48	48
	D	47	48	48	48
	C	49	51	51	51
	All	47	48	48	48
JUN	W	48	49	49	49
	AN	51	51	51	51
	BN	52	52	52	52
	D	52	53	52	53
	C	56	57	57	58
	All	51	52	52	52

Alternative 2D and 5A: Trinity River below Lewiston Reservoir					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JUL	W	51	53	52	53
	AN	52	52	52	52
	BN	52	53	53	53
	D	51	52	52	52
	C	53	56	57	56
	All	51	53	53	53
AUG	W	52	53	52	52
	AN	51	52	51	52
	BN	52	54	53	54
	D	50	52	52	52
	C	54	60	59	58
	All	52	54	53	53
SEP	W	49	50	50	49
	AN	50	50	50	50
	BN	51	54	53	53
	D	50	53	53	53
	C	57	60	59	59
	All	51	53	53	52
OCT	W	48	50	50	49
	AN	49	51	50	50
	BN	50	52	52	52
	D	50	50	50	50
	C	51	54	53	54
	All	49	51	51	51
NOV	W	44	45	45	45
	AN	45	46	46	46
	BN	45	46	46	46
	D	44	45	45	45
	C	46	47	47	48
	All	45	46	46	46
DEC	W	41	42	42	42
	AN	39	41	40	40
	BN	40	41	40	41
	D	40	41	41	41
	C	39	40	40	40
	All	40	41	41	41

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Trinity River below Lewiston Reservoir, Year-Round**

Alternative 2D and 5A: Trinity River below Lewiston Reservoir					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JAN	W	0.9 (2.1%)	0 (-0.1%)	0.8 (2.1%)	-0.1 (-0.2%)
	AN	1.2 (3%)	0.3 (0.7%)	1.1 (3%)	0.2 (0.6%)
	BN	0.5 (1.3%)	-0.3 (-0.6%)	0.6 (1.7%)	-0.1 (-0.3%)
	D	1 (2.6%)	-0.1 (-0.3%)	0.8 (2.1%)	-0.4 (-0.9%)
	C	0.9 (2.2%)	-0.2 (-0.4%)	1 (2.5%)	-0.1 (-0.2%)
	All	0.9 (2.2%)	-0.1 (-0.2%)	0.9 (2.2%)	-0.1 (-0.2%)
FEB	W	1.2 (2.7%)	0 (0%)	1.2 (2.7%)	0 (0%)
	AN	1.2 (2.9%)	0.1 (0.2%)	1.2 (2.8%)	0.1 (0.1%)
	BN	1.1 (2.6%)	0 (0%)	1.1 (2.7%)	0 (0%)
	D	1.1 (2.7%)	0 (0%)	1.1 (2.6%)	0 (-0.1%)
	C	1.1 (2.6%)	0 (0.1%)	1.1 (2.5%)	0 (-0.1%)
	All	1.2 (2.7%)	0 (0.1%)	1.1 (2.7%)	0 (0%)
MAR	W	0.8 (1.7%)	0 (0%)	0.7 (1.6%)	-0.1 (-0.1%)
	AN	0.8 (1.6%)	0.3 (0.6%)	0.9 (1.8%)	0.4 (0.8%)
	BN	0.8 (1.7%)	0 (0%)	0.8 (1.7%)	0 (0%)
	D	0.4 (0.9%)	0.1 (0.1%)	0.4 (0.8%)	0 (0.1%)
	C	1 (2.1%)	0 (0.1%)	0.9 (1.9%)	-0.1 (-0.2%)
	All	0.7 (1.6%)	0.1 (0.1%)	0.7 (1.5%)	0 (0.1%)
APR	W	0.8 (1.7%)	0 (-0.1%)	0.8 (1.6%)	-0.1 (-0.1%)
	AN	1.1 (2.1%)	0.3 (0.5%)	1 (2%)	0.2 (0.4%)
	BN	1.4 (2.9%)	0.1 (0.1%)	1.3 (2.5%)	-0.1 (-0.3%)
	D	0.9 (1.8%)	-0.1 (-0.2%)	1 (1.9%)	-0.1 (-0.1%)
	C	1 (2%)	0.2 (0.3%)	0.9 (1.7%)	0 (0.1%)
	All	1 (2%)	0 (0.1%)	1 (1.9%)	0 (-0.1%)
MAY	W	1.1 (2.5%)	0 (0%)	1.1 (2.5%)	0 (0%)
	AN	1 (2.3%)	0 (0%)	1 (2.3%)	0 (0%)
	BN	1.2 (2.7%)	0.1 (0.2%)	1.2 (2.7%)	0.1 (0.2%)
	D	1.3 (2.8%)	0 (0.1%)	1.3 (2.9%)	0.1 (0.2%)
	C	1.8 (3.7%)	0 (0%)	1.8 (3.6%)	-0.1 (-0.1%)
	All	1.3 (2.7%)	0 (0.1%)	1.3 (2.7%)	0 (0.1%)
JUN	W	0.8 (1.7%)	0 (0%)	0.8 (1.7%)	0 (0%)
	AN	0.6 (1.2%)	-0.3 (-0.5%)	0.6 (1.2%)	-0.3 (-0.5%)
	BN	0.7 (1.4%)	0.1 (0.3%)	0.4 (0.7%)	-0.2 (-0.4%)
	D	0.4 (0.8%)	-0.1 (-0.2%)	0.6 (1.1%)	0 (0%)
	C	1.8 (3.2%)	0 (-0.1%)	2.1 (3.8%)	0.3 (0.5%)
	All	0.8 (1.6%)	0 (-0.1%)	0.8 (1.7%)	0 (-0.1%)



Alternative 2D and 5A: Trinity River below Lewiston Reservoir					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	1.3 (2.5%)	-0.6 (-1.2%)	2 (3.9%)	0.1 (0.2%)
	AN	0.2 (0.5%)	-0.6 (-1.1%)	0.4 (0.8%)	-0.4 (-0.7%)
	BN	0.8 (1.6%)	-0.1 (-0.1%)	0.9 (1.8%)	0 (0.1%)
	D	1 (1.9%)	0 (-0.1%)	1 (2.1%)	0 (0%)
	C	3.8 (7.3%)	0.9 (1.5%)	3.7 (7.1%)	0.8 (1.3%)
	All	1.4 (2.7%)	-0.2 (-0.3%)	1.6 (3.2%)	0.1 (0.2%)
AUG	W	0.3 (0.7%)	-0.5 (-0.9%)	0.4 (0.8%)	-0.4 (-0.7%)
	AN	0.4 (0.8%)	-0.3 (-0.5%)	0.7 (1.3%)	0 (0%)
	BN	1.2 (2.3%)	-0.4 (-0.8%)	1.5 (2.9%)	-0.1 (-0.2%)
	D	1.9 (3.8%)	0.1 (0.2%)	1.5 (2.9%)	-0.3 (-0.6%)
	C	4.6 (8.5%)	-1 (-1.7%)	4.5 (8.4%)	-1.1 (-1.9%)
	All	1.5 (2.9%)	-0.4 (-0.7%)	1.5 (2.9%)	-0.4 (-0.7%)
SEP	W	0.8 (1.6%)	0 (0%)	0.5 (0.9%)	-0.3 (-0.7%)
	AN	0.5 (1%)	-0.1 (-0.1%)	0.6 (1.2%)	0.1 (0.1%)
	BN	1.8 (3.6%)	-0.6 (-1.1%)	1.8 (3.5%)	-0.6 (-1.1%)
	D	2.7 (5.4%)	0.1 (0.2%)	2.6 (5.2%)	0 (0%)
	C	2.8 (5%)	-0.3 (-0.5%)	2.9 (5.2%)	-0.2 (-0.3%)
	All	1.7 (3.3%)	-0.1 (-0.2%)	1.6 (3.1%)	-0.2 (-0.4%)
OCT	W	1.8 (3.7%)	0 (0%)	1.5 (3.1%)	-0.3 (-0.5%)
	AN	0.8 (1.6%)	-0.4 (-0.8%)	1 (2.1%)	-0.2 (-0.3%)
	BN	1.8 (3.6%)	0 (0.1%)	1.7 (3.4%)	-0.1 (-0.1%)
	D	0.8 (1.7%)	0.1 (0.1%)	0.8 (1.6%)	0 (0%)
	C	2 (3.9%)	-0.2 (-0.5%)	2.3 (4.4%)	0 (0%)
	All	1.5 (3%)	-0.1 (-0.1%)	1.4 (2.9%)	-0.1 (-0.2%)
NOV	W	1.2 (2.7%)	0 (0%)	1.1 (2.5%)	-0.1 (-0.2%)
	AN	0.9 (1.9%)	0 (-0.1%)	1 (2.2%)	0.1 (0.2%)
	BN	1.2 (2.7%)	-0.1 (-0.1%)	1.3 (3%)	0 (0.1%)
	D	1 (2.3%)	0 (-0.1%)	1 (2.3%)	0 (-0.1%)
	C	1.4 (3%)	0.4 (0.8%)	1.5 (3.2%)	0.5 (1%)
	All	1.1 (2.5%)	0 (0.1%)	1.2 (2.6%)	0 (0.1%)
DEC	W	0.9 (2.1%)	-0.4 (-0.9%)	0.9 (2.1%)	-0.3 (-0.8%)
	AN	1 (2.6%)	-0.5 (-1.2%)	1.1 (2.9%)	-0.3 (-0.8%)
	BN	0.9 (2.2%)	-0.2 (-0.5%)	1 (2.5%)	-0.1 (-0.2%)
	D	0.7 (1.6%)	0.1 (0.3%)	0.5 (1.2%)	0 (-0.1%)
	C	0.6 (1.6%)	0 (0%)	0.8 (2%)	0.2 (0.4%)
	All	0.8 (2%)	-0.2 (-0.5%)	0.8 (2.1%)	-0.2 (-0.4%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Trinity River at Douglas City**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the Trinity**  
3 **River at Douglas City, Year-Round**

Alternative 2D and 5A: Trinity River at Douglas City					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	40	41	41	41
	AN	39	39	39	39
	BN	38	39	39	39
	D	38	39	39	39
	C	39	40	40	40
	All	39	40	40	40
FEB	W	43	44	44	44
	AN	43	44	44	44
	BN	42	43	43	43
	D	43	44	44	44
	C	43	44	44	44
	All	43	44	44	44
MAR	W	46	46	46	46
	AN	47	47	47	47
	BN	47	47	47	47
	D	48	48	48	48
	C	48	49	49	48
	All	47	47	47	47
APR	W	51	51	51	51
	AN	52	52	53	53
	BN	52	53	53	53
	D	53	53	53	53
	C	52	53	53	53
	All	52	52	52	52
MAY	W	48	49	49	49
	AN	48	49	49	49
	BN	49	50	50	50
	D	49	50	50	50
	C	52	54	54	54
	All	49	50	50	50
JUN	W	51	52	52	52
	AN	54	55	55	55
	BN	55	56	56	56
	D	57	58	58	58
	C	60	61	61	61
	All	55	56	56	56

Alternative 2D and 5A: Trinity River at Douglas City					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JUL	W	57	59	58	59
	AN	58	59	58	58
	BN	59	60	60	60
	D	59	60	60	60
	C	62	64	64	64
	All	59	60	60	60
AUG	W	60	61	61	61
	AN	59	60	60	60
	BN	60	61	61	61
	D	58	60	60	60
	C	61	64	64	64
	All	60	61	61	61
SEP	W	55	56	56	56
	AN	55	56	56	56
	BN	56	58	58	58
	D	55	57	57	57
	C	59	63	61	61
	All	56	58	57	57
OCT	W	50	52	52	52
	AN	51	52	52	52
	BN	52	53	53	53
	D	51	52	52	52
	C	53	54	54	54
	All	51	52	52	52
NOV	W	44	45	45	45
	AN	45	46	46	46
	BN	45	46	46	46
	D	44	45	45	45
	C	46	46	47	47
	All	44	45	45	45
DEC	W	41	42	42	42
	AN	40	41	41	41
	BN	39	40	40	40
	D	40	40	41	40
	C	39	39	39	39
	All	40	41	41	41

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Trinity River at Douglas City, Year-Round**

Alternative 2D and 5A: Trinity River at Douglas City					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JAN	W	0.7 (1.8%)	0 (0%)	0.7 (1.8%)	0 (0%)
	AN	0.8 (2.2%)	0.2 (0.6%)	0.7 (1.9%)	0.1 (0.3%)
	BN	0.4 (1%)	-0.1 (-0.3%)	0.5 (1.2%)	0 (-0.1%)
	D	0.9 (2.3%)	-0.1 (-0.2%)	0.8 (2%)	-0.2 (-0.4%)
	C	0.8 (2.1%)	-0.1 (-0.2%)	0.9 (2.3%)	0 (0%)
	All	0.7 (1.9%)	0 (-0.1%)	0.7 (1.8%)	0 (-0.1%)
FEB	W	0.8 (1.8%)	0 (0%)	0.8 (1.8%)	0 (0%)
	AN	0.8 (1.9%)	0 (0.1%)	0.8 (1.9%)	0 (0%)
	BN	0.8 (1.9%)	0 (0%)	0.8 (1.9%)	0 (0%)
	D	0.8 (1.9%)	0 (0%)	0.8 (1.9%)	0 (0%)
	C	0.9 (2.2%)	0 (0%)	0.9 (2.1%)	0 (0%)
	All	0.8 (1.9%)	0 (0%)	0.8 (1.9%)	0 (0%)
MAR	W	0.4 (0.9%)	0 (0%)	0.4 (0.9%)	0 (0%)
	AN	0.4 (0.8%)	0.1 (0.2%)	0.4 (0.8%)	0.1 (0.3%)
	BN	0.4 (0.9%)	0 (0%)	0.4 (1%)	0 (0%)
	D	0.3 (0.6%)	0 (0.1%)	0.3 (0.6%)	0 (0%)
	C	0.7 (1.4%)	0 (0%)	0.6 (1.3%)	-0.1 (-0.1%)
	All	0.4 (0.9%)	0 (0%)	0.4 (0.9%)	0 (0%)
APR	W	0.5 (1.1%)	0 (-0.1%)	0.5 (1%)	0 (-0.1%)
	AN	0.6 (1.2%)	0.2 (0.5%)	0.6 (1.2%)	0.2 (0.4%)
	BN	0.8 (1.5%)	0 (0.1%)	0.7 (1.4%)	-0.1 (-0.1%)
	D	0.7 (1.3%)	-0.1 (-0.1%)	0.7 (1.3%)	0 (-0.1%)
	C	0.8 (1.5%)	0.1 (0.1%)	0.7 (1.4%)	0 (0.1%)
	All	0.7 (1.3%)	0 (0%)	0.6 (1.2%)	0 (0%)
MAY	W	1.1 (2.3%)	0 (0%)	1.1 (2.3%)	0 (0%)
	AN	1 (2.1%)	0 (0%)	1 (2.2%)	0 (0%)
	BN	1.3 (2.6%)	0.1 (0.1%)	1.3 (2.6%)	0.1 (0.1%)
	D	1.3 (2.6%)	0 (0%)	1.3 (2.7%)	0.1 (0.1%)
	C	1.8 (3.5%)	0 (0%)	1.8 (3.4%)	-0.1 (-0.1%)
	All	1.3 (2.6%)	0 (0%)	1.3 (2.6%)	0 (0%)
JUN	W	0.7 (1.4%)	0 (0%)	0.7 (1.4%)	0 (0%)
	AN	0.7 (1.3%)	-0.2 (-0.4%)	0.7 (1.3%)	-0.2 (-0.4%)
	BN	0.7 (1.2%)	0.1 (0.2%)	0.4 (0.8%)	-0.2 (-0.3%)
	D	0.7 (1.2%)	-0.1 (-0.2%)	0.8 (1.4%)	0 (0%)
	C	1.5 (2.5%)	0 (0%)	1.7 (2.8%)	0.2 (0.3%)
	All	0.8 (1.5%)	0 (-0.1%)	0.8 (1.5%)	0 (0%)

Alternative 2D and 5A: Trinity River at Douglas City					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	1.4 (2.4%)	-0.4 (-0.7%)	1.9 (3.3%)	0.1 (0.1%)
	AN	0.5 (0.8%)	-0.4 (-0.7%)	0.6 (1%)	-0.3 (-0.4%)
	BN	0.6 (1%)	0 (-0.1%)	0.7 (1.1%)	0 (0%)
	D	1 (1.7%)	0 (0%)	1 (1.7%)	0 (0%)
	C	2.5 (4.1%)	0.4 (0.7%)	2.5 (4%)	0.4 (0.6%)
	All	1.2 (2%)	-0.1 (-0.2%)	1.4 (2.3%)	0 (0.1%)
AUG	W	0.8 (1.3%)	-0.3 (-0.4%)	0.9 (1.4%)	-0.2 (-0.3%)
	AN	0.9 (1.5%)	-0.1 (-0.2%)	1 (1.7%)	0 (0%)
	BN	1.3 (2.2%)	-0.2 (-0.4%)	1.5 (2.5%)	-0.1 (-0.1%)
	D	1.7 (2.9%)	0 (0.1%)	1.5 (2.6%)	-0.2 (-0.3%)
	C	3.2 (5.3%)	-0.6 (-0.9%)	3.1 (5.2%)	-0.6 (-0.9%)
	All	1.5 (2.5%)	-0.2 (-0.4%)	1.5 (2.5%)	-0.2 (-0.3%)
SEP	W	1.1 (1.9%)	0 (0%)	0.9 (1.6%)	-0.2 (-0.4%)
	AN	1 (1.8%)	0 (0%)	1 (1.8%)	0 (0%)
	BN	1.7 (3%)	-0.4 (-0.6%)	1.7 (3%)	-0.3 (-0.6%)
	D	2.2 (4%)	0.1 (0.1%)	2.1 (3.9%)	0 (0%)
	C	2.3 (3.9%)	-1.5 (-2.3%)	2.6 (4.4%)	-1.2 (-1.9%)
	All	1.6 (2.9%)	-0.3 (-0.5%)	1.6 (2.8%)	-0.3 (-0.5%)
OCT	W	1.4 (2.8%)	0 (0%)	1.3 (2.5%)	-0.1 (-0.3%)
	AN	0.7 (1.4%)	-0.2 (-0.5%)	0.9 (1.7%)	-0.1 (-0.2%)
	BN	1.4 (2.8%)	0 (0.1%)	1.4 (2.6%)	0 (-0.1%)
	D	0.9 (1.7%)	0 (0.1%)	0.8 (1.7%)	0 (0%)
	C	1.5 (2.8%)	0 (0%)	1.7 (3.2%)	0.2 (0.4%)
	All	1.2 (2.4%)	0 (0%)	1.2 (2.4%)	0 (0%)
NOV	W	1 (2.2%)	0 (0%)	0.9 (2.1%)	0 (-0.1%)
	AN	0.9 (2.1%)	0 (0%)	1 (2.1%)	0 (0.1%)
	BN	1.1 (2.4%)	0 (0%)	1.1 (2.5%)	0 (0.1%)
	D	0.9 (2.1%)	0 (0%)	0.9 (2.1%)	0 (0%)
	C	1 (2.3%)	0.2 (0.5%)	1.1 (2.3%)	0.3 (0.6%)
	All	1 (2.2%)	0 (0.1%)	1 (2.2%)	0 (0.1%)
DEC	W	0.7 (1.7%)	-0.1 (-0.3%)	0.7 (1.6%)	-0.1 (-0.3%)
	AN	0.8 (1.9%)	-0.2 (-0.6%)	0.8 (2.1%)	-0.2 (-0.4%)
	BN	0.8 (2%)	-0.1 (-0.3%)	0.9 (2.2%)	-0.1 (-0.2%)
	D	0.7 (1.7%)	0.1 (0.2%)	0.6 (1.4%)	0 (-0.1%)
	C	0.6 (1.7%)	0 (0%)	0.7 (1.9%)	0.1 (0.2%)
	All	0.7 (1.8%)	-0.1 (-0.2%)	0.7 (1.8%)	-0.1 (-0.2%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Trinity River below North Fork**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the Trinity**  
3 **River below North Fork, Year-Round**

Alternative 2D and 5A: Trinity River below North Fork					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	40	40	40	40
	AN	38	39	39	39
	BN	38	38	38	38
	D	38	38	38	38
	C	38	39	39	39
	All	39	39	39	39
FEB	W	43	44	44	44
	AN	43	44	44	44
	BN	43	43	43	43
	D	43	43	43	43
	C	43	44	44	44
	All	43	44	44	44
MAR	W	46	46	46	46
	AN	46	47	47	47
	BN	46	47	47	47
	D	47	47	47	47
	C	48	48	48	48
	All	47	47	47	47
APR	W	53	53	53	53
	AN	54	54	54	54
	BN	54	54	54	54
	D	54	54	54	54
	C	54	55	55	55
	All	53	54	54	54
MAY	W	50	51	51	51
	AN	50	51	51	51
	BN	51	52	52	52
	D	51	53	53	53
	C	54	56	56	56
	All	51	52	52	52
JUN	W	55	56	56	56
	AN	58	59	58	59
	BN	60	60	60	60
	D	62	62	62	62
	C	63	65	65	65
	All	59	60	60	60

Alternative 2D and 5A: Trinity River below North Fork					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JUL	W	63	64	64	64
	AN	63	64	64	64
	BN	65	65	65	65
	D	65	66	66	66
	C	68	69	69	69
	All	65	66	66	66
AUG	W	65	66	66	66
	AN	64	65	65	65
	BN	65	66	66	66
	D	64	65	65	65
	C	65	68	67	68
	All	65	66	66	66
SEP	W	59	60	60	60
	AN	59	60	60	60
	BN	59	61	61	61
	D	58	60	60	60
	C	61	63	62	63
	All	59	61	61	61
OCT	W	53	54	54	54
	AN	53	54	54	54
	BN	54	55	55	55
	D	53	54	54	54
	C	54	55	55	55
	All	53	54	54	54
NOV	W	44	44	44	44
	AN	44	45	45	45
	BN	44	45	45	45
	D	44	44	44	44
	C	45	46	46	46
	All	44	45	45	45
DEC	W	41	41	41	41
	AN	40	41	41	41
	BN	39	40	40	40
	D	40	40	40	40
	C	38	39	39	39
	All	40	40	40	40

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Trinity River below North Fork, Year-Round**

Alternative 2D and 5A: Trinity River below North Fork					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JAN	W	0.6 (1.4%)	0 (0%)	0.6 (1.4%)	0 (0%)
	AN	0.6 (1.5%)	0.1 (0.4%)	0.4 (1.1%)	0 (0%)
	BN	0.3 (0.8%)	0 (-0.1%)	0.4 (0.9%)	0 (0%)
	D	0.6 (1.7%)	0 (-0.1%)	0.7 (1.8%)	0 (0%)
	C	0.7 (1.8%)	-0.1 (-0.1%)	0.7 (1.9%)	0 (0%)
	All	0.5 (1.4%)	0 (0%)	0.6 (1.4%)	0 (0%)
FEB	W	0.5 (1.2%)	0 (0%)	0.5 (1.2%)	0 (0%)
	AN	0.6 (1.3%)	0 (0%)	0.6 (1.3%)	0 (0%)
	BN	0.6 (1.4%)	0 (0%)	0.6 (1.4%)	0 (0%)
	D	0.5 (1.3%)	0 (0%)	0.5 (1.3%)	0 (0%)
	C	0.7 (1.7%)	0 (0%)	0.7 (1.7%)	0 (0%)
	All	0.6 (1.3%)	0 (0%)	0.6 (1.3%)	0 (0%)
MAR	W	0.2 (0.5%)	0 (0%)	0.2 (0.5%)	0 (0%)
	AN	0.2 (0.5%)	0 (0.1%)	0.2 (0.4%)	0 (0%)
	BN	0.3 (0.5%)	0 (0%)	0.3 (0.6%)	0 (0%)
	D	0.2 (0.5%)	0 (0%)	0.2 (0.5%)	0 (0%)
	C	0.4 (0.9%)	0 (0%)	0.4 (0.9%)	0 (0%)
	All	0.3 (0.6%)	0 (0%)	0.3 (0.6%)	0 (0%)
APR	W	0.3 (0.6%)	0 (0%)	0.3 (0.7%)	0 (0%)
	AN	0.4 (0.7%)	0.2 (0.3%)	0.2 (0.4%)	0 (0%)
	BN	0.4 (0.8%)	0 (0%)	0.4 (0.8%)	0 (0%)
	D	0.5 (0.8%)	0 (0%)	0.5 (0.9%)	0 (0%)
	C	0.6 (1%)	0 (0%)	0.5 (1%)	0 (0%)
	All	0.4 (0.8%)	0 (0%)	0.4 (0.7%)	0 (0%)
MAY	W	1 (2.1%)	0 (0%)	1 (2.1%)	0 (0%)
	AN	1 (2%)	0 (0%)	1 (2%)	0 (0%)
	BN	1.2 (2.4%)	0.1 (0.1%)	1.2 (2.3%)	0 (0%)
	D	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
	C	1.6 (3%)	0 (0%)	1.6 (3%)	0 (0%)
	All	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
JUN	W	0.6 (1%)	0 (0%)	0.6 (1%)	0 (0%)
	AN	0.7 (1.3%)	-0.1 (-0.2%)	0.9 (1.5%)	0 (0%)
	BN	0.6 (1.1%)	0 (0.1%)	0.6 (1%)	0 (0%)
	D	0.8 (1.3%)	-0.1 (-0.1%)	0.8 (1.4%)	0 (0%)
	C	1.2 (1.9%)	0 (0%)	1.2 (2%)	0 (0%)
	All	0.7 (1.3%)	0 (0%)	0.8 (1.3%)	0 (0%)



Alternative 2D and 5A: Trinity River below North Fork					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	1.3 (2.1%)	-0.2 (-0.4%)	1.6 (2.5%)	0 (0%)
	AN	0.5 (0.9%)	-0.2 (-0.4%)	0.8 (1.2%)	0 (0%)
	BN	0.5 (0.8%)	0 (0%)	0.5 (0.8%)	0 (0%)
	D	0.9 (1.4%)	0 (0%)	0.9 (1.4%)	0 (0%)
	C	1.6 (2.3%)	0.2 (0.3%)	1.4 (2.1%)	0 (0%)
	All	1 (1.6%)	-0.1 (-0.1%)	1.1 (1.7%)	0 (0%)
AUG	W	1 (1.5%)	-0.1 (-0.2%)	1.1 (1.7%)	0 (0%)
	AN	1 (1.6%)	-0.1 (-0.1%)	1.1 (1.7%)	0 (0%)
	BN	1.3 (1.9%)	-0.1 (-0.2%)	1.4 (2.1%)	0 (0%)
	D	1.5 (2.3%)	0 (0%)	1.5 (2.3%)	0 (0%)
	C	2.1 (3.2%)	-0.3 (-0.4%)	2.4 (3.6%)	0 (0%)
	All	1.3 (2%)	-0.1 (-0.2%)	1.4 (2.2%)	0 (0%)
SEP	W	1.2 (2%)	0 (0%)	1.2 (2%)	0 (0%)
	AN	1.1 (1.9%)	0 (0%)	1.2 (2%)	0 (0%)
	BN	1.5 (2.5%)	-0.1 (-0.2%)	1.6 (2.7%)	0 (0%)
	D	1.8 (3.1%)	0.1 (0.1%)	1.7 (3%)	0 (0%)
	C	1.8 (3%)	-0.5 (-0.8%)	2.4 (3.9%)	0 (0%)
	All	1.5 (2.5%)	-0.1 (-0.2%)	1.6 (2.6%)	0 (0%)
OCT	W	1.1 (2.1%)	0 (0%)	1.1 (2.1%)	0 (0%)
	AN	1 (1.8%)	0 (0%)	1 (1.9%)	0 (0%)
	BN	1.1 (2.1%)	0 (0%)	1.2 (2.1%)	0 (0%)
	D	1 (1.8%)	0 (0%)	1 (1.8%)	0 (0%)
	C	1.2 (2.2%)	0 (-0.1%)	1.2 (2.2%)	0 (0%)
	All	1.1 (2%)	0 (0%)	1.1 (2%)	0 (0%)
NOV	W	0.8 (1.8%)	0 (0%)	0.8 (1.7%)	0 (0%)
	AN	0.7 (1.5%)	0 (0%)	0.7 (1.5%)	0 (0%)
	BN	0.9 (2%)	0 (0%)	0.9 (2%)	0 (0%)
	D	0.7 (1.6%)	0 (0%)	0.7 (1.7%)	0 (0%)
	C	0.9 (1.9%)	0.1 (0.2%)	0.8 (1.7%)	0 (0%)
	All	0.8 (1.8%)	0 (0%)	0.8 (1.7%)	0 (0%)
DEC	W	0.6 (1.4%)	0 (0%)	0.6 (1.4%)	0 (0%)
	AN	0.6 (1.4%)	-0.1 (-0.2%)	0.6 (1.6%)	0 (0%)
	BN	0.7 (1.7%)	0 (-0.1%)	0.7 (1.9%)	0 (0%)
	D	0.6 (1.5%)	0.1 (0.1%)	0.5 (1.4%)	0 (0%)
	C	0.6 (1.6%)	0 (0%)	0.6 (1.6%)	0 (0%)
	All	0.6 (1.5%)	0 (0%)	0.6 (1.5%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

## 1 Feather River at Fish Barrier Dam

2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the Feather River at Fish Barrier Dam, Year-Round**  
3

Alternative 2D and 5A: Feather River at Fish Barrier Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	48	49	49	49
	AN	47	49	49	49
	BN	48	49	49	49
	D	47	49	49	49
	C	48	49	50	49
	All	48	49	49	49
FEB	W	48	49	49	49
	AN	48	49	49	49
	BN	48	50	50	50
	D	49	50	50	50
	C	49	51	51	51
	All	48	50	50	50
MAR	W	49	50	50	50
	AN	49	50	50	50
	BN	50	51	51	51
	D	51	52	52	52
	C	51	52	52	53
	All	50	51	51	51
APR	W	51	51	51	51
	AN	51	52	52	52
	BN	52	53	53	52
	D	52	53	53	53
	C	52	53	53	53
	All	51	52	52	52
MAY	W	55	55	55	55
	AN	56	56	56	56
	BN	56	56	56	56
	D	56	56	56	56
	C	56	56	56	56
	All	55	56	56	56
JUN	W	57	58	57	58
	AN	58	58	58	58
	BN	58	58	57	58
	D	58	58	58	58
	C	58	58	58	58
	All	58	58	58	58

Alternative 2D and 5A: Feather River at Fish Barrier Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JUL	W	61	61	61	61
	AN	61	61	61	61
	BN	61	61	61	61
	D	61	61	61	61
	C	61	62	63	62
	All	61	61	62	61
AUG	W	61	61	61	61
	AN	60	60	60	60
	BN	60	60	60	60
	D	60	61	61	61
	C	62	63	62	62
	All	61	61	61	61
SEP	W	56	55	55	55
	AN	56	55	55	56
	BN	56	56	57	57
	D	56	57	57	57
	C	58	59	58	58
	All	56	56	56	56
OCT	W	54	54	54	54
	AN	55	55	55	56
	BN	54	55	55	55
	D	54	55	55	55
	C	54	55	55	55
	All	54	55	55	55
NOV	W	52	53	53	53
	AN	53	54	54	55
	BN	53	54	54	53
	D	52	54	55	54
	C	53	54	53	53
	All	53	54	54	54
DEC	W	49	51	51	50
	AN	49	51	51	51
	BN	49	51	51	51
	D	49	51	51	51
	C	49	51	51	51
	All	49	51	51	51

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Feather River at Fish Barrier Dam, Year-Round**

Alternative 2D and 5A: Feather River at Fish Barrier Dam					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JAN	W	1.3 (2.7%)	0 (0%)	1.3 (2.8%)	0 (0.1%)
	AN	1.5 (3.1%)	-0.1 (-0.3%)	1.4 (3%)	-0.2 (-0.4%)
	BN	1.3 (2.8%)	-0.1 (-0.1%)	1.2 (2.4%)	-0.2 (-0.5%)
	D	1.6 (3.5%)	-0.1 (-0.3%)	1.6 (3.4%)	-0.1 (-0.3%)
	C	2 (4.3%)	0.3 (0.6%)	1.7 (3.7%)	0 (0.1%)
	All	1.5 (3.2%)	0 (0%)	1.4 (3%)	-0.1 (-0.2%)
FEB	W	1.1 (2.3%)	0 (0.1%)	1.1 (2.2%)	0 (0%)
	AN	1.4 (2.9%)	0 (0.1%)	1.2 (2.6%)	-0.1 (-0.2%)
	BN	1.5 (3%)	0 (0%)	1.5 (3.1%)	0 (0%)
	D	1.5 (3.1%)	0.1 (0.1%)	1.5 (3.2%)	0.1 (0.1%)
	C	1.8 (3.7%)	0.1 (0.1%)	1.7 (3.5%)	0 (0%)
	All	1.4 (2.9%)	0 (0.1%)	1.4 (2.8%)	0 (0%)
MAR	W	1 (2.1%)	0.1 (0.1%)	1 (2.1%)	0 (0.1%)
	AN	0.9 (1.9%)	0 (0%)	0.7 (1.5%)	-0.2 (-0.4%)
	BN	1.7 (3.5%)	0.1 (0.2%)	1.7 (3.4%)	0.1 (0.1%)
	D	1.1 (2.1%)	-0.2 (-0.5%)	1 (2%)	-0.3 (-0.6%)
	C	1.2 (2.4%)	0.1 (0.1%)	1.4 (2.7%)	0.2 (0.4%)
	All	1.2 (2.4%)	0 (0%)	1.1 (2.3%)	0 (-0.1%)
APR	W	0.6 (1.1%)	0 (0.1%)	0.6 (1.1%)	0 (0.1%)
	AN	0.6 (1.2%)	0.1 (0.1%)	0.6 (1.1%)	0 (0%)
	BN	0.5 (1%)	0 (0%)	0.5 (0.9%)	-0.1 (-0.1%)
	D	0.5 (1%)	-0.1 (-0.3%)	0.8 (1.5%)	0.1 (0.1%)
	C	1.1 (2.2%)	0 (0%)	1.1 (2.2%)	0 (0%)
	All	0.6 (1.2%)	0 (0%)	0.7 (1.3%)	0 (0%)
MAY	W	0.3 (0.6%)	0 (0%)	0.3 (0.6%)	0 (0%)
	AN	0 (0.1%)	-0.3 (-0.6%)	0.4 (0.7%)	0 (0%)
	BN	0.2 (0.3%)	-0.1 (-0.2%)	0.2 (0.4%)	0 (-0.1%)
	D	0.2 (0.3%)	0 (0%)	0.2 (0.4%)	0 (0%)
	C	0.4 (0.7%)	0.1 (0.2%)	0.4 (0.6%)	0.1 (0.1%)
	All	0.2 (0.4%)	-0.1 (-0.1%)	0.3 (0.5%)	0 (0%)
JUN	W	0.1 (0.2%)	-0.4 (-0.8%)	0.2 (0.4%)	-0.3 (-0.5%)
	AN	-0.3 (-0.4%)	-0.5 (-0.9%)	0 (0.1%)	-0.2 (-0.4%)
	BN	-0.6 (-1%)	-0.7 (-1.3%)	-0.2 (-0.4%)	-0.4 (-0.6%)
	D	0.1 (0.1%)	-0.1 (-0.2%)	0.1 (0.1%)	-0.1 (-0.2%)
	C	0.4 (0.7%)	0.1 (0.1%)	0.4 (0.7%)	0.1 (0.1%)
	All	0 (-0.1%)	-0.4 (-0.6%)	0.1 (0.2%)	-0.2 (-0.4%)

Alternative 2D and 5A: Feather River at Fish Barrier Dam					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	0.2 (0.3%)	0.1 (0.2%)	0 (0%)	-0.1 (-0.1%)
	AN	0.1 (0.2%)	0 (0%)	0 (0.1%)	-0.1 (-0.1%)
	BN	0.3 (0.5%)	0.1 (0.2%)	0.1 (0.2%)	-0.1 (-0.1%)
	D	0.7 (1.1%)	0.4 (0.7%)	0.4 (0.6%)	0.1 (0.2%)
	C	1.8 (2.9%)	0.9 (1.4%)	1.2 (1.9%)	0.3 (0.5%)
	All	0.5 (0.9%)	0.3 (0.5%)	0.3 (0.5%)	0 (0%)
AUG	W	0 (0%)	0.4 (0.7%)	-0.1 (-0.1%)	0.3 (0.5%)
	AN	0.3 (0.4%)	0.3 (0.5%)	0.1 (0.2%)	0.1 (0.2%)
	BN	0.5 (0.8%)	0.2 (0.3%)	0.4 (0.6%)	0.1 (0.2%)
	D	1 (1.7%)	0.2 (0.3%)	1 (1.8%)	0.3 (0.4%)
	C	0.6 (1%)	-0.5 (-0.9%)	0.6 (1%)	-0.6 (-0.9%)
	All	0.4 (0.7%)	0.2 (0.3%)	0.4 (0.6%)	0.1 (0.2%)
SEP	W	-1.1 (-2%)	0.2 (0.4%)	-0.8 (-1.5%)	0.5 (0.9%)
	AN	-0.8 (-1.5%)	0.3 (0.6%)	-0.1 (-0.2%)	1 (1.9%)
	BN	0.8 (1.5%)	0.9 (1.6%)	1.1 (2%)	1.2 (2.2%)
	D	1.5 (2.7%)	0 (0%)	1.6 (2.9%)	0.1 (0.1%)
	C	0 (-0.1%)	-0.8 (-1.4%)	0.4 (0.8%)	-0.3 (-0.6%)
	All	0 (0%)	0.1 (0.3%)	0.3 (0.6%)	0.5 (0.8%)
OCT	W	0.6 (1%)	-0.1 (-0.2%)	0.4 (0.7%)	-0.3 (-0.5%)
	AN	0.2 (0.3%)	-0.3 (-0.6%)	0.8 (1.5%)	0.3 (0.5%)
	BN	0.8 (1.4%)	-0.3 (-0.6%)	0.6 (1.1%)	-0.4 (-0.8%)
	D	1.3 (2.4%)	-0.3 (-0.6%)	1 (1.9%)	-0.6 (-1.1%)
	C	0.5 (1%)	-0.6 (-1%)	0.4 (0.7%)	-0.7 (-1.3%)
	All	0.7 (1.3%)	-0.3 (-0.5%)	0.6 (1.2%)	-0.4 (-0.7%)
NOV	W	1.2 (2.2%)	0.1 (0.2%)	0.8 (1.6%)	-0.2 (-0.4%)
	AN	1.2 (2.2%)	-0.1 (-0.1%)	1.6 (3%)	0.3 (0.6%)
	BN	0.8 (1.6%)	-0.1 (-0.2%)	0.5 (1%)	-0.5 (-0.8%)
	D	2.4 (4.5%)	0.5 (0.9%)	1.6 (3.1%)	-0.3 (-0.5%)
	C	0.7 (1.4%)	-0.4 (-0.7%)	0.5 (0.9%)	-0.6 (-1.1%)
	All	1.3 (2.5%)	0.1 (0.1%)	1 (1.9%)	-0.3 (-0.5%)
DEC	W	1.8 (3.7%)	-0.1 (-0.1%)	1.5 (3.1%)	-0.4 (-0.7%)
	AN	1.8 (3.7%)	-0.2 (-0.3%)	1.8 (3.7%)	-0.2 (-0.4%)
	BN	2.4 (4.9%)	0.3 (0.6%)	2.2 (4.6%)	0.2 (0.3%)
	D	2.5 (5%)	0 (0%)	2.1 (4.3%)	-0.3 (-0.6%)
	C	2.1 (4.2%)	0.4 (0.9%)	1.9 (3.9%)	0.3 (0.6%)
	All	2.1 (4.3%)	0.1 (0.2%)	1.9 (3.8%)	-0.1 (-0.3%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Feather River Low-Flow Channel (above Thermalito Afterbay)**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the Feather**  
3 **River Low-Flow Channel (above Thermalito Afterbay), Year-Round**

Alternative 2D and 5A: River Low-Flow Channel (above Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	47	47	49	49
	AN	47	47	49	49
	BN	47	47	48	48
	D	47	47	48	48
	C	47	47	49	49
	All	47	47	49	49
FEB	W	49	49	50	50
	AN	49	49	50	50
	BN	49	49	50	50
	D	49	49	51	51
	C	50	50	52	52
	All	49	49	50	50
MAR	W	50	50	51	51
	AN	51	51	52	52
	BN	51	52	53	53
	D	52	52	53	53
	C	53	53	54	54
	All	51	51	53	53
APR	W	53	53	54	54
	AN	55	55	55	55
	BN	55	55	56	56
	D	55	55	56	56
	C	55	55	56	56
	All	55	55	55	55
MAY	W	59	59	60	60
	AN	60	60	61	61
	BN	60	60	61	61
	D	60	60	61	61
	C	60	60	61	61
	All	60	60	61	61
JUN	W	63	63	64	64
	AN	64	64	65	65
	BN	64	64	64	65
	D	64	64	65	65
	C	63	63	64	64
	All	64	64	64	64

<b>Alternative 2D and 5A: River Low-Flow Channel (above Thermalito Afterbay)</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	68	68	68	68
	AN	67	67	68	68
	BN	67	67	68	68
	D	67	67	68	68
	C	67	68	69	69
	All	67	67	68	68
AUG	W	66	66	67	67
	AN	65	65	66	66
	BN	66	66	67	67
	D	65	65	67	67
	C	67	67	68	68
	All	66	66	67	67
SEP	W	60	59	60	60
	AN	60	59	60	60
	BN	60	60	61	62
	D	60	60	61	62
	C	61	61	62	62
	All	60	60	61	61
OCT	W	55	55	56	56
	AN	57	56	57	58
	BN	56	56	57	57
	D	56	56	57	57
	C	56	56	57	57
	All	56	56	57	57
NOV	W	52	52	54	53
	AN	53	53	55	55
	BN	53	53	54	54
	D	53	53	55	54
	C	53	53	54	54
	All	53	53	54	54
DEC	W	48	48	50	50
	AN	49	49	50	50
	BN	48	48	50	50
	D	48	48	50	50
	C	48	48	50	50
	All	48	48	50	50

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Feather River Low-Flow Channel (above Thermalito Afterbay), Year-Round**

<b>Alternative 2D and 5A: River Low-Flow Channel (above Thermalito Afterbay)</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS VS. A2D_ELT</b>	<b>NAA_ELT VS. A2D_ELT</b>	<b>EXISTING CONDITIONS VS. A5A_ELT</b>	<b>NAA_ELT VS. A5A_ELT</b>
JAN	W	1.3 (2.8%)	1.3 (2.8%)	1.4 (2.9%)	0.1 (0.1%)
	AN	1.5 (3.2%)	1.3 (2.8%)	1.5 (3.1%)	-0.1 (-0.3%)
	BN	1.3 (2.7%)	1.5 (3.1%)	1.2 (2.5%)	-0.2 (-0.4%)
	D	1.6 (3.3%)	1.5 (3.2%)	1.5 (3.3%)	-0.1 (-0.3%)
	C	1.9 (4%)	2 (4.2%)	1.7 (3.5%)	0 (0%)
	All	1.5 (3.1%)	1.5 (3.2%)	1.4 (3%)	-0.1 (-0.1%)
FEB	W	1.2 (2.4%)	1.3 (2.6%)	1.2 (2.4%)	0 (0%)
	AN	1.4 (2.8%)	1.4 (2.8%)	1.3 (2.6%)	-0.1 (-0.1%)
	BN	1.5 (3%)	1.4 (2.8%)	1.5 (3%)	0 (0%)
	D	1.5 (3%)	1.4 (2.9%)	1.5 (3.1%)	0 (0.1%)
	C	1.7 (3.4%)	1.7 (3.4%)	1.7 (3.4%)	0 (0%)
	All	1.4 (2.9%)	1.4 (2.9%)	1.4 (2.8%)	0 (0%)
MAR	W	1 (2.1%)	1.1 (2.2%)	1 (2.1%)	0 (0.1%)
	AN	0.9 (1.8%)	1 (1.9%)	0.8 (1.6%)	-0.1 (-0.2%)
	BN	1.5 (3%)	1.2 (2.3%)	1.5 (2.9%)	0 (0.1%)
	D	1.1 (2%)	1 (1.8%)	1 (1.9%)	-0.2 (-0.5%)
	C	1.2 (2.3%)	1.1 (2.1%)	1.3 (2.5%)	0.1 (0.2%)
	All	1.1 (2.2%)	1.1 (2.1%)	1.1 (2.2%)	0 (-0.1%)
APR	W	0.6 (1.2%)	0.6 (1.2%)	0.6 (1.2%)	0 (0%)
	AN	0.7 (1.3%)	0.7 (1.3%)	0.7 (1.2%)	0 (0%)
	BN	0.6 (1.1%)	0.6 (1%)	0.6 (1%)	0 (-0.1%)
	D	0.7 (1.3%)	0.8 (1.4%)	0.9 (1.6%)	0 (0.1%)
	C	1 (1.9%)	1.1 (2%)	1.1 (2%)	0 (0%)
	All	0.7 (1.3%)	0.7 (1.3%)	0.8 (1.4%)	0 (0%)
MAY	W	0.8 (1.3%)	0.8 (1.3%)	0.8 (1.4%)	0 (0%)
	AN	0.6 (1%)	0.6 (1%)	0.8 (1.3%)	0 (0%)
	BN	0.7 (1.2%)	0.7 (1.1%)	0.7 (1.2%)	0 (0%)
	D	0.7 (1.2%)	0.7 (1.2%)	0.7 (1.2%)	0 (0%)
	C	0.9 (1.4%)	0.8 (1.4%)	0.8 (1.4%)	0 (0%)
	All	0.7 (1.2%)	0.7 (1.2%)	0.8 (1.3%)	0 (0%)
JUN	W	0.7 (1.2%)	0.7 (1.2%)	0.8 (1.3%)	-0.2 (-0.3%)
	AN	0.6 (0.9%)	0.6 (1%)	0.8 (1.2%)	-0.2 (-0.2%)
	BN	0.4 (0.6%)	0.4 (0.6%)	0.7 (1%)	-0.2 (-0.3%)
	D	0.8 (1.3%)	0.9 (1.4%)	0.8 (1.3%)	-0.1 (-0.1%)
	C	0.9 (1.4%)	0.9 (1.5%)	0.9 (1.4%)	0.1 (0.1%)
	All	0.7 (1.1%)	0.7 (1.1%)	0.8 (1.3%)	-0.1 (-0.2%)



<b>Alternative 2D and 5A: River Low-Flow Channel (above Thermalito Afterbay)</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS VS. A2D_ELT</b>	<b>NAA_ELT VS. A2D_ELT</b>	<b>EXISTING CONDITIONS VS. A5A_ELT</b>	<b>NAA_ELT VS. A5A_ELT</b>
JUL	W	0.9 (1.3%)	0.9 (1.4%)	0.8 (1.1%)	-0.1 (-0.1%)
	AN	0.9 (1.3%)	0.9 (1.4%)	0.8 (1.2%)	0 (-0.1%)
	BN	1 (1.5%)	1 (1.5%)	0.9 (1.3%)	-0.1 (-0.1%)
	D	1.2 (1.8%)	1.2 (1.8%)	1 (1.6%)	0.1 (0.1%)
	C	2 (3%)	1.6 (2.4%)	1.6 (2.5%)	0.2 (0.3%)
	All	1.2 (1.7%)	1.1 (1.6%)	1 (1.5%)	0 (0%)
AUG	W	0.8 (1.2%)	0.9 (1.4%)	0.7 (1.1%)	0.2 (0.3%)
	AN	0.9 (1.4%)	1 (1.5%)	0.8 (1.2%)	0.1 (0.1%)
	BN	1.1 (1.7%)	1.1 (1.7%)	1.1 (1.6%)	0.1 (0.1%)
	D	1.4 (2.2%)	1.2 (1.8%)	1.5 (2.2%)	0.2 (0.3%)
	C	1.2 (1.8%)	1.2 (1.7%)	1.2 (1.8%)	-0.4 (-0.6%)
	All	1.1 (1.6%)	1.1 (1.6%)	1 (1.6%)	0.1 (0.1%)
SEP	W	-0.3 (-0.5%)	0.8 (1.3%)	-0.1 (-0.2%)	0.3 (0.6%)
	AN	-0.1 (-0.2%)	0.9 (1.5%)	0.4 (0.7%)	0.8 (1.3%)
	BN	1.1 (1.8%)	1.2 (2%)	1.3 (2.1%)	0.8 (1.4%)
	D	1.6 (2.7%)	1.5 (2.5%)	1.7 (2.8%)	0.1 (0.1%)
	C	0.4 (0.7%)	1 (1.6%)	0.8 (1.3%)	-0.2 (-0.4%)
	All	0.5 (0.8%)	1.1 (1.8%)	0.7 (1.2%)	0.3 (0.6%)
OCT	W	0.7 (1.3%)	0.7 (1.2%)	0.6 (1.1%)	-0.2 (-0.4%)
	AN	0.5 (0.9%)	0.9 (1.6%)	1 (1.7%)	0.2 (0.4%)
	BN	1 (1.7%)	0.7 (1.2%)	0.9 (1.5%)	-0.4 (-0.6%)
	D	1.4 (2.4%)	1.4 (2.5%)	1.1 (2%)	-0.5 (-0.9%)
	C	0.8 (1.4%)	0.8 (1.4%)	0.7 (1.2%)	-0.6 (-1%)
	All	0.9 (1.6%)	0.9 (1.6%)	0.8 (1.5%)	-0.3 (-0.5%)
NOV	W	1.2 (2.3%)	1.2 (2.3%)	0.9 (1.8%)	-0.2 (-0.3%)
	AN	1.2 (2.2%)	1.1 (2%)	1.5 (2.8%)	0.3 (0.5%)
	BN	0.9 (1.7%)	1 (2%)	0.6 (1.2%)	-0.4 (-0.7%)
	D	2.2 (4.1%)	2.1 (4.1%)	1.6 (3%)	-0.2 (-0.4%)
	C	0.8 (1.5%)	0.8 (1.5%)	0.6 (1.1%)	-0.5 (-1%)
	All	1.3 (2.5%)	1.3 (2.5%)	1 (2%)	-0.2 (-0.4%)
DEC	W	1.8 (3.6%)	1.8 (3.8%)	1.5 (3%)	-0.3 (-0.6%)
	AN	1.7 (3.5%)	1.6 (3.4%)	1.7 (3.4%)	-0.2 (-0.4%)
	BN	2.1 (4.4%)	2 (4.2%)	2 (4.2%)	0.1 (0.2%)
	D	2.2 (4.6%)	2.2 (4.5%)	2 (4.1%)	-0.3 (-0.5%)
	C	1.9 (3.9%)	1.9 (4%)	1.8 (3.7%)	0.3 (0.5%)
	All	1.9 (4%)	1.9 (4%)	1.7 (3.6%)	-0.1 (-0.3%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Feather River High-Flow Channel (below Thermalito Afterbay)**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the Feather**  
3 **River High-Flow Channel (below Thermalito Afterbay), Year-Round**

Alternative 2D and 5A: Feather River High-Flow Channel (below Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	47	47	48	48
	AN	47	47	48	48
	BN	46	46	48	47
	D	46	46	47	47
	C	46	46	48	48
	All	47	46	48	48
FEB	W	49	49	50	50
	AN	49	49	51	51
	BN	49	50	51	51
	D	50	50	51	52
	C	51	51	52	52
	All	50	50	51	51
MAR	W	51	51	52	52
	AN	52	53	53	53
	BN	53	54	55	55
	D	54	54	56	56
	C	54	54	56	55
	All	53	53	54	54
APR	W	55	55	56	56
	AN	57	57	58	58
	BN	58	57	58	58
	D	57	57	59	59
	C	57	57	58	58
	All	57	57	57	57
MAY	W	61	61	62	62
	AN	63	63	63	64
	BN	63	63	64	64
	D	63	63	64	64
	C	63	63	65	65
	All	62	62	63	63
JUN	W	66	66	66	67
	AN	67	67	67	68
	BN	67	67	66	68
	D	68	68	69	69
	C	68	68	69	69
	All	67	67	67	68

<b>Alternative 2D and 5A: Feather River High-Flow Channel (below Thermalito Afterbay)</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	70	69	70	69
	AN	68	68	68	68
	BN	68	68	70	68
	D	68	68	71	69
	C	70	70	74	74
	All	69	69	71	70
AUG	W	70	70	70	70
	AN	67	67	69	67
	BN	68	68	70	69
	D	67	68	71	70
	C	70	71	72	72
	All	69	69	70	70
SEP	W	64	61	63	64
	AN	64	61	64	64
	BN	65	65	65	64
	D	64	64	65	64
	C	64	64	66	66
	All	64	63	64	64
OCT	W	58	59	60	60
	AN	60	59	60	61
	BN	59	59	60	60
	D	58	58	60	60
	C	59	59	60	60
	All	59	59	60	60
NOV	W	53	53	54	54
	AN	54	54	55	55
	BN	53	53	54	54
	D	53	53	55	54
	C	53	53	55	54
	All	53	53	54	54
DEC	W	48	47	49	49
	AN	48	48	49	49
	BN	47	47	49	49
	D	47	47	49	49
	C	47	47	48	48
	All	47	47	49	49

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Feather River High-Flow Channel (below Thermalito Afterbay), Year-**  
 3 **Round**

<b>Alternative 2D and 5A: Feather River High-Flow Channel (below Thermalito Afterbay)</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS VS. A2D_ELT</b>	<b>NAA_ELT VS. A2D_ELT</b>	<b>EXISTING CONDITIONS VS. A5A_ELT</b>	<b>NAA_ELT VS. A5A_ELT</b>
JAN	W	1.2 (2.6%)	1.3 (2.7%)	1.3 (2.8%)	0 (0.1%)
	AN	1.4 (2.9%)	1.4 (3%)	1.3 (2.7%)	-0.1 (-0.2%)
	BN	1.2 (2.5%)	1.3 (2.9%)	1.1 (2.3%)	-0.3 (-0.5%)
	D	1.3 (2.9%)	1.4 (3%)	1.3 (2.9%)	0 (0.1%)
	C	1.6 (3.4%)	1.7 (3.7%)	1.5 (3.2%)	-0.1 (-0.1%)
	All	1.3 (2.8%)	1.4 (3%)	1.3 (2.8%)	0 (-0.1%)
FEB	W	1.2 (2.4%)	1.1 (2.3%)	1.1 (2.3%)	-0.1 (-0.1%)
	AN	1.4 (2.8%)	1.2 (2.3%)	1.4 (2.8%)	-0.2 (-0.4%)
	BN	1.6 (3.3%)	1.5 (3.1%)	1.7 (3.4%)	0.1 (0.2%)
	D	1.5 (2.9%)	1.4 (2.8%)	1.5 (3%)	0.1 (0.2%)
	C	1.6 (3.2%)	1.6 (3.2%)	1.5 (3%)	0 (0%)
	All	1.4 (2.9%)	1.3 (2.7%)	1.4 (2.8%)	0 (0%)
MAR	W	1 (1.9%)	1 (1.9%)	0.9 (1.8%)	0 (0%)
	AN	0.3 (0.6%)	0.2 (0.4%)	0.2 (0.3%)	-0.2 (-0.3%)
	BN	1.6 (3%)	1.2 (2.2%)	1.5 (2.8%)	0.2 (0.3%)
	D	1.3 (2.4%)	1.1 (2%)	1.3 (2.4%)	0.1 (0.2%)
	C	1.7 (3.1%)	1.6 (3%)	1.5 (2.8%)	0.1 (0.2%)
	All	1.2 (2.2%)	1 (1.9%)	1.1 (2.1%)	0 (0.1%)
APR	W	0.7 (1.3%)	0.7 (1.3%)	0.7 (1.3%)	0 (0%)
	AN	0.9 (1.5%)	0.9 (1.5%)	0.9 (1.5%)	0 (0%)
	BN	0.5 (0.8%)	0.6 (1%)	0.4 (0.8%)	0 (-0.1%)
	D	1.4 (2.4%)	1.4 (2.5%)	1.2 (2%)	0.1 (0.2%)
	C	1.4 (2.4%)	1.4 (2.5%)	1.2 (2.1%)	0.1 (0.1%)
	All	0.9 (1.7%)	1 (1.7%)	0.9 (1.5%)	0 (0.1%)
MAY	W	1.3 (2.2%)	1.3 (2.2%)	1.3 (2.2%)	0 (0%)
	AN	0.4 (0.7%)	0.4 (0.6%)	0.9 (1.4%)	0 (0%)
	BN	1 (1.6%)	1.1 (1.7%)	1.2 (1.8%)	0 (0%)
	D	1.4 (2.2%)	1.4 (2.2%)	1.5 (2.4%)	0 (0%)
	C	1.4 (2.3%)	1.5 (2.4%)	1.4 (2.2%)	-0.1 (-0.1%)
	All	1.2 (1.9%)	1.2 (1.9%)	1.3 (2.1%)	0 (0%)
JUN	W	0.3 (0.4%)	0.3 (0.5%)	1.3 (2.1%)	-0.3 (-0.5%)
	AN	-0.8 (-1.1%)	-0.7 (-1.1%)	0.8 (1.2%)	-0.6 (-0.9%)
	BN	-1.4 (-2.1%)	-1.4 (-2.1%)	0.5 (0.8%)	-0.7 (-1%)
	D	0.7 (1%)	0.6 (0.9%)	1 (1.5%)	-0.5 (-0.7%)
	C	1.7 (2.4%)	1.6 (2.4%)	1.8 (2.6%)	0.2 (0.3%)
	All	0.1 (0.2%)	0.1 (0.2%)	1.1 (1.7%)	-0.4 (-0.6%)

Alternative 2D and 5A: Feather River High-Flow Channel (below Thermalito Afterbay)					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	0.7 (1%)	0.8 (1.2%)	-0.3 (-0.4%)	-0.3 (-0.5%)
	AN	0.5 (0.8%)	0.8 (1.1%)	0.1 (0.2%)	-0.4 (-0.5%)
	BN	1.5 (2.2%)	1.6 (2.3%)	0.5 (0.7%)	-0.5 (-0.8%)
	D	2.8 (4.1%)	2.7 (4%)	1.4 (2.1%)	0.1 (0.2%)
	C	4.5 (6.4%)	4 (5.6%)	3.9 (5.6%)	1.9 (2.7%)
	All	1.8 (2.7%)	1.8 (2.7%)	0.9 (1.3%)	0.1 (0.1%)
AUG	W	0.5 (0.7%)	0.7 (1%)	0.3 (0.4%)	0.3 (0.4%)
	AN	1.6 (2.4%)	1.6 (2.4%)	0.2 (0.3%)	-0.5 (-0.8%)
	BN	1.9 (2.8%)	2 (3%)	1.1 (1.6%)	-0.1 (-0.2%)
	D	3.6 (5.4%)	3.2 (4.8%)	2.7 (4.1%)	0.7 (1%)
	C	1.7 (2.4%)	1 (1.3%)	2.4 (3.4%)	0.2 (0.3%)
	All	1.8 (2.6%)	1.6 (2.4%)	1.3 (1.9%)	0.2 (0.2%)
SEP	W	-1.1 (-1.7%)	1.9 (3.1%)	0.1 (0.1%)	2.2 (3.6%)
	AN	-0.4 (-0.6%)	2.3 (3.7%)	0.3 (0.5%)	2.2 (3.5%)
	BN	0.1 (0.2%)	0 (0%)	-0.5 (-0.8%)	-1.5 (-2.3%)
	D	0.5 (0.8%)	0.8 (1.2%)	-0.5 (-0.8%)	-1 (-1.5%)
	C	1.7 (2.6%)	1.9 (2.9%)	1.7 (2.7%)	0.1 (0.2%)
	All	0 (0%)	1.4 (2.2%)	0.1 (0.2%)	0.6 (0.9%)
OCT	W	1.2 (2%)	1 (1.8%)	1.1 (1.8%)	-0.2 (-0.3%)
	AN	0.8 (1.4%)	1 (1.6%)	1.3 (2.2%)	0.3 (0.4%)
	BN	1.1 (1.8%)	0.9 (1.5%)	0.9 (1.5%)	-0.4 (-0.6%)
	D	1.4 (2.4%)	1.4 (2.4%)	1.3 (2.2%)	-0.1 (-0.1%)
	C	1.5 (2.5%)	1.4 (2.4%)	1.1 (1.8%)	-0.3 (-0.5%)
	All	1.2 (2%)	1.1 (1.9%)	1.1 (1.9%)	-0.2 (-0.3%)
NOV	W	1.2 (2.3%)	1.1 (2.2%)	1.1 (2%)	-0.1 (-0.1%)
	AN	1.3 (2.5%)	1.3 (2.3%)	1.5 (2.9%)	0.2 (0.3%)
	BN	1.1 (2%)	1.2 (2.3%)	0.9 (1.6%)	-0.3 (-0.5%)
	D	1.8 (3.4%)	1.8 (3.4%)	1.4 (2.7%)	-0.2 (-0.4%)
	C	1.1 (2%)	1 (1.9%)	1 (1.8%)	-0.2 (-0.4%)
	All	1.3 (2.5%)	1.3 (2.4%)	1.2 (2.2%)	-0.1 (-0.2%)
DEC	W	1.4 (2.9%)	1.5 (3.2%)	1.2 (2.6%)	-0.2 (-0.5%)
	AN	1.6 (3.3%)	1.5 (3%)	1.6 (3.4%)	-0.1 (-0.1%)
	BN	1.7 (3.6%)	1.7 (3.6%)	1.7 (3.6%)	0.1 (0.3%)
	D	2 (4.2%)	1.9 (4.1%)	1.8 (3.8%)	0 (0%)
	C	1.3 (2.7%)	1.3 (2.7%)	1.6 (3.5%)	0.2 (0.5%)
	All	1.6 (3.3%)	1.6 (3.4%)	1.5 (3.3%)	0 (-0.1%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

## 1 Feather River at Gridley Dam

2 Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the Feather  
3 River at Gridley Dam, Year-Round

Alternative 2D and 5A: Feather River at Gridley Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	47	47	48	48
	AN	47	47	48	48
	BN	46	46	47	47
	D	46	45	47	47
	C	46	46	48	48
	All	46	46	48	48
FEB	W	49	49	50	50
	AN	49	50	51	51
	BN	50	50	51	51
	D	50	50	52	52
	C	51	51	53	52
	All	50	50	51	51
MAR	W	51	51	52	52
	AN	53	53	53	53
	BN	54	54	55	55
	D	55	55	56	56
	C	54	54	56	56
	All	53	53	54	54
APR	W	56	56	56	56
	AN	58	58	59	59
	BN	59	59	59	59
	D	59	59	60	60
	C	58	58	60	59
	All	58	58	58	58
MAY	W	61	61	63	63
	AN	64	64	64	65
	BN	64	64	65	65
	D	64	64	65	66
	C	64	64	66	66
	All	63	63	64	65
JUN	W	67	67	67	68
	AN	69	69	68	69
	BN	69	69	67	69
	D	69	69	70	70
	C	69	69	70	70
	All	68	68	68	69

Alternative 2D and 5A: Feather River at Gridley Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JUL	W	70	70	71	70
	AN	69	68	69	69
	BN	69	69	70	69
	D	69	69	72	70
	C	71	71	75	75
	All	70	70	72	71
AUG	W	71	71	71	71
	AN	68	68	70	68
	BN	69	69	71	70
	D	68	68	72	71
	C	71	72	73	73
	All	69	70	71	71
SEP	W	65	61	63	65
	AN	65	62	64	65
	BN	66	66	67	66
	D	65	65	66	66
	C	66	65	67	67
	All	65	64	65	66
OCT	W	59	59	60	60
	AN	60	60	61	61
	BN	60	60	61	61
	D	59	59	60	60
	C	59	59	61	61
	All	59	59	60	60
NOV	W	53	53	54	54
	AN	54	54	55	55
	BN	53	53	54	54
	D	53	53	54	54
	C	54	54	55	55
	All	53	53	54	54
DEC	W	48	47	49	49
	AN	47	48	49	49
	BN	47	47	48	48
	D	47	47	49	48
	C	46	46	48	48
	All	47	47	49	48

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Feather River at Gridley Dam, Year-Round**

Alternative 2D and 5A: Feather River at Gridley Dam					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JAN	W	1.2 (2.5%)	1.3 (2.7%)	1.3 (2.8%)	0 (0.1%)
	AN	1.4 (2.9%)	1.4 (3%)	1.3 (2.7%)	-0.1 (-0.2%)
	BN	1.1 (2.5%)	1.3 (2.9%)	1.1 (2.3%)	-0.3 (-0.5%)
	D	1.3 (2.8%)	1.4 (3%)	1.3 (2.9%)	0.1 (0.1%)
	C	1.6 (3.4%)	1.7 (3.7%)	1.5 (3.1%)	-0.1 (-0.2%)
	All	1.3 (2.8%)	1.4 (3%)	1.3 (2.8%)	0 (-0.1%)
FEB	W	1.2 (2.4%)	1.1 (2.3%)	1.1 (2.3%)	-0.1 (-0.1%)
	AN	1.4 (2.9%)	1.2 (2.3%)	1.4 (2.9%)	-0.2 (-0.4%)
	BN	1.7 (3.4%)	1.5 (3%)	1.7 (3.5%)	0.1 (0.3%)
	D	1.4 (2.9%)	1.4 (2.8%)	1.5 (2.9%)	0.1 (0.1%)
	C	1.6 (3.1%)	1.6 (3.1%)	1.5 (2.9%)	0 (0%)
	All	1.4 (2.8%)	1.3 (2.7%)	1.4 (2.8%)	0 (0%)
MAR	W	1 (1.8%)	0.9 (1.8%)	0.9 (1.7%)	0 (0%)
	AN	0.3 (0.7%)	0.2 (0.4%)	0.2 (0.3%)	-0.2 (-0.4%)
	BN	1.6 (3%)	1.2 (2.2%)	1.5 (2.8%)	0.1 (0.2%)
	D	1.3 (2.3%)	1.1 (2%)	1.3 (2.3%)	0.1 (0.1%)
	C	1.5 (2.8%)	1.5 (2.7%)	1.4 (2.5%)	0.1 (0.2%)
	All	1.1 (2.1%)	1 (1.9%)	1 (2%)	0 (0%)
APR	W	0.7 (1.3%)	0.7 (1.3%)	0.7 (1.3%)	0 (0%)
	AN	0.9 (1.5%)	0.9 (1.5%)	0.8 (1.5%)	0 (0%)
	BN	0.6 (1%)	0.6 (1.1%)	0.6 (0.9%)	0 (0%)
	D	1.2 (2.1%)	1.2 (2.1%)	1.1 (1.9%)	0.1 (0.2%)
	C	1.2 (2.1%)	1.2 (2.1%)	1.1 (1.9%)	0 (0%)
	All	0.9 (1.5%)	0.9 (1.6%)	0.9 (1.5%)	0 (0%)
MAY	W	1.5 (2.4%)	1.5 (2.4%)	1.5 (2.4%)	0 (0%)
	AN	0.4 (0.7%)	0.4 (0.6%)	1.1 (1.7%)	0 (0%)
	BN	1 (1.6%)	1 (1.6%)	1.2 (1.9%)	0 (0%)
	D	1.3 (2%)	1.3 (2%)	1.4 (2.2%)	0 (0%)
	C	1.4 (2.2%)	1.5 (2.3%)	1.4 (2.2%)	-0.1 (-0.1%)
	All	1.2 (1.9%)	1.2 (1.9%)	1.4 (2.1%)	0 (0%)
JUN	W	0.4 (0.6%)	0.4 (0.6%)	1.4 (2.1%)	-0.5 (-0.7%)
	AN	-0.9 (-1.2%)	-0.8 (-1.2%)	0.7 (1.1%)	-0.8 (-1.1%)
	BN	-1.6 (-2.4%)	-1.6 (-2.4%)	0.3 (0.5%)	-0.9 (-1.3%)
	D	0.6 (0.9%)	0.6 (0.9%)	0.9 (1.3%)	-0.5 (-0.7%)
	C	1.6 (2.4%)	1.6 (2.4%)	1.7 (2.5%)	0.2 (0.2%)
	All	0.1 (0.2%)	0.1 (0.2%)	1.1 (1.6%)	-0.5 (-0.7%)



Alternative 2D and 5A: Feather River at Gridley Dam					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	0.8 (1.2%)	1 (1.4%)	-0.2 (-0.3%)	-0.4 (-0.5%)
	AN	0.6 (0.9%)	0.9 (1.3%)	0.2 (0.3%)	-0.4 (-0.5%)
	BN	1.6 (2.3%)	1.7 (2.5%)	0.6 (0.8%)	-0.5 (-0.7%)
	D	2.9 (4.3%)	2.9 (4.2%)	1.5 (2.2%)	0.1 (0.2%)
	C	4.6 (6.6%)	4.1 (5.8%)	4 (5.7%)	1.9 (2.6%)
	All	2 (2.8%)	2 (2.8%)	1 (1.4%)	0.1 (0.1%)
AUG	W	0.4 (0.6%)	0.8 (1.1%)	0.3 (0.4%)	0.3 (0.5%)
	AN	1.6 (2.4%)	1.7 (2.5%)	0.2 (0.3%)	-0.4 (-0.6%)
	BN	2 (2.9%)	2.1 (3.1%)	1.2 (1.8%)	-0.1 (-0.1%)
	D	3.8 (5.7%)	3.3 (4.8%)	3 (4.4%)	0.7 (1.1%)
	C	1.8 (2.5%)	1.3 (1.8%)	2.4 (3.4%)	0.2 (0.2%)
	All	1.8 (2.6%)	1.8 (2.5%)	1.3 (1.9%)	0.2 (0.3%)
SEP	W	-1.6 (-2.4%)	2 (3.3%)	-0.4 (-0.6%)	2.3 (3.8%)
	AN	-0.7 (-1.1%)	2.4 (3.9%)	0.3 (0.4%)	2.5 (4%)
	BN	0.7 (1.1%)	0.6 (1%)	0.3 (0.5%)	-0.6 (-0.8%)
	D	1 (1.6%)	1.2 (1.8%)	0.4 (0.6%)	-0.6 (-0.9%)
	C	1.6 (2.4%)	1.8 (2.7%)	1.6 (2.5%)	0.1 (0.1%)
	All	0 (0%)	1.6 (2.5%)	0.3 (0.5%)	0.9 (1.3%)
OCT	W	1.2 (2.1%)	1.1 (1.8%)	1.1 (1.9%)	-0.2 (-0.4%)
	AN	0.9 (1.5%)	1 (1.7%)	1.2 (2.1%)	0.2 (0.3%)
	BN	1.2 (1.9%)	0.9 (1.6%)	1 (1.7%)	-0.3 (-0.5%)
	D	1.4 (2.3%)	1.3 (2.3%)	1.3 (2.2%)	-0.1 (-0.2%)
	C	1.4 (2.4%)	1.3 (2.3%)	1.1 (1.9%)	-0.3 (-0.5%)
	All	1.2 (2.1%)	1.1 (1.9%)	1.1 (1.9%)	-0.2 (-0.3%)
NOV	W	1.2 (2.2%)	1.2 (2.2%)	1.1 (2%)	-0.1 (-0.1%)
	AN	1.3 (2.3%)	1.2 (2.2%)	1.5 (2.7%)	0.2 (0.3%)
	BN	1.1 (2%)	1.2 (2.2%)	0.9 (1.7%)	-0.2 (-0.4%)
	D	1.7 (3.3%)	1.7 (3.3%)	1.4 (2.6%)	-0.2 (-0.4%)
	C	1.1 (2%)	1.1 (2%)	1 (1.9%)	-0.2 (-0.4%)
	All	1.3 (2.4%)	1.3 (2.4%)	1.2 (2.2%)	-0.1 (-0.2%)
DEC	W	1.3 (2.8%)	1.5 (3.2%)	1.2 (2.6%)	-0.2 (-0.5%)
	AN	1.6 (3.3%)	1.4 (3%)	1.6 (3.3%)	-0.1 (-0.2%)
	BN	1.7 (3.6%)	1.6 (3.5%)	1.6 (3.5%)	0.1 (0.2%)
	D	1.9 (4.1%)	1.9 (4%)	1.7 (3.7%)	0 (0%)
	C	1.3 (2.7%)	1.2 (2.7%)	1.6 (3.5%)	0.2 (0.5%)
	All	1.5 (3.3%)	1.6 (3.3%)	1.5 (3.2%)	0 (-0.1%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

## 1 Feather River at Honcut Creek

2 Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the Feather  
3 River at Honcut Creek, Year-Round

Alternative 2D and 5A: Feather River at Honcut Creek					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	47	47	48	48
	AN	46	46	48	48
	BN	46	46	47	47
	D	45	45	47	47
	C	46	46	48	47
	All	46	46	48	48
FEB	W	49	49	50	50
	AN	49	50	51	51
	BN	50	50	51	51
	D	50	50	52	52
	C	51	51	53	53
	All	50	50	51	51
MAR	W	52	52	53	53
	AN	53	53	53	53
	BN	54	54	56	55
	D	55	55	56	56
	C	55	55	56	56
	All	53	54	55	54
APR	W	56	56	57	57
	AN	59	59	60	60
	BN	60	60	60	60
	D	60	60	61	61
	C	59	59	61	61
	All	58	58	59	59
MAY	W	62	62	64	64
	AN	65	65	65	66
	BN	65	65	66	66
	D	65	65	66	66
	C	65	65	67	67
	All	64	64	65	66
JUN	W	67	67	68	69
	AN	69	69	69	70
	BN	69	69	68	70
	D	70	70	71	71
	C	69	69	71	71
	All	69	69	69	70

Alternative 2D and 5A: Feather River at Honcut Creek					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JUL	W	71	71	72	71
	AN	69	69	70	69
	BN	69	69	71	70
	D	69	69	72	71
	C	71	72	76	75
	All	70	70	72	71
AUG	W	72	71	72	72
	AN	69	68	70	69
	BN	69	69	71	71
	D	68	69	72	71
	C	72	72	74	74
	All	70	70	72	71
SEP	W	66	62	64	65
	AN	66	62	65	66
	BN	67	67	68	67
	D	66	66	67	67
	C	66	66	68	68
	All	66	64	66	67
OCT	W	59	59	60	60
	AN	60	60	61	61
	BN	60	60	61	61
	D	59	59	60	60
	C	60	60	61	61
	All	60	60	61	61
NOV	W	53	53	54	54
	AN	54	54	55	55
	BN	53	53	54	54
	D	53	53	54	54
	C	54	54	55	55
	All	53	53	54	54
DEC	W	47	47	49	49
	AN	47	47	49	49
	BN	46	47	48	48
	D	46	47	48	48
	C	46	46	47	48
	All	47	47	48	48

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Feather River at Honcut Creek, Year-Round**

Alternative 2D and 5A: Feather River at Honcut Creek					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JAN	W	1.2 (2.5%)	1.2 (2.6%)	1.3 (2.8%)	0.1 (0.1%)
	AN	1.4 (3%)	1.4 (3%)	1.3 (2.7%)	-0.1 (-0.2%)
	BN	1.1 (2.4%)	1.3 (2.8%)	1 (2.3%)	-0.2 (-0.5%)
	D	1.3 (2.8%)	1.3 (3%)	1.3 (2.9%)	0.1 (0.1%)
	C	1.6 (3.4%)	1.7 (3.6%)	1.4 (3.1%)	-0.1 (-0.2%)
	All	1.3 (2.8%)	1.4 (2.9%)	1.3 (2.8%)	0 (-0.1%)
FEB	W	1.2 (2.4%)	1.1 (2.3%)	1.1 (2.3%)	0 (-0.1%)
	AN	1.4 (2.8%)	1.1 (2.3%)	1.4 (2.9%)	-0.2 (-0.4%)
	BN	1.6 (3.3%)	1.5 (3%)	1.7 (3.4%)	0.1 (0.2%)
	D	1.5 (2.9%)	1.4 (2.8%)	1.5 (2.9%)	0 (0.1%)
	C	1.6 (3%)	1.6 (3%)	1.5 (2.9%)	0 (0%)
	All	1.4 (2.8%)	1.3 (2.6%)	1.4 (2.8%)	0 (0%)
MAR	W	0.9 (1.8%)	0.9 (1.8%)	0.9 (1.7%)	0 (0%)
	AN	0.3 (0.6%)	0.2 (0.3%)	0.2 (0.3%)	-0.2 (-0.3%)
	BN	1.6 (3%)	1.2 (2.2%)	1.5 (2.8%)	0.1 (0.2%)
	D	1.2 (2.2%)	1.1 (1.9%)	1.2 (2.2%)	0 (0%)
	C	1.4 (2.5%)	1.3 (2.5%)	1.3 (2.4%)	0.1 (0.1%)
	All	1.1 (2.1%)	1 (1.8%)	1 (1.9%)	0 (0%)
APR	W	0.7 (1.2%)	0.7 (1.3%)	0.7 (1.3%)	0 (0%)
	AN	0.9 (1.5%)	0.9 (1.6%)	0.9 (1.5%)	0 (0%)
	BN	0.6 (1.1%)	0.7 (1.1%)	0.6 (1.1%)	0 (0%)
	D	1.1 (1.8%)	1.1 (1.8%)	1.1 (1.8%)	0.1 (0.2%)
	C	1.1 (1.8%)	1.1 (1.9%)	1.1 (1.8%)	0 (0%)
	All	0.9 (1.5%)	0.9 (1.5%)	0.9 (1.5%)	0 (0%)
MAY	W	1.6 (2.5%)	1.5 (2.5%)	1.6 (2.5%)	0 (0%)
	AN	0.5 (0.8%)	0.5 (0.8%)	1.2 (1.9%)	0 (0%)
	BN	1.1 (1.7%)	1.1 (1.7%)	1.2 (1.9%)	0 (0%)
	D	1.2 (1.8%)	1.2 (1.8%)	1.4 (2.1%)	0 (0%)
	C	1.4 (2.2%)	1.4 (2.2%)	1.4 (2.1%)	0 (0%)
	All	1.2 (1.9%)	1.2 (1.9%)	1.4 (2.2%)	0 (0%)
JUN	W	0.5 (0.7%)	0.5 (0.8%)	1.4 (2.1%)	-0.6 (-0.9%)
	AN	-0.8 (-1.2%)	-0.8 (-1.1%)	0.7 (1.1%)	-0.8 (-1.2%)
	BN	-1.7 (-2.5%)	-1.7 (-2.5%)	0.3 (0.4%)	-0.9 (-1.3%)
	D	0.6 (0.9%)	0.7 (1%)	0.9 (1.3%)	-0.5 (-0.6%)
	C	1.6 (2.4%)	1.6 (2.3%)	1.7 (2.4%)	0.1 (0.2%)
	All	0.1 (0.2%)	0.2 (0.2%)	1.1 (1.5%)	-0.6 (-0.8%)

Alternative 2D and 5A: Feather River at Honcut Creek					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	0.9 (1.3%)	1.1 (1.6%)	-0.1 (-0.2%)	-0.4 (-0.5%)
	AN	0.7 (1%)	0.9 (1.3%)	0.3 (0.4%)	-0.4 (-0.5%)
	BN	1.7 (2.5%)	1.8 (2.5%)	0.6 (0.9%)	-0.5 (-0.8%)
	D	3.1 (4.4%)	3 (4.4%)	1.6 (2.4%)	0.1 (0.2%)
	C	4.7 (6.6%)	4.1 (5.7%)	4.1 (5.7%)	1.9 (2.6%)
	All	2.1 (2.9%)	2.1 (2.9%)	1.1 (1.5%)	0 (0.1%)
AUG	W	0.5 (0.8%)	0.9 (1.3%)	0.3 (0.4%)	0.4 (0.6%)
	AN	1.6 (2.4%)	1.8 (2.6%)	0.2 (0.3%)	-0.4 (-0.6%)
	BN	2 (3%)	2.1 (3.1%)	1.3 (1.9%)	-0.1 (-0.1%)
	D	3.9 (5.8%)	3.3 (4.8%)	3.1 (4.5%)	0.7 (1.1%)
	C	1.7 (2.4%)	1.5 (2%)	2.3 (3.2%)	0.1 (0.2%)
	All	1.9 (2.7%)	1.9 (2.6%)	1.4 (2%)	0.2 (0.3%)
SEP	W	-1.9 (-2.9%)	2.1 (3.4%)	-0.7 (-1.1%)	2.4 (3.8%)
	AN	-1 (-1.5%)	2.4 (3.9%)	0.2 (0.3%)	2.7 (4.3%)
	BN	1.1 (1.6%)	1 (1.6%)	0.9 (1.4%)	0.1 (0.1%)
	D	1.5 (2.3%)	1.5 (2.2%)	1.1 (1.7%)	-0.3 (-0.5%)
	C	1.5 (2.3%)	1.7 (2.5%)	1.6 (2.4%)	0 (0%)
	All	0 (0%)	1.8 (2.7%)	0.4 (0.7%)	1.1 (1.6%)
OCT	W	1.2 (2.1%)	1.1 (1.9%)	1.1 (1.9%)	-0.2 (-0.4%)
	AN	0.9 (1.4%)	1 (1.7%)	1.2 (2%)	0.1 (0.1%)
	BN	1.2 (2%)	1 (1.6%)	1 (1.7%)	-0.3 (-0.5%)
	D	1.3 (2.2%)	1.2 (2.1%)	1.2 (2.1%)	-0.1 (-0.2%)
	C	1.5 (2.5%)	1.4 (2.4%)	1.2 (2%)	-0.3 (-0.5%)
	All	1.2 (2.1%)	1.2 (1.9%)	1.2 (1.9%)	-0.2 (-0.3%)
NOV	W	1.2 (2.3%)	1.2 (2.2%)	1.1 (2.1%)	-0.1 (-0.1%)
	AN	1.3 (2.4%)	1.2 (2.3%)	1.5 (2.8%)	0.2 (0.3%)
	BN	1.1 (2.1%)	1.2 (2.3%)	1 (1.8%)	-0.2 (-0.4%)
	D	1.7 (3.2%)	1.7 (3.2%)	1.4 (2.6%)	-0.1 (-0.3%)
	C	1.1 (2.1%)	1.1 (2%)	1 (1.9%)	-0.2 (-0.3%)
	All	1.3 (2.4%)	1.3 (2.4%)	1.2 (2.2%)	-0.1 (-0.2%)
DEC	W	1.3 (2.7%)	1.5 (3.1%)	1.2 (2.5%)	-0.2 (-0.4%)
	AN	1.5 (3.2%)	1.4 (3%)	1.6 (3.3%)	-0.1 (-0.2%)
	BN	1.6 (3.5%)	1.6 (3.4%)	1.6 (3.5%)	0.2 (0.3%)
	D	1.8 (3.9%)	1.8 (3.9%)	1.7 (3.6%)	0 (0%)
	C	1.2 (2.6%)	1.2 (2.7%)	1.5 (3.3%)	0.3 (0.6%)
	All	1.5 (3.2%)	1.5 (3.2%)	1.5 (3.1%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Feather River at the Confluence with the Sacramento River**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the Feather**  
3 **River at the Confluence with the Sacramento River, Year-Round**

<b>Alternative 2D and 5A: Feather River at the Confluence with the Sacramento River</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JAN	W	47	47	47	48
	AN	46	46	47	47
	BN	46	45	46	46
	D	45	45	46	46
	C	45	45	46	46
	All	46	46	47	47
FEB	W	50	50	51	51
	AN	50	50	51	51
	BN	50	50	51	51
	D	50	50	51	51
	C	51	51	52	52
	All	50	50	51	51
MAR	W	53	53	54	54
	AN	54	54	55	55
	BN	55	55	56	56
	D	55	55	56	56
	C	56	56	57	57
	All	55	55	55	55
APR	W	59	59	59	59
	AN	60	60	61	61
	BN	61	61	61	61
	D	62	62	63	63
	C	63	63	64	64
	All	61	61	61	61
MAY	W	65	65	66	66
	AN	66	66	67	68
	BN	67	67	68	68
	D	68	68	69	69
	C	68	68	70	70
	All	66	66	68	68
JUN	W	70	70	71	71
	AN	71	71	72	73
	BN	72	72	71	73
	D	73	73	74	75
	C	72	72	74	74
	All	71	71	72	73

<b>Alternative 2D and 5A: Feather River at the Confluence with the Sacramento River</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	74	73	75	75
	AN	72	72	74	73
	BN	73	73	75	74
	D	73	73	76	75
	C	75	75	79	78
	All	73	73	76	75
AUG	W	73	73	75	74
	AN	71	71	73	72
	BN	72	72	74	73
	D	72	72	75	74
	C	75	75	76	77
	All	73	73	75	74
SEP	W	71	67	69	70
	AN	70	67	69	70
	BN	70	70	72	72
	D	70	70	72	72
	C	70	70	72	72
	All	70	69	71	71
OCT	W	61	61	62	62
	AN	62	61	63	63
	BN	61	62	63	63
	D	61	61	62	62
	C	62	62	63	63
	All	61	61	62	62
NOV	W	52	52	53	53
	AN	53	53	54	54
	BN	53	53	54	53
	D	52	52	53	53
	C	53	53	54	54
	All	53	53	54	53
DEC	W	47	47	48	48
	AN	47	47	48	48
	BN	46	46	47	47
	D	46	46	47	47
	C	45	45	46	46
	All	46	46	47	47

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Feather River at the Confluence with the Sacramento River, Year-Round**

<b>Alternative 2D and 5A: Feather River at the Confluence with the Sacramento River</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS VS. A2D_ELT</b>	<b>NAA_ELT VS. A2D_ELT</b>	<b>EXISTING CONDITIONS VS. A5A_ELT</b>	<b>NAA_ELT VS. A5A_ELT</b>
JAN	W	0.9 (1.8%)	0.9 (1.9%)	0.9 (1.9%)	0 (0%)
	AN	0.9 (1.9%)	1 (2.1%)	0.8 (1.8%)	0 (-0.1%)
	BN	0.7 (1.6%)	0.9 (1.9%)	0.7 (1.6%)	-0.1 (-0.2%)
	D	0.9 (2%)	1 (2.1%)	0.9 (2%)	0 (0%)
	C	1 (2.3%)	1.1 (2.4%)	0.9 (2.1%)	-0.1 (-0.1%)
	All	0.9 (1.9%)	0.9 (2.1%)	0.9 (1.9%)	0 (-0.1%)
FEB	W	0.9 (1.8%)	0.9 (1.8%)	0.9 (1.8%)	0 (0%)
	AN	1 (2%)	0.9 (1.7%)	1 (1.9%)	0 (0%)
	BN	0.9 (1.8%)	0.9 (1.8%)	0.9 (1.8%)	0 (0%)
	D	1 (1.9%)	1 (1.9%)	1 (2%)	0 (0.1%)
	C	1 (2%)	1 (2%)	1 (2%)	0 (0%)
	All	1 (1.9%)	0.9 (1.8%)	0.9 (1.9%)	0 (0%)
MAR	W	0.7 (1.3%)	0.7 (1.2%)	0.7 (1.3%)	0 (0%)
	AN	0.4 (0.7%)	0.3 (0.6%)	0.4 (0.7%)	-0.1 (-0.1%)
	BN	0.8 (1.4%)	0.6 (1.2%)	0.8 (1.4%)	0 (0.1%)
	D	0.8 (1.4%)	0.7 (1.3%)	0.8 (1.4%)	0 (0%)
	C	1 (1.7%)	0.9 (1.6%)	0.9 (1.7%)	0 (0%)
	All	0.7 (1.3%)	0.7 (1.2%)	0.7 (1.3%)	0 (0%)
APR	W	0.6 (1%)	0.6 (1%)	0.6 (1%)	0 (0%)
	AN	0.8 (1.3%)	0.8 (1.3%)	0.8 (1.3%)	0 (0%)
	BN	0.6 (1%)	0.6 (1%)	0.6 (1.1%)	0 (0%)
	D	0.8 (1.3%)	0.8 (1.3%)	0.9 (1.4%)	0 (0.1%)
	C	0.9 (1.4%)	0.9 (1.4%)	0.9 (1.5%)	-0.1 (-0.1%)
	All	0.7 (1.2%)	0.7 (1.2%)	0.7 (1.2%)	0 (0%)
MAY	W	1.4 (2.1%)	1.4 (2.1%)	1.4 (2.1%)	0 (0%)
	AN	1.1 (1.7%)	1.1 (1.7%)	1.5 (2.2%)	0 (0%)
	BN	1.2 (1.9%)	1.2 (1.9%)	1.3 (2%)	0 (0%)
	D	1.5 (2.2%)	1.5 (2.2%)	1.6 (2.4%)	0 (0%)
	C	1.6 (2.4%)	1.6 (2.3%)	1.6 (2.3%)	0 (0%)
	All	1.4 (2.1%)	1.4 (2.1%)	1.5 (2.2%)	0 (0%)
JUN	W	1.1 (1.6%)	1.1 (1.6%)	1.6 (2.3%)	-0.4 (-0.5%)
	AN	0.3 (0.4%)	0.3 (0.5%)	1.3 (1.9%)	-0.6 (-0.8%)
	BN	-0.2 (-0.3%)	-0.2 (-0.3%)	1.2 (1.7%)	-0.6 (-0.8%)
	D	1.3 (1.7%)	1.4 (1.9%)	1.5 (2%)	-0.3 (-0.5%)
	C	1.8 (2.5%)	1.8 (2.6%)	1.8 (2.5%)	0.1 (0.1%)
	All	0.9 (1.3%)	0.9 (1.3%)	1.5 (2.1%)	-0.4 (-0.5%)



Alternative 2D and 5A: Feather River at the Confluence with the Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	1.9 (2.6%)	2 (2.7%)	1.1 (1.4%)	-0.2 (-0.3%)
	AN	1.3 (1.8%)	1.5 (2%)	0.9 (1.3%)	-0.3 (-0.4%)
	BN	2 (2.7%)	2 (2.8%)	1.1 (1.6%)	-0.5 (-0.6%)
	D	3 (4.1%)	3 (4.1%)	1.8 (2.5%)	0 (0.1%)
	C	4.2 (5.6%)	3.8 (5%)	3.7 (4.9%)	1.3 (1.8%)
	All	2.4 (3.3%)	2.4 (3.3%)	1.6 (2.2%)	0 (0%)
AUG	W	1.7 (2.3%)	2 (2.7%)	1.3 (1.8%)	0.2 (0.3%)
	AN	1.7 (2.5%)	1.8 (2.6%)	0.8 (1.1%)	-0.4 (-0.5%)
	BN	2.1 (2.9%)	2.1 (2.9%)	1.4 (2%)	-0.2 (-0.3%)
	D	3.5 (4.9%)	3 (4.2%)	2.9 (4%)	0.4 (0.6%)
	C	1.8 (2.4%)	1.8 (2.4%)	2.3 (3%)	0.1 (0.1%)
	All	2.2 (3%)	2.2 (3%)	1.7 (2.4%)	0.1 (0.1%)
SEP	W	-1.5 (-2.2%)	2.3 (3.5%)	-0.6 (-0.8%)	2.1 (3%)
	AN	-0.6 (-0.9%)	2.4 (3.6%)	0.5 (0.7%)	2.4 (3.5%)
	BN	1.9 (2.6%)	2 (2.8%)	2.1 (3%)	1.2 (1.7%)
	D	2.3 (3.2%)	2 (2.8%)	2.4 (3.4%)	0.3 (0.3%)
	C	1.3 (1.9%)	1.4 (2%)	1.4 (1.9%)	-0.2 (-0.3%)
	All	0.4 (0.6%)	2.1 (3%)	1 (1.4%)	1.2 (1.7%)
OCT	W	1.2 (2%)	1.1 (1.8%)	1.1 (1.9%)	-0.2 (-0.3%)
	AN	0.9 (1.4%)	1.1 (1.7%)	0.9 (1.5%)	-0.1 (-0.1%)
	BN	1.2 (1.9%)	1 (1.6%)	1.2 (2%)	-0.1 (-0.1%)
	D	1 (1.7%)	1 (1.6%)	1.1 (1.8%)	-0.1 (-0.1%)
	C	1.5 (2.4%)	1.4 (2.3%)	1.3 (2.1%)	-0.2 (-0.3%)
	All	1.2 (1.9%)	1.1 (1.8%)	1.1 (1.8%)	-0.1 (-0.2%)
NOV	W	0.9 (1.7%)	0.9 (1.7%)	0.9 (1.6%)	0 (0%)
	AN	1 (2%)	1 (1.9%)	1.1 (2%)	0.1 (0.1%)
	BN	1 (1.9%)	1 (1.9%)	0.9 (1.8%)	0 (-0.1%)
	D	1.1 (2%)	1.1 (2.1%)	1 (1.8%)	0 (0%)
	C	1 (1.8%)	1 (1.8%)	1 (1.8%)	0 (0.1%)
	All	1 (1.9%)	1 (1.9%)	0.9 (1.8%)	0 (0%)
DEC	W	0.7 (1.5%)	0.9 (1.9%)	0.7 (1.6%)	-0.1 (-0.2%)
	AN	1.1 (2.3%)	1 (2.1%)	1.1 (2.3%)	-0.1 (-0.2%)
	BN	1.1 (2.4%)	1.1 (2.3%)	1.2 (2.6%)	0.1 (0.3%)
	D	1.1 (2.4%)	1.1 (2.5%)	1 (2.3%)	0.3 (0.6%)
	C	1.1 (2.4%)	1.1 (2.5%)	1.3 (2.8%)	0.6 (1.3%)
	All	1 (2.1%)	1 (2.2%)	1 (2.2%)	0.1 (0.3%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **American River below Nimbus Dam**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the American**  
3 **River below Nimbus Dam, Year-Round**

Alternative 2D and 5A: American River below Nimbus Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	47	47	48	48
	AN	47	47	48	48
	BN	46	46	48	48
	D	47	46	48	48
	C	47	47	48	48
	All	47	47	48	48
FEB	W	48	48	50	50
	AN	48	48	50	50
	BN	47	47	49	49
	D	49	49	50	50
	C	51	50	52	52
	All	48	48	50	50
MAR	W	52	52	53	53
	AN	53	53	54	54
	BN	53	53	54	54
	D	53	53	55	55
	C	55	55	56	56
	All	53	53	54	54
APR	W	56	56	57	57
	AN	57	57	58	58
	BN	57	58	59	59
	D	59	59	60	60
	C	59	59	61	61
	All	58	57	59	59
MAY	W	60	60	62	62
	AN	61	61	63	63
	BN	61	61	63	63
	D	64	64	66	66
	C	64	65	66	66
	All	62	62	64	64
JUN	W	64	64	65	65
	AN	65	66	67	67
	BN	65	66	66	67
	D	67	68	68	68
	C	68	69	71	71
	All	66	66	67	67

Alternative 2D and 5A: American River below Nimbus Dam					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JUL	W	66	67	68	68
	AN	66	67	67	66
	BN	66	66	67	67
	D	67	67	68	68
	C	70	71	72	72
	All	67	68	68	68
AUG	W	67	67	69	69
	AN	67	68	69	69
	BN	67	68	69	69
	D	67	68	70	70
	C	70	71	74	73
	All	67	68	70	70
SEP	W	65	65	66	66
	AN	66	66	67	66
	BN	66	67	68	67
	D	66	67	68	68
	C	68	68	71	71
	All	66	66	68	67
OCT	W	58	59	63	63
	AN	59	60	63	64
	BN	58	59	63	62
	D	59	60	64	64
	C	61	62	64	65
	All	59	60	63	64
NOV	W	57	57	59	59
	AN	57	57	59	59
	BN	56	57	59	59
	D	57	57	59	59
	C	58	58	60	60
	All	57	57	59	59
DEC	W	50	50	51	51
	AN	51	50	52	52
	BN	50	50	51	51
	D	50	50	51	51
	C	50	50	51	51
	All	50	50	51	51

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the American River below Nimbus Dam, Year-Round**

<b>Alternative 2D and 5A: American River below Nimbus Dam</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS VS. A2D_ELT</b>	<b>NAA_ELT VS. A2D_ELT</b>	<b>EXISTING CONDITIONS VS. A5A_ELT</b>	<b>NAA_ELT VS. A5A_ELT</b>
JAN	W	1.4 (3%)	1.4 (3.1%)	1.4 (3%)	0 (0%)
	AN	1.3 (2.7%)	1.4 (2.9%)	1.2 (2.7%)	0 (0%)
	BN	1.4 (3%)	1.5 (3.2%)	1.4 (3%)	0 (-0.1%)
	D	1.2 (2.7%)	1.4 (2.9%)	1.3 (2.7%)	0 (0%)
	C	1.4 (2.9%)	1.4 (3.1%)	1.2 (2.6%)	-0.1 (-0.2%)
	All	1.3 (2.9%)	1.4 (3.1%)	1.3 (2.8%)	0 (0%)
FEB	W	1.7 (3.4%)	1.6 (3.3%)	1.6 (3.4%)	0 (0%)
	AN	1.8 (3.8%)	1.6 (3.3%)	1.8 (3.8%)	0 (-0.1%)
	BN	1.7 (3.5%)	1.6 (3.4%)	1.7 (3.5%)	0 (-0.1%)
	D	1.7 (3.5%)	1.5 (3.1%)	1.6 (3.4%)	0 (0%)
	C	1.4 (2.7%)	1.6 (3.3%)	1.4 (2.8%)	0.1 (0.2%)
	All	1.6 (3.4%)	1.6 (3.3%)	1.6 (3.4%)	0 (0%)
MAR	W	1.4 (2.7%)	1.4 (2.6%)	1.4 (2.7%)	0 (0%)
	AN	1.4 (2.7%)	1.3 (2.4%)	1.4 (2.7%)	0 (0.1%)
	BN	1.3 (2.4%)	1.3 (2.5%)	1.1 (2.1%)	-0.2 (-0.3%)
	D	1.6 (2.9%)	1.5 (2.8%)	1.6 (3.1%)	0 (0%)
	C	1.3 (2.4%)	1.4 (2.6%)	1.3 (2.3%)	-0.1 (-0.3%)
	All	1.4 (2.7%)	1.4 (2.6%)	1.4 (2.6%)	0 (-0.1%)
APR	W	1.2 (2.2%)	1.2 (2.2%)	1.2 (2.2%)	0 (0%)
	AN	1.3 (2.3%)	1.3 (2.3%)	1.3 (2.3%)	0 (0%)
	BN	1.3 (2.2%)	1.2 (2.1%)	1.4 (2.4%)	0 (0%)
	D	0.8 (1.3%)	1.3 (2.3%)	0.8 (1.4%)	0.1 (0.1%)
	C	1.3 (2.1%)	1.4 (2.3%)	1.6 (2.6%)	0 (0%)
	All	1.2 (2%)	1.3 (2.3%)	1.2 (2.1%)	0 (0%)
MAY	W	2.1 (3.5%)	2 (3.3%)	2.1 (3.5%)	0 (0%)
	AN	2.4 (3.9%)	2.3 (3.7%)	2.5 (4%)	0 (-0.1%)
	BN	2 (3.2%)	1.9 (3.1%)	2 (3.3%)	-0.1 (-0.2%)
	D	1.9 (3%)	1.9 (2.9%)	2 (3.1%)	0.3 (0.4%)
	C	2 (3.2%)	1.8 (2.8%)	1.7 (2.6%)	-0.1 (-0.2%)
	All	2.1 (3.3%)	1.9 (3.2%)	2 (3.3%)	0 (0%)
JUN	W	1.7 (2.7%)	1.5 (2.4%)	1.8 (2.8%)	-0.1 (-0.2%)
	AN	1.4 (2.2%)	1.2 (1.8%)	1.7 (2.6%)	-0.4 (-0.6%)
	BN	1.1 (1.7%)	0.7 (1%)	1.8 (2.7%)	-0.4 (-0.5%)
	D	0.6 (0.9%)	-0.2 (-0.3%)	0.8 (1.2%)	-0.6 (-0.9%)
	C	2.9 (4.3%)	2 (2.9%)	2.8 (4.1%)	0.2 (0.2%)
	All	1.5 (2.3%)	1 (1.6%)	1.7 (2.6%)	-0.3 (-0.4%)

Alternative 2D and 5A: American River below Nimbus Dam					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	1.1 (1.7%)	0.5 (0.7%)	1.2 (1.8%)	-0.4 (-0.6%)
	AN	0.7 (1.1%)	0.2 (0.3%)	0.3 (0.5%)	-0.3 (-0.4%)
	BN	0.8 (1.2%)	0.4 (0.6%)	1.2 (1.8%)	0.3 (0.4%)
	D	1.6 (2.4%)	0.9 (1.3%)	1.1 (1.6%)	-0.3 (-0.5%)
	C	2.3 (3.3%)	1 (1.4%)	2.3 (3.3%)	-0.1 (-0.2%)
	All	1.3 (2%)	0.6 (0.9%)	1.2 (1.8%)	-0.2 (-0.3%)
AUG	W	2.1 (3.1%)	1.3 (1.9%)	2 (3%)	0.2 (0.3%)
	AN	1.6 (2.3%)	1 (1.5%)	1.7 (2.5%)	0.2 (0.3%)
	BN	1.7 (2.5%)	0.9 (1.3%)	1.9 (2.8%)	0.3 (0.5%)
	D	3.3 (4.9%)	2.3 (3.4%)	3.2 (4.7%)	0.9 (1.3%)
	C	4 (5.8%)	3.6 (5.1%)	3.2 (4.6%)	-0.6 (-0.8%)
	All	2.5 (3.7%)	1.7 (2.6%)	2.4 (3.5%)	0.3 (0.4%)
SEP	W	1.1 (1.7%)	0.9 (1.3%)	1.1 (1.7%)	0.3 (0.5%)
	AN	1 (1.5%)	0.9 (1.3%)	0.7 (1%)	0.2 (0.3%)
	BN	1.7 (2.5%)	1.1 (1.6%)	1.3 (2%)	0.5 (0.8%)
	D	1.8 (2.8%)	1.2 (1.9%)	1.6 (2.4%)	0.2 (0.4%)
	C	2.3 (3.4%)	2.3 (3.4%)	2.4 (3.5%)	0.1 (0.1%)
	All	1.5 (2.3%)	1.2 (1.8%)	1.4 (2.1%)	0.3 (0.4%)
OCT	W	4.9 (8.3%)	3.8 (6.3%)	5 (8.5%)	0.3 (0.5%)
	AN	4.1 (7%)	3.6 (6%)	4.4 (7.5%)	0.3 (0.5%)
	BN	4.3 (7.3%)	3.7 (6.2%)	4 (6.8%)	-0.1 (-0.1%)
	D	4.5 (7.6%)	3.8 (6.3%)	4.6 (7.8%)	0 (-0.1%)
	C	3.7 (6%)	2.7 (4.4%)	3.9 (6.4%)	0.2 (0.3%)
	All	4.4 (7.5%)	3.6 (6%)	4.5 (7.6%)	0.1 (0.2%)
NOV	W	1.8 (3.2%)	1.4 (2.5%)	1.9 (3.4%)	-0.1 (-0.2%)
	AN	1.9 (3.4%)	1.6 (2.8%)	1.9 (3.3%)	-0.1 (-0.1%)
	BN	2.5 (4.4%)	1.9 (3.3%)	2.6 (4.7%)	-0.1 (-0.2%)
	D	2.1 (3.6%)	1.6 (2.8%)	2 (3.6%)	-0.1 (-0.2%)
	C	2 (3.4%)	1.7 (2.9%)	1.9 (3.2%)	-0.1 (-0.1%)
	All	2 (3.6%)	1.6 (2.8%)	2.1 (3.6%)	-0.1 (-0.2%)
DEC	W	0.9 (1.9%)	1.2 (2.4%)	1 (2%)	0.1 (0.1%)
	AN	1.1 (2.1%)	1.2 (2.4%)	1 (2%)	0 (0%)
	BN	1.1 (2.3%)	1.3 (2.5%)	1.2 (2.4%)	0 (0%)
	D	1 (2.1%)	1.2 (2.4%)	1 (2.1%)	-0.1 (-0.2%)
	C	1.1 (2.2%)	1.2 (2.5%)	1 (2.1%)	0 (0%)
	All	1 (2.1%)	1.2 (2.4%)	1 (2.1%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **American River at Watt Avenue**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the American**  
3 **River at Watt Avenue, Year-Round**

Alternative 2D and 5A: American River at Watt Avenue					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	47	47	48	48
	AN	47	47	48	48
	BN	46	46	47	47
	D	46	46	47	47
	C	46	46	48	48
	All	46	46	48	48
FEB	W	48	48	50	50
	AN	48	48	50	50
	BN	48	48	49	49
	D	49	49	51	51
	C	51	51	53	53
	All	49	49	50	50
MAR	W	53	53	54	54
	AN	53	53	54	54
	BN	54	54	55	55
	D	54	54	56	56
	C	56	56	57	57
	All	54	54	55	55
APR	W	56	56	58	58
	AN	58	58	59	59
	BN	58	58	60	60
	D	60	60	61	61
	C	61	61	62	62
	All	58	58	60	60
MAY	W	61	61	63	63
	AN	62	62	65	65
	BN	62	63	64	64
	D	65	65	67	67
	C	66	66	68	67
	All	63	63	65	65
JUN	W	65	65	67	67
	AN	67	67	68	69
	BN	67	67	68	68
	D	69	69	69	70
	C	69	70	72	72
	All	67	67	68	69

Alternative 2D and 5A: American River at Watt Avenue					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JUL	W	68	68	69	69
	AN	67	68	68	68
	BN	67	68	68	69
	D	68	69	70	70
	C	72	73	74	74
	All	68	69	70	70
AUG	W	68	69	71	70
	AN	69	69	71	71
	BN	69	70	71	71
	D	69	70	72	72
	C	71	72	75	74
	All	69	70	72	72
SEP	W	66	66	67	67
	AN	66	66	68	67
	BN	67	68	69	69
	D	67	68	69	69
	C	69	69	71	71
	All	67	67	69	68
OCT	W	59	60	63	63
	AN	60	60	63	64
	BN	59	60	63	63
	D	60	60	63	63
	C	61	62	64	65
	All	60	60	63	63
NOV	W	56	57	58	58
	AN	56	57	58	58
	BN	56	56	58	58
	D	56	56	58	58
	C	57	57	59	59
	All	56	57	58	58
DEC	W	50	49	51	51
	AN	50	50	51	51
	BN	49	49	50	50
	D	49	49	50	50
	C	49	48	50	50
	All	49	49	50	50

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the American River at Watt Avenue, Year-Round**

Alternative 2D and 5A: American River at Watt Avenue					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JAN	W	1.4 (3%)	1.4 (3.1%)	1.4 (3%)	0 (0%)
	AN	1.3 (2.7%)	1.3 (2.9%)	1.2 (2.7%)	0 (0%)
	BN	1.4 (3%)	1.5 (3.2%)	1.3 (2.9%)	0 (-0.1%)
	D	1.2 (2.6%)	1.3 (2.8%)	1.2 (2.6%)	0 (0%)
	C	1.4 (2.9%)	1.4 (3.1%)	1.2 (2.6%)	-0.1 (-0.2%)
	All	1.3 (2.8%)	1.4 (3%)	1.3 (2.8%)	0 (0%)
FEB	W	1.6 (3.4%)	1.6 (3.3%)	1.6 (3.4%)	0 (0%)
	AN	1.8 (3.7%)	1.6 (3.2%)	1.8 (3.7%)	0 (-0.1%)
	BN	1.6 (3.4%)	1.6 (3.3%)	1.6 (3.4%)	-0.1 (-0.1%)
	D	1.6 (3.3%)	1.5 (3%)	1.6 (3.2%)	0 (0%)
	C	1.4 (2.8%)	1.6 (3.1%)	1.5 (2.9%)	0 (0.1%)
	All	1.6 (3.3%)	1.6 (3.2%)	1.6 (3.3%)	0 (0%)
MAR	W	1.4 (2.6%)	1.3 (2.5%)	1.4 (2.6%)	0 (0%)
	AN	1.4 (2.6%)	1.2 (2.3%)	1.4 (2.6%)	0 (0.1%)
	BN	1.2 (2.2%)	1.2 (2.2%)	1 (1.9%)	-0.1 (-0.3%)
	D	1.4 (2.6%)	1.3 (2.5%)	1.5 (2.8%)	0 (0%)
	C	1.2 (2.2%)	1.3 (2.3%)	1.2 (2.1%)	-0.1 (-0.2%)
	All	1.3 (2.5%)	1.3 (2.4%)	1.3 (2.5%)	0 (-0.1%)
APR	W	1.2 (2.2%)	1.2 (2.1%)	1.2 (2.2%)	0 (0%)
	AN	1.3 (2.3%)	1.3 (2.2%)	1.3 (2.3%)	0 (0%)
	BN	1.2 (2.1%)	1.1 (1.9%)	1.3 (2.2%)	0 (0%)
	D	0.9 (1.5%)	1.3 (2.1%)	0.9 (1.6%)	0 (0.1%)
	C	1.1 (1.9%)	1.2 (2%)	1.3 (2.1%)	-0.1 (-0.2%)
	All	1.2 (2%)	1.2 (2.1%)	1.2 (2%)	0 (0%)
MAY	W	2.1 (3.5%)	2 (3.3%)	2.1 (3.5%)	0 (0%)
	AN	2.5 (4%)	2.3 (3.7%)	2.6 (4.2%)	0 (-0.1%)
	BN	1.9 (3.1%)	1.8 (2.9%)	2 (3.3%)	-0.2 (-0.3%)
	D	1.9 (3%)	1.8 (2.8%)	2 (3%)	0.1 (0.2%)
	C	2 (3.1%)	1.9 (2.9%)	1.6 (2.4%)	-0.1 (-0.1%)
	All	2.1 (3.3%)	2 (3.1%)	2.1 (3.3%)	0 (0%)
JUN	W	1.9 (2.9%)	1.7 (2.6%)	2 (3%)	-0.2 (-0.3%)
	AN	1.3 (1.9%)	1.1 (1.7%)	1.6 (2.5%)	-0.5 (-0.7%)
	BN	1.1 (1.6%)	0.6 (0.9%)	1.6 (2.4%)	-0.6 (-0.8%)
	D	0.6 (0.8%)	0 (0%)	0.8 (1.2%)	-0.7 (-1%)
	C	2.5 (3.6%)	1.9 (2.8%)	2.5 (3.6%)	0 (0%)
	All	1.5 (2.2%)	1.1 (1.6%)	1.7 (2.5%)	-0.4 (-0.5%)



Alternative 2D and 5A: American River at Watt Avenue					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	1.4 (2.1%)	0.8 (1.1%)	1.4 (2.1%)	-0.5 (-0.7%)
	AN	0.9 (1.4%)	0.4 (0.6%)	0.5 (0.7%)	-0.4 (-0.5%)
	BN	1 (1.5%)	0.7 (1%)	1.5 (2.2%)	0.4 (0.5%)
	D	1.8 (2.7%)	1.2 (1.7%)	1.3 (1.9%)	-0.5 (-0.7%)
	C	1.8 (2.6%)	0.8 (1.1%)	1.9 (2.7%)	-0.2 (-0.3%)
	All	1.4 (2.1%)	0.8 (1.2%)	1.3 (2%)	-0.3 (-0.4%)
AUG	W	2.6 (3.8%)	1.8 (2.7%)	2.5 (3.6%)	0.2 (0.2%)
	AN	1.9 (2.7%)	1.5 (2.1%)	1.9 (2.8%)	0.2 (0.3%)
	BN	2 (2.9%)	1.3 (1.9%)	2.2 (3.1%)	0.4 (0.5%)
	D	3.6 (5.2%)	2.7 (3.9%)	3.6 (5.2%)	0.9 (1.2%)
	C	3.5 (4.8%)	3 (4.2%)	3 (4.1%)	-0.3 (-0.3%)
	All	2.7 (4%)	2.1 (3%)	2.7 (3.9%)	0.3 (0.4%)
SEP	W	1.4 (2.1%)	1.2 (1.8%)	1.3 (2%)	0.4 (0.6%)
	AN	1.3 (2%)	1.4 (2.1%)	1.1 (1.6%)	0.3 (0.4%)
	BN	2.1 (3.1%)	1.5 (2.2%)	1.8 (2.7%)	0.6 (0.8%)
	D	1.9 (2.8%)	1.4 (2%)	1.8 (2.6%)	0.1 (0.2%)
	C	2 (3%)	2 (2.9%)	2.1 (3%)	0.1 (0.1%)
	All	1.7 (2.5%)	1.4 (2.1%)	1.6 (2.4%)	0.3 (0.4%)
OCT	W	4 (6.7%)	3.1 (5.2%)	4.1 (6.9%)	0.2 (0.4%)
	AN	3.5 (5.8%)	3 (4.9%)	3.7 (6.2%)	0.2 (0.3%)
	BN	3.6 (6.1%)	3.1 (5.2%)	3.4 (5.7%)	0 (-0.1%)
	D	3.6 (6%)	3.1 (5.1%)	3.7 (6.1%)	0 (0%)
	C	3 (5%)	2.3 (3.8%)	3.2 (5.2%)	0.2 (0.2%)
	All	3.6 (6.1%)	3 (4.9%)	3.7 (6.2%)	0.1 (0.2%)
NOV	W	1.6 (2.8%)	1.2 (2.2%)	1.7 (3%)	-0.2 (-0.4%)
	AN	1.8 (3.1%)	1.5 (2.6%)	1.7 (3.1%)	-0.1 (-0.2%)
	BN	2.1 (3.9%)	1.6 (2.8%)	2.3 (4.2%)	-0.1 (-0.2%)
	D	1.8 (3.1%)	1.4 (2.5%)	1.7 (3.1%)	-0.2 (-0.3%)
	C	1.8 (3.2%)	1.6 (2.8%)	1.7 (3%)	-0.1 (-0.1%)
	All	1.8 (3.2%)	1.4 (2.5%)	1.8 (3.2%)	-0.2 (-0.3%)
DEC	W	0.9 (1.7%)	1.2 (2.3%)	1 (1.9%)	0.1 (0.1%)
	AN	1 (1.9%)	1.1 (2.3%)	0.9 (1.8%)	0 (-0.1%)
	BN	1.1 (2.3%)	1.2 (2.6%)	1.1 (2.3%)	0 (0%)
	D	0.9 (1.9%)	1.1 (2.2%)	0.9 (1.9%)	-0.1 (-0.2%)
	C	1 (2.1%)	1.2 (2.5%)	1 (2%)	0 (0.1%)
	All	1 (2%)	1.2 (2.4%)	1 (2%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **American River at the Confluence with the Sacramento River**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the American**  
3 **River at the Confluence with the Sacramento River, Year-Round**

Alternative 2D and 5A: American River at the Confluence with the Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	47	46	48	48
	AN	46	46	48	48
	BN	46	45	47	47
	D	46	46	47	47
	C	46	46	48	47
	All	46	46	47	47
FEB	W	48	48	50	50
	AN	48	49	50	50
	BN	48	48	49	49
	D	49	50	51	51
	C	51	51	53	53
	All	49	49	51	51
MAR	W	53	53	54	54
	AN	53	53	55	55
	BN	54	54	55	55
	D	55	55	56	56
	C	56	56	57	57
	All	54	54	55	55
APR	W	57	57	58	58
	AN	58	58	60	60
	BN	59	59	60	60
	D	61	60	62	62
	C	62	62	63	63
	All	59	59	60	60
MAY	W	61	61	63	63
	AN	63	63	66	66
	BN	63	63	65	65
	D	66	66	68	68
	C	67	67	69	68
	All	64	64	66	66
JUN	W	65	66	67	67
	AN	68	68	69	69
	BN	68	68	69	69
	D	70	70	70	70
	C	70	70	72	72
	All	68	68	69	69

<b>Alternative 2D and 5A: American River at the Confluence with the Sacramento River</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	69	69	70	70
	AN	68	69	69	69
	BN	68	68	69	70
	D	69	70	71	71
	C	73	73	74	74
	All	69	70	71	71
AUG	W	69	69	72	71
	AN	69	70	71	71
	BN	70	70	72	72
	D	69	70	73	73
	C	72	72	75	75
	All	70	70	73	72
SEP	W	66	66	68	68
	AN	67	67	68	68
	BN	67	68	70	69
	D	68	68	70	70
	C	69	69	71	71
	All	67	68	69	69
OCT	W	60	60	63	63
	AN	60	61	63	64
	BN	60	60	63	63
	D	60	61	63	63
	C	62	62	65	65
	All	60	61	63	64
NOV	W	56	56	58	58
	AN	56	56	58	58
	BN	55	56	57	57
	D	56	56	57	57
	C	57	57	58	58
	All	56	56	58	58
DEC	W	49	49	50	50
	AN	49	49	50	50
	BN	48	48	49	49
	D	49	48	49	49
	C	48	48	49	49
	All	49	49	50	50

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the American River at the Confluence with the Sacramento River, Year-Round**

<b>Alternative 2D and 5A: American River at the Confluence with the Sacramento River</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS VS. A2D_ELT</b>	<b>NAA_ELT VS. A2D_ELT</b>	<b>EXISTING CONDITIONS VS. A5A_ELT</b>	<b>NAA_ELT VS. A5A_ELT</b>
JAN	W	1.4 (3%)	1.5 (3.1%)	1.4 (3%)	0 (0%)
	AN	1.3 (2.8%)	1.4 (3%)	1.3 (2.8%)	0 (0%)
	BN	1.3 (2.8%)	1.4 (3.1%)	1.3 (2.9%)	-0.1 (-0.1%)
	D	1.1 (2.4%)	1.2 (2.7%)	1.1 (2.5%)	0 (0%)
	C	1.4 (3%)	1.5 (3.1%)	1.2 (2.7%)	-0.1 (-0.2%)
	All	1.3 (2.8%)	1.4 (3%)	1.3 (2.8%)	0 (-0.1%)
FEB	W	1.6 (3.4%)	1.6 (3.3%)	1.6 (3.4%)	0 (0%)
	AN	1.8 (3.7%)	1.6 (3.2%)	1.8 (3.7%)	0 (-0.1%)
	BN	1.6 (3.3%)	1.5 (3.2%)	1.6 (3.3%)	0 (-0.1%)
	D	1.6 (3.2%)	1.5 (2.9%)	1.6 (3.2%)	0 (0%)
	C	1.4 (2.7%)	1.5 (3%)	1.5 (2.8%)	0 (0%)
	All	1.6 (3.3%)	1.5 (3.1%)	1.6 (3.3%)	0 (0%)
MAR	W	1.3 (2.5%)	1.3 (2.4%)	1.3 (2.5%)	0 (0%)
	AN	1.3 (2.5%)	1.2 (2.2%)	1.3 (2.5%)	0 (0.1%)
	BN	1.1 (2.1%)	1.1 (2%)	1 (1.9%)	-0.1 (-0.2%)
	D	1.4 (2.5%)	1.3 (2.3%)	1.5 (2.8%)	0 (0%)
	C	1.2 (2.1%)	1.2 (2.1%)	1.1 (1.9%)	-0.1 (-0.2%)
	All	1.3 (2.4%)	1.2 (2.2%)	1.3 (2.4%)	0 (-0.1%)
APR	W	1.2 (2.1%)	1.2 (2.1%)	1.2 (2.1%)	0 (0%)
	AN	1.3 (2.2%)	1.3 (2.2%)	1.3 (2.2%)	0 (0%)
	BN	1.2 (2%)	1.1 (1.8%)	1.3 (2.2%)	0 (0%)
	D	0.9 (1.6%)	1.2 (2%)	1 (1.7%)	0 (0%)
	C	1 (1.7%)	1.1 (1.8%)	1.2 (1.9%)	-0.2 (-0.3%)
	All	1.1 (1.9%)	1.2 (2%)	1.2 (2%)	0 (0%)
MAY	W	2.2 (3.6%)	2.1 (3.4%)	2.2 (3.6%)	0 (0%)
	AN	2.5 (4%)	2.3 (3.7%)	2.7 (4.2%)	0 (-0.1%)
	BN	1.9 (3%)	1.8 (2.9%)	2 (3.2%)	-0.2 (-0.3%)
	D	1.9 (2.9%)	1.8 (2.8%)	2 (3%)	0.1 (0.1%)
	C	2 (3%)	1.9 (2.8%)	1.5 (2.3%)	-0.1 (-0.1%)
	All	2.1 (3.3%)	2 (3.1%)	2.1 (3.3%)	0 (-0.1%)
JUN	W	2 (3.1%)	1.8 (2.7%)	2.1 (3.2%)	-0.2 (-0.3%)
	AN	1.2 (1.8%)	1.1 (1.6%)	1.6 (2.4%)	-0.5 (-0.7%)
	BN	1.1 (1.6%)	0.6 (0.9%)	1.6 (2.3%)	-0.6 (-0.9%)
	D	0.6 (0.8%)	0.1 (0.1%)	0.8 (1.2%)	-0.7 (-1%)
	C	2.4 (3.4%)	1.9 (2.7%)	2.4 (3.4%)	0 (0%)
	All	1.5 (2.2%)	1.1 (1.7%)	1.7 (2.5%)	-0.4 (-0.6%)

Alternative 2D and 5A: American River at the Confluence with the Sacramento River					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	1.5 (2.2%)	0.9 (1.3%)	1.5 (2.2%)	-0.5 (-0.7%)
	AN	1 (1.5%)	0.5 (0.8%)	0.5 (0.8%)	-0.4 (-0.6%)
	BN	1.2 (1.7%)	0.9 (1.3%)	1.7 (2.4%)	0.4 (0.6%)
	D	1.9 (2.8%)	1.3 (1.8%)	1.4 (2%)	-0.5 (-0.7%)
	C	1.7 (2.4%)	0.8 (1.1%)	1.8 (2.5%)	-0.3 (-0.3%)
	All	1.5 (2.2%)	0.9 (1.3%)	1.4 (2.1%)	-0.3 (-0.4%)
AUG	W	2.8 (4.1%)	2.1 (3%)	2.7 (3.9%)	0.1 (0.2%)
	AN	2 (2.9%)	1.7 (2.4%)	2.1 (3%)	0.3 (0.4%)
	BN	2.1 (3.1%)	1.6 (2.2%)	2.3 (3.3%)	0.3 (0.5%)
	D	3.7 (5.3%)	2.8 (4%)	3.7 (5.3%)	0.9 (1.2%)
	C	3.2 (4.4%)	2.8 (3.8%)	2.9 (4%)	-0.1 (-0.2%)
	All	2.8 (4.1%)	2.2 (3.2%)	2.8 (4%)	0.3 (0.4%)
SEP	W	1.5 (2.3%)	1.4 (2.1%)	1.4 (2.2%)	0.5 (0.7%)
	AN	1.5 (2.3%)	1.6 (2.4%)	1.3 (1.9%)	0.3 (0.4%)
	BN	2.3 (3.4%)	1.7 (2.5%)	2 (3%)	0.6 (0.9%)
	D	1.9 (2.9%)	1.4 (2.1%)	1.8 (2.7%)	0.1 (0.1%)
	C	1.9 (2.7%)	1.9 (2.7%)	1.9 (2.8%)	0 (0%)
	All	1.8 (2.7%)	1.5 (2.3%)	1.7 (2.5%)	0.3 (0.5%)
OCT	W	3.5 (5.9%)	2.8 (4.6%)	3.6 (6.1%)	0.2 (0.3%)
	AN	3.2 (5.2%)	2.7 (4.4%)	3.4 (5.6%)	0.1 (0.2%)
	BN	3.2 (5.4%)	2.8 (4.7%)	3 (5%)	0 (-0.1%)
	D	3.2 (5.3%)	2.7 (4.5%)	3.2 (5.4%)	0 (0%)
	C	2.7 (4.4%)	2.1 (3.4%)	2.8 (4.6%)	0.1 (0.2%)
	All	3.2 (5.4%)	2.7 (4.4%)	3.3 (5.4%)	0.1 (0.1%)
NOV	W	1.5 (2.6%)	1.2 (2.1%)	1.6 (2.8%)	-0.2 (-0.4%)
	AN	1.7 (3%)	1.4 (2.5%)	1.7 (2.9%)	-0.2 (-0.3%)
	BN	2 (3.6%)	1.5 (2.6%)	2.1 (3.8%)	-0.1 (-0.3%)
	D	1.6 (2.8%)	1.3 (2.2%)	1.6 (2.8%)	-0.2 (-0.3%)
	C	1.7 (3%)	1.6 (2.7%)	1.6 (2.8%)	0 (-0.1%)
	All	1.6 (2.9%)	1.3 (2.4%)	1.7 (3%)	-0.2 (-0.3%)
DEC	W	0.8 (1.7%)	1.1 (2.3%)	0.9 (1.9%)	0 (0.1%)
	AN	0.9 (1.9%)	1.1 (2.2%)	0.9 (1.8%)	0 (-0.1%)
	BN	1.1 (2.2%)	1.2 (2.5%)	1.1 (2.3%)	0 (0%)
	D	0.9 (1.8%)	1 (2.2%)	0.9 (1.8%)	-0.1 (-0.3%)
	C	1 (2.1%)	1.2 (2.5%)	0.9 (1.9%)	0 (0.1%)
	All	0.9 (1.9%)	1.1 (2.3%)	0.9 (1.9%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Stanislaus River at Knights Ferry**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the Stanislaus**  
3 **River at Knights Ferry, Year-Round**

<b>Alternative 2D and 5A: Stanislaus River at Knights Ferry</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JAN	W	49	50	50	50
	AN	49	50	50	50
	BN	49	50	50	50
	D	48	50	50	50
	C	49	50	50	50
	All	49	50	50	50
FEB	W	49	50	50	50
	AN	49	50	50	50
	BN	49	51	51	51
	D	49	50	50	50
	C	50	51	51	51
	All	49	50	50	50
MAR	W	49	50	50	50
	AN	49	51	51	51
	BN	51	52	52	52
	D	51	53	53	53
	C	52	54	54	54
	All	50	52	52	52
APR	W	50	51	51	51
	AN	50	52	52	52
	BN	51	53	53	53
	D	52	53	53	53
	C	53	55	55	55
	All	51	53	53	53
MAY	W	51	53	53	53
	AN	53	54	54	54
	BN	54	56	56	56
	D	55	56	56	56
	C	56	58	58	58
	All	53	55	55	55
JUN	W	54	55	55	55
	AN	56	57	57	57
	BN	58	59	59	59
	D	59	61	61	61
	C	60	62	62	62
	All	57	58	58	58

Alternative 2D and 5A: Stanislaus River at Knights Ferry					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JUL	W	57	58	58	58
	AN	59	61	61	61
	BN	60	62	62	62
	D	61	63	63	63
	C	62	64	64	64
	All	59	61	61	61
AUG	W	58	59	59	59
	AN	60	61	61	61
	BN	60	62	62	62
	D	61	63	63	63
	C	62	65	65	65
	All	60	62	62	62
SEP	W	59	60	60	60
	AN	60	62	62	62
	BN	61	63	63	63
	D	62	63	63	63
	C	63	65	65	65
	All	61	62	62	62
OCT	W	59	61	61	61
	AN	59	61	61	61
	BN	59	60	60	60
	D	58	60	60	60
	C	60	62	62	62
	All	59	61	61	61
NOV	W	56	58	58	58
	AN	56	58	58	58
	BN	56	57	57	57
	D	56	57	57	57
	C	57	59	59	59
	All	56	58	58	58
DEC	W	52	53	53	53
	AN	52	53	53	53
	BN	51	53	53	53
	D	51	52	52	52
	C	52	53	53	53
	All	51	53	53	53

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Stanislaus River at Knights Ferry, Year-Round**

<b>Alternative 2D and 5A: Stanislaus River at Knights Ferry</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS VS. A2D_ELT</b>	<b>NAA_ELT VS. A2D_ELT</b>	<b>EXISTING CONDITIONS VS. A5A_ELT</b>	<b>NAA_ELT VS. A5A_ELT</b>
JAN	W	1.4 (2.8%)	0 (0%)	1.4 (2.8%)	0 (0%)
	AN	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
	BN	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
	D	1.4 (3%)	0 (0%)	1.4 (3%)	0 (0%)
	C	1.4 (2.9%)	0 (0%)	1.4 (2.9%)	0 (0%)
	All	1.4 (2.9%)	0 (0%)	1.4 (2.9%)	0 (0%)
FEB	W	1.3 (2.6%)	0 (0%)	1.3 (2.6%)	0 (0%)
	AN	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
	BN	1.5 (3.1%)	0 (0%)	1.5 (3.1%)	0 (0%)
	D	1.5 (3.1%)	0 (0%)	1.5 (3.1%)	0 (0%)
	C	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
	All	1.4 (2.9%)	0 (0%)	1.4 (2.9%)	0 (0%)
MAR	W	1.3 (2.7%)	0 (0%)	1.3 (2.7%)	0 (0%)
	AN	1.7 (3.5%)	0 (0%)	1.7 (3.5%)	0 (0%)
	BN	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
	D	1.6 (3.2%)	0 (0%)	1.6 (3.2%)	0 (0%)
	C	1.4 (2.7%)	0 (0%)	1.4 (2.7%)	0 (0%)
	All	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
APR	W	1.5 (2.9%)	0 (0%)	1.5 (2.9%)	0 (0%)
	AN	1.6 (3.2%)	0 (0%)	1.6 (3.2%)	0 (0%)
	BN	1.7 (3.3%)	0 (0%)	1.7 (3.3%)	0 (0%)
	D	1.7 (3.2%)	0 (0%)	1.7 (3.2%)	0 (0%)
	C	1.6 (3%)	0 (0%)	1.6 (3%)	0 (0%)
	All	1.6 (3.1%)	0 (0%)	1.6 (3.1%)	0 (0%)
MAY	W	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
	AN	1.6 (3%)	0 (0%)	1.6 (3%)	0 (0%)
	BN	1.9 (3.5%)	0 (0%)	1.9 (3.5%)	0 (0%)
	D	1.8 (3.3%)	0 (0%)	1.8 (3.3%)	0 (0%)
	C	1.8 (3.3%)	0 (0%)	1.8 (3.3%)	0 (0%)
	All	1.7 (3.2%)	0 (0%)	1.7 (3.2%)	0 (0%)
JUN	W	1.5 (2.7%)	0 (0%)	1.5 (2.7%)	0 (0%)
	AN	1.6 (2.9%)	0 (0%)	1.6 (2.9%)	0 (0%)
	BN	1.9 (3.3%)	0 (0%)	1.9 (3.3%)	0 (0%)
	D	2.1 (3.5%)	0 (0%)	2.1 (3.5%)	0 (0%)
	C	2 (3.3%)	0 (0%)	2 (3.3%)	0 (0%)
	All	1.8 (3.1%)	0 (0%)	1.8 (3.1%)	0 (0%)



Alternative 2D and 5A: Stanislaus River at Knights Ferry					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	1.5 (2.6%)	0 (0%)	1.5 (2.6%)	0 (0%)
	AN	1.8 (3.1%)	0 (0%)	1.8 (3.1%)	0 (0%)
	BN	1.9 (3.2%)	0 (0%)	1.9 (3.2%)	0 (0%)
	D	2.1 (3.4%)	0 (0%)	2.1 (3.4%)	0 (0%)
	C	2.1 (3.3%)	0 (0%)	2.1 (3.4%)	0.1 (0.1%)
	All	1.8 (3.1%)	0 (0%)	1.8 (3.1%)	0 (0%)
AUG	W	1.6 (2.8%)	0 (0%)	1.6 (2.8%)	0 (0%)
	AN	1.7 (2.9%)	0 (0%)	1.7 (2.9%)	0 (0%)
	BN	1.8 (2.9%)	0 (0%)	1.8 (2.9%)	0 (0%)
	D	1.8 (2.9%)	0 (0%)	1.8 (2.9%)	0 (0%)
	C	2.3 (3.6%)	0 (0%)	2.1 (3.3%)	-0.2 (-0.3%)
	All	1.8 (3%)	0 (0%)	1.8 (3%)	0 (-0.1%)
SEP	W	1.6 (2.7%)	0 (0%)	1.6 (2.7%)	0 (0%)
	AN	1.7 (2.8%)	0 (0%)	1.7 (2.8%)	0 (0%)
	BN	1.7 (2.8%)	0 (0%)	1.7 (2.8%)	0 (0%)
	D	1.8 (2.9%)	0 (0%)	1.8 (2.9%)	0 (0%)
	C	2.1 (3.3%)	0 (0%)	2 (3.1%)	-0.1 (-0.2%)
	All	1.8 (2.9%)	0 (0%)	1.7 (2.9%)	0 (0%)
OCT	W	1.6 (2.7%)	0 (0%)	1.6 (2.7%)	0 (0%)
	AN	1.4 (2.4%)	0 (0%)	1.4 (2.4%)	0 (0%)
	BN	1.6 (2.7%)	0 (0%)	1.6 (2.7%)	0 (0%)
	D	1.6 (2.8%)	0 (0%)	1.6 (2.8%)	0 (0%)
	C	1.7 (2.8%)	0 (0%)	1.7 (2.9%)	0 (0%)
	All	1.6 (2.7%)	0 (0%)	1.6 (2.7%)	0 (0%)
NOV	W	1.5 (2.6%)	0 (0%)	1.5 (2.6%)	0 (0%)
	AN	1.4 (2.5%)	0 (0%)	1.4 (2.5%)	0 (0%)
	BN	1.5 (2.6%)	0 (0%)	1.5 (2.6%)	0 (0%)
	D	1.5 (2.6%)	0 (0%)	1.5 (2.6%)	0 (0%)
	C	1.5 (2.7%)	0 (0%)	1.5 (2.7%)	0 (0%)
	All	1.5 (2.6%)	0 (0%)	1.5 (2.6%)	0 (0%)
DEC	W	1.4 (2.7%)	0 (0%)	1.4 (2.7%)	0 (0%)
	AN	1.4 (2.7%)	0 (0%)	1.4 (2.7%)	0 (0%)
	BN	1.5 (2.8%)	0 (0%)	1.5 (2.8%)	0 (0%)
	D	1.4 (2.7%)	0 (0%)	1.4 (2.7%)	0 (0%)
	C	1.4 (2.8%)	0 (0%)	1.4 (2.8%)	0 (0%)
	All	1.4 (2.7%)	0 (0%)	1.4 (2.7%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Stanislaus River at Orange Blossom Bridge**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the Stanislaus**  
3 **River at Orange Blossom Bridge, Year-Round**

Alternative 2D and 5A: Stanislaus River at Orange Blossom Bridge					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	48	49	49	49
	AN	48	49	49	49
	BN	48	49	49	49
	D	47	48	48	48
	C	48	49	49	49
	All	48	49	49	49
FEB	W	49	50	50	50
	AN	49	51	51	51
	BN	49	51	51	51
	D	49	51	51	51
	C	50	52	52	52
	All	49	51	51	51
MAR	W	49	51	51	51
	AN	50	52	52	52
	BN	52	53	53	53
	D	52	54	54	54
	C	53	54	54	54
	All	51	53	53	53
APR	W	50	52	52	52
	AN	51	53	53	53
	BN	52	54	54	54
	D	53	54	54	54
	C	55	56	56	56
	All	52	54	54	54
MAY	W	53	54	54	54
	AN	54	56	56	56
	BN	55	57	57	57
	D	56	58	58	58
	C	58	60	60	60
	All	55	57	57	57
JUN	W	56	57	57	57
	AN	58	60	60	60
	BN	60	62	62	62
	D	62	65	64	65
	C	63	65	65	65
	All	59	61	61	61

Alternative 2D and 5A: Stanislaus River at Orange Blossom Bridge					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JUL	W	60	61	61	61
	AN	63	65	65	65
	BN	63	65	65	65
	D	64	66	66	66
	C	65	67	67	67
	All	63	65	65	65
AUG	W	60	62	62	62
	AN	63	64	64	64
	BN	63	65	65	65
	D	64	66	66	66
	C	65	67	67	67
	All	63	64	64	64
SEP	W	60	62	62	62
	AN	63	64	64	64
	BN	63	65	65	65
	D	63	65	65	65
	C	64	66	66	66
	All	62	64	64	64
OCT	W	59	61	61	61
	AN	59	61	61	61
	BN	59	60	60	60
	D	59	60	60	60
	C	60	62	62	62
	All	59	61	61	61
NOV	W	55	56	56	56
	AN	55	56	56	56
	BN	55	56	56	56
	D	55	56	56	56
	C	56	57	57	57
	All	55	57	57	57
DEC	W	50	52	52	52
	AN	50	51	51	51
	BN	49	51	51	51
	D	50	51	51	51
	C	50	51	51	51
	All	50	51	51	51

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Stanislaus River at Orange Blossom Bridge, Year-Round**

<b>Alternative 2D and 5A: Stanislaus River at Orange Blossom Bridge</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS VS. A2D_ELT</b>	<b>NAA_ELT VS. A2D_ELT</b>	<b>EXISTING CONDITIONS VS. A5A_ELT</b>	<b>NAA_ELT VS. A5A_ELT</b>
JAN	W	1.3 (2.8%)	0 (0%)	1.3 (2.8%)	0 (0%)
	AN	1.5 (3.1%)	0 (0%)	1.5 (3.1%)	0 (0%)
	BN	1.4 (2.9%)	0 (0%)	1.4 (2.9%)	0 (0%)
	D	1.3 (2.9%)	0 (0%)	1.3 (2.9%)	0 (0%)
	C	1.3 (2.6%)	0 (0%)	1.3 (2.6%)	0 (0%)
	All	1.4 (2.8%)	0 (0%)	1.4 (2.8%)	0 (0%)
FEB	W	1.3 (2.6%)	0 (0%)	1.3 (2.6%)	0 (0%)
	AN	1.4 (2.9%)	0 (0%)	1.4 (2.9%)	0 (0%)
	BN	1.5 (3.1%)	0 (0%)	1.5 (3.1%)	0 (0%)
	D	1.6 (3.3%)	0 (0%)	1.6 (3.3%)	0 (0%)
	C	1.6 (3.1%)	0 (0%)	1.6 (3.1%)	0 (0%)
	All	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
MAR	W	1.3 (2.5%)	0 (0%)	1.3 (2.5%)	0 (0%)
	AN	1.7 (3.5%)	0 (0%)	1.7 (3.5%)	0 (0%)
	BN	1.5 (2.9%)	0 (0%)	1.5 (2.9%)	0 (0%)
	D	1.7 (3.3%)	0 (0%)	1.7 (3.3%)	0 (0%)
	C	1.5 (2.7%)	0 (0%)	1.5 (2.7%)	0 (0%)
	All	1.5 (2.9%)	0 (0%)	1.5 (2.9%)	0 (0%)
APR	W	1.5 (2.9%)	0 (0%)	1.5 (2.9%)	0 (0%)
	AN	1.6 (3.1%)	0 (0%)	1.6 (3.1%)	0 (0%)
	BN	1.8 (3.4%)	0 (0%)	1.8 (3.4%)	0 (0%)
	D	1.7 (3.3%)	0 (0%)	1.7 (3.3%)	0 (0%)
	C	1.7 (3.1%)	0 (0%)	1.7 (3.1%)	0 (0%)
	All	1.6 (3.1%)	0 (0%)	1.6 (3.1%)	0 (0%)
MAY	W	1.6 (3%)	0 (0%)	1.6 (3%)	0 (0%)
	AN	1.7 (3.1%)	0 (0%)	1.7 (3.1%)	0 (0%)
	BN	2.2 (3.9%)	0 (0%)	2.2 (3.9%)	0 (0%)
	D	2 (3.5%)	0 (0%)	2 (3.5%)	0 (0%)
	C	2 (3.4%)	0 (0%)	2 (3.4%)	0 (0%)
	All	1.8 (3.3%)	0 (0%)	1.8 (3.3%)	0 (0%)
JUN	W	1.4 (2.5%)	0 (0%)	1.4 (2.5%)	0 (0%)
	AN	1.7 (3%)	0 (0%)	1.7 (3%)	0 (0%)
	BN	2.1 (3.4%)	0 (0%)	2.1 (3.4%)	0 (0%)
	D	2.5 (4%)	0 (0%)	2.5 (4%)	0 (0%)
	C	2.1 (3.4%)	0 (0%)	2.1 (3.4%)	0 (0%)
	All	1.9 (3.2%)	0 (0%)	1.9 (3.2%)	0 (0%)

Alternative 2D and 5A: Stanislaus River at Orange Blossom Bridge					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	1.4 (2.4%)	0 (0%)	1.4 (2.4%)	0 (0%)
	AN	2 (3.3%)	0 (0%)	2 (3.3%)	0 (0%)
	BN	2 (3.2%)	0 (0%)	2 (3.2%)	0 (0%)
	D	2.3 (3.6%)	0 (0%)	2.3 (3.6%)	0 (0%)
	C	2.2 (3.4%)	0 (0%)	2.3 (3.5%)	0.1 (0.1%)
	All	1.9 (3.1%)	0 (0%)	1.9 (3.1%)	0 (0%)
AUG	W	1.8 (2.9%)	0 (0%)	1.8 (2.9%)	0 (0%)
	AN	1.8 (3%)	0 (0%)	1.8 (3%)	0 (0%)
	BN	1.7 (2.8%)	0 (0%)	1.7 (2.8%)	0 (0%)
	D	1.8 (2.8%)	0 (0%)	1.8 (2.8%)	0 (0%)
	C	2.3 (3.6%)	0 (0%)	2.1 (3.3%)	-0.2 (-0.2%)
	All	1.9 (3%)	0 (0%)	1.8 (3%)	0 (0%)
SEP	W	1.7 (2.8%)	0 (0%)	1.7 (2.8%)	0 (0%)
	AN	1.9 (3%)	0 (0%)	1.9 (3%)	0 (0%)
	BN	1.8 (2.9%)	0 (0%)	1.8 (2.9%)	0 (0%)
	D	1.8 (2.8%)	0 (0%)	1.8 (2.8%)	0 (0%)
	C	2.1 (3.2%)	0 (0%)	2 (3.1%)	-0.1 (-0.1%)
	All	1.8 (3%)	0 (0%)	1.8 (2.9%)	0 (0%)
OCT	W	1.6 (2.6%)	0 (0%)	1.6 (2.6%)	0 (0%)
	AN	1.4 (2.4%)	0 (0%)	1.4 (2.4%)	0 (0%)
	BN	1.4 (2.5%)	0 (0%)	1.4 (2.5%)	0 (0%)
	D	1.6 (2.7%)	0 (0%)	1.6 (2.7%)	0 (0%)
	C	1.7 (2.8%)	0 (0%)	1.7 (2.8%)	0 (0%)
	All	1.5 (2.6%)	0 (0%)	1.5 (2.6%)	0 (0%)
NOV	W	1.4 (2.5%)	0 (0%)	1.4 (2.5%)	0 (0%)
	AN	1.3 (2.4%)	0 (0%)	1.3 (2.4%)	0 (0%)
	BN	1.4 (2.6%)	0 (0%)	1.4 (2.6%)	0 (0%)
	D	1.3 (2.5%)	0 (0%)	1.3 (2.5%)	0 (0%)
	C	1.4 (2.5%)	0 (0%)	1.4 (2.5%)	0 (0%)
	All	1.4 (2.5%)	0 (0%)	1.4 (2.5%)	0 (0%)
DEC	W	1.3 (2.7%)	0 (0%)	1.3 (2.7%)	0 (0%)
	AN	1.3 (2.6%)	0 (0%)	1.3 (2.6%)	0 (0%)
	BN	1.4 (2.8%)	0 (0%)	1.4 (2.8%)	0 (0%)
	D	1.3 (2.5%)	0 (0%)	1.3 (2.5%)	0 (0%)
	C	1.3 (2.5%)	0 (0%)	1.3 (2.5%)	0 (0%)
	All	1.3 (2.6%)	0 (0%)	1.3 (2.6%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Stanislaus River at Riverbank**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the Stanislaus**  
3 **River at Riverbank, Year-Round**

Alternative 2D and 5A: Stanislaus River at Riverbank					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JAN	W	47	48	48	48
	AN	47	48	48	48
	BN	46	48	48	48
	D	45	47	47	47
	C	46	47	47	47
	All	46	48	48	48
FEB	W	49	51	51	51
	AN	50	51	51	51
	BN	50	51	51	51
	D	50	51	51	51
	C	51	52	52	52
	All	50	51	51	51
MAR	W	51	52	52	52
	AN	52	53	53	53
	BN	53	55	55	55
	D	54	56	56	56
	C	54	55	55	55
	All	52	54	54	54
APR	W	52	53	53	53
	AN	53	55	55	55
	BN	54	56	56	56
	D	54	56	56	56
	C	57	58	58	58
	All	54	55	55	55
MAY	W	56	57	57	57
	AN	57	59	59	59
	BN	58	60	60	60
	D	59	61	61	61
	C	60	62	62	62
	All	58	59	59	59
JUN	W	60	61	61	61
	AN	62	64	64	64
	BN	64	66	66	66
	D	66	69	69	69
	C	66	68	68	68
	All	63	65	65	65

Alternative 2D and 5A: Stanislaus River at Riverbank					
Month	Water Year Type	EXISTING CONDITIONS	NAA_ELT	A2D_ELT	A5A_ELT
JUL	W	65	67	67	67
	AN	68	70	70	70
	BN	68	70	70	70
	D	68	70	70	70
	C	68	70	70	70
	All	67	69	69	69
AUG	W	65	67	67	67
	AN	67	69	69	69
	BN	67	68	68	68
	D	68	69	69	69
	C	67	69	69	69
	All	66	68	68	68
SEP	W	64	65	65	65
	AN	66	68	68	68
	BN	66	67	67	67
	D	66	68	68	68
	C	66	68	68	68
	All	65	67	67	67
OCT	W	59	61	61	61
	AN	59	61	61	61
	BN	59	60	60	60
	D	59	60	60	60
	C	61	62	62	62
	All	60	61	61	61
NOV	W	53	55	55	55
	AN	53	54	54	54
	BN	53	54	54	54
	D	53	54	54	54
	C	54	55	55	55
	All	53	54	54	54
DEC	W	48	49	49	49
	AN	48	49	49	49
	BN	47	48	48	48
	D	47	48	48	48
	C	47	48	48	48
	All	47	49	49	49

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Stanislaus River at Riverbank, Year-Round**

<b>Alternative 2D and 5A: Stanislaus River at Riverbank</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS VS. A2D_ELT</b>	<b>NAA_ELT VS. A2D_ELT</b>	<b>EXISTING CONDITIONS VS. A5A_ELT</b>	<b>NAA_ELT VS. A5A_ELT</b>
JAN	W	1.3 (2.8%)	0 (0%)	1.3 (2.8%)	0 (0%)
	AN	1.4 (3.1%)	0 (0%)	1.4 (3.1%)	0 (0%)
	BN	1.3 (2.7%)	0 (0%)	1.3 (2.7%)	0 (0%)
	D	1.2 (2.7%)	0 (0%)	1.2 (2.7%)	0 (0%)
	C	1.2 (2.6%)	0 (0%)	1.2 (2.6%)	0 (0%)
	All	1.3 (2.8%)	0 (0%)	1.3 (2.8%)	0 (0%)
FEB	W	1.2 (2.5%)	0 (0%)	1.2 (2.5%)	0 (0%)
	AN	1.4 (2.8%)	0 (0%)	1.4 (2.8%)	0 (0%)
	BN	1.6 (3.1%)	0 (0%)	1.6 (3.1%)	0 (0%)
	D	1.7 (3.3%)	0 (0%)	1.7 (3.3%)	0 (0%)
	C	1.6 (3.1%)	0 (0%)	1.6 (3.1%)	0 (0%)
	All	1.4 (2.9%)	0 (0%)	1.4 (2.9%)	0 (0%)
MAR	W	1.1 (2.1%)	0 (0%)	1.1 (2.1%)	0 (0%)
	AN	1.7 (3.3%)	0 (0%)	1.7 (3.3%)	0 (0%)
	BN	1.3 (2.5%)	0 (0%)	1.3 (2.5%)	0 (0%)
	D	1.7 (3.2%)	0 (0%)	1.7 (3.2%)	0 (0%)
	C	1.4 (2.6%)	0 (0%)	1.4 (2.6%)	0 (0%)
	All	1.4 (2.7%)	0 (0%)	1.4 (2.7%)	0 (0%)
APR	W	1.4 (2.7%)	0 (0%)	1.4 (2.7%)	0 (0%)
	AN	1.6 (2.9%)	0 (0%)	1.6 (2.9%)	0 (0%)
	BN	1.8 (3.4%)	0 (0%)	1.8 (3.4%)	0 (0%)
	D	1.7 (3.2%)	0 (0%)	1.7 (3.2%)	0 (0%)
	C	1.7 (3%)	0 (0%)	1.7 (3%)	0 (0%)
	All	1.6 (3%)	0 (0%)	1.6 (3%)	0 (0%)
MAY	W	1.6 (3%)	0 (0%)	1.6 (3%)	0 (0%)
	AN	1.9 (3.3%)	0 (0%)	1.9 (3.3%)	0 (0%)
	BN	2.4 (4.2%)	0 (0%)	2.4 (4.2%)	0 (0%)
	D	2.1 (3.6%)	0 (0%)	2.1 (3.6%)	0 (0%)
	C	2 (3.3%)	0 (0%)	2 (3.3%)	0 (0%)
	All	2 (3.4%)	0 (0%)	2 (3.4%)	0 (0%)
JUN	W	1.2 (2%)	0 (0%)	1.2 (2%)	0 (0%)
	AN	1.9 (3%)	0 (0%)	1.9 (3%)	0 (0%)
	BN	2 (3.1%)	0 (0%)	2 (3.1%)	0 (0%)
	D	2.4 (3.6%)	0 (0%)	2.4 (3.6%)	0 (0%)
	C	2.1 (3.1%)	0 (0%)	2 (3.1%)	0 (0%)
	All	1.8 (2.8%)	0 (0%)	1.8 (2.8%)	0 (0%)



Alternative 2D and 5A: Stanislaus River at Riverbank					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	1.4 (2.1%)	0 (0%)	1.4 (2.1%)	0 (0%)
	AN	2 (2.9%)	0 (0%)	2 (2.9%)	0 (0%)
	BN	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
	D	2.2 (3.2%)	0 (0%)	2.2 (3.2%)	0 (0%)
	C	2 (2.9%)	0 (0%)	2 (2.9%)	0 (0%)
	All	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
AUG	W	1.8 (2.8%)	0 (0%)	1.8 (2.8%)	0 (0%)
	AN	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
	BN	1.6 (2.5%)	0 (0%)	1.6 (2.5%)	0 (0%)
	D	1.7 (2.4%)	0 (0%)	1.7 (2.4%)	0 (0%)
	C	2.1 (3.1%)	0 (0%)	1.9 (2.8%)	-0.2 (-0.3%)
	All	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (-0.1%)
SEP	W	1.7 (2.7%)	0 (0%)	1.7 (2.7%)	0 (0%)
	AN	1.9 (2.9%)	0 (0%)	1.9 (2.9%)	0 (0%)
	BN	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
	D	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
	C	1.9 (2.9%)	0 (0%)	1.8 (2.7%)	-0.1 (-0.2%)
	All	1.8 (2.8%)	0 (0%)	1.8 (2.7%)	0 (0%)
OCT	W	1.4 (2.4%)	0 (0%)	1.4 (2.4%)	0 (0%)
	AN	1.3 (2.2%)	0 (0%)	1.3 (2.2%)	0 (0%)
	BN	1.2 (2.1%)	0 (0%)	1.2 (2.1%)	0 (0%)
	D	1.4 (2.3%)	0 (0%)	1.4 (2.3%)	0 (0%)
	C	1.5 (2.5%)	0 (0%)	1.5 (2.5%)	0 (0%)
	All	1.4 (2.3%)	0 (0%)	1.4 (2.3%)	0 (0%)
NOV	W	1.3 (2.4%)	0 (0%)	1.3 (2.4%)	0 (0%)
	AN	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
	BN	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
	D	1.2 (2.2%)	0 (0%)	1.2 (2.2%)	0 (0%)
	C	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
	All	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
DEC	W	1.3 (2.7%)	0 (0%)	1.3 (2.7%)	0 (0%)
	AN	1.2 (2.5%)	0 (0%)	1.2 (2.5%)	0 (0%)
	BN	1.2 (2.6%)	0 (0%)	1.2 (2.6%)	0 (0%)
	D	1.1 (2.3%)	0 (0%)	1.1 (2.3%)	0 (0%)
	C	1.1 (2.4%)	0 (0%)	1.1 (2.4%)	0 (0%)
	All	1.2 (2.5%)	0 (0%)	1.2 (2.5%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.

1 **Stanislaus River at the Confluence with the San Joaquin River**2 **Table 1. Mean Monthly Water Temperatures (°F) for Alternative 2D Model Scenarios in the Stanislaus**  
3 **River at the Confluence with the San Joaquin River, Year-Round**

<b>Alternative 2D and 5A: Stanislaus River at the Confluence with the San Joaquin River</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JAN	W	46	48	48	48
	AN	46	47	47	47
	BN	46	47	47	47
	D	45	46	46	46
	C	45	46	46	46
	All	46	47	47	47
FEB	W	50	51	51	51
	AN	50	52	52	52
	BN	50	51	51	51
	D	50	52	52	52
	C	51	53	53	53
	All	50	52	52	52
MAR	W	52	53	53	53
	AN	53	54	54	54
	BN	54	55	55	55
	D	55	57	57	57
	C	55	56	56	56
	All	54	55	55	55
APR	W	54	55	55	55
	AN	55	57	57	57
	BN	56	58	58	58
	D	57	58	58	58
	C	59	60	60	60
	All	56	57	57	57
MAY	W	59	60	60	60
	AN	60	62	62	62
	BN	60	63	63	63
	D	61	64	64	64
	C	63	65	65	65
	All	60	62	62	62
JUN	W	62	64	64	64
	AN	65	67	67	67
	BN	66	68	68	68
	D	68	70	70	70
	C	68	70	70	70
	All	65	67	67	67

<b>Alternative 2D and 5A: Stanislaus River at the Confluence with the San Joaquin River</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS</b>	<b>NAA_ELT</b>	<b>A2D_ELT</b>	<b>A5A_ELT</b>
JUL	W	68	69	69	69
	AN	70	72	72	72
	BN	70	71	71	71
	D	70	72	72	72
	C	70	72	72	72
	All	69	71	71	71
AUG	W	67	69	69	69
	AN	69	70	70	70
	BN	68	70	70	70
	D	69	71	71	71
	C	69	70	70	70
	All	68	70	70	70
SEP	W	65	67	67	67
	AN	67	69	69	69
	BN	67	68	68	68
	D	67	69	69	69
	C	67	68	68	68
	All	66	68	68	68
OCT	W	60	61	61	61
	AN	60	61	61	61
	BN	59	60	60	60
	D	59	61	61	61
	C	61	62	62	62
	All	60	61	61	61
NOV	W	53	54	54	54
	AN	52	53	53	53
	BN	52	53	53	53
	D	52	53	53	53
	C	53	54	54	54
	All	52	54	54	54
DEC	W	47	48	48	48
	AN	46	48	48	48
	BN	45	47	47	47
	D	45	46	46	46
	C	45	46	46	46
	All	46	47	47	47

1 **Table 2. Differences (°F)<sup>a</sup> (Percent Differences) between Pairs of Model Scenarios in Mean Monthly**  
 2 **Water Temperatures in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round**

<b>Alternative 2D and 5A: Stanislaus River at the Confluence with the San Joaquin River</b>					
<b>Month</b>	<b>Water Year Type</b>	<b>EXISTING CONDITIONS VS. A2D_ELT</b>	<b>NAA_ELT VS. A2D_ELT</b>	<b>EXISTING CONDITIONS VS. A5A_ELT</b>	<b>NAA_ELT VS. A5A_ELT</b>
JAN	W	1.3 (2.9%)	0 (0%)	1.3 (2.9%)	0 (0%)
	AN	1.4 (3%)	0 (0%)	1.4 (3%)	0 (0%)
	BN	1.3 (2.9%)	0 (0%)	1.3 (2.9%)	0 (0%)
	D	1.2 (2.7%)	0 (0%)	1.2 (2.7%)	0 (0%)
	C	1.3 (2.9%)	0 (0%)	1.3 (2.9%)	0 (0%)
	All	1.3 (2.9%)	0 (0%)	1.3 (2.9%)	0 (0%)
FEB	W	1.2 (2.4%)	0 (0%)	1.2 (2.4%)	0 (0%)
	AN	1.4 (2.8%)	0 (0%)	1.4 (2.8%)	0 (0%)
	BN	1.5 (3.1%)	0 (0%)	1.5 (3.1%)	0 (0%)
	D	1.5 (3.1%)	0 (0%)	1.5 (3.1%)	0 (0%)
	C	1.5 (3%)	0 (0%)	1.5 (3%)	0 (0%)
	All	1.4 (2.8%)	0 (0%)	1.4 (2.8%)	0 (0%)
MAR	W	1 (1.9%)	0 (0%)	1 (1.9%)	0 (0%)
	AN	1.6 (3%)	0 (0%)	1.6 (3%)	0 (0%)
	BN	1.2 (2.2%)	0 (0%)	1.2 (2.2%)	0 (0%)
	D	1.6 (2.9%)	0 (0%)	1.6 (2.9%)	0 (0%)
	C	1.3 (2.3%)	0 (0%)	1.3 (2.3%)	0 (0%)
	All	1.3 (2.4%)	0 (0%)	1.3 (2.4%)	0 (0%)
APR	W	1.3 (2.4%)	0 (0%)	1.3 (2.4%)	0 (0%)
	AN	1.5 (2.7%)	0 (0%)	1.5 (2.7%)	0 (0%)
	BN	1.7 (3.1%)	0 (0%)	1.7 (3.1%)	0 (0%)
	D	1.6 (2.9%)	0 (0%)	1.6 (2.9%)	0 (0%)
	C	1.5 (2.6%)	0 (0%)	1.5 (2.6%)	0 (0%)
	All	1.5 (2.7%)	0 (0%)	1.5 (2.7%)	0 (0%)
MAY	W	1.6 (2.8%)	0 (0%)	1.6 (2.8%)	0 (0%)
	AN	2 (3.3%)	0 (0%)	2 (3.3%)	0 (0%)
	BN	2.3 (3.8%)	0 (0%)	2.3 (3.8%)	0 (0%)
	D	2.1 (3.4%)	0 (0%)	2.1 (3.4%)	0 (0%)
	C	1.9 (3%)	0 (0%)	1.9 (3%)	0 (0%)
	All	1.9 (3.2%)	0 (0%)	1.9 (3.2%)	0 (0%)
JUN	W	1.2 (1.9%)	0 (0%)	1.2 (1.9%)	0 (0%)
	AN	1.8 (2.8%)	0 (0%)	1.9 (2.9%)	0 (0%)
	BN	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
	D	1.9 (2.8%)	0 (0%)	1.9 (2.8%)	0 (0%)
	C	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
	All	1.7 (2.5%)	0 (0%)	1.7 (2.5%)	0 (0%)

Alternative 2D and 5A: Stanislaus River at the Confluence with the San Joaquin River					
Month	Water Year Type	EXISTING CONDITIONS VS. A2D_ELT	NAA_ELT VS. A2D_ELT	EXISTING CONDITIONS VS. A5A_ELT	NAA_ELT VS. A5A_ELT
JUL	W	1.4 (2.1%)	0 (0%)	1.4 (2.1%)	0 (0%)
	AN	1.8 (2.5%)	0 (0%)	1.8 (2.5%)	0 (0%)
	BN	1.6 (2.3%)	0 (0%)	1.6 (2.3%)	0 (0%)
	D	1.8 (2.6%)	0 (0%)	1.8 (2.6%)	0 (0%)
	C	1.8 (2.5%)	0 (0%)	1.8 (2.5%)	0 (0%)
	All	1.7 (2.4%)	0 (0%)	1.7 (2.4%)	0 (0%)
AUG	W	1.9 (2.8%)	0 (0%)	1.9 (2.8%)	0 (0%)
	AN	1.7 (2.4%)	0 (0%)	1.7 (2.4%)	0 (0%)
	BN	1.6 (2.3%)	0 (0%)	1.6 (2.3%)	0 (0%)
	D	1.6 (2.3%)	0 (0%)	1.6 (2.3%)	0 (0%)
	C	1.9 (2.8%)	0 (0%)	1.7 (2.4%)	-0.3 (-0.4%)
	All	1.8 (2.6%)	0 (0%)	1.7 (2.5%)	-0.1 (-0.1%)
SEP	W	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
	AN	1.8 (2.7%)	0 (0%)	1.8 (2.7%)	0 (0%)
	BN	1.8 (2.6%)	0 (0%)	1.8 (2.6%)	0 (0%)
	D	1.7 (2.6%)	0 (0%)	1.7 (2.6%)	0 (0%)
	C	1.8 (2.7%)	0 (0%)	1.6 (2.5%)	-0.2 (-0.3%)
	All	1.8 (2.7%)	0 (0%)	1.7 (2.6%)	0 (-0.1%)
OCT	W	1.3 (2.2%)	0 (0%)	1.3 (2.2%)	0 (0%)
	AN	1.2 (2%)	0 (0%)	1.2 (2%)	0 (0%)
	BN	1.1 (1.8%)	0 (0%)	1.1 (1.8%)	0 (0%)
	D	1.3 (2.1%)	0 (0%)	1.3 (2.1%)	0 (0%)
	C	1.5 (2.4%)	0 (0%)	1.5 (2.4%)	0 (0%)
	All	1.3 (2.1%)	0 (0%)	1.3 (2.1%)	0 (0%)
NOV	W	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
	AN	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
	BN	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
	D	1.1 (2.2%)	0 (0%)	1.1 (2.2%)	0 (0%)
	C	1.2 (2.2%)	0 (0%)	1.2 (2.2%)	0 (0%)
	All	1.2 (2.3%)	0 (0%)	1.2 (2.3%)	0 (0%)
DEC	W	1.3 (2.7%)	0 (0%)	1.3 (2.7%)	0 (0%)
	AN	1.2 (2.5%)	0 (0%)	1.2 (2.5%)	0 (0%)
	BN	1.2 (2.7%)	0 (0%)	1.2 (2.7%)	0 (0%)
	D	1 (2.2%)	0 (0%)	1 (2.2%)	0 (0%)
	C	1.1 (2.4%)	0 (0%)	1.1 (2.4%)	0 (0%)
	All	1.2 (2.5%)	0 (0%)	1.2 (2.5%)	0 (0%)

<sup>a</sup> Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline; green boxes indicate that water temperatures under the alternative are more than 5% lower than water temperatures under the baseline.