Appendix 5E
Supplemental Modeling Related to the State Water Resources Control Board

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5E.1 Introduction and Purpose of the Supplemental Modeling

The State Water Resources Control Board (State Water Board) is expected to issue discretionary approvals considered a "project" under California Environmental Quality Act (CEQA), and therefore, the State Water Board is identified as a Responsible Agency for purposes of California Department of Water Resources (DWR's) CEQA document. DWR prepared the Bay Delta Conservation Plan (BDCP) Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) in consideration of the State Water Board and other Responsible Agency approvals and specifically included Alternative 8 in the BDCP Draft EIR/EIS at the request of State Water Board staff. The 2015 Partially Recirculated Draft EIR/Supplemental Draft EIS (RDEIR/SDEIS) included, at the request of State Water Board staff, supplemental modeling at year 2025 (Early Long Term [ELT]), conducted to evaluate an operational scenario that provides higher Delta outflows than the Preferred Alternative (Alternative 4A), while including model assumptions that avoid impacts to fish and aquatic resources attributable to reductions in cold water pool storage and flow modifications under Alternative 8 and other higher outflow scenarios analyzed in the BDCP Draft EIR/EIS.

This appendix includes a revised and updated version of the State Water Board staff requested scenario that was presented in the RDEIR/SDEIS (referred to as Scenario 2 in this appendix) and also provides supplemental modeling and analysis of 2 additional scenarios, each at year 2025 (Early Long Term [ELT]) that were presented in the State Water Board water rights petition process (Boundary 1 and Boundary 2). Boundaries 1 and 2 were presented to the State Water Board during the water rights petition process as a means to represent a potential range of operations that could occur as a result of the proposed Adaptive Management Program, and the conditions of any approvals obtained as a result of the ongoing regulatory review of U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Wildlife, and State Water Board. The description and analysis included in this appendix for Boundaries 1 and 2 incorporates by reference the testimony presented to the State Water Board July 29 through September 27, 2016, for the California WaterFix change in point of diversion petition. The testimony exhibits on which this analysis relied are posted at:

http://cms.capitoltechsolutions.com/ClientData/CaliforniaWaterFix/uploads/CWF_ChangePetition_TOC_V212.pdf

The transcripts on which this analysis relied are posted at:

http://cms.capitoltechsolutions.com/ClientData/CaliforniaWaterFix/uploads/CWF_ChangePetitionHearingTranscript.pdf

Specifically, the modeling and water quality exhibits (DWR-5, DWR-513, DWR-514, and DWR-515) and transcripts (August 19, 23, and 24, 2016) were relied upon for this analysis. Boundary 2 was based on the higher Delta outflow operational scenario requested by State Water Board staff that was evaluated in the 2015 RDEIR/SDEIS. Scenario 2 is identical to Boundary 2 in all respects except for upstream releases from Lake Oroville in April and May to support the higher Delta outflow requirements included in Scenario 2.

The evaluations for Boundaries 1 and 2 and Scenario 2 were conducted primarily to consider changes in outflow, without specific consideration of the project objectives or purpose and need statement. Overall, the purpose of this evaluation was to provide a range of Delta outflows and other operational parameters to consider as a part of the CEQA/NEPA process as well as during agency decision-making, including the State Water Board's water rights hearing on the petition for changes in State Water Project (SWP) and Central Valley Project (CVP) authorized points of diversion necessary to implement the proposed project.

5E.2 Modeling Assumptions

Three scenarios were evaluated in this appendix: Boundary 1, Boundary 2, and Scenario 2. Additionally, modeling for Alternatives 4H3 and 4H4 was conducted for the State Water Board petition process. The modeling results of Alternative 4H3, Alternative 4H4, Boundary 1 and Boundary 2 are included as Attachment 5E-1. The modeling results for Scenario 2 are included below in Section 5E.3. Tables 5E-1 through 5E-5 below includes the assumptions for the 3 scenarios evaluated in this appendix, plus the No Action Alternative (for reference).

Table 5E-1. Key CALSIM II CWF No Action Alternative, CPOD Boundary 1 and Boundary 2, and Scenario 2 Inputs and Assumptions

	No Action Alternative (NAA)	Boundary 1	Boundary 2	Scenario 2
Planning horizon[a]	Year 2030	Same as NAA	Same as NAA	Same as Boundary 2
Inflows/ Supplies	Historical with modifications for operations upstream of rim reservoirs and with changed climate at Year 2030	Same as NAA	Same as NAA	Same as Boundary 2
Facilities				
North Delta Diversion Intakes	Not included	9,000 cfs north Delta diversion intake on the Sacramento River at Hood	Same as Boundary 1	Same as Boundary 2
Head of Old River Gate	Temporary Head of Old River Barrier installed in the fall months	Permanent Head of Old River (HOR) Gate	Same as Boundary 1	Same as Boundary 2

	No Action Alternative (NAA)	Boundary 1	Boundary 2	Scenario 2
North Delta Diversion Operations Criteria				
North Delta Diversion Bypass Flows	Not included	Sacramento River bypass flow requirements downstream of the proposed intakes as described in Table 2 below. In addition, a constraint on the potential diversion at the north Delta intakes, to account for the fish screen sweeping velocity criteria of 0.4 fps. The constraint was derived based on resulting diversions from the DSM2 modeling.	Same as Boundary 1	Same as Boundary 2
Minimum flow near Rio Vista	SWRCB D-1641	Same as NAA with additional minimum flow requirement of 3,000 cfs from January to August.	Same as Boundary 1	Same as Boundary 2
South Delta Export Restrictions				
South Delta exports (Jones PP and Banks PP)	SWRCB D-1641. Vernalis flow-based export limits Apr 1 – May 31 as required by NMFS BiOp (Jun, 2009) Action IV.2.1 (additional 500 cfs allowed for Jul – Sep for reducing impact on SWP)	SWRCB D-1641. Pumping at the south Delta intakes are preferred during the July through September months up to a total pumping of 3,000 cfs to minimize potential water quality degradation in the south Delta channels. No specific intake preference is assumed beyond 3,000 cfs.	Same as Boundary 1	Same as Boundary 2
Combined Flow in Old and Middle River (OMR)	FWS BiOp (Dec 2008) Actions 1 through 3 and NMFS BiOp (Jun 2009) Action IV.2.3	Same as NAA	New OMR criteria in Table 3 below or same as the NAA, whichever results in less negative OMR flows	Same as Boundary 2
Head of Old River Barrier/Gate	Head of Old River Barrier (HORB) is only installed in the fall months per FWS Delta Smelt BiOp Action 5; it is assumed to be not installed in April or May.	Same as NAA	HOR gate operations assumptions (% OPEN) Oct - Dec 100%, Jan - Feb 50%, Mar - Jun 0%, Jul - Sep 100%; HOR gate will be open 100% whenever flows are greater than 10,000 cfs at Vernalis.; Oct-Nov: Before the D-1641 pulse = HOR gate open, During the D-1641 pulse = for 2 weeks HOR gate closed; After D-1641 pulse: HORB open 50% for 2 weeks	Same as Boundary 2

	No Action Alternative (NAA)	Boundary 1	Boundary 2	Scenario 2
Delta Outflow Requirements				
Delta Outflow Index (Flow and Salinity)	SWRCB D-1641 and USFWS BiOp (Dec 2008) Action 4 (Fall X2 Requirement)	SWRCB D-1641	Same as NAA; In addition, year-round Delta outflow goals (see Table 5 below); outflow above existing requirements, attempted to achieve through Delta export curtailments by an amount needed to meet the outflow goal, such that minimum exports are greater of 1500 cfs or to meet CVP San Joaquin River exchange contractor demands and CVP south-of-Delta refuge level 2 demands and conveyance losses are maintained. All other export restrictions are maintained. Outflow goals during Jul-Sep of non-Critical water year types, upstream reservoir releases are permitted to meet the additional outflow goals.	Same as Boundary 2; In addition, Oroville releases required during Apr-May months to augment Delta outflow, if specified outflow targets are not achieved with export curtailments. Additional flow needed to meet the outflow target is released from the Oroville reservoir, up to 17,000 cfs as long as projected end-of-May Oroville storage is similar to Alternative 4H4.

Table 5E-2. North Delta Diversion Bypass Flow Criteria

North Delta Diversion Bypass Flows These parameters are for modeling purposes. Actual operations will be based on real-time monitoring of hydrologic conditions and fish presence/movement
Low-Level Pumping (Dec-Jun) Diversions of up to 6% of total Sacramento River flow such that bypass flow never falls below 5,000 cfs. No more than 300 cfs can be diverted at any one intake.
Initial Pulse Protection Low level pumping will be maintained through the initial pulse period. For modeling, the initiation of the pulse is defined by the following criteria: (1) Sacramento River flow at Wilkins Slough increasing by more than 45% within a five-day period and (2) flow on the fifth day greater than 12,000 cfs. The pulse (and low-level pumping) continues until either (1) Sacramento River flow at Wilkins Slough returns to pre-pulse flow level (flow on first day of pulse period), or (2) Sacramento River flow at Wilkins Slough decreases for 5 consecutive days, or (3) Sacramento River flow at Wilkins Slough is greater than 20,000 cfs for 10 consecutive days. After pulse period has ended, operations will return to the bypass flow table (Sub-Table A). If the initial pulse period begins and ends before Dec 1st in the modeling, then any second pulse that may occur before the end of June will receive the same protection, i.e., low level pumping.
Post-Pulse Operations After initial pulse(s), allowable diversion will go to Level I Post-Pulse Operations (see Sub-Table A) until 15 total days of bypass flows above 20,000 cfs occur. Then allowable diversion will go to the Level II Post-Pulse Operations until 30 total days of bypass flows above 20,000 cfs occur. Then allowable diversion will go to the Level III Post-Pulse Operations.
Sub-Table A. Post-Pulse Operations for North Delta Diversion Bypass Flows Implement following bypass flow requirements sufficient to minimize any increase in the upstream tidal transport at two points of control: (1) Sacramento River upstream of Sutter Slough and (2) Sacramento River downstream of Georgiana Slough. These points are used to minimize any increase in upstream transport toward the proposed intakes or into Georgiana Slough. Allowable diversion will be greater of the low-level pumping or the diversion allowed by the following bypass flow rules.

Level I Post-Pulse Operations			**Level II Post-Pulse Operations**			**Level III Post Pulse Operations**		
If Sacramento River flow is over…	**But not over…**	**The bypass is…**	**If Sacramento River flow is over…**	**But not over…**	**The bypass is…**	**If Sacramento River flow is over…**	**But not over…**	**The bypass is…**
Dec–Apr								
0 cfs	5,000 cfs	100% of the amount over 0 cfs	0 cfs	5,000 cfs	100% of the amount over 0 cfs	0 cfs	5,000 cfs	100% of the amount over 0 cfs
5,000 cfs	15,000 cfs	Flows remaining after constant low level pumping	5,000 cfs	11,000 cfs	Flows remaining after constant low level pumping	5,000 cfs	9,000 cfs	Flows remaining after constant low level pumping

Level I Post-Pulse Operations			Level II Post-Pulse Operations			Level III Post Pulse Operations		
If Sacramento River flow is over…	But not over…	The bypass is…	If Sacramento River flow is over…	But not over…	The bypass is…	If Sacramento River flow is over…	But not over…	The bypass is…
15,000 cfs	17,000 cfs	15,000 cfs plus 80% of the amount over 15,000 cfs	11,000 cfs	15,000 cfs	11,000 cfs plus 60% of the amount over 11,000 cfs	9,000 cfs	15,000 cfs	9,000 cfs plus 50% of the amount over 9,000 cfs
17,000 cfs	20,000 cfs	16,600 cfs plus 60% of the amount over 17,000 cfs	15,000 cfs	20,000 cfs	13,400 cfs plus 50% of the amount over 15,000 cfs	15,000 cfs	20,000 cfs	12,000 cfs plus 20% of the amount over 15,000 cfs
20,000 cfs	no limit	18,400 cfs plus 30% of the amount over 20,000 cfs	20,000 cfs	no limit	15,900 cfs plus 20% of the amount over 20,000 cfs	20,000 cfs	no limit	13,000 cfs plus 0% of the amount over 20,000 cfs
May								
0 cfs	5,000 cfs	100% of the amount over 0 cfs	0 cfs	5,000 cfs	100% of the amount over 0 cfs	0 cfs	5,000 cfs	100% of the amount over 0 cfs
5,000 cfs	15,000 cfs	Flows remaining after constant low level pumping	5,000 cfs	11,000 cfs	Flows remaining after constant low level pumping	5,000 cfs	9,000 cfs	Flows remaining after constant low level pumping
15,000 cfs	17,000 cfs	15,000 cfs plus 70% of the amount over 15,000 cfs	11,000 cfs	15,000 cfs	11,000 cfs plus 50% of the amount over 11,000 cfs	9,000 cfs	15,000 cfs	9,000 cfs plus 40% of the amount over 9,000 cfs
17,000 cfs	20,000 cfs	16,400 cfs plus 50% of the amount over 17,000 cfs	15,000 cfs	20,000 cfs	13,000 cfs plus 35% of the amount over 15,000 cfs	15,000 cfs	20,000 cfs	11,400 cfs plus 20% of the amount over 15,000 cfs
20,000 cfs	no limit	17,900 cfs plus 20% of the amount over 20,000 cfs	20,000 cfs	no limit	14,750 cfs plus 20% of the amount over 20,000 cfs	20,000 cfs	no limit	12,400 cfs plus 0% of the amount over 20,000 cfs

Level I Post-Pulse Operations			**Level II Post-Pulse Operations**			**Level III Post Pulse Operations**		
If Sacramento River flow is over…	**But not over…**	**The bypass is…**	**If Sacramento River flow is over…**	**But not over…**	**The bypass is…**	**If Sacramento River flow is over…**	**But not over…**	**The bypass is…**
Jun								
0 cfs	5,000 cfs	100% of the amount over 0 cfs	0 cfs	5,000 cfs	100% of the amount over 0 cfs	0 cfs	5,000 cfs	100% of the amount over 0 cfs
5,000 cfs	15,000 cfs	Flows remaining after constant low level pumping	5,000 cfs	11,000 cfs	Flows remaining after constant low level pumping	5,000 cfs	9,000 cfs	Flows remaining after constant low level pumping
15,000 cfs	17,000 cfs	15,000 cfs plus 60% of the amount over 15,000 cfs	11,000 cfs	15,000 cfs	11,000 cfs plus 40% of the amount over 11,000 cfs	9,000 cfs	15,000 cfs	9,000 cfs plus 30% of the amount over 9,000 cfs
17,000 cfs	20,000 cfs	16,200 cfs plus 40% of the amount over 17,000 cfs	15,000 cfs	20,000 cfs	12,600 cfs plus 20% of the amount over 15,000 cfs	15,000 cfs	20,000 cfs	10,800 cfs plus 20% of the amount over 15,000 cfs
20,000 cfs	no limit	17,400 cfs plus 20% of the amount over 20,000 cfs	20,000 cfs	no limit	13,600 cfs plus 20% of the amount over 20,000 cfs	20,000 cfs	no limit	11,800 cfs plus 0% of the amount over 20,000 cfs
Bypass flow requirements in other months:								
If Sacramento River flow is over…			**But not over…**			**The bypass is…**		
Jul–Sep								
0 cfs			5,000 cfs			100% of the amount over 0 cfs		
5,000 cfs			No limit			A minimum of 5,000 cfs		
Oct–Nov								
0 cfs			7,000 cfs			100% of the amount over 0 cfs		
7,000 cfs			No limit			A minimum of 7,000 cfs		

Table 5E-3. Old and Middle River Flow Criteria under Boundary 2

	Combined Old and Middle River Flows to be No Less than Values Below[a] (cfs)				
Month	Wet Water Year	Above Normal Water Year	Below Normal Water Year	Dry Water Year	Critical Dry Water Year
January	0	0	-2,500	-2,500	-2,500
February	0	0	-2,500	-2,500	-2,500
March[b]	Greater of 0 or Table 4	Greater of 0 or Table 4	Greater of -2,000 or Table 4	Greater of -2,000 or Table 4	Greater of -2,000 or Table 4
April[b]	Greater of -2,000 or Table 4	Greater of -2,000 or Table 4	Greater of -2,000 or Table 4	Greater of -2,000 or Table 4	Greater of -2,000 or Table 4
May[b]	Greater of -2,000 or Table 4	Greater of -2,000 or Table 4	Greater of -2,000 or Table 4	Greater of -2,000 or Table 4	Greater of -2,000 or Table 4
June[b]	Greater of -2,000 or Table 4	Greater of -2,000 or Table 4	Greater of -2,000 or Table 4	Greater of -2,000 or Table 4	Greater of -2,000 or Table 4
July[e]	-5,000	-5,000	-5,000	-5,000	-5,000
August[e]	-5,000	-5,000	-5,000	-5,000	-5,000
September[e]	-5,000	-5,000	-5,000	-5,000	-5,000
October[c]	-3,500	-3,500	-5,000	-5,000	-5,000
November[c]	-3,500	-3,500	-5,000	-5,000	-5,000
December[d]	-3,500	-3,500	-5,000	-5,000	-5,000

[a] Values are monthly average for use in modeling. The model compares these minimum allowable OMR values to 2008 USFWS BiOp RPA OMR requirements and uses the less negative flow requirement.

[b] Based on San Joaquin inflow relationship to OMR provided Table 8.

[c] Values for Two weeks before the D-1641 pulse (assumed to occur October 16-31 in the modeling) and two weeks after the D-1641 pulse. Two weeks during the D-1641 pulse, no south Delta exports.

[d] OMR restriction of -2,000 cfs for delta smelt when triggered.

[e] -5,000 cfs for Wet years and years following Wet years.

Table 5E-4. San Joaquin Inflow Relationship to Old and Middle River Flow Criteria under Boundary 2

April and May		March and June	
If San Joaquin River flow at Vernalis is (cfs):	Minimum Average OMR flows (interpolated linearly between values) (cfs)	If San Joaquin flow at Vernalis is the following (cfs):	Average OMR flows would be at least the following (no interpolation) (cfs):
≤ 5,000	-2,000	≤ 3,500	-2,500
6,000	+1000	3,501 to 10,000	0
10,000	+2000		
15,000	+3000	10,001 to 15,000	+1000
≥30,000	+6000	>15,000	+2000

Table 5E-5. Delta Outflow Goals under Boundary 2 (based on RDEIR/SDEIS App C SWRCB Scenario criteria)—*greater of D-1641/BiOps or outflow goals specified below; Delta outflow goals above current regulatory requirements achieved through Delta export curtailments; upstream storage releases allowed in Jul–Sep months in all water year types, except Critical water year types*

	W	AN	BN	D	C
Oct	11,400	11,400	7,100	7,100	7,100
Nov	11,400	11,400	7,100	7,100	7,100
Dec	11,400	11,400	11,400	11,400	11,400
Jan	35,000	35,000	35,000	35,000	35,000
Feb	35,000	35,000	35,000	35,000	35,000
Mar	44,500	44,500	44,500	25,000	25,000
Apr	44,500	44,500	44,500	25,000	25,000
May	44,500	44,500	44,500	25,000	25,000
Jun	11,400	11,400	7,100	7,100	7,100
Jul	7,100	7,100	7,100	7,100	7,100
Aug	7,100	7,100	7,100	7,100	7,100
Sep	11,400	11,400	7,100	7,100	7,100

5E.3 CALSIM II Summary

This section includes comparison plots of average monthly patterns of storages and flows by water year type for No Action Alternative at ELT, Alternative 4H3 at ELT, Alternative 4H4 at ELT, Boundary 1 at ELT, Boundary 2 at ELT, and Scenario 2 at ELT from June 2016.

Briefly, Scenario 2 (noted as SWB Scenario in the figures) is consistent with Boundary 2 except for the supplemental Oroville releases to augment the Delta outflow in April and May. The detailed assumptions are described in the Section 5E.2 above.

Parameters plotted include:

- Monthly Average Sacramento River at Keswick Flow
- Monthly Average Clear Creek Flow
- Monthly Average Feather River at Low Flow Channel Flow
- Monthly Average Feather River at Thermalito Flow
- Monthly Average Feather River at Confluence Flow
- Monthly Average American River at Nimbus Flow
- Monthly Average American River at Confluence Flow
- Monthly Average Sacramento River at Freeport Flow
- Monthly Average Sacramento River Flow Downstream of North Delta Intakes
- Monthly Average Sacramento River at Rio Vista Flow
- Monthly Average Number of Days Delta Cross Channel Gates Open
- End-of-Month Trinity Lake Storage
- End-of-Month Shasta Lake Storage
- End-of-Month Lake Oroville Storage
- End-of-Month Folsom Lake Storage
- End-of-Month San Luis Reservoir Storage
- Monthly Average Delta Outflow
- End-of-Previous Month X2 Location
- Monthly Average Combined Old and Middle River Flow
- Monthly Average Total Delta Exports
- Monthly Average North Delta Diversion
- Monthly Average South Delta Exports

Water year type classification used in here is based on historical Sacramento River 40-30-30 index.

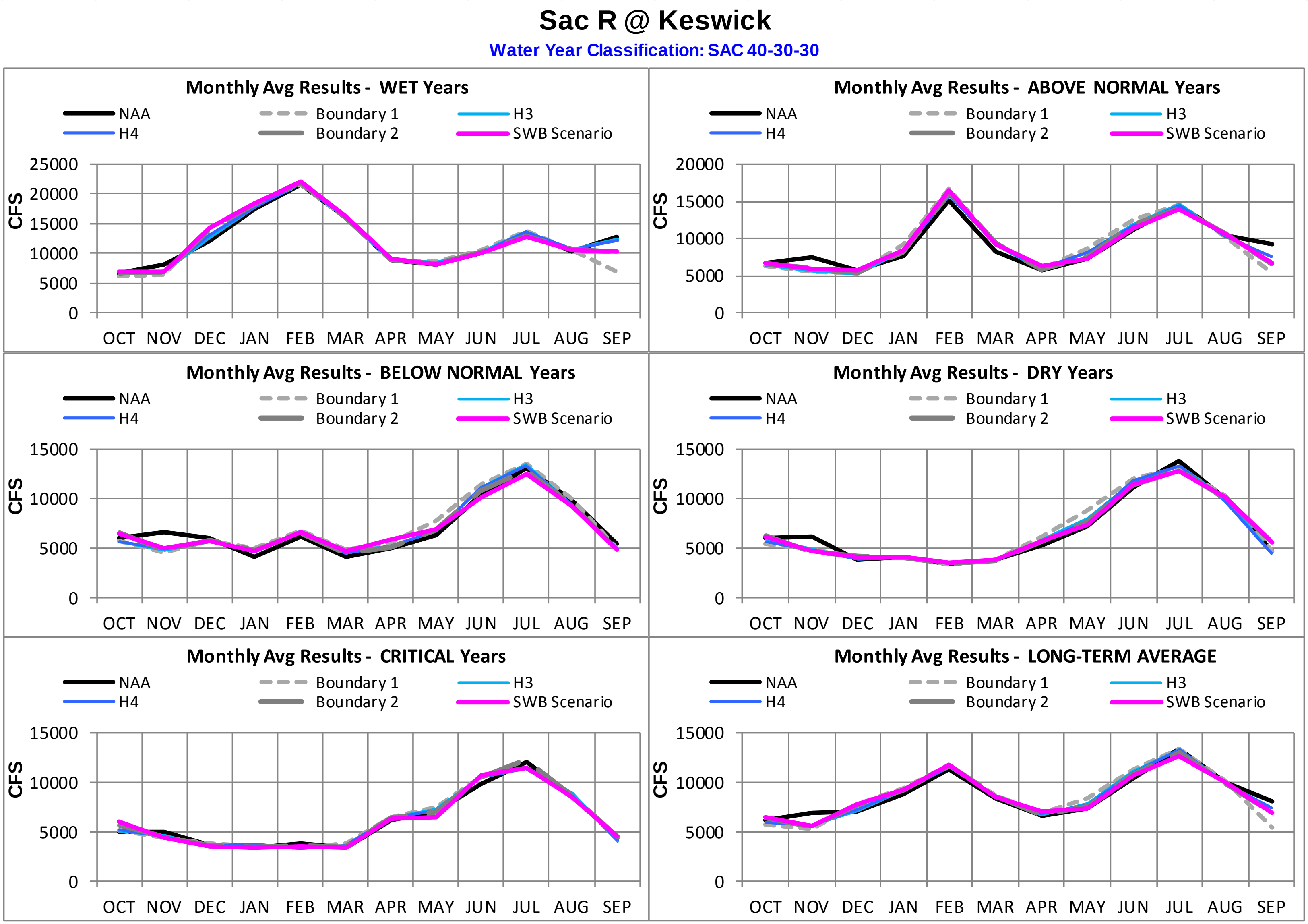


Figure 5E-1: Monthly Average Sacramento River at Keswick Flow

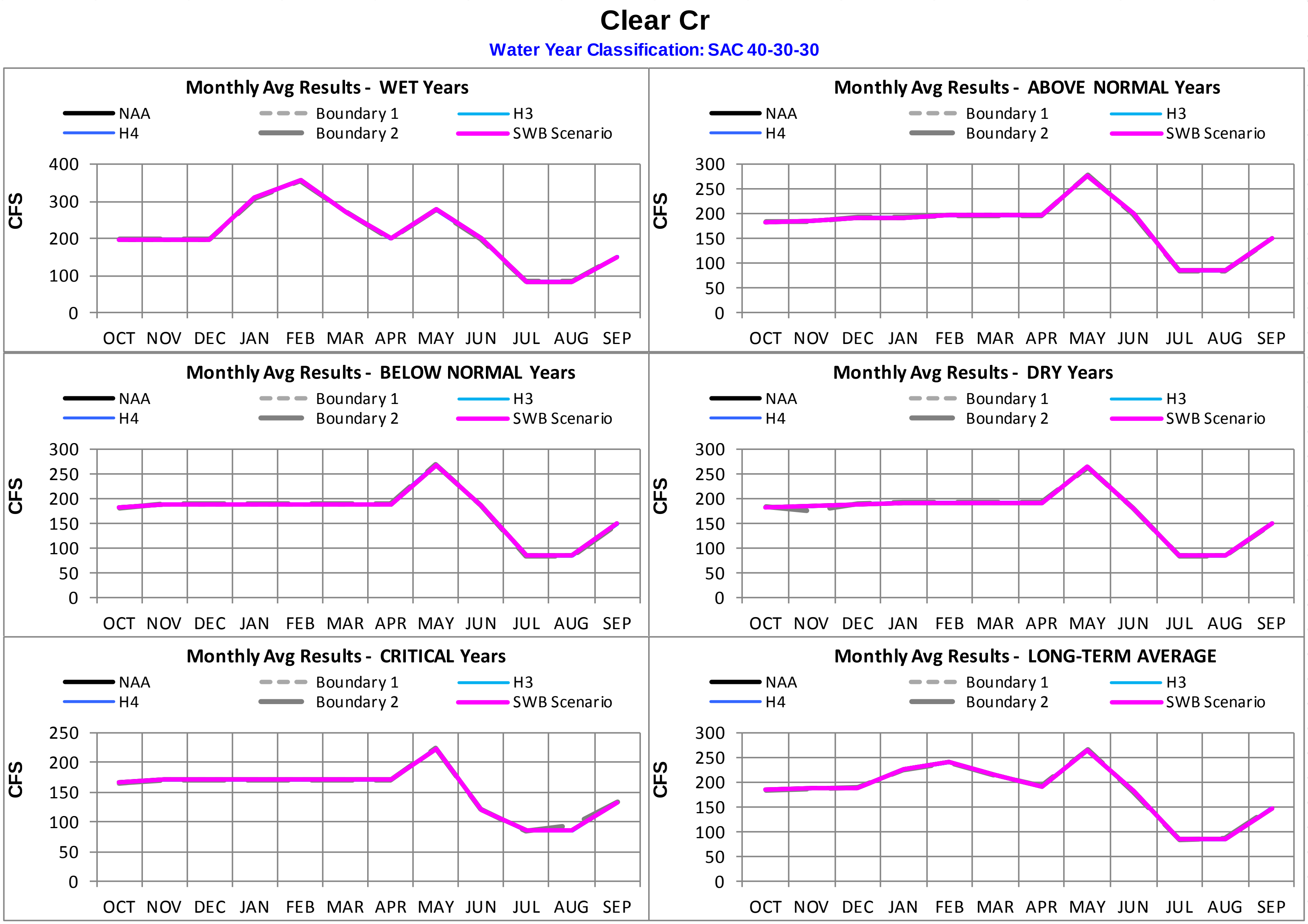


Figure 5E-2: Monthly Average Clear Creek Flow

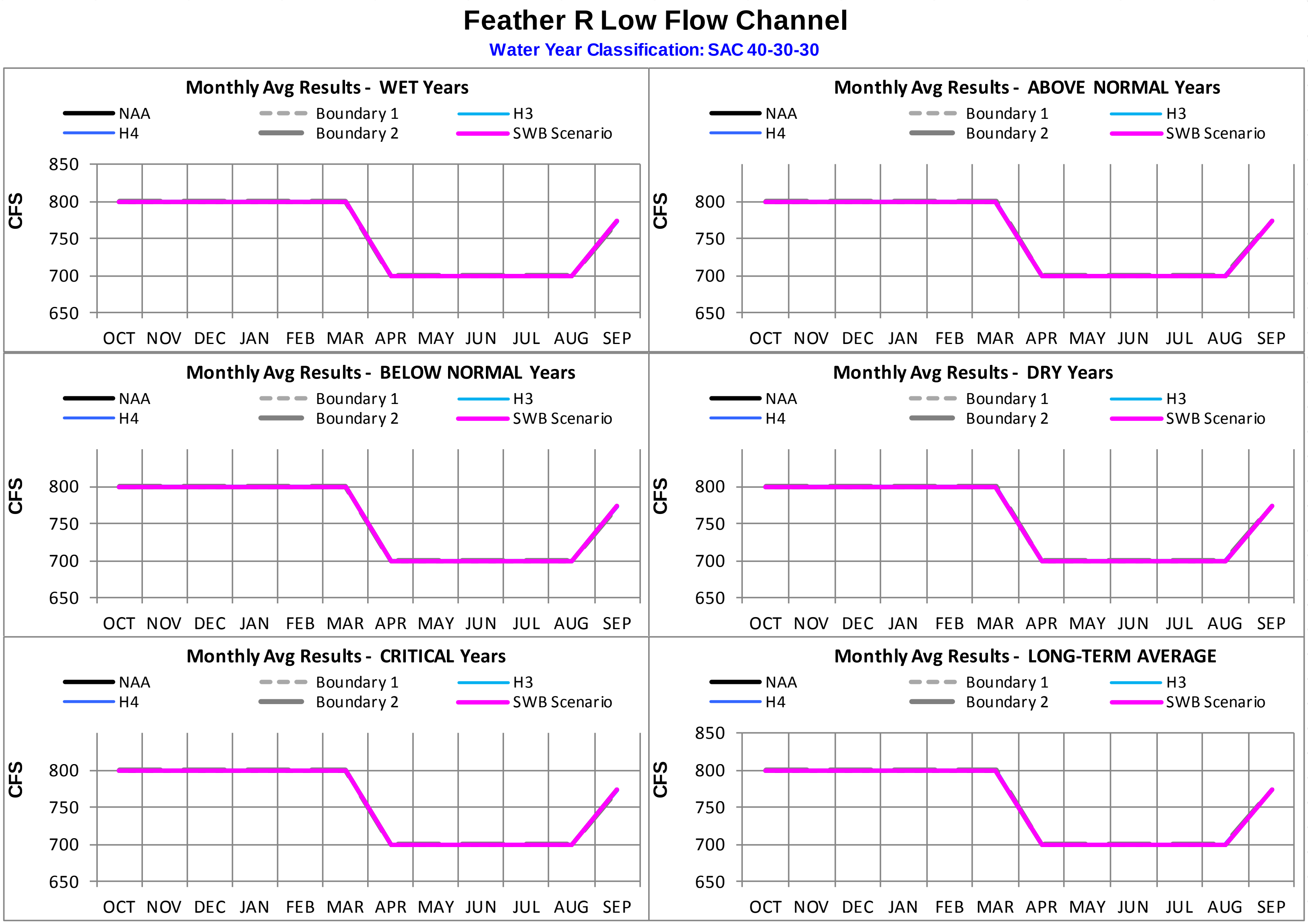
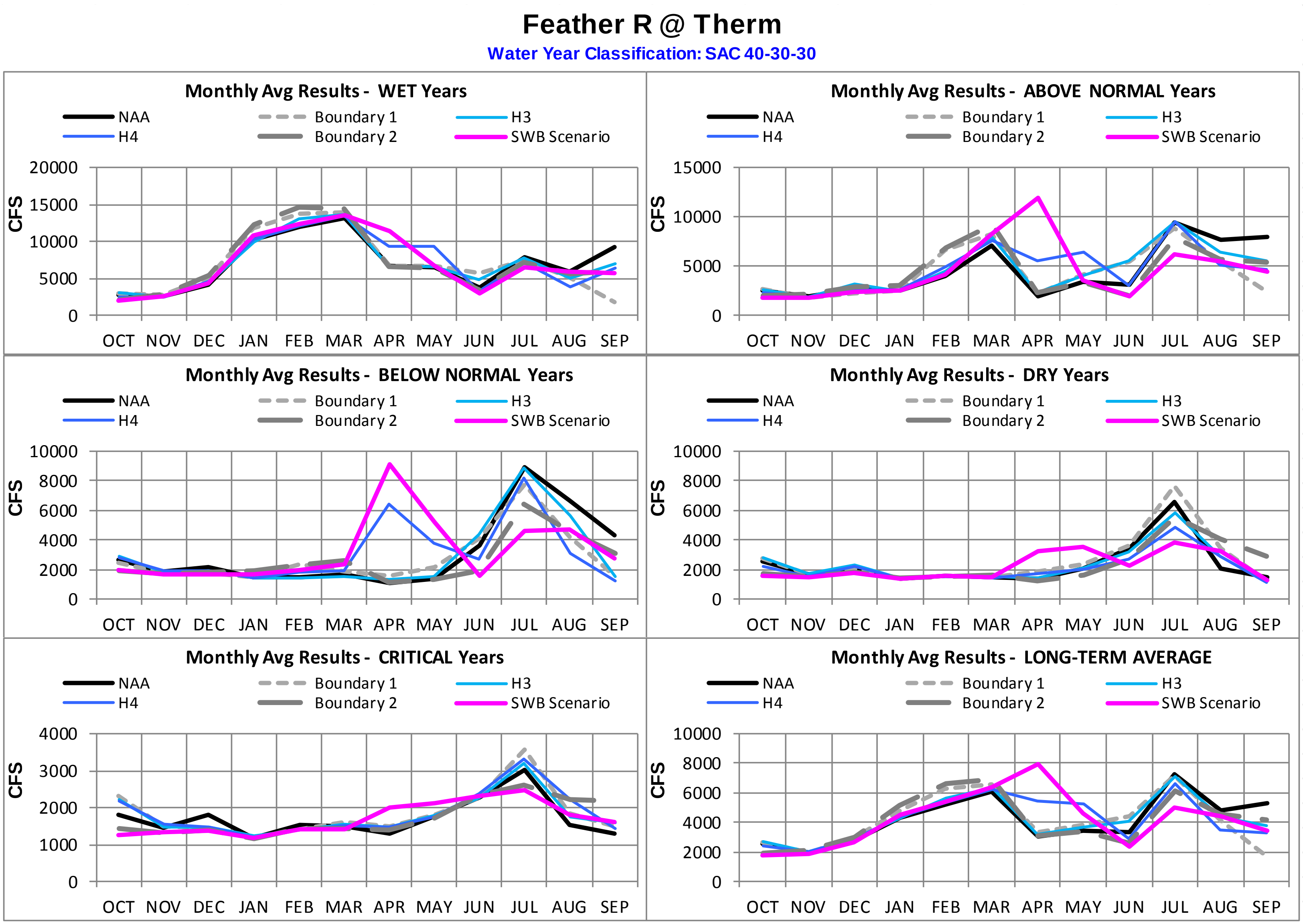
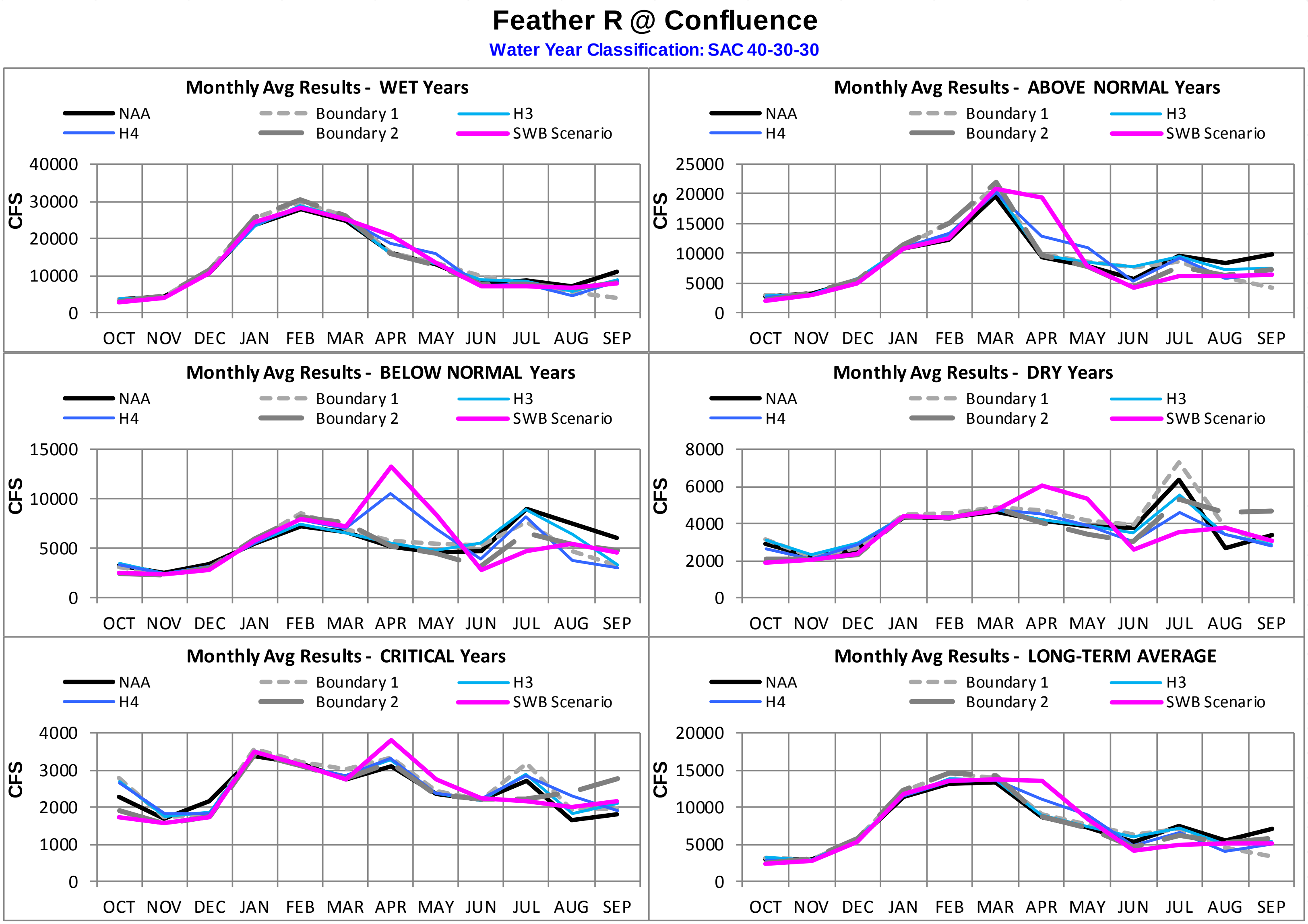


Figure 5E-3: Monthly Average Feather River Low Flow Channel Flow

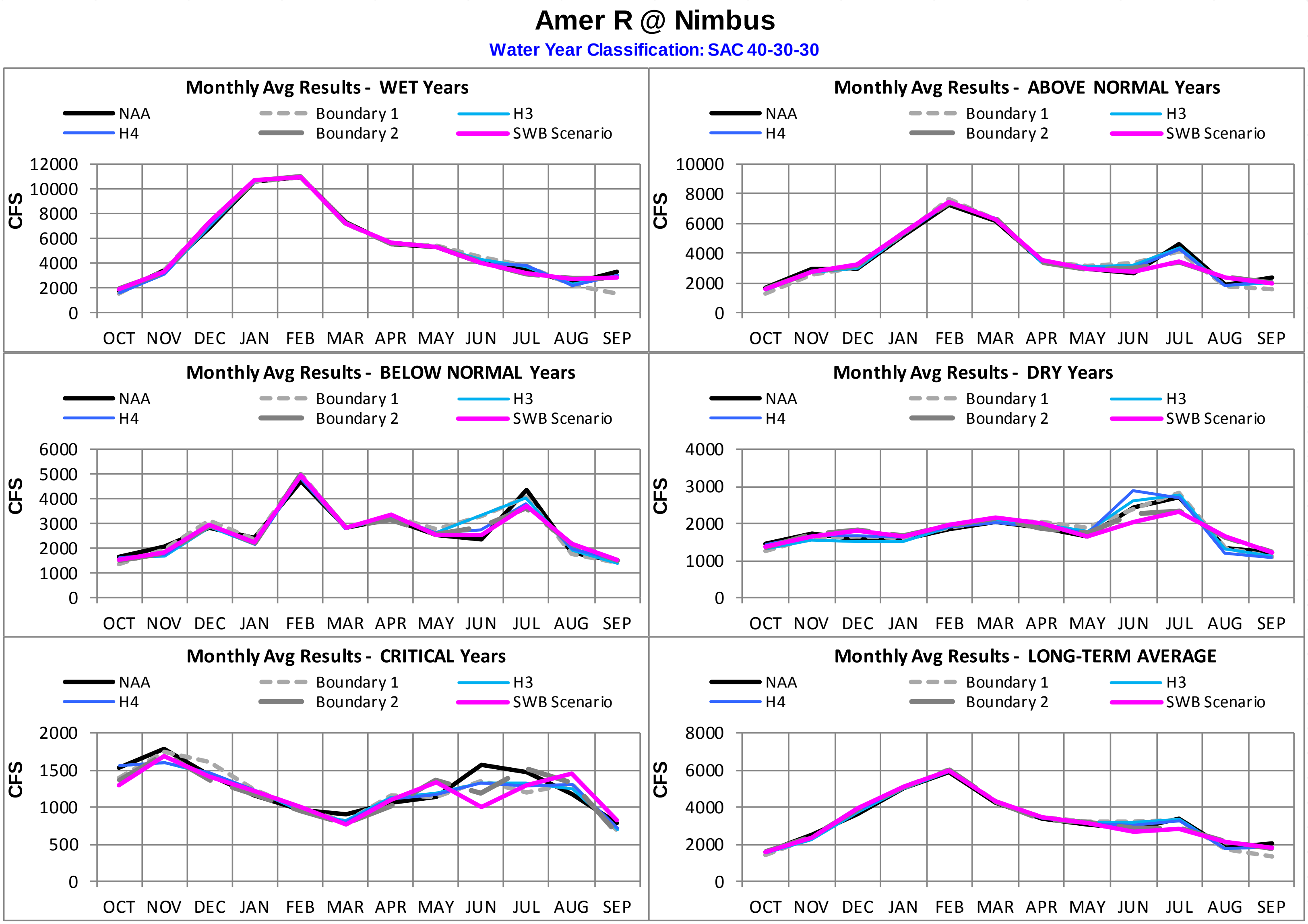
1



2 **Figure 5E-4: Monthly Average Feather River below Thermalito Flow**



1
2 **Figure 5E-5: Monthly Average Feather River at Confluence Flow**



1
2 **Figure 5E-6: Monthly Average American River at Nimbus Flow**

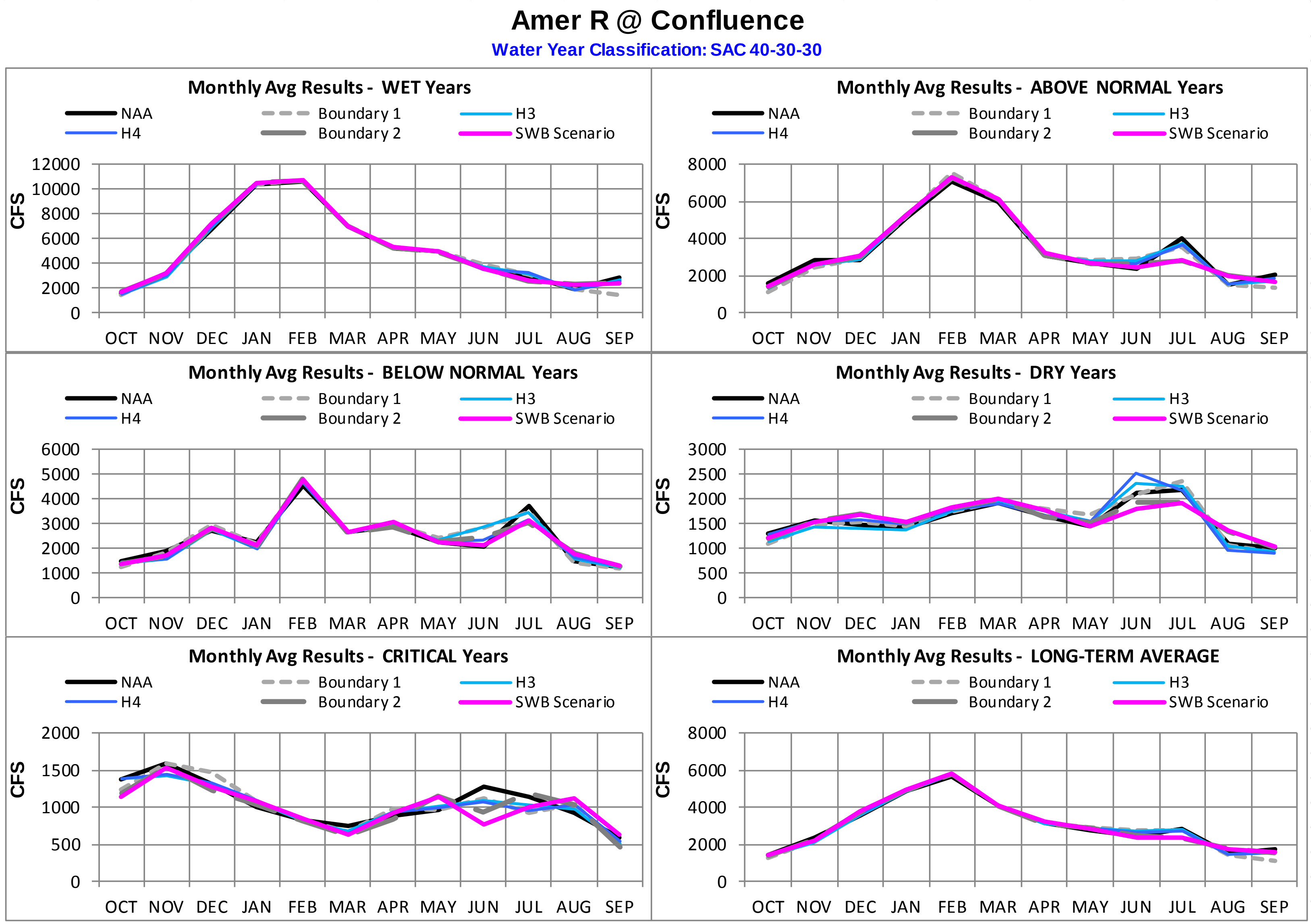
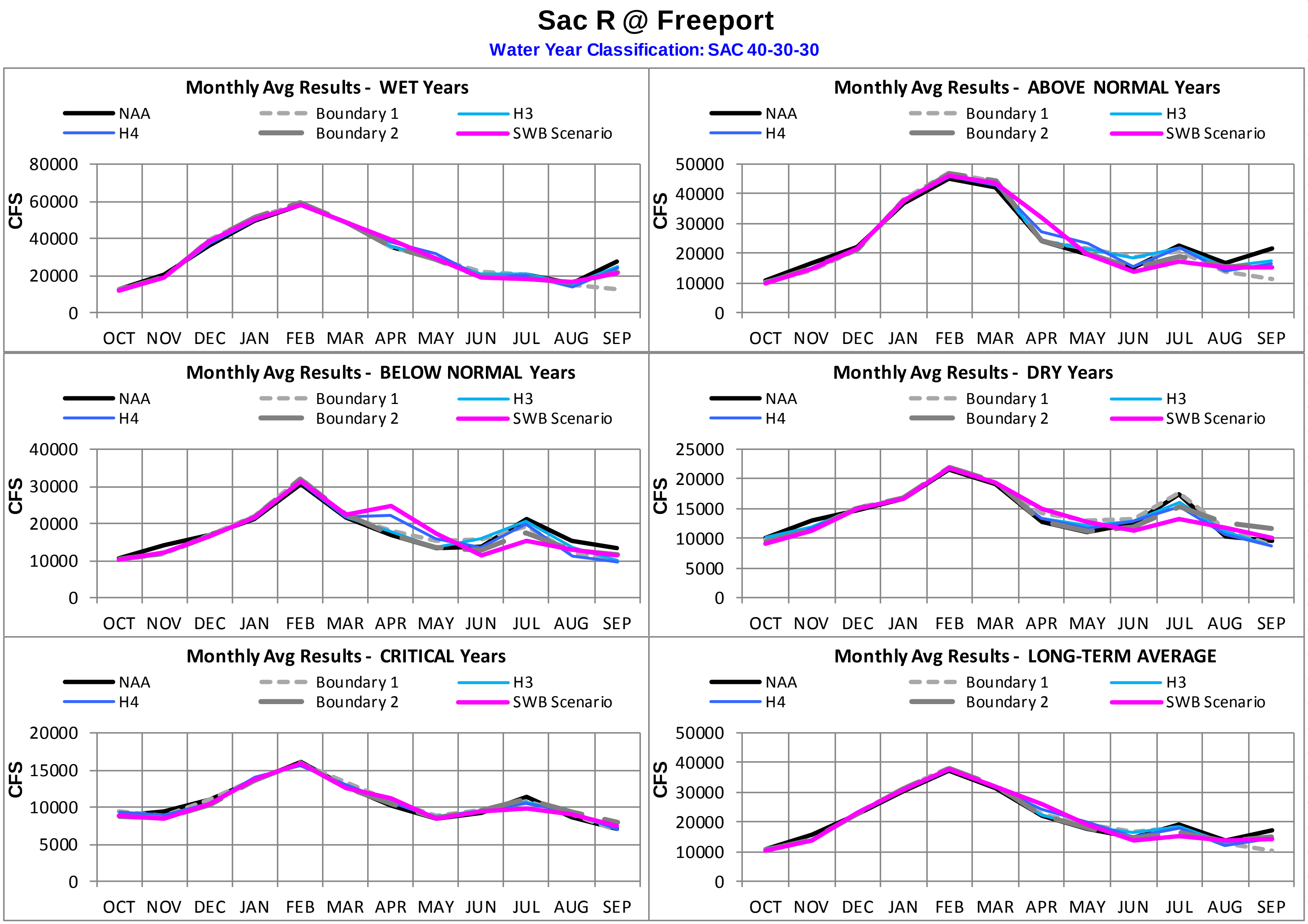
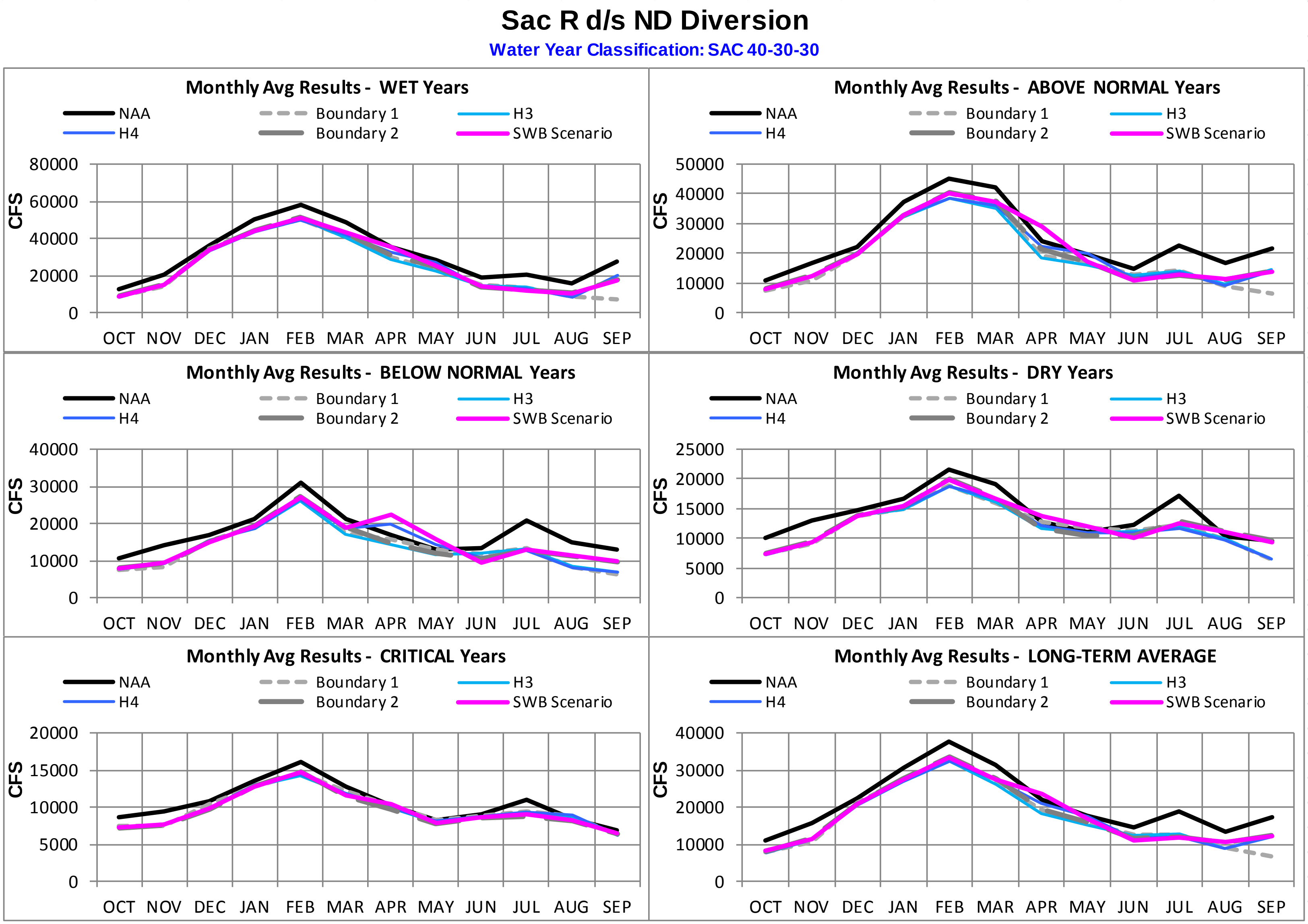


Figure 5E-7: Monthly Average American River at Confluence Flow



1
2 **Figure 5E-8: Monthly Average Sacramento River at Freeport Flow**



1
2 **Figure 5E-9: Monthly Average Sacramento River downstream of North Delta Diversion Flow**

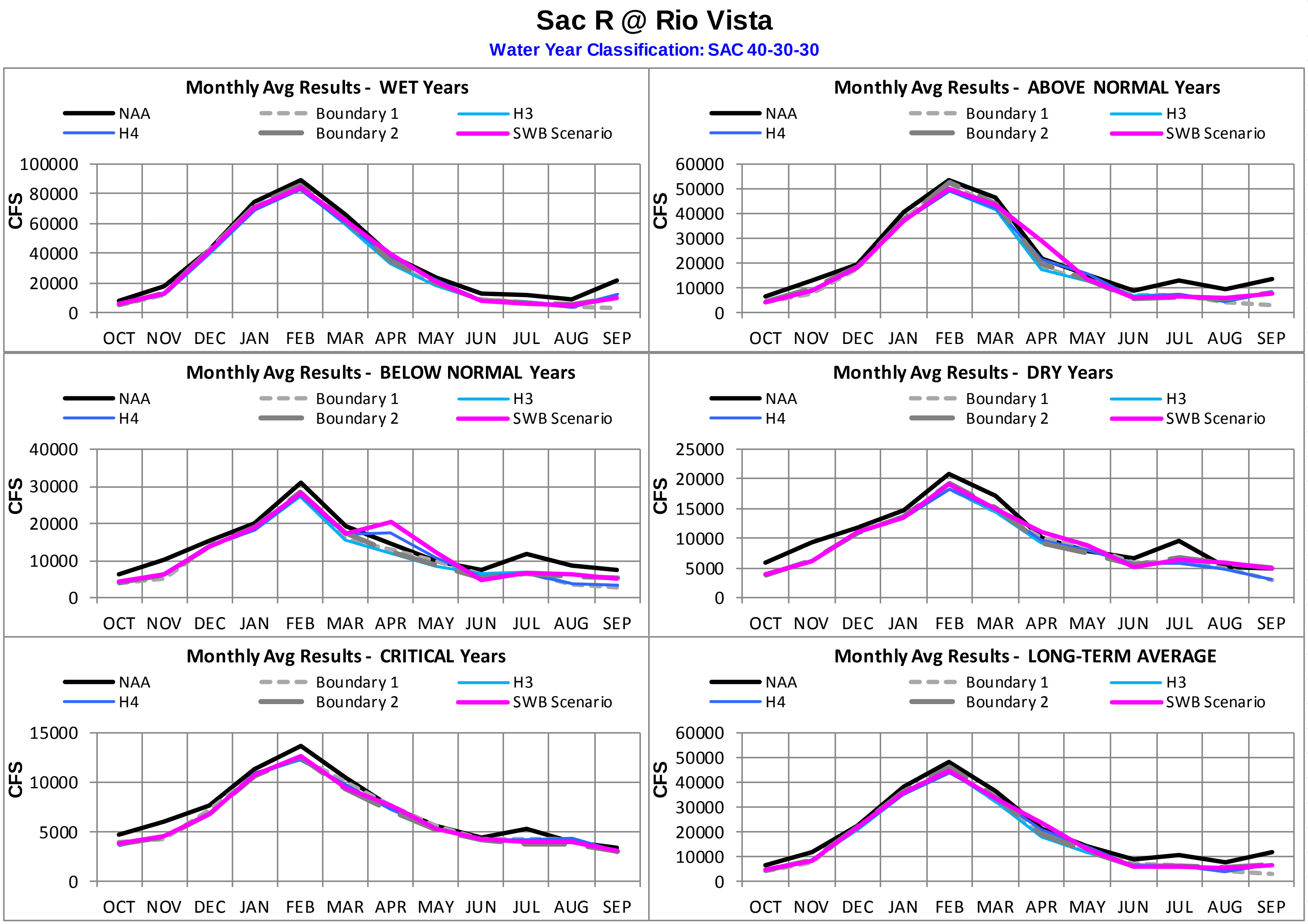


Figure 5E-10: Monthly Average Sacramento River at Rio Vista Flow

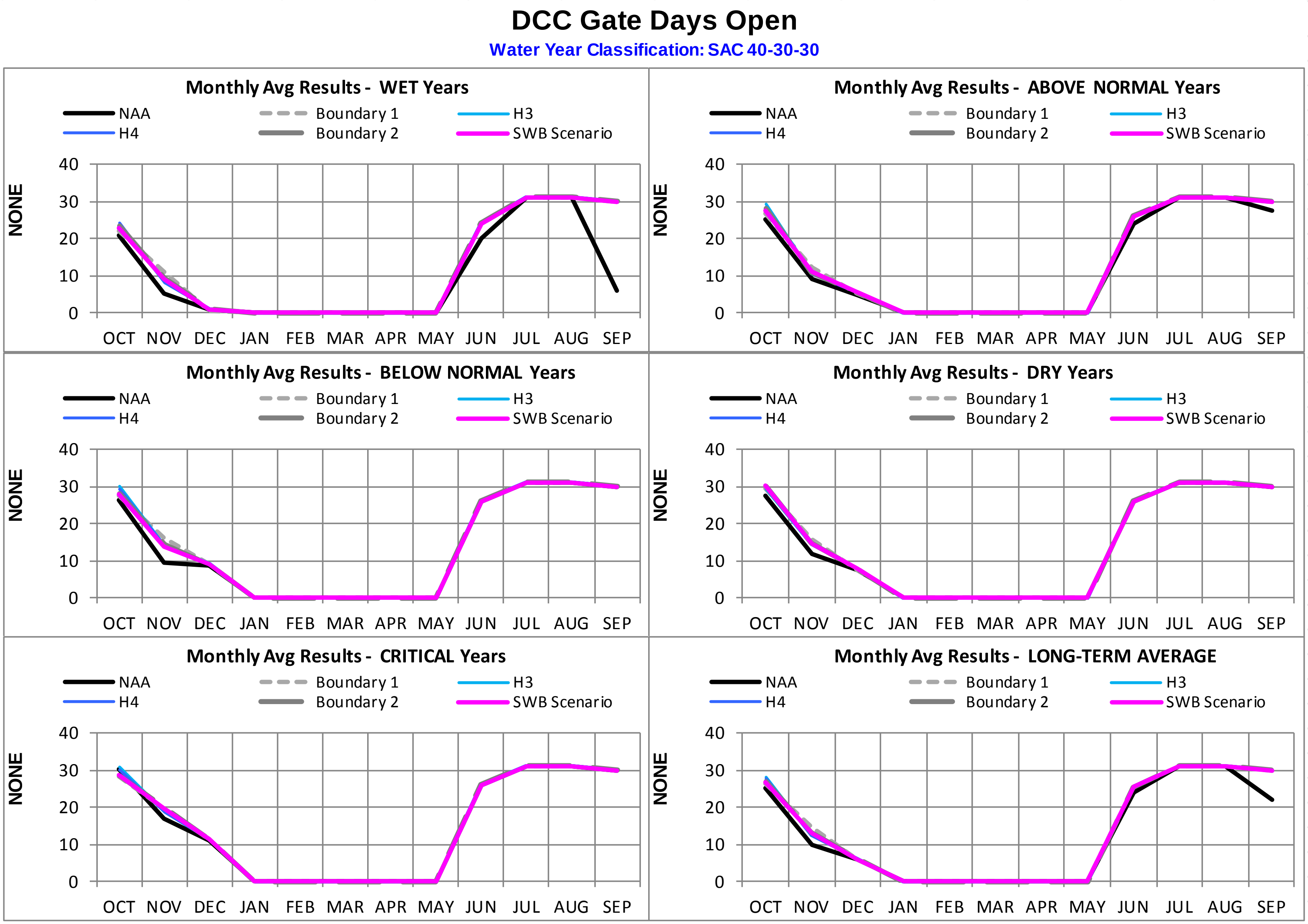


Figure 5E-11: Monthly Average Number of Days Delta Cross Channel Gates Open

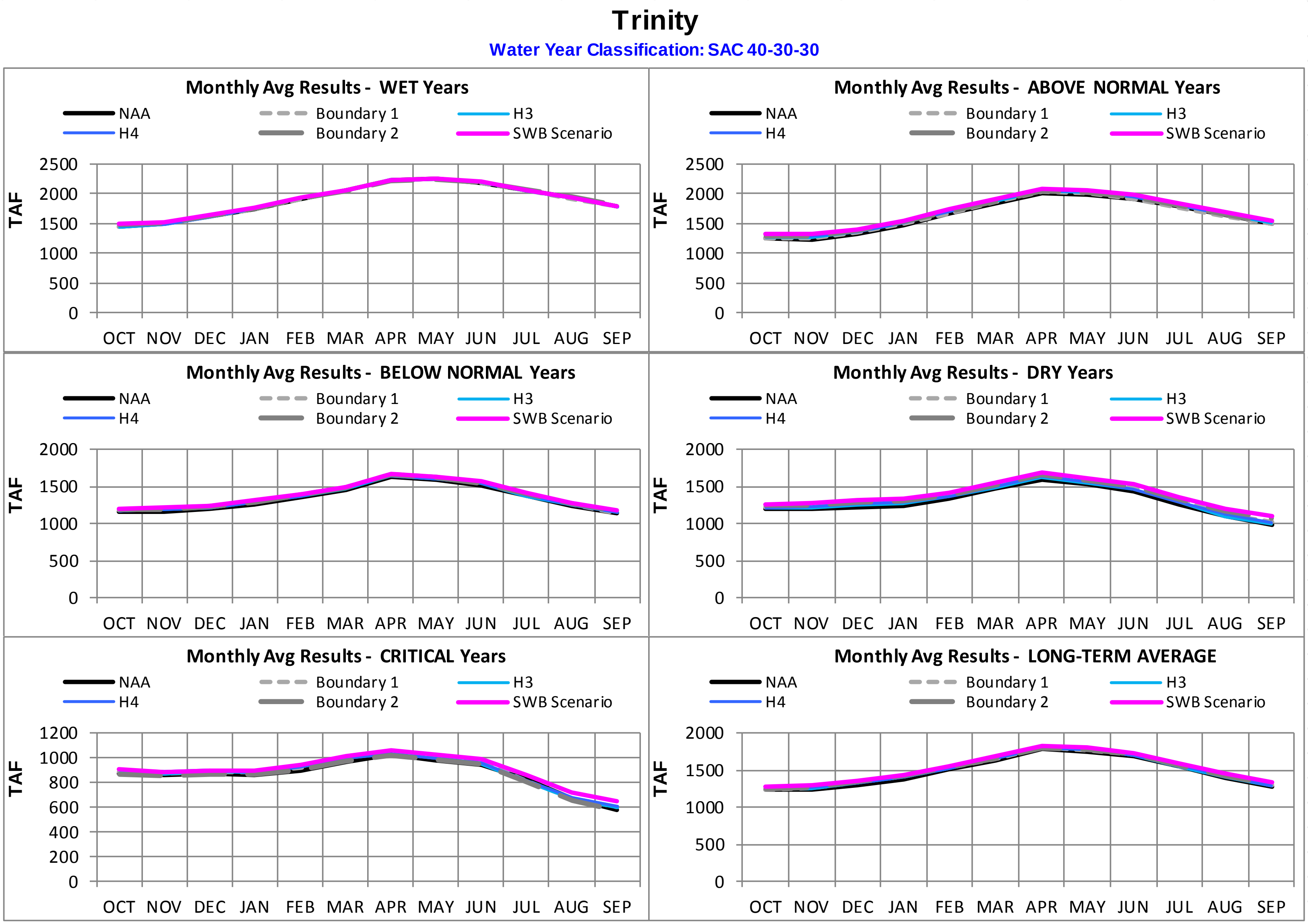


Figure 5E-12: Average End of Month Trinity Lake Storage

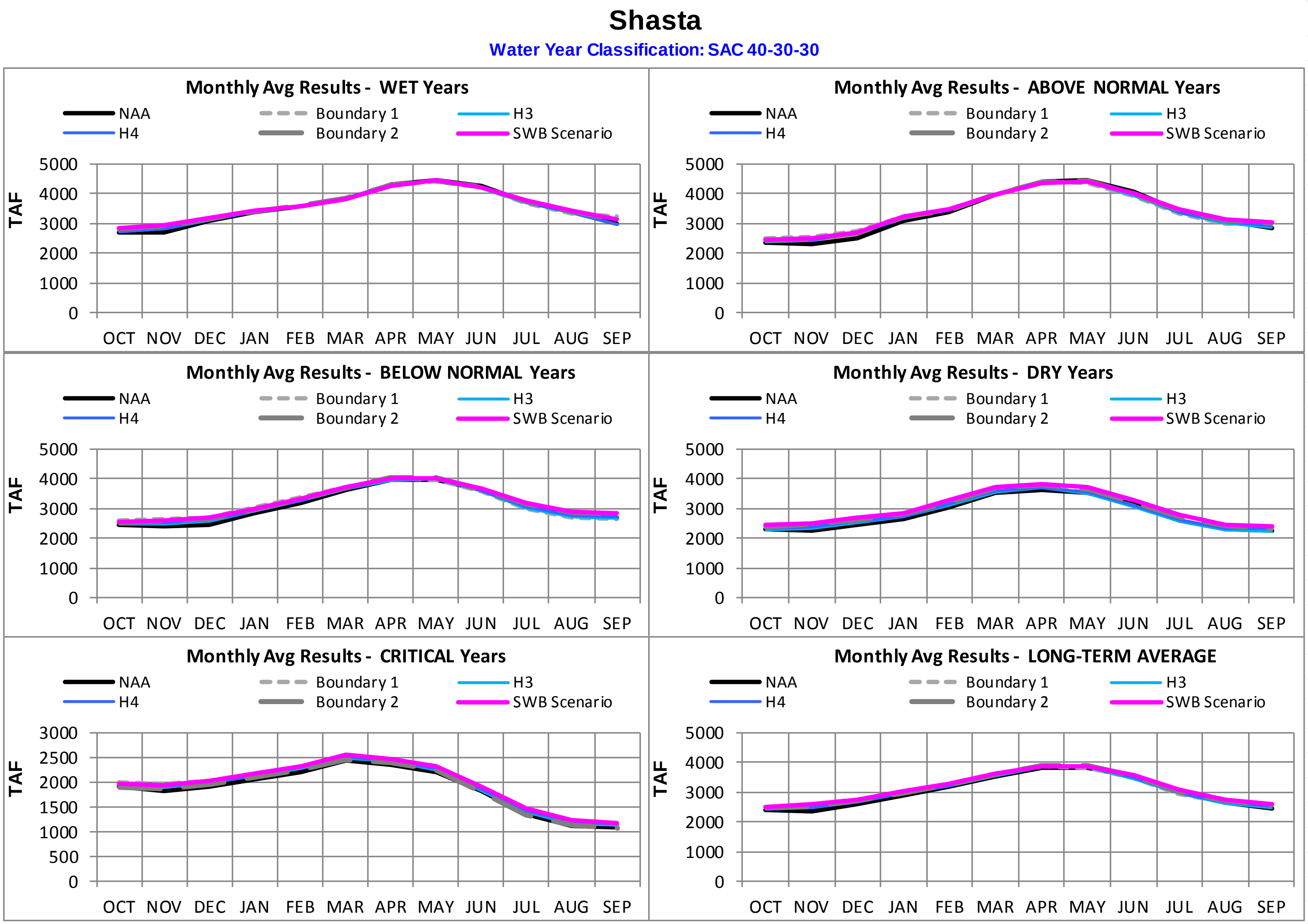
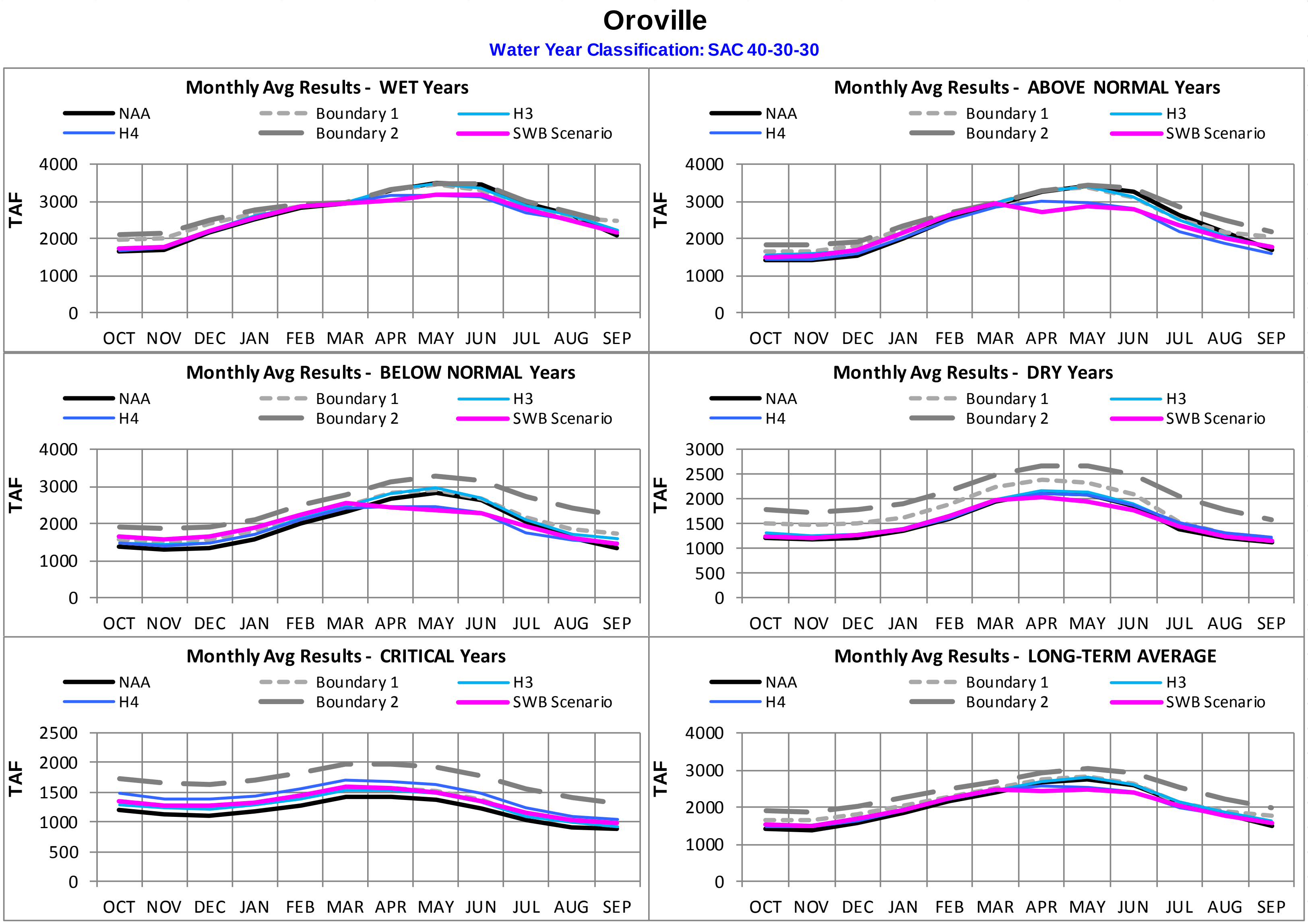


Figure 5E-13: Average End of Month Shasta Lake Storage



1
2 **Figure 5E-14: Average End of Month Lake Oroville Storage**

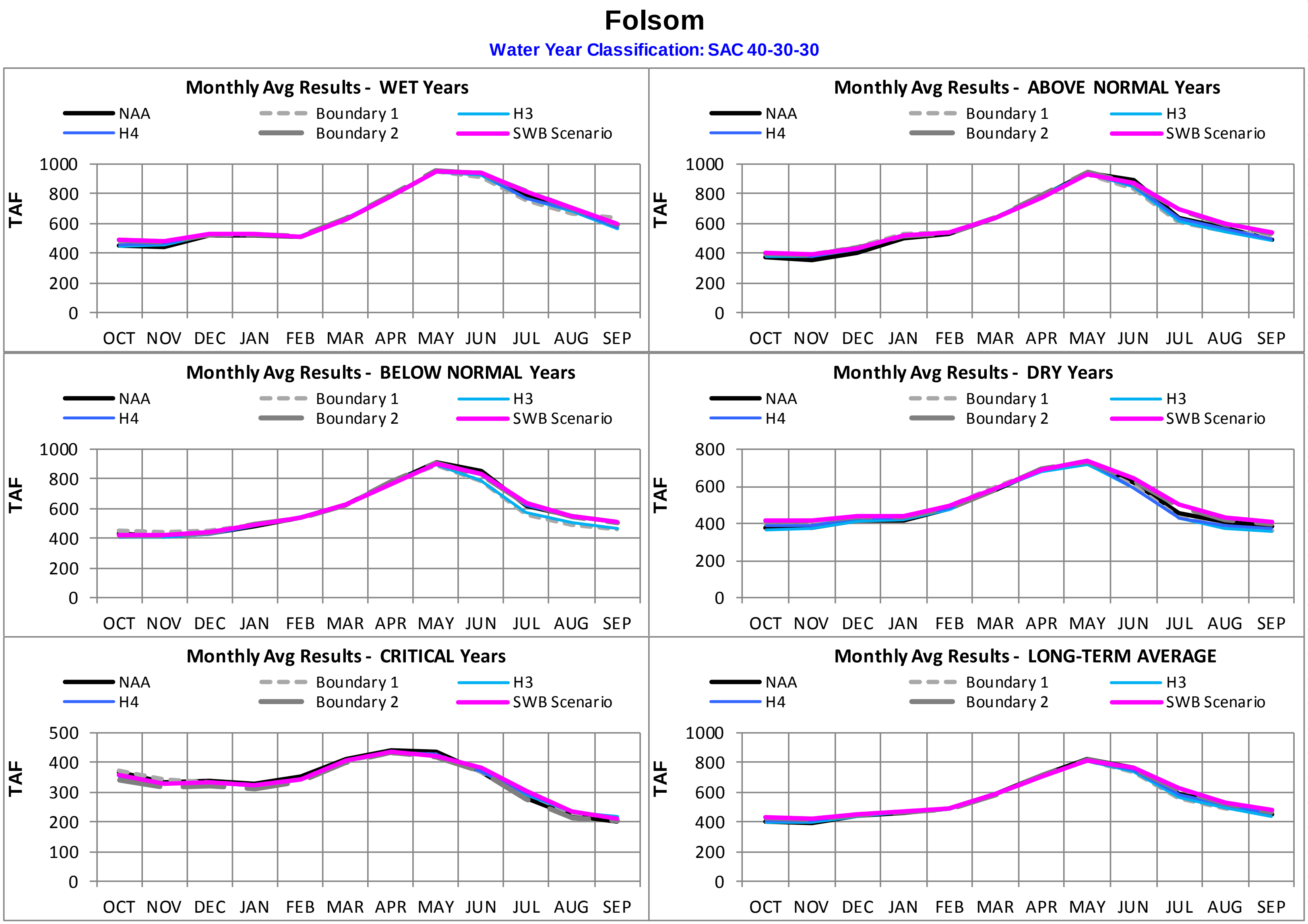


Figure 5E-15: Average End of Month Folsom Lake Storage

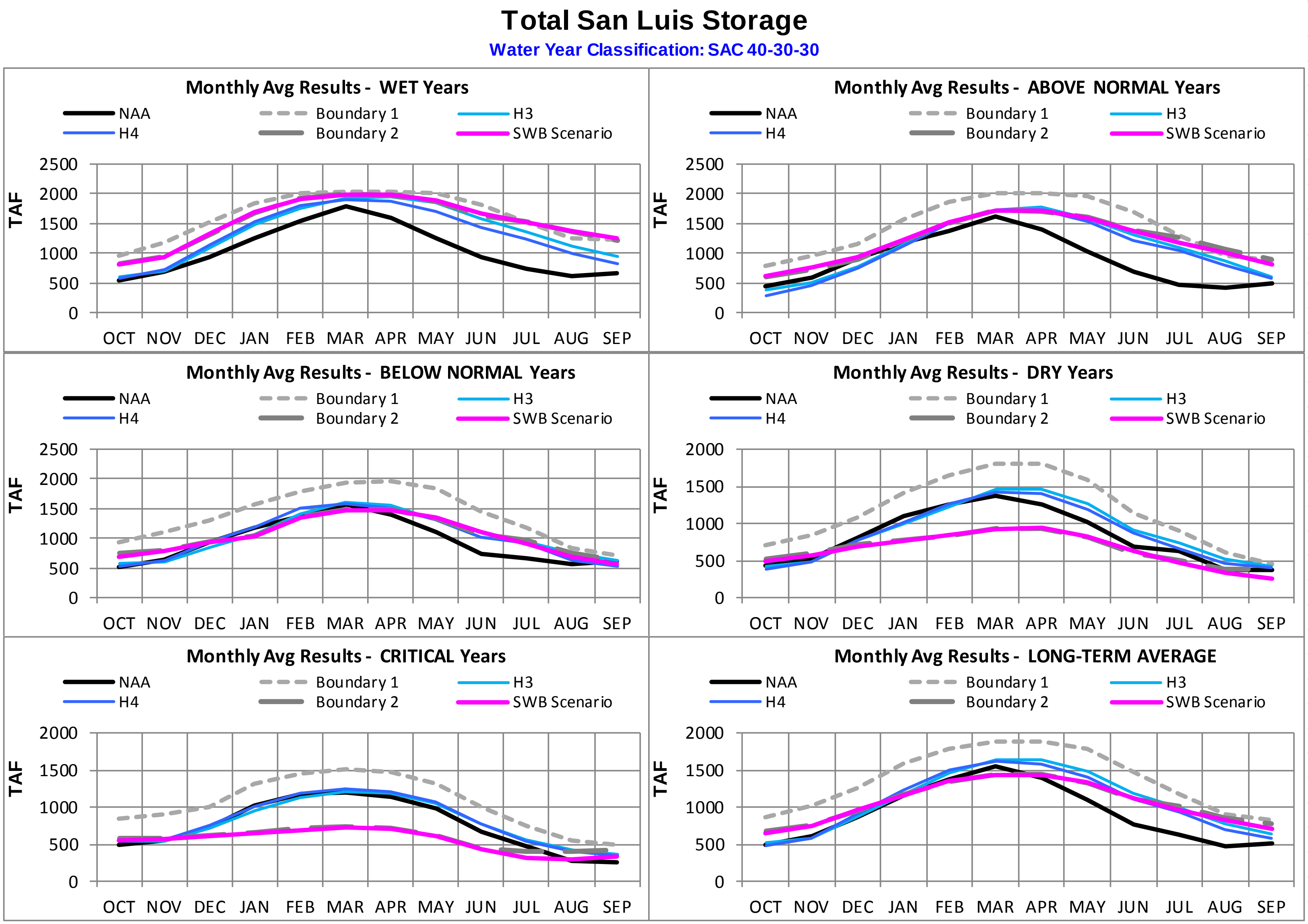


Figure 5E-16: Average End of Month San Luis Reservoir Storage

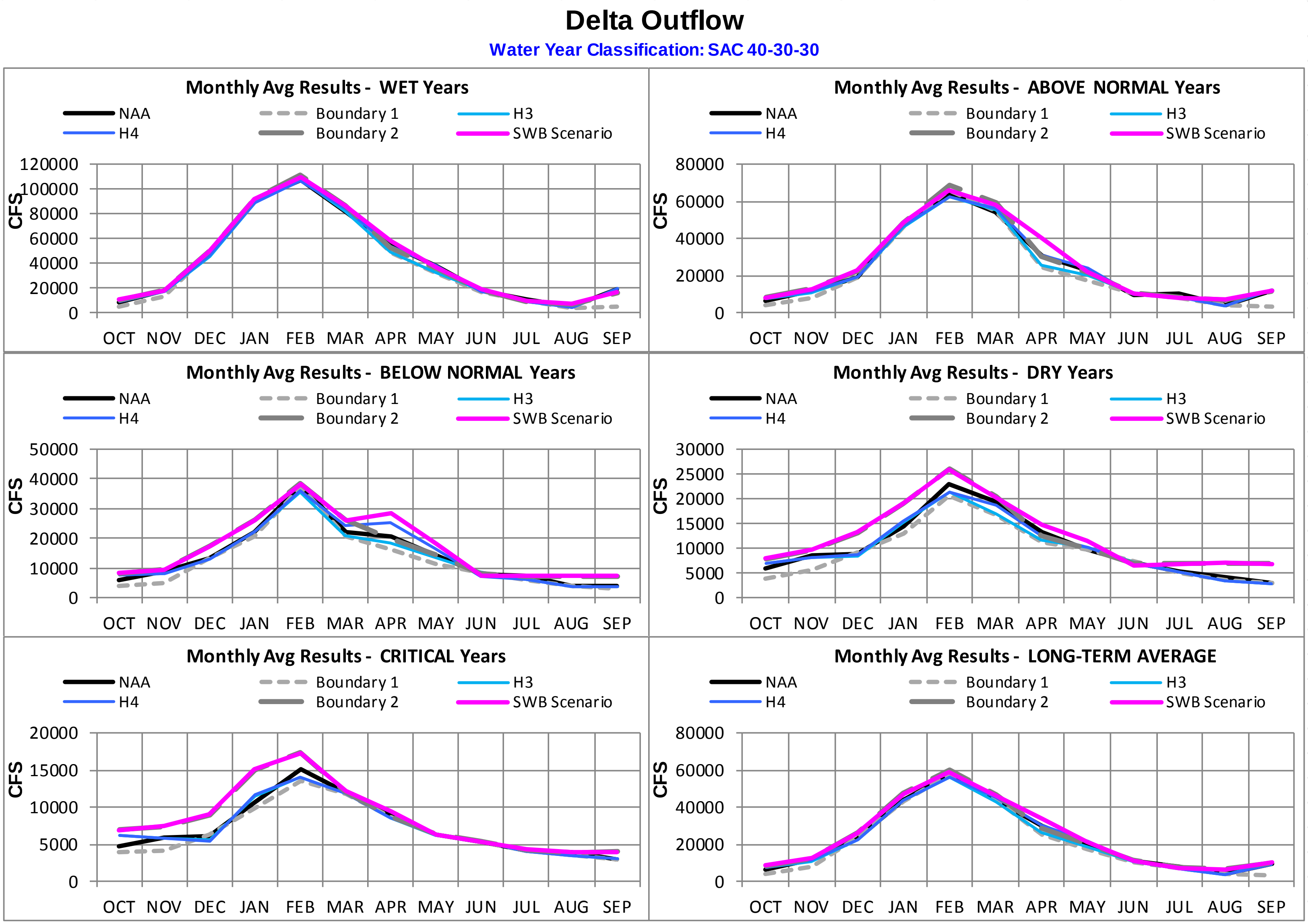


Figure 5E-17: Monthly Average Delta Outflow

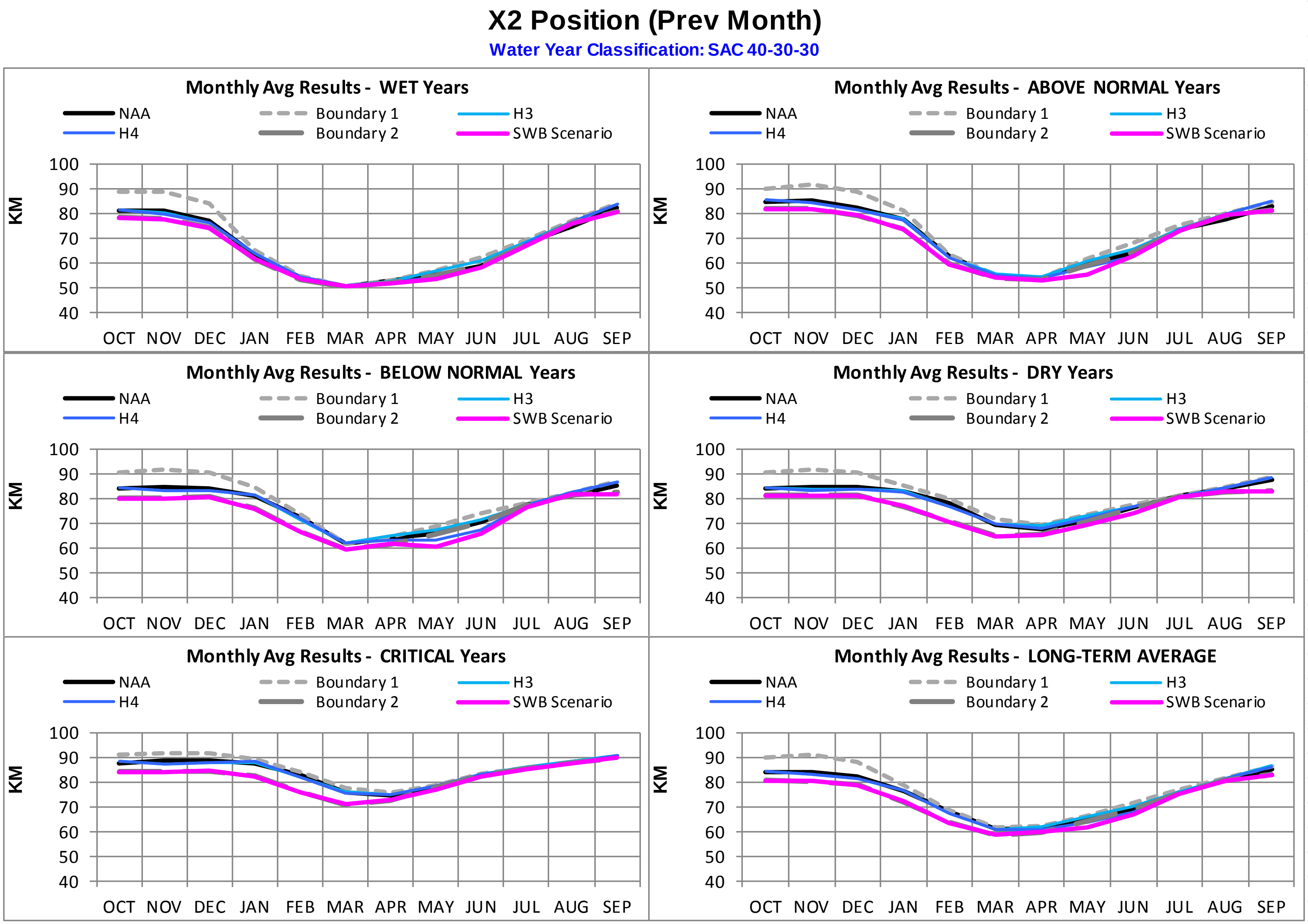


Figure 5E-18: Average End of Previous Month X2 Location

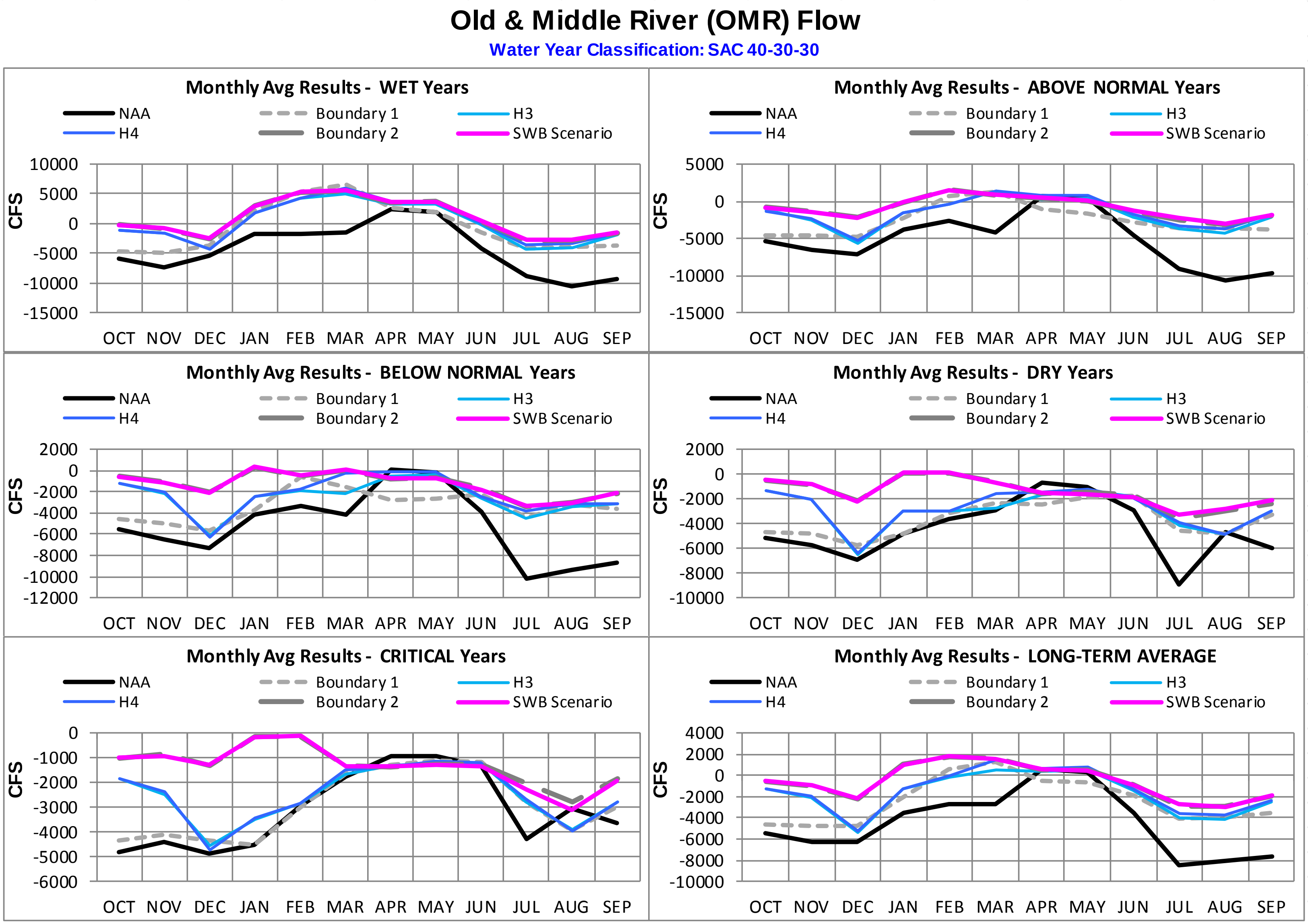


Figure 5E-19: Monthly Average Combined Old and Middle River Flow

Delta Exports

Water Year Classification: SAC 40-30-30

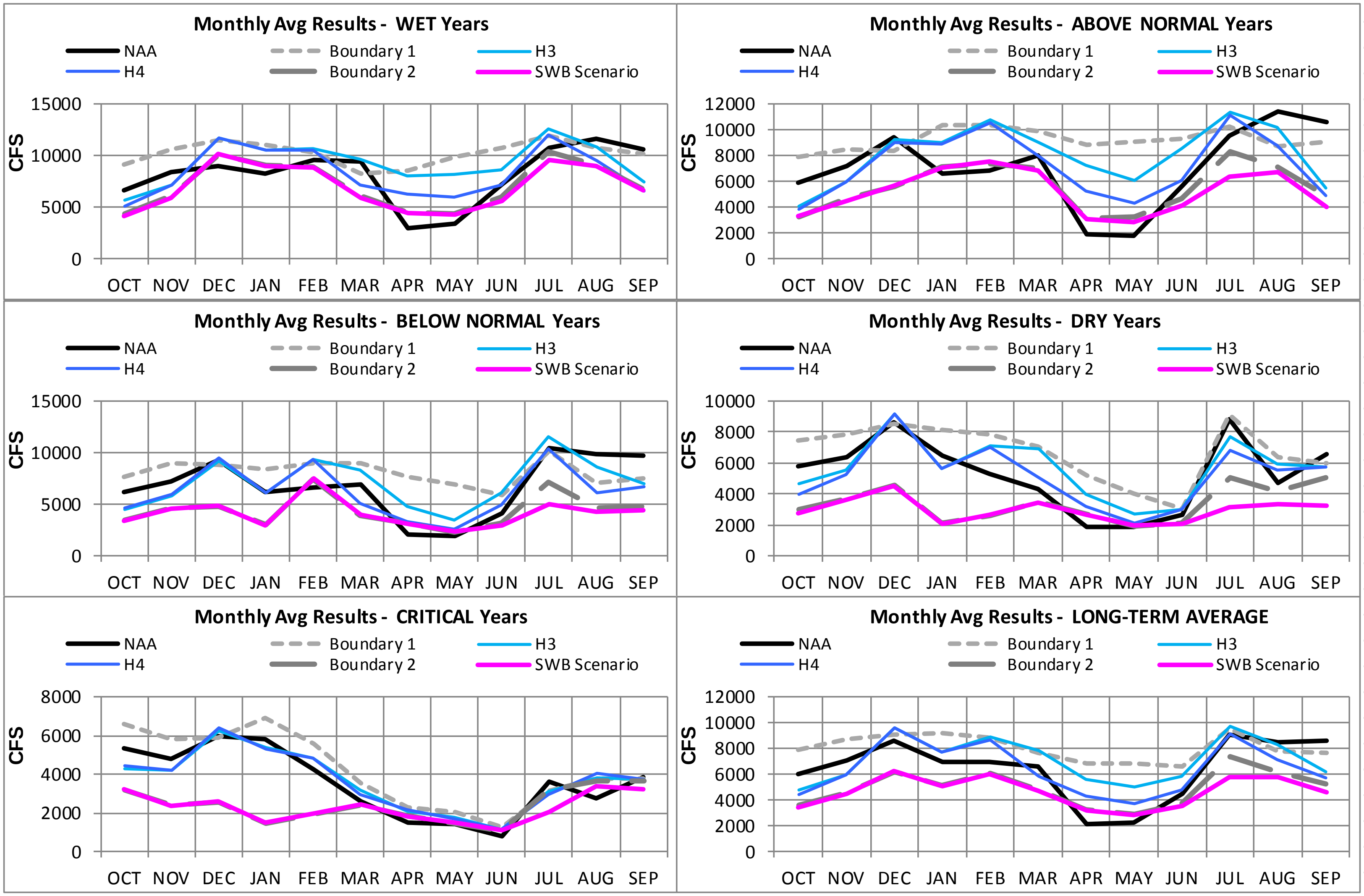


Figure 5E-20: Monthly Average Total Delta Exports

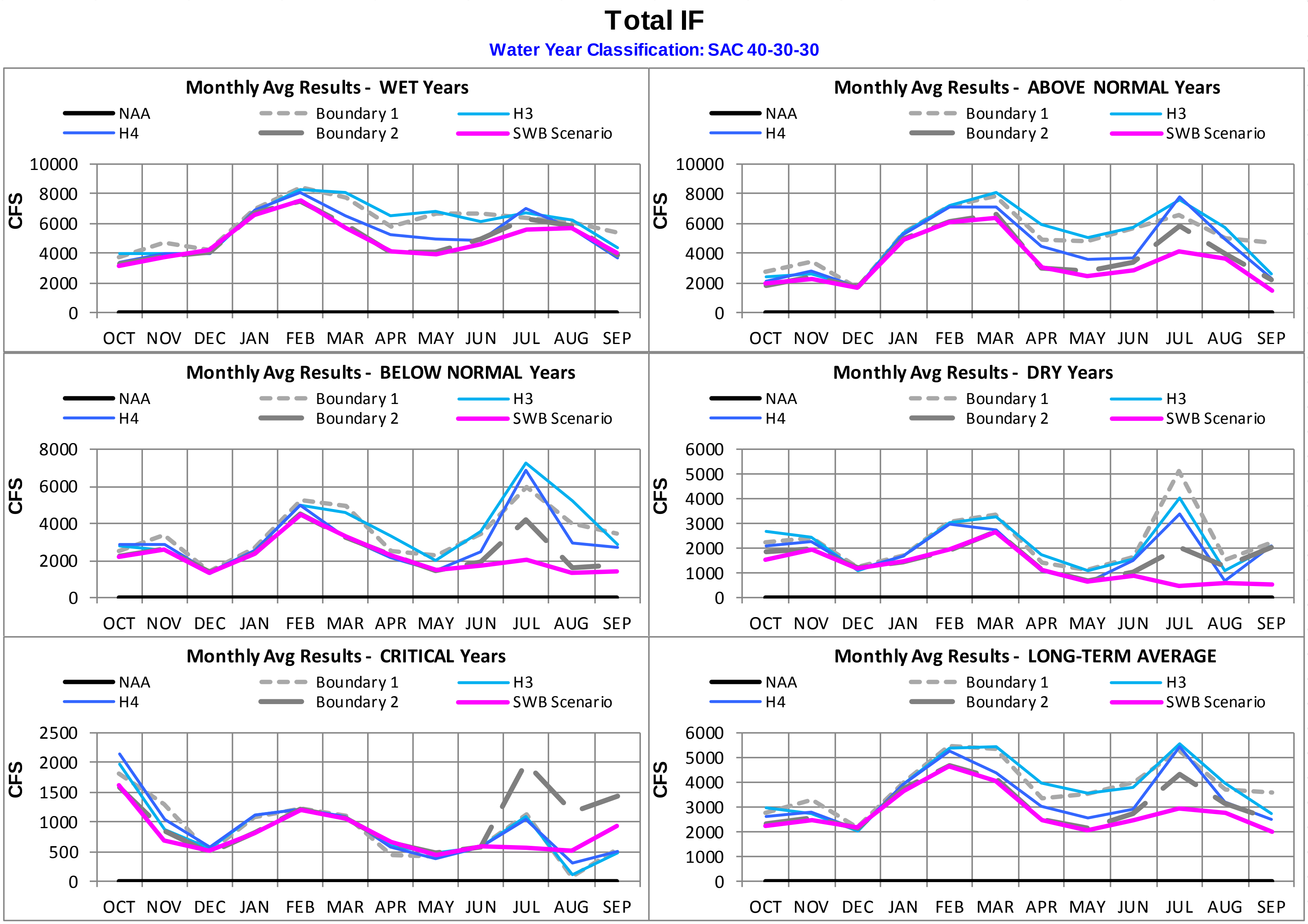


Figure 5E-21: Monthly Average North Delta Diversion

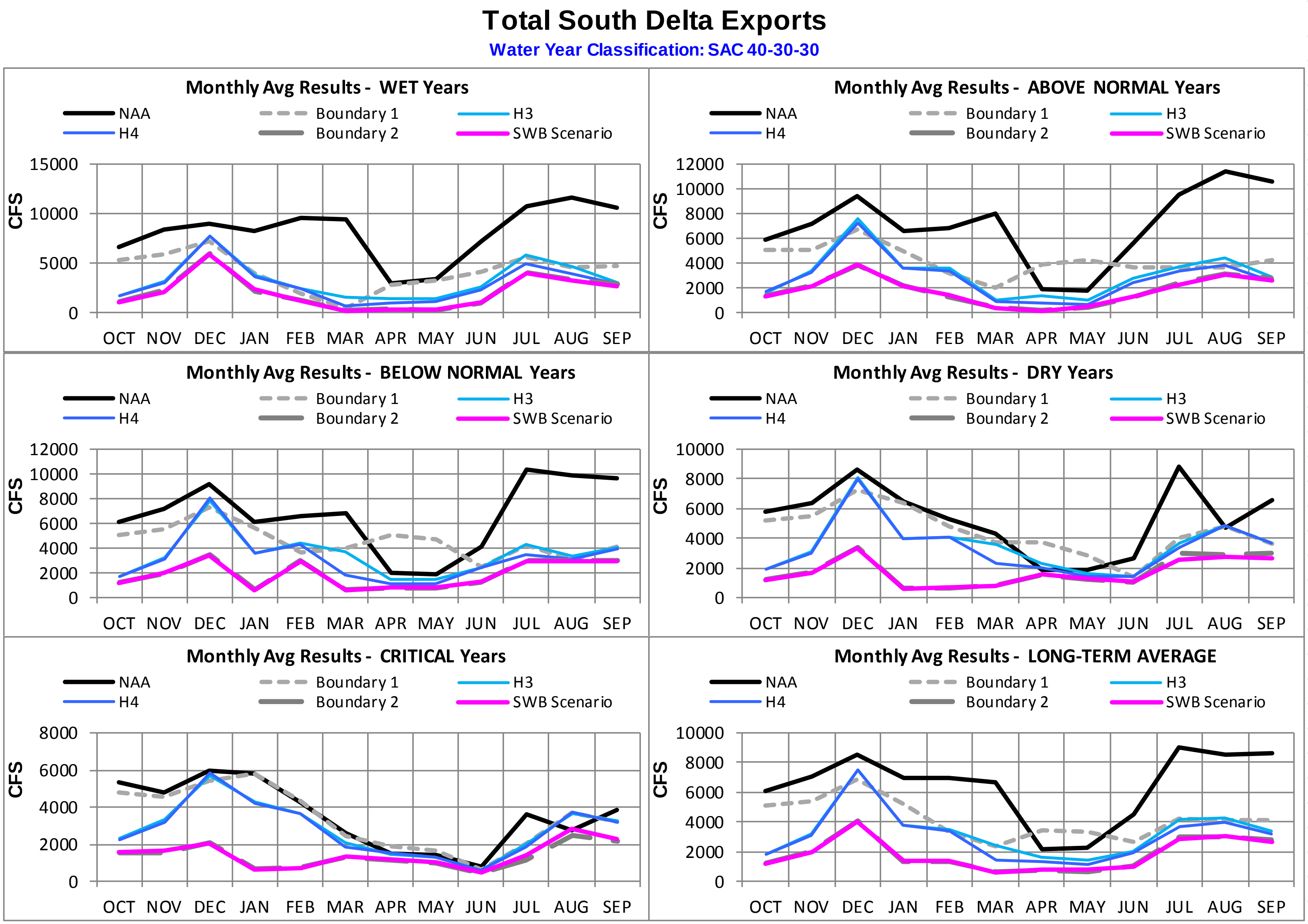


Figure 5E-22: Monthly Average South Delta Exports

5E.4 Comparison of CALSIM Modeling Results Used for the Analysis of Environmental Effects

5E.4.1 Introduction

Results CALSIM modeling for reservoir storage, instream flows, and Delta exports for Boundary 1, Boundary 2, and Scenario 2 are compared in this section to support the analysis of environmental effects of each scenario described in Section 5E.5, *Environmental Effects*. For each CALSIM output location, modeling results for each model run were compared to an existing analysis to determine whether the results presented in Chapter 11 could be used for the CEQA analysis of that model run.

For each of the 25 CALSIM output locations, three tables are presented that include all scenarios considered in this analysis.

The first table displays the mean value for the parameter (storage, instream flow, or exports) by month and water year type, and for all water years combined, for each model scenario. Model scenarios are defined as follows:

- NAA_ELT_2015 = No Action Alternative with early long-term (2025) climate conditions using 2015 CALSIM model version
- SWRCB_B1_ELT_2015 = State Water Board Boundary 1 with early long-term (2025) climate conditions using 2015 CALSIM model version
- SWRCB_B2_ELT_2015 = State Water Board Boundary 2 with early long-term (2025) climate conditions using 2015 CALSIM model version
- SWRCB_S2_ELT_2015 = Scenario 2 with early long-term (2025) climate conditions using 2015 CALSIM model version
- H3_ELT_2015 = Alternative 4A H3 scenario with early long-term (2025) climate conditions using 2015 CALSIM model version
- H3+_ELT_2015 = Alternative 4A H3+ scenario with early long-term (2025) climate conditions using 2015 CALSIM model version
- H4_ELT_2015 = Alternative 4A H4 scenario with early long-term (2025) climate conditions using 2015 CALSIM model version
- NAA_LLT = No Action Alternative with late long-term (2060) climate conditions using original EIR model version
- A1A_LLT = Alternative 1A with late long-term (2060) climate conditions using original EIR model version
- A3_LLT = Alternative 3 with late long-term (2060) climate conditions using original EIR model version
- A8_LLT = Alternative 8 with late long-term (2060) climate conditions using original EIR model version

The second table reports the "effect" of a scenario or alternative as the comparison of the scenario or alternative to its respective baseline as follows:

- Boundary 1 effect: NAA_ELT_2015 vs. SWRCB_B1_ELT_2015
- Boundary 2 effect: NAA_ELT_2015 vs. SWRCB_B2_ELT_2015
- Scenario 2 effect: NAA_ELT_2015 vs. SWRCB_S2_ELT_2015
- Alt 4A H3 effect: NAA_ELT_2015 vs. H3_ELT_2015
- Alt 4A H3+ effect: NAA_ELT_2015 vs. H3+_ELT_2015
- Alt 4A H4 effect: NAA_ELT_2015 vs. H4_ELT_2015
- Alt 1A effect: NAA_LLT vs. A1A_LLT
- Alt 3 effect: NAA_LLT vs. A3_LLT
- Alt 8 effect: NAA_LLT vs. A8_LLT

The third table compares the effect of each model run to the effect of comparable model scenarios as follows:

- The Boundary 1 effect was compared to:
  - Alt 1A effect
  - Alt 3 effect
- The Boundary 2 effect was compared to:
  - Alt 4A H3 scenario effect
  - Alt 4A H3+ scenario effect
  - Alt 8 effect
- The Scenario 2 effect was compared to:
  - Alt 4A H4 scenario effect
  - Alt 8 effect

5E.4.2 Storage and Flow

5E.4.2.1 Upstream

5E.4.2.1.1 Shasta Reservoir

Table 5E-6. Mean End of Month Storage (TAF) for Model Scenarios in Shasta Reservoir, May and September

Upstream—Shasta Reservoir												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
MAY	W	4,460	4,434	4,457	4,444	4,447	4,461	4,433	4,436	4,385	4,392	4,305
	AN	4,448	4,377	4,440	4,427	4,395	4,443	4,391	4,388	4,306	4,313	4,122
	BN	3,978	3,973	4,048	4,009	3,977	4,009	4,002	3,912	3,592	3,592	3,504
	D	3,540	3,549	3,651	3,709	3,514	3,577	3,570	3,334	3,132	3,144	3,188
	C	2,203	2,260	2,238	2,337	2,258	2,262	2,270	1,859	1,824	1,850	1,927
	All	3,844	3,835	3,883	3,898	3,834	3,865	3,848	3,720	3,588	3,598	3,548
SEP	W	2,989	3,243	3,141	2,849	2,971	2,981	2,736	2,805	3,026	3,031	2,840
	AN	2,857	2,979	3,012	2,401	2,893	2,891	2,318	2,582	2,714	2,713	2,709
	BN	2,696	2,645	2,828	1,175	2,699	2,727	1,158	2,518	2,304	2,285	2,519
	D	2,260	2,270	2,332	2,628	2,259	2,298	2,517	1,944	1,900	1,911	1,977
	C	1,079	1,139	1,090	2,829	1,138	1,143	2,732	805	802	795	844
	All	2,480	2,581	2,591	2,477	2,489	2,505	2,425	2,242	2,284	2,284	2,284

[a] For definitions of each model scenario, see the introduction to this section
TAF = thousand acre-feet
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-7. Differences[a] (Percent Differences) between Pairs of Model Scenarios in Shasta Reservoir Storage (TAF), May and September**

Upstream—Shasta Reservoir										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
MAY	W	-26 (-1%)	-3 (0%)	-17 (0%)	-14 (0%)	1 (0%)	-27 (-1%)	-51 (-1%)	-43 (-1%)	-131 (-3%)
	AN	-71 (-2%)	-8 (0%)	-21 (0%)	-53 (-1%)	-5 (0%)	-57 (-1%)	-82 (-2%)	-75 (-2%)	-265 (-6%)
	BN	-5 (0%)	71 (2%)	32 (1%)	0 (0%)	31 (1%)	24 (1%)	-320 (-8%)	-320 (-8%)	-408 (-10%)
	D	9 (0%)	111 (3%)	169 (5%)	-26 (-1%)	37 (1%)	30 (1%)	-202 (-6%)	-190 (-6%)	-146 (-4%)
	C	58 (3%)	35 (2%)	135 (6%)	55 (3%)	59 (3%)	68 (3%)	-35 (-2%)	-9 (0%)	68 (4%)
	All	-9 (0%)	39 (1%)	54 (1%)	-10 (0%)	22 (1%)	4 (0%)	-132 (-4%)	-122 (-3%)	-172 (-5%)
SEP	W	254 (8%)	152 (5%)	-140 (-5%)	-18 (-1%)	-9 (0%)	-253 (-8%)	221 (8%)	226 (8%)	34 (1%)
	AN	122 (4%)	155 (5%)	-456 (-16%)	36 (1%)	34 (1%)	-539 (-19%)	132 (5%)	131 (5%)	127 (5%)
	BN	-51 (-2%)	132 (5%)	-1,522 (-56%)	3 (0%)	31 (1%)	-1,538 (-57%)	-214 (-8%)	-233 (-9%)	1 (0%)
	D	10 (0%)	72 (3%)	367 (16%)	-2 (0%)	38 (2%)	257 (11%)	-44 (-2%)	-33 (-2%)	33 (2%)
	C	60 (6%)	11 (1%)	1,750 (162%)	59 (5%)	64 (6%)	1,652 (153%)	-3 (0%)	-10 (-1%)	39 (5%)
	All	100 (4%)	111 (4%)	-3 (0%)	8 (0%)	25 (1%)	-55 (-2%)	43 (2%)	42 (2%)	43 (2%)

[a] Red boxes indicate that storage under the second model scenario listed in the column header is more than 5% lower than storage under the first model scenario listed; green boxes indicate that storage under the second model scenario listed in the column header is more than 5% greater than storage under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

TAF = thousand acre-feet

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-8. Differences[a] (Difference in Percent Differences) between Effects[b] in Shasta Reservoir Storage (TAF), May and September**

Upstream—Shasta Reservoir								
Month	**Water Year Type**	**Alt 1A Effect vs. Boundary 1 Effect**	**Alt 3 Effect vs. Boundary 1 Effect**	**Alt 4A H3 Effect vs. Boundary 2 Effect**	**Alt 4A H3+ Effect vs. Boundary 2 Effect**	**Alt 8 Effect vs. Boundary 2 Effect**	**Alt 4A H4 Effect vs. Scenario 2 Effect**	**Alt 8 Effect vs. Scenario 2 Effect**
MAY	W	25 (1%)	17 (0%)	10 (0%)	-4 (0%)	127 (3%)	10 (0%)	114 (3%)
	AN	11 (0%)	4 (0%)	45 (1%)	-3 (0%)	257 (6%)	36 (1%)	244 (6%)
	BN	315 (8%)	315 (8%)	71 (2%)	39 (1%)	478 (12%)	7 (0%)	440 (11%)
	D	211 (6%)	199 (6%)	137 (4%)	74 (2%)	257 (8%)	138 (4%)	314 (9%)
	C	93 (4%)	67 (3%)	-20 (-1%)	-24 (-1%)	-33 (-2%)	67 (3%)	67 (2%)
	All	123 (3%)	113 (3%)	49 (1%)	18 (0%)	211 (6%)	50 (1%)	226 (6%)
SEP	W	33 (1%)	28 (0%)	170 (6%)	160 (5%)	117 (4%)	114 (4%)	-174 (-6%)
	AN	-10 (-1%)	-9 (-1%)	119 (4%)	121 (4%)	28 (1%)	83 (3%)	-583 (-21%)
	BN	163 (7%)	182 (7%)	129 (5%)	101 (4%)	130 (5%)	17 (1%)	-1,523 (-56%)
	D	53 (3%)	42 (2%)	74 (3%)	34 (2%)	39 (1%)	110 (5%)	334 (15%)
	C	63 (6%)	70 (7%)	-48 (-4%)	-53 (-5%)	-28 (-4%)	97 (9%)	1,711 (157%)
	All	58 (2%)	58 (2%)	102 (4%)	86 (3%)	68 (3%)	52 (2%)	-46 (-2%)

[a] Red boxes indicate that the second effect on storage listed in the column header is more than 5% more negative than the first effect on storage listed in the column header; green boxes indicate that the second effect on storage listed in the column header is more than 5% more positive than the first effect on storage listed in the column header.

[b] For definitions of each effect, see the introduction to this section

TAF = thousand acre-feet

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.1.2 Oroville Reservoir

Table 5E-9. Mean End of Month Storage (TAF) for Model Scenarios in Oroville Reservoir, May and September

Upstream—Oroville Reservoir												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
MAY	W	3,486	3,468	3,488	3,190	3,479	3,488	3,152	3,461	3,416	3,424	2,818
	AN	3,400	3,389	3,441	2,852	3,392	3,412	2,944	3,341	3,260	3,280	2,329
	BN	2,843	2,920	3,275	2,352	2,955	2,953	2,455	2,911	2,885	2,921	1,850
	D	2,088	2,331	2,674	1,931	2,138	2,157	2,082	2,236	2,346	2,312	1,692
	C	1,385	1,519	1,929	1,490	1,482	1,434	1,639	1,508	1,564	1,569	1,388
	All	2,749	2,828	3,038	2,472	2,790	2,793	2,547	2,795	2,797	2,802	2,125
SEP	W	2,100	2,471	2,377	2,156	2,220	2,165	2,145	1,885	2,432	2,422	2,124
	AN	1,681	2,038	2,168	1,772	1,755	1,724	1,603	1,583	1,870	1,892	1,677
	BN	1,331	1,747	2,212	1,460	1,613	1,569	1,467	1,409	1,678	1,646	1,309
	D	1,116	1,208	1,582	1,151	1,196	1,189	1,227	1,008	1,319	1,331	1,163
	C	875	938	1,315	973	925	910	1,042	796	964	944	954
	All	1,512	1,782	1,988	1,587	1,634	1,601	1,587	1,408	1,762	1,756	1,537

[a] For definitions of each model scenario, see the introduction to this section

TAF = thousand acre-feet

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-10. Differences[a] (Percent Differences) between Pairs of Model Scenarios in Oroville Reservoir Storage (TAF), May and September**

Upstream—Oroville Reservoir										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
MAY	W	-18 (-1%)	2 (0%)	-296 (-8%)	-7 (0%)	1 (0%)	-334 (-10%)	-45 (-1%)	-37 (-1%)	-643 (-19%)
	AN	-11 (0%)	41 (1%)	-548 (-16%)	-8 (0%)	12 (0%)	-456 (-13%)	-81 (-2%)	-61 (-2%)	-1,012 (-30%)
	BN	77 (3%)	433 (15%)	-490 (-17%)	112 (4%)	111 (4%)	-388 (-14%)	-26 (-1%)	10 (0%)	-1,061 (-36%)
	D	243 (12%)	586 (28%)	-158 (-8%)	50 (2%)	69 (3%)	-6 (0%)	110 (5%)	76 (3%)	-544 (-24%)
	C	134 (10%)	544 (39%)	104 (8%)	97 (7%)	49 (4%)	254 (18%)	57 (4%)	61 (4%)	-120 (-8%)
	All	79 (3%)	289 (10%)	-277 (-10%)	41 (1%)	43 (2%)	-203 (-7%)	2 (0%)	7 (0%)	-670 (-24%)
SEP	W	371 (18%)	278 (13%)	56 (3%)	120 (6%)	65 (3%)	45 (2%)	547 (29%)	537 (28%)	239 (13%)
	AN	357 (21%)	487 (29%)	91 (5%)	74 (4%)	43 (3%)	-78 (-5%)	287 (18%)	309 (20%)	94 (6%)
	BN	416 (31%)	880 (66%)	128 (10%)	282 (21%)	237 (18%)	136 (10%)	270 (19%)	237 (17%)	-100 (-7%)
	D	92 (8%)	466 (42%)	35 (3%)	80 (7%)	74 (7%)	111 (10%)	311 (31%)	323 (32%)	155 (15%)
	C	63 (7%)	440 (50%)	98 (11%)	50 (6%)	35 (4%)	167 (19%)	168 (21%)	148 (19%)	157 (20%)
	All	270 (18%)	476 (32%)	75 (5%)	122 (8%)	89 (6%)	75 (5%)	354 (25%)	349 (25%)	130 (9%)

[a] Red boxes indicate that storage under the second model scenario listed in the column header is more than 5% lower than storage under the first model scenario listed; green boxes indicate that storage under the second model scenario listed in the column header is more than 5% greater than storage under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

TAF = thousand acre-feet

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-11. Differences[a] (Difference in Percent Differences) between Effects[b] in Oroville Reservoir Storage (TAF), May and September**

Upstream—Oroville Reservoir								
Month	**Water Year Type**	**Alt 1A Effect vs. Boundary 1 Effect**	**Alt 3 Effect vs. Boundary 1 Effect**	**Alt 4A H3 Effect vs. Boundary 2 Effect**	**Alt 4A H3+ Effect vs. Boundary 2 Effect**	**Alt 8 Effect vs. Boundary 2 Effect**	**Alt 4A H4 Effect vs. Scenario 2 Effect**	**Alt 8 Effect vs. Scenario 2 Effect**
MAY	W	26 (1%)	18 (1%)	9 (0%)	0 (0%)	644 (19%)	38 (1%)	346 (10%)
	AN	70 (2%)	50 (2%)	49 (1%)	30 (1%)	1,054 (32%)	-92 (-3%)	464 (14%)
	BN	103 (4%)	67 (2%)	321 (11%)	322 (11%)	1,494 (52%)	-103 (-4%)	571 (19%)
	D	133 (7%)	167 (8%)	536 (26%)	517 (25%)	1,130 (52%)	-152 (-7%)	387 (17%)
	C	77 (6%)	72 (6%)	447 (32%)	495 (36%)	664 (47%)	-150 (-11%)	224 (15%)
	All	77 (3%)	72 (3%)	248 (9%)	245 (9%)	959 (34%)	-74 (-3%)	393 (14%)
SEP	W	-176 (-11%)	-166 (-11%)	158 (8%)	212 (10%)	38 (1%)	11 (1%)	-183 (-10%)
	AN	70 (3%)	48 (2%)	414 (25%)	444 (26%)	393 (23%)	169 (10%)	-3 (-1%)
	BN	146 (12%)	178 (14%)	598 (45%)	643 (48%)	980 (73%)	-8 (-1%)	228 (17%)
	D	-219 (-23%)	-231 (-24%)	386 (35%)	392 (35%)	311 (26%)	-76 (-7%)	-120 (-12%)
	C	-105 (-14%)	-85 (-11%)	390 (45%)	405 (46%)	283 (31%)	-69 (-8%)	-59 (-9%)
	All	-84 (-7%)	-78 (-7%)	355 (23%)	387 (26%)	347 (22%)	0 (0%)	-55 (-4%)

a Red boxes indicate that the second effect on storage listed in the column header is more than 5% more negative than the first effect on storage listed in the column header; green boxes indicate that the second effect on storage listed in the column header is more than 5% more positive than the first effect on storage listed in the column header.

b For definitions of each effect, see the introduction to this section

TAF = thousand acre-feet

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.1.3 Folsom Reservoir

Table 5E-12. Mean End of Month Storage (TAF) for Model Scenarios in Folsom Reservoir, May and September

Upstream—Folsom Reservoir												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
MAY	W	951	949	952	948	950	952	945	943	934	934	923
	AN	945	932	945	936	935	945	934	930	901	903	904
	BN	908	889	909	898	901	909	900	891	851	852	782
	D	735	722	734	737	719	734	732	691	643	647	599
	C	437	426	417	421	426	434	428	360	342	344	262
	All	820	810	817	814	812	820	813	791	764	766	728
SEP	W	574	637	596	598	567	569	579	485	543	544	522
	AN	487	513	535	539	486	494	498	430	435	433	477
	BN	515	462	509	512	472	482	509	423	428	424	396
	D	384	366	398	410	359	358	370	306	316	310	245
	C	203	215	205	211	217	213	215	159	147	144	114
	All	455	468	472	477	442	445	456	379	400	397	373

[a] For definitions of each model scenario, see the introduction to this section
TAF = thousand acre-feet
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-13. Differences[a] (Percent Differences) between Pairs of Model Scenarios in Folsom Reservoir Storage (TAF), May and September**

Upstream—Folsom Reservoir										
Month	**Water Year Type**	**Boundary 1 Effect[b]**	**Boundary 2 Effect**	**Scenario 2 Effect**	**Alt 4A H3 Effect**	**Alt 4A H3+ Effect**	**Alt 4A H4 Effect**	**Alt 1A Effect**	**Alt 3 Effect**	**Alt 8 Effect**
MAY	W	-3 (0%)	1 (0%)	-4 (0%)	-1 (0%)	1 (0%)	-6 (-1%)	-9 (-1%)	-10 (-1%)	-21 (-2%)
	AN	-12 (-1%)	0 (0%)	-9 (-1%)	-9 (-1%)	0 (0%)	-11 (-1%)	-29 (-3%)	-27 (-3%)	-25 (-3%)
	BN	-19 (-2%)	0 (0%)	-10 (-1%)	-7 (-1%)	1 (0%)	-8 (-1%)	-39 (-4%)	-39 (-4%)	-108 (-12%)
	D	-13 (-2%)	-1 (0%)	2 (0%)	-16 (-2%)	-1 (0%)	-3 (0%)	-48 (-7%)	-44 (-6%)	-92 (-13%)
	C	-11 (-2%)	-20 (-5%)	-16 (-4%)	-11 (-2%)	-3 (-1%)	-9 (-2%)	-18 (-5%)	-15 (-4%)	-98 (-27%)
	All	-10 (-1%)	-3 (0%)	-6 (-1%)	-8 (-1%)	0 (0%)	-7 (-1%)	-27 (-3%)	-26 (-3%)	-63 (-8%)
SEP	W	63 (11%)	22 (4%)	23 (4%)	-7 (-1%)	-6 (-1%)	5 (1%)	58 (12%)	59 (12%)	37 (8%)
	AN	26 (5%)	48 (10%)	52 (11%)	-1 (0%)	7 (2%)	12 (2%)	4 (1%)	3 (1%)	47 (11%)
	BN	-52 (-10%)	-5 (-1%)	-2 (0%)	-43 (-8%)	-32 (-6%)	-6 (-1%)	6 (1%)	2 (0%)	-27 (-6%)
	D	-18 (-5%)	14 (4%)	26 (7%)	-25 (-7%)	-26 (-7%)	-13 (-3%)	10 (3%)	4 (1%)	-61 (-20%)
	C	12 (6%)	1 (1%)	8 (4%)	13 (7%)	10 (5%)	11 (6%)	-12 (-8%)	-15 (-9%)	-45 (-28%)
	All	13 (3%)	16 (4%)	21 (5%)	-13 (-3%)	-11 (-2%)	1 (0%)	21 (5%)	18 (5%)	-6 (-2%)

[a] Red boxes indicate that storage under the second model scenario listed in the column header is more than 5% lower than storage under the first model scenario listed; green boxes indicate that storage under the second model scenario listed in the column header is more than 5% greater than storage under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

TAF = thousand acre-feet

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-14. Differences[a] (Difference in Percent Differences) between Effects[b] in Folsom Reservoir Storage (TAF), May and September**

Upstream—Folsom Reservoir								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
MAY	W	7 (1%)	7 (1%)	2 (0%)	0 (0%)	21 (2%)	2 (0%)	17 (2%)
	AN	17 (2%)	15 (2%)	9 (1%)	0 (0%)	25 (3%)	2 (0%)	16 (2%)
	BN	20 (2%)	19 (2%)	7 (1%)	0 (0%)	108 (12%)	-2 (0%)	98 (11%)
	D	35 (5%)	31 (5%)	16 (2%)	0 (0%)	91 (13%)	5 (1%)	93 (14%)
	C	7 (2%)	4 (2%)	-9 (-2%)	-17 (-4%)	78 (23%)	-7 (-2%)	82 (24%)
	All	17 (2%)	15 (2%)	5 (1%)	-3 (0%)	60 (8%)	1 (0%)	57 (7%)
SEP	W	5 (-1%)	4 (-1%)	29 (5%)	27 (5%)	-15 (-4%)	19 (3%)	-14 (-4%)
	AN	22 (4%)	23 (5%)	49 (10%)	41 (8%)	1 (-1%)	41 (8%)	5 (0%)
	BN	-58 (-12%)	-54 (-11%)	38 (7%)	27 (5%)	22 (5%)	4 (1%)	25 (6%)
	D	-28 (-8%)	-22 (-6%)	40 (10%)	40 (11%)	75 (24%)	39 (10%)	87 (27%)
	C	24 (13%)	27 (15%)	-12 (-6%)	-8 (-4%)	47 (29%)	-3 (-2%)	53 (32%)
	All	-8 (-3%)	-5 (-2%)	30 (7%)	27 (6%)	22 (5%)	21 (5%)	27 (6%)

[a] Red boxes indicate that the second effect on storage listed in the column header is more than 5% more negative than the first effect on storage listed in the column header; green boxes indicate that the second effect on storage listed in the column header is more than 5% more positive than the first effect on storage listed in the column header.

[b] For definitions of each effect, see the introduction to this section

TAF = thousand acre-feet

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.1.4 Lewiston Reservoir

Table 5E-15. Mean End of Month Storage (TAF) for Model Scenarios in Lewiston Reservoir, May and September

Upstream—Lewiston Reservoir												
Month	Water Year Type	NAA_ELT_ 2015[a]	SWRCB_B1_ELT_ 2015	SWRCB_B2_ELT_ 2015	SWRCB_S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
MAY	W	2,247	2,245	2,251	2,258	2,248	2,249	2,254	2,196	2,177	2,181	2,222
	AN	1,997	2,006	2,033	2,069	2,034	2,030	2,039	1,988	1,971	1,969	2,026
	BN	1,585	1,625	1,614	1,630	1,602	1,601	1,608	1,544	1,483	1,489	1,594
	D	1,522	1,573	1,585	1,616	1,548	1,553	1,563	1,406	1,347	1,348	1,500
	C	978	1,000	983	1,023	989	999	995	862	878	867	960
	All	1,753	1,774	1,779	1,802	1,769	1,771	1,776	1,685	1,656	1,657	1,743
SEP	W	1,782	1,793	1,793	1,801	1,773	1,779	1,773	1,657	1,633	1,641	1,615
	AN	1,508	1,486	1,521	1,553	1,518	1,519	1,526	1,388	1,362	1,363	1,381
	BN	1,137	1,144	1,159	1,175	1,141	1,148	1,148	1,068	1,000	1,001	1,068
	D	986	1,014	1,068	1,096	998	1,009	1,019	855	798	811	977
	C	583	598	573	649	593	593	602	440	420	422	490
	All	1,282	1,291	1,307	1,335	1,285	1,291	1,293	1,163	1,125	1,130	1,183

[a] For definitions of each model scenario, see the introduction to this section
TAF = thousand acre-feet
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-16. Differences[a] (Percent Differences) between Pairs of Model Scenarios in Lewiston Reservoir Storage (TAF), May and September**

Upstream—Lewiston Reservoir										
Month	**Water Year Type**	**Boundary 1 Effect[b]**	**Boundary 2 Effect**	**Scenario 2 Effect**	**Alt 4A H3 Effect**	**Alt 4A H3+ Effect**	**Alt 4A H4 Effect**	**Alt 1A Effect**	**Alt 3 Effect**	**Alt 8 Effect**
MAY	W	-3 (0%)	4 (0%)	11 (0%)	1 (0%)	2 (0%)	6 (0%)	-19 (-1%)	-14 (-1%)	26 (1%)
	AN	9 (0%)	36 (2%)	72 (4%)	37 (2%)	33 (2%)	43 (2%)	-17 (-1%)	-19 (-1%)	38 (2%)
	BN	40 (3%)	29 (2%)	45 (3%)	17 (1%)	16 (1%)	23 (1%)	-61 (-4%)	-56 (-4%)	50 (3%)
	D	51 (3%)	62 (4%)	94 (6%)	26 (2%)	30 (2%)	41 (3%)	-59 (-4%)	-58 (-4%)	94 (7%)
	C	23 (2%)	5 (1%)	46 (5%)	12 (1%)	21 (2%)	17 (2%)	16 (2%)	5 (1%)	98 (11%)
	All	22 (1%)	26 (1%)	49 (3%)	16 (1%)	18 (1%)	24 (1%)	-29 (-2%)	-29 (-2%)	58 (3%)
SEP	W	11 (1%)	12 (1%)	20 (1%)	-9 (0%)	-3 (0%)	-9 (-1%)	-25 (-1%)	-17 (-1%)	-42 (-3%)
	AN	-22 (-1%)	13 (1%)	45 (3%)	10 (1%)	11 (1%)	18 (1%)	-26 (-2%)	-25 (-2%)	-7 (-1%)
	BN	7 (1%)	22 (2%)	38 (3%)	4 (0%)	11 (1%)	11 (1%)	-68 (-6%)	-67 (-6%)	0 (0%)
	D	28 (3%)	82 (8%)	110 (11%)	12 (1%)	23 (2%)	34 (3%)	-56 (-7%)	-43 (-5%)	122 (14%)
	C	15 (3%)	-11 (-2%)	66 (11%)	10 (2%)	10 (2%)	19 (3%)	-19 (-4%)	-17 (-4%)	50 (11%)
	All	10 (1%)	26 (2%)	53 (4%)	4 (0%)	9 (1%)	12 (1%)	-38 (-3%)	-33 (-3%)	20 (2%)

[a] Red boxes indicate that storage under the second model scenario listed in the column header is more than 5% lower than storage under the first model scenario listed; green boxes indicate that storage under the second model scenario listed in the column header is more than 5% greater than storage under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

TAF = thousand acre-feet

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-17. Differences[a] (Difference in Percent Differences) between Effects[b] in Lewiston Reservoir Storage (TAF), May and September**

Upstream—Lewiston Reservoir								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
MAY	W	16 (1%)	12 (1%)	3 (0%)	2 (0%)	-22 (-1%)	4 (0%)	-16 (-1%)
	AN	26 (1%)	28 (1%)	-1 (0%)	3 (0%)	-2 (0%)	30 (1%)	34 (2%)
	BN	101 (6%)	96 (6%)	12 (1%)	13 (1%)	-21 (-1%)	22 (1%)	-5 (0%)
	D	110 (8%)	109 (7%)	37 (2%)	32 (2%)	-32 (-3%)	53 (3%)	-1 (-1%)
	C	7 (0%)	18 (2%)	-6 (-1%)	-16 (-2%)	-93 (-11%)	29 (3%)	-52 (-7%)
	All	51 (3%)	51 (3%)	10 (1%)	8 (0%)	-32 (-2%)	25 (1%)	-9 (-1%)
SEP	W	35 (2%)	27 (2%)	20 (1%)	14 (1%)	54 (3%)	29 (2%)	62 (4%)
	AN	4 (0%)	3 (0%)	3 (0%)	2 (0%)	20 (1%)	27 (2%)	52 (3%)
	BN	75 (7%)	74 (7%)	18 (2%)	11 (1%)	22 (2%)	26 (2%)	37 (3%)
	D	84 (9%)	71 (8%)	70 (7%)	59 (6%)	-40 (-6%)	77 (8%)	-12 (-3%)
	C	34 (7%)	32 (7%)	-21 (-4%)	-20 (-4%)	-61 (-13%)	47 (8%)	16 (0%)
	All	48 (4%)	42 (4%)	22 (2%)	17 (1%)	6 (0%)	41 (3%)	33 (2%)

[a] Red boxes indicate that the second effect on storage listed in the column header is more than 5% more negative than the first effect on storage listed in the column header; green boxes indicate that the second effect on storage listed in the column header is more than 5% more positive than the first effect on storage listed in the column header.

[b] For definitions of each effect, see the introduction to this section

TAF = thousand acre-feet

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 ### 5E.4.2.1.5 New Melones Reservoir

2 **Table 5E-18. Mean End of Month Storage (TAF) for Model Scenarios in New Melones Reservoir, May and September**

Upstream—New Melones Reservoir												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
MAY	W	1,830	1,830	1,830	1,830	1,830	1,830	1,830	1,917	1,919	1,919	1,913
	AN	1,473	1,474	1,481	1,481	1,474	1,473	1,473	1,623	1,624	1,624	1,617
	BN	1,242	1,242	1,248	1,248	1,242	1,242	1,242	1,394	1,394	1,394	1,387
	D	1,134	1,135	1,136	1,135	1,134	1,134	1,134	1,287	1,287	1,287	1,281
	C	557	557	557	557	557	557	557	711	713	713	703
	All	1,338	1,339	1,341	1,341	1,338	1,338	1,338	1,470	1,471	1,471	1,464
SEP	W	1,651	1,652	1,651	1,651	1,651	1,651	1,651	1,677	1,678	1,678	1,672
	AN	1,231	1,231	1,238	1,238	1,231	1,231	1,231	1,366	1,366	1,367	1,359
	BN	1,009	1,010	1,015	1,015	1,010	1,009	1,009	1,180	1,180	1,181	1,173
	D	873	873	874	874	873	873	873	1,066	1,066	1,066	1,054
	C	407	407	407	407	407	407	407	537	539	539	528
	All	1,127	1,127	1,130	1,129	1,127	1,127	1,127	1,246	1,246	1,247	1,238

[a] For definitions of each model scenario, see the introduction to this section
TAF = thousand acre-feet
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-19. Differences[a] (Percent Differences) between Pairs of Model Scenarios in New Melones Reservoir Storage (TAF), May and September**

Upstream—New Melones Reservoir										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
MAY	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	-4 (0%)
	AN	0 (0%)	8 (1%)	7 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	-7 (0%)
	BN	1 (0%)	6 (1%)	6 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	-6 (0%)
	D	0 (0%)	1 (0%)	1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-6 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	-8 (-1%)
	All	0 (0%)	3 (0%)	2 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	-6 (0%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	-4 (0%)
	AN	0 (0%)	7 (1%)	7 (1%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	-7 (0%)
	BN	1 (0%)	6 (1%)	6 (1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	-8 (-1%)
	D	0 (0%)	1 (0%)	1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-12 (-1%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	-9 (-2%)
	All	0 (0%)	2 (0%)	2 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	-8 (-1%)

[a] Red boxes indicate that storage under the second model scenario listed in the column header is more than 5% lower than storage under the first model scenario listed; green boxes indicate that storage under the second model scenario listed in the column header is more than 5% greater than storage under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

TAF = thousand acre-feet

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-20. Differences[a] (Difference in Percent Differences) between Effects[b] in New Melones Reservoir Storage (TAF), May and September**

Upstream—New Melones Reservoir								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
MAY	W	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	4 (0%)	0 (0%)	4 (0%)
	AN	0 (0%)	0 (0%)	7 (0%)	8 (1%)	14 (1%)	7 (0%)	14 (1%)
	BN	0 (0%)	0 (0%)	6 (1%)	7 (1%)	13 (1%)	6 (1%)	13 (1%)
	D	0 (0%)	0 (0%)	1 (0%)	2 (0%)	8 (1%)	1 (0%)	7 (1%)
	C	-2 (0%)	-2 (0%)	0 (0%)	1 (0%)	8 (1%)	0 (0%)	8 (1%)
	All	-1 (0%)	-1 (0%)	2 (0%)	3 (0%)	9 (1%)	3 (0%)	8 (1%)
SEP	W	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	5 (0%)	0 (0%)	5 (0%)
	AN	0 (0%)	0 (0%)	7 (1%)	7 (1%)	14 (1%)	7 (1%)	14 (1%)
	BN	1 (0%)	0 (0%)	6 (1%)	6 (1%)	14 (1%)	6 (1%)	13 (1%)
	D	0 (0%)	0 (0%)	1 (0%)	2 (0%)	14 (1%)	1 (0%)	13 (1%)
	C	-2 (0%)	-2 (0%)	0 (0%)	0 (0%)	9 (2%)	0 (0%)	9 (2%)
	All	0 (0%)	-1 (0%)	2 (0%)	3 (0%)	10 (1%)	2 (0%)	10 (1%)

[a] Red boxes indicate that the second effect on storage listed in the column header is more than 5% more negative than the first effect on storage listed in the column header; green boxes indicate that the second effect on storage listed in the column header is more than 5% more positive than the first effect on storage listed in the column header.

[b] For definitions of each effect, see the introduction to this section

TAF = thousand acre-feet

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.1.6 Sacramento River at Keswick

Table 5E-21. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Keswick, Year-Round

Upstream—Sacramento River at Keswick												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	17,440	18,297	18,373	18,424	17,896	17,926	17,813	18,233	18,615	18,760	19,896
	AN	7,755	9,275	8,232	8,416	8,344	8,396	8,440	8,205	7,987	8,054	9,021
	BN	4,127	5,019	4,758	4,759	4,689	4,662	4,685	4,184	5,666	5,344	5,290
	D	4,080	4,086	4,132	4,134	4,082	4,082	4,084	4,096	4,371	4,237	3,596
	C	3,452	3,553	3,452	3,452	3,807	3,817	3,831	4,238	3,452	3,689	3,460
	All	8,770	9,433	9,255	9,299	9,149	9,163	9,140	9,215	9,503	9,509	9,827
FEB	W	21,515	21,622	21,958	22,006	21,758	21,732	21,813	20,853	20,844	21,163	21,267
	AN	15,033	16,633	16,263	16,398	15,792	15,699	15,695	15,297	16,741	15,935	15,609
	BN	6,232	6,786	6,497	6,572	6,579	6,676	6,644	5,544	6,245	6,636	6,120
	D	3,430	3,468	3,483	3,500	3,493	3,542	3,535	3,410	3,609	3,761	4,167
	C	3,823	3,469	3,636	3,609	3,353	3,353	3,353	3,372	3,586	3,341	4,012
	All	11,398	11,717	11,748	11,796	11,591	11,596	11,614	11,039	11,442	11,490	11,574
MAR	W	15,964	15,990	16,050	16,084	15,998	15,991	15,991	17,065	17,202	17,207	17,194
	AN	8,277	9,365	9,355	9,305	9,221	9,057	9,207	8,818	8,558	8,788	9,084
	BN	4,187	4,851	4,568	4,662	4,594	4,475	4,554	4,318	4,873	4,868	5,006
	D	3,783	3,797	3,778	3,857	3,787	3,812	3,786	3,814	3,732	3,747	5,479
	C	3,454	3,786	3,459	3,467	3,685	3,730	3,690	3,583	3,867	3,945	3,868
	All	8,324	8,657	8,574	8,612	8,577	8,542	8,566	8,800	8,924	8,973	9,404
APR	W	8,851	8,859	8,891	9,100	8,873	8,853	9,098	9,131	9,088	9,089	9,585
	AN	5,801	5,878	5,909	6,353	5,811	5,807	5,956	5,536	6,137	6,062	7,440
	BN	4,972	5,596	5,106	5,918	5,300	4,902	5,249	5,009	5,722	5,684	7,981
	D	5,380	6,241	5,615	5,689	5,798	5,564	5,712	5,533	6,308	5,886	7,335
	C	6,241	6,534	6,403	6,375	6,353	6,322	6,385	6,550	6,733	6,709	6,320
	All	6,599	6,951	6,725	7,007	6,771	6,641	6,841	6,733	7,127	7,013	8,026
MAY	W	8,181	8,552	8,202	8,180	8,377	8,147	8,309	7,149	7,871	7,824	8,580
	AN	7,348	8,566	7,572	7,270	8,138	7,383	8,120	7,783	8,868	8,823	10,326
	BN	6,399	7,867	6,802	6,893	6,665	6,396	6,656	6,272	7,346	7,481	8,253
	D	7,151	8,781	7,682	7,342	8,081	7,610	7,699	7,681	8,957	8,971	7,651
	C	7,010	7,502	6,945	6,517	7,250	7,119	7,199	7,316	7,586	7,567	7,708
	All	7,357	8,334	7,573	7,400	7,820	7,468	7,703	7,233	8,124	8,126	8,448
JUN	W	10,024	10,473	10,168	10,065	10,297	10,222	10,065	10,274	11,776	11,605	11,990
	AN	11,220	12,489	11,840	11,340	11,942	11,945	11,608	12,032	13,789	13,622	13,183
	BN	10,501	11,512	10,800	10,223	11,173	11,278	11,106	10,947	11,599	11,535	10,957
	D	11,171	12,004	11,394	11,470	11,767	11,885	11,780	11,898	12,498	12,202	10,804
	C	9,923	10,652	10,565	10,697	10,540	10,521	10,576	11,350	11,750	11,829	12,247
	All	10,517	11,308	10,848	10,679	11,045	11,063	10,920	11,160	12,195	12,052	11,766

Upstream—Sacramento River at Keswick												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	13,472	13,643	12,863	12,749	13,578	13,557	13,639	14,098	14,172	14,236	13,504
	AN	14,561	14,612	13,978	13,863	14,602	14,572	14,482	15,098	14,686	14,721	13,510
	BN	13,101	13,550	12,894	12,468	13,477	13,383	13,343	13,177	12,134	12,706	11,458
	D	13,761	13,107	12,939	12,755	13,249	13,446	13,373	13,727	12,593	12,516	12,777
	C	12,050	11,543	12,338	11,455	11,550	11,565	11,475	11,935	11,451	11,459	11,399
	All	13,423	13,344	12,971	12,676	13,342	13,360	13,337	13,689	13,155	13,262	12,688
AUG	W	10,371	10,645	10,669	10,521	10,586	10,465	10,589	10,491	10,302	10,327	10,059
	AN	10,488	10,267	10,678	10,657	10,392	10,444	10,384	11,641	10,580	10,634	9,528
	BN	9,800	10,016	9,320	9,327	9,373	9,337	9,374	10,261	9,462	9,373	8,606
	D	10,000	10,267	10,016	10,099	10,057	10,037	9,732	10,986	8,874	9,019	10,264
	C	8,704	8,816	8,570	8,554	8,929	8,962	8,635	7,348	7,004	6,947	7,379
	All	9,965	10,132	9,989	9,957	9,992	9,956	9,877	10,269	9,403	9,427	9,386
SEP	W	12,775	6,950	10,210	10,245	12,407	12,624	12,230	12,833	6,998	7,066	11,785
	AN	9,206	5,416	6,642	6,690	7,525	8,240	7,615	9,898	6,253	6,412	8,117
	BN	5,399	5,022	4,869	4,862	4,948	4,904	4,913	5,601	5,284	5,251	4,023
	D	4,803	4,721	5,682	5,562	4,490	4,481	4,519	4,469	4,722	4,651	3,997
	C	4,515	4,292	4,478	4,558	4,126	4,223	4,274	4,368	4,927	5,194	4,421
	All	8,035	5,518	6,943	6,945	7,469	7,647	7,448	8,094	5,794	5,857	7,136
OCT	W	6,632	6,132	6,867	6,868	6,451	6,597	6,453	7,034	8,025	7,984	5,906
	AN	6,731	6,400	6,523	6,715	6,345	6,601	6,359	7,152	8,462	8,802	6,243
	BN	6,060	5,707	6,515	6,474	5,641	6,010	5,722	7,072	8,950	8,371	5,225
	D	6,105	5,446	6,250	6,180	5,913	5,899	5,752	6,494	8,106	7,926	5,721
	C	5,077	5,239	5,663	6,090	5,059	5,214	5,184	5,752	7,875	7,851	4,317
	All	6,206	5,817	6,445	6,513	5,975	6,142	5,975	6,752	8,242	8,138	5,566
NOV	W	8,232	6,496	6,775	6,898	7,031	7,180	7,045	7,539	6,401	6,096	6,317
	AN	7,469	5,522	5,962	5,954	5,622	5,990	6,038	7,134	4,457	4,524	5,554
	BN	6,622	4,513	4,872	5,015	4,832	4,914	4,903	5,936	4,241	4,211	4,756
	D	6,188	4,908	4,694	4,763	4,937	4,868	4,797	5,406	4,319	4,475	4,658
	C	5,096	4,465	4,498	4,418	4,595	4,592	4,570	4,710	4,196	4,233	4,421
	All	6,938	5,369	5,541	5,607	5,633	5,733	5,676	6,324	4,968	4,916	5,297
DEC	W	12,019	14,349	14,093	14,156	12,691	12,695	13,107	11,022	11,953	11,856	11,788
	AN	5,744	5,274	5,478	5,689	5,271	5,344	5,648	5,377	5,376	5,276	4,495
	BN	5,994	5,778	5,810	5,810	5,637	5,638	5,755	5,195	5,412	5,523	5,211
	D	3,875	4,120	4,193	4,194	3,872	3,962	3,864	3,936	4,206	4,695	3,709
	C	3,680	3,882	3,576	3,591	3,550	3,553	3,594	3,582	3,645	3,688	3,766
	All	7,064	7,780	7,706	7,759	7,127	7,160	7,339	6,557	6,958	7,044	6,651

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-22. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios in the Sacramento River at Keswick, Year-Round**

Upstream—Sacramento River at Keswick										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	857 (5%)	932 (5%)	983 (6%)	455 (3%)	486 (3%)	372 (2%)	382 (2%)	527 (3%)	1,663 (9%)
	AN	1,521 (20%)	477 (6%)	661 (9%)	590 (8%)	641 (8%)	686 (9%)	-217 (-3%)	-151 (-2%)	816 (10%)
	BN	892 (22%)	631 (15%)	632 (15%)	562 (14%)	535 (13%)	557 (14%)	1,483 (35%)	1,160 (28%)	1,106 (26%)
	D	6 (0%)	51 (1%)	54 (1%)	2 (0%)	2 (0%)	4 (0%)	275 (7%)	142 (3%)	-500 (-12%)
	C	100 (3%)	0 (0%)	0 (0%)	355 (10%)	365 (11%)	379 (11%)	-786 (-19%)	-549 (-13%)	-778 (-18%)
	All	662 (8%)	484 (6%)	528 (6%)	379 (4%)	393 (4%)	370 (4%)	288 (3%)	294 (3%)	612 (7%)
FEB	W	106 (0%)	443 (2%)	491 (2%)	242 (1%)	217 (1%)	297 (1%)	-9 (0%)	309 (1%)	413 (2%)
	AN	1,600 (11%)	1,230 (8%)	1,365 (9%)	759 (5%)	666 (4%)	662 (4%)	1,444 (9%)	638 (4%)	312 (2%)
	BN	554 (9%)	266 (4%)	341 (5%)	347 (6%)	444 (7%)	412 (7%)	700 (13%)	1,092 (20%)	575 (10%)
	D	38 (1%)	54 (2%)	70 (2%)	64 (2%)	113 (3%)	105 (3%)	199 (6%)	351 (10%)	758 (22%)
	C	-354 (-9%)	-186 (-5%)	-214 (-6%)	-469 (-12%)	-469 (-12%)	-469 (-12%)	214 (6%)	-31 (-1%)	640 (19%)
	All	319 (3%)	350 (3%)	398 (3%)	193 (2%)	198 (2%)	216 (2%)	403 (4%)	450 (4%)	535 (5%)
MAR	W	26 (0%)	86 (1%)	120 (1%)	34 (0%)	27 (0%)	27 (0%)	137 (1%)	141 (1%)	128 (1%)
	AN	1,089 (13%)	1,078 (13%)	1,028 (12%)	944 (11%)	781 (9%)	930 (11%)	-260 (-3%)	-29 (0%)	266 (3%)
	BN	664 (16%)	380 (9%)	475 (11%)	407 (10%)	288 (7%)	367 (9%)	555 (13%)	550 (13%)	688 (16%)
	D	14 (0%)	-5 (0%)	74 (2%)	4 (0%)	28 (1%)	3 (0%)	-82 (-2%)	-67 (-2%)	1,665 (44%)
	C	332 (10%)	5 (0%)	13 (0%)	231 (7%)	276 (8%)	236 (7%)	283 (8%)	362 (10%)	285 (8%)
	All	333 (4%)	250 (3%)	288 (3%)	253 (3%)	218 (3%)	242 (3%)	124 (1%)	173 (2%)	604 (7%)
APR	W	8 (0%)	39 (0%)	249 (3%)	22 (0%)	2 (0%)	246 (3%)	-43 (0%)	-42 (0%)	454 (5%)
	AN	77 (1%)	108 (2%)	551 (9%)	9 (0%)	6 (0%)	155 (3%)	601 (11%)	526 (10%)	1,904 (34%)
	BN	624 (13%)	134 (3%)	946 (19%)	328 (7%)	-70 (-1%)	277 (6%)	714 (14%)	675 (13%)	2,973 (59%)
	D	861 (16%)	235 (4%)	309 (6%)	418 (8%)	184 (3%)	331 (6%)	775 (14%)	353 (6%)	1,802 (33%)
	C	292 (5%)	162 (3%)	134 (2%)	112 (2%)	81 (1%)	144 (2%)	183 (3%)	159 (2%)	-230 (-4%)
	All	352 (5%)	126 (2%)	408 (6%)	172 (3%)	42 (1%)	242 (4%)	393 (6%)	280 (4%)	1,292 (19%)
MAY	W	372 (5%)	22 (0%)	-1 (0%)	196 (2%)	-33 (0%)	128 (2%)	722 (10%)	674 (9%)	1,431 (20%)
	AN	1,218 (17%)	225 (3%)	-78 (-1%)	791 (11%)	35 (0%)	773 (11%)	1,085 (14%)	1,040 (13%)	2,543 (33%)
	BN	1,468 (23%)	403 (6%)	494 (8%)	266 (4%)	-3 (0%)	257 (4%)	1,074 (17%)	1,210 (19%)	1,982 (32%)
	D	1,629 (23%)	531 (7%)	191 (3%)	930 (13%)	459 (6%)	548 (8%)	1,275 (17%)	1,289 (17%)	-30 (0%)
	C	493 (7%)	-64 (-1%)	-493 (-7%)	240 (3%)	109 (2%)	189 (3%)	270 (4%)	251 (3%)	392 (5%)
	All	976 (13%)	216 (3%)	42 (1%)	462 (6%)	111 (2%)	346 (5%)	890 (12%)	892 (12%)	1,215 (17%)
JUN	W	449 (4%)	144 (1%)	41 (0%)	273 (3%)	198 (2%)	41 (0%)	1,502 (15%)	1,330 (13%)	1,716 (17%)
	AN	1,269 (11%)	621 (6%)	120 (1%)	722 (6%)	725 (6%)	388 (3%)	1,758 (15%)	1,591 (13%)	1,151 (10%)
	BN	1,011 (10%)	299 (3%)	-278 (-3%)	672 (6%)	777 (7%)	605 (6%)	651 (6%)	588 (5%)	10 (0%)
	D	833 (7%)	222 (2%)	299 (3%)	595 (5%)	714 (6%)	609 (5%)	600 (5%)	304 (3%)	-1,094 (-9%)
	C	730 (7%)	642 (6%)	774 (8%)	617 (6%)	598 (6%)	653 (7%)	400 (4%)	478 (4%)	897 (8%)
	All	790 (8%)	330 (3%)	162 (2%)	528 (5%)	546 (5%)	402 (4%)	1,035 (9%)	892 (8%)	605 (5%)

Upstream—Sacramento River at Keswick										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	171 (1%)	-609 (-5%)	-723 (-5%)	106 (1%)	85 (1%)	167 (1%)	75 (1%)	138 (1%)	-594 (-4%)
	AN	51 (0%)	-583 (-4%)	-698 (-5%)	41 (0%)	11 (0%)	-79 (-1%)	-412 (-3%)	-376 (-2%)	-1,588 (-11%)
	BN	449 (3%)	-207 (-2%)	-632 (-5%)	376 (3%)	283 (2%)	243 (2%)	-1,043 (-8%)	-471 (-4%)	-1,718 (-13%)
	D	-654 (-5%)	-822 (-6%)	-1,007 (-7%)	-513 (-4%)	-316 (-2%)	-389 (-3%)	-1,133 (-8%)	-1,211 (-9%)	-950 (-7%)
	C	-507 (-4%)	288 (2%)	-595 (-5%)	-500 (-4%)	-485 (-4%)	-575 (-5%)	-484 (-4%)	-476 (-4%)	-535 (-4%)
	All	-79 (-1%)	-452 (-3%)	-748 (-6%)	-82 (-1%)	-63 (0%)	-87 (-1%)	-534 (-4%)	-427 (-3%)	-1,001 (-7%)
AUG	W	274 (3%)	298 (3%)	151 (1%)	216 (2%)	95 (1%)	218 (2%)	-189 (-2%)	-164 (-2%)	-432 (-4%)
	AN	-220 (-2%)	191 (2%)	170 (2%)	-96 (-1%)	-44 (0%)	-103 (-1%)	-1,061 (-9%)	-1,006 (-9%)	-2,113 (-18%)
	BN	217 (2%)	-480 (-5%)	-473 (-5%)	-427 (-4%)	-463 (-5%)	-426 (-4%)	-798 (-8%)	-888 (-9%)	-1,654 (-16%)
	D	268 (3%)	16 (0%)	99 (1%)	57 (1%)	37 (0%)	-268 (-3%)	-2,112 (-19%)	-1,967 (-18%)	-722 (-7%)
	C	111 (1%)	-135 (-2%)	-151 (-2%)	224 (3%)	258 (3%)	-69 (-1%)	-344 (-5%)	-400 (-5%)	32 (0%)
	All	167 (2%)	24 (0%)	-8 (0%)	27 (0%)	-10 (0%)	-88 (-1%)	-865 (-8%)	-841 (-8%)	-882 (-9%)
SEP	W	-5,825 (-46%)	-2,564 (-20%)	-2,530 (-20%)	-368 (-3%)	-151 (-1%)	-545 (-4%)	-5,835 (-45%)	-5,767 (-45%)	-1,048 (-8%)
	AN	-3,790 (-41%)	-2,564 (-28%)	-2,516 (-27%)	-1,681 (-18%)	-966 (-10%)	-1,591 (-17%)	-3,645 (-37%)	-3,486 (-35%)	-1,781 (-18%)
	BN	-378 (-7%)	-530 (-10%)	-537 (-10%)	-452 (-8%)	-495 (-9%)	-487 (-9%)	-317 (-6%)	-350 (-6%)	-1,578 (-28%)
	D	-82 (-2%)	880 (18%)	759 (16%)	-313 (-7%)	-322 (-7%)	-284 (-6%)	254 (6%)	182 (4%)	-471 (-11%)
	C	-223 (-5%)	-37 (-1%)	43 (1%)	-390 (-9%)	-293 (-6%)	-241 (-5%)	559 (13%)	826 (19%)	53 (1%)
	All	-2,517 (-31%)	-1,091 (-14%)	-1,089 (-14%)	-565 (-7%)	-387 (-5%)	-586 (-7%)	-2,300 (-28%)	-2,237 (-28%)	-958 (-12%)
OCT	W	-500 (-8%)	235 (4%)	236 (4%)	-181 (-3%)	-34 (-1%)	-179 (-3%)	990 (14%)	949 (13%)	-1,129 (-16%)
	AN	-331 (-5%)	-207 (-3%)	-16 (0%)	-386 (-6%)	-130 (-2%)	-372 (-6%)	1,310 (18%)	1,650 (23%)	-909 (-13%)
	BN	-354 (-6%)	455 (8%)	413 (7%)	-419 (-7%)	-50 (-1%)	-338 (-6%)	1,877 (27%)	1,299 (18%)	-1,847 (-26%)
	D	-659 (-11%)	145 (2%)	75 (1%)	-192 (-3%)	-206 (-3%)	-353 (-6%)	1,611 (25%)	1,432 (22%)	-773 (-12%)
	C	162 (3%)	586 (12%)	1,012 (20%)	-18 (0%)	137 (3%)	107 (2%)	2,124 (37%)	2,100 (37%)	-1,435 (-25%)
	All	-388 (-6%)	239 (4%)	308 (5%)	-230 (-4%)	-64 (-1%)	-231 (-4%)	1,491 (22%)	1,386 (21%)	-1,186 (-18%)
NOV	W	-1,736 (-21%)	-1,458 (-18%)	-1,335 (-16%)	-1,201 (-15%)	-1,052 (-13%)	-1,188 (-14%)	-1,138 (-15%)	-1,443 (-19%)	-1,222 (-16%)
	AN	-1,947 (-26%)	-1,507 (-20%)	-1,515 (-20%)	-1,846 (-25%)	-1,479 (-20%)	-1,431 (-19%)	-2,677 (-38%)	-2,610 (-37%)	-1,580 (-22%)
	BN	-2,109 (-32%)	-1,751 (-26%)	-1,607 (-24%)	-1,790 (-27%)	-1,708 (-26%)	-1,720 (-26%)	-1,695 (-29%)	-1,725 (-29%)	-1,179 (-20%)
	D	-1,280 (-21%)	-1,494 (-24%)	-1,424 (-23%)	-1,251 (-20%)	-1,320 (-21%)	-1,390 (-22%)	-1,087 (-20%)	-931 (-17%)	-748 (-14%)
	C	-631 (-12%)	-598 (-12%)	-678 (-13%)	-501 (-10%)	-504 (-10%)	-526 (-10%)	-514 (-11%)	-477 (-10%)	-289 (-6%)
	All	-1,569 (-23%)	-1,397 (-20%)	-1,331 (-19%)	-1,305 (-19%)	-1,205 (-17%)	-1,262 (-18%)	-1,356 (-21%)	-1,408 (-22%)	-1,026 (-16%)
DEC	W	2,330 (19%)	2,074 (17%)	2,137 (18%)	672 (6%)	677 (6%)	1,088 (9%)	931 (8%)	834 (8%)	766 (7%)
	AN	-470 (-8%)	-266 (-5%)	-55 (-1%)	-473 (-8%)	-401 (-7%)	-96 (-2%)	-1 (0%)	-102 (-2%)	-882 (-16%)
	BN	-216 (-4%)	-184 (-3%)	-184 (-3%)	-356 (-6%)	-355 (-6%)	-238 (-4%)	217 (4%)	328 (6%)	16 (0%)
	D	245 (6%)	318 (8%)	319 (8%)	-3 (0%)	87 (2%)	-11 (0%)	270 (7%)	759 (19%)	-227 (-6%)
	C	202 (5%)	-104 (-3%)	-89 (-2%)	-130 (-4%)	-127 (-3%)	-86 (-2%)	63 (2%)	105 (3%)	184 (5%)
	All	717 (10%)	642 (9%)	695 (10%)	63 (1%)	96 (1%)	275 (4%)	401 (6%)	488 (7%)	94 (1%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

Table 5E-23. Differences[a] (Percent Differences) (cfs) between Effects[b] in the Sacramento River at Keswick, Year-Round

Upstream—Sacramento River at Keswick								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	475 (3%)	330 (2%)	477 (3%)	447 (3%)	-731 (-4%)	611 (4%)	-680 (-3%)
	AN	1,738 (22%)	1,671 (21%)	-113 (-1%)	-164 (-2%)	-339 (-4%)	-25 (0%)	-155 (-1%)
	BN	-590 (-14%)	-268 (-6%)	70 (2%)	96 (2%)	-475 (-11%)	75 (2%)	-474 (-11%)
	D	-270 (-7%)	-136 (-3%)	49 (1%)	49 (1%)	551 (13%)	50 (1%)	554 (14%)
	C	886 (21%)	649 (16%)	-355 (-10%)	-365 (-11%)	778 (18%)	-379 (-11%)	778 (18%)
	All	375 (4%)	369 (4%)	106 (1%)	91 (1%)	-128 (-1%)	158 (2%)	-84 (-1%)
FEB	W	116 (1%)	-203 (-1%)	201 (1%)	226 (1%)	30 (0%)	194 (1%)	78 (0%)
	AN	156 (1%)	962 (6%)	470 (3%)	564 (4%)	918 (6%)	703 (5%)	1,053 (7%)
	BN	-146 (-4%)	-538 (-11%)	-81 (-1%)	-179 (-3%)	-310 (-6%)	-72 (-1%)	-235 (-5%)
	D	-161 (-5%)	-313 (-9%)	-10 (0%)	-59 (-2%)	-704 (-21%)	-35 (-1%)	-687 (-20%)
	C	-568 (-16%)	-323 (-8%)	283 (7%)	283 (7%)	-826 (-24%)	256 (7%)	-853 (-25%)
	All	-84 (-1%)	-131 (-1%)	158 (1%)	152 (1%)	-184 (-2%)	182 (2%)	-137 (-1%)
MAR	W	-111 (-1%)	-115 (-1%)	52 (0%)	59 (0%)	-42 (0%)	93 (1%)	-8 (0%)
	AN	1,348 (16%)	1,118 (13%)	134 (2%)	298 (4%)	812 (10%)	98 (1%)	762 (9%)
	BN	109 (3%)	114 (3%)	-27 (-1%)	93 (2%)	-308 (-7%)	108 (3%)	-214 (-5%)
	D	96 (3%)	81 (2%)	-8 (0%)	-33 (-1%)	-1,670 (-44%)	71 (2%)	-1,591 (-42%)
	C	49 (2%)	-30 (0%)	-226 (-7%)	-271 (-8%)	-280 (-8%)	-223 (-6%)	-272 (-8%)
	All	209 (3%)	160 (2%)	-3 (0%)	31 (0%)	-355 (-4%)	45 (1%)	-317 (-3%)
APR	W	51 (1%)	50 (1%)	18 (0%)	38 (0%)	-415 (-5%)	2 (0%)	-206 (-2%)
	AN	-524 (-10%)	-449 (-8%)	98 (2%)	102 (2%)	-1,796 (-33%)	396 (7%)	-1,353 (-25%)
	BN	-89 (-2%)	-51 (-1%)	-194 (-4%)	204 (4%)	-2,839 (-57%)	669 (13%)	-2,027 (-40%)
	D	86 (2%)	508 (10%)	-183 (-3%)	51 (1%)	-1,568 (-28%)	-23 (0%)	-1,494 (-27%)
	C	110 (2%)	133 (2%)	50 (1%)	81 (1%)	392 (6%)	-10 (0%)	364 (6%)
	All	-41 (-1%)	72 (1%)	-46 (-1%)	85 (1%)	-1,166 (-17%)	166 (3%)	-884 (-13%)
MAY	W	-350 (-6%)	-303 (-5%)	-175 (-2%)	55 (1%)	-1,409 (-20%)	-130 (-2%)	-1,432 (-20%)
	AN	134 (3%)	178 (3%)	-566 (-8%)	190 (3%)	-2,318 (-30%)	-850 (-12%)	-2,621 (-34%)
	BN	394 (6%)	258 (4%)	137 (2%)	406 (6%)	-1,579 (-25%)	237 (4%)	-1,487 (-24%)
	D	354 (6%)	340 (6%)	-399 (-6%)	72 (1%)	561 (8%)	-357 (-5%)	221 (3%)
	C	223 (3%)	242 (4%)	-304 (-4%)	-174 (-2%)	-457 (-6%)	-682 (-10%)	-885 (-12%)
	All	86 (1%)	84 (1%)	-247 (-3%)	105 (1%)	-999 (-14%)	-303 (-4%)	-1,173 (-16%)
JUN	W	-1,053 (-10%)	-882 (-8%)	-129 (-1%)	-54 (-1%)	-1,572 (-15%)	0 (0%)	-1,675 (-16%)
	AN	-488 (-3%)	-321 (-2%)	-102 (-1%)	-105 (-1%)	-530 (-4%)	-268 (-2%)	-1,031 (-8%)
	BN	359 (4%)	423 (4%)	-373 (-4%)	-478 (-5%)	289 (3%)	-883 (-8%)	-288 (-3%)
	D	233 (2%)	528 (5%)	-373 (-3%)	-492 (-4%)	1,317 (11%)	-310 (-3%)	1,393 (12%)
	C	330 (4%)	251 (3%)	25 (0%)	44 (0%)	-255 (-1%)	121 (1%)	-122 (0%)
	All	-245 (-2%)	-102 (0%)	-198 (-2%)	-216 (-2%)	-275 (-2%)	-240 (-2%)	-443 (-4%)

Upstream—Sacramento River at Keswick									
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JUL	W	96 (1%)	32 (0%)	-715 (-5%)	-694 (-5%)	-15 (0%)	-890 (-7%)	-129 (-1%)
	AN	463 (3%)	427 (3%)	-624 (-4%)	-594 (-4%)	1,005 (7%)	-619 (-4%)	890 (6%)
	BN	1,493 (11%)	920 (7%)	-583 (-4%)	-489 (-4%)	1,512 (11%)	-875 (-7%)	1,086 (8%)
	D	479 (4%)	557 (4%)	-309 (-2%)	-506 (-4%)	127 (1%)	-618 (-4%)	-57 (0%)
	C	-24 (0%)	-31 (0%)	788 (7%)	773 (6%)	823 (7%)	-20 (0%)	-60 (0%)
	All	455 (3%)	348 (3%)	-370 (-3%)	-388 (-3%)	549 (4%)	-661 (-5%)	253 (2%)
AUG	W	463 (4%)	438 (4%)	82 (1%)	203 (2%)	730 (7%)	-67 (-1%)	583 (6%)
	AN	841 (7%)	786 (7%)	286 (3%)	235 (2%)	2,304 (20%)	273 (3%)	2,283 (20%)
	BN	1,015 (10%)	1,105 (11%)	-53 (-1%)	-18 (0%)	1,174 (11%)	-47 (0%)	1,181 (11%)
	D	2,380 (22%)	2,234 (21%)	-41 (0%)	-20 (0%)	738 (7%)	368 (4%)	821 (8%)
	C	455 (6%)	512 (7%)	-359 (-4%)	-392 (-5%)	-166 (-2%)	-81 (-1%)	-182 (-2%)
	All	1,032 (10%)	1,008 (10%)	-3 (0%)	34 (0%)	907 (9%)	79 (1%)	874 (9%)
SEP	W	10 (0%)	-59 (-1%)	-2,197 (-17%)	-2,413 (-19%)	-1,517 (-12%)	-1,985 (-16%)	-1,482 (-12%)
	AN	-145 (-4%)	-304 (-6%)	-883 (-10%)	-1,598 (-17%)	-783 (-10%)	-925 (-10%)	-735 (-9%)
	BN	-60 (-1%)	-27 (-1%)	-79 (-1%)	-35 (-1%)	1,048 (18%)	-50 (-1%)	1,041 (18%)
	D	-336 (-7%)	-264 (-6%)	1,192 (25%)	1,202 (25%)	1,351 (29%)	1,043 (22%)	1,231 (26%)
	C	-782 (-18%)	-1,049 (-24%)	352 (8%)	255 (6%)	-90 (-2%)	284 (6%)	-10 (0%)
	All	-216 (-3%)	-279 (-4%)	-526 (-7%)	-704 (-9%)	-133 (-2%)	-503 (-6%)	-131 (-2%)
OCT	W	-1,490 (-22%)	-1,449 (-21%)	416 (6%)	269 (4%)	1,364 (20%)	415 (6%)	1,365 (20%)
	AN	-1,641 (-23%)	-1,982 (-28%)	178 (3%)	-77 (-1%)	701 (10%)	356 (5%)	893 (12%)
	BN	-2,231 (-32%)	-1,653 (-24%)	874 (14%)	505 (8%)	2,302 (34%)	752 (12%)	2,261 (33%)
	D	-2,271 (-36%)	-2,091 (-33%)	337 (6%)	351 (6%)	918 (14%)	428 (7%)	848 (13%)
	C	-1,961 (-34%)	-1,938 (-33%)	604 (12%)	448 (9%)	2,020 (36%)	905 (18%)	2,447 (45%)
	All	-1,879 (-28%)	-1,774 (-27%)	470 (8%)	303 (5%)	1,425 (21%)	538 (9%)	1,494 (23%)
NOV	W	-598 (-6%)	-294 (-2%)	-257 (-3%)	-406 (-5%)	-236 (-2%)	-147 (-2%)	-113 (0%)
	AN	730 (11%)	663 (11%)	340 (5%)	-28 (0%)	73 (2%)	-83 (-1%)	65 (2%)
	BN	-415 (-3%)	-385 (-3%)	40 (1%)	-43 (-1%)	-571 (-7%)	112 (2%)	-428 (-4%)
	D	-193 (-1%)	-349 (-3%)	-243 (-4%)	-174 (-3%)	-745 (-10%)	-34 (-1%)	-676 (-9%)
	C	-117 (-1%)	-154 (-2%)	-98 (-2%)	-95 (-2%)	-310 (-6%)	-152 (-3%)	-389 (-7%)
	All	-213 (-1%)	-161 (0%)	-93 (-1%)	-192 (-3%)	-371 (-4%)	-69 (-1%)	-305 (-3%)
DEC	W	1,399 (11%)	1,497 (12%)	1,402 (12%)	1,398 (12%)	1,308 (10%)	1,049 (9%)	1,371 (11%)
	AN	-469 (-8%)	-369 (-6%)	206 (4%)	134 (2%)	616 (12%)	41 (1%)	827 (15%)
	BN	-433 (-8%)	-544 (-10%)	172 (3%)	171 (3%)	-200 (-3%)	55 (1%)	-200 (-3%)
	D	-26 (-1%)	-514 (-13%)	321 (8%)	231 (6%)	545 (14%)	330 (9%)	546 (14%)
	C	139 (4%)	96 (3%)	26 (1%)	23 (1%)	-288 (-8%)	-3 (0%)	-273 (-8%)
	All	316 (4%)	229 (3%)	579 (8%)	546 (8%)	548 (8%)	420 (6%)	602 (8%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.1.7 Sacramento River Upstream of Red Bluff

Table 5E-24. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

Upstream—Sacramento River Upstream of Red Bluff												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	29,490	30,329	30,408	30,459	29,938	29,969	29,853	30,390	30,761	30,907	32,040
	AN	16,252	17,771	16,727	16,911	16,841	16,893	16,935	16,885	16,662	16,730	17,699
	BN	9,059	9,947	9,689	9,690	9,618	9,593	9,614	9,146	10,623	10,298	10,244
	D	7,251	7,250	7,297	7,300	7,251	7,250	7,252	7,262	7,532	7,396	6,758
	C	6,165	6,264	6,166	6,166	6,519	6,530	6,544	6,942	6,160	6,405	6,165
	All	15,769	16,424	16,248	16,291	16,145	16,159	16,135	16,278	16,560	16,567	16,884
FEB	W	33,992	34,094	34,430	34,478	34,230	34,205	34,286	33,472	33,458	33,775	33,851
	AN	24,382	25,971	25,606	25,741	25,135	25,041	25,038	24,828	26,269	25,463	25,128
	BN	12,293	12,838	12,552	12,627	12,632	12,730	12,698	11,614	12,301	12,696	12,175
	D	8,775	8,810	8,827	8,843	8,837	8,886	8,878	8,790	8,985	9,139	9,545
	C	6,847	6,493	6,660	6,633	6,373	6,373	6,373	6,378	6,595	6,343	7,015
	All	19,373	19,687	19,719	19,767	19,561	19,567	19,585	19,092	19,490	19,537	19,611
MAR	W	25,107	25,134	25,192	25,226	25,139	25,132	25,132	26,210	26,347	26,349	26,335
	AN	15,836	16,917	16,907	16,856	16,775	16,612	16,762	16,428	16,160	16,394	16,688
	BN	8,324	8,981	8,701	8,795	8,727	8,608	8,687	8,474	9,018	9,004	9,142
	D	8,282	8,293	8,276	8,354	8,284	8,308	8,283	8,300	8,216	8,231	9,955
	C	5,981	6,316	5,987	5,995	6,216	6,260	6,221	6,101	6,377	6,466	6,363
	All	14,392	14,723	14,640	14,678	14,644	14,609	14,633	14,876	14,995	15,044	15,469
APR	W	14,694	14,700	14,733	14,943	14,715	14,696	14,940	14,842	14,796	14,797	15,296
	AN	10,091	10,160	10,192	10,636	10,094	10,093	10,240	9,761	10,362	10,285	11,665
	BN	8,291	8,898	8,420	9,232	8,614	8,219	8,564	8,282	8,990	8,951	11,258
	D	7,555	8,403	7,789	7,862	7,969	7,736	7,883	7,661	8,433	8,012	9,456
	C	7,553	7,838	7,715	7,686	7,661	7,630	7,694	7,829	8,003	7,987	7,583
	All	10,315	10,659	10,439	10,721	10,484	10,355	10,554	10,376	10,765	10,653	11,665
MAY	W	11,245	11,612	11,265	11,241	11,439	11,212	11,370	10,073	10,790	10,743	11,505
	AN	9,685	10,897	9,907	9,601	10,472	9,720	10,454	10,047	11,122	11,078	12,582
	BN	8,037	9,481	8,436	8,524	8,299	8,036	8,291	7,875	8,939	9,073	9,851
	D	8,522	10,127	9,051	8,710	9,443	8,975	9,062	9,012	10,277	10,295	8,978
	C	8,086	8,571	8,020	7,592	8,324	8,193	8,273	8,348	8,615	8,597	8,741
	All	9,409	10,373	9,622	9,447	9,867	9,519	9,751	9,208	10,092	10,095	10,421
JUN	W	11,581	12,021	11,723	11,622	11,850	11,780	11,620	11,720	13,210	13,039	13,435
	AN	12,075	13,326	12,691	12,192	12,788	12,801	12,454	12,789	14,534	14,368	13,967
	BN	11,256	12,232	11,551	10,976	11,924	12,035	11,858	11,651	12,287	12,222	11,670
	D	11,763	12,563	11,984	12,061	12,346	12,469	12,363	12,441	13,028	12,731	11,363
	C	10,447	11,167	11,090	11,225	11,061	11,044	11,098	11,881	12,227	12,317	12,727
	All	11,472	12,242	11,800	11,633	11,993	12,016	11,869	12,046	13,062	12,921	12,653

Upstream—Sacramento River Upstream of Red Bluff												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	13,961	14,123	13,349	13,237	14,064	14,046	14,127	14,525	14,586	14,651	13,955
	AN	14,647	14,683	14,057	13,943	14,681	14,655	14,564	15,142	14,716	14,753	13,566
	BN	13,203	13,621	12,994	12,573	13,575	13,484	13,442	13,258	12,205	12,778	11,568
	D	13,882	13,202	13,062	12,875	13,362	13,559	13,485	13,826	12,687	12,610	12,899
	C	12,249	11,729	12,534	11,647	11,744	11,759	11,669	12,149	11,749	11,750	11,757
	All	13,664	13,567	13,210	12,915	13,577	13,598	13,573	13,898	13,367	13,474	12,937
AUG	W	10,654	10,921	10,952	10,807	10,867	10,749	10,870	10,735	10,543	10,567	10,324
	AN	10,653	10,426	10,844	10,822	10,555	10,611	10,548	11,775	10,714	10,769	9,685
	BN	9,921	10,114	9,441	9,451	9,492	9,460	9,494	10,364	9,565	9,472	8,741
	D	10,174	10,425	10,197	10,279	10,230	10,209	9,903	11,143	9,034	9,178	10,438
	C	8,894	9,010	8,774	8,747	9,128	9,161	8,835	7,665	7,330	7,274	7,762
	All	10,166	10,322	10,194	10,160	10,192	10,158	10,078	10,464	9,600	9,623	9,610
SEP	W	13,282	7,452	10,713	10,749	12,912	13,132	12,735	13,312	7,476	7,544	12,276
	AN	9,660	5,866	7,090	7,137	7,976	8,693	8,066	10,320	6,680	6,840	8,559
	BN	5,780	5,390	5,254	5,247	5,331	5,289	5,297	5,963	5,649	5,617	4,409
	D	5,270	5,174	6,148	6,025	4,953	4,944	4,984	4,911	5,178	5,105	4,450
	C	4,909	4,704	4,874	4,952	4,570	4,637	4,691	4,838	5,393	5,661	4,903
	All	8,487	5,966	7,394	7,396	7,927	8,103	7,903	8,535	6,238	6,301	7,592
OCT	W	7,813	7,335	8,055	8,056	7,637	7,782	7,640	8,188	9,200	9,159	7,066
	AN	7,747	7,433	7,543	7,735	7,364	7,619	7,379	8,162	9,484	9,826	7,262
	BN	6,783	6,444	7,242	7,201	6,368	6,736	6,449	7,778	9,678	9,099	5,946
	D	6,905	6,268	7,058	6,986	6,716	6,703	6,555	7,287	8,902	8,722	6,507
	C	5,888	6,058	6,476	6,901	5,873	6,027	5,996	6,537	8,691	8,663	5,142
	All	7,146	6,776	7,392	7,459	6,920	7,086	6,920	7,675	9,183	9,078	6,499
NOV	W	11,584	9,848	10,121	10,244	10,383	10,531	10,397	10,821	9,671	9,366	9,604
	AN	9,480	7,533	7,974	7,964	7,637	8,002	8,052	9,098	6,407	6,472	7,521
	BN	8,409	6,301	6,654	6,797	6,623	6,702	6,692	7,682	5,971	5,945	6,516
	D	8,174	6,896	6,669	6,748	6,925	6,856	6,787	7,347	6,249	6,403	6,603
	C	6,135	5,502	5,531	5,443	5,633	5,629	5,608	5,703	5,186	5,222	5,444
	All	9,188	7,620	7,785	7,852	7,885	7,983	7,928	8,521	7,154	7,102	7,504
DEC	W	20,768	23,109	22,852	22,915	21,448	21,452	21,864	19,613	20,551	20,455	20,384
	AN	10,392	9,933	10,134	10,345	9,929	9,999	10,303	10,053	10,073	9,973	9,176
	BN	9,058	8,857	8,888	8,887	8,714	8,716	8,832	8,228	8,460	8,570	8,247
	D	7,037	7,289	7,366	7,366	7,043	7,133	7,036	7,091	7,372	7,859	6,866
	C	5,559	5,766	5,462	5,479	5,433	5,436	5,478	5,433	5,498	5,548	5,605
	All	12,010	12,737	12,663	12,716	12,082	12,114	12,294	11,446	11,857	11,945	11,541

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-25. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round**

Upstream—Sacramento River Upstream of Red Bluff										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	840 (3%)	918 (3%)	969 (3%)	449 (2%)	479 (2%)	364 (1%)	371 (1%)	517 (2%)	1,650 (5%)
	AN	1,519 (9%)	475 (3%)	659 (4%)	589 (4%)	641 (4%)	684 (4%)	-224 (-1%)	-156 (-1%)	814 (5%)
	BN	888 (10%)	629 (7%)	631 (7%)	559 (6%)	533 (6%)	554 (6%)	1,476 (16%)	1,152 (13%)	1,098 (12%)
	D	-1 (0%)	46 (1%)	49 (1%)	0 (0%)	-1 (0%)	1 (0%)	271 (4%)	134 (2%)	-504 (-7%)
	C	98 (2%)	1 (0%)	1 (0%)	354 (6%)	364 (6%)	379 (6%)	-782 (-11%)	-537 (-8%)	-777 (-11%)
	All	654 (4%)	478 (3%)	522 (3%)	376 (2%)	390 (2%)	366 (2%)	282 (2%)	289 (2%)	605 (4%)
FEB	W	102 (0%)	438 (1%)	487 (1%)	239 (1%)	214 (1%)	295 (1%)	-13 (0%)	304 (1%)	380 (1%)
	AN	1,588 (7%)	1,224 (5%)	1,359 (6%)	752 (3%)	659 (3%)	655 (3%)	1,441 (6%)	635 (3%)	300 (1%)
	BN	544 (4%)	259 (2%)	334 (3%)	339 (3%)	437 (4%)	405 (3%)	687 (6%)	1,082 (9%)	561 (5%)
	D	35 (0%)	51 (1%)	68 (1%)	62 (1%)	110 (1%)	103 (1%)	195 (2%)	349 (4%)	755 (9%)
	C	-354 (-5%)	-187 (-3%)	-214 (-3%)	-474 (-7%)	-474 (-7%)	-474 (-7%)	216 (3%)	-35 (-1%)	636 (10%)
	All	314 (2%)	346 (2%)	394 (2%)	188 (1%)	194 (1%)	212 (1%)	398 (2%)	445 (2%)	519 (3%)
MAR	W	28 (0%)	86 (0%)	120 (0%)	33 (0%)	26 (0%)	26 (0%)	136 (1%)	139 (1%)	124 (0%)
	AN	1,081 (7%)	1,070 (7%)	1,020 (6%)	938 (6%)	776 (5%)	926 (6%)	-268 (-2%)	-34 (0%)	259 (2%)
	BN	657 (8%)	377 (5%)	471 (6%)	403 (5%)	284 (3%)	363 (4%)	545 (6%)	531 (6%)	668 (8%)
	D	11 (0%)	-6 (0%)	72 (1%)	2 (0%)	26 (0%)	1 (0%)	-83 (-1%)	-69 (-1%)	1,655 (20%)
	C	335 (6%)	6 (0%)	15 (0%)	235 (4%)	280 (5%)	240 (4%)	275 (5%)	364 (6%)	261 (4%)
	All	331 (2%)	248 (2%)	286 (2%)	251 (2%)	217 (2%)	241 (2%)	119 (1%)	168 (1%)	593 (4%)
APR	W	7 (0%)	40 (0%)	249 (2%)	21 (0%)	2 (0%)	246 (2%)	-46 (0%)	-45 (0%)	454 (3%)
	AN	69 (1%)	101 (1%)	545 (5%)	3 (0%)	2 (0%)	149 (1%)	601 (6%)	524 (5%)	1,903 (20%)
	BN	607 (7%)	130 (2%)	942 (11%)	323 (4%)	-72 (-1%)	273 (3%)	707 (9%)	669 (8%)	2,976 (36%)
	D	848 (11%)	234 (3%)	307 (4%)	415 (5%)	181 (2%)	328 (4%)	772 (10%)	350 (5%)	1,794 (23%)
	C	285 (4%)	161 (2%)	133 (2%)	108 (1%)	77 (1%)	140 (2%)	173 (2%)	157 (2%)	-246 (-3%)
	All	344 (3%)	124 (1%)	407 (4%)	169 (2%)	40 (0%)	239 (2%)	389 (4%)	276 (3%)	1,288 (12%)
MAY	W	367 (3%)	21 (0%)	-3 (0%)	195 (2%)	-32 (0%)	126 (1%)	717 (7%)	670 (7%)	1,433 (14%)
	AN	1,212 (13%)	222 (2%)	-84 (-1%)	787 (8%)	35 (0%)	769 (8%)	1,076 (11%)	1,032 (10%)	2,535 (25%)
	BN	1,444 (18%)	399 (5%)	487 (6%)	261 (3%)	-1 (0%)	254 (3%)	1,064 (14%)	1,199 (15%)	1,977 (25%)
	D	1,606 (19%)	529 (6%)	188 (2%)	921 (11%)	453 (5%)	540 (6%)	1,265 (14%)	1,283 (14%)	-34 (0%)
	C	486 (6%)	-66 (-1%)	-494 (-6%)	238 (3%)	108 (1%)	187 (2%)	267 (3%)	249 (3%)	393 (5%)
	All	964 (10%)	214 (2%)	39 (0%)	459 (5%)	110 (1%)	342 (4%)	883 (10%)	886 (10%)	1,213 (13%)
JUN	W	440 (4%)	142 (1%)	41 (0%)	269 (2%)	199 (2%)	39 (0%)	1,490 (13%)	1,319 (11%)	1,715 (15%)
	AN	1,251 (10%)	616 (5%)	118 (1%)	713 (6%)	726 (6%)	379 (3%)	1,744 (14%)	1,578 (12%)	1,177 (9%)
	BN	976 (9%)	295 (3%)	-280 (-2%)	668 (6%)	779 (7%)	602 (5%)	636 (5%)	572 (5%)	20 (0%)
	D	800 (7%)	221 (2%)	298 (3%)	583 (5%)	706 (6%)	600 (5%)	587 (5%)	290 (2%)	-1,078 (-9%)
	C	719 (7%)	643 (6%)	778 (7%)	614 (6%)	596 (6%)	651 (6%)	346 (3%)	436 (4%)	846 (7%)
	All	770 (7%)	328 (3%)	162 (1%)	522 (5%)	544 (5%)	398 (3%)	1,016 (8%)	874 (7%)	607 (5%)

Upstream—Sacramento River Upstream of Red Bluff										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	162 (1%)	-612 (-4%)	-724 (-5%)	103 (1%)	85 (1%)	167 (1%)	61 (0%)	126 (1%)	-570 (-4%)
	AN	36 (0%)	-590 (-4%)	-704 (-5%)	34 (0%)	8 (0%)	-84 (-1%)	-426 (-3%)	-388 (-3%)	-1,576 (-10%)
	BN	418 (3%)	-209 (-2%)	-630 (-5%)	372 (3%)	281 (2%)	239 (2%)	-1,053 (-8%)	-480 (-4%)	-1,690 (-13%)
	D	-680 (-5%)	-820 (-6%)	-1,008 (-7%)	-521 (-4%)	-324 (-2%)	-398 (-3%)	-1,139 (-8%)	-1,216 (-9%)	-927 (-7%)
	C	-519 (-4%)	285 (2%)	-601 (-5%)	-505 (-4%)	-490 (-4%)	-580 (-5%)	-400 (-3%)	-400 (-3%)	-392 (-3%)
	All	-98 (-1%)	-454 (-3%)	-749 (-5%)	-87 (-1%)	-67 (0%)	-91 (-1%)	-531 (-4%)	-424 (-3%)	-961 (-7%)
AUG	W	268 (3%)	299 (3%)	153 (1%)	214 (2%)	96 (1%)	217 (2%)	-192 (-2%)	-168 (-2%)	-411 (-4%)
	AN	-227 (-2%)	191 (2%)	169 (2%)	-98 (-1%)	-43 (0%)	-105 (-1%)	-1,061 (-9%)	-1,006 (-9%)	-2,090 (-18%)
	BN	193 (2%)	-480 (-5%)	-470 (-5%)	-430 (-4%)	-461 (-5%)	-427 (-4%)	-799 (-8%)	-892 (-9%)	-1,623 (-16%)
	D	251 (2%)	23 (0%)	105 (1%)	56 (1%)	35 (0%)	-271 (-3%)	-2,109 (-19%)	-1,965 (-18%)	-705 (-6%)
	C	116 (1%)	-120 (-1%)	-147 (-2%)	234 (3%)	267 (3%)	-59 (-1%)	-335 (-4%)	-391 (-5%)	97 (1%)
	All	157 (2%)	28 (0%)	-5 (0%)	27 (0%)	-8 (0%)	-88 (-1%)	-865 (-8%)	-841 (-8%)	-854 (-8%)
SEP	W	-5,830 (-44%)	-2,569 (-19%)	-2,533 (-19%)	-370 (-3%)	-150 (-1%)	-547 (-4%)	-5,837 (-44%)	-5,768 (-43%)	-1,037 (-8%)
	AN	-3,793 (-39%)	-2,569 (-27%)	-2,522 (-26%)	-1,684 (-17%)	-967 (-10%)	-1,593 (-16%)	-3,640 (-35%)	-3,481 (-34%)	-1,761 (-17%)
	BN	-390 (-7%)	-526 (-9%)	-533 (-9%)	-449 (-8%)	-491 (-8%)	-483 (-8%)	-314 (-5%)	-346 (-6%)	-1,554 (-26%)
	D	-96 (-2%)	878 (17%)	755 (14%)	-317 (-6%)	-326 (-6%)	-287 (-5%)	267 (5%)	194 (4%)	-461 (-9%)
	C	-205 (-4%)	-35 (-1%)	43 (1%)	-339 (-7%)	-272 (-6%)	-218 (-4%)	555 (11%)	823 (17%)	65 (1%)
	All	-2,521 (-30%)	-1,093 (-13%)	-1,091 (-13%)	-560 (-7%)	-384 (-5%)	-584 (-7%)	-2,297 (-27%)	-2,234 (-26%)	-943 (-11%)
OCT	W	-478 (-6%)	243 (3%)	243 (3%)	-176 (-2%)	-31 (0%)	-173 (-2%)	1,012 (12%)	971 (12%)	-1,122 (-14%)
	AN	-314 (-4%)	-204 (-3%)	-12 (0%)	-383 (-5%)	-128 (-2%)	-368 (-5%)	1,323 (16%)	1,665 (20%)	-900 (-11%)
	BN	-339 (-5%)	459 (7%)	418 (6%)	-416 (-6%)	-48 (-1%)	-334 (-5%)	1,899 (24%)	1,321 (17%)	-1,833 (-24%)
	D	-637 (-9%)	153 (2%)	81 (1%)	-189 (-3%)	-202 (-3%)	-350 (-5%)	1,615 (22%)	1,435 (20%)	-779 (-11%)
	C	170 (3%)	587 (10%)	1,012 (17%)	-15 (0%)	139 (2%)	108 (2%)	2,154 (33%)	2,127 (33%)	-1,394 (-21%)
	All	-371 (-5%)	245 (3%)	312 (4%)	-226 (-3%)	-61 (-1%)	-227 (-3%)	1,508 (20%)	1,403 (18%)	-1,175 (-15%)
NOV	W	-1,735 (-15%)	-1,462 (-13%)	-1,339 (-12%)	-1,201 (-10%)	-1,053 (-9%)	-1,187 (-10%)	-1,150 (-11%)	-1,455 (-13%)	-1,217 (-11%)
	AN	-1,947 (-21%)	-1,506 (-16%)	-1,516 (-16%)	-1,843 (-19%)	-1,478 (-16%)	-1,429 (-15%)	-2,691 (-30%)	-2,626 (-29%)	-1,577 (-17%)
	BN	-2,108 (-25%)	-1,756 (-21%)	-1,612 (-19%)	-1,787 (-21%)	-1,707 (-20%)	-1,717 (-20%)	-1,711 (-22%)	-1,737 (-23%)	-1,166 (-15%)
	D	-1,278 (-16%)	-1,505 (-18%)	-1,427 (-17%)	-1,249 (-15%)	-1,318 (-16%)	-1,387 (-17%)	-1,097 (-15%)	-944 (-13%)	-744 (-10%)
	C	-633 (-10%)	-604 (-10%)	-692 (-11%)	-502 (-8%)	-506 (-8%)	-527 (-9%)	-518 (-9%)	-482 (-8%)	-260 (-5%)
	All	-1,568 (-17%)	-1,403 (-15%)	-1,336 (-15%)	-1,303 (-14%)	-1,205 (-13%)	-1,260 (-14%)	-1,367 (-16%)	-1,420 (-17%)	-1,017 (-12%)
DEC	W	2,341 (11%)	2,084 (10%)	2,146 (10%)	680 (3%)	684 (3%)	1,096 (5%)	938 (5%)	843 (4%)	771 (4%)
	AN	-459 (-4%)	-258 (-2%)	-46 (0%)	-462 (-4%)	-392 (-4%)	-88 (-1%)	20 (0%)	-80 (-1%)	-877 (-9%)
	BN	-201 (-2%)	-170 (-2%)	-171 (-2%)	-344 (-4%)	-342 (-4%)	-226 (-2%)	231 (3%)	341 (4%)	19 (0%)
	D	253 (4%)	330 (5%)	330 (5%)	6 (0%)	96 (1%)	-1 (0%)	280 (4%)	768 (11%)	-225 (-3%)
	C	208 (4%)	-97 (-2%)	-80 (-1%)	-126 (-2%)	-123 (-2%)	-81 (-1%)	65 (1%)	115 (2%)	172 (3%)
	All	727 (6%)	652 (5%)	705 (6%)	72 (1%)	104 (1%)	284 (2%)	411 (4%)	499 (4%)	95 (1%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-26. Differences[a] (Percent Differences) (cfs) between Effects[b] in the Sacramento River Upstream of Red Bluff, Year-Round**

Upstream—Sacramento River Upstream of Red Bluff								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	468 (2%)	323 (1%)	469 (2%)	439 (1%)	-732 (-2%)	605 (2%)	-681 (-2%)
	AN	1,743 (11%)	1,675 (10%)	-114 (-1%)	-166 (-1%)	-339 (-2%)	-25 (0%)	-155 (-1%)
	BN	-589 (-6%)	-265 (-3%)	70 (1%)	96 (1%)	-468 (-5%)	76 (1%)	-467 (-5%)
	D	-272 (-4%)	-135 (-2%)	46 (1%)	47 (1%)	550 (8%)	48 (1%)	552 (8%)
	C	880 (13%)	635 (9%)	-353 (-6%)	-363 (-6%)	778 (11%)	-378 (-6%)	778 (11%)
	All	372 (2%)	366 (2%)	103 (1%)	88 (1%)	-127 (-1%)	156 (1%)	-83 (0%)
FEB	W	116 (0%)	-201 (-1%)	200 (1%)	225 (1%)	59 (0%)	192 (1%)	107 (0%)
	AN	147 (1%)	953 (4%)	472 (2%)	565 (2%)	924 (4%)	703 (3%)	1,059 (4%)
	BN	-143 (-1%)	-537 (-5%)	-80 (-1%)	-178 (-1%)	-302 (-3%)	-71 (-1%)	-227 (-2%)
	D	-160 (-2%)	-314 (-4%)	-10 (0%)	-59 (-1%)	-704 (-8%)	-35 (0%)	-688 (-8%)
	C	-571 (-9%)	-319 (-5%)	287 (4%)	287 (4%)	-823 (-13%)	260 (4%)	-850 (-13%)
	All	-85 (0%)	-132 (-1%)	158 (1%)	153 (1%)	-173 (-1%)	182 (1%)	-125 (-1%)
MAR	W	-108 (0%)	-111 (0%)	53 (0%)	60 (0%)	-39 (0%)	94 (0%)	-4 (0%)
	AN	1,349 (8%)	1,115 (7%)	132 (1%)	294 (2%)	811 (5%)	94 (1%)	761 (5%)
	BN	112 (1%)	126 (2%)	-26 (0%)	93 (1%)	-292 (-3%)	109 (1%)	-197 (-2%)
	D	95 (1%)	80 (1%)	-8 (0%)	-32 (0%)	-1,661 (-20%)	72 (1%)	-1,582 (-19%)
	C	60 (1%)	-29 (0%)	-229 (-4%)	-273 (-5%)	-255 (-4%)	-225 (-4%)	-246 (-4%)
	All	212 (1%)	163 (1%)	-4 (0%)	31 (0%)	-345 (-2%)	45 (0%)	-307 (-2%)
APR	W	53 (0%)	52 (0%)	18 (0%)	37 (0%)	-415 (-3%)	3 (0%)	-205 (-1%)
	AN	-532 (-5%)	-455 (-5%)	98 (1%)	99 (1%)	-1,802 (-18%)	396 (4%)	-1,358 (-14%)
	BN	-100 (-1%)	-62 (-1%)	-193 (-2%)	201 (2%)	-2,846 (-34%)	668 (8%)	-2,034 (-25%)
	D	76 (1%)	498 (7%)	-181 (-2%)	53 (1%)	-1,560 (-20%)	-21 (0%)	-1,487 (-19%)
	C	112 (2%)	128 (2%)	53 (1%)	84 (1%)	408 (5%)	-7 (0%)	379 (5%)
	All	-45 (0%)	67 (1%)	-45 (0%)	85 (1%)	-1,164 (-11%)	167 (2%)	-882 (-8%)
MAY	W	-350 (-4%)	-303 (-3%)	-174 (-2%)	53 (0%)	-1,412 (-14%)	-129 (-1%)	-1,436 (-14%)
	AN	136 (2%)	180 (2%)	-566 (-6%)	186 (2%)	-2,313 (-23%)	-853 (-9%)	-2,619 (-26%)
	BN	380 (4%)	245 (3%)	138 (2%)	400 (5%)	-1,578 (-20%)	232 (3%)	-1,490 (-19%)
	D	341 (5%)	323 (5%)	-392 (-5%)	76 (1%)	563 (7%)	-352 (-4%)	222 (3%)
	C	219 (3%)	237 (3%)	-304 (-4%)	-174 (-2%)	-459 (-6%)	-681 (-8%)	-887 (-11%)
	All	81 (1%)	78 (1%)	-245 (-3%)	104 (1%)	-999 (-11%)	-303 (-3%)	-1,174 (-13%)
JUN	W	-1,050 (-9%)	-879 (-7%)	-127 (-1%)	-57 (0%)	-1,573 (-13%)	2 (0%)	-1,674 (-14%)
	AN	-493 (-3%)	-327 (-2%)	-97 (-1%)	-110 (-1%)	-562 (-4%)	-261 (-2%)	-1,060 (-8%)
	BN	340 (3%)	404 (4%)	-373 (-3%)	-484 (-4%)	275 (2%)	-882 (-8%)	-300 (-3%)
	D	213 (2%)	510 (4%)	-362 (-3%)	-485 (-4%)	1,299 (11%)	-302 (-3%)	1,376 (11%)
	C	373 (4%)	283 (3%)	29 (0%)	47 (0%)	-202 (-1%)	127 (1%)	-67 (0%)
	All	-246 (-2%)	-104 (-1%)	-193 (-2%)	-216 (-2%)	-279 (-2%)	-236 (-2%)	-445 (-4%)

Upstream—Sacramento River Upstream of Red Bluff								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JUL	W	100 (1%)	36 (0%)	-715 (-5%)	-698 (-5%)	-43 (0%)	-891 (-6%)	-155 (-1%)
	AN	461 (3%)	424 (3%)	-624 (-4%)	-598 (-4%)	986 (6%)	-620 (-4%)	872 (6%)
	BN	1,471 (11%)	898 (7%)	-581 (-4%)	-490 (-4%)	1,481 (11%)	-869 (-7%)	1,061 (8%)
	D	459 (3%)	536 (4%)	-299 (-2%)	-496 (-4%)	107 (1%)	-610 (-4%)	-81 (-1%)
	C	-119 (-1%)	-120 (-1%)	790 (6%)	775 (6%)	677 (6%)	-21 (0%)	-209 (-2%)
	All	434 (3%)	327 (2%)	-367 (-3%)	-388 (-3%)	506 (4%)	-659 (-5%)	211 (1%)
AUG	W	460 (4%)	436 (4%)	85 (1%)	203 (2%)	710 (7%)	-63 (-1%)	564 (5%)
	AN	834 (7%)	779 (6%)	289 (3%)	234 (2%)	2,281 (20%)	274 (3%)	2,259 (19%)
	BN	991 (10%)	1,084 (11%)	-51 (-1%)	-19 (0%)	1,143 (11%)	-43 (0%)	1,153 (11%)
	D	2,361 (21%)	2,216 (20%)	-32 (0%)	-12 (0%)	728 (7%)	376 (4%)	810 (7%)
	C	451 (6%)	507 (6%)	-354 (-4%)	-387 (-4%)	-217 (-3%)	-89 (-1%)	-244 (-3%)
	All	1,021 (10%)	998 (10%)	2 (0%)	36 (0%)	882 (8%)	82 (1%)	848 (8%)
SEP	W	7 (0%)	-62 (-1%)	-2,199 (-17%)	-2,418 (-18%)	-1,532 (-12%)	-1,986 (-15%)	-1,496 (-11%)
	AN	-153 (-4%)	-313 (-6%)	-885 (-9%)	-1,602 (-17%)	-808 (-10%)	-929 (-10%)	-761 (-9%)
	BN	-76 (-1%)	-44 (-1%)	-77 (-1%)	-36 (-1%)	1,028 (17%)	-50 (-1%)	1,021 (17%)
	D	-363 (-7%)	-290 (-6%)	1,195 (23%)	1,204 (23%)	1,339 (26%)	1,042 (20%)	1,216 (24%)
	C	-760 (-16%)	-1,028 (-21%)	304 (6%)	237 (5%)	-100 (-2%)	261 (5%)	-22 (0%)
	All	-224 (-3%)	-287 (-4%)	-533 (-6%)	-708 (-8%)	-149 (-2%)	-507 (-6%)	-148 (-2%)
OCT	W	-1,490 (-18%)	-1,449 (-18%)	419 (5%)	274 (4%)	1,365 (17%)	416 (5%)	1,365 (17%)
	AN	-1,637 (-20%)	-1,979 (-24%)	179 (2%)	-76 (-1%)	696 (8%)	356 (5%)	888 (11%)
	BN	-2,238 (-29%)	-1,660 (-22%)	875 (13%)	507 (7%)	2,292 (30%)	752 (11%)	2,251 (30%)
	D	-2,253 (-31%)	-2,073 (-29%)	342 (5%)	355 (5%)	932 (13%)	431 (6%)	860 (12%)
	C	-1,984 (-30%)	-1,957 (-30%)	603 (10%)	448 (8%)	1,982 (31%)	905 (15%)	2,406 (39%)
	All	-1,879 (-25%)	-1,774 (-23%)	472 (7%)	306 (4%)	1,421 (19%)	539 (8%)	1,488 (20%)
NOV	W	-585 (-4%)	-281 (-2%)	-262 (-2%)	-410 (-4%)	-245 (-1%)	-152 (-1%)	-122 (0%)
	AN	743 (9%)	679 (8%)	337 (4%)	-28 (0%)	70 (1%)	-87 (-1%)	61 (1%)
	BN	-397 (-3%)	-371 (-2%)	31 (0%)	-48 (-1%)	-589 (-6%)	105 (1%)	-446 (-4%)
	D	-181 (-1%)	-335 (-3%)	-256 (-3%)	-187 (-2%)	-762 (-8%)	-40 (0%)	-683 (-7%)
	C	-115 (-1%)	-151 (-2%)	-102 (-2%)	-98 (-2%)	-344 (-5%)	-164 (-3%)	-432 (-7%)
	All	-201 (-1%)	-149 (0%)	-100 (-1%)	-198 (-2%)	-386 (-3%)	-76 (-1%)	-319 (-3%)
DEC	W	1,403 (6%)	1,498 (7%)	1,404 (7%)	1,400 (7%)	1,313 (6%)	1,051 (5%)	1,375 (6%)
	AN	-478 (-5%)	-378 (-4%)	204 (2%)	135 (1%)	619 (6%)	42 (0%)	831 (8%)
	BN	-432 (-5%)	-542 (-6%)	174 (2%)	172 (2%)	-188 (-2%)	55 (1%)	-190 (-2%)
	D	-28 (0%)	-515 (-7%)	324 (5%)	233 (3%)	555 (8%)	331 (5%)	555 (8%)
	C	143 (3%)	92 (2%)	29 (1%)	26 (0%)	-269 (-5%)	1 (0%)	-252 (-5%)
	All	316 (2%)	228 (2%)	580 (5%)	548 (5%)	557 (5%)	421 (4%)	610 (5%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.1.8 Sacramento River at Wilkins Slough

Table 5E-27. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

Upstream—Sacramento River at Wilkins Slough												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
Jan	W	19,244	19,285	19,296	19,297	19,292	19,295	19,285	19,320	19,341	19,371	19,354
	AN	16,319	17,274	16,569	16,678	16,590	16,610	16,615	16,593	17,356	17,133	17,068
	BN	12,127	12,665	12,610	12,614	12,540	12,507	12,565	12,143	13,377	13,045	12,867
	D	8,846	8,797	8,860	8,861	8,828	8,835	8,828	9,189	9,518	9,356	8,684
	C	7,820	7,895	7,821	7,819	8,169	8,180	8,195	8,586	7,802	8,080	7,745
	All	13,646	13,891	13,785	13,802	13,819	13,820	13,828	13,901	14,187	14,113	13,871
Feb	W	20,007	20,024	20,033	20,035	20,032	20,030	20,033	20,044	20,067	20,068	20,018
	AN	19,140	19,714	19,279	19,286	19,171	19,149	19,179	19,095	19,148	19,106	19,501
	BN	14,481	14,680	14,527	14,539	14,528	14,539	14,533	14,328	14,610	14,718	14,662
	D	11,437	11,435	11,442	11,441	11,450	11,460	11,459	11,473	11,630	11,891	11,935
	C	8,680	8,324	8,494	8,466	8,180	8,180	8,183	8,158	8,420	8,159	8,783
	All	15,398	15,469	15,408	15,407	15,348	15,348	15,353	15,309	15,445	15,476	15,609
Mar	W	18,294	18,299	18,313	18,316	18,299	18,298	18,297	18,323	18,384	18,384	18,359
	AN	17,457	17,738	17,740	17,727	17,710	17,702	17,721	17,537	17,642	17,695	17,722
	BN	11,400	11,963	11,759	11,852	11,798	11,679	11,770	11,534	12,052	12,048	12,109
	D	11,284	11,277	11,303	11,369	11,281	11,284	11,276	11,191	11,394	11,402	12,705
	C	8,028	8,384	8,043	8,050	8,292	8,338	8,297	8,166	8,415	8,524	8,345
	All	13,954	14,143	14,068	14,099	14,098	14,083	14,094	13,997	14,201	14,226	14,492
Apr	W	13,247	13,273	13,287	13,498	13,270	13,269	13,525	13,119	13,151	13,148	13,525
	AN	10,059	10,112	10,143	10,606	10,039	10,049	10,187	9,783	10,391	10,309	11,611
	BN	6,856	7,394	6,971	7,782	7,172	6,785	7,124	6,858	7,554	7,514	9,518
	D	5,002	5,783	5,230	5,293	5,399	5,155	5,313	5,112	5,875	5,444	6,845
	C	4,090	4,317	4,250	4,216	4,176	4,139	4,211	4,331	4,479	4,442	4,064
	All	8,539	8,852	8,658	8,939	8,697	8,573	8,778	8,518	8,926	8,805	9,710
May	W	9,463	9,789	9,461	9,428	9,644	9,432	9,563	8,435	9,114	9,064	9,872
	AN	7,045	8,169	7,227	6,899	7,788	7,075	7,744	7,500	8,521	8,487	10,170
	BN	4,986	6,192	5,313	5,344	5,209	5,000	5,198	4,871	5,826	5,957	6,754
	D	4,558	5,986	5,056	4,701	5,405	4,971	5,041	5,088	6,277	6,331	4,985
	C	4,302	4,733	4,228	3,797	4,533	4,405	4,483	4,528	4,780	4,768	4,942
	All	6,513	7,363	6,693	6,499	6,937	6,615	6,816	6,383	7,209	7,220	7,589
Jun	W	6,182	6,532	6,300	6,216	6,413	6,388	6,214	6,435	7,833	7,664	8,116
	AN	5,818	6,883	6,377	5,906	6,434	6,539	6,105	6,530	8,184	8,023	7,682
	BN	5,156	5,841	5,412	4,868	5,778	5,933	5,721	5,628	6,152	6,079	5,727
	D	5,334	5,896	5,548	5,630	5,834	5,985	5,870	6,075	6,573	6,263	5,095
	C	4,673	5,322	5,330	5,482	5,273	5,261	5,317	6,253	6,397	6,494	6,898
	All	5,547	6,149	5,853	5,704	6,014	6,079	5,907	6,205	7,111	6,967	6,803

Upstream—Sacramento River at Wilkins Slough												
Month	**Water Year Type**	**NAA_ELT_ 2015**[a]	**B1_ELT_ 2015**	**B2_ELT_ 2015**	**S2_ELT_ 2015**	**H3_ELT_ 2015**	**H3+_ELT_ 2015**	**H4_ELT_ 2015**	**NAA_LLT**	**A1A_LLT**	**A3_LLT**	**A8_LLT**
Jul	W	7,214	7,276	6,549	6,448	7,267	7,280	7,351	7,771	7,721	7,792	7,182
	AN	7,395	7,231	6,706	6,603	7,340	7,369	7,238	7,892	7,335	7,384	6,373
	BN	6,430	6,543	6,159	5,779	6,718	6,661	6,615	6,560	5,417	5,998	5,020
	D	7,422	6,525	6,595	6,382	6,823	7,014	6,938	7,474	6,246	6,177	6,628
	C	6,429	5,813	6,680	5,770	5,884	5,897	5,811	6,649	6,340	6,404	6,710
	All	7,037	6,765	6,534	6,243	6,884	6,927	6,893	7,353	6,745	6,868	6,504
Aug	W	5,445	5,671	5,711	5,573	5,643	5,544	5,641	5,537	5,334	5,355	5,219
	AN	5,469	5,156	5,618	5,582	5,321	5,416	5,316	6,610	5,567	5,613	4,684
	BN	4,940	4,881	4,392	4,417	4,418	4,427	4,424	5,462	4,623	4,501	3,981
	D	5,273	5,400	5,312	5,388	5,298	5,271	4,958	6,356	4,239	4,378	5,667
	C	4,971	5,116	4,869	4,861	5,262	5,286	4,976	4,719	4,445	4,375	5,650
	All	5,255	5,320	5,261	5,232	5,255	5,237	5,138	5,741	4,876	4,889	5,091
Sep	W	12,697	6,860	10,102	10,144	12,326	12,558	12,152	12,737	6,918	6,984	11,701
	AN	8,927	5,153	6,334	6,371	7,243	7,969	7,331	9,546	5,969	6,123	7,878
	BN	5,036	4,630	4,535	4,542	4,622	4,582	4,587	5,216	4,926	4,901	3,738
	D	4,505	4,374	5,366	5,231	4,188	4,191	4,233	4,114	4,471	4,380	3,657
	C	4,221	4,016	4,213	4,267	3,924	3,957	4,031	4,354	4,999	5,273	4,383
	All	7,799	5,268	6,699	6,697	7,251	7,429	7,228	7,866	5,621	5,680	6,945
Oct	W	7,026	6,666	7,312	7,295	6,881	7,018	6,887	7,382	8,502	8,461	6,255
	AN	6,365	6,155	6,182	6,370	6,004	6,250	6,021	6,927	8,251	8,618	5,983
	BN	5,575	5,323	6,066	6,025	5,189	5,548	5,268	6,570	8,549	7,981	4,743
	D	5,570	5,110	5,818	5,690	5,450	5,440	5,287	6,040	7,704	7,521	5,223
	C	4,833	5,059	5,446	5,780	4,845	4,994	4,955	5,572	7,756	7,727	4,183
	All	6,041	5,785	6,333	6,369	5,852	6,012	5,850	6,617	8,189	8,088	5,428
Nov	W	11,413	9,586	9,779	9,827	10,122	10,233	10,084	10,889	9,580	9,272	9,486
	AN	9,577	7,611	8,090	8,065	7,748	8,110	8,159	9,141	6,331	6,399	7,572
	BN	8,385	6,250	6,606	6,751	6,608	6,682	6,679	7,588	5,757	5,748	6,450
	D	8,097	6,790	6,572	6,654	6,855	6,787	6,727	7,227	6,066	6,226	6,477
	C	5,419	4,770	4,784	4,656	4,905	4,896	4,880	4,986	4,407	4,405	4,820
	All	9,022	7,409	7,555	7,591	7,694	7,779	7,722	8,402	6,923	6,869	7,344
Dec	W	17,514	18,163	17,987	17,978	17,768	17,765	17,860	17,257	17,806	17,675	17,382
	AN	11,031	10,747	10,862	10,879	10,758	10,783	10,867	10,755	11,332	11,142	10,438
	BN	8,406	8,314	8,325	8,320	8,295	8,298	8,297	8,258	8,592	8,752	8,159
	D	8,621	8,775	8,842	8,810	8,581	8,584	8,573	8,725	9,013	9,544	8,463
	C	6,060	6,308	6,022	6,048	5,961	5,969	6,014	5,981	6,081	6,121	6,077
	All	11,382	11,601	11,536	11,532	11,380	11,385	11,432	11,246	11,639	11,720	11,179

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-28. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round**

Upstream—Sacramento River at Wilkins Slough										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	41 (0%)	52 (0%)	53 (0%)	49 (0%)	51 (0%)	41 (0%)	21 (0%)	51 (0%)	33 (0%)
	AN	955 (6%)	250 (2%)	360 (2%)	271 (2%)	292 (2%)	297 (2%)	763 (5%)	540 (3%)	475 (3%)
	BN	538 (4%)	483 (4%)	487 (4%)	413 (3%)	380 (3%)	437 (4%)	1,234 (10%)	902 (7%)	724 (6%)
	D	-49 (-1%)	14 (0%)	15 (0%)	-18 (0%)	-11 (0%)	-18 (0%)	329 (4%)	167 (2%)	-505 (-5%)
	C	75 (1%)	1 (0%)	-2 (0%)	349 (4%)	360 (5%)	374 (5%)	-784 (-9%)	-506 (-6%)	-840 (-10%)
	All	245 (2%)	139 (1%)	156 (1%)	173 (1%)	174 (1%)	182 (1%)	286 (2%)	212 (2%)	-30 (0%)
FEB	W	17 (0%)	26 (0%)	28 (0%)	25 (0%)	23 (0%)	25 (0%)	23 (0%)	24 (0%)	-27 (0%)
	AN	574 (3%)	139 (1%)	145 (1%)	31 (0%)	9 (0%)	39 (0%)	53 (0%)	11 (0%)	406 (2%)
	BN	199 (1%)	45 (0%)	57 (0%)	47 (0%)	58 (0%)	52 (0%)	282 (2%)	391 (3%)	334 (2%)
	D	-2 (0%)	5 (0%)	4 (0%)	13 (0%)	23 (0%)	21 (0%)	157 (1%)	417 (4%)	462 (4%)
	C	-356 (-4%)	-186 (-2%)	-215 (-2%)	-500 (-6%)	-500 (-6%)	-498 (-6%)	262 (3%)	1 (0%)	625 (8%)
	All	71 (0%)	10 (0%)	9 (0%)	-50 (0%)	-50 (0%)	-46 (0%)	136 (1%)	168 (1%)	301 (2%)
MAR	W	5 (0%)	18 (0%)	22 (0%)	5 (0%)	3 (0%)	3 (0%)	62 (0%)	62 (0%)	37 (0%)
	AN	281 (2%)	283 (2%)	270 (2%)	254 (1%)	245 (1%)	264 (2%)	105 (1%)	158 (1%)	186 (1%)
	BN	562 (5%)	359 (3%)	452 (4%)	397 (3%)	278 (2%)	370 (3%)	518 (4%)	514 (4%)	575 (5%)
	D	-7 (0%)	19 (0%)	85 (1%)	-3 (0%)	0 (0%)	-8 (0%)	203 (2%)	211 (2%)	1,515 (14%)
	C	356 (4%)	14 (0%)	22 (0%)	264 (3%)	310 (4%)	269 (3%)	249 (3%)	358 (4%)	180 (2%)
	All	189 (1%)	115 (1%)	145 (1%)	144 (1%)	130 (1%)	140 (1%)	204 (1%)	229 (2%)	496 (4%)
APR	W	27 (0%)	40 (0%)	251 (2%)	23 (0%)	22 (0%)	278 (2%)	32 (0%)	29 (0%)	406 (3%)
	AN	53 (1%)	84 (1%)	547 (5%)	-20 (0%)	-10 (0%)	128 (1%)	608 (6%)	526 (5%)	1,828 (19%)
	BN	538 (8%)	115 (2%)	926 (14%)	316 (5%)	-71 (-1%)	268 (4%)	696 (10%)	657 (10%)	2,660 (39%)
	D	781 (16%)	228 (5%)	290 (6%)	397 (8%)	152 (3%)	311 (6%)	763 (15%)	331 (6%)	1,733 (34%)
	C	228 (6%)	161 (4%)	126 (3%)	87 (2%)	50 (1%)	122 (3%)	148 (3%)	111 (3%)	-266 (-6%)
	All	313 (4%)	118 (1%)	400 (5%)	158 (2%)	34 (0%)	239 (3%)	407 (5%)	287 (3%)	1,192 (14%)
MAY	W	325 (3%)	-2 (0%)	-35 (0%)	180 (2%)	-31 (0%)	100 (1%)	679 (8%)	628 (7%)	1,436 (17%)
	AN	1,125 (16%)	182 (3%)	-146 (-2%)	743 (11%)	30 (0%)	700 (10%)	1,021 (14%)	988 (13%)	2,670 (36%)
	BN	1,206 (24%)	327 (7%)	357 (7%)	223 (4%)	13 (0%)	212 (4%)	955 (20%)	1,086 (22%)	1,883 (39%)
	D	1,427 (31%)	498 (11%)	143 (3%)	847 (19%)	412 (9%)	483 (11%)	1,189 (23%)	1,244 (24%)	-103 (-2%)
	C	430 (10%)	-74 (-2%)	-505 (-12%)	231 (5%)	103 (2%)	181 (4%)	252 (6%)	240 (5%)	413 (9%)
	All	850 (13%)	180 (3%)	-14 (0%)	424 (7%)	102 (2%)	303 (5%)	826 (13%)	837 (13%)	1,206 (19%)
JUN	W	350 (6%)	118 (2%)	33 (1%)	231 (4%)	205 (3%)	31 (1%)	1,397 (22%)	1,229 (19%)	1,681 (26%)
	AN	1,065 (18%)	559 (10%)	88 (2%)	616 (11%)	721 (12%)	287 (5%)	1,654 (25%)	1,494 (23%)	1,152 (18%)
	BN	685 (13%)	256 (5%)	-288 (-6%)	622 (12%)	777 (15%)	565 (11%)	524 (9%)	451 (8%)	99 (2%)
	D	561 (11%)	214 (4%)	296 (6%)	500 (9%)	651 (12%)	535 (10%)	499 (8%)	188 (3%)	-980 (-16%)
	C	649 (14%)	657 (14%)	809 (17%)	600 (13%)	588 (13%)	644 (14%)	144 (2%)	241 (4%)	645 (10%)
	All	602 (11%)	306 (6%)	158 (3%)	467 (8%)	532 (10%)	360 (6%)	905 (15%)	762 (12%)	598 (10%)

Upstream—Sacramento River at Wilkins Slough										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	62 (1%)	-665 (-9%)	-766 (-11%)	53 (1%)	67 (1%)	138 (2%)	-49 (-1%)	22 (0%)	-589 (-8%)
	AN	-164 (-2%)	-689 (-9%)	-792 (-11%)	-55 (-1%)	-26 (0%)	-157 (-2%)	-557 (-7%)	-508 (-6%)	-1,519 (-19%)
	BN	113 (2%)	-271 (-4%)	-651 (-10%)	288 (4%)	231 (4%)	185 (3%)	-1,143 (-17%)	-562 (-9%)	-1,540 (-23%)
	D	-897 (-12%)	-828 (-11%)	-1,041 (-14%)	-599 (-8%)	-408 (-5%)	-484 (-7%)	-1,228 (-16%)	-1,297 (-17%)	-847 (-11%)
	C	-616 (-10%)	251 (4%)	-660 (-10%)	-545 (-8%)	-533 (-8%)	-618 (-10%)	-309 (-5%)	-245 (-4%)	60 (1%)
	All	-272 (-4%)	-503 (-7%)	-795 (-11%)	-153 (-2%)	-111 (-2%)	-145 (-2%)	-607 (-8%)	-484 (-7%)	-849 (-12%)
AUG	W	226 (4%)	266 (5%)	128 (2%)	198 (4%)	99 (2%)	196 (4%)	-203 (-4%)	-181 (-3%)	-318 (-6%)
	AN	-313 (-6%)	149 (3%)	112 (2%)	-148 (-3%)	-53 (-1%)	-153 (-3%)	-1,043 (-16%)	-997 (-15%)	-1,927 (-29%)
	BN	-59 (-1%)	-548 (-11%)	-523 (-11%)	-522 (-11%)	-514 (-10%)	-516 (-10%)	-840 (-15%)	-962 (-18%)	-1,481 (-27%)
	D	127 (2%)	39 (1%)	115 (2%)	25 (0%)	-2 (0%)	-315 (-6%)	-2,117 (-33%)	-1,978 (-31%)	-689 (-11%)
	C	145 (3%)	-102 (-2%)	-110 (-2%)	291 (6%)	315 (6%)	5 (0%)	-275 (-6%)	-344 (-7%)	930 (20%)
	All	65 (1%)	6 (0%)	-23 (0%)	0 (0%)	-18 (0%)	-117 (-2%)	-865 (-15%)	-852 (-15%)	-650 (-11%)
SEP	W	-5,837 (-46%)	-2,595 (-20%)	-2,553 (-20%)	-371 (-3%)	-139 (-1%)	-545 (-4%)	-5,819 (-46%)	-5,753 (-45%)	-1,036 (-8%)
	AN	-3,774 (-42%)	-2,593 (-29%)	-2,555 (-29%)	-1,683 (-19%)	-957 (-11%)	-1,596 (-18%)	-3,576 (-37%)	-3,422 (-36%)	-1,668 (-17%)
	BN	-406 (-8%)	-501 (-10%)	-494 (-10%)	-414 (-8%)	-454 (-9%)	-449 (-9%)	-289 (-6%)	-315 (-6%)	-1,477 (-28%)
	D	-131 (-3%)	861 (19%)	726 (16%)	-317 (-7%)	-314 (-7%)	-272 (-6%)	357 (9%)	266 (6%)	-457 (-11%)
	C	-205 (-5%)	-8 (0%)	46 (1%)	-297 (-7%)	-264 (-6%)	-190 (-5%)	645 (15%)	919 (21%)	29 (1%)
	All	-2,531 (-32%)	-1,100 (-14%)	-1,102 (-14%)	-548 (-7%)	-369 (-5%)	-571 (-7%)	-2,245 (-29%)	-2,186 (-28%)	-921 (-12%)
OCT	W	-360 (-5%)	286 (4%)	269 (4%)	-146 (-2%)	-8 (0%)	-139 (-2%)	1,120 (15%)	1,079 (15%)	-1,126 (-15%)
	AN	-210 (-3%)	-183 (-3%)	6 (0%)	-360 (-6%)	-115 (-2%)	-344 (-5%)	1,324 (19%)	1,691 (24%)	-944 (-14%)
	BN	-253 (-5%)	491 (9%)	450 (8%)	-386 (-7%)	-28 (0%)	-307 (-6%)	1,979 (30%)	1,411 (21%)	-1,827 (-28%)
	D	-460 (-8%)	248 (4%)	120 (2%)	-120 (-2%)	-130 (-2%)	-283 (-5%)	1,664 (28%)	1,481 (25%)	-817 (-14%)
	C	226 (5%)	613 (13%)	947 (20%)	12 (0%)	161 (3%)	122 (3%)	2,184 (39%)	2,155 (39%)	-1,389 (-25%)
	All	-256 (-4%)	292 (5%)	328 (5%)	-189 (-3%)	-29 (0%)	-191 (-3%)	1,572 (24%)	1,471 (22%)	-1,190 (-18%)
NOV	W	-1,827 (-16%)	-1,634 (-14%)	-1,586 (-14%)	-1,291 (-11%)	-1,181 (-10%)	-1,330 (-12%)	-1,310 (-12%)	-1,617 (-15%)	-1,403 (-13%)
	AN	-1,967 (-21%)	-1,487 (-16%)	-1,512 (-16%)	-1,829 (-19%)	-1,467 (-15%)	-1,418 (-15%)	-2,809 (-31%)	-2,742 (-30%)	-1,569 (-17%)
	BN	-2,135 (-25%)	-1,779 (-21%)	-1,634 (-19%)	-1,776 (-21%)	-1,703 (-20%)	-1,706 (-20%)	-1,830 (-24%)	-1,839 (-24%)	-1,138 (-15%)
	D	-1,306 (-16%)	-1,525 (-19%)	-1,443 (-18%)	-1,242 (-15%)	-1,309 (-16%)	-1,370 (-17%)	-1,161 (-16%)	-1,001 (-14%)	-750 (-10%)
	C	-650 (-12%)	-635 (-12%)	-763 (-14%)	-514 (-9%)	-524 (-10%)	-539 (-10%)	-579 (-12%)	-581 (-12%)	-166 (-3%)
	All	-1,613 (-18%)	-1,467 (-16%)	-1,432 (-16%)	-1,328 (-15%)	-1,244 (-14%)	-1,300 (-14%)	-1,478 (-18%)	-1,533 (-18%)	-1,058 (-13%)
DEC	W	649 (4%)	473 (3%)	464 (3%)	253 (1%)	251 (1%)	346 (2%)	549 (3%)	418 (2%)	125 (1%)
	AN	-283 (-3%)	-168 (-2%)	-152 (-1%)	-273 (-2%)	-248 (-2%)	-163 (-1%)	578 (5%)	387 (4%)	-317 (-3%)
	BN	-93 (-1%)	-81 (-1%)	-87 (-1%)	-112 (-1%)	-109 (-1%)	-109 (-1%)	334 (4%)	494 (6%)	-99 (-1%)
	D	154 (2%)	221 (3%)	189 (2%)	-40 (0%)	-37 (0%)	-48 (-1%)	288 (3%)	820 (9%)	-262 (-3%)
	C	248 (4%)	-38 (-1%)	-12 (0%)	-99 (-2%)	-91 (-2%)	-47 (-1%)	100 (2%)	140 (2%)	96 (2%)
	All	219 (2%)	154 (1%)	150 (1%)	-2 (0%)	3 (0%)	50 (0%)	393 (3%)	474 (4%)	-67 (-1%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-29. Differences[a] (Percent Differences) (cfs) between Effects[b] in the Sacramento River at Wilkins Slough, Year-Round**

Upstream—Sacramento River at Wilkins Slough								
Month	**Water Year Type**	**Alt 1A Effect vs. Boundary 1 Effect**	**Alt 3 Effect vs. Boundary 1 Effect**	**Alt 4A H3 Effect vs. Boundary 2 Effect**	**Alt 4A H3+ Effect vs. Boundary 2 Effect**	**Alt 8 Effect vs. Boundary 2 Effect**	**Alt 4A H4 Effect vs. Scenario 2 Effect**	**Alt 8 Effect vs. Scenario 2 Effect**
JAN	W	20 (0%)	-10 (0%)	4 (0%)	1 (0%)	19 (0%)	12 (0%)	20 (0%)
	AN	193 (1%)	416 (3%)	-21 (0%)	-41 (0%)	-224 (-1%)	63 (0%)	-115 (-1%)
	BN	-696 (-6%)	-364 (-3%)	70 (1%)	103 (1%)	-241 (-2%)	49 (0%)	-237 (-2%)
	D	-379 (-4%)	-217 (-2%)	33 (0%)	26 (0%)	519 (6%)	32 (0%)	519 (6%)
	C	859 (10%)	581 (7%)	-348 (-4%)	-359 (-5%)	841 (10%)	-376 (-5%)	839 (10%)
	All	-42 (0%)	33 (0%)	-34 (0%)	-35 (0%)	169 (1%)	-26 (0%)	186 (1%)
FEB	W	-6 (0%)	-7 (0%)	1 (0%)	3 (0%)	53 (0%)	3 (0%)	55 (0%)
	AN	521 (3%)	563 (3%)	109 (1%)	130 (1%)	-267 (-1%)	107 (1%)	-260 (-1%)
	BN	-83 (-1%)	-192 (-1%)	-2 (0%)	-12 (0%)	-289 (-2%)	5 (0%)	-277 (-2%)
	D	-159 (-1%)	-420 (-4%)	-8 (0%)	-18 (0%)	-457 (-4%)	-18 (0%)	-458 (-4%)
	C	-618 (-7%)	-357 (-4%)	314 (4%)	314 (4%)	-811 (-10%)	283 (3%)	-839 (-10%)
	All	-65 (0%)	-97 (-1%)	60 (0%)	60 (0%)	-291 (-2%)	55 (0%)	-291 (-2%)
MAR	W	-56 (0%)	-56 (0%)	14 (0%)	15 (0%)	-18 (0%)	19 (0%)	-15 (0%)
	AN	176 (1%)	123 (1%)	29 (0%)	38 (0%)	97 (1%)	6 (0%)	85 (0%)
	BN	44 (0%)	48 (0%)	-38 (0%)	80 (1%)	-216 (-2%)	82 (1%)	-123 (-1%)
	D	-210 (-2%)	-217 (-2%)	22 (0%)	19 (0%)	-1,496 (-13%)	92 (1%)	-1,430 (-13%)
	C	107 (1%)	-3 (0%)	-250 (-3%)	-296 (-4%)	-166 (-2%)	-247 (-3%)	-158 (-2%)
	All	-15 (0%)	-40 (0%)	-30 (0%)	-15 (0%)	-381 (-3%)	5 (0%)	-350 (-2%)
APR	W	-5 (0%)	-2 (0%)	17 (0%)	18 (0%)	-366 (-3%)	-27 (0%)	-155 (-1%)
	AN	-555 (-6%)	-473 (-5%)	104 (1%)	95 (1%)	-1,744 (-18%)	419 (4%)	-1,281 (-13%)
	BN	-158 (-2%)	-118 (-2%)	-201 (-3%)	186 (3%)	-2,545 (-37%)	658 (10%)	-1,734 (-25%)
	D	18 (1%)	450 (9%)	-169 (-3%)	76 (2%)	-1,504 (-29%)	-21 (0%)	-1,442 (-28%)
	C	79 (2%)	116 (3%)	74 (2%)	111 (3%)	427 (10%)	4 (0%)	392 (9%)
	All	-94 (-1%)	26 (0%)	-40 (0%)	84 (1%)	-1,073 (-13%)	161 (2%)	-792 (-9%)
MAY	W	-354 (-5%)	-303 (-4%)	-182 (-2%)	29 (0%)	-1,439 (-17%)	-134 (-1%)	-1,471 (-17%)
	AN	103 (2%)	137 (3%)	-561 (-8%)	151 (2%)	-2,488 (-33%)	-845 (-12%)	-2,816 (-38%)
	BN	251 (5%)	120 (2%)	104 (2%)	313 (6%)	-1,556 (-32%)	146 (3%)	-1,526 (-31%)
	D	238 (8%)	184 (7%)	-349 (-8%)	86 (2%)	601 (13%)	-340 (-7%)	246 (5%)
	C	179 (4%)	190 (5%)	-305 (-7%)	-177 (-4%)	-487 (-11%)	-686 (-16%)	-918 (-21%)
	All	24 (0%)	13 (0%)	-243 (-4%)	78 (1%)	-1,025 (-16%)	-317 (-5%)	-1,219 (-19%)
JUN	W	-1,048 (-16%)	-880 (-13%)	-113 (-2%)	-88 (-1%)	-1,563 (-24%)	2 (0%)	-1,647 (-26%)
	AN	-589 (-7%)	-428 (-5%)	-57 (-1%)	-162 (-3%)	-593 (-8%)	-198 (-3%)	-1,063 (-16%)
	BN	160 (4%)	234 (5%)	-366 (-7%)	-521 (-10%)	157 (3%)	-853 (-17%)	-387 (-7%)
	D	63 (2%)	373 (7%)	-286 (-5%)	-438 (-8%)	1,193 (20%)	-239 (-4%)	1,276 (22%)
	C	505 (12%)	409 (10%)	57 (1%)	69 (1%)	12 (4%)	165 (4%)	164 (7%)
	All	-303 (-4%)	-160 (-1%)	-161 (-3%)	-226 (-4%)	-292 (-4%)	-202 (-4%)	-440 (-7%)

Upstream—Sacramento River at Wilkins Slough								
Month	**Water Year Type**	**Alt 1A Effect vs. Boundary 1 Effect**	**Alt 3 Effect vs. Boundary 1 Effect**	**Alt 4A H3 Effect vs. Boundary 2 Effect**	**Alt 4A H3+ Effect vs. Boundary 2 Effect**	**Alt 8 Effect vs. Boundary 2 Effect**	**Alt 4A H4 Effect vs. Scenario 2 Effect**	**Alt 8 Effect vs. Scenario 2 Effect**
JUL	W	112 (1%)	41 (1%)	-718 (-10%)	-732 (-10%)	-76 (-2%)	-903 (-13%)	-177 (-3%)
	AN	392 (5%)	343 (4%)	-633 (-9%)	-663 (-9%)	830 (10%)	-635 (-9%)	727 (9%)
	BN	1,256 (19%)	676 (10%)	-559 (-9%)	-502 (-8%)	1,269 (19%)	-836 (-13%)	889 (13%)
	D	331 (4%)	400 (5%)	-228 (-3%)	-420 (-6%)	19 (0%)	-557 (-7%)	-194 (-3%)
	C	-307 (-5%)	-371 (-6%)	796 (12%)	784 (12%)	190 (3%)	-41 (-1%)	-720 (-11%)
	All	335 (4%)	212 (3%)	-350 (-5%)	-392 (-6%)	346 (4%)	-650 (-9%)	54 (0%)
AUG	W	429 (8%)	408 (7%)	68 (1%)	166 (3%)	583 (11%)	-68 (-1%)	446 (8%)
	AN	730 (10%)	684 (9%)	297 (5%)	202 (4%)	2,076 (32%)	265 (5%)	2,039 (31%)
	BN	780 (14%)	902 (16%)	-26 (-1%)	-35 (-1%)	933 (16%)	-7 (0%)	958 (17%)
	D	2,244 (36%)	2,105 (34%)	14 (0%)	41 (1%)	727 (12%)	430 (8%)	804 (13%)
	C	419 (9%)	489 (10%)	-392 (-8%)	-416 (-8%)	-1,032 (-22%)	-115 (-2%)	-1,040 (-22%)
	All	930 (16%)	917 (16%)	6 (0%)	24 (0%)	657 (11%)	94 (2%)	627 (11%)
SEP	W	-18 (0%)	-84 (-1%)	-2,224 (-18%)	-2,456 (-19%)	-1,559 (-12%)	-2,008 (-16%)	-1,517 (-12%)
	AN	-198 (-5%)	-351 (-6%)	-910 (-10%)	-1,635 (-18%)	-925 (-12%)	-960 (-11%)	-887 (-11%)
	BN	-117 (-3%)	-92 (-2%)	-88 (-2%)	-48 (-1%)	976 (18%)	-45 (-1%)	983 (19%)
	D	-488 (-12%)	-397 (-9%)	1,179 (26%)	1,175 (26%)	1,318 (30%)	998 (22%)	1,183 (27%)
	C	-850 (-20%)	-1,124 (-26%)	289 (7%)	256 (6%)	-37 (-1%)	236 (6%)	17 (0%)
	All	-286 (-4%)	-345 (-5%)	-552 (-7%)	-731 (-9%)	-179 (-2%)	-531 (-7%)	-181 (-2%)
OCT	W	-1,481 (-20%)	-1,439 (-20%)	432 (6%)	294 (4%)	1,413 (19%)	409 (6%)	1,396 (19%)
	AN	-1,534 (-22%)	-1,901 (-28%)	178 (3%)	-68 (-1%)	761 (11%)	349 (5%)	950 (14%)
	BN	-2,231 (-35%)	-1,663 (-26%)	877 (16%)	518 (9%)	2,318 (37%)	757 (14%)	2,277 (36%)
	D	-2,124 (-36%)	-1,941 (-33%)	368 (7%)	378 (7%)	1,065 (18%)	403 (7%)	937 (16%)
	C	-1,958 (-35%)	-1,929 (-34%)	601 (12%)	452 (9%)	2,002 (38%)	824 (17%)	2,336 (45%)
	All	-1,828 (-28%)	-1,727 (-26%)	481 (8%)	321 (5%)	1,482 (23%)	519 (9%)	1,518 (23%)
NOV	W	-517 (-4%)	-210 (-1%)	-343 (-3%)	-453 (-4%)	-231 (-1%)	-256 (-2%)	-183 (-1%)
	AN	843 (10%)	775 (9%)	342 (4%)	-20 (0%)	82 (2%)	-94 (-1%)	57 (1%)
	BN	-304 (-1%)	-295 (-1%)	-3 (0%)	-76 (-1%)	-641 (-6%)	72 (1%)	-497 (-4%)
	D	-146 (0%)	-306 (-2%)	-283 (-3%)	-216 (-3%)	-775 (-8%)	-73 (-1%)	-693 (-7%)
	C	-71 (0%)	-69 (0%)	-121 (-2%)	-112 (-2%)	-470 (-8%)	-223 (-4%)	-597 (-11%)
	All	-135 (0%)	-81 (0%)	-139 (-2%)	-223 (-2%)	-410 (-4%)	-132 (-1%)	-374 (-3%)
DEC	W	100 (1%)	230 (1%)	220 (1%)	222 (1%)	348 (2%)	118 (1%)	339 (2%)
	AN	-861 (-8%)	-670 (-6%)	105 (1%)	79 (1%)	149 (1%)	11 (0%)	165 (2%)
	BN	-427 (-5%)	-587 (-7%)	30 (0%)	27 (0%)	17 (0%)	23 (0%)	12 (0%)
	D	-134 (-2%)	-666 (-8%)	261 (3%)	258 (3%)	483 (6%)	237 (3%)	451 (5%)
	C	148 (2%)	109 (2%)	61 (1%)	53 (1%)	-135 (-2%)	35 (1%)	-108 (-2%)
	All	-175 (-2%)	-255 (-2%)	156 (1%)	151 (1%)	221 (2%)	100 (1%)	217 (2%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.1.9 Sacramento River at Verona

Table 5E-30. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Verona, Year-Round

Upstream—Sacramento River at Verona												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	42,618	43,899	44,148	43,393	42,893	42,915	43,131	45,567	45,067	45,128	45,486
	AN	30,728	32,102	31,232	31,269	31,216	31,247	31,321	33,671	32,916	32,953	34,145
	BN	17,355	18,153	18,331	18,032	17,779	17,695	17,784	19,121	18,786	18,589	19,745
	D	13,938	14,060	14,009	14,009	13,969	13,942	13,994	14,782	15,085	15,126	14,534
	C	11,406	11,687	11,494	11,525	11,905	11,838	11,945	13,051	11,627	11,830	11,774
	All	25,702	26,513	26,456	26,175	26,012	25,994	26,115	27,795	27,327	27,357	27,704
FEB	W	49,756	50,465	50,699	50,002	50,239	50,221	49,751	51,326	50,352	50,301	49,945
	AN	37,953	39,459	39,286	38,719	38,316	38,312	38,376	39,749	39,417	38,461	40,478
	BN	24,818	25,850	25,703	25,374	25,129	25,047	25,202	25,341	24,541	24,762	26,177
	D	18,641	18,880	18,825	18,687	18,778	18,777	18,591	18,090	17,520	18,014	20,375
	C	14,146	13,898	14,058	14,025	13,632	13,532	13,676	12,325	12,509	11,978	13,627
	All	31,730	32,367	32,402	32,007	31,944	31,909	31,776	32,192	31,600	31,512	32,696
MAR	W	41,699	42,143	42,282	41,895	41,917	41,901	41,804	44,624	42,706	42,759	42,619
	AN	36,065	37,975	38,306	37,713	37,369	37,284	37,032	39,687	38,335	38,446	38,706
	BN	17,837	18,568	18,887	18,675	18,042	17,829	18,376	19,448	18,812	18,720	21,736
	D	16,293	16,498	16,427	16,399	16,399	16,360	16,378	17,649	16,892	17,021	21,381
	C	11,229	11,863	11,247	11,255	11,604	11,567	11,613	11,789	11,725	11,967	13,404
	All	26,765	27,447	27,489	27,238	27,138	27,070	27,106	28,877	27,786	27,868	29,544
APR	W	29,410	29,414	29,449	33,081	29,430	29,418	31,720	31,636	29,537	29,548	34,666
	AN	20,066	20,394	20,400	28,048	20,323	20,331	23,105	21,313	20,833	20,604	27,482
	BN	13,349	14,388	13,524	20,771	13,939	13,350	18,171	13,857	14,968	14,835	21,969
	D	10,622	11,930	10,785	12,683	11,103	10,840	11,180	10,903	12,659	11,939	16,125
	C	9,071	9,514	9,313	9,873	9,323	9,294	9,385	9,489	10,042	9,989	10,345
	All	18,200	18,778	18,362	22,369	18,487	18,322	20,369	19,298	19,218	18,999	23,818
MAY	W	23,662	24,292	23,650	23,967	23,962	23,610	26,654	20,229	21,507	21,326	26,022
	AN	16,453	18,337	16,575	16,383	17,855	16,444	20,166	16,002	18,195	17,987	21,783
	BN	10,600	12,617	10,898	14,708	11,034	10,653	13,230	10,534	13,324	12,794	15,829
	D	9,260	11,047	9,343	10,937	10,218	9,567	9,799	9,841	11,262	11,394	11,177
	C	7,333	7,823	7,226	7,196	7,583	7,443	7,530	7,611	7,725	7,754	8,816
	All	14,826	16,109	14,893	15,962	15,447	14,901	16,914	13,828	15,359	15,215	17,885
JUN	W	15,590	17,930	15,479	14,890	16,886	16,791	15,099	15,304	17,666	17,501	17,196
	AN	12,714	15,783	12,046	11,494	15,623	15,374	12,785	13,574	17,364	16,782	13,497
	BN	11,186	12,385	9,799	8,893	12,606	13,585	10,846	11,320	13,654	13,032	10,488
	D	10,351	11,054	9,792	9,475	10,573	11,025	10,173	10,780	11,395	10,915	8,835
	C	7,843	8,464	8,454	8,672	8,417	8,403	8,448	9,827	9,623	9,725	10,219
	All	12,134	13,774	11,730	11,271	13,346	13,543	11,979	12,576	14,383	14,049	12,653

Upstream—Sacramento River at Verona												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	17,200	16,540	15,669	14,916	16,990	17,572	16,475	17,965	15,434	15,781	11,831
	AN	18,161	16,915	15,600	13,807	17,819	18,094	17,705	18,338	15,534	15,913	10,123
	BN	16,742	15,420	13,859	11,672	16,841	16,927	16,006	16,598	12,649	13,824	8,367
	D	15,036	15,086	13,166	11,218	13,637	14,057	12,822	16,465	11,470	11,505	9,540
	C	10,066	9,878	9,750	8,812	9,653	9,199	9,563	12,457	9,976	10,487	10,478
	All	15,743	15,109	13,934	12,495	15,276	15,541	14,762	16,651	13,304	13,753	10,289
AUG	W	13,750	12,696	13,584	13,644	12,858	13,665	11,706	14,016	11,675	11,787	9,152
	AN	15,032	12,283	13,183	12,923	13,678	14,611	12,341	15,828	12,848	12,899	8,840
	BN	13,388	10,597	10,814	10,956	11,846	11,825	9,255	14,074	10,373	11,195	7,561
	D	9,075	10,309	11,048	10,307	9,844	9,948	9,537	13,018	9,604	9,333	9,061
	C	7,526	7,871	8,161	7,726	7,966	8,020	8,122	8,085	7,564	7,546	8,744
	All	11,939	11,047	11,702	11,481	11,428	11,847	10,380	13,204	10,568	10,689	8,755
SEP	W	24,301	11,197	18,512	18,363	21,702	21,947	20,867	23,592	10,567	10,801	17,947
	AN	19,437	10,005	14,203	13,287	15,285	16,335	14,494	19,044	10,363	10,916	12,403
	BN	11,592	8,431	9,849	9,521	8,403	8,357	8,052	10,576	8,608	8,692	7,037
	D	8,483	7,884	10,669	8,913	7,681	7,727	7,671	7,664	8,432	8,185	6,970
	C	6,447	6,389	7,380	6,823	6,428	6,424	6,354	6,832	7,794	8,088	6,800
	All	15,334	9,119	13,052	12,347	13,179	13,412	12,726	14,755	9,328	9,487	11,232
OCT	W	10,508	10,357	10,022	9,913	10,591	10,545	10,016	11,232	12,506	12,627	9,087
	AN	9,013	8,911	8,226	8,309	8,726	8,951	8,392	9,890	11,699	12,190	8,314
	BN	8,883	8,409	8,556	8,538	8,669	9,026	8,673	10,146	12,239	11,575	7,336
	D	8,367	8,130	7,715	7,421	8,447	8,390	7,752	8,989	11,158	10,863	7,362
	C	6,969	7,734	7,176	7,334	7,387	7,377	7,483	8,104	11,622	11,622	5,983
	All	9,024	8,940	8,586	8,519	9,051	9,116	8,681	9,900	11,917	11,849	7,842
NOV	W	16,509	14,580	15,011	14,938	15,179	15,249	15,148	15,754	14,508	14,229	14,069
	AN	13,216	11,058	11,859	11,460	11,328	11,690	11,631	12,817	9,715	9,813	10,883
	BN	11,141	8,909	9,233	9,339	9,337	9,433	9,486	10,437	8,454	8,428	8,905
	D	10,560	9,253	8,908	8,898	9,447	9,379	9,137	9,731	8,622	8,902	8,928
	C	7,148	6,530	6,321	6,221	6,687	6,612	6,726	7,223	6,668	6,649	6,616
	All	12,435	10,749	10,952	10,871	11,117	11,183	11,115	11,846	10,334	10,314	10,502
DEC	W	30,080	32,176	31,953	31,604	30,681	30,589	30,998	31,254	31,026	30,980	29,865
	AN	17,749	16,970	17,164	17,154	17,744	17,602	17,460	18,481	19,160	19,030	15,611
	BN	13,187	12,695	12,556	12,496	12,786	12,783	12,816	13,028	13,674	13,973	12,040
	D	11,916	12,195	11,962	11,944	12,267	12,135	12,158	12,532	12,890	13,426	11,294
	C	8,688	8,590	8,210	8,224	8,278	8,277	8,322	8,627	9,804	9,493	8,293
	All	18,274	18,787	18,614	18,490	18,412	18,332	18,459	18,852	19,240	19,330	17,502

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-31. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios in the Sacramento River at Verona, Year-Round**

Upstream—Sacramento River at Verona										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	1,281 (3%)	1,530 (4%)	774 (2%)	274 (1%)	297 (1%)	513 (1%)	-500 (-1%)	-439 (-1%)	-81 (0%)
	AN	1,375 (4%)	504 (2%)	541 (2%)	488 (2%)	519 (2%)	593 (2%)	-755 (-2%)	-718 (-2%)	473 (1%)
	BN	798 (5%)	976 (6%)	677 (4%)	424 (2%)	340 (2%)	429 (2%)	-335 (-2%)	-532 (-3%)	625 (3%)
	D	122 (1%)	71 (1%)	71 (1%)	31 (0%)	4 (0%)	56 (0%)	303 (2%)	345 (2%)	-248 (-2%)
	C	280 (2%)	88 (1%)	118 (1%)	499 (4%)	432 (4%)	539 (5%)	-1,424 (-11%)	-1,221 (-9%)	-1,277 (-10%)
	All	812 (3%)	754 (3%)	473 (2%)	310 (1%)	292 (1%)	414 (2%)	-468 (-2%)	-438 (-2%)	-91 (0%)
FEB	W	709 (1%)	942 (2%)	246 (0%)	482 (1%)	465 (1%)	-5 (0%)	-973 (-2%)	-1,024 (-2%)	-1,381 (-3%)
	AN	1,506 (4%)	1,333 (4%)	766 (2%)	363 (1%)	359 (1%)	424 (1%)	-332 (-1%)	-1,288 (-3%)	729 (2%)
	BN	1,033 (4%)	885 (4%)	556 (2%)	312 (1%)	229 (1%)	385 (2%)	-800 (-3%)	-579 (-2%)	837 (3%)
	D	238 (1%)	184 (1%)	45 (0%)	137 (1%)	136 (1%)	-50 (0%)	-571 (-3%)	-76 (0%)	2,285 (13%)
	C	-247 (-2%)	-87 (-1%)	-120 (-1%)	-514 (-4%)	-614 (-4%)	-469 (-3%)	183 (1%)	-348 (-3%)	1,302 (11%)
	All	638 (2%)	673 (2%)	277 (1%)	214 (1%)	179 (1%)	46 (0%)	-592 (-2%)	-680 (-2%)	504 (2%)
MAR	W	444 (1%)	583 (1%)	196 (0%)	218 (1%)	202 (0%)	105 (0%)	-1,918 (-4%)	-1,865 (-4%)	-2,005 (-4%)
	AN	1,910 (5%)	2,241 (6%)	1,648 (5%)	1,305 (4%)	1,219 (3%)	967 (3%)	-1,352 (-3%)	-1,242 (-3%)	-981 (-2%)
	BN	731 (4%)	1,049 (6%)	838 (5%)	204 (1%)	-8 (0%)	539 (3%)	-636 (-3%)	-728 (-4%)	2,288 (12%)
	D	205 (1%)	134 (1%)	106 (1%)	106 (1%)	67 (0%)	85 (1%)	-758 (-4%)	-628 (-4%)	3,732 (21%)
	C	634 (6%)	19 (0%)	26 (0%)	375 (3%)	339 (3%)	385 (3%)	-65 (-1%)	178 (2%)	1,615 (14%)
	All	683 (3%)	724 (3%)	473 (2%)	373 (1%)	305 (1%)	342 (1%)	-1,090 (-4%)	-1,009 (-3%)	667 (2%)
APR	W	4 (0%)	39 (0%)	3,671 (12%)	20 (0%)	9 (0%)	2,310 (8%)	-2,099 (-7%)	-2,088 (-7%)	3,030 (10%)
	AN	328 (2%)	334 (2%)	7,983 (40%)	258 (1%)	265 (1%)	3,039 (15%)	-480 (-2%)	-709 (-3%)	6,169 (29%)
	BN	1,039 (8%)	175 (1%)	7,422 (56%)	590 (4%)	1 (0%)	4,822 (36%)	1,111 (8%)	978 (7%)	8,112 (59%)
	D	1,308 (12%)	162 (2%)	2,060 (19%)	481 (5%)	217 (2%)	558 (5%)	1,756 (16%)	1,036 (10%)	5,222 (48%)
	C	443 (5%)	242 (3%)	802 (9%)	252 (3%)	223 (2%)	314 (3%)	553 (6%)	500 (5%)	855 (9%)
	All	579 (3%)	162 (1%)	4,169 (23%)	287 (2%)	122 (1%)	2,169 (12%)	-80 (0%)	-298 (-2%)	4,520 (23%)
MAY	W	630 (3%)	-12 (0%)	305 (1%)	300 (1%)	-52 (0%)	2,992 (13%)	1,278 (6%)	1,098 (5%)	5,793 (29%)
	AN	1,884 (11%)	122 (1%)	-70 (0%)	1,403 (9%)	-8 (0%)	3,713 (23%)	2,194 (14%)	1,985 (12%)	5,781 (36%)
	BN	2,017 (19%)	298 (3%)	4,108 (39%)	434 (4%)	54 (1%)	2,630 (25%)	2,789 (26%)	2,260 (21%)	5,294 (50%)
	D	1,787 (19%)	83 (1%)	1,677 (18%)	959 (10%)	307 (3%)	539 (6%)	1,421 (14%)	1,553 (16%)	1,336 (14%)
	C	490 (7%)	-107 (-1%)	-137 (-2%)	249 (3%)	110 (2%)	197 (3%)	114 (1%)	143 (2%)	1,205 (16%)
	All	1,284 (9%)	67 (0%)	1,136 (8%)	621 (4%)	75 (1%)	2,088 (14%)	1,531 (11%)	1,386 (10%)	4,056 (29%)
JUN	W	2,340 (15%)	-111 (-1%)	-699 (-4%)	1,297 (8%)	1,201 (8%)	-491 (-3%)	2,362 (15%)	2,198 (14%)	1,892 (12%)
	AN	3,069 (24%)	-668 (-5%)	-1,219 (-10%)	2,910 (23%)	2,661 (21%)	72 (1%)	3,790 (28%)	3,207 (24%)	-77 (-1%)
	BN	1,198 (11%)	-1,387 (-12%)	-2,294 (-21%)	1,420 (13%)	2,399 (21%)	-341 (-3%)	2,334 (21%)	1,712 (15%)	-833 (-7%)
	D	702 (7%)	-560 (-5%)	-877 (-8%)	222 (2%)	673 (7%)	-179 (-2%)	615 (6%)	134 (1%)	-1,945 (-18%)
	C	621 (8%)	610 (8%)	829 (11%)	574 (7%)	559 (7%)	604 (8%)	-204 (-2%)	-101 (-1%)	392 (4%)
	All	1,641 (14%)	-403 (-3%)	-863 (-7%)	1,212 (10%)	1,409 (12%)	-154 (-1%)	1,807 (14%)	1,473 (12%)	77 (1%)

Upstream—Sacramento River at Verona										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	-660 (-4%)	-1,531 (-9%)	-2,285 (-13%)	-210 (-1%)	372 (2%)	-725 (-4%)	-2,531 (-14%)	-2,184 (-12%)	-6,134 (-34%)
	AN	-1,246 (-7%)	-2,562 (-14%)	-4,354 (-24%)	-342 (-2%)	-67 (0%)	-457 (-3%)	-2,804 (-15%)	-2,425 (-13%)	-8,215 (-45%)
	BN	-1,322 (-8%)	-2,882 (-17%)	-5,070 (-30%)	100 (1%)	186 (1%)	-736 (-4%)	-3,949 (-24%)	-2,775 (-17%)	-8,231 (-50%)
	D	50 (0%)	-1,870 (-12%)	-3,818 (-25%)	-1,399 (-9%)	-978 (-7%)	-2,214 (-15%)	-4,995 (-30%)	-4,960 (-30%)	-6,926 (-42%)
	C	-188 (-2%)	-316 (-3%)	-1,254 (-12%)	-414 (-4%)	-868 (-9%)	-504 (-5%)	-2,481 (-20%)	-1,971 (-16%)	-1,979 (-16%)
	All	-634 (-4%)	-1,809 (-11%)	-3,249 (-21%)	-467 (-3%)	-202 (-1%)	-982 (-6%)	-3,347 (-20%)	-2,898 (-17%)	-6,362 (-38%)
AUG	W	-1,054 (-8%)	-166 (-1%)	-106 (-1%)	-892 (-6%)	-85 (-1%)	-2,044 (-15%)	-2,342 (-17%)	-2,230 (-16%)	-4,864 (-35%)
	AN	-2,749 (-18%)	-1,849 (-12%)	-2,109 (-14%)	-1,354 (-9%)	-421 (-3%)	-2,691 (-18%)	-2,981 (-19%)	-2,929 (-19%)	-6,988 (-44%)
	BN	-2,791 (-21%)	-2,574 (-19%)	-2,432 (-18%)	-1,542 (-12%)	-1,563 (-12%)	-4,134 (-31%)	-3,701 (-26%)	-2,879 (-20%)	-6,513 (-46%)
	D	1,234 (14%)	1,972 (22%)	1,232 (14%)	769 (8%)	873 (10%)	461 (5%)	-3,414 (-26%)	-3,684 (-28%)	-3,956 (-30%)
	C	345 (5%)	635 (8%)	200 (3%)	440 (6%)	494 (7%)	596 (8%)	-521 (-6%)	-539 (-7%)	659 (8%)
	All	-892 (-7%)	-237 (-2%)	-458 (-4%)	-511 (-4%)	-91 (-1%)	-1,559 (-13%)	-2,636 (-20%)	-2,515 (-19%)	-4,449 (-34%)
SEP	W	-13,104 (-54%)	-5,789 (-24%)	-5,939 (-24%)	-2,600 (-11%)	-2,354 (-10%)	-3,434 (-14%)	-13,025 (-55%)	-12,791 (-54%)	-5,645 (-24%)
	AN	-9,432 (-49%)	-5,234 (-27%)	-6,149 (-32%)	-4,151 (-21%)	-3,102 (-16%)	-4,942 (-25%)	-8,680 (-46%)	-8,127 (-43%)	-6,640 (-35%)
	BN	-3,161 (-27%)	-1,742 (-15%)	-2,070 (-18%)	-3,188 (-28%)	-3,235 (-28%)	-3,540 (-31%)	-1,968 (-19%)	-1,884 (-18%)	-3,539 (-33%)
	D	-599 (-7%)	2,186 (26%)	430 (5%)	-802 (-9%)	-756 (-9%)	-812 (-10%)	768 (10%)	521 (7%)	-694 (-9%)
	C	-58 (-1%)	932 (14%)	375 (6%)	-19 (0%)	-24 (0%)	-94 (-1%)	963 (14%)	1,256 (18%)	-32 (0%)
	All	-6,215 (-41%)	-2,283 (-15%)	-2,987 (-19%)	-2,155 (-14%)	-1,922 (-13%)	-2,609 (-17%)	-5,427 (-37%)	-5,268 (-36%)	-3,523 (-24%)
OCT	W	-150 (-1%)	-486 (-5%)	-595 (-6%)	83 (1%)	37 (0%)	-492 (-5%)	1,274 (11%)	1,396 (12%)	-2,145 (-19%)
	AN	-102 (-1%)	-786 (-9%)	-703 (-8%)	-286 (-3%)	-62 (-1%)	-621 (-7%)	1,809 (18%)	2,300 (23%)	-1,576 (-16%)
	BN	-474 (-5%)	-327 (-4%)	-345 (-4%)	-214 (-2%)	143 (2%)	-210 (-2%)	2,093 (21%)	1,428 (14%)	-2,810 (-28%)
	D	-237 (-3%)	-652 (-8%)	-947 (-11%)	80 (1%)	22 (0%)	-615 (-7%)	2,169 (24%)	1,874 (21%)	-1,627 (-18%)
	C	765 (11%)	208 (3%)	365 (5%)	418 (6%)	409 (6%)	514 (7%)	3,518 (43%)	3,518 (43%)	-2,121 (-26%)
	All	-83 (-1%)	-438 (-5%)	-505 (-6%)	27 (0%)	92 (1%)	-342 (-4%)	2,017 (20%)	1,949 (20%)	-2,058 (-21%)
NOV	W	-1,929 (-12%)	-1,499 (-9%)	-1,571 (-10%)	-1,331 (-8%)	-1,260 (-8%)	-1,362 (-8%)	-1,246 (-8%)	-1,526 (-10%)	-1,685 (-11%)
	AN	-2,158 (-16%)	-1,357 (-10%)	-1,756 (-13%)	-1,888 (-14%)	-1,526 (-12%)	-1,585 (-12%)	-3,102 (-24%)	-3,004 (-23%)	-1,934 (-15%)
	BN	-2,231 (-20%)	-1,907 (-17%)	-1,802 (-16%)	-1,803 (-16%)	-1,708 (-15%)	-1,655 (-15%)	-1,983 (-19%)	-2,009 (-19%)	-1,533 (-15%)
	D	-1,307 (-12%)	-1,651 (-16%)	-1,662 (-16%)	-1,112 (-11%)	-1,181 (-11%)	-1,422 (-13%)	-1,109 (-11%)	-830 (-9%)	-803 (-8%)
	C	-619 (-9%)	-827 (-12%)	-927 (-13%)	-461 (-6%)	-536 (-8%)	-422 (-6%)	-555 (-8%)	-574 (-8%)	-607 (-8%)
	All	-1,686 (-14%)	-1,483 (-12%)	-1,563 (-13%)	-1,318 (-11%)	-1,252 (-10%)	-1,320 (-11%)	-1,512 (-13%)	-1,533 (-13%)	-1,344 (-11%)
DEC	W	2,095 (7%)	1,873 (6%)	1,524 (5%)	600 (2%)	509 (2%)	918 (3%)	-229 (-1%)	-275 (-1%)	-1,390 (-4%)
	AN	-779 (-4%)	-585 (-3%)	-595 (-3%)	-5 (0%)	-147 (-1%)	-289 (-2%)	679 (4%)	550 (3%)	-2,870 (-16%)
	BN	-492 (-4%)	-631 (-5%)	-690 (-5%)	-400 (-3%)	-404 (-3%)	-370 (-3%)	646 (5%)	945 (7%)	-987 (-8%)
	D	279 (2%)	46 (0%)	28 (0%)	351 (3%)	219 (2%)	243 (2%)	358 (3%)	894 (7%)	-1,238 (-10%)
	C	-98 (-1%)	-478 (-6%)	-464 (-5%)	-410 (-5%)	-411 (-5%)	-366 (-4%)	1,177 (14%)	865 (10%)	-334 (-4%)
	All	513 (3%)	341 (2%)	217 (1%)	138 (1%)	59 (0%)	185 (1%)	388 (2%)	477 (3%)	-1,350 (-7%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-32. Differences[a] (Percent Differences) (cfs) between Effects[b] in the Sacramento River at Verona, Year-Round**

Upstream—Sacramento River at Verona								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	1,781 (4%)	1,720 (4%)	1,255 (3%)	1,233 (3%)	1,611 (4%)	262 (1%)	856 (2%)
	AN	2,130 (7%)	2,092 (7%)	16 (0%)	-15 (0%)	30 (0%)	-52 (0%)	68 (0%)
	BN	1,133 (6%)	1,330 (7%)	552 (3%)	636 (4%)	351 (2%)	248 (1%)	52 (1%)
	D	-181 (-1%)	-222 (-1%)	41 (0%)	67 (0%)	319 (2%)	16 (0%)	319 (2%)
	C	1,704 (13%)	1,501 (12%)	-411 (-4%)	-344 (-3%)	1,364 (11%)	-421 (-4%)	1,395 (11%)
	All	1,279 (5%)	1,249 (5%)	443 (2%)	462 (2%)	845 (3%)	60 (0%)	564 (2%)
FEB	W	1,683 (3%)	1,734 (3%)	460 (1%)	477 (1%)	2,324 (5%)	251 (1%)	1,627 (3%)
	AN	1,838 (5%)	2,794 (7%)	970 (3%)	974 (3%)	604 (2%)	343 (1%)	37 (0%)
	BN	1,832 (7%)	1,611 (6%)	574 (2%)	657 (3%)	49 (0%)	172 (1%)	-280 (-1%)
	D	809 (4%)	315 (2%)	47 (0%)	48 (0%)	-2,101 (-12%)	96 (1%)	-2,240 (-12%)
	C	-430 (-3%)	100 (1%)	427 (3%)	527 (4%)	-1,389 (-11%)	349 (2%)	-1,422 (-11%)
	All	1,230 (4%)	1,317 (4%)	459 (1%)	494 (2%)	169 (1%)	231 (1%)	-226 (-1%)
MAR	W	2,362 (5%)	2,309 (5%)	364 (1%)	380 (1%)	2,587 (6%)	91 (0%)	2,200 (5%)
	AN	3,262 (9%)	3,152 (8%)	937 (3%)	1,023 (3%)	3,223 (9%)	680 (2%)	2,629 (7%)
	BN	1,366 (7%)	1,459 (8%)	845 (5%)	1,058 (6%)	-1,239 (-6%)	299 (2%)	-1,450 (-7%)
	D	962 (6%)	833 (5%)	28 (0%)	68 (0%)	-3,597 (-20%)	21 (0%)	-3,626 (-20%)
	C	699 (6%)	456 (4%)	-356 (-3%)	-320 (-3%)	-1,596 (-14%)	-358 (-3%)	-1,588 (-13%)
	All	1,773 (6%)	1,692 (6%)	351 (1%)	419 (2%)	57 (0%)	132 (0%)	-193 (-1%)
APR	W	2,103 (7%)	2,092 (7%)	19 (0%)	30 (0%)	-2,991 (-9%)	1,360 (5%)	640 (3%)
	AN	809 (4%)	1,037 (5%)	77 (0%)	69 (0%)	-5,835 (-27%)	4,944 (25%)	1,814 (11%)
	BN	-72 (0%)	61 (1%)	-415 (-3%)	174 (1%)	-7,937 (-57%)	2,600 (19%)	-690 (-3%)
	D	-448 (-4%)	272 (3%)	-319 (-3%)	-55 (-1%)	-5,060 (-46%)	1,502 (14%)	-3,162 (-29%)
	C	-110 (-1%)	-56 (0%)	-10 (0%)	19 (0%)	-613 (-6%)	488 (5%)	-53 (0%)
	All	659 (4%)	877 (5%)	-125 (-1%)	40 (0%)	-4,358 (-23%)	2,000 (11%)	-351 (-1%)
MAY	W	-648 (-4%)	-468 (-3%)	-312 (-1%)	40 (0%)	-5,805 (-29%)	-2,688 (-11%)	-5,488 (-27%)
	AN	-310 (-2%)	-101 (-1%)	-1,280 (-8%)	131 (1%)	-5,659 (-35%)	-3,783 (-23%)	-5,851 (-37%)
	BN	-772 (-7%)	-243 (-2%)	-136 (-1%)	244 (2%)	-4,996 (-47%)	1,478 (14%)	-1,186 (-11%)
	D	366 (5%)	233 (4%)	-875 (-9%)	-224 (-2%)	-1,253 (-13%)	1,138 (12%)	341 (5%)
	C	376 (5%)	347 (5%)	-357 (-5%)	-218 (-3%)	-1,312 (-17%)	-334 (-5%)	-1,342 (-18%)
	All	-247 (-2%)	-103 (-1%)	-554 (-4%)	-8 (0%)	-3,989 (-29%)	-952 (-6%)	-2,920 (-22%)
JUN	W	-22 (0%)	142 (1%)	-1,408 (-9%)	-1,312 (-8%)	-2,003 (-13%)	-208 (-1%)	-2,592 (-17%)
	AN	-720 (-4%)	-138 (1%)	-3,578 (-28%)	-3,329 (-26%)	-591 (-5%)	-1,291 (-10%)	-1,142 (-9%)
	BN	-1,136 (-10%)	-513 (-4%)	-2,807 (-25%)	-3,786 (-34%)	-554 (-5%)	-1,953 (-17%)	-1,461 (-13%)
	D	88 (1%)	568 (6%)	-781 (-8%)	-1,233 (-12%)	1,385 (13%)	-698 (-7%)	1,068 (10%)
	C	824 (10%)	722 (9%)	36 (0%)	51 (1%)	218 (4%)	224 (3%)	436 (7%)
	All	-167 (-1%)	168 (2%)	-1,615 (-13%)	-1,813 (-15%)	-480 (-4%)	-709 (-6%)	-940 (-8%)

Upstream—Sacramento River at Verona								
Month	**Water Year Type**	**Alt 1A Effect vs. Boundary 1 Effect**	**Alt 3 Effect vs. Boundary 1 Effect**	**Alt 4A H3 Effect vs. Boundary 2 Effect**	**Alt 4A H3+ Effect vs. Boundary 2 Effect**	**Alt 8 Effect vs. Boundary 2 Effect**	**Alt 4A H4 Effect vs. Scenario 2 Effect**	**Alt 8 Effect vs. Scenario 2 Effect**
JUL	W	1,871 (10%)	1,524 (8%)	-1,321 (-8%)	-1,903 (-11%)	4,603 (25%)	-1,560 (-9%)	3,849 (21%)
	AN	1,558 (8%)	1,179 (6%)	-2,219 (-12%)	-2,494 (-14%)	5,654 (31%)	-3,897 (-21%)	3,861 (21%)
	BN	2,628 (16%)	1,453 (9%)	-2,982 (-18%)	-3,068 (-18%)	5,349 (32%)	-4,334 (-26%)	3,162 (19%)
	D	5,045 (31%)	5,010 (30%)	-471 (-3%)	-892 (-6%)	5,056 (30%)	-1,604 (-11%)	3,108 (17%)
	C	2,293 (18%)	1,783 (14%)	97 (1%)	551 (5%)	1,663 (13%)	-750 (-7%)	725 (3%)
	All	2,713 (16%)	2,264 (13%)	-1,342 (-9%)	-1,607 (-10%)	4,553 (27%)	-2,267 (-14%)	3,114 (18%)
AUG	W	1,288 (9%)	1,176 (8%)	726 (5%)	-81 (-1%)	4,698 (33%)	1,938 (14%)	4,758 (34%)
	AN	231 (1%)	180 (0%)	-495 (-3%)	-1,428 (-10%)	5,139 (32%)	582 (4%)	4,879 (30%)
	BN	910 (5%)	88 (0%)	-1,032 (-8%)	-1,011 (-8%)	3,939 (27%)	1,702 (13%)	4,081 (28%)
	D	4,648 (40%)	4,918 (42%)	1,203 (13%)	1,099 (12%)	5,929 (52%)	770 (8%)	5,188 (44%)
	C	866 (11%)	884 (11%)	195 (3%)	141 (2%)	-25 (0%)	-396 (-5%)	-459 (-5%)
	All	1,744 (12%)	1,623 (12%)	274 (2%)	-145 (-1%)	4,212 (32%)	1,101 (9%)	3,991 (30%)
SEP	W	-79 (1%)	-314 (0%)	-3,190 (-13%)	-3,435 (-14%)	-144 (0%)	-2,504 (-10%)	-294 (-1%)
	AN	-751 (-3%)	-1,304 (-6%)	-1,082 (-6%)	-2,132 (-11%)	1,407 (8%)	-1,207 (-6%)	491 (3%)
	BN	-1,193 (-9%)	-1,277 (-9%)	1,446 (12%)	1,493 (13%)	1,797 (18%)	1,469 (13%)	1,468 (16%)
	D	-1,367 (-17%)	-1,120 (-14%)	2,988 (35%)	2,941 (35%)	2,879 (35%)	1,242 (15%)	1,123 (14%)
	C	-1,021 (-15%)	-1,314 (-19%)	951 (15%)	956 (15%)	964 (15%)	469 (7%)	407 (6%)
	All	-788 (-4%)	-947 (-5%)	-128 (-1%)	-361 (-2%)	1,240 (9%)	-379 (-2%)	536 (4%)
OCT	W	-1,424 (-13%)	-1,546 (-14%)	-569 (-5%)	-523 (-5%)	1,659 (14%)	-103 (-1%)	1,550 (13%)
	AN	-1,910 (-19%)	-2,401 (-24%)	-500 (-6%)	-725 (-8%)	789 (7%)	-82 (-1%)	873 (8%)
	BN	-2,567 (-26%)	-1,902 (-19%)	-113 (-1%)	-470 (-5%)	2,483 (24%)	-135 (-2%)	2,465 (24%)
	D	-2,406 (-27%)	-2,111 (-24%)	-732 (-9%)	-674 (-8%)	975 (10%)	-332 (-4%)	680 (7%)
	C	-2,753 (-32%)	-2,753 (-32%)	-211 (-3%)	-201 (-3%)	2,329 (29%)	-149 (-2%)	2,486 (31%)
	All	-2,101 (-21%)	-2,033 (-21%)	-465 (-5%)	-530 (-6%)	1,620 (16%)	-162 (-2%)	1,553 (15%)
NOV	W	-683 (-4%)	-404 (-2%)	-168 (-1%)	-238 (-1%)	187 (2%)	-210 (-1%)	114 (1%)
	AN	944 (8%)	846 (7%)	531 (4%)	169 (1%)	577 (5%)	-171 (-1%)	177 (2%)
	BN	-248 (-1%)	-222 (-1%)	-104 (-1%)	-199 (-2%)	-374 (-2%)	-147 (-1%)	-269 (-1%)
	D	-198 (-1%)	-477 (-4%)	-539 (-5%)	-471 (-4%)	-849 (-7%)	-239 (-2%)	-859 (-7%)
	C	-64 (-1%)	-45 (-1%)	-367 (-5%)	-291 (-4%)	-220 (-3%)	-505 (-7%)	-320 (-5%)
	All	-173 (-1%)	-153 (-1%)	-165 (-1%)	-231 (-2%)	-139 (-1%)	-243 (-2%)	-219 (-1%)
DEC	W	2,324 (8%)	2,370 (8%)	1,273 (4%)	1,364 (5%)	3,262 (11%)	606 (2%)	2,913 (10%)
	AN	-1,458 (-8%)	-1,329 (-7%)	-580 (-3%)	-438 (-2%)	2,285 (12%)	-306 (-2%)	2,275 (12%)
	BN	-1,138 (-9%)	-1,437 (-11%)	-230 (-2%)	-227 (-2%)	357 (3%)	-320 (-2%)	297 (2%)
	D	-79 (-1%)	-615 (-5%)	-305 (-3%)	-173 (-1%)	1,285 (10%)	-214 (-2%)	1,267 (10%)
	C	-1,275 (-15%)	-964 (-11%)	-68 (-1%)	-66 (-1%)	-144 (-2%)	-98 (-1%)	-130 (-1%)
	All	125 (1%)	36 (0%)	202 (1%)	282 (2%)	1,691 (9%)	31 (0%)	1,566 (8%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.1.10 Clear Creek below Whiskeytown

Table 5E-33. Mean Monthly Flows (cfs) for Model Scenarios in Clear Creek below Whiskeytown, Year-Round

Upstream—Clear Creek below Whiskeytown												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	309	309	309	309	309	309	309	339	339	339	339
	AN	192	192	192	192	192	192	192	192	192	192	192
	BN	189	189	189	189	189	189	189	189	189	189	189
	D	192	192	192	192	192	192	192	192	192	192	192
	C	171	171	171	171	171	171	171	159	163	171	167
	All	225	225	225	225	225	225	225	233	234	235	234
FEB	W	356	356	356	356	356	356	356	257	257	257	239
	AN	196	196	196	196	196	196	196	196	196	196	196
	BN	189	189	189	189	189	189	189	189	189	189	189
	D	192	192	192	192	192	192	192	192	192	192	192
	C	171	171	171	171	171	171	171	168	163	158	162
	All	241	241	241	241	241	241	241	209	208	208	203
MAR	W	272	272	272	272	272	272	272	259	258	258	258
	AN	196	196	196	196	196	196	196	196	196	196	196
	BN	189	189	189	189	189	189	189	202	196	189	189
	D	192	192	192	192	192	192	192	192	192	192	192
	C	171	171	171	171	171	171	171	168	163	171	154
	All	214	214	214	214	214	214	214	212	210	210	208
APR	W	200	200	200	200	200	200	200	200	200	200	200
	AN	196	196	196	196	196	196	196	196	196	196	196
	BN	189	189	189	189	189	189	189	189	189	189	189
	D	192	192	192	192	192	192	192	192	192	192	192
	C	171	171	171	171	171	171	171	168	163	171	154
	All	191	191	191	191	191	191	191	191	190	191	189
MAY	W	277	277	277	277	277	277	277	277	277	277	277
	AN	277	277	277	277	277	277	277	277	277	277	277
	BN	269	269	269	269	269	269	269	269	269	269	269
	D	264	264	264	264	264	264	264	264	264	264	264
	C	224	224	224	224	224	224	224	224	224	224	220
	All	265	265	265	265	265	265	265	265	265	265	265
JUN	W	200	200	200	200	200	200	200	200	200	200	200
	AN	200	200	200	200	200	200	200	200	200	200	228
	BN	186	186	186	186	186	186	186	186	186	186	186
	D	180	180	180	180	180	180	180	180	180	180	180
	C	120	120	120	120	120	120	120	131	120	131	120
	All	181	181	181	181	181	181	181	183	181	183	186

Upstream—Clear Creek below Whiskeytown												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	85	85	85	85	85	85	85	85	85	85	106
	AN	85	85	85	85	85	85	85	85	85	85	85
	BN	85	85	85	85	85	85	85	85	85	85	85
	D	85	85	85	85	85	85	85	85	85	85	85
	C	85	85	85	85	85	85	85	85	98	98	85
	All	85	85	85	85	85	85	85	85	87	87	92
AUG	W	85	85	85	85	85	85	85	85	85	85	91
	AN	85	85	85	85	85	85	85	85	85	85	85
	BN	85	85	85	85	85	85	85	85	85	85	85
	D	85	85	85	85	85	85	85	85	85	85	85
	C	85	85	94	85	85	85	85	71	78	78	78
	All	85	85	86	85	85	85	85	83	84	84	86
SEP	W	150	150	150	150	150	150	150	150	150	150	151
	AN	150	150	150	150	150	150	150	150	150	150	150
	BN	150	150	150	150	150	150	150	150	150	150	150
	D	150	150	150	150	150	150	150	150	150	150	150
	C	133	133	133	133	133	133	133	96	83	83	108
	All	148	148	148	148	148	148	148	142	140	140	144
OCT	W	198	198	198	198	198	198	198	198	198	198	198
	AN	183	183	183	183	183	183	183	183	183	183	183
	BN	182	183	182	182	182	182	182	182	189	189	189
	D	183	183	183	183	183	183	183	183	178	178	175
	C	167	165	165	167	165	165	165	142	154	152	167
	All	185	185	185	185	185	185	185	182	184	183	185
NOV	W	198	198	198	198	198	198	198	198	198	198	198
	AN	185	185	185	185	185	185	185	182	182	182	182
	BN	189	189	189	189	189	189	189	189	189	189	189
	D	184	184	176	184	184	184	184	177	180	176	176
	C	171	171	171	171	171	171	171	145	158	158	162
	All	188	188	186	188	188	188	188	182	184	183	184
DEC	W	198	198	198	198	198	198	198	198	198	198	201
	AN	192	192	192	192	192	192	192	192	192	192	192
	BN	189	189	189	189	189	189	189	189	189	189	189
	D	189	189	189	189	189	189	189	189	189	189	189
	C	171	171	171	171	171	171	171	156	150	158	148
	All	190	190	190	190	190	190	190	187	187	188	187

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-34. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios in Clear Creek below Whiskeytown, Year-Round**

Upstream—Clear Creek below Whiskeytown										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	4 (2%)	12 (7%)	7 (5%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (1%)	1 (0%)
FEB	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-18 (-7%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-5 (-3%)	-10 (-6%)	-6 (-3%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)	-1 (-1%)	-7 (-3%)
MAR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-6 (-3%)	-12 (-6%)	-12 (-6%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-5 (-3%)	3 (2%)	-14 (-8%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-2 (-1%)	-2 (-1%)	-4 (-2%)
APR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-5 (-3%)	3 (2%)	-14 (-8%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)	0 (0%)	-2 (-1%)
MAY	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-4 (-2%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)
JUN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	28 (14%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-11 (-8%)	0 (0%)	-11 (-8%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-2 (-1%)	0 (0%)	3 (1%)

Upstream—Clear Creek below Whiskeytown										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	21 (25%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	13 (15%)	13 (15%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (2%)	2 (2%)	7 (8%)
AUG	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	6 (7%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	9 (11%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	7 (10%)	7 (10%)	7 (10%)
	All	0 (0%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (1%)	1 (1%)	3 (4%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-13 (-13%)	-13 (-13%)	12 (13%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-2 (-1%)	-2 (-1%)	2 (1%)
OCT	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	7 (4%)	7 (4%)	7 (4%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-5 (-3%)	-5 (-3%)	-8 (-5%)
	C	-2 (-1%)	-2 (-1%)	0 (0%)	-2 (-1%)	-2 (-1%)	-2 (-1%)	13 (9%)	11 (7%)	25 (18%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (1%)	2 (1%)	3 (2%)
NOV	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	-8 (-5%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (2%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	13 (9%)	13 (9%)	17 (11%)
	All	0 (0%)	-2 (-1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (1%)	2 (1%)	2 (1%)
DEC	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (2%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-6 (-4%)	3 (2%)	-8 (-5%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)	0 (0%)	0 (0%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.
[b] For definitions of each effect, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-35. Differences[a] (Percent Differences) (cfs) between Effects[b] in the Clear Creek below Whiskeytown, Year-Round**

Upstream—Clear Creek below Whiskeytown								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	-4 (-2%)	-12 (-7%)	0 (0%)	0 (0%)	-7 (-5%)	0 (0%)	-7 (-5%)
	All	0 (0%)	-2 (-1%)	0 (0%)	0 (0%)	-1 (0%)	0 (0%)	-1 (0%)
FEB	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	18 (7%)	0 (0%)	18 (7%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	5 (3%)	10 (6%)	0 (0%)	0 (0%)	6 (3%)	0 (0%)	6 (3%)
	All	1 (0%)	1 (1%)	0 (0%)	0 (0%)	7 (3%)	0 (0%)	7 (3%)
MAR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	6 (3%)	12 (6%)	0 (0%)	0 (0%)	12 (6%)	0 (0%)	12 (6%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	5 (3%)	-3 (-2%)	0 (0%)	0 (0%)	14 (8%)	0 (0%)	14 (8%)
	All	2 (1%)	2 (1%)	0 (0%)	0 (0%)	4 (2%)	0 (0%)	4 (2%)
APR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	5 (3%)	-3 (-2%)	0 (0%)	0 (0%)	14 (8%)	0 (0%)	14 (8%)
	All	1 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (1%)	0 (0%)	2 (1%)
MAY	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	4 (2%)	0 (0%)	4 (2%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	0 (0%)	1 (0%)
JUN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-28 (-14%)	0 (0%)	-28 (-14%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	11 (8%)	0 (0%)	0 (0%)	0 (0%)	11 (8%)	0 (0%)	11 (8%)
	All	2 (1%)	0 (0%)	0 (0%)	0 (0%)	-3 (-1%)	0 (0%)	-3 (-1%)

Upstream—Clear Creek below Whiskeytown								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JUL	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-21 (-25%)	0 (0%)	-21 (-25%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	-13 (-15%)	-13 (-15%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	-2 (-2%)	-2 (-2%)	0 (0%)	0 (0%)	-7 (-8%)	0 (0%)	-7 (-8%)
AUG	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-6 (-7%)	0 (0%)	-6 (-7%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	-7 (-10%)	-7 (-10%)	9 (11%)	9 (11%)	2 (1%)	0 (0%)	-7 (-10%)
	All	-1 (-1%)	-1 (-1%)	1 (2%)	1 (2%)	-2 (-2%)	0 (0%)	-3 (-4%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)	0 (0%)	-1 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	13 (13%)	13 (13%)	0 (0%)	0 (0%)	-12 (-13%)	0 (0%)	-12 (-13%)
	All	2 (1%)	2 (1%)	0 (0%)	0 (0%)	-2 (-1%)	0 (0%)	-2 (-1%)
OCT	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	-7 (-4%)	-7 (-4%)	0 (0%)	0 (0%)	-7 (-4%)	0 (0%)	-7 (-4%)
	D	5 (3%)	5 (3%)	0 (0%)	0 (0%)	8 (5%)	0 (0%)	8 (5%)
	C	-14 (-10%)	-12 (-9%)	0 (0%)	0 (0%)	-27 (-19%)	2 (1%)	-25 (-18%)
	All	-2 (-1%)	-2 (-1%)	0 (0%)	0 (0%)	-3 (-2%)	0 (0%)	-3 (-2%)
NOV	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	-3 (-2%)	0 (0%)	-8 (-5%)	-8 (-5%)	-8 (-4%)	0 (0%)	0 (0%)
	C	-13 (-9%)	-13 (-9%)	0 (0%)	0 (0%)	-17 (-11%)	0 (0%)	-17 (-11%)
	All	-3 (-1%)	-2 (-1%)	-2 (-1%)	-2 (-1%)	-4 (-2%)	0 (0%)	-2 (-1%)
DEC	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-3 (-2%)	0 (0%)	-3 (-2%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	6 (4%)	-3 (-2%)	0 (0%)	0 (0%)	8 (5%)	0 (0%)	8 (5%)
	All	1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.1.11 Trinity River below Lewiston

Table 5E-36. Mean Monthly Flows (cfs) for Model Scenarios in the Trinity River below Lewiston, Year-Round

Upstream—Trinity River below Lewiston												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	1,547	1,630	1,700	1,708	1,573	1,581	1,614	1,518	1,457	1,484	1,641
	AN	300	300	300	341	300	300	300	300	483	483	300
	BN	300	300	300	300	300	300	300	300	464	383	300
	D	300	300	300	300	300	300	300	300	300	300	300
	C	300	300	300	300	300	300	300	287	278	275	277
	All	695	722	744	753	704	706	717	684	718	713	722
FEB	W	1,225	1,306	1,342	1,356	1,266	1,283	1,261	1,495	1,400	1,486	1,765
	AN	721	843	872	862	843	844	843	784	1,043	1,043	748
	BN	460	559	559	559	559	559	559	568	641	636	563
	D	300	300	300	300	300	300	300	300	300	300	300
	C	300	300	300	300	300	300	300	300	300	275	300
	All	682	743	758	761	730	735	728	795	816	839	875
MAR	W	1,294	1,376	1,431	1,442	1,357	1,387	1,335	1,385	1,347	1,402	1,585
	AN	475	475	475	475	475	475	475	519	519	519	519
	BN	302	302	302	302	302	302	302	300	300	300	300
	D	300	300	300	300	300	300	300	300	300	300	300
	C	300	300	300	300	300	300	300	300	300	300	300
	All	641	667	685	688	661	671	654	676	664	681	740
APR	W	639	614	623	635	614	626	622	844	844	844	844
	AN	467	467	467	467	467	467	467	513	458	458	458
	BN	508	508	508	508	508	508	508	504	504	504	504
	D	529	529	529	529	529	529	529	529	529	529	529
	C	580	580	580	580	580	580	580	580	580	580	580
	All	559	551	554	558	551	555	553	630	622	622	622
MAY	W	4,620	4,620	4,620	4,620	4,620	4,620	4,620	4,620	4,620	4,620	4,620
	AN	4,450	4,450	4,450	4,450	4,450	4,450	4,450	4,416	4,416	4,416	4,416
	BN	3,763	3,763	3,763	3,763	3,763	3,763	3,763	3,865	3,865	3,865	3,865
	D	3,216	3,216	3,216	3,216	3,216	3,216	3,216	3,216	3,216	3,216	3,216
	C	1,973	1,973	1,973	1,973	1,973	1,973	1,973	1,973	1,973	1,973	1,973
	All	3,753	3,753	3,753	3,753	3,753	3,753	3,753	3,766	3,766	3,766	3,766
JUN	W	3,560	3,560	3,560	3,560	3,560	3,560	3,560	3,560	3,560	3,560	3,560
	AN	2,663	2,663	2,663	2,663	2,663	2,663	2,663	3,188	3,188	3,188	3,188
	BN	1,767	1,767	1,767	1,767	1,767	1,767	1,767	1,767	1,767	1,767	1,767
	D	1,251	1,251	1,251	1,251	1,251	1,251	1,251	1,251	1,251	1,251	1,251
	C	783	783	783	783	783	783	783	783	783	783	783
	All	2,210	2,210	2,210	2,210	2,210	2,210	2,210	2,286	2,286	2,286	2,286

Upstream—Trinity River below Lewiston												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	1,161	1,161	1,161	1,161	1,161	1,161	1,161	1,103	1,103	1,103	1,103
	AN	1,048	1,048	1,048	1,048	1,048	1,048	1,048	1,048	1,048	1,048	1,048
	BN	916	916	916	916	916	916	916	916	916	916	916
	D	667	667	667	667	667	667	667	667	667	667	667
	C	450	450	450	450	450	450	450	413	413	417	450
	All	890	890	890	890	890	890	890	866	866	867	872
AUG	W	450	450	450	450	450	450	450	450	450	450	450
	AN	450	450	450	450	450	450	450	450	450	450	450
	BN	450	450	450	450	450	450	450	450	450	450	450
	D	450	450	450	450	450	450	450	450	450	450	450
	C	450	413	450	450	413	420	413	338	337	338	263
	All	450	445	450	450	445	446	445	434	434	434	423
SEP	W	450	450	450	450	450	450	450	450	450	450	450
	AN	450	450	450	450	450	450	450	450	450	450	450
	BN	450	450	450	450	450	450	450	450	450	450	450
	D	450	450	450	450	450	450	450	450	450	450	450
	C	413	403	373	413	365	379	382	265	259	278	267
	All	445	443	439	445	438	440	440	423	422	425	423
OCT	W	373	373	373	373	373	373	373	373	373	373	373
	AN	373	373	373	373	373	373	373	311	323	323	314
	BN	346	346	346	346	346	346	346	346	346	346	346
	D	373	352	352	373	352	352	352	346	352	352	352
	C	342	342	342	373	342	342	342	311	290	293	280
	All	364	359	359	368	359	359	359	344	344	345	342
NOV	W	510	423	510	509	478	498	510	414	385	385	300
	AN	275	300	275	300	300	300	300	275	275	275	275
	BN	300	300	300	300	300	300	300	300	300	300	300
	D	283	283	283	300	283	283	283	283	283	283	283
	C	275	275	275	300	275	275	275	225	225	225	216
	All	356	332	356	366	349	355	359	318	309	309	280
DEC	W	1,277	1,423	1,392	1,400	1,327	1,319	1,363	837	1,011	1,006	923
	AN	300	300	300	300	300	300	300	300	300	300	300
	BN	300	300	300	300	300	300	300	300	300	300	300
	D	300	300	300	300	300	300	300	300	283	283	297
	C	300	300	300	300	300	300	300	275	250	250	247
	All	610	656	646	649	626	623	637	466	514	513	489

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-37. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios in the Trinity River below Lewiston, Year-Round**

Upstream—Trinity River below Lewiston										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	83 (5%)	153 (10%)	161 (10%)	25 (2%)	34 (2%)	67 (4%)	-62 (-4%)	-34 (-2%)	122 (8%)
	AN	0 (0%)	0 (0%)	41 (14%)	0 (0%)	0 (0%)	0 (0%)	183 (61%)	183 (61%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	164 (55%)	83 (28%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-9 (-3%)	-12 (-4%)	-10 (-3%)
	All	26 (4%)	49 (7%)	57 (8%)	8 (1%)	11 (2%)	21 (3%)	34 (5%)	28 (4%)	37 (5%)
FEB	W	81 (7%)	117 (10%)	132 (11%)	41 (3%)	58 (5%)	37 (3%)	-95 (-6%)	-9 (-1%)	270 (18%)
	AN	122 (17%)	151 (21%)	141 (20%)	122 (17%)	123 (17%)	122 (17%)	260 (33%)	260 (33%)	-35 (-5%)
	BN	99 (22%)	99 (22%)	99 (22%)	99 (22%)	99 (22%)	99 (22%)	73 (13%)	68 (12%)	-5 (-1%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-25 (-8%)	0 (0%)
	All	61 (9%)	76 (11%)	79 (12%)	48 (7%)	53 (8%)	46 (7%)	20 (3%)	43 (5%)	80 (10%)
MAR	W	82 (6%)	137 (11%)	148 (11%)	63 (5%)	93 (7%)	40 (3%)	-38 (-3%)	17 (1%)	200 (14%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	26 (4%)	43 (7%)	47 (7%)	20 (3%)	29 (5%)	13 (2%)	-12 (-2%)	5 (1%)	63 (9%)
APR	W	-26 (-4%)	-16 (-3%)	-4 (-1%)	-26 (-4%)	-13 (-2%)	-17 (-3%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-54 (-11%)	-54 (-11%)	-54 (-11%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	-8 (-1%)	-5 (-1%)	-1 (0%)	-8 (-1%)	-4 (-1%)	-6 (-1%)	-8 (-1%)	-8 (-1%)	-8 (-1%)
MAY	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
JUN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Upstream—Trinity River below Lewiston										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5 (1%)	37 (9%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	5 (1%)
AUG	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	-38 (-8%)	0 (0%)	0 (0%)	-38 (-8%)	-30 (-7%)	-38 (-8%)	0 (0%)	0 (0%)	-75 (-22%)
	All	-5 (-1%)	0 (0%)	0 (0%)	-5 (-1%)	-4 (-1%)	-5 (-1%)	0 (0%)	0 (0%)	-11 (-3%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	-10 (-2%)	-39 (-10%)	0 (0%)	-47 (-11%)	-34 (-8%)	-31 (-8%)	-6 (-2%)	13 (5%)	2 (1%)
	All	-1 (0%)	-6 (-1%)	0 (0%)	-7 (-2%)	-5 (-1%)	-5 (-1%)	-1 (0%)	2 (0%)	0 (0%)
OCT	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	12 (4%)	12 (4%)	3 (1%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	-21 (-6%)	-21 (-6%)	0 (0%)	-21 (-6%)	-21 (-6%)	-21 (-6%)	6 (2%)	6 (2%)	6 (2%)
	C	0 (0%)	0 (0%)	31 (9%)	0 (0%)	0 (0%)	0 (0%)	-21 (-7%)	-18 (-6%)	-31 (-10%)
	All	-5 (-1%)	-5 (-1%)	5 (1%)	-5 (-1%)	-5 (-1%)	-5 (-1%)	0 (0%)	1 (0%)	-3 (-1%)
NOV	W	-87 (-17%)	0 (0%)	-1 (0%)	-31 (-6%)	-12 (-2%)	0 (0%)	-29 (-7%)	-29 (-7%)	-114 (-28%)
	AN	25 (9%)	0 (0%)	25 (9%)	25 (9%)	25 (9%)	25 (9%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	17 (6%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	25 (9%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-9 (-4%)
	All	-24 (-7%)	0 (0%)	11 (3%)	-6 (-2%)	0 (0%)	4 (1%)	-9 (-3%)	-9 (-3%)	-37 (-12%)
DEC	W	146 (11%)	115 (9%)	123 (10%)	50 (4%)	42 (3%)	86 (7%)	174 (21%)	169 (20%)	86 (10%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-17 (-6%)	-17 (-6%)	-3 (-1%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-25 (-9%)	-25 (-9%)	-28 (-10%)
	All	46 (8%)	36 (6%)	39 (6%)	16 (3%)	13 (2%)	27 (4%)	48 (10%)	46 (10%)	22 (5%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-38. Differences[a] (Percent Differences) (cfs) between Effects[b] in the Trinity River below Lewiston, Year-Round**

		Upstream—Trinity River below Lewiston						
Month	**Water Year Type**	**Alt 1A Effect vs. Boundary 1 Effect**	**Alt 3 Effect vs. Boundary 1 Effect**	**Alt 4A H3 Effect vs. Boundary 2 Effect**	**Alt 4A H3+ Effect vs. Boundary 2 Effect**	**Alt 8 Effect vs. Boundary 2 Effect**	**Alt 4A H4 Effect vs. Scenario 2 Effect**	**Alt 8 Effect vs. Scenario 2 Effect**
JAN	W	144 (9%)	117 (8%)	128 (8%)	119 (8%)	31 (2%)	94 (6%)	38 (2%)
	AN	-183 (-61%)	-183 (-61%)	0 (0%)	0 (0%)	0 (0%)	41 (14%)	41 (14%)
	BN	-164 (-55%)	-83 (-28%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	9 (3%)	12 (4%)	0 (0%)	0 (0%)	10 (3%)	0 (0%)	10 (3%)
	All	-8 (-1%)	-2 (0%)	40 (6%)	38 (5%)	11 (2%)	36 (5%)	20 (3%)
FEB	W	176 (13%)	90 (7%)	76 (6%)	59 (5%)	-153 (-9%)	95 (8%)	-139 (-7%)
	AN	-138 (-16%)	-138 (-16%)	29 (4%)	28 (4%)	186 (25%)	19 (3%)	177 (24%)
	BN	26 (9%)	31 (10%)	0 (0%)	0 (0%)	105 (23%)	0 (0%)	105 (23%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	25 (8%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	40 (6%)	17 (3%)	28 (4%)	23 (3%)	-3 (1%)	33 (5%)	0 (2%)
MAR	W	120 (9%)	65 (5%)	74 (6%)	44 (3%)	-63 (-4%)	107 (8%)	-52 (-3%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	38 (6%)	21 (3%)	23 (4%)	14 (2%)	-20 (-3%)	34 (5%)	-17 (-2%)
APR	W	-26 (-4%)	-26 (-4%)	9 (1%)	-4 (-1%)	-16 (-3%)	14 (2%)	-4 (-1%)
	AN	54 (11%)	54 (11%)	0 (0%)	0 (0%)	54 (11%)	0 (0%)	54 (11%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	3 (1%)	-1 (0%)	3 (0%)	4 (1%)	7 (1%)
MAY	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
JUN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Upstream—Trinity River below Lewiston								
Month	**Water Year Type**	**Alt 1A Effect vs. Boundary 1 Effect**	**Alt 3 Effect vs. Boundary 1 Effect**	**Alt 4A H3 Effect vs. Boundary 2 Effect**	**Alt 4A H3+ Effect vs. Boundary 2 Effect**	**Alt 8 Effect vs. Boundary 2 Effect**	**Alt 4A H4 Effect vs. Scenario 2 Effect**	**Alt 8 Effect vs. Scenario 2 Effect**
JUL	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	-5 (-1%)	0 (0%)	0 (0%)	-37 (-9%)	0 (0%)	-37 (-9%)
	All	0 (0%)	-1 (0%)	0 (0%)	0 (0%)	-5 (-1%)	0 (0%)	-5 (-1%)
AUG	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	-37 (-8%)	-38 (-8%)	38 (8%)	30 (7%)	75 (22%)	38 (8%)	75 (22%)
	All	-5 (-1%)	-5 (-1%)	5 (1%)	4 (1%)	11 (3%)	5 (1%)	11 (3%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	-4 (0%)	-22 (-7%)	8 (2%)	-6 (-1%)	-41 (-10%)	31 (8%)	-2 (-1%)
	All	-1 (0%)	-3 (-1%)	1 (0%)	-1 (0%)	-6 (-1%)	5 (1%)	0 (0%)
OCT	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	-12 (-4%)	-12 (-4%)	0 (0%)	0 (0%)	-3 (-1%)	0 (0%)	-3 (-1%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	-27 (-7%)	-27 (-7%)	0 (0%)	0 (0%)	-27 (-7%)	21 (6%)	-6 (-2%)
	C	21 (7%)	18 (6%)	0 (0%)	0 (0%)	31 (10%)	31 (9%)	62 (19%)
	All	-5 (-1%)	-5 (-1%)	0 (0%)	0 (0%)	-2 (0%)	9 (2%)	7 (2%)
NOV	W	-57 (-10%)	-57 (-10%)	31 (6%)	12 (2%)	114 (28%)	-1 (0%)	113 (27%)
	AN	25 (9%)	25 (9%)	-25 (-9%)	-25 (-9%)	0 (0%)	0 (0%)	25 (9%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	17 (6%)	17 (6%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	9 (4%)	25 (9%)	34 (13%)
	All	-15 (-4%)	-15 (-4%)	6 (2%)	0 (0%)	37 (12%)	7 (2%)	48 (15%)
DEC	W	-28 (-9%)	-23 (-9%)	65 (5%)	73 (6%)	29 (-1%)	37 (3%)	37 (-1%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	17 (6%)	17 (6%)	0 (0%)	0 (0%)	3 (1%)	0 (0%)	3 (1%)
	C	25 (9%)	25 (9%)	0 (0%)	0 (0%)	28 (10%)	0 (0%)	28 (10%)
	All	-2 (-3%)	0 (-2%)	21 (3%)	23 (4%)	14 (1%)	12 (2%)	17 (2%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.1.12 Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)

Table 5E-39. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River Low-Flow Channel (Upstream of Thermalito Afterbay), Year-Round

Upstream—Feather River Low-Flow Channel												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	800	800	800	800	800	800	800	800	800	800	800
	AN	800	800	800	800	800	800	800	800	800	800	800
	BN	800	800	800	800	800	800	800	800	800	800	800
	D	800	800	800	800	800	800	800	800	800	800	800
	C	800	800	800	800	800	800	800	800	800	800	800
	All	800	800	800	800	800	800	800	800	800	800	800
FEB	W	800	800	800	800	800	800	800	800	800	800	800
	AN	800	800	800	800	800	800	800	800	800	800	800
	BN	800	800	800	800	800	800	800	800	800	800	800
	D	800	800	800	800	800	800	800	800	800	800	800
	C	800	800	800	800	800	800	800	800	800	800	800
	All	800	800	800	800	800	800	800	800	800	800	800
MAR	W	800	800	800	800	800	800	800	800	800	800	800
	AN	800	800	800	800	800	800	800	800	800	800	800
	BN	800	800	800	800	800	800	800	800	800	800	800
	D	800	800	800	800	800	800	800	800	800	800	800
	C	800	800	800	800	800	800	800	797	797	797	800
	All	800	800	800	800	800	800	800	800	800	800	800
APR	W	700	700	700	700	700	700	700	700	700	700	700
	AN	700	700	700	700	700	700	700	700	700	700	700
	BN	700	700	700	700	700	700	700	700	700	700	700
	D	700	700	700	700	700	700	700	700	700	700	700
	C	700	700	700	700	700	700	700	700	700	700	700
	All	700	700	700	700	700	700	700	700	700	700	700
MAY	W	700	700	700	700	700	700	700	700	700	700	700
	AN	700	700	700	700	700	700	700	700	700	700	700
	BN	700	700	700	700	700	700	700	700	700	700	700
	D	700	700	700	700	700	700	700	700	700	700	700
	C	700	700	700	700	700	700	700	700	700	700	700
	All	700	700	700	700	700	700	700	700	700	700	700
JUN	W	700	700	700	700	700	700	700	700	700	700	700
	AN	700	700	700	700	700	700	700	700	700	700	700
	BN	700	700	700	700	700	700	700	700	700	700	700
	D	700	700	700	700	700	700	700	700	700	700	700
	C	700	700	700	700	700	700	700	700	700	700	700
	All	700	700	700	700	700	700	700	700	700	700	700

Upstream—Feather River Low-Flow Channel												
Month	**Water Year Type**	**NAA_ELT_ 2015**[a]	**B1_ELT_ 2015**	**B2_ELT_ 2015**	**S2_ELT_ 2015**	**H3_ELT_ 2015**	**H3+_ELT_ 2015**	**H4_ELT_ 2015**	**NAA_LLT**	**A1A_LLT**	**A3_LLT**	**A8_LLT**
JUL	W	700	700	700	700	700	700	700	700	700	700	700
	AN	700	700	700	700	700	700	700	700	700	700	700
	BN	700	700	700	700	700	700	700	700	700	700	700
	D	700	700	700	700	700	700	700	700	700	700	700
	C	700	700	700	700	700	700	700	700	700	700	700
	All	700	700	700	700	700	700	700	700	700	700	700
AUG	W	700	700	700	700	700	700	700	700	700	700	700
	AN	700	700	700	700	700	700	700	700	700	700	700
	BN	700	700	700	700	700	700	700	700	700	700	700
	D	700	700	700	700	700	700	700	700	700	700	700
	C	700	700	700	700	700	700	700	700	700	700	700
	All	700	700	700	700	700	700	700	700	700	700	700
SEP	W	773	773	773	773	773	773	773	773	773	773	773
	AN	773	773	773	773	773	773	773	773	773	773	773
	BN	773	773	773	773	773	773	773	773	773	773	773
	D	773	773	773	773	773	773	773	773	773	773	772
	C	773	773	773	773	773	773	773	773	773	773	773
	All	773	773	773	773	773	773	773	773	773	773	773
OCT	W	800	800	800	800	800	800	800	800	800	800	800
	AN	800	800	800	800	800	800	800	800	800	800	800
	BN	800	800	800	800	800	800	800	800	800	800	800
	D	800	800	800	800	800	800	800	800	800	800	800
	C	800	800	800	800	800	800	800	800	800	800	800
	All	800	800	800	800	800	800	800	800	800	800	800
NOV	W	800	800	800	800	800	800	800	800	800	800	800
	AN	800	800	800	800	800	800	800	800	800	800	800
	BN	800	800	800	800	800	800	800	800	800	800	800
	D	800	800	800	800	800	800	800	800	800	800	800
	C	800	800	800	800	800	800	800	800	800	800	800
	All	800	800	800	800	800	800	800	800	800	800	800
DEC	W	800	800	800	800	800	800	800	800	800	800	800
	AN	800	800	800	800	800	800	800	800	800	800	800
	BN	800	800	800	800	800	800	800	800	800	800	800
	D	800	800	800	800	800	800	800	800	800	800	800
	C	800	800	800	800	800	800	800	800	800	800	800
	All	800	800	800	800	800	800	800	800	800	800	800

[a] For definitions of each model scenario, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

Table 5E-40. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios in the Feather River Low-Flow Channel, Year-Round

Upstream—Feather River Low-Flow Channel										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
FEB	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
APR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAY	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
JUN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Upstream—Feather River Low-Flow Channel										
Month	**Water Year Type**	**Boundary 1 Effect[b]**	**Boundary 2 Effect**	**Scenario 2 Effect**	**Alt 4A H3 Effect**	**Alt 4A H3+ Effect**	**Alt 4A H4 Effect**	**Alt 1A Effect**	**Alt 3 Effect**	**Alt 8 Effect**
JUL	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
AUG	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
OCT	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
NOV	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
DEC	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-41. Differences[a] (Percent Differences) (cfs) between Effects[b] in the Feather River Low-Flow Channel, Year-Round**

Upstream—Feather River Low-Flow Channel								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
FEB	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-3 (0%)	0 (0%)	-3 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
APR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAY	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
JUN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Upstream—Feather River Low-Flow Channel								
Month	**Water Year Type**	**Alt 1A Effect vs. Boundary 1 Effect**	**Alt 3 Effect vs. Boundary 1 Effect**	**Alt 4A H3 Effect vs. Boundary 2 Effect**	**Alt 4A H3+ Effect vs. Boundary 2 Effect**	**Alt 8 Effect vs. Boundary 2 Effect**	**Alt 4A H4 Effect vs. Scenario 2 Effect**	**Alt 8 Effect vs. Scenario 2 Effect**
JUL	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
AUG	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	0 (0%)	1 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
OCT	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
NOV	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
DEC	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.
[b] For definitions of each effect, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.1.13 Feather River High-Flow Channel (at Thermalito Afterbay)

Table 5E-42. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River High-Flow Channel (at Thermalito Afterbay), Year-Round

Upstream—Feather River High-Flow Channel (at Thermalito Afterbay)												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	10,241	11,775	12,278	10,815	9,960	9,986	10,349	11,896	14,399	14,347	15,693
	AN	2,464	2,562	3,034	2,515	2,515	2,515	2,584	2,838	4,107	4,175	6,555
	BN	1,468	1,484	1,976	1,716	1,468	1,468	1,467	1,441	1,584	1,679	3,568
	D	1,394	1,394	1,394	1,394	1,394	1,394	1,394	1,459	2,168	2,414	2,626
	C	1,175	1,176	1,175	1,175	1,227	1,226	1,219	1,648	1,403	1,312	1,711
	All	4,336	4,840	5,152	4,568	4,262	4,270	4,395	4,995	6,118	6,168	7,371
FEB	W	11,892	13,719	14,634	12,302	13,131	12,817	11,994	14,787	16,622	16,515	15,609
	AN	3,948	6,568	6,800	4,216	4,554	4,477	4,906	5,809	8,138	7,670	10,262
	BN	1,463	2,402	2,314	1,955	1,457	1,457	1,814	1,897	3,281	3,059	5,745
	D	1,556	1,556	1,556	1,557	1,556	1,556	1,556	1,659	1,866	2,207	5,295
	C	1,543	1,402	1,443	1,425	1,392	1,391	1,391	1,482	1,829	1,560	2,733
	All	5,166	6,268	6,583	5,402	5,624	5,513	5,376	6,444	7,699	7,594	8,994
MAR	W	13,211	13,984	14,503	13,512	13,613	13,664	13,509	14,772	14,988	15,093	15,495
	AN	7,031	8,244	9,236	8,193	7,861	8,085	7,604	8,568	10,417	10,085	10,896
	BN	1,704	1,904	2,641	2,331	1,556	1,407	1,948	1,985	2,333	2,275	6,571
	D	1,455	1,499	1,595	1,486	1,508	1,508	1,484	1,762	2,172	2,311	6,545
	C	1,494	1,601	1,444	1,423	1,544	1,524	1,522	1,634	1,667	1,846	3,365
	All	6,047	6,529	6,963	6,416	6,290	6,310	6,277	6,902	7,396	7,427	9,559
APR	W	6,655	6,652	6,665	11,297	6,652	6,652	9,281	6,408	6,389	6,442	10,993
	AN	1,884	2,237	2,245	11,966	2,238	2,238	5,510	2,170	2,504	2,351	9,113
	BN	1,132	1,614	1,182	9,128	1,382	1,184	6,469	1,203	2,152	2,049	8,015
	D	1,379	1,888	1,287	3,250	1,427	1,409	1,756	1,470	2,681	2,369	5,647
	C	1,308	1,511	1,388	1,990	1,468	1,477	1,495	1,407	1,903	1,887	2,630
	All	3,073	3,348	3,129	7,896	3,201	3,164	5,458	3,084	3,627	3,533	7,812
MAY	W	6,406	6,696	6,396	6,776	6,516	6,379	9,311	4,740	5,415	5,280	9,237
	AN	3,396	4,134	3,338	3,540	4,052	3,360	6,422	3,101	4,350	4,176	6,578
	BN	1,366	2,177	1,349	5,171	1,563	1,396	3,802	1,749	3,667	3,007	5,348
	D	2,034	2,361	1,605	3,576	2,120	1,908	2,071	2,223	2,552	2,628	3,539
	C	1,755	1,802	1,722	2,133	1,771	1,756	1,768	1,790	1,762	1,803	2,332
	All	3,465	3,882	3,351	4,646	3,651	3,428	5,255	3,005	3,798	3,639	5,922
JUN	W	3,712	5,694	3,471	2,981	4,754	4,693	3,199	4,211	5,281	5,284	4,456
	AN	3,189	5,403	1,996	1,927	5,475	5,119	3,019	3,930	6,278	5,795	2,808
	BN	3,615	4,117	1,956	1,625	4,391	5,215	2,699	3,552	5,456	4,904	2,456
	D	3,446	3,595	2,671	2,292	3,163	3,458	2,730	3,284	3,496	3,341	2,032
	C	2,259	2,285	2,347	2,311	2,269	2,267	2,383	2,666	2,563	2,570	2,232
	All	3,348	4,423	2,656	2,346	4,085	4,218	2,865	3,628	4,667	4,470	3,016

Upstream—Feather River High-Flow Channel (at Thermalito Afterbay)												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	7,856	7,465	7,128	6,487	7,722	8,205	7,130	8,577	6,392	6,557	3,245
	AN	9,486	8,859	7,917	6,198	9,424	9,585	9,432	9,488	7,576	7,751	2,910
	BN	8,967	7,774	6,449	4,644	8,905	9,022	8,192	8,833	6,216	6,779	2,168
	D	6,618	7,694	5,585	3,868	5,844	6,043	4,904	8,099	4,420	4,501	1,931
	C	3,027	3,551	2,592	2,457	3,212	2,742	3,304	5,217	2,936	3,353	2,948
	All	7,306	7,199	6,125	4,965	7,101	7,272	6,600	8,157	5,597	5,850	2,680
AUG	W	5,871	5,088	5,601	5,817	5,010	5,654	3,898	6,228	4,584	4,552	2,046
	AN	7,608	5,499	5,704	5,423	6,478	7,200	5,163	7,346	5,708	5,586	2,367
	BN	6,705	4,263	4,580	4,678	5,655	5,548	3,080	6,868	4,251	5,216	1,994
	D	2,109	3,400	4,036	3,227	2,913	2,951	2,929	4,990	3,859	3,441	1,724
	C	1,522	1,829	2,218	1,818	1,751	1,736	2,231	2,163	2,034	2,071	1,668
	All	4,805	4,160	4,603	4,411	4,398	4,695	3,487	5,634	4,159	4,210	1,958
SEP	W	9,183	1,851	5,948	5,769	6,995	6,964	6,312	8,327	1,172	1,323	3,680
	AN	7,989	2,347	5,386	4,438	5,521	5,828	4,655	6,899	1,902	2,299	1,922
	BN	4,312	1,598	3,081	2,755	1,569	1,518	1,226	3,068	1,455	1,569	1,044
	D	1,538	1,211	2,918	1,318	1,155	1,108	1,120	1,052	1,658	1,494	984
	C	1,290	1,496	2,164	1,605	1,606	1,552	1,430	1,345	1,744	1,730	1,193
	All	5,344	1,688	4,157	3,473	3,783	3,790	3,347	4,601	1,518	1,605	2,017
OCT	W	2,806	2,959	2,186	2,096	3,003	2,928	2,544	3,051	3,260	3,421	2,021
	AN	2,547	2,630	1,973	1,867	2,601	2,583	2,266	2,741	3,303	3,415	2,106
	BN	2,704	2,461	1,939	1,960	2,866	2,866	2,813	2,862	3,043	2,946	1,899
	D	2,584	2,775	1,724	1,569	2,772	2,728	2,248	2,652	3,220	3,112	1,834
	C	1,816	2,326	1,438	1,273	2,211	2,058	2,199	2,102	3,506	3,536	1,355
	All	2,557	2,693	1,902	1,803	2,754	2,696	2,434	2,747	3,256	3,288	1,874
NOV	W	2,629	2,692	2,974	2,575	2,569	2,502	2,563	2,470	2,747	2,780	1,934
	AN	1,976	1,793	2,206	1,763	1,891	1,894	1,822	2,119	1,915	1,944	1,711
	BN	1,841	1,738	1,747	1,708	1,803	1,826	1,893	1,900	1,854	1,836	1,496
	D	1,645	1,693	1,545	1,516	1,757	1,757	1,587	1,664	1,811	1,937	1,580
	C	1,455	1,478	1,317	1,329	1,489	1,420	1,566	1,876	2,016	1,998	1,405
	All	2,011	2,000	2,096	1,893	2,003	1,976	1,980	2,058	2,160	2,197	1,671
DEC	W	4,111	5,145	5,402	4,435	4,382	4,193	4,555	3,948	5,927	5,987	5,338
	AN	2,684	2,210	2,892	2,401	3,157	2,843	2,666	3,344	4,443	4,499	1,655
	BN	2,179	1,790	1,823	1,654	1,929	1,921	1,934	2,102	2,748	2,907	1,429
	D	2,034	2,095	1,787	1,778	2,366	2,176	2,269	2,229	2,690	2,739	1,567
	C	1,794	1,447	1,381	1,366	1,481	1,472	1,471	1,694	2,889	2,542	1,299
	All	2,777	2,932	3,042	2,630	2,917	2,767	2,878	2,837	4,012	4,026	2,713

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

Table 5E-43. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios in the Feather River High-Flow Channel (at Thermalito Afterbay), Year-Round

Upstream—Feather River High-Flow Channel (at Thermalito Afterbay)										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	1,534 (15%)	2,037 (20%)	574 (6%)	-281 (-3%)	-256 (-2%)	108 (1%)	2,503 (21%)	2,451 (21%)	3,798 (32%)
	AN	97 (4%)	570 (23%)	51 (2%)	51 (2%)	51 (2%)	120 (5%)	1,269 (45%)	1,337 (47%)	3,717 (131%)
	BN	17 (1%)	508 (35%)	249 (17%)	0 (0%)	0 (0%)	0 (0%)	143 (10%)	238 (17%)	2,127 (148%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	709 (49%)	955 (65%)	1,167 (80%)
	C	1 (0%)	0 (0%)	0 (0%)	52 (4%)	51 (4%)	44 (4%)	-245 (-15%)	-336 (-20%)	63 (4%)
	All	504 (12%)	816 (19%)	232 (5%)	-74 (-2%)	-66 (-2%)	58 (1%)	1,124 (22%)	1,174 (24%)	2,376 (48%)
FEB	W	1,827 (15%)	2,742 (23%)	410 (3%)	1,238 (10%)	924 (8%)	102 (1%)	1,835 (12%)	1,727 (12%)	822 (6%)
	AN	2,620 (66%)	2,852 (72%)	268 (7%)	606 (15%)	529 (13%)	958 (24%)	2,329 (40%)	1,862 (32%)	4,453 (77%)
	BN	939 (64%)	851 (58%)	493 (34%)	-6 (0%)	-6 (0%)	352 (24%)	1,384 (73%)	1,163 (61%)	3,848 (203%)
	D	0 (0%)	0 (0%)	1 (0%)	0 (0%)	0 (0%)	0 (0%)	206 (12%)	548 (33%)	3,636 (219%)
	C	-142 (-9%)	-100 (-6%)	-118 (-8%)	-152 (-10%)	-152 (-10%)	-152 (-10%)	347 (23%)	79 (5%)	1,251 (84%)
	All	1,102 (21%)	1,417 (27%)	236 (5%)	458 (9%)	347 (7%)	210 (4%)	1,255 (19%)	1,150 (18%)	2,551 (40%)
MAR	W	773 (6%)	1,292 (10%)	301 (2%)	403 (3%)	453 (3%)	298 (2%)	216 (1%)	321 (2%)	723 (5%)
	AN	1,214 (17%)	2,205 (31%)	1,162 (17%)	831 (12%)	1,054 (15%)	574 (8%)	1,849 (22%)	1,518 (18%)	2,328 (27%)
	BN	200 (12%)	937 (55%)	627 (37%)	-148 (-9%)	-297 (-17%)	244 (14%)	348 (18%)	291 (15%)	4,587 (231%)
	D	43 (3%)	140 (10%)	30 (2%)	53 (4%)	53 (4%)	29 (2%)	410 (23%)	550 (31%)	4,783 (271%)
	C	107 (7%)	-50 (-3%)	-72 (-5%)	50 (3%)	29 (2%)	28 (2%)	34 (2%)	212 (13%)	1,731 (106%)
	All	482 (8%)	916 (15%)	369 (6%)	243 (4%)	263 (4%)	230 (4%)	493 (7%)	525 (8%)	2,656 (38%)
APR	W	-2 (0%)	10 (0%)	4,642 (70%)	-2 (0%)	-2 (0%)	2,626 (39%)	-19 (0%)	34 (1%)	4,584 (72%)
	AN	353 (19%)	361 (19%)	10,083 (535%)	354 (19%)	354 (19%)	3,626 (192%)	333 (15%)	180 (8%)	6,943 (320%)
	BN	482 (43%)	50 (4%)	7,996 (706%)	250 (22%)	52 (5%)	5,337 (471%)	949 (79%)	846 (70%)	6,811 (566%)
	D	508 (37%)	-92 (-7%)	1,871 (136%)	48 (3%)	30 (2%)	376 (27%)	1,211 (82%)	899 (61%)	4,177 (284%)
	C	203 (15%)	79 (6%)	682 (52%)	159 (12%)	169 (13%)	187 (14%)	495 (35%)	480 (34%)	1,223 (87%)
	All	274 (9%)	56 (2%)	4,823 (157%)	128 (4%)	91 (3%)	2,384 (78%)	543 (18%)	449 (15%)	4,728 (153%)
MAY	W	290 (5%)	-11 (0%)	369 (6%)	110 (2%)	-27 (0%)	2,905 (45%)	675 (14%)	540 (11%)	4,497 (95%)
	AN	738 (22%)	-58 (-2%)	144 (4%)	655 (19%)	-37 (-1%)	3,026 (89%)	1,249 (40%)	1,074 (35%)	3,476 (112%)
	BN	811 (59%)	-16 (-1%)	3,805 (279%)	198 (14%)	30 (2%)	2,437 (178%)	1,919 (110%)	1,258 (72%)	3,599 (206%)
	D	327 (16%)	-429 (-21%)	1,543 (76%)	86 (4%)	-126 (-6%)	37 (2%)	328 (15%)	404 (18%)	1,315 (59%)
	C	47 (3%)	-34 (-2%)	378 (22%)	16 (1%)	1 (0%)	13 (1%)	-28 (-2%)	14 (1%)	543 (30%)
	All	417 (12%)	-114 (-3%)	1,182 (34%)	186 (5%)	-36 (-1%)	1,790 (52%)	793 (26%)	634 (21%)	2,917 (97%)
JUN	W	1,982 (53%)	-242 (-7%)	-732 (-20%)	1,042 (28%)	981 (26%)	-513 (-14%)	1,070 (25%)	1,073 (25%)	246 (6%)
	AN	2,214 (69%)	-1,193 (-37%)	-1,262 (-40%)	2,286 (72%)	1,931 (61%)	-169 (-5%)	2,349 (60%)	1,865 (47%)	-1,122 (-29%)
	BN	502 (14%)	-1,658 (-46%)	-1,989 (-55%)	776 (21%)	1,600 (44%)	-915 (-25%)	1,904 (54%)	1,352 (38%)	-1,095 (-31%)
	D	149 (4%)	-775 (-22%)	-1,154 (-33%)	-283 (-8%)	13 (0%)	-716 (-21%)	212 (6%)	57 (2%)	-1,251 (-38%)
	C	26 (1%)	88 (4%)	51 (2%)	10 (0%)	7 (0%)	123 (5%)	-103 (-4%)	-96 (-4%)	-434 (-16%)
	All	1,075 (32%)	-692 (-21%)	-1,002 (-30%)	737 (22%)	870 (26%)	-483 (-14%)	1,040 (29%)	843 (23%)	-612 (-17%)

Upstream—Feather River High-Flow Channel (at Thermalito Afterbay)										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	-391 (-5%)	-729 (-9%)	-1,369 (-17%)	-134 (-2%)	348 (4%)	-727 (-9%)	-2,185 (-25%)	-2,020 (-24%)	-5,333 (-62%)
	AN	-627 (-7%)	-1,570 (-17%)	-3,288 (-35%)	-62 (-1%)	98 (1%)	-54 (-1%)	-1,912 (-20%)	-1,737 (-18%)	-6,578 (-69%)
	BN	-1,193 (-13%)	-2,518 (-28%)	-4,323 (-48%)	-63 (-1%)	55 (1%)	-775 (-9%)	-2,616 (-30%)	-2,053 (-23%)	-6,664 (-75%)
	D	1,076 (16%)	-1,033 (-16%)	-2,750 (-42%)	-774 (-12%)	-574 (-9%)	-1,714 (-26%)	-3,678 (-45%)	-3,597 (-44%)	-6,168 (-76%)
	C	524 (17%)	-434 (-14%)	-570 (-19%)	186 (6%)	-285 (-9%)	277 (9%)	-2,281 (-44%)	-1,864 (-36%)	-2,269 (-43%)
	All	-107 (-1%)	-1,181 (-16%)	-2,341 (-32%)	-205 (-3%)	-33 (0%)	-706 (-10%)	-2,561 (-31%)	-2,308 (-28%)	-5,477 (-67%)
AUG	W	-783 (-13%)	-269 (-5%)	-53 (-1%)	-861 (-15%)	-217 (-4%)	-1,973 (-34%)	-1,644 (-26%)	-1,676 (-27%)	-4,182 (-67%)
	AN	-2,110 (-28%)	-1,905 (-25%)	-2,185 (-29%)	-1,131 (-15%)	-409 (-5%)	-2,445 (-32%)	-1,637 (-22%)	-1,760 (-24%)	-4,978 (-68%)
	BN	-2,441 (-36%)	-2,124 (-32%)	-2,027 (-30%)	-1,050 (-16%)	-1,156 (-17%)	-3,624 (-54%)	-2,617 (-38%)	-1,652 (-24%)	-4,874 (-71%)
	D	1,290 (61%)	1,927 (91%)	1,118 (53%)	803 (38%)	841 (40%)	819 (39%)	-1,131 (-23%)	-1,549 (-31%)	-3,267 (-65%)
	C	307 (20%)	697 (46%)	296 (19%)	229 (15%)	214 (14%)	709 (47%)	-129 (-6%)	-92 (-4%)	-495 (-23%)
	All	-646 (-13%)	-202 (-4%)	-394 (-8%)	-408 (-8%)	-110 (-2%)	-1,319 (-27%)	-1,475 (-26%)	-1,425 (-25%)	-3,676 (-65%)
SEP	W	-7,332 (-80%)	-3,236 (-35%)	-3,414 (-37%)	-2,188 (-24%)	-2,219 (-24%)	-2,871 (-31%)	-7,155 (-86%)	-7,004 (-84%)	-4,647 (-56%)
	AN	-5,642 (-71%)	-2,604 (-33%)	-3,551 (-44%)	-2,469 (-31%)	-2,161 (-27%)	-3,334 (-42%)	-4,997 (-72%)	-4,601 (-67%)	-4,977 (-72%)
	BN	-2,714 (-63%)	-1,232 (-29%)	-1,558 (-36%)	-2,743 (-64%)	-2,794 (-65%)	-3,086 (-72%)	-1,613 (-53%)	-1,499 (-49%)	-2,024 (-66%)
	D	-327 (-21%)	1,380 (90%)	-220 (-14%)	-383 (-25%)	-430 (-28%)	-418 (-27%)	606 (58%)	442 (42%)	-68 (-7%)
	C	206 (16%)	874 (68%)	315 (24%)	316 (25%)	262 (20%)	139 (11%)	399 (30%)	385 (29%)	-152 (-11%)
	All	-3,656 (-68%)	-1,186 (-22%)	-1,870 (-35%)	-1,561 (-29%)	-1,553 (-29%)	-1,997 (-37%)	-3,084 (-67%)	-2,997 (-65%)	-2,584 (-56%)
OCT	W	153 (5%)	-621 (-22%)	-710 (-25%)	197 (7%)	122 (4%)	-263 (-9%)	209 (7%)	370 (12%)	-1,030 (-34%)
	AN	83 (3%)	-574 (-23%)	-680 (-27%)	54 (2%)	36 (1%)	-281 (-11%)	562 (20%)	673 (25%)	-635 (-23%)
	BN	-243 (-9%)	-765 (-28%)	-744 (-28%)	162 (6%)	162 (6%)	109 (4%)	181 (6%)	84 (3%)	-963 (-34%)
	D	191 (7%)	-859 (-33%)	-1,015 (-39%)	188 (7%)	144 (6%)	-336 (-13%)	568 (21%)	460 (17%)	-819 (-31%)
	C	509 (28%)	-379 (-21%)	-543 (-30%)	395 (22%)	242 (13%)	383 (21%)	1,404 (67%)	1,434 (68%)	-747 (-36%)
	All	135 (5%)	-655 (-26%)	-754 (-29%)	197 (8%)	138 (5%)	-123 (-5%)	509 (19%)	541 (20%)	-873 (-32%)
NOV	W	63 (2%)	345 (13%)	-54 (-2%)	-60 (-2%)	-127 (-5%)	-66 (-3%)	277 (11%)	310 (13%)	-536 (-22%)
	AN	-184 (-9%)	229 (12%)	-213 (-11%)	-85 (-4%)	-83 (-4%)	-154 (-8%)	-204 (-10%)	-175 (-8%)	-409 (-19%)
	BN	-103 (-6%)	-94 (-5%)	-133 (-7%)	-38 (-2%)	-14 (-1%)	52 (3%)	-47 (-2%)	-65 (-3%)	-405 (-21%)
	D	47 (3%)	-100 (-6%)	-130 (-8%)	112 (7%)	112 (7%)	-58 (-4%)	147 (9%)	273 (16%)	-84 (-5%)
	C	23 (2%)	-138 (-9%)	-126 (-9%)	34 (2%)	-35 (-2%)	112 (8%)	140 (7%)	122 (7%)	-470 (-25%)
	All	-11 (-1%)	85 (4%)	-118 (-6%)	-8 (0%)	-35 (-2%)	-31 (-2%)	103 (5%)	139 (7%)	-386 (-19%)
DEC	W	1,034 (25%)	1,291 (31%)	323 (8%)	271 (7%)	82 (2%)	444 (11%)	1,979 (50%)	2,039 (52%)	1,390 (35%)
	AN	-475 (-18%)	208 (8%)	-284 (-11%)	473 (18%)	159 (6%)	-18 (-1%)	1,099 (33%)	1,155 (35%)	-1,688 (-50%)
	BN	-389 (-18%)	-356 (-16%)	-525 (-24%)	-250 (-11%)	-258 (-12%)	-245 (-11%)	646 (31%)	806 (38%)	-673 (-32%)
	D	62 (3%)	-246 (-12%)	-256 (-13%)	332 (16%)	143 (7%)	235 (12%)	461 (21%)	510 (23%)	-662 (-30%)
	C	-347 (-19%)	-413 (-23%)	-429 (-24%)	-313 (-17%)	-323 (-18%)	-324 (-18%)	1,195 (71%)	848 (50%)	-395 (-23%)
	All	155 (6%)	264 (10%)	-147 (-5%)	140 (5%)	-11 (0%)	100 (4%)	1,175 (41%)	1,189 (42%)	-124 (-4%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-44. Differences[a] (Percent Differences) (cfs) between Effects[b] in the Feather River High-Flow Channel (at Thermalito Afterbay), Year-Round**

Upstream—Feather River High-Flow Channel (at Thermalito Afterbay)								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	-970 (-6%)	-918 (-6%)	2,318 (23%)	2,293 (22%)	-1,761 (-12%)	466 (5%)	-3,224 (-26%)
	AN	-1,171 (-41%)	-1,239 (-43%)	519 (21%)	519 (21%)	-3,147 (-108%)	-69 (-3%)	-3,666 (-129%)
	BN	-126 (-9%)	-221 (-15%)	508 (35%)	508 (35%)	-1,619 (-113%)	249 (17%)	-1,878 (-131%)
	D	-709 (-49%)	-955 (-65%)	0 (0%)	0 (0%)	-1,167 (-80%)	0 (0%)	-1,167 (-80%)
	C	247 (15%)	337 (20%)	-52 (-4%)	-51 (-4%)	-63 (-4%)	-44 (-4%)	-63 (-4%)
	All	-620 (-11%)	-670 (-12%)	890 (21%)	882 (20%)	-1,560 (-29%)	174 (4%)	-2,145 (-42%)
FEB	W	-8 (3%)	99 (4%)	1,503 (13%)	1,817 (15%)	1,919 (17%)	308 (3%)	-413 (-2%)
	AN	291 (26%)	758 (34%)	2,245 (57%)	2,323 (59%)	-1,601 (-4%)	-690 (-17%)	-4,185 (-70%)
	BN	-445 (-9%)	-224 (3%)	856 (59%)	856 (59%)	-2,997 (-145%)	141 (10%)	-3,356 (-169%)
	D	-207 (-12%)	-548 (-33%)	0 (0%)	0 (0%)	-3,636 (-219%)	1 (0%)	-3,635 (-219%)
	C	-489 (-33%)	-220 (-14%)	52 (3%)	52 (3%)	-1,351 (-91%)	34 (2%)	-1,369 (-92%)
	All	-153 (2%)	-48 (3%)	959 (19%)	1,070 (21%)	-1,133 (-12%)	26 (0%)	-2,315 (-35%)
MAR	W	557 (4%)	452 (4%)	890 (7%)	839 (6%)	569 (5%)	4 (0%)	-422 (-3%)
	AN	-635 (-4%)	-304 (0%)	1,375 (20%)	1,151 (16%)	-122 (4%)	589 (8%)	-1,165 (-11%)
	BN	-148 (-6%)	-91 (-3%)	1,085 (64%)	1,234 (72%)	-3,650 (-176%)	383 (22%)	-3,960 (-194%)
	D	-367 (-20%)	-506 (-28%)	87 (6%)	87 (6%)	-4,643 (-262%)	2 (0%)	-4,753 (-269%)
	C	73 (5%)	-105 (-6%)	-100 (-7%)	-80 (-5%)	-1,781 (-109%)	-99 (-7%)	-1,803 (-111%)
	All	-11 (1%)	-43 (0%)	673 (11%)	653 (11%)	-1,741 (-23%)	139 (2%)	-2,288 (-32%)
APR	W	17 (0%)	-36 (-1%)	13 (0%)	13 (0%)	-4,574 (-71%)	2,016 (30%)	58 (-2%)
	AN	20 (3%)	173 (10%)	7 (0%)	7 (0%)	-6,582 (-301%)	6,456 (343%)	3,140 (215%)
	BN	-467 (-36%)	-363 (-28%)	-200 (-18%)	-2 (0%)	-6,762 (-562%)	2,659 (235%)	1,184 (140%)
	D	-702 (-45%)	-391 (-24%)	-140 (-10%)	-122 (-9%)	-4,269 (-291%)	1,495 (108%)	-2,306 (-148%)
	C	-293 (-20%)	-277 (-19%)	-80 (-6%)	-89 (-7%)	-1,144 (-81%)	495 (38%)	-541 (-35%)
	All	-269 (-9%)	-175 (-6%)	-72 (-2%)	-35 (-1%)	-4,672 (-152%)	2,439 (79%)	94 (4%)
MAY	W	-385 (-10%)	-250 (-7%)	-121 (-2%)	17 (0%)	-4,507 (-95%)	-2,535 (-40%)	-4,127 (-89%)
	AN	-511 (-19%)	-336 (-13%)	-713 (-21%)	-21 (-1%)	-3,534 (-114%)	-2,882 (-85%)	-3,332 (-108%)
	BN	-1,108 (-50%)	-447 (-13%)	-214 (-16%)	-47 (-3%)	-3,616 (-207%)	1,369 (100%)	206 (73%)
	D	-1 (1%)	-77 (-2%)	-515 (-25%)	-303 (-15%)	-1,744 (-80%)	1,505 (74%)	227 (17%)
	C	75 (4%)	33 (2%)	-49 (-3%)	-34 (-2%)	-577 (-32%)	365 (21%)	-165 (-9%)
	All	-375 (-14%)	-217 (-9%)	-300 (-9%)	-77 (-2%)	-3,031 (-100%)	-608 (-18%)	-1,735 (-63%)
JUN	W	912 (28%)	909 (28%)	-1,284 (-35%)	-1,222 (-33%)	-487 (-12%)	-219 (-6%)	-978 (-26%)
	AN	-134 (10%)	349 (22%)	-3,479 (-109%)	-3,123 (-98%)	-71 (-9%)	-1,093 (-34%)	-140 (-11%)
	BN	-1,402 (-40%)	-850 (-24%)	-2,434 (-67%)	-3,258 (-90%)	-563 (-15%)	-1,074 (-30%)	-894 (-24%)
	D	-64 (-2%)	92 (3%)	-492 (-14%)	-787 (-23%)	477 (16%)	-438 (-13%)	97 (5%)
	C	129 (5%)	122 (5%)	77 (3%)	80 (4%)	522 (20%)	-72 (-3%)	486 (19%)
	All	35 (3%)	232 (9%)	-1,428 (-43%)	-1,562 (-47%)	-80 (-4%)	-519 (-16%)	-391 (-13%)

Upstream—Feather River High-Flow Channel (at Thermalito Afterbay)								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JUL	W	1,794 (20%)	1,629 (19%)	-594 (-8%)	-1,077 (-14%)	4,604 (53%)	-642 (-8%)	3,963 (45%)
	AN	1,285 (14%)	1,110 (12%)	-1,508 (-16%)	-1,668 (-18%)	5,009 (53%)	-3,234 (-34%)	3,290 (35%)
	BN	1,423 (16%)	860 (10%)	-2,455 (-27%)	-2,573 (-29%)	4,147 (47%)	-3,548 (-40%)	2,342 (27%)
	D	4,755 (62%)	4,673 (61%)	-259 (-4%)	-459 (-7%)	5,135 (61%)	-1,036 (-16%)	3,418 (35%)
	C	2,805 (61%)	2,388 (53%)	-620 (-20%)	-150 (-5%)	1,835 (29%)	-848 (-28%)	1,699 (25%)
	All	2,454 (30%)	2,201 (27%)	-976 (-13%)	-1,148 (-16%)	4,296 (51%)	-1,634 (-22%)	3,137 (35%)
AUG	W	861 (13%)	893 (14%)	591 (10%)	-53 (-1%)	3,913 (63%)	1,920 (33%)	4,129 (66%)
	AN	-472 (-5%)	-350 (-4%)	-774 (-10%)	-1,496 (-20%)	3,073 (43%)	260 (3%)	2,793 (39%)
	BN	176 (2%)	-789 (-12%)	-1,074 (-16%)	-968 (-14%)	2,750 (39%)	1,598 (24%)	2,847 (41%)
	D	2,421 (84%)	2,839 (92%)	1,124 (53%)	1,086 (51%)	5,193 (157%)	298 (14%)	4,384 (118%)
	C	436 (26%)	399 (24%)	467 (31%)	482 (32%)	1,191 (69%)	-413 (-27%)	791 (42%)
	All	829 (13%)	779 (12%)	206 (4%)	-92 (-2%)	3,474 (61%)	925 (19%)	3,282 (57%)
SEP	W	-178 (6%)	-329 (4%)	-1,048 (-11%)	-1,016 (-11%)	1,411 (21%)	-543 (-6%)	1,233 (19%)
	AN	-645 (2%)	-1,042 (-4%)	-135 (-2%)	-442 (-6%)	2,373 (40%)	-217 (-3%)	1,426 (28%)
	BN	-1,101 (-10%)	-1,215 (-14%)	1,512 (35%)	1,563 (36%)	793 (37%)	1,529 (35%)	467 (30%)
	D	-934 (-79%)	-769 (-63%)	1,762 (115%)	1,810 (118%)	1,448 (96%)	198 (13%)	-152 (-8%)
	C	-194 (-14%)	-179 (-13%)	557 (43%)	612 (47%)	1,026 (79%)	176 (14%)	467 (36%)
	All	-572 (-1%)	-659 (-3%)	375 (7%)	367 (7%)	1,398 (34%)	126 (2%)	714 (21%)
OCT	W	-56 (-1%)	-217 (-7%)	-818 (-29%)	-742 (-26%)	410 (12%)	-447 (-16%)	320 (8%)
	AN	-479 (-17%)	-591 (-21%)	-627 (-25%)	-610 (-24%)	61 (1%)	-399 (-16%)	-45 (-4%)
	BN	-424 (-15%)	-328 (-12%)	-927 (-34%)	-927 (-34%)	198 (5%)	-854 (-32%)	219 (6%)
	D	-377 (-14%)	-269 (-10%)	-1,048 (-41%)	-1,003 (-39%)	-41 (-2%)	-679 (-26%)	-196 (-8%)
	C	-895 (-39%)	-925 (-40%)	-774 (-43%)	-621 (-34%)	368 (15%)	-926 (-51%)	204 (6%)
	All	-374 (-13%)	-406 (-14%)	-853 (-33%)	-794 (-31%)	218 (6%)	-631 (-25%)	119 (2%)
NOV	W	-214 (-9%)	-247 (-10%)	405 (15%)	471 (18%)	881 (35%)	12 (0%)	482 (20%)
	AN	20 (0%)	-8 (-1%)	314 (16%)	312 (16%)	638 (31%)	-59 (-3%)	195 (8%)
	BN	-57 (-3%)	-39 (-2%)	-56 (-3%)	-80 (-4%)	311 (16%)	-185 (-10%)	272 (14%)
	D	-100 (-6%)	-225 (-14%)	-212 (-13%)	-212 (-13%)	-16 (-1%)	-71 (-4%)	-46 (-3%)
	C	-117 (-6%)	-99 (-5%)	-172 (-12%)	-103 (-7%)	333 (16%)	-238 (-16%)	344 (16%)
	All	-114 (-6%)	-150 (-7%)	93 (5%)	120 (6%)	471 (23%)	-87 (-4%)	268 (13%)
DEC	W	-945 (-25%)	-1,005 (-27%)	1,020 (25%)	1,209 (29%)	-99 (-4%)	-120 (-3%)	-1,066 (-27%)
	AN	-1,574 (-51%)	-1,630 (-52%)	-265 (-10%)	49 (2%)	1,896 (58%)	-265 (-10%)	1,405 (40%)
	BN	-1,035 (-49%)	-1,195 (-56%)	-106 (-5%)	-98 (-4%)	317 (16%)	-279 (-13%)	149 (8%)
	D	-400 (-18%)	-448 (-20%)	-579 (-28%)	-389 (-19%)	416 (18%)	-491 (-24%)	406 (17%)
	C	-1,542 (-90%)	-1,195 (-69%)	-100 (-6%)	-90 (-5%)	-19 (0%)	-105 (-6%)	-34 (-1%)
	All	-1,020 (-36%)	-1,034 (-36%)	125 (4%)	275 (10%)	389 (14%)	-248 (-9%)	-23 (-1%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.1.14 Feather River at Confluence with Sacramento River

Table 5E-45. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at Confluence with Sacramento River, Year-Round

Upstream—Feather River at Confluence with Sacramento River												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	23,573	25,343	25,679	24,225	23,405	23,322	23,790	26,106	28,604	28,552	29,850
	AN	10,800	11,095	11,372	10,847	10,901	10,851	10,985	11,953	13,232	13,291	15,646
	BN	5,449	5,715	5,993	5,754	5,546	5,453	5,551	5,575	5,715	5,821	7,683
	D	4,310	4,492	4,367	4,368	4,359	4,314	4,384	4,412	5,143	5,375	5,543
	C	3,360	3,557	3,433	3,473	3,499	3,413	3,513	3,837	3,587	3,512	3,873
	All	11,423	12,142	12,291	11,718	11,432	11,360	11,575	12,509	13,636	13,686	14,850
FEB	W	27,682	29,734	30,490	28,167	29,026	28,613	27,894	31,065	32,896	32,789	31,814
	AN	12,274	15,105	15,125	12,533	12,921	12,805	13,264	14,599	16,932	16,463	18,989
	BN	7,282	8,566	8,227	7,886	7,459	7,285	7,818	7,892	9,278	9,057	11,663
	D	4,312	4,534	4,315	4,318	4,359	4,318	4,366	4,436	4,645	4,998	8,022
	C	3,186	3,225	3,138	3,145	3,105	3,028	3,126	3,096	3,452	3,183	4,341
	All	13,230	14,568	14,692	13,520	13,779	13,581	13,536	14,761	16,017	15,915	17,254
MAR	W	24,832	25,810	26,170	25,193	25,322	25,290	25,221	26,784	27,009	27,115	27,442
	AN	19,643	21,073	21,833	20,795	20,511	20,697	20,285	21,490	23,340	23,011	23,746
	BN	6,593	6,995	7,558	7,272	6,536	6,300	6,944	6,882	7,254	7,180	11,360
	D	4,635	4,869	4,806	4,701	4,745	4,692	4,731	4,940	5,336	5,482	9,655
	C	2,742	3,029	2,751	2,751	2,858	2,774	2,865	2,756	2,844	2,983	4,490
	All	13,293	13,974	14,241	13,707	13,606	13,559	13,609	14,300	14,806	14,831	16,892
APR	W	16,054	16,055	16,059	20,687	16,054	16,053	18,679	15,852	15,845	15,897	20,381
	AN	9,378	9,731	9,727	19,447	9,732	9,730	13,004	9,585	9,924	9,771	16,479
	BN	5,227	5,715	5,274	13,210	5,481	5,282	10,566	5,189	6,147	6,044	11,910
	D	4,157	4,675	4,064	6,020	4,211	4,192	4,537	4,137	5,354	5,041	8,251
	C	3,115	3,326	3,195	3,790	3,277	3,285	3,306	3,185	3,692	3,675	4,358
	All	8,723	9,003	8,775	13,536	8,854	8,817	11,109	8,689	9,242	9,147	13,356
MAY	W	13,005	13,305	12,996	13,343	13,121	12,982	15,897	10,385	11,072	10,938	14,811
	AN	7,828	8,573	7,770	7,913	8,487	7,793	10,838	6,884	8,143	7,968	10,294
	BN	4,575	5,392	4,561	8,331	4,777	4,609	6,989	4,509	6,432	5,772	8,010
	D	3,826	4,160	3,398	5,351	3,917	3,705	3,866	3,767	4,094	4,172	5,028
	C	2,368	2,418	2,332	2,737	2,383	2,373	2,381	2,321	2,284	2,325	2,837
	All	7,237	7,661	7,124	8,386	7,426	7,204	9,017	6,237	7,034	6,876	9,089
JUN	W	7,825	9,797	7,591	7,092	8,877	8,814	7,301	7,199	8,247	8,250	7,350
	AN	5,561	7,560	4,331	4,261	7,850	7,497	5,343	5,598	7,792	7,371	4,274
	BN	4,800	5,292	3,147	2,794	5,582	6,405	3,883	4,342	6,243	5,695	3,133
	D	3,782	3,919	3,011	2,611	3,501	3,800	3,065	3,367	3,582	3,413	2,037
	C	2,188	2,196	2,213	2,246	2,199	2,196	2,220	2,522	2,316	2,319	1,907
	All	5,265	6,298	4,563	4,251	6,007	6,141	4,758	4,951	5,946	5,755	4,217

Upstream—Feather River at Confluence with Sacramento River												
Month	Water Year Type	NAA_ELT_2015[a]	B1_ELT_2015	B2_ELT_2015	S2_ELT_2015	H3_ELT_2015	H3+_ELT_2015	H4_ELT_2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	8,545	7,874	7,731	7,078	8,331	8,900	7,718	8,734	6,307	6,559	3,091
	AN	9,490	8,564	7,775	6,086	9,360	9,580	9,348	9,223	7,031	7,357	2,345
	BN	8,993	7,671	6,497	4,689	8,919	9,061	8,187	8,725	5,998	6,567	1,787
	D	6,325	7,272	5,284	3,549	5,525	5,755	4,596	7,674	3,932	4,014	1,260
	C	2,702	3,168	2,213	2,146	2,872	2,405	2,855	4,891	2,564	2,991	2,460
	All	7,418	7,119	6,182	5,029	7,167	7,386	6,640	8,009	5,291	5,597	2,265
AUG	W	7,059	5,757	6,556	6,754	5,941	6,848	4,785	7,222	5,092	5,187	2,529
	AN	8,442	5,989	6,397	6,175	7,211	8,049	5,885	8,089	6,149	6,155	2,785
	BN	7,445	4,659	5,360	5,477	6,364	6,335	3,767	7,570	4,700	5,644	2,256
	D	2,659	3,754	4,579	3,762	3,392	3,519	3,420	5,487	4,216	3,806	1,966
	C	1,648	1,916	2,425	1,997	1,834	1,864	2,307	2,340	2,130	2,190	1,872
	All	5,570	4,602	5,290	5,098	5,039	5,476	4,110	6,313	4,554	4,665	2,300
SEP	W	11,216	3,859	7,965	7,778	9,015	8,997	8,336	10,329	3,162	3,331	5,652
	AN	9,885	4,238	7,267	6,319	7,408	7,737	6,544	8,773	3,772	4,168	3,783
	BN	6,072	3,313	4,855	4,523	3,291	3,287	2,991	4,786	3,190	3,299	2,755
	D	3,362	2,876	4,703	3,087	2,873	2,918	2,824	2,848	3,344	3,189	2,619
	C	1,808	1,949	2,759	2,158	2,085	2,047	1,902	1,964	2,316	2,335	1,847
	All	7,042	3,326	5,854	5,157	5,440	5,486	5,010	6,289	3,172	3,271	3,661
OCT	W	3,514	3,693	2,895	2,806	3,720	3,643	3,261	3,746	3,987	4,148	2,746
	AN	2,785	2,887	2,214	2,108	2,852	2,834	2,515	2,988	3,557	3,676	2,381
	BN	3,266	3,047	2,500	2,527	3,438	3,439	3,384	3,437	3,625	3,528	2,491
	D	2,918	3,133	2,062	1,902	3,118	3,074	2,607	2,987	3,572	3,463	2,195
	C	2,276	2,802	1,897	1,722	2,681	2,527	2,667	2,566	3,977	4,008	1,848
	All	3,053	3,211	2,399	2,299	3,261	3,202	2,942	3,243	3,770	3,802	2,397
NOV	W	4,206	4,266	4,544	4,142	4,142	4,075	4,134	3,825	4,078	4,110	3,286
	AN	3,250	3,060	3,479	3,023	3,155	3,156	3,088	3,186	2,958	2,986	2,797
	BN	2,460	2,362	2,363	2,321	2,423	2,446	2,509	2,455	2,400	2,383	2,079
	D	2,177	2,232	2,077	2,050	2,297	2,297	2,127	2,125	2,268	2,390	2,073
	C	1,693	1,722	1,537	1,565	1,745	1,680	1,810	2,107	2,216	2,204	1,674
	All	2,955	2,946	3,034	2,831	2,948	2,922	2,923	2,873	2,958	2,994	2,506
DEC	W	10,475	11,515	11,759	10,790	10,749	10,559	10,920	10,246	12,227	12,287	11,595
	AN	5,339	4,871	5,545	5,051	5,816	5,500	5,326	6,000	7,105	7,160	4,299
	BN	3,422	3,037	3,061	2,889	3,174	3,165	3,175	3,249	3,899	4,058	2,534
	D	2,616	2,678	2,356	2,353	2,947	2,761	2,852	2,811	3,273	3,317	2,110
	C	2,166	1,822	1,744	1,733	1,855	1,845	1,843	2,054	3,256	2,910	1,657
	All	5,578	5,737	5,835	5,424	5,719	5,569	5,679	5,599	6,777	6,791	5,444

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

Table 5E-46. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios in the Feather River at Confluence with Sacramento River, Year-Round

Upstream—Feather River at Confluence with Sacramento River											
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	1,770 (8%)	2,106 (9%)	652 (3%)	-168 (-1%)	-251 (-1%)	217 (1%)	2,499 (10%)	2,446 (9%)	3,744 (14%)
	AN	295 (3%)	572 (5%)	47 (0%)	101 (1%)	51 (0%)	185 (2%)	1,279 (11%)	1,338 (11%)	3,693 (31%)
	BN	266 (5%)	544 (10%)	305 (6%)	97 (2%)	4 (0%)	102 (2%)	140 (3%)	246 (4%)	2,108 (38%)
	D	183 (4%)	57 (1%)	58 (1%)	49 (1%)	4 (0%)	75 (2%)	731 (17%)	963 (22%)	1,131 (26%)
	C	197 (6%)	73 (2%)	113 (3%)	139 (4%)	53 (2%)	153 (5%)	-250 (-7%)	-324 (-8%)	37 (1%)
	All	719 (6%)	868 (8%)	295 (3%)	9 (0%)	-63 (-1%)	152 (1%)	1,127 (9%)	1,177 (9%)	2,341 (19%)
FEB	W	2,052 (7%)	2,808 (10%)	485 (2%)	1,344 (5%)	931 (3%)	212 (1%)	1,831 (6%)	1,724 (6%)	749 (2%)
	AN	2,831 (23%)	2,851 (23%)	259 (2%)	647 (5%)	531 (4%)	990 (8%)	2,332 (16%)	1,864 (13%)	4,389 (30%)
	BN	1,283 (18%)	945 (13%)	604 (8%)	177 (2%)	3 (0%)	535 (7%)	1,386 (18%)	1,164 (15%)	3,771 (48%)
	D	221 (5%)	2 (0%)	5 (0%)	46 (1%)	6 (0%)	54 (1%)	209 (5%)	562 (13%)	3,586 (81%)
	C	40 (1%)	-48 (-1%)	-41 (-1%)	-80 (-3%)	-158 (-5%)	-60 (-2%)	356 (11%)	87 (3%)	1,245 (40%)
	All	1,338 (10%)	1,462 (11%)	290 (2%)	550 (4%)	351 (3%)	306 (2%)	1,256 (9%)	1,154 (8%)	2,493 (17%)
MAR	W	978 (4%)	1,337 (5%)	360 (1%)	490 (2%)	458 (2%)	389 (2%)	226 (1%)	332 (1%)	659 (2%)
	AN	1,430 (7%)	2,190 (11%)	1,152 (6%)	868 (4%)	1,054 (5%)	643 (3%)	1,850 (9%)	1,521 (7%)	2,256 (10%)
	BN	402 (6%)	966 (15%)	679 (10%)	-57 (-1%)	-293 (-4%)	351 (5%)	372 (5%)	298 (4%)	4,478 (65%)
	D	234 (5%)	171 (4%)	66 (1%)	110 (2%)	57 (1%)	96 (2%)	397 (8%)	543 (11%)	4,715 (95%)
	C	286 (10%)	9 (0%)	8 (0%)	115 (4%)	31 (1%)	122 (4%)	87 (3%)	227 (8%)	1,733 (63%)
	All	681 (5%)	948 (7%)	414 (3%)	314 (2%)	267 (2%)	316 (2%)	506 (4%)	531 (4%)	2,592 (18%)
APR	W	1 (0%)	5 (0%)	4,633 (29%)	0 (0%)	-1 (0%)	2,625 (16%)	-7 (0%)	46 (0%)	4,529 (29%)
	AN	353 (4%)	349 (4%)	10,069 (107%)	354 (4%)	352 (4%)	3,626 (39%)	339 (4%)	187 (2%)	6,894 (72%)
	BN	488 (9%)	47 (1%)	7,983 (153%)	254 (5%)	56 (1%)	5,339 (102%)	959 (18%)	855 (16%)	6,721 (130%)
	D	518 (12%)	-93 (-2%)	1,863 (45%)	54 (1%)	35 (1%)	380 (9%)	1,218 (29%)	905 (22%)	4,115 (99%)
	C	211 (7%)	80 (3%)	675 (22%)	162 (5%)	170 (5%)	191 (6%)	507 (16%)	490 (15%)	1,173 (37%)
	All	280 (3%)	52 (1%)	4,813 (55%)	131 (1%)	93 (1%)	2,386 (27%)	553 (6%)	458 (5%)	4,667 (54%)
MAY	W	300 (2%)	-8 (0%)	339 (3%)	116 (1%)	-22 (0%)	2,893 (22%)	687 (7%)	553 (5%)	4,426 (43%)
	AN	745 (10%)	-58 (-1%)	85 (1%)	658 (8%)	-35 (0%)	3,010 (38%)	1,259 (18%)	1,084 (16%)	3,410 (50%)
	BN	817 (18%)	-14 (0%)	3,756 (82%)	201 (4%)	33 (1%)	2,414 (53%)	1,924 (43%)	1,263 (28%)	3,501 (78%)
	D	334 (9%)	-428 (-11%)	1,525 (40%)	92 (2%)	-121 (-3%)	40 (1%)	327 (9%)	405 (11%)	1,261 (33%)
	C	50 (2%)	-36 (-2%)	369 (16%)	15 (1%)	5 (0%)	14 (1%)	-36 (-2%)	5 (0%)	516 (22%)
	All	424 (6%)	-113 (-2%)	1,150 (16%)	190 (3%)	-32 (0%)	1,781 (25%)	797 (13%)	639 (10%)	2,852 (46%)
JUN	W	1,971 (25%)	-235 (-3%)	-733 (-9%)	1,051 (13%)	988 (13%)	-524 (-7%)	1,048 (15%)	1,051 (15%)	151 (2%)
	AN	1,999 (36%)	-1,230 (-22%)	-1,300 (-23%)	2,289 (41%)	1,936 (35%)	-219 (-4%)	2,195 (39%)	1,773 (32%)	-1,324 (-24%)
	BN	492 (10%)	-1,654 (-34%)	-2,006 (-42%)	781 (16%)	1,605 (33%)	-917 (-19%)	1,901 (44%)	1,353 (31%)	-1,209 (-28%)
	D	136 (4%)	-772 (-20%)	-1,171 (-31%)	-282 (-7%)	18 (0%)	-718 (-19%)	215 (6%)	46 (1%)	-1,330 (-39%)
	C	8 (0%)	26 (1%)	58 (3%)	11 (1%)	9 (0%)	33 (1%)	-206 (-8%)	-203 (-8%)	-616 (-24%)
	All	1,033 (20%)	-702 (-13%)	-1,014 (-19%)	741 (14%)	876 (17%)	-508 (-10%)	995 (20%)	804 (16%)	-734 (-15%)

Upstream—Feather River at Confluence with Sacramento River										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	-671 (-8%)	-814 (-10%)	-1,467 (-17%)	-213 (-2%)	355 (4%)	-826 (-10%)	-2,427 (-28%)	-2,175 (-25%)	-5,643 (-65%)
	AN	-926 (-10%)	-1,716 (-18%)	-3,405 (-36%)	-131 (-1%)	90 (1%)	-143 (-2%)	-2,191 (-24%)	-1,866 (-20%)	-6,878 (-75%)
	BN	-1,322 (-15%)	-2,497 (-28%)	-4,304 (-48%)	-75 (-1%)	68 (1%)	-807 (-9%)	-2,727 (-31%)	-2,158 (-25%)	-6,938 (-80%)
	D	946 (15%)	-1,042 (-16%)	-2,776 (-44%)	-800 (-13%)	-571 (-9%)	-1,730 (-27%)	-3,742 (-49%)	-3,660 (-48%)	-6,415 (-84%)
	C	466 (17%)	-489 (-18%)	-556 (-21%)	170 (6%)	-297 (-11%)	152 (6%)	-2,328 (-48%)	-1,901 (-39%)	-2,432 (-50%)
	All	-298 (-4%)	-1,236 (-17%)	-2,389 (-32%)	-250 (-3%)	-31 (0%)	-778 (-10%)	-2,718 (-34%)	-2,413 (-30%)	-5,744 (-72%)
AUG	W	-1,303 (-18%)	-503 (-7%)	-306 (-4%)	-1,118 (-16%)	-212 (-3%)	-2,274 (-32%)	-2,130 (-29%)	-2,035 (-28%)	-4,693 (-65%)
	AN	-2,453 (-29%)	-2,044 (-24%)	-2,266 (-27%)	-1,230 (-15%)	-393 (-5%)	-2,556 (-30%)	-1,940 (-24%)	-1,934 (-24%)	-5,304 (-66%)
	BN	-2,786 (-37%)	-2,085 (-28%)	-1,968 (-26%)	-1,081 (-15%)	-1,111 (-15%)	-3,678 (-49%)	-2,869 (-38%)	-1,926 (-25%)	-5,313 (-70%)
	D	1,096 (41%)	1,920 (72%)	1,103 (41%)	734 (28%)	860 (32%)	762 (29%)	-1,272 (-23%)	-1,681 (-31%)	-3,522 (-64%)
	C	268 (16%)	777 (47%)	349 (21%)	186 (11%)	215 (13%)	659 (40%)	-210 (-9%)	-150 (-6%)	-468 (-20%)
	All	-968 (-17%)	-280 (-5%)	-471 (-8%)	-531 (-10%)	-94 (-2%)	-1,460 (-26%)	-1,759 (-28%)	-1,648 (-26%)	-4,013 (-64%)
SEP	W	-7,357 (-66%)	-3,251 (-29%)	-3,438 (-31%)	-2,202 (-20%)	-2,220 (-20%)	-2,881 (-26%)	-7,168 (-69%)	-6,999 (-68%)	-4,678 (-45%)
	AN	-5,647 (-57%)	-2,618 (-26%)	-3,566 (-36%)	-2,477 (-25%)	-2,148 (-22%)	-3,341 (-34%)	-5,002 (-57%)	-4,606 (-52%)	-4,991 (-57%)
	BN	-2,759 (-45%)	-1,218 (-20%)	-1,549 (-26%)	-2,781 (-46%)	-2,786 (-46%)	-3,081 (-51%)	-1,596 (-33%)	-1,486 (-31%)	-2,031 (-42%)
	D	-486 (-14%)	1,340 (40%)	-275 (-8%)	-489 (-15%)	-445 (-13%)	-538 (-16%)	496 (17%)	341 (12%)	-228 (-8%)
	C	141 (8%)	951 (53%)	349 (19%)	277 (15%)	239 (13%)	94 (5%)	352 (18%)	371 (19%)	-117 (-6%)
	All	-3,716 (-53%)	-1,189 (-17%)	-1,886 (-27%)	-1,602 (-23%)	-1,556 (-22%)	-2,033 (-29%)	-3,117 (-50%)	-3,018 (-48%)	-2,628 (-42%)
OCT	W	179 (5%)	-618 (-18%)	-708 (-20%)	207 (6%)	130 (4%)	-253 (-7%)	241 (6%)	403 (11%)	-999 (-27%)
	AN	102 (4%)	-571 (-20%)	-677 (-24%)	67 (2%)	49 (2%)	-269 (-10%)	569 (19%)	688 (23%)	-608 (-20%)
	BN	-219 (-7%)	-766 (-23%)	-739 (-23%)	172 (5%)	173 (5%)	118 (4%)	187 (5%)	90 (3%)	-947 (-28%)
	D	215 (7%)	-856 (-29%)	-1,016 (-35%)	200 (7%)	156 (5%)	-311 (-11%)	585 (20%)	476 (16%)	-792 (-27%)
	C	526 (23%)	-379 (-17%)	-554 (-24%)	405 (18%)	251 (11%)	391 (17%)	1,412 (55%)	1,442 (56%)	-718 (-28%)
	All	159 (5%)	-654 (-21%)	-754 (-25%)	208 (7%)	149 (5%)	-111 (-4%)	527 (16%)	559 (17%)	-846 (-26%)
NOV	W	60 (1%)	337 (8%)	-65 (-2%)	-65 (-2%)	-131 (-3%)	-72 (-2%)	253 (7%)	285 (7%)	-539 (-14%)
	AN	-190 (-6%)	229 (7%)	-227 (-7%)	-95 (-3%)	-94 (-3%)	-163 (-5%)	-229 (-7%)	-201 (-6%)	-390 (-12%)
	BN	-98 (-4%)	-97 (-4%)	-138 (-6%)	-37 (-1%)	-13 (-1%)	49 (2%)	-55 (-2%)	-72 (-3%)	-376 (-15%)
	D	55 (3%)	-100 (-5%)	-127 (-6%)	121 (6%)	120 (5%)	-50 (-2%)	144 (7%)	266 (12%)	-51 (-2%)
	C	28 (2%)	-156 (-9%)	-129 (-8%)	52 (3%)	-14 (-1%)	117 (7%)	109 (5%)	96 (5%)	-433 (-21%)
	All	-9 (0%)	79 (3%)	-124 (-4%)	-7 (0%)	-33 (-1%)	-32 (-1%)	85 (3%)	121 (4%)	-367 (-13%)
DEC	W	1,040 (10%)	1,283 (12%)	314 (3%)	273 (3%)	84 (1%)	444 (4%)	1,982 (19%)	2,041 (20%)	1,350 (13%)
	AN	-468 (-9%)	206 (4%)	-288 (-5%)	476 (9%)	161 (3%)	-14 (0%)	1,105 (18%)	1,160 (19%)	-1,701 (-28%)
	BN	-385 (-11%)	-361 (-11%)	-533 (-16%)	-247 (-7%)	-257 (-7%)	-247 (-7%)	650 (20%)	809 (25%)	-715 (-22%)
	D	62 (2%)	-260 (-10%)	-263 (-10%)	331 (13%)	145 (6%)	236 (9%)	461 (16%)	506 (18%)	-702 (-25%)
	C	-344 (-16%)	-422 (-19%)	-433 (-20%)	-311 (-14%)	-320 (-15%)	-323 (-15%)	1,202 (59%)	856 (42%)	-398 (-19%)
	All	159 (3%)	257 (5%)	-154 (-3%)	141 (3%)	-9 (0%)	101 (2%)	1,178 (21%)	1,191 (21%)	-155 (-3%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-47. Differences[a] (Percent Differences) (cfs) between Effects[b] in the Feather River at Confluence with Sacramento River, Year-Round**

Upstream—Feather River at Confluence with Sacramento River								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	-728 (-2%)	-676 (-2%)	2,274 (10%)	2,357 (10%)	-1,638 (-5%)	435 (2%)	-3,092 (-12%)
	AN	-984 (-8%)	-1,043 (-8%)	471 (4%)	521 (5%)	-3,121 (-26%)	-138 (-1%)	-3,645 (-30%)
	BN	126 (2%)	20 (0%)	447 (8%)	540 (10%)	-1,564 (-28%)	203 (4%)	-1,803 (-32%)
	D	-548 (-12%)	-781 (-18%)	8 (0%)	53 (1%)	-1,073 (-24%)	-17 (0%)	-1,073 (-24%)
	C	448 (12%)	522 (14%)	-65 (-2%)	20 (1%)	37 (1%)	-40 (-1%)	77 (2%)
	All	-408 (-3%)	-459 (-3%)	858 (8%)	930 (8%)	-1,473 (-11%)	143 (1%)	-2,046 (-16%)
FEB	W	220 (2%)	328 (2%)	1,463 (5%)	1,877 (7%)	2,058 (8%)	273 (1%)	-264 (-1%)
	AN	499 (7%)	967 (10%)	2,204 (18%)	2,320 (19%)	-1,539 (-7%)	-730 (-6%)	-4,130 (-28%)
	BN	-102 (0%)	119 (3%)	768 (11%)	942 (13%)	-2,826 (-35%)	68 (1%)	-3,167 (-39%)
	D	13 (0%)	-341 (-8%)	-44 (-1%)	-3 (0%)	-3,584 (-81%)	-48 (-1%)	-3,581 (-81%)
	C	-316 (-10%)	-47 (-2%)	32 (1%)	110 (3%)	-1,293 (-42%)	19 (1%)	-1,286 (-41%)
	All	82 (2%)	184 (2%)	913 (7%)	1,111 (8%)	-1,031 (-6%)	-16 (0%)	-2,203 (-15%)
MAR	W	752 (3%)	646 (3%)	847 (3%)	879 (4%)	679 (3%)	-29 (0%)	-298 (-1%)
	AN	-420 (-1%)	-91 (0%)	1,322 (7%)	1,136 (6%)	-66 (1%)	509 (3%)	-1,105 (-5%)
	BN	30 (1%)	104 (2%)	1,023 (16%)	1,258 (19%)	-3,513 (-50%)	328 (5%)	-3,799 (-55%)
	D	-162 (-3%)	-308 (-6%)	61 (1%)	114 (2%)	-4,544 (-92%)	-31 (-1%)	-4,650 (-94%)
	C	199 (7%)	59 (2%)	-107 (-4%)	-22 (-1%)	-1,725 (-63%)	-114 (-4%)	-1,725 (-63%)
	All	176 (2%)	150 (1%)	635 (5%)	682 (5%)	-1,644 (-11%)	98 (1%)	-2,178 (-15%)
APR	W	8 (0%)	-44 (0%)	5 (0%)	6 (0%)	-4,524 (-29%)	2,008 (13%)	103 (0%)
	AN	14 (0%)	167 (2%)	-4 (0%)	-3 (0%)	-6,544 (-68%)	6,443 (69%)	3,175 (35%)
	BN	-471 (-9%)	-367 (-7%)	-207 (-4%)	-8 (0%)	-6,674 (-129%)	2,645 (51%)	1,263 (23%)
	D	-700 (-17%)	-387 (-9%)	-147 (-4%)	-128 (-3%)	-4,208 (-102%)	1,482 (36%)	-2,252 (-55%)
	C	-297 (-9%)	-279 (-9%)	-82 (-3%)	-90 (-3%)	-1,093 (-34%)	484 (16%)	-498 (-15%)
	All	-273 (-3%)	-178 (-2%)	-79 (-1%)	-41 (0%)	-4,615 (-53%)	2,427 (28%)	146 (1%)
MAY	W	-387 (-4%)	-253 (-3%)	-125 (-1%)	14 (0%)	-4,435 (-43%)	-2,554 (-20%)	-4,088 (-40%)
	AN	-514 (-9%)	-340 (-6%)	-717 (-9%)	-23 (0%)	-3,468 (-50%)	-2,925 (-37%)	-3,325 (-48%)
	BN	-1,107 (-25%)	-446 (-10%)	-216 (-5%)	-48 (-1%)	-3,516 (-78%)	1,342 (29%)	255 (4%)
	D	7 (0%)	-71 (-2%)	-519 (-14%)	-307 (-8%)	-1,688 (-45%)	1,485 (39%)	264 (6%)
	C	87 (4%)	46 (2%)	-51 (-2%)	-41 (-2%)	-552 (-24%)	355 (15%)	-147 (-7%)
	All	-373 (-7%)	-215 (-4%)	-303 (-4%)	-80 (-1%)	-2,965 (-47%)	-631 (-9%)	-1,703 (-30%)
JUN	W	924 (11%)	920 (11%)	-1,286 (-16%)	-1,223 (-16%)	-386 (-5%)	-209 (-3%)	-884 (-11%)
	AN	-196 (-3%)	226 (4%)	-3,519 (-63%)	-3,165 (-57%)	94 (2%)	-1,082 (-19%)	24 (0%)
	BN	-1,410 (-34%)	-861 (-21%)	-2,435 (-51%)	-3,259 (-68%)	-445 (-7%)	-1,089 (-23%)	-797 (-14%)
	D	-79 (-3%)	90 (2%)	-490 (-13%)	-789 (-21%)	558 (19%)	-454 (-12%)	158 (9%)
	C	215 (9%)	211 (8%)	14 (1%)	17 (1%)	641 (26%)	25 (1%)	674 (27%)
	All	38 (0%)	228 (3%)	-1,444 (-27%)	-1,578 (-30%)	32 (1%)	-506 (-10%)	-280 (-4%)

Upstream—Feather River at Confluence with Sacramento River								
Month	**Water Year Type**	**Alt 1A Effect vs. Boundary 1 Effect**	**Alt 3 Effect vs. Boundary 1 Effect**	**Alt 4A H3 Effect vs. Boundary 2 Effect**	**Alt 4A H3+ Effect vs. Boundary 2 Effect**	**Alt 8 Effect vs. Boundary 2 Effect**	**Alt 4A H4 Effect vs. Scenario 2 Effect**	**Alt 8 Effect vs. Scenario 2 Effect**
JUL	W	1,756 (20%)	1,504 (17%)	-600 (-7%)	-1,169 (-14%)	4,829 (55%)	-640 (-7%)	4,177 (47%)
	AN	1,265 (14%)	940 (10%)	-1,585 (-17%)	-1,806 (-19%)	5,162 (56%)	-3,262 (-34%)	3,473 (39%)
	BN	1,405 (17%)	836 (10%)	-2,422 (-27%)	-2,565 (-29%)	4,441 (52%)	-3,498 (-39%)	2,634 (32%)
	D	4,688 (64%)	4,606 (63%)	-242 (-4%)	-471 (-7%)	5,373 (67%)	-1,047 (-17%)	3,638 (40%)
	C	2,794 (65%)	2,367 (56%)	-659 (-24%)	-192 (-7%)	1,943 (32%)	-709 (-26%)	1,876 (29%)
	All	2,420 (30%)	2,114 (26%)	-985 (-13%)	-1,204 (-16%)	4,509 (55%)	-1,611 (-22%)	3,355 (40%)
AUG	W	827 (11%)	733 (10%)	615 (9%)	-292 (-4%)	4,190 (58%)	1,968 (28%)	4,387 (61%)
	AN	-513 (-5%)	-519 (-5%)	-814 (-10%)	-1,651 (-20%)	3,259 (41%)	290 (3%)	3,037 (39%)
	BN	83 (0%)	-860 (-12%)	-1,004 (-13%)	-974 (-13%)	3,229 (42%)	1,710 (23%)	3,345 (44%)
	D	2,367 (64%)	2,777 (72%)	1,186 (45%)	1,060 (40%)	5,442 (136%)	342 (13%)	4,625 (106%)
	C	477 (25%)	418 (23%)	591 (36%)	561 (34%)	1,245 (67%)	-310 (-19%)	817 (41%)
	All	791 (10%)	680 (9%)	251 (5%)	-186 (-3%)	3,733 (59%)	988 (18%)	3,541 (55%)
SEP	W	-190 (4%)	-359 (2%)	-1,049 (-9%)	-1,032 (-9%)	1,426 (16%)	-557 (-5%)	1,240 (15%)
	AN	-645 (0%)	-1,041 (-5%)	-141 (-1%)	-470 (-5%)	2,372 (30%)	-225 (-2%)	1,425 (21%)
	BN	-1,163 (-12%)	-1,273 (-14%)	1,563 (26%)	1,568 (26%)	813 (22%)	1,532 (25%)	482 (17%)
	D	-982 (-32%)	-827 (-26%)	1,829 (54%)	1,785 (53%)	1,569 (48%)	263 (8%)	-47 (0%)
	C	-211 (-10%)	-230 (-11%)	675 (37%)	712 (39%)	1,068 (59%)	255 (14%)	467 (25%)
	All	-600 (-3%)	-699 (-5%)	414 (6%)	368 (5%)	1,439 (25%)	147 (2%)	742 (15%)
OCT	W	-62 (-1%)	-224 (-6%)	-825 (-23%)	-748 (-21%)	381 (9%)	-455 (-13%)	292 (7%)
	AN	-466 (-15%)	-586 (-19%)	-638 (-23%)	-620 (-22%)	37 (0%)	-408 (-15%)	-70 (-4%)
	BN	-406 (-12%)	-309 (-9%)	-938 (-29%)	-939 (-29%)	181 (4%)	-857 (-26%)	208 (5%)
	D	-370 (-12%)	-260 (-9%)	-1,056 (-36%)	-1,011 (-35%)	-64 (-3%)	-705 (-24%)	-224 (-8%)
	C	-886 (-32%)	-917 (-33%)	-784 (-34%)	-630 (-28%)	338 (11%)	-945 (-42%)	164 (4%)
	All	-368 (-11%)	-401 (-12%)	-862 (-28%)	-802 (-26%)	193 (5%)	-643 (-21%)	93 (1%)
NOV	W	-194 (-5%)	-225 (-6%)	402 (10%)	468 (11%)	876 (22%)	7 (0%)	474 (13%)
	AN	39 (1%)	11 (0%)	325 (10%)	323 (10%)	619 (19%)	-64 (-2%)	163 (5%)
	BN	-43 (-2%)	-26 (-1%)	-60 (-2%)	-83 (-3%)	279 (11%)	-188 (-8%)	237 (10%)
	D	-89 (-4%)	-211 (-10%)	-221 (-10%)	-220 (-10%)	-49 (-2%)	-77 (-4%)	-76 (-3%)
	C	-81 (-4%)	-68 (-3%)	-208 (-12%)	-143 (-8%)	277 (11%)	-245 (-14%)	304 (13%)
	All	-95 (-3%)	-131 (-5%)	86 (3%)	112 (4%)	446 (15%)	-92 (-3%)	243 (9%)
DEC	W	-942 (-9%)	-1,001 (-10%)	1,010 (10%)	1,199 (11%)	-66 (-1%)	-130 (-1%)	-1,035 (-10%)
	AN	-1,573 (-27%)	-1,629 (-28%)	-270 (-5%)	45 (1%)	1,907 (32%)	-275 (-5%)	1,413 (23%)
	BN	-1,035 (-31%)	-1,194 (-36%)	-113 (-3%)	-104 (-3%)	355 (11%)	-286 (-8%)	183 (6%)
	D	-400 (-14%)	-444 (-16%)	-591 (-23%)	-404 (-15%)	442 (15%)	-499 (-19%)	439 (15%)
	C	-1,546 (-74%)	-1,199 (-58%)	-111 (-5%)	-101 (-5%)	-24 (0%)	-110 (-5%)	-35 (-1%)
	All	-1,019 (-18%)	-1,033 (-18%)	116 (2%)	266 (5%)	412 (7%)	-256 (-5%)	1 (0%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 ## 5E.4.2.1.15 American River below Nimbus

2 **Table 5E-48. Mean Monthly Flows (cfs) for Model Scenarios in the American River below Nimbus, Year-Round**

Upstream—American River below Nimbus												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	10,579	10,552	10,678	10,678	10,607	10,609	10,595	11,036	11,011	10,985	11,121
	AN	5,220	5,317	5,355	5,372	5,248	5,214	5,245	5,805	5,803	5,812	6,235
	BN	2,403	2,333	2,234	2,262	2,150	2,156	2,162	2,073	2,149	2,358	2,259
	D	1,557	1,595	1,669	1,672	1,528	1,531	1,627	1,506	1,535	1,532	1,429
	C	1,149	1,237	1,173	1,225	1,218	1,221	1,230	1,095	1,109	1,244	1,003
	All	5,038	5,053	5,089	5,104	5,012	5,010	5,033	5,194	5,207	5,254	5,285
FEB	W	10,906	10,981	10,958	10,962	10,946	10,948	10,947	11,102	11,122	11,092	11,074
	AN	7,239	7,691	7,454	7,474	7,422	7,397	7,442	8,153	8,361	8,327	8,304
	BN	4,700	4,977	4,963	4,944	4,865	4,828	4,881	4,961	5,174	4,727	5,087
	D	1,860	1,891	1,951	1,976	1,889	1,872	1,916	1,844	1,923	1,858	1,950
	C	958	976	959	993	959	962	969	1,007	1,055	1,033	907
	All	5,868	6,015	5,982	5,993	5,943	5,930	5,956	6,112	6,210	6,102	6,156
MAR	W	7,245	7,242	7,244	7,244	7,245	7,246	7,245	6,992	6,987	6,987	6,996
	AN	6,186	6,324	6,319	6,329	6,329	6,318	6,330	5,790	5,870	5,887	5,452
	BN	2,825	2,824	2,831	2,831	2,808	2,831	2,830	2,794	2,688	2,804	2,801
	D	2,047	2,102	2,141	2,143	2,100	2,085	2,029	2,314	2,113	2,151	2,058
	C	899	812	774	774	824	803	792	938	862	860	807
	All	4,266	4,284	4,288	4,290	4,284	4,281	4,268	4,187	4,123	4,154	4,064
APR	W	5,589	5,585	5,587	5,659	5,588	5,589	5,674	5,508	5,519	5,519	5,597
	AN	3,433	3,425	3,429	3,577	3,427	3,429	3,536	3,298	3,337	3,322	3,240
	BN	3,211	3,272	3,143	3,354	3,260	3,241	3,316	2,970	3,156	3,047	3,384
	D	1,894	2,025	1,869	2,004	1,981	1,874	1,891	1,888	2,012	2,016	2,366
	C	1,068	1,161	1,011	1,098	1,120	978	1,112	1,255	1,289	1,237	1,717
	All	3,395	3,445	3,368	3,491	3,429	3,382	3,460	3,334	3,407	3,380	3,597
MAY	W	5,366	5,399	5,354	5,353	5,383	5,355	5,375	4,592	4,718	4,727	4,863
	AN	2,958	3,141	2,955	2,953	3,103	2,953	3,027	2,521	2,944	2,924	2,744
	BN	2,565	2,763	2,570	2,553	2,648	2,559	2,602	1,969	2,517	2,584	3,385
	D	1,657	1,903	1,739	1,649	1,792	1,708	1,751	1,686	2,134	2,156	2,888
	C	1,133	1,148	1,355	1,341	1,186	1,169	1,174	992	1,009	1,005	2,031
	All	3,102	3,229	3,149	3,124	3,180	3,113	3,148	2,676	2,973	2,988	3,453
JUN	W	4,013	4,458	4,090	4,002	4,300	4,239	4,007	3,694	4,568	4,465	3,987
	AN	2,677	3,332	2,973	2,752	3,178	3,087	2,979	3,022	3,857	3,815	3,339
	BN	2,387	3,276	2,837	2,518	3,328	3,426	2,726	2,883	3,768	3,770	2,910
	D	2,440	2,403	2,268	2,056	2,625	2,874	2,871	2,596	2,552	2,596	2,788
	C	1,564	1,363	1,182	999	1,334	1,352	1,328	1,025	1,258	1,122	1,522
	All	2,836	3,188	2,887	2,699	3,168	3,210	2,997	2,825	3,400	3,352	3,084

Upstream—American River below Nimbus												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	3,600	3,769	3,184	3,186	3,756	3,645	3,881	3,860	3,530	3,576	2,927
	AN	4,640	4,167	3,384	3,436	4,349	4,237	4,260	4,927	4,253	4,348	2,928
	BN	4,340	4,086	3,612	3,707	4,029	3,899	3,792	4,328	3,660	3,738	3,237
	D	2,707	2,826	2,328	2,335	2,772	2,820	2,671	3,143	2,494	2,712	2,604
	C	1,467	1,207	1,516	1,288	1,321	1,386	1,277	2,022	1,895	2,093	1,041
	All	3,370	3,300	2,854	2,847	3,317	3,263	3,275	3,670	3,191	3,310	2,633
AUG	W	2,329	2,260	2,769	2,750	2,263	2,348	2,180	2,132	2,159	2,165	2,007
	AN	1,835	1,833	2,411	2,367	1,875	1,895	1,824	1,944	1,810	1,798	2,042
	BN	1,839	1,754	2,172	2,162	1,896	1,908	2,008	2,324	1,633	1,620	2,460
	D	1,347	1,332	1,617	1,650	1,319	1,297	1,220	1,620	1,328	1,266	1,576
	C	1,179	1,310	1,323	1,443	1,238	1,298	1,298	1,100	940	915	955
	All	1,789	1,768	2,150	2,161	1,786	1,822	1,759	1,874	1,657	1,638	1,841
SEP	W	3,283	1,610	2,807	2,818	3,005	3,105	2,982	3,622	1,906	1,929	3,559
	AN	2,405	1,544	1,984	1,962	2,002	2,214	2,106	2,044	1,500	1,519	2,649
	BN	1,487	1,409	1,520	1,525	1,411	1,407	1,488	1,605	1,363	1,369	1,383
	D	1,212	1,120	1,226	1,231	1,120	1,135	1,101	1,182	1,141	1,134	1,150
	C	779	698	638	820	693	723	718	594	588	620	548
	All	2,027	1,325	1,802	1,831	1,834	1,904	1,855	2,068	1,393	1,407	2,085
OCT	W	1,688	1,570	1,914	1,891	1,605	1,664	1,635	1,634	1,823	1,877	1,598
	AN	1,727	1,306	1,601	1,583	1,504	1,639	1,537	1,732	1,976	1,935	1,953
	BN	1,654	1,377	1,539	1,543	1,614	1,603	1,654	1,767	2,177	2,030	1,610
	D	1,467	1,254	1,358	1,381	1,311	1,327	1,434	1,258	1,717	1,624	1,233
	C	1,537	1,395	1,369	1,299	1,557	1,587	1,554	1,655	2,080	1,883	1,629
	All	1,617	1,404	1,603	1,588	1,520	1,565	1,568	1,592	1,920	1,857	1,576
NOV	W	3,389	3,376	3,296	3,312	3,095	3,041	3,132	2,612	2,578	2,574	2,560
	AN	2,998	2,601	2,731	2,733	2,715	2,744	2,790	2,554	2,120	2,168	2,175
	BN	2,059	1,967	1,814	1,840	1,702	1,728	1,735	1,716	1,647	1,646	1,427
	D	1,714	1,599	1,705	1,662	1,565	1,648	1,691	1,424	1,394	1,423	1,494
	C	1,776	1,750	1,714	1,695	1,596	1,600	1,607	1,608	1,655	1,724	1,336
	All	2,501	2,394	2,379	2,377	2,246	2,257	2,304	2,043	1,957	1,979	1,897
DEC	W	6,818	7,338	7,306	7,328	7,035	7,001	7,107	6,171	6,435	6,435	6,407
	AN	2,998	3,038	3,194	3,233	3,015	3,088	3,154	2,933	2,966	2,962	2,947
	BN	2,843	3,109	2,935	2,976	2,856	2,838	2,911	2,527	2,704	2,739	2,461
	D	1,586	1,666	1,812	1,813	1,527	1,574	1,687	1,351	1,349	1,376	1,399
	C	1,442	1,606	1,363	1,420	1,442	1,447	1,457	1,251	1,239	1,248	1,117
	All	3,645	3,903	3,882	3,911	3,705	3,713	3,796	3,297	3,413	3,426	3,354

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-49. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios in the American River below Nimbus, Year-Round**

Upstream—American River below Nimbus										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	-27 (0%)	100 (1%)	99 (1%)	29 (0%)	30 (0%)	17 (0%)	-25 (0%)	-52 (0%)	85 (1%)
	AN	97 (2%)	135 (3%)	152 (3%)	27 (1%)	-6 (0%)	25 (0%)	-2 (0%)	7 (0%)	430 (7%)
	BN	-70 (-3%)	-168 (-7%)	-141 (-6%)	-252 (-11%)	-246 (-10%)	-241 (-10%)	76 (4%)	285 (14%)	186 (9%)
	D	38 (2%)	112 (7%)	115 (7%)	-28 (-2%)	-26 (-2%)	71 (5%)	29 (2%)	26 (2%)	-77 (-5%)
	C	87 (8%)	24 (2%)	76 (7%)	69 (6%)	72 (6%)	80 (7%)	14 (1%)	149 (14%)	-92 (-8%)
	All	15 (0%)	51 (1%)	66 (1%)	-26 (-1%)	-29 (-1%)	-5 (0%)	13 (0%)	61 (1%)	91 (2%)
FEB	W	75 (1%)	52 (0%)	56 (1%)	40 (0%)	42 (0%)	41 (0%)	20 (0%)	-10 (0%)	-28 (0%)
	AN	452 (6%)	216 (3%)	235 (3%)	183 (3%)	158 (2%)	203 (3%)	208 (3%)	175 (2%)	151 (2%)
	BN	277 (6%)	263 (6%)	244 (5%)	165 (4%)	128 (3%)	181 (4%)	213 (4%)	-234 (-5%)	126 (3%)
	D	31 (2%)	92 (5%)	116 (6%)	29 (2%)	12 (1%)	57 (3%)	79 (4%)	15 (1%)	107 (6%)
	C	18 (2%)	1 (0%)	35 (4%)	1 (0%)	4 (0%)	11 (1%)	48 (5%)	27 (3%)	-100 (-10%)
	All	147 (2%)	113 (2%)	124 (2%)	74 (1%)	62 (1%)	88 (1%)	97 (2%)	-11 (0%)	44 (1%)
MAR	W	-4 (0%)	-2 (0%)	-2 (0%)	0 (0%)	1 (0%)	0 (0%)	-5 (0%)	-5 (0%)	3 (0%)
	AN	138 (2%)	134 (2%)	143 (2%)	144 (2%)	132 (2%)	144 (2%)	79 (1%)	96 (2%)	-339 (-6%)
	BN	-2 (0%)	6 (0%)	5 (0%)	-18 (-1%)	6 (0%)	5 (0%)	-106 (-4%)	10 (0%)	7 (0%)
	D	54 (3%)	94 (5%)	95 (5%)	52 (3%)	38 (2%)	-18 (-1%)	-202 (-9%)	-164 (-7%)	-256 (-11%)
	C	-87 (-10%)	-126 (-14%)	-125 (-14%)	-75 (-8%)	-96 (-11%)	-108 (-12%)	-76 (-8%)	-77 (-8%)	-131 (-14%)
	All	18 (0%)	22 (1%)	24 (1%)	18 (0%)	15 (0%)	2 (0%)	-63 (-2%)	-33 (-1%)	-123 (-3%)
APR	W	-4 (0%)	-2 (0%)	70 (1%)	-1 (0%)	0 (0%)	85 (2%)	11 (0%)	11 (0%)	88 (2%)
	AN	-7 (0%)	-4 (0%)	144 (4%)	-6 (0%)	-4 (0%)	103 (3%)	38 (1%)	24 (1%)	-59 (-2%)
	BN	61 (2%)	-68 (-2%)	143 (4%)	50 (2%)	30 (1%)	105 (3%)	187 (6%)	78 (3%)	415 (14%)
	D	132 (7%)	-24 (-1%)	110 (6%)	87 (5%)	-20 (-1%)	-2 (0%)	124 (7%)	128 (7%)	478 (25%)
	C	93 (9%)	-57 (-5%)	30 (3%)	52 (5%)	-90 (-8%)	44 (4%)	34 (3%)	-18 (-1%)	462 (37%)
	All	51 (1%)	-26 (-1%)	96 (3%)	34 (1%)	-13 (0%)	66 (2%)	73 (2%)	46 (1%)	263 (8%)
MAY	W	32 (1%)	-12 (0%)	-13 (0%)	17 (0%)	-11 (0%)	9 (0%)	127 (3%)	135 (3%)	271 (6%)
	AN	183 (6%)	-3 (0%)	-4 (0%)	145 (5%)	-5 (0%)	69 (2%)	423 (17%)	404 (16%)	223 (9%)
	BN	198 (8%)	5 (0%)	-12 (0%)	83 (3%)	-6 (0%)	37 (1%)	548 (28%)	615 (31%)	1,416 (72%)
	D	247 (15%)	82 (5%)	-8 (0%)	135 (8%)	51 (3%)	95 (6%)	448 (27%)	470 (28%)	1,202 (71%)
	C	15 (1%)	221 (20%)	208 (18%)	53 (5%)	35 (3%)	41 (4%)	17 (2%)	14 (1%)	1,040 (105%)
	All	127 (4%)	47 (2%)	22 (1%)	78 (3%)	11 (0%)	46 (1%)	296 (11%)	312 (12%)	777 (29%)
JUN	W	446 (11%)	77 (2%)	-11 (0%)	287 (7%)	226 (6%)	-6 (0%)	874 (24%)	771 (21%)	293 (8%)
	AN	655 (24%)	295 (11%)	75 (3%)	501 (19%)	410 (15%)	302 (11%)	834 (28%)	793 (26%)	317 (10%)
	BN	889 (37%)	450 (19%)	132 (6%)	941 (39%)	1,039 (44%)	339 (14%)	885 (31%)	888 (31%)	27 (1%)
	D	-37 (-2%)	-172 (-7%)	-384 (-16%)	186 (8%)	435 (18%)	432 (18%)	-44 (-2%)	0 (0%)	192 (7%)
	C	-201 (-13%)	-381 (-24%)	-565 (-36%)	-229 (-15%)	-212 (-14%)	-236 (-15%)	234 (23%)	98 (10%)	498 (49%)
	All	351 (12%)	51 (2%)	-137 (-5%)	332 (12%)	374 (13%)	161 (6%)	575 (20%)	526 (19%)	259 (9%)

Upstream—American River below Nimbus										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	169 (5%)	-416 (-12%)	-414 (-11%)	156 (4%)	45 (1%)	281 (8%)	-330 (-9%)	-285 (-7%)	-934 (-24%)
	AN	-472 (-10%)	-1,256 (-27%)	-1,203 (-26%)	-291 (-6%)	-403 (-9%)	-380 (-8%)	-674 (-14%)	-579 (-12%)	-1,999 (-41%)
	BN	-254 (-6%)	-728 (-17%)	-633 (-15%)	-311 (-7%)	-442 (-10%)	-548 (-13%)	-668 (-15%)	-591 (-14%)	-1,091 (-25%)
	D	120 (4%)	-378 (-14%)	-371 (-14%)	66 (2%)	114 (4%)	-35 (-1%)	-650 (-21%)	-431 (-14%)	-540 (-17%)
	C	-260 (-18%)	49 (3%)	-179 (-12%)	-146 (-10%)	-82 (-6%)	-190 (-13%)	-127 (-6%)	71 (4%)	-982 (-49%)
	All	-71 (-2%)	-516 (-15%)	-523 (-16%)	-53 (-2%)	-107 (-3%)	-96 (-3%)	-479 (-13%)	-360 (-10%)	-1,037 (-28%)
AUG	W	-70 (-3%)	440 (19%)	421 (18%)	-66 (-3%)	19 (1%)	-149 (-6%)	27 (1%)	33 (2%)	-125 (-6%)
	AN	-2 (0%)	576 (31%)	532 (29%)	40 (2%)	60 (3%)	-11 (-1%)	-135 (-7%)	-147 (-8%)	98 (5%)
	BN	-84 (-5%)	334 (18%)	323 (18%)	58 (3%)	70 (4%)	169 (9%)	-692 (-30%)	-704 (-30%)	136 (6%)
	D	-15 (-1%)	270 (20%)	303 (22%)	-28 (-2%)	-50 (-4%)	-127 (-9%)	-292 (-18%)	-354 (-22%)	-44 (-3%)
	C	131 (11%)	144 (12%)	264 (22%)	59 (5%)	119 (10%)	119 (10%)	-160 (-15%)	-185 (-17%)	-145 (-13%)
	All	-21 (-1%)	361 (20%)	372 (21%)	-3 (0%)	33 (2%)	-31 (-2%)	-217 (-12%)	-236 (-13%)	-33 (-2%)
SEP	W	-1,673 (-51%)	-476 (-14%)	-465 (-14%)	-278 (-8%)	-178 (-5%)	-300 (-9%)	-1,716 (-47%)	-1,694 (-47%)	-63 (-2%)
	AN	-861 (-36%)	-421 (-18%)	-443 (-18%)	-403 (-17%)	-191 (-8%)	-299 (-12%)	-543 (-27%)	-525 (-26%)	605 (30%)
	BN	-78 (-5%)	33 (2%)	38 (3%)	-75 (-5%)	-80 (-5%)	1 (0%)	-242 (-15%)	-235 (-15%)	-222 (-14%)
	D	-92 (-8%)	14 (1%)	19 (2%)	-92 (-8%)	-77 (-6%)	-111 (-9%)	-41 (-3%)	-48 (-4%)	-31 (-3%)
	C	-80 (-10%)	-141 (-18%)	41 (5%)	-86 (-11%)	-55 (-7%)	-61 (-8%)	-6 (-1%)	26 (4%)	-45 (-8%)
	All	-702 (-35%)	-225 (-11%)	-196 (-10%)	-193 (-10%)	-123 (-6%)	-172 (-8%)	-675 (-33%)	-661 (-32%)	17 (1%)
OCT	W	-117 (-7%)	227 (13%)	204 (12%)	-83 (-5%)	-24 (-1%)	-52 (-3%)	188 (12%)	242 (15%)	-36 (-2%)
	AN	-421 (-24%)	-126 (-7%)	-144 (-8%)	-223 (-13%)	-88 (-5%)	-190 (-11%)	244 (14%)	203 (12%)	221 (13%)
	BN	-277 (-17%)	-114 (-7%)	-110 (-7%)	-40 (-2%)	-51 (-3%)	1 (0%)	410 (23%)	263 (15%)	-157 (-9%)
	D	-213 (-15%)	-109 (-7%)	-85 (-6%)	-156 (-11%)	-140 (-10%)	-33 (-2%)	459 (36%)	366 (29%)	-26 (-2%)
	C	-142 (-9%)	-168 (-11%)	-239 (-16%)	20 (1%)	50 (3%)	17 (1%)	426 (26%)	229 (14%)	-26 (-2%)
	All	-214 (-13%)	-14 (-1%)	-29 (-2%)	-97 (-6%)	-53 (-3%)	-49 (-3%)	329 (21%)	265 (17%)	-15 (-1%)
NOV	W	-14 (0%)	-94 (-3%)	-77 (-2%)	-294 (-9%)	-349 (-10%)	-257 (-8%)	-34 (-1%)	-38 (-1%)	-52 (-2%)
	AN	-397 (-13%)	-267 (-9%)	-265 (-9%)	-283 (-9%)	-254 (-8%)	-208 (-7%)	-434 (-17%)	-386 (-15%)	-379 (-15%)
	BN	-93 (-4%)	-245 (-12%)	-219 (-11%)	-358 (-17%)	-331 (-16%)	-324 (-16%)	-70 (-4%)	-70 (-4%)	-289 (-17%)
	D	-116 (-7%)	-9 (-1%)	-52 (-3%)	-150 (-9%)	-67 (-4%)	-23 (-1%)	-31 (-2%)	-2 (0%)	70 (5%)
	C	-26 (-1%)	-62 (-4%)	-81 (-5%)	-180 (-10%)	-176 (-10%)	-169 (-10%)	48 (3%)	116 (7%)	-272 (-17%)
	All	-107 (-4%)	-122 (-5%)	-124 (-5%)	-255 (-10%)	-245 (-10%)	-197 (-8%)	-86 (-4%)	-64 (-3%)	-146 (-7%)
DEC	W	519 (8%)	487 (7%)	510 (7%)	216 (3%)	182 (3%)	289 (4%)	264 (4%)	264 (4%)	236 (4%)
	AN	40 (1%)	196 (7%)	235 (8%)	17 (1%)	90 (3%)	156 (5%)	33 (1%)	29 (1%)	14 (0%)
	BN	265 (9%)	92 (3%)	133 (5%)	13 (0%)	-5 (0%)	68 (2%)	177 (7%)	212 (8%)	-66 (-3%)
	D	80 (5%)	226 (14%)	228 (14%)	-59 (-4%)	-12 (-1%)	102 (6%)	-3 (0%)	25 (2%)	48 (4%)
	C	164 (11%)	-79 (-5%)	-22 (-2%)	0 (0%)	5 (0%)	15 (1%)	-12 (-1%)	-4 (0%)	-134 (-11%)
	All	257 (7%)	237 (7%)	265 (7%)	60 (2%)	68 (2%)	151 (4%)	116 (4%)	129 (4%)	57 (2%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-50. Differences[a] (Percent Differences) (cfs) between Effects[b] in the American River below Nimbus, Year-Round**

		Upstream—American River below Nimbus						
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	-1 (0%)	25 (0%)	71 (1%)	70 (1%)	15 (0%)	83 (1%)	14 (0%)
	AN	99 (2%)	90 (2%)	108 (2%)	141 (3%)	-295 (-5%)	126 (2%)	-278 (-5%)
	BN	-146 (-7%)	-355 (-17%)	84 (3%)	78 (3%)	-355 (-16%)	100 (4%)	-327 (-15%)
	D	9 (1%)	13 (1%)	140 (9%)	138 (9%)	189 (12%)	44 (3%)	192 (12%)
	C	73 (6%)	-62 (-6%)	-45 (-4%)	-48 (-4%)	116 (10%)	-4 (0%)	168 (15%)
	All	2 (0%)	-46 (-1%)	77 (2%)	79 (2%)	-41 (-1%)	71 (1%)	-25 (0%)
FEB	W	55 (1%)	85 (1%)	12 (0%)	10 (0%)	80 (1%)	15 (0%)	84 (1%)
	AN	244 (4%)	277 (4%)	32 (0%)	58 (1%)	65 (1%)	32 (0%)	84 (1%)
	BN	64 (2%)	512 (11%)	98 (2%)	135 (3%)	138 (3%)	63 (1%)	118 (3%)
	D	-48 (-3%)	16 (1%)	62 (3%)	79 (4%)	-15 (-1%)	59 (3%)	9 (0%)
	C	-30 (-3%)	-8 (-1%)	0 (0%)	-3 (0%)	101 (10%)	24 (3%)	135 (14%)
	All	49 (1%)	157 (3%)	39 (1%)	52 (1%)	70 (1%)	37 (1%)	81 (1%)
MAR	W	2 (0%)	2 (0%)	-2 (0%)	-2 (0%)	-5 (0%)	-1 (0%)	-5 (0%)
	AN	59 (1%)	42 (1%)	-10 (0%)	2 (0%)	472 (8%)	-1 (0%)	482 (8%)
	BN	104 (4%)	-11 (0%)	24 (1%)	0 (0%)	-1 (0%)	1 (0%)	-1 (0%)
	D	256 (11%)	218 (10%)	41 (2%)	56 (3%)	350 (16%)	113 (6%)	351 (16%)
	C	-11 (-2%)	-10 (-1%)	-50 (-6%)	-30 (-3%)	5 (0%)	-18 (-2%)	5 (0%)
	All	81 (2%)	51 (1%)	4 (0%)	7 (0%)	145 (3%)	22 (1%)	147 (3%)
APR	W	-15 (0%)	-15 (0%)	-1 (0%)	-2 (0%)	-90 (-2%)	-15 (0%)	-18 (0%)
	AN	-45 (-1%)	-31 (-1%)	2 (0%)	0 (0%)	55 (2%)	41 (1%)	203 (6%)
	BN	-126 (-4%)	-17 (-1%)	-117 (-4%)	-98 (-3%)	-482 (-16%)	38 (1%)	-271 (-9%)
	D	8 (0%)	4 (0%)	-111 (-6%)	-4 (0%)	-502 (-27%)	113 (6%)	-367 (-19%)
	C	60 (6%)	111 (10%)	-109 (-10%)	33 (3%)	-519 (-42%)	-14 (-1%)	-432 (-34%)
	All	-22 (-1%)	5 (0%)	-60 (-2%)	-13 (0%)	-289 (-9%)	30 (1%)	-166 (-5%)
MAY	W	-94 (-2%)	-103 (-2%)	-29 (-1%)	-1 (0%)	-283 (-6%)	-22 (0%)	-284 (-6%)
	AN	-240 (-11%)	-221 (-10%)	-148 (-5%)	2 (0%)	-226 (-9%)	-74 (-2%)	-228 (-9%)
	BN	-350 (-20%)	-416 (-23%)	-78 (-3%)	11 (0%)	-1,412 (-72%)	-49 (-2%)	-1,428 (-72%)
	D	-201 (-12%)	-223 (-13%)	-53 (-3%)	31 (2%)	-1,120 (-66%)	-102 (-6%)	-1,210 (-72%)
	C	-2 (0%)	1 (0%)	168 (15%)	186 (16%)	-818 (-85%)	167 (15%)	-832 (-86%)
	All	-169 (-7%)	-185 (-8%)	-31 (-1%)	36 (1%)	-729 (-27%)	-24 (-1%)	-754 (-28%)
JUN	W	-429 (-13%)	-326 (-10%)	-210 (-5%)	-149 (-4%)	-216 (-6%)	-5 (0%)	-304 (-8%)
	AN	-179 (-3%)	-137 (-2%)	-206 (-8%)	-114 (-4%)	-22 (1%)	-228 (-9%)	-243 (-8%)
	BN	5 (7%)	2 (6%)	-491 (-21%)	-589 (-25%)	423 (18%)	-208 (-9%)	105 (5%)
	D	7 (0%)	-37 (-2%)	-358 (-15%)	-607 (-25%)	-364 (-14%)	-816 (-33%)	-576 (-23%)
	C	-435 (-36%)	-299 (-22%)	-152 (-10%)	-170 (-11%)	-879 (-73%)	-329 (-21%)	-1,062 (-85%)
	All	-223 (-8%)	-175 (-6%)	-281 (-10%)	-323 (-11%)	-208 (-7%)	-297 (-10%)	-396 (-14%)

Upstream—American River below Nimbus								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JUL	W	499 (13%)	454 (12%)	-572 (-16%)	-461 (-13%)	518 (13%)	-695 (-19%)	520 (13%)
	AN	202 (4%)	106 (2%)	-965 (-21%)	-853 (-18%)	743 (14%)	-824 (-18%)	796 (15%)
	BN	414 (10%)	337 (8%)	-417 (-10%)	-286 (-7%)	363 (8%)	-85 (-2%)	458 (11%)
	D	770 (25%)	551 (18%)	-444 (-16%)	-492 (-18%)	161 (3%)	-336 (-12%)	168 (3%)
	C	-133 (-11%)	-332 (-21%)	195 (13%)	130 (9%)	1,030 (52%)	11 (1%)	803 (36%)
	All	408 (11%)	289 (8%)	-463 (-14%)	-409 (-12%)	521 (13%)	-427 (-13%)	514 (13%)
AUG	W	-96 (-4%)	-103 (-5%)	506 (22%)	421 (18%)	565 (25%)	570 (24%)	546 (24%)
	AN	133 (7%)	144 (7%)	536 (29%)	517 (28%)	479 (26%)	543 (30%)	434 (24%)
	BN	607 (25%)	619 (26%)	276 (15%)	264 (14%)	198 (12%)	154 (8%)	187 (12%)
	D	277 (17%)	339 (21%)	298 (22%)	320 (24%)	314 (23%)	429 (32%)	347 (25%)
	C	291 (26%)	316 (28%)	85 (7%)	25 (2%)	289 (25%)	146 (12%)	409 (36%)
	All	196 (10%)	215 (11%)	364 (20%)	328 (18%)	394 (22%)	402 (22%)	405 (23%)
SEP	W	43 (-4%)	21 (-4%)	-198 (-6%)	-298 (-9%)	-413 (-13%)	-165 (-5%)	-402 (-12%)
	AN	-317 (-9%)	-336 (-10%)	-18 (-1%)	-231 (-10%)	-1,027 (-47%)	-144 (-6%)	-1,048 (-48%)
	BN	165 (10%)	158 (9%)	108 (7%)	112 (8%)	255 (16%)	37 (2%)	261 (16%)
	D	-51 (-4%)	-44 (-4%)	106 (9%)	91 (8%)	45 (4%)	130 (11%)	50 (4%)
	C	-74 (-9%)	-106 (-15%)	-55 (-7%)	-85 (-11%)	-95 (-10%)	102 (13%)	87 (13%)
	All	-27 (-2%)	-41 (-3%)	-32 (-2%)	-102 (-5%)	-242 (-12%)	-24 (-1%)	-213 (-10%)
OCT	W	-306 (-18%)	-360 (-22%)	310 (18%)	251 (15%)	263 (16%)	256 (15%)	240 (14%)
	AN	-665 (-38%)	-624 (-36%)	98 (6%)	-38 (-2%)	-347 (-20%)	46 (3%)	-365 (-21%)
	BN	-687 (-40%)	-540 (-32%)	-74 (-4%)	-64 (-4%)	43 (2%)	-111 (-7%)	47 (2%)
	D	-672 (-51%)	-579 (-44%)	47 (3%)	31 (2%)	-83 (-5%)	-52 (-4%)	-60 (-4%)
	C	-568 (-35%)	-371 (-23%)	-188 (-12%)	-218 (-14%)	-143 (-9%)	-255 (-17%)	-213 (-14%)
	All	-542 (-34%)	-479 (-30%)	83 (5%)	38 (2%)	1 (0%)	20 (1%)	-14 (-1%)
NOV	W	20 (1%)	25 (1%)	201 (6%)	255 (8%)	-41 (-1%)	180 (5%)	-25 (0%)
	AN	37 (4%)	-11 (2%)	17 (1%)	-12 (0%)	112 (6%)	-57 (-2%)	114 (6%)
	BN	-23 (0%)	-23 (0%)	112 (5%)	85 (4%)	44 (5%)	104 (5%)	70 (6%)
	D	-85 (-5%)	-114 (-7%)	141 (8%)	58 (3%)	-79 (-5%)	-29 (-2%)	-122 (-8%)
	C	-74 (-4%)	-142 (-9%)	117 (7%)	114 (6%)	210 (13%)	88 (5%)	191 (12%)
	All	-22 (0%)	-43 (-1%)	133 (5%)	123 (5%)	24 (2%)	73 (3%)	22 (2%)
DEC	W	255 (3%)	255 (3%)	271 (4%)	305 (4%)	251 (3%)	221 (3%)	274 (4%)
	AN	7 (0%)	11 (0%)	180 (6%)	106 (4%)	182 (6%)	79 (3%)	221 (7%)
	BN	88 (2%)	53 (1%)	80 (3%)	97 (3%)	158 (6%)	65 (2%)	198 (7%)
	D	83 (5%)	55 (3%)	285 (18%)	238 (15%)	178 (11%)	126 (8%)	179 (11%)
	C	177 (12%)	168 (12%)	-79 (-6%)	-85 (-6%)	55 (5%)	-37 (-3%)	112 (9%)
	All	141 (4%)	128 (3%)	177 (5%)	169 (5%)	180 (5%)	115 (3%)	209 (6%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.1.16 American River at Confluence with Sacramento River

Table 5E-51. Mean Monthly Flows (cfs) for Model Scenarios in the American River at Confluence with Sacramento River, Year-Round

Upstream—American River at Confluence with Sacramento River												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	10,388	10,358	10,483	10,388	10,414	10,416	10,402	10,960	10,932	10,906	11,043
	AN	5,096	5,189	5,225	5,096	5,119	5,089	5,120	5,760	5,764	5,767	6,190
	BN	2,246	2,170	2,073	2,246	1,993	1,999	2,004	1,988	2,063	2,276	2,176
	D	1,411	1,449	1,521	1,411	1,384	1,385	1,481	1,424	1,458	1,454	1,347
	C	1,001	1,087	1,026	1,001	1,070	1,073	1,082	1,008	1,027	1,168	917
	All	4,879	4,891	4,926	4,879	4,852	4,850	4,873	5,118	5,132	5,181	5,209
FEB	W	10,633	10,709	10,685	10,633	10,674	10,675	10,674	10,947	10,967	10,937	10,919
	AN	7,071	7,510	7,280	7,071	7,248	7,218	7,262	8,073	8,280	8,247	8,219
	BN	4,528	4,796	4,788	4,528	4,691	4,654	4,701	4,888	5,100	4,651	5,012
	D	1,714	1,745	1,805	1,714	1,740	1,727	1,770	1,756	1,835	1,775	1,863
	C	819	836	820	819	819	822	829	921	970	958	823
	All	5,676	5,819	5,787	5,676	5,748	5,735	5,760	6,007	6,104	5,999	6,050
MAR	W	6,987	6,983	6,985	6,987	6,987	6,988	6,987	6,837	6,832	6,832	6,840
	AN	5,966	6,100	6,098	5,966	6,108	6,097	6,109	5,661	5,739	5,756	5,321
	BN	2,631	2,627	2,634	2,631	2,612	2,635	2,634	2,672	2,565	2,684	2,678
	D	1,900	1,954	1,996	1,900	1,953	1,938	1,885	2,224	2,022	2,060	1,967
	C	752	667	627	752	677	656	644	836	759	762	716
	All	4,065	4,082	4,087	4,065	4,083	4,079	4,067	4,063	3,999	4,030	3,941
APR	W	5,250	5,246	5,248	5,250	5,249	5,250	5,334	5,300	5,310	5,310	5,388
	AN	3,101	3,092	3,096	3,101	3,094	3,096	3,203	3,079	3,117	3,102	3,024
	BN	2,913	2,974	2,845	2,913	2,963	2,943	3,018	2,778	2,966	2,855	3,192
	D	1,659	1,790	1,634	1,659	1,746	1,639	1,657	1,677	1,802	1,806	2,156
	C	888	986	834	888	941	800	934	1,059	1,094	1,035	1,524
	All	3,110	3,161	3,083	3,110	3,144	3,097	3,176	3,128	3,202	3,173	3,392
MAY	W	4,930	4,973	4,929	4,930	4,958	4,930	4,936	4,332	4,459	4,467	4,603
	AN	2,679	2,862	2,677	2,679	2,825	2,675	2,748	2,285	2,708	2,689	2,509
	BN	2,244	2,442	2,250	2,244	2,326	2,238	2,280	1,726	2,273	2,340	3,139
	D	1,443	1,669	1,506	1,443	1,558	1,495	1,538	1,454	1,901	1,923	2,652
	C	956	969	1,150	956	1,008	992	996	790	806	807	1,826
	All	2,795	2,921	2,837	2,795	2,872	2,810	2,840	2,438	2,733	2,750	3,212
JUN	W	3,529	3,903	3,607	3,529	3,774	3,730	3,523	3,388	4,261	4,158	3,679
	AN	2,363	2,923	2,628	2,363	2,770	2,710	2,634	2,736	3,566	3,525	3,051
	BN	2,054	2,807	2,423	2,054	2,858	2,986	2,337	2,603	3,483	3,485	2,617
	D	2,115	2,076	1,941	2,115	2,299	2,465	2,504	2,320	2,272	2,316	2,501
	C	1,281	1,111	927	1,281	1,083	1,100	1,076	793	1,026	890	1,280
	All	2,467	2,763	2,503	2,467	2,753	2,791	2,609	2,545	3,117	3,068	2,796

Upstream—American River at Confluence with Sacramento River												
Month	**Water Year Type**	**NAA_ELT_ 2015[a]**	**B1_ELT_ 2015**	**B2_ELT_ 2015**	**S2_ELT_ 2015**	**H3_ELT_ 2015**	**H3+_ELT_ 2015**	**H4_ELT_ 2015**	**NAA_LLT**	**A1A_LLT**	**A3_LLT**	**A8_LLT**
JUL	W	2,997	3,132	2,581	2,997	3,104	3,026	3,232	3,560	3,223	3,269	2,624
	AN	4,009	3,531	2,782	4,009	3,714	3,602	3,627	4,635	3,954	4,050	2,634
	BN	3,714	3,452	3,031	3,714	3,420	3,289	3,163	4,038	3,363	3,440	2,948
	D	2,167	2,353	1,916	2,167	2,255	2,280	2,173	2,858	2,209	2,428	2,318
	C	1,145	918	1,197	1,145	1,032	1,066	960	1,784	1,651	1,851	828
	All	2,814	2,750	2,339	2,814	2,758	2,705	2,713	3,385	2,901	3,020	2,351
AUG	W	1,945	1,884	2,265	1,945	1,874	1,950	1,817	1,858	1,887	1,894	1,741
	AN	1,543	1,517	1,997	1,543	1,560	1,552	1,535	1,663	1,534	1,522	1,778
	BN	1,481	1,423	1,775	1,481	1,565	1,578	1,655	2,048	1,362	1,349	2,194
	D	1,081	1,066	1,338	1,081	1,053	1,030	971	1,357	1,071	1,007	1,318
	C	928	1,049	1,040	928	978	1,024	1,037	899	744	716	764
	All	1,469	1,450	1,759	1,469	1,464	1,491	1,448	1,612	1,400	1,379	1,588
SEP	W	2,875	1,388	2,387	2,875	2,624	2,715	2,583	3,415	1,699	1,721	3,353
	AN	2,069	1,344	1,681	2,069	1,724	1,898	1,829	1,838	1,296	1,314	2,442
	BN	1,275	1,213	1,304	1,275	1,214	1,210	1,274	1,402	1,166	1,173	1,178
	D	1,009	929	1,031	1,009	929	944	911	987	949	942	956
	C	594	514	455	594	510	539	534	427	421	454	385
	All	1,740	1,123	1,518	1,740	1,570	1,631	1,582	1,870	1,197	1,212	1,888
OCT	W	1,516	1,421	1,726	1,516	1,439	1,491	1,461	1,499	1,695	1,749	1,462
	AN	1,549	1,151	1,419	1,549	1,338	1,473	1,371	1,613	1,855	1,813	1,824
	BN	1,459	1,221	1,367	1,459	1,421	1,409	1,456	1,617	2,042	1,895	1,462
	D	1,297	1,103	1,194	1,297	1,149	1,171	1,273	1,114	1,579	1,486	1,090
	C	1,375	1,235	1,189	1,375	1,384	1,400	1,380	1,517	1,945	1,746	1,492
	All	1,442	1,250	1,424	1,442	1,349	1,391	1,394	1,454	1,789	1,725	1,438
NOV	W	3,240	3,227	3,147	3,240	2,953	2,895	2,989	2,540	2,504	2,499	2,488
	AN	2,827	2,459	2,580	2,827	2,565	2,592	2,639	2,455	2,019	2,067	2,077
	BN	1,898	1,818	1,660	1,898	1,551	1,573	1,585	1,618	1,544	1,545	1,336
	D	1,568	1,460	1,560	1,568	1,425	1,508	1,550	1,326	1,291	1,321	1,396
	C	1,596	1,593	1,549	1,596	1,430	1,433	1,441	1,489	1,540	1,610	1,218
	All	2,343	2,247	2,228	2,343	2,099	2,107	2,156	1,950	1,862	1,884	1,806
DEC	W	6,667	7,183	7,152	6,667	6,880	6,846	6,955	6,115	6,379	6,379	6,351
	AN	2,870	2,908	3,057	2,870	2,889	2,957	3,016	2,856	2,899	2,892	2,877
	BN	2,710	2,961	2,804	2,710	2,726	2,708	2,781	2,445	2,628	2,663	2,386
	D	1,467	1,544	1,685	1,467	1,409	1,456	1,564	1,275	1,273	1,300	1,322
	C	1,306	1,465	1,228	1,306	1,308	1,313	1,323	1,158	1,156	1,164	1,026
	All	3,510	3,762	3,743	3,510	3,570	3,577	3,658	3,224	3,344	3,356	3,283

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

Table 5E-52. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios in the American River at Confluence with Sacramento River, Year-Round

Upstream—American River at Confluence with Sacramento River										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	-29 (0%)	95 (1%)	95 (1%)	27 (0%)	28 (0%)	14 (0%)	-28 (0%)	-54 (0%)	83 (1%)
	AN	93 (2%)	129 (3%)	145 (3%)	23 (0%)	-7 (0%)	24 (0%)	4 (0%)	7 (0%)	429 (7%)
	BN	-76 (-3%)	-173 (-8%)	-146 (-6%)	-252 (-11%)	-246 (-11%)	-241 (-11%)	75 (4%)	288 (14%)	187 (9%)
	D	38 (3%)	110 (8%)	113 (8%)	-27 (-2%)	-26 (-2%)	70 (5%)	33 (2%)	29 (2%)	-77 (-5%)
	C	86 (9%)	25 (3%)	76 (8%)	69 (7%)	72 (7%)	80 (8%)	20 (2%)	160 (16%)	-90 (-9%)
	All	12 (0%)	47 (1%)	62 (1%)	-27 (-1%)	-29 (-1%)	-6 (0%)	15 (0%)	63 (1%)	91 (2%)
FEB	W	75 (1%)	51 (0%)	55 (1%)	40 (0%)	42 (0%)	41 (0%)	20 (0%)	-10 (0%)	-28 (0%)
	AN	439 (6%)	209 (3%)	228 (3%)	177 (3%)	146 (2%)	191 (3%)	208 (3%)	174 (2%)	147 (2%)
	BN	268 (6%)	260 (6%)	241 (5%)	163 (4%)	126 (3%)	174 (4%)	212 (4%)	-237 (-5%)	124 (3%)
	D	31 (2%)	91 (5%)	115 (7%)	26 (1%)	13 (1%)	56 (3%)	79 (4%)	19 (1%)	108 (6%)
	C	17 (2%)	1 (0%)	34 (4%)	0 (0%)	3 (0%)	10 (1%)	49 (5%)	37 (4%)	-98 (-11%)
	All	143 (3%)	111 (2%)	122 (2%)	72 (1%)	59 (1%)	84 (1%)	97 (2%)	-9 (0%)	43 (1%)
MAR	W	-4 (0%)	-2 (0%)	-2 (0%)	0 (0%)	0 (0%)	-1 (0%)	-5 (0%)	-5 (0%)	4 (0%)
	AN	134 (2%)	132 (2%)	141 (2%)	142 (2%)	131 (2%)	142 (2%)	77 (1%)	94 (2%)	-340 (-6%)
	BN	-4 (0%)	3 (0%)	3 (0%)	-19 (-1%)	5 (0%)	3 (0%)	-108 (-4%)	12 (0%)	6 (0%)
	D	54 (3%)	96 (5%)	97 (5%)	52 (3%)	38 (2%)	-16 (-1%)	-202 (-9%)	-164 (-7%)	-257 (-12%)
	C	-85 (-11%)	-126 (-17%)	-126 (-17%)	-76 (-10%)	-96 (-13%)	-108 (-14%)	-77 (-9%)	-75 (-9%)	-121 (-14%)
	All	17 (0%)	22 (1%)	23 (1%)	18 (0%)	14 (0%)	2 (0%)	-64 (-2%)	-33 (-1%)	-122 (-3%)
APR	W	-4 (0%)	-2 (0%)	70 (1%)	-1 (0%)	0 (0%)	85 (2%)	11 (0%)	11 (0%)	88 (2%)
	AN	-9 (0%)	-5 (0%)	143 (5%)	-7 (0%)	-5 (0%)	102 (3%)	38 (1%)	23 (1%)	-55 (-2%)
	BN	61 (2%)	-68 (-2%)	143 (5%)	50 (2%)	30 (1%)	105 (4%)	188 (7%)	77 (3%)	414 (15%)
	D	131 (8%)	-26 (-2%)	109 (7%)	86 (5%)	-21 (-1%)	-2 (0%)	126 (8%)	129 (8%)	479 (29%)
	C	98 (11%)	-54 (-6%)	33 (4%)	53 (6%)	-88 (-10%)	46 (5%)	35 (3%)	-25 (-2%)	464 (44%)
	All	51 (2%)	-26 (-1%)	96 (3%)	34 (1%)	-13 (0%)	66 (2%)	74 (2%)	45 (1%)	264 (8%)
MAY	W	43 (1%)	-1 (0%)	-3 (0%)	27 (1%)	0 (0%)	6 (0%)	126 (3%)	135 (3%)	270 (6%)
	AN	183 (7%)	-3 (0%)	-6 (0%)	145 (5%)	-5 (0%)	68 (3%)	423 (18%)	403 (18%)	224 (10%)
	BN	198 (9%)	6 (0%)	-13 (-1%)	82 (4%)	-6 (0%)	36 (2%)	546 (32%)	614 (36%)	1,413 (82%)
	D	226 (16%)	63 (4%)	-9 (-1%)	115 (8%)	51 (4%)	95 (7%)	447 (31%)	469 (32%)	1,198 (82%)
	C	13 (1%)	193 (20%)	179 (19%)	52 (5%)	36 (4%)	40 (4%)	16 (2%)	17 (2%)	1,036 (131%)
	All	126 (4%)	42 (2%)	20 (1%)	77 (3%)	15 (1%)	45 (2%)	296 (12%)	312 (13%)	774 (32%)
JUN	W	374 (11%)	77 (2%)	-10 (0%)	245 (7%)	201 (6%)	-6 (0%)	873 (26%)	770 (23%)	291 (9%)
	AN	560 (24%)	264 (11%)	43 (2%)	406 (17%)	347 (15%)	270 (11%)	831 (30%)	789 (29%)	315 (12%)
	BN	753 (37%)	368 (18%)	76 (4%)	804 (39%)	932 (45%)	283 (14%)	880 (34%)	882 (34%)	14 (1%)
	D	-39 (-2%)	-174 (-8%)	-322 (-15%)	184 (9%)	351 (17%)	389 (18%)	-48 (-2%)	-4 (0%)	181 (8%)
	C	-170 (-13%)	-355 (-28%)	-506 (-40%)	-199 (-16%)	-181 (-14%)	-205 (-16%)	233 (29%)	98 (12%)	487 (61%)
	All	296 (12%)	36 (1%)	-129 (-5%)	286 (12%)	324 (13%)	141 (6%)	572 (22%)	523 (21%)	252 (10%)

Upstream—American River at Confluence with Sacramento River										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	134 (4%)	-417 (-14%)	-414 (-14%)	107 (4%)	29 (1%)	234 (8%)	-338 (-9%)	-291 (-8%)	-936 (-26%)
	AN	-478 (-12%)	-1,227 (-31%)	-1,172 (-29%)	-295 (-7%)	-407 (-10%)	-382 (-10%)	-682 (-15%)	-586 (-13%)	-2,002 (-43%)
	BN	-262 (-7%)	-683 (-18%)	-585 (-16%)	-294 (-8%)	-425 (-11%)	-551 (-15%)	-676 (-17%)	-599 (-15%)	-1,091 (-27%)
	D	186 (9%)	-252 (-12%)	-243 (-11%)	88 (4%)	113 (5%)	6 (0%)	-649 (-23%)	-431 (-15%)	-540 (-19%)
	C	-228 (-20%)	52 (5%)	-143 (-12%)	-113 (-10%)	-79 (-7%)	-185 (-16%)	-132 (-7%)	67 (4%)	-955 (-54%)
	All	-65 (-2%)	-476 (-17%)	-477 (-17%)	-57 (-2%)	-110 (-4%)	-102 (-4%)	-484 (-14%)	-365 (-11%)	-1,034 (-31%)
AUG	W	-62 (-3%)	319 (16%)	300 (15%)	-72 (-4%)	4 (0%)	-128 (-7%)	30 (2%)	36 (2%)	-117 (-6%)
	AN	-25 (-2%)	454 (29%)	412 (27%)	17 (1%)	10 (1%)	-8 (0%)	-129 (-8%)	-142 (-9%)	115 (7%)
	BN	-58 (-4%)	294 (20%)	282 (19%)	84 (6%)	97 (7%)	174 (12%)	-686 (-33%)	-699 (-34%)	146 (7%)
	D	-16 (-1%)	257 (24%)	272 (25%)	-28 (-3%)	-51 (-5%)	-110 (-10%)	-285 (-21%)	-350 (-26%)	-38 (-3%)
	C	120 (13%)	112 (12%)	195 (21%)	50 (5%)	96 (10%)	109 (12%)	-156 (-17%)	-183 (-20%)	-136 (-15%)
	All	-19 (-1%)	291 (20%)	292 (20%)	-5 (0%)	22 (2%)	-20 (-1%)	-212 (-13%)	-232 (-14%)	-24 (-1%)
SEP	W	-1,487 (-52%)	-488 (-17%)	-477 (-17%)	-251 (-9%)	-160 (-6%)	-292 (-10%)	-1,716 (-50%)	-1,694 (-50%)	-62 (-2%)
	AN	-725 (-35%)	-388 (-19%)	-409 (-20%)	-345 (-17%)	-171 (-8%)	-240 (-12%)	-542 (-30%)	-524 (-28%)	604 (33%)
	BN	-62 (-5%)	29 (2%)	35 (3%)	-61 (-5%)	-65 (-5%)	-1 (0%)	-236 (-17%)	-229 (-16%)	-224 (-16%)
	D	-80 (-8%)	22 (2%)	27 (3%)	-80 (-8%)	-64 (-6%)	-98 (-10%)	-38 (-4%)	-45 (-5%)	-31 (-3%)
	C	-80 (-13%)	-139 (-23%)	40 (7%)	-84 (-14%)	-55 (-9%)	-60 (-10%)	-6 (-1%)	27 (6%)	-42 (-10%)
	All	-617 (-35%)	-222 (-13%)	-193 (-11%)	-170 (-10%)	-109 (-6%)	-158 (-9%)	-673 (-36%)	-659 (-35%)	18 (1%)
OCT	W	-95 (-6%)	210 (14%)	191 (13%)	-77 (-5%)	-24 (-2%)	-55 (-4%)	196 (13%)	250 (17%)	-37 (-2%)
	AN	-397 (-26%)	-130 (-8%)	-136 (-9%)	-211 (-14%)	-75 (-5%)	-178 (-11%)	242 (15%)	201 (12%)	211 (13%)
	BN	-238 (-16%)	-92 (-6%)	-87 (-6%)	-38 (-3%)	-50 (-3%)	-3 (0%)	426 (26%)	278 (17%)	-155 (-10%)
	D	-194 (-15%)	-103 (-8%)	-80 (-6%)	-147 (-11%)	-126 (-10%)	-24 (-2%)	465 (42%)	372 (33%)	-24 (-2%)
	C	-141 (-10%)	-186 (-14%)	-244 (-18%)	9 (1%)	25 (2%)	5 (0%)	428 (28%)	230 (15%)	-25 (-2%)
	All	-192 (-13%)	-18 (-1%)	-28 (-2%)	-93 (-6%)	-51 (-4%)	-48 (-3%)	335 (23%)	271 (19%)	-16 (-1%)
NOV	W	-13 (0%)	-93 (-3%)	-76 (-2%)	-288 (-9%)	-345 (-11%)	-251 (-8%)	-35 (-1%)	-40 (-2%)	-52 (-2%)
	AN	-367 (-13%)	-247 (-9%)	-245 (-9%)	-262 (-9%)	-235 (-8%)	-187 (-7%)	-436 (-18%)	-388 (-16%)	-377 (-15%)
	BN	-79 (-4%)	-237 (-12%)	-206 (-11%)	-346 (-18%)	-325 (-17%)	-313 (-16%)	-74 (-5%)	-73 (-4%)	-282 (-17%)
	D	-108 (-7%)	-7 (0%)	-46 (-3%)	-142 (-9%)	-59 (-4%)	-17 (-1%)	-35 (-3%)	-5 (0%)	70 (5%)
	C	-3 (0%)	-46 (-3%)	-64 (-4%)	-165 (-10%)	-162 (-10%)	-154 (-10%)	50 (3%)	121 (8%)	-272 (-18%)
	All	-95 (-4%)	-114 (-5%)	-114 (-5%)	-244 (-10%)	-236 (-10%)	-187 (-8%)	-88 (-5%)	-65 (-3%)	-144 (-7%)
DEC	W	517 (8%)	485 (7%)	505 (8%)	213 (3%)	180 (3%)	288 (4%)	264 (4%)	264 (4%)	237 (4%)
	AN	38 (1%)	186 (6%)	225 (8%)	19 (1%)	86 (3%)	146 (5%)	43 (1%)	36 (1%)	21 (1%)
	BN	250 (9%)	94 (3%)	129 (5%)	15 (1%)	-2 (0%)	71 (3%)	183 (7%)	218 (9%)	-60 (-2%)
	D	77 (5%)	218 (15%)	220 (15%)	-57 (-4%)	-11 (-1%)	98 (7%)	-2 (0%)	25 (2%)	47 (4%)
	C	159 (12%)	-78 (-6%)	-21 (-2%)	2 (0%)	7 (1%)	17 (1%)	-2 (0%)	6 (1%)	-131 (-11%)
	All	252 (7%)	234 (7%)	260 (7%)	61 (2%)	68 (2%)	149 (4%)	120 (4%)	133 (4%)	59 (2%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.
[b] For definitions of each effect, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-53. Differences[a] (Percent Differences) (cfs) between Effects[b] in the American River at Confluence with Sacramento River, Year-Round**

Upstream—American River at Confluence with Sacramento River								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	-2 (0%)	25 (0%)	69 (1%)	67 (1%)	13 (0%)	81 (1%)	12 (0%)
	AN	89 (2%)	86 (2%)	105 (2%)	135 (3%)	-301 (-5%)	121 (2%)	-285 (-5%)
	BN	-151 (-7%)	-364 (-18%)	79 (4%)	73 (3%)	-360 (-17%)	96 (4%)	-333 (-16%)
	D	4 (0%)	8 (1%)	138 (10%)	136 (10%)	187 (13%)	43 (3%)	190 (13%)
	C	66 (7%)	-75 (-7%)	-44 (-4%)	-47 (-5%)	116 (11%)	-4 (0%)	167 (17%)
	All	-3 (0%)	-51 (-1%)	75 (2%)	77 (2%)	-43 (-1%)	68 (1%)	-29 (0%)
FEB	W	55 (1%)	85 (1%)	11 (0%)	10 (0%)	80 (1%)	14 (0%)	84 (1%)
	AN	232 (4%)	265 (4%)	31 (0%)	62 (1%)	62 (1%)	37 (1%)	81 (1%)
	BN	56 (2%)	506 (11%)	98 (2%)	135 (3%)	136 (3%)	67 (1%)	116 (3%)
	D	-48 (-3%)	12 (1%)	65 (4%)	78 (5%)	-17 (-1%)	59 (3%)	7 (1%)
	C	-33 (-3%)	-20 (-2%)	1 (0%)	-2 (0%)	99 (11%)	24 (3%)	132 (15%)
	All	46 (1%)	152 (3%)	39 (1%)	52 (1%)	68 (1%)	38 (1%)	79 (1%)
MAR	W	1 (0%)	1 (0%)	-2 (0%)	-3 (0%)	-6 (0%)	-1 (0%)	-6 (0%)
	AN	57 (1%)	40 (1%)	-10 (0%)	1 (0%)	472 (8%)	-1 (0%)	481 (8%)
	BN	103 (4%)	-16 (-1%)	22 (1%)	-1 (0%)	-2 (0%)	0 (0%)	-3 (0%)
	D	256 (12%)	218 (10%)	43 (2%)	58 (3%)	352 (17%)	113 (6%)	354 (17%)
	C	-8 (-2%)	-11 (-2%)	-50 (-7%)	-30 (-4%)	-5 (-2%)	-18 (-2%)	-5 (-2%)
	All	81 (2%)	49 (1%)	4 (0%)	7 (0%)	143 (4%)	22 (1%)	145 (4%)
APR	W	-15 (0%)	-15 (0%)	-1 (0%)	-2 (0%)	-90 (-2%)	-15 (0%)	-18 (0%)
	AN	-46 (-1%)	-32 (-1%)	2 (0%)	0 (0%)	50 (2%)	41 (1%)	198 (6%)
	BN	-126 (-5%)	-16 (-1%)	-118 (-4%)	-98 (-3%)	-482 (-17%)	39 (1%)	-271 (-10%)
	D	5 (0%)	2 (0%)	-112 (-7%)	-5 (0%)	-505 (-30%)	112 (7%)	-370 (-22%)
	C	63 (8%)	123 (13%)	-107 (-12%)	34 (4%)	-519 (-50%)	-13 (-1%)	-432 (-40%)
	All	-23 (-1%)	6 (0%)	-60 (-2%)	-13 (0%)	-290 (-9%)	30 (1%)	-168 (-5%)
MAY	W	-84 (-2%)	-92 (-2%)	-29 (-1%)	-1 (0%)	-272 (-6%)	-9 (0%)	-273 (-6%)
	AN	-240 (-12%)	-221 (-11%)	-148 (-6%)	2 (0%)	-227 (-10%)	-74 (-3%)	-229 (-10%)
	BN	-348 (-23%)	-416 (-27%)	-77 (-3%)	12 (1%)	-1,407 (-82%)	-49 (-2%)	-1,426 (-82%)
	D	-221 (-15%)	-243 (-17%)	-52 (-4%)	11 (1%)	-1,135 (-78%)	-103 (-7%)	-1,206 (-83%)
	C	-3 (-1%)	-4 (-1%)	141 (15%)	157 (16%)	-842 (-111%)	139 (15%)	-856 (-112%)
	All	-170 (-8%)	-186 (-8%)	-35 (-1%)	28 (1%)	-732 (-30%)	-24 (-1%)	-754 (-31%)
JUN	W	-499 (-15%)	-396 (-12%)	-168 (-5%)	-124 (-4%)	-214 (-6%)	-4 (0%)	-301 (-9%)
	AN	-271 (-7%)	-229 (-5%)	-142 (-6%)	-83 (-4%)	-51 (0%)	-227 (-10%)	-272 (-10%)
	BN	-127 (3%)	-129 (3%)	-436 (-21%)	-564 (-27%)	354 (17%)	-207 (-10%)	62 (3%)
	D	10 (0%)	-34 (-2%)	-358 (-17%)	-524 (-25%)	-355 (-16%)	-711 (-34%)	-503 (-23%)
	C	-404 (-43%)	-268 (-26%)	-156 (-12%)	-174 (-14%)	-842 (-89%)	-301 (-23%)	-993 (-101%)
	All	-276 (-11%)	-228 (-9%)	-250 (-10%)	-288 (-12%)	-216 (-8%)	-270 (-11%)	-380 (-15%)

Upstream—American River at Confluence with Sacramento River								
Month	**Water Year Type**	**Alt 1A Effect vs. Boundary 1 Effect**	**Alt 3 Effect vs. Boundary 1 Effect**	**Alt 4A H3 Effect vs. Boundary 2 Effect**	**Alt 4A H3+ Effect vs. Boundary 2 Effect**	**Alt 8 Effect vs. Boundary 2 Effect**	**Alt 4A H4 Effect vs. Scenario 2 Effect**	**Alt 8 Effect vs. Scenario 2 Effect**
JUL	W	472 (14%)	426 (13%)	-524 (-17%)	-445 (-15%)	520 (12%)	-648 (-22%)	522 (12%)
	AN	203 (3%)	108 (1%)	-932 (-23%)	-820 (-20%)	775 (13%)	-790 (-20%)	829 (14%)
	BN	414 (10%)	337 (8%)	-389 (-10%)	-258 (-7%)	408 (9%)	-34 (-1%)	506 (11%)
	D	835 (31%)	617 (24%)	-339 (-16%)	-364 (-17%)	289 (7%)	-249 (-11%)	298 (8%)
	C	-95 (-12%)	-295 (-24%)	164 (14%)	131 (11%)	1,007 (58%)	42 (4%)	812 (41%)
	All	419 (12%)	300 (8%)	-419 (-15%)	-366 (-13%)	559 (14%)	-375 (-13%)	558 (14%)
AUG	W	-91 (-5%)	-97 (-5%)	391 (20%)	315 (16%)	436 (23%)	428 (22%)	417 (22%)
	AN	104 (6%)	116 (7%)	437 (28%)	444 (29%)	339 (23%)	420 (27%)	297 (20%)
	BN	627 (30%)	640 (30%)	210 (14%)	197 (13%)	149 (13%)	107 (7%)	136 (12%)
	D	270 (20%)	334 (24%)	285 (26%)	308 (28%)	295 (27%)	383 (35%)	311 (28%)
	C	276 (30%)	303 (33%)	62 (7%)	16 (2%)	248 (27%)	86 (9%)	330 (36%)
	All	193 (12%)	213 (13%)	295 (20%)	268 (18%)	314 (21%)	312 (21%)	315 (21%)
SEP	W	229 (-1%)	207 (-2%)	-237 (-8%)	-327 (-11%)	-426 (-15%)	-185 (-6%)	-415 (-15%)
	AN	-183 (-6%)	-202 (-7%)	-43 (-2%)	-216 (-10%)	-992 (-52%)	-169 (-8%)	-1,013 (-53%)
	BN	175 (12%)	168 (12%)	90 (7%)	94 (7%)	253 (18%)	36 (3%)	259 (19%)
	D	-42 (-4%)	-35 (-3%)	102 (10%)	87 (9%)	53 (5%)	125 (12%)	58 (6%)
	C	-74 (-12%)	-106 (-20%)	-55 (-9%)	-84 (-14%)	-96 (-13%)	99 (17%)	82 (17%)
	All	56 (1%)	42 (0%)	-52 (-3%)	-113 (-6%)	-239 (-14%)	-35 (-2%)	-211 (-12%)
OCT	W	-291 (-19%)	-345 (-23%)	287 (19%)	234 (15%)	246 (16%)	246 (16%)	228 (15%)
	AN	-639 (-41%)	-598 (-38%)	81 (5%)	-54 (-4%)	-341 (-21%)	42 (3%)	-347 (-22%)
	BN	-664 (-43%)	-517 (-34%)	-54 (-4%)	-42 (-3%)	64 (3%)	-85 (-6%)	68 (4%)
	D	-659 (-57%)	-566 (-48%)	45 (3%)	23 (2%)	-78 (-6%)	-57 (-4%)	-56 (-4%)
	C	-568 (-38%)	-370 (-25%)	-195 (-14%)	-211 (-15%)	-162 (-12%)	-249 (-18%)	-220 (-16%)
	All	-527 (-36%)	-463 (-32%)	75 (5%)	33 (2%)	-2 (0%)	21 (1%)	-11 (-1%)
NOV	W	23 (1%)	28 (1%)	195 (6%)	252 (8%)	-41 (-1%)	174 (5%)	-25 (0%)
	AN	68 (5%)	21 (3%)	16 (1%)	-12 (0%)	131 (7%)	-57 (-2%)	133 (7%)
	BN	-5 (0%)	-7 (0%)	109 (6%)	88 (5%)	45 (5%)	107 (6%)	77 (7%)
	D	-73 (-4%)	-103 (-6%)	135 (9%)	52 (3%)	-78 (-6%)	-28 (-2%)	-116 (-8%)
	C	-53 (-4%)	-123 (-8%)	119 (7%)	116 (7%)	225 (15%)	91 (6%)	208 (14%)
	All	-8 (0%)	-30 (-1%)	130 (6%)	122 (5%)	30 (3%)	72 (3%)	30 (2%)
DEC	W	252 (3%)	252 (3%)	272 (4%)	306 (5%)	249 (3%)	217 (3%)	268 (4%)
	AN	-5 (0%)	1 (0%)	167 (6%)	100 (3%)	165 (6%)	79 (3%)	204 (7%)
	BN	68 (2%)	33 (0%)	78 (3%)	96 (4%)	154 (6%)	58 (2%)	189 (7%)
	D	79 (5%)	52 (3%)	275 (19%)	229 (16%)	171 (11%)	122 (8%)	173 (11%)
	C	161 (12%)	152 (12%)	-80 (-6%)	-85 (-7%)	53 (5%)	-37 (-3%)	111 (10%)
	All	132 (3%)	119 (3%)	173 (5%)	166 (5%)	175 (5%)	112 (3%)	201 (6%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.1.17 Stanislaus River at Confluence with San Joaquin River

Table 5E-54. Mean Monthly Flows (cfs) for Model Scenarios in the Stanislaus River at Confluence with San Joaquin River, Year-Round

Upstream—Stanislaus River at Confluence with San Joaquin River												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	958	958	958	958	958	958	958	885	885	885	885
	AN	912	912	912	912	912	912	912	963	963	963	963
	BN	371	371	371	371	371	371	371	369	369	369	367
	D	363	363	363	363	363	363	363	366	366	366	366
	C	302	302	302	302	302	302	302	265	265	265	265
	All	633	633	633	633	633	633	633	615	615	615	615
FEB	W	1,175	1,175	1,175	1,175	1,175	1,175	1,175	1,236	1,238	1,239	1,203
	AN	903	903	903	903	903	903	903	858	858	858	858
	BN	518	518	518	518	518	518	518	438	438	438	436
	D	357	357	357	358	357	357	357	359	359	359	359
	C	355	355	355	355	355	355	355	348	348	348	348
	All	728	728	728	728	728	728	728	723	724	724	714
MAR	W	1,848	1,848	1,841	1,841	1,849	1,848	1,848	2,217	2,216	2,216	2,212
	AN	958	958	958	958	958	958	958	956	956	956	956
	BN	558	558	559	559	558	558	558	548	547	547	548
	D	392	392	391	391	392	392	392	390	390	390	393
	C	455	455	454	454	455	455	455	444	444	444	450
	All	967	967	965	965	967	967	967	1,071	1,071	1,071	1,071
APR	W	1,741	1,741	1,741	1,741	1,741	1,741	1,741	1,965	1,965	1,965	1,965
	AN	1,470	1,470	1,421	1,421	1,470	1,470	1,470	1,535	1,534	1,534	1,517
	BN	1,273	1,273	1,274	1,274	1,273	1,273	1,273	1,211	1,210	1,210	1,210
	D	1,144	1,144	1,203	1,203	1,144	1,144	1,144	1,199	1,198	1,198	1,195
	C	713	716	711	711	715	715	715	670	670	670	662
	All	1,319	1,319	1,318	1,318	1,319	1,319	1,319	1,387	1,387	1,387	1,382
MAY	W	1,688	1,688	1,689	1,689	1,688	1,688	1,688	1,613	1,614	1,614	1,600
	AN	1,298	1,297	1,260	1,260	1,297	1,298	1,298	1,243	1,243	1,243	1,228
	BN	1,157	1,155	1,159	1,159	1,156	1,157	1,157	898	898	898	901
	D	965	965	1,009	1,010	965	965	965	916	916	916	925
	C	635	637	632	632	636	636	636	627	627	626	620
	All	1,208	1,208	1,207	1,207	1,208	1,208	1,208	1,125	1,125	1,125	1,118
JUN	W	1,421	1,420	1,422	1,422	1,420	1,420	1,421	1,763	1,761	1,762	1,787
	AN	1,335	1,331	1,342	1,343	1,333	1,335	1,334	985	984	984	977
	BN	692	687	695	695	690	692	692	568	566	566	611
	D	393	393	401	401	394	394	394	364	365	365	463
	C	296	298	295	295	298	298	298	296	294	292	364
	All	906	905	909	910	906	906	906	914	912	912	955

Upstream—Stanislaus River at Confluence with San Joaquin River												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	899	900	899	899	899	898	898	1,080	1,080	1,080	1,074
	AN	450	450	450	450	450	450	450	454	454	454	457
	BN	427	427	427	427	427	427	427	425	425	425	427
	D	362	363	353	355	362	362	362	359	360	360	359
	C	303	306	301	301	304	304	305	310	312	313	305
	All	535	536	533	534	535	535	535	590	590	590	588
AUG	W	742	743	742	741	742	742	742	717	717	717	717
	AN	457	457	457	457	457	457	457	454	454	454	454
	BN	426	426	426	426	426	426	426	418	418	418	418
	D	384	384	384	384	384	384	384	382	382	382	382
	C	328	329	328	328	328	328	328	338	338	338	323
	All	499	499	499	498	499	499	499	491	491	491	489
SEP	W	863	863	863	863	863	863	863	863	863	863	866
	AN	470	470	470	470	470	470	470	474	474	474	479
	BN	414	414	414	414	414	414	414	407	407	407	408
	D	394	394	394	394	394	394	394	390	390	390	391
	C	323	323	323	323	323	323	323	317	327	331	306
	All	536	536	535	535	536	536	536	533	535	536	533
OCT	W	916	916	916	916	916	916	916	845	846	845	849
	AN	938	938	938	938	938	938	938	822	825	823	831
	BN	888	888	888	888	888	888	888	844	844	844	842
	D	979	979	979	979	979	979	979	925	925	925	931
	C	796	796	796	796	796	796	796	612	612	612	632
	All	902	902	902	902	902	902	902	808	808	808	815
NOV	W	413	413	413	413	413	413	413	408	408	408	409
	AN	579	579	579	579	579	579	579	524	524	524	524
	BN	334	334	334	334	334	334	334	334	334	334	334
	D	314	314	314	314	314	314	314	321	321	321	322
	C	314	314	314	314	314	314	314	308	309	309	310
	All	398	398	398	398	398	398	398	386	386	386	386
DEC	W	440	441	440	440	441	441	441	429	418	418	418
	AN	754	754	754	754	754	754	754	697	697	697	696
	BN	323	323	323	323	323	323	323	353	353	353	323
	D	287	287	287	287	287	287	287	294	294	294	294
	C	278	278	278	278	278	278	278	272	272	272	272
	All	427	427	427	427	427	427	427	417	414	414	409

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type (using San Joaquin Valley Index [60:20:20]): AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

Table 5E-55. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios in the Stanislaus River at Confluence with San Joaquin River, Year-Round

Upstream—Stanislaus River at Confluence with San Joaquin River										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-2 (-1%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)
FEB	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (0%)	3 (0%)	-33 (-3%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-2 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	-10 (-1%)
MAR	W	-1 (0%)	-7 (0%)	-8 (0%)	1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-4 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (1%)
	C	1 (0%)	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	7 (2%)
	All	0 (0%)	-2 (0%)	-2 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)
APR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	-49 (-3%)	-49 (-3%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-17 (-1%)
	BN	0 (0%)	1 (0%)	1 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)	-1 (0%)	-1 (0%)
	D	0 (0%)	59 (5%)	59 (5%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-3 (0%)
	C	2 (0%)	-2 (0%)	-2 (0%)	2 (0%)	2 (0%)	2 (0%)	0 (0%)	0 (0%)	-7 (-1%)
	All	0 (0%)	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-5 (0%)
MAY	W	0 (0%)	1 (0%)	1 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	-14 (-1%)
	AN	0 (0%)	-37 (-3%)	-37 (-3%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-14 (-1%)
	BN	-2 (0%)	2 (0%)	2 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)	2 (0%)
	D	0 (0%)	44 (5%)	45 (5%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	9 (1%)
	C	2 (0%)	-2 (0%)	-2 (0%)	1 (0%)	1 (0%)	2 (0%)	0 (0%)	-1 (0%)	-7 (-1%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-6 (-1%)
JUN	W	0 (0%)	1 (0%)	1 (0%)	0 (0%)	0 (0%)	0 (0%)	-2 (0%)	0 (0%)	24 (1%)
	AN	-4 (0%)	7 (1%)	8 (1%)	-2 (0%)	0 (0%)	-1 (0%)	-1 (0%)	-1 (0%)	-8 (-1%)
	BN	-4 (-1%)	3 (0%)	4 (1%)	-2 (0%)	0 (0%)	0 (0%)	-2 (0%)	-2 (0%)	43 (8%)
	D	0 (0%)	8 (2%)	8 (2%)	1 (0%)	1 (0%)	0 (0%)	0 (0%)	0 (0%)	98 (27%)
	C	2 (1%)	-1 (0%)	-1 (0%)	1 (0%)	1 (0%)	1 (0%)	-1 (0%)	-4 (-1%)	68 (23%)
	All	-1 (0%)	3 (0%)	3 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)	-1 (0%)	41 (5%)

Upstream—Stanislaus River at Confluence with San Joaquin River										
Month	**Water Year Type**	**Boundary 1 Effect[b]**	**Boundary 2 Effect**	**Scenario 2 Effect**	**Alt 4A H3 Effect**	**Alt 4A H3+ Effect**	**Alt 4A H4 Effect**	**Alt 1A Effect**	**Alt 3 Effect**	**Alt 8 Effect**
JUL	W	1 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	-7 (-1%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (1%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (0%)
	D	2 (0%)	-9 (-2%)	-7 (-2%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	-1 (0%)
	C	3 (1%)	-2 (-1%)	-2 (-1%)	1 (0%)	1 (0%)	1 (0%)	2 (1%)	2 (1%)	-5 (-2%)
	All	1 (0%)	-2 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	-2 (0%)
AUG	W	1 (0%)	0 (0%)	-1 (0%)	1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-15 (-4%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-3 (-1%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5 (1%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	10 (3%)	14 (4%)	-10 (-3%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (0%)	3 (1%)	0 (0%)
OCT	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	4 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (0%)	0 (0%)	8 (1%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-3 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	6 (1%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	19 (3%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	0 (0%)	7 (1%)
NOV	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (1%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)
DEC	W	0 (0%)	0 (0%)	0 (0%)	1 (0%)	0 (0%)	1 (0%)	-11 (-3%)	-11 (-3%)	-11 (-3%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-30 (-9%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-3 (-1%)	-3 (-1%)	-8 (-2%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type (using San Joaquin Valley Index [60:20:20]): AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-56. Differences[a] (Percent Differences) (cfs) between Effects[b] in the Stanislaus River at Confluence with San Joaquin River, Year-Round**

Upstream—Stanislaus River at Confluence with San Joaquin River								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (1%)	0 (0%)	2 (1%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	0 (0%)	1 (0%)
FEB	W	-2 (0%)	-3 (0%)	0 (0%)	0 (0%)	33 (3%)	0 (0%)	33 (3%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (1%)	0 (0%)	2 (1%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)	0 (0%)	-1 (0%)
	All	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	10 (1%)	0 (0%)	10 (1%)
MAR	W	0 (0%)	0 (0%)	-8 (0%)	-7 (0%)	-3 (0%)	-8 (0%)	-3 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	-1 (0%)	-1 (0%)	-4 (-1%)	-1 (0%)	-4 (-1%)
	C	1 (0%)	1 (0%)	-1 (0%)	-1 (0%)	-8 (-2%)	-1 (0%)	-8 (-2%)
	All	0 (0%)	0 (0%)	-3 (0%)	-2 (0%)	-3 (0%)	-3 (0%)	-3 (0%)
APR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	-49 (-3%)	-49 (-3%)	-32 (-2%)	-49 (-3%)	-32 (-2%)
	BN	0 (0%)	0 (0%)	1 (0%)	1 (0%)	2 (0%)	1 (0%)	2 (0%)
	D	0 (0%)	0 (0%)	59 (5%)	59 (5%)	62 (5%)	59 (5%)	62 (5%)
	C	2 (0%)	2 (0%)	-4 (0%)	-4 (0%)	6 (1%)	-4 (-1%)	5 (1%)
	All	1 (0%)	1 (0%)	-1 (0%)	-1 (0%)	5 (0%)	-1 (0%)	5 (0%)
MAY	W	-1 (0%)	-1 (0%)	1 (0%)	1 (0%)	14 (1%)	1 (0%)	14 (1%)
	AN	-1 (0%)	-1 (0%)	-37 (-3%)	-37 (-3%)	-23 (-2%)	-37 (-3%)	-23 (-2%)
	BN	-1 (0%)	-1 (0%)	3 (0%)	2 (0%)	-1 (0%)	2 (0%)	-1 (0%)
	D	0 (0%)	0 (0%)	44 (5%)	44 (5%)	35 (4%)	45 (5%)	36 (4%)
	C	2 (0%)	3 (1%)	-4 (-1%)	-4 (-1%)	5 (1%)	-4 (-1%)	5 (1%)
	All	0 (0%)	0 (0%)	0 (0%)	-1 (0%)	6 (1%)	0 (0%)	6 (1%)
JUN	W	1 (0%)	0 (0%)	2 (0%)	1 (0%)	-23 (-1%)	1 (0%)	-23 (-1%)
	AN	-3 (0%)	-3 (0%)	9 (1%)	7 (1%)	15 (1%)	8 (1%)	15 (1%)
	BN	-2 (0%)	-2 (0%)	5 (1%)	3 (0%)	-40 (-7%)	4 (1%)	-39 (-7%)
	D	-1 (0%)	-1 (0%)	7 (2%)	7 (2%)	-90 (-25%)	8 (2%)	-90 (-25%)
	C	3 (1%)	5 (2%)	-2 (-1%)	-2 (-1%)	-69 (-23%)	-2 (-1%)	-69 (-23%)
	All	0 (0%)	0 (0%)	4 (0%)	3 (0%)	-38 (-4%)	3 (0%)	-38 (-4%)

Upstream—Stanislaus River at Confluence with San Joaquin River								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JUL	W	1 (0%)	1 (0%)	0 (0%)	1 (0%)	7 (1%)	1 (0%)	7 (1%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-3 (-1%)	0 (0%)	-3 (-1%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-2 (0%)	0 (0%)	-2 (0%)
	D	1 (0%)	1 (0%)	-9 (-3%)	-9 (-3%)	-8 (-2%)	-7 (-2%)	-6 (-2%)
	C	1 (0%)	0 (0%)	-3 (-1%)	-3 (-1%)	3 (1%)	-3 (-1%)	3 (1%)
	All	1 (0%)	1 (0%)	-2 (0%)	-2 (0%)	0 (0%)	-1 (0%)	1 (0%)
AUG	W	1 (0%)	1 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)	-1 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	1 (0%)	1 (0%)	0 (0%)	0 (0%)	15 (4%)	0 (0%)	15 (4%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (1%)	0 (0%)	3 (1%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-3 (0%)	-1 (0%)	-3 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-5 (-1%)	0 (0%)	-5 (-1%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)	0 (0%)	-1 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	-10 (-3%)	-14 (-4%)	0 (0%)	0 (0%)	10 (3%)	0 (0%)	10 (3%)
	All	-2 (0%)	-3 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
OCT	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-4 (0%)	0 (0%)	-4 (0%)
	AN	-2 (0%)	0 (0%)	0 (0%)	0 (0%)	-8 (-1%)	0 (0%)	-8 (-1%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (0%)	0 (0%)	3 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-6 (-1%)	0 (0%)	-6 (-1%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-19 (-3%)	0 (0%)	-19 (-3%)
	All	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	-7 (-1%)	0 (0%)	-7 (-1%)
NOV	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)	0 (0%)	-1 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)	0 (0%)	-1 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-2 (-1%)	0 (0%)	-2 (-1%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)	0 (0%)	-1 (0%)
DEC	W	12 (3%)	12 (3%)	-1 (0%)	-1 (0%)	11 (3%)	-1 (0%)	11 (3%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	30 (9%)	0 (0%)	30 (9%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	0 (0%)	1 (0%)
	All	3 (1%)	3 (1%)	0 (0%)	0 (0%)	8 (2%)	0 (0%)	8 (2%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type (using San Joaquin Valley Index [60:20:20]): AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.2 In Delta

5E.4.2.2.1 OMR Flow (Old and Middle Rivers)

Table 5E-57. Mean Monthly Flows (cfs) for Model Scenarios in Old and Middle Rivers, Year-Round

In Delta—OMR Flow (Old and Middle Rivers)												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	-1,837	2,130	3,148	3,015	1,759	1,759	1,829	-1,606	4,510	532	3,539
	AN	-3,714	-2,170	-99	-90	-1,475	-1,472	-1,466	-3,446	-115	-2,261	1,211
	BN	-4,180	-3,751	276	299	-2,454	-2,451	-2,452	-3,803	-2,695	-3,853	961
	D	-4,817	-4,777	66	66	-2,984	-2,984	-2,984	-4,675	-3,362	-3,466	968
	C	-4,505	-4,530	-154	-151	-3,514	-3,508	-3,410	-3,684	-1,556	-1,542	838
	All	-3,556	-1,994	1,023	986	-1,246	-1,245	-1,207	-3,228	-13	-1,807	1,798
FEB	W	-1,830	5,271	5,203	5,315	4,173	4,006	4,192	-2,293	6,082	2,061	3,300
	AN	-2,703	637	1,628	1,501	-463	-455	-286	-3,147	1,971	-1,359	1,645
	BN	-3,327	-613	-529	-497	-1,846	-1,881	-1,764	-3,290	2	-2,104	1,186
	D	-3,621	-3,180	84	83	-3,015	-3,011	-3,003	-3,502	-3,217	-3,384	972
	C	-2,941	-3,002	-148	-145	-2,830	-2,844	-2,824	-3,047	-3,158	-2,809	891
	All	-2,769	523	1,795	1,817	-136	-195	-86	-2,964	1,049	-1,058	1,833
MAR	W	-1,544	6,560	5,570	5,604	4,951	4,918	5,841	-1,454	6,776	3,772	4,320
	AN	-4,110	1,370	789	803	1,291	1,264	1,393	-3,815	2,649	-1,592	1,840
	BN	-4,155	-1,559	2	31	-2,123	-2,058	-314	-3,834	-454	-1,910	909
	D	-2,898	-2,361	-673	-672	-2,802	-2,786	-1,586	-2,614	-1,843	-2,391	845
	C	-1,770	-1,619	-1,323	-1,331	-1,649	-1,660	-1,472	-1,636	-1,433	-1,687	526
	All	-2,696	1,259	1,541	1,558	540	538	1,439	-2,487	1,844	-135	2,057
APR	W	2,523	2,664	3,527	3,614	3,208	4,191	3,654	2,415	3,673	438	5,117
	AN	756	-1,088	426	467	226	1,202	706	787	579	-2,013	2,653
	BN	36	-2,753	-797	-800	-492	4	-165	214	-1,777	-2,398	2,070
	D	-668	-2,431	-1,574	-1,578	-1,684	-1,179	-1,479	-615	-1,832	-1,740	1,026
	C	-933	-1,307	-1,361	-1,362	-1,305	-1,142	-1,362	-845	-1,124	-1,140	482
	All	634	-510	500	532	406	1,079	710	659	379	-1,114	2,660
MAY	W	1,918	2,027	3,646	3,550	3,166	3,979	3,515	1,555	3,149	434	4,665
	AN	522	-1,750	83	29	457	972	794	396	-625	-1,997	2,134
	BN	-178	-2,700	-642	-700	-421	43	-127	-237	-1,583	-2,003	1,578
	D	-1,010	-1,927	-1,496	-1,594	-1,302	-1,085	-1,206	-1,010	-1,296	-1,481	686
	C	-937	-1,138	-1,251	-1,284	-1,205	-1,111	-1,157	-911	-730	-767	348
	All	295	-664	547	472	537	1,011	775	155	246	-934	2,263
JUN	W	-4,290	-1,490	436	465	-267	-569	-12	-4,369	-540	-2,663	1,034
	AN	-4,623	-2,754	-1,310	-1,319	-2,193	-2,235	-1,829	-4,454	-2,990	-3,918	233
	BN	-3,846	-2,284	-1,694	-1,781	-2,523	-2,804	-2,490	-3,420	-2,008	-2,077	-132
	D	-2,949	-1,754	-1,737	-1,863	-1,864	-2,385	-1,930	-2,592	-1,840	-1,640	-495
	C	-1,346	-1,186	-1,282	-1,350	-1,205	-1,205	-1,205	-2,143	-1,706	-1,616	-597
	All	-3,538	-1,824	-912	-956	-1,422	-1,686	-1,297	-3,504	-1,605	-2,369	144

In Delta—OMR Flow (Old and Middle Rivers)												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	-8,937	-4,118	-2,736	-2,598	-4,340	-4,219	-3,561	-8,699	-5,531	-5,716	-3,169
	AN	-9,001	-3,665	-2,503	-2,271	-3,629	-3,414	-3,316	-7,962	-4,806	-5,241	-1,752
	BN	-10,221	-4,492	-3,394	-3,331	-4,563	-4,426	-3,888	-9,942	-5,238	-6,272	-2,648
	D	-8,966	-4,532	-3,586	-3,227	-4,202	-4,172	-3,981	-9,505	-4,365	-4,542	-3,552
	C	-4,269	-2,792	-2,025	-2,273	-2,771	-2,763	-2,671	-5,234	-2,661	-2,958	-4,072
	All	-8,489	-4,013	-2,897	-2,766	-4,014	-3,913	-3,543	-8,473	-4,699	-5,080	-3,089
AUG	W	-10,578	-4,013	-2,810	-2,804	-4,039	-4,539	-3,363	-10,518	-4,342	-4,552	-5,938
	AN	-10,736	-3,628	-3,091	-3,029	-4,276	-4,542	-3,719	-10,985	-5,549	-5,739	-5,296
	BN	-9,393	-3,165	-3,051	-3,036	-3,386	-3,527	-3,159	-9,374	-4,328	-4,964	-4,644
	D	-4,715	-4,813	-2,975	-2,856	-4,830	-4,835	-4,827	-7,259	-4,205	-3,939	-4,424
	C	-3,037	-3,907	-2,793	-3,121	-3,882	-3,933	-3,937	-3,192	-2,801	-2,872	-3,154
	All	-8,008	-3,972	-2,926	-2,934	-4,113	-4,343	-3,786	-8,604	-4,261	-4,416	-4,883
SEP	W	-9,300	-3,816	-1,653	-1,445	-1,842	-2,041	-1,635	-7,580	-4,507	-5,003	654
	AN	-9,580	-3,775	-2,002	-1,840	-2,179	-2,305	-1,838	-9,002	-5,149	-5,430	-354
	BN	-8,696	-3,601	-2,210	-2,168	-3,201	-3,206	-3,113	-8,392	-4,606	-4,533	-4,392
	D	-5,971	-3,277	-2,362	-2,064	-2,983	-2,994	-2,961	-5,165	-4,082	-4,031	-3,745
	C	-3,614	-3,008	-1,830	-1,941	-2,817	-2,835	-2,759	-3,966	-2,384	-2,536	-2,245
	All	-7,675	-3,537	-1,981	-1,835	-2,516	-2,604	-2,373	-6,868	-4,214	-4,411	-1,745
OCT	W	-5,831	-4,612	-257	-214	-1,028	-1,135	-1,070	-5,049	-5,048	-5,121	298
	AN	-5,371	-4,589	-828	-790	-1,224	-1,209	-1,272	-3,648	-4,681	-4,602	98
	BN	-5,487	-4,526	-561	-549	-1,195	-1,220	-1,167	-4,793	-4,899	-4,918	134
	D	-5,137	-4,643	-509	-488	-1,385	-1,351	-1,357	-4,103	-4,963	-4,826	96
	C	-4,828	-4,335	-1,001	-1,014	-1,853	-1,852	-1,827	-3,920	-4,393	-4,051	4
	All	-5,406	-4,560	-557	-532	-1,284	-1,313	-1,290	-4,427	-4,854	-4,789	153
NOV	W	-7,265	-4,951	-926	-730	-1,685	-1,690	-1,622	-6,527	-4,575	-5,959	501
	AN	-6,555	-4,511	-1,420	-1,395	-2,446	-2,470	-2,336	-6,003	-4,678	-5,307	260
	BN	-6,450	-4,959	-1,096	-1,091	-2,225	-2,264	-2,100	-5,542	-5,311	-5,443	300
	D	-5,722	-4,834	-848	-855	-2,108	-2,166	-1,997	-5,007	-4,352	-5,030	309
	C	-4,374	-4,098	-861	-958	-2,488	-2,487	-2,367	-4,389	-3,808	-3,714	227
	All	-6,260	-4,737	-1,001	-950	-2,099	-2,123	-2,000	-5,636	-4,555	-5,243	349
DEC	W	-5,399	-3,783	-2,603	-2,574	-4,284	-4,333	-4,228	-5,591	-2,570	-4,502	1,402
	AN	-7,208	-4,790	-2,205	-2,201	-5,566	-5,833	-5,243	-7,050	-5,652	-6,087	859
	BN	-7,304	-5,604	-2,066	-2,083	-6,092	-6,118	-6,234	-7,040	-6,209	-6,635	901
	D	-6,970	-5,755	-2,193	-2,194	-6,528	-6,257	-6,416	-7,006	-6,878	-7,006	866
	C	-4,844	-4,331	-1,309	-1,296	-4,554	-4,720	-4,732	-4,173	-5,701	-5,849	714
	All	-6,253	-4,754	-2,174	-2,165	-5,313	-5,336	-5,273	-6,155	-5,046	-5,845	1,019

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

Table 5E-58. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios in Old and Middle Rivers, Year-Round

In Delta—OMR Flow (Old and Middle Rivers)										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	3,968 (216%)	4,985 (271%)	4,852 (264%)	3,596 (196%)	3,596 (196%)	3,666 (200%)	6,116 (381%)	2,138 (133%)	5,144 (320%)
	AN	1,544 (42%)	3,615 (97%)	3,624 (98%)	2,239 (60%)	2,243 (60%)	2,248 (61%)	3,332 (97%)	1,185 (34%)	4,658 (135%)
	BN	429 (10%)	4,456 (107%)	4,478 (107%)	1,726 (41%)	1,728 (41%)	1,728 (41%)	1,107 (29%)	-51 (-1%)	4,763 (125%)
	D	40 (1%)	4,883 (101%)	4,883 (101%)	1,833 (38%)	1,833 (38%)	1,833 (38%)	1,314 (28%)	1,209 (26%)	5,643 (121%)
	C	-25 (-1%)	4,351 (97%)	4,354 (97%)	991 (22%)	996 (22%)	1,095 (24%)	2,128 (58%)	2,142 (58%)	4,522 (123%)
	All	1,562 (44%)	4,579 (129%)	4,543 (128%)	2,310 (65%)	2,312 (65%)	2,349 (66%)	3,216 (100%)	1,422 (44%)	5,027 (156%)
FEB	W	7,101 (388%)	7,032 (384%)	7,145 (390%)	6,003 (328%)	5,836 (319%)	6,022 (329%)	8,375 (365%)	4,354 (190%)	5,593 (244%)
	AN	3,340 (124%)	4,331 (160%)	4,204 (156%)	2,240 (83%)	2,248 (83%)	2,417 (89%)	5,118 (163%)	1,788 (57%)	4,792 (152%)
	BN	2,714 (82%)	2,798 (84%)	2,830 (85%)	1,481 (45%)	1,446 (43%)	1,563 (47%)	3,292 (100%)	1,186 (36%)	4,477 (136%)
	D	441 (12%)	3,706 (102%)	3,704 (102%)	606 (17%)	611 (17%)	618 (17%)	285 (8%)	118 (3%)	4,474 (128%)
	C	-62 (-2%)	2,793 (95%)	2,795 (95%)	110 (4%)	96 (3%)	116 (4%)	-111 (-4%)	239 (8%)	3,938 (129%)
	All	3,292 (119%)	4,564 (165%)	4,586 (166%)	2,633 (95%)	2,574 (93%)	2,683 (97%)	4,013 (135%)	1,905 (64%)	4,797 (162%)
MAR	W	8,104 (525%)	7,114 (461%)	7,148 (463%)	6,496 (421%)	6,462 (418%)	7,385 (478%)	8,230 (566%)	5,225 (359%)	5,773 (397%)
	AN	5,480 (133%)	4,899 (119%)	4,913 (120%)	5,401 (131%)	5,373 (131%)	5,502 (134%)	6,463 (169%)	2,223 (58%)	5,654 (148%)
	BN	2,596 (62%)	4,157 (100%)	4,186 (101%)	2,032 (49%)	2,097 (50%)	3,841 (92%)	3,380 (88%)	1,924 (50%)	4,744 (124%)
	D	537 (19%)	2,225 (77%)	2,226 (77%)	96 (3%)	112 (4%)	1,312 (45%)	770 (29%)	223 (9%)	3,459 (132%)
	C	151 (9%)	447 (25%)	439 (25%)	121 (7%)	110 (6%)	298 (17%)	204 (12%)	-50 (-3%)	2,162 (132%)
	All	3,955 (147%)	4,236 (157%)	4,253 (158%)	3,236 (120%)	3,234 (120%)	4,134 (153%)	4,331 (174%)	2,352 (95%)	4,544 (183%)
APR	W	140 (6%)	1,004 (40%)	1,091 (43%)	685 (27%)	1,667 (66%)	1,131 (45%)	1,257 (52%)	-1,978 (-82%)	2,702 (112%)
	AN	-1,844 (-244%)	-330 (-44%)	-289 (-38%)	-530 (-70%)	446 (59%)	-49 (-7%)	-208 (-26%)	-2,800 (-356%)	1,866 (237%)
	BN	-2,789 (-7,747%)	-833 (-2,315%)	-836 (-2,322%)	-528 (-1,467%)	-32 (-89%)	-201 (-559%)	-1,991 (-931%)	-2,611 (-1,221%)	1,856 (868%)
	D	-1,763 (-264%)	-906 (-136%)	-910 (-136%)	-1,016 (-152%)	-511 (-77%)	-811 (-121%)	-1,217 (-198%)	-1,125 (-183%)	1,642 (267%)
	C	-373 (-40%)	-428 (-46%)	-428 (-46%)	-371 (-40%)	-209 (-22%)	-429 (-46%)	-279 (-33%)	-295 (-35%)	1,328 (157%)
	All	-1,143 (-180%)	-134 (-21%)	-102 (-16%)	-228 (-36%)	446 (70%)	76 (12%)	-280 (-42%)	-1,773 (-269%)	2,002 (304%)
MAY	W	109 (6%)	1,728 (90%)	1,633 (85%)	1,249 (65%)	2,062 (108%)	1,598 (83%)	1,594 (102%)	-1,121 (-72%)	3,110 (200%)
	AN	-2,272 (-436%)	-439 (-84%)	-492 (-94%)	-64 (-12%)	450 (86%)	272 (52%)	-1,020 (-258%)	-2,393 (-605%)	1,739 (439%)
	BN	-2,522 (-1,414%)	-463 (-260%)	-522 (-293%)	-242 (-136%)	221 (124%)	52 (29%)	-1,345 (-567%)	-1,765 (-743%)	1,816 (765%)
	D	-917 (-91%)	-486 (-48%)	-584 (-58%)	-292 (-29%)	-75 (-7%)	-196 (-19%)	-286 (-28%)	-471 (-47%)	1,696 (168%)
	C	-200 (-21%)	-314 (-33%)	-347 (-37%)	-268 (-29%)	-173 (-18%)	-220 (-23%)	181 (20%)	145 (16%)	1,259 (138%)
	All	-959 (-325%)	252 (85%)	178 (60%)	242 (82%)	716 (243%)	480 (163%)	90 (58%)	-1,089 (-701%)	2,107 (1,356%)
JUN	W	2,800 (65%)	4,726 (110%)	4,754 (111%)	4,022 (94%)	3,721 (87%)	4,278 (100%)	3,830 (88%)	1,707 (39%)	5,404 (124%)
	AN	1,869 (40%)	3,313 (72%)	3,304 (71%)	2,430 (53%)	2,388 (52%)	2,794 (60%)	1,464 (33%)	535 (12%)	4,687 (105%)
	BN	1,562 (41%)	2,151 (56%)	2,065 (54%)	1,323 (34%)	1,042 (27%)	1,355 (35%)	1,412 (41%)	1,343 (39%)	3,288 (96%)
	D	1,195 (41%)	1,212 (41%)	1,086 (37%)	1,085 (37%)	564 (19%)	1,019 (35%)	752 (29%)	951 (37%)	2,096 (81%)
	C	160 (12%)	64 (5%)	-3 (0%)	141 (10%)	141 (10%)	141 (10%)	436 (20%)	526 (25%)	1,546 (72%)
	All	1,714 (48%)	2,626 (74%)	2,581 (73%)	2,116 (60%)	1,852 (52%)	2,241 (63%)	1,898 (54%)	1,135 (32%)	3,647 (104%)

In Delta—OMR Flow (Old and Middle Rivers)										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	4,818 (54%)	6,201 (69%)	6,339 (71%)	4,597 (51%)	4,718 (53%)	5,376 (60%)	3,169 (36%)	2,983 (34%)	5,530 (64%)
	AN	5,336 (59%)	6,498 (72%)	6,730 (75%)	5,373 (60%)	5,588 (62%)	5,686 (63%)	3,156 (40%)	2,721 (34%)	6,211 (78%)
	BN	5,728 (56%)	6,826 (67%)	6,889 (67%)	5,657 (55%)	5,795 (57%)	6,333 (62%)	4,705 (47%)	3,670 (37%)	7,294 (73%)
	D	4,434 (49%)	5,380 (60%)	5,739 (64%)	4,763 (53%)	4,794 (53%)	4,985 (56%)	5,140 (54%)	4,963 (52%)	5,953 (63%)
	C	1,477 (35%)	2,244 (53%)	1,996 (47%)	1,498 (35%)	1,506 (35%)	1,598 (37%)	2,573 (49%)	2,275 (43%)	1,162 (22%)
	All	4,476 (53%)	5,592 (66%)	5,723 (67%)	4,475 (53%)	4,576 (54%)	4,946 (58%)	3,775 (45%)	3,393 (40%)	5,384 (64%)
AUG	W	6,566 (62%)	7,768 (73%)	7,774 (73%)	6,539 (62%)	6,039 (57%)	7,215 (68%)	6,177 (59%)	5,966 (57%)	4,580 (44%)
	AN	7,108 (66%)	7,645 (71%)	7,707 (72%)	6,459 (60%)	6,194 (58%)	7,017 (65%)	5,435 (49%)	5,246 (48%)	5,688 (52%)
	BN	6,229 (66%)	6,343 (68%)	6,358 (68%)	6,007 (64%)	5,866 (62%)	6,234 (66%)	5,046 (54%)	4,410 (47%)	4,730 (50%)
	D	-98 (-2%)	1,740 (37%)	1,859 (39%)	-114 (-2%)	-120 (-3%)	-112 (-2%)	3,054 (42%)	3,321 (46%)	2,835 (39%)
	C	-870 (-29%)	244 (8%)	-84 (-3%)	-845 (-28%)	-896 (-30%)	-900 (-30%)	391 (12%)	320 (10%)	38 (1%)
	All	4,037 (50%)	5,082 (63%)	5,074 (63%)	3,895 (49%)	3,665 (46%)	4,223 (53%)	4,343 (50%)	4,188 (49%)	3,720 (43%)
SEP	W	5,484 (59%)	7,647 (82%)	7,855 (84%)	7,458 (80%)	7,258 (78%)	7,665 (82%)	3,073 (41%)	2,578 (34%)	8,234 (109%)
	AN	5,805 (61%)	7,578 (79%)	7,740 (81%)	7,401 (77%)	7,274 (76%)	7,742 (81%)	3,853 (43%)	3,572 (40%)	8,648 (96%)
	BN	5,095 (59%)	6,486 (75%)	6,528 (75%)	5,495 (63%)	5,490 (63%)	5,583 (64%)	3,786 (45%)	3,859 (46%)	4,000 (48%)
	D	2,694 (45%)	3,609 (60%)	3,907 (65%)	2,988 (50%)	2,977 (50%)	3,010 (50%)	1,083 (21%)	1,134 (22%)	1,420 (27%)
	C	606 (17%)	1,784 (49%)	1,674 (46%)	797 (22%)	780 (22%)	855 (24%)	1,581 (40%)	1,430 (36%)	1,721 (43%)
	All	4,138 (54%)	5,694 (74%)	5,840 (76%)	5,159 (67%)	5,071 (66%)	5,302 (69%)	2,654 (39%)	2,457 (36%)	5,123 (75%)
OCT	W	1,220 (21%)	5,574 (96%)	5,618 (96%)	4,803 (82%)	4,697 (81%)	4,762 (82%)	1 (0%)	-72 (-1%)	5,346 (106%)
	AN	782 (15%)	4,543 (85%)	4,582 (85%)	4,147 (77%)	4,162 (77%)	4,099 (76%)	-1,032 (-28%)	-953 (-26%)	3,746 (103%)
	BN	961 (18%)	4,926 (90%)	4,939 (90%)	4,292 (78%)	4,268 (78%)	4,320 (79%)	-106 (-2%)	-125 (-3%)	4,927 (103%)
	D	494 (10%)	4,628 (90%)	4,649 (91%)	3,752 (73%)	3,786 (74%)	3,780 (74%)	-859 (-21%)	-723 (-18%)	4,199 (102%)
	C	493 (10%)	3,827 (79%)	3,814 (79%)	2,975 (62%)	2,975 (62%)	3,001 (62%)	-473 (-12%)	-131 (-3%)	3,925 (100%)
	All	846 (16%)	4,849 (90%)	4,874 (90%)	4,122 (76%)	4,093 (76%)	4,116 (76%)	-427 (-10%)	-362 (-8%)	4,581 (103%)
NOV	W	2,314 (32%)	6,340 (87%)	6,536 (90%)	5,580 (77%)	5,576 (77%)	5,643 (78%)	1,952 (30%)	568 (9%)	7,028 (108%)
	AN	2,044 (31%)	5,135 (78%)	5,160 (79%)	4,109 (63%)	4,085 (62%)	4,219 (64%)	1,326 (22%)	696 (12%)	6,263 (104%)
	BN	1,491 (23%)	5,353 (83%)	5,359 (83%)	4,225 (66%)	4,186 (65%)	4,349 (67%)	231 (4%)	99 (2%)	5,842 (105%)
	D	888 (16%)	4,874 (85%)	4,866 (85%)	3,614 (63%)	3,556 (62%)	3,724 (65%)	655 (13%)	-23 (0%)	5,316 (106%)
	C	276 (6%)	3,513 (80%)	3,416 (78%)	1,886 (43%)	1,888 (43%)	2,008 (46%)	581 (13%)	675 (15%)	4,616 (105%)
	All	1,523 (24%)	5,260 (84%)	5,310 (85%)	4,161 (66%)	4,137 (66%)	4,260 (68%)	1,081 (19%)	393 (7%)	5,985 (106%)
DEC	W	1,616 (30%)	2,796 (52%)	2,826 (52%)	1,115 (21%)	1,066 (20%)	1,171 (22%)	3,021 (54%)	1,090 (19%)	6,993 (125%)
	AN	2,418 (34%)	5,003 (69%)	5,007 (69%)	1,642 (23%)	1,375 (19%)	1,965 (27%)	1,398 (20%)	963 (14%)	7,909 (112%)
	BN	1,700 (23%)	5,238 (72%)	5,221 (71%)	1,212 (17%)	1,187 (16%)	1,070 (15%)	831 (12%)	406 (6%)	7,942 (113%)
	D	1,215 (17%)	4,777 (69%)	4,776 (69%)	442 (6%)	713 (10%)	554 (8%)	128 (2%)	-1 (0%)	7,871 (112%)
	C	513 (11%)	3,535 (73%)	3,548 (73%)	290 (6%)	124 (3%)	112 (2%)	-1,527 (-37%)	-1,675 (-40%)	4,887 (117%)
	All	1,498 (24%)	4,079 (65%)	4,088 (65%)	940 (15%)	917 (15%)	980 (16%)	1,109 (18%)	310 (5%)	7,174 (117%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-59. Differences[a] (Percent Differences) (cfs) between Effects[b] in Old and Middle Rivers, Year-Round**

In Delta—OMR Flow (Old and Middle Rivers)								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	-2,148 (-165%)	1,830 (83%)	1,389 (76%)	1,389 (76%)	-159 (-49%)	1,186 (65%)	-292 (-56%)
	AN	-1,788 (-55%)	359 (7%)	1,376 (37%)	1,372 (37%)	-1,043 (-38%)	1,376 (37%)	-1,034 (-38%)
	BN	-678 (-19%)	480 (12%)	2,730 (65%)	2,727 (65%)	-307 (-19%)	2,751 (66%)	-285 (-18%)
	D	-1,273 (-27%)	-1,169 (-25%)	3,050 (63%)	3,050 (63%)	-760 (-19%)	3,050 (63%)	-760 (-19%)
	C	-2,153 (-58%)	-2,167 (-59%)	3,360 (75%)	3,355 (74%)	-171 (-26%)	3,259 (72%)	-168 (-26%)
	All	-1,653 (-56%)	141 (0%)	2,269 (64%)	2,267 (64%)	-448 (-27%)	2,193 (62%)	-484 (-28%)
FEB	W	-1,274 (23%)	2,748 (198%)	1,029 (56%)	1,197 (65%)	1,440 (140%)	1,122 (61%)	1,552 (147%)
	AN	-1,778 (-39%)	1,552 (67%)	2,091 (77%)	2,083 (77%)	-460 (8%)	1,787 (66%)	-587 (3%)
	BN	-578 (-18%)	1,527 (46%)	1,318 (40%)	1,353 (41%)	-1,678 (-52%)	1,267 (38%)	-1,647 (-51%)
	D	156 (4%)	323 (9%)	3,099 (86%)	3,095 (85%)	-768 (-25%)	3,086 (85%)	-770 (-25%)
	C	50 (2%)	-300 (-10%)	2,683 (91%)	2,697 (92%)	-1,145 (-34%)	2,679 (91%)	-1,143 (-34%)
	All	-721 (-17%)	1,386 (55%)	1,930 (70%)	1,989 (72%)	-234 (3%)	1,903 (69%)	-211 (4%)
MAR	W	-126 (-41%)	2,879 (165%)	619 (40%)	652 (42%)	1,341 (64%)	-237 (-15%)	1,375 (66%)
	AN	-984 (-36%)	3,257 (75%)	-502 (-12%)	-474 (-12%)	-755 (-29%)	-590 (-14%)	-742 (-29%)
	BN	-785 (-26%)	672 (12%)	2,126 (51%)	2,060 (50%)	-586 (-24%)	345 (8%)	-557 (-23%)
	D	-233 (-11%)	314 (10%)	2,129 (73%)	2,113 (73%)	-1,234 (-56%)	914 (32%)	-1,233 (-56%)
	C	-53 (-4%)	201 (12%)	325 (18%)	337 (19%)	-1,715 (-107%)	141 (8%)	-1,723 (-107%)
	All	-377 (-27%)	1,603 (52%)	1,001 (37%)	1,002 (37%)	-307 (-26%)	119 (4%)	-290 (-25%)
APR	W	-1,117 (-47%)	2,118 (87%)	319 (13%)	-663 (-26%)	-1,698 (-72%)	-40 (-2%)	-1,611 (-69%)
	AN	-1,636 (-218%)	956 (112%)	200 (26%)	-776 (-103%)	-2,196 (-281%)	-239 (-32%)	-2,155 (-275%)
	BN	-798 (-6,816%)	-177 (-6,526%)	-305 (-848%)	-801 (-2,226%)	-2,690 (-3,183%)	-635 (-1,763%)	-2,692 (-3,190%)
	D	-546 (-66%)	-638 (-81%)	110 (16%)	-395 (-59%)	-2,548 (-402%)	-99 (-15%)	-2,552 (-403%)
	C	-94 (-7%)	-79 (-5%)	-56 (-6%)	-218 (-23%)	-1,755 (-203%)	0 (0%)	-1,756 (-203%)
	All	-863 (-138%)	630 (89%)	94 (15%)	-579 (-91%)	-2,135 (-325%)	-178 (-28%)	-2,103 (-320%)
MAY	W	-1,485 (-97%)	1,230 (78%)	479 (25%)	-334 (-17%)	-1,382 (-110%)	35 (2%)	-1,477 (-115%)
	AN	-1,251 (-178%)	121 (169%)	-374 (-72%)	-889 (-170%)	-2,177 (-523%)	-765 (-147%)	-2,231 (-534%)
	BN	-1,176 (-847%)	-757 (-670%)	-221 (-124%)	-685 (-384%)	-2,279 (-1,024%)	-574 (-322%)	-2,338 (-1,057%)
	D	-631 (-62%)	-446 (-44%)	-194 (-19%)	-411 (-41%)	-2,182 (-216%)	-388 (-38%)	-2,281 (-226%)
	C	-382 (-41%)	-345 (-37%)	-46 (-5%)	-140 (-15%)	-1,573 (-172%)	-127 (-14%)	-1,606 (-175%)
	All	-1,049 (-383%)	130 (376%)	10 (3%)	-463 (-157%)	-1,855 (-1,270%)	-303 (-103%)	-1,930 (-1,295%)
JUN	W	-1,030 (-22%)	1,093 (26%)	704 (16%)	1,005 (23%)	-678 (-14%)	476 (11%)	-650 (-13%)
	AN	406 (8%)	1,334 (28%)	883 (19%)	925 (20%)	-1,374 (-34%)	510 (11%)	-1,383 (-34%)
	BN	150 (-1%)	218 (1%)	828 (22%)	1,109 (29%)	-1,137 (-40%)	710 (18%)	-1,223 (-42%)
	D	443 (12%)	243 (4%)	127 (4%)	648 (22%)	-884 (-40%)	67 (2%)	-1,011 (-44%)
	C	-276 (-8%)	-366 (-13%)	-77 (-6%)	-77 (-6%)	-1,482 (-67%)	-144 (-11%)	-1,549 (-72%)
	All	-185 (-6%)	579 (16%)	510 (14%)	774 (22%)	-1,021 (-30%)	341 (10%)	-1,066 (-31%)

In Delta—OMR Flow (Old and Middle Rivers)								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JUL	W	1,650 (17%)	1,835 (20%)	1,604 (18%)	1,484 (17%)	671 (6%)	962 (11%)	809 (7%)
	AN	2,180 (20%)	2,615 (25%)	1,126 (13%)	911 (10%)	288 (-6%)	1,045 (12%)	520 (-3%)
	BN	1,024 (9%)	2,058 (19%)	1,169 (11%)	1,032 (10%)	-467 (-7%)	556 (5%)	-404 (-6%)
	D	-707 (-5%)	-529 (-3%)	616 (7%)	586 (7%)	-574 (-3%)	754 (8%)	-214 (1%)
	C	-1,096 (-15%)	-798 (-9%)	746 (17%)	737 (17%)	1,082 (30%)	398 (9%)	834 (25%)
	All	701 (8%)	1,083 (13%)	1,117 (13%)	1,016 (12%)	208 (2%)	777 (9%)	338 (4%)
AUG	W	389 (3%)	600 (5%)	1,229 (12%)	1,729 (16%)	3,188 (30%)	558 (5%)	3,194 (30%)
	AN	1,673 (17%)	1,862 (18%)	1,185 (11%)	1,450 (14%)	1,956 (19%)	690 (6%)	2,019 (20%)
	BN	1,183 (12%)	1,819 (19%)	335 (4%)	477 (5%)	1,612 (17%)	124 (1%)	1,627 (17%)
	D	-3,152 (-44%)	-3,418 (-48%)	1,854 (39%)	1,859 (39%)	-1,096 (-2%)	1,971 (42%)	-977 (0%)
	C	-1,261 (-41%)	-1,190 (-39%)	1,089 (36%)	1,140 (38%)	206 (7%)	816 (27%)	-122 (-4%)
	All	-306 (0%)	-151 (2%)	1,187 (15%)	1,417 (18%)	1,362 (20%)	851 (11%)	1,354 (20%)
SEP	W	2,411 (18%)	2,907 (25%)	189 (2%)	388 (4%)	-588 (-26%)	190 (2%)	-380 (-24%)
	AN	1,952 (18%)	2,233 (21%)	177 (2%)	303 (3%)	-1,070 (-17%)	-2 (0%)	-908 (-15%)
	BN	1,308 (13%)	1,236 (13%)	991 (11%)	996 (11%)	2,486 (27%)	945 (11%)	2,528 (27%)
	D	1,611 (24%)	1,560 (23%)	621 (10%)	632 (11%)	2,189 (33%)	898 (15%)	2,488 (38%)
	C	-975 (-23%)	-824 (-19%)	987 (27%)	1,004 (28%)	63 (6%)	819 (23%)	-47 (3%)
	All	1,484 (15%)	1,681 (18%)	536 (7%)	623 (8%)	571 (0%)	538 (7%)	717 (2%)
OCT	W	1,219 (21%)	1,292 (22%)	771 (13%)	878 (15%)	228 (-10%)	856 (15%)	271 (-10%)
	AN	1,814 (43%)	1,736 (41%)	396 (7%)	381 (7%)	797 (-18%)	483 (9%)	835 (-17%)
	BN	1,067 (20%)	1,086 (20%)	634 (12%)	658 (12%)	-1 (-13%)	619 (11%)	12 (-13%)
	D	1,353 (31%)	1,216 (27%)	876 (17%)	842 (16%)	428 (-12%)	869 (17%)	450 (-12%)
	C	966 (22%)	624 (14%)	852 (18%)	851 (18%)	-98 (-21%)	813 (17%)	-111 (-21%)
	All	1,272 (25%)	1,207 (24%)	728 (13%)	756 (14%)	268 (-14%)	757 (14%)	293 (-13%)
NOV	W	362 (2%)	1,746 (23%)	759 (10%)	764 (11%)	-688 (-20%)	893 (12%)	-492 (-18%)
	AN	719 (9%)	1,348 (20%)	1,026 (16%)	1,050 (16%)	-1,128 (-26%)	941 (14%)	-1,103 (-26%)
	BN	1,260 (19%)	1,392 (21%)	1,128 (17%)	1,168 (18%)	-489 (-22%)	1,010 (16%)	-483 (-22%)
	D	234 (2%)	911 (16%)	1,260 (22%)	1,318 (23%)	-442 (-21%)	1,142 (20%)	-450 (-21%)
	C	-305 (-7%)	-399 (-9%)	1,627 (37%)	1,625 (37%)	-1,103 (-25%)	1,408 (32%)	-1,200 (-27%)
	All	442 (5%)	1,130 (17%)	1,098 (18%)	1,122 (18%)	-725 (-22%)	1,050 (17%)	-674 (-21%)
DEC	W	-1,405 (-24%)	526 (10%)	1,681 (31%)	1,730 (32%)	-4,198 (-73%)	1,655 (31%)	-4,168 (-73%)
	AN	1,021 (14%)	1,455 (20%)	3,361 (47%)	3,628 (50%)	-2,906 (-43%)	3,041 (42%)	-2,902 (-43%)
	BN	869 (11%)	1,295 (18%)	4,026 (55%)	4,052 (55%)	-2,703 (-41%)	4,151 (57%)	-2,720 (-41%)
	D	1,087 (16%)	1,215 (17%)	4,335 (62%)	4,064 (58%)	-3,094 (-44%)	4,223 (61%)	-3,095 (-44%)
	C	2,040 (47%)	2,188 (51%)	3,245 (67%)	3,411 (70%)	-1,352 (-44%)	3,436 (71%)	-1,339 (-44%)
	All	389 (6%)	1,188 (19%)	3,139 (50%)	3,162 (51%)	-3,095 (-51%)	3,108 (50%)	-3,086 (-51%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.2.2 Sacramento River Downstream of North Delta Diversion Facility

Table 5E-60. Mean Monthly Flows (cfs) for Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year-Round

In Delta—Sacramento River Downstream of the North Delta Diversion Facility												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	49,871	44,066	44,565	44,069	43,289	43,209	43,520	52,878	42,014	47,110	45,128
	AN	37,071	33,105	32,705	32,867	32,266	32,248	32,425	40,484	32,151	35,796	35,427
	BN	21,209	19,229	19,639	19,366	18,791	18,727	18,807	22,653	18,962	20,276	20,596
	D	16,638	15,092	15,354	15,357	14,947	14,923	15,062	17,451	16,372	16,758	15,365
	C	13,473	12,766	12,763	12,840	12,928	12,869	12,975	15,073	12,576	13,124	12,556
	All	30,483	27,281	27,508	27,340	26,829	26,776	26,960	32,595	26,698	29,237	28,220
FEB	W	58,306	50,642	51,627	50,996	50,524	50,479	50,257	59,847	48,632	52,834	49,638
	AN	45,291	39,969	40,628	40,155	38,603	38,533	38,729	47,786	37,562	41,555	41,167
	BN	30,827	26,831	27,404	27,086	26,267	26,049	26,369	31,592	24,113	26,948	27,639
	D	21,647	18,866	19,984	19,875	18,787	18,774	18,665	21,107	17,556	18,985	20,251
	C	16,027	14,557	14,724	14,723	14,292	14,208	14,335	14,291	13,618	13,210	14,534
	All	37,475	32,759	33,535	33,188	32,369	32,292	32,300	38,087	30,880	33,535	33,054
MAR	W	48,383	41,083	43,033	42,839	40,488	40,468	41,998	50,993	40,210	43,239	40,489
	AN	41,965	36,186	37,681	37,334	35,319	35,211	35,988	45,088	33,116	38,037	35,489
	BN	21,407	17,169	19,193	18,906	16,975	16,678	18,700	22,915	16,602	18,251	19,686
	D	19,148	16,034	16,711	16,689	16,016	15,985	16,465	20,650	16,014	17,175	20,361
	C	12,682	12,122	11,507	11,514	11,887	11,839	11,869	13,137	11,863	12,343	13,466
	All	31,196	26,547	27,788	27,623	26,160	26,073	27,127	33,134	25,682	27,969	27,833
APR	W	35,461	29,707	31,402	35,090	28,975	32,893	32,623	37,543	27,818	31,285	32,507
	AN	23,875	19,294	21,164	28,967	18,224	22,603	22,593	24,931	17,618	20,064	23,452
	BN	17,000	15,576	14,807	22,276	14,305	15,976	19,782	17,128	14,856	15,612	20,076
	D	12,791	12,783	11,794	13,830	11,631	12,699	12,242	12,904	12,911	12,515	16,150
	C	10,207	10,309	9,740	10,387	9,914	10,041	9,984	10,365	10,315	10,273	11,011
	All	21,941	19,217	19,596	23,724	18,301	20,722	21,176	22,826	18,279	19,772	22,323
MAY	W	28,720	22,748	24,650	25,064	22,245	25,654	26,789	24,500	17,764	21,012	22,834
	AN	19,601	16,823	16,906	17,075	16,081	18,292	19,752	18,657	14,932	16,732	18,114
	BN	13,126	13,065	11,947	15,680	11,619	12,335	14,350	12,394	12,411	12,836	15,228
	D	10,940	11,836	10,433	11,945	10,912	10,919	10,945	11,427	11,868	12,132	12,587
	C	8,227	8,298	7,866	7,847	8,038	8,063	8,069	8,011	7,660	7,720	9,114
	All	17,821	15,718	15,771	16,894	14,962	16,494	17,418	16,295	13,663	15,096	16,588
JUN	W	19,279	15,442	14,244	13,948	14,733	14,636	13,922	18,603	14,397	16,649	14,671
	AN	14,951	13,006	11,209	10,916	12,637	12,420	11,648	16,051	14,276	15,314	12,425
	BN	13,400	12,021	10,492	9,532	12,174	12,240	10,935	13,898	13,069	13,144	11,369
	D	12,319	11,284	10,542	10,145	11,141	11,560	11,049	12,656	11,844	11,544	10,356
	C	8,996	8,811	8,642	8,676	8,748	8,751	8,771	10,123	9,306	9,302	10,316
	All	14,609	12,618	11,527	11,144	12,325	12,366	11,695	14,880	12,847	13,660	12,194

In Delta—Sacramento River Downstream of the North Delta Diversion Facility												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	20,488	13,580	12,185	12,126	13,690	13,618	13,055	21,425	15,809	16,224	12,814
	AN	22,423	14,062	12,699	12,643	14,114	13,909	13,750	22,727	15,970	16,596	11,657
	BN	20,810	13,211	12,951	12,982	13,264	13,096	12,646	20,513	14,056	15,349	10,312
	D	17,278	12,294	12,993	12,588	11,878	11,824	11,634	18,957	12,278	12,628	10,829
	C	11,060	9,421	8,762	9,027	9,368	9,358	9,267	13,767	10,579	10,940	10,587
	All	18,742	12,697	12,067	11,996	12,649	12,554	12,221	19,797	13,993	14,566	11,456
AUG	W	15,959	8,737	10,407	10,531	8,764	9,288	8,096	16,064	9,210	9,409	10,818
	AN	16,585	8,835	11,330	11,365	9,523	9,803	8,956	17,491	11,175	11,332	10,574
	BN	15,125	8,175	11,209	11,576	8,374	8,498	8,126	16,232	9,744	10,460	9,820
	D	10,243	9,884	11,171	11,111	9,845	9,858	9,836	14,351	10,152	9,704	10,283
	C	8,415	8,835	8,072	8,354	8,822	8,867	8,861	8,996	8,047	8,150	9,203
	All	13,550	8,922	10,505	10,640	9,054	9,292	8,721	14,891	9,625	9,751	10,258
SEP	W	27,562	7,360	17,419	17,144	20,351	20,587	20,100	27,212	7,963	8,534	19,758
	AN	21,760	6,705	13,919	13,693	14,636	14,744	14,202	21,006	8,249	8,740	12,835
	BN	13,186	6,512	9,685	9,713	7,045	7,042	6,936	12,306	7,900	8,112	7,697
	D	9,495	6,536	9,625	9,378	6,505	6,518	6,472	8,620	8,330	8,225	7,464
	C	6,922	6,269	6,359	6,405	6,348	6,360	6,291	7,292	8,298	8,512	6,696
	All	17,272	6,779	12,257	12,094	12,154	12,249	11,977	16,763	8,123	8,421	12,075
OCT	W	12,625	8,596	9,102	9,089	8,670	8,734	8,709	13,277	13,281	13,568	8,576
	AN	10,914	7,612	8,160	8,094	8,004	7,997	7,999	11,864	13,607	14,074	8,673
	BN	10,756	7,507	8,041	8,073	7,726	7,777	7,650	12,124	14,504	13,743	7,898
	D	10,097	7,439	7,499	7,486	7,325	7,312	7,359	10,487	12,687	12,294	7,558
	C	8,703	7,509	7,180	7,209	7,177	7,138	7,106	9,964	13,918	13,727	6,955
	All	10,927	7,853	8,149	8,143	7,898	7,917	7,893	11,776	13,500	13,415	8,014
NOV	W	20,797	14,155	15,422	15,398	15,159	15,141	15,217	19,285	13,258	14,617	14,687
	AN	16,744	10,713	12,707	12,407	11,938	12,198	12,174	15,925	9,667	10,477	11,148
	BN	14,081	8,388	9,266	9,468	9,337	9,362	9,260	13,037	8,487	8,652	9,318
	D	13,014	9,183	9,389	9,367	9,338	9,377	9,279	11,914	8,551	9,347	9,334
	C	9,372	7,411	7,624	7,678	7,866	7,858	7,737	9,295	8,074	8,035	7,750
	All	15,677	10,588	11,508	11,494	11,348	11,393	11,357	14,647	10,126	10,873	11,062
DEC	W	36,394	34,688	34,546	34,155	33,249	33,116	33,556	37,022	31,205	33,793	31,790
	AN	22,012	19,587	19,832	19,873	20,290	20,234	20,088	22,629	21,404	22,076	18,460
	BN	17,074	15,449	15,124	15,122	15,406	15,390	15,388	16,692	15,751	16,691	14,285
	D	14,759	13,871	13,818	13,807	13,964	13,880	13,958	15,159	14,448	15,185	13,025
	C	10,858	10,431	9,808	9,843	9,893	9,952	9,929	10,632	11,195	11,087	9,644
	All	22,504	21,074	20,906	20,791	20,655	20,592	20,724	22,784	20,525	21,751	19,491

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

Table 5E-61. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year Round

In Delta—Sacramento River Downstream of the North Delta Diversion Facility										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	-5,805 (-12%)	-5,306 (-11%)	-5,802 (-12%)	-6,582 (-13%)	-6,662 (-13%)	-6,351 (-13%)	-10,864 (-21%)	-5,768 (-11%)	-7,750 (-15%)
	AN	-3,966 (-11%)	-4,366 (-12%)	-4,204 (-11%)	-4,805 (-13%)	-4,823 (-13%)	-4,646 (-13%)	-8,333 (-21%)	-4,688 (-12%)	-5,057 (-12%)
	BN	-1,980 (-9%)	-1,570 (-7%)	-1,842 (-9%)	-2,418 (-11%)	-2,481 (-12%)	-2,401 (-11%)	-3,691 (-16%)	-2,377 (-10%)	-2,057 (-9%)
	D	-1,546 (-9%)	-1,284 (-8%)	-1,281 (-8%)	-1,691 (-10%)	-1,716 (-10%)	-1,576 (-9%)	-1,079 (-6%)	-693 (-4%)	-2,086 (-12%)
	C	-707 (-5%)	-709 (-5%)	-633 (-5%)	-545 (-4%)	-604 (-4%)	-497 (-4%)	-2,497 (-17%)	-1,949 (-13%)	-2,517 (-17%)
	All	-3,202 (-11%)	-2,975 (-10%)	-3,143 (-10%)	-3,654 (-12%)	-3,707 (-12%)	-3,522 (-12%)	-5,897 (-18%)	-3,358 (-10%)	-4,375 (-13%)
FEB	W	-7,664 (-13%)	-6,679 (-11%)	-7,310 (-13%)	-7,781 (-13%)	-7,827 (-13%)	-8,049 (-14%)	-11,214 (-19%)	-7,013 (-12%)	-10,209 (-17%)
	AN	-5,322 (-12%)	-4,662 (-10%)	-5,135 (-11%)	-6,688 (-15%)	-6,757 (-15%)	-6,562 (-14%)	-10,224 (-21%)	-6,231 (-13%)	-6,619 (-14%)
	BN	-3,996 (-13%)	-3,423 (-11%)	-3,741 (-12%)	-4,560 (-15%)	-4,778 (-15%)	-4,458 (-14%)	-7,479 (-24%)	-4,644 (-15%)	-3,953 (-13%)
	D	-2,781 (-13%)	-1,662 (-8%)	-1,772 (-8%)	-2,860 (-13%)	-2,873 (-13%)	-2,982 (-14%)	-3,551 (-17%)	-2,122 (-10%)	-856 (-4%)
	C	-1,470 (-9%)	-1,302 (-8%)	-1,304 (-8%)	-1,735 (-11%)	-1,819 (-11%)	-1,691 (-11%)	-673 (-5%)	-1,081 (-8%)	243 (2%)
	All	-4,716 (-13%)	-3,940 (-11%)	-4,288 (-11%)	-5,106 (-14%)	-5,183 (-14%)	-5,176 (-14%)	-7,207 (-19%)	-4,552 (-12%)	-5,033 (-13%)
MAR	W	-7,300 (-15%)	-5,350 (-11%)	-5,544 (-11%)	-7,896 (-16%)	-7,915 (-16%)	-6,385 (-13%)	-10,783 (-21%)	-7,754 (-15%)	-10,504 (-21%)
	AN	-5,779 (-14%)	-4,284 (-10%)	-4,631 (-11%)	-6,646 (-16%)	-6,754 (-16%)	-5,978 (-14%)	-11,972 (-27%)	-7,051 (-16%)	-9,599 (-21%)
	BN	-4,238 (-20%)	-2,214 (-10%)	-2,501 (-12%)	-4,432 (-21%)	-4,729 (-22%)	-2,707 (-13%)	-6,312 (-28%)	-4,664 (-20%)	-3,229 (-14%)
	D	-3,114 (-16%)	-2,437 (-13%)	-2,459 (-13%)	-3,132 (-16%)	-3,163 (-17%)	-2,683 (-14%)	-4,636 (-22%)	-3,475 (-17%)	-289 (-1%)
	C	-560 (-4%)	-1,175 (-9%)	-1,168 (-9%)	-795 (-6%)	-843 (-7%)	-813 (-6%)	-1,274 (-10%)	-794 (-6%)	329 (3%)
	All	-4,650 (-15%)	-3,408 (-11%)	-3,573 (-11%)	-5,037 (-16%)	-5,123 (-16%)	-4,069 (-13%)	-7,453 (-22%)	-5,165 (-16%)	-5,302 (-16%)
APR	W	-5,753 (-16%)	-4,058 (-11%)	-370 (-1%)	-6,485 (-18%)	-2,568 (-7%)	-2,838 (-8%)	-9,725 (-26%)	-6,258 (-17%)	-5,037 (-13%)
	AN	-4,581 (-19%)	-2,711 (-11%)	5,092 (21%)	-5,651 (-24%)	-1,272 (-5%)	-1,282 (-5%)	-7,313 (-29%)	-4,867 (-20%)	-1,479 (-6%)
	BN	-1,424 (-8%)	-2,193 (-13%)	5,276 (31%)	-2,695 (-16%)	-1,024 (-6%)	2,782 (16%)	-2,272 (-13%)	-1,516 (-9%)	2,948 (17%)
	D	-8 (0%)	-997 (-8%)	1,040 (8%)	-1,160 (-9%)	-92 (-1%)	-549 (-4%)	7 (0%)	-389 (-3%)	3,246 (25%)
	C	102 (1%)	-467 (-5%)	180 (2%)	-294 (-3%)	-166 (-2%)	-223 (-2%)	-50 (0%)	-92 (-1%)	646 (6%)
	All	-2,725 (-12%)	-2,345 (-11%)	1,783 (8%)	-3,641 (-17%)	-1,220 (-6%)	-766 (-3%)	-4,548 (-20%)	-3,054 (-13%)	-503 (-2%)
MAY	W	-5,971 (-21%)	-4,070 (-14%)	-3,655 (-13%)	-6,474 (-23%)	-3,066 (-11%)	-1,930 (-7%)	-6,736 (-27%)	-3,488 (-14%)	-1,666 (-7%)
	AN	-2,778 (-14%)	-2,694 (-14%)	-2,525 (-13%)	-3,519 (-18%)	-1,309 (-7%)	151 (1%)	-3,724 (-20%)	-1,925 (-10%)	-542 (-3%)
	BN	-61 (0%)	-1,179 (-9%)	2,554 (19%)	-1,507 (-11%)	-791 (-6%)	1,224 (9%)	16 (0%)	442 (4%)	2,834 (23%)
	D	895 (8%)	-507 (-5%)	1,005 (9%)	-28 (0%)	-21 (0%)	5 (0%)	442 (4%)	705 (6%)	1,160 (10%)
	C	71 (1%)	-361 (-4%)	-380 (-5%)	-189 (-2%)	-164 (-2%)	-158 (-2%)	-351 (-4%)	-291 (-4%)	1,103 (14%)
	All	-2,103 (-12%)	-2,050 (-12%)	-928 (-5%)	-2,859 (-16%)	-1,327 (-7%)	-403 (-2%)	-2,632 (-16%)	-1,199 (-7%)	292 (2%)
JUN	W	-3,837 (-20%)	-5,035 (-26%)	-5,331 (-28%)	-4,546 (-24%)	-4,643 (-24%)	-5,356 (-28%)	-4,206 (-23%)	-1,954 (-11%)	-3,933 (-21%)
	AN	-1,945 (-13%)	-3,743 (-25%)	-4,036 (-27%)	-2,314 (-15%)	-2,532 (-17%)	-3,303 (-22%)	-1,775 (-11%)	-737 (-5%)	-3,626 (-23%)
	BN	-1,378 (-10%)	-2,908 (-22%)	-3,867 (-29%)	-1,226 (-9%)	-1,159 (-9%)	-2,464 (-18%)	-828 (-6%)	-754 (-5%)	-2,529 (-18%)
	D	-1,035 (-8%)	-1,777 (-14%)	-2,174 (-18%)	-1,178 (-10%)	-759 (-6%)	-1,270 (-10%)	-812 (-6%)	-1,112 (-9%)	-2,300 (-18%)
	C	-185 (-2%)	-354 (-4%)	-319 (-4%)	-248 (-3%)	-245 (-3%)	-225 (-3%)	-816 (-8%)	-821 (-8%)	194 (2%)
	All	-1,991 (-14%)	-3,082 (-21%)	-3,465 (-24%)	-2,284 (-16%)	-2,243 (-15%)	-2,914 (-20%)	-2,032 (-14%)	-1,220 (-8%)	-2,686 (-18%)

In Delta—Sacramento River Downstream of the North Delta Diversion Facility										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	-6,908 (-34%)	-8,303 (-41%)	-8,362 (-41%)	-6,799 (-33%)	-6,871 (-34%)	-7,433 (-36%)	-5,616 (-26%)	-5,201 (-24%)	-8,611 (-40%)
	AN	-8,360 (-37%)	-9,724 (-43%)	-9,780 (-44%)	-8,309 (-37%)	-8,514 (-38%)	-8,672 (-39%)	-6,757 (-30%)	-6,131 (-27%)	-11,070 (-49%)
	BN	-7,599 (-37%)	-7,859 (-38%)	-7,828 (-38%)	-7,546 (-36%)	-7,714 (-37%)	-8,164 (-39%)	-6,457 (-31%)	-5,164 (-25%)	-10,200 (-50%)
	D	-4,984 (-29%)	-4,285 (-25%)	-4,690 (-27%)	-5,400 (-31%)	-5,454 (-32%)	-5,644 (-33%)	-6,679 (-35%)	-6,329 (-33%)	-8,129 (-43%)
	C	-1,639 (-15%)	-2,298 (-21%)	-2,033 (-18%)	-1,692 (-15%)	-1,702 (-15%)	-1,793 (-16%)	-3,188 (-23%)	-2,827 (-21%)	-3,180 (-23%)
	All	-6,045 (-32%)	-6,674 (-36%)	-6,746 (-36%)	-6,093 (-33%)	-6,188 (-33%)	-6,521 (-35%)	-5,804 (-29%)	-5,231 (-26%)	-8,342 (-42%)
AUG	W	-7,222 (-45%)	-5,552 (-35%)	-5,428 (-34%)	-7,196 (-45%)	-6,672 (-42%)	-7,863 (-49%)	-6,853 (-43%)	-6,655 (-41%)	-5,246 (-33%)
	AN	-7,749 (-47%)	-5,254 (-32%)	-5,219 (-31%)	-7,062 (-43%)	-6,782 (-41%)	-7,628 (-46%)	-6,316 (-36%)	-6,159 (-35%)	-6,917 (-40%)
	BN	-6,950 (-46%)	-3,916 (-26%)	-3,549 (-23%)	-6,751 (-45%)	-6,627 (-44%)	-6,999 (-46%)	-6,488 (-40%)	-5,772 (-36%)	-6,412 (-40%)
	D	-359 (-4%)	927 (9%)	868 (8%)	-399 (-4%)	-386 (-4%)	-408 (-4%)	-4,199 (-29%)	-4,647 (-32%)	-4,068 (-28%)
	C	420 (5%)	-344 (-4%)	-62 (-1%)	406 (5%)	452 (5%)	446 (5%)	-950 (-11%)	-846 (-9%)	206 (2%)
	All	-4,628 (-34%)	-3,045 (-22%)	-2,909 (-21%)	-4,496 (-33%)	-4,258 (-31%)	-4,829 (-36%)	-5,266 (-35%)	-5,140 (-35%)	-4,633 (-31%)
SEP	W	-20,201 (-73%)	-10,142 (-37%)	-10,418 (-38%)	-7,211 (-26%)	-6,974 (-25%)	-7,462 (-27%)	-19,250 (-71%)	-18,678 (-69%)	-7,455 (-27%)
	AN	-15,055 (-69%)	-7,841 (-36%)	-8,067 (-37%)	-7,124 (-33%)	-7,015 (-32%)	-7,558 (-35%)	-12,757 (-61%)	-12,266 (-58%)	-8,171 (-39%)
	BN	-6,674 (-51%)	-3,500 (-27%)	-3,472 (-26%)	-6,141 (-47%)	-6,144 (-47%)	-6,250 (-47%)	-4,406 (-36%)	-4,194 (-34%)	-4,609 (-37%)
	D	-2,959 (-31%)	129 (1%)	-117 (-1%)	-2,990 (-31%)	-2,978 (-31%)	-3,023 (-32%)	-291 (-3%)	-395 (-5%)	-1,157 (-13%)
	C	-653 (-9%)	-563 (-8%)	-517 (-7%)	-574 (-8%)	-562 (-8%)	-631 (-9%)	1,005 (14%)	1,220 (17%)	-597 (-8%)
	All	-10,493 (-61%)	-5,015 (-29%)	-5,178 (-30%)	-5,118 (-30%)	-5,023 (-29%)	-5,295 (-31%)	-8,639 (-52%)	-8,342 (-50%)	-4,688 (-28%)
OCT	W	-4,029 (-32%)	-3,523 (-28%)	-3,536 (-28%)	-3,955 (-31%)	-3,891 (-31%)	-3,916 (-31%)	4 (0%)	291 (2%)	-4,701 (-35%)
	AN	-3,302 (-30%)	-2,754 (-25%)	-2,819 (-26%)	-2,910 (-27%)	-2,917 (-27%)	-2,915 (-27%)	1,743 (15%)	2,210 (19%)	-3,191 (-27%)
	BN	-3,250 (-30%)	-2,716 (-25%)	-2,684 (-25%)	-3,031 (-28%)	-2,980 (-28%)	-3,106 (-29%)	2,381 (20%)	1,619 (13%)	-4,226 (-35%)
	D	-2,659 (-26%)	-2,599 (-26%)	-2,611 (-26%)	-2,772 (-27%)	-2,785 (-28%)	-2,738 (-27%)	2,200 (21%)	1,807 (17%)	-2,929 (-28%)
	C	-1,194 (-14%)	-1,523 (-18%)	-1,494 (-17%)	-1,526 (-18%)	-1,565 (-18%)	-1,597 (-18%)	3,954 (40%)	3,763 (38%)	-3,010 (-30%)
	All	-3,074 (-28%)	-2,777 (-25%)	-2,784 (-25%)	-3,029 (-28%)	-3,010 (-28%)	-3,033 (-28%)	1,724 (15%)	1,639 (14%)	-3,762 (-32%)
NOV	W	-6,642 (-32%)	-5,376 (-26%)	-5,399 (-26%)	-5,639 (-27%)	-5,656 (-27%)	-5,581 (-27%)	-6,027 (-31%)	-4,668 (-24%)	-4,597 (-24%)
	AN	-6,031 (-36%)	-4,037 (-24%)	-4,337 (-26%)	-4,806 (-29%)	-4,546 (-27%)	-4,571 (-27%)	-6,258 (-39%)	-5,448 (-34%)	-4,777 (-30%)
	BN	-5,693 (-40%)	-4,815 (-34%)	-4,613 (-33%)	-4,745 (-34%)	-4,719 (-34%)	-4,821 (-34%)	-4,549 (-35%)	-4,385 (-34%)	-3,719 (-29%)
	D	-3,831 (-29%)	-3,625 (-28%)	-3,647 (-28%)	-3,676 (-28%)	-3,636 (-28%)	-3,734 (-29%)	-3,363 (-28%)	-2,567 (-22%)	-2,580 (-22%)
	C	-1,962 (-21%)	-1,748 (-19%)	-1,694 (-18%)	-1,506 (-16%)	-1,514 (-16%)	-1,635 (-17%)	-1,222 (-13%)	-1,260 (-14%)	-1,546 (-17%)
	All	-5,089 (-32%)	-4,169 (-27%)	-4,183 (-27%)	-4,329 (-28%)	-4,284 (-27%)	-4,320 (-28%)	-4,521 (-31%)	-3,774 (-26%)	-3,584 (-24%)
DEC	W	-1,706 (-5%)	-1,848 (-5%)	-2,239 (-6%)	-3,145 (-9%)	-3,277 (-9%)	-2,838 (-8%)	-5,817 (-16%)	-3,229 (-9%)	-5,232 (-14%)
	AN	-2,425 (-11%)	-2,180 (-10%)	-2,139 (-10%)	-1,722 (-8%)	-1,779 (-8%)	-1,924 (-9%)	-1,225 (-5%)	-553 (-2%)	-4,168 (-18%)
	BN	-1,625 (-10%)	-1,950 (-11%)	-1,952 (-11%)	-1,668 (-10%)	-1,684 (-10%)	-1,686 (-10%)	-941 (-6%)	-1 (0%)	-2,407 (-14%)
	D	-888 (-6%)	-941 (-6%)	-952 (-6%)	-794 (-5%)	-878 (-6%)	-801 (-5%)	-711 (-5%)	26 (0%)	-2,134 (-14%)
	C	-427 (-4%)	-1,050 (-10%)	-1,015 (-9%)	-964 (-9%)	-906 (-8%)	-929 (-9%)	562 (5%)	455 (4%)	-988 (-9%)
	All	-1,430 (-6%)	-1,598 (-7%)	-1,714 (-8%)	-1,849 (-8%)	-1,912 (-8%)	-1,781 (-8%)	-2,258 (-10%)	-1,033 (-5%)	-3,293 (-14%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-62. Differences[a] (Percent Differences) (cfs) between Effects[b] for the Sacramento River Downstream of the North Delta Diversion Facility, Year Round**

In Delta—Sacramento River Downstream of the North Delta Diversion Facility								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	5,059 (9%)	-37 (-1%)	1,276 (3%)	1,356 (3%)	2,444 (4%)	549 (1%)	1,948 (3%)
	AN	4,367 (10%)	722 (1%)	439 (1%)	457 (1%)	691 (1%)	442 (1%)	853 (1%)
	BN	1,711 (7%)	397 (1%)	848 (4%)	912 (4%)	487 (2%)	559 (3%)	214 (0%)
	D	-467 (-3%)	-853 (-5%)	407 (2%)	432 (3%)	803 (4%)	296 (2%)	805 (4%)
	C	1,790 (11%)	1,242 (8%)	-164 (-1%)	-106 (-1%)	1,807 (11%)	-135 (-1%)	1,884 (12%)
	All	2,695 (8%)	156 (0%)	679 (2%)	732 (2%)	1,400 (4%)	379 (1%)	1,232 (3%)
FEB	W	3,551 (6%)	-651 (-1%)	1,102 (2%)	1,148 (2%)	3,529 (6%)	739 (1%)	2,899 (5%)
	AN	4,902 (10%)	909 (1%)	2,026 (4%)	2,095 (5%)	1,957 (4%)	1,427 (3%)	1,484 (3%)
	BN	3,483 (11%)	648 (2%)	1,137 (4%)	1,355 (4%)	530 (1%)	717 (2%)	212 (0%)
	D	770 (4%)	-659 (-3%)	1,198 (6%)	1,211 (6%)	-807 (-4%)	1,210 (6%)	-916 (-4%)
	C	-797 (-4%)	-389 (-2%)	433 (3%)	516 (3%)	-1,545 (-10%)	388 (2%)	-1,547 (-10%)
	All	2,490 (6%)	-164 (-1%)	1,166 (3%)	1,243 (3%)	1,093 (3%)	888 (2%)	745 (2%)
MAR	W	3,483 (6%)	454 (0%)	2,546 (5%)	2,565 (5%)	5,154 (10%)	841 (2%)	4,960 (9%)
	AN	6,193 (13%)	1,272 (2%)	2,362 (6%)	2,471 (6%)	5,316 (11%)	1,346 (3%)	4,968 (10%)
	BN	2,074 (8%)	425 (1%)	2,218 (10%)	2,516 (12%)	1,015 (4%)	206 (1%)	727 (2%)
	D	1,521 (6%)	361 (1%)	694 (4%)	726 (4%)	-2,148 (-11%)	224 (1%)	-2,170 (-11%)
	C	714 (5%)	234 (2%)	-380 (-3%)	-332 (-3%)	-1,504 (-12%)	-355 (-3%)	-1,497 (-12%)
	All	2,803 (8%)	516 (1%)	1,628 (5%)	1,715 (5%)	1,894 (5%)	496 (2%)	1,728 (5%)
APR	W	3,972 (10%)	505 (0%)	2,427 (7%)	-1,491 (-4%)	978 (2%)	2,467 (7%)	4,667 (12%)
	AN	2,732 (10%)	286 (0%)	2,940 (12%)	-1,439 (-6%)	-1,232 (-5%)	6,374 (27%)	6,571 (27%)
	BN	848 (5%)	92 (0%)	502 (3%)	-1,169 (-7%)	-5,141 (-30%)	2,494 (15%)	2,328 (14%)
	D	-15 (0%)	381 (3%)	163 (1%)	-905 (-7%)	-4,243 (-33%)	1,588 (12%)	-2,207 (-17%)
	C	152 (1%)	194 (2%)	-174 (-2%)	-301 (-3%)	-1,113 (-11%)	403 (4%)	-467 (-4%)
	All	1,823 (8%)	330 (1%)	1,296 (6%)	-1,126 (-5%)	-1,842 (-8%)	2,549 (12%)	2,286 (10%)
MAY	W	765 (7%)	-2,483 (-7%)	2,405 (8%)	-1,004 (-3%)	-2,403 (-7%)	-1,725 (-6%)	-1,989 (-6%)
	AN	946 (6%)	-853 (-4%)	825 (4%)	-1,385 (-7%)	-2,152 (-11%)	-2,677 (-14%)	-1,983 (-10%)
	BN	-78 (-1%)	-503 (-4%)	328 (2%)	-388 (-3%)	-4,013 (-32%)	1,329 (10%)	-280 (-3%)
	D	453 (4%)	190 (2%)	-479 (-4%)	-486 (-4%)	-1,667 (-15%)	1,000 (9%)	-156 (-1%)
	C	422 (5%)	363 (5%)	-172 (-2%)	-197 (-2%)	-1,464 (-18%)	-221 (-3%)	-1,483 (-18%)
	All	529 (4%)	-904 (-4%)	809 (5%)	-723 (-4%)	-2,342 (-13%)	-525 (-3%)	-1,220 (-7%)
JUN	W	369 (3%)	-1,883 (-9%)	-489 (-3%)	-392 (-2%)	-1,102 (-5%)	25 (0%)	-1,398 (-7%)
	AN	-171 (-2%)	-1,208 (-8%)	-1,428 (-10%)	-1,211 (-8%)	-117 (-2%)	-732 (-5%)	-410 (-4%)
	BN	-550 (-4%)	-625 (-5%)	-1,682 (-13%)	-1,748 (-13%)	-379 (-4%)	-1,403 (-10%)	-1,338 (-11%)
	D	-223 (-2%)	77 (0%)	-598 (-5%)	-1,017 (-8%)	523 (4%)	-904 (-7%)	126 (1%)
	C	631 (6%)	636 (6%)	-106 (-1%)	-109 (-1%)	-548 (-6%)	-94 (-1%)	-513 (-5%)
	All	42 (0%)	-771 (-5%)	-798 (-5%)	-839 (-6%)	-396 (-3%)	-551 (-4%)	-779 (-6%)

In Delta—Sacramento River Downstream of the North Delta Diversion Facility								
Month	**Water Year Type**	**Alt 1A Effect vs. Boundary 1 Effect**	**Alt 3 Effect vs. Boundary 1 Effect**	**Alt 4A H3 Effect vs. Boundary 2 Effect**	**Alt 4A H3+ Effect vs. Boundary 2 Effect**	**Alt 8 Effect vs. Boundary 2 Effect**	**Alt 4A H4 Effect vs. Scenario 2 Effect**	**Alt 8 Effect vs. Scenario 2 Effect**
JUL	W	-1,292 (-8%)	-1,707 (-9%)	-1,504 (-7%)	-1,432 (-7%)	308 (0%)	-929 (-5%)	249 (-1%)
	AN	-1,603 (-8%)	-2,229 (-10%)	-1,415 (-6%)	-1,210 (-5%)	1,346 (5%)	-1,108 (-5%)	1,290 (5%)
	BN	-1,143 (-5%)	-2,436 (-11%)	-313 (-2%)	-145 (-1%)	2,341 (12%)	336 (2%)	2,372 (12%)
	D	1,695 (6%)	1,345 (5%)	1,115 (6%)	1,169 (7%)	3,844 (18%)	954 (6%)	3,438 (16%)
	C	1,549 (8%)	1,188 (6%)	-606 (-5%)	-596 (-5%)	882 (2%)	-240 (-2%)	1,147 (5%)
	All	-241 (-3%)	-814 (-6%)	-581 (-3%)	-487 (-3%)	1,667 (7%)	-225 (-1%)	1,595 (6%)
AUG	W	-369 (-3%)	-568 (-4%)	1,643 (10%)	1,119 (7%)	-306 (-2%)	2,435 (15%)	-182 (-1%)
	AN	-1,433 (-11%)	-1,591 (-12%)	1,808 (11%)	1,527 (9%)	1,663 (8%)	2,409 (15%)	1,698 (8%)
	BN	-462 (-6%)	-1,178 (-10%)	2,835 (19%)	2,711 (18%)	2,496 (14%)	3,449 (23%)	2,863 (16%)
	D	3,840 (26%)	4,288 (29%)	1,326 (13%)	1,313 (13%)	4,996 (37%)	1,275 (12%)	4,936 (37%)
	C	1,369 (16%)	1,266 (14%)	-750 (-9%)	-796 (-9%)	-550 (-6%)	-508 (-6%)	-268 (-3%)
	All	638 (1%)	512 (0%)	1,451 (11%)	1,213 (9%)	1,589 (9%)	1,919 (14%)	1,724 (10%)
SEP	W	-951 (-3%)	-1,523 (-5%)	-2,931 (-11%)	-3,168 (-11%)	-2,688 (-9%)	-2,956 (-11%)	-2,963 (-10%)
	AN	-2,298 (-8%)	-2,789 (-11%)	-717 (-3%)	-825 (-4%)	330 (3%)	-509 (-2%)	104 (2%)
	BN	-2,267 (-15%)	-2,479 (-17%)	2,641 (20%)	2,644 (20%)	1,109 (11%)	2,777 (21%)	1,137 (11%)
	D	-2,668 (-28%)	-2,564 (-27%)	3,120 (33%)	3,107 (33%)	1,286 (15%)	2,906 (31%)	1,040 (12%)
	C	-1,658 (-23%)	-1,872 (-26%)	11 (0%)	-1 (0%)	34 (0%)	114 (2%)	79 (1%)
	All	-1,853 (-9%)	-2,151 (-11%)	103 (1%)	8 (0%)	-327 (-1%)	117 (1%)	-490 (-2%)
OCT	W	-4,033 (-32%)	-4,320 (-34%)	431 (3%)	367 (3%)	1,178 (7%)	380 (3%)	1,165 (7%)
	AN	-5,045 (-45%)	-5,512 (-49%)	156 (1%)	163 (1%)	437 (2%)	96 (1%)	372 (1%)
	BN	-5,630 (-50%)	-4,869 (-44%)	315 (3%)	264 (2%)	1,510 (10%)	422 (4%)	1,542 (10%)
	D	-4,859 (-47%)	-4,466 (-44%)	174 (2%)	186 (2%)	330 (2%)	127 (1%)	318 (2%)
	C	-5,148 (-53%)	-4,957 (-51%)	3 (0%)	42 (0%)	1,486 (13%)	103 (1%)	1,516 (13%)
	All	-4,798 (-43%)	-4,713 (-42%)	252 (2%)	232 (2%)	985 (7%)	250 (2%)	979 (6%)
NOV	W	-615 (-1%)	-1,974 (-8%)	263 (1%)	281 (1%)	-778 (-2%)	181 (1%)	-802 (-2%)
	AN	227 (3%)	-583 (-2%)	769 (5%)	509 (3%)	741 (6%)	234 (1%)	440 (4%)
	BN	-1,144 (-6%)	-1,309 (-7%)	-70 (-1%)	-96 (-1%)	-1,097 (-6%)	208 (1%)	-895 (-4%)
	D	-467 (-1%)	-1,264 (-8%)	51 (0%)	12 (0%)	-1,044 (-6%)	87 (1%)	-1,067 (-6%)
	C	-740 (-8%)	-701 (-7%)	-242 (-3%)	-234 (-2%)	-202 (-2%)	-59 (-1%)	-148 (-1%)
	All	-568 (-2%)	-1,315 (-7%)	160 (1%)	115 (1%)	-584 (-2%)	138 (1%)	-598 (-2%)
DEC	W	4,112 (11%)	1,523 (4%)	1,297 (4%)	1,430 (4%)	3,385 (9%)	599 (2%)	2,993 (8%)
	AN	-1,200 (-6%)	-1,873 (-9%)	-458 (-2%)	-401 (-2%)	1,988 (9%)	-215 (-1%)	2,030 (9%)
	BN	-683 (-4%)	-1,623 (-10%)	-283 (-2%)	-266 (-2%)	457 (3%)	-266 (-2%)	455 (3%)
	D	-177 (-1%)	-914 (-6%)	-146 (-1%)	-62 (0%)	1,193 (8%)	-152 (-1%)	1,182 (8%)
	C	-989 (-9%)	-881 (-8%)	-86 (-1%)	-144 (-1%)	-61 (0%)	-86 (-1%)	-27 (0%)
	All	828 (4%)	-398 (-2%)	251 (1%)	314 (1%)	1,695 (7%)	67 (0%)	1,579 (7%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.
[b] For definitions of each effect, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.2.3 Sacramento River at Rio Vista

Table 5E-63. Mean Monthly Flows (cfs) for Model Scenarios for the Sacramento River at Rio Vista, Year-Round

In Delta—Sacramento River at Rio Vista												
Month	Water Year Type	NAA_ELT_2015[a]	B1_ELT_2015	B2_ELT_2015	S2_ELT_2015	H3_ELT_2015	H3+_ELT_2015	H4_ELT_2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	74,918	71,180	71,937	70,779	69,197	69,066	69,452	78,551	72,415	76,879	77,391
	AN	40,756	37,721	37,513	37,247	36,766	36,741	36,983	42,919	37,439	40,693	42,656
	BN	20,077	18,642	18,890	18,718	18,177	18,094	18,193	19,991	18,693	19,814	20,710
	D	14,741	13,405	13,624	13,628	13,271	13,235	13,373	14,927	14,703	15,067	13,940
	C	11,358	10,735	10,724	10,797	10,873	10,815	10,914	12,601	10,822	11,304	10,881
	All	38,044	35,786	36,084	35,660	34,928	34,853	35,072	39,721	36,443	38,676	38,969
FEB	W	89,370	84,299	86,216	83,856	83,828	83,383	82,746	89,989	83,061	86,983	83,554
	AN	53,764	52,104	52,550	50,158	48,937	48,614	49,272	55,363	50,658	53,741	53,430
	BN	30,879	28,227	28,464	28,128	27,185	27,018	27,545	29,442	25,747	28,133	29,463
	D	20,772	18,380	19,326	19,203	18,312	18,303	18,178	19,422	17,247	18,615	20,680
	C	13,750	12,482	12,620	12,617	12,238	12,159	12,278	11,956	11,812	11,457	12,742
	All	48,049	45,034	45,976	44,793	44,193	43,963	43,937	47,675	43,660	46,011	45,746
MAR	W	66,003	60,236	62,245	61,505	59,456	59,413	60,789	68,663	61,586	64,264	62,296
	AN	46,755	42,318	44,083	43,275	41,483	41,508	42,191	48,513	41,050	45,102	43,620
	BN	19,212	15,817	17,568	17,337	15,493	15,093	17,048	19,562	15,626	17,064	19,557
	D	17,185	14,504	15,091	15,068	14,474	14,450	14,855	17,679	14,726	15,746	19,980
	C	10,434	9,965	9,394	9,400	9,748	9,711	9,720	10,684	9,981	10,404	11,250
	All	36,349	32,635	33,874	33,478	32,171	32,082	33,043	37,655	32,895	34,869	35,507
APR	W	38,608	33,579	35,135	39,558	32,972	36,373	36,717	38,422	32,024	35,059	35,961
	AN	22,075	18,146	19,854	29,172	17,225	21,030	21,693	21,855	16,986	19,103	23,221
	BN	14,387	13,116	12,492	20,483	12,029	13,467	17,610	14,207	12,777	13,415	18,332
	D	10,125	10,107	9,231	11,118	9,105	10,018	9,797	10,299	10,550	10,184	13,788
	C	7,517	7,606	7,105	7,668	7,269	7,373	7,327	7,816	7,883	7,840	8,436
	All	21,251	18,874	19,245	23,872	18,092	20,188	21,046	21,211	18,291	19,585	22,192
MAY	W	23,791	18,607	20,282	20,647	18,169	21,129	22,119	20,046	14,306	17,128	18,687
	AN	15,608	13,186	13,302	13,442	12,541	14,462	15,737	14,948	11,801	13,364	14,545
	BN	9,809	9,744	8,830	12,064	8,501	9,119	10,889	9,355	9,443	9,812	11,936
	D	7,979	8,721	7,548	8,853	7,937	7,947	7,981	8,564	9,032	9,269	9,609
	C	5,583	5,634	5,264	5,250	5,413	5,435	5,435	5,554	5,350	5,405	6,564
	All	14,071	12,232	12,312	13,285	11,582	12,913	13,723	12,833	10,641	11,887	13,162
JUN	W	13,047	9,489	8,650	8,448	8,987	8,919	8,413	11,418	8,002	9,675	8,177
	AN	9,016	7,200	5,959	5,758	6,943	6,795	6,247	9,220	7,583	8,339	6,292
	BN	7,485	6,500	5,461	4,791	6,618	6,666	5,744	7,241	6,703	6,758	5,544
	D	6,737	5,977	5,520	5,248	5,900	6,200	5,843	6,335	5,820	5,604	5,083
	C	4,426	4,293	4,192	4,234	4,257	4,257	4,265	4,513	4,020	4,027	4,901
	All	8,861	7,112	6,372	6,111	6,914	6,944	6,469	8,257	6,657	7,261	6,293

In Delta—Sacramento River at Rio Vista												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	11,774	7,061	6,128	6,094	7,135	7,089	6,718	12,181	7,996	8,504	5,946
	AN	13,096	7,396	6,509	6,481	7,434	7,300	7,200	12,927	8,132	8,573	5,258
	BN	11,985	6,819	6,686	6,711	6,859	6,747	6,440	11,357	6,831	7,734	4,883
	D	9,637	6,217	6,759	6,491	5,957	5,921	5,800	10,307	5,916	6,161	5,000
	C	5,380	4,260	3,823	4,018	4,230	4,224	4,154	6,596	4,453	4,701	4,969
	All	10,599	6,473	6,080	6,040	6,448	6,386	6,164	10,921	6,842	7,312	5,313
AUG	W	9,157	4,183	5,321	5,414	4,203	4,565	3,755	8,650	3,826	3,979	5,100
	AN	9,547	4,251	5,970	6,010	4,723	4,921	4,340	9,648	5,174	5,297	5,000
	BN	8,545	3,810	5,909	6,172	3,943	4,029	3,762	8,753	4,224	4,694	4,591
	D	5,197	4,917	5,915	5,855	4,914	4,923	4,925	7,417	4,505	4,185	4,838
	C	3,953	4,303	3,840	4,009	4,299	4,328	4,319	3,615	3,157	3,234	4,119
	All	7,479	4,308	5,430	5,522	4,405	4,569	4,181	7,806	4,142	4,230	4,798
SEP	W	21,712	3,544	10,429	10,250	12,483	12,615	12,287	21,199	3,165	3,569	11,566
	AN	13,800	3,088	8,043	7,903	8,497	8,576	8,210	12,832	3,359	3,706	6,642
	BN	7,546	3,000	5,217	5,240	3,369	3,369	3,304	6,197	3,158	3,309	3,000
	D	5,054	3,000	5,180	5,017	3,009	3,020	3,000	3,644	3,477	3,416	3,000
	C	3,396	2,990	3,105	3,125	3,026	3,037	2,982	2,996	3,630	3,764	2,576
	All	11,799	3,184	6,966	6,860	6,880	6,938	6,756	10,896	3,329	3,540	6,187
OCT	W	8,419	5,171	5,709	5,720	5,184	5,354	5,321	8,287	8,615	9,070	4,431
	AN	6,635	4,042	4,460	4,457	4,272	4,315	4,324	7,207	8,846	9,573	4,343
	BN	6,395	3,929	4,374	4,406	3,990	4,113	3,985	6,976	9,224	8,217	3,298
	D	5,889	3,886	3,935	3,926	3,815	3,809	3,822	5,727	7,496	7,343	3,486
	C	4,730	3,959	3,821	3,825	3,647	3,658	3,647	4,969	9,015	9,179	2,635
	All	6,717	4,335	4,633	4,640	4,321	4,403	4,373	6,858	8,566	8,635	3,754
NOV	W	17,592	11,887	13,162	12,931	12,738	12,745	12,812	15,879	10,636	11,738	11,584
	AN	12,982	7,637	9,560	9,169	8,695	8,971	8,990	12,156	6,298	6,972	7,860
	BN	10,305	5,229	6,034	6,220	6,113	6,160	6,071	9,071	4,870	5,003	5,626
	D	9,331	6,084	6,186	6,245	6,172	6,199	6,109	8,061	5,178	5,845	5,718
	C	6,039	4,256	4,476	4,526	4,669	4,665	4,583	5,565	4,346	4,348	4,180
	All	12,169	7,738	8,615	8,537	8,393	8,449	8,426	10,946	6,898	7,516	7,651
DEC	W	42,402	42,331	42,490	41,555	40,057	39,851	40,645	40,431	38,576	40,845	39,460
	AN	19,670	17,493	18,487	18,233	18,270	18,092	18,325	19,936	19,338	20,136	16,539
	BN	15,354	13,895	13,943	13,812	13,803	13,791	13,910	14,049	13,609	14,409	12,283
	D	11,700	10,989	11,003	11,002	11,026	10,994	11,030	11,687	11,385	12,086	10,114
	C	7,645	7,251	6,792	6,819	6,847	6,898	6,884	7,186	7,752	7,692	6,427
	All	22,632	21,828	21,968	21,615	21,154	21,060	21,373	21,753	21,019	22,136	20,190

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-64. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios for the Sacramento River at Rio Vista, Year Round**

In Delta—Sacramento River at Rio Vista										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	-3,738 (-5%)	-2,981 (-4%)	-4,139 (-6%)	-5,721 (-8%)	-5,852 (-8%)	-5,466 (-7%)	-6,136 (-8%)	-1,672 (-2%)	-1,161 (-1%)
	AN	-3,034 (-7%)	-3,242 (-8%)	-3,508 (-9%)	-3,989 (-10%)	-4,014 (-10%)	-3,773 (-9%)	-5,480 (-13%)	-2,226 (-5%)	-263 (-1%)
	BN	-1,435 (-7%)	-1,187 (-6%)	-1,359 (-7%)	-1,900 (-9%)	-1,983 (-10%)	-1,884 (-9%)	-1,298 (-6%)	-176 (-1%)	719 (4%)
	D	-1,336 (-9%)	-1,117 (-8%)	-1,113 (-8%)	-1,471 (-10%)	-1,506 (-10%)	-1,369 (-9%)	-224 (-1%)	140 (1%)	-987 (-7%)
	C	-622 (-5%)	-634 (-6%)	-561 (-5%)	-485 (-4%)	-543 (-5%)	-444 (-4%)	-1,780 (-14%)	-1,297 (-10%)	-1,721 (-14%)
	All	-2,259 (-6%)	-1,961 (-5%)	-2,384 (-6%)	-3,116 (-8%)	-3,191 (-8%)	-2,972 (-8%)	-3,279 (-8%)	-1,045 (-3%)	-752 (-2%)
FEB	W	-5,072 (-6%)	-3,154 (-4%)	-5,514 (-6%)	-5,542 (-6%)	-5,988 (-7%)	-6,625 (-7%)	-6,928 (-8%)	-3,006 (-3%)	-6,435 (-7%)
	AN	-1,660 (-3%)	-1,214 (-2%)	-3,606 (-7%)	-4,827 (-9%)	-5,150 (-10%)	-4,491 (-8%)	-4,705 (-8%)	-1,622 (-3%)	-1,932 (-3%)
	BN	-2,652 (-9%)	-2,415 (-8%)	-2,751 (-9%)	-3,694 (-12%)	-3,862 (-13%)	-3,335 (-11%)	-3,696 (-13%)	-1,310 (-4%)	21 (0%)
	D	-2,392 (-12%)	-1,446 (-7%)	-1,569 (-8%)	-2,460 (-12%)	-2,469 (-12%)	-2,594 (-12%)	-2,175 (-11%)	-807 (-4%)	1,258 (6%)
	C	-1,268 (-9%)	-1,130 (-8%)	-1,133 (-8%)	-1,513 (-11%)	-1,591 (-12%)	-1,472 (-11%)	-143 (-1%)	-499 (-4%)	787 (7%)
	All	-3,014 (-6%)	-2,073 (-4%)	-3,256 (-7%)	-3,856 (-8%)	-4,086 (-9%)	-4,112 (-9%)	-4,015 (-8%)	-1,664 (-3%)	-1,928 (-4%)
MAR	W	-5,767 (-9%)	-3,759 (-6%)	-4,498 (-7%)	-6,547 (-10%)	-6,590 (-10%)	-5,214 (-8%)	-7,077 (-10%)	-4,399 (-6%)	-6,367 (-9%)
	AN	-4,436 (-9%)	-2,672 (-6%)	-3,480 (-7%)	-5,272 (-11%)	-5,247 (-11%)	-4,563 (-10%)	-7,463 (-15%)	-3,411 (-7%)	-4,893 (-10%)
	BN	-3,395 (-18%)	-1,643 (-9%)	-1,875 (-10%)	-3,719 (-19%)	-4,118 (-21%)	-2,163 (-11%)	-3,936 (-20%)	-2,499 (-13%)	-5 (0%)
	D	-2,681 (-16%)	-2,094 (-12%)	-2,117 (-12%)	-2,711 (-16%)	-2,735 (-16%)	-2,330 (-14%)	-2,953 (-17%)	-1,933 (-11%)	2,301 (13%)
	C	-469 (-4%)	-1,040 (-10%)	-1,034 (-10%)	-686 (-7%)	-723 (-7%)	-714 (-7%)	-703 (-7%)	-280 (-3%)	567 (5%)
	All	-3,715 (-10%)	-2,475 (-7%)	-2,871 (-8%)	-4,178 (-11%)	-4,267 (-12%)	-3,306 (-9%)	-4,759 (-13%)	-2,786 (-7%)	-2,148 (-6%)
APR	W	-5,029 (-13%)	-3,473 (-9%)	950 (2%)	-5,636 (-15%)	-2,235 (-6%)	-1,891 (-5%)	-6,398 (-17%)	-3,363 (-9%)	-2,461 (-6%)
	AN	-3,929 (-18%)	-2,221 (-10%)	7,097 (32%)	-4,849 (-22%)	-1,045 (-5%)	-382 (-2%)	-4,868 (-22%)	-2,752 (-13%)	1,366 (6%)
	BN	-1,272 (-9%)	-1,896 (-13%)	6,095 (42%)	-2,359 (-16%)	-920 (-6%)	3,222 (22%)	-1,430 (-10%)	-793 (-6%)	4,125 (29%)
	D	-18 (0%)	-893 (-9%)	993 (10%)	-1,019 (-10%)	-106 (-1%)	-327 (-3%)	252 (2%)	-114 (-1%)	3,490 (34%)
	C	89 (1%)	-413 (-5%)	151 (2%)	-249 (-3%)	-144 (-2%)	-190 (-3%)	67 (1%)	24 (0%)	619 (8%)
	All	-2,378 (-11%)	-2,006 (-9%)	2,620 (12%)	-3,160 (-15%)	-1,063 (-5%)	-205 (-1%)	-2,920 (-14%)	-1,626 (-8%)	980 (5%)
MAY	W	-5,185 (-22%)	-3,510 (-15%)	-3,144 (-13%)	-5,622 (-24%)	-2,662 (-11%)	-1,673 (-7%)	-5,739 (-29%)	-2,918 (-15%)	-1,359 (-7%)
	AN	-2,422 (-16%)	-2,306 (-15%)	-2,167 (-14%)	-3,067 (-20%)	-1,147 (-7%)	129 (1%)	-3,147 (-21%)	-1,584 (-11%)	-403 (-3%)
	BN	-64 (-1%)	-979 (-10%)	2,255 (23%)	-1,308 (-13%)	-690 (-7%)	1,081 (11%)	88 (1%)	457 (5%)	2,581 (28%)
	D	742 (9%)	-431 (-5%)	874 (11%)	-42 (-1%)	-32 (0%)	1 (0%)	468 (5%)	706 (8%)	1,046 (12%)
	C	52 (1%)	-319 (-6%)	-333 (-6%)	-170 (-3%)	-148 (-3%)	-147 (-3%)	-204 (-4%)	-149 (-3%)	1,010 (18%)
	All	-1,839 (-13%)	-1,759 (-12%)	-786 (-6%)	-2,489 (-18%)	-1,158 (-8%)	-348 (-2%)	-2,192 (-17%)	-946 (-7%)	328 (3%)
JUN	W	-3,559 (-27%)	-4,397 (-34%)	-4,600 (-35%)	-4,060 (-31%)	-4,128 (-32%)	-4,635 (-36%)	-3,416 (-30%)	-1,743 (-15%)	-3,241 (-28%)
	AN	-1,816 (-20%)	-3,057 (-34%)	-3,257 (-36%)	-2,072 (-23%)	-2,221 (-25%)	-2,769 (-31%)	-1,637 (-18%)	-881 (-10%)	-2,928 (-32%)
	BN	-985 (-13%)	-2,024 (-27%)	-2,694 (-36%)	-867 (-12%)	-819 (-11%)	-1,742 (-23%)	-538 (-7%)	-483 (-7%)	-1,696 (-23%)
	D	-761 (-11%)	-1,218 (-18%)	-1,490 (-22%)	-838 (-12%)	-538 (-8%)	-894 (-13%)	-516 (-8%)	-731 (-12%)	-1,252 (-20%)
	C	-133 (-3%)	-234 (-5%)	-192 (-4%)	-170 (-4%)	-170 (-4%)	-161 (-4%)	-493 (-11%)	-486 (-11%)	388 (9%)
	All	-1,749 (-20%)	-2,489 (-28%)	-2,750 (-31%)	-1,947 (-22%)	-1,917 (-22%)	-2,392 (-27%)	-1,600 (-19%)	-996 (-12%)	-1,964 (-24%)

In Delta—Sacramento River at Rio Vista										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	-4,714 (-40%)	-5,647 (-48%)	-5,680 (-48%)	-4,640 (-39%)	-4,685 (-40%)	-5,057 (-43%)	-4,185 (-34%)	-3,677 (-30%)	-6,236 (-51%)
	AN	-5,700 (-44%)	-6,587 (-50%)	-6,615 (-51%)	-5,661 (-43%)	-5,795 (-44%)	-5,896 (-45%)	-4,795 (-37%)	-4,354 (-34%)	-7,669 (-59%)
	BN	-5,166 (-43%)	-5,299 (-44%)	-5,274 (-44%)	-5,126 (-43%)	-5,238 (-44%)	-5,545 (-46%)	-4,526 (-40%)	-3,623 (-32%)	-6,474 (-57%)
	D	-3,420 (-35%)	-2,878 (-30%)	-3,146 (-33%)	-3,680 (-38%)	-3,716 (-39%)	-3,837 (-40%)	-4,391 (-43%)	-4,147 (-40%)	-5,307 (-51%)
	C	-1,120 (-21%)	-1,557 (-29%)	-1,361 (-25%)	-1,150 (-21%)	-1,156 (-21%)	-1,226 (-23%)	-2,143 (-32%)	-1,896 (-29%)	-1,627 (-25%)
	All	-4,125 (-39%)	-4,519 (-43%)	-4,559 (-43%)	-4,151 (-39%)	-4,213 (-40%)	-4,435 (-42%)	-4,079 (-37%)	-3,609 (-33%)	-5,608 (-51%)
AUG	W	-4,973 (-54%)	-3,836 (-42%)	-3,743 (-41%)	-4,953 (-54%)	-4,592 (-50%)	-5,401 (-59%)	-4,824 (-56%)	-4,671 (-54%)	-3,550 (-41%)
	AN	-5,295 (-55%)	-3,577 (-37%)	-3,537 (-37%)	-4,824 (-51%)	-4,626 (-48%)	-5,207 (-55%)	-4,474 (-46%)	-4,351 (-45%)	-4,648 (-48%)
	BN	-4,735 (-55%)	-2,636 (-31%)	-2,373 (-28%)	-4,602 (-54%)	-4,516 (-53%)	-4,783 (-56%)	-4,529 (-52%)	-4,059 (-46%)	-4,161 (-48%)
	D	-280 (-5%)	718 (14%)	658 (13%)	-283 (-5%)	-274 (-5%)	-272 (-5%)	-2,912 (-39%)	-3,231 (-44%)	-2,579 (-35%)
	C	350 (9%)	-113 (-3%)	56 (1%)	347 (9%)	375 (9%)	366 (9%)	-458 (-13%)	-382 (-11%)	504 (14%)
	All	-3,171 (-42%)	-2,049 (-27%)	-1,957 (-26%)	-3,074 (-41%)	-2,909 (-39%)	-3,297 (-44%)	-3,664 (-47%)	-3,576 (-46%)	-3,008 (-39%)
SEP	W	-18,168 (-84%)	-11,283 (-52%)	-11,461 (-53%)	-9,229 (-43%)	-9,096 (-42%)	-9,425 (-43%)	-18,034 (-85%)	-17,630 (-83%)	-9,633 (-45%)
	AN	-10,712 (-78%)	-5,757 (-42%)	-5,897 (-43%)	-5,303 (-38%)	-5,224 (-38%)	-5,590 (-41%)	-9,473 (-74%)	-9,126 (-71%)	-6,190 (-48%)
	BN	-4,546 (-60%)	-2,329 (-31%)	-2,306 (-31%)	-4,178 (-55%)	-4,177 (-55%)	-4,242 (-56%)	-3,039 (-49%)	-2,888 (-47%)	-3,197 (-52%)
	D	-2,054 (-41%)	126 (2%)	-38 (-1%)	-2,045 (-40%)	-2,034 (-40%)	-2,054 (-41%)	-167 (-5%)	-228 (-6%)	-644 (-18%)
	C	-405 (-12%)	-290 (-9%)	-270 (-8%)	-369 (-11%)	-359 (-11%)	-414 (-12%)	634 (21%)	768 (26%)	-420 (-14%)
	All	-8,615 (-73%)	-4,832 (-41%)	-4,939 (-42%)	-4,919 (-42%)	-4,861 (-41%)	-5,042 (-43%)	-7,567 (-69%)	-7,356 (-68%)	-4,709 (-43%)
OCT	W	-3,248 (-39%)	-2,710 (-32%)	-2,699 (-32%)	-3,235 (-38%)	-3,065 (-36%)	-3,098 (-37%)	328 (4%)	783 (9%)	-3,856 (-47%)
	AN	-2,593 (-39%)	-2,175 (-33%)	-2,178 (-33%)	-2,363 (-36%)	-2,320 (-35%)	-2,311 (-35%)	1,639 (23%)	2,366 (33%)	-2,864 (-40%)
	BN	-2,466 (-39%)	-2,021 (-32%)	-1,990 (-31%)	-2,405 (-38%)	-2,282 (-36%)	-2,411 (-38%)	2,248 (32%)	1,241 (18%)	-3,678 (-53%)
	D	-2,002 (-34%)	-1,953 (-33%)	-1,963 (-33%)	-2,074 (-35%)	-2,079 (-35%)	-2,067 (-35%)	1,769 (31%)	1,616 (28%)	-2,241 (-39%)
	C	-770 (-16%)	-909 (-19%)	-904 (-19%)	-1,083 (-23%)	-1,072 (-23%)	-1,083 (-23%)	4,046 (81%)	4,210 (85%)	-2,334 (-47%)
	All	-2,382 (-35%)	-2,084 (-31%)	-2,077 (-31%)	-2,396 (-36%)	-2,314 (-34%)	-2,344 (-35%)	1,708 (25%)	1,777 (26%)	-3,103 (-45%)
NOV	W	-5,705 (-32%)	-4,430 (-25%)	-4,661 (-26%)	-4,853 (-28%)	-4,847 (-28%)	-4,780 (-27%)	-5,243 (-33%)	-4,142 (-26%)	-4,295 (-27%)
	AN	-5,345 (-41%)	-3,421 (-26%)	-3,813 (-29%)	-4,287 (-33%)	-4,010 (-31%)	-3,992 (-31%)	-5,858 (-48%)	-5,183 (-43%)	-4,296 (-35%)
	BN	-5,076 (-49%)	-4,270 (-41%)	-4,085 (-40%)	-4,192 (-41%)	-4,144 (-40%)	-4,234 (-41%)	-4,200 (-46%)	-4,068 (-45%)	-3,444 (-38%)
	D	-3,247 (-35%)	-3,145 (-34%)	-3,086 (-33%)	-3,159 (-34%)	-3,131 (-34%)	-3,222 (-35%)	-2,883 (-36%)	-2,216 (-27%)	-2,343 (-29%)
	C	-1,783 (-30%)	-1,563 (-26%)	-1,514 (-25%)	-1,370 (-23%)	-1,375 (-23%)	-1,456 (-24%)	-1,219 (-22%)	-1,217 (-22%)	-1,385 (-25%)
	All	-4,431 (-36%)	-3,554 (-29%)	-3,632 (-30%)	-3,776 (-31%)	-3,720 (-31%)	-3,743 (-31%)	-4,048 (-37%)	-3,431 (-31%)	-3,296 (-30%)
DEC	W	-71 (0%)	88 (0%)	-847 (-2%)	-2,346 (-6%)	-2,552 (-6%)	-1,757 (-4%)	-1,855 (-5%)	413 (1%)	-971 (-2%)
	AN	-2,177 (-11%)	-1,183 (-6%)	-1,437 (-7%)	-1,400 (-7%)	-1,579 (-8%)	-1,345 (-7%)	-598 (-3%)	200 (1%)	-3,397 (-17%)
	BN	-1,459 (-10%)	-1,410 (-9%)	-1,541 (-10%)	-1,551 (-10%)	-1,563 (-10%)	-1,444 (-9%)	-440 (-3%)	360 (3%)	-1,766 (-13%)
	D	-711 (-6%)	-697 (-6%)	-698 (-6%)	-674 (-6%)	-706 (-6%)	-670 (-6%)	-302 (-3%)	399 (3%)	-1,573 (-13%)
	C	-394 (-5%)	-853 (-11%)	-826 (-11%)	-798 (-10%)	-747 (-10%)	-761 (-10%)	566 (8%)	506 (7%)	-759 (-11%)
	All	-804 (-4%)	-664 (-3%)	-1,016 (-4%)	-1,478 (-7%)	-1,571 (-7%)	-1,259 (-6%)	-734 (-3%)	384 (2%)	-1,563 (-7%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-65. Differences[a] (Percent Differences) (cfs) between Effects[b] for the Sacramento River at Rio Vista, Year Round**

In Delta—Sacramento River at Rio Vista								
Month	**Water Year Type**	**Alt 1A Effect vs. Boundary 1 Effect**	**Alt 3 Effect vs. Boundary 1 Effect**	**Alt 4A H3 Effect vs. Boundary 2 Effect**	**Alt 4A H3+ Effect vs. Boundary 2 Effect**	**Alt 8 Effect vs. Boundary 2 Effect**	**Alt 4A H4 Effect vs. Scenario 2 Effect**	**Alt 8 Effect vs. Scenario 2 Effect**
JAN	W	2,398 (3%)	-2,066 (-3%)	2,740 (4%)	2,871 (4%)	-1,820 (-3%)	1,327 (2%)	-2,978 (-4%)
	AN	2,446 (5%)	-808 (-2%)	747 (2%)	772 (2%)	-2,979 (-7%)	265 (1%)	-3,245 (-8%)
	BN	-138 (-1%)	-1,259 (-6%)	713 (4%)	795 (4%)	-1,907 (-10%)	526 (3%)	-2,078 (-10%)
	D	-1,112 (-8%)	-1,476 (-10%)	353 (2%)	389 (3%)	-131 (-1%)	255 (2%)	-127 (-1%)
	C	1,157 (9%)	675 (5%)	-149 (-1%)	-91 (-1%)	1,087 (8%)	-117 (-1%)	1,160 (9%)
	All	1,020 (2%)	-1,213 (-3%)	1,156 (3%)	1,231 (3%)	-1,208 (-3%)	588 (2%)	-1,632 (-4%)
FEB	W	1,856 (2%)	-2,066 (-2%)	2,388 (3%)	2,833 (3%)	3,281 (4%)	1,110 (1%)	921 (1%)
	AN	3,045 (5%)	-38 (0%)	3,613 (7%)	3,936 (7%)	718 (1%)	885 (2%)	-1,674 (-3%)
	BN	1,044 (4%)	-1,342 (-4%)	1,279 (4%)	1,446 (5%)	-2,436 (-8%)	584 (2%)	-2,772 (-9%)
	D	-217 (0%)	-1,585 (-7%)	1,014 (5%)	1,023 (5%)	-2,703 (-13%)	1,025 (5%)	-2,827 (-14%)
	C	-1,125 (-8%)	-770 (-5%)	382 (3%)	461 (3%)	-1,917 (-15%)	339 (2%)	-1,920 (-15%)
	All	1,000 (2%)	-1,350 (-3%)	1,783 (4%)	2,013 (4%)	-145 (0%)	856 (2%)	-1,328 (-3%)
MAR	W	1,310 (2%)	-1,369 (-2%)	2,789 (4%)	2,832 (4%)	2,608 (4%)	716 (1%)	1,869 (2%)
	AN	3,027 (6%)	-1,025 (-2%)	2,600 (6%)	2,575 (6%)	2,221 (4%)	1,083 (2%)	1,413 (3%)
	BN	542 (2%)	-896 (-5%)	2,076 (11%)	2,475 (13%)	-1,638 (-9%)	289 (2%)	-1,870 (-10%)
	D	272 (1%)	-748 (-5%)	617 (4%)	641 (4%)	-4,395 (-25%)	214 (1%)	-4,418 (-25%)
	C	234 (2%)	-189 (-2%)	-353 (-3%)	-317 (-3%)	-1,606 (-15%)	-320 (-3%)	-1,601 (-15%)
	All	1,045 (2%)	-929 (-3%)	1,703 (5%)	1,792 (5%)	-327 (-1%)	435 (1%)	-724 (-2%)
APR	W	1,369 (4%)	-1,666 (-4%)	2,163 (6%)	-1,238 (-3%)	-1,012 (-3%)	2,841 (7%)	3,411 (9%)
	AN	939 (4%)	-1,177 (-5%)	2,628 (12%)	-1,176 (-5%)	-3,587 (-16%)	7,479 (34%)	5,731 (26%)
	BN	158 (1%)	-479 (-3%)	463 (3%)	-975 (-7%)	-6,020 (-42%)	2,873 (20%)	1,971 (13%)
	D	-270 (-3%)	96 (1%)	126 (1%)	-787 (-8%)	-4,383 (-43%)	1,320 (13%)	-2,497 (-24%)
	C	22 (0%)	65 (1%)	-164 (-2%)	-268 (-4%)	-1,032 (-13%)	341 (5%)	-469 (-6%)
	All	543 (3%)	-752 (-4%)	1,153 (5%)	-943 (-4%)	-2,987 (-14%)	2,826 (13%)	1,640 (8%)
MAY	W	555 (7%)	-2,267 (-7%)	2,112 (9%)	-847 (-4%)	-2,151 (-8%)	-1,472 (-6%)	-1,786 (-6%)
	AN	725 (6%)	-838 (-5%)	761 (5%)	-1,160 (-7%)	-1,903 (-12%)	-2,295 (-15%)	-1,763 (-11%)
	BN	-152 (-2%)	-522 (-6%)	329 (3%)	-289 (-3%)	-3,560 (-38%)	1,174 (12%)	-326 (-5%)
	D	274 (4%)	36 (1%)	-389 (-5%)	-400 (-5%)	-1,477 (-18%)	873 (11%)	-172 (-1%)
	C	255 (5%)	201 (4%)	-149 (-3%)	-171 (-3%)	-1,329 (-24%)	-185 (-3%)	-1,343 (-24%)
	All	354 (4%)	-893 (-6%)	730 (5%)	-601 (-4%)	-2,087 (-15%)	-438 (-3%)	-1,114 (-8%)
JUN	W	-143 (3%)	-1,816 (-12%)	-337 (-3%)	-269 (-2%)	-1,156 (-5%)	35 (0%)	-1,359 (-7%)
	AN	-178 (-2%)	-935 (-11%)	-985 (-11%)	-836 (-9%)	-129 (-2%)	-488 (-5%)	-329 (-4%)
	BN	-447 (-6%)	-502 (-6%)	-1,157 (-15%)	-1,205 (-16%)	-328 (-4%)	-953 (-13%)	-998 (-13%)
	D	-245 (-3%)	-30 (0%)	-380 (-6%)	-680 (-10%)	34 (2%)	-595 (-9%)	-238 (-2%)
	C	360 (8%)	353 (8%)	-65 (-1%)	-65 (-1%)	-622 (-14%)	-32 (-1%)	-580 (-13%)
	All	-149 (0%)	-753 (-8%)	-542 (-6%)	-572 (-6%)	-525 (-4%)	-358 (-4%)	-786 (-7%)

In Delta—Sacramento River at Rio Vista								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JUL	W	-529 (-6%)	-1,037 (-10%)	-1,007 (-9%)	-962 (-8%)	589 (3%)	-623 (-5%)	556 (3%)
	AN	-904 (-6%)	-1,346 (-10%)	-925 (-7%)	-792 (-6%)	1,083 (9%)	-719 (-5%)	1,054 (9%)
	BN	-641 (-3%)	-1,543 (-11%)	-173 (-1%)	-61 (-1%)	1,175 (13%)	271 (2%)	1,200 (13%)
	D	972 (7%)	727 (5%)	802 (8%)	837 (9%)	2,429 (22%)	692 (7%)	2,162 (19%)
	C	1,023 (12%)	775 (8%)	-407 (-8%)	-401 (-7%)	70 (-4%)	-135 (-3%)	266 (-1%)
	All	-46 (-2%)	-516 (-6%)	-368 (-3%)	-306 (-3%)	1,089 (9%)	-125 (-1%)	1,049 (8%)
AUG	W	-150 (1%)	-302 (0%)	1,118 (12%)	756 (8%)	-286 (-1%)	1,658 (18%)	-193 (0%)
	AN	-822 (-9%)	-945 (-10%)	1,247 (13%)	1,049 (11%)	1,071 (11%)	1,670 (17%)	1,111 (11%)
	BN	-206 (-4%)	-676 (-9%)	1,966 (23%)	1,880 (22%)	1,525 (17%)	2,410 (28%)	1,788 (20%)
	D	2,631 (34%)	2,951 (38%)	1,002 (19%)	993 (19%)	3,297 (49%)	930 (18%)	3,237 (47%)
	C	808 (22%)	731 (19%)	-460 (-12%)	-488 (-12%)	-617 (-17%)	-310 (-8%)	-447 (-13%)
	All	493 (5%)	405 (3%)	1,025 (14%)	861 (12%)	960 (11%)	1,341 (18%)	1,052 (12%)
SEP	W	-133 (1%)	-538 (-1%)	-2,054 (-9%)	-2,186 (-10%)	-1,650 (-7%)	-2,036 (-9%)	-1,829 (-7%)
	AN	-1,239 (-4%)	-1,586 (-7%)	-453 (-3%)	-533 (-4%)	433 (7%)	-307 (-2%)	292 (6%)
	BN	-1,507 (-11%)	-1,658 (-14%)	1,849 (24%)	1,848 (24%)	868 (21%)	1,936 (26%)	891 (21%)
	D	-1,887 (-36%)	-1,827 (-34%)	2,171 (43%)	2,160 (43%)	770 (20%)	2,017 (40%)	606 (17%)
	C	-1,039 (-33%)	-1,173 (-38%)	79 (2%)	69 (2%)	130 (5%)	143 (4%)	150 (6%)
	All	-1,047 (-4%)	-1,258 (-6%)	86 (1%)	29 (0%)	-124 (2%)	104 (1%)	-230 (1%)
OCT	W	-3,576 (-43%)	-4,030 (-48%)	525 (6%)	354 (4%)	1,145 (14%)	399 (5%)	1,157 (14%)
	AN	-4,232 (-62%)	-4,959 (-72%)	189 (3%)	145 (2%)	690 (7%)	133 (2%)	687 (7%)
	BN	-4,714 (-71%)	-3,707 (-56%)	384 (6%)	261 (4%)	1,657 (21%)	421 (7%)	1,688 (22%)
	D	-3,771 (-65%)	-3,618 (-62%)	121 (2%)	126 (2%)	288 (6%)	104 (2%)	278 (6%)
	C	-4,816 (-98%)	-4,980 (-101%)	174 (4%)	163 (3%)	1,426 (28%)	178 (4%)	1,430 (28%)
	All	-4,091 (-60%)	-4,159 (-61%)	312 (5%)	230 (3%)	1,019 (14%)	267 (4%)	1,026 (14%)
NOV	W	-462 (1%)	-1,563 (-6%)	423 (2%)	417 (2%)	-135 (2%)	118 (1%)	-366 (1%)
	AN	513 (7%)	-161 (1%)	866 (7%)	589 (5%)	875 (9%)	179 (1%)	483 (6%)
	BN	-876 (-3%)	-1,008 (-4%)	-78 (-1%)	-126 (-1%)	-826 (-3%)	149 (1%)	-640 (-2%)
	D	-363 (1%)	-1,031 (-7%)	14 (0%)	-13 (0%)	-802 (-5%)	136 (1%)	-743 (-4%)
	C	-564 (-8%)	-566 (-8%)	-193 (-3%)	-189 (-3%)	-179 (-1%)	-57 (-1%)	-129 (0%)
	All	-383 (1%)	-1,000 (-5%)	222 (2%)	166 (1%)	-258 (1%)	111 (1%)	-337 (0%)
DEC	W	1,784 (4%)	-484 (-1%)	2,433 (6%)	2,640 (6%)	1,059 (3%)	910 (2%)	124 (0%)
	AN	-1,579 (-8%)	-2,377 (-12%)	217 (1%)	395 (2%)	2,214 (11%)	-92 (0%)	1,960 (10%)
	BN	-1,019 (-6%)	-1,819 (-12%)	140 (1%)	152 (1%)	356 (3%)	-97 (-1%)	225 (3%)
	D	-409 (-3%)	-1,110 (-9%)	-23 (0%)	9 (0%)	876 (8%)	-28 (0%)	875 (7%)
	C	-960 (-13%)	-900 (-12%)	-55 (-1%)	-106 (-1%)	-94 (-1%)	-65 (-1%)	-67 (0%)
	All	-69 (0%)	-1,187 (-5%)	814 (4%)	907 (4%)	899 (4%)	243 (1%)	547 (3%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.2.4 Delta Outflow

Table 5E-66. Mean Monthly Flows (cfs) for Model Scenarios for Delta Outflow, Year-Round

In Delta—Delta Outflow												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	90,381	90,163	92,779	91,412	88,369	88,233	88,732	94,620	93,144	94,461	98,110
	AN	47,935	46,074	48,571	48,337	46,278	46,254	46,526	51,100	50,514	49,621	55,237
	BN	22,038	20,812	26,174	25,992	22,400	22,311	22,420	22,301	23,567	21,773	27,942
	D	14,505	13,010	19,029	19,033	15,326	15,287	15,443	14,732	15,222	16,098	19,582
	C	10,575	9,833	14,988	15,076	11,531	11,471	11,691	12,651	13,530	13,453	15,420
	All	44,166	43,179	47,365	46,880	43,668	43,589	43,872	46,372	46,271	46,432	50,517
FEB	W	107,076	108,706	111,343	109,018	107,694	107,061	106,599	107,085	106,169	107,861	105,369
	AN	64,620	65,912	68,332	65,740	62,190	61,866	62,733	65,873	68,067	65,321	68,322
	BN	37,645	37,440	38,454	38,111	35,612	35,380	36,077	36,084	38,708	35,420	40,504
	D	22,961	20,687	25,892	25,752	21,371	21,366	21,234	21,461	20,840	20,525	27,556
	C	15,119	13,591	17,325	17,324	13,987	13,882	14,040	12,798	12,494	12,340	17,874
	All	57,087	57,035	60,088	58,882	56,066	55,762	55,855	56,338	56,636	56,118	58,988
MAR	W	81,605	83,692	86,239	85,510	81,774	81,692	84,271	84,471	82,706	84,730	83,030
	AN	54,497	55,300	58,904	58,064	55,413	55,394	56,319	56,737	57,787	54,844	56,840
	BN	21,947	20,844	26,233	25,994	20,758	20,391	24,495	22,467	23,682	21,471	27,303
	D	19,402	16,901	20,466	20,441	16,947	16,936	18,701	19,985	19,478	17,847	26,181
	C	12,073	11,695	12,137	12,137	11,809	11,754	11,970	12,215	11,772	11,759	15,362
	All	43,623	43,609	46,712	46,312	43,030	42,928	45,001	45,097	44,722	44,196	47,301
APR	W	54,488	48,827	53,053	58,055	49,503	54,479	54,210	54,562	54,866	48,187	54,395
	AN	30,752	24,196	29,934	40,323	25,679	31,114	31,240	30,576	31,275	24,101	33,786
	BN	20,728	16,209	19,708	28,679	18,524	20,718	25,175	20,641	21,371	16,785	27,172
	D	13,263	11,311	12,586	14,736	11,644	13,242	12,637	13,413	13,517	12,008	19,140
	C	8,882	8,576	8,704	9,352	8,577	8,874	8,583	9,294	8,883	8,953	11,354
	All	29,527	25,528	28,604	33,808	26,428	29,570	30,088	29,603	29,889	25,618	32,694
MAY	W	37,529	31,632	36,589	36,907	33,000	37,283	37,931	32,880	38,295	28,263	34,707
	AN	22,921	17,640	21,721	21,827	20,264	23,032	24,306	21,709	23,221	17,230	23,131
	BN	14,409	11,571	14,400	18,064	13,456	14,668	16,521	13,596	14,947	12,172	18,491
	D	9,834	9,691	10,019	11,421	10,074	10,318	10,226	10,375	10,079	10,591	13,443
	C	6,386	6,229	6,450	6,398	6,292	6,419	6,370	6,286	6,322	6,205	8,826
	All	20,807	17,626	20,382	21,424	18,858	20,901	21,582	19,121	21,230	16,794	21,789
JUN	W	17,803	16,996	19,024	18,761	17,900	17,477	17,362	15,640	18,083	15,657	17,629
	AN	9,966	10,033	10,882	10,588	10,553	10,293	9,956	10,676	10,208	10,597	12,272
	BN	8,127	8,430	8,391	7,350	8,547	8,310	7,342	8,943	7,970	9,685	10,036
	D	7,064	7,295	7,100	6,581	7,176	7,037	7,021	7,689	7,003	7,779	8,039
	C	5,401	5,359	5,380	5,374	5,353	5,354	5,369	5,632	5,343	5,443	7,590
	All	10,832	10,682	11,403	10,984	11,038	10,795	10,542	10,560	10,908	10,673	11,975

In Delta—Delta Outflow												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	10,833	9,135	9,246	9,343	9,002	9,062	9,224	11,407	10,810	9,386	8,782
	AN	10,707	8,119	8,047	8,251	8,214	8,251	8,200	12,225	10,518	9,017	8,017
	BN	7,596	6,179	7,164	7,254	6,179	6,179	6,279	7,668	7,656	6,529	5,908
	D	5,410	5,111	6,928	6,928	5,111	5,111	5,111	6,448	5,608	5,504	5,072
	C	4,151	4,083	4,288	4,300	4,083	4,083	4,083	5,832	4,977	5,355	4,083
	All	8,093	6,859	7,481	7,558	6,831	6,855	6,916	8,984	8,233	7,402	6,677
AUG	W	4,433	4,261	7,230	7,368	4,260	4,251	4,331	4,308	4,417	4,000	4,000
	AN	4,080	4,000	7,100	7,215	4,000	4,000	4,039	4,713	4,004	4,136	4,003
	BN	4,137	3,857	7,100	7,495	3,857	3,857	3,857	5,129	4,113	4,126	3,995
	D	4,076	3,537	6,937	7,016	3,540	3,547	3,550	5,348	4,645	4,300	4,539
	C	3,974	3,472	3,955	3,881	3,499	3,486	3,472	4,433	4,059	3,956	4,746
	All	4,185	3,880	6,645	6,780	3,884	3,881	3,910	4,754	4,302	4,101	4,227
SEP	W	18,742	4,433	16,382	16,343	19,166	19,153	19,116	20,078	6,109	4,205	21,436
	AN	11,784	3,000	11,804	11,765	12,279	12,253	12,227	11,581	3,616	3,263	12,805
	BN	4,167	3,000	7,407	7,482	3,623	3,623	3,623	3,428	3,413	3,490	3,246
	D	3,098	3,000	6,872	6,956	3,000	3,003	3,000	3,021	3,125	3,925	3,557
	C	3,000	3,000	4,062	3,977	3,000	3,000	3,000	3,036	3,042	5,746	4,225
	All	9,497	3,454	10,289	10,290	9,590	9,583	9,566	9,754	4,180	4,109	10,624
OCT	W	8,084	5,308	10,235	10,271	9,033	9,089	9,149	9,520	6,043	9,900	10,698
	AN	6,317	3,833	8,084	8,070	7,675	7,690	7,633	8,982	4,181	10,282	9,923
	BN	6,160	3,929	8,366	8,413	7,527	7,555	7,500	8,054	4,138	9,695	9,301
	D	5,914	3,778	7,907	7,919	6,963	6,992	7,041	7,294	3,972	8,521	9,005
	C	4,694	3,996	6,950	6,943	6,157	6,129	6,129	6,607	4,398	10,384	7,917
	All	6,524	4,329	8,609	8,628	7,702	7,729	7,741	8,276	4,750	9,689	9,567
NOV	W	17,405	13,431	18,371	18,342	17,004	16,992	17,165	15,987	14,387	12,201	18,783
	AN	11,933	8,061	13,003	12,621	10,958	11,201	11,364	11,529	10,096	6,899	13,443
	BN	9,037	4,930	9,432	9,637	8,260	8,249	8,331	8,681	5,812	4,490	11,211
	D	8,510	5,696	9,569	9,614	8,165	8,144	8,226	8,052	6,625	5,583	11,112
	C	5,913	4,211	7,436	7,387	5,893	5,893	5,906	5,725	4,435	5,248	8,995
	All	11,541	8,146	12,527	12,500	11,060	11,086	11,198	10,844	9,135	7,638	13,593
DEC	W	47,540	48,963	50,424	49,470	45,985	45,709	46,669	45,191	53,849	46,430	51,194
	AN	18,856	18,962	22,811	22,573	19,044	18,566	19,383	19,119	20,065	20,297	23,702
	BN	13,407	13,561	17,385	17,237	12,927	12,891	12,867	12,231	14,191	13,008	18,694
	D	8,784	9,271	13,170	13,165	8,501	8,739	8,619	8,828	9,580	9,263	15,420
	C	6,196	6,297	9,015	9,051	5,537	5,417	5,387	6,560	5,807	5,297	10,783
	All	22,957	23,572	26,505	26,146	22,251	22,122	22,511	22,113	25,386	22,722	27,855

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

Table 5E-67. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios for Delta Outflow, Year Round

In Delta—Delta Outflow										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	-218 (0%)	2,398 (3%)	1,031 (1%)	-2,012 (-2%)	-2,148 (-2%)	-1,649 (-2%)	-1,476 (-2%)	-159 (0%)	3,490 (4%)
	AN	-1,861 (-4%)	636 (1%)	402 (1%)	-1,657 (-3%)	-1,682 (-4%)	-1,409 (-3%)	-585 (-1%)	-1,479 (-3%)	4,137 (8%)
	BN	-1,225 (-6%)	4,136 (19%)	3,955 (18%)	362 (2%)	273 (1%)	382 (2%)	1,266 (6%)	-528 (-2%)	5,641 (25%)
	D	-1,495 (-10%)	4,524 (31%)	4,528 (31%)	821 (6%)	782 (5%)	938 (6%)	490 (3%)	1,366 (9%)	4,850 (33%)
	C	-743 (-7%)	4,413 (42%)	4,501 (43%)	956 (9%)	896 (8%)	1,115 (11%)	879 (7%)	802 (6%)	2,769 (22%)
	All	-987 (-2%)	3,198 (7%)	2,713 (6%)	-498 (-1%)	-578 (-1%)	-295 (-1%)	-101 (0%)	60 (0%)	4,145 (9%)
FEB	W	1,630 (2%)	4,267 (4%)	1,942 (2%)	618 (1%)	-14 (0%)	-476 (0%)	-917 (-1%)	776 (1%)	-1,716 (-2%)
	AN	1,291 (2%)	3,712 (6%)	1,119 (2%)	-2,430 (-4%)	-2,754 (-4%)	-1,888 (-3%)	2,194 (3%)	-553 (-1%)	2,449 (4%)
	BN	-206 (-1%)	809 (2%)	465 (1%)	-2,033 (-5%)	-2,265 (-6%)	-1,569 (-4%)	2,624 (7%)	-664 (-2%)	4,419 (12%)
	D	-2,273 (-10%)	2,931 (13%)	2,791 (12%)	-1,590 (-7%)	-1,595 (-7%)	-1,726 (-8%)	-622 (-3%)	-936 (-4%)	6,095 (28%)
	C	-1,528 (-10%)	2,206 (15%)	2,205 (15%)	-1,132 (-7%)	-1,237 (-8%)	-1,079 (-7%)	-304 (-2%)	-458 (-4%)	5,076 (40%)
	All	-52 (0%)	3,000 (5%)	1,795 (3%)	-1,021 (-2%)	-1,326 (-2%)	-1,232 (-2%)	297 (1%)	-221 (0%)	2,649 (5%)
MAR	W	2,087 (3%)	4,634 (6%)	3,906 (5%)	169 (0%)	87 (0%)	2,666 (3%)	-1,766 (-2%)	259 (0%)	-1,441 (-2%)
	AN	804 (1%)	4,407 (8%)	3,568 (7%)	916 (2%)	898 (2%)	1,822 (3%)	1,050 (2%)	-1,894 (-3%)	103 (0%)
	BN	-1,103 (-5%)	4,286 (20%)	4,047 (18%)	-1,190 (-5%)	-1,556 (-7%)	2,548 (12%)	1,215 (5%)	-996 (-4%)	4,836 (22%)
	D	-2,501 (-13%)	1,064 (5%)	1,039 (5%)	-2,455 (-13%)	-2,466 (-13%)	-701 (-4%)	-508 (-3%)	-2,139 (-11%)	6,195 (31%)
	C	-378 (-3%)	65 (1%)	64 (1%)	-263 (-2%)	-319 (-3%)	-103 (-1%)	-443 (-4%)	-456 (-4%)	3,147 (26%)
	All	-13 (0%)	3,089 (7%)	2,689 (6%)	-593 (-1%)	-695 (-2%)	1,378 (3%)	-375 (-1%)	-901 (-2%)	2,204 (5%)
APR	W	-5,662 (-10%)	-1,435 (-3%)	3,567 (7%)	-4,985 (-9%)	-9 (0%)	-278 (-1%)	304 (1%)	-6,375 (-12%)	-167 (0%)
	AN	-6,557 (-21%)	-818 (-3%)	9,570 (31%)	-5,073 (-16%)	362 (1%)	487 (2%)	699 (2%)	-6,475 (-21%)	3,210 (10%)
	BN	-4,519 (-22%)	-1,021 (-5%)	7,951 (38%)	-2,205 (-11%)	-11 (0%)	4,446 (21%)	730 (4%)	-3,856 (-19%)	6,531 (32%)
	D	-1,952 (-15%)	-676 (-5%)	1,473 (11%)	-1,619 (-12%)	-21 (0%)	-625 (-5%)	104 (1%)	-1,406 (-10%)	5,726 (43%)
	C	-306 (-3%)	-178 (-2%)	470 (5%)	-305 (-3%)	-9 (0%)	-299 (-3%)	-411 (-4%)	-341 (-4%)	2,060 (22%)
	All	-4,000 (-14%)	-924 (-3%)	4,281 (14%)	-3,100 (-10%)	42 (0%)	561 (2%)	286 (1%)	-3,986 (-13%)	3,090 (10%)
MAY	W	-5,897 (-16%)	-940 (-3%)	-622 (-2%)	-4,529 (-12%)	-246 (-1%)	402 (1%)	5,415 (16%)	-4,618 (-14%)	1,827 (6%)
	AN	-5,280 (-23%)	-1,200 (-5%)	-1,094 (-5%)	-2,656 (-12%)	112 (0%)	1,386 (6%)	1,511 (7%)	-4,479 (-21%)	1,422 (7%)
	BN	-2,837 (-20%)	-9 (0%)	3,655 (25%)	-952 (-7%)	259 (2%)	2,113 (15%)	1,351 (10%)	-1,424 (-10%)	4,895 (36%)
	D	-143 (-1%)	185 (2%)	1,586 (16%)	240 (2%)	484 (5%)	392 (4%)	-296 (-3%)	216 (2%)	3,067 (30%)
	C	-157 (-2%)	63 (1%)	12 (0%)	-95 (-1%)	33 (1%)	-16 (0%)	37 (1%)	-81 (-1%)	2,540 (40%)
	All	-3,181 (-15%)	-425 (-2%)	617 (3%)	-1,949 (-9%)	94 (0%)	775 (4%)	2,109 (11%)	-2,327 (-12%)	2,668 (14%)
JUN	W	-807 (-5%)	1,221 (7%)	959 (5%)	97 (1%)	-325 (-2%)	-441 (-2%)	2,443 (16%)	17 (0%)	1,990 (13%)
	AN	67 (1%)	916 (9%)	622 (6%)	587 (6%)	328 (3%)	-9 (0%)	-468 (-4%)	-79 (-1%)	1,596 (15%)
	BN	303 (4%)	264 (3%)	-777 (-10%)	420 (5%)	183 (2%)	-785 (-10%)	-973 (-11%)	742 (8%)	1,093 (12%)
	D	232 (3%)	36 (1%)	-482 (-7%)	112 (2%)	-27 (0%)	-43 (-1%)	-686 (-9%)	90 (1%)	350 (5%)
	C	-42 (-1%)	-21 (0%)	-27 (-1%)	-48 (-1%)	-47 (-1%)	-32 (-1%)	-289 (-5%)	-188 (-3%)	1,958 (35%)
	All	-150 (-1%)	571 (5%)	152 (1%)	206 (2%)	-37 (0%)	-289 (-3%)	347 (3%)	113 (1%)	1,414 (13%)

In Delta—Delta Outflow										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	-1,697 (-16%)	-1,586 (-15%)	-1,490 (-14%)	-1,830 (-17%)	-1,770 (-16%)	-1,608 (-15%)	-597 (-5%)	-2,020 (-18%)	-2,624 (-23%)
	AN	-2,589 (-24%)	-2,660 (-25%)	-2,456 (-23%)	-2,494 (-23%)	-2,457 (-23%)	-2,508 (-23%)	-1,706 (-14%)	-3,207 (-26%)	-4,208 (-34%)
	BN	-1,417 (-19%)	-432 (-6%)	-342 (-4%)	-1,417 (-19%)	-1,417 (-19%)	-1,317 (-17%)	-12 (0%)	-1,139 (-15%)	-1,760 (-23%)
	D	-298 (-6%)	1,518 (28%)	1,518 (28%)	-299 (-6%)	-299 (-6%)	-299 (-6%)	-840 (-13%)	-944 (-15%)	-1,376 (-21%)
	C	-68 (-2%)	137 (3%)	149 (4%)	-68 (-2%)	-68 (-2%)	-68 (-2%)	-855 (-15%)	-477 (-8%)	-1,749 (-30%)
	All	-1,234 (-15%)	-613 (-8%)	-535 (-7%)	-1,263 (-16%)	-1,238 (-15%)	-1,177 (-15%)	-751 (-8%)	-1,581 (-18%)	-2,306 (-26%)
AUG	W	-172 (-4%)	2,797 (63%)	2,935 (66%)	-173 (-4%)	-182 (-4%)	-102 (-2%)	109 (3%)	-308 (-7%)	-308 (-7%)
	AN	-80 (-2%)	3,020 (74%)	3,134 (77%)	-80 (-2%)	-80 (-2%)	-42 (-1%)	-710 (-15%)	-578 (-12%)	-711 (-15%)
	BN	-280 (-7%)	2,963 (72%)	3,358 (81%)	-280 (-7%)	-280 (-7%)	-280 (-7%)	-1,016 (-20%)	-1,003 (-20%)	-1,134 (-22%)
	D	-539 (-13%)	2,861 (70%)	2,940 (72%)	-536 (-13%)	-529 (-13%)	-525 (-13%)	-702 (-13%)	-1,047 (-20%)	-809 (-15%)
	C	-502 (-13%)	-19 (0%)	-93 (-2%)	-475 (-12%)	-488 (-12%)	-502 (-13%)	-375 (-8%)	-477 (-11%)	313 (7%)
	All	-306 (-7%)	2,460 (59%)	2,594 (62%)	-302 (-7%)	-305 (-7%)	-275 (-7%)	-452 (-10%)	-653 (-14%)	-527 (-11%)
SEP	W	-14,309 (-76%)	-2,360 (-13%)	-2,398 (-13%)	424 (2%)	412 (2%)	374 (2%)	-13,969 (-70%)	-15,873 (-79%)	1,358 (7%)
	AN	-8,784 (-75%)	20 (0%)	-19 (0%)	495 (4%)	469 (4%)	443 (4%)	-7,965 (-69%)	-8,318 (-72%)	1,224 (11%)
	BN	-1,167 (-28%)	3,240 (78%)	3,315 (80%)	-544 (-13%)	-544 (-13%)	-544 (-13%)	-15 (0%)	62 (2%)	-182 (-5%)
	D	-98 (-3%)	3,774 (122%)	3,858 (125%)	-98 (-3%)	-95 (-3%)	-98 (-3%)	104 (3%)	904 (30%)	535 (18%)
	C	0 (0%)	1,062 (35%)	977 (33%)	0 (0%)	0 (0%)	0 (0%)	6 (0%)	2,710 (89%)	1,189 (39%)
	All	-6,043 (-64%)	792 (8%)	793 (8%)	92 (1%)	85 (1%)	69 (1%)	-5,574 (-57%)	-5,645 (-58%)	870 (9%)
OCT	W	-2,777 (-34%)	2,150 (27%)	2,187 (27%)	948 (12%)	1,005 (12%)	1,065 (13%)	-3,477 (-37%)	380 (4%)	1,178 (12%)
	AN	-2,484 (-39%)	1,767 (28%)	1,753 (28%)	1,358 (22%)	1,373 (22%)	1,316 (21%)	-4,801 (-53%)	1,300 (14%)	941 (10%)
	BN	-2,231 (-36%)	2,206 (36%)	2,253 (37%)	1,367 (22%)	1,396 (23%)	1,341 (22%)	-3,916 (-49%)	1,641 (20%)	1,247 (15%)
	D	-2,136 (-36%)	1,993 (34%)	2,005 (34%)	1,049 (18%)	1,078 (18%)	1,127 (19%)	-3,322 (-46%)	1,227 (17%)	1,711 (23%)
	C	-698 (-15%)	2,256 (48%)	2,249 (48%)	1,463 (31%)	1,436 (31%)	1,435 (31%)	-2,208 (-33%)	3,778 (57%)	1,310 (20%)
	All	-2,196 (-34%)	2,085 (32%)	2,104 (32%)	1,177 (18%)	1,205 (18%)	1,216 (19%)	-3,526 (-43%)	1,413 (17%)	1,291 (16%)
NOV	W	-3,974 (-23%)	966 (6%)	937 (5%)	-401 (-2%)	-413 (-2%)	-240 (-1%)	-1,600 (-10%)	-3,786 (-24%)	2,796 (17%)
	AN	-3,872 (-32%)	1,070 (9%)	689 (6%)	-975 (-8%)	-731 (-6%)	-569 (-5%)	-1,433 (-12%)	-4,629 (-40%)	1,915 (17%)
	BN	-4,106 (-45%)	395 (4%)	601 (7%)	-777 (-9%)	-788 (-9%)	-706 (-8%)	-2,870 (-33%)	-4,192 (-48%)	2,529 (29%)
	D	-2,814 (-33%)	1,059 (12%)	1,104 (13%)	-345 (-4%)	-365 (-4%)	-284 (-3%)	-1,427 (-18%)	-2,470 (-31%)	3,059 (38%)
	C	-1,702 (-29%)	1,523 (26%)	1,475 (25%)	-20 (0%)	-20 (0%)	-7 (0%)	-1,290 (-23%)	-477 (-8%)	3,270 (57%)
	All	-3,395 (-29%)	986 (9%)	959 (8%)	-481 (-4%)	-455 (-4%)	-343 (-3%)	-1,709 (-16%)	-3,206 (-30%)	2,749 (25%)
DEC	W	1,424 (3%)	2,885 (6%)	1,931 (4%)	-1,555 (-3%)	-1,831 (-4%)	-871 (-2%)	8,658 (19%)	1,240 (3%)	6,003 (13%)
	AN	106 (1%)	3,955 (21%)	3,717 (20%)	187 (1%)	-290 (-2%)	527 (3%)	947 (5%)	1,178 (6%)	4,583 (24%)
	BN	154 (1%)	3,978 (30%)	3,830 (29%)	-480 (-4%)	-516 (-4%)	-541 (-4%)	1,959 (16%)	777 (6%)	6,462 (53%)
	D	487 (6%)	4,386 (50%)	4,381 (50%)	-283 (-3%)	-46 (-1%)	-165 (-2%)	752 (9%)	435 (5%)	6,592 (75%)
	C	101 (2%)	2,819 (45%)	2,855 (46%)	-659 (-11%)	-779 (-13%)	-810 (-13%)	-753 (-11%)	-1,263 (-19%)	4,222 (64%)
	All	615 (3%)	3,548 (15%)	3,189 (14%)	-706 (-3%)	-835 (-4%)	-446 (-2%)	3,273 (15%)	609 (3%)	5,742 (26%)

[a] Red boxes indicate that outflow under the second model scenario listed in the column header is more than 5% lower than outflow under the first model scenario listed; green boxes indicate that outflow under the second model scenario listed in the column header is more than 5% greater than outflow under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

Table 5E-68. Differences[a] (Percent Differences) (cfs) between Effects[b] for Delta Outflow, Year Round

		In Delta—Delta Outflow						
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	1,258 (1%)	-59 (0%)	4,409 (5%)	4,546 (5%)	-1,093 (-1%)	2,680 (3%)	-2,460 (-3%)
	AN	-1,276 (-3%)	-382 (-1%)	2,293 (5%)	2,318 (5%)	-3,501 (-7%)	1,811 (4%)	-3,735 (-7%)
	BN	-2,491 (-11%)	-697 (-3%)	3,774 (17%)	3,863 (18%)	-1,505 (-7%)	3,572 (16%)	-1,687 (-7%)
	D	-1,985 (-14%)	-2,861 (-20%)	3,703 (26%)	3,742 (26%)	-326 (-2%)	3,590 (25%)	-322 (-2%)
	C	-1,622 (-14%)	-1,545 (-13%)	3,457 (33%)	3,517 (33%)	1,644 (20%)	3,385 (32%)	1,731 (21%)
	All	-886 (-2%)	-1,048 (-2%)	3,697 (8%)	3,776 (9%)	-947 (-2%)	3,008 (7%)	-1,432 (-3%)
FEB	W	2,547 (2%)	854 (1%)	3,649 (3%)	4,282 (4%)	5,984 (6%)	2,419 (2%)	3,659 (3%)
	AN	-902 (-1%)	1,844 (3%)	6,142 (10%)	6,466 (10%)	1,263 (2%)	3,007 (5%)	-1,329 (-2%)
	BN	-2,829 (-8%)	458 (1%)	2,842 (8%)	3,074 (8%)	-3,611 (-10%)	2,034 (5%)	-3,954 (-11%)
	D	-1,652 (-7%)	-1,338 (-6%)	4,520 (20%)	4,526 (20%)	-3,164 (-16%)	4,517 (20%)	-3,304 (-16%)
	C	-1,224 (-8%)	-1,071 (-7%)	3,338 (22%)	3,442 (23%)	-2,871 (-25%)	3,284 (22%)	-2,871 (-25%)
	All	-349 (-1%)	169 (0%)	4,022 (7%)	4,326 (8%)	351 (1%)	3,027 (5%)	-855 (-2%)
MAR	W	3,852 (5%)	1,828 (2%)	4,465 (5%)	4,547 (6%)	6,075 (7%)	1,240 (2%)	5,347 (6%)
	AN	-246 (0%)	2,697 (5%)	3,491 (6%)	3,509 (6%)	4,304 (8%)	1,746 (3%)	3,465 (6%)
	BN	-2,318 (-10%)	-107 (-1%)	5,475 (25%)	5,842 (27%)	-550 (-2%)	1,499 (7%)	-789 (-3%)
	D	-1,993 (-10%)	-362 (-2%)	3,519 (18%)	3,530 (18%)	-5,132 (-26%)	1,741 (9%)	-5,156 (-26%)
	C	65 (0%)	79 (1%)	328 (3%)	383 (3%)	-3,083 (-25%)	167 (1%)	-3,083 (-25%)
	All	362 (1%)	888 (2%)	3,682 (8%)	3,784 (9%)	885 (2%)	1,311 (3%)	485 (1%)
APR	W	-5,966 (-11%)	713 (1%)	3,550 (7%)	-1,426 (-3%)	-1,269 (-2%)	3,845 (7%)	3,734 (7%)
	AN	-7,255 (-24%)	-82 (0%)	4,255 (14%)	-1,180 (-4%)	-4,029 (-13%)	9,083 (30%)	6,360 (21%)
	BN	-5,249 (-25%)	-664 (-3%)	1,184 (6%)	-1,010 (-5%)	-7,552 (-37%)	3,504 (17%)	1,419 (7%)
	D	-2,056 (-15%)	-547 (-4%)	942 (7%)	-656 (-5%)	-6,403 (-48%)	2,098 (16%)	-4,253 (-32%)
	C	105 (1%)	35 (0%)	127 (1%)	-169 (-2%)	-2,238 (-24%)	769 (9%)	-1,591 (-17%)
	All	-4,285 (-15%)	-14 (0%)	2,176 (7%)	-966 (-3%)	-4,014 (-14%)	3,720 (13%)	1,191 (4%)
MAY	W	-11,312 (-32%)	-1,279 (-2%)	3,590 (10%)	-694 (-2%)	-2,767 (-8%)	-1,024 (-3%)	-2,449 (-7%)
	AN	-6,792 (-30%)	-801 (-2%)	1,456 (6%)	-1,312 (-6%)	-2,622 (-12%)	-2,480 (-11%)	-2,516 (-11%)
	BN	-4,188 (-30%)	-1,413 (-9%)	944 (7%)	-268 (-2%)	-4,904 (-36%)	1,542 (11%)	-1,240 (-11%)
	D	153 (1%)	-359 (-4%)	-55 (-1%)	-299 (-3%)	-2,882 (-28%)	1,194 (12%)	-1,481 (-13%)
	C	-194 (-3%)	-76 (-1%)	158 (2%)	30 (0%)	-2,476 (-39%)	28 (0%)	-2,528 (-40%)
	All	-5,291 (-26%)	-854 (-3%)	1,523 (7%)	-519 (-2%)	-3,093 (-16%)	-158 (-1%)	-2,051 (-11%)
JUN	W	-3,251 (-20%)	-824 (-5%)	1,124 (6%)	1,546 (9%)	-769 (-6%)	1,399 (8%)	-1,031 (-7%)
	AN	535 (5%)	146 (1%)	329 (3%)	588 (6%)	-680 (-6%)	631 (6%)	-974 (-9%)
	BN	1,276 (15%)	-439 (-5%)	-155 (-2%)	81 (1%)	-829 (-9%)	8 (0%)	-1,870 (-22%)
	D	918 (12%)	141 (2%)	-76 (-1%)	63 (1%)	-314 (-4%)	-439 (-6%)	-833 (-11%)
	C	247 (4%)	147 (3%)	27 (1%)	26 (0%)	-1,979 (-35%)	4 (0%)	-1,985 (-35%)
	All	-497 (-5%)	-263 (-2%)	365 (3%)	608 (6%)	-843 (-8%)	442 (4%)	-1,262 (-12%)

In Delta—Delta Outflow								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JUL	W	-1,101 (-10%)	323 (2%)	244 (2%)	184 (2%)	1,038 (8%)	119 (1%)	1,135 (9%)
	AN	-882 (-10%)	619 (2%)	-167 (-2%)	-203 (-2%)	1,548 (10%)	51 (0%)	1,751 (11%)
	BN	-1,405 (-19%)	-278 (-4%)	986 (13%)	986 (13%)	1,329 (17%)	976 (13%)	1,419 (18%)
	D	542 (8%)	646 (9%)	1,817 (34%)	1,817 (34%)	2,894 (49%)	1,817 (34%)	2,894 (49%)
	C	788 (13%)	409 (7%)	205 (5%)	205 (5%)	1,886 (33%)	216 (5%)	1,897 (34%)
	All	-484 (-7%)	347 (2%)	650 (8%)	626 (8%)	1,694 (18%)	642 (8%)	1,771 (19%)
AUG	W	-280 (-6%)	137 (3%)	2,970 (67%)	2,979 (67%)	3,106 (70%)	3,037 (69%)	3,244 (73%)
	AN	629 (13%)	497 (10%)	3,100 (76%)	3,100 (76%)	3,730 (89%)	3,176 (78%)	3,845 (92%)
	BN	736 (13%)	723 (13%)	3,243 (78%)	3,243 (78%)	4,097 (94%)	3,638 (88%)	4,492 (103%)
	D	164 (0%)	509 (6%)	3,397 (83%)	3,390 (83%)	3,670 (85%)	3,465 (85%)	3,749 (87%)
	C	-128 (-4%)	-25 (-2%)	457 (11%)	469 (12%)	-332 (-8%)	410 (10%)	-406 (-9%)
	All	146 (2%)	348 (6%)	2,761 (66%)	2,765 (66%)	2,987 (70%)	2,870 (69%)	3,122 (73%)
SEP	W	-340 (-7%)	1,564 (3%)	-2,784 (-15%)	-2,772 (-15%)	-3,718 (-19%)	-2,772 (-15%)	-3,757 (-20%)
	AN	-819 (-6%)	-466 (-3%)	-474 (-4%)	-448 (-4%)	-1,203 (-10%)	-461 (-4%)	-1,242 (-11%)
	BN	-1,152 (-28%)	-1,229 (-30%)	3,784 (91%)	3,784 (91%)	3,422 (83%)	3,859 (93%)	3,497 (85%)
	D	-201 (-7%)	-1,002 (-33%)	3,872 (125%)	3,869 (125%)	3,239 (104%)	3,956 (128%)	3,322 (107%)
	C	-6 (0%)	-2,710 (-89%)	1,062 (35%)	1,062 (35%)	-127 (-4%)	977 (33%)	-212 (-7%)
	All	-469 (-6%)	-398 (-6%)	699 (7%)	706 (7%)	-78 (-1%)	724 (8%)	-78 (-1%)
OCT	W	700 (2%)	-3,157 (-38%)	1,202 (15%)	1,145 (14%)	972 (14%)	1,122 (14%)	1,009 (15%)
	AN	2,317 (14%)	-3,784 (-54%)	409 (6%)	394 (6%)	826 (17%)	437 (7%)	812 (17%)
	BN	1,685 (12%)	-3,872 (-57%)	839 (14%)	810 (13%)	959 (20%)	913 (15%)	1,006 (21%)
	D	1,186 (9%)	-3,363 (-53%)	943 (16%)	915 (15%)	282 (10%)	878 (15%)	294 (10%)
	C	1,511 (19%)	-4,475 (-72%)	793 (17%)	821 (17%)	946 (28%)	814 (17%)	939 (28%)
	All	1,330 (9%)	-3,609 (-51%)	907 (14%)	880 (13%)	793 (16%)	887 (14%)	812 (17%)
NOV	W	-2,374 (-13%)	-188 (1%)	1,367 (8%)	1,379 (8%)	-1,830 (-12%)	1,177 (7%)	-1,859 (-12%)
	AN	-2,439 (-20%)	758 (8%)	2,045 (17%)	1,802 (15%)	-845 (-8%)	1,258 (11%)	-1,226 (-11%)
	BN	-1,237 (-12%)	85 (3%)	1,171 (13%)	1,183 (13%)	-2,134 (-25%)	1,307 (14%)	-1,929 (-22%)
	D	-1,387 (-15%)	-344 (-2%)	1,404 (16%)	1,424 (17%)	-2,000 (-26%)	1,388 (16%)	-1,955 (-25%)
	C	-412 (-6%)	-1,224 (-20%)	1,542 (26%)	1,542 (26%)	-1,748 (-31%)	1,481 (25%)	-1,796 (-32%)
	All	-1,686 (-14%)	-189 (0%)	1,467 (13%)	1,441 (12%)	-1,763 (-17%)	1,302 (11%)	-1,790 (-17%)
DEC	W	-7,235 (-16%)	184 (0%)	4,440 (9%)	4,715 (10%)	-3,119 (-7%)	2,801 (6%)	-4,073 (-9%)
	AN	-841 (-4%)	-1,073 (-6%)	3,768 (20%)	4,245 (23%)	-628 (-3%)	3,190 (17%)	-866 (-4%)
	BN	-1,805 (-15%)	-623 (-5%)	4,459 (33%)	4,494 (34%)	-2,484 (-23%)	4,370 (33%)	-2,633 (-24%)
	D	-265 (-3%)	51 (1%)	4,669 (53%)	4,432 (50%)	-2,206 (-25%)	4,546 (52%)	-2,211 (-25%)
	C	854 (13%)	1,364 (21%)	3,479 (56%)	3,598 (58%)	-1,403 (-19%)	3,665 (59%)	-1,367 (-18%)
	All	-2,659 (-12%)	6 (0%)	4,254 (19%)	4,383 (19%)	-2,194 (-11%)	3,635 (16%)	-2,553 (-12%)

[a] Red boxes indicate that the second effect on outflow listed in the column header is more than 5% more negative than the first effect on outflow listed in the column header; green boxes indicate that the second effect on outflow listed in the column header is more than 5% more positive than the first effect on outflow listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.2.5 San Joaquin River at Vernalis

Table 5E-69. Mean Monthly Flows (cfs) for Model Scenarios in the San Joaquin River at Vernalis, Year-Round

In Delta—San Joaquin River at Vernalis												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	10,011	10,009	10,013	10,013	10,010	10,011	10,011	9,681	9,811	9,794	9,785
	AN	5,506	5,506	5,506	5,506	5,506	5,506	5,506	6,011	6,011	5,988	6,077
	BN	2,306	2,307	2,306	2,306	2,306	2,306	2,306	2,220	2,255	2,248	2,226
	D	2,181	2,181	2,180	2,180	2,181	2,181	2,181	2,202	2,236	2,236	2,239
	C	1,611	1,611	1,611	1,611	1,611	1,611	1,611	1,592	1,592	1,592	1,572
	All	5,030	5,030	5,031	5,031	5,030	5,030	5,030	5,018	5,067	5,056	5,064
FEB	W	14,417	14,409	14,428	14,429	14,416	14,418	14,417	13,191	13,196	13,195	13,161
	AN	6,824	6,820	6,829	6,829	6,824	6,825	6,826	6,721	6,680	6,693	6,704
	BN	2,850	2,851	2,850	2,850	2,851	2,851	2,851	2,841	2,849	2,845	2,837
	D	2,283	2,283	2,282	2,282	2,283	2,283	2,283	2,269	2,246	2,246	2,270
	C	1,939	1,940	1,939	1,939	1,940	1,939	1,940	1,941	1,943	1,942	1,942
	All	6,743	6,741	6,747	6,747	6,743	6,744	6,744	6,361	6,352	6,354	6,348
MAR	W	15,116	15,112	15,115	15,115	15,115	15,116	15,117	15,235	15,234	15,242	15,244
	AN	6,239	6,239	6,238	6,238	6,239	6,239	6,239	6,364	6,365	6,365	6,335
	BN	2,871	2,871	2,870	2,870	2,871	2,871	2,871	2,476	2,476	2,476	2,476
	D	2,292	2,293	2,291	2,291	2,292	2,292	2,292	2,146	2,146	2,146	2,145
	C	1,688	1,689	1,687	1,687	1,689	1,689	1,689	1,688	1,688	1,688	1,686
	All	6,789	6,789	6,788	6,788	6,789	6,789	6,790	6,763	6,763	6,765	6,759
APR	W	12,477	12,476	12,482	12,482	12,476	12,476	12,476	12,457	12,458	12,449	12,455
	AN	5,702	5,704	5,648	5,648	5,702	5,702	5,701	6,042	6,044	6,043	6,024
	BN	3,888	3,890	3,883	3,883	3,888	3,887	3,887	3,922	3,924	3,924	3,919
	D	2,828	2,832	2,882	2,882	2,828	2,828	2,828	3,112	3,113	3,113	3,106
	C	1,726	1,730	1,723	1,722	1,728	1,728	1,728	1,796	1,797	1,796	1,790
	All	6,166	6,168	6,164	6,164	6,166	6,166	6,166	6,291	6,292	6,289	6,284
MAY	W	12,759	12,757	12,766	12,766	12,758	12,758	12,757	12,632	12,636	12,638	12,621
	AN	4,962	4,966	4,917	4,917	4,964	4,962	4,962	5,092	5,094	5,094	5,085
	BN	3,538	3,544	3,534	3,533	3,541	3,538	3,538	3,657	3,662	3,661	3,653
	D	2,534	2,541	2,571	2,572	2,534	2,533	2,533	2,823	2,825	2,825	2,817
	C	1,704	1,708	1,699	1,699	1,705	1,705	1,706	1,798	1,799	1,798	1,791
	All	5,998	6,001	5,995	5,995	5,998	5,998	5,997	6,069	6,072	6,072	6,061
JUN	W	9,363	9,365	9,366	9,366	9,363	9,362	9,362	6,820	6,822	6,823	6,843
	AN	2,992	2,994	2,990	2,990	2,992	2,992	2,992	2,678	2,682	2,681	2,658
	BN	2,006	2,010	2,001	2,001	2,008	2,006	2,005	1,870	1,876	1,875	1,864
	D	1,345	1,352	1,345	1,345	1,345	1,344	1,344	1,291	1,295	1,295	1,284
	C	985	989	981	981	987	987	987	956	956	956	950
	All	4,048	4,051	4,047	4,047	4,049	4,047	4,048	3,206	3,209	3,209	3,206

In Delta—San Joaquin River at Vernalis

Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	5,776	5,781	5,768	5,769	5,778	5,774	5,774	4,345	4,350	4,350	4,337
	AN	1,771	1,779	1,758	1,758	1,775	1,771	1,772	1,801	1,808	1,807	1,798
	BN	1,395	1,408	1,384	1,384	1,401	1,395	1,395	1,381	1,392	1,391	1,371
	D	1,126	1,139	1,107	1,109	1,127	1,124	1,125	1,100	1,107	1,107	1,089
	C	873	879	867	868	875	875	875	858	860	860	851
	All	2,606	2,614	2,596	2,596	2,609	2,606	2,606	2,184	2,190	2,190	2,176
AUG	W	2,968	2,972	2,958	2,957	2,970	2,967	2,968	2,645	2,648	2,648	2,643
	AN	1,786	1,792	1,777	1,777	1,789	1,786	1,787	1,699	1,704	1,704	1,697
	BN	1,409	1,418	1,401	1,400	1,413	1,408	1,408	1,375	1,383	1,382	1,368
	D	1,256	1,264	1,248	1,248	1,256	1,254	1,255	1,225	1,230	1,230	1,219
	C	1,002	1,005	999	999	1,002	1,002	1,002	987	988	988	970
	All	1,835	1,841	1,827	1,827	1,837	1,835	1,835	1,710	1,715	1,714	1,704
SEP	W	3,201	3,203	3,196	3,196	3,202	3,201	3,201	3,127	3,129	3,129	3,126
	AN	2,252	2,255	2,248	2,248	2,254	2,252	2,253	2,164	2,167	2,166	2,163
	BN	1,788	1,793	1,785	1,784	1,790	1,788	1,788	1,748	1,752	1,752	1,745
	D	1,680	1,684	1,676	1,677	1,680	1,680	1,680	1,643	1,645	1,645	1,640
	C	1,414	1,415	1,412	1,413	1,414	1,414	1,414	1,378	1,379	1,380	1,366
	All	2,202	2,205	2,199	2,198	2,203	2,202	2,202	2,144	2,146	2,146	2,140
OCT	W	2,731	2,732	2,729	2,729	2,731	2,731	2,731	2,726	2,744	2,744	2,722
	AN	2,713	2,714	2,712	2,712	2,714	2,713	2,713	2,595	2,596	2,596	2,584
	BN	2,415	2,417	2,413	2,413	2,416	2,415	2,415	2,348	2,349	2,349	2,343
	D	2,847	2,848	2,845	2,845	2,848	2,847	2,847	2,790	2,792	2,792	2,790
	C	2,253	2,254	2,252	2,252	2,253	2,253	2,253	2,031	2,032	2,032	2,030
	All	2,603	2,604	2,601	2,601	2,603	2,603	2,603	2,515	2,521	2,521	2,511
NOV	W	2,508	2,509	2,508	2,508	2,508	2,508	2,508	2,411	2,418	2,418	2,418
	AN	3,115	3,116	3,115	3,115	3,115	3,115	3,115	3,193	3,208	3,154	3,083
	BN	2,172	2,173	2,172	2,172	2,173	2,172	2,172	1,997	1,997	1,997	2,064
	D	2,239	2,240	2,239	2,239	2,239	2,239	2,239	2,217	2,253	2,253	2,253
	C	1,919	1,919	1,919	1,919	1,919	1,919	1,919	1,898	1,898	1,898	1,897
	All	2,416	2,416	2,415	2,415	2,416	2,416	2,416	2,367	2,378	2,367	2,364
DEC	W	4,537	4,538	4,537	4,537	4,537	4,537	4,537	4,504	4,556	4,547	4,584
	AN	5,003	5,003	5,003	5,003	5,003	5,003	5,003	4,567	4,593	4,585	4,654
	BN	2,096	2,096	2,095	2,095	2,096	2,096	2,096	2,065	2,060	2,083	2,079
	D	2,076	2,076	2,076	2,076	2,076	2,076	2,076	2,166	2,163	2,163	2,169
	C	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,694	1,694	1,681	1,680
	All	3,295	3,295	3,295	3,295	3,295	3,295	3,295	3,211	3,230	3,227	3,251

[a] For definitions of each model scenario, see the introduction to this section

cfs = cubic feet per second

Water Year Type (using San Joaquin Valley Index [60:20:20]): AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

Table 5E-70. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios in the San Joaquin River at Vernalis, Year Round

In Delta—San Joaquin River at Vernalis										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	-1 (0%)	2 (0%)	2 (0%)	-1 (0%)	0 (0%)	0 (0%)	130 (1%)	112 (1%)	104 (1%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-23 (0%)	66 (1%)
	BN	0 (0%)	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	35 (2%)	28 (1%)	5 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	35 (2%)	34 (2%)	38 (2%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-20 (-1%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	49 (1%)	38 (1%)	46 (1%)
FEB	W	-8 (0%)	12 (0%)	12 (0%)	-1 (0%)	1 (0%)	1 (0%)	5 (0%)	4 (0%)	-30 (0%)
	AN	-4 (0%)	5 (0%)	5 (0%)	0 (0%)	1 (0%)	1 (0%)	-41 (-1%)	-28 (0%)	-17 (0%)
	BN	0 (0%)	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	8 (0%)	4 (0%)	-3 (0%)
	D	0 (0%)	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	-24 (-1%)	-24 (-1%)	0 (0%)
	C	1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	1 (0%)
	All	-3 (0%)	4 (0%)	4 (0%)	0 (0%)	1 (0%)	1 (0%)	-9 (0%)	-7 (0%)	-13 (0%)
MAR	W	-4 (0%)	-1 (0%)	-1 (0%)	-1 (0%)	-1 (0%)	0 (0%)	-1 (0%)	7 (0%)	8 (0%)
	AN	0 (0%)	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-29 (0%)
	BN	1 (0%)	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	1 (0%)	-2 (0%)	-2 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)
	C	1 (0%)	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)
	All	-1 (0%)	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (0%)	-4 (0%)
APR	W	-1 (0%)	5 (0%)	5 (0%)	-1 (0%)	-1 (0%)	-1 (0%)	1 (0%)	-8 (0%)	-2 (0%)
	AN	2 (0%)	-54 (-1%)	-54 (-1%)	0 (0%)	0 (0%)	-1 (0%)	1 (0%)	1 (0%)	-18 (0%)
	BN	3 (0%)	-4 (0%)	-4 (0%)	0 (0%)	0 (0%)	-1 (0%)	2 (0%)	1 (0%)	-3 (0%)
	D	4 (0%)	54 (2%)	54 (2%)	0 (0%)	-1 (0%)	-1 (0%)	1 (0%)	1 (0%)	-5 (0%)
	C	4 (0%)	-4 (0%)	-4 (0%)	2 (0%)	2 (0%)	2 (0%)	1 (0%)	0 (0%)	-6 (0%)
	All	2 (0%)	-2 (0%)	-2 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	-2 (0%)	-6 (0%)
MAY	W	-2 (0%)	7 (0%)	7 (0%)	-1 (0%)	-1 (0%)	-2 (0%)	3 (0%)	5 (0%)	-11 (0%)
	AN	4 (0%)	-45 (-1%)	-45 (-1%)	2 (0%)	0 (0%)	0 (0%)	2 (0%)	2 (0%)	-7 (0%)
	BN	6 (0%)	-4 (0%)	-5 (0%)	2 (0%)	0 (0%)	0 (0%)	5 (0%)	5 (0%)	-4 (0%)
	D	7 (0%)	38 (1%)	39 (2%)	0 (0%)	-1 (0%)	-1 (0%)	2 (0%)	2 (0%)	-6 (0%)
	C	4 (0%)	-5 (0%)	-4 (0%)	2 (0%)	2 (0%)	2 (0%)	1 (0%)	0 (0%)	-7 (0%)
	All	3 (0%)	-2 (0%)	-2 (0%)	1 (0%)	0 (0%)	0 (0%)	3 (0%)	3 (0%)	-7 (0%)
JUN	W	2 (0%)	3 (0%)	3 (0%)	0 (0%)	-1 (0%)	-1 (0%)	2 (0%)	3 (0%)	23 (0%)
	AN	2 (0%)	-2 (0%)	-2 (0%)	0 (0%)	0 (0%)	0 (0%)	4 (0%)	3 (0%)	-20 (-1%)
	BN	5 (0%)	-4 (0%)	-5 (0%)	2 (0%)	0 (0%)	0 (0%)	6 (0%)	6 (0%)	-6 (0%)
	D	8 (1%)	0 (0%)	0 (0%)	1 (0%)	-1 (0%)	-1 (0%)	4 (0%)	5 (0%)	-7 (-1%)
	C	4 (0%)	-4 (0%)	-4 (0%)	2 (0%)	2 (0%)	2 (0%)	1 (0%)	1 (0%)	-6 (-1%)
	All	4 (0%)	-1 (0%)	-1 (0%)	1 (0%)	0 (0%)	0 (0%)	3 (0%)	3 (0%)	0 (0%)

In Delta—San Joaquin River at Vernalis										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	5 (0%)	-7 (0%)	-7 (0%)	2 (0%)	-2 (0%)	-2 (0%)	5 (0%)	5 (0%)	-8 (0%)
	AN	8 (0%)	-12 (-1%)	-13 (-1%)	4 (0%)	0 (0%)	1 (0%)	7 (0%)	6 (0%)	-3 (0%)
	BN	12 (1%)	-11 (-1%)	-12 (-1%)	5 (0%)	0 (0%)	0 (0%)	11 (1%)	11 (1%)	-9 (-1%)
	D	13 (1%)	-19 (-2%)	-17 (-2%)	1 (0%)	-1 (0%)	-1 (0%)	7 (1%)	7 (1%)	-11 (-1%)
	C	6 (1%)	-6 (-1%)	-5 (-1%)	2 (0%)	2 (0%)	2 (0%)	2 (0%)	2 (0%)	-7 (-1%)
	All	8 (0%)	-10 (0%)	-10 (0%)	3 (0%)	-1 (0%)	0 (0%)	6 (0%)	6 (0%)	-8 (0%)
AUG	W	4 (0%)	-9 (0%)	-11 (0%)	2 (0%)	0 (0%)	0 (0%)	3 (0%)	4 (0%)	-2 (0%)
	AN	6 (0%)	-9 (-1%)	-9 (-1%)	3 (0%)	0 (0%)	0 (0%)	5 (0%)	5 (0%)	-2 (0%)
	BN	9 (1%)	-8 (-1%)	-9 (-1%)	4 (0%)	0 (0%)	0 (0%)	8 (1%)	8 (1%)	-6 (0%)
	D	8 (1%)	-8 (-1%)	-8 (-1%)	0 (0%)	-1 (0%)	-1 (0%)	4 (0%)	5 (0%)	-6 (0%)
	C	4 (0%)	-3 (0%)	-3 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	1 (0%)	-17 (-2%)
	All	6 (0%)	-8 (0%)	-8 (0%)	2 (0%)	0 (0%)	0 (0%)	4 (0%)	4 (0%)	-6 (0%)
SEP	W	2 (0%)	-5 (0%)	-5 (0%)	1 (0%)	0 (0%)	0 (0%)	2 (0%)	2 (0%)	-1 (0%)
	AN	3 (0%)	-4 (0%)	-5 (0%)	1 (0%)	0 (0%)	0 (0%)	2 (0%)	2 (0%)	-1 (0%)
	BN	4 (0%)	-4 (0%)	-4 (0%)	2 (0%)	0 (0%)	0 (0%)	4 (0%)	4 (0%)	-3 (0%)
	D	4 (0%)	-4 (0%)	-4 (0%)	0 (0%)	-1 (0%)	0 (0%)	2 (0%)	2 (0%)	-3 (0%)
	C	1 (0%)	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	2 (0%)	-12 (-1%)
	All	3 (0%)	-4 (0%)	-4 (0%)	1 (0%)	0 (0%)	0 (0%)	2 (0%)	2 (0%)	-4 (0%)
OCT	W	1 (0%)	-2 (0%)	-2 (0%)	0 (0%)	0 (0%)	0 (0%)	18 (1%)	18 (1%)	-3 (0%)
	AN	1 (0%)	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	-11 (0%)
	BN	1 (0%)	-2 (0%)	-2 (0%)	1 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	-5 (0%)
	D	1 (0%)	-2 (0%)	-2 (0%)	1 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	0 (0%)
	C	1 (0%)	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	1 (0%)	-1 (0%)
	All	1 (0%)	-2 (0%)	-2 (0%)	0 (0%)	0 (0%)	0 (0%)	6 (0%)	6 (0%)	-4 (0%)
NOV	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	6 (0%)	6 (0%)	6 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	14 (0%)	-39 (-1%)	-110 (-3%)
	BN	0 (0%)	-1 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	67 (3%)
	D	0 (0%)	0 (0%)	-1 (0%)	0 (0%)	0 (0%)	0 (0%)	35 (2%)	35 (2%)	35 (2%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-1 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	10 (0%)	0 (0%)	-3 (0%)
DEC	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	52 (1%)	43 (1%)	80 (2%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	26 (1%)	18 (0%)	87 (2%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-4 (0%)	18 (1%)	14 (1%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-3 (0%)	-3 (0%)	3 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	-13 (-1%)	-14 (-1%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	19 (1%)	16 (0%)	40 (1%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.
[b] For definitions of each effect, see the introduction to this section
cfs = cubic feet per second
Water Year Type (using San Joaquin Valley Index [60:20:20]): AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

Table 5E-71. Differences[a] (Percent Differences) (cfs) between Effects[b] in the San Joaquin River at Vernalis, Year Round

In Delta—San Joaquin River at Vernalis								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect[b]	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	-131 (-1%)	-114 (-1%)	3 (0%)	2 (0%)	-101 (-1%)	2 (0%)	-101 (-1%)
	AN	0 (0%)	23 (0%)	0 (0%)	0 (0%)	-66 (-1%)	0 (0%)	-66 (-1%)
	BN	-34 (-2%)	-28 (-1%)	-1 (0%)	-1 (0%)	-6 (0%)	-1 (0%)	-6 (0%)
	D	-34 (-2%)	-34 (-2%)	-1 (0%)	0 (0%)	-38 (-2%)	-1 (0%)	-38 (-2%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	20 (1%)	0 (0%)	20 (1%)
	All	-49 (-1%)	-39 (-1%)	1 (0%)	0 (0%)	-46 (-1%)	0 (0%)	-46 (-1%)
FEB	W	-13 (0%)	-12 (0%)	13 (0%)	10 (0%)	42 (0%)	11 (0%)	42 (0%)
	AN	37 (1%)	24 (0%)	5 (0%)	4 (0%)	22 (0%)	4 (0%)	22 (0%)
	BN	-8 (0%)	-4 (0%)	-1 (0%)	-1 (0%)	3 (0%)	-1 (0%)	3 (0%)
	D	24 (1%)	24 (1%)	-1 (0%)	-1 (0%)	-1 (0%)	-1 (0%)	-1 (0%)
	C	-1 (0%)	0 (0%)	-1 (0%)	0 (0%)	-1 (0%)	-1 (0%)	-1 (0%)
	All	6 (0%)	4 (0%)	4 (0%)	4 (0%)	17 (0%)	4 (0%)	17 (0%)
MAR	W	-3 (0%)	-11 (0%)	-1 (0%)	-1 (0%)	-9 (0%)	-1 (0%)	-9 (0%)
	AN	0 (0%)	0 (0%)	-1 (0%)	-1 (0%)	28 (0%)	-1 (0%)	28 (0%)
	BN	0 (0%)	0 (0%)	-1 (0%)	-1 (0%)	-1 (0%)	-1 (0%)	-1 (0%)
	D	1 (0%)	1 (0%)	-2 (0%)	-1 (0%)	-1 (0%)	-1 (0%)	-1 (0%)
	C	1 (0%)	1 (0%)	-1 (0%)	-1 (0%)	0 (0%)	-1 (0%)	0 (0%)
	All	-1 (0%)	-3 (0%)	-1 (0%)	-1 (0%)	3 (0%)	-1 (0%)	3 (0%)
APR	W	-2 (0%)	7 (0%)	6 (0%)	6 (0%)	7 (0%)	6 (0%)	7 (0%)
	AN	1 (0%)	1 (0%)	-54 (-1%)	-54 (-1%)	-36 (-1%)	-53 (-1%)	-36 (-1%)
	BN	1 (0%)	2 (0%)	-4 (0%)	-4 (0%)	-1 (0%)	-4 (0%)	-1 (0%)
	D	3 (0%)	3 (0%)	54 (2%)	55 (2%)	59 (2%)	55 (2%)	59 (2%)
	C	3 (0%)	4 (0%)	-6 (0%)	-6 (0%)	2 (0%)	-6 (0%)	2 (0%)
	All	1 (0%)	4 (0%)	-2 (0%)	-2 (0%)	5 (0%)	-2 (0%)	5 (0%)
MAY	W	-5 (0%)	-7 (0%)	8 (0%)	8 (0%)	18 (0%)	9 (0%)	18 (0%)
	AN	3 (0%)	3 (0%)	-46 (-1%)	-45 (-1%)	-37 (-1%)	-45 (-1%)	-38 (-1%)
	BN	1 (0%)	1 (0%)	-7 (0%)	-4 (0%)	-1 (0%)	-5 (0%)	-1 (0%)
	D	5 (0%)	5 (0%)	38 (1%)	39 (2%)	43 (2%)	40 (2%)	44 (2%)
	C	3 (0%)	5 (0%)	-6 (0%)	-6 (0%)	3 (0%)	-6 (0%)	3 (0%)
	All	0 (0%)	0 (0%)	-3 (0%)	-2 (0%)	5 (0%)	-2 (0%)	5 (0%)
JUN	W	0 (0%)	-1 (0%)	3 (0%)	4 (0%)	-19 (0%)	4 (0%)	-19 (0%)
	AN	-2 (0%)	-2 (0%)	-2 (0%)	-2 (0%)	18 (1%)	-2 (0%)	18 (1%)
	BN	-2 (0%)	-1 (0%)	-7 (0%)	-5 (0%)	2 (0%)	-5 (0%)	1 (0%)
	D	3 (0%)	3 (0%)	0 (0%)	1 (0%)	7 (1%)	1 (0%)	7 (1%)
	C	3 (0%)	3 (0%)	-6 (-1%)	-6 (-1%)	2 (0%)	-6 (-1%)	2 (0%)
	All	1 (0%)	0 (0%)	-2 (0%)	-1 (0%)	0 (0%)	-1 (0%)	0 (0%)

In Delta—San Joaquin River at Vernalis								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect[b]	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JUL	W	1 (0%)	0 (0%)	-9 (0%)	-5 (0%)	1 (0%)	-6 (0%)	1 (0%)
	AN	2 (0%)	2 (0%)	-16 (-1%)	-12 (-1%)	-9 (-1%)	-13 (-1%)	-10 (-1%)
	BN	1 (0%)	1 (0%)	-16 (-1%)	-11 (-1%)	-1 (0%)	-12 (-1%)	-2 (0%)
	D	6 (1%)	6 (1%)	-20 (-2%)	-18 (-2%)	-8 (-1%)	-16 (-1%)	-6 (-1%)
	C	4 (0%)	4 (0%)	-7 (-1%)	-7 (-1%)	2 (0%)	-7 (-1%)	2 (0%)
	All	2 (0%)	2 (0%)	-13 (0%)	-10 (0%)	-3 (0%)	-10 (0%)	-3 (0%)
AUG	W	1 (0%)	1 (0%)	-11 (0%)	-9 (0%)	-7 (0%)	-11 (0%)	-9 (0%)
	AN	1 (0%)	2 (0%)	-12 (-1%)	-9 (-1%)	-7 (0%)	-10 (-1%)	-7 (0%)
	BN	1 (0%)	1 (0%)	-12 (-1%)	-8 (-1%)	-1 (0%)	-8 (-1%)	-2 (0%)
	D	4 (0%)	4 (0%)	-8 (-1%)	-7 (-1%)	-2 (0%)	-7 (-1%)	-2 (0%)
	C	3 (0%)	3 (0%)	-4 (0%)	-4 (0%)	14 (1%)	-4 (0%)	14 (1%)
	All	2 (0%)	2 (0%)	-9 (-1%)	-7 (0%)	-1 (0%)	-8 (0%)	-2 (0%)
SEP	W	0 (0%)	0 (0%)	-6 (0%)	-5 (0%)	-4 (0%)	-5 (0%)	-4 (0%)
	AN	1 (0%)	1 (0%)	-6 (0%)	-4 (0%)	-3 (0%)	-5 (0%)	-3 (0%)
	BN	0 (0%)	1 (0%)	-6 (0%)	-4 (0%)	-1 (0%)	-4 (0%)	-1 (0%)
	D	2 (0%)	2 (0%)	-4 (0%)	-3 (0%)	-1 (0%)	-3 (0%)	-1 (0%)
	C	1 (0%)	-1 (0%)	-2 (0%)	-2 (0%)	10 (1%)	-2 (0%)	10 (1%)
	All	1 (0%)	0 (0%)	-5 (0%)	-4 (0%)	0 (0%)	-4 (0%)	0 (0%)
OCT	W	-17 (-1%)	-17 (-1%)	-2 (0%)	-1 (0%)	2 (0%)	-1 (0%)	2 (0%)
	AN	0 (0%)	0 (0%)	-2 (0%)	-1 (0%)	10 (0%)	-1 (0%)	10 (0%)
	BN	1 (0%)	1 (0%)	-3 (0%)	-2 (0%)	3 (0%)	-2 (0%)	3 (0%)
	D	0 (0%)	0 (0%)	-2 (0%)	-2 (0%)	-2 (0%)	-2 (0%)	-2 (0%)
	C	0 (0%)	0 (0%)	-1 (0%)	-1 (0%)	0 (0%)	-1 (0%)	0 (0%)
	All	-5 (0%)	-5 (0%)	-2 (0%)	-1 (0%)	3 (0%)	-2 (0%)	3 (0%)
NOV	W	-6 (0%)	-6 (0%)	0 (0%)	0 (0%)	-7 (0%)	0 (0%)	-7 (0%)
	AN	-14 (0%)	39 (1%)	0 (0%)	0 (0%)	110 (3%)	0 (0%)	110 (3%)
	BN	0 (0%)	0 (0%)	-1 (0%)	-1 (0%)	-68 (-3%)	-1 (0%)	-68 (-3%)
	D	-35 (-2%)	-35 (-2%)	-1 (0%)	0 (0%)	-36 (-2%)	-1 (0%)	-36 (-2%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0%)	0 (0%)	1 (0%)
	All	-10 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (0%)	0 (0%)	3 (0%)
DEC	W	-52 (-1%)	-42 (-1%)	-1 (0%)	0 (0%)	-80 (-2%)	-1 (0%)	-80 (-2%)
	AN	-26 (-1%)	-18 (0%)	0 (0%)	0 (0%)	-87 (-2%)	0 (0%)	-87 (-2%)
	BN	4 (0%)	-18 (-1%)	-1 (0%)	0 (0%)	-14 (-1%)	0 (0%)	-14 (-1%)
	D	3 (0%)	3 (0%)	0 (0%)	0 (0%)	-3 (0%)	0 (0%)	-3 (0%)
	C	0 (0%)	13 (1%)	0 (0%)	0 (0%)	13 (1%)	0 (0%)	13 (1%)
	All	-19 (-1%)	-16 (0%)	0 (0%)	0 (0%)	-41 (-1%)	0 (0%)	-41 (-1%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type (using San Joaquin Valley Index [60:20:20]): AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.2.6 Mokelumne River at the Delta

Table 5E-72. Mean Monthly Flows (cfs) for Model Scenarios in the Mokelumne River at the Delta, Year-Round

In Delta—Mokelumne River at the Delta												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	3,362	3,362	3,362	3,362	3,362	3,362	3,362	3,634	3,634	3,634	3,634
	AN	1,767	1,767	1,767	1,767	1,767	1,767	1,767	1,876	1,876	1,876	1,876
	BN	627	627	627	627	627	627	627	617	617	617	617
	D	487	487	487	487	487	487	487	493	493	493	493
	C	268	268	268	268	268	268	268	281	281	281	281
	All	1,557	1,557	1,557	1,557	1,557	1,557	1,557	1,660	1,660	1,660	1,660
FEB	W	3,714	3,714	3,714	3,714	3,714	3,714	3,714	3,781	3,781	3,781	3,781
	AN	2,831	2,831	2,831	2,831	2,831	2,831	2,831	2,913	2,913	2,913	2,913
	BN	1,059	1,059	1,059	1,059	1,059	1,059	1,059	1,035	1,035	1,035	1,035
	D	687	687	687	687	687	687	687	678	678	678	678
	C	428	428	428	428	428	428	428	442	442	442	442
	All	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,033	2,033	2,033	2,033
MAR	W	3,226	3,226	3,226	3,226	3,226	3,226	3,226	3,336	3,336	3,336	3,336
	AN	1,587	1,587	1,587	1,587	1,587	1,587	1,587	1,639	1,639	1,639	1,639
	BN	1,159	1,159	1,159	1,159	1,159	1,159	1,159	1,140	1,140	1,140	1,140
	D	715	715	715	715	715	715	715	691	691	691	691
	C	567	567	567	567	567	567	567	580	580	580	580
	All	1,662	1,662	1,662	1,662	1,662	1,662	1,662	1,700	1,700	1,700	1,700
APR	W	2,759	2,759	2,759	2,759	2,759	2,759	2,759	2,694	2,694	2,694	2,694
	AN	1,526	1,526	1,526	1,526	1,526	1,526	1,526	1,424	1,424	1,424	1,424
	BN	1,155	1,155	1,155	1,155	1,155	1,155	1,155	1,068	1,068	1,068	1,068
	D	574	574	574	574	574	574	574	550	550	550	550
	C	322	322	322	322	322	322	322	311	311	311	311
	All	1,442	1,442	1,442	1,442	1,442	1,442	1,442	1,384	1,384	1,384	1,384
MAY	W	3,114	3,114	3,114	3,114	3,114	3,114	3,114	2,885	2,885	2,885	2,885
	AN	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,179	1,179	1,179	1,179
	BN	887	887	887	887	887	887	887	812	812	812	812
	D	360	360	360	360	360	360	360	333	333	333	333
	C	179	179	179	179	179	179	179	170	170	170	170
	All	1,404	1,404	1,404	1,404	1,404	1,404	1,404	1,289	1,289	1,289	1,289
JUN	W	1,619	1,619	1,619	1,619	1,619	1,619	1,619	1,415	1,415	1,415	1,415
	AN	738	738	738	738	738	738	738	631	631	631	631
	BN	401	401	401	401	401	401	401	366	366	366	366
	D	83	83	83	83	83	83	83	76	76	76	76
	C	48	48	48	48	48	48	48	44	44	44	44
	All	704	704	704	704	704	704	704	616	616	616	616

In Delta—Mokelumne River at the Delta												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	623	623	623	623	623	623	623	469	469	469	469
	AN	241	241	241	241	241	241	241	167	167	167	167
	BN	82	82	82	82	82	82	82	70	70	70	70
	D	6	6	6	6	6	6	6	6	6	6	6
	C	3	3	3	3	3	3	3	3	3	3	3
	All	244	244	244	244	244	244	244	183	183	183	183
AUG	W	486	486	486	486	486	486	486	346	346	346	346
	AN	256	256	256	256	256	256	256	216	216	216	216
	BN	72	72	72	72	72	72	72	71	71	71	71
	D	4	4	4	4	4	4	4	4	4	4	4
	C	2	2	2	2	2	2	2	2	2	2	2
	All	204	204	204	204	204	204	204	156	156	156	156
SEP	W	559	559	559	559	559	559	559	497	497	497	497
	AN	288	288	288	288	288	288	288	259	259	259	259
	BN	89	89	89	89	89	89	89	91	91	91	91
	D	9	9	9	9	9	9	9	9	9	9	9
	C	5	5	5	5	5	5	5	5	5	5	5
	All	236	236	236	236	236	236	236	213	213	213	213
OCT	W	152	152	152	152	152	152	152	147	147	147	147
	AN	177	177	177	177	177	177	177	180	180	180	180
	BN	152	152	152	152	152	152	152	144	144	144	144
	D	171	171	171	171	171	171	171	160	160	160	160
	C	111	111	111	111	111	111	111	123	123	123	123
	All	152	152	152	152	152	152	152	150	150	150	150
NOV	W	503	503	503	503	503	503	503	431	431	431	431
	AN	1,011	1,011	1,011	1,011	1,011	1,011	1,011	855	855	855	855
	BN	352	352	352	352	352	352	352	301	301	301	301
	D	375	375	375	375	375	375	375	327	327	327	327
	C	189	189	189	189	189	189	189	186	186	186	186
	All	497	497	497	497	497	497	497	429	429	429	429
DEC	W	1,731	1,731	1,731	1,731	1,731	1,731	1,731	1,732	1,732	1,732	1,732
	AN	1,809	1,809	1,809	1,809	1,809	1,809	1,809	1,628	1,628	1,628	1,628
	BN	509	509	509	509	509	509	509	472	472	472	472
	D	395	395	395	395	395	395	395	374	374	374	374
	C	203	203	203	203	203	203	203	209	209	209	209
	All	1,043	1,043	1,043	1,043	1,043	1,043	1,043	999	999	999	999

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type (using San Joaquin Valley Index [60:20:20]): AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-73. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios in the Mokelumne River at the Delta, Year Round**

In Delta—Mokelumne River at the Delta										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
FEB	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
APR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAY	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
JUN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

In Delta—Mokelumne River at the Delta										
Month	**Water Year Type**	**Boundary 1 Effect[b]**	**Boundary 2 Effect**	**Scenario 2 Effect**	**Alt 4A H3 Effect**	**Alt 4A H3+ Effect**	**Alt 4A H4 Effect**	**Alt 1A Effect**	**Alt 3 Effect**	**Alt 8 Effect**
JUL	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
AUG	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
OCT	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
NOV	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
DEC	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

[a] Red boxes indicate that flows under the second model scenario listed in the column header are more than 5% lower than flows under the first model scenario listed; green boxes indicate that flows under the second model scenario listed in the column header are more than 5% greater than flows under the first model scenario listed.
[b] For definitions of each effect, see the introduction to this section
cfs = cubic feet per second
Water Year Type (using San Joaquin Valley Index [60:20:20]): AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

Table 5E-74. Differences[a] (Percent Differences) (cfs) between Effects[b] in the Mokelumne River at the Delta, Year Round

In Delta—Mokelumne River at the Delta								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
FEB	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
APR	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAY	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
JUN	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

In Delta—Mokelumne River at the Delta								
Month	**Water Year Type**	**Alt 1A Effect vs. Boundary 1 Effect**	**Alt 3 Effect vs. Boundary 1 Effect**	**Alt 4A H3 Effect vs. Boundary 2 Effect**	**Alt 4A H3+ Effect vs. Boundary 2 Effect**	**Alt 8 Effect vs. Boundary 2 Effect**	**Alt 4A H4 Effect vs. Scenario 2 Effect**	**Alt 8 Effect vs. Scenario 2 Effect**
JUL	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
AUG	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
SEP	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
OCT	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
NOV	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
DEC	W	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	AN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	BN	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	D	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	C	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	All	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

[a] Red boxes indicate that the second effect on flows listed in the column header is more than 5% more negative than the first effect on flows listed in the column header; green boxes indicate that the second effect on flows listed in the column header is more than 5% more positive than the first effect on flows listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type (using San Joaquin Valley Index [60:20:20]): AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.2.7 North Delta Exports

Table 5E-75. Mean Monthly North Delta Exports (cfs) for Model Scenarios, Year-Round

In Delta—North Delta Exports												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	0	6,989	6,759	6,571	6,867	6,960	6,873	0	10,348	5,281	7,563
	AN	0	5,427	4,981	4,883	5,309	5,325	5,249	0	7,616	4,007	5,840
	BN	0	2,704	2,370	2,372	2,586	2,571	2,585	0	3,448	2,156	2,872
	D	0	1,706	1,465	1,464	1,695	1,697	1,701	0	1,455	1,099	1,756
	C	0	1,078	819	823	1,115	1,110	1,120	0	1,101	918	1,135
	All	0	4,004	3,718	3,645	3,931	3,960	3,926	0	5,465	3,004	4,295
FEB	W	0	8,409	7,549	7,553	8,263	8,302	8,067	0	10,229	5,909	8,792
	AN	0	7,171	6,105	6,070	7,209	7,256	7,141	0	10,025	5,099	7,523
	BN	0	5,278	4,526	4,501	5,019	5,121	5,007	0	6,915	3,872	4,873
	D	0	3,049	1,930	1,927	3,017	3,017	2,977	0	3,061	2,078	3,234
	C	0	1,237	1,206	1,207	1,215	1,202	1,221	0	905	778	936
	All	0	5,467	4,660	4,651	5,372	5,406	5,290	0	6,695	3,851	5,567
MAR	W	0	7,725	5,909	5,729	8,104	8,112	6,490	0	8,852	5,872	8,496
	AN	0	7,809	6,627	6,400	8,077	8,083	7,073	0	10,707	5,912	8,290
	BN	0	4,962	3,265	3,341	4,617	4,725	3,257	0	5,569	3,945	5,517
	D	0	3,375	2,663	2,661	3,292	3,270	2,755	0	3,670	2,681	3,787
	C	0	1,106	1,065	1,066	1,094	1,085	1,088	0	1,131	896	1,156
	All	0	5,342	4,141	4,063	5,422	5,438	4,413	0	6,296	4,120	5,849
APR	W	0	5,755	4,095	4,110	6,505	2,577	5,241	0	7,643	4,187	8,152
	AN	0	4,902	3,039	3,029	5,900	1,532	4,436	0	6,879	4,190	7,594
	BN	0	2,525	2,300	2,289	3,336	1,054	2,150	0	3,572	2,576	5,588
	D	0	1,452	1,138	1,133	1,736	289	1,108	0	1,881	1,560	2,459
	C	0	438	655	655	601	302	585	0	652	585	685
	All	0	3,356	2,482	2,482	3,965	1,329	3,007	0	4,548	2,809	5,290
MAY	W	0	6,634	4,046	3,946	6,791	3,003	4,940	0	8,146	4,725	7,740
	AN	0	4,845	2,813	2,449	5,066	1,295	3,637	0	6,347	4,316	6,560
	BN	0	2,273	1,483	1,540	2,026	839	1,447	0	3,321	2,438	3,889
	D	0	1,131	675	663	1,124	380	628	0	1,422	1,313	1,357
	C	0	428	475	450	489	309	395	0	469	447	1,131
	All	0	3,511	2,165	2,084	3,559	1,414	2,541	0	4,460	2,900	4,542
JUN	W	0	6,625	5,001	4,621	6,130	6,072	4,860	0	7,444	4,929	6,122
	AN	0	5,665	3,368	2,887	5,720	5,618	3,674	0	6,395	4,734	3,864
	BN	0	3,452	1,969	1,705	3,582	4,599	2,461	0	4,036	3,343	1,718
	D	0	1,683	1,044	912	1,580	1,862	1,517	0	1,388	1,250	554
	C	0	597	581	582	591	591	593	0	643	614	496
	All	0	3,976	2,729	2,464	3,826	4,028	2,918	0	4,384	3,190	2,994

In Delta—North Delta Exports												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	0	6,399	6,317	5,626	6,732	7,280	6,974	0	2,743	2,721	1,529
	AN	0	6,542	5,815	4,132	7,635	8,001	7,778	0	3,243	3,116	829
	BN	0	5,952	4,195	2,075	7,275	7,402	6,877	0	1,796	1,774	842
	D	0	5,128	2,027	492	4,048	4,570	3,375	0	1,027	933	650
	C	0	1,137	1,987	558	1,086	706	1,055	0	547	858	40
	All	0	5,294	4,306	2,933	5,541	5,849	5,419	0	1,957	1,952	899
AUG	W	0	6,089	5,824	5,740	6,230	6,601	5,662	0	4,514	4,433	240
	AN	0	4,989	3,984	3,643	5,740	6,415	4,919	0	3,189	3,065	24
	BN	0	3,997	1,615	1,379	5,201	5,073	2,972	0	2,053	2,145	0
	D	0	1,521	1,274	625	1,092	1,161	695	0	421	530	0
	C	0	78	1,171	513	125	164	300	0	105	95	0
	All	0	3,688	3,157	2,801	3,961	4,177	3,219	0	2,356	2,351	80
SEP	W	0	5,410	3,872	4,007	4,333	4,442	3,728	0	4,501	4,183	1,748
	AN	0	4,758	2,180	1,468	2,567	3,721	2,315	0	3,534	3,615	2,137
	BN	0	3,428	1,789	1,439	2,877	2,832	2,711	0	2,177	2,057	825
	D	0	2,259	2,066	561	2,093	2,143	2,099	0	1,004	852	414
	C	0	550	1,430	932	471	498	509	0	115	159	176
	All	0	3,573	2,515	1,990	2,769	2,980	2,519	0	2,553	2,417	1,124
OCT	W	0	3,758	3,256	3,139	3,954	3,903	3,366	0	1,458	1,344	2,521
	AN	0	2,779	1,832	1,960	2,409	2,776	2,113	0	261	257	1,745
	BN	0	2,513	2,272	2,227	2,778	3,072	2,898	0	165	107	1,254
	D	0	2,220	1,837	1,565	2,696	2,668	2,078	0	438	441	1,250
	C	0	1,822	1,573	1,617	1,976	2,036	2,137	0	4	0	808
	All	0	2,781	2,322	2,243	2,962	3,052	2,640	0	626	579	1,661
NOV	W	0	4,705	3,780	3,751	4,029	4,065	3,973	0	4,739	3,095	2,860
	AN	0	3,482	2,386	2,310	2,662	2,785	2,787	0	2,750	2,086	2,451
	BN	0	3,383	2,675	2,599	2,595	2,692	2,860	0	2,497	2,307	1,883
	D	0	2,414	1,974	1,942	2,424	2,400	2,298	0	2,221	1,728	1,824
	C	0	1,314	860	689	864	800	1,043	0	741	829	615
	All	0	3,301	2,564	2,498	2,769	2,800	2,813	0	2,927	2,181	2,077
DEC	W	0	4,265	4,113	4,217	3,977	3,980	4,029	0	5,833	3,201	4,020
	AN	0	1,673	1,721	1,723	1,687	1,703	1,738	0	1,977	1,158	1,417
	BN	0	1,428	1,388	1,380	1,307	1,301	1,390	0	1,792	1,189	1,330
	D	0	1,236	1,200	1,195	1,084	1,084	1,141	0	1,077	900	911
	C	0	485	483	519	550	496	574	0	616	421	488
	All	0	2,183	2,127	2,163	2,050	2,044	2,104	0	2,771	1,647	1,980

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-76. Differences[a] (cfs) between Pairs of Model Scenarios in North Delta Exports, Year Round**

In Delta—North Delta Exports										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	6,989	6,759	6,571	6,867	6,960	6,873	10,348	5,281	7,563
	AN	5,427	4,981	4,883	5,309	5,325	5,249	7,616	4,007	5,840
	BN	2,704	2,370	2,372	2,586	2,571	2,585	3,448	2,156	2,872
	D	1,706	1,465	1,464	1,695	1,697	1,701	1,455	1,099	1,756
	C	1,078	819	823	1,115	1,110	1,120	1,101	918	1,135
	All	4,004	3,718	3,645	3,931	3,960	3,926	5,465	3,004	4,295
FEB	W	8,409	7,549	7,553	8,263	8,302	8,067	10,229	5,909	8,792
	AN	7,171	6,105	6,070	7,209	7,256	7,141	10,025	5,099	7,523
	BN	5,278	4,526	4,501	5,019	5,121	5,007	6,915	3,872	4,873
	D	3,049	1,930	1,927	3,017	3,017	2,977	3,061	2,078	3,234
	C	1,237	1,206	1,207	1,215	1,202	1,221	905	778	936
	All	5,467	4,660	4,651	5,372	5,406	5,290	6,695	3,851	5,567
MAR	W	7,725	5,909	5,729	8,104	8,112	6,490	8,852	5,872	8,496
	AN	7,809	6,627	6,400	8,077	8,083	7,073	10,707	5,912	8,290
	BN	4,962	3,265	3,341	4,617	4,725	3,257	5,569	3,945	5,517
	D	3,375	2,663	2,661	3,292	3,270	2,755	3,670	2,681	3,787
	C	1,106	1,065	1,066	1,094	1,085	1,088	1,131	896	1,156
	All	5,342	4,141	4,063	5,422	5,438	4,413	6,296	4,120	5,849
APR	W	5,755	4,095	4,110	6,505	2,577	5,241	7,643	4,187	8,152
	AN	4,902	3,039	3,029	5,900	1,532	4,436	6,879	4,190	7,594
	BN	2,525	2,300	2,289	3,336	1,054	2,150	3,572	2,576	5,588
	D	1,452	1,138	1,133	1,736	289	1,108	1,881	1,560	2,459
	C	438	655	655	601	302	585	652	585	685
	All	3,356	2,482	2,482	3,965	1,329	3,007	4,548	2,809	5,290
MAY	W	6,634	4,046	3,946	6,791	3,003	4,940	8,146	4,725	7,740
	AN	4,845	2,813	2,449	5,066	1,295	3,637	6,347	4,316	6,560
	BN	2,273	1,483	1,540	2,026	839	1,447	3,321	2,438	3,889
	D	1,131	675	663	1,124	380	628	1,422	1,313	1,357
	C	428	475	450	489	309	395	469	447	1,131
	All	3,511	2,165	2,084	3,559	1,414	2,541	4,460	2,900	4,542
JUN	W	6,625	5,001	4,621	6,130	6,072	4,860	7,444	4,929	6,122
	AN	5,665	3,368	2,887	5,720	5,618	3,674	6,395	4,734	3,864
	BN	3,452	1,969	1,705	3,582	4,599	2,461	4,036	3,343	1,718
	D	1,683	1,044	912	1,580	1,862	1,517	1,388	1,250	554
	C	597	581	582	591	591	593	643	614	496
	All	3,976	2,729	2,464	3,826	4,028	2,918	4,384	3,190	2,994

In Delta—North Delta Exports										
Month	Water Year Type	Boundary 1 Effect[b]	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	6,399	6,317	5,626	6,732	7,280	6,974	2,743	2,721	1,529
	AN	6,542	5,815	4,132	7,635	8,001	7,778	3,243	3,116	829
	BN	5,952	4,195	2,075	7,275	7,402	6,877	1,796	1,774	842
	D	5,128	2,027	492	4,048	4,570	3,375	1,027	933	650
	C	1,137	1,987	558	1,086	706	1,055	547	858	40
	All	5,294	4,306	2,933	5,541	5,849	5,419	1,957	1,952	899
AUG	W	6,089	5,824	5,740	6,230	6,601	5,662	4,514	4,433	240
	AN	4,989	3,984	3,643	5,740	6,415	4,919	3,189	3,065	24
	BN	3,997	1,615	1,379	5,201	5,073	2,972	2,053	2,145	0
	D	1,521	1,274	625	1,092	1,161	695	421	530	0
	C	78	1,171	513	125	164	300	105	95	0
	All	3,688	3,157	2,801	3,961	4,177	3,219	2,356	2,351	80
SEP	W	5,410	3,872	4,007	4,333	4,442	3,728	4,501	4,183	1,748
	AN	4,758	2,180	1,468	2,567	3,721	2,315	3,534	3,615	2,137
	BN	3,428	1,789	1,439	2,877	2,832	2,711	2,177	2,057	825
	D	2,259	2,066	561	2,093	2,143	2,099	1,004	852	414
	C	550	1,430	932	471	498	509	115	159	176
	All	3,573	2,515	1,990	2,769	2,980	2,519	2,553	2,417	1,124
OCT	W	3,758	3,256	3,139	3,954	3,903	3,366	1,458	1,344	2,521
	AN	2,779	1,832	1,960	2,409	2,776	2,113	261	257	1,745
	BN	2,513	2,272	2,227	2,778	3,072	2,898	165	107	1,254
	D	2,220	1,837	1,565	2,696	2,668	2,078	438	441	1,250
	C	1,822	1,573	1,617	1,976	2,036	2,137	4	0	808
	All	2,781	2,322	2,243	2,962	3,052	2,640	626	579	1,661
NOV	W	4,705	3,780	3,751	4,029	4,065	3,973	4,739	3,095	2,860
	AN	3,482	2,386	2,310	2,662	2,785	2,787	2,750	2,086	2,451
	BN	3,383	2,675	2,599	2,595	2,692	2,860	2,497	2,307	1,883
	D	2,414	1,974	1,942	2,424	2,400	2,298	2,221	1,728	1,824
	C	1,314	860	689	864	800	1,043	741	829	615
	All	3,301	2,564	2,498	2,769	2,800	2,813	2,927	2,181	2,077
DEC	W	4,265	4,113	4,217	3,977	3,980	4,029	5,833	3,201	4,020
	AN	1,673	1,721	1,723	1,687	1,703	1,738	1,977	1,158	1,417
	BN	1,428	1,388	1,380	1,307	1,301	1,390	1,792	1,189	1,330
	D	1,236	1,200	1,195	1,084	1,084	1,141	1,077	900	911
	C	485	483	519	550	496	574	616	421	488
	All	2,183	2,127	2,163	2,050	2,044	2,104	2,771	1,647	1,980

[a] Note that percent differences could not be calculated because North Delta Exports for NAA scenarios were 0 cfs for all months and water year types, resulting in division by 0.
[b] For definitions of each effect, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-77. Differences[a] (cfs) between Effects[b] in North Delta Exports, Year Round**

In Delta—North Delta Exports								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	-3,359	1,708	-108	-201	-804	-302	-992
	AN	-2,189	1,420	-328	-344	-859	-366	-958
	BN	-744	547	-215	-201	-502	-214	-501
	D	251	607	-230	-232	-291	-237	-291
	C	-23	160	-297	-291	-317	-296	-312
	All	-1,461	999	-213	-242	-577	-281	-650
FEB	W	-1,820	2,500	-714	-753	-1,243	-514	-1,239
	AN	-2,854	2,072	-1,104	-1,151	-1,418	-1,072	-1,454
	BN	-1,637	1,406	-493	-595	-347	-506	-372
	D	-12	971	-1,087	-1,087	-1,304	-1,049	-1,306
	C	331	459	-9	4	270	-14	271
	All	-1,228	1,616	-712	-747	-908	-639	-916
MAR	W	-1,128	1,853	-2,194	-2,203	-2,587	-761	-2,767
	AN	-2,898	1,897	-1,451	-1,456	-1,664	-673	-1,890
	BN	-607	1,017	-1,351	-1,460	-2,252	84	-2,176
	D	-295	694	-629	-607	-1,124	-94	-1,126
	C	-25	210	-29	-20	-91	-23	-91
	All	-954	1,222	-1,281	-1,297	-1,708	-350	-1,786
APR	W	-1,889	1,567	-2,409	1,519	-4,057	-1,131	-4,042
	AN	-1,977	712	-2,861	1,508	-4,555	-1,407	-4,565
	BN	-1,047	-51	-1,036	1,246	-3,288	139	-3,300
	D	-429	-109	-598	849	-1,320	25	-1,325
	C	-214	-147	54	354	-30	70	-30
	All	-1,192	547	-1,483	1,153	-2,809	-525	-2,808
MAY	W	-1,513	1,909	-2,745	1,043	-3,694	-993	-3,793
	AN	-1,503	528	-2,253	1,518	-3,747	-1,189	-4,112
	BN	-1,047	-165	-543	644	-2,406	94	-2,349
	D	-291	-182	-449	295	-682	35	-694
	C	-41	-19	-15	165	-657	55	-682
	All	-948	612	-1,394	751	-2,376	-457	-2,458
JUN	W	-819	1,697	-1,129	-1,071	-1,121	-239	-1,501
	AN	-730	931	-2,353	-2,250	-496	-786	-977
	BN	-585	109	-1,613	-2,629	251	-756	-13
	D	294	433	-535	-818	490	-605	358
	C	-46	-18	-10	-11	84	-10	86
	All	-408	785	-1,097	-1,299	-265	-454	-530

In Delta—North Delta Exports								
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JUL	W	3,656	3,678	-414	-963	4,788	-1,348	4,097
	AN	3,299	3,426	-1,820	-2,185	4,986	-3,646	3,303
	BN	4,156	4,178	-3,080	-3,207	3,353	-4,802	1,234
	D	4,101	4,195	-2,021	-2,543	1,377	-2,883	-158
	C	590	279	902	1,281	1,947	-497	519
	All	3,338	3,343	-1,235	-1,543	3,407	-2,486	2,034
AUG	W	1,575	1,656	-405	-777	5,585	78	5,501
	AN	1,800	1,924	-1,757	-2,431	3,959	-1,277	3,618
	BN	1,944	1,852	-3,586	-3,458	1,615	-1,593	1,379
	D	1,100	991	183	113	1,274	-71	625
	C	-27	-17	1,047	1,007	1,171	213	513
	All	1,332	1,338	-805	-1,020	3,077	-418	2,721
SEP	W	909	1,227	-461	-570	2,124	279	2,259
	AN	1,224	1,144	-387	-1,542	43	-847	-669
	BN	1,251	1,371	-1,088	-1,044	964	-1,272	614
	D	1,255	1,407	-27	-77	1,652	-1,538	147
	C	435	391	960	932	1,254	424	756
	All	1,020	1,156	-254	-465	1,391	-528	866
OCT	W	2,300	2,415	-698	-647	735	-227	618
	AN	2,518	2,522	-578	-944	86	-152	215
	BN	2,348	2,406	-505	-800	1,018	-671	973
	D	1,782	1,779	-859	-830	587	-513	315
	C	1,818	1,822	-403	-462	765	-519	809
	All	2,156	2,203	-640	-730	660	-398	581
NOV	W	-34	1,610	-248	-284	921	-222	891
	AN	731	1,395	-276	-399	-65	-477	-141
	BN	886	1,076	80	-17	792	-261	716
	D	193	686	-450	-426	150	-355	118
	C	573	484	-4	60	245	-354	74
	All	374	1,120	-205	-236	486	-315	421
DEC	W	-1,568	1,064	136	134	93	188	197
	AN	-304	515	34	18	304	-15	306
	BN	-365	238	82	87	59	-10	50
	D	159	336	115	116	289	54	284
	C	-130	65	-68	-13	-5	-54	32
	All	-588	537	78	83	147	60	183

[a] Note that percent differences could not be calculated because North Delta Exports for NAA scenarios were 0 cfs for all months and water year types, resulting in division by 0.
[b] For definitions of each effect, see the introduction to this section
cfs = cubic feet per second
Water Year Type (using San Joaquin Valley Index [60:20:20]): AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.4.2.2.8 South Delta Exports

Table 5E-78. Mean Monthly South Delta Exports (cfs) for Model Scenarios, Year-Round

In Delta—South Delta Exports												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JAN	W	8,306	4,020	2,226	2,370	3,726	3,726	3,650	7,939	1,299	5,645	2,357
	AN	6,621	4,926	2,171	2,161	3,660	3,656	3,649	6,598	3,006	5,386	1,493
	BN	6,169	5,699	636	610	3,590	3,589	3,587	5,741	4,504	5,789	568
	D	6,463	6,417	655	655	3,951	3,951	3,951	6,297	4,826	4,965	175
	C	5,798	5,826	663	658	4,289	4,283	4,177	4,900	2,508	2,500	0
	All	6,923	5,230	1,373	1,412	3,825	3,823	3,782	6,562	3,047	5,022	1,101
FEB	W	9,625	1,908	1,334	1,212	2,440	2,625	2,418	9,410	172	4,626	3,192
	AN	6,828	3,173	1,291	1,430	3,552	3,544	3,361	7,184	1,460	5,186	1,817
	BN	6,651	3,687	2,977	2,943	4,398	4,434	4,307	6,444	2,759	5,110	1,473
	D	5,301	4,817	705	707	4,054	4,049	4,042	5,162	4,846	5,018	247
	C	4,260	4,320	745	743	3,644	3,659	3,637	4,326	4,474	4,099	47
	All	6,974	3,388	1,384	1,360	3,468	3,532	3,414	6,901	2,458	4,799	1,590
MAR	W	9,366	549	268	232	1,611	1,647	647	9,369	386	3,682	3,060
	AN	8,034	2,032	391	376	970	1,000	860	7,693	574	5,251	1,464
	BN	6,867	4,018	646	615	3,754	3,682	1,798	6,421	2,675	4,308	1,173
	D	4,288	3,699	808	807	3,619	3,602	2,305	3,890	3,049	3,644	73
	C	2,603	2,438	1,339	1,347	2,071	2,084	1,880	2,454	2,231	2,510	0
	All	6,640	2,326	626	608	2,391	2,393	1,419	6,406	1,659	3,839	1,401
APR	W	2,960	2,836	411	317	1,456	395	973	3,016	1,596	5,166	0
	AN	1,864	3,889	148	104	1,343	289	824	2,086	2,308	5,129	0
	BN	2,035	5,098	843	846	1,539	1,003	1,177	2,114	4,254	4,963	0
	D	1,836	3,773	1,534	1,541	2,284	1,739	2,062	1,853	3,177	3,070	0
	C	1,473	1,884	1,174	1,175	1,492	1,316	1,554	1,407	1,722	1,736	0
	All	2,177	3,443	805	770	1,640	913	1,310	2,235	2,520	4,164	0
MAY	W	3,358	3,285	272	376	1,449	570	1,064	3,421	1,685	4,663	0
	AN	1,782	4,276	386	441	1,003	445	638	1,894	3,047	4,537	0
	BN	1,912	4,683	790	841	1,469	968	1,149	1,947	3,431	3,888	0
	D	1,866	2,882	1,217	1,321	1,590	1,355	1,478	1,855	2,250	2,439	0
	C	1,422	1,644	994	1,026	1,323	1,221	1,271	1,378	1,243	1,285	0
	All	2,270	3,340	690	768	1,400	887	1,137	2,303	2,242	3,530	0
JUN	W	7,189	4,160	1,022	1,000	2,544	2,869	2,268	6,160	2,015	4,290	393
	AN	5,695	3,673	1,315	1,284	2,788	2,833	2,396	4,916	3,353	4,347	0
	BN	4,129	2,441	1,210	1,267	2,483	2,785	2,448	3,386	1,966	2,027	0
	D	2,708	1,418	1,079	1,135	1,414	1,975	1,485	2,098	1,337	1,105	0
	C	772	657	471	522	598	598	582	1,522	1,080	1,018	0
	All	4,525	2,681	1,029	1,047	2,036	2,321	1,899	3,934	1,917	2,734	125

In Delta—South Delta Exports												
Month	Water Year Type	NAA_ELT_ 2015[a]	B1_ELT_ 2015	B2_ELT_ 2015	S2_ELT_ 2015	H3_ELT_ 2015	H3+_ELT_ 2015	H4_ELT_ 2015	NAA_LLT	A1A_LLT	A3_LLT	A8_LLT
JUL	W	10,799	5,587	4,085	3,936	5,826	5,692	4,981	9,779	6,357	6,558	3,875
	AN	9,492	3,721	2,453	2,201	3,679	3,444	3,339	8,162	4,792	5,249	1,573
	BN	10,392	4,198	3,000	2,932	4,270	4,120	3,538	10,041	4,962	6,077	2,204
	D	8,832	4,037	3,002	2,614	3,678	3,644	3,437	9,401	3,899	4,109	3,003
	C	3,621	2,025	1,191	1,459	2,000	1,991	1,892	4,630	1,963	2,310	3,496
	All	9,056	4,215	3,000	2,858	4,215	4,104	3,703	8,751	4,707	5,125	3,006
AUG	W	11,690	4,586	3,279	3,272	4,614	5,153	3,881	11,509	4,986	5,179	6,653
	AN	11,408	3,719	3,130	3,062	4,419	4,704	3,814	11,688	5,912	6,122	5,632
	BN	9,868	3,130	3,000	2,983	3,367	3,519	3,120	9,783	4,415	5,082	4,731
	D	4,748	4,856	2,863	2,734	4,872	4,877	4,870	7,398	4,177	3,890	4,347
	C	2,756	3,699	2,490	2,846	3,670	3,726	3,730	2,852	2,458	2,530	2,819
	All	8,506	4,140	3,003	3,012	4,291	4,539	3,936	9,071	4,477	4,630	5,108
SEP	W	10,661	4,704	2,844	2,616	3,054	3,273	2,826	8,754	5,417	5,964	22
	AN	10,581	4,276	2,736	2,558	2,933	3,072	2,559	9,970	5,794	6,115	775
	BN	9,660	4,126	2,980	2,934	4,066	4,070	3,969	9,276	5,145	5,086	4,876
	D	6,612	3,686	3,016	2,689	3,699	3,711	3,677	5,709	4,464	4,424	4,081
	C	3,862	3,204	2,193	2,314	3,277	3,296	3,213	4,162	2,444	2,622	2,299
	All	8,594	4,100	2,794	2,634	3,383	3,479	3,226	7,681	4,781	5,009	2,185
OCT	W	6,636	5,325	1,099	1,052	1,702	1,817	1,747	5,748	5,726	5,807	0
	AN	5,905	5,065	1,390	1,347	1,635	1,619	1,686	4,005	5,116	5,050	0
	BN	6,136	5,096	1,251	1,236	1,723	1,750	1,698	5,311	5,378	5,414	0
	D	5,774	5,243	1,205	1,182	1,947	1,910	1,917	4,564	5,434	5,306	0
	C	5,320	4,790	1,581	1,595	2,313	2,312	2,285	4,245	4,676	4,313	0
	All	6,062	5,151	1,261	1,235	1,839	1,870	1,846	4,938	5,360	5,301	0
NOV	W	8,344	5,856	2,345	2,132	3,176	3,181	3,109	7,500	5,359	6,857	0
	AN	7,230	5,032	2,224	2,196	3,345	3,371	3,224	6,686	5,238	5,898	0
	BN	7,198	5,595	2,005	1,999	3,237	3,280	3,101	6,203	5,904	6,024	0
	D	6,414	5,459	1,714	1,722	3,091	3,153	2,972	5,590	4,876	5,593	0
	C	4,820	4,523	1,536	1,642	3,313	3,311	3,180	4,819	4,157	4,064	0
	All	7,046	5,409	2,012	1,957	3,212	3,238	3,105	6,348	5,153	5,888	0
DEC	W	8,960	7,212	5,917	5,885	7,757	7,809	7,695	9,069	5,767	7,850	1,468
	AN	9,390	6,735	3,898	3,894	7,587	7,881	7,233	9,060	7,487	7,979	458
	BN	9,215	7,349	3,465	3,484	7,884	7,913	8,040	8,827	7,887	8,358	260
	D	8,611	7,278	3,365	3,365	8,125	7,828	8,003	8,578	8,430	8,573	76
	C	5,983	5,419	2,102	2,087	5,665	5,847	5,860	5,237	6,875	7,033	0
	All	8,554	6,918	4,084	4,075	7,528	7,554	7,485	8,358	7,127	7,995	594

[a] For definitions of each model scenario, see the introduction to this section
cfs = cubic feet per second
Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

Table 5E-79. Differences[a] (Percent Differences) (cfs) between Pairs of Model Scenarios in South Delta Exports, Year Round

In Delta—South Delta Exports										
Month	Water Year Type	Boundary 1 Effect	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JAN	W	-4,286 (-52%)	-6,080 (-73%)	-5,936 (-71%)	-4,580 (-55%)	-4,580 (-55%)	-4,656 (-56%)	-6,640 (-84%)	-2,294 (-29%)	-5,582 (-70%)
	AN	-1,695 (-26%)	-4,450 (-67%)	-4,461 (-67%)	-2,962 (-45%)	-2,965 (-45%)	-2,973 (-45%)	-3,592 (-54%)	-1,212 (-18%)	-5,105 (-77%)
	BN	-470 (-8%)	-5,533 (-90%)	-5,559 (-90%)	-2,579 (-42%)	-2,580 (-42%)	-2,581 (-42%)	-1,236 (-22%)	49 (1%)	-5,172 (-90%)
	D	-46 (-1%)	-5,808 (-90%)	-5,808 (-90%)	-2,512 (-39%)	-2,512 (-39%)	-2,512 (-39%)	-1,471 (-23%)	-1,332 (-21%)	-6,122 (-97%)
	C	27 (0%)	-5,136 (-89%)	-5,140 (-89%)	-1,510 (-26%)	-1,515 (-26%)	-1,622 (-28%)	-2,392 (-49%)	-2,400 (-49%)	-4,900 (-100%)
	All	-1,693 (-24%)	-5,550 (-80%)	-5,511 (-80%)	-3,098 (-45%)	-3,100 (-45%)	-3,141 (-45%)	-3,515 (-54%)	-1,540 (-23%)	-5,461 (-83%)
FEB	W	-7,717 (-80%)	-8,292 (-86%)	-8,413 (-87%)	-7,185 (-75%)	-7,000 (-73%)	-7,207 (-75%)	-9,238 (-98%)	-4,783 (-51%)	-6,218 (-66%)
	AN	-3,655 (-54%)	-5,537 (-81%)	-5,398 (-79%)	-3,276 (-48%)	-3,284 (-48%)	-3,467 (-51%)	-5,723 (-80%)	-1,998 (-28%)	-5,366 (-75%)
	BN	-2,965 (-45%)	-3,674 (-55%)	-3,708 (-56%)	-2,253 (-34%)	-2,217 (-33%)	-2,344 (-35%)	-3,685 (-57%)	-1,334 (-21%)	-4,971 (-77%)
	D	-484 (-9%)	-4,596 (-87%)	-4,594 (-87%)	-1,247 (-24%)	-1,252 (-24%)	-1,260 (-24%)	-317 (-6%)	-144 (-3%)	-4,916 (-95%)
	C	60 (1%)	-3,515 (-83%)	-3,517 (-83%)	-616 (-14%)	-601 (-14%)	-622 (-15%)	148 (3%)	-227 (-5%)	-4,279 (-99%)
	All	-3,585 (-51%)	-5,590 (-80%)	-5,614 (-80%)	-3,506 (-50%)	-3,441 (-49%)	-3,560 (-51%)	-4,444 (-64%)	-2,102 (-30%)	-5,311 (-77%)
MAR	W	-8,818 (-94%)	-9,098 (-97%)	-9,135 (-98%)	-7,755 (-83%)	-7,720 (-82%)	-8,719 (-93%)	-8,982 (-96%)	-5,687 (-61%)	-6,308 (-67%)
	AN	-6,002 (-75%)	-7,643 (-95%)	-7,657 (-95%)	-7,064 (-88%)	-7,034 (-88%)	-7,173 (-89%)	-7,119 (-93%)	-2,442 (-32%)	-6,229 (-81%)
	BN	-2,849 (-41%)	-6,221 (-91%)	-6,252 (-91%)	-3,113 (-45%)	-3,185 (-46%)	-5,068 (-74%)	-3,746 (-58%)	-2,114 (-33%)	-5,249 (-82%)
	D	-589 (-14%)	-3,480 (-81%)	-3,482 (-81%)	-669 (-16%)	-686 (-16%)	-1,983 (-46%)	-842 (-22%)	-246 (-6%)	-3,817 (-98%)
	C	-165 (-6%)	-1,264 (-49%)	-1,255 (-48%)	-531 (-20%)	-519 (-20%)	-722 (-28%)	-223 (-9%)	55 (2%)	-2,454 (-100%)
	All	-4,314 (-65%)	-6,014 (-91%)	-6,032 (-91%)	-4,249 (-64%)	-4,247 (-64%)	-5,221 (-79%)	-4,747 (-74%)	-2,567 (-40%)	-5,005 (-78%)
APR	W	-124 (-4%)	-2,549 (-86%)	-2,643 (-89%)	-1,504 (-51%)	-2,565 (-87%)	-1,987 (-67%)	-1,419 (-47%)	2,151 (71%)	-3,016 (-100%)
	AN	2,024 (109%)	-1,717 (-92%)	-1,760 (-94%)	-521 (-28%)	-1,576 (-85%)	-1,040 (-56%)	223 (11%)	3,044 (146%)	-2,086 (-100%)
	BN	3,063 (151%)	-1,192 (-59%)	-1,189 (-58%)	-496 (-24%)	-1,032 (-51%)	-858 (-42%)	2,139 (101%)	2,849 (135%)	-2,114 (-100%)
	D	1,937 (105%)	-301 (-16%)	-295 (-16%)	448 (24%)	-97 (-5%)	226 (12%)	1,324 (71%)	1,217 (66%)	-1,853 (-100%)
	C	412 (28%)	-298 (-20%)	-297 (-20%)	19 (1%)	-156 (-11%)	81 (6%)	316 (22%)	330 (23%)	-1,407 (-100%)
	All	1,265 (58%)	-1,373 (-63%)	-1,407 (-65%)	-537 (-25%)	-1,264 (-58%)	-867 (-40%)	285 (13%)	1,929 (86%)	-2,235 (-100%)
MAY	W	-72 (-2%)	-3,086 (-92%)	-2,982 (-89%)	-1,908 (-57%)	-2,787 (-83%)	-2,294 (-68%)	-1,736 (-51%)	1,242 (36%)	-3,421 (-100%)
	AN	2,494 (140%)	-1,396 (-78%)	-1,340 (-75%)	-779 (-44%)	-1,337 (-75%)	-1,144 (-64%)	1,153 (61%)	2,643 (140%)	-1,894 (-100%)
	BN	2,771 (145%)	-1,123 (-59%)	-1,071 (-56%)	-444 (-23%)	-945 (-49%)	-763 (-40%)	1,484 (76%)	1,942 (100%)	-1,947 (-100%)
	D	1,017 (54%)	-648 (-35%)	-545 (-29%)	-276 (-15%)	-511 (-27%)	-387 (-21%)	395 (21%)	584 (32%)	-1,855 (-100%)
	C	222 (16%)	-428 (-30%)	-396 (-28%)	-99 (-7%)	-201 (-14%)	-151 (-11%)	-135 (-10%)	-93 (-7%)	-1,378 (-100%)
	All	1,071 (47%)	-1,579 (-70%)	-1,502 (-66%)	-870 (-38%)	-1,382 (-61%)	-1,132 (-50%)	-61 (-3%)	1,227 (53%)	-2,303 (-100%)
JUN	W	-3,029 (-42%)	-6,167 (-86%)	-6,189 (-86%)	-4,645 (-65%)	-4,320 (-60%)	-4,921 (-68%)	-4,145 (-67%)	-1,870 (-30%)	-5,767 (-94%)
	AN	-2,021 (-35%)	-4,379 (-77%)	-4,411 (-77%)	-2,907 (-51%)	-2,862 (-50%)	-3,299 (-58%)	-1,564 (-32%)	-569 (-12%)	-4,916 (-100%)
	BN	-1,688 (-41%)	-2,920 (-71%)	-2,863 (-69%)	-1,646 (-40%)	-1,344 (-33%)	-1,681 (-41%)	-1,420 (-42%)	-1,360 (-40%)	-3,386 (-100%)
	D	-1,291 (-48%)	-1,629 (-60%)	-1,574 (-58%)	-1,294 (-48%)	-733 (-27%)	-1,223 (-45%)	-761 (-36%)	-993 (-47%)	-2,098 (-100%)
	C	-115 (-15%)	-302 (-39%)	-250 (-32%)	-174 (-23%)	-174 (-23%)	-190 (-25%)	-441 (-29%)	-504 (-33%)	-1,522 (-100%)
	All	-1,845 (-41%)	-3,496 (-77%)	-3,479 (-77%)	-2,489 (-55%)	-2,205 (-49%)	-2,627 (-58%)	-2,017 (-51%)	-1,200 (-31%)	-3,809 (-97%)

In Delta—South Delta Exports										
Month	Water Year Type	Boundary 1 Effect	Boundary 2 Effect	Scenario 2 Effect	Alt 4A H3 Effect	Alt 4A H3+ Effect	Alt 4A H4 Effect	Alt 1A Effect	Alt 3 Effect	Alt 8 Effect
JUL	W	-5,212 (-48%)	-6,714 (-62%)	-6,863 (-64%)	-4,973 (-46%)	-5,106 (-47%)	-5,818 (-54%)	-3,421 (-35%)	-3,221 (-33%)	-5,903 (-60%)
	AN	-5,770 (-61%)	-7,039 (-74%)	-7,290 (-77%)	-5,813 (-61%)	-6,047 (-64%)	-6,153 (-65%)	-3,370 (-41%)	-2,913 (-36%)	-6,589 (-81%)
	BN	-6,194 (-60%)	-7,392 (-71%)	-7,461 (-72%)	-6,122 (-59%)	-6,272 (-60%)	-6,854 (-66%)	-5,080 (-51%)	-3,965 (-39%)	-7,837 (-78%)
	D	-4,794 (-54%)	-5,830 (-66%)	-6,218 (-70%)	-5,154 (-58%)	-5,188 (-59%)	-5,395 (-61%)	-5,502 (-59%)	-5,292 (-56%)	-6,398 (-68%)
	C	-1,596 (-44%)	-2,430 (-67%)	-2,161 (-60%)	-1,621 (-45%)	-1,630 (-45%)	-1,729 (-48%)	-2,668 (-58%)	-2,320 (-50%)	-1,134 (-24%)
	All	-4,840 (-53%)	-6,056 (-67%)	-6,198 (-68%)	-4,841 (-53%)	-4,952 (-55%)	-5,353 (-59%)	-4,043 (-46%)	-3,626 (-41%)	-5,744 (-66%)
AUG	W	-7,103 (-61%)	-8,411 (-72%)	-8,418 (-72%)	-7,076 (-61%)	-6,536 (-56%)	-7,809 (-67%)	-6,523 (-57%)	-6,330 (-55%)	-4,856 (-42%)
	AN	-7,689 (-67%)	-8,278 (-73%)	-8,346 (-73%)	-6,989 (-61%)	-6,704 (-59%)	-7,594 (-67%)	-5,775 (-49%)	-5,565 (-48%)	-6,056 (-52%)
	BN	-6,737 (-68%)	-6,868 (-70%)	-6,884 (-70%)	-6,501 (-66%)	-6,349 (-64%)	-6,747 (-68%)	-5,368 (-55%)	-4,701 (-48%)	-5,053 (-52%)
	D	108 (2%)	-1,885 (-40%)	-2,014 (-42%)	124 (3%)	129 (3%)	122 (3%)	-3,221 (-44%)	-3,508 (-47%)	-3,050 (-41%)
	C	943 (34%)	-266 (-10%)	90 (3%)	914 (33%)	970 (35%)	974 (35%)	-394 (-14%)	-322 (-11%)	-33 (-1%)
	All	-4,366 (-51%)	-5,504 (-65%)	-5,495 (-65%)	-4,215 (-50%)	-3,967 (-47%)	-4,570 (-54%)	-4,594 (-51%)	-4,441 (-49%)	-3,963 (-44%)
SEP	W	-5,957 (-56%)	-7,817 (-73%)	-8,045 (-75%)	-7,607 (-71%)	-7,388 (-69%)	-7,834 (-73%)	-3,337 (-38%)	-2,790 (-32%)	-8,732 (-100%)
	AN	-6,304 (-60%)	-7,845 (-74%)	-8,022 (-76%)	-7,647 (-72%)	-7,509 (-71%)	-8,022 (-76%)	-4,176 (-42%)	-3,855 (-39%)	-9,195 (-92%)
	BN	-5,533 (-57%)	-6,680 (-69%)	-6,726 (-70%)	-5,594 (-58%)	-5,590 (-58%)	-5,691 (-59%)	-4,131 (-45%)	-4,190 (-45%)	-4,400 (-47%)
	D	-2,926 (-44%)	-3,595 (-54%)	-3,923 (-59%)	-2,913 (-44%)	-2,900 (-44%)	-2,935 (-44%)	-1,245 (-22%)	-1,285 (-23%)	-1,628 (-29%)
	C	-658 (-17%)	-1,669 (-43%)	-1,548 (-40%)	-585 (-15%)	-566 (-15%)	-649 (-17%)	-1,718 (-41%)	-1,540 (-37%)	-1,863 (-45%)
	All	-4,495 (-52%)	-5,800 (-67%)	-5,961 (-69%)	-5,211 (-61%)	-5,115 (-60%)	-5,369 (-62%)	-2,899 (-38%)	-2,671 (-35%)	-5,495 (-72%)
OCT	W	-1,311 (-20%)	-5,537 (-83%)	-5,584 (-84%)	-4,934 (-74%)	-4,819 (-73%)	-4,889 (-74%)	-22 (0%)	59 (1%)	-5,748 (-100%)
	AN	-841 (-14%)	-4,516 (-76%)	-4,559 (-77%)	-4,270 (-72%)	-4,286 (-73%)	-4,219 (-71%)	1,112 (28%)	1,045 (26%)	-4,005 (-100%)
	BN	-1,040 (-17%)	-4,885 (-80%)	-4,899 (-80%)	-4,413 (-72%)	-4,386 (-71%)	-4,437 (-72%)	67 (1%)	104 (2%)	-5,311 (-100%)
	D	-531 (-9%)	-4,569 (-79%)	-4,592 (-80%)	-3,827 (-66%)	-3,864 (-67%)	-3,857 (-67%)	870 (19%)	743 (16%)	-4,564 (-100%)
	C	-530 (-10%)	-3,739 (-70%)	-3,725 (-70%)	-3,007 (-57%)	-3,008 (-57%)	-3,035 (-57%)	431 (10%)	68 (2%)	-4,245 (-100%)
	All	-910 (-15%)	-4,801 (-79%)	-4,827 (-80%)	-4,223 (-70%)	-4,192 (-69%)	-4,216 (-70%)	421 (9%)	362 (7%)	-4,938 (-100%)
NOV	W	-2,488 (-30%)	-5,999 (-72%)	-6,212 (-74%)	-5,168 (-62%)	-5,163 (-62%)	-5,235 (-63%)	-2,141 (-29%)	-644 (-9%)	-7,500 (-100%)
	AN	-2,198 (-30%)	-5,006 (-69%)	-5,034 (-70%)	-3,885 (-54%)	-3,859 (-53%)	-4,005 (-55%)	-1,448 (-22%)	-788 (-12%)	-6,686 (-100%)
	BN	-1,603 (-22%)	-5,194 (-72%)	-5,200 (-72%)	-3,961 (-55%)	-3,919 (-54%)	-4,097 (-57%)	-299 (-5%)	-179 (-3%)	-6,203 (-100%)
	D	-955 (-15%)	-4,700 (-73%)	-4,692 (-73%)	-3,323 (-52%)	-3,261 (-51%)	-3,443 (-54%)	-714 (-13%)	3 (0%)	-5,590 (-100%)
	C	-297 (-6%)	-3,284 (-68%)	-3,178 (-66%)	-1,507 (-31%)	-1,509 (-31%)	-1,640 (-34%)	-662 (-14%)	-756 (-16%)	-4,819 (-100%)
	All	-1,637 (-23%)	-5,034 (-71%)	-5,089 (-72%)	-3,834 (-54%)	-3,808 (-54%)	-3,941 (-56%)	-1,195 (-19%)	-460 (-7%)	-6,348 (-100%)
DEC	W	-1,748 (-20%)	-3,043 (-34%)	-3,075 (-34%)	-1,203 (-13%)	-1,151 (-13%)	-1,265 (-14%)	-3,302 (-36%)	-1,219 (-13%)	-7,601 (-84%)
	AN	-2,655 (-28%)	-5,492 (-58%)	-5,496 (-59%)	-1,802 (-19%)	-1,509 (-16%)	-2,157 (-23%)	-1,573 (-17%)	-1,081 (-12%)	-8,603 (-95%)
	BN	-1,866 (-20%)	-5,750 (-62%)	-5,731 (-62%)	-1,331 (-14%)	-1,302 (-14%)	-1,175 (-13%)	-940 (-11%)	-470 (-5%)	-8,567 (-97%)
	D	-1,333 (-15%)	-5,246 (-61%)	-5,245 (-61%)	-486 (-6%)	-783 (-9%)	-608 (-7%)	-149 (-2%)	-6 (0%)	-8,502 (-99%)
	C	-563 (-9%)	-3,881 (-65%)	-3,895 (-65%)	-318 (-5%)	-136 (-2%)	-123 (-2%)	1,638 (31%)	1,796 (34%)	-5,237 (-100%)
	All	-1,636 (-19%)	-4,470 (-52%)	-4,479 (-52%)	-1,026 (-12%)	-1,000 (-12%)	-1,069 (-12%)	-1,231 (-15%)	-363 (-4%)	-7,764 (-93%)

[a] Red boxes indicate that exports under the second model scenario listed in the column header are more than 5% greater than exports under the first model scenario listed; green boxes indicate that exports under the second model scenario listed in the column header are more than 5% lower than exports under the first model scenario listed.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

1 **Table 5E-80. Differences[a] (Percent Differences) (cfs) between Effects[b] in South Delta Exports, Year Round**

		In Delta—South Delta Exports						
Month	Water Year Type	Alt 1A Effect vs. Boundary 1 Effect	Alt 3 Effect vs. Boundary 1 Effect	Alt 4A H3 Effect vs. Boundary 2 Effect	Alt 4A H3+ Effect vs. Boundary 2 Effect	Alt 8 Effect vs. Boundary 2 Effect	Alt 4A H4 Effect vs. Scenario 2 Effect	Alt 8 Effect vs. Scenario 2 Effect
JAN	W	2,355 (32%)	-1,992 (-23%)	-1,500 (-18%)	-1,500 (-18%)	-498 (-3%)	-1,280 (-15%)	-354 (-1%)
	AN	1,897 (29%)	-483 (-7%)	-1,489 (-22%)	-1,485 (-22%)	655 (10%)	-1,488 (-22%)	645 (10%)
	BN	766 (14%)	-519 (-8%)	-2,954 (-48%)	-2,953 (-48%)	-361 (0%)	-2,978 (-48%)	-387 (0%)
	D	1,425 (23%)	1,287 (20%)	-3,297 (-51%)	-3,296 (-51%)	314 (7%)	-3,297 (-51%)	314 (7%)
	C	2,419 (49%)	2,428 (49%)	-3,626 (-63%)	-3,620 (-62%)	-236 (11%)	-3,519 (-61%)	-241 (11%)
	All	1,822 (29%)	-153 (-1%)	-2,452 (-35%)	-2,450 (-35%)	-89 (3%)	-2,370 (-34%)	-50 (4%)
FEB	W	1,520 (18%)	-2,934 (-29%)	-1,106 (-11%)	-1,292 (-13%)	-2,074 (-20%)	-1,206 (-13%)	-2,195 (-21%)
	AN	2,068 (26%)	-1,657 (-26%)	-2,261 (-33%)	-2,253 (-33%)	-170 (-6%)	-1,931 (-28%)	-32 (-4%)
	BN	720 (13%)	-1,630 (-24%)	-1,421 (-21%)	-1,457 (-22%)	1,297 (22%)	-1,364 (-21%)	1,263 (21%)
	D	-167 (-3%)	-339 (-6%)	-3,349 (-63%)	-3,344 (-63%)	320 (9%)	-3,334 (-63%)	322 (9%)
	C	-88 (-2%)	287 (7%)	-2,899 (-68%)	-2,914 (-68%)	764 (16%)	-2,895 (-68%)	762 (16%)
	All	858 (13%)	-1,484 (-21%)	-2,084 (-30%)	-2,149 (-31%)	-279 (-3%)	-2,054 (-29%)	-303 (-4%)
MAR	W	164 (2%)	-3,131 (-33%)	-1,343 (-14%)	-1,379 (-15%)	-2,790 (-30%)	-415 (-4%)	-2,826 (-30%)
	AN	1,117 (18%)	-3,560 (-43%)	-579 (-7%)	-609 (-8%)	-1,414 (-14%)	-484 (-6%)	-1,428 (-14%)
	BN	897 (17%)	-735 (-9%)	-3,108 (-45%)	-3,036 (-44%)	-972 (-9%)	-1,184 (-17%)	-1,003 (-9%)
	D	253 (8%)	-343 (-7%)	-2,811 (-66%)	-2,794 (-65%)	337 (17%)	-1,498 (-35%)	336 (17%)
	C	58 (3%)	-220 (-9%)	-732 (-28%)	-745 (-29%)	1,190 (51%)	-533 (-20%)	1,199 (52%)
	All	433 (9%)	-1,747 (-25%)	-1,766 (-27%)	-1,767 (-27%)	-1,009 (-12%)	-811 (-12%)	-1,027 (-13%)
APR	W	1,296 (43%)	-2,274 (-75%)	-1,044 (-35%)	16 (1%)	467 (14%)	-656 (-22%)	373 (11%)
	AN	1,802 (98%)	-1,020 (-37%)	-1,195 (-64%)	-141 (-8%)	369 (8%)	-720 (-39%)	325 (6%)
	BN	923 (49%)	214 (16%)	-696 (-34%)	-160 (-8%)	922 (41%)	-331 (-16%)	925 (42%)
	D	612 (34%)	720 (40%)	-749 (-41%)	-204 (-11%)	1,552 (84%)	-521 (-28%)	1,558 (84%)
	C	96 (6%)	82 (5%)	-318 (-22%)	-142 (-10%)	1,108 (80%)	-379 (-26%)	1,109 (80%)
	All	981 (45%)	-664 (-28%)	-836 (-38%)	-108 (-5%)	862 (37%)	-540 (-25%)	828 (35%)
MAY	W	1,664 (49%)	-1,314 (-38%)	-1,178 (-35%)	-298 (-9%)	335 (8%)	-688 (-20%)	440 (11%)
	AN	1,341 (79%)	-149 (0%)	-617 (-35%)	-59 (-3%)	498 (22%)	-196 (-11%)	553 (25%)
	BN	1,286 (69%)	829 (45%)	-679 (-36%)	-178 (-9%)	824 (41%)	-308 (-16%)	876 (44%)
	D	622 (33%)	432 (23%)	-373 (-20%)	-138 (-7%)	1,206 (65%)	-158 (-8%)	1,310 (71%)
	C	357 (25%)	314 (22%)	-329 (-23%)	-227 (-16%)	949 (70%)	-245 (-17%)	982 (72%)
	All	1,132 (50%)	-156 (-6%)	-710 (-31%)	-197 (-9%)	724 (30%)	-370 (-16%)	801 (34%)
JUN	W	1,115 (25%)	-1,160 (-12%)	-1,522 (-21%)	-1,847 (-26%)	-400 (8%)	-1,268 (-18%)	-423 (8%)
	AN	-458 (-4%)	-1,452 (-24%)	-1,472 (-26%)	-1,517 (-27%)	537 (23%)	-1,112 (-20%)	506 (23%)
	BN	-268 (1%)	-328 (-1%)	-1,274 (-31%)	-1,576 (-38%)	467 (29%)	-1,181 (-29%)	524 (31%)
	D	-529 (-11%)	-298 (0%)	-335 (-12%)	-896 (-33%)	469 (40%)	-350 (-13%)	525 (42%)
	C	326 (14%)	388 (18%)	-127 (-16%)	-127 (-16%)	1,220 (61%)	-61 (-8%)	1,271 (68%)
	All	173 (11%)	-645 (-10%)	-1,008 (-22%)	-1,292 (-29%)	313 (20%)	-852 (-19%)	331 (20%)

In Delta—South Delta Exports								
Month	**Water Year Type**	**Alt 1A Effect vs. Boundary 1 Effect**	**Alt 3 Effect vs. Boundary 1 Effect**	**Alt 4A H3 Effect vs. Boundary 2 Effect**	**Alt 4A H3+ Effect vs. Boundary 2 Effect**	**Alt 8 Effect vs. Boundary 2 Effect**	**Alt 4A H4 Effect vs. Scenario 2 Effect**	**Alt 8 Effect vs. Scenario 2 Effect**
JUL	W	-1,790 (-13%)	-1,991 (-15%)	-1,741 (-16%)	-1,607 (-15%)	-811 (-2%)	-1,044 (-10%)	-959 (-3%)
	AN	-2,400 (-20%)	-2,857 (-25%)	-1,227 (-13%)	-992 (-10%)	-450 (7%)	-1,138 (-12%)	-702 (4%)
	BN	-1,115 (-9%)	-2,230 (-20%)	-1,270 (-12%)	-1,120 (-11%)	445 (7%)	-606 (-6%)	376 (6%)
	D	708 (4%)	498 (2%)	-676 (-8%)	-642 (-7%)	569 (2%)	-823 (-9%)	180 (-2%)
	C	1,072 (14%)	725 (6%)	-809 (-22%)	-800 (-22%)	-1,296 (-43%)	-432 (-12%)	-1,027 (-35%)
	All	-797 (-7%)	-1,215 (-12%)	-1,215 (-13%)	-1,104 (-12%)	-312 (-1%)	-845 (-9%)	-453 (-3%)
AUG	W	-581 (-4%)	-773 (-6%)	-1,336 (-11%)	-1,875 (-16%)	-3,555 (-30%)	-609 (-5%)	-3,562 (-30%)
	AN	-1,914 (-18%)	-2,124 (-20%)	-1,289 (-11%)	-1,574 (-14%)	-2,223 (-21%)	-752 (-7%)	-2,290 (-21%)
	BN	-1,370 (-13%)	-2,036 (-20%)	-367 (-4%)	-519 (-5%)	-1,815 (-18%)	-137 (-1%)	-1,832 (-18%)
	D	3,329 (46%)	3,616 (50%)	-2,009 (-42%)	-2,014 (-42%)	1,165 (2%)	-2,136 (-45%)	1,037 (-1%)
	C	1,337 (48%)	1,265 (45%)	-1,180 (-43%)	-1,236 (-45%)	-233 (-8%)	-884 (-32%)	124 (4%)
	All	228 (-1%)	75 (-2%)	-1,289 (-15%)	-1,536 (-18%)	-1,541 (-21%)	-925 (-11%)	-1,532 (-21%)
SEP	W	-2,620 (-18%)	-3,167 (-24%)	-210 (-2%)	-428 (-4%)	916 (26%)	-211 (-2%)	687 (24%)
	AN	-2,129 (-18%)	-2,450 (-21%)	-198 (-2%)	-336 (-3%)	1,350 (18%)	-1 (0%)	1,173 (16%)
	BN	-1,403 (-13%)	-1,343 (-12%)	-1,086 (-11%)	-1,090 (-11%)	-2,280 (-22%)	-1,035 (-11%)	-2,326 (-22%)
	D	-1,681 (-22%)	-1,641 (-22%)	-683 (-10%)	-695 (-11%)	-1,968 (-26%)	-987 (-15%)	-2,295 (-31%)
	C	1,060 (24%)	882 (20%)	-1,084 (-28%)	-1,103 (-29%)	194 (2%)	-899 (-23%)	315 (5%)
	All	-1,596 (-15%)	-1,823 (-18%)	-589 (-7%)	-685 (-8%)	-305 (4%)	-592 (-7%)	-465 (2%)
OCT	W	-1,290 (-19%)	-1,370 (-21%)	-604 (-9%)	-718 (-11%)	211 (17%)	-695 (-10%)	164 (16%)
	AN	-1,952 (-42%)	-1,886 (-40%)	-245 (-4%)	-230 (-4%)	-511 (24%)	-339 (-6%)	-554 (23%)
	BN	-1,107 (-18%)	-1,144 (-19%)	-472 (-8%)	-499 (-8%)	426 (20%)	-462 (-8%)	411 (20%)
	D	-1,401 (-28%)	-1,274 (-25%)	-742 (-13%)	-705 (-12%)	-5 (21%)	-735 (-13%)	-28 (20%)
	C	-962 (-20%)	-598 (-12%)	-732 (-14%)	-731 (-14%)	506 (30%)	-690 (-13%)	520 (30%)
	All	-1,332 (-24%)	-1,273 (-22%)	-578 (-10%)	-608 (-10%)	138 (21%)	-611 (-10%)	111 (20%)
NOV	W	-347 (-1%)	-1,844 (-21%)	-831 (-10%)	-836 (-10%)	1,501 (28%)	-977 (-12%)	1,288 (26%)
	AN	-750 (-9%)	-1,409 (-19%)	-1,121 (-16%)	-1,147 (-16%)	1,680 (31%)	-1,028 (-14%)	1,652 (30%)
	BN	-1,304 (-17%)	-1,424 (-19%)	-1,232 (-17%)	-1,275 (-18%)	1,010 (28%)	-1,102 (-15%)	1,004 (28%)
	D	-241 (-2%)	-958 (-15%)	-1,377 (-21%)	-1,439 (-22%)	889 (27%)	-1,249 (-19%)	898 (27%)
	C	365 (8%)	459 (10%)	-1,777 (-37%)	-1,775 (-37%)	1,535 (32%)	-1,538 (-32%)	1,641 (34%)
	All	-442 (-4%)	-1,177 (-16%)	-1,200 (-17%)	-1,226 (-17%)	1,314 (29%)	-1,148 (-16%)	1,259 (28%)
DEC	W	1,555 (17%)	-529 (-6%)	-1,839 (-21%)	-1,891 (-21%)	4,558 (50%)	-1,811 (-20%)	4,525 (49%)
	AN	-1,081 (-11%)	-1,573 (-16%)	-3,689 (-39%)	-3,982 (-42%)	3,111 (36%)	-3,339 (-36%)	3,107 (36%)
	BN	-926 (-10%)	-1,397 (-15%)	-4,419 (-48%)	-4,447 (-48%)	2,817 (35%)	-4,557 (-49%)	2,836 (35%)
	D	-1,185 (-14%)	-1,328 (-15%)	-4,761 (-55%)	-4,463 (-52%)	3,256 (38%)	-4,638 (-54%)	3,257 (38%)
	C	-2,201 (-41%)	-2,359 (-44%)	-3,563 (-60%)	-3,745 (-63%)	1,356 (35%)	-3,772 (-63%)	1,342 (35%)
	All	-405 (-4%)	-1,273 (-15%)	-3,444 (-40%)	-3,469 (-41%)	3,295 (41%)	-3,411 (-40%)	3,285 (41%)

[a] Red boxes indicate that the second effect listed in the column header on storage is more than 5% more positive than the first effect listed in the column header on storage; green boxes indicate that the second effect listed in the column header on storage is more than 5% more negative than the first effect listed in the column header.

[b] For definitions of each effect, see the introduction to this section

cfs = cubic feet per second

Water Year Type: AN = above normal year; BN = below normal year; C = critical year; D = dry year; W = wet year

5E.5 Environmental Effects

The modeling provides important information that is used to determine the similarities of the results to alternatives evaluated in this Final EIR/EIS to understand the potential environmental effects of these scenarios. These similarities are described below, by resource topic as organized for alternatives in this Final EIR/EIS. The scenarios evaluated in this appendix (Boundary 1, Boundary 2, and Scenario 2) assume the same facilities and associated construction as Alternative 4A and therefore, the construction-related impacts of these scenarios is the same as described for Alternative 4A. Consistent with the goals of this analysis, the nature and severity of the impacts generally fall within the range of impacts disclosed under Alternatives 1A and 3 for Boundary 1, Alternative 4H3,Alternative 4H3+, and Alternative 8 for Boundary 2, and Alternative 4H4 and Alternative 8 for Scenario 2. However, the analyses and conclusions derived for each of the scenarios below also relied on other EIR/EIS alternatives as noted in the analyses.

5E.5.1 Boundary 1

5E.5.1.1 Water Supply

Generally, water supply related impacts under Boundary 1 would be similar to or less than the impacts disclosed under Alternatives 1A and 3. During construction of water conveyance facilities, operation of existing SWP and CVP water conveyance would continue. Construction would not affect the timing or amount of water exported from the Delta through SWP and CVP facilities.

The effect of Boundary 1 on end-of-May and end-of-September reservoir storage would be similar to or better than the effect of Alternatives 1A and 3 for all reservoirs except Oroville Reservoir. In Oroville, increases in September storage under both Alternative 1A and 3 would be smaller increases in end-of-September storage under Boundary 1. Because all alternatives result in benefits to end-of-September storage, CEQA conclusions for Boundary 1 would be the same as conclusions for Alternative 1A and 3.

Effects of Boundary 1 on total exports (North Delta and South Delta exports combined) would be similar to effects of both Alternative 1A and 3. Effects of Boundary 1 on South Delta exports would generally be reduced in comparison to effects of Alternative 3 but would be higher, especially during January through May, compared to effects of Alternative 1A. Effects of Boundary 1 on North Delta exports would be consistently greater, or more negative from a water supply perspective, during December through June, averaged over all year types, than effects of Alternative 1A, but would be lower, or more beneficial, during July through November. Effects of Boundary 1 on North Delta exports would be consistently lower (beneficial) than effects of Alternative 3 for all months and water year types, with a few minor exceptions that would not change CEQA conclusions under Alternative 3 based on North Delta exports. Therefore, CEQA conclusions based on reservoir storage would be the same as those under Alternative 3.

5E.5.1.2 Surface Water

There would be no increased risk for flood flows under Boundary 1 compared to Alternative 1A and 3. Further, effects on flood flows in the San Joaquin River would remain consistent under Boundary 1, Alternative 1A and Alternative 3.

Impacts of Boundary 1 on reservoir storage would be the same as those of Alternative 1A and 3 in all reservoirs. As a result, the frequency at which Shasta Lake, Folsom Lake, and Lake Oroville storage is close to the flood storage capacity and would not exceed SWP or CVP reservoir flood storage capacities would be the same between Boundary 1 and Alternatives 1A and 3.

The effect of Boundary 1 on OMR flows (Table 5E-59) flows would be similar to or better than effects of Alternatives 1A and 3. Although there are reductions in positive OMR flow effects during some months (Table 5E-58) relative to Alternative 1A, flows under Boundary 1 would be more positive or more negative than NAA_ELT_2015 flows during similar months and water year types and, therefore, CEQA conclusions would be the same as those under Alternative 1A. One exception is during October, when there would be an increase in OMR flows (a benefit) under Boundary 1 relative to NAA_ELT_2015 that would not occur under Alternatives 1A and 3. Thus, effects of Boundary 1 on OMR reverse flow conditions, and therefore CEQA conclusions based on OMR flows, would be the same as or better than both Alternative 1A and 3.

Impacts under Boundary 1 regarding altering existing or planned drainage patterns or substantially increasing the rate or amount of surface runoff would be the same as under Alternative 4A, and would be reduced with mitigation. Similar to Alternative 1A and 3, Boundary 1 would not result in an increase in exposure of people or structures to flooding due to construction of the conveyance facilities because the scenario would conform with requirements and implement mitigation. Although structures would be placed within the 100-year flood hazard area under Boundary 1, impeded or redirected flood flows or conditions that could lead to mudflows would not result.

5E.5.1.3 Groundwater

Under Boundary 1, construction impacts to the Delta region would be the same as Alternative 4A. Dewatering would temporarily lower groundwater levels in the vicinity of the dewatering sites, but groundwater would return to pre-pumping levels over the course of several months. The temporarily lowered groundwater levels are not expected to cause a decrease in groundwater quality. The project would not result in substantial seepage, altered groundwater levels, or reductions in well capacities. Construction of the facilities is not expected to interfere with agricultural drainage in the Delta.

Under Boundary 1, operational impacts to groundwater in the SWP and CVP Export Service Areas would be similar to but less severe than those described under Alternative 1A because Boundary 1 exports, while lower during July through December, would be greater overall than those under Alternative 1A. However, Boundary 1 exports would be consistently lower than Alternative 3 exports for all months and water year types, which would result in greater impacts to groundwater than those described under Alternative 3. Nonetheless, Boundary 1 CEQA conclusions would be the same as or better than the conclusions for Alternative 1A for groundwater impacts.

5E.5.1.4 Water Quality

The construction-related effects of Boundary 1 on water quality would be the same as those described for Alternative 4A.

Of the constituents of concern addressed in detailed impact assessments in Chapter 8, *Water Quality*, facilities operations of all project alternatives (BDCP Alternatives 1A, 1B, 1C, 2A, 2B, 2C, 3, 4, 5, 6A, 6B, 6C, 7, 8, 9 and WaterFix Alternatives 4A, 2D, 5A) were determined to have a less than significant impact on the following constituents in all areas of the affected environment, which includes the

Upstream of Delta Region, Delta Region, and SWP/CVP Export Service Areas: ammonia, boron, dissolved oxygen, nitrate, pathogens, phosphorus, trace metals, and total suspended solids (TSS)/turbidity. These project alternatives consist of a wide range of facilities operations scenarios. The project alternatives also have varying Delta tidal habitat restoration areas, from less than 100 acres for the WaterFix alternatives up to 65,000 acres for the BDCP alternatives, which would affect the tidal prism, Delta hydrodynamics, and thus proportions of source waters throughout the Delta. The Boundary 1 scenario falls within the range of these alternatives in terms of facilities operations, and tidal habitat restoration would be limited consistent with the WaterFix alternatives. Therefore, the impacts of the Boundary 1 scenario on ammonia, boron, dissolved oxygen, nitrate, pathogens, phosphorus, trace metals, and TSS/turbidity within the affected environment are concluded to also be less than significant. Further, for all project alternatives, impacts to water quality from facilities operations in the Upstream of Delta Region and SWP/CVP Export Service Areas would be less than significant for bromide, chloride, electrical conductivity (EC), mercury, organic carbon, pesticides, selenium, and *Microcystis*; therefore, for the Boundary 1 scenario, impacts in the Upstream of Delta Region and SWP/CVP Export Service Areas for these constituents are concluded to also be less than significant. Thus, remaining to be addressed within this water quality assessment are impacts of the Boundary 1 scenario in the Delta Region to the following constituents: bromide, chloride, EC, mercury, organic carbon, pesticides, selenium, and *Microcystis*. These constituents are addressed separately below. Effects of the changes in Delta water quality on San Francisco Bay are addressed at the end of this section.

In the discussion below, the water quality conditions that would occur with the Boundary 1 scenario are related to the BDCP and WaterFix alternatives, as appropriate. While the Boundary 1 scenario is operationally most similar to BDCP Alternatives 1A and 3, the water quality modeling that was conducted for these alternatives incorporated both facilities operations and tidal habitat restoration, both of which would have an effect on the resultant source water proportions at Delta assessment locations. Further, the modeling of these alternatives was conducted for the late long-term timeframe. Only WaterFix Alternatives 4A, 2D, and 5A were modeled with no tidal habitat restoration and at the early long-term timeframe. Thus, it is most practical to discuss water quality impacts of the Boundary 1 scenario, which has the same tidal habitat restoration as Alternatives 4A, 2D, and 5A, and also is evaluated at the early long-term timeframe, relative to the WaterFix alternatives. Discussion of Alternatives 1A and 3 is included if relevant to illustrating the potential Boundary 1 scenario effects.

Bromide: Bay water is the primary source of bromide to the Delta, having concentrations orders of magnitude higher than in other Delta source waters. Significant impacts to bromide were identified for Alternatives 1A and 3 based on modeled increases in bromide concentrations at the North Bay Aqueduct in Barker Slough. The modeled increases in bromide at the North Bay Aqueduct were associated with the modeling assumptions regarding siting of tidal habitat conservation measures, which was 65,000 acres for these alternatives, and the resulting hydrodynamics allowing more Bay water into Barker Slough. Less than significant impacts to bromide were identified for Alternatives 4A, 2D, and 5A. These WaterFix alternatives do not have the tidal habitat conservation measures that are components of the BDCP alternatives. Similarly, the Boundary 1 scenario does not include tidal habitat restoration conservation measures. Therefore, the impacts of the Boundary 1 scenario on bromide are concluded to the same as for Alternatives 4A, 2D, and 5A—less than significant.

Chloride: As with bromide, Bay water is the primary source of chloride to the Delta, having concentrations orders of magnitude higher than in other Delta source waters. Significant impacts to chloride were identified for Alternatives 1A and 3. As described for bromide, the Delta tidal habitat conservation measure was determined to contribute to the significant impacts to chloride. For Alternatives 4A, 2D and 5A, which do not have the tidal habitat conservation measures, it was concluded that impacts to chloride would be less than significant. The Boundary 1 scenario has been modeled to support the WaterFix Water Right Petition before the State Water Board. The modeling results for chloride water quality objectives show that, compared to the No Action Alternative (ELT), there would be more frequent exceedance of the Bay-Delta Water Quality Control Plan (WQCP) 250 mg/L chloride objective at the Contra Costa Pumping Plant (PP) No. 1 under Boundary 1. Further, the modeling results show that the WQCP 150 mg/L objective at the Contra Costa PP No. 1 would be met less frequently. The modeled exceedances of these objectives are primarily a function of the CALSIM II monthly time-step and other key model assumptions, and that real time operations that would occur would prevent exceedances of these objectives under the Boundary 1 scenario. Consequently, operations under the Boundary 1 scenario would be expected to result in a less than significant impact to Delta chloride concentrations, consistent with Alternatives 4A, 2D, and 5A.

EC: Significant impacts to EC were identified for all the project alternatives. For Alternatives 1A and 3, the significant impacts were associated with both facilities operations and the tidal habitat restoration conservation measures. For Alternatives 4A, 2D, and 5A, the significant impacts were associated with modeled degradation at Emmaton in the months of July, August, and September, and more frequent exceedance of the Bay-Delta WQCP Prisoners Point EC objective in April and May, relative to the No Action Alternative (ELT). Under Boundary 1, long-term average EC increases at Emmaton would be similar to modeled increases for Alternative 4A for July and August, and greater for September, as well as October through February. Thus, the significant impacts identified for Alternative 4A also would be identified for Boundary 1; however, the period of degradation would be greater under Boundary 1.

The Boundary 1 scenario also shows modeled exceedance of the Prisoners Point objective, but much less frequently than under Alternative 4A and only 1% greater frequency relative to the No Action Alternative (ELT). Review of the modeling indicates that exceedances of WQCP EC objectives are primarily a function of the CALSIM II monthly time-step and other key model assumptions, and real time operations that would occur would prevent exceedances of objectives under the Boundary 1 scenario. The mitigation described for Alternatives 4A, 2D, and 5A addresses adaptive management of the north and south Delta intakes and real time operations to reduce these impacts to a less than significant level.

Mercury: Under the Boundary 1 scenario, long-term average methylmercury concentrations would be the same as those described for Alternative 4A. Because these results are most similar to Alternative 4A, which did not have significant impacts to mercury, it is concluded that the Boundary 1 scenario also would have less than significant impacts to mercury.

Organic Carbon: Organic carbon impacts due to facilities operations were assessed from modeled dissolved organic carbon (DOC). The modeled Boundary 1 scenario DOC concentrations are the same or less than the concentrations modeled for Alternative 4A, which would have less than significant impacts to DOC in the western Delta. Thus, the impacts to organic carbon from the Boundary 1 scenario would be less than significant.

Pesticides: The San Joaquin River water is considered to be higher in pesticides compared to other Delta source waters based on existing data and water body impairments. Under Alternatives 1A and 3, as well as Alternatives 4A, 2D, and 5A, the impact to pesticides would be less than significant. Under the Boundary 1 scenario the proportion of San Joaquin River water at Franks Tract, Rock

Slough, and Contra Costa PP No. 1 would be slightly greater than would occur under Alternative 4A in some months, but nearly the same or less than Alternative 2D. Thus, the impacts to pesticides from the Boundary 1 scenario would be less than significant.

Selenium: The modeled Boundary 1 scenario selenium concentrations are the same or less than the concentrations modeled for Alternative 4A, which would have less than significant impacts to selenium and whole body sturgeon concentrations in the western Delta. Thus, the impacts to selenium from the Boundary 1 scenario would be less than significant.

Microcystis: Significant impacts to *Microcystis* were identified under Alternatives 1A and 3. The significant impact determination for *Microcystis* for these alternatives was driven by higher residence times that would result from the creation of tidal habitat restoration areas in the Delta. As described previously, tidal habitat conservation measures are not a component of the Boundary 1 scenario. As has been described in the impact assessments of Alternatives 4A, 2D, and 5A, modeling has shown that there is the potential for increased residence times resulting from these alternatives' facilities operations. However, to ensure project operations do not create conditions that would result in increased *Microcystis* blooms in the Delta, water flow through Delta channels would be managed through real-time operations. By operating the south Delta pumps more frequently during periods conducive to increased *Microcystis* blooms, residence times could be managed. With this approach applied to the Boundary 1 scenario, the less than significant impact determinations made for Alternatives 4A, 2D, and 5A for the Delta would apply to this scenario.

San Francisco Bay: As discussed above in "Selenium," Delta selenium concentrations under the Boundary 1 scenario would be the same or less than Alternative 4A, which would have a less than significant impact to San Francisco Bay selenium. As such, the Boundary 1 scenario would have a less than significant impact to San Francisco Bay selenium. Further, as described for Alternatives 4A, 2D, and 5A, the Boundary 1 scenario would have a less than significant impact to water quality for all other constituents assessed, including nitrogen, phosphorus, mercury, chloride, and EC.

5E.5.1.5 Geology and Seismicity

All impacts from construction and operation of the water conveyance features under Boundary 1 on geology and seismicity would be the same as Alternative 4A.

5E.5.1.6 Soils

All impacts from construction and operation under Boundary 1 on soils would be the same as Alternative 4A.

5E.5.1.7 Fish and Aquatic Resources

Boundary 1 effects were compared to effects of Alternatives 1A and 3, which were determined *a priori* to be most similar among all alternatives to Boundary 1 effects.

As noted in Section 5E.5.1.1, *Water Supply*, CEQA conclusions based on reservoir storage for Boundary 1 would be the same as conclusions for Alternative 3.

The effect of Boundary 1 on Sacramento River flows upstream of the Delta would be similar to or better than effects of Alternatives 1A and 3, except during October. During October, effects of Boundary 1 and Alternatives 1A and 3 on flows would be positive, although the positive effect would be lower under Boundary 1 than under Alternatives 1A and 3. This difference under Boundary 1, however, would be small and not biologically meaningful. Given that no CEQA conclusions were beneficial solely as a result of higher October flows under Alternatives 1A and 3, this difference between Boundary 1 effect and Alternative 1A and 3 effects in October would suggest that the CEQA conclusions in the Sacramento River upstream of the Delta for Boundary 1 would be the same as both Alternatives 1A and 3.

The effect of Boundary 1 on Clear Creek (Table 5E-35) and Trinity River (Table 5E-38) flows would be similar to or better than effects of Alternatives 1A and 3 except in the Trinity River in above normal and below normal years during January. Under Alternatives 1A and 3 during January, there would be large increases in flows (up to 61% higher) relative to NAA. Under Boundary 1 during January, flows would be identical to those under NAA_ELT_2015. Because there are no negative effects in Boundary 1 during these month and water year types, and no CEQA conclusions under Alternative 1A and 3were beneficial solely as a result of higher January flows in above normal and below normal water year types, this difference between Boundary 1 effect and Alternative 1A and 3 effects in January would suggest that the CEQA conclusions in the Trinity River for Boundary 1 would be the same as both Alternative 1A and 3.

The effect of Boundary 1 in the Feather River high-flow channel would be similar to effects under Alternative 1A and 3, except during January, February, April, May, and September through December. Differences in January, February, April, May, October, and November are a result of positive effects under Alternatives 1A and 3 becoming less positive under Boundary 1in all of these months. During September, Alternatives 1A and 3 would cause reductions in flows that would be even lower under Boundary 1. During December, positive effects under Alternatives 1A and 3 would become negative under Boundary 1. This December difference would not cause a change in CEQA determinations because it would not be substantial and would only occur in one month. Therefore, the CEQA conclusions based on the high-flow channel for Boundary 1 would be the same as both Alternatives 1A and 3.There would be no flow differences between Boundary 1 and Alternative 1A and 3 in the Feather River low-flow channel and, therefore, CEQA conclusions based on the low-flow channel for Boundary 1 would be the same as both Alternatives 1A and 3.

The effect of Boundary 1 in the American River would be similar to effects under Alternative 1A and 3, except during May, June, and October. In May and June, these differences are a result flow increases (a benefit) under Alternatives 1A and 3 becoming smaller flow increases under Boundary 1 (Table 5E-49, Table 5E-52) and, therefore, this would not change any CEQA conclusions. In October, small to moderate flow increases under Alternatives 1A and 3 would become small to moderate flow decreases under Boundary 1. This difference would not result in differences in the CEQA conclusions between Alternatives 1A and 3 and Boundary 1 because the determinations are not based on a single month (October) and there would also be a concomitant change during August from flow reductions under Alternatives 1A and 3 to negligible flow changes under Boundary 1. Therefore, CEQA conclusions based on American River flows for Boundary 1 would be the same as both Alternatives 1A and 3.

The effect of Boundary 1 on Stanislaus River (Table 5E-56) flows would be similar to or better than effects of Alternatives 1A and 3. As such, the CEQA conclusions would be the same.

As reported in Section 5E.5.1.2, *Surface Water*, CEQA conclusions related to OMR flows under and Boundary 1 would be the same as both Alternatives 1A and 3.

The effect of Boundary 1 on flows in the Sacramento River downstream of the North Delta diversion facilities (Table 5E-62) and at Rio Vista (Table 5E-65) would be similar to or better than effects of

Alternatives 1A and 3 during January through June and August. However, the reduction in flows under Boundary 1 in the Sacramento River downstream of the North Delta diversion would be slightly greater than reductions in Alternatives 1A and 3 during July and September through December, but would not be substantial.

The effect of Boundary 1 on Delta Outflow (Table 5E-68) would be similar to or better than effects of Alternative 3, except during September and October, when beneficial effects of Alternative 3 would be negative effects under Boundary 1 (up to 76% lower in nearly all water year types). The effects of Boundary 1 on Delta Outflow during most months would be more negative than effects under Alternative 1A and, therefore, conclusions from Alternative 1A should not be used for Boundary 1 conclusions, except during summer and fall months when Delta outflow is already greatly reduced under Alternative 1A. Reductions in fall Delta outflow would cause reductions in fall abiotic habitat index for delta smelt rearing using the equations from Feyrer et al. (2011), which is based on Delta outflow (as indicated by X2) (Impact AQUA-5), and is consistent with the modeled criteria of Boundary 1, which did not include the Fall X2 action. Therefore, Alternative 1A is the same as and should be used for the Boundary 1 CEQA conclusions for summer and fall months and Alternative 3 is the same as and should be used for the Boundary 1 CEQA conclusions for winter and spring months.

The effect of Boundary 1 on San Joaquin River (Table 5E-71) and Mokelumne River (Table 5E-74) flows would be similar to or better than effects of Alternatives 1A and 3. As such, the CEQA conclusions for Boundary 1 based on flows in these rivers would be the same as both alternatives.

5E.5.1.8 Terrestrial Biological Resources

All impacts from construction of Boundary 1 would be the same as those under Alternative 4A.

5E.5.1.9 Land Use

All impacts from construction and operation of the water conveyance features under Boundary 1 on land use would be the same as Alternative 4A.

5E.5.1.10 Agricultural Resources

Construction-related effects of Boundary 1 would be the same as the effects described for Alternative 4A. Impacts to Important Farmland and farmland under Williamson Act contracts under Boundary 2 would be the same as Alternative 4A. Temporary construction activities and the permanent footprints associated with physical features could create conflicts with existing irrigation and drainage facilities throughout the study area, similar to Alternative 4A.

The hydrodynamic effects of habitat restoration activities under Alternatives 1A and 3 which have the potential to change the quality of irrigation water in parts of the study would not apply to Boundary 1. However, the effects of Boundary 1 on agriculture would be similar to Alternatives 1A, 3 and 4A and would be significant and unavoidable, with mitigation incorporated.

5E.5.1.11 Recreation

All impact conclusions for construction and maintenance of the water conveyance features under Boundary 1 on recreation would be the same as Alternative 4A. All operational impacts on recreation would be the same as those described for Alternative 1A.

Operations under Boundary 1 would result in similar or greater storage in reservoirs than Alternatives 1A and 3 for all the principal reservoirs except Oroville Reservoir. Increased reservoir storage will result in less impacts to water-based recreation opportunities and experiences at north- and south-of-Delta reservoirs than Alternatives 1A and 3 with the exception of Oroville Reservoir, which will see a decrease in water levels and a greater impact to water-based recreation than Alternatives 1A and 3. However, this impact would be less than significant consistent with the analysis for Alternatives 1A and 3.

5E.5.1.12 Socioeconomics

Construction-related socioeconomic impacts would be the same as those described for Alternative 4A. Operations-related socioeconomic impacts under Boundary 1 would be less than those described under Alternatives 1A and 3, with the exception of discussions related to in-Delta agricultural economics. Under CEQA, economic effects are not significant impacts, but an EIR should consider their potential to lead to reasonably foreseeable physical changes in the environment. The significance of those associated environmental impacts is discussed in other resources. As such, consistent with Alternatives 1A and 3, the CEQA conclusions for all operational impacts on socioeconomics is No Impact, and Boundary 1 CEQA conclusions would be the same.

5E.5.1.13 Aesthetics and Visual Resources

Impacts to aesthetics and visual resources under Boundary 1 would be the same as those described under Alternative 4A.

5E.5.1.14 Cultural Resources

Impacts to cultural resources under Boundary 1 would be the same as those described under Alternative 4A.

5E.5.1.15 Transportation

All impacts from construction and operation of the water conveyance features under Boundary 1 on transportation would be the same as those described Alternative 4A.

5E.5.1.16 Public Services and Utilities

Impacts to public services and utilities under Boundary 1 would be the same as those described under Alternative 4A.

5E.5.1.17 Energy

Energy use under Boundary 1 would be the same as Alternative 4A for construction.

Boundary 1 would result in operational impacts greater than those described for Alternatives 1A for pumping and conveyance in the north and south Delta. Impacts would be greater than those described for Alternative 3 in the north Delta, and less than those described for Alternative 3 in the south Delta. Under Boundary 1, south Delta exports would be reduced relative to NAA, while north Delta exports would be greatly increased. Overall, decreases in south Delta exports under Boundary 1 would be less than Alternative 1A and more than Alternative 3 relative to NAA. Increases in north Delta exports would be greater for Boundary 1 than Alternatives 1A and 3 relative to NAA. These increases in exports in the north Delta would result in a greater energy need for intake pumping; However, operation of the water conveyance facility would be managed to maximize efficient energy use, including off-peak pumping and use of gravity. Boundary 1 would not result in substantial impacts related to wasteful or inefficient energy use for construction, and pumping and conveyance and the CEQA conclusion would be the same for Alternatives 1A and 3 and Boundary 1.

5E.5.1.18 Air Quality and Greenhouse Gases

Air quality and greenhouse gas impacts from construction under Boundary 1 would be the same as, or less than, Alternative 4A.

Boundary 1 would result in operational impacts greater than those described for Alternatives 1A and 3 due to an increase in exports in the North Delta resulting in greater impacts to air quality and greenhouse gases. While impacts due to operation would be greater than those described under Alternatives 1A and 3, Boundary 1 would not result in a substantial increase in impacts related to air quality and greenhouse gases and the CEQA conclusion would be the same as for Alternatives 1A and 3.

5E.5.1.19 Noise

All noise impacts from construction of the water conveyance features under Boundary 1 would be the same as those described under Alternative 4A.

Noise impacts from operation may be slightly greater than those under Alternative 1A and 3 in the north Delta due to additional operation of the water conveyance facilities which would expose noise-sensitive land uses during pumping plant operations to noise levels above daytime and nighttime thresholds, but there would be no difference in the CEQA conclusions.

5E.5.1.20 Hazards and Hazardous Materials

All hazardous and hazardous materials impacts from construction and operation of the water conveyance features under Boundary 1 would be the same as Alternative 4A.

5E.5.1.21 Public Health

All impacts from construction of the water conveyance features under Boundary 1 on public health would be the same as described under Alternative 4A.

CEQA conclusions related to impacts to public health from operations under Boundary 1 would be the same as Alternatives 1A, 3, and 4A.

5E.5.1.22 Mineral Resources

All impacts from construction and operation of the water conveyance features under Boundary 1 on mineral resources would be the same or less than as Alternative 4A.

5E.5.1.23 Paleontological Resources

All impacts from construction and operation of the water conveyance features under Boundary 1 on paleontological resources would be the same or less than as Alternative 4A.

5E.5.1.24 Environmental Justice

All environmental justice impacts from construction and operation of the water conveyance features under Boundary 1 would be the same as Alternative 4A.

5E.5.1.25 Climate Change

All climate change impacts from construction under Boundary 1 would be the same as Alternative 4A. Impacts of the operation of the water conveyance features under Boundary 1 would be the same as Alternative 1A and 3.

Climate change will increase air temperatures, CO_2, humidity, and cloudiness. These factors will lead to increased water demand for crops and vegetation, and reduced water supplies from open water supply or conveyance facilities that include canals and reservoirs. Boundary 1 would result in similar impacts as Alternative 1A and 3 with respect to water operations. Because this scenario would increase total SWP and CVP exports relative to the No Action Alternative, it would not result in reduced water supply reliability or increased reliance on adaptability to the impacts of climate change, and the CEQA conclusions for Boundary 1 would be the same as Alternatives 1A and 3.

5E.5.1.26 Growth Inducement and Other Indirect Effects

Growth inducement and other indirect effects from construction would be the same as Alternative 4A. The growth inducement effects of operation of the water conveyance features under Boundary 1 would be the same or slightly greater than Alternatives 1A and 3. South of Delta SWP and CVP deliveries under Boundary 1 are projected to generally increase compared to the No Action Alternative. Increased diversions would increase operational flexibility and water supply available to SWP and CVP for exports south of the Delta. Increased exports have the potential for indirect growth inducement associate with water delivery due to increases water deliveries and subsequent population growth and agricultural operation expansion; however, this indirect growth would not be significant and the CEQA conclusions for Boundary 1 would be the same as Alternative 1A and 3.

5E.5.2 Boundary 2

5E.5.2.1 Water Supply

Generally, water supply related impacts under Boundary 2 would be similar to or less than the impacts disclosed under Alternative 4H3, Alternative 4H3+, and Alternative 8. During construction of water conveyance facilities, operation of existing SWP and CVP water conveyance would continue. Construction would not affect the timing or amount of water exported from the Delta through SWP and CVP facilities.

The effect of Boundary 2 on reservoir storage would be similar to or better than effects of Alternative 4H3 and Alternative 4H3+ for all reservoirs. In addition, the effect of Boundary 2 end-of-May and end-of-September reservoir storage would be similar to or better than the effect of Alternative 8 for all reservoirs, except Lewiston Reservoir. The effect of Alternative 8 on Lewiston storage would be similar to Boundary 2 in all water year types except dry water years during May and dry and critical years during September. However, these effects would be infrequent and not substantial, such that the Alternative 8 CEQA conclusions based on reservoir storage would also apply for Boundary 2.

Overall, the effect of Boundary 2 on SWP and CVP deliveries is greater (lower deliveries, or a negative effect) compared to effects of Alternative 4H3 on deliveries. The effect of Boundary 2 on CVP deliveries would likely be greater (greater reduction) than the effect on SWP deliveries. Therefore, demand for water transfers to supplement supply shortages is estimated to increase under Boundary 2 compared to 4H3. Instead, effects of Boundary 2 on SWP and CVP deliveries and resulting demand for water transfers would be similar to or better than Alternative 8. Therefore, CEQA conclusions for Boundary 2 based on SWP and CVP deliveries and water transfers would be the same as Alternative 8.

5E.5.2.2 Surface Water

There would be no increased risk for flood flows under Boundary 2 compared to Alternative 4H3, Alternative 4H3+, and Alternative 8. Further, effects on flood flows in the San Joaquin River would remain consistent under Boundary 2, Alternative 4H3, Alternative 4H3+, and Alternative 8.

Impacts of Boundary 2 on reservoir storage would be to the same as Alternative 4H3, Alternative 4H3+, and Alternative 8 in all reservoirs. As a result, the frequency at which Shasta Lake, Folsom Lake, and Lake Oroville storage is close to the flood storage capacity and would not exceed SWP or CVP reservoir flood storage capacities would be the same between Boundary 2, Alternative 4H3, Alternative 4H3+, and Alternative 8.

The effect of Boundary 2 on OMR flows (Table 5E-59) flows would be similar to or better than effects of Alternative 4H3, Alternative 4H3+, and Alternative 8, except during April and May relative to Alternative 8. Although there are reductions under Boundary 2 in positive effects to OMR flows under Alternative 4H3, Alternative 4H3+, and Alternative 8 under most months (Table 5E-58), OMR flows under Boundary 2 would be more positive or more negative than NAA_ELT_2015 flows during similar months and water year types between Boundary 2 and Alternative 4H3, Alternative 4H3+, and Alternative 8. One exception is during April and May, when positive effects to OMR flows under Alternative 8 would be reductions in OMR flows under Boundary 2. However, the CEQA conclusions for Boundary 2would be the same as for Alternative 8 and Alternative 4H3, which are less than significant (Impacts SW-1 through SW-3) or less than significant with mitigation (Impacts SW-4 through SW-9). Construction-related impacts to surface water under Boundary 2 would be the same as Alternative 4A.

5E.5.2.3 Groundwater

The construction-related effects of Boundary 2 on groundwater would be the same as under Alternative 4A. During operation of the facilities, Boundary 2 would have the same effects as described for Alternative 4H3 and Alternative 8. Impacts to groundwater in the SWP and CVP Export Service Areas would be similar to but less severe than those described under Alternative 8 because both operating scenarios would reduce exports. This reduction in deliveries could lead to a corresponding increase in groundwater use. The increase in groundwater pumping would cause a substantial decrease in groundwater levels, supplies, and recharge, and yields of domestic, municipal and agricultural wells in the Export Service Areas. Increased groundwater pumping in response to reduced SWP/CVP water supply availability under Boundary 2 would also degrade groundwater quality in portions of the Export Service Areas by altering regional patterns of groundwater flow and induce the migration of poor-quality groundwater into areas of good-quality groundwater. Land subsidence from groundwater pumping in most of the Export Service Areas under Boundary 2 would be negligible.

5E.5.2.4 Water Quality

The construction-related effects of Boundary 2 on water quality would be the same as those described for Alternative 4A.

Further, for the reasons described for the Boundary 1 scenario, the Boundary 2 scenario would have a less than significant impact on the following constituents in all areas of the affected environment, which includes the Upstream of Delta Region, Delta Region, and SWP/CVP Export Service Areas: ammonia, boron, bromide, dissolved oxygen, *Microcystis*, nitrate, pathogens, phosphorus, trace metals, and TSS/turbidity. Further, impacts to water quality from facilities operations in the Upstream of Delta Region and SWP/CVP Export Service Areas with the Boundary 2 scenario would be less than significant for chloride, EC, mercury, organic carbon, pesticides, and selenium. Thus, remaining to be addressed within this water quality assessment are impacts of the Boundary 2 scenario in the Delta Region to the following constituents: chloride, EC, mercury, organic carbon, pesticides, and selenium. These constituents are addressed separately below. Effects of the changes in Delta water quality on San Francisco Bay are addressed at the end of this section.

In the discussion below, the water quality conditions that would occur with the Boundary 2 scenario are related to the BDCP and WaterFix alternatives, as appropriate. While the Boundary 2 scenario is operationally most similar to BDCP Alternatives 4H3 and 8, the water quality modeling that was conducted for these alternatives incorporated both facilities operations and tidal habitat restoration, both of which would have an effect on the resultant source water proportions at Delta assessment locations. Further, the modeling of these alternatives was conducted for the late long-term timeframe. Only WaterFix Alternatives 4A, 2D, and 5A were modeled with no tidal habitat restoration and at the early long-term timeframe, as described in Appendix 5A, Section B: *CALSIM II and DSM2 Modeling Simulations and Assumptions*. Thus, it is most practical to discuss effects of the Boundary 2 scenario, which has comparatively very little tidal habitat restoration and also is evaluated at the early long-term timeframe, relative to the WaterFix alternatives. Discussion of Alternatives 4H3 and 8 is included if relevant to illustrating the potential Boundary 2 scenario effects.

Chloride: The modeling results for Boundary 2 show that, compared to the No Action Alternative (ELT), there would be less frequent exceedance of the objective under Boundary 2. Further, the modeling results show that the 150 mg/L objective at the Contra Costa PP No. 1 would be met more frequently under Boundary 2, relative to the No Action Alternative (ELT). As described for Boundary 1, modeled exceedances of these objectives are primarily a function of the modeling capability and assumptions, and that real time operations that would occur would prevent exceedances of these objectives under Boundary 2 operations. Consequently, operations under the Boundary 2 scenario would be expected to result in a less than significant impact to Delta chloride concentrations.

EC: Significant impacts to EC were identified for all the project alternatives. For Alternatives 4H3 and 8, the significant impacts were associated with both facilities operations and the tidal habitat restoration conservation measures. For Alternative 4A, the significant impacts to EC were associated with modeled degradation at Emmaton in the months of July, August, and September, and more frequent exceedance of the Prisoners Point EC objective in April and May, relative to the No Action Alternative (ELT). With the Boundary 2 scenario, long-term average EC at Emmaton would increase significantly only in July. The Boundary 2 scenario modeling also shows more frequent exceedances of the Prisoners Point objective than under the No Action Alternative (ELT), thus the significant impact determination for Alternative 4A based on degradation at Emmaton and exceedances of the

Prisoners Point objective applies to Boundary 2. Review of the EC modeling indicated that exceedances of WQCP EC objectives are primarily a function of the CALSIM II monthly time-step and other key model assumptions, and that real time operations that would occur would prevent exceedances of objectives under the Boundary 2 scenario. The mitigation described for Alternatives 4A, 2D, and 5A addresses adaptive management of the north and south Delta intakes and real time operations to reduce these impacts to a less than significant level.

Mercury: Facilities operations under Alternative 4H3 was identified as having a less than significant impact to mercury, whereas Alternative 8 was identified as having a significant impact to mercury. The significant impact to mercury with Alternative 8 is due to increased San Joaquin River influence throughout most of Delta, which has higher methylmercury concentrations, and decreased influence of the Sacramento River, which has comparatively lower methylmercury concentrations. Under the Boundary 2 scenario, long-term average methylmercury concentrations would be the same as those under Alternative 4A, except at Franks Tract and Contra Costa PP No. 1, which would see slightly (0.01 ng/L) higher concentrations. Because these results are most similar to Alternative 4A, which did not have significant impacts to mercury, it is concluded that the Boundary 2 scenario also would have less than significant impacts to mercury.

Organic Carbon: Facilities operations under Alternatives 4A and 4H3 were identified as having a less than significant impact to organic carbon, whereas Alternative 8 was identified as having a significant impact. The primary driver of the significant impact under Alternative 8 was the greater proportion of San Joaquin River water at Franks Tract, Rock Slough, and Contra Costa PP No. 1, which is higher in DOC than other Delta source waters. The modeled long-term average DOC concentrations under the Boundary 2 scenario are 0.2–0.4 mg/L greater than for Alternative 4A at these Delta assessment locations, but 0.2–0.3 mg/L less than the Alternative 8 concentrations. Modeled long-term average concentrations at these locations range from 3.1–3.6 mg/L under the No Action Alternative (ELT) and from 3.5–4.2 mg/L under the Boundary 2 scenario. As described in Chapter 8, *Water Quality*, a study commissioned by the California Urban Water Agencies determined that source water between 4 and 7 mg/L TOC (most of which is in the form of DOC in the Delta) would allow continued flexibility in treatment technology necessary to achieve existing drinking water criteria for disinfection byproducts. The increases in long-term average DOC concentrations modeled to occur at various Delta locations under the Boundary 2 scenario are of sufficiently small magnitude that they would not be expected to require existing drinking water treatment plants to substantially upgrade treatment for DOC removal above levels currently employed. Thus, it is concluded that the less than significant impact determination for Alternatives 4A and 4H3 for organic carbon applies to the Boundary 2 scenario.

Pesticides: Facilities operations under Alternative 4A and 4H3 were identified as having a less than significant impact to pesticides, whereas Alternative 8 was identified as having a significant impact to pesticides, with the primary driver of the significant impact being the greater proportion of San Joaquin River water at Franks Tract, Rock Slough and Contra Costa PP No. 1. The San Joaquin River water is considered to be higher in pesticides compared to other Delta source waters based on existing data and water body impairments. The Boundary 2 scenario would have greater portions of San Joaquin River water at Franks Tract, Rock Slough, and Contra Costa PP No. 1 than under Alternative 4A, but less than Alternative 8. The San Joaquin River would comprise close to or greater than 50 percent of the total source water volume at these locations and the proportion of San Joaquin River water would increase, relative to the No Action Alternative (ELT), between 20 and 35 percent. As discussed for Alternative 8, these large increases in San Joaquin River source water fraction could alter the long-term risk of pesticide-related toxicity to aquatic life. Also, as discussed for the project alternatives, in the future, a greater degree of pesticide control is anticipated, but forecasting the success of those efforts would be speculative. Thus, there is the potential for there to be significant impacts to pesticides with Boundary 2.

Selenium: Facilities operations under Alternative 4H3 was identified as having a less than significant impact to selenium, whereas Alternative 8 was identified as having a significant impact to selenium, with the primary driver being increases in whole body sturgeon concentrations at the western Delta locations of the San Joaquin River at Antioch and Sacramento River at Mallard Island. The modeled Boundary 2 scenario selenium concentrations in the western Delta are the same as those under Alternative 8. Due to the increased fraction of San Joaquin River water in the western Delta, which has higher waterborne selenium concentrations than the other source waters, Boundary 2 could potentially result in a significant impact to whole body sturgeon selenium concentrations in the western Delta. However, there is substantial uncertainty associated with this impact determination. The sturgeon selenium bioaccumulation model would need to be calibrated for the western Delta locations modeled in order for this impact determination to be verified.

San Francisco Bay: As discussed for the Boundary 1 scenario, the Boundary 2 scenario would have a less than significant impact to water quality for all constituents assessed, except selenium. As discussed above in "Selenium," the Boundary 2 scenario has the potential to result in significant impacts to selenium in the western Delta, based on higher concentrations of selenium in the western Delta, as described for Alternative 8. As such, the Boundary 2 scenario would be considered to have a significant impact to San Francisco Bay selenium.

5E.5.2.5 Geology and Seismicity

All impacts from construction and operation of the water conveyance features under Boundary 2 on geology and seismicity would be the same as Alternative 4A.

5E.5.2.6 Soils

All impacts from construction and operation under Boundary 2 on soils would be the same as or less than Alternative 4A.

5E.5.2.7 Fish and Aquatic Resources

Boundary 2 effects were compared to effects of Alternatives 4H3, 4H3+, and 8, which were determined *a priori* to be most similar among all alternatives to Boundary 2 effects.

As noted in Section 5E.5.2.1, *Water Supply*, CEQA conclusions based on reservoir storage for Boundary 2 would be the same as conclusions for Alternatives 4H3, 4H3+, and 8.

The effect of Boundary 2 on Sacramento River flows at Keswick and Red Bluff would be similar to or better than effects of Alternatives 4H3 and 4H3+ with few exceptions that would still make the Boundary 2 conclusions the same as Alternative 4H3 and 4H3+ CEQA conclusions (Table 5E-23, Table 5E-26). At Wilkins Slough, effects of Boundary 2 on Sacramento River flows would be less beneficial than Alternatives 4H3 and 4H3+ during May and July, although because these effects would be beneficial under all scenarios during May, Alternative 4H3 and 4H3+ CEQA conclusions could be used for Boundary 2 with respect to these locations during May (Table 5E-29). During July, effects of Boundary 2 would be marginally more negative than effects of Alternatives 4H3 and 4H3+

at Wilkins Slough (Table 5E-28), but not of a high enough magnitude to change CEQA determinations under Alternatives 4H3 and 4H3+ based on Wilkins Slough.

At Verona, effects of Boundary 2 would be similar to or better than effects of Alternatives 4H3 and 4H3+ scenarios, except during June, July, and October (Table 5E-32). During June, Boundary 2 effects would be negative relative to the NAA_ELT_2015 baseline, whereas Alternative 4H3 and 4H3+ effects would be positive relative to the NAA_ELT_2015 baseline (Table 5E-31). Therefore, positive effects seen in June and no effects seen in July and October under Alternatives 4H3 and 4H3+ would become negative under Boundary 2. The effect of Boundary 2 on flows at all four Sacramento River locations would be similar to or better than effects of Alternative 8 for most of the year, except during February through May when effects of Boundary 2 would be lower than effects of Alternative 8 (Table 5E-23, Table 5E-26, Table 5E-30, Table 5E-32). However, at all locations, this is the result of a change from a positive effect on flows under Alternative 8 to a negligibly positive effect under Boundary 2 (Table 5E-22, Table 5E-25, Table 5E-28, Table 5E-31). Therefore, CEQA conclusions for Boundary 2 would be the same as those described for Alternative 8 for the Sacramento River upstream of the Delta.

The effect of Boundary 2 on Clear Creek (Table 5E-35) and Trinity River (Table 5E-38) flows would be similar to or better than effects of Alternatives 4H3, 4H3+, and 8 with few exceptions in the Trinity River that would still make Boundary 2 CEQA conclusions based on these rivers the same as Alternatives 4H3, 4H3+, and 8 CEQA conclusions.

There would be no differences in the effect on flow between Boundary 2, Alternative 4H3, Alternative 4H3+, or Alternative 8 in the Feather River low-flow channel (Table 5E-41). Therefore, the Alternative 4H3, 4H3+, and 8 CEQA conclusions based on the low flow channel would all be the same for Boundary 2. The effect of Boundary 2 on flow in the Feather River high-flow channel would be similar to or better than effects of Alternatives 4H3 and 4H3+, except during April through July, October, and December (Table 5E-44, Table 5E-47). In June, July, October, and December, positive effects or an overall lack of effect on flows under Alternative 4H3 and 4H3+ would be negative effects under Boundary 2 (Table 5E-43, Table 5E-46). During April and May, positive effects of Alternative 4H3 and 4H3+ would be small to negligible under Boundary 2 and, therefore, CEQA conclusions would be the same for Alternative 4H3, Alternative 4H3+, and Boundary 2 during these months. Effects of Boundary 2 on high-flow channel flows would be greater (more negative) than effects of Alternative 8 during January through June and similar to or lower (more positive) than effects of Alternative 8 during July through December (Table 5E-44, Table 5E-47). The more negative effects in January through June would be a result mostly of a reduction in benefits (positive changes in flows) from Alternative 8 to Boundary 2 and, therefore, CEQA conclusions based on these months in the high-flow channel would be the same for Alternative 8 and Boundary 2. There would be some reduced negative effects under Boundary 2 relative to Alternative 8 during July through December, such as during November, but negative flow effects would dominate during these months in the high-flow channel. Therefore, CEQA conclusions for Boundary 2 based on Feather River high-flow channel flows would be the same as Alternative 8 conclusions.

The effect of Boundary 2 on flow in the American River would be similar to or better than effects of Alternatives 4H3 and 4H3+, except during June, July, August, and November (Table 5E-49, Table 5E-53). During June, effects of Boundary 2 on flows would be small to negligible, but would be beneficial under 4H3 and 4H3+. During July, beneficial effects under Alternatives 4H3 and 4H3+ would become negative (reduced flows) under Boundary 2 and, therefore, Boundary 2 conclusions are different from Alternative 4H3 and 4H3+ CEQA conclusions. During August, a lack of effects under

Alternatives 4H3 and 4H3+ would be beneficial effects (increased flows) under Boundary 2. During November, negative effects of Alternatives 4H3 and 4H3+ would be small to negligible effects under Boundary 2. Therefore, CEQA conclusions for Boundary 2 would be the same as those for Alternatives 4H3 and 4H3+ in all months but July. The effect of Boundary 2 on flow in the American River would be similar to or better than effects of Alternative 8, except during April through June. (Table 5E-50, Table 5E-53). During April through June, beneficial effects of Alternative 8 would be reduced to less beneficial or negligible effects under Boundary 2. However, because there would be no substantial changes between Boundary 2 and Alternative 8 during these months, the CEQA conclusions would be the same.

The effect of Boundary 2 on Stanislaus River (Table 5E-56) flows would be similar to or better than effects of Alternatives 4H3, 4H3+, and 8. As such, the CEQA conclusions would be the same.

As reported in Section 5E.5.2.2, *Surface Water*, the CEQA conclusions for Alternative 8 and Alternative 4H3 would apply to Boundary 2.

The effect of Boundary 2 on flows in the Sacramento River downstream of the North Delta diversion facilities (Table 5E-62) and at Rio Vista (Table 5E-65) would be similar to or better than effects of Alternative 4H3 and 4H3+ except for April through July and similar or better than effects of Alternative 8 except for February through May. The reduction in flows would be significant under Alternatives 4H3 and 4H3+ during April through July and the reduction in flows under Boundary 2 would be slightly greater, although not substantially greater, than that under Alternative 4H3 and 4H3+, and would therefore also be significant. Therefore, the CEQA conclusions under Alternatives 4H3 and 4H3+ would be the same for Boundary 2. The difference in effects between Boundary 2 and Alternative 8 during February through May would be the result of beneficial effects (increased flows) under Alternative 8 becoming negative effects (reduction in flows) under Boundary 2 and, therefore, Boundary 2 CEQA conclusions would be different from Alternative 8 based on these locations during February through May. Instead, both Alternatives 4H3 and 4H3+ CEQA conclusions based on flows in the Sacramento River downstream of the North Delta diversion facilities and at Rio Vista are the same as and would apply to Boundary 2 for all months.

The effect of Boundary 2 on Delta outflow (Table 5E-68) would be similar to or better than effects of both Alternative 4H3 and 4H3+ and, therefore, CEQA conclusions based on Delta outflow would be the same. The effect of Boundary 2 on Delta outflow would be similar to or better than effects of Alternative 8 during January, March, and July through October, but would be worse (more negative effect) during February, April through June, November, and December. In all months when Boundary 2 effects would be worse, this result would be caused by a reduction in beneficial effects of Alternative 8, but flow effects under Boundary 2 would either remain beneficial (higher flows) or there would be no flow effects of Boundary 2 (Table 5E-67). Therefore, Boundary 2 CEQA conclusions based on Delta outflow would also be the same as those for Alternative 8.

The effect of Boundary 2 on San Joaquin River (Table 5E-71) and Mokelumne River (Table 5E-74) flows would be similar to or better than effects of Alternatives 4H3, 4H3+, and 8. As such, the CEQA conclusion based on San Joaquin River and Mokelumne River flows under Boundary 2 would be the same as conclusions in all three alternatives.

5E.5.2.8 Terrestrial Biological Resources

All impacts from construction and operation of Boundary 2 would be the same as those described under Alternative 4A.

5E.5.2.9 Land Use

All impacts from construction and operation of the water conveyance features under Boundary 2 would be less than those described under Alternative 4A.

5E.5.2.10 Agricultural Resources

Under Boundary 2, construction and operation would result in impacts to agriculture, including groundwater elevation, salinity, and disruptions to agricultural infrastructure. The CEQA conclusions would be the same as those described for Alternative 4A and 8.

5E.5.2.11 Recreation

All impacts from construction of the water conveyance features under Boundary 2 on recreation would be the same as Alternative 4A.

Because upstream impacts under Boundary 2 would also be similar to Alternative 4H3, effects of changes in reservoir levels would be similar to Alternative 4H3, and the CEQA conclusions would be the same. With the exception of San Luis Reservoir, reservoir levels under Boundary 2 operations are anticipated to either not change or to fall below the individual reservoir recreation thresholds less frequently than under NAA conditions. Reservoir levels at San Luis Reservoir could fall below the reservoir boating threshold at the end of September more frequently than under the NAA, and based on the modeling, potentially more frequently than Alternatives 4H2 and 4H4. Alternatives 4H2 and 4H4 were determined to be significant and as such, Boundary 2 could also result in a significant impact.

The effects of Boundary 2 on recreational fishing, land- and water-based recreation, and boating-related recreation would be the same as those described for Alternatives 4A and 8, except for San Luis Reservoir described above.

5E.5.2.12 Socioeconomics

Construction-related socioeconomic impacts would be the same as those described for Alternative 4A. Operations-related socioeconomic impacts under Boundary 1 would be less than those described under Alternative 8 but greater than effects described for Alternative 4H3. Under CEQA, economic effects are not significant impacts, but an EIR should consider their potential to lead to reasonably foreseeable physical changes in the environment. The significance of those associated environmental impacts is discussed in other resources. As such, consistent with Alternatives 1A and 3, the CEQA conclusions for all operational impacts on socioeconomics is No Impact, and Boundary 1 CEQA conclusions would be the same.

5E.5.2.13 Aesthetics and Visual Resources

Impacts to aesthetics and visual resources under Boundary 2 would be the same as those described under Alternative 4A.

5E.5.2.14 Cultural Resources

Impacts to cultural resources under Boundary 2 would be the same as those described under Alternative 4A.

5E.5.2.15 Transportation

All impacts from construction and operation of the water conveyance features under Boundary 2 on transportation would be the same as those described under Alternative 4A.

5E.5.2.16 Public Services and Utilities

Impacts to public services and utilities under Boundary 2 would be the same as those described under Alternative 4A.

5E.5.2.17 Energy

Energy use under Boundary 2 would be the same as Alternative 4A for construction.

Boundary 2 would result in operational impacts similar to, or slightly less than, impacts described for Alternative 4H3 for pumping and conveyance in the north and south Delta, as less water would be pumped and conveyed under Boundary 2 compared to Alternative 4H3. Under both Boundary 2 and Alternative 4H3, south Delta exports would be reduced relative to NAA, but Boundary 2 would include even greater restrictions than Alternative 4H3. Operation of the water conveyance facility would be managed to maximize efficient energy use, including off-peak pumping and use of gravity. Boundary 2 would not result in substantial impacts related to wasteful or inefficient energy use for construction, and pumping and conveyance. The CEQA conclusions for Alternative 4H3 would apply to Boundary 2 for energy resources.

5E.5.2.18 Air Quality and Greenhouse Gases

Air quality and greenhouse gas impacts from construction under Boundary 2 would be the same as Alternative 4A. Boundary 2 would result in operational impacts slightly less than those described for Alternative 8, but the CEQA conclusions for Boundary 2 would be the same as those for Alternative 8.

5E.5.2.19 Noise

All noise impacts from construction of the water conveyance features under Boundary 2 would be the same as those described under Alternative 4A. Noise impacts from operation under Boundary 2 would be similar to or less than Alternative 8 due to less pumping under Boundary 2, and the CEQA conclusions for operations-related noise under Boundary 2 would be the same as described for Alternative 8.

5E.5.2.20 Hazards and Hazardous Materials

All hazardous and hazardous materials impacts from construction of the water conveyance features under Boundary 2 would be the same as Alternative 4A, and CEQA conclusions for operation-related effects would be the same as those described for Alternative 8.

5E.5.2.21 Public Health

All impacts from construction of the water conveyance features under Boundary 2 on public health would be the same as described under Alternative 4A. Based on the water quality analysis presented above, except for impacts to public health associated with pesticides and selenium, the public health

CEQA conclusions for operations of Boundary 2 would be the same as the conclusions for Alternative 4A. For pesticides- and selenium-related public health impacts, the CEQA conclusions for public health from operations under Boundary 2 would be the same as Alternative 8.

5E.5.2.22 Mineral Resources

All impacts from construction and operation of the water conveyance features on mineral resources under Boundary 2 would be the same or less than Alternative 4A.

5E.5.2.23 Paleontological Resources

All impacts from construction and operation of the water conveyance features on paleontological resources under Boundary 2 would be the same or less than Alternative 4A.

5E.5.2.24 Environmental Justice

Disproportionate impacts to minority and low-income populations would occur under Boundary 2 due to impacts on public health associated with subsistence fishing, which is specifically associated with minority populations in the Delta compared to the population at large. This impact is based on the potential for significantly greater bioaccumulation of selenium in sturgeon in the western Delta,.

5E.5.2.25 Climate Change

Climate change will increase air temperatures, CO_2, humidity, and cloudiness. These factors will lead to increased water demand for crops and vegetation, and reduced water supplies from open water supply or conveyance facilities that include canals and reservoirs. Boundary 2 would result in similar impacts as Alternative 8 with respect to water operations. Because this scenario would reduce total SWP and CVP exports relative to the No Action Alternative, it would result in reduced water supply reliability and therefore provide reduced resilience and adaptability to the impacts of climate change.

5E.5.2.26 Growth Inducement and Other Indirect Effects

Growth impacts under Boundary 2 would be similar to Alternative 8 because of their reduced exports. With respect to direct growth inducement potential, construction and operation of the conveyance facilities would not foster economic or population growth or the construction of additional housing within the study area because of the limited number of new jobs created to construct and operate the facilities relative to the available labor pool and housing stock. With respect to indirect growth inducement potential associated with facility construction and operation, construction and operation of conveyance facilities could foster economic or population growth, or the construction of additional housing, indirectly in the surrounding environment.

South of Delta SWP and CVP deliveries under Boundary 2 are projected to decrease compared to the No Action Alternative. Reduced diversions would reduce operational flexibility and water supply available to SWP and CVP for exports south of the Delta. Decreases to CVP water supplies relative to the No Action Alternative would not remove any obstacle to growth, but would likely have increased secondary effects caused by developing new (or reallocated) water supplies needed to support the projected population growth. Reductions in SWP and CVP deliveries to CVP and SWP contractors could result in a range of potential responses, including increased groundwater pumping and surface water storage, fallowing of agricultural land, increased use of water transfers, curtailment of certain water uses, and expansion of water recycling and desalination. While past responses to extended droughts and increased water costs provide insights into the potential indirect effects of reduced SWP/CVP deliveries in export areas, such effects are speculative at this time.

5E.5.3 Scenario 2

In general, the intent behind Scenario 2 was to evaluate the water supply effects of a high-Delta outflow scenario (beyond that modeled for Alternative 4 in the BDCP Draft EIR/EIS or Alternative 4A in this FEIR/FEIS) that potentially provides both general and specific benefits to fish and their habitat related to increases in outflow during the fall (September through November), winter/spring (January through June), and summer (July and August) hydrological periods beyond those specified by the U.S. Fish and Wildlife Service and National Marine Fisheries Service in the 2008 and 2009 Biological Opinions, existing California Department of Fish & Wildlife California Endangered Species Act determinations, and the State Water Board's current WQCP. Increased fall Delta outflow will shift the low salinity zone further downstream in the Delta, which could result, based on current understanding of the science, in more favorable conditions for Delta smelt habitat in the western Delta and Suisun region. Similarly, increased winter/spring Delta outflow will shift the low salinity zone further downstream into the Suisun region which could result in more favorable conditions for longfin smelt and Delta smelt habitat. Higher Delta outflow during this period could also shift pelagic fish further from the export pumps and assist out-migrating salmonids. Additionally, the increased winter/spring Delta outflow would push fresh water through the Delta, past the Suisun region, and out into the San Francisco Bay which could benefit native estuarine species that have evolved under conditions of seasonally fluctuating salinity. The increase in Delta outflow during the summer over the amount specified in Alternative 4A may provide general habitat benefits and a quantity of flow that can be adaptively managed to benefit Delta smelt when conditions during the previous winter and spring are likely to produce a strong cohort. The relationships between the survival and abundance of various species and habitat conditions and outflows are currently under active investigation by the Collaborative Adaptive Management Team, an interagency group of scientists investigating outflow and other issues pertinent to CVP and SWP Delta operations. These issues will also be central to the Adaptive Management Program as part of the CWF as well as the State Water Board's current water quality control planning and other decision making processes.

5E.5.3.1 Summary of Effects of Scenario 2

Boundary 2 and Scenario 2 are very similar and as such, the following resource topics would have the same CEQA conclusions for Scenario 2 as were described above for the Boundary 2:

- Geology and Seismicity
- Soils
- Terrestrial Biological Resources
- Land Use
- Agricultural Resources
- Recreation
- Socioeconomics

- Aesthetics and Visual Resources
- Cultural Resources
- Transportation
- Public Services and Utilities
- Air Quality and Greenhouse Gases
- Noise
- Hazards and Hazardous Materials
- Public Health
- Mineral Resources
- Paleontological Resources
- Environmental Justice
- Climate Change
- Growth Inducement and Other Indirect Effects

5E.5.3.2 Water Supply

Generally, water supply related impacts under Scenario 2 would be similar to or less than the impacts disclosed under Alternative 4H4 and Alternative 8. During construction of water conveyance facilities, operation of existing SWP and CVP water conveyance would continue. Construction would not affect the timing or amount of water exported from the Delta through SWP and CVP facilities.

The effect of Scenario 2 on reservoir storage would be similar to or better than effects of Alternative 4H4 for all reservoirs except for end-of-May storage in Oroville (Table 5E-8, Table 5E-11, Table 5E-14, Table 5E-17, Table 5E-20). The effect of end-of-May Oroville storage would be slightly greater (more negative) under Scenario 2 compared to Alternative 4H4. The effects of Scenario 2 on reservoir storage would be similar to or better than effects of Alternative 8 for all reservoirs, except for end-of-September storage in Shasta and Oroville. For Shasta, this difference is a result of no effects under Alternative 8 on end-of-September storage becoming storage reductions in wetter water year types under Scenario 2 (Table 5E-7) and, therefore, Alternative 8 CEQA conclusions based on end-of-September Shasta storage should not be used for Scenario 2. For Oroville, the difference is a result of beneficial effects under Alternative 8 on end-of-September storage becoming less beneficial under Scenario 2, although Scenario 2 effect would also be beneficial (Table 5E-10). Thus, the CEQA conclusions for Scenario 2 regarding end-of-September Oroville storage would be the same as Alternative 8.

The effect on total exports (north Delta and south Delta exports combined) under Scenario 2 would be greater (more negative) than the effect on exports under Alternative 4H4 but similar to the effect on exports under Alternative 8 and, therefore, Scenario 2 CEQAA conclusions based on total exports are the same as those for Alternative 8. Relative to Alternative 4H4, the reductions in South Delta exports would occur in all water year types throughout the year whereas reductions in North Delta exports would occur for majority of months and water years. Relative to Alternative 8, North Delta exports under Scenario 2 would be greater (a negative effect) during January through June, but effects would be lower (a positive effect) during July through December. However, North Delta exports under Scenario 2 would be lower than under Alternative 4H4 year-round and, therefore, conclusions based on the North Delta diversions would be the same or better than those under Alternative 4H4. The effect of Scenario 2 on South Delta exports would be lower (a benefit) compared to Alternative 8 during most months except March and July through September and, therefore, Scenario 2 CEQA conclusions based on south Delta exports would be the same or better than those for Alternative 8 for those months. For March and July through December, South Delta exports under Scenario 2 would be lower than under Alternative 4H4 year-round and, therefore, conclusions based on the South Delta diversions would be the same or better than those under Alternative 4H4

5E.5.3.3 Surface Water

There would be no increased risk for flood flows under Scenario 2 compared to Alternatives 4H4 and 8. Further, effects on flood flows in the San Joaquin River would remain consistent under Scenario 2, Alternative 4H4, and Alternative 3.

Impacts of Scenario 2 on reservoir storage would be similar to Alternative 4H3 and 8 in all reservoirs with exceptions noted in Section 5E.5.3.2, *Water Supply*. Regardless, the frequency at which Shasta Lake, Folsom Lake, and Lake Oroville storage is close to the flood storage capacity and would not exceed SWP or CVP reservoir flood storage capacities would be similar between Scenario 2, Alternative 4H3, and Alternative 8, and CEQA conclusions would be the same.

The effect of Scenario 2 on OMR flows (Table 5E-59) would be similar to or better than effects of Alternative 8, except during April and May. As a result, Scenario 2 CEQA conclusions based on OMR flows would be the same as those under Alternative 8 for all months except April and May. For April and May, effects of Alternative 1A on OMR flows would be similar to Scenario 2. Therefore, Scenario 2 CEQA conclusions based on OMR flows would be the same as those under Alternative 1 during April and May. Construction-related impacts under Scenario 2 would be the same as Alternative 4A

5E.5.3.4 Groundwater

Under Scenario 2, construction impacts to the Delta region would be the same as Alternative 4A. During operation of the facilities, Scenario 2 would have similar effects as described for Alternative 8. Impacts to groundwater in the SWP and CVP Export Service Areas would be similar to but less severe than those described under Alternative 8 because both operating scenarios would reduce exports. This reduction in deliveries could lead to a corresponding increase in groundwater use. The increase in groundwater pumping would cause a substantial decrease in groundwater levels, supplies, and recharge, and yields of domestic, municipal and agricultural wells in the Export Service Areas. Increased groundwater pumping in response to reduced SWP/CVP water supply availability under Scenario 2 would also degrade groundwater quality in portions of the Export Service Areas by altering regional patterns of groundwater flow and induce the migration of poor-quality groundwater into areas of good-quality groundwater. Land subsidence from groundwater pumping in most of the Export Service Areas under Scenario 2 would be negligible.

5E.5.3.5 Water Quality

The impacts to water quality from construction and operation of conveyance facilities under the SWB Scenario would be the same as those described for the Boundary 2 scenario. For the reasons provided for the Boundary 2 scenario, the SWB would have a less than significant impact in all areas of the affected environment on ammonia, boron, bromide, chloride, dissolved oxygen, mercury, *Microcystis*, nitrate, organic carbon, pathogens, phosphorus, trace metals, and TSS/turbidity. Because modeled source water fractions at Franks Tract, Rock Slough, and Contra Costa PP No. 1 are similar to the Boundary 2 scenario, showing greater than 50 percent San Joaquin River water at these locations along with and increases in the San Joaquin River water portion of up to 35 percent relative to the No Action Alternative (ELT), there is the potential for there to be significant impacts to pesticides with the SWB scenario. Also, due to the increased fraction of San Joaquin River water in the western Delta, which has higher waterborne selenium concentrations than the other source waters, the SWB scenario could potentially result in a significant impact to whole body sturgeon selenium concentrations in the western Delta. As such, the SWB scenario would be considered to have a significant impact to San Francisco Bay selenium. Finally, with the SWB scenario, long-term average EC at Emmaton would similarly increase significantly in July and exceedances of the Prisoners Point objective were modeled to be more frequent than under the No Action Alternative (ELT), thus there is a potential for a significant impact to EC. Review of the modeling indicated that exceedances of WQCP EC objectives are primarily a function of the CALSIM II monthly time-step and other key model assumptions, and that real time operations that would occur would prevent exceedances of objectives. The mitigation described for Alternative 4A addresses real time operations to reduce the EC impact to a less than significant level.

5E.5.3.6 Fish and Aquatic Resources

Scenario 2 effects were compared to effects of Alternative 4H4 and Alternative 8, which were determined *a priori* to be most similar among all alternatives to Scenario 2 effects.

The effects of Scenario 2 on flows in the Sacramento River upstream of the Delta, Clear Creek, Trinity River, Feather River, American River, Stanislaus River, San Joaquin River, and Mokelumne River and OMR flows relative to Alternative 4H4 and Alternative 8 would be the same as described for effects of Boundary 2 relative to Alternative 4H3 and Alternative 8, respectively, with few exceptions that would not change the findings in Section 5E.5.2.7 *Fish and Aquatic Resources*, above. Therefore, these effects will not be discussed further in this section.

As described in Section 5E.5.3.2, *Water Supply*, CEQA conclusions based on nearly all reservoir for both end-of-May and end-of September storage would be similar to both Alternative 4H4 and 8. However, CEQA conclusions for Scenario 2 based on end-of-May Oroville storage would only be similar to Alternative 8, and CEQA conclusions for Scenario 2 based on end-of-September Oroville storage would only be the same as Alternative 4H4.

The effect of Scenario 2 on flows in the Sacramento River downstream of the North Delta diversion facilities (Table 5E-62) and at Rio Vista (Table 5E-65) would be similar to or better than effects of Alternative 4H4 except for May and June, and similar or better than effects of Alternative 8 except for February, March, May, and June. There would be no effect of Alternative 4H4 during May, but there would be a small reduction in flows under of Scenario 2 that would not be substantial. A reduction in flows under Alternative 4H4 during June would be slightly reduced further under Scenario 2 and, therefore, the CEQA conclusions under Alternative 4H4 based on June would be the same for Scenario 2. As a result, Scenario 2 CEQA conclusions based on flows in the Sacramento River downstream of the North Delta diversion facilities and at Rio Vista ion all months would be the same as Alternative 8. The reduction in flows under Alternative 8 during June would be reduced further under Scenario 2 and, therefore, the CEQA conclusions under Alternative 8 based on June would be the same for Scenario 2. There would be no effect of Alternative 8 during February, March, and May, but there would be an effect of Scenario 2 during these months. Therefore, Scenario 2 CEQA conclusions would be different from those under Alternative 8 during these months and should rely upon Alterative 4H4, as discussed above.

The effect of Scenario 2 on Delta outflow (Table 5E-68) would be similar to or better than effects of Alternative 4H4 and, therefore, CEQA conclusions would be the same.

5E.5.3.7 Energy

Energy use under Scenario 2 would be the same as Alternative 4A for construction.

Scenario 2 would result in operational impacts similar to, or slightly greater than, impacts described for Alternative 8 for pumping and conveyance in the north and south Delta, as slightly more water would be pumped and conveyed under Scenario 2 compared to Alternative 8. Under both Scenario 2 and Alternative 8, south Delta exports would be reduced relative to NAA. Operation of the water conveyance facility would be managed to maximize efficient energy use, including off-peak pumping and use of gravity. Scenario 2 would not result in substantial impacts related to wasteful or inefficient energy use for construction, and pumping and conveyance. The CEQA conclusions for Alternative 8 would apply to Scenario 2 for energy resources.

Attachment 5E-1

Modeling Results for Boundary 1, Boundary 2, H3, and H4

Figure 1- Analytical tools used to evaluate changes in water supply and water quality

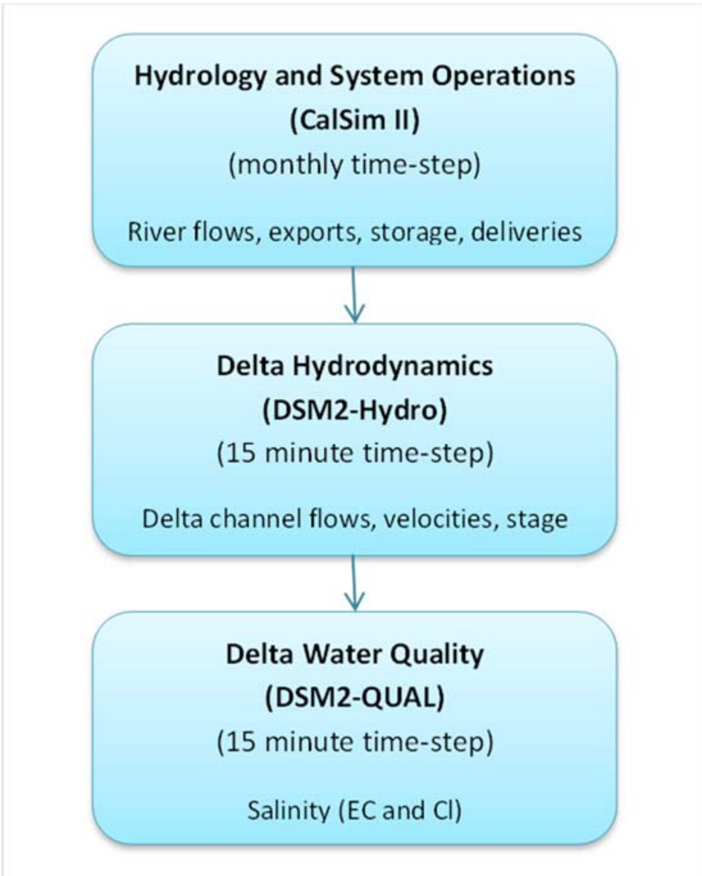


TABLE 1- Compliance Locations in ANN Based on Beneficial Use

Beneficial Use	Compliance Location
Municipal and Industrial Use	Contra Costa Canal
Municipal and Industrial Use	Banks/Jones Pumping Plants
Agriculture	Sacramento River at Emmaton
Agriculture	San Joaquin River at Jersey Point
Fish and Wildlife	Sacramento River at Collinsville

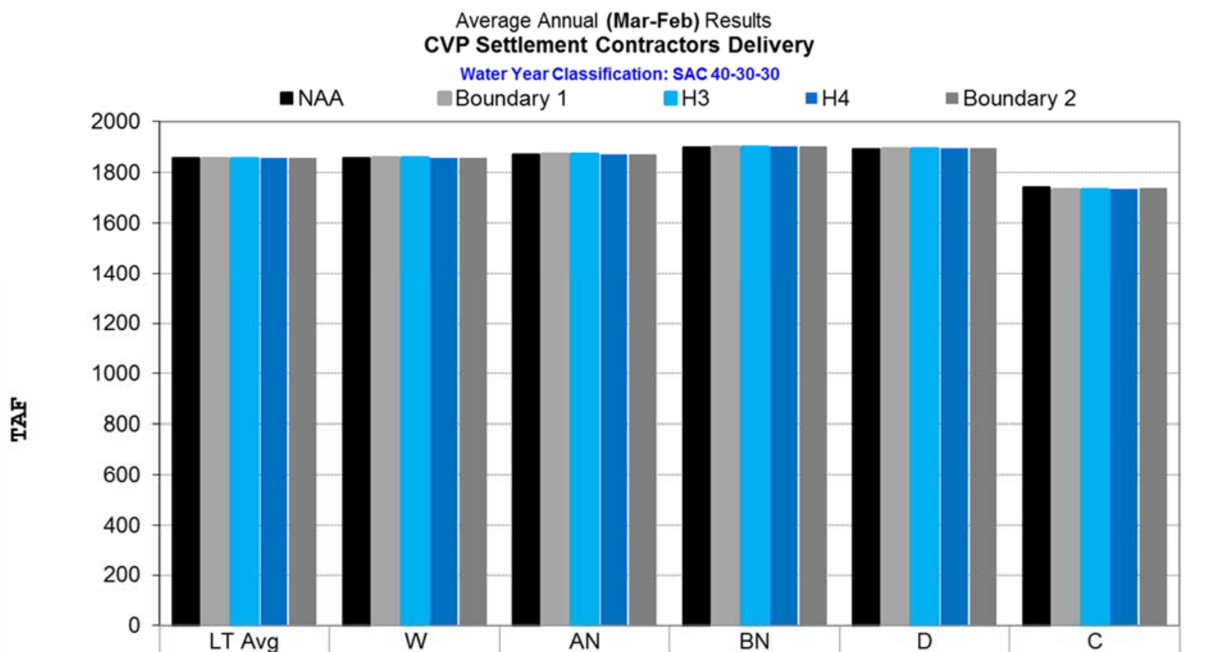
Table 2. CALSIM II Simulation Study, p. ES-2.

Performance Parameter	Dry-period average 1987-1992				Long-term average			
	Simulated	Historical	Difference		Simulated	Historical	Difference	
	taf/yr	taf/yr	taf/yr	%	taf/yr	taf/yr	taf/yr	%
SWP south-of-Delta Table A deliveries	1,930	2,030	-100	-4.9	1,810	1,790	20	1.1
CVP south-of-Delta deliveries	2,230	2,320	-90	-3.9	2,650	2,490	160	6.4
Sacramento Valley inflow to the Delta	9,700	9,670	30	0.3	19,830	19,920	-90	-0.5
Net Delta Outflow Index	5,270	5,090	180	3.5	19,070	19,690	-620	-3.1

TABLE 3- CALSIM 2015 v. 2010

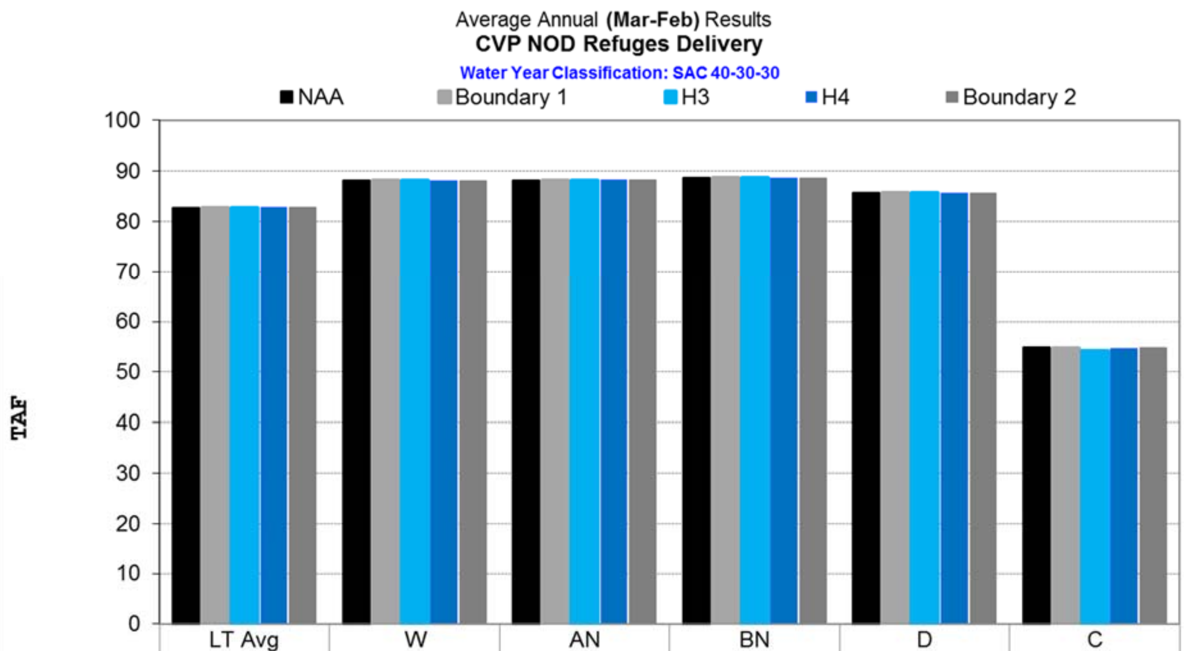
Region	**Update**	**Rational**
American River	American River Flow Management Standard	Incorporation of existing regulatory standard. (2009 NMFS BiOp)
Contra Costa County	Los Vaqueros Expansion	Incorporation of existing physical feature. Capacity increased from 100 TAF to 160 TAF.
Sacramento Valley	Feather River rice decomposition demands and return flows	Update to better match existing diversion and use by non CVP-SWP water right holders on Feather River.
Sacramento Valley	Fremont Weir notch	Update to model future facility to reflect existing regulatory obligations
Sacramento Valley	American River and Sacramento River demand assumptions	Incorporation of existing upstream demand; full water rights and full contracts including Freeport Regional Water Project
Sacramento Valley	Folsom flood control improvements	Incorporation of existing physical feature
Delta	Hood minimum instream flow	Modification to improve performance of ANN when modeling proposed additional point of diversion
Delta	COA sharing	Fixed coding error to improve modeling of existing COA requirements.
Delta	Health and safety pumping limits	Incorporate recent drought year operations. 2014-2015 TUCP health and safety CVP-SWP diversion rate was a minimum of 1,500 cfs
San Joaquin River	Stanislaus River and New Melones operations consistent with FWS 2008 BiOp and 2009 NMFS BiOp	Incorporation of existing regulatory standard
San Joaquin River	Removed Vernalis Adaptive Management Program (VAMP)	Incorporation of existing regulatory standard. VAMP expired. Incorporated existing San Joaquin River WQCP obligations.
San Joaquin River	San Joaquin River Restoration Program Flows	San Joaquin River Restoration Program included qualitatively, however, releases as part of the program were not simulated because recapture/recirculation component has not been fully defined
South Delta	Update to south-of-Delta SWP demand	Incorporation of existing demand
General	Updated climate change inputs	Correction to Friant inflow adjustments; improvements to water year index adjustments for climate change
General	Software updates	Maintenance of model

Figure 2. Simulated CVP Deliveries to Settlement Contractors



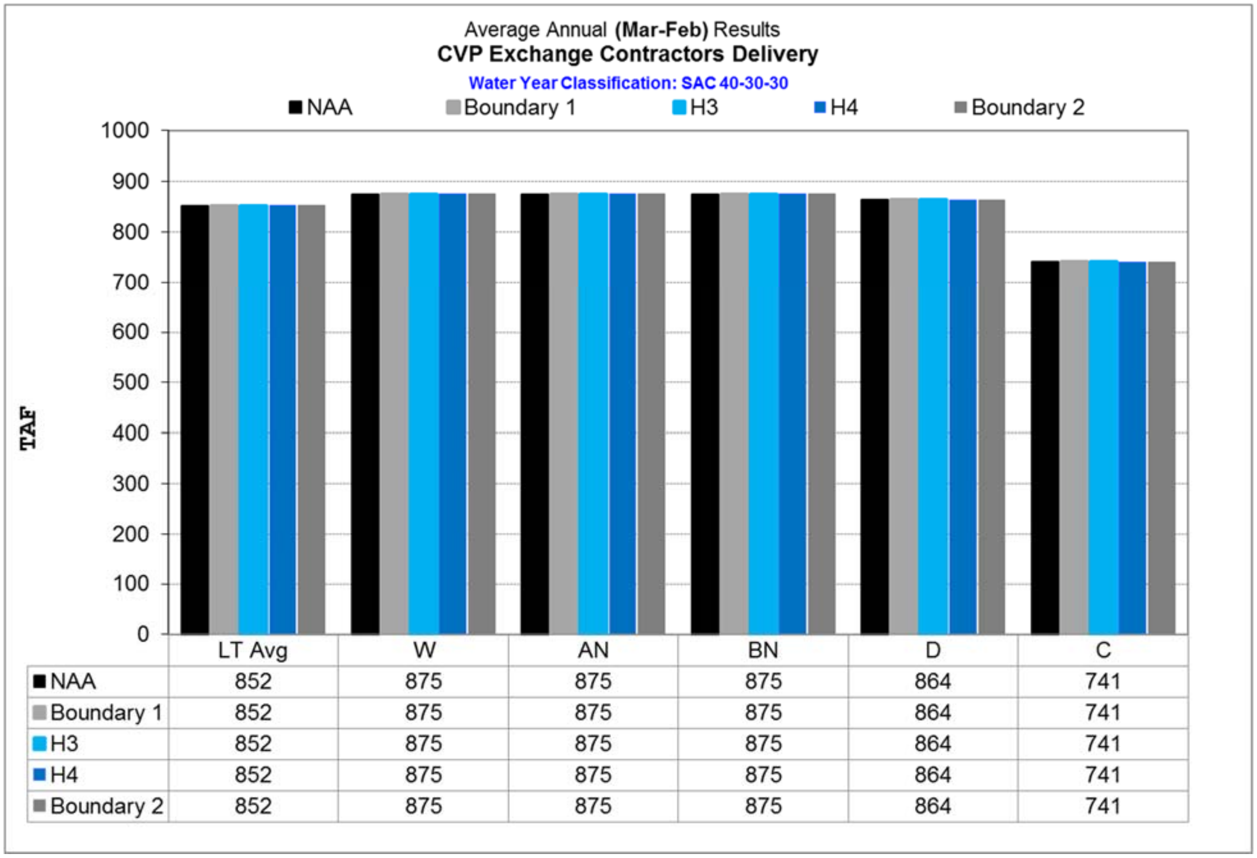
	LT Avg	W	AN	BN	D	C
NAA	1858	1857	1873	1903	1894	1741
Boundary 1	1856	1857	1871	1901	1894	1732
H3	1857	1857	1872	1902	1894	1731
H4	1857	1857	1872	1902	1894	1734
Boundary 2	1857	1857	1872	1902	1894	1735

Figure 3. Simulated CVP Deliveries to North of Delta Refuges



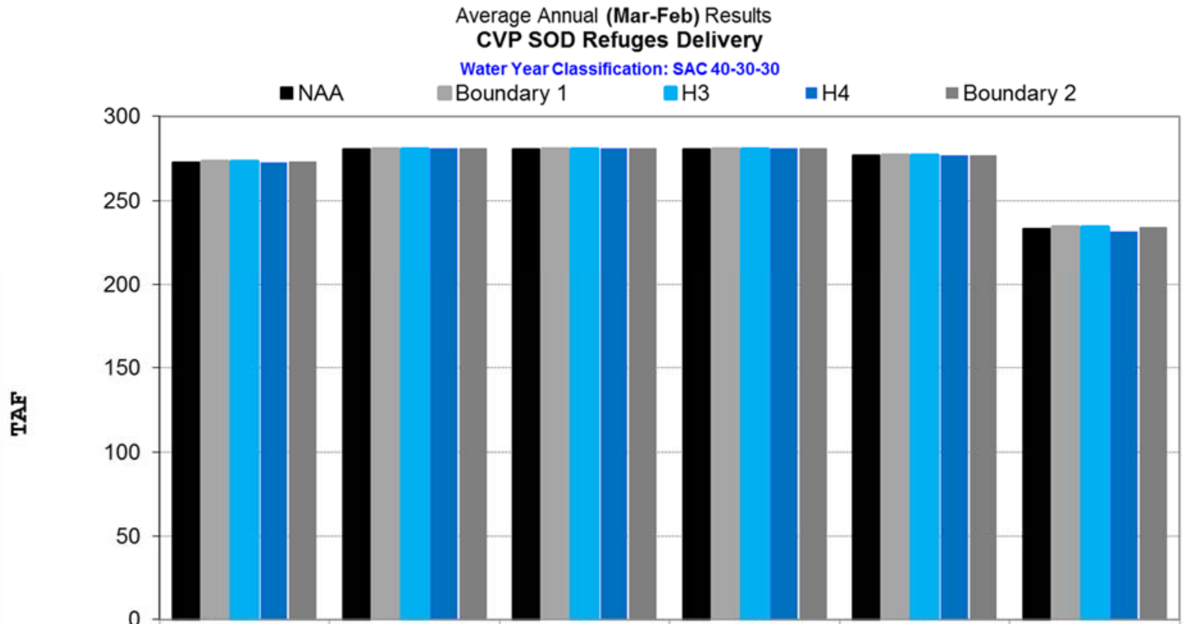
	LT Avg	W	AN	BN	D	C
NAA	83	88	88	89	86	55
Boundary 1	83	88	88	89	86	55
H3	83	88	88	89	86	54
H4	83	88	88	89	86	55
Boundary 2	83	88	88	89	86	55

Figure 4. Simulated CVP Deliveries to Exchange Contractors



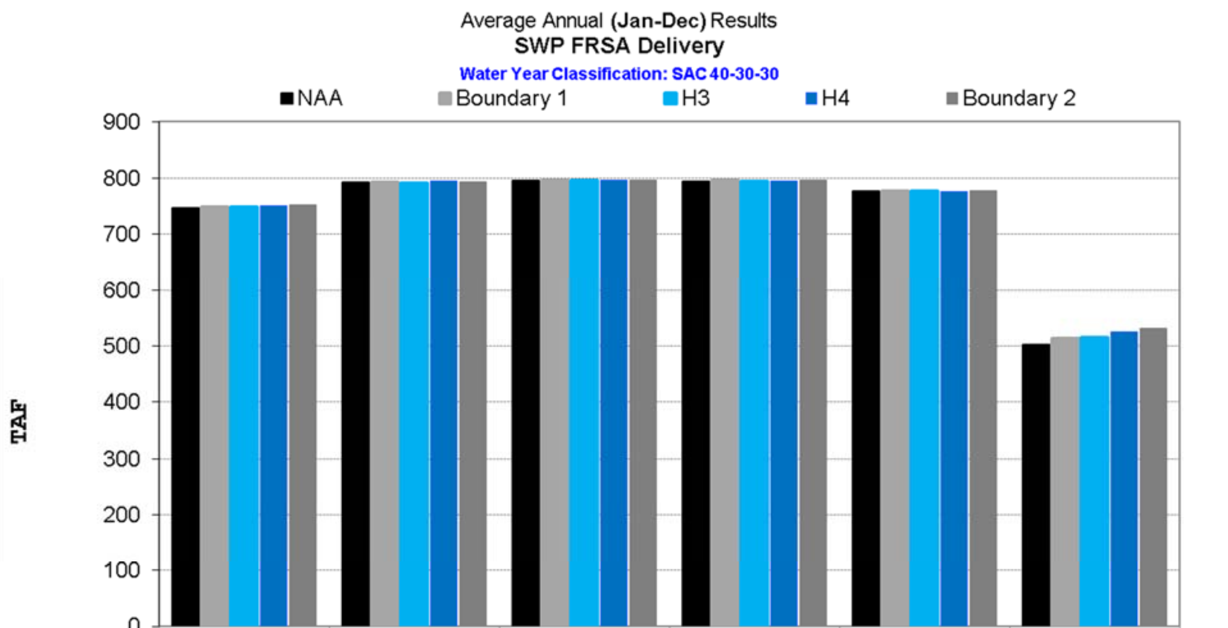
	LT Avg	W	AN	BN	D	C
NAA	852	875	875	875	864	741
Boundary 1	852	875	875	875	864	741
H3	852	875	875	875	864	741
H4	852	875	875	875	864	741
Boundary 2	852	875	875	875	864	741

Figure 5. Simulated CVP Deliveries to South of Delta Refuges (Level 2 Demand)



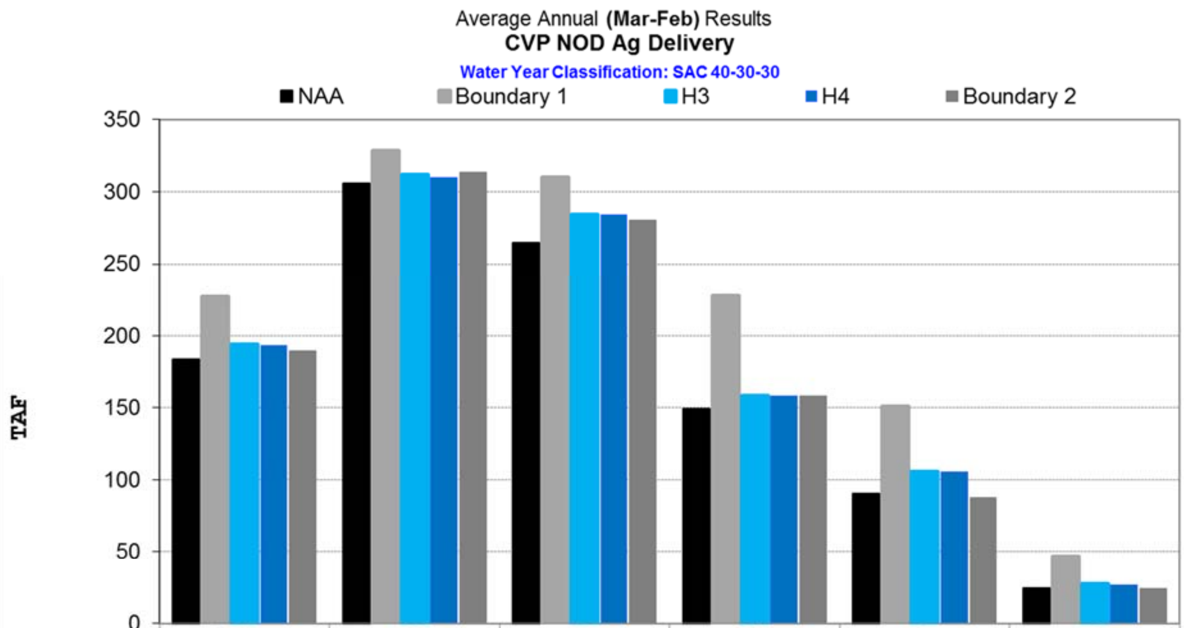
	LT Avg	W	AN	BN	D	C
NAA	273	281	281	281	277	233
Boundary 1	273	281	281	281	277	234
H3	273	281	281	281	277	234
H4	273	281	281	281	277	232
Boundary 2	273	281	281	281	277	234

Figure 6. Simulated SWP Deliveries to Feather River Service Areas Contractors



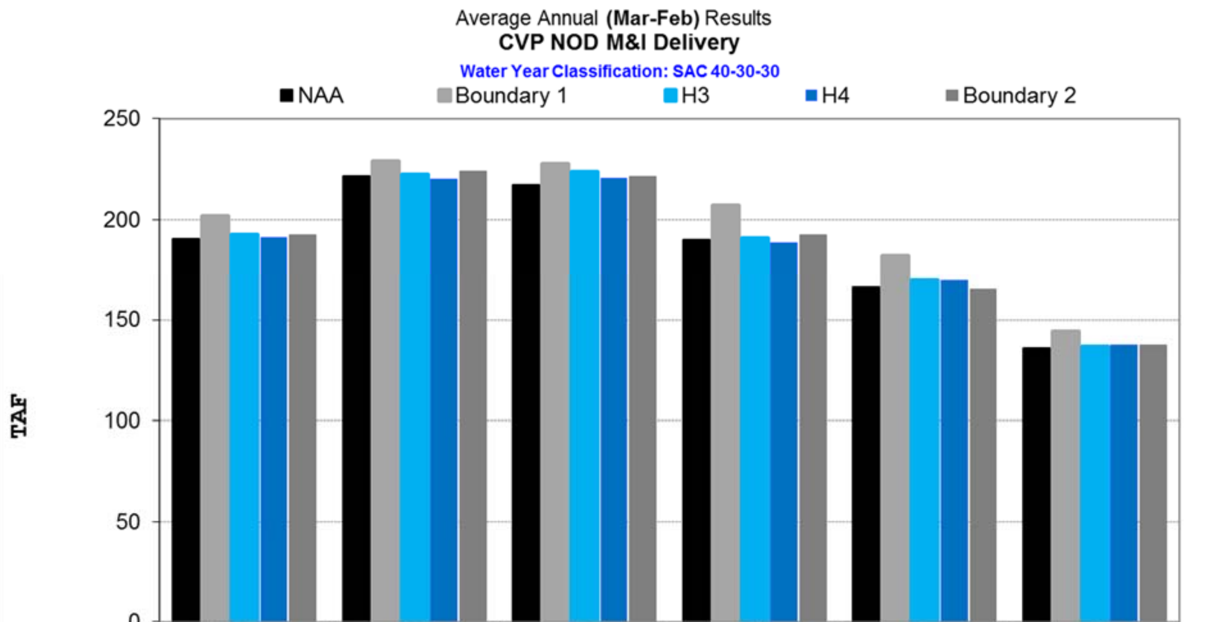
	LT Avg	W	AN	BN	D	C
NAA	747	793	796	795	777	502
Boundary 1	749	793	796	796	777	514
H3	749	792	796	795	777	515
H4	751	795	796	796	777	526
Boundary 2	752	794	796	796	778	532

Figure 7. Simulated CVP Deliveries to Sacramento Valley Agricultural Water Service Contractors



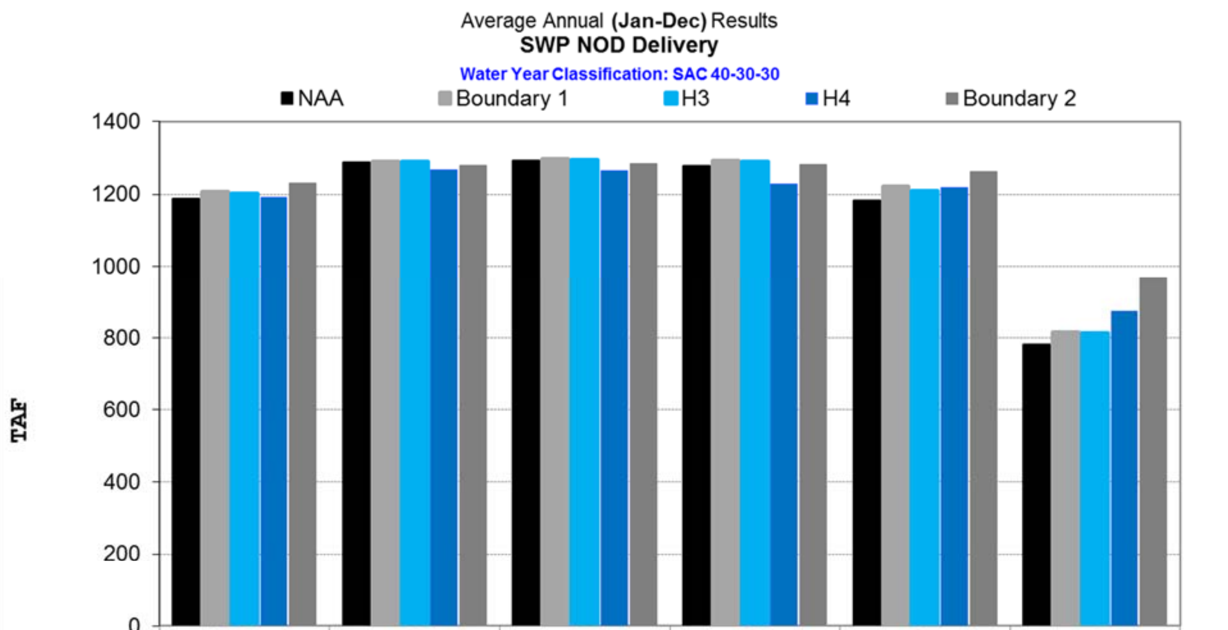
	LT Avg	W	AN	BN	D	C
NAA	184	306	265	149	91	25
Boundary 1	227	329	311	228	151	47
H3	194	312	285	158	106	27
H4	193	310	284	158	106	27
Boundary 2	189	314	281	158	88	24

Figure 8. Simulated CVP Deliveries to Sacramento Valley Municipal and Industrial Water Service Contractors



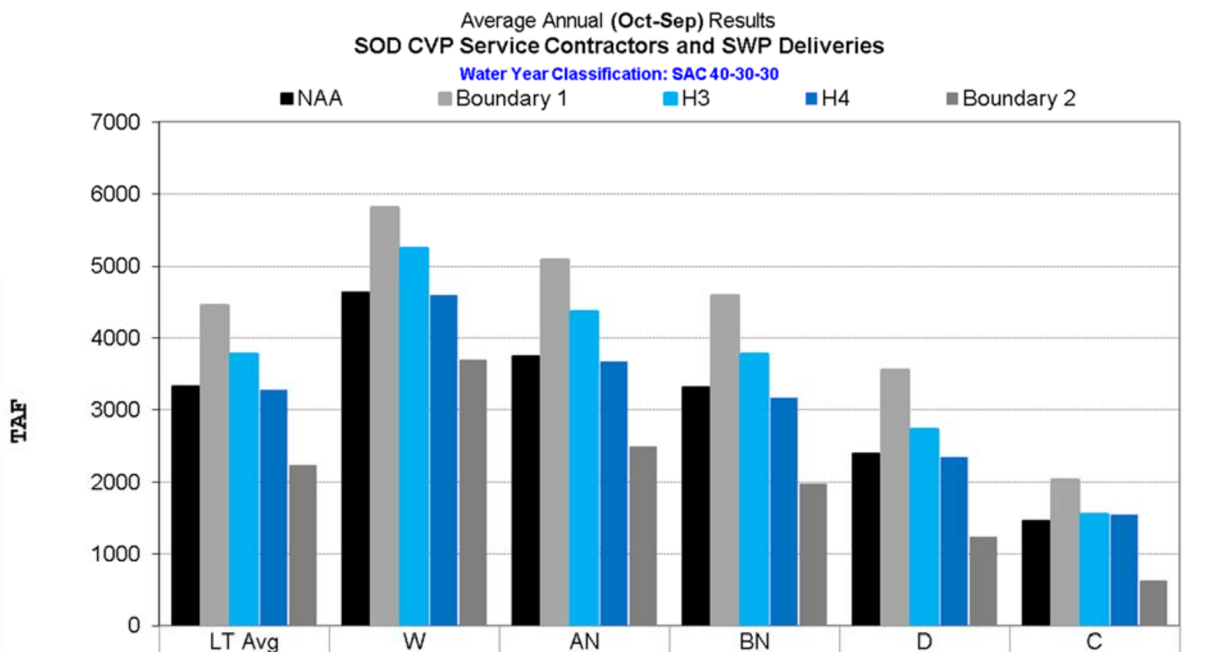
	LT Avg	W	AN	BN	D	C
NAA	191	222	218	190	166	136
Boundary 1	202	229	228	207	182	144
H3	193	222	224	191	170	137
H4	191	220	221	188	169	137
Boundary 2	192	224	221	193	165	138

Figure 9. Simulated SWP Deliveries to North of Delta Contractors



	LT Avg	W	AN	BN	D	C
NAA	1189	1288	1293	1278	1183	782
Boundary 1	1207	1292	1298	1293	1223	815
H3	1203	1291	1296	1291	1211	814
H4	1191	1268	1266	1228	1218	874
Boundary 2	1232	1281	1284	1284	1263	966

Figure 10. Simulated Combined SWP and CVP South of Delta Water Service Contractor Deliveries



	LT Avg	W	AN	BN	D	C
NAA	3326	4636	3749	3322	2391	1468
Boundary 1	4443	5806	5084	4582	3550	2026
H3	3772	5246	4365	3771	2728	1552
H4	3276	4593	3672	3164	2346	1548
Boundary 2	2236	3697	2493	1976	1236	618

Figure 11. Simulated Combined SWP and CVP Delta Exports

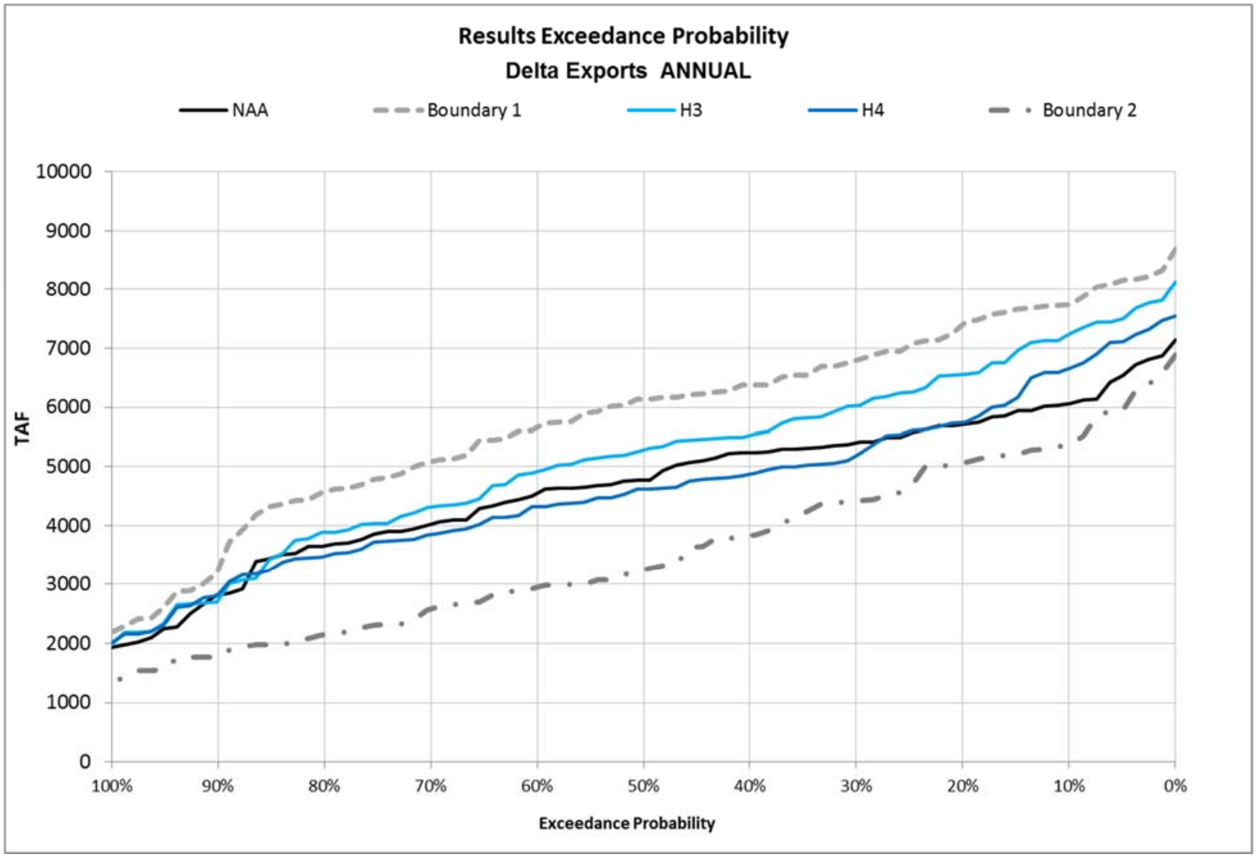


Figure 12. Simulated End of September Shasta Storage

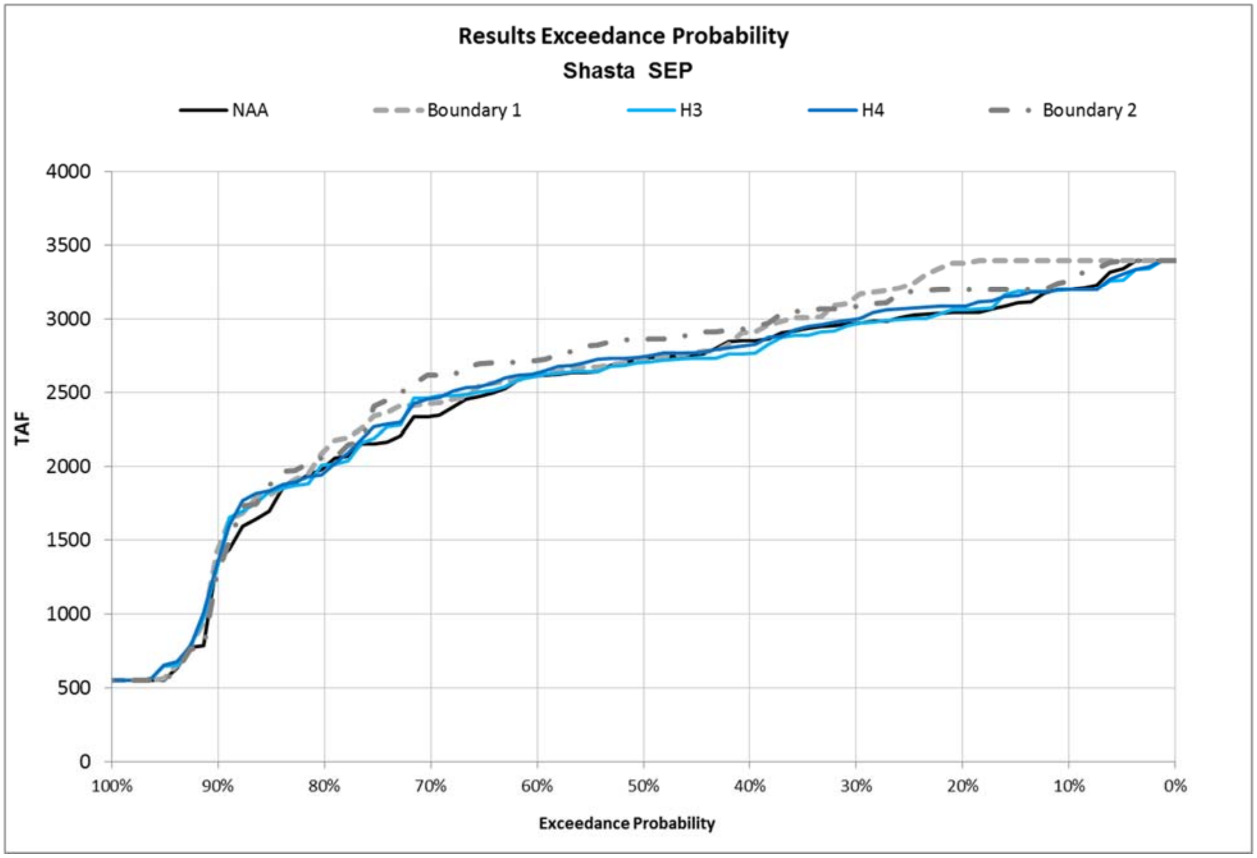


Figure 13. Simulated End of September Oroville Storage

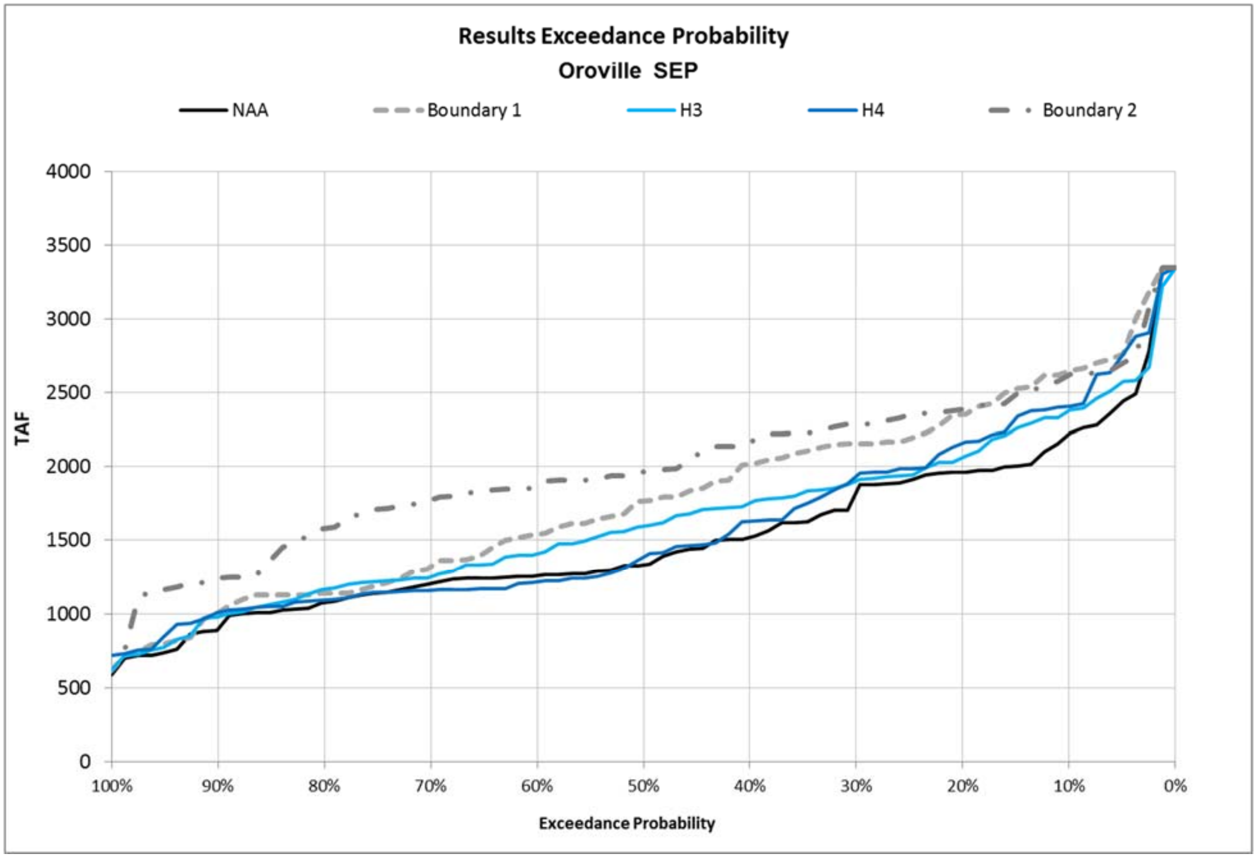


Figure 14. Simulated End of September Folsom Storage

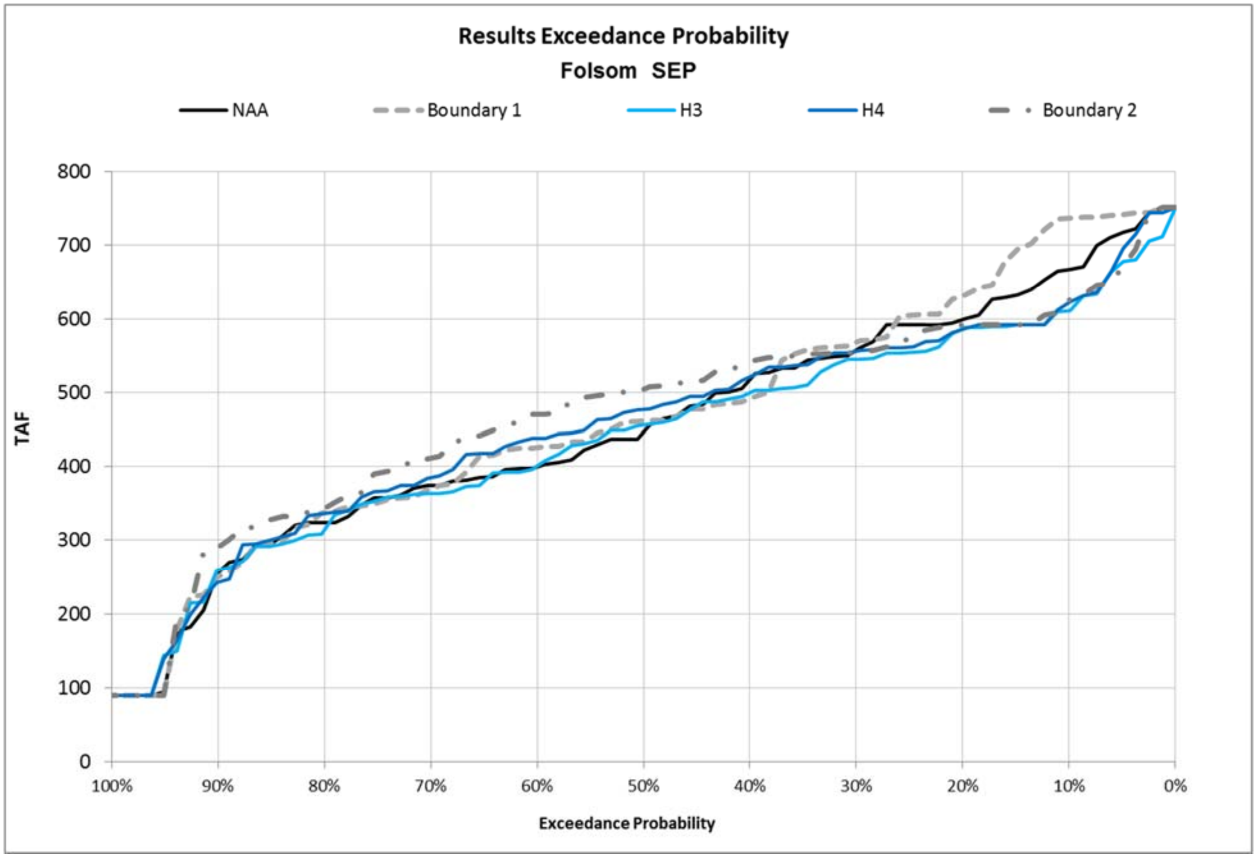


Figure 15. Simulated End of September Trinity Storage

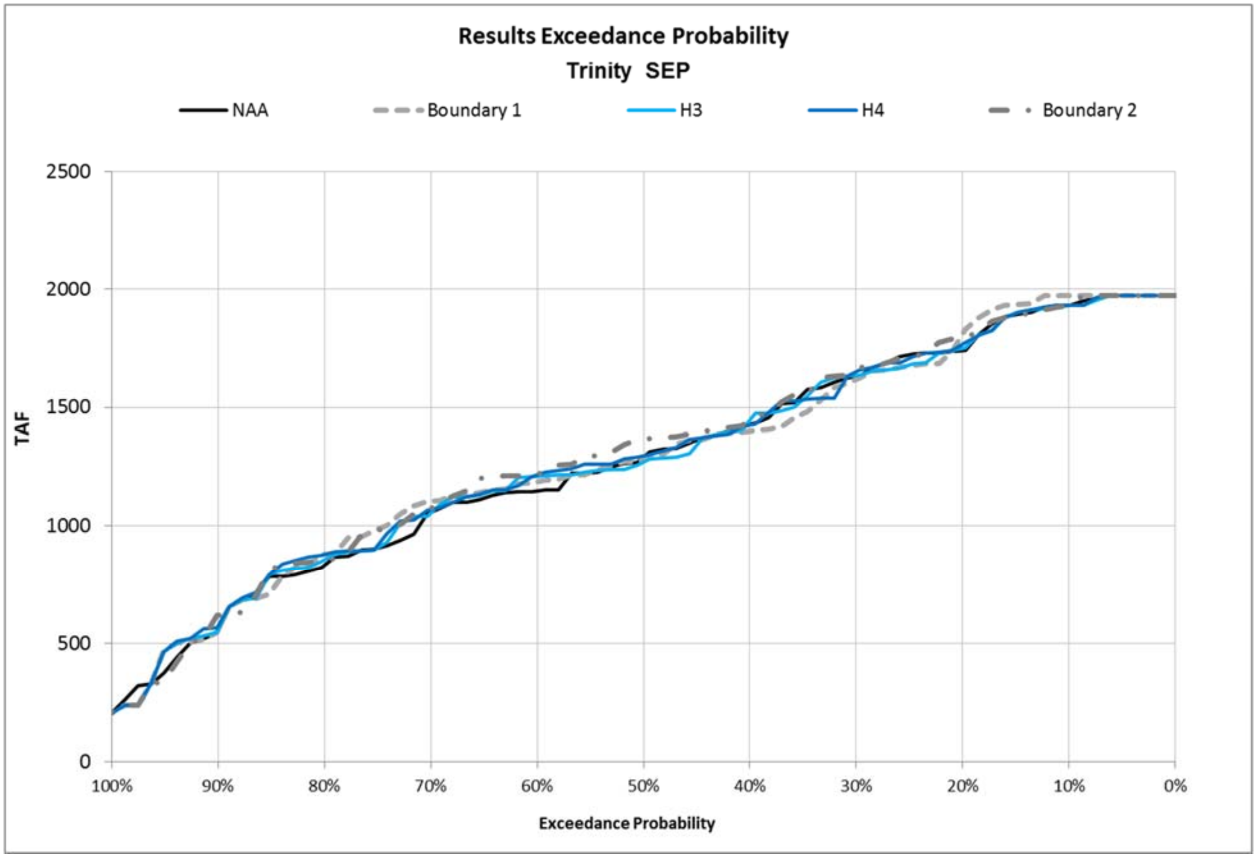
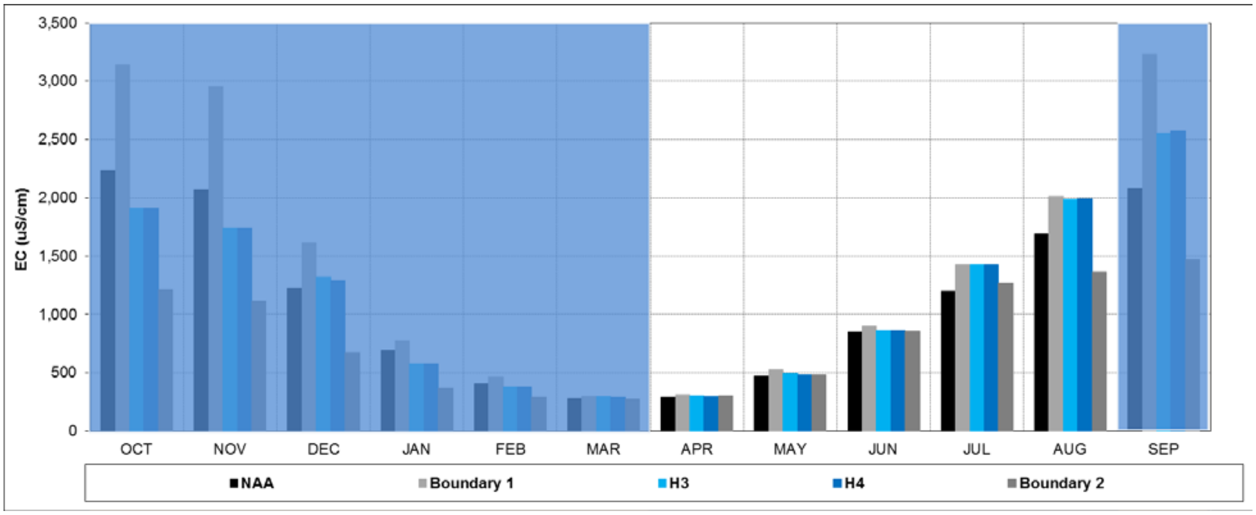
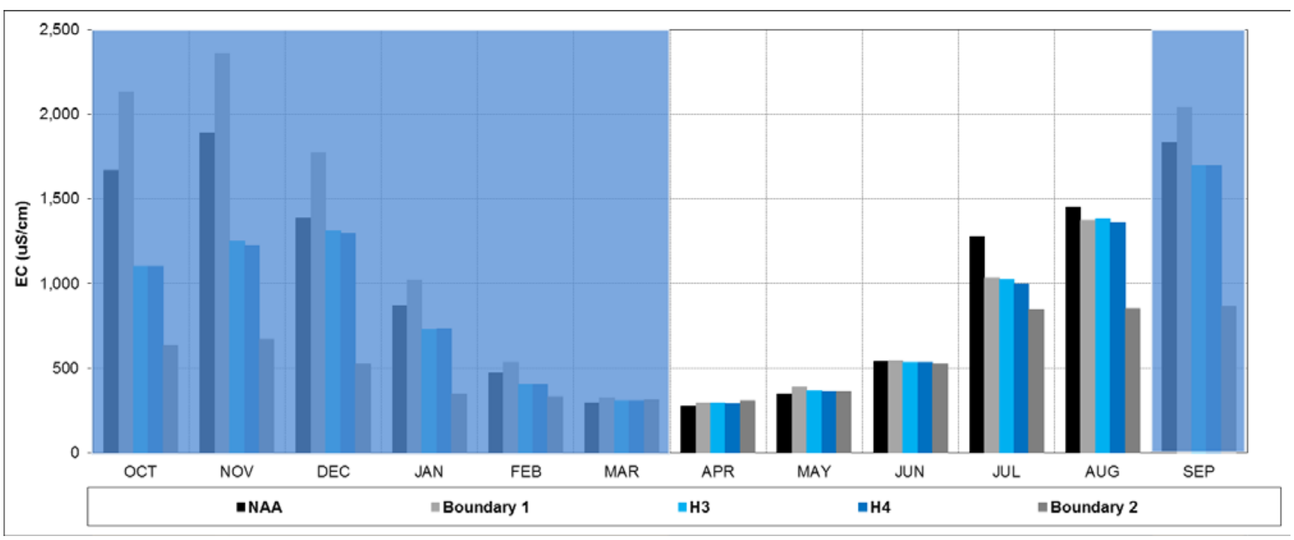


Figure EC1: Monthly Average EC at Emmaton



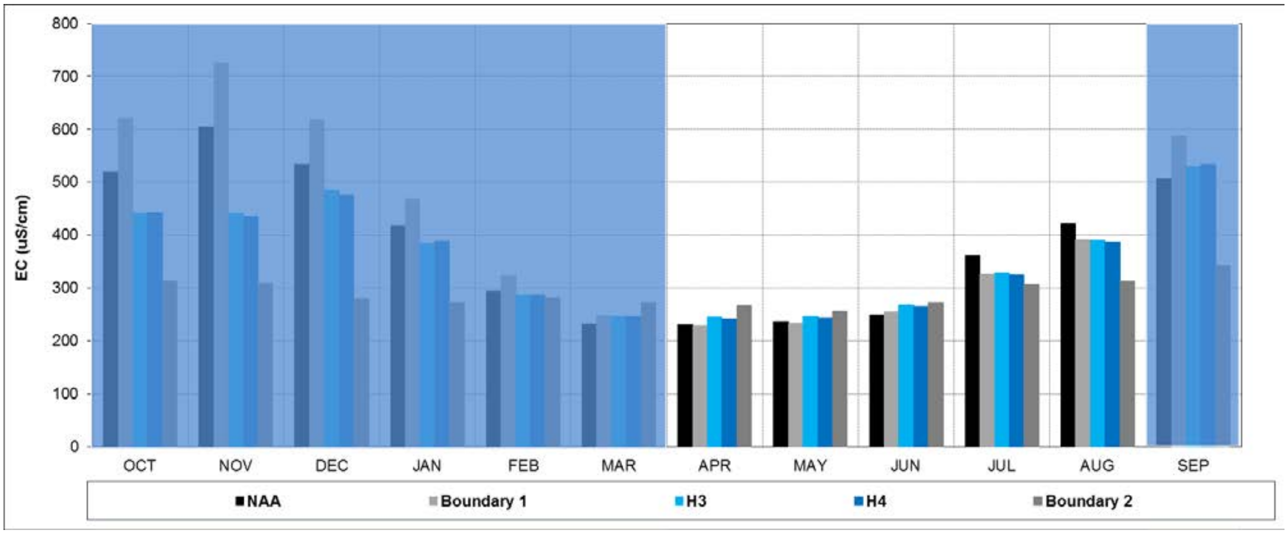
**Model results are used for comparative purposes and not for predictive purposes*

Figure EC2: Monthly Average EC at Jersey Point



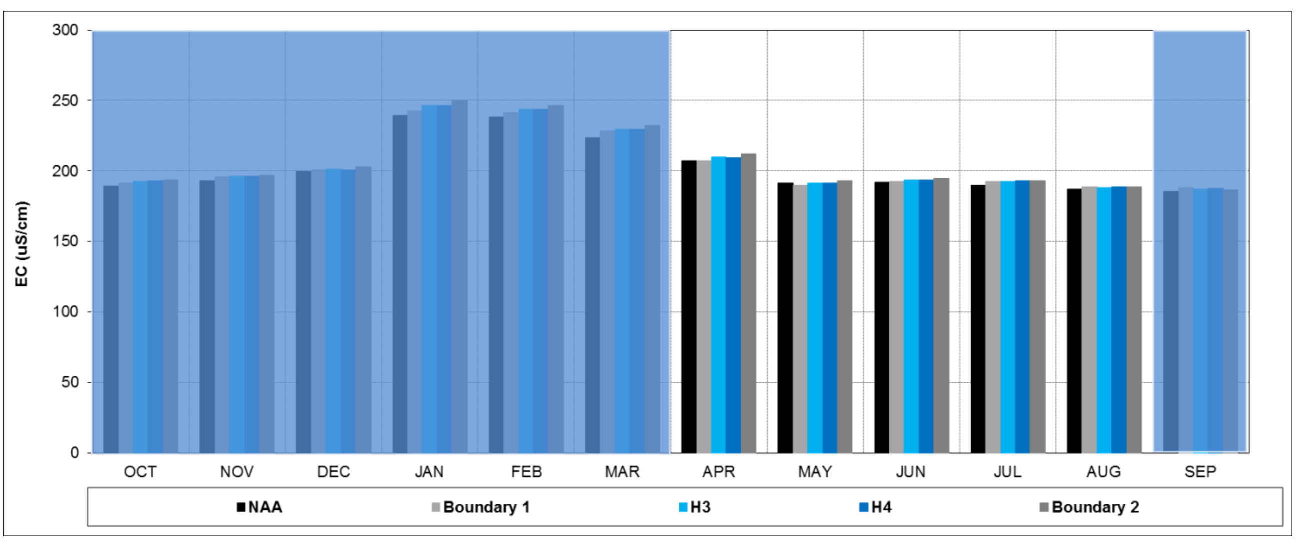
**Model results are used for comparative purposes and not for predictive purposes*

Figure EC3: Monthly Average EC at San Andreas Landing



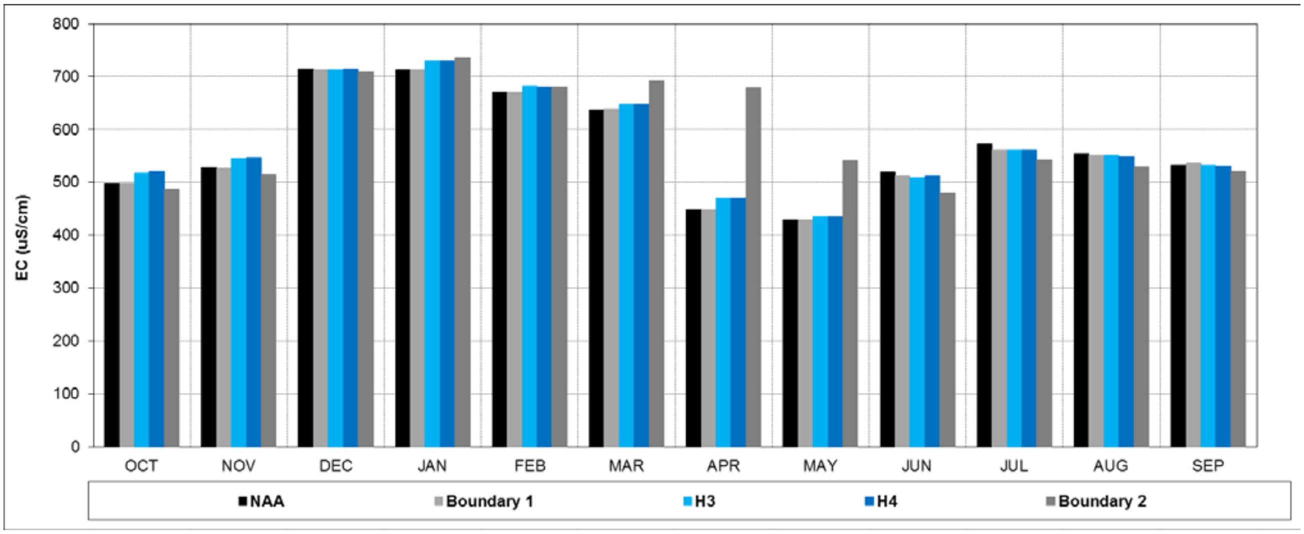
**Model results are used for comparative purposes and not for predictive purposes*

Figure EC4: Monthly Average EC at Terminous



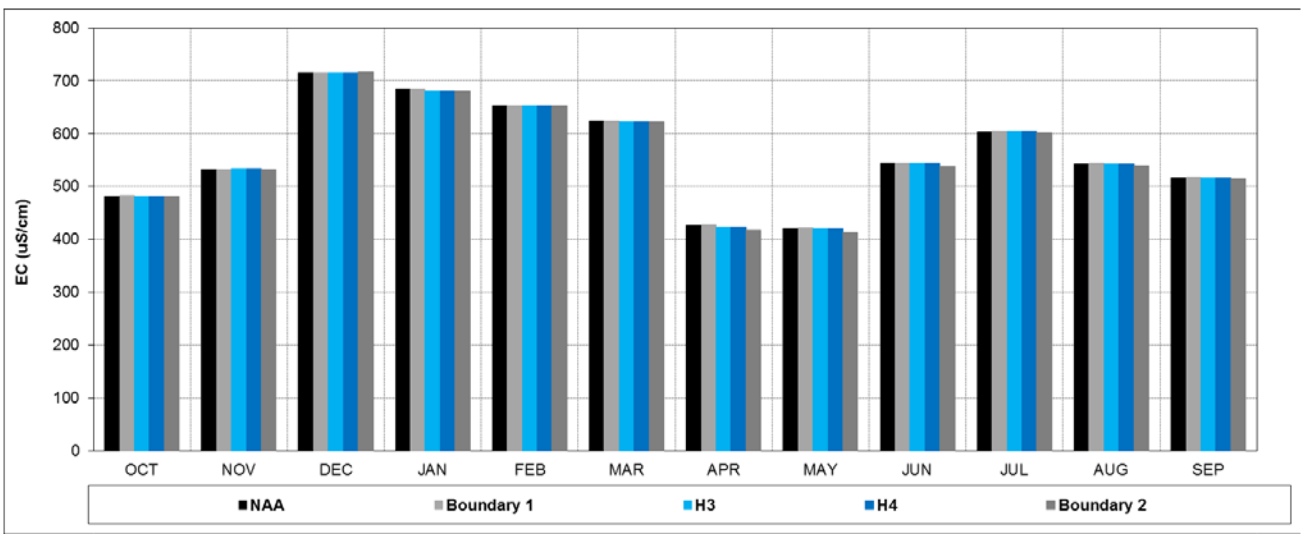
**Model results are used for comparative purposes and not for predictive purposes*

Figure EC5: Monthly Average EC at Old River at Tracy Road



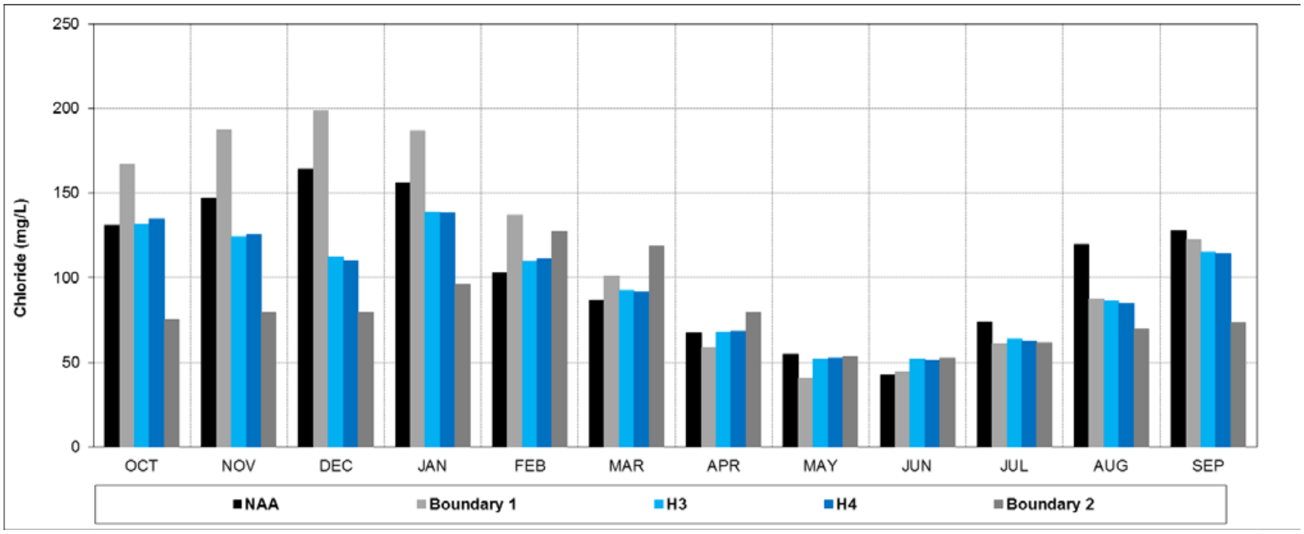
**Model results are used for comparative purposes and not for predictive purposes*

Figure EC6: Monthly Average EC at San Joaquin River at Brandt Bridge



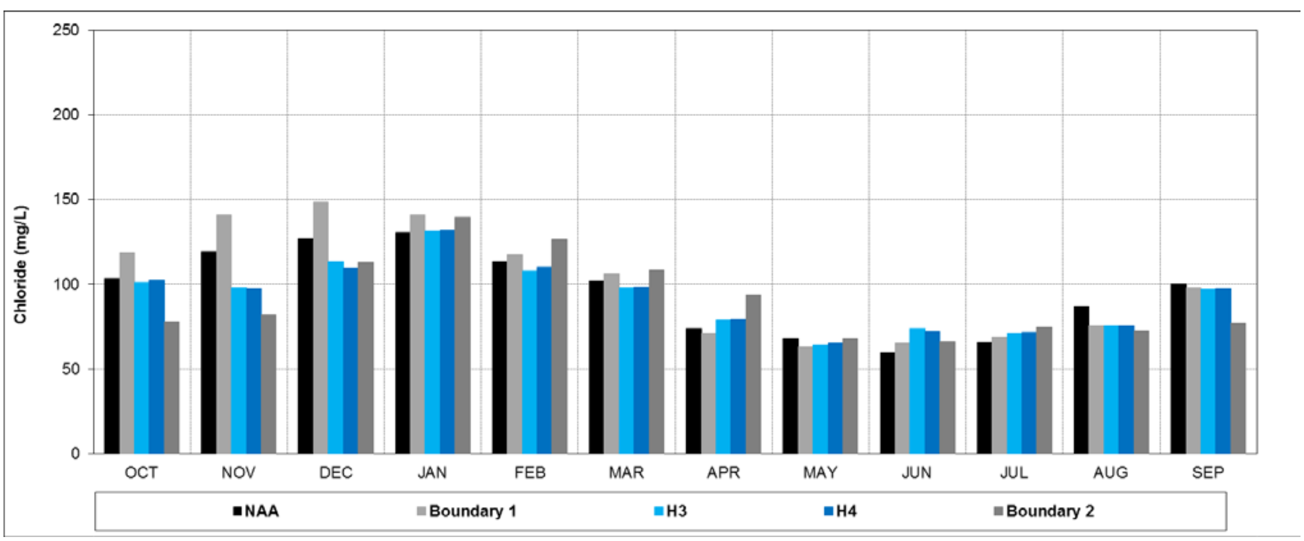
**Model results are used for comparative purposes and not for predictive purposes*

Figure CL1: Monthly Average Chloride Concentration at Contra Costa Canal



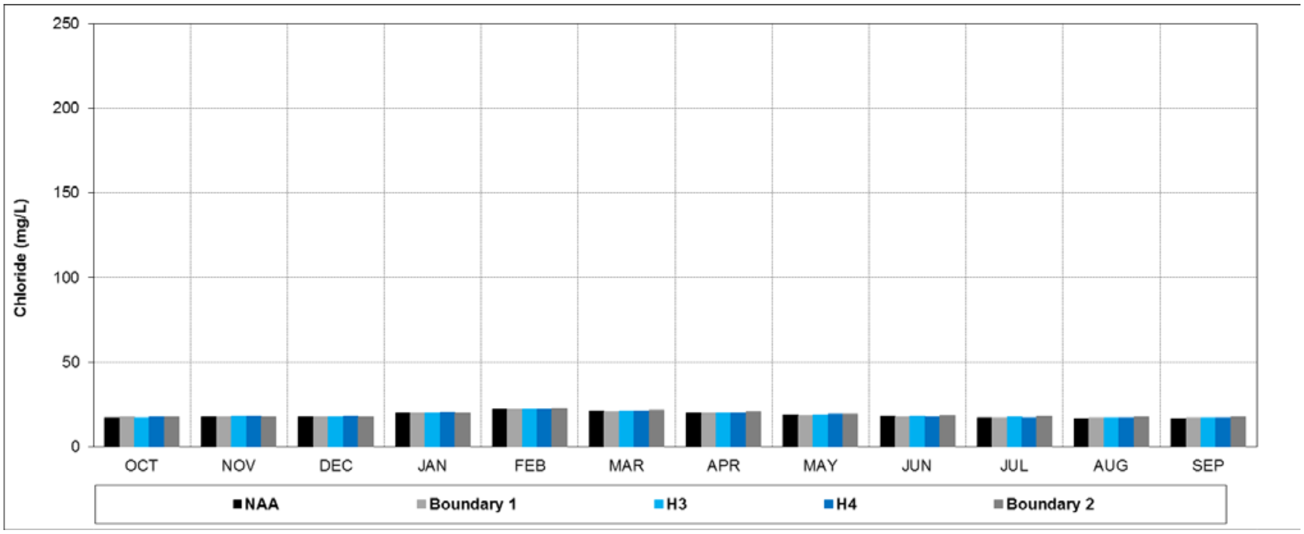
**Model results are used for comparative purposes and not for predictive purposes*

Figure CL2: Monthly Average Chloride Concentration at Old River at Clifton Court.



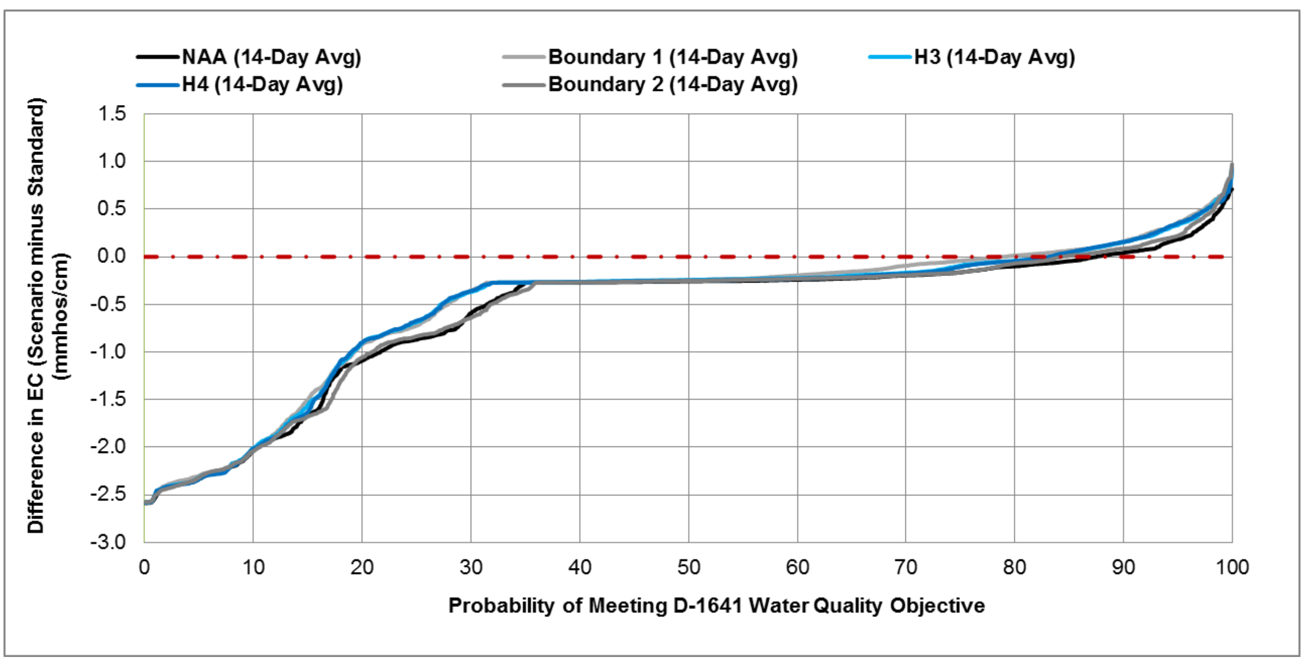
**Model results are used for comparative purposes and not for predictive purposes*

Figure CL3: Monthly Average Chloride Concentration at Barker Slough



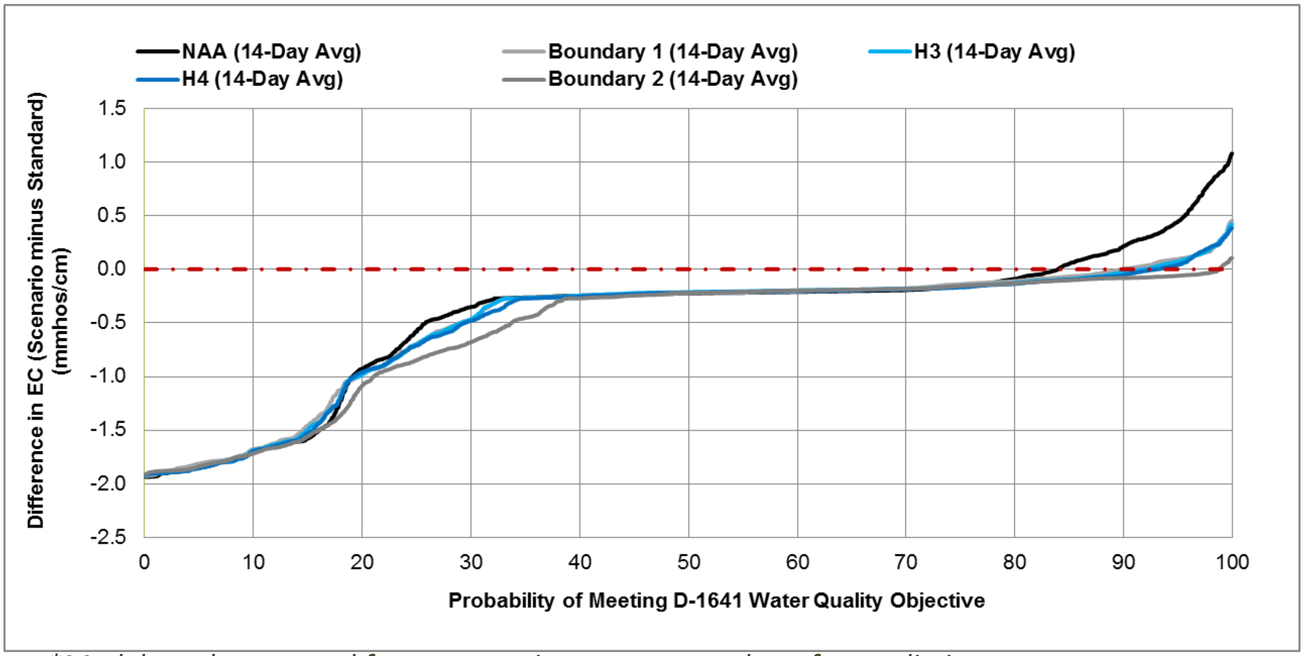
**Model results are used for comparative purposes and not for predictive purposes*

Figure C1: D-1641 Agricultural EC Objective at Emmaton –Probability of Meeting D-1641



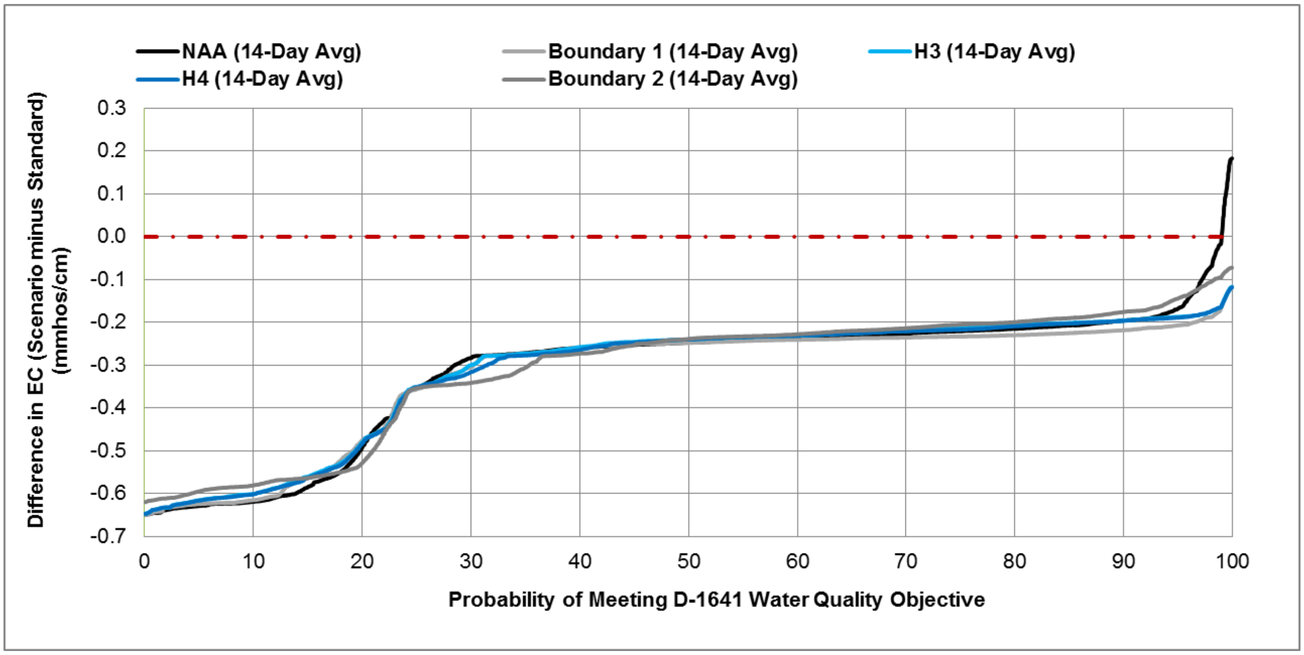
**Model results are used for comparative purposes and not for predictive purposes*

Figure C2: D-1641 Agricultural EC Objective at Jersey Point –Probability of Meeting D-1641



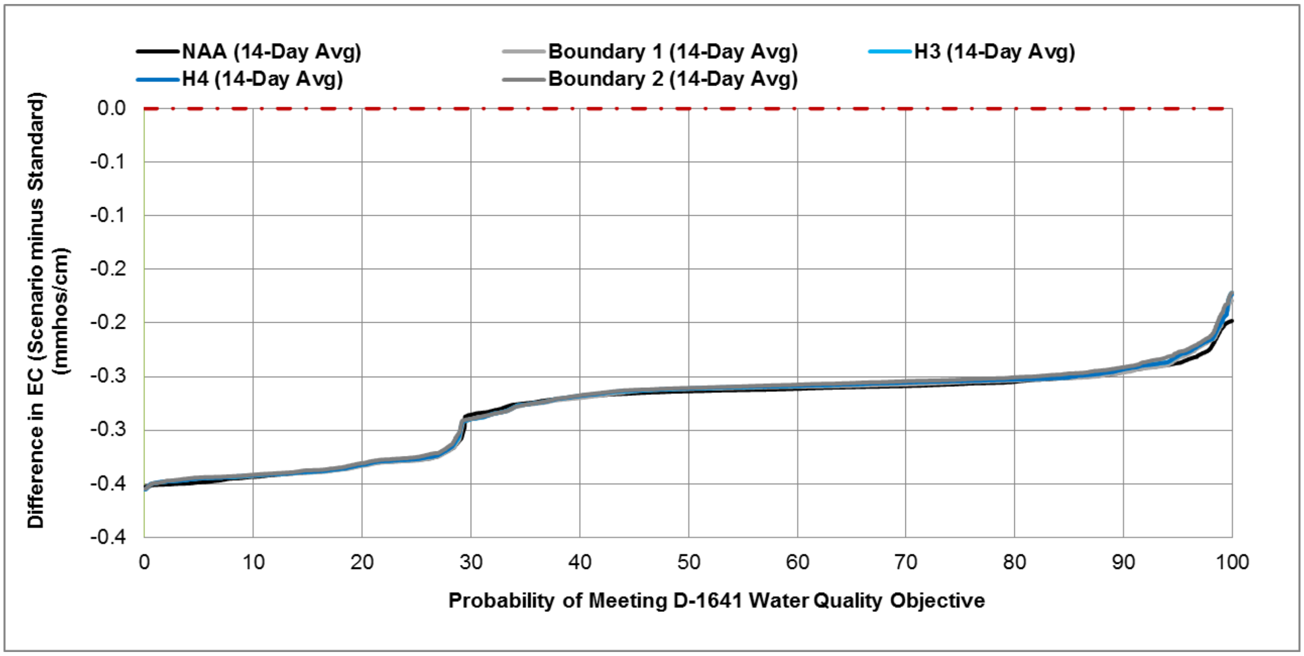
**Model results are used for comparative purposes and not for predictive purposes*

Figure C3: D-1641 Agricultural EC Objective at San Andreas Landing –Probability of Meeting D-1641



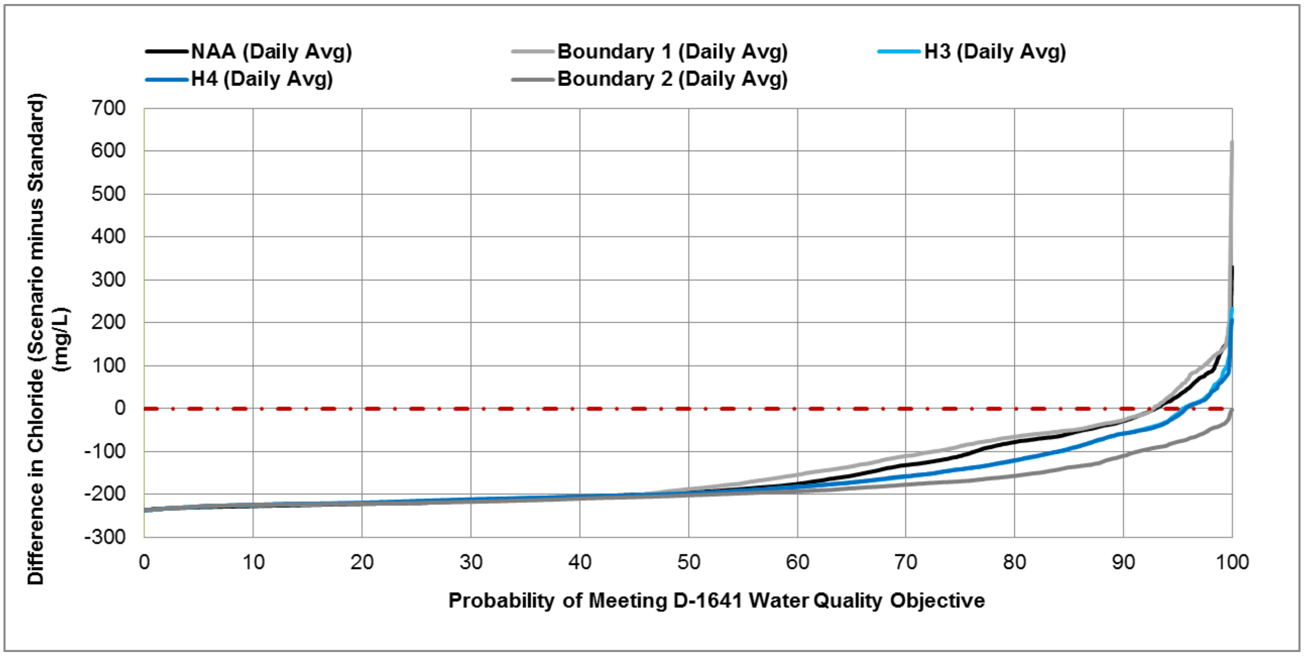
**Model results are used for comparative purposes and not for predictive purposes*

Figure C4: D-1641 Agricultural EC Objective at Terminous –Probability of Meeting D-1641



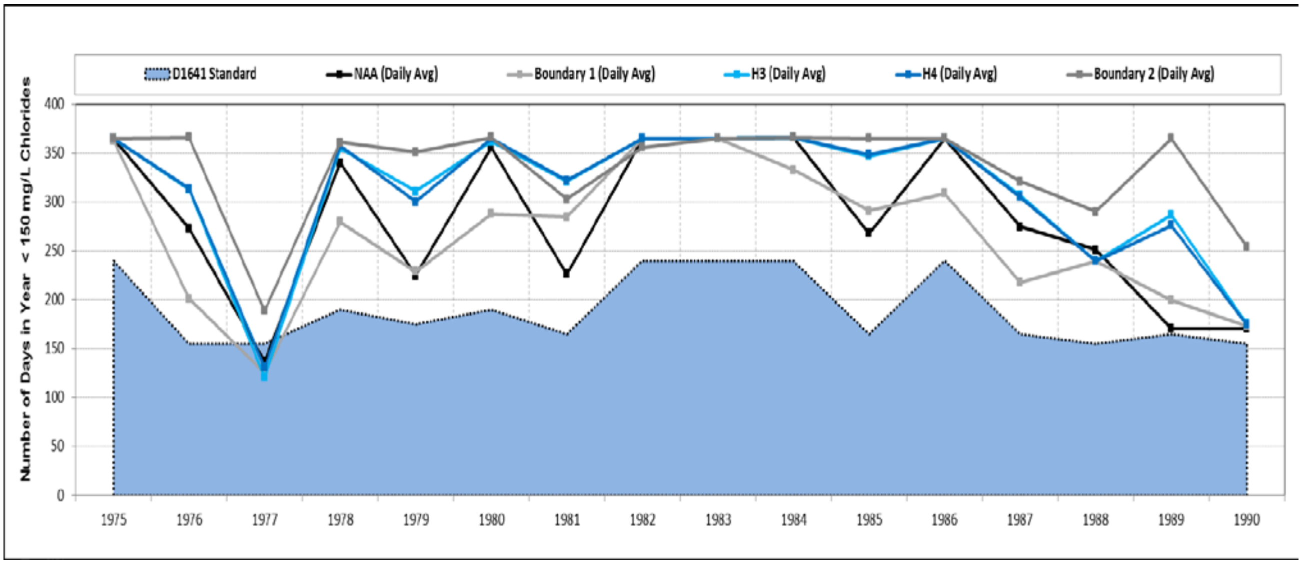
**Model results are used for comparative purposes and not for predictive purposes*

Figure C5: D-1641 250 mg/L Chloride Objective at Contra Costa Canal Pumping Plant 1 – Probability of Meeting D-1641



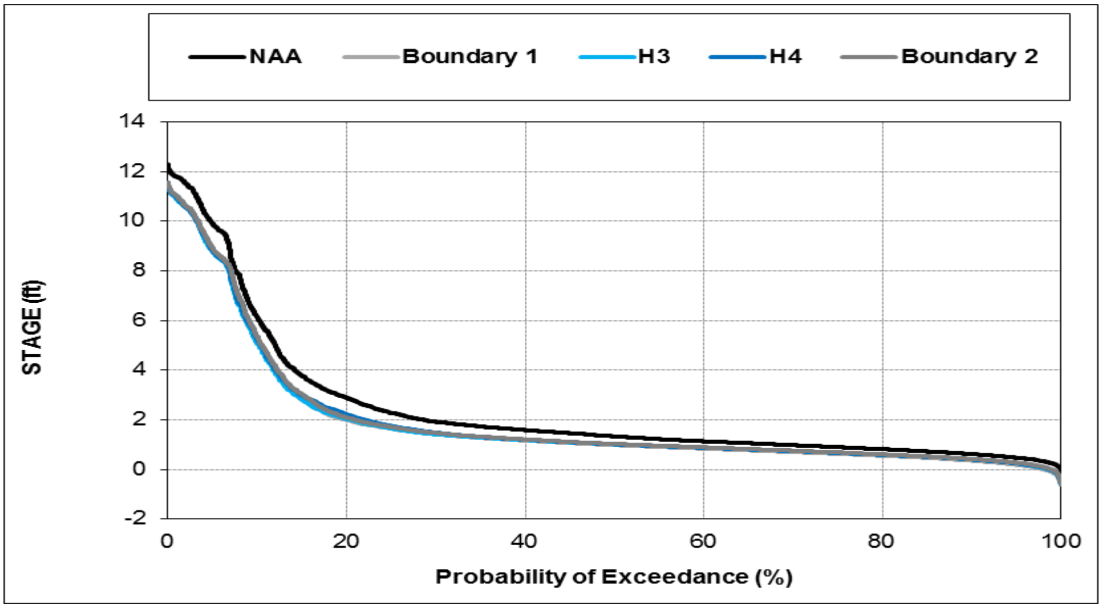
**Model results are used for comparative purposes and not for predictive purposes*

Figure C6: D-1641 Number of Days in a Year Meeting the Mean Daily Concentration 150 mg/L Chloride Objective at Contra Costa Canal Pumping Plant 1



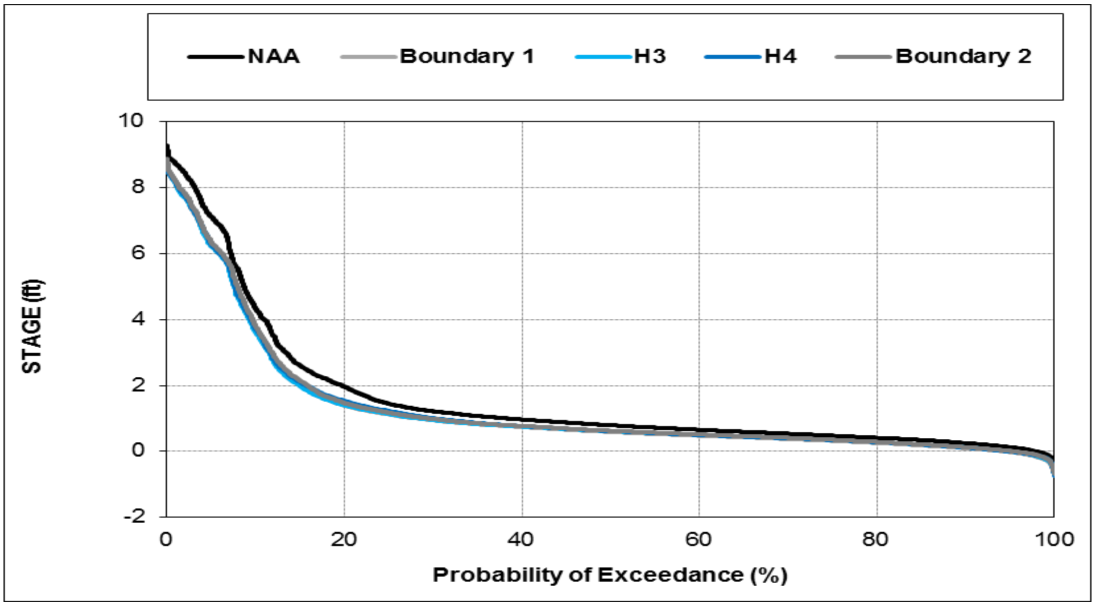
**Model results are used for comparative purposes and not for predictive purposes*

Figure W1: Probability of Exceedance for Daily Minimum Stage at Sacramento River Downstream From the Three Proposed Intakes.



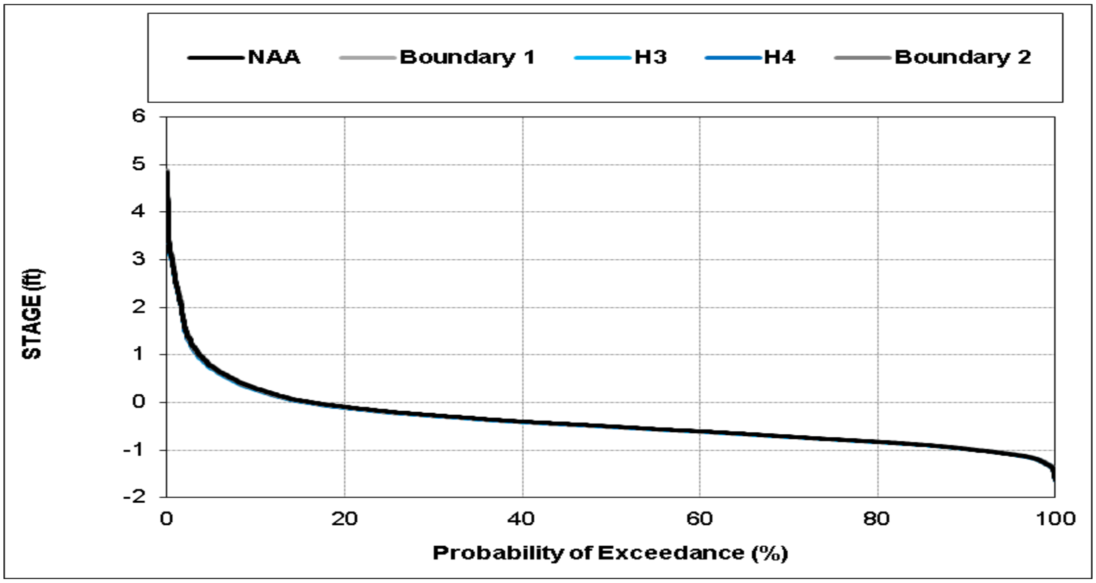
**Model results are used for comparative purposes and not for predictive purposes*

Figure W2: Probability of Exceedance for Daily Minimum Stage at Sacramento River Downstream of Georgiana Slough



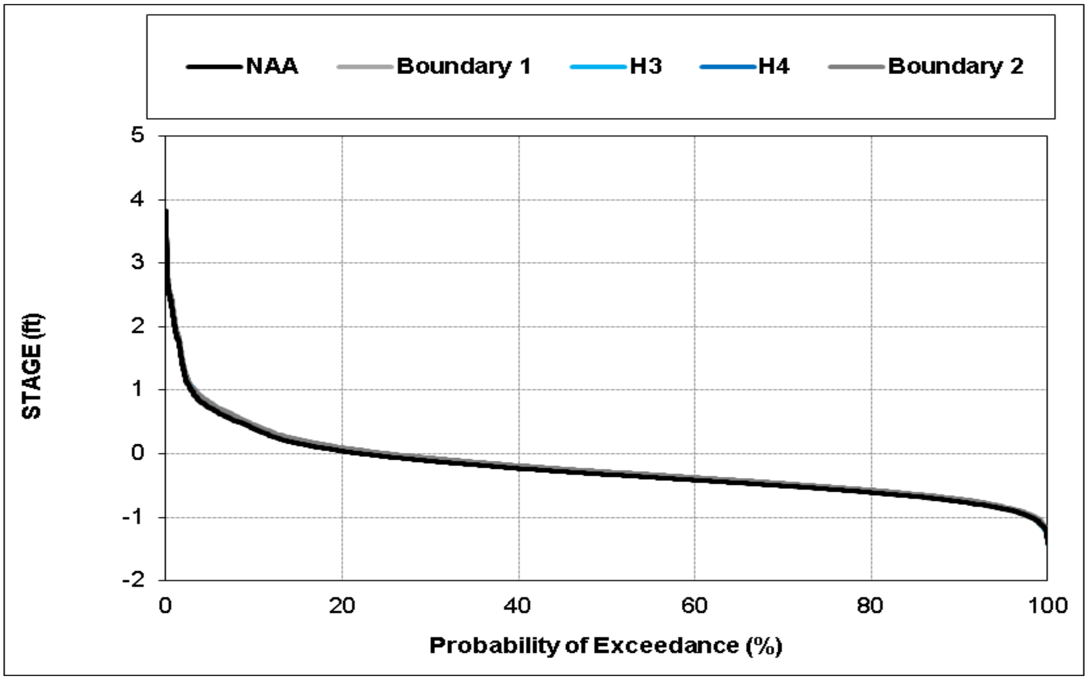
**Model results are used for comparative purposes and not for predictive purposes*

Figure W3: Probability of Exceedance for Daily Minimum Stage at Sacramento River at Rio Vista



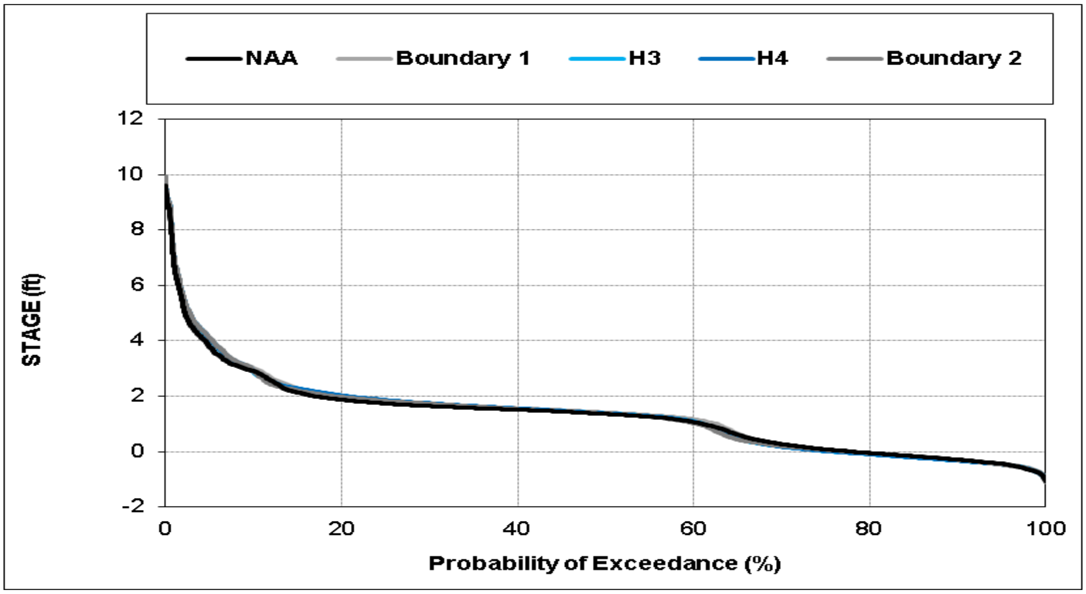
**Model results are used for comparative purposes and not for predictive purposes*

Figure W4: Probability of Exceedance for Daily Minimum Stage at Mokelumne River at Terminous



**Model results are used for comparative purposes and not for predictive purposes*

Figure W5: Probability of Exceedance for Daily Minimum Stage at Old River at Tracy Road



**Model results are used for comparative purposes and not for predictive purposes*