1 **Appendix 5B**

2 Sensitivity Analysis on Representation
3 of EID's Warren Act and EDCWA's
4 Water Service Contracts with
5 Reclamation in Alternatives 3 and 5

6 During internal review of the CalSim II models, it was discovered that the
7 demands for the El Dorado Irrigation District (EID) and El Dorado County Water
8 Agency (EDCWA) contracts were not included in Alternatives 3 and 5, as
9 intended. In an effort to address this oversight, this appendix provides
10 information on and findings from a sensitivity analysis of potential effects of
11 including EID's Warren Act contract and EDCWA's water service contract with
12 Reclamation. The sensitivity analysis includes system operations (CalSim II) and
13 temperature (HEC-5Q) model runs with inclusion of these demands at Folsom
14 Lake. It is apparent from this analysis that inclusion of these contracts would not
15 change the previous conclusions in Chapters 5 through 21.

16 The following summary focuses on the differences seen within Folsom Lake and
17 the American River. As will be discussed further in this appendix, addition of
18 these demands did not show sensitivity to the rest of the CVP and SWP system
19 and no further model simulations were necessary to capture potential effects.

20 5B.1 Background

21 This section provides brief background on EID and EDCWA's Warren Act
22 contracts with Reclamation.

23 *EID Power to Consumptive Use Transfer and Warren Act Contract*

24 EID has requested to execute a Warren Act contract with Reclamation for use of
25 Folsom Reservoir to convey 17,000 acre-feet annually of non-Central Valley
26 Project (CVP) water from EID's El Dorado Hydroelectric Project (FERC
27 Project 184); a 20 megawatt power project with four small storage reservoirs
28 providing flows to the South Fork of the American River. The Contract was
29 originally negotiated and completed in 2005, but was not executed because of
30 potential operational impacts and difficulties in securing concurrence from the
31 National Marine Fisheries Service (NMFS) that this action is "not likely to
32 adversely affect" threatened and endangered species. In 2014, the Section 7
33 consultation for the EID Warren Act contract was completed with NMFS. The
34 Section 7 consultation allowed EID to transfer up to 7,500 AF without a
35 temperature control device (to target warmer diversions) and could transfer the
36 full volume of 17,000 AF after construction and implementation of a temperature
37 control device.

1 Execution of the contract will result in the diversion of flow out of Folsom
2 Reservoir. Due to the anticipated effect of this reduction in historical inflow, the
3 depletion of Folsom inflow was accounted for in the 2008 Biological Assessment
4 future conditions modeling, but not referenced in the proposed action.

5 *El Dorado County Water Agency Water Service Contract*

6 Public Law 101-514, Section 206(b) (1) (B) directed the Secretary to enter into a
7 M&I water supply contract with EDCWA for up to 15,000 AF of CVP water
8 diverted from Folsom Reservoir.

9 **5B.2   Methodology**

10 CalSim II model simulations of Alternatives 3 and 5 were rerun with inclusion of
11 these Warren Act contracts (specifically CalSim II parameters: dem_dsa70_pmi,
12 np_dr70_imi, prj_dr70_imi, DEM_D8F_WR_ANN, DEM_D8I_PMI_ANN,
13 ElDorIDPL table values) as diversions from Folsom Lake. Subsequently,
14 HEC-5Q temperature model was rerun for the American River. The results of
15 Alternatives 3 and 5 are compared with and without representation of the Warren
16 Act and water service contracts. The comparisons represent the changes solely
17 due to inclusion of these diversions at the Folsom Lake.

18 **5B.3   Results**

19 This section presents select CalSim II model results and American River
20 temperature model results.

21 Results for Shasta, Trinity and Oroville show that changes in reservoir storage
22 were less than 2% by month and when averaged by water year types. This minor
23 change was considered minor and not substantial to the system outside of the
24 American River basin. These results were consistent for both Alternative 3 and
25 Alternative 5.

26 Folsom Storage showed a less than 3% difference when averaged by water year
27 types, but larger differences between 3-6% were seen in month to month
28 comparisons. Although this is slightly higher than the differences seen elsewhere
29 in the system, the new values do not change any of the conclusions presented in
30 Chapters 5 through 21. Results at Folsom were similar for both Alternative 3 and
31 Alternative 5.

32 American River flows showed the most difference with reductions in the drier
33 water years. Alternative 3 shows more differences than Alternative 5 with
34 differences as high as 6% in August of critical years. Although these results show
35 some differences with inclusion of the contracts, these new values do not change
36 any of the conclusions presented in Chapters 5 through 21.

1 American River temperatures below Nimbus Dam and at Watt Avenue for
2 Alternative 5 showed a slight decrease in October of the drier years, but was
3 within 5% when averaged by water year type. Although these results show some
4 improvement in temperature with inclusion of the contracts, these new values do
5 not change any of the conclusions presented in Chapters 5 through 21.

6 Alternative 3 did not show any differences above 1% with the inclusion of these
7 contracts.

8 Temperature threshold exceedances in the American River show 1 to 2%
9 differences in Alternatives 3 and 5 with and without inclusion of the EID and
10 ECWA diversions; which is considered similar in this EIS.

11 These results confirm that inclusion of EID's Warren Act contract and ECWA's
12 water service contract that result in increased diversions from Folsom Lake do not
13 cause many changes greater than 5% in model results and hence do not change
14 any of the conclusions presented in Chapters 5 through 21.

15 The following results for Alternatives 3 and 5 are presented:

16   5B.3.1 Trinity Storage

17   5B.3.2. Shasta Storage

18   5B.3.3. Oroville Storage

19   5B.3.4. Folsom Storage

20   5B.3.5. Folsom Elevation

21   5B.3.6. American River below Nimbus Flow

22   5B.3.7. Sacramento River at Freeport Flow

23   5B.3.8. Delta Outflow

24   5B.3.9. Jones and Banks Export Volume

25   5B.3.10. American River below Nimbus Temperature

26   5B.3.11. American River at Watt Temperature

27   5B.3.12. American River at Mouth Temperature

28   5B.3.13 Temperature Threshold Exceedances – American River

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5B.3.1 Trinity Storage

Table 5B.3.1.1. Trinity Lake, End of Month Storage

Alternative 3

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	1,850	1,850	1,850	1,900	2,000	2,100	2,298	2,351	2,298	2,211	2,100	1,975
20%	1,815	1,831	1,849	1,900	2,000	2,100	2,259	2,246	2,204	2,064	1,903	1,818
30%	1,583	1,614	1,719	1,803	1,968	2,069	2,222	2,159	2,064	1,925	1,794	1,649
40%	1,365	1,400	1,572	1,671	1,858	1,995	2,104	2,046	1,937	1,759	1,581	1,419
50%	1,257	1,259	1,420	1,588	1,700	1,823	1,990	1,895	1,784	1,599	1,418	1,307
60%	1,169	1,205	1,233	1,318	1,536	1,721	1,787	1,748	1,674	1,495	1,334	1,221
70%	1,100	1,095	1,187	1,200	1,344	1,472	1,629	1,579	1,525	1,385	1,223	1,100
80%	909	956	961	1,041	1,155	1,250	1,429	1,407	1,322	1,160	1,019	937
90%	628	630	623	681	790	921	1,065	1,023	965	843	690	628
Long Term												
Full Simulation Period[b]	1,266	1,283	1,347	1,427	1,550	1,674	1,816	1,793	1,724	1,580	1,432	1,318
Water Year Types[c]												
Wet (32%)	1,502	1,537	1,643	1,766	1,928	2,053	2,224	2,248	2,192	2,067	1,936	1,805
Above Normal (16%)	1,197	1,230	1,349	1,511	1,707	1,891	2,071	2,045	1,949	1,806	1,646	1,513
Below Normal (13%)	1,434	1,457	1,477	1,542	1,629	1,717	1,858	1,786	1,680	1,509	1,334	1,199
Dry (24%)	1,173	1,179	1,206	1,226	1,318	1,450	1,585	1,537	1,468	1,301	1,152	1,056
Critical (15%)	829	803	817	829	871	952	1,003	968	936	813	664	600

Alternative 3_WA

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	1,850	1,850	1,850	1,900	2,000	2,100	2,300	2,353	2,298	2,210	2,100	1,975
20%	1,815	1,832	1,849	1,900	2,000	2,100	2,259	2,246	2,209	2,070	1,905	1,819
30%	1,583	1,614	1,719	1,805	1,964	2,074	2,222	2,159	2,064	1,925	1,794	1,649
40%	1,352	1,402	1,572	1,676	1,849	1,997	2,104	2,053	1,950	1,751	1,577	1,407
50%	1,265	1,285	1,424	1,590	1,707	1,827	2,002	1,901	1,789	1,604	1,420	1,319
60%	1,170	1,208	1,247	1,335	1,545	1,721	1,789	1,750	1,675	1,497	1,340	1,222
70%	1,101	1,084	1,189	1,202	1,354	1,473	1,629	1,588	1,532	1,387	1,222	1,097
80%	916	961	972	1,053	1,157	1,252	1,433	1,416	1,325	1,160	1,030	948
90%	629	630	624	683	796	921	1,066	1,024	967	844	690	629
Long Term												
Full Simulation Period[b]	1,268	1,286	1,349	1,429	1,552	1,677	1,818	1,795	1,727	1,583	1,436	1,321
Water Year Types[c]												
Wet (32%)	1,501	1,536	1,642	1,766	1,929	2,054	2,224	2,249	2,194	2,069	1,939	1,806
Above Normal (16%)	1,201	1,234	1,352	1,514	1,710	1,894	2,075	2,049	1,954	1,805	1,651	1,520
Below Normal (13%)	1,436	1,459	1,478	1,543	1,631	1,719	1,860	1,788	1,681	1,510	1,337	1,202
Dry (24%)	1,177	1,183	1,209	1,230	1,322	1,454	1,588	1,540	1,472	1,305	1,157	1,059
Critical (15%)	833	811	823	834	876	957	1,006	970	938	815	668	600

Alternative 3_WA minus Alternative 3

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	-1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	-1%
50%	1%	2%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%
60%	0%	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%
70%	0%	-1%	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%
80%	1%	0%	1%	1%	0%	0%	0%	1%	0%	0%	1%	1%
90%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	1%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

Table 5B.3.1.2. Trinity Lake, End of Month Storage

Alternative 5

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	1,850	1,828	1,850	1,900	2,000	2,100	2,283	2,344	2,306	2,262	2,143	1,932
20%	1,764	1,735	1,803	1,889	2,000	2,100	2,250	2,276	2,207	2,064	1,893	1,743
30%	1,542	1,577	1,694	1,779	1,954	2,084	2,220	2,159	2,055	1,913	1,776	1,631
40%	1,427	1,373	1,560	1,683	1,770	1,994	2,131	2,029	1,921	1,779	1,600	1,453
50%	1,231	1,253	1,376	1,518	1,671	1,771	1,895	1,842	1,728	1,563	1,420	1,309
60%	1,127	1,172	1,247	1,279	1,493	1,669	1,798	1,720	1,634	1,479	1,271	1,148
70%	1,051	1,037	1,098	1,146	1,250	1,378	1,484	1,460	1,390	1,268	1,139	1,067
80%	834	850	879	977	1,036	1,141	1,321	1,259	1,209	1,066	941	830
90%	537	589	594	628	733	908	983	967	922	811	607	553
Long Term												
Full Simulation Period[b]	1,235	1,244	1,309	1,387	1,512	1,638	1,779	1,756	1,688	1,553	1,411	1,288
Water Year Types[c]												
Wet (32%)	1,494	1,520	1,635	1,759	1,926	2,056	2,222	2,246	2,191	2,068	1,940	1,781
Above Normal (16%)	1,155	1,180	1,290	1,459	1,662	1,850	2,030	2,004	1,912	1,778	1,627	1,503
Below Normal (13%)	1,398	1,405	1,422	1,493	1,580	1,667	1,813	1,741	1,637	1,474	1,311	1,190
Dry (24%)	1,155	1,150	1,175	1,183	1,275	1,404	1,540	1,492	1,415	1,259	1,110	1,012
Critical (15%)	744	726	741	743	784	866	913	878	856	755	622	539

Alternative 5_WA

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	1,850	1,828	1,850	1,900	2,000	2,100	2,283	2,344	2,306	2,262	2,144	1,932
20%	1,764	1,735	1,799	1,889	2,000	2,100	2,251	2,271	2,202	2,064	1,893	1,744
30%	1,546	1,594	1,681	1,779	1,961	2,085	2,217	2,159	2,061	1,913	1,776	1,631
40%	1,427	1,381	1,558	1,680	1,767	1,988	2,136	2,029	1,925	1,778	1,612	1,455
50%	1,233	1,254	1,379	1,534	1,672	1,769	1,903	1,839	1,723	1,568	1,417	1,314
60%	1,138	1,167	1,246	1,268	1,491	1,667	1,790	1,730	1,637	1,440	1,256	1,149
70%	1,046	1,036	1,102	1,151	1,276	1,390	1,495	1,479	1,395	1,284	1,153	1,075
80%	818	847	882	977	1,050	1,142	1,327	1,271	1,205	1,056	938	840
90%	534	589	618	624	732	908	998	967	922	812	617	549
Long Term												
Full Simulation Period[b]	1,236	1,245	1,310	1,387	1,513	1,639	1,781	1,757	1,689	1,553	1,411	1,290
Water Year Types[c]												
Wet (32%)	1,492	1,517	1,633	1,758	1,924	2,055	2,221	2,245	2,190	2,067	1,940	1,783
Above Normal (16%)	1,156	1,182	1,291	1,460	1,663	1,851	2,031	2,005	1,913	1,780	1,629	1,505
Below Normal (13%)	1,400	1,408	1,425	1,495	1,582	1,669	1,820	1,748	1,644	1,481	1,318	1,199
Dry (24%)	1,159	1,153	1,179	1,186	1,278	1,407	1,543	1,494	1,418	1,255	1,106	1,011
Critical (15%)	745	726	742	744	787	868	915	880	854	754	623	536

Alternative 5_WA minus Alternative 5

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
50%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
60%	1%	0%	0%	-1%	0%	0%	0%	1%	0%	-3%	-1%	0%
70%	0%	0%	0%	0%	2%	1%	1%	1%	0%	1%	1%	1%
80%	-2%	0%	0%	0%	1%	0%	0%	1%	0%	-1%	0%	1%
90%	-1%	0%	4%	-1%	0%	0%	2%	0%	0%	0%	2%	-1%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

5B.3.2. Shasta Storage

Table 5B.3.2.1. Shasta Lake, End of Month Storage

Alternative 3

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	3,250	3,252	3,349	3,639	3,910	4,225	4,481	4,552	4,434	3,884	3,579	3,400
20%	3,200	3,251	3,321	3,552	3,771	4,127	4,435	4,552	4,276	3,764	3,421	3,358
30%	3,094	3,161	3,292	3,513	3,675	4,020	4,382	4,515	4,155	3,528	3,171	3,106
40%	2,918	3,066	3,257	3,370	3,592	3,975	4,281	4,367	3,917	3,296	2,999	2,933
50%	2,680	2,774	3,085	3,277	3,484	3,866	4,177	4,228	3,736	3,148	2,761	2,735
60%	2,475	2,593	2,921	3,173	3,330	3,751	4,078	3,987	3,504	2,992	2,668	2,579
70%	2,379	2,412	2,634	2,889	3,252	3,513	3,895	3,731	3,375	2,802	2,547	2,448
80%	2,107	2,114	2,239	2,610	2,981	3,387	3,636	3,552	2,996	2,475	2,188	2,146
90%	1,527	1,514	1,581	2,107	2,371	2,814	2,706	2,899	2,628	2,089	1,752	1,621
Long Term												
Full Simulation Period[b]	2,525	2,578	2,750	3,019	3,284	3,636	3,914	3,908	3,543	3,013	2,687	2,605
Water Year Types[c]												
Wet (32%)	2,816	2,932	3,161	3,408	3,597	3,841	4,301	4,453	4,221	3,720	3,370	3,244
Above Normal (16%)	2,475	2,555	2,783	3,303	3,509	4,023	4,403	4,401	3,975	3,350	2,998	2,946
Below Normal (13%)	2,818	2,851	2,983	3,302	3,650	3,971	4,176	4,056	3,631	3,036	2,669	2,562
Dry (24%)	2,431	2,451	2,590	2,770	3,189	3,662	3,885	3,798	3,359	2,826	2,542	2,500
Critical (15%)	1,833	1,793	1,877	2,024	2,184	2,424	2,354	2,237	1,836	1,406	1,129	1,066

Alternative 3_WA

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	3,250	3,252	3,349	3,639	3,911	4,225	4,480	4,552	4,434	3,886	3,577	3,400
20%	3,196	3,250	3,321	3,552	3,771	4,125	4,435	4,552	4,275	3,764	3,416	3,347
30%	3,091	3,171	3,298	3,514	3,675	4,020	4,384	4,509	4,154	3,528	3,167	3,136
40%	2,919	3,055	3,252	3,370	3,596	3,975	4,280	4,363	3,915	3,295	2,999	2,934
50%	2,680	2,772	3,099	3,270	3,477	3,865	4,175	4,227	3,732	3,155	2,759	2,732
60%	2,469	2,598	2,921	3,189	3,329	3,746	4,076	3,986	3,502	3,001	2,673	2,599
70%	2,380	2,401	2,629	2,891	3,252	3,513	3,890	3,732	3,370	2,796	2,548	2,466
80%	2,109	2,117	2,249	2,597	2,987	3,377	3,638	3,559	2,989	2,461	2,176	2,140
90%	1,515	1,502	1,569	2,110	2,372	2,815	2,708	2,913	2,639	2,096	1,749	1,608
Long Term												
Full Simulation Period[b]	2,525	2,577	2,750	3,019	3,284	3,636	3,914	3,908	3,543	3,013	2,686	2,606
Water Year Types[c]												
Wet (32%)	2,818	2,934	3,161	3,409	3,597	3,841	4,301	4,454	4,220	3,718	3,367	3,246
Above Normal (16%)	2,471	2,549	2,782	3,302	3,508	4,024	4,404	4,401	3,972	3,353	2,996	2,948
Below Normal (13%)	2,817	2,849	2,981	3,301	3,648	3,969	4,173	4,053	3,629	3,034	2,668	2,562
Dry (24%)	2,432	2,452	2,592	2,771	3,190	3,662	3,885	3,799	3,358	2,826	2,543	2,502
Critical (15%)	1,834	1,791	1,875	2,024	2,183	2,424	2,356	2,240	1,840	1,412	1,128	1,067

Alternative 3_WA minus Alternative 3

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%
70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
90%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

Table 5B.3.2.2. Shasta Lake, End of Month Storage

Alternative 5

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	3,200	3,242	3,322	3,615	3,812	4,217	4,486	4,552	4,451	3,905	3,580	3,188
20%	3,018	2,911	3,293	3,525	3,704	4,114	4,434	4,552	4,282	3,762	3,471	3,041
30%	2,878	2,770	3,252	3,370	3,616	3,998	4,371	4,542	4,196	3,578	3,239	2,971
40%	2,735	2,684	3,037	3,270	3,496	3,944	4,260	4,435	3,973	3,313	3,027	2,866
50%	2,615	2,540	2,771	3,188	3,391	3,756	4,139	4,223	3,785	3,196	2,859	2,722
60%	2,495	2,452	2,537	2,971	3,284	3,590	3,989	3,967	3,595	3,020	2,738	2,605
70%	2,246	2,250	2,355	2,639	3,163	3,417	3,748	3,615	3,292	2,728	2,489	2,330
80%	1,912	1,958	2,146	2,447	2,766	3,151	3,485	3,251	2,855	2,356	2,051	1,979
90%	1,216	1,196	1,281	1,929	2,246	2,565	2,672	2,777	2,423	1,794	1,341	1,308
Long Term												
Full Simulation Period[b]	2,399	2,377	2,593	2,900	3,185	3,552	3,838	3,859	3,534	2,991	2,675	2,483
Water Year Types[c]												
Wet (32%)	2,704	2,716	3,078	3,385	3,590	3,836	4,299	4,461	4,243	3,736	3,410	2,989
Above Normal (16%)	2,369	2,388	2,598	3,164	3,454	4,019	4,401	4,430	4,042	3,409	3,071	2,842
Below Normal (13%)	2,603	2,565	2,704	3,077	3,450	3,820	4,039	3,970	3,602	3,012	2,663	2,620
Dry (24%)	2,344	2,287	2,433	2,627	3,039	3,509	3,745	3,699	3,315	2,787	2,497	2,459
Critical (15%)	1,676	1,611	1,700	1,856	2,015	2,258	2,203	2,104	1,749	1,246	958	910

Alternative 5_WA

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	3,200	3,249	3,322	3,615	3,812	4,217	4,486	4,552	4,451	3,905	3,578	3,186
20%	3,004	2,911	3,293	3,525	3,700	4,114	4,434	4,552	4,282	3,762	3,471	3,039
30%	2,876	2,772	3,252	3,367	3,616	3,998	4,371	4,543	4,197	3,580	3,239	2,968
40%	2,723	2,681	3,033	3,270	3,488	3,940	4,258	4,434	3,979	3,313	3,027	2,854
50%	2,609	2,534	2,762	3,187	3,382	3,756	4,136	4,222	3,785	3,197	2,855	2,727
60%	2,499	2,453	2,532	2,958	3,284	3,590	3,992	3,971	3,591	3,037	2,739	2,607
70%	2,242	2,237	2,357	2,632	3,155	3,417	3,743	3,608	3,282	2,774	2,493	2,333
80%	1,911	1,952	2,141	2,447	2,764	3,145	3,450	3,221	2,839	2,346	2,084	1,980
90%	1,218	1,197	1,283	1,927	2,253	2,534	2,686	2,778	2,423	1,797	1,345	1,309
Long Term												
Full Simulation Period[b]	2,398	2,376	2,591	2,899	3,183	3,551	3,836	3,858	3,532	2,990	2,674	2,480
Water Year Types[c]												
Wet (32%)	2,704	2,718	3,077	3,385	3,590	3,836	4,299	4,461	4,243	3,733	3,408	2,984
Above Normal (16%)	2,368	2,388	2,600	3,165	3,453	4,019	4,402	4,431	4,043	3,409	3,070	2,837
Below Normal (13%)	2,597	2,559	2,698	3,072	3,445	3,816	4,029	3,962	3,593	3,005	2,656	2,611
Dry (24%)	2,343	2,284	2,430	2,624	3,036	3,507	3,742	3,697	3,313	2,793	2,504	2,463
Critical (15%)	1,679	1,612	1,701	1,857	2,014	2,256	2,201	2,102	1,749	1,245	954	911

Alternative 5_WA minus Alternative 5

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
70%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
80%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%	2%	0%
90%	0%	0%	0%	0%	0%	-1%	1%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

5B.3.3. Oroville Storage

Table 5B.3.3.1. Lake Oroville, End of Month Storage

Alternative 3

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
						End of Month Storage (TAF)						
Probability of Exceedance[a]												
10%	2,639	2,548	2,788	2,807	2,943	3,052	3,352	3,538	3,538	3,046	2,791	2,727
20%	2,094	2,155	2,500	2,788	2,802	2,983	3,298	3,538	3,522	2,898	2,518	2,283
30%	1,905	1,889	2,078	2,450	2,788	2,938	3,268	3,454	3,177	2,562	2,273	2,045
40%	1,641	1,686	1,860	2,278	2,724	2,839	3,208	3,295	2,954	2,317	1,982	1,701
50%	1,264	1,293	1,647	2,109	2,565	2,788	3,081	3,061	2,744	2,106	1,708	1,470
60%	1,195	1,126	1,375	1,678	2,130	2,642	2,884	2,819	2,450	1,867	1,429	1,251
70%	1,103	1,056	1,110	1,356	1,827	2,179	2,527	2,549	2,185	1,605	1,309	1,244
80%	1,023	964	999	1,157	1,459	1,739	2,034	2,029	1,743	1,344	1,242	1,136
90%	918	905	907	1,016	1,239	1,461	1,663	1,666	1,294	1,167	1,050	974
Long Term												
Full Simulation Period[b]	1,560	1,554	1,717	1,961	2,248	2,472	2,733	2,798	2,580	2,108	1,823	1,674
Water Year Types[c]												
Wet (32%)	1,893	1,931	2,315	2,608	2,854	2,942	3,300	3,473	3,375	2,902	2,630	2,499
Above Normal (16%)	1,405	1,448	1,623	2,109	2,623	2,945	3,280	3,371	3,129	2,494	2,039	1,778
Below Normal (13%)	1,839	1,801	1,846	2,054	2,370	2,636	2,879	2,883	2,610	1,971	1,520	1,354
Dry (24%)	1,332	1,288	1,322	1,454	1,733	2,088	2,329	2,319	1,980	1,548	1,343	1,198
Critical (15%)	1,129	1,067	1,067	1,156	1,275	1,429	1,449	1,437	1,236	1,029	918	862

Alternative 3_WA

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
						End of Month Storage (TAF)						
Probability of Exceedance[a]												
10%	2,642	2,557	2,788	2,807	2,939	3,052	3,352	3,538	3,538	3,045	2,784	2,720
20%	2,098	2,155	2,508	2,788	2,802	2,983	3,298	3,538	3,522	2,897	2,519	2,282
30%	1,910	1,890	2,118	2,452	2,788	2,940	3,268	3,454	3,174	2,559	2,268	2,051
40%	1,647	1,673	1,860	2,284	2,751	2,841	3,208	3,294	2,954	2,318	1,982	1,705
50%	1,267	1,293	1,645	2,119	2,569	2,788	3,085	3,064	2,746	2,109	1,708	1,479
60%	1,192	1,128	1,358	1,670	2,132	2,643	2,880	2,822	2,451	1,865	1,423	1,250
70%	1,103	1,052	1,108	1,354	1,833	2,194	2,526	2,548	2,183	1,602	1,307	1,244
80%	1,023	964	997	1,157	1,458	1,723	2,037	2,029	1,739	1,347	1,242	1,136
90%	909	906	907	1,013	1,239	1,454	1,661	1,664	1,284	1,137	1,018	942
Long Term												
Full Simulation Period[b]	1,560	1,553	1,718	1,961	2,248	2,471	2,732	2,797	2,579	2,106	1,822	1,674
Water Year Types[c]												
Wet (32%)	1,892	1,931	2,315	2,608	2,854	2,942	3,300	3,472	3,374	2,901	2,630	2,499
Above Normal (16%)	1,406	1,448	1,631	2,115	2,627	2,945	3,280	3,371	3,130	2,494	2,039	1,775
Below Normal (13%)	1,841	1,802	1,847	2,056	2,372	2,638	2,880	2,885	2,611	1,971	1,520	1,356
Dry (24%)	1,330	1,287	1,321	1,454	1,733	2,088	2,328	2,317	1,978	1,546	1,341	1,201
Critical (15%)	1,129	1,064	1,063	1,152	1,271	1,425	1,445	1,434	1,232	1,024	913	857

Alternative 3_WA minus Alternative 3

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
						End of Month Storage (Percent Change)						
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	-1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
60%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
80%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
90%	-1%	0%	0%	0%	0%	0%	0%	0%	-1%	-3%	-3%	-3%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

Table 5B.3.3.2. Lake Oroville, End of Month Storage

Alternative 5

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,047	2,116	2,763	2,788	2,921	3,035	3,352	3,538	3,538	3,017	2,704	2,150
20%	1,778	1,801	2,036	2,655	2,788	2,964	3,298	3,538	3,538	2,951	2,508	1,961
30%	1,614	1,653	1,810	2,267	2,788	2,898	3,268	3,475	3,367	2,759	2,317	1,829
40%	1,402	1,371	1,559	1,931	2,557	2,788	3,208	3,336	3,132	2,493	2,005	1,562
50%	1,248	1,251	1,433	1,709	2,177	2,642	2,928	3,020	2,849	2,218	1,753	1,349
60%	1,170	1,145	1,252	1,595	1,940	2,279	2,607	2,720	2,516	1,870	1,438	1,245
70%	1,101	1,050	1,095	1,309	1,693	2,044	2,225	2,340	2,049	1,478	1,243	1,176
80%	1,011	974	1,004	1,166	1,440	1,710	1,910	1,894	1,717	1,241	1,135	1,051
90%	894	895	903	1,030	1,250	1,489	1,661	1,579	1,306	1,167	1,050	954
Long Term												
Full Simulation Period[b]	1,403	1,394	1,568	1,836	2,151	2,393	2,660	2,770	2,622	2,134	1,821	1,514
Water Year Types[c]												
Wet (32%)	1,681	1,723	2,179	2,556	2,833	2,942	3,300	3,488	3,447	2,961	2,613	2,103
Above Normal (16%)	1,275	1,310	1,471	1,948	2,512	2,892	3,247	3,401	3,241	2,608	2,125	1,668
Below Normal (13%)	1,552	1,507	1,517	1,728	2,132	2,406	2,663	2,746	2,569	1,959	1,521	1,305
Dry (24%)	1,223	1,173	1,190	1,319	1,595	1,952	2,193	2,255	1,992	1,502	1,295	1,150
Critical (15%)	1,102	1,037	1,025	1,114	1,229	1,383	1,415	1,411	1,266	1,045	929	873

Alternative 5_WA

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,045	2,110	2,745	2,788	2,916	3,035	3,352	3,538	3,538	3,015	2,706	2,152
20%	1,777	1,803	2,035	2,653	2,788	2,964	3,298	3,538	3,537	2,951	2,501	1,960
30%	1,615	1,652	1,804	2,266	2,788	2,898	3,268	3,475	3,367	2,756	2,321	1,832
40%	1,403	1,377	1,559	1,932	2,557	2,788	3,208	3,336	3,133	2,492	2,004	1,560
50%	1,248	1,251	1,432	1,709	2,176	2,641	2,928	3,021	2,852	2,218	1,754	1,348
60%	1,171	1,147	1,252	1,598	1,938	2,290	2,607	2,720	2,514	1,868	1,440	1,247
70%	1,102	1,051	1,094	1,309	1,693	2,048	2,226	2,339	2,043	1,488	1,242	1,175
80%	1,011	974	1,004	1,167	1,440	1,710	1,911	1,893	1,711	1,241	1,133	1,052
90%	893	895	902	1,030	1,246	1,489	1,665	1,578	1,300	1,166	1,049	953
Long Term												
Full Simulation Period[b]	1,403	1,394	1,568	1,836	2,151	2,393	2,661	2,770	2,622	2,133	1,820	1,515
Water Year Types[c]												
Wet (32%)	1,682	1,724	2,180	2,556	2,833	2,942	3,300	3,488	3,445	2,958	2,611	2,104
Above Normal (16%)	1,274	1,309	1,470	1,946	2,511	2,892	3,247	3,401	3,240	2,608	2,124	1,667
Below Normal (13%)	1,554	1,510	1,519	1,731	2,135	2,409	2,666	2,748	2,572	1,961	1,520	1,304
Dry (24%)	1,222	1,173	1,190	1,319	1,595	1,951	2,193	2,255	1,991	1,500	1,295	1,150
Critical (15%)	1,100	1,036	1,025	1,113	1,228	1,382	1,414	1,411	1,263	1,044	929	873

Alternative 5_WA minus Alternative 5

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

5B.3.4. Folsom Storage

Table 5B.3.4.1. Folsom Lake, End of Month Storage

Alternative 3

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	688	567	567	567	567	661	792	967	967	921	792	751
20%	592	563	567	567	567	656	792	967	967	814	709	648
30%	548	537	564	564	560	652	792	967	958	726	647	605
40%	483	495	523	556	556	646	792	967	899	636	567	522
50%	396	432	502	520	545	633	792	957	793	546	465	429
60%	348	387	450	469	499	621	790	859	749	485	434	397
70%	329	358	405	431	457	603	734	758	655	431	381	366
80%	304	329	342	389	438	563	649	656	547	392	346	331
90%	259	260	251	297	384	446	484	479	428	312	285	290
Long Term												
Full Simulation Period[b]	432	424	456	474	493	591	714	822	755	580	508	473
Water Year Types[c]												
Wet (32%)	486	473	525	524	515	632	785	951	929	790	690	645
Above Normal (16%)	388	404	454	537	539	640	787	946	851	580	516	479
Below Normal (13%)	513	496	505	514	542	627	764	844	766	506	436	407
Dry (24%)	405	398	420	434	482	580	692	761	654	491	436	411
Critical (15%)	331	314	322	325	370	436	474	485	431	343	291	257

Alternative 3_WA

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	679	567	567	567	567	661	792	967	967	915	792	742
20%	591	562	567	567	567	656	792	967	967	810	707	641
30%	533	534	557	563	560	652	792	967	952	722	636	599
40%	468	480	523	554	556	645	792	967	895	627	557	507
50%	382	427	499	524	545	633	792	952	791	540	468	423
60%	338	381	437	461	496	621	792	853	747	482	425	390
70%	315	349	401	432	457	598	730	760	655	434	372	354
80%	295	328	339	384	433	549	643	646	543	379	333	318
90%	257	257	238	292	377	443	489	484	422	299	277	280
Long Term												
Full Simulation Period[b]	425	418	452	471	492	590	712	819	751	575	501	465
Water Year Types[c]												
Wet (32%)	481	469	524	524	515	632	784	950	927	787	686	639
Above Normal (16%)	381	398	450	537	539	640	786	944	848	573	505	466
Below Normal (13%)	506	490	503	513	542	626	762	841	764	500	427	396
Dry (24%)	395	389	411	426	477	575	688	756	649	486	430	403
Critical (15%)	325	310	319	323	368	434	471	480	425	336	286	254

Alternative 3_WA minus Alternative 3

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	-1%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	-1%
30%	-3%	0%	-1%	0%	0%	0%	0%	0%	-1%	-1%	-2%	-1%
40%	-3%	-3%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-3%
50%	-4%	-1%	-1%	1%	0%	0%	0%	-1%	0%	-1%	1%	-2%
60%	-3%	-2%	-3%	-2%	-1%	0%	0%	-1%	0%	-1%	-2%	-2%
70%	-4%	-2%	-1%	0%	0%	-1%	0%	0%	0%	1%	-3%	-3%
80%	-3%	0%	-1%	-1%	-1%	-2%	-1%	-2%	-1%	-3%	-4%	-4%
90%	-1%	-1%	-5%	-2%	-2%	-1%	1%	1%	-1%	-4%	-3%	-3%
Long Term												
Full Simulation Period[b]	-2%	-1%	-1%	-1%	0%	0%	0%	0%	0%	-1%	-1%	-2%
Water Year Types[c]												
Wet (32%)	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%
Above Normal (16%)	-2%	-1%	-1%	0%	0%	0%	0%	0%	0%	-1%	-2%	-3%
Below Normal (13%)	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-3%
Dry (24%)	-3%	-2%	-2%	-2%	-1%	-1%	-1%	-1%	-1%	-1%	-2%	-2%
Critical (15%)	-2%	-1%	-1%	-1%	0%	0%	-1%	-1%	-1%	-2%	-2%	-1%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

Table 5B.3.4.2. Folsom Lake, End of Month Storage

Alternative 5

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	592	533	567	567	567	661	792	967	967	869	792	665
20%	538	489	567	565	566	656	792	967	967	818	733	604
30%	503	463	537	557	558	652	792	967	967	738	664	559
40%	455	429	503	541	553	646	792	967	933	665	608	521
50%	412	409	444	479	530	633	792	965	874	595	514	449
60%	353	392	417	448	496	621	790	861	773	524	460	401
70%	329	353	400	422	450	593	736	756	682	432	386	364
80%	294	314	350	370	412	542	626	665	552	383	349	333
90%	227	249	239	299	381	432	484	498	430	331	285	248
Long Term												
Full Simulation Period[b]	407	394	439	461	490	590	715	825	766	587	520	453
Water Year Types[c]												
Wet (32%)	454	435	515	518	515	632	785	952	941	794	710	577
Above Normal (16%)	375	379	428	513	532	640	787	946	888	622	554	478
Below Normal (13%)	440	425	461	483	534	620	758	845	783	523	469	450
Dry (24%)	397	386	411	426	479	579	691	766	664	489	435	410
Critical (15%)	325	304	314	320	367	433	483	499	411	324	257	231

Alternative 5_WA

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	590	530	567	567	567	661	792	967	967	888	786	664
20%	533	485	567	565	566	656	792	967	967	819	728	602
30%	501	463	535	557	558	652	792	967	966	732	654	557
40%	448	419	501	539	553	644	792	967	928	653	599	512
50%	402	404	442	479	530	633	792	960	862	586	513	438
60%	345	387	410	443	495	621	792	855	765	522	454	396
70%	322	350	398	420	451	592	732	758	672	423	376	359
80%	286	302	347	366	407	540	628	652	550	369	336	314
90%	229	242	228	296	377	425	475	488	427	337	292	248
Long Term												
Full Simulation Period[b]	401	389	436	459	488	588	712	821	762	582	513	447
Water Year Types[c]												
Wet (32%)	449	432	514	518	515	632	785	950	938	791	704	573
Above Normal (16%)	372	377	427	513	531	640	786	945	884	614	544	472
Below Normal (13%)	433	419	458	481	533	619	756	842	777	515	460	439
Dry (24%)	389	380	405	421	477	576	688	762	659	485	429	403
Critical (15%)	317	299	309	314	360	427	475	489	403	319	253	228

Alternative 5_WA minus Alternative 5

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	2%	-1%	0%
20%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%
40%	-1%	-2%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	-2%
50%	-3%	-1%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	-3%
60%	-2%	-1%	-2%	-1%	0%	0%	0%	-1%	-1%	0%	-1%	-1%
70%	-2%	-1%	0%	0%	0%	0%	0%	0%	-1%	-2%	-3%	-2%
80%	-3%	-4%	-1%	-1%	-1%	0%	0%	-2%	0%	-4%	-4%	-5%
90%	1%	-3%	-5%	-1%	-1%	-2%	-2%	-2%	-1%	2%	2%	0%
Long Term												
Full Simulation Period[b]	-1%	-1%	-1%	-1%	0%	0%	0%	0%	-1%	-1%	-1%	-1%
Water Year Types[c]												
Wet (32%)	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%
Above Normal (16%)	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%
Below Normal (13%)	-2%	-1%	-1%	0%	0%	0%	0%	0%	-1%	-2%	-2%	-2%
Dry (24%)	-2%	-2%	-1%	-1%	-1%	-1%	0%	-1%	-1%	-1%	-1%	-2%
Critical (15%)	-2%	-2%	-2%	-2%	-2%	-1%	-2%	-2%	-2%	-2%	-1%	-1%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

5B.3.5. Folsom Elevation

Table 5B.3.5.1. Folsom Lake, End of Month Elevation

Alternative 3

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	439	424	424	424	424	436	449	467	467	462	449	445
20%	427	424	424	424	424	435	449	467	467	451	441	434
30%	422	421	424	424	423	435	449	467	465	443	434	429
40%	414	415	419	423	423	434	449	467	459	433	424	419
50%	403	408	416	418	422	433	449	465	449	422	412	407
60%	396	402	410	412	416	431	449	455	445	414	408	403
70%	393	397	404	407	411	429	443	446	435	407	401	399
80%	389	393	395	402	408	424	435	435	422	403	395	393
90%	380	381	379	387	402	409	414	413	407	390	385	386
Long Term												
Full Simulation Period[b]	404	404	409	412	415	427	440	451	444	423	414	409
Water Year Types[c]												
Wet (32%)	413	412	419	419	418	432	448	465	463	448	438	433
Above Normal (16%)	395	397	408	421	421	433	448	465	455	425	418	413
Below Normal (13%)	416	415	416	417	421	432	446	454	446	415	404	401
Dry (24%)	401	401	405	407	414	426	438	445	434	414	407	404
Critical (15%)	388	386	390	390	396	406	411	411	403	389	379	372

Alternative 3_WA

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	438	424	424	424	424	436	449	467	467	461	449	444
20%	427	424	424	424	424	435	449	467	467	451	441	434
30%	420	420	423	424	423	435	449	467	465	442	433	428
40%	412	414	419	423	423	434	449	467	459	432	423	417
50%	401	407	416	419	422	433	449	465	449	421	412	406
60%	394	401	408	411	415	431	449	455	445	414	407	402
70%	390	396	404	408	411	428	443	446	435	408	400	397
80%	387	392	394	402	408	422	434	434	421	401	393	391
90%	380	380	376	387	401	409	415	414	406	388	384	384
Long Term												
Full Simulation Period[b]	403	403	409	411	414	427	440	451	443	422	413	408
Water Year Types[c]												
Wet (32%)	412	412	419	419	418	432	448	465	463	448	437	432
Above Normal (16%)	393	396	407	421	421	433	448	464	455	425	417	412
Below Normal (13%)	415	414	416	417	421	432	446	454	446	414	403	399
Dry (24%)	400	400	404	406	413	425	438	445	433	413	406	402
Critical (15%)	387	385	389	390	396	406	410	410	402	388	378	371

Alternative 3_WA minus Alternative 3

Statistic	End of Month Elevation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
70%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%
90%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

Table 5B.3.5.2. Folsom Lake, End of Month Elevation

Alternative 5

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	427	420	424	424	424	436	449	466	466	457	449	437
20%	421	415	424	424	424	435	449	466	466	452	443	429
30%	416	411	421	423	423	435	449	466	466	444	436	423
40%	410	407	416	421	423	434	449	466	463	437	429	419
50%	405	405	409	413	420	433	449	466	457	428	418	410
60%	397	403	406	410	415	431	449	456	447	419	411	404
70%	393	397	404	406	410	428	444	446	438	408	402	398
80%	387	390	396	399	405	421	432	437	423	401	396	393
90%	374	378	376	388	401	407	414	416	407	393	385	378
Long Term												
Full Simulation Period[b]	401	400	407	410	414	427	440	451	444	424	415	407
Water Year Types[c]												
Wet (32%)	409	407	418	418	418	432	448	465	464	449	440	425
Above Normal (16%)	394	395	405	418	420	433	449	464	458	431	423	413
Below Normal (13%)	406	405	410	413	420	431	445	454	447	417	411	408
Dry (24%)	400	400	404	406	413	426	438	446	435	413	406	403
Critical (15%)	386	384	389	390	396	406	412	414	400	385	370	365

Alternative 5_WA

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	427	420	424	424	424	436	449	467	467	458	448	436
20%	420	414	424	424	424	435	449	467	467	452	443	429
30%	416	411	420	423	423	435	449	467	467	443	435	423
40%	410	406	416	421	423	434	449	467	462	435	428	417
50%	404	404	409	413	420	433	449	465	456	427	418	408
60%	395	402	405	409	415	431	449	455	446	419	410	403
70%	392	396	403	406	410	427	443	446	437	406	400	398
80%	385	388	396	399	404	421	432	435	422	399	394	390
90%	374	377	374	387	401	407	413	414	407	394	386	378
Long Term												
Full Simulation Period[b]	400	399	407	410	414	427	440	451	444	423	414	406
Water Year Types[c]												
Wet (32%)	408	407	418	418	418	432	448	465	464	448	439	424
Above Normal (16%)	394	395	405	418	420	433	448	464	458	430	421	412
Below Normal (13%)	404	404	409	413	420	431	445	454	447	416	409	407
Dry (24%)	399	399	403	405	413	425	438	445	434	412	405	402
Critical (15%)	385	383	388	389	395	405	410	411	398	383	369	365

Alternative 5_WA minus Alternative 5

Statistic	End of Month Elevation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
90%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

5B.3.6. American River below Nimbus Flow

Table 5B.3.6.1. American River d/s of Nimbus Dam, Monthly Flow

Alternative 3

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
					Monthly Flow (cfs)							
Probability of Exceedance[a]												
10%	2,022	3,873	9,622	12,160	14,655	9,756	6,737	7,450	4,944	5,000	3,092	1,949
20%	1,714	3,207	4,325	7,873	10,797	6,816	5,085	4,486	4,005	5,000	2,542	1,687
30%	1,500	2,069	2,733	5,563	7,391	5,044	4,484	3,543	3,661	4,999	2,018	1,533
40%	1,500	1,925	2,000	3,579	5,756	4,172	3,491	2,838	3,200	3,840	1,875	1,533
50%	1,500	1,893	2,000	1,890	3,718	3,047	2,548	2,240	2,664	3,535	1,750	1,533
60%	1,500	1,683	1,960	1,700	2,605	2,017	2,152	1,750	2,230	2,900	1,750	1,533
70%	1,425	1,448	1,596	1,700	1,445	1,747	1,747	1,616	1,851	2,579	1,648	1,493
80%	1,150	1,150	1,244	1,374	1,264	1,059	1,073	1,112	1,598	2,013	1,081	800
90%	800	800	800	825	982	800	800	804	1,011	1,250	800	800
Long Term												
Full Simulation Period[b]	1,496	2,397	3,855	5,095	6,027	4,288	3,390	3,100	2,999	3,396	1,849	1,449
Water Year Types[c]												
Wet (32%)	1,696	3,301	7,254	10,565	10,615	7,210	5,522	5,541	4,361	3,511	2,516	1,815
Above Normal (16%)	1,323	2,651	3,693	5,447	7,960	6,141	3,574	2,529	2,982	4,854	1,863	1,539
Below Normal (13%)	1,622	2,285	2,711	2,417	5,174	2,188	2,454	2,009	2,380	4,514	1,728	1,354
Dry (24%)	1,374	1,704	1,661	1,593	2,327	2,389	2,262	1,942	2,453	2,792	1,476	1,229
Critical (15%)	1,336	1,419	1,371	1,153	938	1,041	1,313	1,362	1,542	1,546	1,125	1,012

Alternative 3_WA

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
					Monthly Flow (cfs)							
Probability of Exceedance[a]												
10%	1,939	3,832	9,575	12,142	14,637	9,738	6,685	7,387	4,863	5,000	2,989	1,909
20%	1,655	3,147	4,215	7,854	10,809	6,798	5,028	4,418	3,960	5,000	2,449	1,632
30%	1,500	1,964	2,610	5,547	7,335	5,026	4,424	3,523	3,638	4,979	2,017	1,533
40%	1,500	1,925	2,000	3,549	5,740	4,151	3,391	2,779	3,170	3,777	1,851	1,533
50%	1,500	1,862	2,000	1,799	3,664	3,029	2,480	2,156	2,588	3,425	1,750	1,533
60%	1,500	1,644	1,927	1,700	2,586	1,996	2,051	1,750	2,175	2,788	1,750	1,533
70%	1,372	1,385	1,490	1,700	1,445	1,747	1,747	1,601	1,787	2,527	1,609	1,480
80%	1,081	1,081	1,151	1,216	1,241	1,001	976	1,032	1,498	2,002	1,062	800
90%	800	800	800	819	960	800	800	800	914	1,151	800	590
Long Term												
Full Simulation Period[b]	1,461	2,351	3,809	5,057	5,989	4,272	3,344	3,059	2,936	3,344	1,811	1,431
Water Year Types[c]												
Wet (32%)	1,664	3,256	7,197	10,526	10,590	7,191	5,483	5,490	4,293	3,443	2,464	1,796
Above Normal (16%)	1,288	2,614	3,646	5,382	7,929	6,124	3,527	2,488	2,922	4,841	1,850	1,533
Below Normal (13%)	1,589	2,232	2,635	2,391	5,137	2,176	2,408	1,969	2,299	4,491	1,714	1,368
Dry (24%)	1,346	1,666	1,631	1,573	2,259	2,371	2,196	1,897	2,386	2,712	1,447	1,209
Critical (15%)	1,281	1,357	1,353	1,106	919	1,030	1,282	1,347	1,511	1,512	1,053	961

Alternative 3_WA minus Alternative 3

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
					Monthly Flow (Percent Change)							
Probability of Exceedance[a]												
10%	-4%	-1%	0%	0%	0%	0%	-1%	-1%	-2%	0%	-3%	-2%
20%	-3%	-2%	-3%	0%	0%	0%	-1%	-2%	-1%	0%	-4%	-3%
30%	0%	**-5%**	-4%	0%	-1%	0%	-1%	-1%	-1%	0%	0%	0%
40%	0%	0%	0%	-1%	0%	-1%	-3%	-2%	-1%	-2%	-1%	0%
50%	0%	-2%	0%	-5%	-1%	-1%	-3%	-4%	-3%	-3%	0%	0%
60%	0%	-2%	-2%	0%	-1%	-1%	-5%	0%	-3%	-4%	0%	0%
70%	-4%	-4%	**-7%**	0%	0%	0%	0%	-1%	-3%	-2%	-2%	-1%
80%	**-6%**	**-6%**	**-7%**	**-11%**	-2%	**-5%**	**-9%**	**-7%**	**-6%**	-1%	-2%	0%
90%	0%	0%	0%	-1%	-2%	0%	0%	0%	**-10%**	**-8%**	0%	**-26%**
Long Term												
Full Simulation Period[b]	-2%	-2%	-1%	-1%	-1%	0%	-1%	-1%	-2%	-2%	-2%	-1%
Water Year Types[c]												
Wet (32%)	-2%	-1%	-1%	0%	0%	0%	-1%	-1%	-2%	-2%	-2%	-1%
Above Normal (16%)	-3%	-1%	-1%	-1%	0%	0%	-1%	-2%	-2%	0%	-1%	0%
Below Normal (13%)	-2%	-2%	-3%	-1%	-1%	-1%	-2%	-2%	-3%	-1%	-1%	1%
Dry (24%)	-2%	-2%	-2%	-1%	-3%	-1%	-3%	-2%	-3%	-3%	-2%	-2%
Critical (15%)	-4%	-4%	-1%	-4%	-2%	-1%	-2%	-1%	-2%	-2%	**-6%**	**-5%**

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

Table 5B.3.6.2. American River d/s of Nimbus Dam, Monthly Flow

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,591	3,790	8,385	12,160	14,655	9,756	6,737	7,450	4,997	5,000	2,981	3,872
20%	1,858	3,384	3,894	7,653	10,889	6,820	5,085	4,492	3,883	5,000	2,354	3,145
30%	1,544	2,539	2,092	5,303	7,315	5,044	4,490	3,543	3,613	4,903	1,895	2,423
40%	1,500	1,961	2,000	3,582	5,758	4,175	3,491	2,733	2,886	4,084	1,750	1,910
50%	1,500	1,925	2,000	1,750	3,095	3,057	2,524	2,009	2,330	3,616	1,750	1,533
60%	1,500	1,683	1,823	1,700	1,796	2,022	2,038	1,750	1,965	2,944	1,750	1,533
70%	1,437	1,498	1,608	1,700	1,445	1,747	1,634	1,609	1,750	2,671	1,631	1,356
80%	1,188	1,219	1,262	1,356	1,264	845	1,024	992	1,508	2,392	965	800
90%	800	800	800	992	906	800	800	800	1,006	1,133	800	800
Long Term												
Full Simulation Period[b]	1,596	2,484	3,644	5,034	5,866	4,263	3,364	3,060	2,878	3,473	1,789	1,998
Water Year Types[c]												
Wet (32%)	1,728	3,416	6,805	10,493	10,513	7,212	5,524	5,544	4,165	3,654	2,242	3,306
Above Normal (16%)	1,588	2,861	3,698	5,425	7,666	6,024	3,580	2,535	2,374	4,775	1,927	2,204
Below Normal (13%)	1,768	2,251	2,282	2,218	4,766	2,184	2,450	1,916	2,151	4,524	1,499	1,222
Dry (24%)	1,550	1,768	1,619	1,587	2,233	2,363	2,267	1,867	2,384	2,983	1,485	1,239
Critical (15%)	1,239	1,462	1,358	1,111	912	1,041	1,117	1,285	2,121	1,523	1,430	919

Alternative 5_WA

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,556	3,768	8,365	12,142	14,637	9,738	6,685	7,387	4,989	5,000	2,907	3,767
20%	1,819	3,380	3,841	7,630	10,889	6,803	5,028	4,425	3,790	5,000	2,346	2,981
30%	1,500	2,512	2,000	5,274	7,128	5,027	4,437	3,523	3,604	4,823	1,803	2,323
40%	1,500	1,925	2,000	3,551	5,742	4,154	3,391	2,715	2,808	4,020	1,750	1,802
50%	1,500	1,860	2,000	1,738	3,072	3,040	2,464	1,931	2,246	3,557	1,750	1,533
60%	1,500	1,682	1,809	1,700	1,858	2,001	1,997	1,750	1,907	2,839	1,750	1,533
70%	1,401	1,431	1,475	1,682	1,445	1,747	1,609	1,609	1,750	2,539	1,630	1,263
80%	1,100	1,115	1,181	1,308	1,264	823	955	959	1,498	2,105	860	804
90%	782	800	800	945	865	800	800	800	890	1,070	800	800
Long Term												
Full Simulation Period[b]	1,567	2,440	3,604	5,008	5,838	4,245	3,325	3,024	2,826	3,411	1,754	1,944
Water Year Types[c]												
Wet (32%)	1,702	3,367	6,746	10,469	10,491	7,194	5,486	5,492	4,110	3,577	2,232	3,219
Above Normal (16%)	1,550	2,824	3,678	5,403	7,648	5,995	3,534	2,495	2,335	4,759	1,892	2,095
Below Normal (13%)	1,726	2,216	2,216	2,175	4,735	2,164	2,415	1,891	2,114	4,489	1,453	1,211
Dry (24%)	1,524	1,723	1,589	1,558	2,181	2,357	2,210	1,836	2,331	2,906	1,446	1,226
Critical (15%)	1,221	1,415	1,343	1,099	901	1,012	1,110	1,270	2,050	1,445	1,359	889

Alternative 5_WA minus Alternative 5

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-1%	-1%	0%	0%	0%	0%	-1%	-1%	0%	0%	-2%	-3%
20%	-2%	0%	-1%	0%	0%	0%	-1%	-1%	-2%	0%	0%	**-5%**
30%	-3%	-1%	-4%	-1%	-3%	0%	-1%	-1%	0%	-2%	-5%	-4%
40%	0%	-2%	0%	-1%	0%	-1%	-3%	-1%	-3%	-2%	0%	**-6%**
50%	0%	-3%	0%	-1%	-1%	-1%	-2%	-4%	-4%	-2%	0%	0%
60%	0%	0%	-1%	0%	3%	-1%	-2%	0%	-3%	-4%	0%	0%
70%	-3%	-4%	**-8%**	-1%	0%	0%	-2%	0%	0%	-5%	0%	**-7%**
80%	**-7%**	**-9%**	**-6%**	-4%	0%	-3%	**-7%**	-3%	-1%	**-12%**	**-11%**	0%
90%	-2%	0%	0%	-5%	-5%	0%	0%	0%	**-12%**	**-6%**	0%	0%
Long Term												
Full Simulation Period[b]	-2%	-2%	-1%	-1%	0%	0%	-1%	-1%	-2%	-2%	-2%	-3%
Water Year Types[c]												
Wet (32%)	-1%	-1%	-1%	0%	0%	0%	-1%	-1%	-1%	-2%	0%	-3%
Above Normal (16%)	-2%	-1%	-1%	0%	0%	0%	-1%	-2%	-2%	0%	-2%	-5%
Below Normal (13%)	-2%	-2%	-3%	-2%	-1%	-1%	-1%	-1%	-2%	-1%	-3%	-1%
Dry (24%)	-2%	-3%	-2%	-2%	-2%	0%	-3%	-2%	-2%	-3%	-3%	-1%
Critical (15%)	-1%	-3%	-1%	-1%	-1%	-3%	-1%	-1%	-3%	**-5%**	-5%	-3%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

5B.3.7. Sacramento River at Freeport Flow

Table 5B.3.7.1. Sacramento River at Freeport, Monthly Flow

Alternative 3

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
						Monthly Flow (cfs)						
Probability of Exceedance[a]												
10%	14,522	22,777	54,349	64,547	70,425	63,650	46,194	38,572	19,618	24,124	16,982	15,306
20%	14,016	15,433	35,012	55,813	62,015	51,429	32,554	26,881	18,690	23,538	16,423	14,750
30%	12,928	13,874	22,439	41,575	51,558	39,917	22,941	17,225	16,622	22,859	15,633	14,073
40%	11,616	12,936	18,500	26,437	45,279	29,972	19,998	15,149	16,079	21,097	15,244	13,635
50%	10,659	12,079	15,589	22,431	33,014	24,758	16,406	13,375	15,441	19,572	14,373	13,300
60%	9,263	11,153	13,999	18,180	24,733	20,947	12,825	12,360	14,633	17,322	13,505	12,363
70%	8,269	10,294	12,891	14,734	20,406	18,647	11,997	11,712	14,169	15,486	11,575	9,959
80%	7,912	8,827	11,039	13,490	16,256	15,202	10,876	11,076	12,499	13,687	9,625	8,924
90%	6,450	7,533	9,307	11,790	14,187	11,426	10,192	9,200	11,354	10,481	8,411	6,941
Long Term												
Full Simulation Period[b]	10,882	14,066	23,134	31,069	37,948	31,691	22,137	18,659	16,634	18,450	13,425	12,156
Water Year Types[c]												
Wet (32%)	12,631	18,451	38,620	50,401	56,918	48,277	35,056	30,274	21,422	19,904	15,099	14,529
Above Normal (16%)	10,011	15,687	24,282	39,084	47,607	42,363	24,359	18,074	15,986	22,756	16,372	14,207
Below Normal (13%)	11,703	14,058	15,668	19,267	31,751	19,354	14,632	14,094	15,368	22,662	16,099	13,094
Dry (24%)	10,247	10,917	13,572	17,315	23,665	21,407	15,052	12,639	14,931	16,466	10,640	10,168
Critical (15%)	8,345	8,067	11,116	14,242	15,868	12,641	10,425	8,341	10,959	10,077	8,799	7,248

Alternative 3_WA

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
						Monthly Flow (cfs)						
Probability of Exceedance[a]												
10%	14,522	22,597	54,573	64,595	70,440	63,652	46,204	38,551	19,576	24,059	16,983	15,302
20%	14,001	15,342	34,852	55,792	62,055	51,434	32,551	26,873	18,685	23,519	16,453	14,786
30%	12,914	13,898	22,398	41,583	51,560	40,594	22,928	17,225	16,611	22,903	15,661	14,073
40%	11,693	12,952	18,395	26,428	45,289	29,973	19,889	15,154	16,060	21,039	15,298	13,660
50%	10,717	12,046	15,530	22,279	32,969	24,754	16,407	13,378	15,457	19,538	14,357	13,322
60%	9,353	11,121	13,811	18,195	24,732	20,972	12,917	12,390	14,631	17,346	13,441	12,299
70%	8,214	10,221	12,802	14,746	20,413	18,634	11,988	11,714	14,181	15,374	11,535	9,914
80%	7,912	8,717	11,043	13,550	16,276	15,231	10,916	11,076	12,409	13,629	9,639	8,918
90%	6,450	7,551	9,303	11,820	14,220	11,459	10,235	9,201	11,355	10,430	8,552	6,963
Long Term												
Full Simulation Period[b]	10,892	14,051	23,085	31,051	37,940	31,702	22,126	18,660	16,618	18,429	13,421	12,151
Water Year Types[c]												
Wet (32%)	12,647	18,424	38,609	50,384	56,924	48,279	35,051	30,261	21,403	19,893	15,068	14,530
Above Normal (16%)	10,014	15,687	24,067	39,036	47,615	42,396	24,345	18,080	15,983	22,762	16,378	14,189
Below Normal (13%)	11,739	14,031	15,607	19,256	31,751	19,364	14,631	14,089	15,347	22,693	16,100	13,093
Dry (24%)	10,262	10,905	13,568	17,315	23,614	21,416	15,028	12,651	14,911	16,390	10,614	10,162
Critical (15%)	8,314	8,064	11,100	14,217	15,877	12,652	10,420	8,355	10,948	10,056	8,870	7,240

Alternative 3_WA minus Alternative 3

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
						Monthly Flow (Percent Change)						
Probability of Exceedance[a]												
10%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%
40%	1%	0%	-1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%
50%	1%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
60%	1%	0%	-1%	0%	0%	0%	1%	0%	0%	0%	0%	-1%
70%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
80%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

Table 5B.3.7.2. Sacramento River at Freeport, Monthly Flow

Alternative 5

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Monthly Flow (cfs)												
Probability of Exceedance[a]												
10%	14,940	22,403	48,958	63,738	70,363	62,025	46,178	38,574	19,953	24,625	17,185	29,151
20%	13,753	18,981	32,387	52,655	61,599	51,038	32,559	25,815	16,141	24,012	16,842	28,386
30%	13,111	18,329	21,304	38,363	49,567	37,212	22,950	16,490	13,942	23,249	16,214	22,293
40%	11,971	16,727	17,992	24,503	42,844	29,460	20,004	12,900	13,403	21,099	15,960	21,312
50%	10,996	15,185	15,541	20,791	32,715	24,379	15,901	11,905	13,055	19,737	15,468	14,746
60%	9,175	13,119	15,099	18,100	24,483	20,700	12,517	11,096	12,619	18,365	14,543	13,155
70%	8,302	10,026	13,584	14,777	19,202	18,200	11,777	10,131	12,094	17,451	11,864	10,306
80%	7,912	8,595	10,753	13,467	16,241	14,863	10,304	9,401	10,762	15,630	9,789	8,689
90%	6,444	7,512	9,293	11,701	13,900	11,364	9,585	8,003	10,127	11,885	8,975	7,378
Long Term												
Full Simulation Period[b]	11,003	15,715	22,497	30,404	37,388	31,223	21,901	17,523	14,824	19,224	13,951	17,409
Water Year Types[c]												
Wet (32%)	12,973	20,552	36,278	49,232	56,574	48,034	35,045	29,921	20,050	20,717	16,120	27,839
Above Normal (16%)	10,196	17,255	24,677	38,449	46,580	40,841	24,141	16,617	13,618	23,104	16,859	21,070
Below Normal (13%)	12,003	15,829	15,766	18,240	30,181	18,617	14,146	12,152	12,755	22,395	15,727	12,486
Dry (24%)	10,157	12,669	13,658	17,178	23,432	21,280	14,835	10,813	12,951	17,695	11,049	10,285
Critical (15%)	8,100	8,542	11,179	14,090	15,730	12,507	9,883	7,752	9,826	11,428	9,309	7,230

Alternative 5_WA

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Monthly Flow (cfs)												
Probability of Exceedance[a]												
10%	14,939	22,317	49,006	63,715	70,379	62,013	46,174	38,552	19,936	24,654	17,184	29,026
20%	13,754	18,988	32,533	52,689	61,606	51,039	32,558	25,656	16,092	24,038	16,866	28,236
30%	13,072	18,328	21,226	38,367	49,249	37,198	22,936	16,518	13,940	23,268	16,214	22,324
40%	11,951	16,821	17,967	24,529	42,874	29,426	19,897	12,902	13,400	21,094	15,951	21,304
50%	11,010	15,177	15,551	20,785	32,688	24,390	15,905	11,894	13,107	19,751	15,453	14,728
60%	9,173	13,106	15,119	18,061	24,509	20,711	12,491	11,125	12,679	18,366	14,626	13,076
70%	8,292	10,039	13,535	14,786	19,204	18,221	11,812	10,128	12,071	17,551	11,851	10,308
80%	7,912	8,609	10,772	13,485	16,261	14,895	10,336	9,396	10,762	15,578	9,756	8,589
90%	6,444	7,525	9,274	11,723	13,914	11,394	9,606	8,001	10,117	11,784	8,969	7,372
Long Term												
Full Simulation Period[b]	10,992	15,703	22,482	30,398	37,387	31,226	21,894	17,524	14,835	19,215	13,932	17,385
Water Year Types[c]												
Wet (32%)	12,942	20,520	36,264	49,222	56,587	48,038	35,042	29,908	20,086	20,718	16,108	27,764
Above Normal (16%)	10,181	17,223	24,671	38,454	46,578	40,822	24,125	16,618	13,613	23,142	16,852	21,065
Below Normal (13%)	12,007	15,813	15,724	18,216	30,172	18,608	14,142	12,148	12,760	22,380	15,781	12,497
Dry (24%)	10,165	12,686	13,646	17,171	23,407	21,294	14,812	10,821	12,949	17,661	10,998	10,288
Critical (15%)	8,094	8,546	11,171	14,098	15,742	12,520	9,903	7,772	9,830	11,392	9,249	7,221

Alternative 5_WA minus Alternative 5

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Monthly Flow (Percent Change)												
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	-1%
30%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
40%	0%	1%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%
70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

5B.3.8. Delta Outflow

Table 5B.3.8.1. Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Alternative 3

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
						Monthly Outflow Volume (TAF)						
Probability of Exceedance[a]												
10%	298	902	4,155	6,646	7,924	5,788	3,812	2,471	1,066	729	265	261
20%	266	389	2,140	4,462	4,802	4,293	2,584	1,383	630	659	246	245
30%	257	319	1,154	3,104	3,795	2,714	1,525	913	572	575	246	235
40%	246	290	722	1,875	3,031	2,137	1,238	750	502	492	246	229
50%	246	268	480	1,398	2,079	1,678	867	704	477	492	246	222
60%	246	268	398	1,061	1,416	1,185	754	630	436	428	246	191
70%	246	268	336	768	1,078	1,032	601	579	422	307	246	179
80%	246	268	277	599	821	789	566	493	409	307	241	179
90%	185	208	277	497	634	654	512	437	351	246	222	179
Long Term												
Full Simulation Period[b]	277	506	1,465	2,772	3,236	2,711	1,617	1,122	656	490	252	240
Water Year Types[c]												
Wet (32%)	333	791	3,116	5,609	5,812	5,020	2,996	2,109	1,118	649	271	319
Above Normal (16%)	242	568	1,461	3,096	3,903	3,292	1,636	960	514	645	246	228
Below Normal (13%)	281	422	564	1,156	2,186	1,120	856	699	457	507	254	221
Dry (24%)	250	297	457	992	1,459	1,384	882	612	445	321	245	191
Critical (15%)	234	243	397	721	859	752	528	397	346	246	230	179

Alternative 3_WA

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
						Monthly Outflow Volume (TAF)						
Probability of Exceedance[a]												
10%	313	890	4,169	6,646	7,923	5,788	3,820	2,470	1,064	724	266	261
20%	266	376	2,137	4,462	4,818	4,300	2,584	1,382	629	660	246	245
30%	255	317	1,154	3,104	3,795	2,775	1,524	912	572	578	246	235
40%	246	291	721	1,876	3,031	2,138	1,225	750	502	492	246	228
50%	246	268	479	1,384	2,072	1,680	865	704	475	492	246	223
60%	246	268	399	1,058	1,414	1,186	752	631	436	428	246	187
70%	246	268	319	767	1,081	1,027	598	577	422	307	246	179
80%	246	268	277	603	822	791	568	492	409	307	239	179
90%	185	208	277	498	636	655	514	437	350	246	222	179
Long Term												
Full Simulation Period[b]	277	505	1,464	2,771	3,237	2,713	1,616	1,122	656	490	252	240
Water Year Types[c]												
Wet (32%)	335	788	3,116	5,608	5,811	5,019	2,996	2,108	1,117	649	271	319
Above Normal (16%)	243	568	1,455	3,093	3,909	3,297	1,635	960	514	645	246	227
Below Normal (13%)	280	421	560	1,155	2,186	1,120	855	699	455	508	254	221
Dry (24%)	250	297	457	992	1,456	1,385	881	611	445	321	244	191
Critical (15%)	234	243	397	721	861	753	529	398	346	246	228	179

Alternative 3_WA minus Alternative 3

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
						Monthly Outflow Volume (Percent Change)						
Probability of Exceedance[a]												
10%	5%	-1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
20%	0%	-3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	-1%	-1%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%
50%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	1%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%
70%	0%	0%	-5%	0%	0%	0%	0%	0%	0%	0%	0%	0%
80%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	-1%	0%
90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

Table 5B.3.8.2. Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Alternative 5

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	623	960	4,115	6,339	7,831	5,439	4,160	2,849	1,180	767	284	1,161
20%	594	874	2,112	4,319	4,907	4,174	2,807	1,763	606	688	256	1,134
30%	576	830	1,008	3,149	3,653	2,835	1,798	1,237	524	593	246	910
40%	423	660	762	1,785	2,869	2,092	1,542	1,002	453	501	246	651
50%	257	586	616	1,301	2,053	1,666	1,234	873	423	492	246	255
60%	246	369	359	1,048	1,406	1,203	1,028	776	422	400	246	204
70%	246	268	310	800	1,025	1,057	817	629	401	308	246	179
80%	246	268	286	585	823	783	712	561	370	307	246	179
90%	184	211	277	486	633	662	623	462	330	246	230	179
Long Term												
Full Simulation Period[b]	401	690	1,413	2,714	3,184	2,695	1,848	1,312	642	500	257	565
Water Year Types[c]												
Wet (32%)	517	1,020	2,905	5,499	5,773	4,996	3,288	2,411	1,117	667	273	1,132
Above Normal (16%)	334	767	1,505	3,048	3,795	3,232	1,947	1,223	482	668	251	661
Below Normal (13%)	471	650	582	1,075	2,047	1,110	1,061	821	434	513	254	214
Dry (24%)	342	471	467	980	1,444	1,396	1,081	720	423	316	256	191
Critical (15%)	254	296	418	714	856	747	621	462	346	249	233	179

Alternative 5_WA

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	614	893	4,109	6,332	7,834	5,439	4,159	2,847	1,178	767	284	1,161
20%	594	874	2,123	4,318	4,907	4,176	2,807	1,762	605	701	258	1,134
30%	576	819	1,007	3,149	3,645	2,833	1,797	1,235	525	593	246	910
40%	423	660	763	1,785	2,870	2,092	1,538	1,001	449	502	246	651
50%	256	586	616	1,301	2,054	1,667	1,226	873	422	492	246	256
60%	246	369	360	1,048	1,407	1,204	1,027	777	422	400	246	205
70%	246	268	310	801	1,023	1,061	816	630	401	308	246	179
80%	246	268	286	587	824	785	709	561	370	307	246	179
90%	184	211	277	488	633	664	627	464	330	246	230	179
Long Term												
Full Simulation Period[b]	400	685	1,413	2,714	3,185	2,695	1,848	1,312	642	500	257	565
Water Year Types[c]												
Wet (32%)	516	1,018	2,906	5,498	5,775	4,995	3,288	2,410	1,115	668	272	1,132
Above Normal (16%)	333	736	1,504	3,048	3,797	3,229	1,946	1,223	482	669	251	661
Below Normal (13%)	471	649	579	1,073	2,046	1,111	1,061	821	434	513	254	214
Dry (24%)	342	471	468	980	1,443	1,396	1,079	721	422	316	256	192
Critical (15%)	254	296	417	714	856	747	622	463	346	248	233	179

Alternative 5_WA minus Alternative 5

Statistic	Monthly Outflow Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-1%	**-7%**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	1%	0%	0%	0%	0%	0%	0%	2%	1%	0%
30%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
90%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period[b]	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	-4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

5B.3.9. Jones and Banks Export Volume

Table 5B.3.9.1. Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Alternative 3

Statistic	Monthly Export Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	694	671	718	653	725	722	547	563	667	694	694	671
20%	673	671	691	565	603	622	510	496	461	694	694	671
30%	627	652	628	440	524	577	465	452	399	694	694	671
40%	552	627	583	422	449	532	437	386	373	680	694	657
50%	476	571	546	411	393	460	369	329	355	628	624	640
60%	382	501	523	395	365	351	320	281	338	566	502	572
70%	322	467	505	377	320	316	255	230	311	448	396	417
80%	265	346	479	328	264	288	187	124	252	382	268	344
90%	218	276	378	304	202	159	124	102	138	190	170	228
Long Term												
Full Simulation Period[b]	465	520	549	442	426	445	353	330	362	533	513	529
Water Year Types[c]												
Wet (32%)	544	615	601	559	594	589	494	490	519	648	667	654
Above Normal (16%)	430	533	574	414	469	566	441	413	397	586	680	647
Below Normal (13%)	524	587	607	394	373	448	312	266	330	683	650	588
Dry (24%)	440	471	523	389	314	337	270	242	292	492	318	426
Critical (15%)	321	319	401	355	251	180	127	100	131	158	196	245

Alternative 3_WA

Statistic	Monthly Export Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	694	671	718	653	726	722	542	563	667	696	694	671
20%	672	671	690	565	603	622	512	496	461	694	694	671
30%	628	660	620	440	524	576	465	451	399	694	694	671
40%	552	624	582	422	449	532	438	386	373	680	694	657
50%	475	571	545	411	393	460	369	329	355	630	619	640
60%	397	501	521	395	365	351	320	280	339	566	498	555
70%	316	467	505	373	320	316	256	231	311	448	392	420
80%	265	344	479	328	264	288	186	124	252	379	269	343
90%	219	276	378	304	202	159	124	102	136	189	189	230
Long Term												
Full Simulation Period[b]	465	520	548	442	426	444	353	330	362	532	513	528
Water Year Types[c]												
Wet (32%)	544	616	601	558	594	589	493	491	519	648	665	654
Above Normal (16%)	430	534	567	414	469	562	442	413	397	586	680	647
Below Normal (13%)	526	586	608	394	373	448	313	266	330	684	650	588
Dry (24%)	441	471	523	390	314	337	270	243	290	488	317	426
Critical (15%)	319	320	401	354	249	180	126	100	131	157	202	245

Alternative 3_WA minus Alternative 3

Statistic	Monthly Export Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
60%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-3%
70%	-2%	0%	0%	-1%	0%	0%	0%	1%	0%	0%	-1%	1%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
90%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	**11%**	1%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	-1%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
Critical (15%)	0%	0%	0%	0%	-1%	0%	-1%	0%	-1%	-1%	3%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

Table 5B.3.9.2. Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Alternative 5

Statistic	Monthly Export Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	514	671	721	604	613	677	223	218	509	714	724	671
20%	454	553	717	490	528	612	165	127	359	709	724	662
30%	429	479	685	427	448	528	134	91	340	696	715	648
40%	378	443	558	419	416	479	122	83	318	678	705	626
50%	360	408	496	405	380	424	111	71	251	646	693	598
60%	334	375	481	396	363	349	97	50	207	606	571	508
70%	311	347	452	377	323	312	80	38	193	568	401	415
80%	289	302	387	319	267	283	45	23	178	445	278	347
90%	245	250	337	280	165	159	30	7	42	271	192	254
Long Term												
Full Simulation Period[b]	376	427	528	427	394	423	122	99	279	570	538	514
Water Year Types[c]												
Wet (32%)	408	505	564	514	532	592	202	202	444	667	718	627
Above Normal (16%)	376	423	561	407	405	496	127	92	315	590	705	625
Below Normal (13%)	381	456	588	387	359	397	103	55	208	663	632	561
Dry (24%)	370	394	513	392	315	318	80	41	205	577	333	433
Critical (15%)	313	293	382	355	249	179	34	20	69	239	222	243

Alternative 5_WA

Statistic	Monthly Export Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	513	671	721	604	607	678	223	218	509	714	724	671
20%	454	567	717	490	529	611	165	127	359	709	724	661
30%	432	493	685	427	448	517	134	91	340	695	715	647
40%	377	447	558	419	412	479	122	83	319	679	700	616
50%	360	415	497	405	380	424	111	71	268	647	693	590
60%	334	375	477	396	363	349	97	50	207	606	586	518
70%	312	349	453	377	323	312	80	38	193	566	390	416
80%	288	306	389	319	267	283	45	23	178	445	276	349
90%	247	251	337	280	165	160	30	7	42	266	193	254
Long Term												
Full Simulation Period[b]	376	432	527	427	394	423	122	99	280	569	537	513
Water Year Types[c]												
Wet (32%)	407	504	564	514	532	592	202	202	448	667	717	622
Above Normal (16%)	376	451	562	407	404	496	127	92	315	591	705	625
Below Normal (13%)	381	456	588	387	359	396	103	55	208	662	635	561
Dry (24%)	370	395	512	391	315	318	80	41	205	575	331	433
Critical (15%)	312	293	382	356	250	179	33	20	69	237	219	243

Alternative 5_WA minus Alternative 5

Statistic	Monthly Export Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
20%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	1%	3%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	0%
40%	0%	1%	0%	0%	-1%	0%	0%	0%	0%	0%	-1%	-2%
50%	0%	2%	0%	0%	0%	0%	0%	0%	7%	0%	0%	-1%
60%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	3%	2%
70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-3%	0%
80%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%
90%	1%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	1%	0%
Long Term												
Full Simulation Period[b]	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	-1%
Above Normal (16%)	0%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

5B.3.10. American River below Nimbus Temperature

Table 5B.3.10.1. American River below Nimbus Dam, Monthly Temperature

Alternative 3

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	66.2	58.1	53.3	48.3	48.8	52.2	58.0	63.2	67.8	68.7	67.3	68.0
20%	65.2	57.9	52.0	47.6	47.8	51.3	56.9	62.0	65.3	66.7	66.3	67.4
30%	64.4	57.6	51.7	47.2	47.5	50.7	56.2	60.7	64.6	65.3	65.6	66.5
40%	63.6	57.3	50.7	46.9	47.0	49.9	55.3	59.6	63.1	64.8	64.9	65.9
50%	63.3	57.1	50.5	46.3	46.7	49.4	54.5	58.3	62.4	64.5	64.2	65.3
60%	63.1	56.9	49.4	45.8	46.3	49.0	54.0	57.8	60.8	64.4	64.0	64.9
70%	62.8	56.6	48.9	45.6	46.0	48.7	53.4	57.0	59.8	64.1	63.2	64.6
80%	62.6	56.1	48.3	45.0	45.8	48.3	52.4	56.5	59.3	63.7	62.7	64.0
90%	59.2	55.7	47.1	44.5	45.4	48.0	51.9	54.9	59.0	63.4	62.2	63.4
Long Term												
Full Simulation Period[b]	63.4	57.0	50.2	46.4	46.9	49.8	54.8	59.1	62.5	65.3	64.5	65.6
Water Year Types[c]												
Wet (32%)	60.1	54.4	47.6	45.7	46.1	48.6	52.8	56.6	60.0	63.9	62.6	64.0
Above Normal (16%)	63.7	56.8	49.8	46.4	46.6	49.0	54.2	58.3	62.1	64.2	64.3	65.1
Below Normal (13%)	62.4	56.9	51.1	47.0	46.9	50.0	56.0	60.6	63.4	65.0	64.9	66.0
Dry (24%)	63.9	57.3	50.7	46.7	47.3	50.6	55.5	60.5	63.7	65.9	65.6	66.3
Critical (15%)	64.9	57.7	50.7	46.8	48.1	52.1	57.2	61.5	65.6	69.0	67.0	68.0

Alternative 3_WA

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	66.3	58.1	53.2	48.2	48.6	52.3	57.9	63.3	67.5	68.8	67.3	68.1
20%	65.1	57.8	51.8	47.4	47.8	51.4	57.0	61.8	65.5	66.9	66.4	67.5
30%	64.3	57.6	51.5	47.2	47.5	50.7	56.2	61.0	64.9	65.2	65.7	66.6
40%	63.5	57.4	50.7	46.9	47.0	49.9	55.2	59.6	63.2	64.8	65.0	65.9
50%	63.2	57.1	50.4	46.2	46.7	49.4	54.6	58.4	62.4	64.6	64.4	65.4
60%	62.9	56.8	49.4	45.8	46.3	49.0	54.0	57.8	60.8	64.4	63.9	64.9
70%	62.7	56.5	48.9	45.5	46.0	48.7	53.4	57.0	59.8	64.1	63.1	64.6
80%	62.5	56.0	48.2	45.0	45.8	48.3	52.4	56.5	59.3	63.6	62.8	64.1
90%	59.1	55.6	46.9	44.5	45.4	48.0	51.9	54.9	59.0	63.4	62.2	63.5
Long Term												
Full Simulation Period[b]	63.4	56.9	50.1	46.3	46.8	49.8	54.7	59.0	62.6	65.3	64.6	65.6
Water Year Types[c]												
Wet (32%)	60.1	54.4	47.5	45.7	46.1	48.6	52.8	56.6	60.0	63.8	62.7	64.0
Above Normal (16%)	63.7	56.8	49.7	46.4	46.6	49.0	54.2	58.3	62.1	64.2	64.4	65.1
Below Normal (13%)	62.0	56.5	51.0	46.9	46.9	50.0	56.1	60.4	63.5	65.0	64.8	65.9
Dry (24%)	63.9	57.3	50.6	46.6	47.3	50.6	55.5	60.6	63.9	65.9	65.6	66.4
Critical (15%)	65.0	57.7	50.7	46.7	48.1	52.1	57.1	61.3	65.5	69.0	67.2	68.1

Alternative 3_WA minus Alternative 3

Statistic	Monthly Temperature (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

Table 5B.3.10.2. American River below Nimbus Dam, Monthly Temperature

Alternative 5

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	66.3	58.0	53.3	47.9	48.6	52.4	57.8	62.8	67.6	68.4	67.3	68.3
20%	65.3	57.8	51.9	47.3	47.8	51.7	56.9	61.7	65.9	66.7	66.7	67.5
30%	64.4	57.6	51.2	46.9	47.4	50.6	56.0	60.7	64.6	65.3	65.7	66.5
40%	63.5	57.3	50.7	46.8	46.9	49.8	55.3	59.5	63.1	64.9	65.0	65.7
50%	63.3	57.1	50.4	46.3	46.6	49.4	54.5	58.3	61.9	64.6	64.2	65.3
60%	63.1	56.8	49.2	45.8	46.3	49.0	54.0	57.8	60.6	64.5	63.8	64.8
70%	62.8	56.5	48.5	45.4	46.0	48.7	53.4	57.0	59.7	64.3	63.4	64.4
80%	62.6	56.1	48.0	44.9	45.8	48.3	52.4	56.5	59.3	63.7	63.1	64.1
90%	59.2	55.6	46.9	44.5	45.4	48.0	51.9	54.9	59.0	63.5	62.6	63.0
Long Term												
Full Simulation Period[b]	63.4	57.0	50.0	46.2	46.8	49.9	54.7	59.0	62.5	65.2	64.7	65.5
Water Year Types[c]												
Wet (32%)	60.1	54.5	47.3	45.6	46.0	48.6	52.8	56.6	59.9	63.8	62.9	63.7
Above Normal (16%)	63.9	56.8	49.8	46.2	46.5	49.0	54.2	58.3	61.8	64.5	64.1	65.0
Below Normal (13%)	62.3	56.6	50.6	46.5	46.7	50.0	56.1	60.2	63.6	65.1	65.3	65.7
Dry (24%)	63.9	57.3	50.5	46.6	47.3	50.6	55.4	60.2	63.8	65.8	65.6	66.4
Critical (15%)	64.8	57.5	50.6	46.7	48.1	52.3	57.0	61.8	65.8	68.3	67.1	68.2

Alternative 5_WA

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	66.4	58.1	54.0	48.2	48.6	52.5	57.7	62.8	67.3	68.6	67.3	68.0
20%	65.0	57.6	52.6	47.5	47.8	51.8	56.9	61.8	65.5	66.1	66.5	67.1
30%	63.4	57.4	51.6	47.2	47.5	50.7	56.0	60.7	64.7	65.0	65.3	65.8
40%	63.1	57.0	51.2	46.9	46.9	49.7	55.2	59.5	63.1	64.3	64.7	65.2
50%	62.8	56.8	50.6	46.3	46.7	49.4	54.5	58.3	61.8	63.9	63.6	64.3
60%	62.5	56.5	49.5	45.8	46.3	49.0	54.0	57.8	60.5	63.7	63.1	63.5
70%	59.4	56.4	48.7	45.5	46.0	48.7	53.4	56.9	59.8	63.4	62.8	63.1
80%	58.9	56.2	48.2	44.9	45.8	48.3	52.4	56.3	59.3	62.9	62.3	62.5
90%	58.5	55.7	46.9	44.5	45.4	48.0	51.9	54.9	59.0	62.4	61.0	61.3
Long Term												
Full Simulation Period[b]	62.2	56.9	50.4	46.4	46.8	49.9	54.7	59.0	62.4	64.7	64.1	64.5
Water Year Types[c]												
Wet (32%)	59.4	54.6	47.5	45.7	46.0	48.5	52.7	56.6	59.8	62.9	61.8	62.1
Above Normal (16%)	62.1	57.0	50.5	46.5	46.6	49.0	54.2	58.3	61.8	63.8	63.4	63.9
Below Normal (13%)	60.4	56.1	51.2	46.7	46.7	50.0	56.0	59.9	63.3	64.6	64.8	64.9
Dry (24%)	62.8	57.1	50.9	46.7	47.3	50.7	55.5	60.3	63.7	65.5	65.3	65.9
Critical (15%)	63.9	57.3	50.8	46.8	48.1	52.4	57.1	61.9	65.9	68.1	67.4	68.0

Alternative 5_WA minus Alternative 5

Statistic	Monthly Temperature (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	1%	0%	0%	0%	0%	0%	-1%	-1%	0%	-1%
30%	-1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	-1%	-1%
40%	-1%	0%	1%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
50%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
60%	-1%	-1%	1%	0%	0%	0%	0%	0%	0%	-1%	-1%	-2%
70%	**-5%**	0%	1%	0%	0%	0%	0%	0%	0%	-1%	-1%	-2%
80%	**-6%**	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-2%
90%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-2%	-3%
Long Term												
Full Simulation Period[b]	-2%	0%	1%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
Water Year Types[c]												
Wet (32%)	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-3%
Above Normal (16%)	-3%	0%	1%	1%	0%	0%	0%	0%	0%	-1%	-1%	-2%
Below Normal (13%)	-3%	-1%	1%	0%	0%	0%	0%	0%	-1%	-1%	-1%	-1%
Dry (24%)	-2%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
Critical (15%)	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 81-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

5B.3.11. American River at Watt Temperature

Table 5B.3.11.1. American River at Watt Avenue, Monthly Temperature

Alternative 3

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Monthly Temperature (DEG-F)												
Probability of Exceedance [a]												
10%	67.1	58.3	52.6	48.7	50.1	56.4	62.7	67.9	72.5	73.0	73.4	71.4
20%	65.7	57.9	51.7	48.0	49.5	54.7	60.2	66.4	69.2	70.0	71.6	70.2
30%	64.9	57.6	51.3	47.6	48.7	53.0	59.2	65.3	68.2	68.7	69.8	69.1
40%	64.5	57.3	50.4	47.4	48.3	51.9	57.7	63.8	66.8	68.2	69.0	68.6
50%	64.1	57.0	50.3	46.7	47.8	51.3	57.0	62.3	65.9	67.8	68.5	67.9
60%	63.7	56.7	49.5	46.4	47.3	50.5	56.5	61.0	64.5	67.5	67.9	67.6
70%	63.4	56.5	48.8	45.9	46.9	50.0	55.0	59.8	63.6	67.1	67.4	67.3
80%	63.0	56.1	48.2	45.3	46.5	49.7	54.2	59.1	62.9	67.0	66.2	66.7
90%	60.7	55.8	47.3	44.9	46.1	49.2	53.4	57.1	61.9	66.4	65.6	65.8
Long Term												
Full Simulation Period [b]	64.1	57.0	50.0	46.8	48.1	52.0	57.4	62.7	66.3	68.9	69.0	68.4
Water Year Types [c]												
Wet (32%)	60.8	54.5	47.5	46.0	46.8	49.9	54.7	59.3	63.2	67.4	66.5	66.7
Above Normal (16%)	64.6	57.0	49.8	46.8	47.5	50.4	56.3	62.0	65.8	67.0	68.4	67.7
Below Normal (13%)	63.2	56.7	50.7	47.3	47.9	52.5	59.1	64.1	67.4	67.7	69.3	68.8
Dry (24%)	64.5	57.2	50.3	47.2	48.8	53.2	58.6	64.4	67.7	69.5	70.2	69.2
Critical (15%)	65.6	57.7	50.3	47.4	50.5	55.5	61.3	66.3	70.5	74.4	72.6	71.3

Alternative 3_WA

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Monthly Temperature (DEG-F)												
Probability of Exceedance [a]												
10%	67.2	58.2	52.5	48.7	50.1	56.4	62.5	68.0	72.7	73.3	73.4	71.5
20%	65.7	57.9	51.6	48.0	49.5	54.7	60.6	66.3	69.5	70.4	71.6	70.1
30%	64.9	57.6	51.1	47.6	48.7	53.0	59.1	65.5	68.5	68.7	70.1	69.4
40%	64.5	57.2	50.4	47.4	48.2	51.9	57.9	63.9	66.8	68.3	69.1	68.8
50%	64.2	57.0	50.1	46.7	47.7	51.3	57.0	62.2	65.9	68.0	68.4	67.9
60%	63.7	56.7	49.4	46.4	47.3	50.5	56.5	61.0	64.5	67.5	68.0	67.6
70%	63.3	56.5	48.8	45.9	46.9	50.0	55.0	59.8	63.7	67.1	67.3	67.3
80%	63.0	56.0	48.1	45.3	46.5	49.7	54.2	59.1	63.0	66.9	66.3	66.7
90%	60.7	55.6	47.3	44.9	46.2	49.2	53.4	57.1	62.0	66.4	65.9	65.9
Long Term												
Full Simulation Period [b]	64.1	57.0	49.9	46.8	48.1	52.0	57.5	62.7	66.5	69.0	69.1	68.5
Water Year Types [c]												
Wet (32%)	60.9	54.5	47.4	46.0	46.8	49.9	54.7	59.3	63.3	67.5	66.6	66.7
Above Normal (16%)	64.6	57.0	49.8	46.8	47.5	50.4	56.4	62.0	65.8	67.0	68.5	67.7
Below Normal (13%)	63.0	56.4	50.6	47.3	47.9	52.5	59.2	64.1	67.6	67.8	69.3	68.8
Dry (24%)	64.5	57.2	50.2	47.1	48.8	53.2	58.6	64.6	67.9	69.6	70.3	69.3
Critical (15%)	65.7	57.7	50.2	47.4	50.5	55.5	61.3	66.3	70.6	74.4	73.0	71.5

Alternative 3_WA minus Alternative 3

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Monthly Temperature (Percent Change)												
Probability of Exceedance [a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period [b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types [c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

Table 5B.3.11.2. American River at Watt Avenue, Monthly Temperature

Alternative 5

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
						Monthly Temperature (DEG-F)						
Probability of Exceedance[a]												
10%	66.3	58.0	53.3	47.9	48.6	52.4	57.8	62.8	67.6	68.4	67.3	68.3
20%	65.3	57.8	51.9	47.3	47.8	51.7	56.9	61.7	65.9	66.7	66.7	67.5
30%	64.4	57.6	51.2	46.9	47.4	50.6	56.0	60.7	64.6	65.3	65.7	66.5
40%	63.5	57.3	50.7	46.8	46.9	49.8	55.3	59.5	63.1	64.9	65.0	65.7
50%	63.3	57.1	50.4	46.3	46.6	49.4	54.5	58.3	61.9	64.6	64.2	65.3
60%	63.1	56.8	49.2	45.8	46.3	49.0	54.0	57.8	60.6	64.5	63.8	64.8
70%	62.8	56.5	48.5	45.4	46.0	48.7	53.4	57.0	59.7	64.3	63.4	64.4
80%	62.6	56.1	48.0	44.9	45.8	48.3	52.4	56.5	59.3	63.7	63.1	64.1
90%	59.2	55.6	46.9	44.5	45.4	48.0	51.9	54.9	59.0	63.5	62.6	63.0
Long Term												
Full Simulation Period[b]	63.4	57.0	50.0	46.2	46.8	49.9	54.7	59.0	62.5	65.2	64.7	65.5
Water Year Types[c]												
Wet (32%)	60.1	54.5	47.3	45.6	46.0	48.6	52.8	56.6	59.9	63.8	62.9	63.7
Above Normal (16%)	63.9	56.8	49.8	46.2	46.5	49.0	54.2	58.3	61.8	64.5	64.1	65.0
Below Normal (13%)	62.3	56.6	50.6	46.5	46.7	50.0	56.1	60.2	63.6	65.1	65.3	65.7
Dry (24%)	63.9	57.3	50.5	46.6	47.3	50.6	55.4	60.2	63.8	65.8	65.6	66.4
Critical (15%)	64.8	57.5	50.6	46.7	48.1	52.3	57.0	61.8	65.8	68.3	67.1	68.2

Alternative 5_WA

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
						Monthly Temperature (DEG-F)						
Probability of Exceedance[a]												
10%	66.4	58.1	54.0	48.2	48.6	52.5	57.7	62.8	67.3	68.6	67.3	68.0
20%	65.0	57.6	52.6	47.5	47.8	51.8	56.9	61.8	65.5	66.1	66.5	67.1
30%	63.4	57.4	51.6	47.2	47.5	50.7	56.0	60.7	64.7	65.0	65.3	65.8
40%	63.1	57.0	51.2	46.9	46.9	49.7	55.2	59.5	63.1	64.3	64.7	65.2
50%	62.8	56.8	50.6	46.3	46.7	49.4	54.5	58.3	61.8	63.9	63.6	64.3
60%	62.5	56.5	49.5	45.8	46.3	49.0	54.0	57.8	60.5	63.7	63.1	63.5
70%	59.4	56.4	48.7	45.5	46.0	48.7	53.4	56.9	59.8	63.4	62.8	63.1
80%	58.9	56.2	48.2	44.9	45.8	48.3	52.4	56.3	59.3	62.9	62.3	62.5
90%	58.5	55.7	46.9	44.5	45.4	48.0	51.9	54.9	59.0	62.4	61.0	61.3
Long Term												
Full Simulation Period[b]	62.2	56.9	50.4	46.4	46.8	49.9	54.7	59.0	62.4	64.7	64.1	64.5
Water Year Types[c]												
Wet (32%)	59.4	54.6	47.5	45.7	46.0	48.5	52.7	56.6	59.8	62.9	61.8	62.1
Above Normal (16%)	62.1	57.0	50.5	46.5	46.6	49.0	54.2	58.3	61.8	63.8	63.4	63.9
Below Normal (13%)	60.4	56.1	51.2	46.7	46.7	50.0	56.0	59.9	63.3	64.6	64.8	64.9
Dry (24%)	62.8	57.1	50.9	46.7	47.3	50.7	55.5	60.3	63.7	65.5	65.3	65.9
Critical (15%)	63.9	57.3	50.8	46.8	48.1	52.4	57.1	61.9	65.9	68.1	67.4	68.0

Alternative 5_WA minus Alternative 5

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
						Monthly Temperature (Percent Change)						
Probability of Exceedance[a]												
10%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	1%	0%	0%	0%	0%	0%	-1%	-1%	0%	-1%
30%	-1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	-1%	-1%
40%	-1%	0%	1%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
50%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
60%	-1%	-1%	1%	0%	0%	0%	0%	0%	0%	-1%	-1%	-2%
70%	**-5%**	0%	1%	0%	0%	0%	0%	0%	0%	-1%	-1%	-2%
80%	**-6%**	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-2%
90%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-2%	-3%
Long Term												
Full Simulation Period[b]	-2%	0%	1%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
Water Year Types[c]												
Wet (32%)	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-3%
Above Normal (16%)	-3%	0%	1%	1%	0%	0%	0%	0%	0%	-1%	-1%	-2%
Below Normal (13%)	-3%	-1%	1%	0%	0%	0%	0%	0%	-1%	-1%	-1%	-1%
Dry (24%)	-2%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
Critical (15%)	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 81-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

5B.3.12. American River at Mouth Temperature

Table 5B.3.12.1. American River at the Mouth, Monthly Temperature (above the confluence with the Sacramento River)

Alternative 3

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	67.9	58.5	52.2	49.0	51.6	59.0	65.8	71.1	75.8	75.9	77.5	74.3
20%	66.2	58.1	51.4	48.4	50.6	56.9	62.4	70.0	72.2	72.4	75.2	72.6
30%	65.7	57.7	50.9	47.8	49.7	55.1	61.0	68.3	71.1	71.5	73.1	71.3
40%	65.1	57.3	50.3	47.7	49.1	53.3	60.0	66.6	69.6	71.1	72.1	70.7
50%	64.7	57.0	50.0	47.2	48.4	52.6	58.6	64.6	68.1	70.3	71.5	69.8
60%	64.4	56.7	49.5	46.5	48.0	51.3	58.2	63.1	67.0	69.6	71.0	69.6
70%	64.0	56.5	48.8	46.2	47.3	50.9	56.5	61.8	66.3	69.3	70.4	69.3
80%	63.3	56.1	48.2	45.5	46.9	50.5	55.2	60.7	65.3	68.8	69.0	68.7
90%	62.1	55.9	47.4	45.1	46.5	49.8	54.2	58.4	63.9	68.3	68.3	67.6
Long Term												
Full Simulation Period[b]	64.8	57.1	49.9	47.1	48.9	53.4	59.3	65.1	69.0	71.5	72.2	70.7
Water Year Types[c]												
Wet (32%)	61.5	54.6	47.5	46.2	47.2	50.8	55.9	61.1	65.5	70.1	69.4	68.8
Above Normal (16%)	65.3	57.2	49.9	47.1	48.0	51.3	57.9	64.6	68.3	68.9	71.4	69.7
Below Normal (13%)	63.9	56.5	50.4	47.5	48.6	54.3	61.3	66.7	70.2	69.7	72.7	71.1
Dry (24%)	65.1	57.3	50.1	47.5	49.8	55.0	60.7	67.2	70.5	72.1	73.5	71.5
Critical (15%)	66.3	57.8	50.0	47.9	52.2	57.9	64.2	69.4	73.6	77.8	76.4	73.9

Alternative 3_WA

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	67.9	58.5	52.2	49.0	51.5	59.0	65.9	71.5	76.2	76.4	77.9	75.4
20%	66.4	58.0	51.3	48.4	50.6	57.0	63.5	69.9	72.8	72.7	75.4	72.5
30%	65.7	57.7	50.8	47.8	49.8	55.1	61.0	68.5	71.1	71.6	73.3	71.4
40%	65.0	57.4	50.2	47.6	49.1	53.3	60.1	66.6	69.7	71.1	72.1	70.9
50%	64.8	57.0	49.9	47.1	48.4	52.6	58.7	64.7	68.1	70.7	71.6	69.9
60%	64.2	56.7	49.5	46.5	48.0	51.3	58.2	63.2	67.2	69.7	70.9	69.6
70%	64.0	56.5	48.7	46.2	47.3	50.9	56.5	61.8	66.3	69.3	70.5	69.3
80%	63.4	56.0	48.1	45.5	46.9	50.5	55.2	60.8	65.4	68.9	69.1	68.9
90%	62.1	55.5	47.3	45.1	46.5	49.8	54.2	58.4	64.0	68.3	68.4	67.7
Long Term												
Full Simulation Period[b]	64.8	57.0	49.8	47.1	48.9	53.4	59.4	65.2	69.1	71.5	72.3	70.8
Water Year Types[c]												
Wet (32%)	61.5	54.6	47.4	46.1	47.2	50.8	55.9	61.1	65.5	70.2	69.5	68.9
Above Normal (16%)	65.3	57.2	49.9	47.1	48.0	51.3	57.9	64.6	68.4	68.9	71.5	69.7
Below Normal (13%)	63.8	56.3	50.3	47.5	48.6	54.3	61.4	66.7	70.5	69.8	72.7	71.0
Dry (24%)	65.1	57.2	50.0	47.5	49.8	55.0	60.8	67.4	70.8	72.3	73.7	71.7
Critical (15%)	66.3	57.8	49.9	47.9	52.2	57.9	64.3	69.5	73.8	77.8	76.8	74.2

Alternative 3_WA minus Alternative 3

Statistic	Monthly Temperature (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	1%
20%	0%	0%	0%	0%	0%	0%	2%	0%	1%	0%	0%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
90%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 81-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

Table 5B.3.12.2. American River at the Mouth, Monthly Temperature (above the confluence with the Sacramento River)

Alternative 5

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	67.8	58.4	52.3	48.7	51.5	59.2	66.2	71.4	76.7	75.8	77.4	74.4
20%	66.4	58.0	51.4	48.3	50.7	57.0	62.9	70.3	73.1	72.2	75.4	72.5
30%	65.5	57.6	50.8	47.7	49.8	55.1	61.0	68.2	71.1	71.5	73.0	71.2
40%	65.0	57.3	50.4	47.5	49.3	53.3	60.0	66.8	69.6	70.8	72.1	70.3
50%	64.6	56.9	49.9	47.2	48.5	52.6	58.6	64.9	68.3	70.1	71.4	69.7
60%	64.3	56.7	49.0	46.5	47.9	51.4	58.1	63.3	67.7	69.6	71.0	69.0
70%	63.8	56.5	48.6	46.0	47.3	50.9	56.4	61.7	66.2	69.2	70.6	68.2
80%	63.5	56.1	48.0	45.5	46.9	50.4	55.2	60.7	65.4	68.9	70.0	67.3
90%	62.5	55.8	47.3	45.0	46.5	49.8	54.2	58.4	63.9	68.5	68.6	66.7
Long Term												
Full Simulation Period[b]	64.7	57.0	49.7	47.0	48.9	53.4	59.4	65.2	69.2	71.3	72.4	70.1
Water Year Types[c]												
Wet (32%)	61.5	54.6	47.2	46.1	47.2	50.8	55.9	61.1	65.7	69.8	70.0	67.2
Above Normal (16%)	65.3	57.1	49.9	47.0	48.1	51.4	57.8	64.5	69.0	69.1	71.1	68.8
Below Normal (13%)	63.7	56.4	50.0	47.3	48.6	54.3	61.5	66.9	71.1	69.8	73.5	71.3
Dry (24%)	65.0	57.3	50.0	47.4	49.8	55.0	60.7	67.4	70.8	71.8	73.5	71.5
Critical (15%)	66.3	57.7	49.9	47.8	52.2	58.0	64.6	69.6	72.7	77.5	75.8	74.2

Alternative 5_WA

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	67.8	58.4	52.7	48.9	51.5	59.2	66.2	71.5	76.8	76.3	77.9	74.2
20%	66.0	57.9	51.7	48.3	50.9	57.2	63.1	70.1	73.1	72.3	75.8	72.8
30%	65.0	57.5	51.2	48.0	49.9	55.1	61.1	68.4	71.1	71.4	72.9	70.8
40%	64.5	57.0	50.5	47.6	49.2	53.3	60.1	66.8	69.7	70.5	71.9	69.9
50%	63.8	56.7	50.3	47.3	48.5	52.6	58.7	65.0	68.2	69.6	71.3	69.1
60%	63.3	56.6	49.2	46.5	48.0	51.5	58.2	63.3	67.7	69.2	70.6	68.2
70%	62.5	56.4	48.7	46.1	47.3	50.9	56.5	61.8	66.5	68.8	70.1	67.2
80%	61.4	56.1	47.9	45.5	46.9	50.5	55.2	60.8	65.4	68.4	69.6	66.3
90%	60.6	55.5	47.2	45.1	46.5	49.8	54.1	58.4	63.5	67.9	67.8	65.3
Long Term												
Full Simulation Period[b]	63.9	56.9	50.0	47.1	48.9	53.5	59.4	65.2	69.3	71.0	72.1	69.5
Water Year Types[c]												
Wet (32%)	61.0	54.7	47.4	46.1	47.2	50.8	55.9	61.1	65.7	69.3	69.3	66.0
Above Normal (16%)	64.1	57.1	50.4	47.2	48.2	51.4	57.9	64.6	69.0	68.6	70.8	68.2
Below Normal (13%)	62.5	55.9	50.4	47.4	48.6	54.3	61.5	66.8	71.0	69.5	73.4	70.8
Dry (24%)	64.3	57.1	50.3	47.6	49.9	55.0	60.8	67.4	70.9	71.8	73.5	71.3
Critical (15%)	65.7	57.6	50.1	47.9	52.3	58.1	64.7	69.7	73.1	77.6	76.1	74.2

Alternative 5_WA minus Alternative 5

Statistic	Monthly Temperature (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%	1%	0%
20%	-1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	-1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
50%	-1%	0%	1%	0%	0%	0%	0%	0%	0%	-1%	0%	-1%
60%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
70%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
80%	-3%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
90%	-3%	-1%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	-2%
Long Term												
Full Simulation Period[b]	-1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
Water Year Types[c]												
Wet (32%)	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-2%
Above Normal (16%)	-2%	0%	1%	0%	0%	0%	0%	0%	0%	-1%	0%	-1%
Below Normal (13%)	-2%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
Dry (24%)	-1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 81-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Note: All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.

1 **5B.3.13. Temperature Threshold Exceedances -**
2 **American River**

Table 5B.3.13.1. Temperature Threshold Exceedances - American River

Species	Lifestage	River	Reach	Water Year Type	Month	Temperature Objective (Degree F)	Temperature Objective Reference[1]	Alternative 3	Alternative 5	Alternative 3 _WA	Alternative 5_WA	Alternative 3_WA minus Alternative 3	Alternative 5_WA minus Alternative 5
Juvenile steelhead	Rearing	American	Watt Ave Bridge	All	May	65	BDCP 2013	33%	32%	33%	33%	-1%	1%
Juvenile steelhead	Rearing	American	Watt Ave Bridge	All	June	65	BDCP 2013	55%	56%	55%	57%	0%	2%
Juvenile steelhead	Rearing	American	Watt Ave Bridge	All	July	65	BDCP 2013	99%	99%	99%	99%	0%	0%
Juvenile steelhead	Rearing	American	Watt Ave Bridge	All	August	65	BDCP 2013	93%	94%	94%	94%	0%	0%
Juvenile steelhead	Rearing	American	Watt Ave Bridge	All	eptembe	65	BDCP 2013	96%	90%	96%	91%	0%	1%
Juvenile steelhead	Rearing	American	Watt Ave Bridge	All	October	65	BDCP 2013	30%	28%	28%	27%	-2%	-1%

[1]See section 9N.C for the full reference