

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 EIDorIDPL 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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1 **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.

1 **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.

1 **5B.3.3. Oroville Storage**

Table 5B.3.3.1. Lake Oroville, 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%	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	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
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	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%	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.

1 **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%	-1%	-2%	-3%	-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.

1 **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.

1 **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	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
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	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
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	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
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.

1 **5B.3.7. Sacramento River at Freeport Flow**

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

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
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	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
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	Monthly Flow (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%	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	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
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	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
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	Monthly Flow (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%	-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.

1 **5B.3.8. Delta Outflow**

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

Alternative 3

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
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	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
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	Monthly Outflow Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
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.

1 **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.

1 **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.

1 **5B.3.11. American River at Watt Temperature**

Table 5B.3.11.1. American River at Watt Avenue, 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%	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	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
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	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%	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	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.

1 **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	September	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%

¹See section 9N.C for the full reference

1 **Appendix 5C**

2 **Revised Second Basis of Comparison**

3 A CalSim II model error was identified in New Melones operations in the Second
4 Basis of Comparison simulation. The model error is due to use of an incorrect
5 lookup table for one month and causes New Melones to release increased fishery
6 flows in May. This appendix provides findings from an analysis of potential
7 effects of this model error.

8 **5C.1 Methodology**

9 CalSim II model simulation representing the Second Basis of Comparison is rerun
10 with the corrected New Melones Operations. The results are analyzed in two
11 different sections. First, the Revised Second Basis of Comparison (SBC_R) is
12 compared against the Second Basis of Comparison (SBC) to identify the extent of
13 the effects of this model error. As presented in the next section, the results show
14 that the effects of this model error is contained within the Stanislaus River.
15 Secondly, the No Action Alternative (model results same as Alternative 2),
16 Alternative 3, and Alternative 5 are compared against the Revised Second Basis
17 of Comparison (SBC_R) and the Alternative 1 (same as Revised Second Basis of
18 Comparison (SBC_R) is compared against the No Action Alternative. Results
19 analysis in this appendix identifies between similar results (less than 5%) and
20 results with noticeable changes (greater than 5%).

21 **5C.2 Analysis**

22 **5C.2.1 Revised Second Basis of Comparison Compared to the** 23 **Second Basis of Comparison**

24 Model results comparing Revised Second Basis of Comparison (SBC_R) to the
25 Second Basis of Comparison (SBC) presented in Section 5C.3.1 of this document
26 show that the effect of the CalSim II model error is confined to Stanislaus River
27 basin and do not cause any significant change in the overall system operations.

28 **5C.2.2 Revised Second Basis of Comparison Compared to the** 29 **Alternatives**

30 This section provides analysis of effects of the identified CalSim II model error
31 on the Stanislaus River Basin. The section is organized by alternative comparison
32 and by each parameter that is likely to change.

33 The changes described in this section are due to increased storage in New
34 Melones and decrease and change in patter of flows in Stanislaus River
35 downstream of New Melones under the Revised Second Basis of Comparison
36 (Revised Alternative 1) compared to the Second Basis of Comparison
37 (Alternative 1).

1 **5C.2.2.1 Revised Alternative 1 Compared to the No Action Alternative**

2 **5C.2.2.1.1 New Melones Storage**

3 Alternative 1 showed increased storage in October and November of above
4 normal years (up to 6%), October and April of below normal years (slightly above
5 5%), October of dry years (slightly above 5%), and October through June of
6 critically dry years (up to 7%) when compared to the No Action Alternative.
7 Revised Alternative 1 shows increased storage in all months of all water year
8 types when compared to the No Action Alternative (from approximately 6 to
9 44%).

10 **5C.2.2.1.2 New Melones Elevation**

11 Alternative 1 showed similar elevation (within 5% change) in all months of all
12 water year types when compared to the No Action Alternative. Revised
13 Alternative 1 shows increased reservoir elevation in all months of all water year
14 types (from approximately 8 to 13%) when compared to the No Action
15 Alternative.

16 **5C.2.2.1.3 Stanislaus River Flow below Goodwin**

17 Flow patterns are different between the Second Basis of Comparison and the
18 Revised Second Basis of Comparison and the changes between alternatives reflect
19 the change in patterns.

- 20 • In wet years, Alternative 1 showed lower flows (from approximately 5 to
21 54%) in October, March, May, July, and August, higher flows (from
22 approximately 6 to 103%) in November, December, January, June, and
23 September), and similar flows (within 5% change) in February and April
24 when compared to the No Action Alternative.

25 Revised Alternative 1 shows lower flows (from approximately 8 to 57%) in
26 October, March, and May, higher flows (from approximately 12 to 59%) in
27 November, December, February, June, July, August, and September, and
28 similar flows (within 5% change) in January and April when compared to the
29 No Action Alternative.

- 30 • In above normal years, Alternative 1 showed lower flows (from
31 approximately 19 to 58%) in October, March, and April months, higher flows
32 (from approximately 7 to 54%) in November, December, January, February,
33 May, and June), and similar flows (within 5% change) in July through
34 September when compared to the No Action Alternative.

35 Revised Alternative 1 shows lower flows (from approximately 7 to 65%) in
36 October, March, April, and May, higher flows (from approximately 5 to 25%)
37 in November, December, and February, and similar flows (within 5% change)
38 in January and June through September when compared to the No Action
39 Alternative.

- 40 • In below normal years, Alternative 1 showed lower flows (from
41 approximately 14 to 61%) in October, March, and April months, higher flows

1 (from approximately 5 to 66%) in November through February, May, June,
 2 and September), and similar flows (within 5% change) in July and August
 3 when compared to the No Action Alternative.

4 Revised Alternative 1 shows lower flows (from approximately 13 to 66%) in
 5 October, March, April, May, and June, higher flows (from approximately
 6 19 to 54%) in November through February, and similar flows (within 5%
 7 change) in July through September when compared to the No Action
 8 Alternative.

- 9 • In dry years, Alternative 1 showed lower flows (approximately 61 and 44%)
 10 in October and April months, higher flows (from approximately 7 to 56%) in
 11 November through March, May, and June), and similar flows (within 5%
 12 change) in July through September when compared to the No Action
 13 Alternative.

14 Revised Alternative 1 shows lower flows (from approximately 7 to 65%) in
 15 October, March, April, May, and June, higher flows (from approximately 8 to
 16 36%) in November through February, and similar flows (within 5% change) in
 17 July through September when compared to the No Action Alternative.

- 18 • In critically dry years, Alternative 1 showed lower flows (approximately
 19 66 and 37%) in October and April months, higher flows (from approximately
 20 5 to 41%) in November through March, May, and July), and similar flows
 21 (within 5% change) in June, August, and September when compared to the No
 22 Action Alternative.

23 Revised Alternative 1 shows lower flows (from approximately 10 to 74%) in
 24 October, January, March, April, and May, higher flows (from approximately
 25 6 to 18%) in November, December, July, and August, and similar flows
 26 (within 5% change) in February, June, and September when compared to the
 27 No Action Alternative.

28 **5C.2.2.1.4 Stanislaus River Flow at Mouth**

- 29 • In wet years, Alternative 1 showed higher flows (from approximately 5 to
 30 81%) in November, December, January, and June, lower flows (from
 31 approximately 7 to 44%) in October, March, May, and August, and similar
 32 flows (within 5% change) in February, April, July, and September when
 33 compared to the No Action Alternative.

34 Revised Alternative 1 shows lower flows (from approximately 7 to 47%) in
 35 October, March, and May, higher flows (from approximately 11 to 46%) in
 36 November, December, February, June, July, August, and September, and
 37 similar flows (within 5% change) in January and April when compared to the
 38 No Action Alternative.

- 39 • In above normal years, Alternative 1 showed higher flows (from
 40 approximately 6 to 33%) in November through February, May, and June,
 41 lower flows (from approximately 15 to 46%) in October, March, and April,

1 and similar flows (within 5% change) in July through September when
2 compared to the No Action Alternative.

3 Revised Alternative 1 shows lower flows (from approximately 7 to 51%) in
4 October, March, April, and May, higher flows (from approximately 14 to
5 15%) in November and December, and similar flows (within 5% change) in
6 January, February, and June through September when compared to the No
7 Action Alternative.

8 • In below normal years, Alternative 1 showed higher flows (from
9 approximately 5 to 42%) in November through February and June, lower
10 flows (from approximately 9 to 49%) in October, March, and April, and
11 similar flows (within 5% change) in May, July, August, and September when
12 compared to the No Action Alternative.

13 Revised Alternative 1 shows lower flows (from approximately 9 to 52%) in
14 October and March through June, higher flows (from approximately 13 to
15 36%) in November through February, and similar flows (within 5% change) in
16 July through September when compared to the No Action Alternative.

17 • In dry years, Alternative 1 showed higher flows (approximately 14 and 38%)
18 in November through March and May, lower flows (approximately 47% and
19 42%) in October and April, and similar flows (within 5% change) in June
20 through September when compared to the No Action Alternative.

21 Revised Alternative 1 shows lower flows (from approximately 5 to 50%) in
22 October, April, May, and June, higher flows (from approximately 5 to 25%) in
23 November through February, and similar flows (within 5% change) in March
24 and July through September when compared to the No Action Alternative.

25 • In critically dry years, Alternative 1 showed higher flows (approximately
26 8 and 30%) in November through March and May, lower flows
27 (approximately 54% and 37%) in October and April, and similar flows (within
28 5% change) in June through September when compared to the No Action
29 Alternative.

30 Revised Alternative 1 shows lower flows (from approximately 7 to 60%) in
31 October, January, March, April, and May, higher flows (from approximately
32 7 to 14%) in November, December, and July, and similar flows (within 5%
33 change) in February, June, August, and September when compared to the No
34 Action Alternative.

35 **5C.2.2.1.5 Stanislaus River Water Temperature below Goodwin Dam**

36 Alternative 1 showed similar temperatures at Goodwin except for higher
37 temperatures in November of critically dry years (average increase of 0.7 °F) and
38 lower temperatures in June and September of critically dry years (up to 1.3 °F)
39 when compared to the No Action Alternative. Difference in temperature
40 threshold exceedances were all within 5% (varied from 2% less to 3% more
41 exceedances in January through May).

1 Revised Alternative 1 shows similar temperatures at Goodwin except for lower
 2 temperatures (from approximately 0.5 to 1.1 °F) in October and September of
 3 above normal years, August and September of dry years, and October, June, July,
 4 and September of critically dry years. Difference in temperature threshold
 5 exceedances are mostly within 5% (3% to 4% more in January through April) and
 6 5% more in May.

7 In general, Revised Alternative 1 shows higher temperatures for Steelhead smolts
 8 in Stanislaus when compared to the No Action Alternative.

9 **5C.2.2.1.6 Stanislaus River Water Temperature at Orange Blossom Bridge**

10 Alternative 1 showed similar temperatures at Orange Blossom Bridge except for
 11 higher temperatures in October of wet years, October and April of above normal,
 12 below normal, dry, and critically dry years (from approximately 0.6 to 1.9°F) and
 13 lower temperatures in June of wet years, March and June of below normal years,
 14 and May and July of critically dry years (approximately from 0.6 to 0.7°F) when
 15 compared to the No Action Alternative. Difference in temperature threshold
 16 exceedances showed 28% more exceedance in October (adult migration
 17 threshold), 6% more exceedance in April (smoltification threshold), 17% more
 18 exceedance in April (spawning threshold), 8% less exceedance in May
 19 (smoltification threshold), and 5% less in November (adult migration threshold)
 20 and March and May (spawning threshold).

21 Revised Alternative 1 shows similar temperatures at Orange Blossom Bridge
 22 except for higher temperatures (from approximately 0.5 to 2.1°F) in October and
 23 March of wet years, October and April of above normal years, October and June
 24 of below normal years, October, April, and May of dry years, and October,
 25 March, and April of critically dry years; and lower temperatures (from
 26 approximately 0.5 to 1.2°F) in September of wet years, August and September of
 27 dry years, and July, August, and September of critically dry years when compared
 28 to the No Action Alternative. Difference in temperature threshold exceedances
 29 showed 29% more exceedance in October (adult migration threshold), 10% more
 30 exceedance in March (smoltification threshold), 5% more exceedance in April
 31 (smoltification threshold), 14% more exceedance in March and April (spawning
 32 threshold), 9% more exceedance in May (spawning threshold), and 6% less in
 33 November (adult migration threshold) , 8% less in August (rearing threshold).

34 In general, Revised Alternative 1 shows higher temperatures for Steelhead
 35 lifestages in Stanislaus when compared to the No Action Alternative.

36 **5C.2.2.1.7 CVP Stanislaus Deliveries**

37 Under Alternative 1, annual CVP service contract deliveries were increased by
 38 4.5 TAF and annual water rights deliveries were increased by 2.3 TAF when
 39 compared to the No Action Alternative.

40 Under Revised Alternative 1, annual CVP service contract deliveries are
 41 increased by 14.8 TAF and annual water rights deliveries are increased by
 42 6.2 TAF when compared to the No Action Alternative.

1 In general, Revised Alternative 1 shows increased CVP Stanislaus deliveries
2 when compared to the No Action Alternative.

3 **5C.2.2.1.8 CVP Power Generation**

4 Long-term average power capacity and energy generation under Alternative 1
5 were 3% and 1% higher than the No Action Alternative. The energy use at the
6 CVP pumping facilities was 16% higher than the No Action Alternative; which
7 resulted in a 4% lower net generation.

8 In dry and critical years, long-term average power capacity and energy generation
9 under Alternative 1 were 6% and 3% higher than the No Action Alternative. The
10 energy use at the CVP pumping facilities was 11% higher than the No Action
11 Alternative; which resulted in similar net generation.

12 Under the revised Alternative 1, long-term average power capacity and energy
13 generation are 4% and 1% higher than the No Action Alternative. The energy use
14 at the CVP pumping facilities is 15% higher than the No Action Alternative;
15 which results in a 3% lower net generation.

16 In dry and critical years, long-term average power capacity and energy generation
17 under Revised Alternative 1 are 10% and 5% higher than the No Action
18 Alternative. The energy use at the CVP pumping facilities is 15% higher than the
19 No Action Alternative; which results 3% higher net generation.

20 **5C.2.2.1.9 New Melones Large Mouth Bass Nest Survival Percentage**

21 Monthly pattern of reservoir storage is different between the Second Basis of
22 Comparison and the Revised Second Basis of Comparison and the changes
23 between alternatives reflect the change in this pattern.

- 24 • In wet years, Alternative 1 showed lower percentage of nest survival in June
25 (approximately 13%), higher percentage of nest survival (48% and 11%) in
26 October and April when compared to the No Action Alternative.

27 The Revised Alternative 1 shows lower percentage of nest survival (from
28 approximately 7 to 14%) in July through September, higher percentage of nest
29 survival (approximately 49 and 10%) in October and April when compared to
30 the No Action Alternative.

- 31 • In above normal years, Alternative 1 showed lower percentage of nest survival
32 in June (approximately 5%), higher percentage of nest survival (29% and 9%)
33 in October and April when compared to the No Action Alternative.

34 The Revised Alternative 1 shows higher percentage of nest survival (from
35 approximately 6 to 31%) in October, April, July, and August when compared
36 to the No Action Alternative.

- 37 • In below normal years, Alternative 1 showed lower percentage of nest
38 survival (approximately 9%) in June; and higher percentage of nest survival
39 (from approximately 5% and 55%) in October, March, April, and July when
40 compared to the No Action Alternative.

1 The Revised Alternative 1 shows higher percentage of nest survival (from
 2 approximately 5 to 59%) in October and March through August when
 3 compared to the No Action Alternative.

- 4 • In dry years, Alternative 1 showed lower percentage of nest survival
 5 (approximately 9%) in May; and higher percentage of nest survival (from
 6 approximately 12% and 44%) in October, April, and July when compared to
 7 the No Action Alternative.

8 The Revised Alternative 1 shows higher percentage of nest survival (from
 9 approximately 7 to 51%) in October and April through September when
 10 compared to the No Action Alternative.

- 11 • In critically dry years, Alternative 1 showed lower percentage of nest survival
 12 (from approximately 12 to 23%) in May, July, and August; and higher
 13 percentage of nest survival (from approximately 7% and 53%) in October,
 14 April, and September when compared to the No Action Alternative.

15 The Revised Alternative 1 shows lower percentage of nest survival (from
 16 approximately 7 to 45%) in June through August; and higher percentage of
 17 nest survival (from approximately 34 to 53%) in October, April, and May
 18 when compared to the No Action Alternative.

19 In general, Revised Alternative 1 shows higher percentage of nest survival for the
 20 New Melones Large Mouth Bass when compared to the No Action Alternative.

21 **5C.2.2.1.10 New Melones Small Mouth Bass Nest Survival Percentage**

22 Monthly pattern of reservoir storage is different between the Second Basis of
 23 Comparison and the Revised Second Basis of Comparison and the changes
 24 between alternatives reflect the change in this pattern.

- 25 • In wet years, Alternative 1 showed lower percentage of nest survival in June
 26 (approximately 15%), higher percentage of nest survival (59% and 9%) in
 27 October and April when compared to the No Action Alternative.

28 The Revised Alternative 1 shows lower percentage of nest survival (from
 29 approximately 6 to 14%) in July through September, higher percentage of nest
 30 survival (approximately 61 and 9%) in October and April when compared to
 31 the No Action Alternative.

- 32 • In above normal years, Alternative 1 showed higher percentage of nest
 33 survival (41% and 10%) in October and April when compared to the No
 34 Action Alternative.

35 The Revised Alternative 1 shows higher percentage of nest survival (from
 36 approximately 8 to 44%) in October, April, July, and August when compared
 37 to the No Action Alternative.

- 38 • In below normal years, Alternative 1 showed lower percentage of nest
 39 survival (approximately 10 and 14%) in June and July; and higher percentage
 40 of nest survival (from approximately 6% to 57%) in October, March, and
 41 April when compared to the No Action Alternative.

1 The Revised Alternative 1 shows higher percentage of nest survival (from
2 approximately 5 to 61%) in October and March through August when
3 compared to the No Action Alternative.

- 4 • In dry years, Alternative 1 showed lower percentage of nest survival
5 (approximately 8% and 5%) in May and November; and higher percentage of
6 nest survival (from approximately 11% to 52%) in October, April, and July
7 when compared to the No Action Alternative.

8 The Revised Alternative 1 shows higher percentage of nest survival (from
9 approximately 6 to 59%) in October and April through September when
10 compared to the No Action Alternative.

- 11 • In critically dry years, Alternative 1 showed lower percentage of nest survival
12 (from approximately 5 to 22%) in November, May, July, and August; and
13 higher percentage of nest survival (from approximately 6% to 58%) in
14 October, April, and September when compared to the No Action Alternative.

15 The Revised Alternative 1 shows lower percentage of nest survival (from
16 approximately 7 to 50%) in June through September; and higher percentage of
17 nest survival (from approximately 44 to 69%) in October, and April when
18 compared to the No Action Alternative.

19 In general, Revised Alternative 1 shows higher percentage of nest survival for the
20 New Melones Small Mouth Bass when compared to the No Action
21 Alternative except for the summer months of critically dry years.

22 **5C.2.2.1.11 New Melones Spotted Bass Nest Survival Percentage**

23 Monthly pattern of reservoir storage is different between the Second Basis of
24 Comparison and the Revised Second Basis of Comparison and the changes
25 between alternatives reflect the change in this pattern.

- 26 • In wet years, Alternative 1 showed higher percentage of nest survival (from
27 approximately 6% to 13%) in October, April, July and August when
28 compared to the No Action Alternative.

29 The Revised Alternative 1 shows higher percentage of nest survival (from
30 approximately 11% to 13%) in October, April, and July when compared to the
31 No Action Alternative.

- 32 • In above normal years, Alternative 1 showed similar percentage of nest
33 survival when compared to the No Action Alternative.

34 The Revised Alternative 1 shows higher percentage of nest survival (from
35 approximately 6% to 8%) in July and August when compared to the No
36 Action Alternative.

- 37 • In below normal years, Alternative 1 showed higher percentage of nest
38 survival (from approximately 5% to 11%) in October, April, and July when
39 compared to the No Action Alternative.

1 The Revised Alternative 1 shows higher percentage of nest survival (from
2 approximately 6 to 10%) in October, April, and August when compared to the
3 No Action Alternative.

- 4 • In dry years, Alternative 1 showed lower percentage of nest survival
5 (approximately 5%) in May when compared to the No Action Alternative.

6 The Revised Alternative 1 shows higher percentage of nest survival (from
7 approximately 5% to 13%) in May, July and August when compared to the No
8 Action Alternative.

- 9 • In critically dry years, Alternative 1 showed lower percentage of nest survival
10 (from approximately 10% to 17%) in May and July; and higher percentage of
11 nest survival (approximately 20% to 9%) in April and June when compared to
12 the No Action Alternative.

13 The Revised Alternative 1 shows lower percentage of nest survival
14 (approximately 7%) in July; and higher percentage of nest survival (from
15 approximately 5% to 21%) in April through June, and September when
16 compared to the No Action Alternative.

17 In general, Revised Alternative 1 shows higher percentage of nest survival for the
18 New Melones Spotted Bass when compared to the No Action Alternative.

19 **5C.2.2.2 No Action Alternative Compared to the Revised Second Basis of** 20 **Comparison**

21 **5C.2.2.2.1 New Melones Storage**

22 No Action Alternative showed decreased storage in October and November of
23 above normal years (up to 6%), October and April of below normal years (slightly
24 above 5%), October of dry years (slightly above 5%), and October through June
25 of critically dry years (up to 7%) when compared to the Second Basis of
26 Comparison. When compared to the Revised Second Basis of Comparison, the
27 No Action Alternative shows decreased storage (from approximately 6 to 44%) in
28 all months of all water year types.

29 **5C.2.2.2.2 New Melones Elevation**

30 No Action Alternative showed similar reservoir elevation (within 5% change) in
31 all months of all water year types when compared to the Second Basis of
32 Comparison. When compared to the Revised Second Basis of Comparison, the
33 No Action Alternative shows decreased reservoir elevation in all months of all
34 water year types (from approximately 8 to 13%).

35 **5C.2.2.2.3 Stanislaus River Flow below Goodwin**

36 Flow patterns are different between the Second Basis of Comparison and the
37 Revised Second Basis of Comparison and the changes between alternatives reflect
38 the change in patterns.

- 39 • In wet years, the No Action Alternative showed lower flows (from
40 approximately 5 to 51%) in November, December, January, June, and

- 1 September months, higher flows (from approximately 10 to 117%) in October,
2 March, May, July, and August, and similar flows (within 5% change) in
3 February and April when compared to the Second Basis of Comparison.
- 4 When compared to the Revised Second Basis of Comparison, the No Action
5 Alternative shows lower flows (from approximately 11 to 37%) in November,
6 December, February, June, July, August, and September, higher flows (from
7 approximately 9 to 134%) in October, March, and May, and similar flows
8 (within 5% change) in January and April when compared to the No Action
9 Alternative.
- 10 • In above normal years, the No Action Alternative showed lower flows (from
11 approximately 6 to 35%) in November, December, January, February, May,
12 and June months, higher flows (from approximately 23 to 137%) in October,
13 March, and April, and similar flows (within 5% change) in July through
14 September when compared to the Second Basis of Comparison.
- 15 When compared to the Revised Second Basis of Comparison, the No Action
16 Alternative shows lower flows (from approximately 5 to 20%) in November,
17 December, and February, higher flows (from approximately 8 to 188%) in
18 October, March, April, and May, and similar flows (within 5% change) in
19 January and June through September when compared to the No Action
20 Alternative.
- 21 • In below normal years, the No Action Alternative showed lower flows (from
22 approximately 5 to 40%) in November through February, May, June, and
23 September) months, higher flows (from approximately 16 to 157%) in
24 October, March, and April, and similar flows (within 5% change) in July and
25 August when compared to the Second Basis of Comparison.
- 26 When compared to the Revised Second Basis of Comparison, the No Action
27 Alternative shows lower flows (from approximately 16 to 35%) in November
28 through February, higher flows (from approximately 15 to 192%) in October,
29 March, April, May, and June, and similar flows (within 5% change) in July
30 through September.
- 31 • In dry years, the No Action Alternative showed lower flows (approximately
32 6 to 36%) in November through March, May, and June, higher flows (from
33 approximately 154 and 77%) in October and April months, and similar flows
34 (within 5% change) in July through September when compared to the Second
35 Basis of Comparison.
- 36 When compared to the Revised Second Basis of Comparison, the No Action
37 Alternative shows lower flows (from approximately 8 to 26%) in November
38 through February, higher flows (from approximately 8 to 189%) in October,
39 March, April, May, and June, and similar flows (within 5% change) in July
40 through September.
- 41 • In critically dry years, the No Action Alternative showed lower flows
42 (approximately 9 to 29%) in November through March, and May, higher
43 flows (approximately 197 and 60%) in October and April months, and similar

1 flows (within 5% change) in June through September when compared to the
 2 Second Basis of Comparison.

3 When compared to the Revised Second Basis of Comparison, the No Action
 4 Alternative shows lower flows (from approximately 6 to 15%) in November,
 5 December, July, and August, higher flows (from approximately 12 to 277%)
 6 in October, January, March, April, and May, and similar flows (within 5%
 7 change) in February, June, and September.

8 **5C.2.2.2.4 Stanislaus River Flow at Mouth**

9 Flow patterns are different between the Second Basis of Comparison and the
 10 Revised Second Basis of Comparison and the changes between alternatives reflect
 11 the change in patterns.

- 12 • In wet years, No Action Alternative showed lower flows (from approximately
 13 5 to 45%) in November, December, January, and June, higher flows (from
 14 approximately 8 to 79%) in October, March, May, and August, and similar
 15 flows (within 5% change) in February, April, July, and September when
 16 compared to the Second Basis of Comparison.

17 When compared to the Revised Second Basis of Comparison, No Action
 18 Alternative shows lower flows (from approximately 10 to 32%) in November,
 19 December, February, and June through September, higher flows (from
 20 approximately 8 to 88%) in October, March, and May, and similar flows
 21 (within 5% change) in January and April when compared to No Action
 22 Alternative.

- 23 • In above normal years, No Action Alternative showed lower flows (from
 24 approximately 6 to 25%) in November through February and May and June,
 25 higher flows (from approximately 18 to 84%) in October, March, and April,
 26 and similar flows (within 5% change) in July, August, and September when
 27 compared to the Second Basis of Comparison.

28 When compared to the Revised Second Basis of Comparison, No Action
 29 Alternative shows lower flows (approximately 13 and 12%) in November and
 30 December, higher flows (from approximately 7 to 106%) in October, March,
 31 April, and May, and similar flows (within 5% change) in January, February,
 32 and June through September when compared to the No Action Alternative.

- 33 • In below normal years, No Action Alternative showed lower flows (from
 34 approximately 12 to 29%) in November through February and June, higher
 35 flows (from approximately 10 to 94%) in October, March, and April, and
 36 similar flows (within 5% change) in May, and July through September when
 37 compared to the Second Basis of Comparison.

38 When compared to the Revised Second Basis of Comparison, No Action
 39 Alternative shows lower flows (from approximately 11 to 26%) in November
 40 through February, higher flows (from approximately 10 to 109%) in October
 41 and March through June, and similar flows (within 5% change) in July
 42 through September.

1 • In dry years, No Action Alternative showed lower flows (approximately 5 to
2 28%) in, November through March and May and June, higher flows
3 (approximately 88% and 73%) in October and April, and similar flows (within
4 5% change) in June through September when compared to the Second Basis
5 of Comparison.

6 When compared to the Revised Second Basis of Comparison, No Action
7 Alternative shows lower flows (approximately 5 to 20%) in November
8 through February, higher flows (from approximately 6 to 102%) in October,
9 April, May, and June, and similar flows (within 5% change) in March and
10 July through September.

11 • In critically dry years, No Action Alternative showed lower flows
12 (approximately 7 to 23%) in November through March, and May, higher
13 flows (approximately 118 and 58%) in October and April and similar flows
14 (within 5% change) in June through September when compared to the Second
15 Basis of Comparison.

16 When compared to the Revised Second Basis of Comparison, No Action
17 Alternative shows lower flows (from approximately 6 to 12%) in November,
18 December, and July, higher flows (from approximately 27 to 149%) in
19 October, January, March, April, May, and July, and similar flows (within 5%
20 change) in February, June, August, and September.

21 **5C.2.2.2.5 Stanislaus River Water Temperature below Goodwin Dam**

22 No Action Alternative showed similar temperatures at Goodwin except for higher
23 temperatures in June and September critically dry years (average increase of 0.8
24 and 1.3°F) and lower temperatures in November of critically dry years (up to
25 0.7°F) when compared to the Second Basis of Comparison. Difference in
26 temperature threshold exceedances were all within 5% (varied from 3% less to
27 2% more exceedances in January through May).

28 No Action Alternative shows similar temperatures at Goodwin except for higher
29 temperatures (from approximately 0.5 to 1.1 °F) in October and September of
30 above normal years, August and September of dry years, and October, June, July,
31 and September of critically dry years when compared to the Revised Second Basis
32 of Comparison. Difference in temperature threshold exceedances are mostly
33 within 5% (2% to 4% less in January through April) and 5% less in May.

34 In general, No Action Alternative shows lower temperatures for Steelhead smolts
35 in Stanislaus when compared to the Revised Second Basis of Comparison.

36 **5C.2.2.2.6 Stanislaus River Water Temperature at Orange Blossom Bridge**

37 No Action Alternative showed similar temperatures at Orange Blossom Bridge
38 except for lower temperatures in October of wet years, October and April of
39 above normal, below normal, dry, and critically dry years (from approximately
40 0.6 to 1.9°F) and higher temperatures in June of wet years, March and June of
41 below normal years, and May and July of critically dry years (approximately from
42 0.6 to 0.7°F) when compared to the Second Basis of Comparison. Difference in

1 temperature threshold exceedances showed 28% less exceedance in October
 2 (adult migration threshold), 6% less exceedance in April (smoltification
 3 threshold), 17% less exceedance in April (spawning threshold), 8% more
 4 exceedance in May (smoltification threshold), and 5% more in November (adult
 5 migration threshold) and March and May (spawning threshold).

6 No Action Alternative shows similar temperatures at Orange Blossom Bridge
 7 except for lower temperatures (from approximately 0.5 to 2.1°F) in October and
 8 March of wet years, October and April of above normal years, October and June
 9 of below normal years, October, April, and May of dry years, and October,
 10 March, and April of critically dry years; and higher temperatures (from
 11 approximately 0.5 to 1.2°F) in September of wet years, August and September of
 12 dry years, and July, August, and September of critically dry years when compared
 13 to the Revised Second Basis of Comparison. Difference in temperature threshold
 14 exceedances showed 29% less exceedance in October (adult migration threshold),
 15 10% less exceedance in March (smoltification threshold), 5% less exceedance in
 16 April (smoltification threshold), 14% less exceedance in March and April
 17 (spawning threshold), 9% less exceedance in May (spawning threshold), and 6%
 18 more in November (adult migration threshold), 8% more in August (rearing
 19 threshold).

20 In general, No Action Alternative shows lower temperatures for Steelhead
 21 lifestages in Stanislaus when compared to the Revised Second Basis of
 22 Comparison.

23 **5C.2.2.2.7 CVP Stanislaus Deliveries**

24 Under the No Action Alternative, annual CVP service contract deliveries were
 25 decreased by 4.5 TAF and annual water rights deliveries were decreased by
 26 2.3 TAF when compared to the Second Basis of Comparison.

27 When compared to the Revised Second Basis of Comparison, annual CVP service
 28 contract deliveries are decreased by 14.8 TAF and annual water rights deliveries
 29 are decreased by 6.2 TAF under the No Action Alternative.

30 In general, the No Action Alternative shows decreased CVP Stanislaus deliveries
 31 when compared to the Revised Second Basis of Comparison.

32 **5C.2.2.2.8 CVP Power Generation**

33 Long-term average power capacity and energy generation under the No Action
 34 Alternative were 3% and 1% lower than the Second Basis of Comparison. The
 35 energy use at the CVP pumping facilities was 14% lower than the Second Basis of
 36 Comparison; which resulted in a 4% higher net generation.

37 In dry and critical years, long-term average power capacity and energy generation
 38 under the No Action Alternative were 6% and 3% lower than the Second Basis of
 39 Comparison. The energy use at the CVP pumping facilities was 10% lower than
 40 the Second Basis of Comparison; which resulted in similar net generation.

41 When compares to the Revised Second Basis of Comparison, long-term average
 42 power capacity and energy generation are 4% and 1% lower under the No Action

1 Alternative. The energy use at the CVP pumping facilities is 13% lower than the
2 Revised Second Basis of Comparison; which results in a 3% higher net
3 generation.

4 In dry and critical years, long-term average power capacity and energy generation
5 under the No Action Alternative are 9% and 4% lower than the Revised Second
6 Basis of Comparison. The energy use at the CVP pumping facilities is 9% lower
7 than the Revised Second Basis of Comparison; which results 3% lower net
8 generation.

9 **5C.2.2.2.9 New Melones Large Mouth Bass Nest Survival Percentage**

10 Monthly pattern of reservoir storage is different between the Second Basis of
11 Comparison and the Revised Second Basis of Comparison and the changes
12 between alternatives reflect the change in this pattern.

- 13 • In wet years, the No Action Alternative showed higher percentage of nest
14 survival in June (approximately 16%); and lower percentage of nest survival
15 (32% and 10%) in October and April when compared to the Second Basis of
16 Comparison.

17 When compared to the Revised Second Basis of Comparison, the No Action
18 Alternative shows higher percentage of nest survival (from approximately 8 to
19 16%) in July through September; and lower percentage of nest survival
20 (approximately 33 and 9%) in October and April.

- 21 • In above normal years, the No Action Alternative showed higher percentage
22 of nest survival in June (approximately 5%); and lower percentage of nest
23 survival (22% and 8%) in October and April when compared to the Second
24 Basis of Comparison.

25 When compared to the Revised Second Basis of Comparison, the No Action
26 Alternative shows lower percentage of nest survival (from approximately 6 to
27 23%) in October, April, July, and August.

- 28 • In below normal years, the No Action Alternative showed higher percentage
29 of nest survival (approximately 10%) in June; and lower percentage of nest
30 survival (from approximately 5% and 35%) in October, March, April, and
31 July when compared to the Second Basis of Comparison.

32 When compared to the Revised Second Basis of Comparison, the No Action
33 Alternative shows lower percentage of nest survival (from approximately 5 to
34 37%) in October and March through August.

- 35 • In dry years, the No Action Alternative showed higher percentage of nest
36 survival (approximately 10%) in May; and lower percentage of nest survival
37 (from approximately 11% and 31%) in October, April, May, July and August
38 when compared to the Second Basis of Comparison.

39 When compared to the Revised Second Basis of Comparison, the No Action
40 Alternative shows lower percentage of nest survival (from approximately 7 to
41 34%) in October and April through September.

1 • In critically dry years, the No Action Alternative showed higher percentage of
2 nest survival (from approximately 13 to 30%) in May, July, and August; and
3 lower percentage of nest survival (from approximately 6% and 35%) in
4 October, April, and September when compared to the Second Basis of
5 Comparison.

6 When compared to the Revised Second Basis of Comparison, the No Action
7 Alternative shows higher percentage of nest survival (from approximately 7 to
8 81%) in June through August; and lower percentage of nest survival (from
9 approximately 25 to 35%) in October, April, and May.

10 In general, the No Action Alternative shows lower percentage of nest survival for
11 the New Melones Large Mouth Bass when compared to the Revised Second Basis
12 of Comparison.

13 **5C.2.2.2.10 New Melones Small Mouth Bass Nest Survival Percentage**

14 Monthly pattern of reservoir storage is different between the Second Basis of
15 Comparison and the Revised Second Basis of Comparison and the changes
16 between alternatives reflect the change in this pattern.

17 • In wet years, the No Action Alternative showed higher percentage of nest
18 survival in June (approximately 17%); and lower percentage of nest survival
19 (37% and 9%) in October and April when compared to the Second Basis of
20 Comparison.

21 When compared to the Revised Second Basis of Comparison, the No Action
22 Alternative shows higher percentage of nest survival (from approximately 8 to
23 16%) in July through September; and lower percentage of nest survival
24 (approximately 38 and 8%) in October and April.

25 • In above normal years, the No Action Alternative showed lower percentage of
26 nest survival (29% and 9%) in October and April when compared to the
27 Second Basis of Comparison.

28 When compared to the Revised Second Basis of Comparison, the No Action
29 Alternative shows lower percentage of nest survival (from approximately 7 to
30 30%) in October, April, July, and August.

31 • In below normal years, the No Action Alternative showed higher percentage
32 of nest survival (approximately 11%) in June; and lower percentage of nest
33 survival (from approximately 6% to 37%) in October, March, April, and July
34 when compared to the Second Basis of Comparison.

35 When compared to the Revised Second Basis of Comparison, the No Action
36 Alternative shows lower percentage of nest survival (from approximately 6 to
37 38%) in October, March through May, July, and August.

38 • In dry years, the No Action Alternative showed higher percentage of nest
39 survival (approximately 5% and 8%) in November and May; and lower
40 percentage of nest survival (from approximately 10% to 34%) in October,
41 April, and July when compared to the Second Basis of Comparison.

1 When compared to the Revised Second Basis of Comparison, the No Action
2 Alternative shows lower percentage of nest survival (from approximately 6 to
3 37%) in October and April through.

- 4 • In critically dry years, the No Action Alternative showed higher percentage of
5 nest survival (from approximately 5 to 28%) in November, May, July, and
6 August; and lower percentage of nest survival (from approximately 6% to
7 37%) in October, April, and September when compared to the Second Basis
8 of Comparison.

9 When compared to the Revised Second Basis of Comparison, the No Action
10 Alternative shows higher percentage of nest survival (from approximately 8 to
11 100%) in June through September; and lower percentage of nest survival
12 (from approximately 23 to 41%) in October, April, and May.

13 In general, the No Action Alternative shows lower percentage of nest survival for
14 the New Melones Small Mouth Bass when compared to the Revised Second Basis
15 of Comparison except for the summer months of critically dry years.

16 **5C.2.2.2.11 New Melones Spotted Bass Nest Survival Percentage**

17 Monthly pattern of reservoir storage is different between the Second Basis of
18 Comparison and the Revised Second Basis of Comparison and the changes
19 between alternatives reflect the change in this pattern.

- 20 • In wet years, the No Action Alternative showed lower percentage of nest
21 survival (from approximately 5% to 12%) in October, April, July, and August
22 when compared to the Second Basis of Comparison.

23 When compared to the Revised Second Basis of Comparison, the No Action
24 Alternative shows lower percentage of nest survival (from approximately 10%
25 to 12%) in October, April, and July.

- 26 • In above normal years, the No Action Alternative showed similar percentage
27 of nest survival when compared to the Second Basis of Comparison.

28 When compared to the Revised Second Basis of Comparison, the No Action
29 Alternative shows lower percentage of nest survival (from approximately 5 to
30 7%) in July and August.

- 31 • In below normal years, the No Action Alternative showed lower percentage of
32 nest survival (from approximately 5% to 10%) in October, April, and July
33 when compared to the Second Basis of Comparison.

34 When compared to the Revised Second Basis of Comparison, the No Action
35 Alternative shows lower percentage of nest survival (from approximately 5 to
36 9%) in October, April, and August.

- 37 • In dry years, the No Action Alternative showed higher percentage of nest
38 survival (approximately 5%) in May when compared to the Second Basis of
39 Comparison.

1 When compared to the Revised Second Basis of Comparison, the No Action
 2 Alternative shows lower percentage of nest survival (from approximately 8%
 3 to 12%) in July and August.

- 4 • In critically dry years, the No Action Alternative showed higher percentage of
 5 nest survival (from approximately 11% to 21%) in May and July; and lower
 6 percentage of nest survival (from approximately 8% to 17%) in April and June
 7 when compared to the Second Basis of Comparison.

8 When compared to the Revised Second Basis of Comparison, the No Action
 9 Alternative shows higher percentage of nest survival (from approximately 5%
 10 to 8%) in July and August; and lower percentage of nest survival (from
 11 approximately 5% to 18%) in April through June, and September.

12 In general, the No Action Alternative shows lower percentage of nest survival for
 13 the New Melones Spotted Bass when compared to the Revised Second Basis of
 14 Comparison.

15 **5C.2.2.3 Alternative 3 Compared to the Revised Second Basis of** 16 **Comparison**

17 **5C.2.2.3.1 New Melones Storage**

18 Alternative 3 showed increased storage (from approximately 8 to 32%) almost all
 19 months of all water year types except for February through May of wet years (less
 20 than 5% increase). When compared to the Revised Second Basis of Comparison,
 21 Alternative 3 shows similar storage in all months of all water year types (changes
 22 within 5%).

23 **5C.2.2.3.2 New Melones Elevation**

24 Alternative 3 showed similar reservoir elevation in all months of all water year
 25 types (changes within 5%). When compared to the Revised Second Basis of
 26 Comparison, Alternative 3 still shows similar reservoir elevation in all months of
 27 all water year types (changes within 5%).

28 **5C.2.2.3.3 Stanislaus River Flow below Goodwin**

29 Flow patterns are different between the Second Basis of Comparison and the
 30 Revised Second Basis of Comparison and the changes between alternatives reflect
 31 the change in patterns.

- 32 • In wet years, Alternative 3 showed lower flows (from approximately 40 to
 33 45%) in May and June, higher flows (from approximately 9 to 67%) in
 34 December, February, March, July, August, and September, and similar flows
 35 (within 5% change) in October, November, January, and April when
 36 compared to the Second Basis of Comparison.

37 When compared to the Revised Second Basis of Comparison, Alternative 3
 38 shows lower flows (from approximately 17 to 30%) in May and June, higher
 39 flows (from approximately 5 to 19%) in October, December, February, and

- 1 July, and similar flows (within 5% change) in November, January, March,
2 April, August, and September when compared to Alternative 3.
- 3 • In above normal years, Alternative 3 showed lower flows (from
4 approximately 14 to 79%) in November, May, June, and July months, higher
5 flows (from approximately 5 to 23%) in October, March, and April, and
6 similar flows (within 5% change) in December, January, February, August,
7 and September when compared to the Second Basis of Comparison.
- 8 When compared to the Revised Second Basis of Comparison, Alternative 3
9 shows lower flows (from approximately 10 to 74%) in May through July,
10 higher flows (from approximately 6 to 30%) in October through January,
11 March, and April, and similar flows (within 5% change) in February, August,
12 and September when compared to Alternative 3.
- 13 • In below normal years, Alternative 3 showed lower flows (from
14 approximately 7 to 58%) in October, November, December, March, May,
15 June, and September, higher flows (from approximately 18 to 32%) in
16 January, February, and April, and similar flows (within 5% change) in August
17 and September when compared to the Second Basis of Comparison.
- 18 When compared to the Revised Second Basis of Comparison, Alternative 3
19 shows lower flows (from approximately 7 to 38%) in November, December,
20 March, May, and June, higher flows (from approximately 6 to 44%) in
21 October and January, and similar flows (within 5% change) in February,
22 April, July, August, and September.
- 23 • In dry years, Alternative 3 showed lower flows (approximately 5 to 36%) in,
24 November through March, May, and June, higher flows (approximately 40%)
25 in April, and similar flows (within 5% change) in October and July through
26 September when compared to the Second Basis of Comparison.
- 27 When compared to the Revised Second Basis of Comparison, Alternative 3
28 shows lower flows (approximately 26%) in June, higher flows (from
29 approximately 8 to 19%) in October, March, and April, and similar flows
30 (within 5% change) in November through February, May, and July through
31 September.
- 32 • In critically dry years, Alternative 3 showed lower flows (approximately 8 to
33 31%) in November through March and May through July, higher flows
34 (approximately 5 to 47%) in October, April, and September, and similar flows
35 (within 5% change) in August when compared to the Second Basis of
36 Comparison.
- 37 When compared to the Revised Second Basis of Comparison, Alternative 3
38 shows lower flows (from approximately 6 to 19%) in January, February, June,
39 and July, higher flows (from approximately 9 to 36%) in October, November,
40 December, March, April, and May, and similar flows (within 5% change) in
41 August and September.

1 **5C.2.2.3.4 Stanislaus River Flow at Mouth**

2 • In wet years, Alternative 3 showed lower flows (from approximately 12 to
3 39%) in May and June, higher flows (from approximately 8 to 58%) in
4 December, February, March, July, August, and September, and similar flows
5 (within 5% change) in October, November, January, and April when
6 compared to the Second Basis of Comparison.

7 When compared to the Revised Second Basis of Comparison, Alternative 3
8 shows lower flows (from approximately 15 to 25%) in May and June, higher
9 flows (from approximately 6 to 17%) in October, December, February, and
10 July, and similar flows (within 5% change) in November, January, March,
11 April, August, and September when compared to Alternative 3.

12 • In above normal years, Alternative 3 showed lower flows (from
13 approximately 10 to 63%) in November, May, June, and July, higher flows
14 (approximately 19%) in April, and similar flows (within 5% change) in
15 October, December, January, February, March, August, and September when
16 compared to the Second Basis of Comparison.

17 When compared to the Revised Second Basis of Comparison, Alternative 3
18 shows lower flows (from approximately 9 to 57%) in May through July,
19 higher flows (from approximately 8 to 17%) in October, December, March,
20 and April, and similar flows (within 5% change) in November, February,
21 August, and September when compared to Alternative 3.

22 • In below normal years, Alternative 3 showed lower flows (from
23 approximately 9 to 44%) in November, December, March, May, June, and
24 September, higher flows (from approximately 16 to 23%) in January,
25 February, and April, and similar flows (within 5% change) in July, August,
26 and September when compared to the Second Basis of Comparison.

27 When compared to the Revised Second Basis of Comparison, Alternative 3
28 shows lower flows (from approximately 7 to 26%) in November, December,
29 May, and June, higher flows (approximately 30%) in January, and similar
30 flows (within 5% change) in October, February, March, April, July, August,
31 and September.

32 • In dry years, Alternative 3 showed lower flows (approximately 9 to 26%) in,
33 November December, January, March, May, and June, higher flows
34 (approximately 38%) in April, and similar flows (within 5% change) in
35 October, February, and July through September when compared to the Second
36 Basis of Comparison.

37 When compared to the Revised Second Basis of Comparison, Alternative 3
38 shows lower flows (approximately 18%) in June, higher flows (from
39 approximately 9 to 18%) in October and April, and similar flows (within 5%
40 change) in November through March, May, and July through September.

41 • In critically dry years, Alternative 3 showed lower flows (approximately 6 to
42 28%) in November through March and May through July, higher flows

1 (approximately 45%) in April, and similar flows (within 5% change) in
2 October, August, and September when compared to the Second Basis of
3 Comparison.

4 When compared to the Revised Second Basis of Comparison, Alternative 3
5 shows lower flows (from approximately 10 to 15%) in February, June, and
6 July, higher flows (from approximately 6 to 32%) in October, November,
7 December, March, April, and May, and similar flows (within 5% change) in
8 January, August, and September.

9 **5C.2.2.3.5 Stanislaus River Water Temperature below Goodwin Dam**

10 Alternative 3 showed similar temperatures at Goodwin except for lower
11 temperatures in October of above normal years, October and November of below
12 normal years, September of dry years, and October, November, May, and July
13 through September of critically dry years (varied from 0.5 to 1.5°F) when
14 compared to the Second Basis of Comparison. Difference in temperature
15 threshold exceedances were all within 5% (varied from 3% less to 3% more
16 exceedances in March through May).

17 Alternative 3 shows similar temperatures at Goodwin except for higher
18 temperatures in June (approximately 0.6°F) and lower temperatures in September
19 (approximately 0.6°F) of critically dry years when compared to the Revised
20 Second Basis of Comparison. Difference in temperature threshold exceedances
21 are mostly within 5% (1% to 4% less in January, February, and April) and 5%
22 less in May.

23 In general, Alternative 3 shows lower temperatures for Steelhead smolts in
24 Stanislaus when compared to the Revised Second Basis of Comparison.

25 **5C.2.2.3.6 Stanislaus River Water Temperature at Orange Blossom Bridge**

26 Alternative 3 showed similar temperatures at Orange Blossom Bridge except for
27 higher temperatures in June of wet years, May through July of above normal,
28 March and June of below normal years, March, May, and June of dry years, and
29 February and June of critically dry years (from approximately 0.5 to 4.3°F) and
30 lower temperatures in August wet years, April of below normal and dry years, and
31 October, November, April, August, and September of critically dry years
32 (approximately from 0.5 to 1.2°F) when compared to the Second Basis of
33 Comparison. Difference in temperature threshold exceedances showed 16% less
34 exceedance in April (spawning threshold), 7% more exceedance in May
35 (smoltification threshold), and 8% more in March (spawning threshold) and 10%
36 more in May (spawning threshold).

37 Alternative 3 showed similar temperatures at Orange Blossom Bridge except for
38 higher temperatures in June of wet years, June and July of above normal, June of
39 below normal and dry years, and June and July of critically dry years (from
40 approximately 0.6 to 5.1°F) and lower temperatures in October of wet and above
41 normal years, October and April of dry years, and October, March, April, and
42 September of critically dry years (approximately from 0.5 to 1.2°F) when
43 compared to the Revised Second Basis of Comparison. Difference in temperature

1 threshold exceedances showed 10% less exceedance in March (smoltification
 2 threshold), 5% less exceedance in May (smoltification threshold), 11 and 12%
 3 less in March and April (spawning threshold), and 5% more exceedance in July
 4 (rearing threshold).

5 In general, Alternative 3 shows lower temperatures for Steelhead lifestages in
 6 Stanislaus when compared to the Revised Second Basis of Comparison.

7 **5C.2.2.3.7 CVP Stanislaus Deliveries**

8 Under Alternative 3, annual CVP service contract deliveries were increased by
 9 15.1 TAF and annual water rights deliveries were increased by 2.6 TAF when
 10 compared to the Second Basis of Comparison.

11 When compared to the Revised Second Basis of Comparison, annual CVP service
 12 contract deliveries are increased by 4.8 TAF; however annual water rights
 13 deliveries are decreased by 1.2 TAF under Alternative 3.

14 In general, the Alternative 3 shows increased Stanislaus deliveries to CVP service
 15 contractors and similar (slightly decreased) deliveries to water right holders when
 16 compared to the Revised Second Basis of Comparison.

17 **5C.2.2.3.8 CVP Power Generation**

18 Under Alternative 3, long-term average power capacity was 1% higher and energy
 19 generation was similar when compared to the Second Basis of Comparison. The
 20 energy use at the CVP pumping facilities was 4% lower than the Second Basis of
 21 Comparison; which resulted in a 1% higher net generation.

22 In dry and critical years, long-term average power capacity and energy generation
 23 under Alternative 3 were both 1% lower than the Second Basis of Comparison.
 24 The energy use at the CVP pumping facilities was 8% lower than the Second
 25 Basis of Comparison; which resulted in 4% higher net generation.

26 When compared to the Revised Second Basis of Comparison, long-term average
 27 power capacity and energy generation are both 1% lower under Alternative 3.
 28 The energy use at the CVP pumping facilities is 4% lower than the Revised
 29 Second Basis of Comparison; which results in similar net generation.

30 In dry and critical years, long-term average power capacity and energy generation
 31 under Alternative 3 are 3% and 1% lower than the Revised Second Basis of
 32 Comparison. The energy use at the CVP pumping facilities is 7% lower than the
 33 Revised Second Basis of Comparison; which results 1% higher net generation.

34 **5C.2.2.3.9 New Melones Large Mouth Bass Nest Survival Percentage**

35 Monthly pattern of reservoir storage is different between the Second Basis of
 36 Comparison and the Revised Second Basis of Comparison and the changes
 37 between alternatives reflect the change in this pattern.

- 38 • In wet years, Alternative 3 showed higher percentage of nest survival in July
 39 through September (from approximately 5% and 45%); and lower percentage

Appendix 5C: Revised Second Basis of Comparison

1 of nest survival (7% and 6%) in May and June when compared to the Second
2 Basis of Comparison.

3 When compared to the Revised Second Basis of Comparison, Alternative 3
4 shows higher percentage of nest survival (from approximately 12 to 62%) in
5 July through September; and lower percentage of nest survival (approximately
6 7 and 20%) in May and June.

- 7 • In above normal years, Alternative 3 showed higher percentage of nest
8 survival in June through August (from approximately 10% to 38 when
9 compared to the Second Basis of Comparison.

10 When compared to the Revised Second Basis of Comparison, Alternative 3
11 shows lower percentage of nest survival in June (approximately 6 %) in
12 August; and higher percentage of nest survival (approximately 24% and 17%)
13 in June and July.

- 14 • In below normal years, Alternative 3 showed higher percentage of nest
15 survival (approximately 15%) in May and June; and lower percentage of nest
16 survival (from approximately 9% and 21%) in December, April, and July
17 when compared to the Second Basis of Comparison.

18 When compared to the Revised Second Basis of Comparison, Alternative 3
19 shows lower percentage of nest survival (from approximately 7 to 18%) in
20 December, April, July, and August.

- 21 • In dry years, Alternative 3 showed higher percentage of nest survival (from
22 approximately 5% to 21%) in February, June, and August; and lower
23 percentage of nest survival (approximately 20% and 17%) in April and
24 September when compared to the Second Basis of Comparison.

25 When compared to the Revised Second Basis of Comparison, Alternative 3
26 shows lower percentage of nest survival (from approximately 7 to 23%) in
27 October, April, May, July, and September.

- 28 • In critically dry years, Alternative 3 showed higher percentage of nest survival
29 (approximately 7% to 56%) in February and May; and lower percentage of
30 nest survival (from approximately 5% and 37%) in, April, and June through
31 September when compared to the Second Basis of Comparison.

32 When compared to the Revised Second Basis of Comparison, Alternative 3
33 shows higher percentage of nest survival (approximately 25%) in August; and
34 lower percentage of nest survival (from approximately 10 to 28%) in April,
35 May, July, and September.

36 In general, the Alternative 3 shows lower percentage of nest survival for the New
37 Melones Large Mouth Bass when compared to the Revised Second Basis of
38 Comparison except for summer months of wet years.

5C.2.2.3.10 New Melones Small Mouth Bass Nest Survival Percentage

Monthly pattern of reservoir storage is different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in this pattern.

- In wet years, Alternative 3 showed higher percentage of nest survival in July and August (approximately 53% and 24%); and lower percentage of nest survival (approximately 7%) in May when compared to the Second Basis of Comparison.

When compared to the Revised Second Basis of Comparison, Alternative 3 shows higher percentage of nest survival (from approximately 12 to 72%) in July through September; and lower percentage of nest survival (approximately 8 and 18%) in May and June.

- In above normal years, Alternative 3 showed higher percentage of nest survival in June through August (from approximately 8% to 35%) when compared to the Second Basis of Comparison.

When compared to the Revised Second Basis of Comparison, Alternative 3 shows lower percentage of nest survival (approximately 7%) in August; and higher percentage of nest survival (approximately 28% and 16%) in June and July.

- In below normal years, the Alternative 3 showed higher percentage of nest survival (from approximately 7% to 16%) in November, May, and June; and lower percentage of nest survival (from approximately 9% to 23%) in December, April, and July when compared to the Second Basis of Comparison.

When compared to the Revised Second Basis of Comparison, the Alternative 3 shows lower percentage of nest survival (from approximately 8 to 18%) in December, April, July, and August.

- In dry years, the Alternative 3 showed higher percentage of nest survival (from approximately 5% to 19%) in February, June, and August; and lower percentage of nest survival (approximately 20% and 16%) in April, and September when compared to the Second Basis of Comparison.

When compared to the Revised Second Basis of Comparison, the Alternative 3 shows lower percentage of nest survival (from approximately 7 to 22%) in October, April, May, July, and September.

- In critically dry years, the Alternative 3 showed higher percentage of nest survival (from approximately 8 to 51%) in February and May; and lower percentage of nest survival (from approximately 8% to 40%) in April, and June through September when compared to the Second Basis of Comparison.

When compared to the Revised Second Basis of Comparison, the Alternative 3 shows higher percentage of nest survival (from approximately 5 to 31%) in February and August; and lower percentage of nest survival

1 (from approximately 8% to 27%) in October, April, May, July, and
2 September.

3 In general, the Alternative 3 shows lower percentage of nest survival for the New
4 Melones Small Mouth Bass when compared to the Revised Second Basis of
5 Comparison.

6 **5C.2.2.3.11 New Melones Spotted Bass Nest Survival Percentage**

7 Monthly pattern of reservoir storage is different between the Second Basis of
8 Comparison and the Revised Second Basis of Comparison and the changes
9 between alternatives reflect the change in this pattern.

- 10 • In wet years, Alternative 3 showed lower percentage of nest survival (from
11 approximately 8% to 22%) in May and June when compared to the Second
12 Basis of Comparison.

13 When compared to the Revised Second Basis of Comparison, Alternative 3
14 shows higher percentage of nest survival (from approximately 5% to 8%) in
15 August and September; and lower percentage of nest survival (approximately
16 8% and 23%) in May and June.

- 17 • In above normal years, Alternative 3 showed lower percentage of nest survival
18 (from approximately 8% to 35%) in August and September when compared to
19 the Second Basis of Comparison.

20 When compared to the Revised Second Basis of Comparison, Alternative 3
21 shows lower percentage of nest survival (from approximately 8% to 18%) in
22 August and September.

- 23 • In below normal years, the Alternative 3 showed higher percentage of nest
24 survival (from approximately 5% to 6%) in May and June; and lower
25 percentage of nest survival (from approximately 9% to 18%) in December,
26 April, July, and August when compared to the Second Basis of Comparison.

27 When compared to the Revised Second Basis of Comparison, the
28 Alternative 3 shows lower percentage of nest survival (from approximately
29 9% to 18%) in December, April, July, and August.

- 30 • In dry years, the Alternative 3 showed lower percentage of nest survival (from
31 approximately 6% to 21%) in April, May, July and September when
32 compared to the Second Basis of Comparison.

33 When compared to the Revised Second Basis of Comparison, the
34 Alternative 3 shows lower percentage of nest survival (from approximately
35 7 to 24%) in April, May, and July through September.

- 36 • In critically dry years, the Alternative 3 showed higher percentage of nest
37 survival (from approximately 5% to 26%) in May and June; and lower
38 percentage of nest survival (from approximately 7% to 10%) in March, April,
39 and September when compared to the Second Basis of Comparison.

1 When compared to the Revised Second Basis of Comparison, the
 2 Alternative 3 shows lower percentage of nest survival (from approximately
 3 6% to 10%) in March through May, July, and September.

4 In general, the Alternative 3 shows lower percentage of nest survival for the New
 5 Melones Spotted Bass when compared to the Revised Second Basis of
 6 Comparison.

7 **5C.2.2.4 Alternative 5 Compared to the Revised Second Basis of**
 8 **Comparison**

9 **5C.2.2.4.1 New Melones Storage**

10 Alternative 5 showed decreased storage (from approximately 6 to 23%) almost all
 11 months of all water year types except for June through September of wet years
 12 (less than 5% decrease). When compared to the Revised Second Basis of
 13 Comparison, Alternative 5 shows further decreased storage (from approximately
 14 8 to 43%) in all months of all water year types.

15 **5C.2.2.4.2 New Melones Elevation**

16 Alternative 5 showed similar reservoir elevation (changes within 5%) in all
 17 months of all water year types. When compared to the Revised Second Basis of
 18 Comparison, Alternative 5 shows decreased storage in all months of all water year
 19 types (from approximately 9 to 13%).

20 **5C.2.2.4.3 Stanislaus River Flow below Goodwin**

21 Flow patterns are different between the Second Basis of Comparison and the
 22 Revised Second Basis of Comparison and the changes between alternatives reflect
 23 the change in patterns.

24 • In wet years, Alternative 5 showed lower flows (from approximately 6 to
 25 53%) in November, December, January, and June through September, higher
 26 flows (from approximately 16 to 113%) in October, March, and May, and
 27 similar flows (within 5% change) in February and April when compared to the
 28 Second Basis of Comparison.

29 When compared to the Revised Second Basis of Comparison, Alternative 5
 30 shows lower flows (from approximately 14 to 40%) in November, December,
 31 February, and June through September, higher flows (from approximately
 32 11 to 129%) in October, March, and May, and similar flows (within 5%
 33 change) in January and April when compared to Alternative 5.

34 • In above normal years, Alternative 5 showed lower flows (from
 35 approximately 7 to 37%) in November through February and June, higher
 36 flows (from approximately 23 to 134%) in October, March, April, and May,
 37 and similar flows (within 5% change) in July, August, and September when
 38 compared to the Second Basis of Comparison.

39 When compared to the Revised Second Basis of Comparison, Alternative 5
 40 shows lower flows (from approximately 7 to 22%) in November, December,

1 and February, higher flows (from approximately 11 to 185%) in October,
2 March, April, and May, and similar flows (within 5% change) in January and
3 June through September when compared to Alternative 5.

- 4 • In below normal years, Alternative 5 showed lower flows (from
5 approximately 5 to 40%) in November through February, June, and
6 September, higher flows (from approximately 16 to 155%) in October, March,
7 and April, and similar flows (within 5% change) in May, July, and August
8 when compared to the Second Basis of Comparison.

9 When compared to the Revised Second Basis of Comparison, Alternative 5
10 shows lower flows (from approximately 16 to 35%) in November through
11 February, higher flows (from approximately 11 to 189%) in October and
12 March through June, and similar flows (within 5% change) in July through
13 September.

- 14 • In dry years, Alternative 5 showed lower flows (approximately 8 to 36%) in,
15 November through March and June, higher flows (approximately 25 to 148%)
16 in October, April, and May, and similar flows (within 5% change) in July
17 through September when compared to the Second Basis of Comparison.

18 When compared to the Revised Second Basis of Comparison, Alternative 5
19 shows lower flows (approximately 8 to 26%) in November through February,
20 higher flows (from approximately 8 to 182%) in October and March through
21 June, and similar flows (within 5% change) in July through September.

- 22 • In critically dry years, Alternative 5 showed lower flows (approximately 8 to
23 30%) in November through March, Jun, and July, higher flows
24 (approximately 7 to 193%) in October, April, and May, and similar flows
25 (within 5% change) in August and September when compared to the Second
26 Basis of Comparison.

27 When compared to the Revised Second Basis of Comparison, Alternative 5
28 shows lower flows (from approximately 5 to 17%) in November, December,
29 February, June, July, and August, higher flows (from approximately 8 to
30 272%) in October, January, March, April, and May, and similar flows (within
31 5% change) in September.

32 **5C.2.2.4.4 Stanislaus River Flow at Mouth**

33 Flow patterns are different between the Second Basis of Comparison and the
34 Revised Second Basis of Comparison and the changes between alternatives reflect
35 the change in patterns.

- 36 • In wet years, Alternative 5 showed lower flows (from approximately 5 to
37 47%) in November, December, January, and June through September, higher
38 flows (from approximately 14 to 77%) in October, March, and May, and
39 similar flows (within 5% change) in February and April when compared to the
40 Second Basis of Comparison.

41 When compared to the Revised Second Basis of Comparison, Alternative 5
42 shows lower flows (from approximately 12 to 34%) in November, December,

- 1 February, and June through September, higher flows (from approximately
 2 10 to 86%) in October, March, and May, and similar flows (within 5%
 3 change) in January and April when compared to Alternative 5.
- 4 • In above normal years, Alternative 5 showed lower flows (from
 5 approximately 6 to 26%) in November through February and June, higher
 6 flows (from approximately 18 to 82%) in October, March, April, and May,
 7 and similar flows (within 5% change) in July, August, and September when
 8 compared to the Second Basis of Comparison.
- 9 When compared to the Revised Second Basis of Comparison, Alternative 5
 10 shows lower flows (from approximately 6 to 15%) in November, December,
 11 and February, higher flows (from approximately 8 to 104%) in October,
 12 March, April, and May, and similar flows (within 5% change) in January and
 13 June through September when compared to Alternative 5.
- 14 • In below normal years, Alternative 5 showed lower flows (from
 15 approximately 12 to 34%) in November through February and June, higher
 16 flows (from approximately 10 to 93%) in October, March, and April, and
 17 similar flows (within 5% change) in May, July, August, and September when
 18 compared to the Second Basis of Comparison.
- 19 When compared to the Revised Second Basis of Comparison, Alternative 5
 20 shows lower flows (from approximately 11 to 27%) in November through
 21 February, higher flows (from approximately 8 to 108%) in October and March
 22 through June, and similar flows (within 5% change) in July through
 23 September.
- 24 • In dry years, Alternative 5 showed lower flows (approximately 6 to 28%) in,
 25 November through March and June, higher flows (approximately 23 to 142%)
 26 in October, April, and May, and similar flows (within 5% change) in July
 27 through September when compared to the Second Basis of Comparison.
- 28 When compared to the Revised Second Basis of Comparison, Alternative 5
 29 shows lower flows (approximately 6 to 20%) in November through February,
 30 higher flows (from approximately 77 to 107%) in October, April, and May,
 31 and similar flows (within 5% change) in March and June through September.
- 32 • In critically dry years, Alternative 5 showed lower flows (approximately 7 to
 33 24%) in November through March, Jun, and July, higher flows
 34 (approximately 7 to 149%) in October, April, and May, and similar flows
 35 (within 5% change) in August and September when compared to the Second
 36 Basis of Comparison.
- 37 When compared to the Revised Second Basis of Comparison, Alternative 5
 38 shows lower flows (from approximately 6 to 13%) in November, December,
 39 June, July, and August, higher flows (from approximately 6 to 147%) in
 40 October, January, March, April, and May, and similar flows (within 5%
 41 change) in February and September.

1 **5C.2.2.4.5 Stanislaus River Water Temperature below Goodwin Dam**

2 Alternative 5 showed similar temperatures at Goodwin except for higher
3 temperatures in October of wet years, October, July, August, and September of
4 below normal years, October, November, July, August, and September of dry
5 years, October, April, May, August, and September of critically dry years (varied
6 from 0.5 to 1.9°F), and lower temperatures in December and February of critically
7 dry years (approximately 0.5°F) when compared to the Second Basis of
8 Comparison. Difference in temperature threshold exceedances were within 5%
9 (varied from 1% less to 2% more exceedances in February, March, and May) and
10 higher (approximately 6%) in April.

11 Alternative 5 shows similar temperatures at Goodwin except for higher
12 temperatures in October of wet years, October, November, August and September
13 of above normal years, October, August, and September of below normal years,
14 October through December and July through September of dry years, October,
15 November, May, and July through September of critically dry years (varied from
16 0.5 to 2.5°F) when compared to the Revised Second Basis of Comparison.
17 Difference in temperature threshold exceedances are within 5% (varied from 4%
18 less to 3% more exceedances in January through April).

19 In general, Alternative 5 shows lower temperatures for Steelhead smolts in
20 Stanislaus when compared to the Revised Second Basis of Comparison.

21 **5C.2.2.4.6 Stanislaus River Water Temperature at Orange Blossom Bridge**

22 Alternative 5 showed similar temperatures at Orange Blossom Bridge except for
23 lower temperatures in October of wet years, October and April of above normal,
24 below normal, dry, and critically dry years (from approximately 0.7 to 1.6°F) and
25 higher temperatures in November and June of wet years, June and September of
26 below normal years, August and September of dry years, and June through
27 September of critically dry years (approximately from 0.5 to 1.3°F) when
28 compared to the Second Basis of Comparison. Difference in temperature
29 threshold exceedances showed 27% less exceedance in October (adult migration
30 threshold), 8% less exceedance in April (smoltification threshold), 26% less
31 exceedance in April (spawning threshold), 8% more exceedance in November
32 (adult migration threshold), 6% more exceedance in April (smoltification
33 threshold), and 6 % more exceedance in July (rearing threshold), and 8% more in
34 August and September (rearing threshold).

35 Alternative 5 shows similar temperatures at Orange Blossom Bridge except for
36 lower temperatures (from approximately 0.5 to 1.7°F) in October and March of
37 wet years, October, March, and May of above normal years, October of below
38 normal years, October, April, and May of dry years, and October, March, April,
39 and May of critically dry years; and higher temperatures (from approximately
40 0.6 to 1.7°F) in July through September of wet years, November and September
41 of above normal years, September of below normal years, November, and July
42 through September of dry years, and November and June through September of
43 critically dry years when compared to the Revised Second Basis of Comparison.
44 Difference in temperature threshold exceedances showed 28% less exceedance in

1 October (adult migration threshold), 10% less exceedance in March
 2 (smoltification threshold), 7% less exceedance in April (smoltification threshold),
 3 15% less exceedance in May (smoltification threshold), 15, 23, and 17% less
 4 exceedance in March, April, and May respectively (spawning threshold), and 9%
 5 more in November (adult migration threshold) , and 7, 13, and 11% more in July,
 6 August, and September respectively (rearing threshold).

7 In general, Alternative 5 shows lower temperatures for Steelhead lifestages in
 8 Stanislaus except for higher temperatures when Steelhead is rearing in summer;
 9 when compared to the Revised Second Basis of Comparison.

10 **5C.2.2.4.7 CVP Stanislaus Deliveries**

11 Under Alternative 5, annual CVP service contract deliveries were decreased by
 12 8.4 TAF and annual water rights deliveries were decreased by 8.1 TAF when
 13 compared to the Second Basis of Comparison.

14 When compared to the Revised Second Basis of Comparison, annual CVP service
 15 contract deliveries are decreased by 18.6 TAF and annual water rights deliveries
 16 are decreased by 11.9 TAF under Alternative 5.

17 In general, the Alternative 5 shows decreased CVP Stanislaus deliveries when
 18 compared to the Revised Second Basis of Comparison.

19 **5C.2.2.4.8 CVP Power Generation**

20 Under Alternative 5, long-term average power capacity and energy generation
 21 were 4% and 1% lower when compared to the Second Basis of Comparison. The
 22 energy use at the CVP pumping facilities was 14% lower than the Second Basis of
 23 Comparison; which resulted in a 4% higher net generation.

24 In dry and critical years, long-term average power capacity and energy generation
 25 under Alternative 5 were both 1% lower than the Second Basis of Comparison.
 26 The energy use at the CVP pumping facilities was 8% lower than the Second
 27 Basis of Comparison; which resulted in 4% higher net generation.

28 When compared to the Revised Second Basis of Comparison, long-term average
 29 power capacity and energy generation are 5% and 1% lower under Alternative 5.
 30 The energy use at the CVP pumping facilities is 14% lower than the Revised
 31 Second Basis of Comparison; which results in 3% higher net generation.

32 In dry and critical years, long-term average power capacity and energy generation
 33 under Alternative 5 are 12% and 5% lower than the Revised Second Basis of
 34 Comparison. The energy use at the CVP pumping facilities is 9% lower than the
 35 Revised Second Basis of Comparison; which results 3% lower net generation.

36 **5C.2.2.4.9 New Melones Large Mouth Bass Nest Survival Percentage**

37 Monthly pattern of reservoir storage is different between the Second Basis of
 38 Comparison and the Revised Second Basis of Comparison and the changes
 39 between alternatives reflect the change in this pattern.

Appendix 5C: Revised Second Basis of Comparison

1 • In wet years, Alternative 5 showed higher percentage of nest survival in June
2 (approximately 19%); and lower percentage of nest survival (from
3 approximately 5% through 28%) in October, April, May, and July through
4 August when compared to the Second Basis of Comparison.

5 When compared to the Revised Second Basis of Comparison, Alternative 5
6 shows lower percentage of nest survival (from approximately 5% to 28%) in
7 October, May, and August.

8 • In above normal years, the Alternative 5 showed lower percentage of nest
9 survival (from 6% to 23%) in October and April through September when
10 compared to the Second Basis of Comparison.

11 When compared to the Revised Second Basis of Comparison, the
12 Alternative 5 shows lower percentage of nest survival (from approximately
13 6 to 29%) in October and April through September.

14 • In below normal years, the Alternative 5 showed higher percentage of nest
15 survival (approximately 6%) in June; and lower percentage of nest survival
16 (from approximately 5% and 38%) in October, March, April, May, and July
17 through September when compared to the Second Basis of Comparison.

18 When compared to the Revised Second Basis of Comparison, the
19 Alternative 5 shows lower percentage of nest survival (from approximately
20 5 to 40%) in October and March through September.

21 • In dry years, the Alternative 5 showed higher percentage of nest survival
22 (approximately 5%) in February; and lower percentage of nest survival (from
23 approximately 11% and 47%) in October, April, May, and July through
24 September when compared to the Second Basis of Comparison.

25 When compared to the Revised Second Basis of Comparison, Alternative 5
26 shows lower percentage of nest survival (from approximately 9 to 45%) in
27 October and April through September.

28 • In critically dry years, Alternative 5 showed higher percentage of nest survival
29 (from approximately 5 to 82%) in February, and June through September and
30 lower percentage of nest survival (approximately 21% and 69%) in October,
31 and April when compared to the Second Basis of Comparison.

32 When compared to the Revised Second Basis of Comparison, Alternative 5
33 shows higher percentage of nest survival (from approximately 17 to 148%) in
34 June through September; and lower percentage of nest survival (from
35 approximately 26 to 67%) in October, April, and May.

36 In general, the Alternative 5 shows lower percentage of nest survival for the New
37 Melones Large Mouth Bass when compared to the Revised Second Basis of
38 Comparison except for summer months of the critically dry years.

1 **5C.2.2.4.10 New Melones Small Mouth Bass Nest Survival Percentage**

2 Monthly pattern of reservoir storage is different between the Second Basis of
 3 Comparison and the Revised Second Basis of Comparison and the changes
 4 between alternatives reflect the change in this pattern.

- 5 • In wet years, Alternative 5 showed higher percentage of nest survival in June
 6 (approximately 19%); and lower percentage of nest survival (from
 7 approximately 7% through 34%) in October, May, and July through
 8 September when compared to the Second Basis of Comparison.

9 When compared to the Revised Second Basis of Comparison, Alternative 5
 10 shows lower percentage of nest survival (from approximately 5% to 35%) in
 11 October, May, and August.

- 12 • In above normal years, the Alternative 5 showed lower percentage of nest
 13 survival (from 7% to 28%) in October and April through September when
 14 compared to the Second Basis of Comparison.

15 When compared to the Revised Second Basis of Comparison, the
 16 Alternative 5 shows lower percentage of nest survival (from approximately
 17 7 to 29%) in October and April through September.

- 18 • In below normal years, the Alternative 5 showed higher percentage of nest
 19 survival (approximately 8%) in June; and lower percentage of nest survival
 20 (from approximately 6% and 39%) in October, March, April, May, and July
 21 through September when compared to the Second Basis of Comparison.

22 When compared to the Revised Second Basis of Comparison, the
 23 Alternative 5 shows lower percentage of nest survival (from approximately
 24 6 to 41%) in October and March through September.

- 25 • In dry years, the Alternative 5 showed higher percentage of nest survival
 26 (approximately 5%) in November and February; and lower percentage of nest
 27 survival (from approximately 11% and 45%) in October, April, May, and July
 28 through September when compared to the Second Basis of Comparison.

29 When compared to the Revised Second Basis of Comparison, Alternative 5
 30 shows lower percentage of nest survival (from approximately 9 to 48%) in
 31 October, and April through September.

- 32 • In critically dry years, Alternative 5 showed higher percentage of nest survival
 33 (from approximately 5 to 92%) in November, February, and May through
 34 September and lower percentage of nest survival (approximately 26% and
 35 67%) in October and April when compared to the Second Basis of
 36 Comparison.

37 When compared to the Revised Second Basis of Comparison, Alternative 5
 38 shows higher percentage of nest survival (from approximately 28 to 179%) in
 39 June through September; and lower percentage of nest survival (from
 40 approximately 31 to 65%) in October, April and May.

1 In general, the Alternative 5 shows lower percentage of nest survival for the New
2 Melones Small Mouth Bass when compared to the Revised Second Basis of
3 Comparison except for summer months of the critically dry years.

4 **5C.2.2.4.11 New Melones Spotted Bass Nest Survival Percentage**

5 Monthly pattern of reservoir storage is different between the Second Basis of
6 Comparison and the Revised Second Basis of Comparison and the changes
7 between alternatives reflect the change in this pattern.

8 • In wet years, Alternative 5 showed lower percentage of nest survival
9 (approximately 8%) in August when compared to the Second Basis of
10 Comparison.

11 When compared to the Revised Second Basis of Comparison, Alternative 5
12 shows lower percentage of nest survival (approximately 6%) in August.

13 • In above normal years, the Alternative 5 showed lower percentage of nest
14 survival (from 8% to 21%) in April, June, July and September when compared
15 to the Second Basis of Comparison.

16 When compared to the Revised Second Basis of Comparison, the
17 Alternative 5 shows lower percentage of nest survival (from approximately
18 8% to 24%) in April, and June through September.

19 • In below normal years, the Alternative 5 showed lower percentage of nest
20 survival (from approximately 13% and 22%) in October, April, May, and July
21 through September when compared to the Second Basis of Comparison.

22 When compared to the Revised Second Basis of Comparison, the
23 Alternative 5 shows lower percentage of nest survival (from approximately
24 6% to 22%) in October, and April through September.

25 • In dry years, the Alternative 5 showed lower percentage of nest survival (from
26 approximately 6% and 22%) in October, and April through September when
27 compared to the Second Basis of Comparison.

28 When compared to the Revised Second Basis of Comparison, Alternative 5
29 shows lower percentage of nest survival (from approximately 6% to 28%) in
30 October, and April through September.

31 • In critically dry years, Alternative 5 showed higher percentage of nest survival
32 (from approximately 13% to 18%) in July and August; and lower percentage
33 of nest survival (approximately 31% and 57%) in April and May when
34 compared to the Second Basis of Comparison.

35 When compared to the Revised Second Basis of Comparison, Alternative 5
36 shows higher percentage of nest survival (from approximately 5% to 13%) in
37 July and August; and lower percentage of nest survival (from approximately
38 7% to 56%) in April, May, and September.

1 In general, the Alternative 5 shows lower percentage of nest survival for the New
2 Melones Spotted Bass when compared to the Revised Second Basis of
3 Comparison except for summer months of the critically dry years.

4 **5C.3 Results**

5 **5C.3.1 Revised Second Basis of Comparison vs. Second Basis of** 6 **Comparison Results**

- 7 5C.3.1.1 Trinity Storage
- 8 5C.3.1.2 Shasta Storage
- 9 5C.3.1.3 Oroville Storage
- 10 5C.3.1.4 Folsom Storage
- 11 5C.3.1.5 New Melones Storage
- 12 5C.3.1.6 Trinity Elevation
- 13 5C.3.1.7 Shasta Elevation
- 14 5C.3.1.8 Oroville Elevation
- 15 5C.3.1.9 Folsom Elevation
- 16 5C.3.1.10 New Melones Elevation
- 17 5C.3.1.11 Delta Outflow
- 18 5C.3.1.12 Exports through Jones and Banks Pumping Plants
- 19 5C.3.1.13 Trinity River below Lewiston Dam
- 20 5C.3.1.14 Clear Creek below Whiskeytown Dam
- 21 5C.3.1.15 Sacramento River downstream of Keswick Reservoir
- 22 5C.3.1.16 Feather River downstream of Thermalito Afterbay
- 23 5C.3.1.17 Fremont Weir Spills
- 24 5C.3.1.18 American River below Nimbus Dam
- 25 5C.3.1.19 Sacramento River at Freeport
- 26 5C.3.1.20 Yolo Bypass Flow
- 27 5C.3.1.21 San Joaquin River at Vernalis Flow
- 28 5C.3.1.22 San Joaquin River at Vernalis Salinity
- 29 5C.3.1.23 Stanislaus River below Goodwin Flow
- 30 5C.3.1.24 Stanislaus River at Mouth Flow

1 **5C.3.2 Revised Second Basis of Comparison vs. Second Basis of**
2 **Comparison Results**

- 3 5C.3.2.1 New Melones Storage
- 4 5C.3.2.2 New Melones Elevation
- 5 5C.3.2.3 Stanislaus River below Goodwin Flow
- 6 5C.3.2.4 Stanislaus River at Mouth Flow
- 7 5C.3.2.5 Stanislaus River below New Melones Reservoir Temperature
- 8 5C.3.2.6 Stanislaus River below Tulloch Reservoir Temperature
- 9 5C.3.2.7 Stanislaus River below Goodwin Dam Temperature
- 10 5C.3.2.8 Stanislaus River at Orange Blossom Bridge Temperature
- 11 5C.3.2.9 Stanislaus River at Mouth Temperature
- 12 5C.3.2.10 San Joaquin River at Vernalis Flow
- 13 5C.3.2.11 Delta Outflow
- 14 5C.3.2.12 X2 Position
- 15 5C.3.2.13 Old and Middle River Flow
- 16 5C.3.2.14 Exports through Jones and Banks Pumping Plant
- 17 5C.3.2.15 CVP Deliveries
- 18 5C.3.2.16 CVP Total Capacity
- 19 5C.3.2.17 CVP Total Generation
- 20 5C.3.2.18 CVP Total Energy Use
- 21 5C.3.2.19 CVP Net Generation
- 22 5C.3.2.20 Salmon Mortality
- 23 5C.3.2.21 New Melones Large Mouth Bass Nest Survival Percentage
- 24 5C.3.2.22 New Melones Small Mouth Bass Nest Survival Percentage
- 25 5C.3.2.23 New Melones Spotted Bass Nest Survival Percentage
- 26 5C.3.2.24 Temperature Threshold Exceedances
- 27 5C.3.2.25 CVP Annual Power Generation Summary

28 **5C.3.3 Second Basis of Comparison vs. No Action Alternative,**
29 **Alternative 3, and Alternative 5 Results**

- 30 5C.3.3.1 New Melones Storage
- 31 5C.3.3.2 New Melones Elevation
- 32 5C.3.3.3 Stanislaus River below Goodwin Flow
- 33 5C.3.3.4 Stanislaus River at Mouth Flow

- 1 5C.3.3.5 Stanislaus River below New Melones Reservoir Temperature
- 2 5C.3.3.6 Stanislaus River below Tulloch Reservoir Temperature
- 3 5C.3.3.7 Stanislaus River below Goodwin Dam Temperature
- 4 5C.3.3.8 Stanislaus River at Orange Blossom Bridge Temperature
- 5 5C.3.3.9 Stanislaus River at Mouth Temperature
- 6 5C.3.3.10 San Joaquin River at Vernalis Flow
- 7 5C.3.3.11 Delta Outflow
- 8 5C.3.3.12 X2 Position
- 9 5C.3.3.13 Old and Middle River Flow
- 10 5C.3.3.14 Exports through Jones and Banks Pumping Plant
- 11 5C.3.3.15 CVP Deliveries
- 12 5C.3.3.16 CVP Total Capacity
- 13 5C.3.3.17 CVP Total Generation
- 14 5C.3.3.18 CVP Total Energy Use
- 15 5C.3.3.19 CVP Net Generation
- 16 5C.3.3.20 Salmon Mortality
- 17 5C.3.3.21 New Melones Large Mouth Bass Nest Survival Percentage
- 18 5C.3.3.22 New Melones Small Mouth Bass Nest Survival Percentage
- 19 5C.3.3.23 New Melones Spotted Bass Nest Survival Percentage
- 20 5C.3.3.24 Temperature Threshold Exceedances
- 21 5C.3.3.25 CVP Annual Power Generation Summary

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

Second Basis of Comparison

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	2,345	2,302	2,253	2,143	1,975
20%	1,804	1,840	1,850	1,900	2,000	2,100	2,255	2,276	2,193	2,055	1,920	1,822
30%	1,576	1,594	1,740	1,816	1,981	2,091	2,222	2,159	2,074	1,924	1,793	1,645
40%	1,391	1,446	1,568	1,705	1,855	2,019	2,131	2,030	1,918	1,767	1,582	1,426
50%	1,267	1,266	1,396	1,567	1,685	1,818	2,012	1,912	1,773	1,601	1,416	1,304
60%	1,174	1,201	1,230	1,335	1,535	1,709	1,778	1,749	1,677	1,497	1,330	1,218
70%	1,106	1,099	1,179	1,216	1,362	1,484	1,645	1,599	1,537	1,400	1,225	1,111
80%	948	954	983	1,052	1,132	1,274	1,453	1,434	1,338	1,168	1,055	976
90%	634	645	672	724	810	921	1,051	975	917	802	689	651
Long Term												
Full Simulation Period ^b	1,269	1,288	1,352	1,431	1,554	1,678	1,819	1,796	1,727	1,583	1,434	1,319
Water Year Types^c												
Wet (32%)	1,501	1,535	1,644	1,767	1,931	2,055	2,224	2,250	2,194	2,068	1,939	1,805
Above Normal (16%)	1,208	1,245	1,363	1,524	1,718	1,901	2,079	2,053	1,955	1,815	1,647	1,513
Below Normal (13%)	1,451	1,472	1,492	1,554	1,641	1,729	1,872	1,799	1,696	1,515	1,337	1,204
Dry (24%)	1,178	1,184	1,210	1,230	1,322	1,453	1,586	1,536	1,466	1,302	1,152	1,055
Critical (15%)	819	803	813	825	868	949	999	962	929	811	667	598

Revised Second Basis of Comparison

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	2,345	2,303	2,253	2,143	1,975
20%	1,805	1,840	1,850	1,900	2,000	2,100	2,257	2,276	2,199	2,059	1,922	1,822
30%	1,577	1,591	1,725	1,816	1,979	2,084	2,222	2,159	2,074	1,924	1,791	1,643
40%	1,386	1,446	1,567	1,701	1,865	2,023	2,131	2,029	1,919	1,767	1,588	1,422
50%	1,265	1,284	1,398	1,563	1,694	1,820	2,024	1,915	1,777	1,599	1,419	1,307
60%	1,173	1,200	1,226	1,341	1,538	1,709	1,778	1,749	1,671	1,497	1,329	1,218
70%	1,105	1,092	1,183	1,209	1,356	1,483	1,643	1,592	1,533	1,398	1,221	1,106
80%	942	958	979	1,053	1,143	1,267	1,442	1,429	1,332	1,166	1,054	972
90%	633	630	640	720	808	921	1,064	994	939	816	690	640
Long Term												
Full Simulation Period ^b	1,270	1,288	1,352	1,431	1,554	1,678	1,819	1,796	1,727	1,583	1,435	1,319
Water Year Types^c												
Wet (32%)	1,502	1,536	1,645	1,768	1,931	2,055	2,224	2,250	2,194	2,068	1,939	1,804
Above Normal (16%)	1,207	1,245	1,363	1,524	1,718	1,902	2,082	2,056	1,959	1,819	1,650	1,517
Below Normal (13%)	1,446	1,467	1,486	1,551	1,638	1,726	1,868	1,796	1,692	1,510	1,334	1,203
Dry (24%)	1,178	1,184	1,210	1,230	1,322	1,452	1,585	1,536	1,466	1,299	1,151	1,055
Critical (15%)	825	806	817	827	870	951	1,002	966	933	814	673	600

Revised Second Basis of Comparison minus Second Basis of Comparison

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%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
50%	0%	1%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
80%	-1%	0%	0%	0%	1%	-1%	-1%	0%	0%	0%	0%	0%
90%	0%	-2%	-5%	-1%	0%	0%	1%	2%	2%	2%	0%	-2%
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%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.2 Shasta Lake, End of Month Storage

Second Basis of Comparison

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	3,359	3,632	3,911	4,222	4,499	4,552	4,434	3,902	3,563	3,400
20%	3,247	3,252	3,333	3,552	3,771	4,118	4,448	4,552	4,283	3,767	3,380	3,330
30%	3,127	3,199	3,304	3,513	3,673	4,018	4,384	4,532	4,155	3,546	3,174	3,096
40%	2,924	3,028	3,254	3,382	3,569	3,978	4,290	4,375	3,913	3,291	2,980	2,935
50%	2,689	2,753	3,134	3,314	3,487	3,916	4,175	4,245	3,712	3,139	2,781	2,738
60%	2,520	2,594	2,922	3,170	3,354	3,727	4,064	3,971	3,493	2,942	2,636	2,592
70%	2,345	2,467	2,643	2,891	3,252	3,513	3,886	3,757	3,332	2,790	2,527	2,453
80%	2,099	2,145	2,178	2,609	2,978	3,409	3,640	3,525	2,951	2,410	2,127	2,125
90%	1,414	1,350	1,524	2,050	2,383	2,760	2,722	2,958	2,604	1,986	1,584	1,526
Long Term												
Full Simulation Period ^b	2,530	2,578	2,753	3,020	3,285	3,639	3,913	3,907	3,539	3,007	2,674	2,607
Water Year Types^c												
Wet (32%)	2,817	2,926	3,154	3,406	3,597	3,841	4,301	4,453	4,228	3,733	3,362	3,252
Above Normal (16%)	2,499	2,578	2,808	3,313	3,515	4,038	4,416	4,417	3,979	3,347	2,975	2,921
Below Normal (13%)	2,826	2,846	2,977	3,299	3,646	3,966	4,164	4,042	3,599	3,010	2,601	2,574
Dry (24%)	2,409	2,431	2,578	2,755	3,168	3,644	3,861	3,774	3,333	2,800	2,539	2,496
Critical (15%)	1,873	1,826	1,911	2,050	2,222	2,460	2,386	2,270	1,861	1,409	1,151	1,086

Revised Second Basis of Comparison

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	3,359	3,632	3,911	4,220	4,499	4,552	4,434	3,902	3,563	3,400
20%	3,247	3,252	3,333	3,552	3,771	4,118	4,448	4,552	4,283	3,766	3,379	3,354
30%	3,117	3,191	3,302	3,513	3,674	4,020	4,384	4,532	4,155	3,550	3,183	3,095
40%	2,931	3,015	3,253	3,380	3,569	3,980	4,290	4,364	3,907	3,289	2,969	2,942
50%	2,687	2,782	3,116	3,320	3,492	3,917	4,175	4,238	3,704	3,139	2,777	2,749
60%	2,505	2,583	2,937	3,167	3,356	3,713	4,064	3,961	3,482	2,960	2,646	2,599
70%	2,364	2,479	2,619	2,922	3,252	3,513	3,906	3,729	3,335	2,793	2,536	2,456
80%	2,096	2,142	2,178	2,617	2,973	3,390	3,643	3,536	2,977	2,449	2,139	2,114
90%	1,404	1,374	1,488	2,077	2,347	2,775	2,720	2,950	2,583	1,968	1,590	1,536
Long Term												
Full Simulation Period ^b	2,534	2,582	2,755	3,023	3,287	3,641	3,916	3,907	3,539	3,009	2,677	2,613
Water Year Types^c												
Wet (32%)	2,819	2,925	3,153	3,405	3,597	3,841	4,301	4,453	4,225	3,732	3,362	3,255
Above Normal (16%)	2,513	2,592	2,819	3,326	3,521	4,038	4,415	4,415	3,977	3,347	2,974	2,926
Below Normal (13%)	2,822	2,840	2,972	3,293	3,642	3,963	4,163	4,042	3,599	3,012	2,604	2,576
Dry (24%)	2,411	2,434	2,579	2,756	3,170	3,647	3,866	3,774	3,333	2,804	2,543	2,501
Critical (15%)	1,881	1,835	1,920	2,065	2,234	2,471	2,397	2,275	1,864	1,418	1,162	1,102

Revised Second Basis of Comparison minus Second Basis of Comparison

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%	1%
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%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	-1%	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%
70%	1%	0%	-1%	1%	0%	0%	1%	-1%	0%	0%	0%	0%
80%	0%	0%	0%	0%	0%	-1%	0%	0%	1%	2%	1%	-1%
90%	-1%	2%	-2%	1%	-2%	1%	0%	0%	-1%	-1%	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%)	1%	1%	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%	1%	1%	0%	0%	0%	0%	1%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.3 Lake Oroville, End of Month Storage

Second Basis of Comparison

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2,616	2,550	2,788	2,807	2,948	3,052	3,352	3,538	3,538	3,037	2,854	2,707
20%	2,272	2,304	2,464	2,788	2,838	2,990	3,298	3,538	3,531	2,965	2,590	2,473
30%	1,937	2,035	2,166	2,556	2,788	2,937	3,268	3,474	3,285	2,772	2,415	2,135
40%	1,699	1,784	2,024	2,366	2,788	2,841	3,209	3,278	2,983	2,367	2,000	1,795
50%	1,429	1,445	1,715	2,187	2,579	2,788	3,067	3,028	2,658	2,145	1,795	1,609
60%	1,145	1,101	1,402	1,723	2,140	2,641	2,888	2,792	2,438	1,915	1,601	1,365
70%	1,037	1,001	1,079	1,306	1,871	2,230	2,527	2,480	2,064	1,754	1,422	1,239
80%	998	974	999	1,109	1,544	1,806	1,996	2,050	1,769	1,436	1,232	1,052
90%	913	877	889	1,003	1,200	1,472	1,563	1,575	1,325	1,133	995	917
Long Term												
Full Simulation Period ^b	1,588	1,585	1,742	1,978	2,258	2,474	2,735	2,796	2,571	2,160	1,897	1,725
Water Year Types^c												
Wet (32%)	1,936	1,984	2,354	2,636	2,871	2,942	3,300	3,477	3,402	2,976	2,728	2,569
Above Normal (16%)	1,465	1,523	1,702	2,173	2,648	2,937	3,271	3,357	3,081	2,493	2,087	1,827
Below Normal (13%)	1,823	1,783	1,831	2,037	2,361	2,627	2,875	2,836	2,461	1,930	1,637	1,424
Dry (24%)	1,371	1,324	1,344	1,473	1,764	2,120	2,363	2,357	2,031	1,688	1,427	1,261
Critical (15%)	1,117	1,044	1,041	1,125	1,235	1,406	1,423	1,407	1,219	1,027	911	839

Revised Second Basis of Comparison

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2,613	2,547	2,788	2,807	2,948	3,052	3,352	3,538	3,538	3,037	2,860	2,729
20%	2,277	2,324	2,490	2,788	2,831	2,990	3,298	3,538	3,532	2,959	2,592	2,458
30%	1,932	1,996	2,165	2,565	2,788	2,937	3,268	3,474	3,274	2,756	2,385	2,112
40%	1,687	1,759	2,023	2,372	2,780	2,844	3,209	3,275	2,945	2,340	1,988	1,789
50%	1,406	1,421	1,705	2,204	2,574	2,788	3,084	3,022	2,634	2,121	1,785	1,601
60%	1,143	1,078	1,383	1,682	2,133	2,621	2,885	2,777	2,418	1,913	1,588	1,376
70%	1,034	1,001	1,047	1,307	1,868	2,209	2,499	2,470	2,053	1,723	1,392	1,228
80%	998	959	985	1,109	1,538	1,789	1,938	2,034	1,805	1,443	1,255	1,097
90%	913	876	851	1,003	1,198	1,471	1,575	1,584	1,335	1,113	994	891
Long Term												
Full Simulation Period ^b	1,584	1,580	1,736	1,972	2,253	2,470	2,732	2,792	2,561	2,152	1,891	1,721
Water Year Types^c												
Wet (32%)	1,940	1,983	2,353	2,633	2,869	2,942	3,300	3,478	3,392	2,969	2,730	2,571
Above Normal (16%)	1,465	1,521	1,697	2,166	2,644	2,939	3,274	3,359	3,079	2,491	2,085	1,823
Below Normal (13%)	1,831	1,796	1,839	2,046	2,376	2,642	2,892	2,844	2,460	1,933	1,635	1,413
Dry (24%)	1,354	1,306	1,327	1,456	1,745	2,101	2,345	2,339	2,012	1,668	1,409	1,248
Critical (15%)	1,101	1,028	1,032	1,119	1,227	1,398	1,415	1,398	1,210	1,018	904	840

Revised Second Basis of Comparison minus Second Basis of Comparison

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%	1%
20%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
30%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
40%	-1%	-1%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%
50%	-2%	-2%	-1%	1%	0%	0%	1%	0%	-1%	-1%	-1%	-1%
60%	0%	-2%	-1%	-2%	0%	-1%	0%	-1%	-1%	0%	-1%	1%
70%	0%	0%	-3%	0%	0%	-1%	-1%	0%	-1%	-2%	-2%	-1%
80%	0%	-2%	-1%	0%	0%	-1%	-3%	-1%	2%	0%	2%	4%
90%	0%	0%	-4%	0%	0%	0%	1%	1%	1%	-2%	0%	-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%	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	-1%
Dry (24%)	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%
Critical (15%)	-1%	-2%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.4 Folsom Lake, End of Month Storage

Second Basis of Comparison

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	689	567	567	567	567	661	792	967	967	906	792	750
20%	582	561	567	567	567	657	792	967	967	817	684	625
30%	552	528	566	563	559	653	792	967	965	728	638	608
40%	469	499	525	556	555	646	792	967	908	641	569	522
50%	400	430	500	523	537	633	792	959	807	546	468	433
60%	351	391	456	470	498	621	790	858	745	504	442	408
70%	336	356	405	430	457	601	733	761	630	433	387	366
80%	291	333	352	388	437	563	634	654	544	371	325	318
90%	253	259	266	311	392	455	489	471	426	309	244	233
Long Term												
Full Simulation Period ^b	431	424	457	475	494	592	715	823	757	579	503	471
Water Year Types^c												
Wet (32%)	483	470	522	524	515	632	785	951	937	793	688	646
Above Normal (16%)	390	412	467	537	538	640	787	946	857	591	522	485
Below Normal (13%)	506	489	502	514	541	626	761	847	739	475	408	387
Dry (24%)	405	399	423	437	486	585	698	769	664	486	432	408
Critical (15%)	339	317	323	325	369	436	469	482	430	352	288	258

Revised Second Basis of Comparison

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	692	567	567	567	567	661	792	967	967	903	792	750
20%	580	558	567	567	567	657	792	967	967	816	685	631
30%	548	520	566	563	559	653	792	967	965	725	634	608
40%	472	498	523	554	555	646	792	967	908	639	567	526
50%	396	429	493	523	541	633	792	955	797	546	461	424
60%	349	394	456	470	498	621	790	858	731	497	438	403
70%	329	353	405	428	457	600	733	760	631	432	386	360
80%	285	337	358	388	432	563	635	655	545	376	329	315
90%	253	260	267	304	392	453	484	471	428	311	244	233
Long Term												
Full Simulation Period ^b	430	422	456	474	494	592	715	823	755	577	502	469
Water Year Types^c												
Wet (32%)	483	469	522	524	515	632	785	951	936	793	687	646
Above Normal (16%)	388	410	465	537	538	640	787	946	851	584	517	479
Below Normal (13%)	505	488	501	514	541	626	762	848	739	476	404	385
Dry (24%)	402	396	421	437	486	585	699	768	662	486	432	407
Critical (15%)	336	315	322	323	367	433	467	479	429	349	290	257

Revised Second Basis of Comparison minus Second Basis of Comparison

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%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
30%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
40%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
50%	-1%	0%	-1%	0%	1%	0%	0%	0%	-1%	0%	-1%	-2%
60%	-1%	1%	0%	0%	0%	0%	0%	0%	-2%	-2%	-1%	-1%
70%	-2%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	-2%
80%	-2%	1%	2%	0%	-1%	0%	0%	0%	0%	1%	1%	-1%
90%	0%	0%	0%	-2%	0%	0%	-1%	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%)	-1%	-1%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	-1%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%
Dry (24%)	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	-1%	-1%	-1%	-1%	0%	-1%	0%	-1%	0%	-1%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.5 New Melones Reservoir, End of Month Storage

Second Basis of Comparison

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,801	1,782	1,827	1,875	1,952	2,030	2,017	2,134	2,071	1,977	1,869	1,805
20%	1,657	1,655	1,665	1,690	1,847	1,928	1,884	1,963	1,884	1,830	1,719	1,663
30%	1,575	1,582	1,614	1,627	1,697	1,743	1,751	1,836	1,836	1,743	1,635	1,577
40%	1,366	1,372	1,472	1,556	1,621	1,675	1,649	1,601	1,619	1,510	1,415	1,362
50%	1,200	1,211	1,248	1,348	1,472	1,541	1,484	1,511	1,467	1,357	1,258	1,200
60%	1,089	1,093	1,124	1,209	1,259	1,341	1,373	1,379	1,317	1,224	1,134	1,089
70%	956	989	1,040	1,084	1,099	1,099	1,146	1,179	1,147	1,064	982	940
80%	711	712	730	753	825	932	914	945	903	837	758	712
90%	508	517	515	555	666	664	608	619	697	619	547	507
Long Term												
Full Simulation Period ^b	1,192	1,194	1,226	1,279	1,345	1,397	1,402	1,433	1,420	1,336	1,245	1,194
Water Year Types^c												
Wet (32%)	1,443	1,446	1,502	1,606	1,709	1,794	1,833	1,962	1,994	1,917	1,803	1,731
Above Normal (16%)	1,092	1,116	1,175	1,261	1,360	1,455	1,481	1,543	1,516	1,419	1,321	1,274
Below Normal (13%)	1,364	1,366	1,378	1,397	1,453	1,479	1,461	1,447	1,415	1,322	1,228	1,183
Dry (24%)	1,149	1,143	1,149	1,161	1,191	1,221	1,210	1,176	1,131	1,039	956	912
Critical (15%)	667	663	674	680	696	690	646	585	557	498	449	426

Revised Second Basis of Comparison

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,879	1,859	1,935	1,954	1,970	2,030	2,043	2,167	2,141	2,080	1,971	1,911
20%	1,775	1,776	1,788	1,823	1,966	1,979	1,955	1,999	2,045	1,947	1,838	1,781
30%	1,666	1,660	1,703	1,764	1,807	1,896	1,885	1,955	1,912	1,817	1,712	1,661
40%	1,508	1,514	1,596	1,693	1,771	1,801	1,788	1,756	1,711	1,634	1,541	1,496
50%	1,364	1,362	1,396	1,478	1,611	1,671	1,625	1,668	1,621	1,512	1,417	1,360
60%	1,257	1,260	1,320	1,353	1,393	1,474	1,492	1,532	1,474	1,381	1,300	1,249
70%	1,074	1,086	1,146	1,224	1,231	1,230	1,250	1,343	1,299	1,204	1,111	1,055
80%	843	824	852	894	999	1,049	1,078	1,094	1,039	975	902	861
90%	705	711	716	724	802	806	749	817	842	775	722	718
Long Term												
Full Simulation Period ^b	1,316	1,321	1,355	1,411	1,470	1,522	1,522	1,564	1,559	1,470	1,373	1,319
Water Year Types^c												
Wet (32%)	1,534	1,539	1,596	1,700	1,784	1,864	1,901	2,027	2,087	2,001	1,880	1,802
Above Normal (16%)	1,225	1,252	1,315	1,405	1,501	1,594	1,613	1,686	1,664	1,566	1,468	1,420
Below Normal (13%)	1,479	1,484	1,500	1,522	1,576	1,605	1,579	1,581	1,555	1,457	1,359	1,313
Dry (24%)	1,285	1,280	1,287	1,303	1,335	1,369	1,351	1,338	1,291	1,197	1,112	1,067
Critical (15%)	845	843	858	869	887	885	837	789	751	682	617	587

Revised Second Basis of Comparison minus Second Basis of Comparison

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	4%	4%	6%	4%	1%	0%	1%	2%	3%	5%	5%	6%
20%	7%	7%	7%	8%	6%	3%	4%	2%	9%	6%	7%	7%
30%	6%	5%	5%	8%	6%	9%	8%	6%	4%	4%	5%	5%
40%	10%	10%	8%	9%	9%	8%	8%	10%	6%	8%	9%	10%
50%	14%	12%	12%	10%	9%	8%	10%	10%	10%	11%	13%	13%
60%	16%	15%	17%	12%	11%	10%	9%	11%	12%	13%	15%	15%
70%	12%	10%	10%	13%	12%	12%	9%	14%	13%	13%	13%	12%
80%	18%	16%	17%	19%	21%	13%	18%	16%	15%	17%	19%	21%
90%	39%	37%	39%	31%	20%	22%	23%	32%	21%	25%	32%	42%
Long Term												
Full Simulation Period ^b	10%	11%	11%	10%	9%	9%	9%	9%	10%	10%	10%	10%
Water Year Types^c												
Wet (32%)	6%	6%	6%	6%	4%	4%	4%	3%	5%	4%	4%	4%
Above Normal (16%)	12%	12%	12%	11%	10%	10%	9%	9%	10%	10%	11%	11%
Below Normal (13%)	8%	9%	9%	9%	8%	9%	8%	9%	10%	10%	11%	11%
Dry (24%)	12%	12%	12%	12%	12%	12%	12%	14%	14%	15%	16%	17%
Critical (15%)	27%	27%	27%	28%	27%	28%	29%	35%	35%	37%	37%	38%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.6 Trinity Lake, End of Month Elevation

Second Basis of Comparison

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2,332	2,332	2,332	2,337	2,345	2,350	2,361	2,364	2,361	2,358	2,353	2,343
20%	2,328	2,331	2,332	2,337	2,345	2,350	2,359	2,360	2,355	2,348	2,338	2,330
30%	2,309	2,310	2,323	2,329	2,343	2,350	2,357	2,353	2,349	2,339	2,327	2,315
40%	2,293	2,298	2,308	2,320	2,333	2,346	2,352	2,347	2,338	2,325	2,309	2,296
50%	2,283	2,283	2,294	2,308	2,318	2,330	2,346	2,338	2,326	2,311	2,296	2,286
60%	2,273	2,276	2,279	2,289	2,306	2,320	2,326	2,324	2,318	2,302	2,288	2,278
70%	2,267	2,266	2,274	2,278	2,291	2,301	2,315	2,311	2,306	2,294	2,279	2,267
80%	2,249	2,250	2,253	2,261	2,269	2,283	2,299	2,297	2,289	2,273	2,261	2,252
90%	2,207	2,208	2,212	2,220	2,232	2,246	2,261	2,252	2,245	2,230	2,215	2,209
Long Term												
Full Simulation Period ^b	2,275	2,277	2,283	2,291	2,303	2,314	2,325	2,322	2,317	2,305	2,291	2,280
Water Year Types^c												
Wet (32%)	2,301	2,305	2,314	2,325	2,339	2,347	2,357	2,358	2,355	2,347	2,338	2,328
Above Normal (16%)	2,270	2,273	2,286	2,303	2,320	2,335	2,347	2,346	2,339	2,329	2,315	2,304
Below Normal (13%)	2,295	2,296	2,298	2,305	2,313	2,320	2,331	2,326	2,318	2,303	2,287	2,274
Dry (24%)	2,266	2,269	2,272	2,274	2,284	2,296	2,309	2,304	2,298	2,284	2,269	2,259
Critical (15%)	2,218	2,216	2,217	2,222	2,229	2,243	2,250	2,246	2,243	2,227	2,204	2,191

Revised Second Basis of Comparison

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2,332	2,332	2,332	2,337	2,345	2,350	2,361	2,364	2,361	2,358	2,353	2,343
20%	2,328	2,331	2,332	2,337	2,345	2,350	2,359	2,360	2,356	2,348	2,338	2,330
30%	2,309	2,310	2,322	2,329	2,343	2,350	2,357	2,353	2,349	2,339	2,327	2,315
40%	2,293	2,298	2,308	2,320	2,334	2,346	2,352	2,347	2,338	2,325	2,310	2,296
50%	2,282	2,284	2,294	2,308	2,319	2,330	2,346	2,338	2,326	2,311	2,296	2,286
60%	2,273	2,276	2,279	2,289	2,306	2,320	2,326	2,324	2,317	2,302	2,288	2,278
70%	2,266	2,265	2,274	2,277	2,290	2,301	2,315	2,310	2,305	2,294	2,278	2,267
80%	2,248	2,250	2,253	2,261	2,270	2,283	2,298	2,297	2,288	2,273	2,261	2,252
90%	2,207	2,206	2,208	2,219	2,231	2,246	2,262	2,254	2,248	2,233	2,215	2,208
Long Term												
Full Simulation Period ^b	2,275	2,277	2,283	2,291	2,303	2,314	2,325	2,323	2,317	2,305	2,291	2,280
Water Year Types^c												
Wet (32%)	2,301	2,305	2,314	2,325	2,339	2,347	2,357	2,358	2,355	2,347	2,338	2,328
Above Normal (16%)	2,270	2,273	2,286	2,303	2,320	2,335	2,347	2,346	2,339	2,329	2,315	2,304
Below Normal (13%)	2,294	2,296	2,298	2,305	2,313	2,320	2,331	2,326	2,318	2,302	2,286	2,274
Dry (24%)	2,266	2,269	2,272	2,274	2,284	2,296	2,309	2,304	2,298	2,283	2,269	2,259
Critical (15%)	2,221	2,217	2,219	2,223	2,230	2,243	2,251	2,247	2,243	2,228	2,205	2,191

Revised Second Basis of Comparison minus Second Basis of Comparison

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%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.7 Shasta Lake, End of Month Elevation

Second Basis of Comparison

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,017	1,017	1,022	1,033	1,044	1,055	1,065	1,067	1,063	1,044	1,030	1,023
20%	1,017	1,017	1,020	1,030	1,039	1,051	1,063	1,067	1,057	1,039	1,023	1,020
30%	1,012	1,015	1,019	1,028	1,035	1,048	1,061	1,066	1,053	1,030	1,014	1,010
40%	1,003	1,007	1,017	1,023	1,031	1,046	1,058	1,061	1,044	1,019	1,005	1,003
50%	993	995	1,012	1,020	1,027	1,044	1,054	1,056	1,037	1,012	997	995
60%	985	988	1,003	1,013	1,021	1,037	1,050	1,046	1,027	1,004	990	988
70%	975	982	991	1,001	1,017	1,028	1,043	1,039	1,020	997	986	982
80%	961	964	966	989	1,005	1,024	1,034	1,029	1,004	979	963	963
90%	918	913	926	959	978	996	994	1,004	989	955	931	926
Long Term												
Full Simulation Period ^b	979	981	990	1,004	1,016	1,031	1,042	1,041	1,026	1,002	986	983
Water Year Types^c												
Wet (32%)	997	1,002	1,012	1,024	1,032	1,041	1,058	1,063	1,055	1,037	1,022	1,017
Above Normal (16%)	974	978	992	1,019	1,028	1,048	1,062	1,062	1,046	1,021	1,005	1,003
Below Normal (13%)	997	998	1,004	1,019	1,034	1,046	1,053	1,049	1,031	1,006	987	986
Dry (24%)	972	974	982	992	1,012	1,032	1,041	1,038	1,020	997	984	982
Critical (15%)	938	935	941	950	961	977	974	967	943	910	889	884

Revised Second Basis of Comparison

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,017	1,017	1,022	1,033	1,044	1,055	1,065	1,067	1,063	1,044	1,030	1,023
20%	1,017	1,017	1,020	1,030	1,039	1,051	1,063	1,067	1,057	1,039	1,022	1,021
30%	1,011	1,014	1,019	1,028	1,035	1,048	1,061	1,066	1,053	1,030	1,014	1,010
40%	1,003	1,007	1,017	1,023	1,031	1,047	1,058	1,060	1,044	1,019	1,005	1,004
50%	992	997	1,011	1,020	1,027	1,044	1,054	1,056	1,037	1,012	996	995
60%	984	988	1,003	1,013	1,021	1,037	1,050	1,046	1,027	1,004	991	989
70%	976	983	989	1,003	1,017	1,028	1,044	1,038	1,021	997	986	982
80%	961	964	966	989	1,005	1,023	1,034	1,029	1,005	981	964	962
90%	917	915	923	960	975	996	994	1,004	988	954	931	927
Long Term												
Full Simulation Period ^b	979	981	990	1,004	1,016	1,031	1,042	1,041	1,026	1,002	986	983
Water Year Types^c												
Wet (32%)	997	1,002	1,012	1,024	1,032	1,041	1,058	1,063	1,055	1,037	1,022	1,017
Above Normal (16%)	975	979	993	1,020	1,028	1,048	1,062	1,062	1,046	1,021	1,005	1,003
Below Normal (13%)	997	998	1,004	1,019	1,033	1,046	1,053	1,049	1,031	1,006	987	986
Dry (24%)	972	974	982	992	1,012	1,032	1,042	1,038	1,020	997	985	983
Critical (15%)	939	936	942	951	962	978	975	968	943	911	890	885

Revised Second Basis of Comparison minus Second Basis of Comparison

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%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.8 Lake Oroville, End of Month Elevation

Second Basis of Comparison

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	837	832	849	850	860	867	887	900	900	866	853	843
20%	811	814	827	849	852	863	884	900	900	861	835	827
30%	776	786	800	833	849	859	882	896	883	848	823	797
40%	752	761	785	820	849	852	877	882	862	820	783	762
50%	719	721	754	802	834	849	868	865	840	798	762	741
60%	685	679	716	754	797	839	856	849	825	774	740	712
70%	672	667	677	704	770	807	831	828	789	758	719	696
80%	666	662	666	680	733	763	782	788	759	720	695	673
90%	651	644	647	667	691	725	736	737	707	683	666	652
Long Term												
Full Simulation Period ^b	730	729	746	771	799	818	838	842	823	788	762	744
Water Year Types^c												
Wet (32%)	768	773	810	837	854	859	884	896	891	861	844	831
Above Normal (16%)	717	723	745	796	838	859	882	888	869	826	790	763
Below Normal (13%)	757	752	757	779	812	834	854	852	823	775	743	719
Dry (24%)	706	701	705	721	755	791	814	813	784	748	718	698
Critical (15%)	677	668	668	680	694	715	716	714	691	664	647	636

Revised Second Basis of Comparison

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	837	832	849	850	860	867	887	900	900	866	854	845
20%	811	816	828	849	852	863	884	900	900	860	835	826
30%	776	782	800	834	849	859	882	896	882	847	821	794
40%	751	758	785	820	848	853	877	882	859	818	782	761
50%	717	718	753	804	834	849	869	865	838	795	761	740
60%	684	676	714	750	797	837	855	848	823	774	739	713
70%	671	667	673	704	769	804	829	827	788	754	715	695
80%	666	659	664	680	733	761	776	786	763	721	698	679
90%	651	644	640	667	691	725	737	738	708	681	666	647
Long Term												
Full Simulation Period ^b	729	728	745	771	798	818	838	842	822	787	762	744
Water Year Types^c												
Wet (32%)	768	773	809	836	854	859	884	896	890	861	844	831
Above Normal (16%)	717	723	745	796	838	859	882	888	869	826	790	763
Below Normal (13%)	757	753	758	780	814	836	855	853	823	775	743	717
Dry (24%)	704	698	703	719	753	790	812	812	782	746	716	697
Critical (15%)	675	666	666	680	693	714	716	713	690	662	646	636

Revised Second Basis of Comparison minus Second Basis of Comparison

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%	-1%	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%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
80%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	1%
90%	0%	0%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.9 Folsom Lake, End of Month Elevation

Second Basis of Comparison

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	460	449	445
20%	426	424	424	424	424	436	449	467	467	451	439	432
30%	423	419	424	424	423	435	449	467	467	443	433	429
40%	412	416	419	423	423	434	449	467	460	434	425	419
50%	404	407	416	419	421	433	449	465	450	422	412	408
60%	396	402	410	412	416	431	449	455	444	417	409	405
70%	394	397	404	407	411	429	443	446	432	408	402	399
80%	386	393	396	402	408	424	433	435	422	400	392	391
90%	379	380	382	390	403	410	415	412	407	389	377	375
Long Term												
Full Simulation Period ^b	404	404	410	412	415	427	440	451	444	423	413	409
Water Year Types^c												
Wet (32%)	412	412	419	419	418	432	448	465	464	449	438	433
Above Normal (16%)	397	400	410	421	421	433	448	465	456	427	419	414
Below Normal (13%)	415	414	416	417	421	432	446	455	443	410	401	398
Dry (24%)	401	401	405	407	414	427	439	446	435	413	406	403
Critical (15%)	389	386	390	391	397	406	410	411	404	391	378	372

Revised Second Basis of Comparison

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	460	449	445
20%	426	423	424	424	424	436	449	467	467	451	439	432
30%	422	418	424	424	423	435	449	467	467	443	433	429
40%	413	416	419	423	423	434	449	467	460	433	424	419
50%	403	407	415	419	421	433	449	465	449	422	411	407
60%	396	403	410	412	416	431	449	455	443	416	408	404
70%	393	397	404	407	411	428	443	446	432	408	402	398
80%	385	394	397	402	408	424	433	435	422	400	393	390
90%	379	381	382	389	403	410	414	412	407	390	377	375
Long Term												
Full Simulation Period ^b	404	404	409	412	415	427	440	451	444	423	413	409
Water Year Types^c												
Wet (32%)	412	412	419	419	418	432	448	465	464	448	437	433
Above Normal (16%)	396	400	410	421	421	433	448	465	455	426	418	413
Below Normal (13%)	415	414	415	417	421	432	446	455	443	410	400	397
Dry (24%)	401	401	405	407	414	427	439	446	435	413	406	403
Critical (15%)	388	386	390	391	396	406	410	411	403	390	378	372

Revised Second Basis of Comparison minus Second Basis of Comparison

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%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.10 New Melones Reservoir, End of Month Elevation

Second Basis of Comparison

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,032	1,031	1,035	1,040	1,048	1,055	1,054	1,064	1,058	1,050	1,039	1,033
20%	1,018	1,018	1,019	1,021	1,037	1,045	1,041	1,049	1,041	1,035	1,024	1,019
30%	1,010	1,010	1,014	1,015	1,022	1,027	1,027	1,036	1,036	1,027	1,016	1,010
40%	988	988	999	1,008	1,014	1,020	1,017	1,012	1,014	1,003	994	987
50%	966	968	972	985	999	1,006	1,001	1,003	999	986	974	966
60%	952	952	956	967	974	984	989	989	981	969	957	952
70%	934	939	945	951	953	953	959	963	959	948	938	932
80%	892	892	896	901	915	931	929	933	927	918	902	892
90%	851	852	852	860	883	883	871	873	889	873	859	850
Long Term												
Full Simulation Period ^b	952	953	957	965	974	981	981	984	982	971	959	953
Water Year Types^c												
Wet (32%)	989	990	997	1,009	1,021	1,030	1,034	1,047	1,050	1,043	1,032	1,025
Above Normal (16%)	941	944	951	966	979	992	995	1,003	1,001	990	978	972
Below Normal (13%)	977	977	979	982	991	994	994	993	991	980	968	962
Dry (24%)	951	950	950	953	957	962	963	960	954	941	929	922
Critical (15%)	866	866	870	872	878	879	871	856	850	835	823	817

Revised Second Basis of Comparison

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,040	1,038	1,046	1,048	1,050	1,055	1,056	1,066	1,064	1,059	1,050	1,044
20%	1,030	1,030	1,031	1,035	1,049	1,050	1,048	1,052	1,056	1,047	1,036	1,030
30%	1,019	1,018	1,023	1,029	1,033	1,042	1,041	1,048	1,044	1,034	1,024	1,018
40%	1,003	1,004	1,012	1,022	1,029	1,033	1,031	1,028	1,023	1,016	1,006	1,002
50%	987	987	992	1,000	1,013	1,019	1,015	1,019	1,014	1,003	994	987
60%	974	974	982	986	991	1,000	1,001	1,005	1,000	990	979	972
70%	950	951	959	969	970	970	973	985	979	967	954	947
80%	919	915	921	926	940	946	950	952	945	937	927	922
90%	891	892	893	895	911	912	900	914	919	905	894	894
Long Term												
Full Simulation Period ^b	972	973	977	984	992	998	997	1,001	1,000	990	978	972
Water Year Types^c												
Wet (32%)	1,001	1,002	1,009	1,020	1,029	1,038	1,041	1,053	1,059	1,051	1,039	1,032
Above Normal (16%)	958	962	970	984	996	1,007	1,010	1,019	1,017	1,007	996	990
Below Normal (13%)	993	993	995	998	1,006	1,010	1,007	1,009	1,006	996	984	979
Dry (24%)	971	971	972	974	978	982	981	980	975	964	952	946
Critical (15%)	905	905	908	911	915	916	907	899	892	878	865	859

Revised Second Basis of Comparison minus Second Basis of Comparison

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

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.11 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Second Basis of Comparison

Statistic	Monthly Outflow Volume (TAF)												TOT
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Probability of Exceedance^a													
10%	357	895	4,054	6,567	8,061	5,795	3,950	2,541	1,167	670	268	260	30,938
20%	283	383	2,007	4,470	4,927	4,380	2,580	1,582	679	593	251	240	24,148
30%	264	327	950	2,828	3,382	2,653	1,494	954	588	515	246	234	18,780
40%	251	291	635	1,564	2,894	2,062	1,215	801	556	492	246	227	14,389
50%	246	268	477	1,080	1,904	1,621	855	734	507	475	246	219	9,739
60%	246	268	382	833	1,179	1,104	724	674	485	400	246	181	8,033
70%	246	268	314	673	908	901	597	563	433	307	246	179	6,520
80%	246	268	277	518	698	752	567	535	422	307	232	179	5,882
90%	211	208	277	405	562	601	528	437	377	246	215	179	4,991
Long Term													
Full Simulation Period ^b	286	506	1,408	2,595	3,126	2,682	1,611	1,161	705	458	252	237	15,027
Water Year Types^c													
Wet (32%)	340	791	3,011	5,453	5,779	5,081	3,010	2,178	1,209	605	271	319	28,046
Above Normal (16%)	253	566	1,391	2,845	3,822	3,311	1,615	1,026	562	601	249	224	16,467
Below Normal (13%)	291	433	545	879	2,062	1,078	813	719	533	437	255	206	8,251
Dry (24%)	260	296	439	815	1,269	1,236	879	635	454	310	242	191	7,026
Critical (15%)	240	244	364	670	690	680	525	386	346	248	231	179	4,802

Revised Second Basis of Comparison

Statistic	Monthly Outflow Volume (TAF)												TOT
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Probability of Exceedance^a													
10%	373	895	4,048	6,551	8,106	5,795	3,956	2,541	1,141	670	271	259	30,929
20%	286	384	2,029	4,469	4,884	4,375	2,589	1,579	658	581	247	240	24,158
30%	269	329	947	2,826	3,377	2,686	1,466	952	591	508	246	234	18,772
40%	257	291	635	1,561	2,882	2,060	1,215	790	559	492	246	229	14,349
50%	246	269	464	1,078	1,898	1,614	859	715	512	461	246	221	9,721
60%	246	268	371	829	1,168	1,103	726	675	495	400	246	184	8,015
70%	246	268	312	665	918	899	599	560	439	307	246	179	6,505
80%	246	268	277	501	720	751	565	533	422	307	236	179	5,871
90%	232	208	277	405	596	601	528	437	369	246	215	179	5,025
Long Term													
Full Simulation Period ^b	289	508	1,407	2,590	3,140	2,678	1,609	1,159	704	457	252	238	15,030
Water Year Types^c													
Wet (32%)	345	794	3,009	5,453	5,819	5,073	3,004	2,182	1,199	607	271	321	28,075
Above Normal (16%)	252	566	1,394	2,837	3,821	3,313	1,620	1,021	569	599	250	223	16,464
Below Normal (13%)	294	433	540	878	2,078	1,075	812	715	532	429	254	208	8,248
Dry (24%)	267	297	433	821	1,268	1,232	879	627	455	310	244	191	7,025
Critical (15%)	241	244	367	640	692	680	525	385	346	247	229	179	4,774

Revised Second Basis of Comparison minus Second Basis of Comparison

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

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.12 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Second Basis of Comparison

Statistic	Monthly Export Volume (TAF)												TOT
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Probability of Exceedance^a													
10%	694	671	739	803	727	703	526	515	555	694	694	671	7,362
20%	680	671	724	769	686	608	503	420	455	694	694	671	6,940
30%	627	652	719	747	668	560	477	387	425	680	694	671	6,751
40%	553	623	718	741	614	542	427	351	412	624	634	669	6,572
50%	489	591	683	730	552	509	390	319	389	551	515	635	6,309
60%	433	513	601	635	519	486	321	281	361	474	446	545	5,942
70%	318	464	553	565	465	461	258	242	320	404	369	420	5,012
80%	273	352	500	499	416	374	188	181	176	300	281	340	4,594
90%	209	288	378	391	335	304	109	80	128	160	161	226	3,470
Long Term													
Full Simulation Period ^b	471	525	612	638	538	489	351	308	352	494	489	528	5,793
Water Year Types^c													
Wet (32%)	549	619	716	724	609	543	476	430	456	632	655	660	7,068
Above Normal (16%)	428	521	641	716	584	570	453	363	415	572	647	651	6,560
Below Normal (13%)	548	595	623	674	497	500	337	304	414	629	517	539	6,176
Dry (24%)	435	475	546	579	518	493	259	228	274	403	325	438	4,971
Critical (15%)	340	345	455	433	406	266	134	121	132	139	203	249	3,222

Revised Second Basis of Comparison

Statistic	Monthly Export Volume (TAF)												TOT
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Probability of Exceedance^a													
10%	694	671	738	803	722	707	530	515	526	694	694	671	7,327
20%	681	671	723	769	684	619	508	417	450	694	694	671	6,944
30%	626	659	719	746	666	563	481	369	429	691	694	671	6,761
40%	551	622	717	738	602	542	433	351	408	609	621	668	6,571
50%	488	590	683	724	552	512	391	314	392	555	529	628	6,266
60%	426	502	609	645	512	489	336	277	353	474	468	549	5,943
70%	327	460	554	562	461	459	264	228	316	390	364	408	5,000
80%	249	349	492	499	393	373	189	169	176	306	281	338	4,572
90%	196	286	382	371	309	301	109	81	128	146	183	228	3,458
Long Term													
Full Simulation Period ^b	467	524	613	638	528	491	355	302	349	494	487	526	5,775
Water Year Types^c													
Wet (32%)	544	620	717	724	587	554	485	428	451	632	653	660	7,055
Above Normal (16%)	419	520	641	719	590	568	455	359	411	574	647	648	6,553
Below Normal (13%)	544	595	629	670	471	498	342	296	413	631	525	543	6,156
Dry (24%)	434	472	550	567	516	491	262	221	273	401	323	431	4,941
Critical (15%)	336	340	444	451	405	264	135	110	132	138	195	249	3,199

Revised Second Basis of Comparison minus Second Basis of Comparison

Statistic	Monthly Export Volume (Percent Change)												TOT
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Probability of Exceedance^a													
10%	0%	0%	0%	0%	-1%	1%	1%	0%	-5%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	2%	1%	-1%	-1%	0%	0%	0%	0%
30%	0%	1%	0%	0%	0%	1%	1%	-5%	1%	2%	0%	0%	0%
40%	0%	0%	0%	0%	-2%	0%	1%	0%	-1%	-2%	-2%	0%	0%
50%	0%	0%	0%	-1%	0%	0%	0%	-1%	1%	3%	-1%	-1%	-1%
60%	-2%	-2%	1%	2%	-1%	1%	5%	-1%	-2%	0%	5%	1%	0%
70%	3%	-1%	0%	-1%	-1%	0%	2%	-6%	-1%	-3%	-1%	-3%	0%
80%	-9%	-1%	-2%	0%	-6%	-1%	1%	-7%	0%	2%	0%	-1%	0%
90%	-6%	-1%	1%	-5%	-8%	-1%	0%	1%	0%	-8%	14%	1%	0%
Long Term													
Full Simulation Period ^b	-1%	0%	0%	0%	-2%	0%	1%	-2%	-1%	0%	0%	0%	0%
Water Year Types^c													
Wet (32%)	-1%	0%	0%	0%	-4%	2%	2%	0%	-1%	0%	0%	0%	0%
Above Normal (16%)	-2%	0%	0%	0%	1%	0%	1%	-1%	-1%	0%	0%	0%	0%
Below Normal (13%)	-1%	0%	1%	-1%	-5%	0%	1%	-2%	0%	0%	1%	1%	0%
Dry (24%)	0%	-1%	1%	-2%	0%	0%	1%	-3%	0%	-1%	-1%	-2%	-1%
Critical (15%)	-1%	-1%	-2%	4%	0%	-1%	1%	-8%	0%	-1%	-4%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.13 Trinity River below Lewiston Reservoir, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	373	300	300	1,448	2,106	527	600	4,709	4,626	1,102	450	450
20%	373	300	300	300	300	300	540	4,709	2,526	1,102	450	450
30%	373	300	300	300	300	300	540	4,570	2,526	1,102	450	450
40%	373	300	300	300	300	300	521	4,570	2,526	1,102	450	450
50%	373	300	300	300	300	300	493	4,189	2,120	1,102	450	450
60%	373	300	300	300	300	300	493	4,189	2,120	1,102	450	450
70%	373	300	300	300	300	300	460	2,924	783	450	450	450
80%	373	300	300	300	300	300	460	2,924	783	450	450	450
90%	373	300	300	300	300	300	427	1,498	783	450	450	450
Long Term												
Full Simulation Period ^b	367	358	660	739	741	670	557	3,753	2,210	890	450	445
Water Year Types^c												
Wet (32%)	373	504	1,437	1,646	1,300	1,386	639	4,556	3,413	1,136	450	450
Above Normal (16%)	373	300	300	374	801	462	457	4,597	2,948	1,102	450	450
Below Normal (13%)	373	300	300	300	630	303	517	3,585	1,755	924	450	450
Dry (24%)	354	300	300	300	300	300	528	3,250	1,271	678	450	450
Critical (15%)	364	257	300	300	300	300	575	2,092	783	450	450	413

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	373	300	300	1,448	2,151	387	600	4,709	4,626	1,102	450	450
20%	373	300	300	300	300	300	540	4,709	2,526	1,102	450	450
30%	373	300	300	300	300	300	540	4,570	2,526	1,102	450	450
40%	373	300	300	300	300	300	521	4,570	2,526	1,102	450	450
50%	373	300	300	300	300	300	493	4,189	2,120	1,102	450	450
60%	373	300	300	300	300	300	493	4,189	2,120	1,102	450	450
70%	373	300	300	300	300	300	460	2,924	783	450	450	450
80%	373	300	300	300	300	300	460	2,924	783	450	450	450
90%	373	300	300	300	300	300	427	1,498	783	450	450	450
Long Term												
Full Simulation Period ^b	366	361	659	738	747	668	555	3,753	2,210	890	450	445
Water Year Types^c												
Wet (32%)	373	504	1,432	1,645	1,319	1,380	632	4,556	3,413	1,136	450	450
Above Normal (16%)	373	300	300	374	801	462	457	4,597	2,948	1,102	450	450
Below Normal (13%)	373	300	300	300	630	303	517	3,585	1,755	924	450	450
Dry (24%)	354	300	300	300	300	300	528	3,250	1,271	678	450	450
Critical (15%)	357	275	300	300	300	300	575	2,092	783	450	450	413

Revised Second Basis of Comparison minus Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0%	0%	0%	0%	2%	-26%	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%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Water Year Types^c												
Wet (32%)	0%	0%	0%	0%	1%	0%	-1%	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%)	-2%	7%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.14 Clear Creek below Whiskeytown, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	200	200	200	200	200	200	200	200	200	85	85	150
20%	200	200	200	200	200	200	200	200	200	85	85	150
30%	200	200	200	200	200	200	200	200	200	85	85	150
40%	200	200	200	200	200	200	200	200	200	85	85	150
50%	200	200	200	200	200	200	200	200	200	85	85	150
60%	200	200	200	200	200	200	200	200	200	85	85	150
70%	200	200	200	200	200	200	200	200	200	85	85	150
80%	200	200	200	200	200	200	200	200	150	85	85	150
90%	150	150	150	150	150	150	150	150	150	85	85	150
Long Term												
Full Simulation Period ^b	185	188	190	225	241	214	191	192	181	85	85	148
Water Year Types^c												
Wet (32%)	200	200	200	309	356	272	200	200	200	85	85	150
Above Normal (16%)	181	182	188	192	196	196	196	200	200	85	85	150
Below Normal (13%)	195	195	195	195	195	195	195	195	191	85	85	150
Dry (24%)	178	184	188	190	190	190	190	190	183	85	85	150
Critical (15%)	163	167	167	167	167	167	167	167	111	85	85	133

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	200	200	200	200	200	200	200	200	200	85	85	150
20%	200	200	200	200	200	200	200	200	200	85	85	150
30%	200	200	200	200	200	200	200	200	200	85	85	150
40%	200	200	200	200	200	200	200	200	200	85	85	150
50%	200	200	200	200	200	200	200	200	200	85	85	150
60%	200	200	200	200	200	200	200	200	200	85	85	150
70%	200	200	200	200	200	200	200	200	200	85	85	150
80%	200	200	200	200	200	200	200	200	150	85	85	150
90%	150	150	150	150	150	150	150	150	150	85	85	150
Long Term												
Full Simulation Period ^b	185	188	190	225	241	214	191	192	181	85	85	148
Water Year Types^c												
Wet (32%)	200	200	200	309	356	272	200	200	200	85	85	150
Above Normal (16%)	181	182	188	192	196	196	196	200	200	85	85	150
Below Normal (13%)	195	195	195	195	195	195	195	195	191	85	85	150
Dry (24%)	178	184	188	190	190	190	190	190	183	85	85	150
Critical (15%)	163	167	167	167	167	167	167	167	111	85	85	133

Revised Second Basis of Comparison minus Second Basis of Comparison

Statistic	Monthly Flow (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%)	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.15 Sacramento River d/s of Keswick Reservoir, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	8,508	7,576	19,509	20,146	30,874	18,571	10,177	10,192	14,534	15,000	12,723	8,971
20%	7,890	6,794	11,462	15,160	21,412	12,718	8,220	9,232	13,041	15,000	11,885	6,409
30%	7,356	5,587	6,088	8,978	13,139	8,359	6,971	8,471	12,242	15,000	11,209	6,029
40%	6,136	5,210	4,329	4,737	5,375	4,500	6,320	7,928	11,433	14,639	10,726	5,666
50%	5,715	4,858	4,000	4,333	4,500	4,500	5,731	7,458	11,014	14,084	10,347	5,475
60%	5,257	4,364	3,949	3,798	3,735	3,668	5,202	7,098	10,374	13,509	9,891	5,246
70%	4,871	4,181	3,674	3,251	3,250	3,250	4,500	6,497	9,974	13,051	9,282	4,637
80%	4,389	4,000	3,275	3,250	3,250	3,250	4,500	6,095	9,209	11,861	8,985	4,312
90%	4,000	3,501	3,250	3,250	3,250	3,250	3,713	5,503	8,402	10,691	8,150	4,147
Long Term												
Full Simulation Period ^b	6,028	5,615	7,660	9,366	11,718	8,569	6,754	7,708	11,203	13,462	10,417	5,836
Water Year Types^c												
Wet (32%)	6,391	6,705	14,039	18,191	20,773	16,037	8,687	8,398	10,243	13,254	11,143	7,306
Above Normal (16%)	5,940	5,801	7,417	9,024	17,709	8,800	6,317	7,789	12,028	14,804	11,351	6,065
Below Normal (13%)	6,491	5,680	4,134	4,805	7,156	5,076	6,127	8,129	12,334	14,533	11,988	5,429
Dry (24%)	6,092	4,768	3,855	4,123	3,591	3,716	5,107	7,240	11,737	13,465	8,939	4,794
Critical (15%)	4,806	4,404	3,675	3,533	3,335	3,431	6,355	6,519	10,465	11,474	8,854	4,513

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	8,508	7,567	19,509	20,470	31,560	18,571	10,172	10,229	14,458	15,000	12,700	8,243
20%	7,898	6,796	11,485	15,018	21,412	12,718	8,215	9,227	13,000	15,000	11,702	6,412
30%	7,349	5,700	6,189	8,978	12,892	8,359	6,962	8,481	12,266	15,000	11,187	5,953
40%	6,205	5,230	4,374	4,500	5,302	4,500	6,305	8,011	11,426	14,606	10,732	5,680
50%	5,651	4,873	4,016	4,184	4,500	4,500	5,732	7,437	11,089	14,001	10,234	5,500
60%	5,260	4,407	3,976	3,798	3,656	3,872	5,144	7,099	10,345	13,365	9,823	5,180
70%	4,873	4,180	3,680	3,251	3,250	3,250	4,500	6,543	9,975	12,759	9,256	4,650
80%	4,295	4,000	3,274	3,250	3,250	3,250	4,500	6,091	9,205	11,861	9,034	4,318
90%	4,000	3,502	3,250	3,250	3,250	3,250	3,713	5,573	8,400	10,741	8,139	4,013
Long Term												
Full Simulation Period ^b	6,057	5,625	7,681	9,345	11,729	8,578	6,745	7,749	11,210	13,425	10,387	5,801
Water Year Types^c												
Wet (32%)	6,381	6,742	14,046	18,182	20,764	16,037	8,702	8,399	10,291	13,215	11,128	7,264
Above Normal (16%)	5,874	5,793	7,473	8,992	17,811	8,881	6,317	7,819	11,981	14,792	11,359	5,970
Below Normal (13%)	6,540	5,702	4,124	4,784	7,119	5,064	6,094	8,130	12,326	14,507	11,942	5,416
Dry (24%)	6,237	4,756	3,898	4,123	3,573	3,701	5,074	7,334	11,725	13,439	8,903	4,782
Critical (15%)	4,808	4,399	3,682	3,463	3,382	3,440	6,347	6,608	10,486	11,383	8,776	4,501

Revised Second Basis of Comparison minus Second Basis of Comparison

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

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.16 Feather River d/s of Thermalito, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	4,000	2,500	5,073	13,890	19,393	14,789	8,389	8,275	7,910	9,420	7,729	5,580
20%	4,000	2,500	3,420	2,988	11,501	11,022	3,686	6,352	6,635	9,054	6,656	5,247
30%	4,000	2,054	2,218	1,700	6,252	7,843	2,757	5,334	6,248	8,621	5,681	4,554
40%	3,974	1,700	1,700	1,700	2,379	5,528	1,853	3,369	5,222	8,022	4,745	3,796
50%	3,439	1,700	1,700	1,700	1,700	2,535	1,254	2,495	4,272	6,164	3,646	2,481
60%	2,492	1,700	1,700	1,700	1,700	1,700	1,000	1,956	3,834	4,837	2,691	1,904
70%	1,846	1,700	1,700	1,200	1,700	1,700	1,000	1,334	3,356	3,641	2,363	1,244
80%	1,700	1,200	1,374	1,200	1,200	1,000	1,000	1,000	2,525	3,030	1,955	1,051
90%	1,200	900	948	900	900	800	968	1,000	1,714	2,044	1,223	1,000
Long Term												
Full Simulation Period ^b	2,883	1,956	3,113	4,812	5,841	6,488	3,136	4,013	4,637	6,050	4,145	3,045
Water Year Types^c												
Wet (32%)	3,068	2,585	5,476	11,696	12,740	13,784	6,587	7,101	4,333	6,920	4,346	3,254
Above Normal (16%)	2,660	1,600	2,519	2,477	5,166	8,173	2,259	3,058	4,823	8,866	6,433	4,449
Below Normal (13%)	3,311	1,913	1,687	1,582	3,161	2,066	1,405	3,388	6,145	7,681	4,260	3,333
Dry (24%)	2,736	1,615	1,966	1,360	1,497	1,321	1,203	2,431	4,961	4,326	3,639	2,574
Critical (15%)	2,577	1,582	1,853	1,139	1,317	1,520	1,414	1,569	3,170	2,495	1,969	1,595

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	4,000	2,500	4,835	14,314	19,368	14,789	8,396	8,275	7,856	9,422	7,708	5,582
20%	4,000	2,500	3,418	3,405	11,381	11,022	3,686	6,274	6,941	9,008	6,567	5,294
30%	4,000	2,154	2,155	1,700	6,094	7,843	2,757	5,155	6,254	8,564	5,571	4,549
40%	3,846	1,700	1,700	1,700	2,096	5,528	1,853	3,512	5,303	7,944	4,680	3,736
50%	3,257	1,700	1,700	1,700	1,700	2,556	1,251	2,546	4,170	6,005	3,576	2,541
60%	2,524	1,700	1,700	1,700	1,700	1,700	1,000	2,029	3,830	4,794	2,735	1,630
70%	1,907	1,700	1,700	1,200	1,700	1,700	1,000	1,368	3,414	3,703	2,365	1,194
80%	1,700	1,200	1,233	960	1,200	1,000	1,000	1,000	2,670	3,289	1,809	1,044
90%	1,200	900	947	900	900	800	853	1,000	1,896	2,030	1,206	1,000
Long Term												
Full Simulation Period ^b	2,883	1,975	3,118	4,822	5,809	6,464	3,131	4,034	4,728	6,028	4,104	3,030
Water Year Types^c												
Wet (32%)	3,088	2,647	5,483	11,721	12,717	13,752	6,587	7,095	4,508	6,870	4,216	3,247
Above Normal (16%)	2,619	1,600	2,558	2,517	5,107	8,076	2,259	3,064	4,892	8,869	6,442	4,473
Below Normal (13%)	3,268	1,918	1,782	1,582	3,049	2,066	1,394	3,522	6,283	7,619	4,328	3,469
Dry (24%)	2,761	1,611	1,960	1,360	1,497	1,323	1,191	2,421	4,994	4,330	3,640	2,475
Critical (15%)	2,572	1,582	1,754	1,108	1,317	1,523	1,410	1,609	3,159	2,495	1,898	1,521

Revised Second Basis of Comparison minus Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0%	0%	-5%	3%	0%	0%	0%	0%	-1%	0%	0%	0%
20%	0%	0%	0%	14%	-1%	0%	0%	-1%	5%	-1%	-1%	1%
30%	0%	5%	-3%	0%	-3%	0%	0%	-3%	0%	-1%	-2%	0%
40%	-3%	0%	0%	0%	-12%	0%	0%	4%	2%	-1%	-1%	-2%
50%	-5%	0%	0%	0%	0%	1%	0%	2%	-2%	-3%	-2%	2%
60%	1%	0%	0%	0%	0%	0%	0%	4%	0%	-1%	2%	-14%
70%	3%	0%	0%	0%	0%	0%	0%	3%	2%	2%	0%	-4%
80%	0%	0%	-10%	-20%	0%	0%	0%	0%	6%	9%	-7%	-1%
90%	0%	0%	0%	0%	0%	0%	-12%	0%	11%	-1%	-1%	0%
Long Term												
Full Simulation Period ^b	0%	1%	0%	0%	-1%	0%	0%	1%	2%	0%	-1%	0%
Water Year Types^c												
Wet (32%)	1%	2%	0%	0%	0%	0%	0%	0%	4%	-1%	-3%	0%
Above Normal (16%)	-2%	0%	2%	2%	-1%	-1%	0%	0%	1%	0%	0%	1%
Below Normal (13%)	-1%	0%	6%	0%	-4%	0%	-1%	4%	2%	-1%	2%	4%
Dry (24%)	1%	0%	0%	0%	0%	0%	-1%	0%	1%	0%	0%	-4%
Critical (15%)	0%	0%	-5%	-3%	0%	0%	0%	3%	0%	0%	-4%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.17 Fremont Weir, Monthly Spills

Second Basis of Comparison

Statistic	Monthly Spills (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	10,543	30,193	44,709	18,331	5,859	100	100	0	0	100
20%	100	100	3,673	10,516	13,894	7,379	4,169	100	100	0	0	100
30%	100	100	1,561	5,231	8,342	5,266	966	100	100	0	0	100
40%	100	100	533	2,826	5,470	3,433	341	100	100	0	0	100
50%	100	100	186	1,630	3,269	2,065	119	100	100	0	0	100
60%	100	100	100	851	2,291	1,101	100	100	100	0	0	100
70%	100	100	100	153	1,008	481	100	100	100	0	0	100
80%	100	100	100	100	184	201	100	100	100	0	0	100
90%	100	100	100	100	100	100	100	100	100	0	0	100
Long Term												
Full Simulation Period ^b	115	384	3,697	9,549	13,200	7,942	2,211	160	104	0	0	100
Water Year Types^c												
Wet (32%)	147	996	9,888	25,442	30,547	18,997	5,602	289	113	0	0	100
Above Normal (16%)	100	100	2,659	6,349	15,114	8,566	1,765	100	100	0	0	100
Below Normal (13%)	100	100	262	1,256	4,057	1,166	292	100	100	0	0	100
Dry (24%)	100	100	342	932	2,032	1,411	411	100	100	0	0	100
Critical (15%)	100	100	149	542	533	408	106	100	100	0	0	100

Revised Second Basis of Comparison

Statistic	Monthly Spills (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	10,536	30,202	45,235	18,332	5,859	100	100	0	0	100
20%	100	100	3,758	10,563	13,794	7,393	4,170	100	100	0	0	100
30%	100	100	1,561	5,232	8,155	5,246	957	100	100	0	0	100
40%	100	100	532	2,826	5,590	3,433	341	100	100	0	0	100
50%	100	100	188	1,638	3,268	2,065	119	100	100	0	0	100
60%	100	100	100	851	2,291	1,093	100	100	100	0	0	100
70%	100	100	100	153	1,142	482	100	100	100	0	0	100
80%	100	100	100	100	184	201	100	100	100	0	0	100
90%	100	100	100	100	100	100	100	100	100	0	0	100
Long Term												
Full Simulation Period ^b	113	386	3,702	9,547	13,182	7,929	2,213	160	104	0	0	100
Water Year Types^c												
Wet (32%)	142	1,002	9,898	25,426	30,534	18,973	5,611	289	113	0	0	100
Above Normal (16%)	100	100	2,664	6,376	15,112	8,541	1,765	100	100	0	0	100
Below Normal (13%)	100	100	262	1,251	3,971	1,167	292	100	100	0	0	100
Dry (24%)	100	100	346	931	2,024	1,405	410	100	100	0	0	100
Critical (15%)	100	100	149	542	536	407	106	100	100	0	0	100

Revised Second Basis of Comparison minus Second Basis of Comparison

Statistic	Monthly Spills (cfs)											
	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%	0%	2%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	-2%	0%	-1%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
70%	0%	0%	0%	0%	13%	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	-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types^c												
Wet (32%)	-3%	1%	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%	-2%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	1%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.18 American River d/s of Nimbus Dam, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,967	3,834	9,336	12,160	14,655	9,754	6,737	7,450	4,650	5,000	3,236	1,837
20%	1,500	3,218	4,325	7,873	10,806	6,805	5,083	4,486	3,799	5,000	2,678	1,604
30%	1,500	2,070	2,528	5,813	7,391	5,044	4,483	3,543	3,623	4,957	2,299	1,533
40%	1,500	1,925	2,000	3,587	5,755	4,172	3,491	2,836	3,223	4,250	1,912	1,533
50%	1,500	1,818	2,000	1,776	3,753	3,039	2,499	2,021	2,835	3,591	1,750	1,533
60%	1,500	1,683	1,936	1,700	2,602	2,015	2,089	1,750	2,245	2,935	1,750	1,533
70%	1,449	1,500	1,701	1,700	1,445	1,747	1,750	1,625	1,832	2,589	1,681	1,493
80%	991	1,136	1,146	1,440	1,264	921	1,162	1,074	1,727	2,373	957	800
90%	800	800	800	819	1,032	800	800	800	1,061	1,327	800	780
Long Term												
Full Simulation Period ^b	1,461	2,386	3,826	5,109	6,030	4,279	3,395	3,077	2,987	3,454	1,899	1,404
Water Year Types^c												
Wet (32%)	1,664	3,300	7,242	10,514	10,615	7,209	5,521	5,541	4,226	3,591	2,597	1,756
Above Normal (16%)	1,274	2,549	3,614	5,670	7,969	6,116	3,572	2,527	2,860	4,782	1,913	1,553
Below Normal (13%)	1,661	2,262	2,660	2,370	5,181	2,187	2,477	1,907	2,881	4,610	1,666	1,236
Dry (24%)	1,329	1,698	1,619	1,587	2,322	2,377	2,222	1,925	2,413	3,028	1,446	1,222
Critical (15%)	1,263	1,492	1,400	1,171	951	1,027	1,391	1,327	1,496	1,368	1,336	935

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,967	3,951	9,359	12,160	14,655	9,754	6,737	7,450	4,652	5,000	3,200	1,766
20%	1,500	3,208	4,325	7,873	10,804	6,804	5,084	4,486	3,799	5,000	2,779	1,546
30%	1,500	2,078	2,528	5,706	7,391	5,044	4,483	3,543	3,623	4,965	2,299	1,533
40%	1,500	1,925	2,000	3,592	5,756	4,172	3,491	2,851	3,235	4,227	1,968	1,533
50%	1,500	1,827	2,000	1,750	3,739	3,042	2,499	2,060	2,954	3,616	1,750	1,533
60%	1,500	1,683	1,921	1,700	2,602	2,015	2,084	1,750	2,267	2,923	1,750	1,533
70%	1,389	1,438	1,676	1,700	1,445	1,747	1,750	1,614	1,916	2,515	1,659	1,493
80%	994	1,116	1,172	1,359	1,264	1,012	1,146	1,079	1,715	2,373	1,003	800
90%	800	800	800	819	978	800	800	800	1,070	1,377	800	800
Long Term												
Full Simulation Period ^b	1,461	2,384	3,819	5,098	6,026	4,282	3,390	3,085	3,012	3,445	1,905	1,407
Water Year Types^c												
Wet (32%)	1,666	3,308	7,234	10,515	10,615	7,209	5,522	5,541	4,239	3,582	2,611	1,749
Above Normal (16%)	1,269	2,552	3,616	5,637	7,965	6,117	3,572	2,527	2,973	4,780	1,902	1,553
Below Normal (13%)	1,656	2,274	2,654	2,356	5,177	2,187	2,471	1,914	2,895	4,586	1,752	1,205
Dry (24%)	1,321	1,682	1,603	1,572	2,313	2,377	2,209	1,947	2,426	3,001	1,466	1,223
Critical (15%)	1,279	1,469	1,400	1,171	950	1,047	1,383	1,340	1,479	1,395	1,249	1,002

Revised Second Basis of Comparison minus Second Basis of Comparison

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

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.19 Sacramento River at Freeport, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	14,535	22,483	54,532	64,835	70,451	63,654	46,241	38,579	21,089	23,075	16,647	15,053
20%	14,097	14,990	34,381	56,263	62,040	51,425	32,543	27,633	18,924	21,676	15,939	14,645
30%	13,025	13,727	22,366	41,579	51,549	41,505	22,929	17,142	17,961	20,420	15,394	14,129
40%	11,580	13,241	18,580	26,629	45,721	29,974	20,054	15,174	16,521	19,429	14,779	13,931
50%	10,818	12,087	15,606	23,009	33,290	24,771	16,394	13,624	15,588	18,340	13,795	13,397
60%	10,029	11,225	14,369	18,466	24,734	20,966	12,916	12,737	14,567	16,653	12,006	11,957
70%	9,019	10,194	12,581	15,005	19,838	18,448	11,708	11,915	13,085	14,599	10,893	9,897
80%	8,009	8,857	10,799	13,486	16,580	15,217	11,229	10,874	12,353	12,878	9,767	8,646
90%	6,709	7,537	9,360	11,871	14,217	11,487	10,200	8,922	11,289	10,339	8,546	7,115
Long Term												
Full Simulation Period ^b	11,135	14,147	23,180	31,236	37,980	31,862	22,179	18,663	16,752	17,326	13,094	12,141
Water Year Types^c												
Wet (32%)	12,828	18,463	38,689	50,375	56,977	48,450	35,060	30,181	20,772	19,106	15,038	14,726
Above Normal (16%)	10,150	15,450	24,122	39,692	47,763	42,758	24,410	18,064	16,533	21,746	15,907	14,192
Below Normal (13%)	12,254	14,318	15,586	19,280	31,808	19,442	14,599	14,690	17,758	20,643	13,951	12,000
Dry (24%)	10,354	10,984	13,633	17,418	23,789	21,475	15,084	12,519	14,646	14,838	10,740	10,387
Critical (15%)	8,809	8,499	11,430	14,601	15,535	12,818	10,626	8,240	10,863	9,787	8,969	7,370

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	14,551	22,359	54,045	64,879	70,451	63,654	46,240	38,579	20,776	23,195	16,663	15,098
20%	14,090	15,039	34,473	56,266	61,709	51,427	32,544	27,639	18,975	21,635	15,939	14,531
30%	13,193	13,786	22,326	41,578	51,524	41,506	22,932	17,452	18,150	20,277	15,193	14,129
40%	11,535	13,341	18,577	26,629	45,616	29,974	19,982	15,203	16,964	19,565	14,570	13,918
50%	10,865	12,102	15,606	23,009	33,290	24,772	16,394	13,797	15,808	18,216	13,980	13,211
60%	10,117	11,213	14,404	18,460	24,623	20,971	12,918	12,876	14,539	16,370	12,432	12,035
70%	9,064	10,188	12,929	15,002	19,808	18,571	11,683	12,087	13,047	14,608	10,714	9,785
80%	8,007	8,873	10,823	13,487	16,579	15,219	11,109	11,037	12,359	13,049	9,752	8,533
90%	7,029	7,552	9,350	11,866	14,216	11,491	10,200	9,036	11,481	9,999	8,703	7,301
Long Term												
Full Simulation Period ^b	11,166	14,169	23,197	31,223	37,970	31,864	22,160	18,740	16,877	17,261	13,039	12,099
Water Year Types^c												
Wet (32%)	12,847	18,563	38,684	50,414	56,964	48,443	35,068	30,178	21,009	19,004	14,907	14,667
Above Normal (16%)	10,044	15,450	24,213	39,681	47,790	42,769	24,411	18,103	16,671	21,742	15,918	14,124
Below Normal (13%)	12,260	14,350	15,660	19,252	31,672	19,432	14,555	14,839	17,909	20,529	14,052	12,119
Dry (24%)	10,515	10,941	13,654	17,397	23,786	21,469	15,030	12,638	14,681	14,800	10,736	10,279
Critical (15%)	8,820	8,470	11,351	14,500	15,588	12,846	10,613	8,393	10,858	9,733	8,780	7,353

Revised Second Basis of Comparison minus Second Basis of Comparison

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

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.20 Yolo Bypass, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	164	575	15,113	37,297	53,013	25,747	10,346	335	168	48	183	240
20%	162	245	6,239	16,046	22,314	11,069	7,372	178	168	48	55	159
30%	160	146	2,510	8,216	12,519	8,557	2,043	173	168	48	55	159
40%	154	110	802	5,019	10,224	5,190	498	170	168	48	55	159
50%	147	108	495	2,405	5,513	2,987	272	168	167	48	55	159
60%	142	105	259	970	3,258	1,402	229	165	167	48	55	159
70%	132	100	146	470	1,068	754	211	163	166	48	55	157
80%	116	100	109	167	332	225	186	159	164	48	55	155
90%	106	100	100	122	152	149	173	153	162	48	54	152
Long Term												
Full Simulation Period ^b	187	572	5,169	12,745	17,130	10,720	3,653	311	185	48	101	175
Water Year Types^c												
Wet (32%)	231	1,348	13,405	32,933	38,563	25,293	8,874	560	227	48	147	173
Above Normal (16%)	137	344	4,156	9,639	19,777	11,623	3,242	273	166	48	92	165
Below Normal (13%)	246	299	470	1,973	5,998	1,664	546	169	166	48	130	192
Dry (24%)	156	131	583	1,579	3,404	2,190	910	175	167	48	61	170
Critical (15%)	145	124	376	856	905	687	210	167	165	48	55	188

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	164	575	15,106	37,291	53,011	25,260	10,346	335	168	48	183	240
20%	162	245	6,371	16,098	21,931	11,070	7,372	178	168	48	55	159
30%	160	146	2,509	8,217	12,355	8,556	2,043	173	168	48	55	159
40%	154	110	803	5,020	10,223	5,190	499	170	168	48	55	159
50%	147	108	496	2,405	5,513	2,988	272	168	167	48	55	159
60%	142	105	259	970	3,254	1,402	229	165	167	48	55	159
70%	132	100	146	470	1,202	754	211	163	166	48	55	157
80%	116	100	107	167	345	225	186	159	164	48	55	155
90%	106	100	100	123	129	149	173	153	162	48	54	152
Long Term												
Full Simulation Period ^b	186	574	5,171	12,736	17,111	10,707	3,656	311	185	48	101	175
Water Year Types^c												
Wet (32%)	227	1,354	13,411	32,911	38,549	25,268	8,882	560	227	48	147	173
Above Normal (16%)	137	345	4,161	9,622	19,789	11,595	3,242	273	166	48	92	165
Below Normal (13%)	246	299	470	1,969	5,903	1,665	546	169	166	48	130	192
Dry (24%)	156	131	585	1,582	3,393	2,185	908	175	167	48	61	170
Critical (15%)	145	124	365	857	900	687	210	167	165	48	55	188

Revised Second Basis of Comparison minus Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0%	0%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	0%
20%	0%	0%	2%	0%	-2%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	-1%	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%	12%	0%	0%	0%	0%	0%	0%	0%
80%	0%	0%	-3%	0%	4%	0%	0%	0%	0%	0%	0%	0%
90%	0%	0%	0%	1%	-16%	0%	0%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period ^b	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types^c												
Wet (32%)	-2%	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%	-2%	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%	-3%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.21 San Joaquin River at Vernalis, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,015	3,156	4,932	11,157	14,594	15,467	14,666	14,360	10,139	5,612	2,740	3,146
20%	2,692	2,843	2,953	4,819	10,200	9,482	10,169	8,291	5,696	2,636	2,600	2,658
30%	2,520	2,663	2,541	3,655	6,300	7,933	8,421	5,676	3,488	1,990	1,897	2,503
40%	2,331	2,500	2,341	2,692	4,268	5,393	7,435	4,617	3,188	1,742	1,676	2,142
50%	2,157	2,386	2,257	2,544	3,420	3,883	6,016	4,043	2,349	1,506	1,500	1,944
60%	1,952	2,244	2,165	2,343	2,774	3,511	4,349	3,276	1,895	1,379	1,415	1,842
70%	1,752	2,141	2,027	2,153	2,443	2,963	3,119	2,891	1,485	1,170	1,321	1,743
80%	1,597	1,984	1,903	1,923	2,174	2,414	2,442	2,362	1,274	1,088	1,211	1,611
90%	1,411	1,793	1,699	1,733	1,945	2,230	1,779	1,890	1,085	941	1,071	1,478
Long Term												
Full Simulation Period ^b	2,241	2,721	3,492	5,136	6,700	7,131	7,255	6,101	4,547	2,625	1,838	2,238
Water Year Types^c												
Wet (23%)	2,497	3,627	6,644	11,506	15,763	16,308	15,374	14,433	12,512	6,641	3,078	3,456
Above Normal (24%)	2,288	2,532	2,757	4,947	6,946	7,415	8,260	5,348	3,525	1,999	1,977	2,352
Below Normal (10%)	2,086	2,397	3,810	3,608	3,723	4,101	5,842	4,213	2,225	1,481	1,457	1,856
Dry (16%)	2,339	2,684	2,347	2,487	2,628	3,304	3,551	2,976	1,714	1,267	1,362	1,789
Critical (27%)	1,974	2,251	1,998	1,927	2,138	2,311	2,031	2,122	1,116	943	1,059	1,485

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,058	3,088	4,931	11,054	17,256	15,467	14,774	14,101	9,720	6,052	2,996	3,315
20%	2,699	2,813	2,924	4,859	10,259	9,401	10,359	8,202	4,768	2,636	2,599	2,659
30%	2,470	2,631	2,462	3,635	6,228	7,841	8,536	5,452	3,364	1,988	1,896	2,484
40%	2,326	2,448	2,299	2,606	4,252	5,343	7,507	4,488	2,947	1,742	1,675	2,152
50%	2,089	2,342	2,226	2,481	3,420	3,825	6,018	3,916	2,205	1,503	1,499	1,934
60%	1,895	2,218	2,100	2,247	2,681	3,460	4,432	2,913	1,824	1,384	1,415	1,837
70%	1,697	2,100	1,988	2,070	2,379	2,870	3,224	2,493	1,420	1,170	1,322	1,743
80%	1,511	1,954	1,866	1,827	2,153	2,327	2,452	1,994	1,271	1,087	1,211	1,611
90%	1,338	1,753	1,671	1,638	1,931	2,115	1,813	1,564	1,085	941	1,099	1,503
Long Term												
Full Simulation Period ^b	2,200	2,673	3,455	5,082	6,806	7,116	7,330	5,903	4,350	2,668	1,876	2,266
Water Year Types^c												
Wet (23%)	2,472	3,596	6,642	11,484	16,260	16,444	15,398	14,493	12,009	6,823	3,227	3,582
Above Normal (24%)	2,234	2,469	2,712	4,887	6,916	7,376	8,371	5,184	3,310	1,997	1,976	2,348
Below Normal (10%)	2,052	2,330	3,742	3,561	3,837	4,077	5,974	3,968	2,025	1,478	1,455	1,847
Dry (16%)	2,305	2,644	2,306	2,421	2,623	3,227	3,656	2,625	1,661	1,266	1,362	1,783
Critical (27%)	1,926	2,205	1,952	1,854	2,092	2,228	2,079	1,780	1,114	951	1,077	1,490

Revised Second Basis of Comparison minus Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1%	-2%	0%	-1%	18%	0%	1%	-2%	-4%	8%	9%	5%
20%	0%	-1%	-1%	1%	1%	-1%	2%	-1%	-16%	0%	0%	0%
30%	-2%	-1%	-3%	-1%	-1%	-1%	1%	-4%	-4%	0%	0%	-1%
40%	0%	-2%	-2%	-3%	0%	-1%	1%	-3%	-8%	0%	0%	0%
50%	-3%	-2%	-1%	-2%	0%	-1%	0%	-3%	-6%	0%	0%	0%
60%	-3%	-1%	-3%	-4%	-3%	-1%	2%	-11%	-4%	0%	0%	0%
70%	-3%	-2%	-2%	-4%	-3%	-3%	3%	-14%	-4%	0%	0%	0%
80%	-5%	-1%	-2%	-5%	-1%	-4%	0%	-16%	0%	0%	0%	0%
90%	-5%	-2%	-2%	-5%	-1%	-5%	2%	-17%	0%	0%	3%	2%
Long Term												
Full Simulation Period ^b	-2%	-2%	-1%	-1%	2%	0%	1%	-3%	-4%	2%	2%	1%
Water Year Types^c												
Wet (23%)	-1%	-1%	0%	0%	3%	1%	0%	0%	-4%	3%	5%	4%
Above Normal (24%)	-2%	-2%	-2%	-1%	0%	-1%	1%	-3%	-6%	0%	0%	0%
Below Normal (10%)	-2%	-3%	-2%	-1%	3%	-1%	2%	-6%	-9%	0%	0%	0%
Dry (16%)	-1%	-2%	-2%	-3%	0%	-2%	3%	-12%	-3%	0%	0%	0%
Critical (27%)	-2%	-2%	-2%	-4%	-2%	-4%	2%	-16%	0%	1%	2%	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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.1.22 San Joaquin River at Vernalis, Monthly Salinity

Second Basis of Comparison

Statistic	Monthly Salinity (EC)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	715	631	791	775	938	836	584	539	649	649	635	603
20%	685	599	772	749	882	796	528	527	644	648	603	586
30%	657	576	756	725	831	722	455	486	619	648	580	568
40%	626	563	740	713	789	679	387	431	568	640	571	550
50%	592	546	729	688	693	606	331	374	540	629	556	537
60%	571	527	716	676	624	493	308	358	490	617	542	519
70%	542	512	704	642	468	350	282	346	437	607	526	489
80%	522	487	676	569	321	307	261	294	384	587	451	478
90%	477	456	613	380	281	258	202	192	334	503	433	435
Long Term												
Full Simulation Period ^b	598	537	700	644	636	561	377	392	509	600	540	525
Water Year Types^c												
Wet (23%)	576	511	616	516	362	307	220	229	343	496	419	416
Above Normal (24%)	588	534	713	614	481	417	304	357	474	616	515	506
Below Normal (10%)	605	553	670	654	684	599	319	359	524	610	562	549
Dry (16%)	585	519	731	705	812	682	424	456	577	634	579	557
Critical (27%)	630	566	755	743	892	827	573	537	640	652	635	607

Revised Second Basis of Comparison

Statistic	Monthly Salinity (EC)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	752	643	807	807	948	865	577	597	649	649	622	603
20%	714	611	784	781	911	824	524	572	645	648	603	584
30%	677	584	770	754	840	744	436	528	631	647	580	568
40%	642	572	758	723	790	686	383	493	606	638	571	552
50%	609	555	740	704	693	612	324	395	572	628	557	539
60%	570	538	730	691	631	499	303	363	500	617	543	520
70%	551	522	716	643	469	352	282	346	464	607	526	489
80%	522	495	691	572	316	306	261	294	420	587	451	478
90%	477	467	611	380	261	255	201	192	366	487	410	418
Long Term												
Full Simulation Period ^b	613	547	714	661	642	573	372	419	526	597	533	522
Water Year Types^c												
Wet (23%)	585	518	623	520	357	306	220	229	365	489	405	405
Above Normal (24%)	608	548	728	628	485	421	301	365	494	617	515	506
Below Normal (10%)	618	566	688	673	692	606	313	388	555	611	563	551
Dry (16%)	597	526	742	725	818	698	413	502	593	635	579	559
Critical (27%)	648	577	772	772	909	854	563	594	643	645	623	607

Revised Second Basis of Comparison minus Second Basis of Comparison

Statistic	Monthly Salinity (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	5%	2%	2%	4%	1%	3%	-1%	11%	0%	0%	-2%	0%
20%	4%	2%	2%	4%	3%	4%	-1%	8%	0%	0%	0%	0%
30%	3%	1%	2%	4%	1%	3%	-4%	9%	2%	0%	0%	0%
40%	3%	2%	3%	1%	0%	1%	-1%	14%	7%	0%	0%	0%
50%	3%	2%	1%	2%	0%	1%	-2%	5%	6%	0%	0%	0%
60%	0%	2%	2%	2%	1%	1%	-2%	1%	2%	0%	0%	0%
70%	2%	2%	2%	0%	0%	0%	0%	0%	6%	0%	0%	0%
80%	0%	2%	2%	1%	-2%	0%	0%	0%	9%	0%	0%	0%
90%	0%	2%	0%	0%	-7%	-1%	0%	0%	10%	-3%	-5%	-4%
Long Term												
Full Simulation Period ^b	2%	2%	2%	3%	1%	2%	-1%	7%	3%	-1%	-1%	0%
Water Year Types^c												
Wet (23%)	2%	1%	1%	1%	-1%	0%	0%	0%	6%	-1%	-3%	-3%
Above Normal (24%)	3%	3%	2%	2%	1%	1%	-1%	2%	4%	0%	0%	0%
Below Normal (10%)	2%	2%	3%	3%	1%	1%	-2%	8%	6%	0%	0%	0%
Dry (16%)	2%	1%	2%	3%	1%	2%	-3%	10%	3%	0%	0%	0%
Critical (27%)	3%	2%	2%	4%	2%	3%	-2%	10%	0%	-1%	-2%	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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.1.23 Stanislaus River below Goodwin, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	350	499	508	508	907	709	1,500	1,500	2,887	360	300	300
20%	350	415	415	415	503	415	1,462	1,500	1,709	306	300	300
30%	331	386	415	408	415	415	1,337	1,434	1,571	300	296	268
40%	286	318	326	318	415	318	991	1,303	845	300	283	268
50%	286	318	318	318	318	318	664	1,303	450	284	283	268
60%	194	247	275	242	318	275	512	1,112	398	268	283	249
70%	194	247	247	242	260	242	461	920	289	268	283	249
80%	173	233	247	242	242	242	424	848	257	265	283	249
90%	164	230	230	200	239	200	378	760	255	265	283	249
Long Term												
Full Simulation Period ^b	291	388	466	584	642	607	884	1,181	1,028	390	347	363
Water Year Types^c												
Wet (23%)	360	612	886	1,060	1,196	1,462	1,488	1,497	2,316	678	580	731
Above Normal (24%)	301	332	376	726	742	523	940	1,225	1,200	354	288	271
Below Normal (10%)	288	373	373	383	418	316	955	1,266	613	272	285	270
Dry (16%)	278	323	331	318	392	262	581	1,094	399	276	283	255
Critical (27%)	230	287	298	275	303	256	464	890	280	283	259	228

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	350	399	400	400	1,825	999	1,500	1,500	1,502	491	319	300
20%	349	356	358	359	863	400	1,500	1,498	1,243	313	300	300
30%	318	334	340	336	400	344	1,429	1,380	948	300	285	281
40%	260	305	323	318	364	312	1,241	1,134	713	296	283	250
50%	193	246	280	250	339	267	879	855	399	283	283	249
60%	146	217	230	183	304	200	649	725	300	271	283	249
70%	123	207	214	152	239	159	517	612	265	265	283	249
80%	115	202	206	136	176	140	462	507	255	265	283	249
90%	104	188	188	122	133	123	403	439	255	265	283	249
Long Term												
Full Simulation Period ^b	250	340	429	530	748	593	958	984	830	433	386	391
Water Year Types^c												
Wet (23%)	334	581	884	1,038	1,692	1,597	1,511	1,556	1,813	860	729	857
Above Normal (24%)	248	269	331	666	712	484	1,051	1,062	986	352	287	268
Below Normal (10%)	254	306	306	336	532	292	1,087	1,021	414	269	283	261
Dry (16%)	245	282	290	253	387	185	686	743	346	276	283	249
Critical (27%)	181	242	252	203	256	174	511	548	278	291	277	233

Revised Second Basis of Comparison minus Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0%	-20%	-21%	-21%	101%	41%	0%	0%	-48%	37%	6%	0%
20%	0%	-14%	-14%	-13%	72%	-4%	3%	0%	-27%	2%	0%	0%
30%	-4%	-14%	-18%	-18%	-4%	-17%	7%	-4%	-40%	0%	-4%	5%
40%	-9%	-4%	-1%	0%	-12%	-2%	25%	-13%	-16%	-1%	0%	-7%
50%	-33%	-23%	-12%	-21%	6%	-16%	32%	-34%	-11%	0%	0%	-7%
60%	-25%	-12%	-16%	-24%	-5%	-27%	27%	-35%	-25%	1%	0%	0%
70%	-37%	-16%	-13%	-37%	-8%	-34%	12%	-33%	-9%	-1%	0%	0%
80%	-34%	-13%	-17%	-44%	-27%	-42%	9%	-40%	0%	0%	0%	0%
90%	-37%	-18%	-18%	-39%	-45%	-39%	7%	-42%	0%	0%	0%	0%
Long Term												
Full Simulation Period ^b	-14%	-12%	-8%	-9%	16%	-2%	8%	-17%	-19%	11%	11%	8%
Water Year Types^c												
Wet (23%)	-7%	-5%	0%	-2%	41%	9%	2%	4%	-22%	27%	26%	17%
Above Normal (24%)	-18%	-19%	-12%	-8%	-4%	-7%	12%	-13%	-18%	0%	-1%	-1%
Below Normal (10%)	-12%	-18%	-18%	-12%	27%	-8%	14%	-19%	-33%	-1%	-1%	-3%
Dry (16%)	-12%	-13%	-12%	-20%	-1%	-29%	18%	-32%	-13%	0%	0%	-2%
Critical (27%)	-21%	-16%	-15%	-26%	-15%	-32%	10%	-38%	-1%	3%	7%	2%

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.1.24 Stanislaus River at Mouth, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	662	653	656	688	1,117	1,153	1,804	1,679	3,009	661	569	673
20%	582	548	522	557	694	613	1,608	1,592	2,016	555	485	508
30%	507	492	464	518	562	562	1,489	1,533	1,772	502	461	481
40%	471	459	427	473	512	522	1,040	1,423	1,092	444	445	457
50%	405	421	378	412	484	446	821	1,331	694	412	443	439
60%	377	388	341	364	423	394	637	1,049	572	386	416	431
70%	346	355	329	339	331	361	529	972	402	378	395	396
80%	327	312	311	318	296	295	440	865	352	350	373	373
90%	249	280	269	283	257	233	406	787	312	318	331	316
Long Term												
Full Simulation Period ^b	471	507	549	696	766	756	1,004	1,265	1,231	542	491	545
Water Year Types^c												
Wet (23%)	530	737	980	1,176	1,407	1,704	1,731	1,634	2,632	939	772	985
Above Normal (24%)	494	463	451	840	852	680	1,126	1,323	1,495	535	463	484
Below Normal (10%)	480	503	506	532	589	489	1,057	1,443	807	452	440	443
Dry (16%)	487	437	415	433	484	407	616	1,166	555	377	404	408
Critical (27%)	384	393	360	366	367	309	476	887	334	335	343	338

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	653	567	590	624	2,437	1,243	1,824	1,680	1,791	932	588	706
20%	577	482	480	506	987	615	1,626	1,588	1,545	564	488	506
30%	491	441	431	462	560	531	1,495	1,515	1,261	499	458	473
40%	424	409	382	434	498	458	1,303	1,285	1,041	443	445	446
50%	377	386	336	392	442	405	1,022	903	726	412	441	439
60%	314	344	312	279	399	311	716	756	418	389	420	431
70%	284	313	291	248	320	277	584	601	375	374	396	397
80%	248	270	270	229	232	226	469	541	347	349	374	370
90%	185	243	204	199	178	146	424	471	312	317	347	320
Long Term												
Full Simulation Period ^b	430	460	512	642	872	741	1,079	1,067	1,034	585	530	573
Water Year Types^c												
Wet (23%)	505	706	978	1,155	1,903	1,839	1,754	1,693	2,130	1,121	921	1,111
Above Normal (24%)	441	400	406	779	822	641	1,237	1,160	1,281	533	461	480
Below Normal (10%)	445	435	438	484	703	466	1,189	1,197	607	449	438	434
Dry (16%)	454	397	375	368	479	330	720	816	502	376	404	402
Critical (27%)	336	347	314	294	320	226	524	544	332	343	361	344

Revised Second Basis of Comparison minus Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-1%	-13%	-10%	-9%	118%	8%	1%	0%	-40%	41%	3%	5%
20%	-1%	-12%	-8%	-9%	42%	0%	1%	0%	-23%	2%	1%	0%
30%	-3%	-10%	-7%	-11%	0%	-6%	0%	-1%	-29%	-1%	-1%	-2%
40%	-10%	-11%	-11%	-8%	-3%	-12%	25%	-10%	-5%	0%	0%	-2%
50%	-7%	-9%	-11%	-5%	-9%	-9%	24%	-32%	5%	0%	0%	0%
60%	-17%	-11%	-8%	-23%	-6%	-21%	12%	-28%	-27%	1%	1%	0%
70%	-18%	-12%	-12%	-27%	-4%	-23%	10%	-38%	-7%	-1%	0%	0%
80%	-24%	-13%	-13%	-28%	-22%	-23%	7%	-37%	-1%	0%	0%	-1%
90%	-26%	-13%	-24%	-30%	-31%	-37%	4%	-40%	0%	0%	5%	1%
Long Term												
Full Simulation Period ^b	-9%	-9%	-7%	-8%	14%	-2%	7%	-16%	-16%	8%	8%	5%
Water Year Types^c												
Wet (23%)	-5%	-4%	0%	-2%	35%	8%	1%	4%	-19%	19%	19%	13%
Above Normal (24%)	-11%	-14%	-10%	-7%	-3%	-6%	10%	-12%	-14%	0%	0%	-1%
Below Normal (10%)	-7%	-13%	-13%	-9%	19%	-5%	13%	-17%	-25%	-1%	0%	-2%
Dry (16%)	-7%	-9%	-10%	-15%	-1%	-19%	17%	-30%	-10%	0%	0%	-1%
Critical (27%)	-13%	-12%	-13%	-20%	-13%	-27%	10%	-39%	-1%	2%	5%	2%

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.1 New Melones Storage

Table 5C.3.2.1.1 New Melones Reservoir, End of Month Storage

No Action Alternative

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,765	1,759	1,823	1,880	1,931	1,980	1,945	2,052	2,075	1,978	1,869	1,805
20%	1,612	1,631	1,647	1,687	1,768	1,799	1,834	1,901	1,876	1,798	1,691	1,633
30%	1,533	1,534	1,556	1,598	1,686	1,729	1,686	1,745	1,786	1,707	1,605	1,556
40%	1,271	1,274	1,432	1,514	1,594	1,618	1,592	1,533	1,539	1,433	1,333	1,273
50%	1,121	1,127	1,154	1,307	1,436	1,535	1,461	1,444	1,392	1,283	1,190	1,156
60%	1,024	1,043	1,080	1,146	1,199	1,273	1,278	1,335	1,277	1,199	1,102	1,054
70%	882	911	986	1,015	1,038	1,057	1,080	1,090	1,087	994	910	868
80%	646	658	684	684	735	808	835	878	872	808	733	693
90%	430	435	440	488	541	569	574	586	630	566	507	473
Long Term												
Full Simulation Period ^b	1,132	1,142	1,180	1,237	1,305	1,348	1,337	1,373	1,381	1,300	1,208	1,159
Water Year Types^c												
Wet (23%)	1,379	1,390	1,454	1,562	1,666	1,724	1,758	1,878	1,968	1,890	1,773	1,703
Above Normal (24%)	1,029	1,060	1,125	1,214	1,317	1,406	1,413	1,484	1,467	1,372	1,277	1,232
Below Normal (10%)	1,294	1,305	1,326	1,351	1,413	1,438	1,390	1,383	1,359	1,268	1,175	1,133
Dry (16%)	1,094	1,094	1,106	1,121	1,156	1,188	1,154	1,132	1,087	997	914	871
Critical (27%)	624	623	638	645	661	656	602	554	526	476	431	408

Revised Alternative 1

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,879	1,859	1,935	1,954	1,970	2,030	2,043	2,167	2,141	2,080	1,971	1,911
20%	1,775	1,776	1,788	1,823	1,966	1,979	1,955	1,999	2,045	1,947	1,838	1,781
30%	1,666	1,660	1,703	1,764	1,807	1,896	1,885	1,955	1,912	1,817	1,712	1,661
40%	1,508	1,514	1,596	1,693	1,771	1,801	1,788	1,756	1,711	1,634	1,541	1,496
50%	1,364	1,362	1,396	1,478	1,611	1,671	1,625	1,668	1,621	1,512	1,417	1,360
60%	1,257	1,260	1,320	1,353	1,393	1,474	1,492	1,532	1,474	1,381	1,300	1,249
70%	1,074	1,086	1,146	1,224	1,231	1,230	1,250	1,343	1,299	1,204	1,111	1,055
80%	843	824	852	894	999	1,049	1,078	1,094	1,039	975	902	861
90%	705	711	716	724	802	806	749	817	842	775	722	718
Long Term												
Full Simulation Period ^b	1,316	1,321	1,355	1,411	1,470	1,522	1,522	1,564	1,559	1,470	1,373	1,319
Water Year Types^c												
Wet (23%)	1,534	1,539	1,596	1,700	1,784	1,864	1,901	2,027	2,087	2,001	1,880	1,802
Above Normal (24%)	1,225	1,252	1,315	1,405	1,501	1,594	1,613	1,686	1,664	1,566	1,468	1,420
Below Normal (10%)	1,479	1,484	1,500	1,522	1,576	1,605	1,579	1,581	1,555	1,457	1,359	1,313
Dry (16%)	1,285	1,280	1,287	1,303	1,335	1,369	1,351	1,338	1,291	1,197	1,112	1,067
Critical (27%)	845	843	858	869	887	885	837	789	751	682	617	587

Revised Alternative 1 minus No Action Alternative

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	6%	6%	6%	4%	2%	3%	5%	6%	3%	5%	5%	6%
20%	10%	9%	9%	8%	11%	10%	7%	5%	9%	8%	9%	9%
30%	9%	8%	9%	10%	7%	10%	12%	12%	7%	6%	7%	7%
40%	19%	19%	11%	12%	11%	11%	12%	15%	11%	14%	16%	18%
50%	22%	21%	21%	13%	12%	9%	11%	15%	16%	18%	19%	18%
60%	23%	21%	22%	18%	16%	16%	17%	15%	15%	15%	18%	18%
70%	22%	19%	16%	21%	18%	16%	16%	23%	19%	21%	22%	21%
80%	31%	25%	25%	31%	36%	30%	29%	25%	19%	21%	23%	24%
90%	64%	63%	63%	48%	48%	42%	30%	39%	34%	37%	42%	52%
Long Term												
Full Simulation Period ^b	16%	16%	15%	14%	13%	13%	14%	14%	13%	13%	14%	14%
Water Year Types^c												
Wet (23%)	11%	11%	10%	9%	7%	8%	8%	8%	6%	6%	6%	6%
Above Normal (24%)	19%	18%	17%	16%	14%	13%	14%	14%	13%	14%	15%	15%
Below Normal (10%)	14%	14%	13%	13%	12%	12%	14%	14%	14%	15%	16%	16%
Dry (16%)	17%	17%	16%	16%	15%	15%	17%	18%	19%	20%	22%	23%
Critical (27%)	36%	35%	35%	35%	34%	35%	39%	43%	43%	43%	43%	44%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.1.2 New Melones Reservoir, End of Month Storage

Revised Second Basis of Comparison

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,879	1,859	1,935	1,954	1,970	2,030	2,043	2,167	2,141	2,080	1,971	1,911
20%	1,775	1,776	1,788	1,823	1,966	1,979	1,955	1,999	2,045	1,947	1,838	1,781
30%	1,666	1,660	1,703	1,764	1,807	1,896	1,885	1,955	1,912	1,817	1,712	1,661
40%	1,508	1,514	1,596	1,693	1,771	1,801	1,788	1,756	1,711	1,634	1,541	1,496
50%	1,364	1,362	1,396	1,478	1,611	1,671	1,625	1,668	1,621	1,512	1,417	1,360
60%	1,257	1,260	1,320	1,353	1,393	1,474	1,492	1,532	1,474	1,381	1,300	1,249
70%	1,074	1,086	1,146	1,224	1,231	1,230	1,250	1,343	1,299	1,204	1,111	1,055
80%	843	824	852	894	999	1,049	1,078	1,094	1,039	975	902	861
90%	705	711	716	724	802	806	749	817	842	775	722	718
Long Term												
Full Simulation Period ^b	1,316	1,321	1,355	1,411	1,470	1,522	1,522	1,564	1,559	1,470	1,373	1,319
Water Year Types^c												
Wet (23%)	1,534	1,539	1,596	1,700	1,784	1,864	1,901	2,027	2,087	2,001	1,880	1,802
Above Normal (24%)	1,225	1,252	1,315	1,405	1,501	1,594	1,613	1,686	1,664	1,566	1,468	1,420
Below Normal (10%)	1,479	1,484	1,500	1,522	1,576	1,605	1,579	1,581	1,555	1,457	1,359	1,313
Dry (16%)	1,285	1,280	1,287	1,303	1,335	1,369	1,351	1,338	1,291	1,197	1,112	1,067
Critical (27%)	845	843	858	869	887	885	837	789	751	682	617	587

No Action Alternative

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,765	1,759	1,823	1,880	1,931	1,980	1,945	2,052	2,075	1,978	1,869	1,805
20%	1,612	1,631	1,647	1,687	1,768	1,799	1,834	1,901	1,876	1,798	1,691	1,633
30%	1,533	1,534	1,556	1,598	1,686	1,729	1,686	1,745	1,786	1,707	1,605	1,556
40%	1,271	1,274	1,432	1,514	1,594	1,618	1,592	1,533	1,539	1,433	1,333	1,273
50%	1,121	1,127	1,154	1,307	1,436	1,535	1,461	1,444	1,392	1,283	1,190	1,156
60%	1,024	1,043	1,080	1,146	1,199	1,273	1,278	1,335	1,277	1,199	1,102	1,054
70%	882	911	986	1,015	1,038	1,057	1,080	1,090	1,087	994	910	868
80%	646	658	684	684	735	808	835	878	872	808	733	693
90%	430	435	440	488	541	569	574	586	630	566	507	473
Long Term												
Full Simulation Period ^b	1,132	1,142	1,180	1,237	1,305	1,348	1,337	1,373	1,381	1,300	1,208	1,159
Water Year Types^c												
Wet (23%)	1,379	1,390	1,454	1,562	1,666	1,724	1,758	1,878	1,968	1,890	1,773	1,703
Above Normal (24%)	1,029	1,060	1,125	1,214	1,317	1,406	1,413	1,484	1,467	1,372	1,277	1,232
Below Normal (10%)	1,294	1,305	1,326	1,351	1,413	1,438	1,390	1,383	1,359	1,268	1,175	1,133
Dry (16%)	1,094	1,094	1,106	1,121	1,156	1,188	1,154	1,132	1,087	997	914	871
Critical (27%)	624	623	638	645	661	656	602	554	526	476	431	408

No Action Alternative minus Revised Second Basis of Comparison

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-6%	-5%	-6%	-4%	-2%	-2%	-5%	-5%	-3%	-5%	-5%	-6%
20%	-9%	-8%	-8%	-7%	-10%	-9%	-6%	-5%	-8%	-8%	-8%	-8%
30%	-8%	-8%	-9%	-9%	-7%	-9%	-11%	-11%	-7%	-6%	-6%	-6%
40%	-16%	-16%	-10%	-11%	-10%	-10%	-11%	-13%	-10%	-12%	-14%	-15%
50%	-18%	-17%	-17%	-12%	-11%	-8%	-10%	-13%	-14%	-15%	-16%	-15%
60%	-19%	-17%	-18%	-15%	-14%	-14%	-14%	-13%	-13%	-13%	-15%	-16%
70%	-18%	-16%	-14%	-17%	-16%	-14%	-14%	-19%	-16%	-17%	-18%	-18%
80%	-23%	-20%	-20%	-23%	-26%	-23%	-23%	-20%	-16%	-17%	-19%	-20%
90%	-39%	-39%	-39%	-33%	-33%	-29%	-23%	-28%	-25%	-27%	-30%	-34%
Long Term												
Full Simulation Period ^b	-14%	-14%	-13%	-12%	-11%	-11%	-12%	-12%	-11%	-12%	-12%	-12%
Water Year Types^c												
Wet (23%)	-10%	-10%	-9%	-8%	-7%	-8%	-8%	-7%	-6%	-6%	-6%	-5%
Above Normal (24%)	-16%	-15%	-14%	-14%	-12%	-12%	-12%	-12%	-12%	-12%	-13%	-13%
Below Normal (10%)	-12%	-12%	-12%	-11%	-10%	-10%	-12%	-13%	-13%	-13%	-14%	-14%
Dry (16%)	-15%	-15%	-14%	-14%	-13%	-13%	-15%	-15%	-16%	-17%	-18%	-18%
Critical (27%)	-26%	-26%	-26%	-26%	-25%	-26%	-28%	-30%	-30%	-30%	-30%	-30%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.1.3 New Melones Reservoir, End of Month Storage

Revised Second Basis of Comparison

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,879	1,859	1,935	1,954	1,970	2,030	2,043	2,167	2,141	2,080	1,971	1,911
20%	1,775	1,776	1,788	1,823	1,966	1,979	1,955	1,999	2,045	1,947	1,838	1,781
30%	1,666	1,660	1,703	1,764	1,807	1,896	1,885	1,955	1,912	1,817	1,712	1,661
40%	1,508	1,514	1,596	1,693	1,771	1,801	1,788	1,756	1,711	1,634	1,541	1,496
50%	1,364	1,362	1,396	1,478	1,611	1,671	1,625	1,668	1,621	1,512	1,417	1,360
60%	1,257	1,260	1,320	1,353	1,393	1,474	1,492	1,532	1,474	1,381	1,300	1,249
70%	1,074	1,086	1,146	1,224	1,231	1,230	1,250	1,343	1,299	1,204	1,111	1,055
80%	843	824	852	894	999	1,049	1,078	1,094	1,039	975	902	861
90%	705	711	716	724	802	806	749	817	842	775	722	718
Long Term												
Full Simulation Period ^b	1,316	1,321	1,355	1,411	1,470	1,522	1,522	1,564	1,559	1,470	1,373	1,319
Water Year Types^c												
Wet (23%)	1,534	1,539	1,596	1,700	1,784	1,864	1,901	2,027	2,087	2,001	1,880	1,802
Above Normal (24%)	1,225	1,252	1,315	1,405	1,501	1,594	1,613	1,686	1,664	1,566	1,468	1,420
Below Normal (10%)	1,479	1,484	1,500	1,522	1,576	1,605	1,579	1,581	1,555	1,457	1,359	1,313
Dry (16%)	1,285	1,280	1,287	1,303	1,335	1,369	1,351	1,338	1,291	1,197	1,112	1,067
Critical (27%)	845	843	858	869	887	885	837	789	751	682	617	587

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%	1,967	1,954	1,970	1,970	1,970	2,030	2,062	2,198	2,284	2,209	2,103	2,000
20%	1,901	1,905	1,913	1,911	1,970	2,026	1,988	2,021	2,154	2,055	1,955	1,902
30%	1,729	1,727	1,790	1,857	1,925	1,975	1,910	1,972	1,983	1,877	1,785	1,736
40%	1,582	1,596	1,668	1,775	1,851	1,884	1,838	1,826	1,796	1,697	1,601	1,546
50%	1,427	1,416	1,439	1,556	1,660	1,719	1,674	1,721	1,675	1,561	1,460	1,409
60%	1,308	1,316	1,318	1,366	1,426	1,494	1,488	1,529	1,525	1,432	1,335	1,289
70%	1,049	1,073	1,187	1,210	1,289	1,269	1,265	1,343	1,276	1,180	1,092	1,043
80%	875	862	919	957	1,020	1,099	1,056	1,121	1,071	1,001	938	907
90%	635	646	646	681	779	803	734	731	835	756	682	639
Long Term												
Full Simulation Period ^b	1,347	1,351	1,382	1,436	1,491	1,541	1,534	1,580	1,595	1,506	1,408	1,353
Water Year Types^c												
Wet (23%)	1,562	1,567	1,618	1,720	1,792	1,871	1,906	2,049	2,146	2,057	1,934	1,855
Above Normal (24%)	1,269	1,295	1,356	1,442	1,530	1,620	1,634	1,713	1,720	1,627	1,529	1,481
Below Normal (10%)	1,530	1,536	1,550	1,570	1,620	1,650	1,614	1,617	1,599	1,501	1,403	1,357
Dry (16%)	1,327	1,320	1,326	1,342	1,378	1,409	1,380	1,360	1,319	1,224	1,137	1,091
Critical (27%)	828	824	836	846	866	860	803	751	719	653	593	563

Alternative 3 minus Revised Second Basis of Comparison

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	5%	5%	2%	1%	0%	0%	1%	1%	7%	6%	7%	5%
20%	7%	7%	7%	5%	0%	2%	2%	1%	5%	6%	6%	7%
30%	4%	4%	5%	5%	7%	4%	1%	1%	4%	3%	4%	5%
40%	5%	5%	5%	5%	5%	5%	3%	4%	5%	4%	4%	3%
50%	5%	4%	3%	5%	3%	3%	3%	3%	3%	3%	3%	4%
60%	4%	4%	0%	1%	2%	1%	0%	0%	4%	4%	3%	3%
70%	-2%	-1%	4%	-1%	5%	3%	1%	0%	-2%	-2%	-2%	-1%
80%	4%	5%	8%	7%	2%	5%	-2%	2%	3%	3%	4%	5%
90%	-10%	-9%	-10%	-6%	-3%	0%	-2%	-11%	-1%	-2%	-6%	-11%
Long Term												
Full Simulation Period ^b	2%	2%	2%	2%	1%	1%	1%	1%	2%	2%	3%	3%
Water Year Types^c												
Wet (23%)	2%	2%	1%	1%	0%	0%	0%	1%	3%	3%	3%	3%
Above Normal (24%)	4%	3%	3%	3%	2%	2%	1%	2%	3%	4%	4%	4%
Below Normal (10%)	3%	4%	3%	3%	3%	3%	2%	2%	3%	3%	3%	3%
Dry (16%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%
Critical (27%)	-2%	-2%	-3%	-3%	-2%	-3%	-4%	-5%	-4%	-4%	-4%	-4%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.1.4 New Melones Reservoir, End of Month Storage

Revised Second Basis of Comparison

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,879	1,859	1,935	1,954	1,970	2,030	2,043	2,167	2,141	2,080	1,971	1,911
20%	1,775	1,776	1,788	1,823	1,966	1,979	1,955	1,999	2,045	1,947	1,838	1,781
30%	1,666	1,660	1,703	1,764	1,807	1,896	1,885	1,955	1,912	1,817	1,712	1,661
40%	1,508	1,514	1,596	1,693	1,771	1,801	1,788	1,756	1,711	1,634	1,541	1,496
50%	1,364	1,362	1,396	1,478	1,611	1,671	1,625	1,668	1,621	1,512	1,417	1,360
60%	1,257	1,260	1,320	1,353	1,393	1,474	1,492	1,532	1,474	1,381	1,300	1,249
70%	1,074	1,086	1,146	1,224	1,231	1,230	1,250	1,343	1,299	1,204	1,111	1,055
80%	843	824	852	894	999	1,049	1,078	1,094	1,039	975	902	861
90%	705	711	716	724	802	806	749	817	842	775	722	718
Long Term												
Full Simulation Period ^b	1,316	1,321	1,355	1,411	1,470	1,522	1,522	1,564	1,559	1,470	1,373	1,319
Water Year Types^c												
Wet (23%)	1,534	1,539	1,596	1,700	1,784	1,864	1,901	2,027	2,087	2,001	1,880	1,802
Above Normal (24%)	1,225	1,252	1,315	1,405	1,501	1,594	1,613	1,686	1,664	1,566	1,468	1,420
Below Normal (10%)	1,479	1,484	1,500	1,522	1,576	1,605	1,579	1,581	1,555	1,457	1,359	1,313
Dry (16%)	1,285	1,280	1,287	1,303	1,335	1,369	1,351	1,338	1,291	1,197	1,112	1,067
Critical (27%)	845	843	858	869	887	885	837	789	751	682	617	587

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%	1,765	1,759	1,831	1,881	1,949	1,969	1,908	2,012	2,117	2,013	1,900	1,826
20%	1,588	1,587	1,601	1,626	1,782	1,794	1,752	1,844	1,816	1,740	1,631	1,571
30%	1,468	1,459	1,490	1,544	1,630	1,672	1,679	1,693	1,721	1,633	1,531	1,489
40%	1,249	1,252	1,347	1,437	1,522	1,573	1,512	1,494	1,505	1,405	1,297	1,242
50%	1,040	1,058	1,142	1,227	1,437	1,455	1,393	1,357	1,289	1,190	1,100	1,074
60%	976	997	1,023	1,072	1,134	1,161	1,159	1,246	1,218	1,130	1,032	983
70%	766	802	855	907	938	973	1,006	978	991	900	821	783
80%	554	553	620	621	623	697	651	721	761	686	617	587
90%	285	298	299	377	429	449	386	452	492	423	349	308
Long Term												
Full Simulation Period ^b	1,063	1,073	1,112	1,169	1,239	1,284	1,265	1,287	1,299	1,221	1,134	1,086
Water Year Types^c												
Wet (23%)	1,309	1,321	1,388	1,496	1,602	1,668	1,704	1,812	1,906	1,833	1,722	1,653
Above Normal (24%)	983	1,014	1,079	1,168	1,271	1,361	1,363	1,413	1,396	1,302	1,207	1,162
Below Normal (10%)	1,210	1,220	1,242	1,267	1,329	1,354	1,298	1,276	1,254	1,163	1,071	1,028
Dry (16%)	1,018	1,018	1,030	1,045	1,081	1,114	1,066	1,031	990	903	823	781
Critical (27%)	558	559	570	578	597	591	506	449	433	391	355	336

Alternative 5 minus Revised Second Basis of Comparison

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-6%	-5%	-5%	-4%	-1%	-3%	-7%	-7%	-1%	-3%	-4%	-4%
20%	-11%	-11%	-10%	-11%	-9%	-9%	-10%	-8%	-11%	-11%	-11%	-12%
30%	-12%	-12%	-12%	-12%	-10%	-12%	-11%	-13%	-10%	-10%	-11%	-10%
40%	-17%	-17%	-16%	-15%	-14%	-13%	-15%	-15%	-12%	-14%	-16%	-17%
50%	-24%	-22%	-18%	-17%	-11%	-13%	-14%	-19%	-21%	-21%	-22%	-21%
60%	-22%	-21%	-23%	-21%	-19%	-21%	-22%	-19%	-17%	-18%	-21%	-21%
70%	-29%	-26%	-25%	-26%	-24%	-21%	-20%	-27%	-24%	-25%	-26%	-26%
80%	-34%	-33%	-27%	-31%	-38%	-34%	-40%	-34%	-27%	-30%	-32%	-32%
90%	-60%	-58%	-58%	-48%	-47%	-44%	-48%	-45%	-42%	-45%	-52%	-57%
Long Term												
Full Simulation Period ^b	-19%	-19%	-18%	-17%	-16%	-16%	-17%	-18%	-17%	-17%	-17%	-18%
Water Year Types^c												
Wet (23%)	-15%	-14%	-13%	-12%	-10%	-11%	-10%	-11%	-9%	-8%	-8%	-8%
Above Normal (24%)	-20%	-19%	-18%	-17%	-15%	-15%	-16%	-16%	-16%	-17%	-18%	-18%
Below Normal (10%)	-18%	-18%	-17%	-17%	-16%	-16%	-18%	-19%	-19%	-20%	-21%	-22%
Dry (16%)	-21%	-20%	-20%	-20%	-19%	-19%	-21%	-23%	-23%	-25%	-26%	-27%
Critical (27%)	-34%	-34%	-34%	-33%	-33%	-33%	-39%	-43%	-42%	-43%	-43%	-43%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.2 New Melones Elevation

Table 5C.3.2.2.1 New Melones Reservoir, End of Month Elevation

No Action Alternative

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,029	1,028	1,035	1,040	1,046	1,089	1,047	1,094	1,095	1,085	1,039	1,033
20%	1,013	1,015	1,017	1,021	1,029	1,032	1,036	1,043	1,040	1,032	1,021	1,016
30%	1,006	1,006	1,008	1,012	1,021	1,025	1,021	1,027	1,031	1,023	1,013	1,008
40%	975	976	995	1,004	1,012	1,014	1,011	1,006	1,006	995	983	976
50%	956	957	960	980	996	1,006	998	997	991	977	965	960
60%	943	946	950	959	966	976	976	984	976	966	953	947
70%	925	928	938	942	945	947	950	952	951	939	928	923
80%	879	881	887	887	897	912	918	924	923	912	897	888
90%	835	836	837	847	857	863	864	867	876	863	850	843
Long Term												
Full Simulation Period ^b	944	946	953	962	972	979	976	981	981	969	957	950
Water Year Types^c												
Wet (23%)	983	986	998	1,014	1,027	1,037	1,036	1,054	1,062	1,052	1,038	1,030
Above Normal (24%)	932	937	945	960	974	986	988	997	996	985	973	967
Below Normal (10%)	968	969	972	975	985	988	985	985	983	972	960	955
Dry (16%)	943	943	944	947	951	957	955	953	948	934	922	915
Critical (27%)	856	856	862	864	870	871	860	848	840	828	818	812

Revised Alternative 1

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,158	1,156	1,164	1,166	1,167	1,171	1,172	1,177	1,177	1,175	1,167	1,161
20%	1,147	1,147	1,149	1,152	1,167	1,168	1,166	1,168	1,165	1,165	1,154	1,148
30%	1,136	1,135	1,140	1,146	1,151	1,160	1,159	1,154	1,153	1,152	1,141	1,135
40%	1,119	1,120	1,128	1,139	1,147	1,150	1,149	1,143	1,135	1,132	1,123	1,118
50%	1,060	1,060	1,086	1,116	1,130	1,136	1,131	1,135	1,131	1,120	1,109	1,060
60%	1,046	1,046	1,054	1,059	1,064	1,116	1,117	1,122	1,115	1,062	1,052	1,045
70%	1,022	1,024	1,031	1,042	1,043	1,042	1,045	1,057	1,052	1,039	1,027	1,019
80%	933	930	993	998	1,012	1,019	1,022	1,025	1,017	1,009	999	994
90%	891	892	893	895	911	912	900	914	926	905	894	894
Long Term												
Full Simulation Period ^b	1,050	1,051	1,058	1,069	1,079	1,090	1,090	1,092	1,090	1,077	1,061	1,050
Water Year Types^c												
Wet (23%)	1,098	1,098	1,110	1,128	1,139	1,151	1,155	1,162	1,162	1,165	1,154	1,148
Above Normal (24%)	1,037	1,037	1,049	1,075	1,090	1,105	1,111	1,123	1,127	1,111	1,090	1,081
Below Normal (10%)	1,081	1,085	1,087	1,090	1,105	1,115	1,112	1,113	1,111	1,092	1,081	1,064
Dry (16%)	1,052	1,051	1,053	1,055	1,061	1,075	1,074	1,069	1,060	1,035	1,013	1,000
Critical (27%)	933	933	936	939	943	943	935	927	922	908	889	877

Revised Alternative 1 minus No Action Alternative

Statistic	End of Month Elevation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	13%	12%	12%	12%	12%	8%	12%	8%	8%	8%	12%	12%
20%	13%	13%	13%	13%	13%	13%	13%	12%	12%	13%	13%	13%
30%	13%	13%	13%	13%	13%	13%	13%	12%	12%	13%	13%	13%
40%	15%	15%	13%	13%	13%	13%	14%	14%	13%	14%	14%	15%
50%	11%	11%	13%	14%	13%	13%	13%	14%	14%	15%	15%	10%
60%	11%	11%	11%	10%	10%	14%	14%	14%	14%	10%	10%	10%
70%	11%	10%	10%	11%	10%	10%	10%	11%	11%	11%	11%	10%
80%	6%	6%	12%	13%	13%	12%	11%	11%	10%	11%	11%	12%
90%	7%	7%	7%	6%	6%	6%	4%	5%	6%	5%	5%	6%
Long Term												
Full Simulation Period ^b	11%	11%	11%	11%	11%	11%	12%	11%	11%	11%	11%	11%
Water Year Types^c												
Wet (23%)	12%	11%	11%	11%	11%	11%	11%	10%	9%	11%	11%	11%
Above Normal (24%)	11%	11%	11%	12%	12%	12%	12%	13%	13%	13%	12%	12%
Below Normal (10%)	12%	12%	12%	12%	12%	13%	13%	13%	13%	12%	13%	12%
Dry (16%)	12%	12%	11%	11%	12%	12%	12%	12%	12%	11%	10%	9%
Critical (27%)	9%	9%	9%	9%	8%	8%	9%	9%	10%	10%	9%	8%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.2.2 New Melones Reservoir, End of Month Elevation

Revised Second Basis of Comparison

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,158	1,156	1,164	1,166	1,167	1,171	1,172	1,177	1,177	1,175	1,167	1,161
20%	1,147	1,147	1,149	1,152	1,167	1,168	1,166	1,168	1,165	1,165	1,154	1,148
30%	1,136	1,135	1,140	1,146	1,151	1,160	1,159	1,154	1,153	1,152	1,141	1,135
40%	1,119	1,120	1,128	1,139	1,147	1,150	1,149	1,143	1,135	1,132	1,123	1,118
50%	1,060	1,060	1,086	1,116	1,130	1,136	1,131	1,135	1,131	1,120	1,109	1,060
60%	1,046	1,046	1,054	1,059	1,064	1,116	1,117	1,122	1,115	1,062	1,052	1,045
70%	1,022	1,024	1,031	1,042	1,043	1,042	1,045	1,057	1,052	1,039	1,027	1,019
80%	933	930	993	998	1,012	1,019	1,022	1,025	1,017	1,009	999	994
90%	891	892	893	895	911	912	900	914	926	905	894	894
Long Term												
Full Simulation Period ^b	1,050	1,051	1,058	1,069	1,079	1,090	1,090	1,092	1,090	1,077	1,061	1,050
Water Year Types^c												
Wet (23%)	1,098	1,098	1,110	1,128	1,139	1,151	1,155	1,162	1,162	1,165	1,154	1,148
Above Normal (24%)	1,037	1,037	1,049	1,075	1,090	1,105	1,111	1,123	1,127	1,111	1,090	1,081
Below Normal (10%)	1,081	1,085	1,087	1,090	1,105	1,115	1,112	1,113	1,111	1,092	1,081	1,064
Dry (16%)	1,052	1,051	1,053	1,055	1,061	1,075	1,074	1,069	1,060	1,035	1,013	1,000
Critical (27%)	933	933	936	939	943	943	935	927	922	908	889	877

No Action Alternative

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,029	1,028	1,035	1,040	1,046	1,089	1,047	1,094	1,095	1,085	1,039	1,033
20%	1,013	1,015	1,017	1,021	1,029	1,032	1,036	1,043	1,040	1,032	1,021	1,016
30%	1,006	1,006	1,008	1,012	1,021	1,025	1,021	1,027	1,031	1,023	1,013	1,008
40%	975	976	995	1,004	1,012	1,014	1,011	1,006	1,006	995	983	976
50%	956	957	960	980	996	1,006	998	997	991	977	965	960
60%	943	946	950	959	966	976	976	984	976	966	953	947
70%	925	928	938	942	945	947	950	952	951	939	928	923
80%	879	881	887	887	897	912	918	924	923	912	897	888
90%	835	836	837	847	857	863	864	867	876	863	850	843
Long Term												
Full Simulation Period ^b	944	946	953	962	972	979	976	981	981	969	957	950
Water Year Types^c												
Wet (23%)	983	986	998	1,014	1,027	1,037	1,036	1,054	1,062	1,052	1,038	1,030
Above Normal (24%)	932	937	945	960	974	986	988	997	996	985	973	967
Below Normal (10%)	968	969	972	975	985	988	985	985	983	972	960	955
Dry (16%)	943	943	944	947	951	957	955	953	948	934	922	915
Critical (27%)	856	856	862	864	870	871	860	848	840	828	818	812

No Action Alternative minus Revised Second Basis of Comparison

Statistic	End of Month Elevation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-11%	-11%	-11%	-11%	-10%	-7%	-11%	-7%	-7%	-8%	-11%	-11%
20%	-12%	-12%	-11%	-11%	-12%	-12%	-11%	-11%	-11%	-11%	-11%	-12%
30%	-11%	-11%	-12%	-12%	-11%	-12%	-12%	-11%	-11%	-11%	-11%	-11%
40%	-13%	-13%	-12%	-12%	-12%	-12%	-12%	-12%	-11%	-12%	-12%	-13%
50%	-10%	-10%	-12%	-12%	-12%	-11%	-12%	-12%	-12%	-12%	-13%	-9%
60%	-10%	-10%	-10%	-9%	-9%	-13%	-13%	-12%	-12%	-9%	-9%	-9%
70%	-10%	-9%	-9%	-10%	-9%	-9%	-9%	-10%	-10%	-10%	-10%	-9%
80%	-6%	-5%	-11%	-11%	-11%	-11%	-10%	-10%	-9%	-10%	-10%	-11%
90%	-6%	-6%	-6%	-5%	-6%	-5%	-4%	-5%	-5%	-5%	-5%	-6%
Long Term												
Full Simulation Period ^b	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
Water Year Types^c												
Wet (23%)	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-9%	-9%	-10%	-10%	-10%
Above Normal (24%)	-10%	-10%	-10%	-11%	-11%	-11%	-11%	-11%	-12%	-11%	-11%	-11%
Below Normal (10%)	-10%	-11%	-11%	-11%	-11%	-11%	-11%	-12%	-11%	-11%	-11%	-10%
Dry (16%)	-10%	-10%	-10%	-10%	-10%	-11%	-11%	-11%	-10%	-10%	-9%	-9%
Critical (27%)	-8%	-8%	-8%	-8%	-8%	-8%	-8%	-9%	-9%	-9%	-8%	-7%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.2.3 New Melones Reservoir, End of Month Elevation

Revised Second Basis of Comparison

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,158	1,156	1,164	1,166	1,167	1,171	1,172	1,177	1,177	1,175	1,167	1,161
20%	1,147	1,147	1,149	1,152	1,167	1,168	1,166	1,168	1,165	1,165	1,154	1,148
30%	1,136	1,135	1,140	1,146	1,151	1,160	1,159	1,154	1,153	1,152	1,141	1,135
40%	1,119	1,120	1,128	1,139	1,147	1,150	1,149	1,143	1,135	1,132	1,123	1,118
50%	1,060	1,060	1,086	1,116	1,130	1,136	1,131	1,135	1,131	1,120	1,109	1,060
60%	1,046	1,046	1,054	1,059	1,064	1,116	1,117	1,122	1,115	1,062	1,052	1,045
70%	1,022	1,024	1,031	1,042	1,043	1,042	1,045	1,057	1,052	1,039	1,027	1,019
80%	933	930	993	998	1,012	1,019	1,022	1,025	1,017	1,009	999	994
90%	891	892	893	895	911	912	900	914	926	905	894	894
Long Term												
Full Simulation Period ^b	1,050	1,051	1,058	1,069	1,079	1,090	1,090	1,092	1,090	1,077	1,061	1,050
Water Year Types^c												
Wet (23%)	1,098	1,098	1,110	1,128	1,139	1,151	1,155	1,162	1,162	1,165	1,154	1,148
Above Normal (24%)	1,037	1,037	1,049	1,075	1,090	1,105	1,111	1,123	1,127	1,111	1,090	1,081
Below Normal (10%)	1,081	1,085	1,087	1,090	1,105	1,115	1,112	1,113	1,111	1,092	1,081	1,064
Dry (16%)	1,052	1,051	1,053	1,055	1,061	1,075	1,074	1,069	1,060	1,035	1,013	1,000
Critical (27%)	933	933	936	939	943	943	935	927	922	908	889	877

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%	1,167	1,166	1,167	1,167	1,167	1,171	1,174	1,182	1,180	1,184	1,176	1,169
20%	1,160	1,161	1,162	1,161	1,167	1,171	1,168	1,170	1,168	1,173	1,166	1,161
30%	1,142	1,142	1,149	1,156	1,163	1,168	1,161	1,159	1,149	1,158	1,148	1,143
40%	1,127	1,128	1,136	1,147	1,155	1,159	1,154	1,150	1,137	1,139	1,129	1,123
50%	1,111	1,109	1,112	1,124	1,135	1,141	1,137	1,136	1,135	1,125	1,114	1,109
60%	1,053	1,054	1,054	1,060	1,111	1,118	1,117	1,121	1,121	1,111	1,056	1,050
70%	1,019	1,022	1,037	1,040	1,050	1,048	1,047	1,057	1,049	1,036	1,024	1,018
80%	996	994	1,002	1,007	1,015	1,025	1,020	1,028	1,022	1,012	1,004	1,000
90%	877	879	879	886	906	911	897	896	925	901	886	878
Long Term												
Full Simulation Period ^b	1,056	1,057	1,061	1,070	1,083	1,091	1,090	1,092	1,089	1,082	1,065	1,056
Water Year Types^c												
Wet (23%)	1,101	1,102	1,111	1,125	1,140	1,152	1,155	1,164	1,157	1,169	1,159	1,153
Above Normal (24%)	1,051	1,058	1,065	1,082	1,096	1,107	1,113	1,125	1,132	1,119	1,096	1,088
Below Normal (10%)	1,093	1,094	1,092	1,094	1,109	1,116	1,110	1,121	1,119	1,101	1,079	1,073
Dry (16%)	1,055	1,054	1,055	1,062	1,072	1,079	1,077	1,065	1,061	1,041	1,026	1,011
Critical (27%)	927	927	930	932	943	937	927	917	916	900	882	870

Alternative 3 minus Revised Second Basis of Comparison

Statistic	End of Month Elevation (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%	0%	0%	0%	1%	1%	1%
20%	1%	1%	1%	1%	0%	0%	0%	0%	0%	1%	1%	1%
30%	1%	1%	1%	1%	1%	1%	0%	0%	0%	1%	1%	1%
40%	1%	1%	1%	1%	1%	1%	0%	1%	0%	1%	1%	0%
50%	5%	5%	2%	1%	0%	0%	0%	0%	0%	0%	0%	5%
60%	1%	1%	0%	0%	4%	0%	0%	0%	0%	5%	0%	1%
70%	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%
80%	7%	7%	1%	1%	0%	1%	0%	0%	0%	0%	0%	1%
90%	-2%	-1%	-2%	-1%	0%	0%	0%	-2%	0%	0%	-1%	-2%
Long Term												
Full Simulation Period ^b	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Water Year Types^c												
Wet (23%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (24%)	1%	2%	2%	1%	1%	0%	0%	0%	0%	1%	1%	1%
Below Normal (10%)	1%	1%	0%	0%	0%	0%	1%	1%	1%	0%	0%	1%
Dry (16%)	0%	0%	0%	1%	1%	0%	0%	0%	0%	1%	1%	1%
Critical (27%)	-1%	-1%	-1%	-1%	0%	-1%	-1%	-1%	-1%	-1%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.2.4 New Melones Reservoir, End of Month Elevation

Revised Second Basis of Comparison

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,158	1,156	1,164	1,166	1,167	1,171	1,172	1,177	1,177	1,175	1,167	1,161
20%	1,147	1,147	1,149	1,152	1,167	1,168	1,166	1,168	1,165	1,165	1,154	1,148
30%	1,136	1,135	1,140	1,146	1,151	1,160	1,159	1,154	1,153	1,152	1,141	1,135
40%	1,119	1,120	1,128	1,139	1,147	1,150	1,149	1,143	1,135	1,132	1,123	1,118
50%	1,060	1,060	1,086	1,116	1,130	1,136	1,131	1,135	1,131	1,120	1,109	1,060
60%	1,046	1,046	1,054	1,059	1,064	1,116	1,117	1,122	1,115	1,062	1,052	1,045
70%	1,022	1,024	1,031	1,042	1,043	1,042	1,045	1,057	1,052	1,039	1,027	1,019
80%	933	930	993	998	1,012	1,019	1,022	1,025	1,017	1,009	999	994
90%	891	892	893	895	911	912	900	914	926	905	894	894
Long Term												
Full Simulation Period ^b	1,050	1,051	1,058	1,069	1,079	1,090	1,090	1,092	1,090	1,077	1,061	1,050
Water Year Types^c												
Wet (23%)	1,098	1,098	1,110	1,128	1,139	1,151	1,155	1,162	1,162	1,165	1,154	1,148
Above Normal (24%)	1,037	1,037	1,049	1,075	1,090	1,105	1,111	1,123	1,127	1,111	1,090	1,081
Below Normal (10%)	1,081	1,085	1,087	1,090	1,105	1,115	1,112	1,113	1,111	1,092	1,081	1,064
Dry (16%)	1,052	1,051	1,053	1,055	1,061	1,075	1,074	1,069	1,060	1,035	1,013	1,000
Critical (27%)	933	933	936	939	943	943	935	927	922	908	889	877

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%	1,029	1,028	1,036	1,041	1,047	1,049	1,043	1,053	1,062	1,053	1,043	1,035
20%	1,011	1,011	1,012	1,015	1,031	1,032	1,028	1,037	1,034	1,026	1,015	1,009
30%	999	998	1,001	1,007	1,015	1,019	1,020	1,022	1,024	1,016	1,005	1,001
40%	973	973	985	996	1,004	1,010	1,003	1,002	1,003	992	979	972
50%	945	948	959	970	996	998	991	987	978	965	953	950
60%	937	940	943	949	957	961	961	972	968	957	944	938
70%	904	911	921	928	932	936	941	937	939	927	915	907
80%	860	860	874	874	874	889	880	894	902	887	873	867
90%	803	807	808	824	834	838	826	839	847	833	818	810
Long Term												
Full Simulation Period ^b	931	933	939	947	957	964	961	962	963	952	941	934
Water Year Types^c												
Wet (23%)	969	971	980	995	1,007	1,016	1,020	1,031	1,040	1,033	1,022	1,015
Above Normal (24%)	924	930	939	954	968	980	982	988	987	975	963	958
Below Normal (10%)	954	956	959	962	973	977	972	970	968	957	944	938
Dry (16%)	930	930	932	934	939	945	940	936	931	918	905	898
Critical (27%)	837	838	842	845	853	855	834	818	815	804	796	791

Alternative 5 minus Revised Second Basis of Comparison

Statistic	End of Month Elevation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-11%	-11%	-11%	-11%	-10%	-10%	-11%	-11%	-10%	-10%	-11%	-11%
20%	-12%	-12%	-12%	-12%	-12%	-12%	-12%	-11%	-11%	-12%	-12%	-12%
30%	-12%	-12%	-12%	-12%	-12%	-12%	-12%	-11%	-11%	-12%	-12%	-12%
40%	-13%	-13%	-13%	-13%	-12%	-12%	-13%	-12%	-12%	-12%	-13%	-13%
50%	-11%	-11%	-12%	-13%	-12%	-12%	-12%	-13%	-14%	-14%	-14%	-10%
60%	-10%	-10%	-11%	-10%	-10%	-14%	-14%	-13%	-13%	-10%	-10%	-10%
70%	-12%	-11%	-11%	-11%	-11%	-10%	-10%	-11%	-11%	-11%	-11%	-11%
80%	-8%	-8%	-12%	-12%	-14%	-13%	-14%	-13%	-11%	-12%	-13%	-13%
90%	-10%	-9%	-10%	-8%	-8%	-8%	-8%	-8%	-8%	-8%	-9%	-9%
Long Term												
Full Simulation Period ^b	-11%	-11%	-11%	-11%	-11%	-12%	-12%	-12%	-12%	-12%	-11%	-11%
Water Year Types^c												
Wet (23%)	-12%	-12%	-12%	-12%	-12%	-12%	-12%	-11%	-10%	-11%	-11%	-12%
Above Normal (24%)	-11%	-10%	-10%	-11%	-11%	-11%	-12%	-12%	-12%	-12%	-12%	-11%
Below Normal (10%)	-12%	-12%	-12%	-12%	-12%	-12%	-13%	-13%	-13%	-12%	-13%	-12%
Dry (16%)	-12%	-12%	-11%	-11%	-11%	-12%	-12%	-12%	-12%	-11%	-11%	-10%
Critical (27%)	-10%	-10%	-10%	-10%	-10%	-9%	-11%	-12%	-12%	-11%	-10%	-10%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.3 Stanislaus River below Goodwin Dam Flow

Table 5C.3.2.3.1 Stanislaus River below Goodwin, Monthly Flow

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	837	290	306	358	897	1,648	1,633	1,929	1,103	429	390	390
20%	797	200	218	232	409	1,521	1,553	1,555	1,090	310	300	300
30%	774	200	200	232	290	440	1,553	1,296	940	300	284	250
40%	774	200	200	226	236	200	1,400	1,242	855	300	283	250
50%	774	200	200	226	236	200	1,400	1,242	363	271	283	250
60%	636	200	200	219	229	200	812	918	363	265	283	249
70%	636	200	200	219	229	200	767	705	297	265	283	249
80%	578	200	200	214	221	200	767	631	261	265	283	249
90%	577	200	200	213	215	200	505	546	255	265	283	249
Long Term												
Full Simulation Period ^b	723	278	365	518	595	754	1,158	1,123	680	394	361	351
Water Year Types^c												
Wet (23%)	781	499	787	999	1,201	2,016	1,536	1,691	1,140	715	639	692
Above Normal (24%)	714	216	282	663	676	645	1,224	1,146	962	353	292	267
Below Normal (10%)	740	225	225	282	346	365	1,454	1,201	476	269	285	256
Dry (16%)	707	208	216	234	313	200	1,030	930	374	275	277	245
Critical (27%)	683	205	215	227	255	234	741	699	281	269	262	231

Revised Alternative 1

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	350	399	400	400	1,825	999	1,500	1,500	1,502	491	319	300
20%	349	356	358	359	863	400	1,500	1,498	1,243	313	300	300
30%	318	334	340	336	400	344	1,429	1,380	948	300	285	281
40%	260	305	323	318	364	312	1,241	1,134	713	296	283	250
50%	193	246	280	250	339	267	879	855	399	283	283	249
60%	146	217	230	183	304	200	649	725	300	271	283	249
70%	123	207	214	152	239	159	517	612	265	265	283	249
80%	115	202	206	136	176	140	462	507	255	265	283	249
90%	104	188	188	122	133	123	403	439	255	265	283	249
Long Term												
Full Simulation Period ^b	250	340	429	530	748	593	958	984	830	433	386	391
Water Year Types^c												
Wet (23%)	334	581	884	1,038	1,692	1,597	1,511	1,556	1,813	860	729	857
Above Normal (24%)	248	269	331	666	712	484	1,051	1,062	986	352	287	268
Below Normal (10%)	254	306	306	336	532	292	1,087	1,021	414	269	283	261
Dry (16%)	245	282	290	253	387	185	686	743	346	276	283	249
Critical (27%)	181	242	252	203	256	174	511	548	278	291	277	233

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-58%	38%	31%	12%	103%	-39%	-8%	-22%	36%	14%	-18%	-23%
20%	-56%	78%	64%	55%	111%	-74%	-3%	-4%	14%	1%	0%	0%
30%	-59%	67%	70%	44%	38%	-22%	-8%	7%	1%	0%	0%	12%
40%	-66%	53%	61%	41%	54%	56%	-11%	-9%	-17%	-1%	0%	0%
50%	-75%	23%	40%	11%	44%	34%	-37%	-31%	10%	4%	0%	-1%
60%	-77%	9%	15%	-16%	33%	0%	-20%	-21%	-17%	2%	0%	0%
70%	-81%	3%	7%	-31%	5%	-21%	-33%	-13%	-11%	0%	0%	0%
80%	-80%	1%	3%	-36%	-21%	-30%	-40%	-20%	-2%	0%	0%	0%
90%	-82%	-6%	-6%	-43%	-38%	-39%	-20%	-20%	0%	0%	0%	0%
Long Term												
Full Simulation Period ^b	-65%	22%	18%	2%	26%	-21%	-17%	-12%	22%	10%	7%	11%
Water Year Types^c												
Wet (23%)	-57%	17%	12%	4%	41%	-21%	-2%	-8%	59%	20%	14%	24%
Above Normal (24%)	-65%	25%	17%	0%	5%	-25%	-14%	-7%	2%	0%	-2%	0%
Below Normal (10%)	-66%	36%	36%	19%	54%	-20%	-25%	-15%	-13%	0%	-1%	2%
Dry (16%)	-65%	36%	35%	8%	23%	-7%	-33%	-20%	-7%	0%	2%	1%
Critical (27%)	-73%	18%	17%	-10%	0%	-26%	-31%	-22%	-1%	8%	6%	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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.3.2 Stanislaus River below Goodwin, Monthly Flow

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	350	399	400	400	1,825	999	1,500	1,500	1,502	491	319	300
20%	349	356	358	359	863	400	1,500	1,498	1,243	313	300	300
30%	318	334	340	336	400	344	1,429	1,380	948	300	285	281
40%	260	305	323	318	364	312	1,241	1,134	713	296	283	250
50%	193	246	280	250	339	267	879	855	399	283	283	249
60%	146	217	230	183	304	200	649	725	300	271	283	249
70%	123	207	214	152	239	159	517	612	265	265	283	249
80%	115	202	206	136	176	140	462	507	255	265	283	249
90%	104	188	188	122	133	123	403	439	255	265	283	249
Long Term												
Full Simulation Period ^b	250	340	429	530	748	593	958	984	830	433	386	391
Water Year Types^c												
Wet (23%)	334	581	884	1,038	1,692	1,597	1,511	1,556	1,813	860	729	857
Above Normal (24%)	248	269	331	666	712	484	1,051	1,062	986	352	287	268
Below Normal (10%)	254	306	306	336	532	292	1,087	1,021	414	269	283	261
Dry (16%)	245	282	290	253	387	185	686	743	346	276	283	249
Critical (27%)	181	242	252	203	256	174	511	548	278	291	277	233

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	837	290	306	358	897	1,648	1,633	1,929	1,103	429	390	390
20%	797	200	218	232	409	1,521	1,553	1,555	1,090	310	300	300
30%	774	200	200	232	290	440	1,553	1,296	940	300	284	250
40%	774	200	200	226	236	200	1,400	1,242	855	300	283	250
50%	774	200	200	226	236	200	1,400	1,242	363	271	283	250
60%	636	200	200	219	229	200	812	918	363	265	283	249
70%	636	200	200	219	229	200	767	705	297	265	283	249
80%	578	200	200	214	221	200	767	631	261	265	283	249
90%	577	200	200	213	215	200	505	546	255	265	283	249
Long Term												
Full Simulation Period ^b	723	278	365	518	595	754	1,158	1,123	680	394	361	351
Water Year Types^c												
Wet (23%)	781	499	787	999	1,201	2,016	1,536	1,691	1,140	715	639	692
Above Normal (24%)	714	216	282	663	676	645	1,224	1,146	962	353	292	267
Below Normal (10%)	740	225	225	282	346	365	1,454	1,201	476	269	285	256
Dry (16%)	707	208	216	234	313	200	1,030	930	374	275	277	245
Critical (27%)	683	205	215	227	255	234	741	699	281	269	262	231

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	139%	-27%	-24%	-11%	-51%	65%	9%	29%	-27%	-13%	22%	30%
20%	128%	-44%	-39%	-35%	-53%	280%	4%	4%	-12%	-1%	0%	0%
30%	144%	-40%	-41%	-31%	-28%	28%	9%	-6%	-1%	0%	0%	-11%
40%	197%	-34%	-38%	-29%	-35%	-36%	13%	10%	20%	1%	0%	0%
50%	302%	-19%	-29%	-10%	-30%	-25%	59%	45%	-9%	-4%	0%	1%
60%	337%	-8%	-13%	20%	-25%	0%	25%	27%	21%	-2%	0%	0%
70%	417%	-3%	-6%	44%	-4%	26%	48%	15%	12%	0%	0%	0%
80%	403%	-1%	-3%	57%	26%	43%	66%	24%	2%	0%	0%	0%
90%	458%	6%	6%	75%	62%	63%	25%	24%	0%	0%	0%	0%
Long Term												
Full Simulation Period ^b	189%	-18%	-15%	-2%	-20%	27%	21%	14%	-18%	-9%	-6%	-10%
Water Year Types^c												
Wet (23%)	134%	-14%	-11%	-4%	-29%	26%	2%	9%	-37%	-17%	-12%	-19%
Above Normal (24%)	188%	-20%	-15%	0%	-5%	33%	17%	8%	-2%	0%	2%	0%
Below Normal (10%)	192%	-26%	-26%	-16%	-35%	25%	34%	18%	15%	0%	1%	-2%
Dry (16%)	189%	-26%	-26%	-8%	-19%	8%	50%	25%	8%	0%	-2%	-1%
Critical (27%)	277%	-15%	-15%	12%	0%	35%	45%	28%	1%	-7%	-5%	-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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.3.3 Stanislaus River below Goodwin, Monthly Flow

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	350	399	400	400	1,825	999	1,500	1,500	1,502	491	319	300
20%	349	356	358	359	863	400	1,500	1,498	1,243	313	300	300
30%	318	334	340	336	400	344	1,429	1,380	948	300	285	281
40%	260	305	323	318	364	312	1,241	1,134	713	296	283	250
50%	193	246	280	250	339	267	879	855	399	283	283	249
60%	146	217	230	183	304	200	649	725	300	271	283	249
70%	123	207	214	152	239	159	517	612	265	265	283	249
80%	115	202	206	136	176	140	462	507	255	265	283	249
90%	104	188	188	122	133	123	403	439	255	265	283	249
Long Term												
Full Simulation Period ^b	250	340	429	530	748	593	958	984	830	433	386	391
Water Year Types^c												
Wet (23%)	334	581	884	1,038	1,692	1,597	1,511	1,556	1,813	860	729	857
Above Normal (24%)	248	269	331	666	712	484	1,051	1,062	986	352	287	268
Below Normal (10%)	254	306	306	336	532	292	1,087	1,021	414	269	283	261
Dry (16%)	245	282	290	253	387	185	686	743	346	276	283	249
Critical (27%)	181	242	252	203	256	174	511	548	278	291	277	233

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	300	300	609	1,135	2,548	1,189	1,500	1,165	255	265	283	952
20%	300	300	305	300	1,157	344	1,500	1,165	255	265	283	249
30%	300	300	300	300	333	300	1,500	1,165	255	265	283	249
40%	252	300	300	300	300	300	1,034	963	255	265	283	249
50%	252	300	300	150	176	200	893	829	255	265	283	249
60%	252	300	300	150	173	200	893	829	255	265	283	249
70%	252	300	300	150	173	200	893	829	255	265	283	249
80%	200	200	220	150	173	200	528	466	255	265	283	249
90%	200	200	200	150	173	200	493	466	255	265	283	249
Long Term												
Full Simulation Period ^b	302	349	475	557	814	622	1,060	911	490	421	391	397
Water Year Types^c												
Wet (23%)	368	589	1,001	1,066	2,016	1,599	1,538	1,300	1,279	952	768	885
Above Normal (24%)	323	287	394	705	732	552	1,155	955	255	265	283	260
Below Normal (10%)	269	275	275	483	552	272	1,128	909	255	265	283	249
Dry (16%)	285	285	293	251	371	200	815	730	255	265	283	249
Critical (27%)	246	264	274	191	208	218	680	643	245	254	268	240

Alternative 3 minus Revised Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-14%	-25%	52%	184%	40%	19%	0%	-22%	-83%	-46%	-11%	217%
20%	-14%	-16%	-15%	-17%	34%	-14%	0%	-22%	-79%	-15%	-6%	-17%
30%	-6%	-10%	-12%	-11%	-17%	-13%	5%	-16%	-73%	-12%	-1%	-11%
40%	-3%	-2%	-7%	-6%	-18%	-4%	-17%	-15%	-64%	-10%	0%	0%
50%	31%	22%	7%	-40%	-48%	-25%	2%	-3%	-36%	-6%	0%	0%
60%	73%	38%	30%	-18%	-43%	0%	38%	14%	-15%	-2%	0%	0%
70%	105%	45%	40%	-1%	-28%	26%	73%	36%	-3%	0%	0%	0%
80%	74%	-1%	7%	10%	-2%	43%	14%	-8%	0%	0%	0%	0%
90%	93%	6%	6%	23%	30%	63%	22%	6%	0%	0%	0%	0%
Long Term												
Full Simulation Period ^b	21%	3%	11%	5%	9%	5%	11%	-7%	-41%	-3%	1%	1%
Water Year Types^c												
Wet (23%)	10%	1%	13%	3%	19%	0%	2%	-16%	-29%	11%	5%	3%
Above Normal (24%)	30%	7%	19%	6%	3%	14%	10%	-10%	-74%	-25%	-1%	-3%
Below Normal (10%)	6%	-10%	-10%	44%	4%	-7%	4%	-11%	-38%	-1%	0%	-5%
Dry (16%)	17%	1%	1%	-1%	-4%	8%	19%	-2%	-26%	-4%	0%	0%
Critical (27%)	36%	9%	9%	-6%	-19%	26%	33%	17%	-12%	-13%	-3%	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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.3.4 Stanislaus River below Goodwin, Monthly Flow

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	350	399	400	400	1,825	999	1,500	1,500	1,502	491	319	300
20%	349	356	358	359	863	400	1,500	1,498	1,243	313	300	300
30%	318	334	340	336	400	344	1,429	1,380	948	300	285	281
40%	260	305	323	318	364	312	1,241	1,134	713	296	283	250
50%	193	246	280	250	339	267	879	855	399	283	283	249
60%	146	217	230	183	304	200	649	725	300	271	283	249
70%	123	207	214	152	239	159	517	612	265	265	283	249
80%	115	202	206	136	176	140	462	507	255	265	283	249
90%	104	188	188	122	133	123	403	439	255	265	283	249
Long Term												
Full Simulation Period ^b	250	340	429	530	748	593	958	984	830	433	386	391
Water Year Types^c												
Wet (23%)	334	581	884	1,038	1,692	1,597	1,511	1,556	1,813	860	729	857
Above Normal (24%)	248	269	331	666	712	484	1,051	1,062	986	352	287	268
Below Normal (10%)	254	306	306	336	532	292	1,087	1,021	414	269	283	261
Dry (16%)	245	282	290	253	387	185	686	743	346	276	283	249
Critical (27%)	181	242	252	203	256	174	511	548	278	291	277	233

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	797	200	306	358	885	1,636	1,717	1,958	1,103	423	300	300
20%	797	200	211	232	415	1,521	1,633	1,815	979	307	300	300
30%	774	200	200	232	274	343	1,553	1,595	940	300	283	250
40%	774	200	200	226	236	200	1,487	1,555	759	297	283	250
50%	636	200	200	226	236	200	1,400	1,341	363	265	283	249
60%	636	200	200	219	229	200	1,324	1,242	342	265	283	249
70%	636	200	200	219	222	200	1,134	1,068	270	265	283	249
80%	577	200	200	213	221	200	825	887	255	265	283	249
90%	577	200	200	213	214	200	767	798	255	265	283	249
Long Term												
Full Simulation Period ^b	711	276	345	520	580	712	1,317	1,375	660	369	332	341
Water Year Types^c												
Wet (23%)	766	499	690	998	1,169	1,831	1,502	1,730	1,093	619	523	655
Above Normal (24%)	705	211	298	676	659	645	1,170	1,553	962	353	292	267
Below Normal (10%)	733	225	225	281	345	365	1,416	1,267	462	269	285	256
Dry (16%)	690	208	216	233	312	200	1,454	1,370	366	275	277	245
Critical (27%)	674	200	210	221	242	234	1,175	948	257	260	253	224

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	128%	-50%	-24%	-11%	-52%	64%	14%	31%	-27%	-14%	-6%	0%
20%	128%	-44%	-41%	-35%	-52%	280%	9%	21%	-21%	-2%	0%	0%
30%	144%	-40%	-41%	-31%	-31%	0%	9%	16%	-1%	0%	-1%	-11%
40%	197%	-34%	-38%	-29%	-35%	-36%	20%	37%	6%	0%	0%	0%
50%	230%	-19%	-29%	-10%	-30%	-25%	59%	57%	-9%	-6%	0%	0%
60%	337%	-8%	-13%	20%	-25%	0%	104%	71%	14%	-2%	0%	0%
70%	417%	-3%	-6%	44%	-7%	26%	120%	74%	2%	0%	0%	0%
80%	402%	-1%	-3%	56%	26%	43%	79%	75%	0%	0%	0%	0%
90%	458%	6%	6%	75%	61%	63%	90%	82%	0%	0%	0%	0%
Long Term												
Full Simulation Period ^b	185%	-19%	-20%	-2%	-22%	20%	37%	40%	-21%	-15%	-14%	-13%
Water Year Types^c												
Wet (23%)	129%	-14%	-22%	-4%	-31%	15%	-1%	11%	-40%	-28%	-28%	-24%
Above Normal (24%)	185%	-22%	-10%	2%	-7%	33%	11%	46%	-2%	0%	2%	0%
Below Normal (10%)	189%	-26%	-26%	-16%	-35%	25%	30%	24%	12%	0%	1%	-2%
Dry (16%)	182%	-26%	-26%	-8%	-19%	8%	112%	84%	6%	0%	-2%	-1%
Critical (27%)	272%	-17%	-16%	9%	-5%	35%	130%	73%	-8%	-11%	-9%	-4%

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.4 Stanislaus River at Mouth Flow

Table 5C.3.2.4.1 Stanislaus River at Mouth, Monthly Flow

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,122	463	442	576	1,084	1,969	1,886	1,989	1,536	751	587	646
20%	1,029	384	368	427	643	1,708	1,769	1,647	1,334	606	488	507
30%	982	348	319	368	472	520	1,696	1,536	1,221	502	462	473
40%	958	337	304	347	406	433	1,610	1,362	1,053	442	445	443
50%	879	319	290	337	369	367	1,485	1,289	635	412	445	439
60%	826	292	281	326	331	336	936	873	510	383	416	428
70%	772	267	262	312	279	314	806	755	406	372	395	389
80%	755	260	241	295	253	241	686	646	358	341	371	360
90%	676	248	224	273	230	207	572	576	311	308	331	318
Long Term												
Full Simulation Period ^b	903	398	448	630	719	903	1,279	1,207	883	546	505	533
Water Year Types^c												
Wet (23%)	952	624	881	1,115	1,412	2,258	1,779	1,828	1,456	976	831	946
Above Normal (24%)	907	347	357	776	786	801	1,410	1,244	1,257	534	467	480
Below Normal (10%)	932	354	358	430	517	539	1,556	1,378	669	449	440	429
Dry (16%)	916	322	300	349	405	345	1,064	1,002	530	375	397	399
Critical (27%)	837	310	277	317	319	286	754	695	335	321	346	342

Revised Alternative 1

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	653	567	590	624	2,437	1,243	1,824	1,680	1,791	932	588	706
20%	577	482	480	506	987	615	1,626	1,588	1,545	564	488	506
30%	491	441	431	462	560	531	1,495	1,515	1,261	499	458	473
40%	424	409	382	434	498	458	1,303	1,285	1,041	443	445	446
50%	377	386	336	392	442	405	1,022	903	726	412	441	439
60%	314	344	312	279	399	311	716	756	418	389	420	431
70%	284	313	291	248	320	277	584	601	375	374	396	397
80%	248	270	270	229	232	226	469	541	347	349	374	370
90%	185	243	204	199	178	146	424	471	312	317	347	320
Long Term												
Full Simulation Period ^b	430	460	512	642	872	741	1,079	1,067	1,034	585	530	573
Water Year Types^c												
Wet (23%)	505	706	978	1,155	1,903	1,839	1,754	1,693	2,130	1,121	921	1,111
Above Normal (24%)	441	400	406	779	822	641	1,237	1,160	1,281	533	461	480
Below Normal (10%)	445	435	438	484	703	466	1,189	1,197	607	449	438	434
Dry (16%)	454	397	375	368	479	330	720	816	502	376	404	402
Critical (27%)	336	347	314	294	320	226	524	544	332	343	361	344

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-42%	22%	33%	8%	125%	-37%	-3%	-16%	17%	24%	0%	9%
20%	-44%	26%	31%	19%	54%	-64%	-8%	-4%	16%	-7%	0%	0%
30%	-50%	27%	35%	26%	19%	2%	-12%	-1%	3%	-1%	-1%	0%
40%	-56%	21%	25%	25%	23%	6%	-19%	-6%	-1%	0%	0%	1%
50%	-57%	21%	16%	16%	20%	10%	-31%	-30%	14%	0%	-1%	0%
60%	-62%	18%	11%	-14%	21%	-7%	-23%	-13%	-18%	1%	1%	1%
70%	-63%	18%	11%	-20%	14%	-12%	-28%	-20%	-8%	0%	0%	2%
80%	-67%	4%	12%	-22%	-8%	-6%	-32%	-16%	-3%	3%	1%	3%
90%	-73%	-2%	-9%	-27%	-22%	-29%	-26%	-18%	0%	3%	5%	1%
Long Term												
Full Simulation Period ^b	-52%	16%	14%	2%	21%	-18%	-16%	-12%	17%	7%	5%	7%
Water Year Types^c												
Wet (23%)	-47%	13%	11%	4%	35%	-19%	-1%	-7%	46%	15%	11%	17%
Above Normal (24%)	-51%	15%	14%	0%	5%	-20%	-12%	-7%	2%	0%	-1%	0%
Below Normal (10%)	-52%	23%	23%	13%	36%	-14%	-24%	-13%	-9%	0%	0%	1%
Dry (16%)	-50%	23%	25%	5%	18%	-4%	-32%	-19%	-5%	0%	2%	1%
Critical (27%)	-60%	12%	13%	-7%	0%	-21%	-30%	-22%	-1%	7%	4%	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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.4.2 Stanislaus River at Mouth, Monthly Flow

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	653	567	590	624	2,437	1,243	1,824	1,680	1,791	932	588	706
20%	577	482	480	506	987	615	1,626	1,588	1,545	564	488	506
30%	491	441	431	462	560	531	1,495	1,515	1,261	499	458	473
40%	424	409	382	434	498	458	1,303	1,285	1,041	443	445	446
50%	377	386	336	392	442	405	1,022	903	726	412	441	439
60%	314	344	312	279	399	311	716	756	418	389	420	431
70%	284	313	291	248	320	277	584	601	375	374	396	397
80%	248	270	270	229	232	226	469	541	347	349	374	370
90%	185	243	204	199	178	146	424	471	312	317	347	320
Long Term												
Full Simulation Period ^b	430	460	512	642	872	741	1,079	1,067	1,034	585	530	573
Water Year Types^c												
Wet (23%)	505	706	978	1,155	1,903	1,839	1,754	1,693	2,130	1,121	921	1,111
Above Normal (24%)	441	400	406	779	822	641	1,237	1,160	1,281	533	461	480
Below Normal (10%)	445	435	438	484	703	466	1,189	1,197	607	449	438	434
Dry (16%)	454	397	375	368	479	330	720	816	502	376	404	402
Critical (27%)	336	347	314	294	320	226	524	544	332	343	361	344

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,122	463	442	576	1,084	1,969	1,886	1,989	1,536	751	587	646
20%	1,029	384	368	427	643	1,708	1,769	1,647	1,334	606	488	507
30%	982	348	319	368	472	520	1,696	1,536	1,221	502	462	473
40%	958	337	304	347	406	433	1,610	1,362	1,053	442	445	443
50%	879	319	290	337	369	367	1,485	1,289	635	412	445	439
60%	826	292	281	326	331	336	936	873	510	383	416	428
70%	772	267	262	312	279	314	806	755	406	372	395	389
80%	755	260	241	295	253	241	686	646	358	341	371	360
90%	676	248	224	273	230	207	572	576	311	308	331	318
Long Term												
Full Simulation Period ^b	903	398	448	630	719	903	1,279	1,207	883	546	505	533
Water Year Types^c												
Wet (23%)	952	624	881	1,115	1,412	2,258	1,779	1,828	1,456	976	831	946
Above Normal (24%)	907	347	357	776	786	801	1,410	1,244	1,257	534	467	480
Below Normal (10%)	932	354	358	430	517	539	1,556	1,378	669	449	440	429
Dry (16%)	916	322	300	349	405	345	1,064	1,002	530	375	397	399
Critical (27%)	837	310	277	317	319	286	754	695	335	321	346	342

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	72%	-18%	-25%	-8%	-56%	58%	3%	18%	-14%	-19%	0%	-9%
20%	78%	-20%	-23%	-16%	-35%	178%	9%	4%	-14%	7%	0%	0%
30%	100%	-21%	-26%	-20%	-16%	-2%	13%	1%	-3%	1%	1%	0%
40%	126%	-18%	-20%	-20%	-19%	-5%	24%	6%	1%	0%	0%	-1%
50%	133%	-17%	-14%	-14%	-16%	-9%	45%	43%	-13%	0%	1%	0%
60%	163%	-15%	-10%	17%	-17%	8%	31%	15%	22%	-1%	-1%	-1%
70%	171%	-15%	-10%	26%	-13%	13%	38%	26%	8%	0%	0%	-2%
80%	204%	-4%	-11%	29%	9%	7%	46%	19%	3%	-2%	-1%	-3%
90%	265%	2%	10%	37%	29%	42%	35%	22%	0%	-3%	-5%	-1%
Long Term												
Full Simulation Period ^b	110%	-13%	-13%	-2%	-18%	22%	19%	13%	-15%	-7%	-5%	-7%
Water Year Types^c												
Wet (23%)	88%	-12%	-10%	-3%	-26%	23%	1%	8%	-32%	-13%	-10%	-15%
Above Normal (24%)	106%	-13%	-12%	0%	-4%	25%	14%	7%	-2%	0%	1%	0%
Below Normal (10%)	109%	-19%	-18%	-11%	-26%	16%	31%	15%	10%	0%	0%	-1%
Dry (16%)	102%	-19%	-20%	-5%	-15%	4%	48%	23%	6%	0%	-2%	-1%
Critical (27%)	149%	-11%	-12%	8%	0%	27%	44%	28%	1%	-6%	-4%	-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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.4.3 Stanislaus River at Mouth, Monthly Flow

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	653	567	590	624	2,437	1,243	1,824	1,680	1,791	932	588	706
20%	577	482	480	506	987	615	1,626	1,588	1,545	564	488	506
30%	491	441	431	462	560	531	1,495	1,515	1,261	499	458	473
40%	424	409	382	434	498	458	1,303	1,285	1,041	443	445	446
50%	377	386	336	392	442	405	1,022	903	726	412	441	439
60%	314	344	312	279	399	311	716	756	418	389	420	431
70%	284	313	291	248	320	277	584	601	375	374	396	397
80%	248	270	270	229	232	226	469	541	347	349	374	370
90%	185	243	204	199	178	146	424	471	312	317	347	320
Long Term												
Full Simulation Period ^b	430	460	512	642	872	741	1,079	1,067	1,034	585	530	573
Water Year Types^c												
Wet (23%)	505	706	978	1,155	1,903	1,839	1,754	1,693	2,130	1,121	921	1,111
Above Normal (24%)	441	400	406	779	822	641	1,237	1,160	1,281	533	461	480
Below Normal (10%)	445	435	438	484	703	466	1,189	1,197	607	449	438	434
Dry (16%)	454	397	375	368	479	330	720	816	502	376	404	402
Critical (27%)	336	347	314	294	320	226	524	544	332	343	361	344

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	679	485	722	1,267	2,628	1,444	1,865	1,414	950	885	571	1,146
20%	557	456	438	518	1,301	734	1,634	1,306	679	535	480	489
30%	482	441	411	410	502	486	1,552	1,233	558	476	457	450
40%	448	424	400	374	416	419	1,240	1,043	428	424	445	439
50%	435	402	381	311	366	367	1,064	920	413	382	440	435
60%	392	372	362	275	308	334	996	882	374	374	410	415
70%	377	359	325	251	238	312	893	829	352	350	390	384
80%	360	333	300	232	201	238	575	550	304	327	367	360
90%	293	260	239	198	180	203	493	489	273	290	347	320
Long Term												
Full Simulation Period ^b	482	469	558	669	938	770	1,180	995	693	573	535	578
Water Year Types^c												
Wet (23%)	539	714	1,096	1,183	2,227	1,841	1,781	1,437	1,596	1,213	961	1,139
Above Normal (24%)	516	418	468	818	843	708	1,341	1,054	550	446	457	473
Below Normal (10%)	461	404	408	632	723	446	1,230	1,086	449	445	438	422
Dry (16%)	495	399	377	365	463	345	849	803	411	365	404	402
Critical (27%)	401	369	336	282	272	271	692	639	299	305	351	351

Alternative 3 minus Revised Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	4%	-14%	22%	103%	8%	16%	2%	-16%	-47%	-5%	-3%	62%
20%	-3%	-5%	-9%	2%	32%	19%	1%	-18%	-56%	-5%	-2%	-3%
30%	-2%	0%	-5%	-11%	-10%	-8%	4%	-19%	-56%	-4%	0%	-5%
40%	6%	4%	5%	-14%	-16%	-8%	-5%	-19%	-59%	-4%	0%	-1%
50%	15%	4%	13%	-21%	-17%	-9%	4%	2%	-43%	-7%	0%	-1%
60%	25%	8%	16%	-2%	-23%	7%	39%	17%	-11%	-4%	-2%	-4%
70%	33%	15%	12%	1%	-25%	12%	53%	38%	-6%	-6%	-2%	-3%
80%	45%	23%	11%	1%	-13%	6%	23%	2%	-13%	-6%	-2%	-3%
90%	58%	7%	17%	0%	1%	39%	16%	4%	-13%	-9%	0%	0%
Long Term												
Full Simulation Period ^b	12%	2%	9%	4%	8%	4%	9%	-7%	-33%	-2%	1%	1%
Water Year Types^c												
Wet (23%)	7%	1%	12%	2%	17%	0%	2%	-15%	-25%	8%	4%	2%
Above Normal (24%)	17%	5%	15%	5%	3%	11%	8%	-9%	-57%	-16%	-1%	-2%
Below Normal (10%)	3%	-7%	-7%	30%	3%	-4%	3%	-9%	-26%	-1%	0%	-3%
Dry (16%)	9%	1%	1%	-1%	-3%	4%	18%	-2%	-18%	-3%	0%	0%
Critical (27%)	19%	6%	7%	-4%	-15%	20%	32%	17%	-10%	-11%	-3%	2%

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.4.4 Stanislaus River at Mouth, Monthly Flow

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	653	567	590	624	2,437	1,243	1,824	1,680	1,791	932	588	706
20%	577	482	480	506	987	615	1,626	1,588	1,545	564	488	506
30%	491	441	431	462	560	531	1,495	1,515	1,261	499	458	473
40%	424	409	382	434	498	458	1,303	1,285	1,041	443	445	446
50%	377	386	336	392	442	405	1,022	903	726	412	441	439
60%	314	344	312	279	399	311	716	756	418	389	420	431
70%	284	313	291	248	320	277	584	601	375	374	396	397
80%	248	270	270	229	232	226	469	541	347	349	374	370
90%	185	243	204	199	178	146	424	471	312	317	347	320
Long Term												
Full Simulation Period ^b	430	460	512	642	872	741	1,079	1,067	1,034	585	530	573
Water Year Types^c												
Wet (23%)	505	706	978	1,155	1,903	1,839	1,754	1,693	2,130	1,121	921	1,111
Above Normal (24%)	441	400	406	779	822	641	1,237	1,160	1,281	533	461	480
Below Normal (10%)	445	435	438	484	703	466	1,189	1,197	607	449	438	434
Dry (16%)	454	397	375	368	479	330	720	816	502	376	404	402
Critical (27%)	336	347	314	294	320	226	524	544	332	343	361	344

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,121	456	442	570	1,081	1,952	1,950	2,148	1,536	719	571	659
20%	1,029	382	378	416	586	1,708	1,815	1,974	1,319	564	488	501
30%	979	348	319	363	483	495	1,707	1,806	1,139	502	461	473
40%	903	336	304	347	401	415	1,630	1,672	1,034	442	445	443
50%	854	318	290	337	368	365	1,529	1,434	635	407	443	439
60%	818	292	281	326	319	333	1,311	1,290	485	382	413	428
70%	764	267	262	312	272	312	1,168	1,183	383	371	389	389
80%	748	260	241	295	245	241	1,044	962	343	339	367	356
90%	681	248	224	270	230	207	865	752	300	307	305	316
Long Term												
Full Simulation Period ^b	891	396	428	631	704	860	1,437	1,458	863	521	476	522
Water Year Types^c												
Wet (23%)	937	624	784	1,115	1,380	2,073	1,744	1,866	1,409	880	716	909
Above Normal (24%)	898	342	372	790	770	801	1,356	1,651	1,257	534	467	480
Below Normal (10%)	925	354	358	430	516	539	1,518	1,444	656	449	440	429
Dry (16%)	900	322	300	347	403	345	1,488	1,442	522	375	397	399
Critical (27%)	829	306	272	311	306	286	1,187	944	310	311	337	335

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	72%	-20%	-25%	-9%	-56%	57%	7%	28%	-14%	-23%	-3%	-7%
20%	78%	-21%	-21%	-18%	-41%	178%	12%	24%	-15%	0%	0%	-1%
30%	99%	-21%	-26%	-22%	-14%	-7%	14%	19%	-10%	1%	1%	0%
40%	113%	-18%	-20%	-20%	-19%	-9%	25%	30%	-1%	0%	0%	-1%
50%	127%	-18%	-14%	-14%	-17%	-10%	50%	59%	-13%	-1%	0%	0%
60%	160%	-15%	-10%	17%	-20%	7%	83%	71%	16%	-2%	-2%	-1%
70%	169%	-15%	-10%	26%	-15%	12%	100%	97%	2%	-1%	-2%	-2%
80%	201%	-4%	-11%	29%	6%	7%	122%	78%	-1%	-3%	-2%	-4%
90%	268%	2%	10%	36%	29%	42%	104%	60%	-4%	-3%	-12%	-1%
Long Term												
Full Simulation Period ^b	107%	-14%	-16%	-2%	-19%	16%	33%	37%	-17%	-11%	-10%	-9%
Water Year Types^c												
Wet (23%)	85%	-12%	-20%	-3%	-28%	13%	-1%	10%	-34%	-21%	-22%	-18%
Above Normal (24%)	104%	-15%	-8%	1%	-6%	25%	10%	42%	-2%	0%	1%	0%
Below Normal (10%)	108%	-19%	-18%	-11%	-27%	16%	28%	21%	8%	0%	0%	-1%
Dry (16%)	98%	-19%	-20%	-6%	-16%	4%	107%	77%	4%	0%	-2%	-1%
Critical (27%)	147%	-12%	-13%	6%	-4%	27%	127%	74%	-6%	-9%	-7%	-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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.5 Stanislaus River below New Melones Temperature

Table 5C.3.2.5.1 Stanislaus River below New Melones Reservoir, Monthly Temperature

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	58.8	56.0	53.6	52.1	51.1	50.7	51.0	51.6	52.6	53.7	55.1	57.5
20%	55.6	54.6	52.7	51.5	50.4	49.9	50.2	51.1	51.8	52.5	53.0	54.4
30%	53.4	53.3	52.3	50.9	49.7	49.5	49.9	50.5	51.1	51.8	52.5	53.0
40%	52.9	52.8	51.8	50.6	49.4	49.2	49.7	50.3	50.8	51.4	51.9	52.5
50%	52.4	52.5	51.6	50.2	49.2	49.0	49.3	49.7	50.3	51.1	51.6	52.0
60%	52.0	52.1	51.4	49.9	48.9	48.7	48.9	49.3	49.7	50.4	50.9	51.4
70%	51.4	51.6	51.0	49.6	48.7	48.1	48.4	49.0	49.3	50.0	50.5	51.0
80%	51.1	51.2	50.3	49.2	48.0	47.5	48.0	48.4	48.9	49.6	50.1	50.7
90%	49.9	49.9	49.8	48.3	47.0	46.8	46.9	47.2	47.5	48.5	48.9	49.3
Long Term												
Full Simulation Period ^b	53.4	52.8	51.7	50.2	49.1	48.8	49.2	49.9	50.6	51.3	52.2	53.1
Water Year Types^c												
Wet (23%)	49.6	49.6	48.7	49.4	48.1	47.9	47.8	48.1	48.5	49.0	49.5	49.9
Above Normal (24%)	53.8	52.7	51.2	49.5	48.2	48.0	48.4	48.9	49.6	50.4	51.4	52.2
Below Normal (10%)	52.6	52.2	51.3	50.2	49.2	48.8	49.1	49.6	50.2	50.9	51.5	52.1
Dry (16%)	52.3	52.4	51.8	50.7	49.8	49.4	49.7	50.3	51.0	51.9	52.9	53.8
Critical (27%)	54.8	53.7	52.5	51.2	50.4	50.0	50.8	52.1	53.1	53.9	54.9	56.8

Revised Alternative 1

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	54.7	54.8	53.5	52.1	51.2	50.7	51.0	51.5	52.1	53.0	53.7	54.1
20%	53.8	53.9	52.7	51.5	50.4	50.1	50.2	50.9	51.5	52.0	52.7	53.1
30%	52.8	52.8	52.3	50.9	50.0	49.6	49.9	50.4	50.9	51.4	52.2	52.5
40%	52.3	52.3	51.7	50.7	49.6	49.3	49.7	50.2	50.6	51.1	51.7	52.0
50%	51.8	51.9	51.4	50.3	49.4	49.1	49.3	49.6	50.1	50.7	51.3	51.6
60%	51.3	51.6	51.3	50.1	49.1	48.7	48.9	49.3	49.8	50.3	50.7	51.1
70%	51.1	51.4	51.0	49.8	48.9	48.4	48.7	49.0	49.4	50.0	50.5	50.8
80%	50.6	50.9	50.6	49.4	48.5	48.0	47.9	48.4	49.1	49.5	50.0	50.4
90%	49.8	50.0	50.1	49.1	47.6	47.1	47.2	47.5	48.0	48.6	49.1	49.4
Long Term												
Full Simulation Period ^b	52.5	52.4	51.6	50.4	49.4	49.0	49.2	49.7	50.2	50.9	51.8	52.2
Water Year Types^c												
Wet (23%)	48.9	49.0	48.5	49.5	48.2	47.9	48.0	48.3	48.7	49.1	49.6	50.0
Above Normal (24%)	53.1	52.8	51.6	49.9	48.7	48.2	48.4	48.8	49.4	50.0	50.8	51.4
Below Normal (10%)	51.5	51.6	51.1	50.4	49.4	49.0	49.2	49.6	50.1	50.6	51.1	51.6
Dry (16%)	51.5	51.7	51.4	50.6	49.9	49.6	49.8	50.2	50.8	51.3	51.9	52.5
Critical (27%)	53.6	53.4	52.4	51.4	50.7	50.2	50.6	51.4	52.2	53.2	54.8	55.0

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-4.1	-1.3	-0.2	0.0	0.1	0.0	0.0	-0.1	-0.5	-0.7	-1.4	-3.4
20%	-1.9	-0.7	-0.1	0.0	0.0	0.2	0.0	-0.2	-0.3	-0.5	-0.3	-1.3
30%	-0.6	-0.4	0.0	0.0	0.2	0.1	0.0	-0.1	-0.2	-0.4	-0.3	-0.5
40%	-0.7	-0.5	-0.2	0.1	0.2	0.1	0.0	-0.1	-0.2	-0.3	-0.2	-0.5
50%	-0.6	-0.6	-0.1	0.1	0.2	0.1	0.0	-0.1	-0.2	-0.4	-0.3	-0.4
60%	-0.7	-0.5	0.0	0.2	0.1	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.3
70%	-0.2	-0.2	0.0	0.2	0.2	0.3	0.3	0.1	0.1	-0.1	0.0	-0.2
80%	-0.5	-0.3	0.2	0.2	0.5	0.5	-0.1	0.0	0.2	-0.1	-0.1	-0.4
90%	-0.1	0.1	0.3	0.8	0.6	0.2	0.2	0.3	0.4	0.1	0.2	0.1
Long Term												
Full Simulation Period ^b	-0.9	-0.4	0.0	0.2	0.3	0.2	0.0	-0.2	-0.3	-0.4	-0.4	-0.9
Water Year Types^c												
Wet (23%)	-0.7	-0.6	-0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.0
Above Normal (24%)	-0.7	0.1	0.4	0.4	0.5	0.2	0.0	-0.1	-0.2	-0.4	-0.6	-0.8
Below Normal (10%)	-1.1	-0.6	-0.2	0.1	0.2	0.2	0.0	-0.1	-0.3	-0.4	-0.5	-0.5
Dry (16%)	-0.8	-0.7	-0.4	-0.1	0.1	0.2	0.1	-0.1	-0.2	-0.6	-1.0	-1.3
Critical (27%)	-1.2	-0.2	0.0	0.2	0.3	0.3	-0.2	-0.7	-1.0	-0.7	-0.2	-1.8

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.5.2 Stanislaus River below New Melones Reservoir, Monthly Temperature

Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	54.7	54.8	53.5	52.1	51.2	50.7	51.0	51.5	52.1	53.0	53.7	54.1
20%	53.8	53.9	52.7	51.5	50.4	50.1	50.2	50.9	51.5	52.0	52.7	53.1
30%	52.8	52.8	52.3	50.9	50.0	49.6	49.9	50.4	50.9	51.4	52.2	52.5
40%	52.3	52.3	51.7	50.7	49.6	49.3	49.7	50.2	50.6	51.1	51.7	52.0
50%	51.8	51.9	51.4	50.3	49.4	49.1	49.3	49.6	50.1	50.7	51.3	51.6
60%	51.3	51.6	51.3	50.1	49.1	48.7	48.9	49.3	49.8	50.3	50.7	51.1
70%	51.1	51.4	51.0	49.8	48.9	48.4	48.7	49.0	49.4	50.0	50.5	50.8
80%	50.6	50.9	50.6	49.4	48.5	48.0	47.9	48.4	49.1	49.5	50.0	50.4
90%	49.8	50.0	50.1	49.1	47.6	47.1	47.2	47.5	48.0	48.6	49.1	49.4
Long Term												
Full Simulation Period ^b	52.5	52.4	51.6	50.4	49.4	49.0	49.2	49.7	50.2	50.9	51.8	52.2
Water Year Types^c												
Wet (23%)	48.9	49.0	48.5	49.5	48.2	47.9	48.0	48.3	48.7	49.1	49.6	50.0
Above Normal (24%)	53.1	52.8	51.6	49.9	48.7	48.2	48.4	48.8	49.4	50.0	50.8	51.4
Below Normal (10%)	51.5	51.6	51.1	50.4	49.4	49.0	49.2	49.6	50.1	50.6	51.1	51.6
Dry (16%)	51.5	51.7	51.4	50.6	49.9	49.6	49.8	50.2	50.8	51.3	51.9	52.5
Critical (27%)	53.6	53.4	52.4	51.4	50.7	50.2	50.6	51.4	52.2	53.2	54.8	55.0

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	58.8	56.0	53.6	52.1	51.1	50.7	51.0	51.6	52.6	53.7	55.1	57.5
20%	55.6	54.6	52.7	51.5	50.4	49.9	50.2	51.1	51.8	52.5	53.0	54.4
30%	53.4	53.3	52.3	50.9	49.7	49.5	49.9	50.5	51.1	51.8	52.5	53.0
40%	52.9	52.8	51.8	50.6	49.4	49.2	49.7	50.3	50.8	51.4	51.9	52.5
50%	52.4	52.5	51.6	50.2	49.2	49.0	49.3	49.7	50.3	51.1	51.6	52.0
60%	52.0	52.1	51.4	49.9	48.9	48.7	48.9	49.3	49.7	50.4	50.9	51.4
70%	51.4	51.6	51.0	49.6	48.7	48.1	48.4	49.0	49.3	50.0	50.5	51.0
80%	51.1	51.2	50.3	49.2	48.0	47.5	48.0	48.4	48.9	49.6	50.1	50.7
90%	49.9	49.9	49.8	48.3	47.0	46.8	46.9	47.2	47.5	48.5	48.9	49.3
Long Term												
Full Simulation Period ^b	53.4	52.8	51.7	50.2	49.1	48.8	49.2	49.9	50.6	51.3	52.2	53.1
Water Year Types^c												
Wet (23%)	49.6	49.6	48.7	49.4	48.1	47.9	47.8	48.1	48.5	49.0	49.5	49.9
Above Normal (24%)	53.8	52.7	51.2	49.5	48.2	48.0	48.4	48.9	49.6	50.4	51.4	52.2
Below Normal (10%)	52.6	52.2	51.3	50.2	49.2	48.8	49.1	49.6	50.2	50.9	51.5	52.1
Dry (16%)	52.3	52.4	51.8	50.7	49.8	49.4	49.7	50.3	51.0	51.9	52.9	53.8
Critical (27%)	54.8	53.7	52.5	51.2	50.4	50.0	50.8	52.1	53.1	53.9	54.9	56.8

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	4.1	1.3	0.2	0.0	-0.1	0.0	0.0	0.1	0.5	0.7	1.4	3.4
20%	1.9	0.7	0.1	0.0	0.0	-0.2	0.0	0.2	0.3	0.5	0.3	1.3
30%	0.6	0.4	0.0	0.0	-0.2	-0.1	0.0	0.1	0.2	0.4	0.3	0.5
40%	0.7	0.5	0.2	-0.1	-0.2	-0.1	0.0	0.1	0.2	0.3	0.2	0.5
50%	0.6	0.6	0.1	-0.1	-0.2	-0.1	0.0	0.1	0.2	0.4	0.3	0.4
60%	0.7	0.5	0.0	-0.2	-0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.3
70%	0.2	0.2	0.0	-0.2	-0.2	-0.3	-0.3	-0.1	-0.1	0.1	0.0	0.2
80%	0.5	0.3	-0.2	-0.2	-0.5	-0.5	0.1	0.0	-0.2	0.1	0.1	0.4
90%	0.1	-0.1	-0.3	-0.8	-0.6	-0.2	-0.2	-0.3	-0.4	-0.1	-0.2	-0.1
Long Term												
Full Simulation Period ^b	0.9	0.4	0.0	-0.2	-0.3	-0.2	0.0	0.2	0.3	0.4	0.4	0.9
Water Year Types^c												
Wet (23%)	0.7	0.6	0.2	-0.1	-0.2	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	0.0
Above Normal (24%)	0.7	-0.1	-0.4	-0.4	-0.5	-0.2	0.0	0.1	0.2	0.4	0.6	0.8
Below Normal (10%)	1.1	0.6	0.2	-0.1	-0.2	-0.2	0.0	0.1	0.3	0.4	0.5	0.5
Dry (16%)	0.8	0.7	0.4	0.1	-0.1	-0.2	-0.1	0.1	0.2	0.6	1.0	1.3
Critical (27%)	1.2	0.2	0.0	-0.2	-0.3	-0.3	0.2	0.7	1.0	0.7	0.2	1.8

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.5.3 Stanislaus River below New Melones Reservoir, Monthly Temperature

Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	54.7	54.8	53.5	52.1	51.2	50.7	51.0	51.5	52.1	53.0	53.7	54.1
20%	53.8	53.9	52.7	51.5	50.4	50.1	50.2	50.9	51.5	52.0	52.7	53.1
30%	52.8	52.8	52.3	50.9	50.0	49.6	49.9	50.4	50.9	51.4	52.2	52.5
40%	52.3	52.3	51.7	50.7	49.6	49.3	49.7	50.2	50.6	51.1	51.7	52.0
50%	51.8	51.9	51.4	50.3	49.4	49.1	49.3	49.6	50.1	50.7	51.3	51.6
60%	51.3	51.6	51.3	50.1	49.1	48.7	48.9	49.3	49.8	50.3	50.7	51.1
70%	51.1	51.4	51.0	49.8	48.9	48.4	48.7	49.0	49.4	50.0	50.5	50.8
80%	50.6	50.9	50.6	49.4	48.5	48.0	47.9	48.4	49.1	49.5	50.0	50.4
90%	49.8	50.0	50.1	49.1	47.6	47.1	47.2	47.5	48.0	48.6	49.1	49.4
Long Term												
Full Simulation Period ^b	52.5	52.4	51.6	50.4	49.4	49.0	49.2	49.7	50.2	50.9	51.8	52.2
Water Year Types^c												
Wet (23%)	48.9	49.0	48.5	49.5	48.2	47.9	48.0	48.3	48.7	49.1	49.6	50.0
Above Normal (24%)	53.1	52.8	51.6	49.9	48.7	48.2	48.4	48.8	49.4	50.0	50.8	51.4
Below Normal (10%)	51.5	51.6	51.1	50.4	49.4	49.0	49.2	49.6	50.1	50.6	51.1	51.6
Dry (16%)	51.5	51.7	51.4	50.6	49.9	49.6	49.8	50.2	50.8	51.3	51.9	52.5
Critical (27%)	53.6	53.4	52.4	51.4	50.7	50.2	50.6	51.4	52.2	53.2	54.8	55.0

Alternative 3

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	55.7	55.3	53.2	52.3	51.1	50.8	51.1	51.6	52.2	53.0	53.7	54.9
20%	53.6	53.7	52.5	51.4	50.4	50.1	50.3	50.9	51.6	52.1	52.6	53.3
30%	52.6	52.7	52.1	51.0	49.9	49.6	50.0	50.4	50.9	51.5	52.0	52.5
40%	52.1	52.3	51.7	50.6	49.5	49.3	49.7	50.2	50.5	51.2	51.6	52.0
50%	51.7	51.9	51.4	50.3	49.5	49.2	49.3	49.6	50.0	50.6	51.1	51.5
60%	51.3	51.6	51.3	50.0	49.1	48.7	49.0	49.3	49.7	50.2	50.7	51.2
70%	51.1	51.3	51.0	49.7	48.8	48.5	48.7	49.1	49.5	49.9	50.4	50.8
80%	50.6	50.8	50.5	49.3	48.4	48.1	48.2	48.5	48.9	49.3	49.7	50.4
90%	49.7	49.9	50.0	48.4	47.3	47.1	47.3	47.6	48.0	48.5	48.9	49.4
Long Term												
Full Simulation Period ^b	52.5	52.4	51.6	50.3	49.3	49.0	49.3	49.7	50.3	51.1	51.6	52.1
Water Year Types^c												
Wet (23%)	48.8	49.0	48.5	49.4	48.3	47.9	48.0	48.3	48.6	49.0	49.5	49.9
Above Normal (24%)	53.4	52.8	51.4	49.7	48.4	48.2	48.5	48.8	49.3	50.0	50.7	51.3
Below Normal (10%)	51.5	51.5	51.0	50.4	49.4	49.0	49.2	49.6	50.1	50.6	51.1	51.5
Dry (16%)	51.4	51.6	51.3	50.5	49.8	49.5	49.8	50.2	50.7	51.3	51.9	52.5
Critical (27%)	53.3	53.3	52.4	51.4	50.7	50.3	50.8	51.5	52.6	53.9	54.4	54.7

Alternative 3 minus Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0.9	0.5	-0.2	0.2	-0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.8
20%	-0.1	-0.2	-0.1	-0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.2
30%	-0.1	-0.1	-0.2	0.0	-0.1	0.0	0.1	0.0	0.0	0.0	-0.2	0.0
40%	-0.2	-0.1	0.0	-0.1	-0.1	0.0	0.0	0.0	-0.1	0.1	-0.1	-0.1
50%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.1
60%	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.0	0.0	-0.1	0.0	0.0
70%	-0.1	-0.1	0.0	-0.1	-0.1	0.1	0.1	0.0	0.0	-0.1	-0.1	0.0
80%	0.0	-0.2	0.0	-0.1	-0.1	0.0	0.3	0.1	-0.1	-0.2	-0.3	0.0
90%	-0.2	-0.1	-0.1	-0.7	-0.2	0.1	0.1	0.1	0.1	0.0	-0.2	0.0
Long Term												
Full Simulation Period ^b	0.0	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.0	0.1	0.2	-0.1	-0.1
Water Year Types^c												
Wet (23%)	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
Above Normal (24%)	0.3	0.0	-0.2	-0.2	-0.3	-0.1	0.1	0.0	0.0	-0.1	-0.1	0.0
Below Normal (10%)	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dry (16%)	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Critical (27%)	-0.3	-0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.4	0.7	-0.4	-0.3

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.5.4 Stanislaus River below New Melones Reservoir, Monthly Temperature

Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	54.7	54.8	53.5	52.1	51.2	50.7	51.0	51.5	52.1	53.0	53.7	54.1
20%	53.8	53.9	52.7	51.5	50.4	50.1	50.2	50.9	51.5	52.0	52.7	53.1
30%	52.8	52.8	52.3	50.9	50.0	49.6	49.9	50.4	50.9	51.4	52.2	52.5
40%	52.3	52.3	51.7	50.7	49.6	49.3	49.7	50.2	50.6	51.1	51.7	52.0
50%	51.8	51.9	51.4	50.3	49.4	49.1	49.3	49.6	50.1	50.7	51.3	51.6
60%	51.3	51.6	51.3	50.1	49.1	48.7	48.9	49.3	49.8	50.3	50.7	51.1
70%	51.1	51.4	51.0	49.8	48.9	48.4	48.7	49.0	49.4	50.0	50.5	50.8
80%	50.6	50.9	50.6	49.4	48.5	48.0	47.9	48.4	49.1	49.5	50.0	50.4
90%	49.8	50.0	50.1	49.1	47.6	47.1	47.2	47.5	48.0	48.6	49.1	49.4
Long Term												
Full Simulation Period ^b	52.5	52.4	51.6	50.4	49.4	49.0	49.2	49.7	50.2	50.9	51.8	52.2
Water Year Types^c												
Wet (23%)	48.9	49.0	48.5	49.5	48.2	47.9	48.0	48.3	48.7	49.1	49.6	50.0
Above Normal (24%)	53.1	52.8	51.6	49.9	48.7	48.2	48.4	48.8	49.4	50.0	50.8	51.4
Below Normal (10%)	51.5	51.6	51.1	50.4	49.4	49.0	49.2	49.6	50.1	50.6	51.1	51.6
Dry (16%)	51.5	51.7	51.4	50.6	49.9	49.6	49.8	50.2	50.8	51.3	51.9	52.5
Critical (27%)	53.6	53.4	52.4	51.4	50.7	50.2	50.6	51.4	52.2	53.2	54.8	55.0

Alternative 5

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	60.7	57.0	53.9	52.0	51.0	50.7	51.2	52.3	53.1	55.4	59.8	63.1
20%	56.7	55.0	52.8	51.4	50.3	50.0	50.4	51.4	52.0	53.4	54.4	55.9
30%	54.4	53.7	52.3	50.9	49.6	49.5	50.0	50.7	51.3	52.2	53.1	53.8
40%	53.2	53.1	51.9	50.4	49.4	49.1	49.8	50.3	50.8	51.5	52.1	52.8
50%	52.5	52.6	51.6	50.2	49.0	49.0	49.3	49.9	50.3	51.2	51.7	52.1
60%	52.1	52.3	51.2	49.7	48.7	48.6	48.9	49.4	49.7	50.4	50.9	51.5
70%	51.5	51.8	51.0	49.4	48.3	48.0	48.5	48.9	49.3	50.0	50.6	51.1
80%	51.1	51.3	50.2	48.9	47.3	47.3	47.6	48.1	48.5	49.5	50.1	50.7
90%	49.9	50.1	49.5	47.8	46.3	46.3	46.7	47.1	47.4	48.4	48.9	49.5
Long Term												
Full Simulation Period ^b	54.0	53.1	51.7	50.0	48.9	48.7	49.2	50.0	50.4	51.7	52.8	53.9
Water Year Types^c												
Wet (23%)	50.1	49.7	48.7	49.3	47.9	47.7	47.6	48.0	48.4	48.9	49.4	49.9
Above Normal (24%)	54.7	53.3	51.2	49.3	47.9	47.9	48.3	48.9	49.7	50.6	51.7	52.6
Below Normal (10%)	52.9	51.6	50.7	49.7	48.9	48.6	49.1	49.8	50.4	51.2	52.1	52.9
Dry (16%)	53.0	53.0	52.1	50.7	49.7	49.3	49.7	50.6	51.6	52.9	53.1	54.4
Critical (27%)	55.3	54.0	52.4	50.9	50.0	50.0	51.1	52.6	52.0	54.5	56.8	58.5

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	6.0	2.2	0.4	-0.1	-0.1	0.0	0.2	0.7	1.0	2.4	6.1	9.0
20%	2.9	1.1	0.1	-0.1	-0.1	-0.1	0.2	0.5	0.5	1.3	1.7	2.8
30%	1.6	0.9	0.0	0.0	-0.3	-0.1	0.1	0.3	0.4	0.8	0.8	1.3
40%	0.9	0.7	0.2	-0.3	-0.2	-0.1	0.1	0.1	0.2	0.4	0.4	0.8
50%	0.7	0.7	0.2	-0.2	-0.4	-0.1	0.0	0.2	0.1	0.5	0.4	0.5
60%	0.8	0.6	-0.1	-0.4	-0.4	-0.1	0.0	0.1	-0.1	0.1	0.2	0.4
70%	0.4	0.4	0.0	-0.3	-0.5	-0.4	-0.1	-0.1	-0.1	0.1	0.1	0.3
80%	0.5	0.4	-0.3	-0.5	-1.2	-0.7	-0.2	-0.3	-0.5	0.0	0.1	0.4
90%	0.1	0.1	-0.6	-1.3	-1.2	-0.7	-0.5	-0.4	-0.5	-0.1	-0.2	0.1
Long Term												
Full Simulation Period ^b	1.5	0.7	0.0	-0.4	-0.5	-0.3	0.0	0.4	0.1	0.8	1.0	1.7
Water Year Types^c												
Wet (23%)	1.2	0.7	0.2	-0.1	-0.3	-0.2	-0.4	-0.3	-0.3	-0.2	-0.1	0.0
Above Normal (24%)	1.6	0.5	-0.4	-0.7	-0.8	-0.3	-0.1	0.1	0.3	0.6	1.0	1.2
Below Normal (10%)	1.4	0.0	-0.4	-0.7	-0.5	-0.4	-0.1	0.1	0.3	0.6	1.0	1.3
Dry (16%)	1.5	1.3	0.7	0.1	-0.2	-0.3	-0.1	0.4	0.8	1.6	1.2	2.0
Critical (27%)	1.7	0.6	0.0	-0.6	-0.7	-0.3	0.6	1.2	-0.1	1.3	2.0	3.5

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.6 Stanislaus River below Tulloch Reservoir Temperature

Table 5C.3.2.6.1 Stanislaus River below Tulloch Reservoir, Monthly Temperature

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	60.5	59.0	54.8	50.7	50.2	51.2	52.6	53.6	54.7	56.5	57.4	59.2
20%	57.4	56.6	53.3	50.3	49.5	50.6	52.1	53.0	54.1	55.0	55.7	56.7
30%	55.6	55.1	52.8	49.6	48.8	50.2	51.7	52.6	53.4	54.3	55.0	55.6
40%	55.1	54.6	52.0	49.1	48.5	49.8	51.3	52.4	52.9	53.9	54.5	55.0
50%	54.5	54.1	51.7	48.7	48.0	49.6	51.0	52.1	52.6	53.7	54.1	54.5
60%	54.1	53.9	51.4	48.3	47.8	49.3	50.6	51.6	52.2	52.8	53.5	54.0
70%	53.6	53.2	50.9	47.8	47.5	48.9	50.1	51.3	51.8	52.4	53.2	53.5
80%	53.2	52.6	50.4	47.1	46.7	48.4	49.7	51.0	51.4	51.8	52.8	53.1
90%	52.0	51.8	49.9	46.3	45.8	47.5	48.8	50.2	50.3	50.8	51.5	51.8
Long Term												
Full Simulation Period ^b	55.6	54.7	51.9	48.6	48.1	49.5	50.9	52.1	52.8	53.7	54.6	55.4
Water Year Types^c												
Wet (23%)	51.5	51.0	48.7	47.6	47.1	48.8	49.6	50.9	51.0	51.5	52.2	52.4
Above Normal (24%)	56.3	54.9	51.5	48.1	47.4	48.7	50.1	51.4	51.9	52.7	53.7	54.5
Below Normal (10%)	54.6	53.8	51.0	48.3	48.1	49.4	51.0	51.7	52.2	53.3	54.0	54.4
Dry (16%)	54.5	54.1	51.9	49.0	48.6	50.0	51.6	52.3	53.2	54.3	55.2	56.0
Critical (27%)	57.0	55.8	53.0	49.6	49.2	50.7	52.3	53.7	55.1	56.5	57.2	58.7

Revised Alternative 1

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	57.8	57.4	54.4	50.7	50.3	51.4	52.7	53.5	54.5	55.7	56.5	57.2
20%	56.0	55.9	53.4	50.0	49.6	50.7	52.0	52.8	53.8	54.8	55.3	55.7
30%	55.2	54.7	52.9	49.6	48.9	50.3	51.7	52.5	53.2	53.9	54.8	55.1
40%	54.7	54.4	51.9	49.1	48.7	49.9	51.3	52.3	53.0	53.7	54.2	54.6
50%	54.4	53.9	51.6	48.9	48.3	49.7	51.1	52.1	52.6	53.2	53.9	54.2
60%	53.9	53.4	51.4	48.4	47.9	49.4	50.8	51.7	52.2	52.7	53.4	53.6
70%	53.5	53.0	51.0	48.0	47.7	49.1	50.3	51.6	52.0	52.5	53.1	53.4
80%	53.1	52.7	50.6	47.5	47.3	48.6	49.9	51.0	51.5	51.8	52.6	52.9
90%	52.1	51.9	49.7	47.0	46.0	47.9	49.1	50.3	50.7	51.1	51.8	51.7
Long Term												
Full Simulation Period ^b	54.9	54.5	52.0	48.7	48.3	49.7	51.0	52.0	52.7	53.4	54.3	54.7
Water Year Types^c												
Wet (23%)	51.1	50.8	48.6	47.6	47.6	48.8	49.8	51.0	51.4	51.6	52.3	52.4
Above Normal (24%)	55.4	55.0	52.0	48.5	47.7	49.0	50.3	51.4	51.8	52.4	53.3	53.8
Below Normal (10%)	54.0	53.4	50.9	48.3	48.3	49.5	51.0	51.7	52.2	53.2	53.7	54.0
Dry (16%)	54.0	53.7	51.6	48.9	48.6	50.1	51.5	52.3	53.1	53.9	54.5	54.9
Critical (27%)	56.1	55.6	53.1	49.7	49.3	50.9	52.2	53.3	54.5	55.5	57.0	57.5

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-2.7	-1.6	-0.3	0.0	0.1	0.2	0.1	-0.1	-0.2	-0.8	-0.9	-2.0
20%	-1.3	-0.7	0.1	-0.3	0.1	0.2	-0.1	-0.1	-0.3	-0.3	-0.4	-1.0
30%	-0.5	-0.4	0.0	0.0	0.1	0.1	-0.1	-0.1	-0.2	-0.3	-0.3	-0.5
40%	-0.4	-0.2	-0.1	0.1	0.2	0.1	0.0	-0.1	0.1	-0.2	-0.3	-0.4
50%	-0.2	-0.2	-0.1	0.1	0.3	0.1	0.1	0.0	0.0	-0.5	-0.2	-0.3
60%	-0.2	-0.4	0.0	0.2	0.1	0.1	0.2	0.0	-0.1	-0.1	-0.1	-0.3
70%	-0.1	-0.2	0.1	0.2	0.1	0.1	0.2	0.3	0.2	0.0	-0.1	-0.1
80%	-0.1	0.1	0.1	0.3	0.5	0.2	0.2	0.0	0.1	0.0	-0.2	-0.1
90%	0.0	0.1	-0.2	0.7	0.2	0.4	0.3	0.1	0.4	0.3	0.3	-0.1
Long Term												
Full Simulation Period ^b	-0.7	-0.2	0.1	0.1	0.2	0.1	0.1	-0.1	-0.1	-0.4	-0.3	-0.7
Water Year Types^c												
Wet (23%)	-0.4	-0.3	-0.1	0.1	0.5	0.0	0.3	0.1	0.3	0.1	0.1	0.0
Above Normal (24%)	-0.8	0.0	0.5	0.4	0.3	0.3	0.1	0.0	-0.1	-0.3	-0.5	-0.7
Below Normal (10%)	-0.6	-0.4	-0.1	0.0	0.2	0.1	0.0	0.1	0.0	-0.1	-0.3	-0.4
Dry (16%)	-0.5	-0.4	-0.2	-0.1	0.0	0.0	-0.1	0.0	-0.1	-0.4	-0.8	-1.1
Critical (27%)	-1.0	-0.2	0.0	0.1	0.1	0.2	-0.1	-0.5	-0.6	-0.9	-0.2	-1.3

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.6.2 Stanislaus River below Tulloch Reservoir, Monthly Temperature

Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	57.8	57.4	54.4	50.7	50.3	51.4	52.7	53.5	54.5	55.7	56.5	57.2
20%	56.0	55.9	53.4	50.0	49.6	50.7	52.0	52.8	53.8	54.8	55.3	55.7
30%	55.2	54.7	52.9	49.6	48.9	50.3	51.7	52.5	53.2	53.9	54.8	55.1
40%	54.7	54.4	51.9	49.1	48.7	49.9	51.3	52.3	53.0	53.7	54.2	54.6
50%	54.4	53.9	51.6	48.9	48.3	49.7	51.1	52.1	52.6	53.2	53.9	54.2
60%	53.9	53.4	51.4	48.4	47.9	49.4	50.8	51.7	52.2	52.7	53.4	53.6
70%	53.5	53.0	51.0	48.0	47.7	49.1	50.3	51.6	52.0	52.5	53.1	53.4
80%	53.1	52.7	50.6	47.5	47.3	48.6	49.9	51.0	51.5	51.8	52.6	52.9
90%	52.1	51.9	49.7	47.0	46.0	47.9	49.1	50.3	50.7	51.1	51.8	51.7
Long Term												
Full Simulation Period ^b	54.9	54.5	52.0	48.7	48.3	49.7	51.0	52.0	52.7	53.4	54.3	54.7
Water Year Types^c												
Wet (23%)	51.1	50.8	48.6	47.6	47.6	48.8	49.8	51.0	51.4	51.6	52.3	52.4
Above Normal (24%)	55.4	55.0	52.0	48.5	47.7	49.0	50.3	51.4	51.8	52.4	53.3	53.8
Below Normal (10%)	54.0	53.4	50.9	48.3	48.3	49.5	51.0	51.7	52.2	53.2	53.7	54.0
Dry (16%)	54.0	53.7	51.6	48.9	48.6	50.1	51.5	52.3	53.1	53.9	54.5	54.9
Critical (27%)	56.1	55.6	53.1	49.7	49.3	50.9	52.2	53.3	54.5	55.5	57.0	57.5

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	60.5	59.0	54.8	50.7	50.2	51.2	52.6	53.6	54.7	56.5	57.4	59.2
20%	57.4	56.6	53.3	50.3	49.5	50.6	52.1	53.0	54.1	55.0	55.7	56.7
30%	55.6	55.1	52.8	49.6	48.8	50.2	51.7	52.6	53.4	54.3	55.0	55.6
40%	55.1	54.6	52.0	49.1	48.5	49.8	51.3	52.4	52.9	53.9	54.5	55.0
50%	54.5	54.1	51.7	48.7	48.0	49.6	51.0	52.1	52.6	53.7	54.1	54.5
60%	54.1	53.9	51.4	48.3	47.8	49.3	50.6	51.6	52.2	52.8	53.5	54.0
70%	53.6	53.2	50.9	47.8	47.5	48.9	50.1	51.3	51.8	52.4	53.2	53.5
80%	53.2	52.6	50.4	47.1	46.7	48.4	49.7	51.0	51.4	51.8	52.8	53.1
90%	52.0	51.8	49.9	46.3	45.8	47.5	48.8	50.2	50.3	50.8	51.5	51.8
Long Term												
Full Simulation Period ^b	55.6	54.7	51.9	48.6	48.1	49.5	50.9	52.1	52.8	53.7	54.6	55.4
Water Year Types^c												
Wet (23%)	51.5	51.0	48.7	47.6	47.1	48.8	49.6	50.9	51.0	51.5	52.2	52.4
Above Normal (24%)	56.3	54.9	51.5	48.1	47.4	48.7	50.1	51.4	51.9	52.7	53.7	54.5
Below Normal (10%)	54.6	53.8	51.0	48.3	48.1	49.4	51.0	51.7	52.2	53.3	54.0	54.4
Dry (16%)	54.5	54.1	51.9	49.0	48.6	50.0	51.6	52.3	53.2	54.3	55.2	56.0
Critical (27%)	57.0	55.8	53.0	49.6	49.2	50.7	52.3	53.7	55.1	56.5	57.2	58.7

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2.7	1.6	0.3	0.0	-0.1	-0.2	-0.1	0.1	0.2	0.8	0.9	2.0
20%	1.3	0.7	-0.1	0.3	-0.1	-0.2	0.1	0.1	0.3	0.3	0.4	1.0
30%	0.5	0.4	0.0	0.0	-0.1	-0.1	0.1	0.1	0.2	0.3	0.3	0.5
40%	0.4	0.2	0.1	-0.1	-0.2	-0.1	0.0	0.1	-0.1	0.2	0.3	0.4
50%	0.2	0.2	0.1	-0.1	-0.3	-0.1	-0.1	0.0	0.0	0.5	0.2	0.3
60%	0.2	0.4	0.0	-0.2	-0.1	-0.1	-0.2	0.0	0.1	0.1	0.1	0.3
70%	0.1	0.2	-0.1	-0.2	-0.1	-0.1	-0.2	-0.3	-0.2	0.0	0.1	0.1
80%	0.1	-0.1	-0.1	-0.3	-0.5	-0.2	-0.2	0.0	-0.1	0.0	0.2	0.1
90%	0.0	-0.1	0.2	-0.7	-0.2	-0.4	-0.3	-0.1	-0.4	-0.3	-0.3	0.1
Long Term												
Full Simulation Period ^b	0.7	0.2	-0.1	-0.1	-0.2	-0.1	-0.1	0.1	0.1	0.4	0.3	0.7
Water Year Types^c												
Wet (23%)	0.4	0.3	0.1	-0.1	-0.5	0.0	-0.3	-0.1	-0.3	-0.1	-0.1	0.0
Above Normal (24%)	0.8	0.0	-0.5	-0.4	-0.3	-0.3	-0.1	0.0	0.1	0.3	0.5	0.7
Below Normal (10%)	0.6	0.4	0.1	0.0	-0.2	-0.1	0.0	-0.1	0.0	0.1	0.3	0.4
Dry (16%)	0.5	0.4	0.2	0.1	0.0	0.0	0.1	0.0	0.1	0.4	0.8	1.1
Critical (27%)	1.0	0.2	0.0	-0.1	-0.1	-0.2	0.1	0.5	0.6	0.9	0.2	1.3

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.6.3 Stanislaus River below Tulloch Reservoir, Monthly Temperature

Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	57.8	57.4	54.4	50.7	50.3	51.4	52.7	53.5	54.5	55.7	56.5	57.2
20%	56.0	55.9	53.4	50.0	49.6	50.7	52.0	52.8	53.8	54.8	55.3	55.7
30%	55.2	54.7	52.9	49.6	48.9	50.3	51.7	52.5	53.2	53.9	54.8	55.1
40%	54.7	54.4	51.9	49.1	48.7	49.9	51.3	52.3	53.0	53.7	54.2	54.6
50%	54.4	53.9	51.6	48.9	48.3	49.7	51.1	52.1	52.6	53.2	53.9	54.2
60%	53.9	53.4	51.4	48.4	47.9	49.4	50.8	51.7	52.2	52.7	53.4	53.6
70%	53.5	53.0	51.0	48.0	47.7	49.1	50.3	51.6	52.0	52.5	53.1	53.4
80%	53.1	52.7	50.6	47.5	47.3	48.6	49.9	51.0	51.5	51.8	52.6	52.9
90%	52.1	51.9	49.7	47.0	46.0	47.9	49.1	50.3	50.7	51.1	51.8	51.7
Long Term												
Full Simulation Period ^b	54.9	54.5	52.0	48.7	48.3	49.7	51.0	52.0	52.7	53.4	54.3	54.7
Water Year Types^c												
Wet (23%)	51.1	50.8	48.6	47.6	47.6	48.8	49.8	51.0	51.4	51.6	52.3	52.4
Above Normal (24%)	55.4	55.0	52.0	48.5	47.7	49.0	50.3	51.4	51.8	52.4	53.3	53.8
Below Normal (10%)	54.0	53.4	50.9	48.3	48.3	49.5	51.0	51.7	52.2	53.2	53.7	54.0
Dry (16%)	54.0	53.7	51.6	48.9	48.6	50.1	51.5	52.3	53.1	53.9	54.5	54.9
Critical (27%)	56.1	55.6	53.1	49.7	49.3	50.9	52.2	53.3	54.5	55.5	57.0	57.5

Alternative 3

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	57.8	57.5	54.3	50.8	50.3	51.3	52.7	53.5	54.5	55.7	56.4	57.3
20%	56.4	55.9	53.5	50.0	49.6	50.7	52.0	52.8	53.8	54.8	55.3	55.7
30%	55.1	54.5	52.8	49.5	49.1	50.3	51.5	52.4	53.2	54.0	54.7	55.1
40%	54.6	54.1	51.8	49.0	48.7	49.9	51.4	52.2	52.8	53.6	54.2	54.5
50%	54.2	53.7	51.5	48.7	48.2	49.7	51.0	51.9	52.5	53.3	53.8	54.1
60%	53.7	53.4	51.3	48.5	47.9	49.5	50.8	51.6	52.1	52.9	53.3	53.6
70%	53.5	53.0	50.9	48.0	47.6	49.0	50.4	51.4	51.7	52.6	53.0	53.2
80%	52.9	52.7	50.5	47.5	47.2	48.6	49.9	50.9	51.2	52.1	52.5	52.8
90%	51.9	51.8	49.6	46.8	46.2	47.8	49.2	50.1	50.7	51.3	51.7	51.7
Long Term												
Full Simulation Period ^b	54.8	54.3	51.8	48.6	48.3	49.6	51.0	51.9	52.6	53.6	54.3	54.5
Water Year Types^c												
Wet (23%)	51.0	50.7	48.5	47.6	47.7	48.8	49.8	50.8	51.3	51.8	52.2	52.3
Above Normal (24%)	55.6	55.0	51.8	48.5	47.6	48.9	50.3	51.2	51.6	52.6	53.3	53.8
Below Normal (10%)	53.9	53.3	50.8	48.5	48.3	49.5	51.0	51.6	52.3	53.2	53.7	54.0
Dry (16%)	53.8	53.5	51.5	48.9	48.6	50.0	51.5	52.2	53.0	53.9	54.4	54.9
Critical (27%)	55.8	55.3	52.9	49.6	49.2	50.9	52.3	53.3	54.5	56.1	56.9	57.2

Alternative 3 minus Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0.0	0.1	-0.2	0.1	0.0	-0.1	0.0	0.0	0.1	0.0	-0.1	0.0
20%	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
30%	-0.1	-0.2	-0.1	-0.1	0.2	0.0	-0.1	-0.1	-0.1	0.1	0.0	0.0
40%	-0.1	-0.3	-0.1	-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	0.0	-0.1
50%	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	0.0	-0.2	-0.1	0.0	-0.1	-0.2
60%	-0.1	-0.1	-0.1	0.0	-0.1	0.0	0.0	-0.1	-0.1	0.2	-0.1	0.0
70%	0.0	0.0	-0.2	0.0	-0.1	-0.1	0.1	-0.1	-0.3	0.2	0.0	-0.2
80%	-0.2	0.0	-0.1	0.0	0.0	-0.1	0.0	-0.1	-0.2	0.3	-0.1	-0.2
90%	-0.1	-0.1	-0.1	-0.2	0.2	-0.1	0.1	-0.2	0.0	0.2	-0.1	-0.1
Long Term												
Full Simulation Period ^b	-0.1	-0.1	-0.1	0.0	0.0	-0.1	0.0	-0.1	-0.1	0.3	0.0	-0.1
Water Year Types^c												
Wet (23%)	-0.1	-0.1	-0.1	0.0	0.1	0.0	0.0	-0.2	-0.1	0.2	0.0	-0.1
Above Normal (24%)	0.2	0.0	-0.2	-0.1	0.0	-0.1	0.0	-0.1	-0.2	0.2	0.0	0.0
Below Normal (10%)	-0.1	-0.1	0.0	0.2	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0
Dry (16%)	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	0.0	-0.1	0.0	0.0	0.0
Critical (27%)	-0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.1	0.1	0.1	0.6	0.0	-0.3

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.6.4 Stanislaus River below Tulloch Reservoir, Monthly Temperature

Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	57.8	57.4	54.4	50.7	50.3	51.4	52.7	53.5	54.5	55.7	56.5	57.2
20%	56.0	55.9	53.4	50.0	49.6	50.7	52.0	52.8	53.8	54.8	55.3	55.7
30%	55.2	54.7	52.9	49.6	48.9	50.3	51.7	52.5	53.2	53.9	54.8	55.1
40%	54.7	54.4	51.9	49.1	48.7	49.9	51.3	52.3	53.0	53.7	54.2	54.6
50%	54.4	53.9	51.6	48.9	48.3	49.7	51.1	52.1	52.6	53.2	53.9	54.2
60%	53.9	53.4	51.4	48.4	47.9	49.4	50.8	51.7	52.2	52.7	53.4	53.6
70%	53.5	53.0	51.0	48.0	47.7	49.1	50.3	51.6	52.0	52.5	53.1	53.4
80%	53.1	52.7	50.6	47.5	47.3	48.6	49.9	51.0	51.5	51.8	52.6	52.9
90%	52.1	51.9	49.7	47.0	46.0	47.9	49.1	50.3	50.7	51.1	51.8	51.7
Long Term												
Full Simulation Period ^b	54.9	54.5	52.0	48.7	48.3	49.7	51.0	52.0	52.7	53.4	54.3	54.7
Water Year Types^c												
Wet (23%)	51.1	50.8	48.6	47.6	47.6	48.8	49.8	51.0	51.4	51.6	52.3	52.4
Above Normal (24%)	55.4	55.0	52.0	48.5	47.7	49.0	50.3	51.4	51.8	52.4	53.3	53.8
Below Normal (10%)	54.0	53.4	50.9	48.3	48.3	49.5	51.0	51.7	52.2	53.2	53.7	54.0
Dry (16%)	54.0	53.7	51.6	48.9	48.6	50.1	51.5	52.3	53.1	53.9	54.5	54.9
Critical (27%)	56.1	55.6	53.1	49.7	49.3	50.9	52.2	53.3	54.5	55.5	57.0	57.5

Alternative 5

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	64.5	60.2	55.1	51.0	50.0	51.1	52.9	53.9	55.2	57.1	60.8	63.2
20%	58.4	57.9	53.6	50.2	49.5	50.6	52.2	53.2	54.3	55.4	56.8	57.9
30%	56.4	55.7	52.7	49.4	48.8	50.0	51.8	52.6	53.4	54.7	55.5	56.1
40%	55.3	54.8	52.1	49.0	48.4	49.7	51.6	52.4	52.9	54.0	54.9	55.2
50%	54.7	54.2	51.8	48.7	48.0	49.5	51.0	52.2	52.6	53.7	54.2	54.6
60%	54.4	53.9	51.5	48.3	47.7	49.2	50.6	51.8	52.2	52.8	53.5	54.0
70%	53.7	53.4	50.9	47.9	47.2	48.8	50.1	51.4	51.7	52.4	53.2	53.6
80%	53.3	52.7	50.4	47.1	46.7	48.1	49.6	50.8	51.3	51.9	52.8	53.1
90%	52.1	51.8	49.8	45.9	45.6	47.4	48.7	50.1	50.1	50.7	51.4	52.0
Long Term												
Full Simulation Period ^b	56.2	55.1	52.0	48.6	48.0	49.4	50.9	52.2	52.6	53.9	55.1	56.0
Water Year Types^c												
Wet (23%)	52.0	51.3	48.8	47.6	47.0	48.7	49.5	50.8	50.9	51.4	52.1	52.4
Above Normal (24%)	57.2	55.5	51.5	48.1	47.2	48.6	50.1	51.5	51.9	52.8	54.0	54.9
Below Normal (10%)	55.4	53.7	50.9	48.1	48.0	49.2	51.0	51.8	52.4	53.6	54.5	55.1
Dry (16%)	55.1	54.7	52.2	49.2	48.7	50.0	51.7	52.6	53.4	55.0	55.7	56.5
Critical (27%)	57.4	56.3	53.1	49.6	49.1	50.6	52.6	54.1	54.5	56.5	58.5	60.3

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	6.7	2.8	0.7	0.3	-0.3	-0.3	0.2	0.4	0.8	1.4	4.3	6.0
20%	2.4	2.1	0.2	0.2	-0.2	-0.1	0.2	0.4	0.4	0.6	1.6	2.2
30%	1.2	1.0	-0.1	-0.2	-0.2	-0.3	0.2	0.2	0.2	0.8	0.8	1.0
40%	0.5	0.4	0.2	-0.1	-0.3	-0.2	0.2	0.2	0.0	0.3	0.6	0.6
50%	0.4	0.3	0.2	-0.2	-0.3	-0.2	-0.1	0.2	0.0	0.5	0.3	0.3
60%	0.5	0.5	0.1	-0.1	-0.2	-0.3	-0.2	0.2	0.0	0.1	0.1	0.4
70%	0.2	0.3	-0.1	-0.1	-0.4	-0.3	-0.2	-0.2	-0.3	0.0	0.1	0.3
80%	0.2	0.0	-0.2	-0.3	-0.6	-0.5	-0.3	-0.3	-0.1	0.1	0.2	0.2
90%	0.0	-0.1	0.1	-1.0	-0.4	-0.5	-0.4	-0.2	-0.6	-0.4	-0.4	0.3
Long Term												
Full Simulation Period ^b	1.3	0.6	0.0	-0.1	-0.3	-0.3	0.0	0.3	0.0	0.5	0.8	1.4
Water Year Types^c												
Wet (23%)	0.9	0.5	0.2	0.0	-0.5	-0.1	-0.3	-0.2	-0.5	-0.2	-0.1	0.0
Above Normal (24%)	1.8	0.5	-0.5	-0.4	-0.5	-0.5	-0.2	0.1	0.0	0.5	0.7	1.0
Below Normal (10%)	1.4	0.3	0.1	-0.1	-0.3	-0.2	0.0	0.1	0.1	0.4	0.7	1.1
Dry (16%)	1.1	1.0	0.6	0.2	0.1	-0.1	0.1	0.3	0.4	1.1	1.2	1.6
Critical (27%)	1.4	0.8	0.1	-0.1	-0.2	-0.3	0.3	0.8	0.0	0.9	1.5	2.8

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.7 Stanislaus River below Goodwin Dam Temperature

Table 5C.3.2.7.1 Stanislaus River below Goodwin Dam, Monthly Temperature

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	60.7	59.2	54.6	51.1	50.8	51.9	53.1	54.1	55.6	57.6	58.3	60.1
20%	58.0	56.6	53.3	50.3	50.2	51.4	52.4	53.6	54.8	55.9	56.5	57.4
30%	56.1	55.5	52.5	49.7	49.5	50.8	52.1	53.0	54.0	55.1	55.8	56.4
40%	55.5	54.8	51.9	49.3	48.9	50.6	51.7	52.8	53.7	54.6	55.3	55.7
50%	55.0	54.2	51.6	48.9	48.8	50.3	51.4	52.6	53.3	54.4	54.8	55.3
60%	54.5	54.0	51.3	48.4	48.4	50.0	51.0	52.1	52.8	53.5	54.2	54.6
70%	54.0	53.5	51.0	48.0	48.0	49.8	50.6	51.8	52.5	53.2	53.9	54.2
80%	53.5	52.9	50.4	47.3	47.4	49.0	50.1	51.5	52.0	52.6	53.3	53.8
90%	52.4	52.1	49.9	46.5	46.7	48.3	49.2	50.6	50.8	51.5	52.2	52.6
Long Term												
Full Simulation Period ^b	56.0	54.9	51.9	48.8	48.7	50.2	51.3	52.5	53.5	54.6	55.3	56.1
Water Year Types^c												
Wet (23%)	51.9	51.3	48.8	47.9	47.6	49.1	50.0	51.3	51.6	52.2	52.8	53.0
Above Normal (24%)	56.7	55.2	51.5	48.4	48.0	49.6	50.6	51.9	52.5	53.5	54.5	55.2
Below Normal (10%)	55.0	54.1	51.0	48.4	48.7	50.0	51.3	52.1	52.9	54.1	54.7	55.1
Dry (16%)	54.9	54.3	51.8	49.2	49.2	50.9	51.9	52.8	53.9	55.1	56.0	56.7
Critical (27%)	57.4	56.0	52.9	49.7	49.9	51.5	52.7	54.3	56.0	57.5	58.2	59.5

Revised Alternative 1

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	58.8	57.3	54.1	50.9	50.8	52.1	53.2	54.1	55.4	56.6	57.4	57.9
20%	57.0	56.0	53.4	50.1	50.2	51.4	52.4	53.5	54.6	55.6	56.0	56.7
30%	56.2	54.9	52.9	49.8	49.5	50.9	52.1	53.0	53.9	54.8	55.4	55.8
40%	55.5	54.6	51.9	49.2	49.1	50.7	51.7	52.7	53.6	54.5	55.0	55.3
50%	55.0	54.0	51.6	49.0	48.8	50.5	51.5	52.6	53.1	54.0	54.7	55.0
60%	54.6	53.8	51.4	48.5	48.5	50.2	51.2	52.1	52.8	53.4	54.1	54.4
70%	54.2	53.3	51.0	48.1	48.3	49.9	50.8	52.0	52.5	53.2	53.8	54.0
80%	53.6	52.9	50.6	47.6	47.8	49.2	50.3	51.6	52.0	52.5	53.3	53.5
90%	52.7	52.1	49.8	47.1	46.9	48.6	49.6	50.7	51.3	51.7	52.4	52.4
Long Term												
Full Simulation Period ^b	55.6	54.6	51.9	48.9	48.9	50.4	51.4	52.5	53.3	54.1	55.0	55.4
Water Year Types^c												
Wet (23%)	51.7	51.0	48.6	47.9	48.0	49.4	50.2	51.4	51.9	52.3	52.9	53.0
Above Normal (24%)	56.2	55.1	51.9	48.7	48.4	49.9	50.7	51.9	52.4	53.1	54.0	54.5
Below Normal (10%)	54.7	53.6	50.9	48.4	48.8	50.1	51.4	52.2	52.9	53.9	54.4	54.7
Dry (16%)	54.7	53.9	51.6	49.1	49.2	50.9	51.9	52.8	53.8	54.7	55.2	55.6
Critical (27%)	56.8	55.7	52.9	49.8	50.0	51.7	52.7	53.9	55.3	56.4	57.8	58.5

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-2.0	-1.8	-0.5	-0.1	0.0	0.2	0.1	0.0	-0.2	-1.0	-1.0	-2.2
20%	-1.0	-0.6	0.1	-0.2	0.0	0.0	0.0	-0.2	-0.2	-0.3	-0.5	-0.8
30%	0.1	-0.6	0.3	0.1	0.0	0.1	0.0	-0.1	-0.1	-0.4	-0.4	-0.5
40%	0.1	-0.2	-0.1	-0.1	0.1	0.2	0.0	-0.1	-0.1	-0.2	-0.3	-0.4
50%	0.1	-0.2	0.0	0.1	0.0	0.2	0.1	0.0	-0.2	-0.5	-0.2	-0.3
60%	0.1	-0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.0	-0.1	-0.1	-0.2
70%	0.2	-0.2	0.0	0.1	0.3	0.2	0.2	0.2	0.0	0.0	-0.1	-0.2
80%	0.1	0.0	0.2	0.3	0.4	0.2	0.2	0.1	0.0	-0.1	-0.1	-0.3
90%	0.3	0.0	-0.1	0.6	0.2	0.3	0.4	0.1	0.5	0.2	0.2	-0.2
Long Term												
Full Simulation Period ^b	-0.4	-0.3	0.0	0.1	0.2	0.2	0.1	-0.1	-0.2	-0.4	-0.4	-0.6
Water Year Types^c												
Wet (23%)	-0.1	-0.3	-0.1	0.0	0.3	0.2	0.3	0.1	0.3	0.0	0.1	0.0
Above Normal (24%)	-0.5	0.0	0.5	0.4	0.3	0.4	0.2	0.0	-0.1	-0.3	-0.5	-0.6
Below Normal (10%)	-0.3	-0.4	-0.1	0.0	0.1	0.1	0.0	0.1	0.0	-0.2	-0.3	-0.4
Dry (16%)	-0.2	-0.4	-0.2	-0.1	0.0	0.0	0.0	0.0	-0.1	-0.4	-0.8	-1.1
Critical (27%)	-0.6	-0.3	0.0	0.1	0.1	0.2	0.0	-0.4	-0.7	-1.1	-0.4	-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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.7.2 Stanislaus River below Goodwin Dam, Monthly Temperature

Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	58.8	57.3	54.1	50.9	50.8	52.1	53.2	54.1	55.4	56.6	57.4	57.9
20%	57.0	56.0	53.4	50.1	50.2	51.4	52.4	53.5	54.6	55.6	56.0	56.7
30%	56.2	54.9	52.9	49.8	49.5	50.9	52.1	53.0	53.9	54.8	55.4	55.8
40%	55.5	54.6	51.9	49.2	49.1	50.7	51.7	52.7	53.6	54.5	55.0	55.3
50%	55.0	54.0	51.6	49.0	48.8	50.5	51.5	52.6	53.1	54.0	54.7	55.0
60%	54.6	53.8	51.4	48.5	48.5	50.2	51.2	52.1	52.8	53.4	54.1	54.4
70%	54.2	53.3	51.0	48.1	48.3	49.9	50.8	52.0	52.5	53.2	53.8	54.0
80%	53.6	52.9	50.6	47.6	47.8	49.2	50.3	51.6	52.0	52.5	53.3	53.5
90%	52.7	52.1	49.8	47.1	46.9	48.6	49.6	50.7	51.3	51.7	52.4	52.4
Long Term												
Full Simulation Period ^b	55.6	54.6	51.9	48.9	48.9	50.4	51.4	52.5	53.3	54.1	55.0	55.4
Water Year Types^c												
Wet (23%)	51.7	51.0	48.6	47.9	48.0	49.4	50.2	51.4	51.9	52.3	52.9	53.0
Above Normal (24%)	56.2	55.1	51.9	48.7	48.4	49.9	50.7	51.9	52.4	53.1	54.0	54.5
Below Normal (10%)	54.7	53.6	50.9	48.4	48.8	50.1	51.4	52.2	52.9	53.9	54.4	54.7
Dry (16%)	54.7	53.9	51.6	49.1	49.2	50.9	51.9	52.8	53.8	54.7	55.2	55.6
Critical (27%)	56.8	55.7	52.9	49.8	50.0	51.7	52.7	53.9	55.3	56.4	57.8	58.5

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	60.7	59.2	54.6	51.1	50.8	51.9	53.1	54.1	55.6	57.6	58.3	60.1
20%	58.0	56.6	53.3	50.3	50.2	51.4	52.4	53.6	54.8	55.9	56.5	57.4
30%	56.1	55.5	52.5	49.7	49.5	50.8	52.1	53.0	54.0	55.1	55.8	56.4
40%	55.5	54.8	51.9	49.3	48.9	50.6	51.7	52.8	53.7	54.6	55.3	55.7
50%	55.0	54.2	51.6	48.9	48.8	50.3	51.4	52.6	53.3	54.4	54.8	55.3
60%	54.5	54.0	51.3	48.4	48.4	50.0	51.0	52.1	52.8	53.5	54.2	54.6
70%	54.0	53.5	51.0	48.0	48.0	49.8	50.6	51.8	52.5	53.2	53.9	54.2
80%	53.5	52.9	50.4	47.3	47.4	49.0	50.1	51.5	52.0	52.6	53.3	53.8
90%	52.4	52.1	49.9	46.5	46.7	48.3	49.2	50.6	50.8	51.5	52.2	52.6
Long Term												
Full Simulation Period ^b	56.0	54.9	51.9	48.8	48.7	50.2	51.3	52.5	53.5	54.6	55.3	56.1
Water Year Types^c												
Wet (23%)	51.9	51.3	48.8	47.9	47.6	49.1	50.0	51.3	51.6	52.2	52.8	53.0
Above Normal (24%)	56.7	55.2	51.5	48.4	48.0	49.6	50.6	51.9	52.5	53.5	54.5	55.2
Below Normal (10%)	55.0	54.1	51.0	48.4	48.7	50.0	51.3	52.1	52.9	54.1	54.7	55.1
Dry (16%)	54.9	54.3	51.8	49.2	49.2	50.9	51.9	52.8	53.9	55.1	56.0	56.7
Critical (27%)	57.4	56.0	52.9	49.7	49.9	51.5	52.7	54.3	56.0	57.5	58.2	59.5

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2.0	1.8	0.5	0.1	0.0	-0.2	-0.1	0.0	0.2	1.0	1.0	2.2
20%	1.0	0.6	-0.1	0.2	0.0	0.0	0.0	0.2	0.2	0.3	0.5	0.8
30%	-0.1	0.6	-0.3	-0.1	0.0	-0.1	0.0	0.1	0.1	0.4	0.4	0.5
40%	-0.1	0.2	0.1	0.1	-0.1	-0.2	0.0	0.1	0.1	0.2	0.3	0.4
50%	-0.1	0.2	0.0	-0.1	0.0	-0.2	-0.1	0.0	0.2	0.5	0.2	0.3
60%	-0.1	0.2	-0.2	-0.1	-0.1	-0.2	-0.2	-0.1	0.0	0.1	0.1	0.2
70%	-0.2	0.2	0.0	-0.1	-0.3	-0.2	-0.2	-0.2	0.0	0.0	0.1	0.2
80%	-0.1	0.0	-0.2	-0.3	-0.4	-0.2	-0.2	-0.1	0.0	0.1	0.1	0.3
90%	-0.3	0.0	0.1	-0.6	-0.2	-0.3	-0.4	-0.1	-0.5	-0.2	-0.2	0.2
Long Term												
Full Simulation Period ^b	0.4	0.3	0.0	-0.1	-0.2	-0.2	-0.1	0.1	0.2	0.4	0.4	0.6
Water Year Types^c												
Wet (23%)	0.1	0.3	0.1	0.0	-0.3	-0.2	-0.3	-0.1	-0.3	0.0	-0.1	0.0
Above Normal (24%)	0.5	0.0	-0.5	-0.4	-0.3	-0.4	-0.2	0.0	0.1	0.3	0.5	0.6
Below Normal (10%)	0.3	0.4	0.1	0.0	-0.1	-0.1	0.0	-0.1	0.0	0.2	0.3	0.4
Dry (16%)	0.2	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.4	0.8	1.1
Critical (27%)	0.6	0.3	0.0	-0.1	-0.1	-0.2	0.0	0.4	0.7	1.1	0.4	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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.7.3 Stanislaus River below Goodwin Dam, Monthly Temperature

Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	58.8	57.3	54.1	50.9	50.8	52.1	53.2	54.1	55.4	56.6	57.4	57.9
20%	57.0	56.0	53.4	50.1	50.2	51.4	52.4	53.5	54.6	55.6	56.0	56.7
30%	56.2	54.9	52.9	49.8	49.5	50.9	52.1	53.0	53.9	54.8	55.4	55.8
40%	55.5	54.6	51.9	49.2	49.1	50.7	51.7	52.7	53.6	54.5	55.0	55.3
50%	55.0	54.0	51.6	49.0	48.8	50.5	51.5	52.6	53.1	54.0	54.7	55.0
60%	54.6	53.8	51.4	48.5	48.5	50.2	51.2	52.1	52.8	53.4	54.1	54.4
70%	54.2	53.3	51.0	48.1	48.3	49.9	50.8	52.0	52.5	53.2	53.8	54.0
80%	53.6	52.9	50.6	47.6	47.8	49.2	50.3	51.6	52.0	52.5	53.3	53.5
90%	52.7	52.1	49.8	47.1	46.9	48.6	49.6	50.7	51.3	51.7	52.4	52.4
Long Term												
Full Simulation Period ^b	55.6	54.6	51.9	48.9	48.9	50.4	51.4	52.5	53.3	54.1	55.0	55.4
Water Year Types^c												
Wet (23%)	51.7	51.0	48.6	47.9	48.0	49.4	50.2	51.4	51.9	52.3	52.9	53.0
Above Normal (24%)	56.2	55.1	51.9	48.7	48.4	49.9	50.7	51.9	52.4	53.1	54.0	54.5
Below Normal (10%)	54.7	53.6	50.9	48.4	48.8	50.1	51.4	52.2	52.9	53.9	54.4	54.7
Dry (16%)	54.7	53.9	51.6	49.1	49.2	50.9	51.9	52.8	53.8	54.7	55.2	55.6
Critical (27%)	56.8	55.7	52.9	49.8	50.0	51.7	52.7	53.9	55.3	56.4	57.8	58.5

Alternative 3

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	58.5	57.6	54.1	50.9	50.8	52.1	53.1	54.0	55.3	56.7	57.3	58.2
20%	57.0	56.0	53.3	50.1	50.1	51.4	52.4	53.5	54.7	55.6	56.0	56.6
30%	56.0	54.7	52.8	49.7	49.5	50.9	52.0	52.9	53.9	54.8	55.4	55.9
40%	55.2	54.3	51.7	49.1	49.1	50.7	51.7	52.6	53.5	54.4	54.9	55.2
50%	54.8	53.9	51.5	48.9	48.8	50.4	51.4	52.4	53.2	54.0	54.5	54.8
60%	54.5	53.7	51.3	48.6	48.5	50.1	51.2	52.1	52.8	53.6	54.0	54.4
70%	54.1	53.2	50.8	48.1	48.1	49.8	50.8	51.9	52.5	53.3	53.7	53.9
80%	53.4	52.9	50.5	47.7	47.7	49.0	50.3	51.4	52.0	52.9	53.2	53.4
90%	52.6	52.1	49.7	47.1	46.9	48.6	49.6	50.6	51.4	51.9	52.4	52.4
Long Term												
Full Simulation Period ^b	55.5	54.5	51.8	48.8	48.9	50.4	51.4	52.4	53.4	54.4	55.0	55.3
Water Year Types^c												
Wet (23%)	51.6	50.9	48.6	48.0	48.1	49.3	50.2	51.3	51.9	52.5	52.9	52.9
Above Normal (24%)	56.3	55.2	51.8	48.7	48.3	49.7	50.7	51.7	52.4	53.4	54.0	54.5
Below Normal (10%)	54.6	53.6	50.9	48.6	48.8	50.1	51.3	52.1	53.0	54.0	54.4	54.7
Dry (16%)	54.5	53.8	51.4	49.0	49.2	50.9	51.9	52.7	53.8	54.7	55.2	55.6
Critical (27%)	56.5	55.5	52.8	49.7	49.9	51.6	52.7	53.9	55.4	57.0	57.8	57.9

Alternative 3 minus Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-0.2	0.3	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	0.1	-0.1	0.3
20%	0.0	0.0	-0.1	0.0	-0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0
30%	-0.3	-0.2	0.0	-0.1	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.1
40%	-0.3	-0.2	-0.1	-0.1	0.1	0.0	0.0	-0.1	-0.1	0.0	-0.1	-0.1
50%	-0.2	-0.1	-0.1	-0.1	0.0	-0.1	-0.1	-0.2	0.1	0.0	-0.1	-0.2
60%	-0.1	-0.1	-0.1	0.1	0.0	-0.1	0.0	-0.1	0.0	0.2	0.0	0.0
70%	-0.1	0.0	-0.2	0.0	-0.2	-0.1	0.0	-0.1	0.0	0.2	-0.1	-0.2
80%	-0.2	0.0	-0.1	0.1	-0.1	-0.2	0.0	-0.1	-0.1	0.4	-0.1	-0.1
90%	-0.1	0.0	-0.1	0.0	0.0	0.0	0.0	-0.2	0.1	0.2	0.0	0.0
Long Term												
Full Simulation Period ^b	-0.1	-0.1	-0.1	0.0	0.0	-0.1	0.0	-0.1	0.0	0.3	0.0	-0.2
Water Year Types^c												
Wet (23%)	-0.1	-0.1	-0.1	0.0	0.1	0.0	0.0	-0.2	0.0	0.2	0.0	-0.1
Above Normal (24%)	0.1	0.1	-0.1	-0.1	-0.1	-0.2	0.0	-0.1	0.0	0.3	0.0	0.0
Below Normal (10%)	-0.1	-0.1	0.0	0.2	0.0	0.0	0.0	-0.1	0.1	0.0	0.0	0.0
Dry (16%)	-0.2	-0.1	-0.1	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
Critical (27%)	-0.4	-0.2	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.1	0.6	0.0	-0.6

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.7.4 Stanislaus River below Goodwin Dam, Monthly Temperature

Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	58.8	57.3	54.1	50.9	50.8	52.1	53.2	54.1	55.4	56.6	57.4	57.9
20%	57.0	56.0	53.4	50.1	50.2	51.4	52.4	53.5	54.6	55.6	56.0	56.7
30%	56.2	54.9	52.9	49.8	49.5	50.9	52.1	53.0	53.9	54.8	55.4	55.8
40%	55.5	54.6	51.9	49.2	49.1	50.7	51.7	52.7	53.6	54.5	55.0	55.3
50%	55.0	54.0	51.6	49.0	48.8	50.5	51.5	52.6	53.1	54.0	54.7	55.0
60%	54.6	53.8	51.4	48.5	48.5	50.2	51.2	52.1	52.8	53.4	54.1	54.4
70%	54.2	53.3	51.0	48.1	48.3	49.9	50.8	52.0	52.5	53.2	53.8	54.0
80%	53.6	52.9	50.6	47.6	47.8	49.2	50.3	51.6	52.0	52.5	53.3	53.5
90%	52.7	52.1	49.8	47.1	46.9	48.6	49.6	50.7	51.3	51.7	52.4	52.4
Long Term												
Full Simulation Period ^b	55.6	54.6	51.9	48.9	48.9	50.4	51.4	52.5	53.3	54.1	55.0	55.4
Water Year Types^c												
Wet (23%)	51.7	51.0	48.6	47.9	48.0	49.4	50.2	51.4	51.9	52.3	52.9	53.0
Above Normal (24%)	56.2	55.1	51.9	48.7	48.4	49.9	50.7	51.9	52.4	53.1	54.0	54.5
Below Normal (10%)	54.7	53.6	50.9	48.4	48.8	50.1	51.4	52.2	52.9	53.9	54.4	54.7
Dry (16%)	54.7	53.9	51.6	49.1	49.2	50.9	51.9	52.8	53.8	54.7	55.2	55.6
Critical (27%)	56.8	55.7	52.9	49.8	50.0	51.7	52.7	53.9	55.3	56.4	57.8	58.5

Alternative 5

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	64.8	60.4	54.8	51.2	50.7	51.9	53.2	54.3	56.3	58.3	61.3	64.0
20%	58.8	58.0	53.4	50.3	50.2	51.3	52.5	53.7	55.1	56.6	57.6	58.7
30%	56.7	56.0	52.7	49.6	49.4	50.8	52.2	53.0	54.2	55.6	56.3	56.9
40%	55.7	54.9	52.0	49.1	48.9	50.5	51.9	52.9	53.8	54.7	55.6	55.9
50%	55.2	54.4	51.6	48.9	48.8	50.1	51.4	52.7	53.2	54.5	54.9	55.3
60%	54.8	54.1	51.5	48.4	48.3	49.9	51.0	52.2	52.8	53.5	54.2	54.7
70%	54.2	53.6	50.9	48.0	47.8	49.5	50.6	51.8	52.2	53.2	53.9	54.3
80%	53.6	53.0	50.5	47.3	47.4	48.9	50.0	51.2	52.0	52.6	53.4	53.7
90%	52.5	52.1	49.7	46.2	46.7	48.2	49.1	50.5	50.7	51.5	52.2	52.7
Long Term												
Full Simulation Period ^b	56.6	55.3	52.0	48.8	48.6	50.1	51.3	52.7	53.4	54.8	55.9	56.7
Water Year Types^c												
Wet (23%)	52.4	51.5	48.9	47.9	47.6	49.1	49.9	51.2	51.5	52.1	52.8	53.1
Above Normal (24%)	57.6	55.7	51.5	48.3	47.9	49.5	50.5	51.9	52.5	53.6	54.7	55.6
Below Normal (10%)	55.8	53.9	50.9	48.3	48.6	49.9	51.3	52.2	53.0	54.3	55.1	55.7
Dry (16%)	55.5	54.9	52.1	49.3	49.3	50.8	52.0	53.0	54.2	55.8	56.4	57.2
Critical (27%)	57.8	56.5	53.0	49.7	49.8	51.3	52.9	54.6	55.6	57.6	59.5	61.0

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	6.0	3.1	0.7	0.3	-0.2	-0.2	0.0	0.2	0.9	1.7	4.0	6.0
20%	1.8	2.0	0.0	0.2	0.0	-0.1	0.1	0.3	0.5	1.0	1.6	2.0
30%	0.5	1.1	-0.2	-0.1	-0.1	-0.1	0.1	0.0	0.3	0.8	0.8	1.1
40%	0.2	0.4	0.1	-0.1	-0.1	-0.3	0.1	0.1	0.2	0.2	0.6	0.6
50%	0.2	0.4	0.1	-0.1	-0.1	-0.4	-0.1	0.1	0.1	0.5	0.2	0.3
60%	0.2	0.3	0.0	-0.1	-0.2	-0.3	-0.2	0.0	0.0	0.2	0.1	0.4
70%	0.0	0.4	-0.1	0.0	-0.4	-0.4	-0.2	-0.2	-0.3	0.0	0.2	0.3
80%	0.0	0.1	-0.1	-0.4	-0.4	-0.3	-0.3	-0.3	0.0	0.1	0.2	0.2
90%	-0.2	0.0	-0.1	-0.9	-0.2	-0.5	-0.5	-0.2	-0.6	-0.2	-0.2	0.3
Long Term												
Full Simulation Period ^b	1.0	0.6	0.1	-0.1	-0.3	-0.3	-0.1	0.2	0.1	0.6	0.9	1.3
Water Year Types^c												
Wet (23%)	0.7	0.5	0.2	0.0	-0.4	-0.3	-0.3	-0.2	-0.4	-0.2	-0.1	0.1
Above Normal (24%)	1.4	0.6	-0.4	-0.4	-0.5	-0.5	-0.2	0.0	0.1	0.5	0.7	1.0
Below Normal (10%)	1.1	0.3	0.0	-0.1	-0.2	-0.2	-0.1	0.1	0.1	0.4	0.7	1.0
Dry (16%)	0.8	1.0	0.5	0.2	0.1	-0.1	0.0	0.2	0.4	1.1	1.2	1.5
Critical (27%)	1.0	0.8	0.1	-0.1	-0.2	-0.4	0.2	0.7	0.3	1.2	1.7	2.5

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.8 Stanislaus River at Orange Blossom Bridge Temperature

Table 5C.3.2.8.1. Stanislaus River at Orange Blossom Bridge, Monthly Temperature

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance ^a												
10%	61.6	58.7	53.5	51.3	52.5	55.8	55.3	57.7	63.9	65.6	65.4	64.5
20%	59.3	56.9	52.6	50.8	51.7	55.1	54.8	56.8	62.5	64.6	64.2	63.3
30%	57.6	56.2	52.3	50.1	51.2	54.6	54.1	56.0	61.6	64.1	63.4	62.0
40%	56.8	55.1	51.5	49.6	50.7	54.0	53.6	55.3	60.7	63.7	62.9	61.7
50%	56.4	54.9	51.1	49.1	50.3	53.7	53.1	55.0	59.3	63.2	62.5	61.2
60%	55.9	54.6	50.7	48.8	50.1	53.2	52.7	54.4	56.6	62.6	62.2	60.7
70%	55.2	54.1	50.5	48.4	49.6	52.1	52.2	53.9	55.9	62.1	61.9	60.4
80%	54.9	53.7	50.2	47.9	49.2	51.0	51.9	53.6	55.3	61.5	61.5	59.9
90%	54.0	52.7	49.8	47.1	48.4	49.7	50.8	52.6	54.4	58.6	59.8	58.2
Long Term												
Full Simulation Period ^b	57.2	55.3	51.4	49.2	50.4	53.2	53.2	55.1	59.0	62.9	62.7	61.5
Water Year Types ^c												
Wet (23%)	53.1	51.8	48.6	48.7	49.3	50.2	51.3	53.2	55.2	59.5	59.4	57.8
Above Normal (24%)	57.9	55.5	51.2	49.0	49.9	52.7	52.4	54.5	56.3	61.9	62.2	61.1
Below Normal (10%)	56.2	54.7	50.7	48.9	50.3	53.4	52.9	54.2	58.8	63.3	62.4	61.0
Dry (16%)	56.3	55.0	51.1	49.5	50.9	54.5	54.0	55.4	61.2	64.2	63.5	62.4
Critical (27%)	58.6	56.2	52.1	49.8	51.6	55.2	55.2	57.4	63.4	65.9	65.5	64.6

Revised Alternative 1

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance ^a												
10%	62.9	57.4	53.0	51.1	52.6	56.7	56.1	58.0	63.1	65.2	64.6	63.3
20%	61.5	56.4	52.6	50.6	51.7	55.8	55.4	57.4	62.6	64.3	63.6	62.4
30%	61.0	55.5	52.0	50.0	51.2	55.2	54.9	56.5	62.1	63.8	63.0	61.9
40%	59.5	55.0	51.5	49.6	50.8	54.4	54.2	56.0	61.5	63.5	62.7	61.4
50%	59.0	54.6	51.1	49.1	50.5	53.7	53.5	55.5	59.2	63.1	62.4	60.9
60%	57.9	54.3	50.8	49.0	50.0	53.3	53.2	54.8	56.4	62.6	62.1	60.6
70%	56.8	54.0	50.6	48.4	49.8	52.5	52.6	54.3	55.8	62.1	61.8	60.0
80%	56.4	53.5	50.3	48.0	49.3	51.6	51.9	53.8	55.1	61.5	61.5	59.5
90%	55.7	52.8	49.9	47.5	48.4	50.3	51.2	52.9	53.9	58.6	60.4	57.9
Long Term												
Full Simulation Period ^b	59.2	55.1	51.4	49.3	50.5	53.8	53.8	55.5	58.9	62.4	62.3	60.9
Water Year Types ^c												
Wet (23%)	54.9	51.5	48.5	48.7	49.1	51.1	51.6	53.4	54.8	59.2	59.1	57.3
Above Normal (24%)	59.8	55.3	51.4	49.3	50.3	53.2	52.9	54.9	56.1	61.7	62.0	60.7
Below Normal (10%)	58.0	54.2	50.6	48.9	50.1	53.1	53.2	54.7	59.4	63.3	62.2	60.7
Dry (16%)	58.4	54.6	51.0	49.4	50.7	54.9	54.7	55.9	61.7	64.0	63.0	61.6
Critical (27%)	60.6	56.0	52.1	49.8	51.9	56.4	56.0	57.8	63.0	64.7	64.8	64.0

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance ^a												
10%	1.3	-1.3	-0.5	-0.2	0.1	1.0	0.9	0.3	-0.8	-0.3	-0.8	-1.2
20%	2.1	-0.5	0.0	-0.1	0.0	0.8	0.6	0.5	0.1	-0.3	-0.6	-0.8
30%	3.5	-0.6	-0.4	-0.1	0.0	0.6	0.8	0.5	0.5	-0.3	-0.4	-0.2
40%	2.7	0.0	0.1	0.0	0.1	0.4	0.5	0.7	0.8	-0.2	-0.2	-0.3
50%	2.6	-0.3	0.0	0.0	0.1	0.0	0.4	0.5	0.0	-0.1	-0.1	-0.3
60%	2.1	-0.3	0.1	0.2	0.0	0.0	0.5	0.4	-0.3	-0.1	-0.1	-0.2
70%	1.6	-0.1	0.1	0.1	0.1	0.4	0.4	0.4	-0.1	0.0	0.0	-0.4
80%	1.5	-0.1	0.1	0.2	0.1	0.7	0.1	0.2	-0.2	-0.1	0.0	-0.4
90%	1.7	0.1	0.1	0.4	0.1	0.7	0.4	0.3	-0.5	0.0	0.5	-0.2
Long Term												
Full Simulation Period ^b	1.9	-0.3	0.0	0.1	0.1	0.7	0.6	0.4	-0.1	-0.5	-0.4	-0.5
Water Year Types ^c												
Wet (23%)	1.8	-0.3	-0.1	0.0	-0.2	0.9	0.3	0.2	-0.4	-0.3	-0.3	-0.5
Above Normal (24%)	1.9	-0.1	0.2	0.3	0.4	0.5	0.5	0.3	-0.2	-0.2	-0.2	-0.4
Below Normal (10%)	1.8	-0.5	-0.1	0.0	-0.2	-0.3	0.4	0.5	0.6	0.0	-0.1	-0.4
Dry (16%)	2.1	-0.4	-0.1	-0.1	-0.2	0.3	0.8	0.5	0.5	-0.2	-0.6	-0.7
Critical (27%)	2.0	-0.2	0.0	0.0	0.2	1.2	0.8	0.3	-0.4	-1.2	-0.7	-0.6

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.8.2 Stanislaus River at Orange Blossom Bridge, Monthly Temperature

Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	62.9	57.4	53.0	51.1	52.6	56.7	56.1	58.0	63.1	65.2	64.6	63.3
20%	61.5	56.4	52.6	50.6	51.7	55.8	55.4	57.4	62.6	64.3	63.6	62.4
30%	61.0	55.5	52.0	50.0	51.2	55.2	54.9	56.5	62.1	63.8	63.0	61.9
40%	59.5	55.0	51.5	49.6	50.8	54.4	54.2	56.0	61.5	63.5	62.7	61.4
50%	59.0	54.6	51.1	49.1	50.5	53.7	53.5	55.5	59.2	63.1	62.4	60.9
60%	57.9	54.3	50.8	49.0	50.0	53.3	53.2	54.8	56.4	62.6	62.1	60.6
70%	56.8	54.0	50.6	48.4	49.8	52.5	52.6	54.3	55.8	62.1	61.8	60.0
80%	56.4	53.5	50.3	48.0	49.3	51.6	51.9	53.8	55.1	61.5	61.5	59.5
90%	55.7	52.8	49.9	47.5	48.4	50.3	51.2	52.9	53.9	58.6	60.4	57.9
Long Term												
Full Simulation Period ^b	59.2	55.1	51.4	49.3	50.5	53.8	53.8	55.5	58.9	62.4	62.3	60.9
Water Year Types^c												
Wet (23%)	54.9	51.5	48.5	48.7	49.1	51.1	51.6	53.4	54.8	59.2	59.1	57.3
Above Normal (24%)	59.8	55.3	51.4	49.3	50.3	53.2	52.9	54.9	56.1	61.7	62.0	60.7
Below Normal (10%)	58.0	54.2	50.6	48.9	50.1	53.1	53.2	54.7	59.4	63.3	62.2	60.7
Dry (16%)	58.4	54.6	51.0	49.4	50.7	54.9	54.7	55.9	61.7	64.0	63.0	61.6
Critical (27%)	60.6	56.0	52.1	49.8	51.9	56.4	56.0	57.8	63.0	64.7	64.8	64.0

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	61.6	58.7	53.5	51.3	52.5	55.8	55.3	57.7	63.9	65.6	65.4	64.5
20%	59.3	56.9	52.6	50.8	51.7	55.1	54.8	56.8	62.5	64.6	64.2	63.3
30%	57.6	56.2	52.3	50.1	51.2	54.6	54.1	56.0	61.6	64.1	63.4	62.0
40%	56.8	55.1	51.5	49.6	50.7	54.0	53.6	55.3	60.7	63.7	62.9	61.7
50%	56.4	54.9	51.1	49.1	50.3	53.7	53.1	55.0	59.3	63.2	62.5	61.2
60%	55.9	54.6	50.7	48.8	50.1	53.2	52.7	54.4	56.6	62.6	62.2	60.7
70%	55.2	54.1	50.5	48.4	49.6	52.1	52.2	53.9	55.9	62.1	61.9	60.4
80%	54.9	53.7	50.2	47.9	49.2	51.0	51.9	53.6	55.3	61.5	61.5	59.9
90%	54.0	52.7	49.8	47.1	48.4	49.7	50.8	52.6	54.4	58.6	59.8	58.2
Long Term												
Full Simulation Period ^b	57.2	55.3	51.4	49.2	50.4	53.2	53.2	55.1	59.0	62.9	62.7	61.5
Water Year Types^c												
Wet (23%)	53.1	51.8	48.6	48.7	49.3	50.2	51.3	53.2	55.2	59.5	59.4	57.8
Above Normal (24%)	57.9	55.5	51.2	49.0	49.9	52.7	52.4	54.5	56.3	61.9	62.2	61.1
Below Normal (10%)	56.2	54.7	50.7	48.9	50.3	53.4	52.9	54.2	58.8	63.3	62.4	61.0
Dry (16%)	56.3	55.0	51.1	49.5	50.9	54.5	54.0	55.4	61.2	64.2	63.5	62.4
Critical (27%)	58.6	56.2	52.1	49.8	51.6	55.2	55.2	57.4	63.4	65.9	65.5	64.6

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-1.3	1.3	0.5	0.2	-0.1	-1.0	-0.9	-0.3	0.8	0.3	0.8	1.2
20%	-2.1	0.5	0.0	0.1	0.0	-0.8	-0.6	-0.5	-0.1	0.3	0.6	0.8
30%	-3.5	0.6	0.4	0.1	0.0	-0.6	-0.8	-0.5	-0.5	0.3	0.4	0.2
40%	-2.7	0.0	-0.1	0.0	-0.1	-0.4	-0.5	-0.7	-0.8	0.2	0.2	0.3
50%	-2.6	0.3	0.0	0.0	-0.1	0.0	-0.4	-0.5	0.0	0.1	0.1	0.3
60%	-2.1	0.3	-0.1	-0.2	0.0	0.0	-0.5	-0.4	0.3	0.1	0.1	0.2
70%	-1.6	0.1	-0.1	-0.1	-0.1	-0.4	-0.4	-0.4	0.1	0.0	0.0	0.4
80%	-1.5	0.1	-0.1	-0.2	-0.1	-0.7	-0.1	-0.2	0.2	0.1	0.0	0.4
90%	-1.7	-0.1	-0.1	-0.4	-0.1	-0.7	-0.4	-0.3	0.5	0.0	-0.5	0.2
Long Term												
Full Simulation Period ^b	-1.9	0.3	0.0	-0.1	-0.1	-0.7	-0.6	-0.4	0.1	0.5	0.4	0.5
Water Year Types^c												
Wet (23%)	-1.8	0.3	0.1	0.0	0.2	-0.9	-0.3	-0.2	0.4	0.3	0.3	0.5
Above Normal (24%)	-1.9	0.1	-0.2	-0.3	-0.4	-0.5	-0.5	-0.3	0.2	0.2	0.2	0.4
Below Normal (10%)	-1.8	0.5	0.1	0.0	0.2	0.3	-0.4	-0.5	-0.6	0.0	0.1	0.4
Dry (16%)	-2.1	0.4	0.1	0.1	0.2	-0.3	-0.8	-0.5	-0.5	0.2	0.6	0.7
Critical (27%)	-2.0	0.2	0.0	0.0	-0.2	-1.2	-0.8	-0.3	0.4	1.2	0.7	0.6

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.8.3 Stanislaus River at Orange Blossom Bridge, Monthly Temperature

Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	62.9	57.4	53.0	51.1	52.6	56.7	56.1	58.0	63.1	65.2	64.6	63.3
20%	61.5	56.4	52.6	50.6	51.7	55.8	55.4	57.4	62.6	64.3	63.6	62.4
30%	61.0	55.5	52.0	50.0	51.2	55.2	54.9	56.5	62.1	63.8	63.0	61.9
40%	59.5	55.0	51.5	49.6	50.8	54.4	54.2	56.0	61.5	63.5	62.7	61.4
50%	59.0	54.6	51.1	49.1	50.5	53.7	53.5	55.5	59.2	63.1	62.4	60.9
60%	57.9	54.3	50.8	49.0	50.0	53.3	53.2	54.8	56.4	62.6	62.1	60.6
70%	56.8	54.0	50.6	48.4	49.8	52.5	52.6	54.3	55.8	62.1	61.8	60.0
80%	56.4	53.5	50.3	48.0	49.3	51.6	51.9	53.8	55.1	61.5	61.5	59.5
90%	55.7	52.8	49.9	47.5	48.4	50.3	51.2	52.9	53.9	58.6	60.4	57.9
Long Term												
Full Simulation Period ^b	59.2	55.1	51.4	49.3	50.5	53.8	53.8	55.5	58.9	62.4	62.3	60.9
Water Year Types^c												
Wet (23%)	54.9	51.5	48.5	48.7	49.1	51.1	51.6	53.4	54.8	59.2	59.1	57.3
Above Normal (24%)	59.8	55.3	51.4	49.3	50.3	53.2	52.9	54.9	56.1	61.7	62.0	60.7
Below Normal (10%)	58.0	54.2	50.6	48.9	50.1	53.1	53.2	54.7	59.4	63.3	62.2	60.7
Dry (16%)	58.4	54.6	51.0	49.4	50.7	54.9	54.7	55.9	61.7	64.0	63.0	61.6
Critical (27%)	60.6	56.0	52.1	49.8	51.9	56.4	56.0	57.8	63.0	64.7	64.8	64.0

Alternative 3

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	61.3	57.6	53.2	51.0	52.9	55.8	55.5	57.8	63.9	65.8	64.8	63.5
20%	60.0	56.6	52.7	50.7	51.9	55.2	54.8	56.7	63.2	64.8	63.8	62.6
30%	59.2	55.4	52.2	50.2	51.3	54.6	54.3	56.2	62.6	64.2	63.1	62.1
40%	58.3	54.8	51.6	49.5	50.9	54.1	53.8	55.6	62.1	63.9	62.8	61.4
50%	57.9	54.5	51.1	49.2	50.5	53.7	53.2	55.2	61.7	63.5	62.4	61.1
60%	57.4	54.1	50.9	48.8	50.1	53.4	52.8	54.7	61.3	63.3	62.1	60.8
70%	56.8	53.9	50.5	48.5	49.7	52.6	52.5	54.4	60.8	63.1	61.9	60.3
80%	56.4	53.5	50.2	48.2	49.4	51.6	51.8	53.8	60.3	62.7	61.6	60.0
90%	55.4	52.9	49.9	47.5	48.5	50.5	51.1	53.1	59.0	61.4	60.4	55.8
Long Term												
Full Simulation Period ^b	58.3	55.0	51.4	49.3	50.6	53.4	53.4	55.3	61.3	63.3	62.4	60.8
Water Year Types^c												
Wet (23%)	54.3	51.4	48.5	48.8	49.3	51.2	51.6	53.5	58.0	59.6	59.0	57.3
Above Normal (24%)	58.8	55.4	51.4	49.3	50.2	52.8	52.5	54.6	61.2	63.1	62.2	60.8
Below Normal (10%)	57.5	54.2	50.6	48.8	50.2	53.2	53.1	54.8	61.3	63.5	62.2	60.9
Dry (16%)	57.6	54.4	51.0	49.4	51.0	54.5	54.2	56.0	62.5	64.2	62.9	61.6
Critical (27%)	59.4	55.8	52.1	49.8	52.0	55.4	55.3	57.4	63.6	65.9	65.1	63.4

Alternative 3 minus Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-1.6	0.2	0.2	-0.1	0.3	-1.0	-0.7	-0.2	0.9	0.6	0.2	0.1
20%	-1.5	0.1	0.1	0.1	0.3	-0.6	-0.6	-0.7	0.5	0.5	0.2	0.2
30%	-1.8	-0.2	0.3	0.1	0.1	-0.6	-0.6	-0.2	0.5	0.4	0.1	0.2
40%	-1.3	-0.2	0.0	-0.1	0.1	-0.3	-0.4	-0.4	0.6	0.4	0.1	0.0
50%	-1.1	-0.1	-0.1	0.0	0.0	0.0	-0.2	-0.3	2.5	0.4	0.0	0.1
60%	-0.5	-0.2	0.1	-0.1	0.1	0.1	-0.4	-0.1	4.9	0.7	0.0	0.2
70%	0.0	-0.2	-0.1	0.1	-0.1	0.1	-0.1	0.1	5.0	1.0	0.1	0.3
80%	0.0	0.0	-0.1	0.1	0.1	0.0	-0.1	0.0	5.2	1.3	0.1	0.5
90%	-0.3	0.1	0.0	0.0	0.0	0.2	-0.1	0.2	5.1	2.8	0.1	-2.1
Long Term												
Full Simulation Period ^b	-0.9	-0.1	0.0	0.0	0.1	-0.4	-0.4	-0.1	2.4	0.8	0.1	-0.1
Water Year Types^c												
Wet (23%)	-0.5	-0.1	0.0	0.1	0.2	0.1	0.0	0.1	3.1	0.4	-0.1	0.0
Above Normal (24%)	-1.0	0.0	0.1	0.0	0.0	-0.3	-0.3	-0.3	5.1	1.5	0.1	0.2
Below Normal (10%)	-0.5	0.0	0.0	0.0	0.1	0.1	-0.1	0.1	1.9	0.2	0.0	0.2
Dry (16%)	-0.8	-0.1	0.0	0.0	0.2	-0.3	-0.6	0.0	0.8	0.3	0.0	0.0
Critical (27%)	-1.2	-0.2	0.0	0.0	0.1	-1.0	-0.7	-0.4	0.6	1.2	0.3	-0.5

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.8.4 Stanislaus River at Orange Blossom Bridge, Monthly Temperature

Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	62.9	57.4	53.0	51.1	52.6	56.7	56.1	58.0	63.1	65.2	64.6	63.3
20%	61.5	56.4	52.6	50.6	51.7	55.8	55.4	57.4	62.6	64.3	63.6	62.4
30%	61.0	55.5	52.0	50.0	51.2	55.2	54.9	56.5	62.1	63.8	63.0	61.9
40%	59.5	55.0	51.5	49.6	50.8	54.4	54.2	56.0	61.5	63.5	62.7	61.4
50%	59.0	54.6	51.1	49.1	50.5	53.7	53.5	55.5	59.2	63.1	62.4	60.9
60%	57.9	54.3	50.8	49.0	50.0	53.3	53.2	54.8	56.4	62.6	62.1	60.6
70%	56.8	54.0	50.6	48.4	49.8	52.5	52.6	54.3	55.8	62.1	61.8	60.0
80%	56.4	53.5	50.3	48.0	49.3	51.6	51.9	53.8	55.1	61.5	61.5	59.5
90%	55.7	52.8	49.9	47.5	48.4	50.3	51.2	52.9	53.9	58.6	60.4	57.9
Long Term												
Full Simulation Period ^b	59.2	55.1	51.4	49.3	50.5	53.8	53.8	55.5	58.9	62.4	62.3	60.9
Water Year Types^c												
Wet (23%)	54.9	51.5	48.5	48.7	49.1	51.1	51.6	53.4	54.8	59.2	59.1	57.3
Above Normal (24%)	59.8	55.3	51.4	49.3	50.3	53.2	52.9	54.9	56.1	61.7	62.0	60.7
Below Normal (10%)	58.0	54.2	50.6	48.9	50.1	53.1	53.2	54.7	59.4	63.3	62.2	60.7
Dry (16%)	58.4	54.6	51.0	49.4	50.7	54.9	54.7	55.9	61.7	64.0	63.0	61.6
Critical (27%)	60.6	56.0	52.1	49.8	51.9	56.4	56.0	57.8	63.0	64.7	64.8	64.0

Alternative 5

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	65.0	59.6	53.4	51.3	52.5	55.7	54.6	56.3	64.0	66.4	67.0	67.3
20%	60.0	58.0	52.6	50.6	51.7	55.0	54.1	55.8	62.7	65.1	65.0	64.2
30%	58.1	56.5	52.2	49.9	51.2	54.5	53.7	55.4	61.8	64.3	63.7	62.7
40%	57.1	55.3	51.6	49.6	50.7	54.0	53.5	55.0	61.0	63.7	63.0	61.8
50%	56.5	55.0	51.2	49.1	50.3	53.6	53.0	54.7	59.2	63.2	62.7	61.3
60%	55.9	54.6	50.8	48.9	50.1	53.3	52.6	54.3	57.0	62.7	62.3	60.9
70%	55.4	54.2	50.6	48.4	49.6	52.0	52.2	53.7	55.9	62.2	61.9	60.6
80%	55.0	53.7	50.3	47.9	49.2	51.0	51.8	53.4	55.3	61.6	61.5	60.0
90%	54.0	53.1	49.8	47.2	48.3	49.6	50.7	52.6	54.4	58.9	60.1	58.1
Long Term												
Full Simulation Period ^b	57.8	55.7	51.5	49.2	50.4	53.1	52.9	54.8	59.1	63.3	63.2	61.9
Water Year Types^c												
Wet (23%)	53.6	52.0	48.7	48.7	49.3	50.3	51.3	53.1	55.3	60.2	60.0	58.0
Above Normal (24%)	58.6	56.0	51.2	48.9	49.8	52.6	52.4	54.0	56.3	62.0	62.4	61.4
Below Normal (10%)	57.0	54.6	50.6	48.8	50.2	53.3	52.9	54.3	59.1	63.5	62.6	61.5
Dry (16%)	56.8	55.4	51.4	49.6	51.0	54.5	53.5	54.9	61.5	64.6	63.9	62.7
Critical (27%)	59.0	56.6	52.2	49.8	51.6	55.1	54.5	57.0	63.7	66.2	66.5	65.6

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2.1	2.2	0.4	0.3	-0.1	-1.0	-1.5	-1.6	1.0	1.2	2.4	3.9
20%	-1.5	1.6	0.0	-0.1	0.0	-0.8	-1.3	-1.6	0.1	0.9	1.4	1.7
30%	-2.9	0.9	0.2	-0.1	0.0	-0.7	-1.3	-1.1	-0.4	0.5	0.7	0.9
40%	-2.4	0.2	0.1	-0.1	-0.1	-0.5	-0.7	-1.0	-0.5	0.2	0.3	0.4
50%	-2.5	0.4	0.0	-0.1	-0.2	-0.1	-0.4	-0.8	0.0	0.1	0.3	0.4
60%	-2.0	0.4	0.0	-0.1	0.0	0.0	-0.5	-0.5	0.7	0.2	0.2	0.3
70%	-1.4	0.2	0.0	0.0	-0.1	-0.5	-0.3	-0.6	0.1	0.1	0.1	0.5
80%	-1.4	0.2	0.0	-0.1	-0.1	-0.6	-0.1	-0.4	0.3	0.2	0.0	0.4
90%	-1.7	0.2	-0.1	-0.3	-0.2	-0.7	-0.5	-0.3	0.5	0.3	-0.3	0.1
Long Term												
Full Simulation Period ^b	-1.4	0.6	0.1	0.0	-0.1	-0.7	-0.8	-0.7	0.3	0.8	0.9	1.0
Water Year Types^c												
Wet (23%)	-1.3	0.5	0.2	0.1	0.2	-0.8	-0.3	-0.4	0.5	1.0	0.9	0.7
Above Normal (24%)	-1.2	0.6	-0.2	-0.3	-0.5	-0.5	-0.4	-0.9	0.1	0.3	0.4	0.7
Below Normal (10%)	-1.0	0.4	0.0	-0.1	0.1	0.2	-0.3	-0.4	-0.3	0.2	0.4	0.8
Dry (16%)	-1.6	0.8	0.4	0.2	0.2	-0.4	-1.3	-1.0	-0.2	0.6	0.9	1.0
Critical (27%)	-1.7	0.6	0.1	0.0	-0.2	-1.3	-1.5	-0.7	0.7	1.5	1.7	1.7

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.9 Stanislaus River at Mouth Temperature

Table 5C.3.2.9.1 Stanislaus River at Mouth, Monthly Temperature

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	64.3	58.6	51.9	51.4	55.1	60.5	62.1	65.5	72.3	76.5	75.2	71.8
20%	62.9	57.4	51.6	50.8	54.3	59.7	61.1	64.6	71.7	75.5	74.4	70.7
30%	61.7	56.8	51.0	50.2	53.8	59.1	60.3	63.6	70.8	74.9	73.8	70.4
40%	60.6	56.5	50.7	49.7	53.2	58.7	58.8	62.1	70.2	74.3	73.4	69.8
50%	60.1	55.7	50.3	49.4	52.9	57.9	57.9	61.0	67.8	73.8	73.0	69.5
60%	59.6	55.2	49.9	49.0	52.6	57.0	57.1	60.7	65.3	73.1	72.6	69.0
70%	59.0	55.0	49.7	48.8	52.1	55.7	56.2	59.8	63.8	72.9	72.4	68.6
80%	58.7	54.7	49.3	48.5	51.5	53.6	55.7	58.7	62.7	71.7	71.9	68.1
90%	58.2	54.2	49.0	47.9	50.6	52.1	54.8	58.0	61.7	69.3	70.7	66.9
Long Term												
Full Simulation Period ^b	60.8	56.0	50.4	49.6	52.9	57.1	58.3	61.6	67.3	73.1	72.6	69.0
Water Year Types^c												
Wet (23%)	56.7	52.7	48.1	49.6	51.8	53.0	55.4	58.9	63.1	69.7	69.6	65.7
Above Normal (24%)	61.1	56.0	50.4	49.5	52.5	56.8	57.2	61.2	64.2	72.1	72.6	69.2
Below Normal (10%)	59.7	55.5	49.9	49.3	52.5	57.3	57.4	59.9	67.6	73.9	72.6	69.0
Dry (16%)	60.3	56.0	49.9	49.7	53.3	58.6	59.6	62.1	70.3	75.0	73.4	70.0
Critical (27%)	61.9	56.6	50.6	49.6	54.2	59.9	61.3	64.8	72.0	75.7	74.6	71.1

Revised Alternative 1

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	66.8	58.5	52.0	51.4	54.8	60.8	63.5	66.4	72.5	76.0	74.9	71.4
20%	65.8	57.8	51.4	50.7	54.1	60.1	62.8	65.6	72.2	75.4	74.2	70.4
30%	64.7	57.0	51.0	50.2	53.8	59.3	61.6	64.6	71.1	74.8	73.6	70.1
40%	64.1	56.5	50.7	49.7	53.2	58.9	60.2	63.7	70.6	74.3	73.3	69.7
50%	63.5	55.8	50.2	49.2	52.6	57.5	59.5	62.6	68.3	73.9	72.9	69.4
60%	62.5	55.5	50.0	49.0	52.3	57.1	57.8	61.7	65.2	73.2	72.5	68.8
70%	61.9	55.2	49.6	48.8	51.9	56.5	56.8	60.0	63.8	72.7	72.3	68.5
80%	61.2	54.8	49.4	48.5	51.0	55.8	56.1	59.1	62.4	71.8	72.0	68.0
90%	60.2	54.3	48.9	47.9	50.3	53.9	55.4	58.6	61.3	69.0	71.0	66.9
Long Term												
Full Simulation Period ^b	63.4	56.2	50.4	49.5	52.7	57.6	59.3	62.5	67.2	72.9	72.3	68.6
Water Year Types^c												
Wet (23%)	59.2	52.8	48.0	49.6	51.0	54.5	55.8	59.3	61.8	68.8	68.9	64.7
Above Normal (24%)	63.5	56.1	50.4	49.6	52.5	57.2	58.0	61.9	64.1	72.0	72.6	69.0
Below Normal (10%)	62.4	55.5	49.9	49.2	52.1	57.1	58.3	60.9	68.2	74.0	72.6	68.9
Dry (16%)	63.1	56.1	49.9	49.6	53.1	58.6	61.3	63.3	70.8	75.1	73.2	69.7
Critical (27%)	64.6	56.9	50.6	49.5	54.2	60.3	62.8	65.9	72.1	75.4	74.3	70.8

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2.5	-0.1	0.1	0.0	-0.2	0.3	1.4	0.9	0.2	-0.5	-0.4	-0.5
20%	2.8	0.4	-0.1	0.0	-0.2	0.5	1.7	1.0	0.5	0.0	-0.2	-0.3
30%	3.0	0.1	-0.1	0.0	0.0	0.2	1.4	1.1	0.4	-0.1	-0.2	-0.3
40%	3.5	0.0	0.0	0.0	0.0	0.2	1.5	1.5	0.4	0.1	-0.2	-0.2
50%	3.4	0.2	0.0	-0.2	-0.4	-0.4	1.6	1.7	0.5	0.0	-0.1	-0.1
60%	2.9	0.2	0.1	0.0	-0.3	0.2	0.7	1.0	-0.1	0.1	0.0	-0.2
70%	2.8	0.2	0.0	-0.1	-0.3	0.9	0.5	0.2	0.0	-0.1	0.0	-0.1
80%	2.5	0.1	0.1	0.0	-0.5	2.2	0.4	0.4	-0.3	0.1	0.1	-0.1
90%	2.0	0.1	-0.2	0.1	-0.3	1.8	0.6	0.6	-0.4	-0.4	0.3	0.0
Long Term												
Full Simulation Period ^b	2.6	0.1	0.0	0.0	-0.2	0.5	1.0	0.9	-0.2	-0.3	-0.3	-0.4
Water Year Types^c												
Wet (23%)	2.5	0.1	0.0	-0.1	-0.7	1.5	0.4	0.5	-1.3	-0.9	-0.7	-1.0
Above Normal (24%)	2.4	0.1	0.0	0.1	0.0	0.4	0.8	0.6	-0.1	-0.1	0.0	-0.1
Below Normal (10%)	2.6	-0.1	0.0	-0.1	-0.4	-0.2	0.9	1.0	0.6	0.1	0.0	-0.2
Dry (16%)	2.8	0.1	0.0	-0.1	-0.2	0.0	1.7	1.2	0.5	0.0	-0.2	-0.2
Critical (27%)	2.7	0.2	0.0	0.0	0.0	0.4	1.5	1.2	0.2	-0.3	-0.3	-0.3

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.9.2 Stanislaus River at Mouth, Monthly Temperature

Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	66.8	58.5	52.0	51.4	54.8	60.8	63.5	66.4	72.5	76.0	74.9	71.4
20%	65.8	57.8	51.4	50.7	54.1	60.1	62.8	65.6	72.2	75.4	74.2	70.4
30%	64.7	57.0	51.0	50.2	53.8	59.3	61.6	64.6	71.1	74.8	73.6	70.1
40%	64.1	56.5	50.7	49.7	53.2	58.9	60.2	63.7	70.6	74.3	73.3	69.7
50%	63.5	55.8	50.2	49.2	52.6	57.5	59.5	62.6	68.3	73.9	72.9	69.4
60%	62.5	55.5	50.0	49.0	52.3	57.1	57.8	61.7	65.2	73.2	72.5	68.8
70%	61.9	55.2	49.6	48.8	51.9	56.5	56.8	60.0	63.8	72.7	72.3	68.5
80%	61.2	54.8	49.4	48.5	51.0	55.8	56.1	59.1	62.4	71.8	72.0	68.0
90%	60.2	54.3	48.9	47.9	50.3	53.9	55.4	58.6	61.3	69.0	71.0	66.9
Long Term												
Full Simulation Period ^b	63.4	56.2	50.4	49.5	52.7	57.6	59.3	62.5	67.2	72.9	72.3	68.6
Water Year Types^c												
Wet (23%)	59.2	52.8	48.0	49.6	51.0	54.5	55.8	59.3	61.8	68.8	68.9	64.7
Above Normal (24%)	63.5	56.1	50.4	49.6	52.5	57.2	58.0	61.9	64.1	72.0	72.6	69.0
Below Normal (10%)	62.4	55.5	49.9	49.2	52.1	57.1	58.3	60.9	68.2	74.0	72.6	68.9
Dry (16%)	63.1	56.1	49.9	49.6	53.1	58.6	61.3	63.3	70.8	75.1	73.2	69.7
Critical (27%)	64.6	56.9	50.6	49.5	54.2	60.3	62.8	65.9	72.1	75.4	74.3	70.8

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	64.3	58.6	51.9	51.4	55.1	60.5	62.1	65.5	72.3	76.5	75.2	71.8
20%	62.9	57.4	51.6	50.8	54.3	59.7	61.1	64.6	71.7	75.5	74.4	70.7
30%	61.7	56.8	51.0	50.2	53.8	59.1	60.3	63.6	70.8	74.9	73.8	70.4
40%	60.6	56.5	50.7	49.7	53.2	58.7	58.8	62.1	70.2	74.3	73.4	69.8
50%	60.1	55.7	50.3	49.4	52.9	57.9	57.9	61.0	67.8	73.8	73.0	69.5
60%	59.6	55.2	49.9	49.0	52.6	57.0	57.1	60.7	65.3	73.1	72.6	69.0
70%	59.0	55.0	49.7	48.8	52.1	55.7	56.2	59.8	63.8	72.9	72.4	68.6
80%	58.7	54.7	49.3	48.5	51.5	53.6	55.7	58.7	62.7	71.7	71.9	68.1
90%	58.2	54.2	49.0	47.9	50.6	52.1	54.8	58.0	61.7	69.3	70.7	66.9
Long Term												
Full Simulation Period ^b	60.8	56.0	50.4	49.6	52.9	57.1	58.3	61.6	67.3	73.1	72.6	69.0
Water Year Types^c												
Wet (23%)	56.7	52.7	48.1	49.6	51.8	53.0	55.4	58.9	63.1	69.7	69.6	65.7
Above Normal (24%)	61.1	56.0	50.4	49.5	52.5	56.8	57.2	61.2	64.2	72.1	72.6	69.2
Below Normal (10%)	59.7	55.5	49.9	49.3	52.5	57.3	57.4	59.9	67.6	73.9	72.6	69.0
Dry (16%)	60.3	56.0	49.9	49.7	53.3	58.6	59.6	62.1	70.3	75.0	73.4	70.0
Critical (27%)	61.9	56.6	50.6	49.6	54.2	59.9	61.3	64.8	72.0	75.7	74.6	71.1

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-2.5	0.1	-0.1	0.0	0.2	-0.3	-1.4	-0.9	-0.2	0.5	0.4	0.5
20%	-2.8	-0.4	0.1	0.0	0.2	-0.5	-1.7	-1.0	-0.5	0.0	0.2	0.3
30%	-3.0	-0.1	0.1	0.0	0.0	-0.2	-1.4	-1.1	-0.4	0.1	0.2	0.3
40%	-3.5	0.0	0.0	0.0	0.0	-0.2	-1.5	-1.5	-0.4	-0.1	0.2	0.2
50%	-3.4	-0.2	0.0	0.2	0.4	0.4	-1.6	-1.7	-0.5	0.0	0.1	0.1
60%	-2.9	-0.2	-0.1	0.0	0.3	-0.2	-0.7	-1.0	0.1	-0.1	0.0	0.2
70%	-2.8	-0.2	0.0	0.1	0.3	-0.9	-0.5	-0.2	0.0	0.1	0.0	0.1
80%	-2.5	-0.1	-0.1	0.0	0.5	-2.2	-0.4	-0.4	0.3	-0.1	-0.1	0.1
90%	-2.0	-0.1	0.2	-0.1	0.3	-1.8	-0.6	-0.6	0.4	0.4	-0.3	0.0
Long Term												
Full Simulation Period ^b	-2.6	-0.1	0.0	0.0	0.2	-0.5	-1.0	-0.9	0.2	0.3	0.3	0.4
Water Year Types^c												
Wet (23%)	-2.5	-0.1	0.0	0.1	0.7	-1.5	-0.4	-0.5	1.3	0.9	0.7	1.0
Above Normal (24%)	-2.4	-0.1	0.0	-0.1	0.0	-0.4	-0.8	-0.6	0.1	0.1	0.0	0.1
Below Normal (10%)	-2.6	0.1	0.0	0.1	0.4	0.2	-0.9	-1.0	-0.6	-0.1	0.0	0.2
Dry (16%)	-2.8	-0.1	0.0	0.1	0.2	0.0	-1.7	-1.2	-0.5	0.0	0.2	0.2
Critical (27%)	-2.7	-0.2	0.0	0.0	0.0	-0.4	-1.5	-1.2	-0.2	0.3	0.3	0.3

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.9.3 Stanislaus River at Mouth, Monthly Temperature

Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	66.8	58.5	52.0	51.4	54.8	60.8	63.5	66.4	72.5	76.0	74.9	71.4
20%	65.8	57.8	51.4	50.7	54.1	60.1	62.8	65.6	72.2	75.4	74.2	70.4
30%	64.7	57.0	51.0	50.2	53.8	59.3	61.6	64.6	71.1	74.8	73.6	70.1
40%	64.1	56.5	50.7	49.7	53.2	58.9	60.2	63.7	70.6	74.3	73.3	69.7
50%	63.5	55.8	50.2	49.2	52.6	57.5	59.5	62.6	68.3	73.9	72.9	69.4
60%	62.5	55.5	50.0	49.0	52.3	57.1	57.8	61.7	65.2	73.2	72.5	68.8
70%	61.9	55.2	49.6	48.8	51.9	56.5	56.8	60.0	63.8	72.7	72.3	68.5
80%	61.2	54.8	49.4	48.5	51.0	55.8	56.1	59.1	62.4	71.8	72.0	68.0
90%	60.2	54.3	48.9	47.9	50.3	53.9	55.4	58.6	61.3	69.0	71.0	66.9
Long Term												
Full Simulation Period ^b	63.4	56.2	50.4	49.5	52.7	57.6	59.3	62.5	67.2	72.9	72.3	68.6
Water Year Types^c												
Wet (23%)	59.2	52.8	48.0	49.6	51.0	54.5	55.8	59.3	61.8	68.8	68.9	64.7
Above Normal (24%)	63.5	56.1	50.4	49.6	52.5	57.2	58.0	61.9	64.1	72.0	72.6	69.0
Below Normal (10%)	62.4	55.5	49.9	49.2	52.1	57.1	58.3	60.9	68.2	74.0	72.6	68.9
Dry (16%)	63.1	56.1	49.9	49.6	53.1	58.6	61.3	63.3	70.8	75.1	73.2	69.7
Critical (27%)	64.6	56.9	50.6	49.5	54.2	60.3	62.8	65.9	72.1	75.4	74.3	70.8

Alternative 3

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	65.7	58.3	51.9	51.6	55.2	60.9	62.6	65.8	73.2	76.9	75.3	71.7
20%	65.2	57.7	51.5	50.7	54.7	59.7	61.6	64.6	72.4	76.0	74.3	70.7
30%	64.0	56.7	51.0	50.2	53.8	59.2	60.4	63.7	72.1	75.5	73.8	70.2
40%	63.2	56.3	50.8	49.7	53.2	58.7	59.7	62.9	71.7	75.0	73.4	69.9
50%	62.9	55.6	50.4	49.4	52.8	58.2	58.3	62.5	71.1	74.7	73.1	69.4
60%	62.4	55.3	50.0	49.0	52.3	57.3	57.3	61.7	70.3	74.2	72.5	69.0
70%	61.7	55.0	49.6	48.8	52.0	56.7	56.6	60.9	69.3	73.8	72.4	68.7
80%	61.3	54.8	49.4	48.6	51.1	55.0	56.1	60.2	68.5	73.5	72.0	68.1
90%	60.6	54.3	49.0	47.9	50.3	53.5	55.4	59.0	67.4	73.0	71.3	62.2
Long Term												
Full Simulation Period ^b	62.9	56.0	50.4	49.6	52.8	57.5	58.7	62.5	69.9	73.7	72.4	68.6
Water Year Types^c												
Wet (23%)	58.8	52.7	48.1	49.7	51.1	54.6	55.7	60.0	65.7	69.2	68.6	64.6
Above Normal (24%)	62.9	56.0	50.5	49.7	52.6	57.1	57.4	61.8	70.2	74.2	72.9	69.2
Below Normal (10%)	62.3	55.5	49.9	49.1	52.1	57.3	58.2	61.2	70.0	74.4	72.6	69.0
Dry (16%)	62.6	55.9	49.9	49.6	53.3	58.6	60.4	63.3	71.6	75.4	73.2	69.7
Critical (27%)	64.0	56.6	50.7	49.5	54.4	60.0	61.6	65.1	72.3	76.0	74.5	70.8

Alternative 3 minus Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-1.1	-0.2	0.0	0.2	0.4	0.0	-0.9	-0.6	0.6	1.0	0.4	0.4
20%	-0.6	-0.1	0.1	0.0	0.6	-0.4	-1.3	-1.0	0.2	0.6	0.1	0.2
30%	-0.7	-0.2	0.0	0.0	0.0	-0.1	-1.2	-0.9	1.0	0.7	0.2	0.1
40%	-0.9	-0.2	0.1	0.0	0.0	-0.2	-0.5	-0.7	1.1	0.7	0.1	0.2
50%	-0.7	-0.2	0.2	0.2	0.3	0.7	-1.2	-0.2	2.7	0.8	0.1	0.0
60%	-0.1	-0.1	0.0	-0.1	0.1	0.2	-0.5	0.0	5.1	1.0	0.0	0.2
70%	-0.1	-0.2	0.0	0.1	0.1	0.2	-0.1	0.9	5.5	1.1	0.1	0.1
80%	0.1	0.0	0.0	0.1	0.0	-0.8	0.0	1.1	6.1	1.8	0.0	0.0
90%	0.4	0.0	0.1	0.0	0.0	-0.3	0.0	0.4	6.1	4.0	0.4	-4.7
Long Term												
Full Simulation Period ^b	-0.5	-0.1	0.1	0.0	0.1	-0.1	-0.6	-0.1	2.7	0.9	0.1	0.0
Water Year Types^c												
Wet (23%)	-0.3	-0.1	0.0	0.1	0.1	0.1	-0.1	0.6	3.9	0.4	-0.3	-0.1
Above Normal (24%)	-0.6	-0.1	0.1	0.0	0.0	-0.1	-0.5	0.0	6.1	2.2	0.3	0.1
Below Normal (10%)	-0.1	0.0	0.0	-0.1	0.1	0.2	-0.2	0.3	1.8	0.4	0.0	0.2
Dry (16%)	-0.5	-0.1	0.0	0.0	0.2	0.0	-1.0	0.0	0.8	0.3	0.0	0.0
Critical (27%)	-0.6	-0.2	0.1	0.0	0.2	-0.2	-1.2	-0.8	0.2	0.6	0.3	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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.9.4 Stanislaus River at Mouth, Monthly Temperature

Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	66.8	58.5	52.0	51.4	54.8	60.8	63.5	66.4	72.5	76.0	74.9	71.4
20%	65.8	57.8	51.4	50.7	54.1	60.1	62.8	65.6	72.2	75.4	74.2	70.4
30%	64.7	57.0	51.0	50.2	53.8	59.3	61.6	64.6	71.1	74.8	73.6	70.1
40%	64.1	56.5	50.7	49.7	53.2	58.9	60.2	63.7	70.6	74.3	73.3	69.7
50%	63.5	55.8	50.2	49.2	52.6	57.5	59.5	62.6	68.3	73.9	72.9	69.4
60%	62.5	55.5	50.0	49.0	52.3	57.1	57.8	61.7	65.2	73.2	72.5	68.8
70%	61.9	55.2	49.6	48.8	51.9	56.5	56.8	60.0	63.8	72.7	72.3	68.5
80%	61.2	54.8	49.4	48.5	51.0	55.8	56.1	59.1	62.4	71.8	72.0	68.0
90%	60.2	54.3	48.9	47.9	50.3	53.9	55.4	58.6	61.3	69.0	71.0	66.9
Long Term												
Full Simulation Period ^b	63.4	56.2	50.4	49.5	52.7	57.6	59.3	62.5	67.2	72.9	72.3	68.6
Water Year Types^c												
Wet (23%)	59.2	52.8	48.0	49.6	51.0	54.5	55.8	59.3	61.8	68.8	68.9	64.7
Above Normal (24%)	63.5	56.1	50.4	49.6	52.5	57.2	58.0	61.9	64.1	72.0	72.6	69.0
Below Normal (10%)	62.4	55.5	49.9	49.2	52.1	57.1	58.3	60.9	68.2	74.0	72.6	68.9
Dry (16%)	63.1	56.1	49.9	49.6	53.1	58.6	61.3	63.3	70.8	75.1	73.2	69.7
Critical (27%)	64.6	56.9	50.6	49.5	54.2	60.3	62.8	65.9	72.1	75.4	74.3	70.8

Alternative 5

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	65.4	58.6	52.2	51.4	55.1	60.5	60.1	64.4	72.3	76.3	75.4	72.0
20%	63.3	57.7	51.5	50.8	54.4	59.7	59.1	62.6	71.8	75.6	74.6	71.0
30%	62.0	57.0	51.0	50.3	53.7	59.2	58.7	61.5	70.9	75.0	73.9	70.5
40%	61.1	56.7	50.5	49.7	53.2	58.7	58.3	60.8	70.1	74.3	73.5	70.0
50%	60.4	56.0	50.3	49.3	52.9	57.9	57.7	60.1	67.6	73.9	73.1	69.7
60%	59.7	55.4	50.0	49.0	52.6	57.1	57.3	59.5	65.2	73.1	72.6	69.2
70%	59.2	55.1	49.7	48.9	52.0	55.9	56.3	59.0	64.0	72.9	72.4	68.7
80%	58.7	54.8	49.3	48.5	51.5	53.8	55.7	58.3	62.7	72.0	72.0	68.2
90%	58.2	54.2	48.9	47.9	50.6	52.1	55.0	57.9	61.5	69.4	71.3	66.9
Long Term												
Full Simulation Period ^b	61.1	56.2	50.4	49.6	52.9	57.1	57.6	60.6	67.4	73.4	72.9	69.2
Water Year Types^c												
Wet (23%)	57.0	52.8	48.1	49.7	51.8	53.3	55.4	58.8	63.4	70.6	70.6	66.0
Above Normal (24%)	61.5	56.3	50.4	49.5	52.5	56.8	57.4	59.9	64.1	72.1	72.7	69.3
Below Normal (10%)	60.2	55.5	49.9	49.3	52.5	57.2	57.5	59.9	67.8	73.9	72.6	69.1
Dry (16%)	60.6	56.2	50.0	49.7	53.4	58.6	58.2	60.3	70.2	75.1	73.5	70.0
Critical (27%)	62.1	56.8	50.7	49.6	54.2	59.9	59.4	63.4	72.0	75.9	74.8	71.5

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-1.3	0.2	0.2	0.0	0.3	-0.3	-3.4	-2.0	-0.2	0.4	0.5	0.7
20%	-2.4	-0.1	0.1	0.0	0.3	-0.5	-3.7	-3.1	-0.4	0.2	0.4	0.6
30%	-2.7	0.0	0.1	0.1	-0.1	-0.1	-2.9	-3.1	-0.2	0.2	0.4	0.3
40%	-3.1	0.2	-0.2	0.0	0.1	-0.2	-1.9	-2.9	-0.4	0.0	0.2	0.3
50%	-3.1	0.1	0.1	0.0	0.4	0.4	-1.8	-2.5	-0.7	0.0	0.2	0.3
60%	-2.8	-0.1	0.0	0.0	0.3	0.0	-0.5	-2.2	-0.1	-0.1	0.1	0.4
70%	-2.7	-0.2	0.0	0.1	0.1	-0.6	-0.5	-1.0	0.2	0.2	0.1	0.2
80%	-2.5	0.0	0.0	0.0	0.5	-2.0	-0.4	-0.7	0.3	0.3	0.0	0.2
90%	-2.0	0.0	0.0	0.0	0.3	-1.8	-0.4	-0.7	0.2	0.5	0.3	0.0
Long Term												
Full Simulation Period ^b	-2.3	0.0	0.1	0.0	0.3	-0.5	-1.7	-1.9	0.2	0.6	0.6	0.6
Water Year Types^c												
Wet (23%)	-2.2	0.0	0.1	0.1	0.7	-1.2	-0.4	-0.6	1.6	1.8	1.7	1.3
Above Normal (24%)	-1.9	0.1	0.0	-0.1	0.0	-0.5	-0.6	-1.9	0.0	0.1	0.1	0.2
Below Normal (10%)	-2.1	0.0	0.0	0.1	0.4	0.1	-0.8	-1.0	-0.4	0.0	0.1	0.3
Dry (16%)	-2.5	0.1	0.1	0.1	0.3	0.0	-3.1	-3.0	-0.6	0.1	0.3	0.3
Critical (27%)	-2.4	0.0	0.1	0.1	0.1	-0.4	-3.3	-2.6	-0.1	0.5	0.6	0.6

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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.10 San Joaquin River at Vernalis Flow

Table 5C.3.2.10.1 San Joaquin River at Vernalis, Monthly Flow

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,498	2,953	4,804	11,135	14,596	15,471	14,974	14,174	9,351	5,890	2,796	3,060
20%	3,161	2,777	2,857	4,812	10,143	10,197	10,637	8,318	4,690	2,628	2,589	2,654
30%	2,980	2,527	2,401	3,610	6,118	8,459	8,616	5,534	3,364	1,985	1,904	2,490
40%	2,796	2,395	2,215	2,629	4,232	5,570	7,564	4,609	2,947	1,735	1,666	2,125
50%	2,601	2,219	2,101	2,402	3,420	3,847	6,017	3,925	2,246	1,487	1,488	1,930
60%	2,401	2,169	2,046	2,293	2,683	3,459	4,832	3,062	1,859	1,366	1,403	1,835
70%	2,247	2,059	1,979	2,114	2,305	2,906	3,776	2,699	1,448	1,154	1,307	1,739
80%	1,994	1,951	1,829	1,884	2,150	2,371	2,789	2,153	1,293	1,087	1,202	1,611
90%	1,849	1,763	1,669	1,699	1,947	2,204	1,887	1,678	1,085	885	1,067	1,476
Long Term												
Full Simulation Period ^b	2,672	2,611	3,391	5,070	6,655	7,278	7,528	6,039	4,194	2,622	1,847	2,223
Water Year Types^c												
Wet (23%)	2,918	3,513	6,545	11,446	15,776	16,863	15,423	14,628	11,335	6,676	3,135	3,416
Above Normal (24%)	2,700	2,416	2,663	4,883	6,881	7,536	8,542	5,264	3,280	1,989	1,975	2,345
Below Normal (10%)	2,538	2,249	3,661	3,507	3,651	4,149	6,337	4,140	2,076	1,463	1,446	1,837
Dry (16%)	2,767	2,569	2,232	2,402	2,549	3,241	3,996	2,805	1,680	1,254	1,347	1,776
Critical (27%)	2,426	2,168	1,915	1,877	2,090	2,288	2,307	1,929	1,115	926	1,060	1,487

Revised Alternative 1

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,058	3,088	4,931	11,054	17,256	15,467	14,774	14,101	9,720	6,052	2,996	3,315
20%	2,699	2,813	2,924	4,859	10,259	9,401	10,359	8,202	4,768	2,636	2,599	2,659
30%	2,470	2,631	2,462	3,635	6,228	7,841	8,536	5,452	3,364	1,988	1,896	2,484
40%	2,326	2,448	2,299	2,606	4,252	5,343	7,507	4,488	2,947	1,742	1,675	2,152
50%	2,089	2,342	2,226	2,481	3,420	3,825	6,018	3,916	2,205	1,503	1,499	1,934
60%	1,895	2,218	2,100	2,247	2,681	3,460	4,432	2,913	1,824	1,384	1,415	1,837
70%	1,697	2,100	1,988	2,070	2,379	2,870	3,224	2,493	1,420	1,170	1,322	1,743
80%	1,511	1,954	1,866	1,827	2,153	2,327	2,452	1,994	1,271	1,087	1,211	1,611
90%	1,338	1,753	1,671	1,638	1,931	2,115	1,813	1,564	1,085	941	1,099	1,503
Long Term												
Full Simulation Period ^b	2,200	2,673	3,455	5,082	6,806	7,116	7,330	5,903	4,350	2,668	1,876	2,266
Water Year Types^c												
Wet (23%)	2,472	3,596	6,642	11,484	16,260	16,444	15,398	14,493	12,009	6,823	3,227	3,582
Above Normal (24%)	2,234	2,469	2,712	4,887	6,916	7,376	8,371	5,184	3,310	1,997	1,976	2,348
Below Normal (10%)	2,052	2,330	3,742	3,561	3,837	4,077	5,974	3,968	2,025	1,478	1,455	1,847
Dry (16%)	2,305	2,644	2,306	2,421	2,623	3,227	3,656	2,625	1,661	1,266	1,362	1,783
Critical (27%)	1,926	2,205	1,952	1,854	2,092	2,228	2,079	1,780	1,114	951	1,077	1,490

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-13%	5%	3%	-1%	18%	0%	-1%	-1%	4%	3%	7%	8%
20%	-15%	1%	2%	1%	1%	-8%	-3%	-1%	2%	0%	0%	0%
30%	-17%	4%	3%	1%	2%	-7%	-1%	-1%	0%	0%	0%	0%
40%	-17%	2%	4%	-1%	0%	-4%	-1%	-3%	0%	0%	1%	1%
50%	-20%	6%	6%	3%	0%	-1%	0%	0%	-2%	1%	1%	0%
60%	-21%	2%	3%	-2%	0%	0%	-8%	-5%	-2%	1%	1%	0%
70%	-24%	2%	0%	-2%	3%	-1%	-15%	-8%	-2%	1%	1%	0%
80%	-24%	0%	2%	-3%	0%	-2%	-12%	-7%	-2%	0%	1%	0%
90%	-28%	-1%	0%	-4%	-1%	-4%	-4%	-7%	0%	6%	3%	2%
Long Term												
Full Simulation Period ^b	-18%	2%	2%	0%	2%	-2%	-3%	-2%	4%	2%	2%	2%
Water Year Types^c												
Wet (23%)	-15%	2%	1%	0%	3%	-2%	0%	-1%	6%	2%	3%	5%
Above Normal (24%)	-17%	2%	2%	0%	1%	-2%	-2%	-2%	1%	0%	0%	0%
Below Normal (10%)	-19%	4%	2%	2%	5%	-2%	-6%	-4%	-2%	1%	1%	1%
Dry (16%)	-17%	3%	3%	1%	3%	0%	-9%	-6%	-1%	1%	1%	0%
Critical (27%)	-21%	2%	2%	-1%	0%	-3%	-10%	-8%	0%	3%	2%	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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.10.2 San Joaquin River at Vernalis, Monthly Flow

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,058	3,088	4,931	11,054	17,256	15,467	14,774	14,101	9,720	6,052	2,996	3,315
20%	2,699	2,813	2,924	4,859	10,259	9,401	10,359	8,202	4,768	2,636	2,599	2,659
30%	2,470	2,631	2,462	3,635	6,228	7,841	8,536	5,452	3,364	1,988	1,896	2,484
40%	2,326	2,448	2,299	2,606	4,252	5,343	7,507	4,488	2,947	1,742	1,675	2,152
50%	2,089	2,342	2,226	2,481	3,420	3,825	6,018	3,916	2,205	1,503	1,499	1,934
60%	1,895	2,218	2,100	2,247	2,681	3,460	4,432	2,913	1,824	1,384	1,415	1,837
70%	1,697	2,100	1,988	2,070	2,379	2,870	3,224	2,493	1,420	1,170	1,322	1,743
80%	1,511	1,954	1,866	1,827	2,153	2,327	2,452	1,994	1,271	1,087	1,211	1,611
90%	1,338	1,753	1,671	1,638	1,931	2,115	1,813	1,564	1,085	941	1,099	1,503
Long Term												
Full Simulation Period ^b	2,200	2,673	3,455	5,082	6,806	7,116	7,330	5,903	4,350	2,668	1,876	2,266
Water Year Types^c												
Wet (23%)	2,472	3,596	6,642	11,484	16,260	16,444	15,398	14,493	12,009	6,823	3,227	3,582
Above Normal (24%)	2,234	2,469	2,712	4,887	6,916	7,376	8,371	5,184	3,310	1,997	1,976	2,348
Below Normal (10%)	2,052	2,330	3,742	3,561	3,837	4,077	5,974	3,968	2,025	1,478	1,455	1,847
Dry (16%)	2,305	2,644	2,306	2,421	2,623	3,227	3,656	2,625	1,661	1,266	1,362	1,783
Critical (27%)	1,926	2,205	1,952	1,854	2,092	2,228	2,079	1,780	1,114	951	1,077	1,490

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,498	2,953	4,804	11,135	14,596	15,471	14,974	14,174	9,351	5,890	2,796	3,060
20%	3,161	2,777	2,857	4,812	10,143	10,197	10,637	8,318	4,690	2,628	2,589	2,654
30%	2,980	2,527	2,401	3,610	6,118	8,459	8,616	5,534	3,364	1,985	1,904	2,490
40%	2,796	2,395	2,215	2,629	4,232	5,570	7,564	4,609	2,947	1,735	1,666	2,125
50%	2,601	2,219	2,101	2,402	3,420	3,847	6,017	3,925	2,246	1,487	1,488	1,930
60%	2,401	2,169	2,046	2,293	2,683	3,459	4,832	3,062	1,859	1,366	1,403	1,835
70%	2,247	2,059	1,979	2,114	2,305	2,906	3,776	2,699	1,448	1,154	1,307	1,739
80%	1,994	1,951	1,829	1,884	2,150	2,371	2,789	2,153	1,293	1,087	1,202	1,611
90%	1,849	1,763	1,669	1,699	1,947	2,204	1,887	1,678	1,085	885	1,067	1,476
Long Term												
Full Simulation Period ^b	2,672	2,611	3,391	5,070	6,655	7,278	7,528	6,039	4,194	2,622	1,847	2,223
Water Year Types^c												
Wet (23%)	2,918	3,513	6,545	11,446	15,776	16,863	15,423	14,628	11,335	6,676	3,135	3,416
Above Normal (24%)	2,700	2,416	2,663	4,883	6,881	7,536	8,542	5,264	3,280	1,989	1,975	2,345
Below Normal (10%)	2,538	2,249	3,661	3,507	3,651	4,149	6,337	4,140	2,076	1,463	1,446	1,837
Dry (16%)	2,767	2,569	2,232	2,402	2,549	3,241	3,996	2,805	1,680	1,254	1,347	1,776
Critical (27%)	2,426	2,168	1,915	1,877	2,090	2,288	2,307	1,929	1,115	926	1,060	1,487

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	14%	-4%	-3%	1%	-15%	0%	1%	1%	-4%	-3%	-7%	-8%
20%	17%	-1%	-2%	-1%	-1%	8%	3%	1%	-2%	0%	0%	0%
30%	21%	-4%	-3%	-1%	-2%	8%	1%	2%	0%	0%	0%	0%
40%	20%	-2%	-4%	1%	0%	4%	1%	3%	0%	0%	-1%	-1%
50%	25%	-5%	-6%	-3%	0%	1%	0%	0%	2%	-1%	-1%	0%
60%	27%	-2%	-3%	2%	0%	0%	9%	5%	2%	-1%	-1%	0%
70%	32%	-2%	0%	2%	-3%	1%	17%	8%	2%	-1%	-1%	0%
80%	32%	0%	-2%	3%	0%	2%	14%	8%	2%	0%	-1%	0%
90%	38%	1%	0%	4%	1%	4%	4%	7%	0%	-6%	-3%	-2%
Long Term												
Full Simulation Period ^b	21%	-2%	-2%	0%	-2%	2%	3%	2%	-4%	-2%	-2%	-2%
Water Year Types^c												
Wet (23%)	18%	-2%	-1%	0%	-3%	3%	0%	1%	-6%	-2%	-3%	-5%
Above Normal (24%)	21%	-2%	-2%	0%	-1%	2%	2%	2%	-1%	0%	0%	0%
Below Normal (10%)	24%	-3%	-2%	-2%	-5%	2%	6%	4%	2%	-1%	-1%	-1%
Dry (16%)	20%	-3%	-3%	-1%	-3%	0%	9%	7%	1%	-1%	-1%	0%
Critical (27%)	26%	-2%	-2%	1%	0%	3%	11%	8%	0%	-3%	-2%	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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.10.3 San Joaquin River at Vernalis, Monthly Flow

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,058	3,088	4,931	11,054	17,256	15,467	14,774	14,101	9,720	6,052	2,996	3,315
20%	2,699	2,813	2,924	4,859	10,259	9,401	10,359	8,202	4,768	2,636	2,599	2,659
30%	2,470	2,631	2,462	3,635	6,228	7,841	8,536	5,452	3,364	1,988	1,896	2,484
40%	2,326	2,448	2,299	2,606	4,252	5,343	7,507	4,488	2,947	1,742	1,675	2,152
50%	2,089	2,342	2,226	2,481	3,420	3,825	6,018	3,916	2,205	1,503	1,499	1,934
60%	1,895	2,218	2,100	2,247	2,681	3,460	4,432	2,913	1,824	1,384	1,415	1,837
70%	1,697	2,100	1,988	2,070	2,379	2,870	3,224	2,493	1,420	1,170	1,322	1,743
80%	1,511	1,954	1,866	1,827	2,153	2,327	2,452	1,994	1,271	1,087	1,211	1,611
90%	1,338	1,753	1,671	1,638	1,931	2,115	1,813	1,564	1,085	941	1,099	1,503
Long Term												
Full Simulation Period ^b	2,200	2,673	3,455	5,082	6,806	7,116	7,330	5,903	4,350	2,668	1,876	2,266
Water Year Types^c												
Wet (23%)	2,472	3,596	6,642	11,484	16,260	16,444	15,398	14,493	12,009	6,823	3,227	3,582
Above Normal (24%)	2,234	2,469	2,712	4,887	6,916	7,376	8,371	5,184	3,310	1,997	1,976	2,348
Below Normal (10%)	2,052	2,330	3,742	3,561	3,837	4,077	5,974	3,968	2,025	1,478	1,455	1,847
Dry (16%)	2,305	2,644	2,306	2,421	2,623	3,227	3,656	2,625	1,661	1,266	1,362	1,783
Critical (27%)	1,926	2,205	1,952	1,854	2,092	2,228	2,079	1,780	1,114	951	1,077	1,490

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,023	3,053	4,949	12,089	17,246	15,467	14,936	14,309	10,004	6,473	3,525	3,287
20%	2,667	2,830	2,938	4,833	10,213	9,874	10,251	7,931	4,627	2,495	2,587	2,623
30%	2,494	2,583	2,421	3,540	6,797	7,753	8,532	5,438	2,558	1,926	1,892	2,464
40%	2,328	2,478	2,304	2,753	4,210	5,305	7,580	4,344	2,294	1,722	1,667	2,125
50%	2,137	2,313	2,191	2,439	3,215	3,847	6,112	3,821	1,955	1,506	1,495	1,932
60%	1,956	2,244	2,140	2,236	2,668	3,440	4,501	2,907	1,700	1,361	1,415	1,838
70%	1,782	2,148	2,012	2,088	2,360	2,906	3,355	2,502	1,364	1,164	1,319	1,743
80%	1,609	1,974	1,886	1,824	2,090	2,371	2,581	2,158	1,241	1,026	1,211	1,612
90%	1,466	1,763	1,669	1,639	1,849	2,205	1,936	1,650	1,001	930	1,065	1,477
Long Term												
Full Simulation Period ^b	2,252	2,683	3,501	5,108	6,872	7,145	7,431	5,830	4,009	2,655	1,882	2,271
Water Year Types^c												
Wet (23%)	2,505	3,604	6,760	11,512	16,584	16,445	15,425	14,237	11,476	6,916	3,267	3,610
Above Normal (24%)	2,310	2,488	2,775	4,925	6,937	7,444	8,476	5,078	2,579	1,910	1,972	2,341
Below Normal (10%)	2,067	2,299	3,711	3,708	3,857	4,057	6,015	3,856	1,865	1,472	1,454	1,834
Dry (16%)	2,346	2,646	2,309	2,419	2,607	3,241	3,785	2,611	1,568	1,253	1,360	1,782
Critical (27%)	1,991	2,227	1,974	1,842	2,043	2,273	2,247	1,874	1,080	912	1,067	1,497

Alternative 3 minus Revised Second Basis of Comparison

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%	9%	0%	0%	1%	1%	3%	7%	18%	-1%
20%	-1%	1%	0%	-1%	0%	5%	-1%	-3%	-3%	-5%	0%	-1%
30%	1%	-2%	-2%	-3%	9%	-1%	0%	0%	-24%	-3%	0%	-1%
40%	0%	1%	0%	6%	-1%	-1%	1%	-3%	-22%	-1%	0%	-1%
50%	2%	-1%	-2%	-2%	-6%	1%	2%	-2%	-11%	0%	0%	0%
60%	3%	1%	2%	0%	0%	-1%	2%	0%	-7%	-2%	0%	0%
70%	5%	2%	1%	1%	-1%	1%	4%	0%	-4%	0%	0%	0%
80%	6%	1%	1%	0%	-3%	2%	5%	8%	-2%	-6%	0%	0%
90%	10%	1%	0%	0%	-4%	4%	7%	5%	-8%	-1%	-3%	-2%
Long Term												
Full Simulation Period ^b	2%	0%	1%	1%	1%	0%	1%	-1%	-8%	0%	0%	0%
Water Year Types^c												
Wet (23%)	1%	0%	2%	0%	2%	0%	0%	-2%	-4%	1%	1%	1%
Above Normal (24%)	3%	1%	2%	1%	0%	1%	1%	-2%	-22%	-4%	0%	0%
Below Normal (10%)	1%	-1%	-1%	4%	1%	0%	1%	-3%	-8%	0%	0%	-1%
Dry (16%)	2%	0%	0%	0%	-1%	0%	4%	-1%	-6%	-1%	0%	0%
Critical (27%)	3%	1%	1%	-1%	-2%	2%	8%	5%	-3%	-4%	-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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.10.4 San Joaquin River at Vernalis, Monthly Flow

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,058	3,088	4,931	11,054	17,256	15,467	14,774	14,101	9,720	6,052	2,996	3,315
20%	2,699	2,813	2,924	4,859	10,259	9,401	10,359	8,202	4,768	2,636	2,599	2,659
30%	2,470	2,631	2,462	3,635	6,228	7,841	8,536	5,452	3,364	1,988	1,896	2,484
40%	2,326	2,448	2,299	2,606	4,252	5,343	7,507	4,488	2,947	1,742	1,675	2,152
50%	2,089	2,342	2,226	2,481	3,420	3,825	6,018	3,916	2,205	1,503	1,499	1,934
60%	1,895	2,218	2,100	2,247	2,681	3,460	4,432	2,913	1,824	1,384	1,415	1,837
70%	1,697	2,100	1,988	2,070	2,379	2,870	3,224	2,493	1,420	1,170	1,322	1,743
80%	1,511	1,954	1,866	1,827	2,153	2,327	2,452	1,994	1,271	1,087	1,211	1,611
90%	1,338	1,753	1,671	1,638	1,931	2,115	1,813	1,564	1,085	941	1,099	1,503
Long Term												
Full Simulation Period ^b	2,200	2,673	3,455	5,082	6,806	7,116	7,330	5,903	4,350	2,668	1,876	2,266
Water Year Types^c												
Wet (23%)	2,472	3,596	6,642	11,484	16,260	16,444	15,398	14,493	12,009	6,823	3,227	3,582
Above Normal (24%)	2,234	2,469	2,712	4,887	6,916	7,376	8,371	5,184	3,310	1,997	1,976	2,348
Below Normal (10%)	2,052	2,330	3,742	3,561	3,837	4,077	5,974	3,968	2,025	1,478	1,455	1,847
Dry (16%)	2,305	2,644	2,306	2,421	2,623	3,227	3,656	2,625	1,661	1,266	1,362	1,783
Critical (27%)	1,926	2,205	1,952	1,854	2,092	2,228	2,079	1,780	1,114	951	1,077	1,490

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,495	2,953	4,804	11,129	14,597	15,473	14,976	14,176	9,351	5,773	2,776	3,084
20%	3,146	2,777	2,897	4,811	10,142	9,856	10,265	8,232	4,688	2,628	2,589	2,654
30%	2,938	2,527	2,401	3,610	6,118	8,461	8,576	5,670	3,364	1,985	1,904	2,488
40%	2,763	2,395	2,204	2,629	4,232	5,570	7,567	5,162	2,947	1,735	1,666	2,125
50%	2,588	2,219	2,101	2,402	3,420	3,846	6,110	4,183	2,219	1,484	1,488	1,930
60%	2,385	2,169	2,046	2,289	2,683	3,459	5,047	3,554	1,860	1,365	1,402	1,835
70%	2,196	2,059	1,979	2,083	2,303	2,906	4,317	2,916	1,447	1,155	1,307	1,739
80%	1,988	1,951	1,829	1,883	2,145	2,371	3,100	2,401	1,283	1,052	1,202	1,611
90%	1,849	1,763	1,669	1,699	1,947	2,204	2,461	2,245	1,000	885	1,025	1,431
Long Term												
Full Simulation Period ^b	2,660	2,609	3,371	5,071	6,639	7,235	7,686	6,290	4,174	2,597	1,818	2,213
Water Year Types^c												
Wet (23%)	2,903	3,513	6,448	11,445	15,743	16,679	15,389	14,666	11,287	6,580	3,020	3,379
Above Normal (24%)	2,691	2,411	2,679	4,897	6,864	7,536	8,487	5,671	3,280	1,989	1,975	2,345
Below Normal (10%)	2,531	2,249	3,661	3,506	3,650	4,149	6,299	4,206	2,062	1,462	1,446	1,837
Dry (16%)	2,750	2,569	2,232	2,400	2,547	3,241	4,420	3,245	1,672	1,253	1,346	1,776
Critical (27%)	2,418	2,163	1,910	1,871	2,078	2,288	2,741	2,177	1,090	916	1,051	1,480

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	14%	-4%	-3%	1%	-15%	0%	1%	1%	-4%	-5%	-7%	-7%
20%	17%	-1%	-1%	-1%	-1%	5%	-1%	0%	-2%	0%	0%	0%
30%	19%	-4%	-3%	-1%	-2%	8%	0%	4%	0%	0%	0%	0%
40%	19%	-2%	-4%	1%	0%	4%	1%	15%	0%	0%	-1%	-1%
50%	24%	-5%	-6%	-3%	0%	1%	2%	7%	1%	-1%	-1%	0%
60%	26%	-2%	-3%	2%	0%	0%	14%	22%	2%	-1%	-1%	0%
70%	29%	-2%	0%	1%	-3%	1%	34%	17%	2%	-1%	-1%	0%
80%	32%	0%	-2%	3%	0%	2%	26%	20%	1%	-3%	-1%	0%
90%	38%	1%	0%	4%	1%	4%	36%	44%	-8%	-6%	-7%	-5%
Long Term												
Full Simulation Period ^b	21%	-2%	-2%	0%	-2%	2%	5%	7%	-4%	-3%	-3%	-2%
Water Year Types^c												
Wet (23%)	17%	-2%	-3%	0%	-3%	1%	0%	1%	-6%	-4%	-6%	-6%
Above Normal (24%)	20%	-2%	-1%	0%	-1%	2%	1%	9%	-1%	0%	0%	0%
Below Normal (10%)	23%	-3%	-2%	-2%	-5%	2%	5%	6%	2%	-1%	-1%	-1%
Dry (16%)	19%	-3%	-3%	-1%	-3%	0%	21%	24%	1%	-1%	-1%	0%
Critical (27%)	26%	-2%	-2%	1%	-1%	3%	32%	22%	-2%	-4%	-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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.11 Old and Middle River Flow

Table 5C.3.2.11.1 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

No Action Alternative

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	614	893	4,094	6,333	7,834	5,445	4,160	2,848	1,180	763	277	1,161
20%	586	874	2,112	4,323	4,927	4,179	2,834	1,727	609	688	259	1,134
30%	576	825	1,003	3,149	3,624	2,834	1,795	1,200	548	573	246	909
40%	423	657	761	1,793	2,868	2,092	1,504	1,004	465	497	246	656
50%	270	586	611	1,299	2,037	1,676	1,197	843	431	492	246	261
60%	246	368	359	1,050	1,407	1,204	946	731	422	400	246	201
70%	246	268	315	800	1,023	1,061	758	592	408	307	246	179
80%	246	268	278	586	823	783	598	520	383	307	246	179
90%	184	210	277	486	633	662	564	446	334	246	240	179
Long Term												
Full Simulation Period ^b	401	686	1,416	2,720	3,186	2,697	1,812	1,281	648	495	258	565
Water Year Types^c												
Wet (23%)	520	1,020	2,913	5,509	5,771	5,000	3,288	2,394	1,120	655	273	1,133
Above Normal (24%)	332	742	1,502	3,049	3,807	3,236	1,938	1,201	485	667	251	662
Below Normal (10%)	471	650	582	1,077	2,048	1,113	1,019	789	445	508	254	211
Dry (16%)	341	470	471	981	1,443	1,396	999	680	431	315	257	191
Critical (27%)	253	296	418	723	861	747	559	410	348	249	235	179

Revised Alternative 1

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	373	895	4,048	6,551	8,106	5,795	3,956	2,541	1,141	670	271	259
20%	286	384	2,029	4,469	4,884	4,375	2,589	1,579	658	581	247	240
30%	269	329	947	2,826	3,377	2,686	1,466	952	591	508	246	234
40%	257	291	635	1,561	2,882	2,060	1,215	790	559	492	246	229
50%	246	269	464	1,078	1,898	1,614	859	715	512	461	246	221
60%	246	268	371	829	1,168	1,103	726	675	495	400	246	184
70%	246	268	312	665	918	899	599	560	439	307	246	179
80%	246	268	277	501	720	751	565	533	422	307	236	179
90%	232	208	277	405	596	601	528	437	369	246	215	179
Long Term												
Full Simulation Period ^b	289	508	1,407	2,590	3,140	2,678	1,609	1,159	704	457	252	238
Water Year Types^c												
Wet (23%)	345	794	3,009	5,453	5,819	5,073	3,004	2,182	1,199	607	271	321
Above Normal (24%)	252	566	1,394	2,837	3,821	3,313	1,620	1,021	569	599	250	223
Below Normal (10%)	294	433	540	878	2,078	1,075	812	715	532	429	254	208
Dry (16%)	267	297	433	821	1,268	1,232	879	627	455	310	244	191
Critical (27%)	241	244	367	640	692	680	525	385	346	247	229	179

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Outflow Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-39%	0%	-1%	3%	3%	6%	-5%	-11%	-3%	-12%	-2%	-78%
20%	-51%	-56%	-4%	3%	-1%	5%	-9%	-9%	8%	-16%	-5%	-79%
30%	-53%	-60%	-6%	-10%	-7%	-5%	-18%	-21%	8%	-11%	0%	-74%
40%	-39%	-56%	-17%	-13%	0%	-2%	-19%	-21%	20%	-1%	0%	-65%
50%	-9%	-54%	-24%	-17%	-7%	-4%	-28%	-15%	19%	-6%	0%	-15%
60%	0%	-27%	4%	-21%	-17%	-8%	-23%	-8%	17%	0%	0%	-8%
70%	0%	0%	-1%	-17%	-10%	-15%	-21%	-5%	7%	0%	0%	0%
80%	0%	0%	0%	-14%	-13%	-4%	-6%	2%	10%	0%	-4%	0%
90%	26%	-1%	0%	-17%	-6%	-9%	-6%	-2%	11%	0%	-10%	0%
Long Term												
Full Simulation Period ^b	-28%	-26%	-1%	-5%	-1%	-1%	-11%	-10%	9%	-8%	-2%	-58%
Water Year Types^c												
Wet (23%)	-34%	-22%	3%	-1%	1%	1%	-9%	-9%	7%	-7%	-1%	-72%
Above Normal (24%)	-24%	-24%	-7%	-7%	0%	2%	-16%	-15%	17%	-10%	-1%	-66%
Below Normal (10%)	-38%	-33%	-7%	-18%	1%	-3%	-20%	-9%	20%	-16%	0%	-1%
Dry (16%)	-22%	-37%	-8%	-16%	-12%	-12%	-12%	-8%	6%	-2%	-5%	0%
Critical (27%)	-5%	-18%	-12%	-12%	-20%	-9%	-6%	-6%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.11.2 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Revised Second Basis of Comparison

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	373	895	4,048	6,551	8,106	5,795	3,956	2,541	1,141	670	271	259
20%	286	384	2,029	4,469	4,884	4,375	2,589	1,579	658	581	247	240
30%	269	329	947	2,826	3,377	2,686	1,466	952	591	508	246	234
40%	257	291	635	1,561	2,882	2,060	1,215	790	559	492	246	229
50%	246	269	464	1,078	1,898	1,614	859	715	512	461	246	221
60%	246	268	371	829	1,168	1,103	726	675	495	400	246	184
70%	246	268	312	665	918	899	599	560	439	307	246	179
80%	246	268	277	501	720	751	565	533	422	307	236	179
90%	232	208	277	405	596	601	528	437	369	246	215	179
Long Term												
Full Simulation Period ^b	289	508	1,407	2,590	3,140	2,678	1,609	1,159	704	457	252	238
Water Year Types^c												
Wet (23%)	345	794	3,009	5,453	5,819	5,073	3,004	2,182	1,199	607	271	321
Above Normal (24%)	252	566	1,394	2,837	3,821	3,313	1,620	1,021	569	599	250	223
Below Normal (10%)	294	433	540	878	2,078	1,075	812	715	532	429	254	208
Dry (16%)	267	297	433	821	1,268	1,232	879	627	455	310	244	191
Critical (27%)	241	244	367	640	692	680	525	385	346	247	229	179

No Action Alternative

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	614	893	4,094	6,333	7,834	5,445	4,160	2,848	1,180	763	277	1,161
20%	586	874	2,112	4,323	4,927	4,179	2,834	1,727	609	688	259	1,134
30%	576	825	1,003	3,149	3,624	2,834	1,795	1,200	548	573	246	909
40%	423	657	761	1,793	2,868	2,092	1,504	1,004	465	497	246	656
50%	270	586	611	1,299	2,037	1,676	1,197	843	431	492	246	261
60%	246	368	359	1,050	1,407	1,204	946	731	422	400	246	201
70%	246	268	315	800	1,023	1,061	758	592	408	307	246	179
80%	246	268	278	586	823	783	598	520	383	307	246	179
90%	184	210	277	486	633	662	564	446	334	246	240	179
Long Term												
Full Simulation Period ^b	401	686	1,416	2,720	3,186	2,697	1,812	1,281	648	495	258	565
Water Year Types^c												
Wet (23%)	520	1,020	2,913	5,509	5,771	5,000	3,288	2,394	1,120	655	273	1,133
Above Normal (24%)	332	742	1,502	3,049	3,807	3,236	1,938	1,201	485	667	251	662
Below Normal (10%)	471	650	582	1,077	2,048	1,113	1,019	789	445	508	254	211
Dry (16%)	341	470	471	981	1,443	1,396	999	680	431	315	257	191
Critical (27%)	253	296	418	723	861	747	559	410	348	249	235	179

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Outflow Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	65%	0%	1%	-3%	-3%	-6%	5%	12%	3%	14%	2%	349%
20%	105%	128%	4%	-3%	1%	-4%	9%	9%	-7%	18%	5%	372%
30%	114%	151%	6%	11%	7%	6%	22%	26%	-7%	13%	0%	288%
40%	64%	126%	20%	15%	0%	2%	24%	27%	-17%	1%	0%	187%
50%	10%	118%	32%	20%	7%	4%	39%	18%	-16%	7%	0%	18%
60%	0%	37%	-3%	27%	20%	9%	30%	8%	-15%	0%	0%	9%
70%	0%	0%	1%	20%	11%	18%	26%	6%	-7%	0%	0%	0%
80%	0%	0%	0%	17%	14%	4%	6%	-2%	-9%	0%	4%	0%
90%	-20%	1%	0%	20%	6%	10%	7%	2%	-10%	0%	11%	0%
Long Term												
Full Simulation Period ^b	39%	35%	1%	5%	1%	1%	13%	11%	-8%	8%	2%	138%
Water Year Types^c												
Wet (23%)	51%	28%	-3%	1%	-1%	-1%	9%	10%	-7%	8%	1%	253%
Above Normal (24%)	32%	31%	8%	8%	0%	-2%	20%	18%	-15%	11%	1%	197%
Below Normal (10%)	60%	50%	8%	23%	-1%	4%	25%	10%	-16%	18%	0%	2%
Dry (16%)	28%	58%	9%	19%	14%	13%	14%	8%	-5%	2%	5%	0%
Critical (27%)	5%	21%	14%	13%	24%	10%	6%	6%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.11.3 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Revised Second Basis of Comparison

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	373	895	4,048	6,551	8,106	5,795	3,956	2,541	1,141	670	271	259
20%	286	384	2,029	4,469	4,884	4,375	2,589	1,579	658	581	247	240
30%	269	329	947	2,826	3,377	2,686	1,466	952	591	508	246	234
40%	257	291	635	1,561	2,882	2,060	1,215	790	559	492	246	229
50%	246	269	464	1,078	1,898	1,614	859	715	512	461	246	221
60%	246	268	371	829	1,168	1,103	726	675	495	400	246	184
70%	246	268	312	665	918	899	599	560	439	307	246	179
80%	246	268	277	501	720	751	565	533	422	307	236	179
90%	232	208	277	405	596	601	528	437	369	246	215	179
Long Term												
Full Simulation Period ^b	289	508	1,407	2,590	3,140	2,678	1,609	1,159	704	457	252	238
Water Year Types^c												
Wet (23%)	345	794	3,009	5,453	5,819	5,073	3,004	2,182	1,199	607	271	321
Above Normal (24%)	252	566	1,394	2,837	3,821	3,313	1,620	1,021	569	599	250	223
Below Normal (10%)	294	433	540	878	2,078	1,075	812	715	532	429	254	208
Dry (16%)	267	297	433	821	1,268	1,232	879	627	455	310	244	191
Critical (27%)	241	244	367	640	692	680	525	385	346	247	229	179

Alternative 3

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
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 (23%)	333	791	3,116	5,609	5,812	5,020	2,996	2,109	1,118	649	271	319
Above Normal (24%)	242	568	1,461	3,096	3,903	3,292	1,636	960	514	645	246	228
Below Normal (10%)	281	422	564	1,156	2,186	1,120	856	699	457	507	254	221
Dry (16%)	250	297	457	992	1,459	1,384	882	612	445	321	245	191
Critical (27%)	234	243	397	721	859	752	528	397	346	246	230	179

Alternative 3 minus Revised Second Basis of Comparison

Statistic	Monthly Outflow Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-20%	1%	3%	1%	-2%	0%	-4%	-3%	-7%	9%	-2%	1%
20%	-7%	1%	5%	0%	-2%	-2%	0%	-12%	-4%	13%	0%	2%
30%	-5%	-3%	22%	10%	12%	1%	4%	-4%	-3%	13%	0%	0%
40%	-4%	0%	14%	20%	5%	4%	2%	-5%	-10%	0%	0%	0%
50%	0%	0%	4%	30%	10%	4%	1%	-2%	-7%	7%	0%	0%
60%	0%	0%	7%	28%	21%	7%	4%	-7%	-12%	7%	0%	3%
70%	0%	0%	8%	15%	17%	15%	0%	3%	-4%	0%	0%	0%
80%	0%	0%	0%	20%	14%	5%	0%	-7%	-3%	0%	2%	0%
90%	-20%	0%	0%	23%	7%	9%	-3%	0%	-5%	0%	3%	0%
Long Term												
Full Simulation Period ^b	-4%	0%	4%	7%	3%	1%	0%	-3%	-7%	7%	0%	1%
Water Year Types^c												
Wet (23%)	-3%	0%	4%	3%	0%	-1%	0%	-3%	-7%	7%	0%	0%
Above Normal (24%)	-4%	0%	5%	9%	2%	-1%	1%	-6%	-10%	8%	-1%	2%
Below Normal (10%)	-4%	-3%	4%	32%	5%	4%	5%	-2%	-14%	18%	0%	6%
Dry (16%)	-6%	0%	5%	21%	15%	12%	0%	-2%	-2%	4%	0%	0%
Critical (27%)	-3%	0%	8%	13%	24%	11%	1%	3%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.11.4 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Revised Second Basis of Comparison

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	373	895	4,048	6,551	8,106	5,795	3,956	2,541	1,141	670	271	259
20%	286	384	2,029	4,469	4,884	4,375	2,589	1,579	658	581	247	240
30%	269	329	947	2,826	3,377	2,686	1,466	952	591	508	246	234
40%	257	291	635	1,561	2,882	2,060	1,215	790	559	492	246	229
50%	246	269	464	1,078	1,898	1,614	859	715	512	461	246	221
60%	246	268	371	829	1,168	1,103	726	675	495	400	246	184
70%	246	268	312	665	918	899	599	560	439	307	246	179
80%	246	268	277	501	720	751	565	533	422	307	236	179
90%	232	208	277	405	596	601	528	437	369	246	215	179
Long Term												
Full Simulation Period ^b	289	508	1,407	2,590	3,140	2,678	1,609	1,159	704	457	252	238
Water Year Types^c												
Wet (23%)	345	794	3,009	5,453	5,819	5,073	3,004	2,182	1,199	607	271	321
Above Normal (24%)	252	566	1,394	2,837	3,821	3,313	1,620	1,021	569	599	250	223
Below Normal (10%)	294	433	540	878	2,078	1,075	812	715	532	429	254	208
Dry (16%)	267	297	433	821	1,268	1,232	879	627	455	310	244	191
Critical (27%)	241	244	367	640	692	680	525	385	346	247	229	179

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 (23%)	517	1,020	2,905	5,499	5,773	4,996	3,288	2,411	1,117	667	273	1,132
Above Normal (24%)	334	767	1,505	3,048	3,795	3,232	1,947	1,223	482	668	251	661
Below Normal (10%)	471	650	582	1,075	2,047	1,110	1,061	821	434	513	254	214
Dry (16%)	342	471	467	980	1,444	1,396	1,081	720	423	316	256	191
Critical (27%)	254	296	418	714	856	747	621	462	346	249	233	179

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Outflow Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	67%	7%	2%	-3%	-3%	-6%	5%	12%	3%	14%	5%	349%
20%	108%	128%	4%	-3%	0%	-5%	8%	12%	-8%	18%	4%	372%
30%	114%	152%	7%	11%	8%	6%	23%	30%	-11%	17%	0%	288%
40%	64%	127%	20%	14%	0%	2%	27%	27%	-19%	2%	0%	185%
50%	5%	118%	33%	21%	8%	3%	44%	22%	-17%	7%	0%	16%
60%	0%	38%	-3%	26%	20%	9%	42%	15%	-15%	0%	0%	10%
70%	0%	0%	-1%	20%	12%	18%	36%	12%	-9%	0%	0%	0%
80%	0%	0%	3%	17%	14%	4%	26%	5%	-12%	0%	4%	0%
90%	-20%	1%	0%	20%	6%	10%	18%	6%	-11%	0%	7%	0%
Long Term												
Full Simulation Period ^b	39%	36%	0%	5%	1%	1%	15%	13%	-9%	9%	2%	138%
Water Year Types^c												
Wet (23%)	50%	28%	-3%	1%	-1%	-2%	9%	11%	-7%	10%	1%	253%
Above Normal (24%)	32%	36%	8%	7%	-1%	-2%	20%	20%	-15%	11%	1%	197%
Below Normal (10%)	60%	50%	8%	22%	-1%	3%	31%	15%	-18%	20%	0%	3%
Dry (16%)	28%	59%	8%	19%	14%	13%	23%	15%	-7%	2%	5%	0%
Critical (27%)	5%	21%	14%	12%	24%	10%	18%	20%	0%	1%	2%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.12 X2 Position

Table 5C.3.2.12.1 X2, End of Month Position

No Action Alternative

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance ^a												
10%	93.4	93.6	90.8	84.0	77.3	75.9	78.1	81.0	83.1	86.5	89.7	91.9
20%	91.8	91.4	87.6	82.3	71.7	72.8	73.6	79.3	81.8	84.9	88.1	91.1
30%	91.6	90.9	83.9	79.8	67.2	65.7	70.0	77.3	81.0	84.3	87.5	90.6
40%	91.1	88.1	82.5	73.5	64.0	64.5	66.7	72.3	80.2	82.4	86.2	90.1
50%	89.7	81.1	81.1	71.2	58.5	59.9	64.7	69.9	77.8	80.6	84.8	88.5
60%	81.0	81.0	79.7	64.4	55.2	58.0	60.9	66.3	76.6	78.1	84.6	81.0
70%	74.1	75.1	72.0	55.1	51.9	53.9	58.0	63.8	73.4	77.4	84.1	74.1
80%	74.0	74.0	62.2	51.3	49.4	50.6	53.8	59.1	69.8	76.8	82.7	74.0
90%	74.0	74.0	52.8	49.4	48.2	49.0	49.9	53.3	63.5	74.6	82.2	74.0
Long Term												
Full Simulation Period ^b	84.2	82.3	76.4	68.0	61.1	61.4	64.2	68.8	75.9	80.4	85.4	83.9
Water Year Types ^c												
Wet (23%)	80.6	76.8	63.7	54.8	51.2	53.1	55.1	58.4	67.4	74.9	82.7	73.9
Above Normal (24%)	86.9	82.4	75.1	61.0	54.9	55.3	59.1	65.2	75.3	77.9	83.1	74.7
Below Normal (10%)	80.4	80.3	80.4	74.6	64.3	66.9	69.0	72.9	79.1	81.1	85.1	89.3
Dry (16%)	85.6	85.5	84.5	77.7	67.7	65.4	68.8	74.5	80.1	84.5	87.6	90.5
Critical (27%)	90.4	90.7	88.2	82.0	75.3	74.6	77.7	82.3	85.2	87.9	90.3	92.1

Revised Alternative 1

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance ^a												
10%	92.3	92.5	91.0	87.3	80.4	78.2	78.5	81.5	83.5	86.6	90.0	92.1
20%	91.8	91.3	90.6	85.9	75.6	73.5	75.2	79.6	81.6	84.8	88.5	91.4
30%	91.2	91.0	89.5	83.6	72.1	68.3	73.3	78.6	80.5	84.3	88.0	90.8
40%	91.0	90.8	88.7	78.9	66.2	66.6	69.7	75.4	78.6	82.1	86.5	90.1
50%	90.6	90.3	86.8	75.6	61.5	61.7	67.3	72.9	77.9	81.1	85.6	89.4
60%	90.2	89.6	82.5	67.7	55.7	57.8	64.2	70.3	76.1	78.9	84.7	89.0
70%	90.0	89.0	77.0	56.3	52.4	54.0	59.9	66.0	74.4	78.2	84.4	88.6
80%	89.6	88.0	65.9	51.9	49.4	50.4	54.7	60.2	71.4	77.3	84.1	88.4
90%	87.3	79.7	53.3	49.5	48.2	48.8	50.4	54.6	64.1	74.8	83.0	87.8
Long Term												
Full Simulation Period ^b	90.0	87.6	79.5	70.4	62.8	62.3	65.9	70.6	75.8	80.7	86.0	89.3
Water Year Types ^c												
Wet (23%)	88.1	83.7	66.3	55.7	51.6	53.0	56.4	60.3	67.3	75.3	83.3	86.6
Above Normal (24%)	91.0	87.1	79.1	63.6	56.1	55.2	61.1	67.9	75.0	78.2	83.8	81.9
Below Normal (10%)	89.6	87.3	84.5	78.8	66.0	67.3	71.3	74.9	78.2	81.4	86.0	89.7
Dry (16%)	90.7	90.4	87.9	81.1	70.7	67.6	70.8	76.0	80.2	84.4	88.0	90.8
Critical (27%)	91.9	92.1	90.0	84.0	78.5	76.8	78.8	83.3	85.7	88.2	90.6	92.4

Revised Alternative 1 minus No Action Alternative

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance ^a												
10%	-1.1	-1.1	0.2	3.3	3.1	2.3	0.4	0.5	0.3	0.1	0.3	0.1
20%	0.0	-0.1	2.9	3.6	3.9	0.7	1.6	0.3	-0.1	-0.1	0.4	0.3
30%	-0.4	0.1	5.5	3.8	4.8	2.6	3.2	1.3	-0.5	0.1	0.5	0.3
40%	-0.1	2.7	6.2	5.4	2.2	2.1	3.0	3.1	-1.6	-0.2	0.3	0.0
50%	0.9	9.2	5.7	4.4	3.0	1.8	2.6	3.0	0.2	0.5	0.8	0.9
60%	9.2	8.6	2.7	3.3	0.6	-0.2	3.3	4.0	-0.6	0.8	0.1	8.0
70%	15.9	13.9	5.1	1.1	0.5	0.1	1.9	2.2	1.0	0.8	0.3	14.6
80%	15.6	13.9	3.6	0.6	0.0	-0.2	0.9	1.1	1.5	0.5	1.4	14.4
90%	13.3	5.8	0.5	0.1	0.0	-0.2	0.5	1.2	0.7	0.2	0.7	13.8
Long Term												
Full Simulation Period ^b	5.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Water Year Types ^c												
Wet (23%)	7.5	6.9	2.7	1.0	0.4	0.0	1.3	1.9	0.0	0.4	0.5	12.7
Above Normal (24%)	4.1	4.6	4.0	2.7	1.2	0.0	2.0	2.7	-0.3	0.3	0.7	7.2
Below Normal (10%)	9.2	7.0	4.1	4.2	1.7	0.5	2.3	2.0	-0.9	0.3	0.9	0.4
Dry (16%)	5.1	4.9	3.5	3.4	3.1	2.2	2.0	1.5	0.1	-0.1	0.4	0.3
Critical (27%)	1.4	1.4	1.8	2.1	3.2	2.2	1.2	1.0	0.5	0.3	0.3	0.2

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.12.2 X2, End of Month Position

Revised Second Basis of Comparison

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	92.3	92.5	91.0	87.3	80.4	78.2	78.5	81.5	83.5	86.6	90.0	92.1
20%	91.8	91.3	90.6	85.9	75.6	73.5	75.2	79.6	81.6	84.8	88.5	91.4
30%	91.2	91.0	89.5	83.6	72.1	68.3	73.3	78.6	80.5	84.3	88.0	90.8
40%	91.0	90.8	88.7	78.9	66.2	66.6	69.7	75.4	78.6	82.1	86.5	90.1
50%	90.6	90.3	86.8	75.6	61.5	61.7	67.3	72.9	77.9	81.1	85.6	89.4
60%	90.2	89.6	82.5	67.7	55.7	57.8	64.2	70.3	76.1	78.9	84.7	89.0
70%	90.0	89.0	77.0	56.3	52.4	54.0	59.9	66.0	74.4	78.2	84.4	88.6
80%	89.6	88.0	65.9	51.9	49.4	50.4	54.7	60.2	71.4	77.3	84.1	88.4
90%	87.3	79.7	53.3	49.5	48.2	48.8	50.4	54.6	64.1	74.8	83.0	87.8
Long Term												
Full Simulation Period ^b	90.0	87.6	79.5	70.4	62.8	62.3	65.9	70.6	75.8	80.7	86.0	89.3
Water Year Types^c												
Wet (23%)	88.1	83.7	66.3	55.7	51.6	53.0	56.4	60.3	67.3	75.3	83.3	86.6
Above Normal (24%)	91.0	87.1	79.1	63.6	56.1	55.2	61.1	67.9	75.0	78.2	83.8	81.9
Below Normal (10%)	89.6	87.3	84.5	78.8	66.0	67.3	71.3	74.9	78.2	81.4	86.0	89.7
Dry (16%)	90.7	90.4	87.9	81.1	70.7	67.6	70.8	76.0	80.2	84.4	88.0	90.8
Critical (27%)	91.9	92.1	90.0	84.0	78.5	76.8	78.8	83.3	85.7	88.2	90.6	92.4

No Action Alternative

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	93.4	93.6	90.8	84.0	77.3	75.9	78.1	81.0	83.1	86.5	89.7	91.9
20%	91.8	91.4	87.6	82.3	71.7	72.8	73.6	79.3	81.8	84.9	88.1	91.1
30%	91.6	90.9	83.9	79.8	67.2	65.7	70.0	77.3	81.0	84.3	87.5	90.6
40%	91.1	88.1	82.5	73.5	64.0	64.5	66.7	72.3	80.2	82.4	86.2	90.1
50%	89.7	81.1	81.1	71.2	58.5	59.9	64.7	69.9	77.8	80.6	84.8	88.5
60%	81.0	81.0	79.7	64.4	55.2	58.0	60.9	66.3	76.6	78.1	84.6	81.0
70%	74.1	75.1	72.0	55.1	51.9	53.9	58.0	63.8	73.4	77.4	84.1	74.1
80%	74.0	74.0	62.2	51.3	49.4	50.6	53.8	59.1	69.8	76.8	82.7	74.0
90%	74.0	74.0	52.8	49.4	48.2	49.0	49.9	53.3	63.5	74.6	82.2	74.0
Long Term												
Full Simulation Period ^b	84.2	82.3	76.4	68.0	61.1	61.4	64.2	68.8	75.9	80.4	85.4	83.9
Water Year Types^c												
Wet (23%)	80.6	76.8	63.7	54.8	51.2	53.1	55.1	58.4	67.4	74.9	82.7	73.9
Above Normal (24%)	86.9	82.4	75.1	61.0	54.9	55.3	59.1	65.2	75.3	77.9	83.1	74.7
Below Normal (10%)	80.4	80.3	80.4	74.6	64.3	66.9	69.0	72.9	79.1	81.1	85.1	89.3
Dry (16%)	85.6	85.5	84.5	77.7	67.7	65.4	68.8	74.5	80.1	84.5	87.6	90.5
Critical (27%)	90.4	90.7	88.2	82.0	75.3	74.6	77.7	82.3	85.2	87.9	90.3	92.1

No Action Alternative minus Revised Second Basis of Comparison

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1.1	1.1	-0.2	-3.3	-3.1	-2.3	-0.4	-0.5	-0.3	-0.1	-0.3	-0.1
20%	0.0	0.1	-2.9	-3.6	-3.9	-0.7	-1.6	-0.3	0.1	0.1	-0.4	-0.3
30%	0.4	-0.1	-5.5	-3.8	-4.8	-2.6	-3.2	-1.3	0.5	-0.1	-0.5	-0.3
40%	0.1	-2.7	-6.2	-5.4	-2.2	-2.1	-3.0	-3.1	1.6	0.2	-0.3	0.0
50%	-0.9	-9.2	-5.7	-4.4	-3.0	-1.8	-2.6	-3.0	-0.2	-0.5	-0.8	-0.9
60%	-9.2	-8.6	-2.7	-3.3	-0.6	0.2	-3.3	-4.0	0.6	-0.8	-0.1	-8.0
70%	-15.9	-13.9	-5.1	-1.1	-0.5	-0.1	-1.9	-2.2	-1.0	-0.8	-0.3	-14.6
80%	-15.6	-13.9	-3.6	-0.6	0.0	0.2	-0.9	-1.1	-1.5	-0.5	-1.4	-14.4
90%	-13.3	-5.8	-0.5	-0.1	0.0	0.2	-0.5	-1.2	-0.7	-0.2	-0.7	-13.8
Long Term												
Full Simulation Period ^b	-5.7	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Water Year Types^c												
Wet (23%)	-7.5	-6.9	-2.7	-1.0	-0.4	0.0	-1.3	-1.9	0.0	-0.4	-0.5	-12.7
Above Normal (24%)	-4.1	-4.6	-4.0	-2.7	-1.2	0.0	-2.0	-2.7	0.3	-0.3	-0.7	-7.2
Below Normal (10%)	-9.2	-7.0	-4.1	-4.2	-1.7	-0.5	-2.3	-2.0	0.9	-0.3	-0.9	-0.4
Dry (16%)	-5.1	-4.9	-3.5	-3.4	-3.1	-2.2	-2.0	-1.5	-0.1	0.1	-0.4	-0.3
Critical (27%)	-1.4	-1.4	-1.8	-2.1	-3.2	-2.2	-1.2	-1.0	-0.5	-0.3	-0.3	-0.2

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.12.3 X2, End of Month Position

Revised Second Basis of Comparison

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	92.3	92.5	91.0	87.3	80.4	78.2	78.5	81.5	83.5	86.6	90.0	92.1
20%	91.8	91.3	90.6	85.9	75.6	73.5	75.2	79.6	81.6	84.8	88.5	91.4
30%	91.2	91.0	89.5	83.6	72.1	68.3	73.3	78.6	80.5	84.3	88.0	90.8
40%	91.0	90.8	88.7	78.9	66.2	66.6	69.7	75.4	78.6	82.1	86.5	90.1
50%	90.6	90.3	86.8	75.6	61.5	61.7	67.3	72.9	77.9	81.1	85.6	89.4
60%	90.2	89.6	82.5	67.7	55.7	57.8	64.2	70.3	76.1	78.9	84.7	89.0
70%	90.0	89.0	77.0	56.3	52.4	54.0	59.9	66.0	74.4	78.2	84.4	88.6
80%	89.6	88.0	65.9	51.9	49.4	50.4	54.7	60.2	71.4	77.3	84.1	88.4
90%	87.3	79.7	53.3	49.5	48.2	48.8	50.4	54.6	64.1	74.8	83.0	87.8
Long Term												
Full Simulation Period ^b	90.0	87.6	79.5	70.4	62.8	62.3	65.9	70.6	75.8	80.7	86.0	89.3
Water Year Types^c												
Wet (23%)	88.1	83.7	66.3	55.7	51.6	53.0	56.4	60.3	67.3	75.3	83.3	86.6
Above Normal (24%)	91.0	87.1	79.1	63.6	56.1	55.2	61.1	67.9	75.0	78.2	83.8	81.9
Below Normal (10%)	89.6	87.3	84.5	78.8	66.0	67.3	71.3	74.9	78.2	81.4	86.0	89.7
Dry (16%)	90.7	90.4	87.9	81.1	70.7	67.6	70.8	76.0	80.2	84.4	88.0	90.8
Critical (27%)	91.9	92.1	90.0	84.0	78.5	76.8	78.8	83.3	85.7	88.2	90.6	92.4

Alternative 3

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	93.2	93.6	90.8	86.1	77.8	75.8	78.2	81.5	83.2	86.4	90.0	92.2
20%	91.9	91.5	90.5	83.7	71.7	72.5	74.6	79.6	82.0	84.8	88.4	91.3
30%	91.6	91.1	89.4	81.5	67.6	66.1	71.3	78.4	81.0	84.3	87.7	90.8
40%	91.2	90.8	88.5	74.8	64.1	64.5	69.7	75.6	80.3	81.7	86.0	89.8
50%	90.7	90.6	86.7	71.8	58.8	60.0	67.3	73.1	78.8	80.7	84.9	89.3
60%	90.2	89.8	82.6	64.6	54.4	58.0	63.6	70.4	77.1	78.4	84.6	88.7
70%	89.9	89.0	74.2	55.1	52.2	54.4	59.9	66.8	75.1	77.8	84.2	88.4
80%	89.6	87.9	65.1	51.2	49.3	50.4	54.8	61.7	71.8	77.1	83.2	88.2
90%	88.2	79.6	53.0	49.5	48.1	48.8	50.4	54.8	64.9	75.0	82.4	87.6
Long Term												
Full Simulation Period ^b	90.1	87.8	79.0	68.5	61.2	61.4	65.5	70.8	76.5	80.5	85.6	89.1
Water Year Types^c												
Wet (23%)	88.1	83.9	65.6	54.8	51.3	53.1	56.5	60.8	68.3	75.1	82.9	86.6
Above Normal (24%)	91.2	87.2	78.3	61.5	54.9	55.0	60.9	68.4	76.2	78.0	83.4	81.8
Below Normal (10%)	89.9	87.7	84.4	75.4	64.0	66.6	70.5	74.9	79.6	81.0	85.1	89.2
Dry (16%)	90.8	90.6	87.6	78.8	67.9	65.5	69.9	76.0	80.4	84.3	87.8	90.8
Critical (27%)	92.1	92.2	89.5	82.7	75.6	74.6	78.1	82.8	85.4	88.0	90.5	92.3

Alternative 3 minus Revised Second Basis of Comparison

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0.9	1.0	-0.1	-1.2	-2.6	-2.4	-0.3	-0.1	-0.3	-0.2	0.0	0.2
20%	0.2	0.1	-0.1	-2.2	-3.9	-1.0	-0.6	0.0	0.3	0.0	-0.2	-0.1
30%	0.4	0.1	0.0	-2.1	-4.5	-2.2	-2.0	-0.1	0.5	0.0	-0.3	-0.1
40%	0.2	0.1	-0.2	-4.1	-2.0	-2.1	0.0	0.3	1.8	-0.4	-0.5	-0.3
50%	0.1	0.3	-0.1	-3.8	-2.6	-1.7	0.0	0.3	0.9	-0.4	-0.7	-0.1
60%	0.0	0.2	0.2	-3.1	-1.4	0.2	-0.5	0.1	1.1	-0.6	-0.1	-0.3
70%	-0.1	0.0	-2.8	-1.1	-0.2	0.3	-0.1	0.8	0.7	-0.5	-0.1	-0.2
80%	0.0	-0.1	-0.8	-0.7	0.0	0.1	0.1	1.5	0.4	-0.2	-0.8	-0.2
90%	0.8	-0.1	-0.3	0.0	-0.1	0.0	0.0	0.2	0.7	0.1	-0.6	-0.1
Long Term												
Full Simulation Period ^b	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Year Types^c												
Wet (23%)	0.0	0.2	-0.7	-0.9	-0.3	0.1	0.0	0.5	1.0	-0.2	-0.4	-0.1
Above Normal (24%)	0.3	0.1	-0.8	-2.2	-1.2	-0.2	-0.2	0.5	1.1	-0.2	-0.4	-0.2
Below Normal (10%)	0.4	0.4	-0.1	-3.4	-2.0	-0.8	-0.7	0.0	1.4	-0.4	-0.8	-0.5
Dry (16%)	0.1	0.2	-0.3	-2.3	-2.8	-2.1	-0.8	0.0	0.3	-0.1	-0.2	-0.1
Critical (27%)	0.2	0.2	-0.5	-1.4	-2.8	-2.2	-0.8	-0.4	-0.3	-0.2	-0.1	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.12.4 X2, End of Month Position

Revised Second Basis of Comparison

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	92.3	92.5	91.0	87.3	80.4	78.2	78.5	81.5	83.5	86.6	90.0	92.1
20%	91.8	91.3	90.6	85.9	75.6	73.5	75.2	79.6	81.6	84.8	88.5	91.4
30%	91.2	91.0	89.5	83.6	72.1	68.3	73.3	78.6	80.5	84.3	88.0	90.8
40%	91.0	90.8	88.7	78.9	66.2	66.6	69.7	75.4	78.6	82.1	86.5	90.1
50%	90.6	90.3	86.8	75.6	61.5	61.7	67.3	72.9	77.9	81.1	85.6	89.4
60%	90.2	89.6	82.5	67.7	55.7	57.8	64.2	70.3	76.1	78.9	84.7	89.0
70%	90.0	89.0	77.0	56.3	52.4	54.0	59.9	66.0	74.4	78.2	84.4	88.6
80%	89.6	88.0	65.9	51.9	49.4	50.4	54.7	60.2	71.4	77.3	84.1	88.4
90%	87.3	79.7	53.3	49.5	48.2	48.8	50.4	54.6	64.1	74.8	83.0	87.8
Long Term												
Full Simulation Period ^b	90.0	87.6	79.5	70.4	62.8	62.3	65.9	70.6	75.8	80.7	86.0	89.3
Water Year Types^c												
Wet (23%)	88.1	83.7	66.3	55.7	51.6	53.0	56.4	60.3	67.3	75.3	83.3	86.6
Above Normal (24%)	91.0	87.1	79.1	63.6	56.1	55.2	61.1	67.9	75.0	78.2	83.8	81.9
Below Normal (10%)	89.6	87.3	84.5	78.8	66.0	67.3	71.3	74.9	78.2	81.4	86.0	89.7
Dry (16%)	90.7	90.4	87.9	81.1	70.7	67.6	70.8	76.0	80.2	84.4	88.0	90.8
Critical (27%)	91.9	92.1	90.0	84.0	78.5	76.8	78.8	83.3	85.7	88.2	90.6	92.4

Alternative 5

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	93.2	93.3	90.8	84.0	77.3	75.9	77.2	79.1	83.1	86.5	89.6	91.9
20%	91.9	91.5	87.6	82.3	71.7	72.8	72.5	77.9	81.4	84.9	88.1	91.1
30%	91.6	91.0	83.9	79.8	67.2	65.8	69.5	75.8	81.0	84.2	87.4	90.5
40%	91.0	88.0	82.4	73.5	63.9	64.5	66.4	71.5	79.6	82.3	86.1	90.0
50%	89.5	81.1	81.2	71.2	58.5	59.9	64.2	69.3	77.8	80.7	84.8	88.5
60%	81.0	81.0	79.7	64.4	55.1	57.9	60.8	66.4	76.6	78.2	84.6	81.0
70%	74.1	75.1	71.9	55.1	51.9	53.9	58.0	63.7	73.4	77.5	84.1	74.1
80%	74.0	74.1	62.2	51.3	49.4	50.6	53.5	58.9	69.8	76.8	82.6	74.0
90%	74.0	73.9	53.0	49.4	48.2	49.1	49.9	53.3	63.5	74.6	82.2	74.0
Long Term												
Full Simulation Period ^b	84.2	82.3	76.4	68.0	61.1	61.4	63.8	68.2	75.7	80.4	85.3	83.8
Water Year Types^c												
Wet (23%)	80.6	76.9	63.7	54.7	51.2	53.1	55.1	58.2	67.3	74.7	82.6	73.9
Above Normal (24%)	86.8	82.1	74.9	60.9	54.9	55.3	59.0	65.0	75.2	77.9	83.1	74.8
Below Normal (10%)	80.4	80.3	80.4	74.6	64.3	66.9	68.4	72.1	79.0	81.1	85.0	89.3
Dry (16%)	85.6	85.5	84.5	77.7	67.7	65.4	67.9	73.4	79.8	84.5	87.6	90.5
Critical (27%)	90.4	90.6	88.2	82.1	75.5	74.6	76.7	80.8	84.5	87.7	90.2	92.1

Alternative 5 minus Revised Second Basis of Comparison

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0.9	0.8	-0.1	-3.2	-3.1	-2.3	-1.4	-2.4	-0.4	-0.1	-0.4	-0.1
20%	0.1	0.1	-3.0	-3.6	-3.9	-0.7	-2.7	-1.6	-0.2	0.1	-0.4	-0.3
30%	0.4	0.0	-5.5	-3.8	-4.8	-2.5	-3.7	-2.7	0.4	-0.2	-0.6	-0.3
40%	0.0	-2.7	-6.3	-5.4	-2.2	-2.0	-3.3	-3.8	1.0	0.2	-0.5	0.0
50%	-1.0	-9.2	-5.6	-4.4	-3.0	-1.8	-3.1	-3.5	-0.2	-0.4	-0.8	-0.9
60%	-9.2	-8.6	-2.7	-3.3	-0.6	0.1	-3.4	-3.9	0.5	-0.8	-0.1	-8.0
70%	-15.9	-13.9	-5.2	-1.2	-0.5	-0.1	-1.9	-2.3	-1.0	-0.7	-0.3	-14.6
80%	-15.6	-13.9	-3.7	-0.6	0.0	0.2	-1.2	-1.3	-1.6	-0.5	-1.5	-14.4
90%	-13.4	-5.8	-0.3	-0.1	0.0	0.3	-0.5	-1.2	-0.7	-0.2	-0.8	-13.8
Long Term												
Full Simulation Period ^b	-5.7	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Water Year Types^c												
Wet (23%)	-7.5	-6.8	-2.6	-1.0	-0.4	0.0	-1.3	-2.0	0.0	-0.5	-0.6	-12.7
Above Normal (24%)	-4.1	-5.0	-4.2	-2.7	-1.2	0.0	-2.1	-2.9	0.2	-0.3	-0.7	-7.2
Below Normal (10%)	-9.2	-7.0	-4.1	-4.2	-1.7	-0.5	-2.8	-2.8	0.7	-0.4	-1.0	-0.5
Dry (16%)	-5.1	-4.9	-3.4	-3.4	-3.1	-2.2	-2.9	-2.6	-0.4	0.1	-0.4	-0.3
Critical (27%)	-1.5	-1.4	-1.8	-1.9	-3.0	-2.1	-2.1	-2.5	-1.3	-0.5	-0.4	-0.2

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.13 Delta Outflow

Table 5C.3.2.13.1 Old and Middle River, Monthly Flow

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3,764	-3,724	-3,812	-2,823	-666	-969	3,205	2,797	-1,150	-4,130	-2,453	-3,775
20%	-4,076	-4,560	-4,673	-2,823	-1,771	-1,394	2,207	1,304	-1,570	-6,849	-4,032	-5,147
30%	-4,613	-5,156	-5,244	-3,355	-2,823	-2,738	1,632	561	-3,500	-7,647	-5,770	-6,006
40%	-4,820	-5,627	-5,871	-4,392	-3,314	-3,500	1,268	108	-3,500	-8,888	-7,996	-7,621
50%	-5,328	-6,320	-5,871	-4,710	-3,781	-3,500	612	-182	-3,500	-9,376	-9,956	-9,000
60%	-5,589	-6,564	-5,871	-5,000	-4,878	-4,568	-102	-483	-4,487	-9,746	-10,630	-9,256
70%	-6,253	-7,101	-7,413	-5,000	-5,000	-5,000	-448	-632	-5,000	-10,301	-10,737	-9,653
80%	-6,560	-8,185	-9,537	-5,000	-5,000	-5,000	-995	-1,129	-5,000	-10,602	-10,853	-9,884
90%	-7,404	-9,995	-9,681	-5,000	-5,000	-5,000	-1,247	-1,414	-5,000	-11,108	-11,083	-10,032
Long Term												
Full Simulation Period ^b	-5,476	-6,380	-6,228	-3,535	-2,905	-2,690	919	310	-3,577	-8,496	-7,975	-7,706
Water Year Types^c												
Wet (23%)	-5,847	-7,229	-5,526	-1,900	-1,991	-1,552	3,110	2,011	-4,274	-8,957	-10,532	-9,358
Above Normal (24%)	-5,525	-6,801	-6,850	-3,699	-3,161	-4,176	1,196	412	-4,525	-9,151	-10,873	-9,542
Below Normal (10%)	-5,488	-6,749	-7,669	-4,380	-3,477	-3,919	165	-316	-3,445	-10,539	-9,624	-8,178
Dry (16%)	-5,440	-5,953	-6,676	-4,621	-3,573	-3,072	-670	-906	-3,350	-8,900	-4,745	-6,453
Critical (27%)	-4,671	-4,458	-5,006	-4,314	-2,968	-1,780	-786	-887	-1,539	-4,242	-3,168	-3,793

Revised Alternative 1

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3,213	-4,272	-3,968	-2,854	-824	-160	-2,064	-1,634	-2,112	-3,246	-3,105	-3,732
20%	-3,760	-5,330	-6,081	-4,745	-2,550	-1,248	-3,157	-2,833	-2,809	-5,223	-4,480	-5,069
30%	-4,915	-6,950	-6,787	-6,261	-4,041	-3,273	-4,168	-3,932	-3,314	-6,217	-5,712	-6,231
40%	-6,258	-7,438	-7,871	-7,379	-5,843	-4,024	-4,920	-4,714	-3,970	-7,181	-7,103	-8,305
50%	-7,278	-8,669	-8,406	-8,289	-6,429	-4,945	-5,965	-5,153	-5,163	-8,021	-8,109	-9,168
60%	-8,071	-9,221	-9,004	-8,845	-7,331	-5,427	-6,654	-5,526	-5,795	-8,941	-9,175	-9,647
70%	-9,158	-9,706	-9,347	-9,257	-8,356	-6,217	-7,180	-5,865	-6,068	-9,445	-9,861	-9,963
80%	-9,924	-9,988	-9,503	-9,553	-8,878	-6,633	-7,672	-6,382	-6,578	-9,955	-10,366	-10,089
90%	-10,188	-10,067	-9,686	-9,795	-9,516	-7,604	-8,033	-7,291	-7,016	-10,733	-10,684	-10,164
Long Term												
Full Simulation Period ^b	-6,927	-7,828	-7,459	-6,669	-4,977	-3,763	-5,451	-4,776	-4,655	-7,520	-7,457	-7,883
Water Year Types^c												
Wet (23%)	-7,970	-9,125	-7,749	-4,991	-2,581	-1,121	-7,036	-6,345	-4,153	-8,364	-9,546	-9,646
Above Normal (24%)	-6,298	-7,886	-7,998	-8,337	-6,176	-5,288	-7,062	-5,723	-5,991	-8,950	-9,951	-9,844
Below Normal (10%)	-8,002	-8,896	-8,199	-8,551	-5,299	-5,515	-5,435	-4,867	-6,643	-10,133	-8,149	-8,185
Dry (16%)	-6,476	-7,093	-7,256	-7,215	-6,840	-5,661	-4,200	-3,734	-4,589	-6,796	-5,151	-6,536
Critical (27%)	-5,117	-5,206	-5,908	-5,862	-5,471	-3,067	-2,373	-2,005	-2,584	-2,950	-3,436	-3,906

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	552	-548	-156	-32	-158	809	-5270	-4431	-961	883	-652	43
20%	317	-770	-1409	-1922	-779	146	-5363	-4137	-1239	1626	-448	78
30%	-302	-1794	-1543	-2906	-1218	-535	-5800	-4493	186	1429	57	-226
40%	-1437	-1812	-2000	-2986	-2529	-524	-6188	-4822	-470	1707	893	-684
50%	-1950	-2349	-2535	-3579	-2648	-1445	-6576	-4971	-1663	1355	1847	-168
60%	-2482	-2657	-3133	-3845	-2453	-860	-6552	-5043	-1309	805	1455	-391
70%	-2905	-2605	-1934	-4257	-3356	-1217	-6732	-5233	-1068	856	876	-311
80%	-3363	-1803	34	-4553	-3878	-1633	-6677	-5253	-1578	647	488	-205
90%	-2784	-71	-5	-4795	-4516	-2604	-6786	-5876	-2016	375	399	-133
Long Term												
Full Simulation Period ^b	-1451	-1448	-1232	-3134	-2072	-1073	-6371	-5086	-1078	976	518	-177
Water Year Types^c												
Wet (23%)	-2123	-1895	-2223	-3091	-590	432	-10146	-8356	121	593	986	-288
Above Normal (24%)	-773	-1085	-1148	-4637	-3015	-1112	-8258	-6134	-1466	200	922	-302
Below Normal (10%)	-2514	-2147	-530	-4171	-1823	-1597	-5601	-4551	-3198	407	1476	-7
Dry (16%)	-1036	-1140	-581	-2594	-3267	-2588	-3531	-2828	-1240	2104	-406	-84
Critical (27%)	-446	-748	-902	-1548	-2503	-1287	-1587	-1118	-1045	1291	-268	-113

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.13.2 Old and Middle River, Monthly Flow

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3,213	-4,272	-3,968	-2,854	-824	-160	-2,064	-1,634	-2,112	-3,246	-3,105	-3,732
20%	-3,760	-5,330	-6,081	-4,745	-2,550	-1,248	-3,157	-2,833	-2,809	-5,223	-4,480	-5,069
30%	-4,915	-6,950	-6,787	-6,261	-4,041	-3,273	-4,168	-3,932	-3,314	-6,217	-5,712	-6,231
40%	-6,258	-7,438	-7,871	-7,379	-5,843	-4,024	-4,920	-4,714	-3,970	-7,181	-7,103	-8,305
50%	-7,278	-8,669	-8,406	-8,289	-6,429	-4,945	-5,965	-5,153	-5,163	-8,021	-8,109	-9,168
60%	-8,071	-9,221	-9,004	-8,845	-7,331	-5,427	-6,654	-5,526	-5,795	-8,941	-9,175	-9,647
70%	-9,158	-9,706	-9,347	-9,257	-8,356	-6,217	-7,180	-5,865	-6,068	-9,445	-9,861	-9,963
80%	-9,924	-9,988	-9,503	-9,553	-8,878	-6,633	-7,672	-6,382	-6,578	-9,955	-10,366	-10,089
90%	-10,188	-10,067	-9,686	-9,795	-9,516	-7,604	-8,033	-7,291	-7,016	-10,733	-10,684	-10,164
Long Term												
Full Simulation Period ^b	-6,927	-7,828	-7,459	-6,669	-4,977	-3,763	-5,451	-4,776	-4,655	-7,520	-7,457	-7,883
Water Year Types^c												
Wet (23%)	-7,970	-9,125	-7,749	-4,991	-2,581	-1,121	-7,036	-6,345	-4,153	-8,364	-9,546	-9,646
Above Normal (24%)	-6,298	-7,886	-7,998	-8,337	-6,176	-5,288	-7,062	-5,723	-5,991	-8,950	-9,951	-9,844
Below Normal (10%)	-8,002	-8,896	-8,199	-8,551	-5,299	-5,515	-5,435	-4,867	-6,643	-10,133	-8,149	-8,185
Dry (16%)	-6,476	-7,093	-7,256	-7,215	-6,840	-5,661	-4,200	-3,734	-4,589	-6,796	-5,151	-6,536
Critical (27%)	-5,117	-5,206	-5,908	-5,862	-5,471	-3,067	-2,373	-2,005	-2,584	-2,950	-3,436	-3,906

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3,764	-3,724	-3,812	-2,823	-666	-969	3,205	2,797	-1,150	-4,130	-2,453	-3,775
20%	-4,076	-4,560	-4,673	-2,823	-1,771	-1,394	2,207	1,304	-1,570	-6,849	-4,032	-5,147
30%	-4,613	-5,156	-5,244	-3,355	-2,823	-2,738	1,632	561	-3,500	-7,647	-5,770	-6,006
40%	-4,820	-5,627	-5,871	-4,392	-3,314	-3,500	1,268	108	-3,500	-8,888	-7,996	-7,621
50%	-5,328	-6,320	-5,871	-4,710	-3,781	-3,500	612	-182	-3,500	-9,376	-9,956	-9,000
60%	-5,589	-6,564	-5,871	-5,000	-4,878	-4,568	-102	-483	-4,487	-9,746	-10,630	-9,256
70%	-6,253	-7,101	-7,413	-5,000	-5,000	-5,000	-448	-632	-5,000	-10,301	-10,737	-9,653
80%	-6,560	-8,185	-9,537	-5,000	-5,000	-5,000	-995	-1,129	-5,000	-10,602	-10,853	-9,884
90%	-7,404	-9,995	-9,681	-5,000	-5,000	-5,000	-1,247	-1,414	-5,000	-11,108	-11,083	-10,032
Long Term												
Full Simulation Period ^b	-5,476	-6,380	-6,228	-3,535	-2,905	-2,690	919	310	-3,577	-8,496	-7,975	-7,706
Water Year Types^c												
Wet (23%)	-5,847	-7,229	-5,526	-1,900	-1,991	-1,552	3,110	2,011	-4,274	-8,957	-10,532	-9,358
Above Normal (24%)	-5,525	-6,801	-6,850	-3,699	-3,161	-4,176	1,196	412	-4,525	-9,151	-10,873	-9,542
Below Normal (10%)	-5,488	-6,749	-7,669	-4,380	-3,477	-3,919	165	-316	-3,445	-10,539	-9,624	-8,178
Dry (16%)	-5,440	-5,953	-6,676	-4,621	-3,573	-3,072	-670	-906	-3,350	-8,900	-4,745	-6,453
Critical (27%)	-4,671	-4,458	-5,006	-4,314	-2,968	-1,780	-786	-887	-1,539	-4,242	-3,168	-3,793

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-552	548	156	32	158	-809	5270	4431	961	-883	652	-43
20%	-317	770	1409	1922	779	-146	5363	4137	1239	-1626	448	-78
30%	302	1794	1543	2906	1218	535	5800	4493	-186	-1429	-57	226
40%	1437	1812	2000	2986	2529	524	6188	4822	470	-1707	-893	684
50%	1950	2349	2535	3579	2648	1445	6576	4971	1663	-1355	-1847	168
60%	2482	2657	3133	3845	2453	860	6552	5043	1309	-805	-1455	391
70%	2905	2605	1934	4257	3356	1217	6732	5233	1068	-856	-876	311
80%	3363	1803	-34	4553	3878	1633	6677	5253	1578	-647	-488	205
90%	2784	71	5	4795	4516	2604	6786	5876	2016	-375	-399	133
Long Term												
Full Simulation Period ^b	1451	1448	1232	3134	2072	1073	6371	5086	1078	-976	-518	177
Water Year Types^c												
Wet (23%)	2123	1895	2223	3091	590	-432	10146	8356	-121	-593	-986	288
Above Normal (24%)	773	1085	1148	4637	3015	1112	8258	6134	1466	-200	-922	302
Below Normal (10%)	2514	2147	530	4171	1823	1597	5601	4551	3198	-407	-1476	7
Dry (16%)	1036	1140	581	2594	3267	2588	3531	2828	1240	-2104	406	84
Critical (27%)	446	748	902	1548	2503	1287	1587	1118	1045	-1291	268	113

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.13.3 Old and Middle River, Monthly Flow

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3,213	-4,272	-3,968	-2,854	-824	-160	-2,064	-1,634	-2,112	-3,246	-3,105	-3,732
20%	-3,760	-5,330	-6,081	-4,745	-2,550	-1,248	-3,157	-2,833	-2,809	-5,223	-4,480	-5,069
30%	-4,915	-6,950	-6,787	-6,261	-4,041	-3,273	-4,168	-3,932	-3,314	-6,217	-5,712	-6,231
40%	-6,258	-7,438	-7,871	-7,379	-5,843	-4,024	-4,920	-4,714	-3,970	-7,181	-7,103	-8,305
50%	-7,278	-8,669	-8,406	-8,289	-6,429	-4,945	-5,965	-5,153	-5,163	-8,021	-8,109	-9,168
60%	-8,071	-9,221	-9,004	-8,845	-7,331	-5,427	-6,654	-5,526	-5,795	-8,941	-9,175	-9,647
70%	-9,158	-9,706	-9,347	-9,257	-8,356	-6,217	-7,180	-5,865	-6,068	-9,445	-9,861	-9,963
80%	-9,924	-9,988	-9,503	-9,553	-8,878	-6,633	-7,672	-6,382	-6,578	-9,955	-10,366	-10,089
90%	-10,188	-10,067	-9,686	-9,795	-9,516	-7,604	-8,033	-7,291	-7,016	-10,733	-10,684	-10,164
Long Term												
Full Simulation Period ^b	-6,927	-7,828	-7,459	-6,669	-4,977	-3,763	-5,451	-4,776	-4,655	-7,520	-7,457	-7,883
Water Year Types^c												
Wet (23%)	-7,970	-9,125	-7,749	-4,991	-2,581	-1,121	-7,036	-6,345	-4,153	-8,364	-9,546	-9,646
Above Normal (24%)	-6,298	-7,886	-7,998	-8,337	-6,176	-5,288	-7,062	-5,723	-5,991	-8,950	-9,951	-9,844
Below Normal (10%)	-8,002	-8,896	-8,199	-8,551	-5,299	-5,515	-5,435	-4,867	-6,643	-10,133	-8,149	-8,185
Dry (16%)	-6,476	-7,093	-7,256	-7,215	-6,840	-5,661	-4,200	-3,734	-4,589	-6,796	-5,151	-6,536
Critical (27%)	-5,117	-5,206	-5,908	-5,862	-5,471	-3,067	-2,373	-2,005	-2,584	-2,950	-3,436	-3,906

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3,471	-4,154	-3,935	-2,361	-447	-819	405	-673	-2,098	-3,660	-3,007	-3,495
20%	-4,101	-5,233	-5,184	-3,500	-1,896	-1,347	-946	-1,150	-4,287	-5,775	-4,278	-5,225
30%	-4,803	-6,947	-6,403	-3,500	-2,838	-2,283	-1,200	-1,150	-4,625	-7,093	-6,258	-6,437
40%	-5,638	-7,541	-6,403	-3,500	-3,500	-3,500	-2,086	-2,560	-5,017	-8,012	-7,669	-8,402
50%	-7,049	-8,326	-6,403	-5,000	-3,500	-3,500	-2,787	-3,326	-5,526	-8,990	-9,396	-9,192
60%	-8,252	-9,400	-6,811	-5,000	-4,273	-3,616	-3,368	-3,500	-5,750	-9,549	-9,845	-9,680
70%	-8,982	-9,810	-7,677	-5,000	-5,000	-5,061	-3,526	-3,500	-5,750	-10,046	-10,212	-9,842
80%	-9,734	-9,990	-8,823	-5,000	-5,621	-6,252	-4,031	-4,451	-6,160	-10,767	-10,624	-10,044
90%	-10,085	-10,084	-9,552	-6,976	-7,500	-7,499	-4,474	-5,149	-7,011	-11,148	-10,797	-10,177
Long Term												
Full Simulation Period ^b	-6,888	-7,771	-6,494	-3,764	-3,283	-3,072	-2,176	-2,623	-4,997	-8,112	-7,831	-7,917
Water Year Types^c												
Wet (23%)	-7,965	-9,052	-5,964	-2,522	-2,581	-1,646	-1,367	-2,399	-5,476	-8,581	-9,731	-9,555
Above Normal (24%)	-6,452	-8,078	-6,997	-3,789	-4,137	-5,220	-3,630	-4,226	-5,981	-9,160	-10,444	-9,839
Below Normal (10%)	-7,685	-8,790	-7,868	-4,451	-3,689	-4,765	-2,676	-2,885	-5,409	-10,929	-10,032	-8,880
Dry (16%)	-6,546	-7,086	-6,848	-4,588	-3,582	-3,358	-2,517	-2,670	-4,927	-8,172	-5,079	-6,457
Critical (27%)	-4,869	-4,871	-5,252	-4,429	-3,011	-1,804	-1,328	-1,054	-2,628	-3,280	-3,450	-3,839

Alternative 3 minus Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-258	118	33	494	377	-660	2469	960	13	-413	98	237
20%	-341	98	897	1245	654	-99	2210	1682	-1478	-551	202	-156
30%	112	3	384	2761	1203	990	2968	2782	-1311	-875	-546	-205
40%	620	-103	1468	3879	2343	524	2834	2153	-1047	-831	-566	-97
50%	229	344	2002	3289	2929	1445	3178	1827	-363	-969	-1287	-24
60%	-181	-178	2193	3845	3058	1811	3287	2026	45	-608	-670	-33
70%	176	-104	1669	4257	3356	1156	3654	2365	318	-601	-351	121
80%	189	-2	680	4553	3257	381	3641	1930	418	-812	-258	45
90%	103	-17	134	2819	2016	105	3558	2141	5	-414	-113	-13
Long Term												
Full Simulation Period ^b	39	57	965	2904	1694	692	3275	2153	-341	-593	-374	-34
Water Year Types^c												
Wet (23%)	5	73	1785	2469	0	-525	5669	3946	-1323	-217	-185	91
Above Normal (24%)	-154	-192	1001	4548	2039	68	3432	1497	10	-210	-493	5
Below Normal (10%)	317	106	331	4100	1611	751	2760	1982	1234	-796	-1883	-695
Dry (16%)	-70	7	408	2627	3257	2303	1684	1064	-337	-1376	72	80
Critical (27%)	248	334	656	1433	2460	1263	1046	951	-44	-330	-14	68

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.13.4 Old and Middle River, Monthly Flow

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3,213	-4,272	-3,968	-2,854	-824	-160	-2,064	-1,634	-2,112	-3,246	-3,105	-3,732
20%	-3,760	-5,330	-6,081	-4,745	-2,550	-1,248	-3,157	-2,833	-2,809	-5,223	-4,480	-5,069
30%	-4,915	-6,950	-6,787	-6,261	-4,041	-3,273	-4,168	-3,932	-3,314	-6,217	-5,712	-6,231
40%	-6,258	-7,438	-7,871	-7,379	-5,843	-4,024	-4,920	-4,714	-3,970	-7,181	-7,103	-8,305
50%	-7,278	-8,669	-8,406	-8,289	-6,429	-4,945	-5,965	-5,153	-5,163	-8,021	-8,109	-9,168
60%	-8,071	-9,221	-9,004	-8,845	-7,331	-5,427	-6,654	-5,526	-5,795	-8,941	-9,175	-9,647
70%	-9,158	-9,706	-9,347	-9,257	-8,356	-6,217	-7,180	-5,865	-6,068	-9,445	-9,861	-9,963
80%	-9,924	-9,988	-9,503	-9,553	-8,878	-6,633	-7,672	-6,382	-6,578	-9,955	-10,366	-10,089
90%	-10,188	-10,067	-9,686	-9,795	-9,516	-7,604	-8,033	-7,291	-7,016	-10,733	-10,684	-10,164
Long Term												
Full Simulation Period ^b	-6,927	-7,828	-7,459	-6,669	-4,977	-3,763	-5,451	-4,776	-4,655	-7,520	-7,457	-7,883
Water Year Types^c												
Wet (23%)	-7,970	-9,125	-7,749	-4,991	-2,581	-1,121	-7,036	-6,345	-4,153	-8,364	-9,546	-9,646
Above Normal (24%)	-6,298	-7,886	-7,998	-8,337	-6,176	-5,288	-7,062	-5,723	-5,991	-8,950	-9,951	-9,844
Below Normal (10%)	-8,002	-8,896	-8,199	-8,551	-5,299	-5,515	-5,435	-4,867	-6,643	-10,133	-8,149	-8,185
Dry (16%)	-6,476	-7,093	-7,256	-7,215	-6,840	-5,661	-4,200	-3,734	-4,589	-6,796	-5,151	-6,536
Critical (27%)	-5,117	-5,206	-5,908	-5,862	-5,471	-3,067	-2,373	-2,005	-2,584	-2,950	-3,436	-3,906

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3,722	-3,722	-3,826	-2,823	-641	-965	3,206	2,797	-1,150	-4,455	-3,295	-3,913
20%	-4,102	-4,558	-4,737	-2,823	-1,771	-1,394	2,134	1,335	-2,319	-6,620	-4,451	-5,247
30%	-4,583	-5,162	-5,150	-3,355	-2,820	-2,738	1,566	712	-3,500	-8,001	-6,361	-6,304
40%	-4,858	-5,603	-5,871	-4,378	-3,267	-3,500	1,270	568	-3,500	-9,172	-8,612	-7,552
50%	-5,145	-6,098	-5,871	-4,710	-3,513	-3,500	623	381	-3,500	-9,522	-10,244	-8,864
60%	-5,368	-6,494	-5,871	-5,000	-4,878	-4,568	381	381	-4,467	-9,822	-10,615	-9,232
70%	-6,237	-7,087	-7,453	-5,000	-5,000	-5,000	381	381	-5,000	-10,430	-10,756	-9,654
80%	-6,583	-8,086	-9,466	-5,000	-5,000	-5,000	381	381	-5,000	-10,694	-10,844	-9,915
90%	-7,355	-9,871	-9,681	-5,000	-5,000	-5,000	381	381	-5,000	-11,168	-11,076	-10,031
Long Term												
Full Simulation Period ^b	-5,443	-6,337	-6,246	-3,551	-2,904	-2,710	1,482	1,034	-3,631	-8,687	-8,239	-7,714
Water Year Types^c												
Wet (23%)	-5,812	-7,354	-5,572	-1,900	-1,926	-1,598	3,122	2,182	-4,275	-8,965	-10,573	-9,193
Above Normal (24%)	-5,543	-6,368	-6,838	-3,716	-3,222	-4,174	1,292	780	-4,521	-9,187	-10,817	-9,491
Below Normal (10%)	-5,418	-6,748	-7,637	-4,380	-3,554	-3,971	718	468	-3,444	-10,623	-9,770	-8,460
Dry (16%)	-5,380	-5,893	-6,731	-4,620	-3,578	-3,074	565	453	-3,523	-9,446	-5,313	-6,571
Critical (27%)	-4,661	-4,461	-4,983	-4,409	-2,957	-1,770	363	310	-1,623	-4,501	-3,860	-3,805

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-510	550	142	32	183	-805	5270	4431	961	-1209	-189	-181
20%	-343	773	1345	1922	779	-146	5291	4168	490	-1397	30	-178
30%	332	1788	1637	2906	1221	535	5733	4644	-186	-1784	-648	-73
40%	1400	1835	2000	3001	2576	524	6190	5281	470	-1991	-1509	752
50%	2132	2571	2535	3579	2916	1445	6588	5534	1663	-1501	-2135	305
60%	2703	2727	3133	3845	2453	860	7036	5907	1328	-881	-1440	415
70%	2921	2619	1893	4257	3356	1217	7562	6247	1068	-985	-895	309
80%	3340	1902	37	4553	3878	1633	8053	6763	1578	-739	-478	174
90%	2833	196	5	4795	4516	2604	8414	7672	2016	-435	-392	133
Long Term												
Full Simulation Period ^b	1485	1492	1213	3118	2074	1053	6933	5811	1025	-1167	-782	169
Water Year Types^c												
Wet (23%)	2158	1771	2177	3091	655	-477	10158	8528	-122	-602	-1027	453
Above Normal (24%)	755	1517	1160	4621	2954	1114	8354	6502	1470	-236	-866	353
Below Normal (10%)	2585	2148	562	4171	1746	1544	6153	5335	3199	-490	-1621	-275
Dry (16%)	1096	1200	525	2595	3262	2587	4766	4187	1067	-2650	-162	-34
Critical (27%)	456	744	925	1453	2514	1297	2737	2315	962	-1551	-424	102

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.14 Exports through Jones and Banks Pumping Plants

Table 5C.3.2.14.1 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

No Action Alternative

Statistic	Monthly Export Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	517	671	721	604	611	675	242	240	509	714	724	671
20%	454	572	717	490	532	617	181	151	359	708	724	664
30%	434	479	685	427	448	508	158	127	340	694	715	651
40%	400	443	558	419	409	479	138	104	318	667	707	623
50%	370	415	494	406	380	424	128	97	253	634	692	604
60%	336	381	477	396	363	349	121	92	207	588	519	509
70%	310	347	454	377	325	312	113	92	192	501	371	410
80%	286	302	379	321	267	283	104	92	150	444	240	335
90%	250	251	335	280	165	159	89	92	43	232	141	243
Long Term												
Full Simulation Period ^b	378	430	527	426	395	423	154	140	276	558	521	514
Water Year Types^c												
Wet (23%)	410	497	564	513	537	594	204	207	445	669	717	638
Above Normal (24%)	376	450	562	406	401	496	130	105	315	587	709	628
Below Normal (10%)	386	456	590	387	354	394	134	100	209	657	622	542
Dry (16%)	374	398	510	392	315	318	153	126	194	541	296	426
Critical (27%)	314	293	384	349	250	179	93	90	64	223	176	242

Revised Alternative 1

Statistic	Monthly Export Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	694	671	738	803	722	707	530	515	526	694	694	671
20%	681	671	723	769	684	619	508	417	450	694	694	671
30%	626	659	719	746	666	563	481	369	429	691	694	671
40%	551	622	717	738	602	542	433	351	408	609	621	668
50%	488	590	683	724	552	512	391	314	392	555	529	628
60%	426	502	609	645	512	489	336	277	353	474	468	549
70%	327	460	554	562	461	459	264	228	316	390	364	408
80%	249	349	492	499	393	373	189	169	176	306	281	338
90%	196	286	382	371	309	301	109	81	128	146	183	228
Long Term												
Full Simulation Period ^b	467	524	613	638	528	491	355	302	349	494	487	526
Water Year Types^c												
Wet (23%)	544	620	717	724	587	554	485	428	451	632	653	660
Above Normal (24%)	419	520	641	719	590	568	455	359	411	574	647	648
Below Normal (10%)	544	595	629	670	471	498	342	296	413	631	525	543
Dry (16%)	434	472	550	567	516	491	262	221	273	401	323	431
Critical (27%)	336	340	444	451	405	264	135	110	132	138	195	249

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Export Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	34%	0%	2%	33%	18%	5%	119%	115%	3%	-3%	-4%	0%
20%	50%	17%	1%	57%	29%	0%	180%	176%	25%	-2%	-4%	1%
30%	44%	38%	5%	75%	49%	11%	205%	189%	26%	0%	-3%	3%
40%	38%	40%	28%	76%	47%	13%	214%	238%	28%	-9%	-12%	7%
50%	32%	42%	38%	79%	45%	21%	205%	225%	55%	-12%	-24%	4%
60%	27%	32%	28%	63%	41%	40%	179%	201%	70%	-19%	-10%	8%
70%	5%	33%	22%	49%	42%	47%	133%	147%	64%	-22%	-2%	0%
80%	-13%	16%	30%	55%	48%	32%	82%	83%	17%	-31%	17%	1%
90%	-22%	14%	14%	33%	88%	89%	22%	-12%	200%	-37%	30%	-6%
Long Term												
Full Simulation Period ^b	23%	22%	16%	50%	34%	16%	130%	117%	27%	-11%	-6%	2%
Water Year Types^c												
Wet (23%)	33%	25%	27%	41%	9%	-7%	138%	107%	1%	-5%	-9%	3%
Above Normal (24%)	11%	16%	14%	77%	47%	14%	249%	241%	30%	-2%	-9%	3%
Below Normal (10%)	41%	30%	7%	73%	33%	27%	154%	196%	98%	-4%	-16%	0%
Dry (16%)	16%	19%	8%	45%	64%	55%	71%	76%	41%	-26%	9%	1%
Critical (27%)	7%	16%	16%	29%	62%	47%	46%	23%	105%	-38%	11%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.14.2 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Revised Second Basis of Comparison

Statistic	Monthly Export Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	694	671	738	803	722	707	530	515	526	694	694	671
20%	681	671	723	769	684	619	508	417	450	694	694	671
30%	626	659	719	746	666	563	481	369	429	691	694	671
40%	551	622	717	738	602	542	433	351	408	609	621	668
50%	488	590	683	724	552	512	391	314	392	555	529	628
60%	426	502	609	645	512	489	336	277	353	474	468	549
70%	327	460	554	562	461	459	264	228	316	390	364	408
80%	249	349	492	499	393	373	189	169	176	306	281	338
90%	196	286	382	371	309	301	109	81	128	146	183	228
Long Term												
Full Simulation Period ^b	467	524	613	638	528	491	355	302	349	494	487	526
Water Year Types^c												
Wet (23%)	544	620	717	724	587	554	485	428	451	632	653	660
Above Normal (24%)	419	520	641	719	590	568	455	359	411	574	647	648
Below Normal (10%)	544	595	629	670	471	498	342	296	413	631	525	543
Dry (16%)	434	472	550	567	516	491	262	221	273	401	323	431
Critical (27%)	336	340	444	451	405	264	135	110	132	138	195	249

No Action Alternative

Statistic	Monthly Export Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	517	671	721	604	611	675	242	240	509	714	724	671
20%	454	572	717	490	532	617	181	151	359	708	724	664
30%	434	479	685	427	448	508	158	127	340	694	715	651
40%	400	443	558	419	409	479	138	104	318	667	707	623
50%	370	415	494	406	380	424	128	97	253	634	692	604
60%	336	381	477	396	363	349	121	92	207	588	519	509
70%	310	347	454	377	325	312	113	92	192	501	371	410
80%	286	302	379	321	267	283	104	92	150	444	240	335
90%	250	251	335	280	165	159	89	92	43	232	141	243
Long Term												
Full Simulation Period ^b	378	430	527	426	395	423	154	140	276	558	521	514
Water Year Types^c												
Wet (23%)	410	497	564	513	537	594	204	207	445	669	717	638
Above Normal (24%)	376	450	562	406	401	496	130	105	315	587	709	628
Below Normal (10%)	386	456	590	387	354	394	134	100	209	657	622	542
Dry (16%)	374	398	510	392	315	318	153	126	194	541	296	426
Critical (27%)	314	293	384	349	250	179	93	90	64	223	176	242

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Export Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-25%	0%	-2%	-25%	-15%	-5%	-54%	-53%	-3%	3%	4%	0%
20%	-33%	-15%	-1%	-36%	-22%	0%	-64%	-64%	-20%	2%	4%	-1%
30%	-31%	-27%	-5%	-43%	-33%	-10%	-67%	-65%	-21%	0%	3%	-3%
40%	-27%	-29%	-22%	-43%	-32%	-12%	-68%	-70%	-22%	9%	14%	-7%
50%	-24%	-30%	-28%	-44%	-31%	-17%	-67%	-69%	-36%	14%	31%	-4%
60%	-21%	-24%	-22%	-39%	-29%	-29%	-64%	-67%	-41%	24%	11%	-7%
70%	-5%	-25%	-18%	-33%	-30%	-32%	-57%	-60%	-39%	29%	2%	0%
80%	15%	-14%	-23%	-36%	-32%	-24%	-45%	-45%	-14%	45%	-14%	-1%
90%	28%	-12%	-12%	-25%	-47%	-47%	-18%	14%	-67%	58%	-23%	7%
Long Term												
Full Simulation Period ^b	-19%	-18%	-14%	-33%	-25%	-14%	-57%	-54%	-21%	13%	7%	-2%
Water Year Types^c												
Wet (23%)	-25%	-20%	-21%	-29%	-8%	7%	-58%	-52%	-1%	6%	10%	-3%
Above Normal (24%)	-10%	-13%	-12%	-44%	-32%	-13%	-71%	-71%	-23%	2%	9%	-3%
Below Normal (10%)	-29%	-23%	-6%	-42%	-25%	-21%	-61%	-66%	-49%	4%	19%	0%
Dry (16%)	-14%	-16%	-7%	-31%	-39%	-35%	-41%	-43%	-29%	35%	-8%	-1%
Critical (27%)	-6%	-14%	-14%	-23%	-38%	-32%	-31%	-18%	-51%	62%	-10%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.14.3 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Revised Second Basis of Comparison

Statistic	Monthly Export Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	694	671	738	803	722	707	530	515	526	694	694	671
20%	681	671	723	769	684	619	508	417	450	694	694	671
30%	626	659	719	746	666	563	481	369	429	691	694	671
40%	551	622	717	738	602	542	433	351	408	609	621	668
50%	488	590	683	724	552	512	391	314	392	555	529	628
60%	426	502	609	645	512	489	336	277	353	474	468	549
70%	327	460	554	562	461	459	264	228	316	390	364	408
80%	249	349	492	499	393	373	189	169	176	306	281	338
90%	196	286	382	371	309	301	109	81	128	146	183	228
Long Term												
Full Simulation Period ^b	467	524	613	638	528	491	355	302	349	494	487	526
Water Year Types^c												
Wet (23%)	544	620	717	724	587	554	485	428	451	632	653	660
Above Normal (24%)	419	520	641	719	590	568	455	359	411	574	647	648
Below Normal (10%)	544	595	629	670	471	498	342	296	413	631	525	543
Dry (16%)	434	472	550	567	516	491	262	221	273	401	323	431
Critical (27%)	336	340	444	451	405	264	135	110	132	138	195	249

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 (23%)	544	615	601	559	594	589	494	490	519	648	667	654
Above Normal (24%)	430	533	574	414	469	566	441	413	397	586	680	647
Below Normal (10%)	524	587	607	394	373	448	312	266	330	683	650	588
Dry (16%)	440	471	523	389	314	337	270	242	292	492	318	426
Critical (27%)	321	319	401	355	251	180	127	100	131	158	196	245

Alternative 3 minus Revised Second Basis of Comparison

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%	-3%	-19%	0%	2%	3%	9%	27%	0%	0%	0%
20%	-1%	0%	-4%	-26%	-12%	1%	0%	19%	2%	0%	0%	0%
30%	0%	-1%	-13%	-41%	-21%	2%	-3%	22%	-7%	0%	0%	0%
40%	0%	1%	-19%	-43%	-25%	-2%	1%	10%	-9%	12%	12%	-2%
50%	-3%	-3%	-20%	-43%	-29%	-10%	-6%	5%	-9%	13%	18%	2%
60%	-10%	0%	-14%	-39%	-29%	-28%	-5%	1%	-4%	20%	7%	4%
70%	-2%	1%	-9%	-33%	-31%	-31%	-3%	1%	-1%	15%	9%	2%
80%	7%	-1%	-3%	-34%	-33%	-23%	-1%	-26%	43%	25%	-5%	2%
90%	11%	-3%	-1%	-18%	-35%	-47%	14%	25%	7%	30%	-7%	0%
Long Term												
Full Simulation Period ^b	0%	-1%	-10%	-31%	-19%	-9%	-1%	9%	4%	8%	5%	0%
Water Year Types^c												
Wet (23%)	0%	-1%	-16%	-23%	1%	6%	2%	14%	15%	2%	2%	-1%
Above Normal (24%)	3%	2%	-10%	-42%	-21%	0%	-3%	15%	-3%	2%	5%	0%
Below Normal (10%)	-4%	-1%	-3%	-41%	-21%	-10%	-9%	-10%	-20%	8%	24%	8%
Dry (16%)	1%	0%	-5%	-31%	-39%	-31%	3%	9%	7%	23%	-1%	-1%
Critical (27%)	-4%	-6%	-10%	-21%	-38%	-32%	-6%	-9%	0%	15%	0%	-2%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.14.4 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Revised Second Basis of Comparison

Statistic	Monthly Export Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	694	671	738	803	722	707	530	515	526	694	694	671
20%	681	671	723	769	684	619	508	417	450	694	694	671
30%	626	659	719	746	666	563	481	369	429	691	694	671
40%	551	622	717	738	602	542	433	351	408	609	621	668
50%	488	590	683	724	552	512	391	314	392	555	529	628
60%	426	502	609	645	512	489	336	277	353	474	468	549
70%	327	460	554	562	461	459	264	228	316	390	364	408
80%	249	349	492	499	393	373	189	169	176	306	281	338
90%	196	286	382	371	309	301	109	81	128	146	183	228
Long Term												
Full Simulation Period ^b	467	524	613	638	528	491	355	302	349	494	487	526
Water Year Types^c												
Wet (23%)	544	620	717	724	587	554	485	428	451	632	653	660
Above Normal (24%)	419	520	641	719	590	568	455	359	411	574	647	648
Below Normal (10%)	544	595	629	670	471	498	342	296	413	631	525	543
Dry (16%)	434	472	550	567	516	491	262	221	273	401	323	431
Critical (27%)	336	340	444	451	405	264	135	110	132	138	195	249

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 (23%)	408	505	564	514	532	592	202	202	444	667	718	627
Above Normal (24%)	376	423	561	407	405	496	127	92	315	590	705	625
Below Normal (10%)	381	456	588	387	359	397	103	55	208	663	632	561
Dry (16%)	370	394	513	392	315	318	80	41	205	577	333	433
Critical (27%)	313	293	382	355	249	179	34	20	69	239	222	243

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Export Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-26%	0%	-2%	-25%	-15%	-4%	-58%	-58%	-3%	3%	4%	0%
20%	-33%	-18%	-1%	-36%	-23%	-1%	-67%	-70%	-20%	2%	4%	-1%
30%	-32%	-27%	-5%	-43%	-33%	-6%	-72%	-75%	-21%	1%	3%	-4%
40%	-31%	-29%	-22%	-43%	-31%	-12%	-72%	-77%	-22%	11%	14%	-6%
50%	-26%	-31%	-27%	-44%	-31%	-17%	-72%	-77%	-36%	16%	31%	-5%
60%	-22%	-25%	-21%	-39%	-29%	-29%	-71%	-82%	-41%	28%	22%	-8%
70%	-5%	-25%	-18%	-33%	-30%	-32%	-70%	-84%	-39%	46%	10%	2%
80%	16%	-14%	-21%	-36%	-32%	-24%	-76%	-86%	1%	45%	-1%	3%
90%	25%	-13%	-12%	-25%	-47%	-47%	-72%	-91%	-67%	85%	5%	11%
Long Term												
Full Simulation Period ^b	-19%	-18%	-14%	-33%	-25%	-14%	-66%	-67%	-20%	15%	10%	-2%
Water Year Types^c												
Wet (23%)	-25%	-19%	-21%	-29%	-9%	7%	-58%	-53%	-1%	6%	10%	-5%
Above Normal (24%)	-10%	-19%	-12%	-43%	-31%	-13%	-72%	-74%	-23%	3%	9%	-4%
Below Normal (10%)	-30%	-23%	-6%	-42%	-24%	-20%	-70%	-82%	-50%	5%	21%	3%
Dry (16%)	-15%	-16%	-7%	-31%	-39%	-35%	-69%	-81%	-25%	44%	3%	0%
Critical (27%)	-7%	-14%	-14%	-21%	-38%	-32%	-75%	-82%	-48%	74%	14%	-2%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.15 CVP Deliveries

Table 5C.3.2.15.1.1 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

				Revised Alternative 1	No Action Alternative	Revised Alternative 1 minus No Action Alternative
Water Supply Reliability						
Sacramento River Hydrologic Region						
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,858	1,859	-1
			Dry	1,905	1,906	-1
			Critical	1,732	1,737	-5
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	155	146	8
			Dry	151	146	5
			Critical	105	102	3
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	214	207	7
			Dry	192	186	5
			Critical	151	152	-1
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term	219	185	34
			Dry	122	86	37
			Critical	35	24	12
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries)						
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term	852	852	0
			Dry	875	875	0
			Critical	741	741	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	260	261	0
			Dry	268	269	-1
			Critical	221	224	-3
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	0	0	0
			Dry	0	0	0
			Critical	0	0	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	348	269	79
			Dry	203	140	63
			Critical	61	41	20
San Francisco Bay Hydrologic Region						
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	288	275	13
			Dry	284	274	10
			Critical	269	264	4
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	43	33	11
			Dry	25	17	8
			Critical	7	5	2
Central Coast Hydrologic Region						
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)						
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	0
			Dry	12	12	0
			Critical	10	10	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term	709	545	164
			Dry	422	288	134
			Critical	127	85	41
Total For All Regions						
Total Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	4,959	4,646	313
			Dry	4,459	4,198	261
			Critical	3,460	3,385	74

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text. 6) Annual deliveries are based on March to February Average.

Table 5C.3.2.15.1.2 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

				Revised Alternative 1	No Action Alternative	Revised Alternative 1 minus No Action Alternative
Water Supply Reliability						
North of Delta						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term Dry Critical	219 122 35	185 86 24	34 37 12
CVP M&I (Including American River)	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	485 461 408	467 447 405	18 14 3
CVP M&I American River	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	120 105 79	113 97 75	7 8 5
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	1,858 1,905 1,732	1,859 1,906 1,737	-1 -1 -5
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	155 151 105	146 146 102	8 5 3
Total CVP North of Delta						
Total CVP Ag, M&I, Settlement, and Refuge Deliveries	Contract Delivery (CVP) (annual average)	(TAF/year)	Long Term Dry Critical	2,717 2,639 2,281	2,658 2,584 2,268	59 55 13
South of Delta (Does not include Eastside Contractors deliveries)						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term Dry Critical	1,100 650 195	847 445 131	253 206 64
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	17 15 12	15 14 11	2 1 1
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	260 268 221	261 269 224	0 -1 -3
Total CVP South of Delta (Does not include Eastside Contractors deliveries)						
Total CVP Ag, M&I, Settlement, and Refuge Deliveries	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	1,377 933 428	1,123 727 366	254 206 62
Eastside Contractors deliveries						
Water Rights	Delivery (annual average)	(TAF/year)	Long Term Dry Critical	514 524 486	508 524 445	6 0 42
CVP Service Contracts	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	118 98 25	104 84 4	15 13 21
Total Eastside Contractors Deliveries						
Total Water Rights and CVP Service Contracts Deliveries	Delivery (annual average)	(TAF/year)	Long Term Dry Critical	632 621 511	611 608 449	21 13 63

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text. 6) Annual deliveries are based on March to February Average.

Table 5C.3.2.15.2.1 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

				No Action Alternative	Revised Second Basis of Comparison	No Action Alternative minus Revised Second Basis of Comparison
Water Supply Reliability						
Sacramento River Hydrologic Region						
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,859	1,858	1
			Dry	1,906	1,905	1
			Critical	1,737	1,732	5
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	146	155	-8
			Dry	146	151	-5
			Critical	102	105	-3
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	207	214	-7
			Dry	186	192	-5
			Critical	152	151	1
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term	185	219	-34
			Dry	86	122	-37
			Critical	24	35	-12
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries)						
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term	852	852	0
			Dry	875	875	0
			Critical	741	741	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	261	260	0
			Dry	269	268	1
			Critical	224	221	3
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	0	0	0
			Dry	0	0	0
			Critical	0	0	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	269	348	-79
			Dry	140	203	-63
			Critical	41	61	-20
San Francisco Bay Hydrologic Region						
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	275	288	-13
			Dry	274	284	-10
			Critical	264	269	-4
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	33	43	-11
			Dry	17	25	-8
			Critical	5	7	-2
Central Coast Hydrologic Region						
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)						
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	0
			Dry	12	12	0
			Critical	10	10	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term	545	709	-164
			Dry	288	422	-134
			Critical	85	127	-41
Total For All Regions						
Total Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	4,646	4,959	-313
			Dry	4,198	4,459	-261
			Critical	3,385	3,460	-74

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text. 6) Annual deliveries are based on March to February Average.

Table 5C.3.2.15.2.2 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

				No Action Alternative	Revised Second Basis of Comparison	No Action Alternative minus Revised Second Basis of Comparison
Water Supply Reliability						
North of Delta						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term Dry Critical	185 86 24	219 122 35	-34 -37 -12
CVP M&I (Including American River)	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	467 447 405	485 461 408	-18 -14 -3
CVP M&I American River	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	113 97 75	120 105 79	-7 -8 -5
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	1,859 1,906 1,737	1,858 1,905 1,732	1 1 5
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	146 146 102	155 151 105	-8 -5 -3
Total CVP North of Delta						
Total CVP Ag, M&I, Settlement, and Refuge Deliveries	Contract Delivery (CVP) (annual average)	(TAF/year)	Long Term Dry Critical	2,658 2,584 2,268	2,717 2,639 2,281	-59 -55 -13
South of Delta (Does not include Eastside Contractors deliveries)						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term Dry Critical	847 445 131	1,100 650 195	-253 -206 -64
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	15 14 11	17 15 12	-2 -1 -1
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	261 269 224	260 268 221	0 1 3
Total CVP South of Delta (Does not include Eastside Contractors deliveries)						
Total CVP Ag, M&I, Settlement, and Refuge Deliveries	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	1,123 727 366	1,377 933 428	-254 -206 -62
Eastside Contractors deliveries						
Water Rights	Delivery (annual average)	(TAF/year)	Long Term Dry Critical	508 524 445	514 524 486	-6 0 -42
CVP Service Contracts	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	104 84 4	118 98 25	-15 -13 -21
Total Eastside Contractors Deliveries						
Total Water Rights and CVP Service Contracts Deliveries	Delivery (annual average)	(TAF/year)	Long Term Dry Critical	611 608 449	632 621 511	-21 -13 -63

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text. 6) Annual deliveries are based on March to February Average.

Table 5C.3.2.15.3.1 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

				Alternative 3	Revised Second Basis of Comparison	Alternative 3 minus Revised Second Basis of Comparison
Water Supply Reliability						
Sacramento River Hydrologic Region						
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,860	1,858	2
			Dry	1,906	1,905	1
			Critical	1,742	1,732	10
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	153	155	-1
			Dry	149	151	-2
			Critical	103	105	-2
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	214	214	0
			Dry	192	192	0
			Critical	152	151	2
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term	209	219	-10
			Dry	111	122	-11
			Critical	31	35	-4
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries)						
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term	852	852	0
			Dry	875	875	0
			Critical	741	741	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	261	260	1
			Dry	269	268	1
			Critical	224	221	3
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	0	0	0
			Dry	0	0	0
			Critical	0	0	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	342	348	-6
			Dry	185	203	-17
			Critical	53	61	-8
San Francisco Bay Hydrologic Region						
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	286	288	-2
			Dry	283	284	-1
			Critical	267	269	-2
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	42	43	-1
			Dry	23	25	-2
			Critical	6	7	-1
Central Coast Hydrologic Region						
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)						
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	0
			Dry	12	12	0
			Critical	10	10	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term	696	709	-13
			Dry	387	422	-35
			Critical	108	127	-18
Total For All Regions						
Total Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	4,927	4,959	-32
			Dry	4,392	4,459	-67
			Critical	3,437	3,460	-22

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text. 6) Annual deliveries are based on March to February Average.

Table 5C.3.2.15.3.2 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

				Alternative 3	Revised Second Basis of Comparison	Alternative 3 minus Revised Second Basis of Comparison
Water Supply Reliability						
North of Delta						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term Dry Critical	209 111 31	219 122 35	-10 -11 -4
CVP M&I (Including American River)	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	483 460 408	485 461 408	-2 -1 0
CVP M&I American River	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	118 104 78	120 105 79	-2 -1 -2
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	1,860 1,906 1,742	1,858 1,905 1,732	2 1 10
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	153 149 103	155 151 105	-1 -2 -2
Total CVP North of Delta						
Total CVP Ag, M&I, Settlement, and Refuge Deliveries	Contract Delivery (CVP) (annual average)	(TAF/year)	Long Term Dry Critical	2,706 2,626 2,284	2,717 2,639 2,281	-11 -13 3
South of Delta (Does not include Eastside Contractors deliveries)						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term Dry Critical	1,079 596 168	1,100 650 195	-20 -55 -28
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	17 15 11	17 15 12	0 0 0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	261 269 224	260 268 221	1 1 3
Total CVP South of Delta (Does not include Eastside Contractors deliveries)						
Total CVP Ag, M&I, Settlement, and Refuge Deliveries	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	1,357 879 403	1,377 933 428	-20 -54 -25
Eastside Contractors deliveries						
Water Rights	Delivery (annual average)	(TAF/year)	Long Term Dry Critical	513 524 478	514 524 486	-1 0 -8
CVP Service Contracts	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	123 109 36	118 98 25	5 12 11
Total Eastside Contractors Deliveries						
Total Water Rights and CVP Service Contracts Deliveries	Delivery (annual average)	(TAF/year)	Long Term Dry Critical	636 633 514	632 621 511	4 12 3

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text. 6) Annual deliveries are based on March to February Average.

Table 5C.3.2.15.4.1 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

				Alternative 5	Revised Second Basis of Comparison	Alternative 5 minus Revised Second Basis of Comparison
Water Supply Reliability						
Sacramento River Hydrologic Region						
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,861	1,858	3
			Dry	1,906	1,905	1
			Critical	1,747	1,732	15
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	146	155	-8
			Dry	145	151	-6
			Critical	103	105	-2
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	207	214	-6
			Dry	186	192	-6
			Critical	152	151	1
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term	185	219	-34
			Dry	85	122	-37
			Critical	24	35	-11
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries)						
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term	852	852	0
			Dry	875	875	0
			Critical	741	741	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	261	260	0
			Dry	269	268	1
			Critical	222	221	0
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	0	0	0
			Dry	0	0	0
			Critical	0	0	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	264	348	-84
			Dry	135	203	-68
			Critical	40	61	-21
San Francisco Bay Hydrologic Region						
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	275	288	-13
			Dry	275	284	-9
			Critical	264	269	-5
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	32	43	-11
			Dry	17	25	-8
			Critical	5	7	-2
Central Coast Hydrologic Region						
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)						
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	0
			Dry	12	12	0
			Critical	10	10	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term	538	709	-171
			Dry	281	422	-141
			Critical	85	127	-42
Total For All Regions						
Total Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	4,634	4,959	-324
			Dry	4,186	4,459	-273
			Critical	3,393	3,460	-67

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text. 6) Annual deliveries are based on March to February Average.

Table 5C.3.2.15.4.2 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

				Alternative 5	Revised Second Basis of Comparison	Alternative 5 minus Revised Second Basis of Comparison
Water Supply Reliability						
North of Delta						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term Dry Critical	185 85 24	219 122 35	-34 -37 -11
CVP M&I (Including American River)	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	467 447 405	485 461 408	-18 -14 -3
CVP M&I American River	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	112 96 74	120 105 79	-7 -9 -6
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	1,861 1,906 1,747	1,858 1,905 1,732	3 1 15
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	146 145 103	155 151 105	-8 -6 -2
Total CVP North of Delta						
Total CVP Ag, M&I, Settlement, and Refuge Deliveries	Contract Delivery (CVP) (annual average)	(TAF/year)	Long Term Dry Critical	2,660 2,584 2,279	2,717 2,639 2,281	-57 -55 -2
South of Delta (Does not include Eastside Contractors deliveries)						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term Dry Critical	834 433 130	1,100 650 195	-266 -217 -65
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	15 14 11	17 15 12	-2 -1 -1
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	261 269 222	260 268 221	0 1 0
Total CVP South of Delta (Does not include Eastside Contractors deliveries)						
Total CVP Ag, M&I, Settlement, and Refuge Deliveries	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	1,110 715 363	1,377 933 428	-267 -217 -65
Eastside Contractors deliveries						
Water Rights	Delivery (annual average)	(TAF/year)	Long Term Dry Critical	502 524 406	514 524 486	-12 0 -80
CVP Service Contracts	Contract Delivery (annual average)	(TAF/year)	Long Term Dry Critical	100 69 8	118 98 25	-19 -29 -17
Total Eastside Contractors Deliveries						
Total Water Rights and CVP Service Contracts Deliveries	Delivery (annual average)	(TAF/year)	Long Term Dry Critical	602 593 414	632 621 511	-31 -29 -97

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text. 6) Annual deliveries are based on March to February Average.

Table 5C.3.2.15.5 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

	Stanislaus Deliveries		Difference from No Action Alternative		Difference from Second Basis of Comparison	
	CVP	Water Rights	CVP	Water Rights	CVP	Water Rights
	(TAF)	(TAF)	(TAF)	(TAF)	(TAF)	(TAF)
No Action Alternative	103.5	507.8				
Revised Second Basis of Comparison	118.3	514.0	14.8	6.2		
Alternative 2	103.5	507.8			-14.8	-6.2
Alternative 3	123.2	512.7	19.6	4.9	4.8	-1.2
Alternative 5	99.7	502.1	-3.8	-5.7	-18.6	-11.9

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.16 CVP Total Generating Capacity

Table 5C.3.2.16.1 CVP Total Capacity, Monthly Capacity

No Action Alternative

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,688	1,743	1,810	1,854	1,883	1,895	1,877	1,848	1,785	1,749	1,670	1,647
20%	1,638	1,724	1,772	1,829	1,858	1,872	1,842	1,806	1,719	1,695	1,623	1,615
30%	1,600	1,694	1,744	1,802	1,837	1,842	1,825	1,782	1,671	1,623	1,585	1,599
40%	1,579	1,635	1,710	1,776	1,811	1,812	1,793	1,736	1,634	1,583	1,545	1,553
50%	1,550	1,611	1,681	1,732	1,778	1,782	1,757	1,711	1,607	1,543	1,510	1,516
60%	1,529	1,556	1,622	1,700	1,749	1,752	1,725	1,652	1,564	1,504	1,481	1,473
70%	1,465	1,519	1,588	1,661	1,712	1,714	1,685	1,618	1,524	1,457	1,433	1,432
80%	1,354	1,428	1,521	1,584	1,666	1,675	1,637	1,578	1,440	1,353	1,332	1,342
90%	1,137	1,293	1,403	1,455	1,476	1,502	1,454	1,384	1,203	1,120	1,085	1,103
Long Term												
Full Simulation Period ^b	1,476	1,542	1,612	1,685	1,727	1,734	1,705	1,648	1,542	1,468	1,429	1,430
Water Year Types^c												
Wet (32%)	1,621	1,696	1,761	1,824	1,860	1,877	1,859	1,831	1,753	1,717	1,645	1,628
Above Normal (16%)	1,465	1,580	1,676	1,762	1,814	1,814	1,793	1,741	1,633	1,590	1,545	1,541
Below Normal (13%)	1,530	1,580	1,669	1,719	1,764	1,757	1,728	1,665	1,559	1,491	1,478	1,483
Dry (24%)	1,441	1,491	1,556	1,637	1,690	1,709	1,680	1,607	1,508	1,434	1,418	1,433
Critical (15%)	1,180	1,221	1,264	1,348	1,374	1,355	1,299	1,205	1,025	832	808	825

Revised Alternative 1

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,773	1,820	1,859	1,890	1,911	1,950	1,942	1,907	1,822	1,762	1,756	1,742
20%	1,746	1,799	1,838	1,869	1,899	1,930	1,918	1,861	1,752	1,690	1,682	1,693
30%	1,701	1,778	1,823	1,859	1,892	1,909	1,897	1,824	1,699	1,626	1,621	1,658
40%	1,661	1,742	1,796	1,842	1,878	1,889	1,873	1,787	1,665	1,606	1,584	1,581
50%	1,594	1,703	1,761	1,819	1,858	1,874	1,840	1,764	1,622	1,557	1,552	1,553
60%	1,570	1,647	1,720	1,783	1,829	1,842	1,802	1,721	1,598	1,527	1,501	1,508
70%	1,501	1,573	1,664	1,726	1,786	1,799	1,774	1,681	1,567	1,491	1,453	1,460
80%	1,393	1,469	1,589	1,659	1,739	1,761	1,728	1,632	1,488	1,403	1,408	1,393
90%	1,235	1,374	1,447	1,554	1,588	1,576	1,546	1,454	1,350	1,236	1,196	1,227
Long Term												
Full Simulation Period ^b	1,550	1,626	1,698	1,754	1,797	1,814	1,791	1,712	1,590	1,509	1,486	1,494
Water Year Types^c												
Wet (32%)	1,688	1,765	1,818	1,863	1,898	1,932	1,925	1,876	1,780	1,724	1,701	1,708
Above Normal (16%)	1,537	1,667	1,774	1,825	1,869	1,891	1,874	1,791	1,664	1,598	1,583	1,580
Below Normal (13%)	1,622	1,684	1,766	1,803	1,842	1,850	1,819	1,730	1,602	1,512	1,494	1,500
Dry (24%)	1,490	1,558	1,629	1,711	1,769	1,789	1,763	1,670	1,550	1,482	1,464	1,473
Critical (15%)	1,297	1,340	1,408	1,470	1,506	1,485	1,429	1,323	1,155	987	948	968

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Capacity (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	5%	4%	3%	2%	1%	3%	3%	3%	2%	1%	5%	6%
20%	7%	4%	4%	2%	2%	3%	4%	3%	2%	0%	4%	5%
30%	6%	5%	5%	3%	3%	4%	4%	2%	2%	0%	2%	4%
40%	5%	7%	5%	4%	4%	4%	4%	3%	2%	1%	3%	2%
50%	3%	6%	5%	5%	4%	5%	5%	3%	1%	1%	3%	2%
60%	3%	6%	6%	5%	5%	5%	4%	4%	2%	2%	1%	2%
70%	2%	4%	5%	4%	4%	5%	5%	4%	3%	2%	1%	2%
80%	3%	3%	5%	5%	4%	5%	6%	3%	3%	4%	6%	4%
90%	9%	6%	3%	7%	8%	5%	6%	5%	12%	10%	10%	11%
Long Term												
Full Simulation Period ^b	5%	5%	5%	4%	4%	5%	5%	4%	3%	3%	4%	5%
Water Year Types^c												
Wet (32%)	4%	4%	3%	2%	2%	3%	4%	2%	1%	0%	3%	5%
Above Normal (16%)	5%	5%	6%	4%	3%	4%	5%	3%	2%	0%	2%	3%
Below Normal (13%)	6%	7%	6%	5%	4%	5%	5%	4%	3%	1%	1%	1%
Dry (24%)	3%	4%	5%	5%	5%	5%	4%	3%	3%	3%	3%	3%
Critical (15%)	10%	10%	11%	9%	10%	10%	10%	10%	13%	19%	17%	17%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.16.2 CVP Total Capacity, Monthly Capacity

Revised Second Basis of Comparison

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,773	1,820	1,859	1,890	1,911	1,950	1,942	1,907	1,822	1,762	1,756	1,742
20%	1,746	1,799	1,838	1,869	1,899	1,930	1,918	1,861	1,752	1,690	1,682	1,693
30%	1,701	1,778	1,823	1,859	1,892	1,909	1,897	1,824	1,699	1,626	1,621	1,658
40%	1,661	1,742	1,796	1,842	1,878	1,889	1,873	1,787	1,665	1,606	1,584	1,581
50%	1,594	1,703	1,761	1,819	1,858	1,874	1,840	1,764	1,622	1,557	1,552	1,553
60%	1,570	1,647	1,720	1,783	1,829	1,842	1,802	1,721	1,598	1,527	1,501	1,508
70%	1,501	1,573	1,664	1,726	1,786	1,799	1,774	1,681	1,567	1,491	1,453	1,460
80%	1,393	1,469	1,589	1,659	1,739	1,761	1,728	1,632	1,488	1,403	1,408	1,393
90%	1,235	1,374	1,447	1,554	1,588	1,576	1,546	1,454	1,350	1,236	1,196	1,227
Long Term												
Full Simulation Period ^b	1,550	1,626	1,698	1,754	1,797	1,814	1,791	1,712	1,590	1,509	1,486	1,494
Water Year Types^c												
Wet (32%)	1,688	1,765	1,818	1,863	1,898	1,932	1,925	1,876	1,780	1,724	1,701	1,708
Above Normal (16%)	1,537	1,667	1,774	1,825	1,869	1,891	1,874	1,791	1,664	1,598	1,583	1,580
Below Normal (13%)	1,622	1,684	1,766	1,803	1,842	1,850	1,819	1,730	1,602	1,512	1,494	1,500
Dry (24%)	1,490	1,558	1,629	1,711	1,769	1,789	1,763	1,670	1,550	1,482	1,464	1,473
Critical (15%)	1,297	1,340	1,408	1,470	1,506	1,485	1,429	1,323	1,155	987	948	968

No Action Alternative

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,688	1,743	1,810	1,854	1,883	1,895	1,877	1,848	1,785	1,749	1,670	1,647
20%	1,638	1,724	1,772	1,829	1,858	1,872	1,842	1,806	1,719	1,695	1,623	1,615
30%	1,600	1,694	1,744	1,802	1,837	1,842	1,825	1,782	1,671	1,623	1,585	1,599
40%	1,579	1,635	1,710	1,776	1,811	1,812	1,793	1,736	1,634	1,583	1,545	1,553
50%	1,550	1,611	1,681	1,732	1,778	1,782	1,757	1,711	1,607	1,543	1,510	1,516
60%	1,529	1,556	1,622	1,700	1,749	1,752	1,725	1,652	1,564	1,504	1,481	1,473
70%	1,465	1,519	1,588	1,661	1,712	1,714	1,685	1,618	1,524	1,457	1,433	1,432
80%	1,354	1,428	1,521	1,584	1,666	1,675	1,637	1,578	1,440	1,353	1,332	1,342
90%	1,137	1,293	1,403	1,455	1,476	1,502	1,454	1,384	1,203	1,120	1,085	1,103
Long Term												
Full Simulation Period ^b	1,476	1,542	1,612	1,685	1,727	1,734	1,705	1,648	1,542	1,468	1,429	1,430
Water Year Types^c												
Wet (32%)	1,621	1,696	1,761	1,824	1,860	1,877	1,859	1,831	1,753	1,717	1,645	1,628
Above Normal (16%)	1,465	1,580	1,676	1,762	1,814	1,814	1,793	1,741	1,633	1,590	1,545	1,541
Below Normal (13%)	1,530	1,580	1,669	1,719	1,764	1,757	1,728	1,665	1,559	1,491	1,478	1,483
Dry (24%)	1,441	1,491	1,556	1,637	1,690	1,709	1,680	1,607	1,508	1,434	1,418	1,433
Critical (15%)	1,180	1,221	1,264	1,348	1,374	1,355	1,299	1,205	1,025	832	808	825

No Action Alternative minus Revised Second Basis of Comparison

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

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.16.3 CVP Total Capacity, Monthly Capacity

Revised Second Basis of Comparison

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,773	1,820	1,859	1,890	1,911	1,950	1,942	1,907	1,822	1,762	1,756	1,742
20%	1,746	1,799	1,838	1,869	1,899	1,930	1,918	1,861	1,752	1,690	1,682	1,693
30%	1,701	1,778	1,823	1,859	1,892	1,909	1,897	1,824	1,699	1,626	1,621	1,658
40%	1,661	1,742	1,796	1,842	1,878	1,889	1,873	1,787	1,665	1,606	1,584	1,581
50%	1,594	1,703	1,761	1,819	1,858	1,874	1,840	1,764	1,622	1,557	1,552	1,553
60%	1,570	1,647	1,720	1,783	1,829	1,842	1,802	1,721	1,598	1,527	1,501	1,508
70%	1,501	1,573	1,664	1,726	1,786	1,799	1,774	1,681	1,567	1,491	1,453	1,460
80%	1,393	1,469	1,589	1,659	1,739	1,761	1,728	1,632	1,488	1,403	1,408	1,393
90%	1,235	1,374	1,447	1,554	1,588	1,576	1,546	1,454	1,350	1,236	1,196	1,227
Long Term												
Full Simulation Period ^b	1,550	1,626	1,698	1,754	1,797	1,814	1,791	1,712	1,590	1,509	1,486	1,494
Water Year Types^c												
Wet (32%)	1,688	1,765	1,818	1,863	1,898	1,932	1,925	1,876	1,780	1,724	1,701	1,708
Above Normal (16%)	1,537	1,667	1,774	1,825	1,869	1,891	1,874	1,791	1,664	1,598	1,583	1,580
Below Normal (13%)	1,622	1,684	1,766	1,803	1,842	1,850	1,819	1,730	1,602	1,512	1,494	1,500
Dry (24%)	1,490	1,558	1,629	1,711	1,769	1,789	1,763	1,670	1,550	1,482	1,464	1,473
Critical (15%)	1,297	1,340	1,408	1,470	1,506	1,485	1,429	1,323	1,155	987	948	968

Alternative 3

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,778	1,818	1,852	1,884	1,910	1,945	1,947	1,910	1,837	1,777	1,759	1,753
20%	1,749	1,789	1,828	1,860	1,894	1,930	1,930	1,883	1,766	1,692	1,687	1,696
30%	1,708	1,772	1,814	1,851	1,884	1,900	1,895	1,828	1,717	1,654	1,633	1,659
40%	1,663	1,741	1,781	1,838	1,866	1,882	1,849	1,777	1,670	1,601	1,604	1,600
50%	1,609	1,689	1,744	1,800	1,840	1,851	1,821	1,760	1,644	1,572	1,554	1,569
60%	1,579	1,639	1,695	1,748	1,797	1,814	1,781	1,711	1,603	1,542	1,511	1,510
70%	1,499	1,557	1,632	1,703	1,768	1,784	1,755	1,665	1,567	1,487	1,453	1,465
80%	1,394	1,457	1,570	1,624	1,708	1,738	1,707	1,620	1,506	1,408	1,378	1,372
90%	1,231	1,365	1,434	1,496	1,518	1,545	1,519	1,453	1,343	1,229	1,190	1,181
Long Term												
Full Simulation Period ^b	1,551	1,613	1,676	1,732	1,777	1,794	1,775	1,705	1,592	1,512	1,486	1,493
Water Year Types^c												
Wet (32%)	1,690	1,756	1,806	1,856	1,894	1,929	1,928	1,885	1,791	1,730	1,713	1,716
Above Normal (16%)	1,527	1,640	1,746	1,802	1,852	1,875	1,862	1,786	1,679	1,615	1,591	1,589
Below Normal (13%)	1,629	1,676	1,751	1,790	1,829	1,832	1,788	1,718	1,607	1,529	1,504	1,501
Dry (24%)	1,504	1,551	1,612	1,686	1,748	1,768	1,745	1,660	1,555	1,479	1,459	1,475
Critical (15%)	1,283	1,319	1,355	1,411	1,444	1,422	1,386	1,288	1,113	967	909	930

Alternative 3 minus Revised Second Basis of Comparison

Statistic	Monthly Capacity (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%	1%	1%	0%	1%
20%	0%	-1%	-1%	0%	0%	0%	1%	1%	1%	0%	0%	0%
30%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	2%	1%	0%
40%	0%	0%	-1%	0%	-1%	0%	-1%	-1%	0%	0%	1%	1%
50%	1%	-1%	-1%	-1%	-1%	-1%	-1%	0%	1%	1%	0%	1%
60%	1%	-1%	-1%	-2%	-2%	-2%	-1%	-1%	0%	1%	1%	0%
70%	0%	-1%	-2%	-1%	-1%	-1%	-1%	-1%	0%	0%	0%	0%
80%	0%	-1%	-1%	-2%	-2%	-1%	-1%	-1%	1%	0%	-2%	-2%
90%	0%	-1%	-1%	-4%	-4%	-2%	-2%	0%	-1%	-1%	0%	-4%
Long Term												
Full Simulation Period ^b	0%	-1%	-1%	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%
Water Year Types^c												
Wet (32%)	0%	-1%	-1%	0%	0%	0%	0%	0%	1%	0%	1%	0%
Above Normal (16%)	-1%	-2%	-2%	-1%	-1%	-1%	-1%	0%	1%	1%	0%	1%
Below Normal (13%)	0%	0%	-1%	-1%	-1%	-1%	-2%	-1%	0%	1%	1%	0%
Dry (24%)	1%	0%	-1%	-1%	-1%	-1%	-1%	-1%	0%	0%	0%	0%
Critical (15%)	-1%	-2%	-4%	-4%	-4%	-4%	-3%	-3%	-4%	-2%	-4%	-4%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.16.4 CVP Total Capacity, Monthly Capacity

Revised Second Basis of Comparison

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,773	1,820	1,859	1,890	1,911	1,950	1,942	1,907	1,822	1,762	1,756	1,742
20%	1,746	1,799	1,838	1,869	1,899	1,930	1,918	1,861	1,752	1,690	1,682	1,693
30%	1,701	1,778	1,823	1,859	1,892	1,909	1,897	1,824	1,699	1,626	1,621	1,658
40%	1,661	1,742	1,796	1,842	1,878	1,889	1,873	1,787	1,665	1,606	1,584	1,581
50%	1,594	1,703	1,761	1,819	1,858	1,874	1,840	1,764	1,622	1,557	1,552	1,553
60%	1,570	1,647	1,720	1,783	1,829	1,842	1,802	1,721	1,598	1,527	1,501	1,508
70%	1,501	1,573	1,664	1,726	1,786	1,799	1,774	1,681	1,567	1,491	1,453	1,460
80%	1,393	1,469	1,589	1,659	1,739	1,761	1,728	1,632	1,488	1,403	1,408	1,393
90%	1,235	1,374	1,447	1,554	1,588	1,576	1,546	1,454	1,350	1,236	1,196	1,227
Long Term												
Full Simulation Period ^b	1,550	1,626	1,698	1,754	1,797	1,814	1,791	1,712	1,590	1,509	1,486	1,494
Water Year Types^c												
Wet (32%)	1,688	1,765	1,818	1,863	1,898	1,932	1,925	1,876	1,780	1,724	1,701	1,708
Above Normal (16%)	1,537	1,667	1,774	1,825	1,869	1,891	1,874	1,791	1,664	1,598	1,583	1,580
Below Normal (13%)	1,622	1,684	1,766	1,803	1,842	1,850	1,819	1,730	1,602	1,512	1,494	1,500
Dry (24%)	1,490	1,558	1,629	1,711	1,769	1,789	1,763	1,670	1,550	1,482	1,464	1,473
Critical (15%)	1,297	1,340	1,408	1,470	1,506	1,485	1,429	1,323	1,155	987	948	968

Alternative 5

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,693	1,746	1,805	1,849	1,882	1,891	1,879	1,849	1,777	1,748	1,671	1,650
20%	1,635	1,721	1,772	1,829	1,859	1,867	1,843	1,806	1,725	1,690	1,624	1,612
30%	1,599	1,680	1,744	1,797	1,836	1,839	1,816	1,766	1,655	1,616	1,576	1,579
40%	1,566	1,638	1,710	1,767	1,801	1,801	1,785	1,732	1,619	1,571	1,538	1,547
50%	1,538	1,596	1,668	1,726	1,775	1,774	1,737	1,700	1,598	1,555	1,504	1,510
60%	1,516	1,552	1,617	1,687	1,737	1,733	1,701	1,643	1,537	1,484	1,460	1,457
70%	1,458	1,512	1,571	1,650	1,694	1,699	1,673	1,596	1,506	1,415	1,413	1,413
80%	1,327	1,399	1,504	1,574	1,644	1,639	1,616	1,532	1,439	1,324	1,302	1,310
90%	1,044	1,242	1,372	1,427	1,440	1,483	1,450	1,351	1,173	1,061	1,046	1,029
Long Term												
Full Simulation Period ^b	1,460	1,532	1,603	1,672	1,716	1,717	1,692	1,633	1,525	1,450	1,410	1,410
Water Year Types^c												
Wet (32%)	1,609	1,690	1,755	1,819	1,856	1,873	1,858	1,830	1,748	1,715	1,641	1,625
Above Normal (16%)	1,458	1,576	1,671	1,757	1,808	1,806	1,785	1,735	1,624	1,577	1,536	1,532
Below Normal (13%)	1,504	1,559	1,648	1,712	1,755	1,743	1,710	1,653	1,546	1,474	1,465	1,468
Dry (24%)	1,428	1,478	1,545	1,622	1,676	1,686	1,657	1,585	1,485	1,403	1,383	1,391
Critical (15%)	1,152	1,205	1,253	1,308	1,344	1,310	1,274	1,159	985	793	768	794

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Capacity (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-5%	-4%	-3%	-2%	-2%	-3%	-3%	-3%	-2%	-1%	-5%	-5%
20%	-6%	-4%	-4%	-2%	-2%	-3%	-4%	-3%	-2%	0%	-3%	-5%
30%	-6%	-6%	-4%	-3%	-3%	-4%	-4%	-3%	-3%	-1%	-3%	-5%
40%	-6%	-6%	-5%	-4%	-4%	-5%	-5%	-3%	-3%	-2%	-3%	-2%
50%	-4%	-6%	-5%	-5%	-4%	-5%	-6%	-4%	-1%	0%	-3%	-3%
60%	-3%	-6%	-6%	-5%	-5%	-6%	-6%	-5%	-4%	-3%	-3%	-3%
70%	-3%	-4%	-6%	-4%	-5%	-6%	-6%	-5%	-4%	-5%	-3%	-3%
80%	-5%	-5%	-5%	-5%	-5%	-7%	-6%	-6%	-3%	-6%	-8%	-6%
90%	-15%	-10%	-5%	-8%	-9%	-6%	-6%	-7%	-13%	-14%	-12%	-16%
Long Term												
Full Simulation Period ^b	-6%	-6%	-6%	-5%	-5%	-5%	-6%	-5%	-4%	-4%	-5%	-6%
Water Year Types^c												
Wet (32%)	-5%	-4%	-3%	-2%	-2%	-3%	-3%	-2%	-2%	0%	-4%	-5%
Above Normal (16%)	-5%	-5%	-6%	-4%	-3%	-4%	-5%	-3%	-2%	-1%	-3%	-3%
Below Normal (13%)	-7%	-7%	-7%	-5%	-5%	-6%	-6%	-4%	-3%	-3%	-2%	-2%
Dry (24%)	-4%	-5%	-5%	-5%	-5%	-6%	-6%	-5%	-4%	-5%	-6%	-6%
Critical (15%)	-11%	-10%	-11%	-11%	-11%	-12%	-11%	-12%	-15%	-20%	-19%	-18%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.2.17 CVP Total Generation

Table 5C.3.2.17.1 CVP Total Generation, Monthly Generation

No Action Alternative

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	409	413	641	689	671	696	492	616	619	756	585	630
20%	372	380	338	490	622	569	397	549	577	729	549	597
30%	329	310	240	381	471	363	358	514	561	705	536	469
40%	292	274	190	235	245	267	334	478	544	662	511	414
50%	270	231	175	201	205	229	318	464	527	644	496	342
60%	239	183	167	179	173	194	302	442	495	630	476	285
70%	210	162	146	152	141	171	282	415	479	598	451	250
80%	186	140	131	137	130	151	249	350	435	551	421	215
90%	159	118	105	120	110	141	217	291	350	474	359	184
Long Term												
Full Simulation Period ^b	273	255	260	317	322	329	343	461	514	631	487	376
Water Year Types^c												
Wet (32%)	317	318	441	558	513	557	447	580	568	683	542	598
Above Normal (16%)	268	263	259	320	454	367	370	484	544	708	527	421
Below Normal (13%)	310	258	175	186	266	220	318	455	540	679	529	289
Dry (24%)	254	232	154	183	145	183	263	406	511	607	457	246
Critical (15%)	184	149	123	134	111	135	242	271	345	431	333	145

Revised Alternative 1

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	416	296	658	692	692	710	488	631	701	773	637	443
20%	334	254	432	581	649	584	390	566	658	755	593	370
30%	302	232	240	439	446	368	347	535	619	732	570	337
40%	278	219	195	265	286	261	327	507	590	708	550	316
50%	237	206	181	207	219	226	312	492	565	688	527	298
60%	218	179	170	175	173	192	294	464	551	662	503	280
70%	199	167	147	153	144	175	280	442	531	628	479	259
80%	172	138	133	138	134	153	252	372	481	582	436	226
90%	152	124	113	121	115	139	221	314	389	472	392	191
Long Term												
Full Simulation Period ^b	257	215	278	334	335	335	337	481	566	659	517	307
Water Year Types^c												
Wet (32%)	296	269	491	581	531	551	430	588	624	700	577	402
Above Normal (16%)	241	215	246	359	481	398	345	511	615	741	572	340
Below Normal (13%)	285	221	186	227	282	245	326	490	612	724	577	303
Dry (24%)	248	183	158	177	150	179	266	429	543	639	462	252
Critical (15%)	181	148	134	133	109	141	257	297	386	452	362	161

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Generation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2%	-28%	3%	0%	3%	2%	-1%	2%	13%	2%	9%	-30%
20%	-10%	-33%	28%	19%	4%	3%	-2%	3%	14%	4%	8%	-38%
30%	-8%	-25%	0%	15%	-5%	1%	-3%	4%	10%	4%	6%	-28%
40%	-5%	-20%	3%	13%	17%	-2%	-2%	6%	8%	7%	8%	-24%
50%	-12%	-11%	3%	3%	7%	-1%	-2%	6%	7%	7%	6%	-13%
60%	-9%	-2%	2%	-2%	0%	-1%	-3%	5%	11%	5%	6%	-2%
70%	-5%	3%	0%	1%	2%	2%	-1%	6%	11%	5%	6%	3%
80%	-8%	-2%	2%	1%	4%	1%	1%	6%	11%	6%	4%	5%
90%	-4%	5%	8%	1%	5%	-1%	2%	8%	11%	-1%	9%	4%
Long Term												
Full Simulation Period ^b	-6%	-16%	7%	6%	4%	2%	-2%	4%	10%	4%	6%	-18%
Water Year Types^c												
Wet (32%)	-7%	-15%	12%	4%	3%	-1%	-4%	1%	10%	3%	6%	-33%
Above Normal (16%)	-10%	-18%	-5%	12%	6%	8%	-7%	6%	13%	5%	8%	-19%
Below Normal (13%)	-8%	-14%	6%	22%	6%	11%	3%	8%	13%	7%	9%	5%
Dry (24%)	-2%	-21%	3%	-3%	4%	-2%	1%	6%	6%	5%	1%	2%
Critical (15%)	-1%	-1%	9%	0%	-2%	5%	6%	10%	12%	5%	9%	11%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.17.2 CVP Total Generation, Monthly Generation

Revised Second Basis of Comparison

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	416	296	658	692	692	710	488	631	701	773	637	443
20%	334	254	432	581	649	584	390	566	658	755	593	370
30%	302	232	240	439	446	368	347	535	619	732	570	337
40%	278	219	195	265	286	261	327	507	590	708	550	316
50%	237	206	181	207	219	226	312	492	565	688	527	298
60%	218	179	170	175	173	192	294	464	551	662	503	280
70%	199	167	147	153	144	175	280	442	531	628	479	259
80%	172	138	133	138	134	153	252	372	481	582	436	226
90%	152	124	113	121	115	139	221	314	389	472	392	191
Long Term												
Full Simulation Period ^b	257	215	278	334	335	335	337	481	566	659	517	307
Water Year Types^c												
Wet (32%)	296	269	491	581	531	551	430	588	624	700	577	402
Above Normal (16%)	241	215	246	359	481	398	345	511	615	741	572	340
Below Normal (13%)	285	221	186	227	282	245	326	490	612	724	577	303
Dry (24%)	248	183	158	177	150	179	266	429	543	639	462	252
Critical (15%)	181	148	134	133	109	141	257	297	386	452	362	161

No Action Alternative

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	409	413	641	689	671	696	492	616	619	756	585	630
20%	372	380	338	490	622	569	397	549	577	729	549	597
30%	329	310	240	381	471	363	358	514	561	705	536	469
40%	292	274	190	235	245	267	334	478	544	662	511	414
50%	270	231	175	201	205	229	318	464	527	644	496	342
60%	239	183	167	179	173	194	302	442	495	630	476	285
70%	210	162	146	152	141	171	282	415	479	598	451	250
80%	186	140	131	137	130	151	249	350	435	551	421	215
90%	159	118	105	120	110	141	217	291	350	474	359	184
Long Term												
Full Simulation Period ^b	273	255	260	317	322	329	343	461	514	631	487	376
Water Year Types^c												
Wet (32%)	317	318	441	558	513	557	447	580	568	683	542	598
Above Normal (16%)	268	263	259	320	454	367	370	484	544	708	527	421
Below Normal (13%)	310	258	175	186	266	220	318	455	540	679	529	289
Dry (24%)	254	232	154	183	145	183	263	406	511	607	457	246
Critical (15%)	184	149	123	134	111	135	242	271	345	431	333	145

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Generation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-2%	39%	-3%	0%	-3%	-2%	1%	-2%	-12%	-2%	-8%	42%
20%	11%	49%	-22%	-16%	-4%	-2%	2%	-3%	-12%	-3%	-7%	61%
30%	9%	33%	0%	-13%	6%	-1%	3%	-4%	-9%	-4%	-6%	39%
40%	5%	25%	-3%	-11%	-14%	2%	2%	-6%	-8%	-7%	-7%	31%
50%	14%	12%	-3%	-3%	-6%	1%	2%	-6%	-7%	-6%	-6%	15%
60%	10%	2%	-2%	2%	0%	1%	3%	-5%	-10%	-5%	-5%	2%
70%	5%	-3%	0%	-1%	-2%	-2%	1%	-6%	-10%	-5%	-6%	-3%
80%	8%	2%	-2%	-1%	-3%	-1%	-1%	-6%	-10%	-5%	-3%	-5%
90%	5%	-5%	-7%	-1%	-5%	1%	-2%	-7%	-10%	1%	-8%	-4%
Long Term												
Full Simulation Period ^b	6%	19%	-6%	-5%	-4%	-2%	2%	-4%	-9%	-4%	-6%	23%
Water Year Types^c												
Wet (32%)	7%	18%	-10%	-4%	-3%	1%	4%	-1%	-9%	-2%	-6%	49%
Above Normal (16%)	11%	22%	6%	-11%	-6%	-8%	7%	-5%	-12%	-4%	-8%	24%
Below Normal (13%)	9%	17%	-6%	-18%	-6%	-10%	-2%	-7%	-12%	-6%	-8%	-5%
Dry (24%)	2%	27%	-3%	3%	-3%	2%	-1%	-5%	-6%	-5%	-1%	-2%
Critical (15%)	1%	1%	-8%	0%	2%	-4%	-6%	-9%	-11%	-5%	-8%	-10%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.17.3 CVP Total Generation, Monthly Generation

Revised Second Basis of Comparison

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	416	296	658	692	692	710	488	631	701	773	637	443
20%	334	254	432	581	649	584	390	566	658	755	593	370
30%	302	232	240	439	446	368	347	535	619	732	570	337
40%	278	219	195	265	286	261	327	507	590	708	550	316
50%	237	206	181	207	219	226	312	492	565	688	527	298
60%	218	179	170	175	173	192	294	464	551	662	503	280
70%	199	167	147	153	144	175	280	442	531	628	479	259
80%	172	138	133	138	134	153	252	372	481	582	436	226
90%	152	124	113	121	115	139	221	314	389	472	392	191
Long Term												
Full Simulation Period ^b	257	215	278	334	335	335	337	481	566	659	517	307
Water Year Types^c												
Wet (32%)	296	269	491	581	531	551	430	588	624	700	577	402
Above Normal (16%)	241	215	246	359	481	398	345	511	615	741	572	340
Below Normal (13%)	285	221	186	227	282	245	326	490	612	724	577	303
Dry (24%)	248	183	158	177	150	179	266	429	543	639	462	252
Critical (15%)	181	148	134	133	109	141	257	297	386	452	362	161

Alternative 3

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	415	306	662	691	701	710	489	598	648	775	610	459
20%	342	256	426	590	650	583	393	551	635	759	578	387
30%	314	227	242	427	458	367	360	507	590	741	557	358
40%	275	216	199	254	283	258	330	493	564	720	538	328
50%	245	204	181	203	220	223	314	469	548	678	525	302
60%	222	180	170	173	179	192	291	442	518	657	513	279
70%	202	164	149	156	142	171	271	421	511	624	482	257
80%	176	145	133	134	128	153	250	363	453	561	445	227
90%	158	124	113	122	109	136	222	300	381	474	387	191
Long Term												
Full Simulation Period ^b	262	215	279	333	336	335	338	462	542	658	512	314
Water Year Types^c												
Wet (32%)	298	268	493	584	537	551	430	562	593	712	576	407
Above Normal (16%)	249	222	245	350	477	401	346	482	580	736	550	341
Below Normal (13%)	284	211	187	228	283	245	332	476	580	711	557	347
Dry (24%)	256	184	162	175	146	180	265	416	532	635	471	251
Critical (15%)	189	150	132	130	113	139	253	285	373	445	360	160

Alternative 3 minus Revised Second Basis of Comparison

Statistic	Monthly Generation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0%	3%	1%	0%	1%	0%	0%	-5%	-7%	0%	-4%	4%
20%	2%	0%	-1%	1%	0%	0%	1%	-3%	-3%	0%	-2%	5%
30%	4%	-2%	1%	-3%	3%	0%	4%	-5%	-5%	1%	-2%	6%
40%	-1%	-1%	2%	-4%	-1%	-1%	1%	-3%	-4%	2%	-2%	4%
50%	4%	-1%	0%	-2%	1%	-2%	0%	-5%	-3%	-1%	0%	1%
60%	2%	1%	0%	-2%	3%	0%	-1%	-5%	-6%	-1%	2%	0%
70%	2%	-1%	2%	2%	-2%	-2%	-3%	-5%	-4%	-1%	1%	-1%
80%	2%	5%	0%	-3%	-5%	0%	-1%	-3%	-6%	-3%	2%	0%
90%	4%	0%	1%	0%	-5%	-2%	0%	-4%	-2%	0%	-1%	0%
Long Term												
Full Simulation Period ^b	2%	0%	0%	0%	0%	0%	0%	-4%	-4%	0%	-1%	2%
Water Year Types^c												
Wet (32%)	1%	-1%	0%	1%	1%	0%	0%	-4%	-5%	2%	0%	1%
Above Normal (16%)	3%	3%	0%	-2%	-1%	1%	0%	-6%	-6%	-1%	-4%	0%
Below Normal (13%)	0%	-4%	0%	1%	0%	0%	2%	-3%	-5%	-2%	-4%	14%
Dry (24%)	3%	1%	2%	-1%	-3%	1%	0%	-3%	-2%	-1%	2%	0%
Critical (15%)	4%	1%	-2%	-2%	4%	-1%	-2%	-4%	-3%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.17.4 CVP Total Generation, Monthly Generation

Revised Second Basis of Comparison

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	416	296	658	692	692	710	488	631	701	773	637	443
20%	334	254	432	581	649	584	390	566	658	755	593	370
30%	302	232	240	439	446	368	347	535	619	732	570	337
40%	278	219	195	265	286	261	327	507	590	708	550	316
50%	237	206	181	207	219	226	312	492	565	688	527	298
60%	218	179	170	175	173	192	294	464	551	662	503	280
70%	199	167	147	153	144	175	280	442	531	628	479	259
80%	172	138	133	138	134	153	252	372	481	582	436	226
90%	152	124	113	121	115	139	221	314	389	472	392	191
Long Term												
Full Simulation Period ^b	257	215	278	334	335	335	337	481	566	659	517	307
Water Year Types^c												
Wet (32%)	296	269	491	581	531	551	430	588	624	700	577	402
Above Normal (16%)	241	215	246	359	481	398	345	511	615	741	572	340
Below Normal (13%)	285	221	186	227	282	245	326	490	612	724	577	303
Dry (24%)	248	183	158	177	150	179	266	429	543	639	462	252
Critical (15%)	181	148	134	133	109	141	257	297	386	452	362	161

Alternative 5

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	404	410	647	689	671	694	491	627	618	752	574	628
20%	365	380	341	486	622	563	404	562	578	722	553	598
30%	328	316	236	381	459	362	368	513	557	705	534	468
40%	284	281	188	233	245	266	334	482	541	660	514	418
50%	269	226	173	201	205	229	327	460	525	648	498	351
60%	244	182	163	178	173	199	304	439	493	634	471	277
70%	220	161	145	153	139	170	281	412	472	601	451	248
80%	183	140	131	137	127	151	258	343	432	548	416	217
90%	155	113	102	120	108	136	233	308	350	463	365	184
Long Term												
Full Simulation Period ^b	273	254	258	317	321	328	348	463	509	628	485	378
Water Year Types^c												
Wet (32%)	313	320	438	558	512	554	446	585	567	685	538	598
Above Normal (16%)	266	254	259	321	454	368	370	489	542	708	523	419
Below Normal (13%)	307	257	173	186	265	221	334	458	533	675	520	294
Dry (24%)	254	231	153	183	145	183	273	404	505	604	459	247
Critical (15%)	192	149	120	135	110	132	250	270	336	414	337	153

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Generation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3%	38%	-2%	0%	-3%	-2%	1%	-1%	-12%	-3%	-10%	42%
20%	9%	49%	-21%	-16%	-4%	-4%	4%	-1%	-12%	-4%	-7%	62%
30%	9%	36%	-1%	-13%	3%	-2%	6%	-4%	-10%	-4%	-6%	39%
40%	2%	28%	-3%	-12%	-14%	2%	2%	-5%	-8%	-7%	-7%	32%
50%	14%	10%	-4%	-3%	-6%	1%	5%	-7%	-7%	-6%	-6%	18%
60%	12%	2%	-4%	2%	0%	3%	3%	-5%	-11%	-4%	-6%	-1%
70%	11%	-3%	-1%	0%	-4%	-3%	0%	-7%	-11%	-4%	-6%	-4%
80%	7%	1%	-2%	-1%	-5%	-1%	3%	-8%	-10%	-6%	-5%	-4%
90%	2%	-9%	-9%	-1%	-6%	-2%	5%	-2%	-10%	-2%	-7%	-4%
Long Term												
Full Simulation Period ^b	6%	18%	-7%	-5%	-4%	-2%	3%	-4%	-10%	-5%	-6%	23%
Water Year Types^c												
Wet (32%)	6%	19%	-11%	-4%	-4%	1%	4%	0%	-9%	-2%	-7%	49%
Above Normal (16%)	10%	18%	5%	-11%	-6%	-8%	7%	-4%	-12%	-4%	-9%	23%
Below Normal (13%)	8%	16%	-7%	-18%	-6%	-10%	2%	-7%	-13%	-7%	-10%	-3%
Dry (24%)	2%	26%	-3%	3%	-3%	2%	2%	-6%	-7%	-6%	-1%	-2%
Critical (15%)	6%	1%	-10%	1%	1%	-6%	-3%	-9%	-13%	-8%	-7%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.2.18 CVP Total Energy Use

Table 5C.3.2.18.1 CVP Total Energy Use, Monthly Energy Use

No Action Alternative

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	111	171	154	153	146	149	60	69	128	153	133	106
20%	95	150	149	131	133	138	43	46	103	139	122	105
30%	85	139	142	118	115	109	37	41	88	122	114	103
40%	76	129	134	113	99	98	35	39	78	114	109	96
50%	72	105	129	110	94	75	32	36	65	104	102	87
60%	67	93	123	105	85	65	31	33	58	93	94	76
70%	62	81	115	95	72	61	29	30	44	84	79	68
80%	57	65	96	83	47	46	25	26	34	69	59	58
90%	54	58	74	71	31	22	21	21	21	42	36	45
Long Term												
Full Simulation Period ^b	76	111	121	108	92	86	36	40	71	101	93	82
Water Year Types^c												
Wet (32%)	81	125	130	124	125	122	50	58	113	132	119	94
Above Normal (16%)	74	120	123	97	91	104	36	40	85	99	108	87
Below Normal (13%)	79	122	132	107	84	76	30	33	61	106	106	92
Dry (24%)	76	103	120	108	77	64	30	30	42	90	65	72
Critical (15%)	65	73	89	85	52	31	21	22	22	51	56	57

Revised Alternative 1

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	137	152	163	173	189	145	83	90	114	163	178	109
20%	121	140	159	167	148	128	81	64	103	156	153	108
30%	118	139	157	163	142	103	80	59	96	148	132	107
40%	96	131	155	162	138	82	75	53	91	140	128	106
50%	74	123	152	160	135	68	69	46	87	131	123	105
60%	65	108	143	157	99	67	63	43	78	117	110	90
70%	54	96	128	147	77	62	49	38	64	97	85	83
80%	44	77	119	123	48	52	36	28	43	86	54	68
90%	32	67	86	74	25	28	22	23	25	42	39	49
Long Term												
Full Simulation Period ^b	84	114	136	148	114	84	61	50	77	118	113	92
Water Year Types^c												
Wet (32%)	99	131	154	168	137	96	79	69	102	145	149	109
Above Normal (16%)	73	115	136	148	133	93	79	57	100	129	135	115
Below Normal (13%)	93	135	149	157	99	85	61	51	83	147	139	93
Dry (24%)	86	101	125	139	103	84	43	36	55	105	67	75
Critical (15%)	52	76	106	109	78	50	30	24	30	45	61	58

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Energy Use (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	23%	-11%	5%	13%	30%	-2%	39%	31%	-11%	7%	34%	3%
20%	27%	-7%	7%	27%	11%	-8%	90%	40%	1%	12%	25%	3%
30%	39%	-1%	11%	39%	23%	-6%	114%	44%	9%	21%	16%	3%
40%	27%	2%	16%	43%	39%	-17%	118%	37%	17%	23%	18%	10%
50%	3%	17%	18%	46%	44%	-8%	113%	30%	34%	26%	21%	20%
60%	-3%	16%	16%	49%	17%	2%	106%	33%	34%	26%	17%	18%
70%	-13%	18%	11%	54%	8%	2%	68%	26%	44%	14%	7%	23%
80%	-23%	18%	24%	49%	3%	13%	44%	8%	29%	25%	-8%	17%
90%	-42%	14%	16%	5%	-20%	27%	2%	6%	20%	0%	7%	9%
Long Term												
Full Simulation Period ^b	10%	3%	13%	36%	25%	-1%	69%	25%	9%	17%	21%	13%
Water Year Types^c												
Wet (32%)	21%	5%	19%	35%	10%	-21%	59%	18%	-10%	9%	25%	16%
Above Normal (16%)	-1%	-4%	11%	53%	46%	-11%	119%	42%	18%	30%	25%	32%
Below Normal (13%)	18%	11%	13%	46%	17%	11%	105%	53%	35%	39%	32%	1%
Dry (24%)	13%	-3%	4%	28%	34%	31%	42%	20%	31%	18%	3%	4%
Critical (15%)	-20%	4%	19%	27%	51%	63%	47%	8%	33%	-12%	9%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.18.2 CVP Total Energy Use, Monthly Energy Use

Revised Second Basis of Comparison

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	137	152	163	173	189	145	83	90	114	163	178	109
20%	121	140	159	167	148	128	81	64	103	156	153	108
30%	118	139	157	163	142	103	80	59	96	148	132	107
40%	96	131	155	162	138	82	75	53	91	140	128	106
50%	74	123	152	160	135	68	69	46	87	131	123	105
60%	65	108	143	157	99	67	63	43	78	117	110	90
70%	54	96	128	147	77	62	49	38	64	97	85	83
80%	44	77	119	123	48	52	36	28	43	86	54	68
90%	32	67	86	74	25	28	22	23	25	42	39	49
Long Term												
Full Simulation Period ^b	84	114	136	148	114	84	61	50	77	118	113	92
Water Year Types^c												
Wet (32%)	99	131	154	168	137	96	79	69	102	145	149	109
Above Normal (16%)	73	115	136	148	133	93	79	57	100	129	135	115
Below Normal (13%)	93	135	149	157	99	85	61	51	83	147	139	93
Dry (24%)	86	101	125	139	103	84	43	36	55	105	67	75
Critical (15%)	52	76	106	109	78	50	30	24	30	45	61	58

No Action Alternative

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	111	171	154	153	146	149	60	69	128	153	133	106
20%	95	150	149	131	133	138	43	46	103	139	122	105
30%	85	139	142	118	115	109	37	41	88	122	114	103
40%	76	129	134	113	99	98	35	39	78	114	109	96
50%	72	105	129	110	94	75	32	36	65	104	102	87
60%	67	93	123	105	85	65	31	33	58	93	94	76
70%	62	81	115	95	72	61	29	30	44	84	79	68
80%	57	65	96	83	47	46	25	26	34	69	59	58
90%	54	58	74	71	31	22	21	21	21	42	36	45
Long Term												
Full Simulation Period ^b	76	111	121	108	92	86	36	40	71	101	93	82
Water Year Types^c												
Wet (32%)	81	125	130	124	125	122	50	58	113	132	119	94
Above Normal (16%)	74	120	123	97	91	104	36	40	85	99	108	87
Below Normal (13%)	79	122	132	107	84	76	30	33	61	106	106	92
Dry (24%)	76	103	120	108	77	64	30	30	42	90	65	72
Critical (15%)	65	73	89	85	52	31	21	22	22	51	56	57

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Energy Use (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-19%	13%	-5%	-12%	-23%	2%	-28%	-24%	12%	-6%	-26%	-3%
20%	-21%	7%	-6%	-21%	-10%	8%	-47%	-29%	-1%	-11%	-20%	-2%
30%	-28%	1%	-10%	-28%	-19%	6%	-53%	-31%	-8%	-18%	-14%	-3%
40%	-21%	-2%	-13%	-30%	-28%	21%	-54%	-27%	-14%	-19%	-15%	-9%
50%	-3%	-14%	-15%	-31%	-30%	9%	-53%	-23%	-25%	-21%	-17%	-17%
60%	3%	-14%	-14%	-33%	-14%	-2%	-51%	-25%	-25%	-21%	-15%	-15%
70%	14%	-15%	-10%	-35%	-7%	-2%	-41%	-21%	-30%	-13%	-7%	-18%
80%	30%	-15%	-19%	-33%	-3%	-11%	-30%	-7%	-22%	-20%	9%	-14%
90%	72%	-12%	-14%	-5%	25%	-21%	-2%	-6%	-17%	0%	-7%	-8%
Long Term												
Full Simulation Period ^b	-9%	-3%	-12%	-27%	-20%	1%	-41%	-20%	-8%	-15%	-17%	-11%
Water Year Types^c												
Wet (32%)	-17%	-5%	-16%	-26%	-9%	27%	-37%	-15%	11%	-9%	-20%	-14%
Above Normal (16%)	1%	4%	-10%	-34%	-32%	12%	-54%	-29%	-15%	-23%	-20%	-24%
Below Normal (13%)	-15%	-10%	-11%	-32%	-15%	-10%	-51%	-34%	-26%	-28%	-24%	-1%
Dry (24%)	-11%	3%	-4%	-22%	-25%	-24%	-30%	-17%	-23%	-15%	-3%	-4%
Critical (15%)	25%	-4%	-16%	-21%	-34%	-39%	-32%	-7%	-25%	14%	-8%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.18.3 CVP Total Energy Use, Monthly Energy Use

Revised Second Basis of Comparison

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	137	152	163	173	189	145	83	90	114	163	178	109
20%	121	140	159	167	148	128	81	64	103	156	153	108
30%	118	139	157	163	142	103	80	59	96	148	132	107
40%	96	131	155	162	138	82	75	53	91	140	128	106
50%	74	123	152	160	135	68	69	46	87	131	123	105
60%	65	108	143	157	99	67	63	43	78	117	110	90
70%	54	96	128	147	77	62	49	38	64	97	85	83
80%	44	77	119	123	48	52	36	28	43	86	54	68
90%	32	67	86	74	25	28	22	23	25	42	39	49
Long Term												
Full Simulation Period ^b	84	114	136	148	114	84	61	50	77	118	113	92
Water Year Types^c												
Wet (32%)	99	131	154	168	137	96	79	69	102	145	149	109
Above Normal (16%)	73	115	136	148	133	93	79	57	100	129	135	115
Below Normal (13%)	93	135	149	157	99	85	61	51	83	147	139	93
Dry (24%)	86	101	125	139	103	84	43	36	55	105	67	75
Critical (15%)	52	76	106	109	78	50	30	24	30	45	61	58

Alternative 3

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	143	149	161	165	151	147	87	99	142	154	156	139
20%	124	140	157	131	142	139	82	89	122	146	134	112
30%	119	138	154	120	126	100	81	79	106	139	132	107
40%	108	128	143	117	105	78	79	72	100	128	128	106
50%	86	118	140	110	91	72	72	66	91	118	113	105
60%	70	107	131	104	75	64	64	53	80	103	99	95
70%	63	95	122	93	65	62	46	40	59	87	83	85
80%	52	82	102	84	54	51	35	30	41	71	62	63
90%	46	66	73	76	31	24	23	23	24	46	41	45
Long Term												
Full Simulation Period ^b	91	113	129	109	95	85	62	62	85	109	106	97
Water Year Types^c												
Wet (32%)	101	130	144	128	135	108	83	87	125	139	140	113
Above Normal (16%)	83	113	122	93	96	125	77	74	105	115	121	111
Below Normal (13%)	94	130	144	111	85	78	56	58	86	123	117	126
Dry (24%)	97	104	126	108	75	65	49	44	54	98	75	74
Critical (15%)	64	78	97	85	53	31	30	25	27	43	55	58

Alternative 3 minus Revised Second Basis of Comparison

Statistic	Monthly Energy Use (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	4%	-2%	-1%	-5%	-20%	1%	5%	11%	24%	-5%	-12%	27%
20%	2%	0%	-1%	-21%	-4%	9%	1%	38%	18%	-6%	-13%	4%
30%	1%	0%	-2%	-27%	-11%	-2%	2%	34%	11%	-6%	0%	1%
40%	12%	-3%	-8%	-27%	-24%	-4%	5%	35%	10%	-9%	0%	0%
50%	16%	-4%	-8%	-31%	-32%	5%	4%	43%	4%	-10%	-8%	0%
60%	8%	-1%	-8%	-34%	-24%	-4%	1%	22%	3%	-12%	-10%	6%
70%	16%	-1%	-4%	-37%	-16%	0%	-5%	4%	-8%	-10%	-2%	3%
80%	18%	8%	-15%	-31%	12%	-2%	-2%	8%	-5%	-18%	15%	-7%
90%	45%	-1%	-16%	2%	21%	-17%	8%	2%	-5%	11%	7%	-7%
Long Term												
Full Simulation Period ^b	8%	0%	-5%	-26%	-17%	1%	2%	23%	10%	-8%	-6%	5%
Water Year Types^c												
Wet (32%)	3%	-1%	-7%	-24%	-2%	12%	5%	27%	23%	-4%	-6%	4%
Above Normal (16%)	13%	-2%	-10%	-37%	-27%	34%	-3%	30%	5%	-11%	-10%	-4%
Below Normal (13%)	1%	-4%	-3%	-29%	-14%	-8%	-9%	15%	4%	-16%	-16%	36%
Dry (24%)	13%	3%	1%	-22%	-27%	-22%	13%	20%	-2%	-7%	12%	-1%
Critical (15%)	22%	2%	-8%	-21%	-33%	-39%	-1%	5%	-10%	-4%	-9%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.18.4 CVP Total Energy Use, Monthly Energy Use

Revised Second Basis of Comparison

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	137	152	163	173	189	145	83	90	114	163	178	109
20%	121	140	159	167	148	128	81	64	103	156	153	108
30%	118	139	157	163	142	103	80	59	96	148	132	107
40%	96	131	155	162	138	82	75	53	91	140	128	106
50%	74	123	152	160	135	68	69	46	87	131	123	105
60%	65	108	143	157	99	67	63	43	78	117	110	90
70%	54	96	128	147	77	62	49	38	64	97	85	83
80%	44	77	119	123	48	52	36	28	43	86	54	68
90%	32	67	86	74	25	28	22	23	25	42	39	49
Long Term												
Full Simulation Period ^b	84	114	136	148	114	84	61	50	77	118	113	92
Water Year Types^c												
Wet (32%)	99	131	154	168	137	96	79	69	102	145	149	109
Above Normal (16%)	73	115	136	148	133	93	79	57	100	129	135	115
Below Normal (13%)	93	135	149	157	99	85	61	51	83	147	139	93
Dry (24%)	86	101	125	139	103	84	43	36	55	105	67	75
Critical (15%)	52	76	106	109	78	50	30	24	30	45	61	58

Alternative 5

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	106	174	154	153	146	153	59	68	128	155	132	106
20%	94	153	151	134	134	138	41	44	103	140	121	105
30%	85	140	142	120	116	109	35	40	86	122	113	102
40%	75	126	135	114	104	99	32	37	77	115	110	95
50%	72	106	128	110	94	75	30	33	65	105	102	90
60%	69	92	123	104	86	65	29	30	57	94	94	76
70%	63	74	115	95	71	61	24	22	46	88	80	70
80%	59	65	92	83	46	48	18	16	32	74	63	58
90%	54	56	68	71	32	22	13	12	24	50	49	47
Long Term												
Full Simulation Period ^b	76	110	121	109	92	86	33	36	71	103	95	82
Water Year Types^c												
Wet (32%)	81	129	131	125	124	123	50	58	113	132	119	93
Above Normal (16%)	75	112	122	100	90	104	35	40	84	100	107	86
Below Normal (13%)	76	122	132	107	90	77	28	30	62	106	100	96
Dry (24%)	74	101	121	108	77	64	23	21	43	96	71	74
Critical (15%)	69	73	86	88	54	30	13	13	22	56	64	56

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Energy Use (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-23%	14%	-5%	-12%	-23%	5%	-29%	-25%	12%	-5%	-26%	-3%
20%	-22%	9%	-5%	-20%	-10%	8%	-49%	-31%	0%	-10%	-21%	-2%
30%	-28%	1%	-10%	-27%	-18%	6%	-56%	-32%	-10%	-17%	-15%	-4%
40%	-22%	-4%	-13%	-30%	-25%	21%	-57%	-31%	-16%	-18%	-14%	-10%
50%	-2%	-14%	-16%	-31%	-30%	9%	-57%	-29%	-25%	-20%	-17%	-14%
60%	7%	-15%	-14%	-34%	-13%	-2%	-55%	-32%	-26%	-20%	-15%	-15%
70%	16%	-22%	-10%	-35%	-8%	-2%	-52%	-42%	-28%	-9%	-5%	-16%
80%	33%	-16%	-23%	-33%	-4%	-8%	-49%	-42%	-26%	-15%	16%	-15%
90%	70%	-16%	-21%	-4%	27%	-22%	-40%	-48%	-6%	20%	27%	-4%
Long Term												
Full Simulation Period ^b	-10%	-3%	-12%	-26%	-19%	2%	-47%	-28%	-8%	-13%	-16%	-11%
Water Year Types^c												
Wet (32%)	-18%	-2%	-16%	-26%	-10%	27%	-37%	-15%	10%	-9%	-20%	-15%
Above Normal (16%)	3%	-3%	-10%	-32%	-32%	12%	-56%	-31%	-16%	-23%	-21%	-25%
Below Normal (13%)	-18%	-10%	-11%	-32%	-9%	-9%	-54%	-42%	-25%	-28%	-28%	3%
Dry (24%)	-14%	0%	-3%	-22%	-25%	-24%	-47%	-41%	-21%	-9%	6%	-2%
Critical (15%)	31%	-4%	-18%	-19%	-31%	-39%	-57%	-44%	-25%	24%	5%	-4%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.2.19 CVP Net Energy Use

Table 5C.3.2.19.1 CVP Net Generation, Monthly Net Generation

No Action Alternative

Statistic	Monthly Net Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	324	257	523	556	567	564	449	560	543	664	474	528
20%	283	220	218	372	491	444	355	513	500	624	446	491
30%	249	195	116	257	358	262	325	468	476	596	427	366
40%	216	162	72	147	163	169	304	441	452	558	418	344
50%	200	112	49	104	110	150	285	424	438	537	405	246
60%	154	96	42	71	94	133	270	404	426	508	381	198
70%	134	71	30	50	71	109	248	383	410	480	366	183
80%	119	56	18	37	54	95	225	327	377	450	347	150
90%	86	40	-1	24	36	72	198	262	332	400	302	104
Long Term												
Full Simulation Period ^b	197	145	139	209	230	243	307	420	443	530	393	295
Water Year Types^c												
Wet (32%)	236	193	311	433	389	435	397	522	455	551	423	504
Above Normal (16%)	193	143	136	223	363	263	334	443	459	608	419	334
Below Normal (13%)	231	137	43	79	181	144	288	422	478	573	423	198
Dry (24%)	178	128	34	74	67	119	233	376	469	518	391	174
Critical (15%)	118	76	34	48	59	104	221	249	323	380	276	89

Revised Alternative 1

Statistic	Monthly Net Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	284	162	524	558	598	565	406	564	602	639	479	291
20%	242	130	268	409	492	482	323	519	571	620	466	257
30%	197	106	114	286	291	296	292	481	531	602	441	228
40%	172	88	75	135	201	194	272	463	503	585	423	217
50%	164	81	46	72	113	155	255	436	482	549	408	203
60%	154	74	32	37	81	129	236	407	465	524	395	191
70%	141	61	21	19	58	106	215	386	452	497	372	181
80%	115	51	9	11	24	83	199	340	410	463	358	156
90%	97	33	-13	-10	-6	63	170	288	366	399	319	103
Long Term												
Full Simulation Period ^b	173	102	142	187	220	251	277	431	489	540	404	215
Water Year Types^c												
Wet (32%)	198	138	337	413	394	455	351	519	522	555	428	293
Above Normal (16%)	167	99	110	211	348	305	266	454	515	612	437	225
Below Normal (13%)	192	85	37	70	183	160	265	440	529	577	438	210
Dry (24%)	162	82	34	39	46	95	223	393	488	534	395	177
Critical (15%)	129	72	28	25	30	91	227	273	356	407	301	103

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Net Generation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-12%	-37%	0%	0%	5%	0%	-10%	1%	11%	-4%	1%	-45%
20%	-14%	-41%	23%	10%	0%	9%	-9%	1%	14%	-1%	5%	-48%
30%	-21%	-45%	-2%	11%	-19%	13%	-10%	3%	11%	1%	3%	-38%
40%	-20%	-45%	4%	-8%	24%	15%	-11%	5%	11%	5%	1%	-37%
50%	-18%	-28%	-6%	-31%	3%	3%	-10%	3%	10%	2%	1%	-18%
60%	0%	-23%	-24%	-48%	-14%	-3%	-13%	1%	9%	3%	4%	-4%
70%	5%	-14%	-30%	-62%	-18%	-3%	-13%	1%	10%	4%	2%	-1%
80%	-4%	-8%	-47%	-72%	-56%	-13%	-12%	4%	9%	3%	3%	4%
90%	13%	-18%	1847%	-141%	-117%	-14%	-14%	10%	10%	0%	6%	-1%
Long Term												
Full Simulation Period ^b	-12%	-30%	2%	-10%	-4%	3%	-10%	3%	10%	2%	3%	-27%
Water Year Types^c												
Wet (32%)	-16%	-29%	8%	-5%	1%	5%	-12%	-1%	15%	1%	1%	-42%
Above Normal (16%)	-13%	-31%	-20%	-5%	-4%	16%	-20%	2%	12%	1%	4%	-33%
Below Normal (13%)	-17%	-37%	-13%	-12%	1%	11%	-8%	4%	11%	1%	4%	6%
Dry (24%)	-9%	-36%	-1%	-48%	-31%	-20%	-4%	4%	3%	1%	2%	2%
Critical (15%)	9%	-5%	-16%	-49%	-49%	-13%	3%	10%	10%	7%	9%	16%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.19.2 CVP Net Generation, Monthly Net Generation

Revised Second Basis of Comparison

Statistic	Monthly Net Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	284	162	524	558	598	565	406	564	602	639	479	291
20%	242	130	268	409	492	482	323	519	571	620	466	257
30%	197	106	114	286	291	296	292	481	531	602	441	228
40%	172	88	75	135	201	194	272	463	503	585	423	217
50%	164	81	46	72	113	155	255	436	482	549	408	203
60%	154	74	32	37	81	129	236	407	465	524	395	191
70%	141	61	21	19	58	106	215	386	452	497	372	181
80%	115	51	9	11	24	83	199	340	410	463	358	156
90%	97	33	-13	-10	-6	63	170	288	366	399	319	103
Long Term												
Full Simulation Period ^b	173	102	142	187	220	251	277	431	489	540	404	215
Water Year Types^c												
Wet (32%)	198	138	337	413	394	455	351	519	522	555	428	293
Above Normal (16%)	167	99	110	211	348	305	266	454	515	612	437	225
Below Normal (13%)	192	85	37	70	183	160	265	440	529	577	438	210
Dry (24%)	162	82	34	39	46	95	223	393	488	534	395	177
Critical (15%)	129	72	28	25	30	91	227	273	356	407	301	103

No Action Alternative

Statistic	Monthly Net Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	324	257	523	556	567	564	449	560	543	664	474	528
20%	283	220	218	372	491	444	355	513	500	624	446	491
30%	249	195	116	257	358	262	325	468	476	596	427	366
40%	216	162	72	147	163	169	304	441	452	558	418	344
50%	200	112	49	104	110	150	285	424	438	537	405	246
60%	154	96	42	71	94	133	270	404	426	508	381	198
70%	134	71	30	50	71	109	248	383	410	480	366	183
80%	119	56	18	37	54	95	225	327	377	450	347	150
90%	86	40	-1	24	36	72	198	262	332	400	302	104
Long Term												
Full Simulation Period ^b	197	145	139	209	230	243	307	420	443	530	393	295
Water Year Types^c												
Wet (32%)	236	193	311	433	389	435	397	522	455	551	423	504
Above Normal (16%)	193	143	136	223	363	263	334	443	459	608	419	334
Below Normal (13%)	231	137	43	79	181	144	288	422	478	573	423	198
Dry (24%)	178	128	34	74	67	119	233	376	469	518	391	174
Critical (15%)	118	76	34	48	59	104	221	249	323	380	276	89

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Net Generation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	14%	59%	0%	0%	-5%	0%	11%	-1%	-10%	4%	-1%	81%
20%	17%	69%	-19%	-9%	0%	-8%	10%	-1%	-12%	1%	-4%	91%
30%	26%	83%	2%	-10%	23%	-11%	11%	-3%	-10%	-1%	-3%	61%
40%	26%	83%	-4%	8%	-19%	-13%	12%	-5%	-10%	-5%	-1%	59%
50%	22%	38%	7%	45%	-3%	-3%	12%	-3%	-9%	-2%	-1%	21%
60%	0%	30%	31%	91%	16%	3%	14%	-1%	-8%	-3%	-3%	4%
70%	-5%	16%	43%	162%	22%	3%	16%	-1%	-9%	-3%	-2%	1%
80%	4%	9%	89%	254%	130%	15%	13%	-4%	-8%	-3%	-3%	-4%
90%	-11%	21%	-95%	-341%	-681%	16%	16%	-9%	-9%	0%	-5%	1%
Long Term												
Full Simulation Period ^b	14%	42%	-2%	12%	4%	-3%	11%	-2%	-9%	-2%	-3%	37%
Water Year Types^c												
Wet (32%)	19%	40%	-8%	5%	-1%	-4%	13%	1%	-13%	-1%	-1%	72%
Above Normal (16%)	15%	44%	24%	6%	4%	-14%	26%	-2%	-11%	-1%	-4%	49%
Below Normal (13%)	20%	60%	15%	14%	-1%	-10%	9%	-4%	-10%	-1%	-3%	-6%
Dry (24%)	10%	56%	1%	93%	45%	25%	4%	-4%	-4%	-1%	-1%	-2%
Critical (15%)	-8%	5%	20%	96%	95%	14%	-3%	-9%	-9%	-7%	-8%	-14%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.19.3 CVP Net Generation, Monthly Net Generation

Revised Second Basis of Comparison

Statistic	Monthly Net Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	284	162	524	558	598	565	406	564	602	639	479	291
20%	242	130	268	409	492	482	323	519	571	620	466	257
30%	197	106	114	286	291	296	292	481	531	602	441	228
40%	172	88	75	135	201	194	272	463	503	585	423	217
50%	164	81	46	72	113	155	255	436	482	549	408	203
60%	154	74	32	37	81	129	236	407	465	524	395	191
70%	141	61	21	19	58	106	215	386	452	497	372	181
80%	115	51	9	11	24	83	199	340	410	463	358	156
90%	97	33	-13	-10	-6	63	170	288	366	399	319	103
Long Term												
Full Simulation Period ^b	173	102	142	187	220	251	277	431	489	540	404	215
Water Year Types^c												
Wet (32%)	198	138	337	413	394	455	351	519	522	555	428	293
Above Normal (16%)	167	99	110	211	348	305	266	454	515	612	437	225
Below Normal (13%)	192	85	37	70	183	160	265	440	529	577	438	210
Dry (24%)	162	82	34	39	46	95	223	393	488	534	395	177
Critical (15%)	129	72	28	25	30	91	227	273	356	407	301	103

Alternative 3

Statistic	Monthly Net Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	291	182	530	558	606	583	437	534	563	674	481	336
20%	235	125	266	480	511	511	316	479	531	638	465	266
30%	193	104	114	332	334	287	298	459	508	622	441	246
40%	173	91	74	160	183	189	268	439	473	596	424	216
50%	158	77	52	112	122	150	251	392	448	544	409	205
60%	147	66	39	72	84	122	229	374	433	528	387	195
70%	133	60	25	51	71	106	216	348	411	506	374	181
80%	113	52	12	36	56	92	200	316	387	469	362	155
90%	88	31	-6	18	41	71	174	260	340	397	326	104
Long Term												
Full Simulation Period ^b	172	102	150	224	241	250	275	400	457	549	406	217
Water Year Types^c												
Wet (32%)	197	137	349	456	402	443	347	475	467	572	436	294
Above Normal (16%)	166	109	123	257	381	276	269	408	475	621	429	230
Below Normal (13%)	190	81	42	117	198	167	276	418	493	588	440	221
Dry (24%)	160	81	36	67	71	115	217	372	478	537	396	177
Critical (15%)	125	73	35	45	60	108	223	260	346	402	305	101

Alternative 3 minus Revised Second Basis of Comparison

Statistic	Monthly Net Generation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2%	13%	1%	0%	1%	3%	8%	-5%	-6%	5%	0%	15%
20%	-3%	-4%	-1%	17%	4%	6%	-2%	-8%	-7%	3%	0%	3%
30%	-2%	-2%	0%	16%	15%	-3%	2%	-4%	-4%	3%	0%	8%
40%	1%	3%	-2%	18%	-9%	-2%	-1%	-5%	-6%	2%	0%	-1%
50%	-4%	-4%	12%	56%	8%	-3%	-2%	-10%	-7%	-1%	0%	1%
60%	-5%	-11%	20%	94%	3%	-5%	-3%	-8%	-7%	1%	-2%	2%
70%	-6%	-2%	19%	166%	23%	-1%	1%	-10%	-9%	2%	1%	0%
80%	-2%	1%	23%	241%	136%	11%	0%	-7%	-6%	1%	1%	0%
90%	-9%	-5%	-57%	-278%	-768%	14%	3%	-10%	-7%	-1%	2%	1%
Long Term												
Full Simulation Period ^b	-1%	0%	6%	20%	9%	0%	-1%	-7%	-7%	2%	1%	1%
Water Year Types^c												
Wet (32%)	0%	0%	4%	11%	2%	-3%	-1%	-8%	-10%	3%	2%	0%
Above Normal (16%)	-1%	10%	12%	22%	9%	-10%	1%	-10%	-8%	2%	-2%	3%
Below Normal (13%)	-1%	-5%	14%	68%	8%	4%	4%	-5%	-7%	2%	0%	5%
Dry (24%)	-2%	-2%	7%	74%	53%	21%	-3%	-5%	-2%	1%	0%	0%
Critical (15%)	-3%	0%	22%	83%	97%	19%	-2%	-5%	-3%	-1%	1%	-2%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.19.4 CVP Net Generation, Monthly Net Generation

Revised Second Basis of Comparison

Statistic	Monthly Net Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	284	162	524	558	598	565	406	564	602	639	479	291
20%	242	130	268	409	492	482	323	519	571	620	466	257
30%	197	106	114	286	291	296	292	481	531	602	441	228
40%	172	88	75	135	201	194	272	463	503	585	423	217
50%	164	81	46	72	113	155	255	436	482	549	408	203
60%	154	74	32	37	81	129	236	407	465	524	395	191
70%	141	61	21	19	58	106	215	386	452	497	372	181
80%	115	51	9	11	24	83	199	340	410	463	358	156
90%	97	33	-13	-10	-6	63	170	288	366	399	319	103
Long Term												
Full Simulation Period ^b	173	102	142	187	220	251	277	431	489	540	404	215
Water Year Types^c												
Wet (32%)	198	138	337	413	394	455	351	519	522	555	428	293
Above Normal (16%)	167	99	110	211	348	305	266	454	515	612	437	225
Below Normal (13%)	192	85	37	70	183	160	265	440	529	577	438	210
Dry (24%)	162	82	34	39	46	95	223	393	488	534	395	177
Critical (15%)	129	72	28	25	30	91	227	273	356	407	301	103

Alternative 5

Statistic	Monthly Net Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	323	255	511	557	567	559	451	559	528	654	468	527
20%	285	219	219	356	495	444	360	514	496	620	442	495
30%	233	186	113	253	363	270	330	469	475	589	426	365
40%	217	160	72	146	159	168	310	447	450	551	415	343
50%	194	116	48	104	107	148	294	426	437	531	402	243
60%	158	99	39	72	92	131	274	409	424	509	377	199
70%	134	71	28	52	67	105	254	389	404	485	366	177
80%	110	57	18	38	52	84	237	323	368	425	346	146
90%	84	31	-2	25	35	72	210	288	322	396	304	107
Long Term												
Full Simulation Period ^b	197	144	137	208	229	242	315	427	438	524	390	296
Water Year Types^c												
Wet (32%)	233	191	307	433	388	431	397	527	454	553	419	506
Above Normal (16%)	190	142	136	221	364	264	335	449	458	608	416	333
Below Normal (13%)	230	135	42	79	175	144	305	428	471	569	420	198
Dry (24%)	179	130	32	75	67	119	250	383	461	508	388	173
Critical (15%)	123	76	34	47	56	102	237	257	314	358	273	97

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Net Generation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	14%	58%	-2%	0%	-5%	-1%	11%	-1%	-12%	2%	-2%	81%
20%	18%	68%	-18%	-13%	1%	-8%	11%	-1%	-13%	0%	-5%	92%
30%	18%	74%	0%	-12%	25%	-9%	13%	-2%	-10%	-2%	-4%	60%
40%	26%	80%	-5%	8%	-21%	-14%	14%	-3%	-10%	-6%	-2%	58%
50%	18%	44%	3%	44%	-6%	-5%	15%	-2%	-9%	-3%	-1%	20%
60%	2%	33%	21%	94%	13%	2%	16%	1%	-9%	-3%	-5%	4%
70%	-5%	16%	31%	167%	15%	-1%	18%	1%	-11%	-2%	-2%	-2%
80%	-5%	11%	88%	259%	122%	1%	19%	-5%	-10%	-8%	-3%	-6%
90%	-13%	-6%	-86%	-350%	-678%	15%	24%	0%	-12%	-1%	-5%	4%
Long Term												
Full Simulation Period ^b	13%	42%	-3%	12%	4%	-4%	14%	-1%	-10%	-3%	-4%	38%
Water Year Types^c												
Wet (32%)	18%	39%	-9%	5%	-1%	-5%	13%	1%	-13%	0%	-2%	73%
Above Normal (16%)	14%	43%	24%	5%	4%	-14%	26%	-1%	-11%	-1%	-5%	48%
Below Normal (13%)	20%	58%	12%	13%	-5%	-10%	15%	-3%	-11%	-1%	-4%	-6%
Dry (24%)	11%	58%	-5%	95%	45%	25%	12%	-3%	-6%	-5%	-2%	-2%
Critical (15%)	-5%	6%	19%	91%	84%	12%	4%	-6%	-12%	-12%	-9%	-6%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.2.20 Stanislaus River Percent Mortality – Fall-run Chinook Salmon

Table 5C.3.2.20 Stanislaus River Percent Mortality - Fall-Run Chinook Salmon

	Percent Mortality	Difference from No Action Alternative	Difference from Second Basis of Comparison
	%	%	%
No Action Alternative			
Long-term Average	7.0	---	0.4
Wet	1.6	---	0.1
Above Normal	5.3	---	1.1
Below Normal	4.4	---	0.5
Dry	4.9	---	-0.3
Critical	14.4	---	0.4
Second Basis of Comparison			
Long-term Average	6.6	-0.4	
Wet	1.5	-0.1	---
Above Normal	4.3	-1.1	---
Below Normal	4.0	-0.5	---
Dry	5.1	0.3	---
Critical	14.0	-0.4	---
Alternative 3			
Long-term Average	6.2	-0.8	-0.4
Wet	1.6	0.0	0.1
Above Normal	4.0	-1.3	-0.3
Below Normal	3.8	-0.6	-0.2
Dry	4.2	-0.7	-0.9
Critical	13.4	-1.0	-0.6
Alternative 5			
Long-term Average	8.5	1.5	1.9
Wet	1.8	0.2	0.3
Above Normal	6.4	1.1	2.1
Below Normal	6.1	1.6	2.1
Dry	7.0	2.2	1.9
Critical	16.9	2.5	2.9

Notes: All results are based on the 82-year simulation period. The water year types are defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

5C.3.2.21 New Melones Large Mouth Bass Nest Survival Percentage

Table 5C.3.2.21.1 New Melones Large Mouth Bass Nest Survival Percentage, Monthly Percentage

No Action Alternative

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	66	38	80
20%	100	100	100	100	100	100	100	100	100	49	30	64
30%	84	100	100	100	100	100	100	100	100	31	25	59
40%	74	100	100	100	100	100	100	100	100	25	23	57
50%	67	100	100	100	100	100	80	100	98	22	20	55
60%	59	100	100	100	100	100	72	100	63	18	19	50
70%	50	100	100	100	100	100	49	40	42	13	16	43
80%	43	100	100	100	100	100	27	29	27	10	12	38
90%	29	100	100	100	100	100	13	14	15	1	4	34
Long Term												
Full Simulation Period ^b	66	99	100	100	97	95	68	72	69	29	23	54
Water Year Types^c												
Wet (23%)	67	100	100	100	96	94	83	98	95	47	24	51
Above Normal (24%)	74	100	100	100	100	100	88	100	72	26	20	60
Below Normal (10%)	60	100	100	100	98	95	58	65	61	22	19	58
Dry (16%)	63	99	100	100	97	98	66	51	54	14	16	49
Critical (27%)	65	97	100	100	93	87	29	25	43	28	37	58

Revised Alternative 1

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	53	33	74
20%	100	100	100	100	100	100	100	100	100	38	30	65
30%	100	100	100	100	100	100	100	100	100	31	29	59
40%	100	100	100	100	100	100	100	100	100	27	26	57
50%	100	100	100	100	100	100	100	100	93	24	23	54
60%	100	100	100	100	100	100	86	100	63	22	21	51
70%	100	100	100	100	100	100	69	53	44	19	17	47
80%	97	100	100	100	100	100	49	43	31	16	11	39
90%	90	100	100	100	100	100	36	24	21	12	7	23
Long Term												
Full Simulation Period ^b	97	100	100	100	97	97	79	76	71	29	22	54
Water Year Types^c												
Wet (23%)	99	100	100	100	96	97	91	98	96	41	22	47
Above Normal (24%)	96	99	100	100	100	100	93	100	72	29	23	61
Below Normal (10%)	96	100	100	100	98	100	74	73	65	25	22	57
Dry (16%)	96	99	100	100	96	98	81	60	58	20	21	53
Critical (27%)	99	100	100	100	96	87	42	34	40	19	20	57

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Percentage (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%	-20%	-13%	-8%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-24%	2%	1%
30%	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%
40%	35%	0%	0%	0%	0%	0%	0%	0%	0%	6%	16%	0%
50%	48%	0%	0%	0%	0%	0%	26%	0%	-5%	5%	13%	0%
60%	70%	0%	0%	0%	0%	0%	20%	0%	-1%	19%	11%	3%
70%	99%	0%	0%	0%	0%	0%	41%	32%	7%	50%	2%	8%
80%	126%	0%	0%	0%	0%	0%	85%	48%	12%	62%	-4%	2%
90%	215%	0%	0%	0%	0%	0%	183%	75%	42%	888%	93%	-32%
Long Term												
Full Simulation Period ^b	48%	0%	0%	0%	0%	2%	17%	7%	2%	-3%	-4%	-1%
Water Year Types^c												
Wet (23%)	49%	0%	0%	0%	0%	4%	10%	0%	2%	-14%	-7%	-8%
Above Normal (24%)	31%	0%	0%	0%	0%	0%	6%	0%	0%	13%	16%	1%
Below Normal (10%)	59%	0%	0%	0%	0%	5%	28%	12%	6%	11%	16%	0%
Dry (16%)	51%	0%	0%	0%	0%	0%	22%	18%	7%	48%	29%	8%
Critical (27%)	53%	3%	0%	0%	3%	0%	47%	34%	-7%	-32%	-45%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.21.2 New Melones Large Mouth Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	53	33	74
20%	100	100	100	100	100	100	100	100	100	38	30	65
30%	100	100	100	100	100	100	100	100	100	31	29	59
40%	100	100	100	100	100	100	100	100	100	27	26	57
50%	100	100	100	100	100	100	100	100	93	24	23	54
60%	100	100	100	100	100	100	86	100	63	22	21	51
70%	100	100	100	100	100	100	69	53	44	19	17	47
80%	97	100	100	100	100	100	49	43	31	16	11	39
90%	90	100	100	100	100	100	36	24	21	12	7	23
Long Term												
Full Simulation Period ^b	97	100	100	100	97	97	79	76	71	29	22	54
Water Year Types^c												
Wet (23%)	99	100	100	100	96	97	91	98	96	41	22	47
Above Normal (24%)	96	99	100	100	100	100	93	100	72	29	23	61
Below Normal (10%)	96	100	100	100	98	100	74	73	65	25	22	57
Dry (16%)	96	99	100	100	96	98	81	60	58	20	21	53
Critical (27%)	99	100	100	100	96	87	42	34	40	19	20	57

No Action Alternative

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	66	38	80
20%	100	100	100	100	100	100	100	100	100	49	30	64
30%	84	100	100	100	100	100	100	100	100	31	25	59
40%	74	100	100	100	100	100	100	100	100	25	23	57
50%	67	100	100	100	100	100	80	100	98	22	20	55
60%	59	100	100	100	100	100	72	100	63	18	19	50
70%	50	100	100	100	100	100	49	40	42	13	16	43
80%	43	100	100	100	100	100	27	29	27	10	12	38
90%	29	100	100	100	100	100	13	14	15	1	4	34
Long Term												
Full Simulation Period ^b	66	99	100	100	97	95	68	72	69	29	23	54
Water Year Types^c												
Wet (23%)	67	100	100	100	96	94	83	98	95	47	24	51
Above Normal (24%)	74	100	100	100	100	100	88	100	72	26	20	60
Below Normal (10%)	60	100	100	100	98	95	58	65	61	22	19	58
Dry (16%)	63	99	100	100	97	98	66	51	54	14	16	49
Critical (27%)	65	97	100	100	93	87	29	25	43	28	37	58

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Percentage (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%	25%	15%	8%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	32%	-2%	-1%
30%	-16%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-13%	0%
40%	-26%	0%	0%	0%	0%	0%	0%	0%	0%	-6%	-14%	0%
50%	-33%	0%	0%	0%	0%	0%	-20%	0%	5%	-5%	-12%	0%
60%	-41%	0%	0%	0%	0%	0%	-17%	0%	1%	-16%	-10%	-3%
70%	-50%	0%	0%	0%	0%	0%	-29%	-24%	-6%	-33%	-2%	-7%
80%	-56%	0%	0%	0%	0%	0%	-46%	-32%	-11%	-38%	5%	-2%
90%	-68%	0%	0%	0%	0%	0%	-65%	-43%	-30%	-90%	-48%	47%
Long Term												
Full Simulation Period ^b	-32%	0%	0%	0%	0%	-2%	-14%	-6%	-2%	3%	4%	1%
Water Year Types^c												
Wet (23%)	-33%	0%	0%	0%	0%	-3%	-9%	0%	-2%	16%	8%	9%
Above Normal (24%)	-23%	0%	0%	0%	0%	0%	-6%	0%	0%	-12%	-13%	-1%
Below Normal (10%)	-37%	0%	0%	0%	0%	-5%	-22%	-11%	-6%	-10%	-14%	0%
Dry (16%)	-34%	0%	0%	0%	0%	0%	-18%	-16%	-7%	-32%	-22%	-7%
Critical (27%)	-35%	-3%	0%	0%	-3%	0%	-32%	-25%	7%	46%	81%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.21.3 New Melones Large Mouth Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	53	33	74
20%	100	100	100	100	100	100	100	100	100	38	30	65
30%	100	100	100	100	100	100	100	100	100	31	29	59
40%	100	100	100	100	100	100	100	100	100	27	26	57
50%	100	100	100	100	100	100	100	100	93	24	23	54
60%	100	100	100	100	100	100	86	100	63	22	21	51
70%	100	100	100	100	100	100	69	53	44	19	17	47
80%	97	100	100	100	100	100	49	43	31	16	11	39
90%	90	100	100	100	100	100	36	24	21	12	7	23
Long Term												
Full Simulation Period ^b	97	100	100	100	97	97	79	76	71	29	22	54
Water Year Types^c												
Wet (23%)	99	100	100	100	96	97	91	98	96	41	22	47
Above Normal (24%)	96	99	100	100	100	100	93	100	72	29	23	61
Below Normal (10%)	96	100	100	100	98	100	74	73	65	25	22	57
Dry (16%)	96	99	100	100	96	98	81	60	58	20	21	53
Critical (27%)	99	100	100	100	96	87	42	34	40	19	20	57

Alternative 3

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	43	78
20%	100	100	100	100	100	100	100	100	100	57	37	69
30%	100	100	100	100	100	100	100	100	100	43	29	61
40%	100	100	100	100	100	100	100	100	100	31	27	56
50%	100	100	100	100	100	100	97	100	100	24	23	55
60%	100	100	100	100	100	100	75	92	55	21	20	48
70%	100	100	100	100	100	100	57	44	35	18	18	42
80%	94	100	100	100	100	100	43	21	28	11	11	31
90%	84	100	100	100	100	100	23	0	14	0	0	23
Long Term												
Full Simulation Period ^b	95	99	99	100	99	96	73	70	67	35	24	51
Water Year Types^c												
Wet (23%)	99	100	100	100	96	98	92	91	77	66	30	53
Above Normal (24%)	98	99	100	100	100	100	94	100	90	34	22	58
Below Normal (10%)	96	100	91	100	100	100	62	73	64	23	18	56
Dry (16%)	89	100	100	100	100	98	68	46	59	16	20	42
Critical (27%)	94	97	100	100	100	83	30	30	40	15	25	50

Alternative 3 minus Revised Second Basis of Comparison

Statistic	Monthly Percentage (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%	88%	33%	6%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	52%	21%	6%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	37%	2%	3%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%	2%	-1%
50%	0%	0%	0%	0%	0%	0%	-3%	0%	7%	1%	0%	0%
60%	0%	0%	0%	0%	0%	0%	-13%	-8%	-13%	-5%	-4%	-6%
70%	0%	0%	0%	0%	0%	0%	-18%	-17%	-21%	-8%	8%	-9%
80%	-3%	0%	0%	0%	0%	0%	-14%	-53%	-10%	-29%	-5%	-20%
90%	-7%	0%	0%	0%	0%	0%	-36%	-98%	-34%	-100%	-99%	1%
Long Term												
Full Simulation Period ^b	-2%	0%	-1%	0%	2%	-1%	-8%	-8%	-5%	24%	10%	-4%
Water Year Types^c												
Wet (23%)	0%	0%	0%	0%	0%	0%	1%	-7%	-20%	62%	34%	12%
Above Normal (24%)	2%	0%	0%	0%	0%	0%	1%	0%	24%	17%	-6%	-4%
Below Normal (10%)	0%	0%	-9%	0%	2%	0%	-17%	-1%	-1%	-7%	-18%	-2%
Dry (16%)	-7%	1%	0%	0%	4%	0%	-16%	-23%	1%	-22%	-4%	-20%
Critical (27%)	-5%	-3%	0%	0%	4%	-5%	-28%	-10%	2%	-19%	25%	-12%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.21.4 New Melones Large Mouth Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	53	33	74
20%	100	100	100	100	100	100	100	100	100	38	30	65
30%	100	100	100	100	100	100	100	100	100	31	29	59
40%	100	100	100	100	100	100	100	100	100	27	26	57
50%	100	100	100	100	100	100	100	100	93	24	23	54
60%	100	100	100	100	100	100	86	100	63	22	21	51
70%	100	100	100	100	100	100	69	53	44	19	17	47
80%	97	100	100	100	100	100	49	43	31	16	11	39
90%	90	100	100	100	100	100	36	24	21	12	7	23
Long Term												
Full Simulation Period ^b	97	100	100	100	97	97	79	76	71	29	22	54
Water Year Types^c												
Wet (23%)	99	100	100	100	96	97	91	98	96	41	22	47
Above Normal (24%)	96	99	100	100	100	100	93	100	72	29	23	61
Below Normal (10%)	96	100	100	100	98	100	74	73	65	25	22	57
Dry (16%)	96	99	100	100	96	98	81	60	58	20	21	53
Critical (27%)	99	100	100	100	96	87	42	34	40	19	20	57

Alternative 5

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	75	36	98
20%	100	100	100	100	100	100	100	100	100	42	24	62
30%	88	100	100	100	100	100	100	100	100	30	22	57
40%	75	100	100	100	100	100	100	100	100	23	20	55
50%	69	100	100	100	100	100	72	100	100	20	19	50
60%	57	100	100	100	100	100	43	60	79	16	16	44
70%	51	100	100	100	100	100	24	29	43	12	11	39
80%	46	100	100	100	100	100	10	1	25	5	5	35
90%	35	100	100	100	100	95	0	0	7	0	0	13
Long Term												
Full Simulation Period ^b	67	100	100	100	98	95	60	64	70	28	21	50
Water Year Types^c												
Wet (23%)	71	100	100	100	96	95	87	93	97	41	19	47
Above Normal (24%)	73	99	100	100	100	100	79	94	61	21	17	53
Below Normal (10%)	58	100	100	100	98	95	50	58	59	18	14	44
Dry (16%)	58	99	100	100	100	98	45	37	52	10	13	45
Critical (27%)	73	100	100	100	99	85	14	19	60	44	50	67

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Percentage (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%	40%	10%	33%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	-21%	-4%
30%	-12%	0%	0%	0%	0%	0%	0%	0%	0%	-3%	-24%	-4%
40%	-25%	0%	0%	0%	0%	0%	0%	0%	0%	-13%	-25%	-3%
50%	-31%	0%	0%	0%	0%	0%	-28%	0%	7%	-16%	-19%	-8%
60%	-43%	0%	0%	0%	0%	0%	-50%	-40%	26%	-27%	-21%	-14%
70%	-49%	0%	0%	0%	0%	0%	-65%	-45%	-3%	-38%	-33%	-16%
80%	-53%	0%	0%	0%	0%	0%	-80%	-97%	-19%	-72%	-53%	-10%
90%	-62%	0%	0%	0%	0%	-5%	-100%	-100%	-66%	-99%	-99%	-44%
Long Term												
Full Simulation Period ^b	-31%	0%	0%	0%	1%	-2%	-25%	-16%	-1%	-3%	-3%	-7%
Water Year Types^c												
Wet (23%)	-28%	0%	0%	0%	0%	-3%	-5%	-5%	1%	1%	-14%	-1%
Above Normal (24%)	-24%	0%	0%	0%	0%	0%	-15%	-6%	-16%	-29%	-27%	-12%
Below Normal (10%)	-40%	0%	0%	0%	0%	-5%	-33%	-21%	-9%	-27%	-39%	-24%
Dry (16%)	-39%	0%	0%	0%	4%	0%	-45%	-38%	-9%	-51%	-39%	-15%
Critical (27%)	-26%	0%	0%	0%	3%	-2%	-67%	-43%	51%	134%	148%	17%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.22 New Melones Small Mouth Bass Nest Survival Percentage

Table 5C.3.2.22.1 New Melones Small Mouth Bass Nest Survival Percentage, Monthly Percentage

No Action Alternative

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	56	32	67
20%	84	100	100	100	100	100	100	100	100	42	26	54
30%	71	100	100	100	100	100	100	100	100	27	22	50
40%	62	100	100	100	100	100	100	100	100	22	20	48
50%	57	100	100	100	100	100	67	100	86	20	18	46
60%	50	100	100	100	100	100	60	91	53	16	17	42
70%	43	100	100	100	100	100	42	34	35	12	15	37
80%	37	100	100	100	100	100	23	25	24	9	11	33
90%	25	100	100	100	100	85	12	13	14	2	4	29
Long Term												
Full Simulation Period ^b	58	98	100	100	96	94	65	70	66	26	21	47
Water Year Types^c												
Wet (23%)	59	100	100	100	96	93	81	97	93	42	21	43
Above Normal (24%)	64	98	100	100	100	100	86	99	68	22	18	52
Below Normal (10%)	54	100	100	100	97	94	55	63	59	19	17	50
Dry (16%)	55	97	100	100	97	98	59	48	50	12	15	43
Critical (27%)	58	95	100	99	92	82	26	23	40	25	36	53

Revised Alternative 1

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	45	28	62
20%	100	100	100	100	100	100	100	100	100	32	26	55
30%	100	100	100	100	100	100	100	100	100	27	25	50
40%	100	100	100	100	100	100	100	100	100	23	23	48
50%	100	100	100	100	100	100	100	100	78	21	20	46
60%	93	100	100	100	100	100	72	100	53	19	18	43
70%	88	100	100	100	100	100	58	45	38	17	15	40
80%	81	100	100	100	100	100	42	37	26	15	10	33
90%	76	92	100	100	100	100	31	21	19	11	7	20
Long Term												
Full Simulation Period ^b	92	98	100	100	96	96	75	74	67	25	19	46
Water Year Types^c												
Wet (23%)	94	100	100	100	96	97	88	98	94	36	20	40
Above Normal (24%)	92	97	100	100	100	100	92	100	68	25	20	53
Below Normal (10%)	86	99	100	100	97	100	69	70	62	22	20	50
Dry (16%)	88	97	100	100	96	98	75	55	53	18	18	46
Critical (27%)	98	96	100	100	94	83	37	30	37	17	18	49

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Percentage (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%	-19%	-13%	-8%
20%	19%	0%	0%	0%	0%	0%	0%	0%	0%	-23%	2%	1%
30%	42%	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%	0%
40%	61%	0%	0%	0%	0%	0%	0%	0%	0%	6%	15%	0%
50%	76%	0%	0%	0%	0%	0%	49%	0%	-10%	5%	12%	0%
60%	87%	0%	0%	0%	0%	0%	20%	10%	-1%	18%	11%	3%
70%	106%	0%	0%	0%	0%	0%	40%	31%	7%	45%	2%	7%
80%	122%	0%	0%	0%	0%	0%	81%	46%	11%	54%	-4%	2%
90%	204%	-8%	0%	0%	0%	18%	164%	67%	38%	399%	66%	-31%
Long Term												
Full Simulation Period ^b	59%	0%	0%	0%	0%	2%	17%	6%	1%	-4%	-6%	-2%
Water Year Types^c												
Wet (23%)	61%	0%	0%	0%	0%	4%	9%	0%	1%	-14%	-6%	-8%
Above Normal (24%)	44%	-1%	0%	0%	0%	0%	8%	1%	1%	13%	14%	1%
Below Normal (10%)	61%	-1%	0%	0%	0%	6%	25%	13%	5%	10%	15%	0%
Dry (16%)	59%	0%	0%	0%	0%	0%	28%	16%	6%	43%	26%	8%
Critical (27%)	69%	2%	0%	1%	2%	1%	44%	30%	-9%	-34%	-50%	-7%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.22.2 New Melones Small Mouth Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	45	28	62
20%	100	100	100	100	100	100	100	100	100	32	26	55
30%	100	100	100	100	100	100	100	100	100	27	25	50
40%	100	100	100	100	100	100	100	100	100	23	23	48
50%	100	100	100	100	100	100	100	100	78	21	20	46
60%	93	100	100	100	100	100	72	100	53	19	18	43
70%	88	100	100	100	100	100	58	45	38	17	15	40
80%	81	100	100	100	100	100	42	37	26	15	10	33
90%	76	92	100	100	100	100	31	21	19	11	7	20
Long Term												
Full Simulation Period ^b	92	98	100	100	96	96	75	74	67	25	19	46
Water Year Types^c												
Wet (23%)	94	100	100	100	96	97	88	98	94	36	20	40
Above Normal (24%)	92	97	100	100	100	100	92	100	68	25	20	53
Below Normal (10%)	86	99	100	100	97	100	69	70	62	22	20	50
Dry (16%)	88	97	100	100	96	98	75	55	53	18	18	46
Critical (27%)	98	96	100	100	94	83	37	30	37	17	18	49

No Action Alternative

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	56	32	67
20%	84	100	100	100	100	100	100	100	100	42	26	54
30%	71	100	100	100	100	100	100	100	100	27	22	50
40%	62	100	100	100	100	100	100	100	100	22	20	48
50%	57	100	100	100	100	100	67	100	86	20	18	46
60%	50	100	100	100	100	100	60	91	53	16	17	42
70%	43	100	100	100	100	100	42	34	35	12	15	37
80%	37	100	100	100	100	100	23	25	24	9	11	33
90%	25	100	100	100	100	85	12	13	14	2	4	29
Long Term												
Full Simulation Period ^b	58	98	100	100	96	94	65	70	66	26	21	47
Water Year Types^c												
Wet (23%)	59	100	100	100	96	93	81	97	93	42	21	43
Above Normal (24%)	64	98	100	100	100	100	86	99	68	22	18	52
Below Normal (10%)	54	100	100	100	97	94	55	63	59	19	17	50
Dry (16%)	55	97	100	100	97	98	59	48	50	12	15	43
Critical (27%)	58	95	100	99	92	82	26	23	40	25	36	53

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Percentage (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%	24%	15%	8%
20%	-16%	0%	0%	0%	0%	0%	0%	0%	0%	30%	-2%	-1%
30%	-29%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-12%	0%
40%	-38%	0%	0%	0%	0%	0%	0%	0%	0%	-5%	-13%	0%
50%	-43%	0%	0%	0%	0%	0%	-33%	0%	11%	-5%	-11%	0%
60%	-47%	0%	0%	0%	0%	0%	-17%	-9%	1%	-15%	-10%	-3%
70%	-51%	0%	0%	0%	0%	0%	-28%	-24%	-6%	-31%	-2%	-7%
80%	-55%	0%	0%	0%	0%	0%	-45%	-31%	-10%	-35%	4%	-2%
90%	-67%	9%	0%	0%	0%	-15%	-62%	-40%	-28%	-80%	-40%	44%
Long Term												
Full Simulation Period ^b	-37%	0%	0%	0%	0%	-2%	-14%	-6%	-1%	4%	7%	2%
Water Year Types^c												
Wet (23%)	-38%	0%	0%	0%	0%	-4%	-8%	0%	-1%	16%	7%	8%
Above Normal (24%)	-30%	1%	0%	0%	0%	0%	-7%	-1%	-1%	-12%	-13%	-1%
Below Normal (10%)	-38%	1%	0%	0%	0%	-6%	-20%	-11%	-5%	-10%	-13%	0%
Dry (16%)	-37%	0%	0%	0%	0%	0%	-22%	-14%	-6%	-30%	-21%	-7%
Critical (27%)	-41%	-2%	0%	-1%	-2%	-1%	-30%	-23%	9%	51%	100%	8%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.22.3 New Melones Small Mouth Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	45	28	62
20%	100	100	100	100	100	100	100	100	100	32	26	55
30%	100	100	100	100	100	100	100	100	100	27	25	50
40%	100	100	100	100	100	100	100	100	100	23	23	48
50%	100	100	100	100	100	100	100	100	78	21	20	46
60%	93	100	100	100	100	100	72	100	53	19	18	43
70%	88	100	100	100	100	100	58	45	38	17	15	40
80%	81	100	100	100	100	100	42	37	26	15	10	33
90%	76	92	100	100	100	100	31	21	19	11	7	20
Long Term												
Full Simulation Period ^b	92	98	100	100	96	96	75	74	67	25	19	46
Water Year Types^c												
Wet (23%)	94	100	100	100	96	97	88	98	94	36	20	40
Above Normal (24%)	92	97	100	100	100	100	92	100	68	25	20	53
Below Normal (10%)	86	99	100	100	97	100	69	70	62	22	20	50
Dry (16%)	88	97	100	100	96	98	75	55	53	18	18	46
Critical (27%)	98	96	100	100	94	83	37	30	37	17	18	49

Alternative 3

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	37	66
20%	100	100	100	100	100	100	100	100	100	48	31	58
30%	100	100	100	100	100	100	100	100	100	36	25	52
40%	100	100	100	100	100	100	100	100	100	27	23	48
50%	99	100	100	100	100	100	81	100	100	21	20	46
60%	97	100	100	100	100	100	63	81	46	18	18	41
70%	84	100	100	100	100	100	48	38	30	16	16	36
80%	79	100	100	100	100	100	36	18	24	11	10	27
90%	70	88	100	100	100	100	20	0	13	0	0	20
Long Term												
Full Simulation Period ^b	90	98	99	100	99	96	70	69	65	32	21	44
Water Year Types^c												
Wet (23%)	94	100	100	100	96	98	89	90	77	62	26	45
Above Normal (24%)	93	98	100	100	100	100	93	100	88	30	19	50
Below Normal (10%)	90	100	91	100	100	100	57	69	61	20	16	49
Dry (16%)	81	96	100	100	100	97	62	44	54	14	18	37
Critical (27%)	90	92	100	100	99	79	27	27	37	13	23	44

Alternative 3 minus Revised Second Basis of Comparison

Statistic	Monthly Percentage (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%	122%	31%	6%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	20%	6%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	2%	3%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	2%	-1%
50%	-1%	0%	0%	0%	0%	0%	-19%	0%	28%	1%	0%	0%
60%	4%	0%	0%	0%	0%	0%	-13%	-19%	-12%	-5%	-4%	-6%
70%	-5%	0%	0%	0%	0%	0%	-17%	-17%	-21%	-7%	8%	-9%
80%	-3%	0%	0%	0%	0%	0%	-14%	-51%	-9%	-27%	-5%	-19%
90%	-7%	-4%	0%	0%	0%	0%	-35%	-98%	-32%	-96%	-98%	1%
Long Term												
Full Simulation Period ^b	-2%	-1%	-1%	0%	2%	-1%	-8%	-8%	-3%	29%	10%	-4%
Water Year Types^c												
Wet (23%)	0%	0%	0%	0%	0%	0%	1%	-8%	-18%	72%	32%	12%
Above Normal (24%)	1%	1%	0%	0%	0%	0%	1%	0%	28%	16%	-7%	-4%
Below Normal (10%)	4%	1%	-9%	0%	3%	0%	-17%	-1%	-1%	-8%	-18%	-2%
Dry (16%)	-7%	-1%	0%	0%	4%	0%	-18%	-20%	1%	-22%	-4%	-20%
Critical (27%)	-8%	-4%	0%	0%	5%	-5%	-27%	-9%	2%	-20%	31%	-11%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.22.4 New Melones Small Mouth Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	45	28	62
20%	100	100	100	100	100	100	100	100	100	32	26	55
30%	100	100	100	100	100	100	100	100	100	27	25	50
40%	100	100	100	100	100	100	100	100	100	23	23	48
50%	100	100	100	100	100	100	100	100	78	21	20	46
60%	93	100	100	100	100	100	72	100	53	19	18	43
70%	88	100	100	100	100	100	58	45	38	17	15	40
80%	81	100	100	100	100	100	42	37	26	15	10	33
90%	76	92	100	100	100	100	31	21	19	11	7	20
Long Term												
Full Simulation Period ^b	92	98	100	100	96	96	75	74	67	25	19	46
Water Year Types^c												
Wet (23%)	94	100	100	100	96	97	88	98	94	36	20	40
Above Normal (24%)	92	97	100	100	100	100	92	100	68	25	20	53
Below Normal (10%)	86	99	100	100	97	100	69	70	62	22	20	50
Dry (16%)	88	97	100	100	96	98	75	55	53	18	18	46
Critical (27%)	98	96	100	100	94	83	37	30	37	17	18	49

Alternative 5

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	63	31	88
20%	87	100	100	100	100	100	100	100	100	36	21	53
30%	74	100	100	100	100	100	100	100	100	26	19	48
40%	63	100	100	100	100	100	100	100	100	20	17	47
50%	58	100	100	100	100	100	60	100	100	18	17	42
60%	48	100	100	100	100	100	37	51	66	14	15	37
70%	43	100	100	100	100	100	21	25	37	11	10	34
80%	39	100	100	100	100	100	9	2	22	5	6	30
90%	30	100	100	100	100	80	0	0	7	0	1	12
Long Term												
Full Simulation Period ^b	59	99	100	100	98	94	57	62	67	25	20	44
Water Year Types^c												
Wet (23%)	61	100	100	100	96	95	84	90	94	36	17	40
Above Normal (24%)	65	98	100	100	100	100	76	93	58	18	15	46
Below Normal (10%)	51	100	100	100	97	94	47	56	57	16	12	39
Dry (16%)	52	97	100	100	100	97	43	36	49	9	12	39
Critical (27%)	68	98	100	100	98	81	13	19	58	43	50	63

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Percentage (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%	39%	10%	41%
20%	-13%	0%	0%	0%	0%	0%	0%	0%	0%	11%	-20%	-4%
30%	-26%	0%	0%	0%	0%	0%	0%	0%	0%	-3%	-23%	-4%
40%	-37%	0%	0%	0%	0%	0%	0%	0%	0%	-13%	-24%	-3%
50%	-42%	0%	0%	0%	0%	0%	-40%	0%	28%	-15%	-18%	-8%
60%	-48%	0%	0%	0%	0%	0%	-50%	-49%	25%	-25%	-19%	-14%
70%	-51%	0%	0%	0%	0%	0%	-64%	-44%	-3%	-35%	-30%	-16%
80%	-52%	0%	0%	0%	0%	0%	-78%	-94%	-18%	-66%	-47%	-10%
90%	-61%	9%	0%	0%	0%	-20%	-100%	-100%	-62%	-98%	-82%	-41%
Long Term												
Full Simulation Period ^b	-36%	1%	0%	0%	2%	-2%	-24%	-16%	0%	0%	2%	-5%
Water Year Types^c												
Wet (23%)	-35%	0%	0%	0%	0%	-3%	-4%	-8%	1%	1%	-13%	-1%
Above Normal (24%)	-29%	1%	0%	0%	0%	0%	-17%	-7%	-15%	-29%	-25%	-12%
Below Normal (10%)	-41%	1%	0%	0%	0%	-6%	-32%	-20%	-7%	-26%	-37%	-23%
Dry (16%)	-41%	0%	0%	0%	4%	-1%	-43%	-36%	-9%	-48%	-37%	-14%
Critical (27%)	-31%	2%	0%	0%	4%	-2%	-65%	-37%	60%	157%	179%	28%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.23 New Melones Spotted Bass Nest Survival Percentage

Table 5C.3.2.23.1 New Melones Spotted Bass Nest Survival Percentage, Monthly Percentage

No Action Alternative

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	100	100
20%	100	100	100	100	100	100	100	100	100	100	100	91
30%	100	100	100	100	100	100	100	100	100	100	93	85
40%	100	100	100	100	100	100	100	100	100	100	85	81
50%	100	100	100	100	100	100	100	100	100	100	81	78
60%	100	100	100	100	100	100	100	100	100	100	75	76
70%	100	100	100	100	100	100	100	100	100	100	68	73
80%	100	100	100	100	100	100	100	87	91	88	64	66
90%	90	100	100	100	100	100	100	68	69	71	51	55
Long Term												
Full Simulation Period ^b	94	100	100	100	99	99	90	91	91	77	76	97
Water Year Types^c												
Wet (23%)	88	100	100	100	98	96	88	100	96	84	79	96
Above Normal (24%)	99	100	100	100	100	100	98	100	99	77	78	100
Below Normal (10%)	91	100	100	100	100	100	90	90	94	80	77	99
Dry (16%)	97	100	100	100	100	100	97	92	89	69	72	99
Critical (27%)	99	100	100	100	100	100	73	62	72	75	75	94

Revised Alternative 1

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	96	100
20%	100	100	100	100	100	100	100	100	100	100	92	100
30%	100	100	100	100	100	100	100	100	100	100	93	100
40%	100	100	100	100	100	100	100	100	100	100	87	86
50%	100	100	100	100	100	100	100	100	100	100	83	82
60%	100	100	100	100	100	100	100	100	100	100	80	79
70%	100	100	100	100	100	100	100	100	100	100	77	73
80%	100	100	100	100	100	100	100	100	100	93	73	66
90%	100	100	100	100	100	100	100	84	79	66	60	82
Long Term												
Full Simulation Period ^b	100	100	100	100	99	100	98	95	95	83	79	97
Water Year Types^c												
Wet (23%)	100	100	100	100	97	100	100	100	100	93	81	93
Above Normal (24%)	100	100	100	100	100	100	99	100	100	83	82	100
Below Normal (10%)	100	100	100	100	100	100	99	94	98	82	81	99
Dry (16%)	100	100	100	100	99	100	100	96	93	78	79	99
Critical (27%)	100	100	100	100	100	100	87	75	82	69	71	99

Revised Alternative 1 minus No Action Alternative

Statistic	Monthly Percentage (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%	-4%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	6%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	5%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	4%	0%
70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	1%	0%
80%	0%	0%	0%	0%	0%	0%	15%	10%	5%	14%	-1%	0%
90%	11%	0%	0%	0%	0%	0%	48%	21%	12%	29%	9%	-16%
Long Term												
Full Simulation Period ^b	6%	0%	0%	0%	0%	1%	9%	4%	4%	7%	4%	0%
Water Year Types^c												
Wet (23%)	13%	0%	0%	0%	-1%	4%	13%	0%	4%	11%	3%	-2%
Above Normal (24%)	1%	0%	0%	0%	0%	0%	1%	0%	0%	8%	6%	0%
Below Normal (10%)	10%	0%	0%	0%	0%	0%	10%	4%	4%	3%	6%	0%
Dry (16%)	3%	0%	0%	0%	-1%	0%	3%	5%	4%	13%	9%	0%
Critical (27%)	1%	0%	0%	0%	0%	0%	19%	21%	13%	-7%	-5%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.23.2 New Melones Spotted Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	96	100
20%	100	100	100	100	100	100	100	100	100	100	92	100
30%	100	100	100	100	100	100	100	100	100	93	90	100
40%	100	100	100	100	100	100	100	100	100	87	86	100
50%	100	100	100	100	100	100	100	100	100	83	82	100
60%	100	100	100	100	100	100	100	100	100	80	79	100
70%	100	100	100	100	100	100	100	100	100	77	73	100
80%	100	100	100	100	100	100	100	100	93	73	66	100
90%	100	100	100	100	100	100	100	84	79	66	60	82
Long Term												
Full Simulation Period ^b	100	100	100	100	99	100	98	95	95	83	79	97
Water Year Types^c												
Wet (23%)	100	100	100	100	97	100	100	100	100	93	81	93
Above Normal (24%)	100	100	100	100	100	100	99	100	100	83	82	100
Below Normal (10%)	100	100	100	100	100	100	99	94	98	82	81	99
Dry (16%)	100	100	100	100	99	100	100	96	93	78	79	99
Critical (27%)	100	100	100	100	100	100	87	75	82	69	71	99

No Action Alternative

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	100	100
20%	100	100	100	100	100	100	100	100	100	100	91	100
30%	100	100	100	100	100	100	100	100	100	93	85	100
40%	100	100	100	100	100	100	100	100	100	85	81	100
50%	100	100	100	100	100	100	100	100	100	81	78	100
60%	100	100	100	100	100	100	100	100	100	75	76	100
70%	100	100	100	100	100	100	100	100	100	68	73	100
80%	100	100	100	100	100	100	87	91	88	64	66	100
90%	90	100	100	100	100	100	68	69	71	51	55	97
Long Term												
Full Simulation Period ^b	94	100	100	100	99	99	90	91	91	77	76	97
Water Year Types^c												
Wet (23%)	88	100	100	100	98	96	88	100	96	84	79	96
Above Normal (24%)	99	100	100	100	100	100	98	100	99	77	78	100
Below Normal (10%)	91	100	100	100	100	100	90	90	94	80	77	99
Dry (16%)	97	100	100	100	100	100	97	92	89	69	72	99
Critical (27%)	99	100	100	100	100	100	73	62	72	75	75	94

No Action Alternative minus Revised Second Basis of Comparison

Statistic	Monthly Percentage (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%	4%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-6%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-6%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-5%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-6%	-4%	0%
70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-12%	-1%	0%
80%	0%	0%	0%	0%	0%	0%	-13%	-9%	-5%	-12%	1%	0%
90%	-10%	0%	0%	0%	0%	0%	-32%	-17%	-11%	-23%	-8%	18%
Long Term												
Full Simulation Period ^b	-6%	0%	0%	0%	0%	-1%	-8%	-4%	-4%	-7%	-4%	0%
Water Year Types^c												
Wet (23%)	-12%	0%	0%	0%	1%	-4%	-12%	0%	-4%	-10%	-3%	2%
Above Normal (24%)	-1%	0%	0%	0%	0%	0%	-1%	0%	0%	-7%	-5%	0%
Below Normal (10%)	-9%	0%	0%	0%	0%	0%	-9%	-4%	-4%	-3%	-5%	0%
Dry (16%)	-3%	0%	0%	0%	1%	0%	-3%	-5%	-4%	-12%	-8%	0%
Critical (27%)	-1%	0%	0%	0%	0%	0%	-16%	-18%	-12%	8%	5%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.23.3 New Melones Spotted Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	96	100
20%	100	100	100	100	100	100	100	100	100	100	92	100
30%	100	100	100	100	100	100	100	100	100	93	90	100
40%	100	100	100	100	100	100	100	100	100	87	86	100
50%	100	100	100	100	100	100	100	100	100	83	82	100
60%	100	100	100	100	100	100	100	100	100	80	79	100
70%	100	100	100	100	100	100	100	100	100	77	73	100
80%	100	100	100	100	100	100	100	100	93	73	66	100
90%	100	100	100	100	100	100	100	84	79	66	60	82
Long Term												
Full Simulation Period ^b	100	100	100	100	99	100	98	95	95	83	79	97
Water Year Types^c												
Wet (23%)	100	100	100	100	97	100	100	100	100	93	81	93
Above Normal (24%)	100	100	100	100	100	100	99	100	100	83	82	100
Below Normal (10%)	100	100	100	100	100	100	99	94	98	82	81	99
Dry (16%)	100	100	100	100	99	100	100	96	93	78	79	99
Critical (27%)	100	100	100	100	100	100	87	75	82	69	71	99

Alternative 3

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	100	100
20%	100	100	100	100	100	100	100	100	100	100	100	100
30%	100	100	100	100	100	100	100	100	100	100	91	100
40%	100	100	100	100	100	100	100	100	100	94	87	100
50%	100	100	100	100	100	100	100	100	100	83	82	100
60%	100	100	100	100	100	100	100	100	100	79	78	100
70%	100	100	100	100	100	100	100	100	98	75	75	100
80%	100	100	100	100	100	100	100	79	88	66	65	94
90%	100	100	100	100	100	100	82	38	69	48	38	82
Long Term												
Full Simulation Period ^b	100	100	99	100	99	99	94	86	88	78	75	91
Water Year Types^c												
Wet (23%)	100	100	100	100	98	100	100	92	77	98	87	98
Above Normal (24%)	100	100	100	100	100	100	100	100	99	80	68	92
Below Normal (10%)	100	100	91	100	100	100	90	95	97	69	66	98
Dry (16%)	100	100	100	100	100	100	93	73	93	67	74	79
Critical (27%)	100	100	100	100	100	100	92	79	71	83	63	89

Alternative 3 minus Revised Second Basis of Comparison

Statistic	Monthly Percentage (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%	4%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	1%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	1%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-2%	0%
70%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-3%	3%	0%
80%	0%	0%	0%	0%	0%	0%	0%	-21%	-5%	-9%	-1%	-6%
90%	0%	0%	0%	0%	0%	0%	-18%	-55%	-13%	-27%	-37%	1%
Long Term												
Full Simulation Period ^b	0%	0%	-1%	0%	0%	-1%	-4%	-9%	-8%	-5%	-5%	-6%
Water Year Types^c												
Wet (23%)	0%	0%	0%	0%	1%	0%	0%	-8%	-23%	5%	8%	5%
Above Normal (24%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	-3%	-18%	-8%
Below Normal (10%)	0%	0%	-9%	0%	0%	0%	-9%	0%	-1%	-16%	-18%	0%
Dry (16%)	0%	0%	0%	0%	1%	0%	-7%	-24%	1%	-14%	-6%	-20%
Critical (27%)	0%	0%	0%	0%	0%	-8%	-9%	-6%	1%	-10%	-2%	-10%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.23.4 New Melones Spotted Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	96	100
20%	100	100	100	100	100	100	100	100	100	100	92	100
30%	100	100	100	100	100	100	100	100	100	93	90	100
40%	100	100	100	100	100	100	100	100	100	87	86	100
50%	100	100	100	100	100	100	100	100	100	83	82	100
60%	100	100	100	100	100	100	100	100	100	80	79	100
70%	100	100	100	100	100	100	100	100	100	77	73	100
80%	100	100	100	100	100	100	100	100	93	73	66	100
90%	100	100	100	100	100	100	100	84	79	66	60	82
Long Term												
Full Simulation Period ^b	100	100	100	100	99	100	98	95	95	83	79	97
Water Year Types^c												
Wet (23%)	100	100	100	100	97	100	100	100	100	93	81	93
Above Normal (24%)	100	100	100	100	100	100	99	100	100	83	82	100
Below Normal (10%)	100	100	100	100	100	100	99	94	98	82	81	99
Dry (16%)	100	100	100	100	99	100	100	96	93	78	79	99
Critical (27%)	100	100	100	100	100	100	87	75	82	69	71	99

Alternative 5

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	99	100
20%	100	100	100	100	100	100	100	100	100	100	83	100
30%	100	100	100	100	100	100	100	100	100	92	80	100
40%	100	100	100	100	100	100	100	100	100	82	77	100
50%	100	100	100	100	100	100	100	100	100	78	76	100
60%	100	100	100	100	100	100	100	100	100	72	73	100
70%	100	100	100	100	100	100	84	91	100	67	65	100
80%	100	100	100	100	100	100	63	52	84	56	57	99
90%	98	100	100	100	100	100	27	9	60	33	50	68
Long Term												
Full Simulation Period ^b	96	100	100	100	99	100	81	80	88	72	71	91
Water Year Types^c												
Wet (23%)	99	100	100	100	97	99	99	100	100	90	76	94
Above Normal (24%)	99	100	100	100	100	100	90	100	76	66	74	92
Below Normal (10%)	87	100	100	100	100	100	78	74	92	65	65	79
Dry (16%)	93	100	100	100	100	100	78	71	85	56	59	93
Critical (27%)	97	100	100	100	100	100	38	38	80	73	80	92

Alternative 5 minus Revised Second Basis of Comparison

Statistic	Monthly Percentage (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%	4%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-10%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-11%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-6%	-11%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-6%	-8%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-10%	-8%	0%
70%	0%	0%	0%	0%	0%	0%	-16%	-9%	0%	-13%	-11%	0%
80%	0%	0%	0%	0%	0%	0%	-37%	-48%	-9%	-23%	-13%	-1%
90%	-2%	0%	0%	0%	0%	0%	-73%	-89%	-25%	-50%	-16%	-17%
Long Term												
Full Simulation Period ^b	-4%	0%	0%	0%	0%	0%	-17%	-15%	-7%	-13%	-11%	-6%
Water Year Types^c												
Wet (23%)	-1%	0%	0%	0%	-1%	-1%	-1%	0%	0%	-3%	-6%	1%
Above Normal (24%)	-1%	0%	0%	0%	0%	0%	-9%	0%	-24%	-21%	-10%	-8%
Below Normal (10%)	-13%	0%	0%	0%	0%	0%	-22%	-22%	-6%	-21%	-21%	-20%
Dry (16%)	-7%	0%	0%	0%	1%	0%	-22%	-26%	-9%	-28%	-25%	-6%
Critical (27%)	-3%	0%	0%	0%	0%	0%	-56%	-49%	-2%	5%	13%	-7%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.24 Temperature Threshold Exceedances

Species	Lifestage	River	Reach	Water Year Type	Month	Temperature Objective (Degree F)	Temperature Objective Reference ¹	No Action Alternative	Revised Second Basis of Comparison (Revised Alternative 1)	Alternative 3	Alternative 5	Revised Alternative 1 minus No Action Alternative	No Action Alternative minus Revised Second Basis of Comparison	Alternative 3 minus Revised Second Basis of Comparison	Alternative 5 minus Revised Second Basis of Comparison
Steelhead	Adult Migration	Stanislaus	Orange Blossom Bridge	All	October	56	NMFS BiOp 2009	57%	86%	87%	58%	29%	-29%	1%	-28%
Steelhead	Adult Migration	Stanislaus	Orange Blossom Bridge	All	November	56	NMFS BiOp 2009	33%	27%	24%	36%	-6%	6%	-3%	9%
Steelhead	Adult Migration	Stanislaus	Orange Blossom Bridge	All	December	56	NMFS BiOp 2009	0%	0%	0%	3%	0%	0%	0%	3%
Steelhead	Smoltification	Stanislaus	Knights Ferry ("Used Below Goodwin Dam)	All	January	52	NMFS BiOp 2009	0%	3%	2%	2%	3%	-3%	-1%	-1%
Steelhead	Smoltification	Stanislaus	Knights Ferry ("Used Below Goodwin Dam)	All	February	52	NMFS BiOp 2009	0%	3%	2%	0%	3%	-3%	-1%	-3%
Steelhead	Smoltification	Stanislaus	Knights Ferry ("Used Below Goodwin Dam)	All	March	52	NMFS BiOp 2009	8%	12%	12%	8%	4%	-4%	0%	-4%
Steelhead	Smoltification	Stanislaus	Knights Ferry ("Used Below Goodwin Dam)	All	April	52	NMFS BiOp 2009	33%	34%	30%	37%	2%	-2%	-4%	3%
Steelhead	Smoltification	Stanislaus	Knights Ferry ("Used Below Goodwin Dam)	All	May	52	NMFS BiOp 2009	63%	68%	63%	68%	5%	-5%	-5%	0%
Steelhead	Smoltification	Stanislaus	Orange Blossom Bridge	All	January	57	NMFS BiOp 2009	0%	0%	0%	0%	0%	0%	0%	0%
Steelhead	Smoltification	Stanislaus	Orange Blossom Bridge	All	February	57	NMFS BiOp 2009	0%	0%	0%	0%	0%	0%	0%	0%
Steelhead	Smoltification	Stanislaus	Orange Blossom Bridge	All	March	57	NMFS BiOp 2009	0%	10%	0%	0%	10%	-10%	-10%	-10%
Steelhead	Smoltification	Stanislaus	Orange Blossom Bridge	All	April	57	NMFS BiOp 2009	2%	7%	3%	0%	5%	-5%	-4%	-7%
Steelhead	Smoltification	Stanislaus	Orange Blossom Bridge	All	May	57	NMFS BiOp 2009	18%	22%	17%	8%	4%	-4%	-5%	-15%
Steelhead	Spawning	Stanislaus	Orange Blossom Bridge	All	January	55	NMFS BiOp 2009	0%	0%	0%	0%	0%	0%	0%	0%
Steelhead	Spawning	Stanislaus	Orange Blossom Bridge	All	February	55	NMFS BiOp 2009	0%	2%	1%	0%	2%	-2%	-1%	-2%
Steelhead	Spawning	Stanislaus	Orange Blossom Bridge	All	March	55	NMFS BiOp 2009	21%	35%	25%	21%	14%	-14%	-11%	-15%
Steelhead	Spawning	Stanislaus	Orange Blossom Bridge	All	April	55	NMFS BiOp 2009	16%	30%	17%	7%	14%	-14%	-12%	-23%
Steelhead	Spawning	Stanislaus	Orange Blossom Bridge	All	May	55	NMFS BiOp 2009	49%	57%	53%	40%	9%	-9%	-4%	-17%
Steelhead	Rearing	Stanislaus	Orange Blossom Bridge	All	June	65	NMFS BiOp 2009	6%	2%	4%	6%	-3%	3%	2%	4%
Steelhead	Rearing	Stanislaus	Orange Blossom Bridge	All	July	65	NMFS BiOp 2009	16%	15%	19%	21%	-2%	2%	5%	7%
Steelhead	Rearing	Stanislaus	Orange Blossom Bridge	All	August	65	NMFS BiOp 2009	15%	7%	9%	21%	-8%	8%	2%	13%
Steelhead	Rearing	Stanislaus	Orange Blossom Bridge	All	September	65	NMFS BiOp 2009	11%	7%	7%	18%	-4%	4%	0%	11%
Steelhead	Rearing	Stanislaus	Orange Blossom Bridge	All	October	65	NMFS BiOp 2009	7%	7%	4%	11%	0%	0%	-3%	4%
Steelhead	Rearing	Stanislaus	Orange Blossom Bridge	All	November	65	NMFS BiOp 2009	0%	0%	0%	0%	0%	0%	0%	0%

¹See Appendix 9N, Section C for the full reference

Table 5C.3.2.25 CVP Annual Power Generation Summary

				No Action Alternative	Revised Second Basis of Comparison (Revised Alternative 1)	Alternative 3	Alternative 5	Revised Alternative 1 vs. No Action Alternative (Percent Difference)	No Action Alternative vs. Revised Second Basis of Comparison (Percent Difference)	Alternative 3 vs. Revised Second Basis of Comparison (Percent Difference)	Alternative 5 vs. Revised Second Basis of Comparison (Percent Difference)
CVP Generation Facilities											
Capacity	At load center	(MW)	Long Term	1,583	1,651	1,642	1,568	4%	-4%	-1%	-5%
			Dry and Critical	1,203	1,327	1,291	1,173	10%	-9%	-3%	-12%
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	4,558	4,617	4,582	4,552	1%	-1%	-1%	-1%
			Dry and Critical	2,696	2,823	2,798	2,684	5%	-4%	-1%	-5%
CVP Pumping Facilities											
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	1,113	1,285	1,238	1,110	15%	-13%	-4%	-14%
			Dry and Critical	699	769	715	699	10%	-9%	-7%	-9%
All CVP Facilities											
Net Generation	Total of all Facilities	(GWh)	Long Term	3,445	3,331	3,344	3,442	-3%	3%	0%	3%
			Dry and Critical	1,997	2,054	2,084	1,986	3%	-3%	1%	-3%

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in text.

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5C.3.3.1 New Melones Storage

Table 5C.3.3.1.1 New Melones Reservoir, End of Month Storage

No Action Alternative

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,765	1,759	1,823	1,880	1,931	1,980	1,945	2,052	2,075	1,978	1,869	1,805
20%	1,612	1,631	1,647	1,687	1,768	1,799	1,834	1,901	1,876	1,798	1,691	1,633
30%	1,533	1,534	1,556	1,598	1,686	1,729	1,686	1,745	1,786	1,707	1,605	1,556
40%	1,271	1,274	1,432	1,514	1,594	1,618	1,592	1,533	1,539	1,433	1,333	1,273
50%	1,121	1,127	1,154	1,307	1,436	1,535	1,461	1,444	1,392	1,283	1,190	1,156
60%	1,024	1,043	1,080	1,146	1,199	1,273	1,278	1,335	1,277	1,199	1,102	1,054
70%	882	911	986	1,015	1,038	1,057	1,080	1,090	1,087	994	910	868
80%	646	658	684	684	735	808	835	878	872	808	733	693
90%	430	435	440	488	541	569	574	586	630	566	507	473
Long Term												
Full Simulation Period ^b	1,132	1,142	1,180	1,237	1,305	1,348	1,337	1,373	1,381	1,300	1,208	1,159
Water Year Types^c												
Wet (32%)	1,379	1,390	1,454	1,562	1,666	1,724	1,758	1,878	1,968	1,890	1,773	1,703
Above Normal (16%)	1,029	1,060	1,125	1,214	1,317	1,406	1,413	1,484	1,467	1,372	1,277	1,232
Below Normal (13%)	1,294	1,305	1,326	1,351	1,413	1,438	1,390	1,383	1,359	1,268	1,175	1,133
Dry (24%)	1,094	1,094	1,106	1,121	1,156	1,188	1,154	1,132	1,087	997	914	871
Critical (15%)	624	623	638	645	661	656	602	554	526	476	431	408

Alternative 1

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,801	1,782	1,827	1,875	1,952	2,030	2,017	2,134	2,071	1,977	1,869	1,805
20%	1,657	1,655	1,665	1,690	1,847	1,928	1,884	1,963	1,884	1,830	1,719	1,663
30%	1,575	1,582	1,614	1,627	1,697	1,743	1,751	1,836	1,836	1,743	1,635	1,577
40%	1,366	1,372	1,472	1,556	1,621	1,675	1,649	1,601	1,619	1,510	1,415	1,362
50%	1,200	1,211	1,248	1,348	1,472	1,541	1,484	1,511	1,467	1,357	1,258	1,200
60%	1,089	1,093	1,124	1,209	1,259	1,341	1,373	1,379	1,317	1,224	1,134	1,089
70%	956	989	1,040	1,084	1,099	1,099	1,146	1,179	1,147	1,064	982	940
80%	711	712	730	753	825	932	914	945	903	837	758	712
90%	508	517	515	555	666	664	608	619	697	619	547	507
Long Term												
Full Simulation Period ^b	1,192	1,194	1,226	1,279	1,345	1,397	1,402	1,433	1,420	1,336	1,245	1,194
Water Year Types^c												
Wet (32%)	1,443	1,446	1,502	1,606	1,709	1,794	1,833	1,962	1,994	1,917	1,803	1,731
Above Normal (16%)	1,092	1,116	1,175	1,261	1,360	1,455	1,481	1,543	1,516	1,419	1,321	1,274
Below Normal (13%)	1,364	1,366	1,378	1,397	1,453	1,479	1,461	1,447	1,415	1,322	1,228	1,183
Dry (24%)	1,149	1,143	1,149	1,161	1,191	1,221	1,210	1,176	1,131	1,039	956	912
Critical (15%)	667	663	674	680	696	690	646	585	557	498	449	426

Alternative 1 minus No Action Alternative

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2%	1%	0%	0%	1%	3%	4%	4%	0%	0%	0%	0%
20%	3%	1%	1%	0%	4%	7%	3%	3%	0%	2%	2%	2%
30%	3%	3%	4%	2%	1%	1%	4%	5%	3%	2%	2%	1%
40%	7%	8%	3%	3%	2%	4%	4%	4%	5%	5%	6%	7%
50%	7%	7%	8%	3%	3%	0%	2%	5%	5%	6%	6%	4%
60%	6%	5%	4%	5%	5%	5%	7%	3%	3%	2%	3%	3%
70%	8%	9%	5%	7%	6%	4%	6%	8%	5%	7%	8%	8%
80%	10%	8%	7%	10%	12%	15%	9%	8%	4%	3%	3%	3%
90%	18%	19%	17%	14%	23%	17%	6%	6%	11%	9%	8%	7%
Long Term												
Full Simulation Period ^b	5%	5%	4%	3%	3%	4%	5%	4%	3%	3%	3%	3%
Water Year Types^c												
Wet (32%)	5%	4%	3%	3%	3%	4%	4%	4%	1%	1%	2%	2%
Above Normal (16%)	6%	5%	4%	4%	3%	3%	5%	4%	3%	3%	3%	3%
Below Normal (13%)	5%	5%	4%	3%	3%	3%	5%	5%	4%	4%	4%	4%
Dry (24%)	5%	5%	4%	4%	3%	3%	5%	4%	4%	4%	5%	5%
Critical (15%)	7%	6%	6%	6%	5%	5%	7%	6%	6%	5%	4%	4%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.1.2 New Melones Reservoir, End of Month Storage

Second Basis of Comparison

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,801	1,782	1,827	1,875	1,952	2,030	2,017	2,134	2,071	1,977	1,869	1,805
20%	1,657	1,655	1,665	1,690	1,847	1,928	1,884	1,963	1,884	1,830	1,719	1,663
30%	1,575	1,582	1,614	1,627	1,697	1,743	1,751	1,836	1,836	1,743	1,635	1,577
40%	1,366	1,372	1,472	1,556	1,621	1,675	1,649	1,601	1,619	1,510	1,415	1,362
50%	1,200	1,211	1,248	1,348	1,472	1,541	1,484	1,511	1,467	1,357	1,258	1,200
60%	1,089	1,093	1,124	1,209	1,259	1,341	1,373	1,379	1,317	1,224	1,134	1,089
70%	956	989	1,040	1,084	1,099	1,099	1,146	1,179	1,147	1,064	982	940
80%	711	712	730	753	825	932	914	945	903	837	758	712
90%	508	517	515	555	666	664	608	619	697	619	547	507
Long Term												
Full Simulation Period ^b	1,192	1,194	1,226	1,279	1,345	1,397	1,402	1,433	1,420	1,336	1,245	1,194
Water Year Types^c												
Wet (32%)	1,443	1,446	1,502	1,606	1,709	1,794	1,833	1,962	1,994	1,917	1,803	1,731
Above Normal (16%)	1,092	1,116	1,175	1,261	1,360	1,455	1,481	1,543	1,516	1,419	1,321	1,274
Below Normal (13%)	1,364	1,366	1,378	1,397	1,453	1,479	1,461	1,447	1,415	1,322	1,228	1,183
Dry (24%)	1,149	1,143	1,149	1,161	1,191	1,221	1,210	1,176	1,131	1,039	956	912
Critical (15%)	667	663	674	680	696	690	646	585	557	498	449	426

No Action Alternative

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,765	1,759	1,823	1,880	1,931	1,980	1,945	2,052	2,075	1,978	1,869	1,805
20%	1,612	1,631	1,647	1,687	1,768	1,799	1,834	1,901	1,876	1,798	1,691	1,633
30%	1,533	1,534	1,556	1,598	1,686	1,729	1,686	1,745	1,786	1,707	1,605	1,556
40%	1,271	1,274	1,432	1,514	1,594	1,618	1,592	1,533	1,539	1,433	1,333	1,273
50%	1,121	1,127	1,154	1,307	1,436	1,535	1,461	1,444	1,392	1,283	1,190	1,156
60%	1,024	1,043	1,080	1,146	1,199	1,273	1,278	1,335	1,277	1,199	1,102	1,054
70%	882	911	986	1,015	1,038	1,057	1,080	1,090	1,087	994	910	868
80%	646	658	684	684	735	808	835	878	872	808	733	693
90%	430	435	440	488	541	569	574	586	630	566	507	473
Long Term												
Full Simulation Period ^b	1,132	1,142	1,180	1,237	1,305	1,348	1,337	1,373	1,381	1,300	1,208	1,159
Water Year Types^c												
Wet (32%)	1,379	1,390	1,454	1,562	1,666	1,724	1,758	1,878	1,968	1,890	1,773	1,703
Above Normal (16%)	1,029	1,060	1,125	1,214	1,317	1,406	1,413	1,484	1,467	1,372	1,277	1,232
Below Normal (13%)	1,294	1,305	1,326	1,351	1,413	1,438	1,390	1,383	1,359	1,268	1,175	1,133
Dry (24%)	1,094	1,094	1,106	1,121	1,156	1,188	1,154	1,132	1,087	997	914	871
Critical (15%)	624	623	638	645	661	656	602	554	526	476	431	408

No Action Alternative minus Second Basis of Comparison

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-2%	-1%	0%	0%	-1%	-2%	-4%	-4%	0%	0%	0%	0%
20%	-3%	-1%	-1%	0%	-4%	-7%	-3%	-3%	0%	-2%	-2%	-2%
30%	-3%	-3%	-4%	-2%	-1%	-1%	-4%	-5%	-3%	-2%	-2%	-1%
40%	-7%	-7%	-3%	-3%	-2%	-3%	-3%	-4%	-5%	-5%	-6%	-7%
50%	-7%	-7%	-8%	-3%	-2%	0%	-2%	-4%	-5%	-5%	-5%	-4%
60%	-6%	-5%	-4%	-5%	-5%	-5%	-7%	-3%	-3%	-2%	-3%	-3%
70%	-8%	-8%	-5%	-6%	-6%	-4%	-6%	-8%	-5%	-7%	-7%	-8%
80%	-9%	-8%	-6%	-9%	-11%	-13%	-9%	-7%	-3%	-3%	-3%	-3%
90%	-15%	-16%	-15%	-12%	-19%	-14%	-6%	-5%	-10%	-9%	-7%	-7%
Long Term												
Full Simulation Period ^b	-5%	-4%	-4%	-3%	-3%	-3%	-5%	-4%	-3%	-3%	-3%	-3%
Water Year Types^c												
Wet (32%)	-4%	-4%	-3%	-3%	-3%	-4%	-4%	-4%	-1%	-1%	-2%	-2%
Above Normal (16%)	-6%	-5%	-4%	-4%	-3%	-3%	-5%	-4%	-3%	-3%	-3%	-3%
Below Normal (13%)	-5%	-4%	-4%	-3%	-3%	-3%	-5%	-4%	-4%	-4%	-4%	-4%
Dry (24%)	-5%	-4%	-4%	-3%	-3%	-3%	-5%	-4%	-4%	-4%	-4%	-5%
Critical (15%)	-7%	-6%	-5%	-5%	-5%	-5%	-7%	-5%	-6%	-5%	-4%	-4%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.1.3 New Melones Reservoir, End of Month Storage

Second Basis of Comparison

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,801	1,782	1,827	1,875	1,952	2,030	2,017	2,134	2,071	1,977	1,869	1,805
20%	1,657	1,655	1,665	1,690	1,847	1,928	1,884	1,963	1,884	1,830	1,719	1,663
30%	1,575	1,582	1,614	1,627	1,697	1,743	1,751	1,836	1,836	1,743	1,635	1,577
40%	1,366	1,372	1,472	1,556	1,621	1,675	1,649	1,601	1,619	1,510	1,415	1,362
50%	1,200	1,211	1,248	1,348	1,472	1,541	1,484	1,511	1,467	1,357	1,258	1,200
60%	1,089	1,093	1,124	1,209	1,259	1,341	1,373	1,379	1,317	1,224	1,134	1,089
70%	956	989	1,040	1,084	1,099	1,099	1,146	1,179	1,147	1,064	982	940
80%	711	712	730	753	825	932	914	945	903	837	758	712
90%	508	517	515	555	666	664	608	619	697	619	547	507
Long Term												
Full Simulation Period ^b	1,192	1,194	1,226	1,279	1,345	1,397	1,402	1,433	1,420	1,336	1,245	1,194
Water Year Types^c												
Wet (32%)	1,443	1,446	1,502	1,606	1,709	1,794	1,833	1,962	1,994	1,917	1,803	1,731
Above Normal (16%)	1,092	1,116	1,175	1,261	1,360	1,455	1,481	1,543	1,516	1,419	1,321	1,274
Below Normal (13%)	1,364	1,366	1,378	1,397	1,453	1,479	1,461	1,447	1,415	1,322	1,228	1,183
Dry (24%)	1,149	1,143	1,149	1,161	1,191	1,221	1,210	1,176	1,131	1,039	956	912
Critical (15%)	667	663	674	680	696	690	646	585	557	498	449	426

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%	1,967	1,954	1,970	1,970	1,970	2,030	2,062	2,198	2,284	2,209	2,103	2,000
20%	1,901	1,905	1,913	1,911	1,970	2,026	1,988	2,021	2,154	2,055	1,955	1,902
30%	1,729	1,727	1,790	1,857	1,925	1,975	1,910	1,972	1,983	1,877	1,785	1,736
40%	1,582	1,596	1,668	1,775	1,851	1,884	1,838	1,826	1,796	1,697	1,601	1,546
50%	1,427	1,416	1,439	1,556	1,660	1,719	1,674	1,721	1,675	1,561	1,460	1,409
60%	1,308	1,316	1,318	1,366	1,426	1,494	1,488	1,529	1,525	1,432	1,335	1,289
70%	1,049	1,073	1,187	1,210	1,289	1,269	1,265	1,343	1,276	1,180	1,092	1,043
80%	875	862	919	957	1,020	1,099	1,056	1,121	1,071	1,001	938	907
90%	635	646	646	681	779	803	734	731	835	756	682	639
Long Term												
Full Simulation Period ^b	1,347	1,351	1,382	1,436	1,491	1,541	1,534	1,580	1,595	1,506	1,408	1,353
Water Year Types^c												
Wet (32%)	1,562	1,567	1,618	1,720	1,792	1,871	1,906	2,049	2,146	2,057	1,934	1,855
Above Normal (16%)	1,269	1,295	1,356	1,442	1,530	1,620	1,634	1,713	1,720	1,627	1,529	1,481
Below Normal (13%)	1,530	1,536	1,550	1,570	1,620	1,650	1,614	1,617	1,599	1,501	1,403	1,357
Dry (24%)	1,327	1,320	1,326	1,342	1,378	1,409	1,380	1,360	1,319	1,224	1,137	1,091
Critical (15%)	828	824	836	846	866	860	803	751	719	653	593	563

Alternative 3 minus Second Basis of Comparison

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	9%	10%	8%	5%	1%	0%	2%	3%	10%	12%	13%	11%
20%	15%	15%	15%	13%	7%	5%	6%	3%	14%	12%	14%	14%
30%	10%	9%	11%	14%	13%	13%	9%	7%	8%	8%	9%	10%
40%	16%	16%	13%	14%	14%	12%	11%	14%	11%	12%	13%	14%
50%	19%	17%	15%	15%	13%	12%	13%	14%	14%	15%	16%	17%
60%	20%	20%	17%	13%	13%	11%	8%	11%	16%	17%	18%	18%
70%	10%	9%	14%	12%	17%	15%	10%	14%	11%	11%	11%	11%
80%	23%	21%	26%	27%	24%	18%	16%	19%	19%	20%	24%	27%
90%	25%	25%	25%	23%	17%	21%	21%	18%	20%	22%	25%	26%
Long Term												
Full Simulation Period ^b	13%	13%	13%	12%	11%	10%	9%	10%	12%	13%	13%	13%
Water Year Types^c												
Wet (32%)	8%	8%	8%	7%	5%	4%	4%	4%	8%	7%	7%	7%
Above Normal (16%)	16%	16%	15%	14%	13%	11%	10%	11%	13%	15%	16%	16%
Below Normal (13%)	12%	12%	12%	12%	11%	12%	10%	12%	13%	14%	14%	15%
Dry (24%)	15%	15%	15%	16%	16%	15%	14%	16%	17%	18%	19%	20%
Critical (15%)	24%	24%	24%	24%	24%	25%	24%	28%	29%	31%	32%	32%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.1.4 New Melones Reservoir, End of Month Storage

Second Basis of Comparison

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,801	1,782	1,827	1,875	1,952	2,030	2,017	2,134	2,071	1,977	1,869	1,805
20%	1,657	1,655	1,665	1,690	1,847	1,928	1,884	1,963	1,884	1,830	1,719	1,663
30%	1,575	1,582	1,614	1,627	1,697	1,743	1,751	1,836	1,836	1,743	1,635	1,577
40%	1,366	1,372	1,472	1,556	1,621	1,675	1,649	1,601	1,619	1,510	1,415	1,362
50%	1,200	1,211	1,248	1,348	1,472	1,541	1,484	1,511	1,467	1,357	1,258	1,200
60%	1,089	1,093	1,124	1,209	1,259	1,341	1,373	1,379	1,317	1,224	1,134	1,089
70%	956	989	1,040	1,084	1,099	1,099	1,146	1,179	1,147	1,064	982	940
80%	711	712	730	753	825	932	914	945	903	837	758	712
90%	508	517	515	555	666	664	608	619	697	619	547	507
Long Term												
Full Simulation Period ^b	1,192	1,194	1,226	1,279	1,345	1,397	1,402	1,433	1,420	1,336	1,245	1,194
Water Year Types^c												
Wet (32%)	1,443	1,446	1,502	1,606	1,709	1,794	1,833	1,962	1,994	1,917	1,803	1,731
Above Normal (16%)	1,092	1,116	1,175	1,261	1,360	1,455	1,481	1,543	1,516	1,419	1,321	1,274
Below Normal (13%)	1,364	1,366	1,378	1,397	1,453	1,479	1,461	1,447	1,415	1,322	1,228	1,183
Dry (24%)	1,149	1,143	1,149	1,161	1,191	1,221	1,210	1,176	1,131	1,039	956	912
Critical (15%)	667	663	674	680	696	690	646	585	557	498	449	426

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%	1,765	1,759	1,831	1,881	1,949	1,969	1,908	2,012	2,117	2,013	1,900	1,826
20%	1,588	1,587	1,601	1,626	1,782	1,794	1,752	1,844	1,816	1,740	1,631	1,571
30%	1,468	1,459	1,490	1,544	1,630	1,672	1,679	1,693	1,721	1,633	1,531	1,489
40%	1,249	1,252	1,347	1,437	1,522	1,573	1,512	1,494	1,505	1,405	1,297	1,242
50%	1,040	1,058	1,142	1,227	1,437	1,455	1,393	1,357	1,289	1,190	1,100	1,074
60%	976	997	1,023	1,072	1,134	1,161	1,159	1,246	1,218	1,130	1,032	983
70%	766	802	855	907	938	973	1,006	978	991	900	821	783
80%	554	553	620	621	623	697	651	721	761	686	617	587
90%	285	298	299	377	429	449	386	452	492	423	349	308
Long Term												
Full Simulation Period ^b	1,063	1,073	1,112	1,169	1,239	1,284	1,265	1,287	1,299	1,221	1,134	1,086
Water Year Types^c												
Wet (32%)	1,309	1,321	1,388	1,496	1,602	1,668	1,704	1,812	1,906	1,833	1,722	1,653
Above Normal (16%)	983	1,014	1,079	1,168	1,271	1,361	1,363	1,413	1,396	1,302	1,207	1,162
Below Normal (13%)	1,210	1,220	1,242	1,267	1,329	1,354	1,298	1,276	1,254	1,163	1,071	1,028
Dry (24%)	1,018	1,018	1,030	1,045	1,081	1,114	1,066	1,031	990	903	823	781
Critical (15%)	558	559	570	578	597	591	506	449	433	391	355	336

Alternative 5 minus Second Basis of Comparison

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-2%	-1%	0%	0%	0%	-3%	-5%	-6%	2%	2%	2%	1%
20%	-4%	-4%	-4%	-4%	-4%	-7%	-7%	-6%	-4%	-5%	-5%	-6%
30%	-7%	-8%	-8%	-5%	-4%	-4%	-4%	-8%	-6%	-6%	-6%	-6%
40%	-9%	-9%	-9%	-8%	-6%	-6%	-8%	-7%	-7%	-8%	-8%	-9%
50%	-13%	-13%	-8%	-9%	-2%	-6%	-6%	-10%	-12%	-12%	-13%	-11%
60%	-10%	-9%	-9%	-11%	-10%	-13%	-16%	-10%	-8%	-8%	-9%	-10%
70%	-20%	-19%	-18%	-16%	-15%	-11%	-12%	-17%	-14%	-15%	-16%	-17%
80%	-22%	-22%	-15%	-17%	-25%	-25%	-29%	-24%	-16%	-18%	-19%	-18%
90%	-44%	-42%	-42%	-32%	-36%	-32%	-36%	-27%	-29%	-32%	-36%	-39%
Long Term												
Full Simulation Period ^b	-11%	-10%	-9%	-9%	-8%	-8%	-10%	-10%	-9%	-9%	-9%	-9%
Water Year Types^c												
Wet (32%)	-9%	-9%	-8%	-7%	-6%	-7%	-7%	-8%	-4%	-4%	-4%	-4%
Above Normal (16%)	-10%	-9%	-8%	-7%	-7%	-6%	-8%	-8%	-8%	-8%	-9%	-9%
Below Normal (13%)	-11%	-11%	-10%	-9%	-9%	-8%	-11%	-12%	-11%	-12%	-13%	-13%
Dry (24%)	-11%	-11%	-10%	-10%	-9%	-9%	-12%	-12%	-12%	-13%	-14%	-14%
Critical (15%)	-16%	-16%	-15%	-15%	-14%	-14%	-22%	-23%	-22%	-21%	-21%	-21%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.2 New Melones Elevation

Table 5C.3.3.2.1 New Melones Reservoir, End of Month Elevation

No Action Alternative

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,029	1,028	1,035	1,040	1,046	1,050	1,047	1,057	1,059	1,050	1,039	1,033
20%	1,013	1,015	1,017	1,021	1,029	1,032	1,036	1,043	1,040	1,032	1,021	1,016
30%	1,006	1,006	1,008	1,012	1,021	1,025	1,021	1,027	1,031	1,023	1,013	1,008
40%	975	976	995	1,004	1,012	1,014	1,011	1,006	1,006	995	983	976
50%	956	957	960	980	996	1,006	998	997	991	977	965	961
60%	943	946	950	959	966	976	976	984	976	966	953	947
70%	925	928	938	942	945	947	950	952	951	939	928	929
80%	879	881	887	887	897	912	918	924	923	912	897	888
90%	835	836	837	847	857	863	864	867	876	863	850	843
Long Term												
Full Simulation Period ^b	944	945	951	958	968	974	973	976	976	965	954	948
Water Year Types^c												
Wet (32%)	980	982	990	1,004	1,016	1,023	1,026	1,039	1,047	1,040	1,029	1,022
Above Normal (16%)	932	937	945	960	974	986	988	997	996	985	973	897
Below Normal (13%)	968	969	972	975	985	988	985	985	983	972	960	955
Dry (24%)	943	943	944	947	951	957	955	953	948	934	922	915
Critical (15%)	856	856	862	864	870	871	860	848	840	828	818	812

Alternative 1

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,032	1,031	1,035	1,040	1,048	1,055	1,054	1,064	1,058	1,050	1,039	1,033
20%	1,018	1,018	1,019	1,021	1,037	1,045	1,041	1,049	1,041	1,035	1,024	1,019
30%	1,010	1,010	1,014	1,015	1,022	1,027	1,027	1,036	1,036	1,027	1,016	1,010
40%	988	988	999	1,008	1,014	1,020	1,017	1,012	1,014	1,003	994	988
50%	966	968	972	985	999	1,006	1,001	1,003	999	986	974	968
60%	952	952	956	967	974	984	989	989	981	969	957	952
70%	934	939	945	951	953	953	959	963	959	948	938	933
80%	892	892	896	901	915	931	929	933	927	918	902	891
90%	851	852	852	860	883	883	871	873	889	873	859	849
Long Term												
Full Simulation Period ^b	952	953	957	965	974	981	981	984	982	971	959	953
Water Year Types^c												
Wet (32%)	989	990	997	1,009	1,021	1,030	1,034	1,047	1,050	1,043	1,032	1,025
Above Normal (16%)	941	944	951	966	979	992	995	1,003	1,001	990	978	901
Below Normal (13%)	977	977	979	982	991	994	994	993	991	980	968	962
Dry (24%)	951	950	950	953	957	962	963	960	954	941	929	922
Critical (15%)	866	866	870	872	878	879	871	856	850	835	823	817

Alternative 1 minus No Action Alternative

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%	1%	1%	0%	0%	0%	0%
20%	0%	0%	0%	0%	1%	1%	0%	1%	0%	0%	0%	0%
30%	0%	0%	1%	0%	0%	0%	1%	1%	0%	0%	0%	0%
40%	1%	1%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%
50%	1%	1%	1%	1%	0%	0%	0%	1%	1%	1%	1%	1%
60%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%
70%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%
80%	2%	1%	1%	2%	2%	2%	1%	1%	0%	1%	1%	0%
90%	2%	2%	2%	2%	3%	2%	1%	1%	2%	1%	1%	1%
Long Term												
Full Simulation Period ^b	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Water Year Types^c												
Wet (32%)	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%
Above Normal (16%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Below Normal (13%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Dry (24%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Critical (15%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.2.2 New Melones Reservoir, End of Month Elevation

Second Basis of Comparison

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,032	1,031	1,035	1,040	1,048	1,055	1,054	1,064	1,058	1,050	1,039	1,033
20%	1,018	1,018	1,019	1,021	1,037	1,045	1,041	1,049	1,041	1,035	1,024	1,019
30%	1,010	1,010	1,014	1,015	1,022	1,027	1,027	1,036	1,036	1,027	1,016	1,010
40%	988	988	999	1,008	1,014	1,020	1,017	1,012	1,014	1,003	994	988
50%	966	968	972	985	999	1,006	1,001	1,003	999	986	974	968
60%	952	952	956	967	974	984	989	989	981	969	957	952
70%	934	939	945	951	953	953	959	963	959	948	938	933
80%	892	892	896	901	915	931	929	933	927	918	902	891
90%	851	852	852	860	883	883	871	873	889	873	859	849
Long Term												
Full Simulation Period ^b	952	953	957	965	974	981	981	984	982	971	959	953
Water Year Types^c												
Wet (32%)	989	990	997	1,009	1,021	1,030	1,034	1,047	1,050	1,043	1,032	1,025
Above Normal (16%)	941	944	951	966	979	992	995	1,003	1,001	990	978	901
Below Normal (13%)	977	977	979	982	991	994	994	993	991	980	968	962
Dry (24%)	951	950	950	953	957	962	963	960	954	941	929	922
Critical (15%)	866	866	870	872	878	879	871	856	850	835	823	817

No Action Alternative

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,029	1,028	1,035	1,040	1,046	1,050	1,047	1,057	1,059	1,050	1,039	1,033
20%	1,013	1,015	1,017	1,021	1,029	1,032	1,036	1,043	1,040	1,032	1,021	1,016
30%	1,006	1,006	1,008	1,012	1,021	1,025	1,021	1,027	1,031	1,023	1,013	1,008
40%	975	976	995	1,004	1,012	1,014	1,011	1,006	1,006	995	983	976
50%	956	957	960	980	996	1,006	998	997	991	977	965	961
60%	943	946	950	959	966	976	976	984	976	966	953	947
70%	925	928	938	942	945	947	950	952	951	939	928	929
80%	879	881	887	887	897	912	918	924	923	912	897	888
90%	835	836	837	847	857	863	864	867	876	863	850	843
Long Term												
Full Simulation Period ^b	944	945	951	958	968	974	973	976	976	965	954	948
Water Year Types^c												
Wet (32%)	980	982	990	1,004	1,016	1,023	1,026	1,039	1,047	1,040	1,029	1,022
Above Normal (16%)	932	937	945	960	974	986	988	997	996	985	973	897
Below Normal (13%)	968	969	972	975	985	988	985	985	983	972	960	955
Dry (24%)	943	943	944	947	951	957	955	953	948	934	922	915
Critical (15%)	856	856	862	864	870	871	860	848	840	828	818	812

No Action Alternative minus Second Basis of Comparison

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%	-1%	-1%	0%	0%	0%	0%
20%	0%	0%	0%	0%	-1%	-1%	0%	-1%	0%	0%	0%	0%
30%	0%	0%	-1%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%
40%	-1%	-1%	0%	0%	0%	-1%	-1%	-1%	-1%	-1%	-1%	-1%
50%	-1%	-1%	-1%	-1%	0%	0%	0%	-1%	-1%	-1%	-1%	-1%
60%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	0%	0%	0%
70%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	0%
80%	-2%	-1%	-1%	-2%	-2%	-2%	-1%	-1%	0%	-1%	-1%	0%
90%	-2%	-2%	-2%	-2%	-3%	-2%	-1%	-1%	-2%	-1%	-1%	-1%
Long Term												
Full Simulation Period ^b	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%
Water Year Types^c												
Wet (32%)	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	0%	0%	0%	0%
Above Normal (16%)	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%
Below Normal (13%)	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%
Dry (24%)	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%
Critical (15%)	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.2.3 New Melones Reservoir, End of Month Elevation

Second Basis of Comparison

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,032	1,031	1,035	1,040	1,048	1,055	1,054	1,064	1,058	1,050	1,039	1,033
20%	1,018	1,018	1,019	1,021	1,037	1,045	1,041	1,049	1,041	1,035	1,024	1,019
30%	1,010	1,010	1,014	1,015	1,022	1,027	1,027	1,036	1,036	1,027	1,016	1,010
40%	988	988	999	1,008	1,014	1,020	1,017	1,012	1,014	1,003	994	988
50%	966	968	972	985	999	1,006	1,001	1,003	999	986	974	968
60%	952	952	956	967	974	984	989	989	981	969	957	952
70%	934	939	945	951	953	953	959	963	959	948	938	933
80%	892	892	896	901	915	931	929	933	927	918	902	891
90%	851	852	852	860	883	883	871	873	889	873	859	849
Long Term												
Full Simulation Period ^b	952	953	957	965	974	981	981	984	982	971	959	953
Water Year Types^c												
Wet (32%)	989	990	997	1,009	1,021	1,030	1,034	1,047	1,050	1,043	1,032	1,025
Above Normal (16%)	941	944	951	966	979	992	995	1,003	1,001	990	978	901
Below Normal (13%)	977	977	979	982	991	994	994	993	991	980	968	962
Dry (24%)	951	950	950	953	957	962	963	960	954	941	929	922
Critical (15%)	866	866	870	872	878	879	871	856	850	835	823	817

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%	1,049	1,048	1,050	1,050	1,050	1,055	1,057	1,069	1,076	1,070	1,061	1,052
20%	1,043	1,043	1,044	1,044	1,050	1,054	1,051	1,054	1,065	1,057	1,048	1,043
30%	1,025	1,025	1,031	1,038	1,045	1,050	1,044	1,050	1,051	1,040	1,031	1,027
40%	1,011	1,012	1,019	1,030	1,038	1,041	1,036	1,035	1,032	1,022	1,012	1,007
50%	995	994	996	1,008	1,018	1,024	1,020	1,024	1,020	1,008	998	994
60%	980	981	982	988	995	1,002	1,001	1,005	1,005	995	984	979
70%	946	950	964	967	978	975	974	985	976	963	952	945
80%	924	922	930	934	943	953	947	956	949	940	932	926
90%	877	879	879	886	906	911	897	896	918	901	886	876
Long Term												
Full Simulation Period ^b	974	974	978	985	993	999	998	1,002	1,003	992	981	975
Water Year Types^c												
Wet (32%)	1,003	1,004	1,010	1,022	1,030	1,038	1,042	1,055	1,064	1,056	1,045	1,037
Above Normal (16%)	964	967	974	987	999	1,009	1,012	1,021	1,022	1,013	1,002	924
Below Normal (13%)	998	998	1,000	1,002	1,011	1,014	1,011	1,012	1,010	1,000	989	983
Dry (24%)	974	973	974	977	981	985	983	982	978	966	954	948
Critical (15%)	899	899	902	904	909	909	899	889	883	870	858	852

Alternative 3 minus Second Basis of Comparison

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

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.2.4 New Melones Reservoir, End of Month Elevation

Second Basis of Comparison

Statistic	End of Month Elevation (Feet)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,032	1,031	1,035	1,040	1,048	1,055	1,054	1,064	1,058	1,050	1,039	1,033
20%	1,018	1,018	1,019	1,021	1,037	1,045	1,041	1,049	1,041	1,035	1,024	1,019
30%	1,010	1,010	1,014	1,015	1,022	1,027	1,027	1,036	1,036	1,027	1,016	1,010
40%	988	988	999	1,008	1,014	1,020	1,017	1,012	1,014	1,003	994	988
50%	966	968	972	985	999	1,006	1,001	1,003	999	986	974	968
60%	952	952	956	967	974	984	989	989	981	969	957	952
70%	934	939	945	951	953	953	959	963	959	948	938	933
80%	892	892	896	901	915	931	929	933	927	918	902	891
90%	851	852	852	860	883	883	871	873	889	873	859	849
Long Term												
Full Simulation Period ^b	952	953	957	965	974	981	981	984	982	971	959	953
Water Year Types^c												
Wet (32%)	989	990	997	1,009	1,021	1,030	1,034	1,047	1,050	1,043	1,032	1,025
Above Normal (16%)	941	944	951	966	979	992	995	1,003	1,001	990	978	901
Below Normal (13%)	977	977	979	982	991	994	994	993	991	980	968	962
Dry (24%)	951	950	950	953	957	962	963	960	954	941	929	922
Critical (15%)	866	866	870	872	878	879	871	856	850	835	823	817

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%	1,029	1,028	1,036	1,041	1,047	1,049	1,043	1,053	1,062	1,053	1,043	1,035
20%	1,011	1,011	1,012	1,015	1,031	1,032	1,028	1,037	1,034	1,026	1,015	1,009
30%	999	998	1,001	1,007	1,015	1,019	1,020	1,022	1,024	1,016	1,005	1,002
40%	973	973	985	996	1,004	1,010	1,003	1,002	1,003	992	979	973
50%	945	948	959	970	996	998	991	987	978	965	953	951
60%	937	940	943	949	957	961	961	972	968	957	944	938
70%	904	911	921	928	932	936	941	937	939	927	915	909
80%	860	860	874	874	874	889	880	894	902	887	873	867
90%	803	807	808	824	834	838	826	839	847	833	818	810
Long Term												
Full Simulation Period ^b	931	933	939	947	957	964	961	962	963	952	941	935
Water Year Types^c												
Wet (32%)	969	971	980	995	1,007	1,016	1,020	1,031	1,040	1,033	1,022	1,015
Above Normal (16%)	924	930	939	954	968	980	982	988	987	975	963	890
Below Normal (13%)	954	956	959	962	973	977	972	970	968	957	944	938
Dry (24%)	930	930	932	934	939	945	940	936	931	918	905	898
Critical (15%)	837	838	842	845	853	855	834	818	815	804	796	791

Alternative 5 minus Second Basis of Comparison

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%	-1%	-1%	0%	0%	0%	0%
20%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%
30%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%
40%	-2%	-2%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-2%
50%	-2%	-2%	-1%	-2%	0%	-1%	-1%	-2%	-2%	-2%	-2%	-2%
60%	-2%	-1%	-1%	-2%	-2%	-2%	-3%	-2%	-1%	-1%	-1%	-1%
70%	-3%	-3%	-3%	-2%	-2%	-2%	-2%	-3%	-2%	-2%	-2%	-3%
80%	-4%	-4%	-3%	-3%	-4%	-4%	-5%	-4%	-3%	-3%	-3%	-3%
90%	-6%	-5%	-5%	-4%	-6%	-5%	-5%	-4%	-5%	-5%	-5%	-5%
Long Term												
Full Simulation Period ^b	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%
Water Year Types^c												
Wet (32%)	-2%	-2%	-2%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%
Above Normal (16%)	-2%	-2%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-2%	-1%
Below Normal (13%)	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%
Dry (24%)	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-3%	-3%	-3%
Critical (15%)	-3%	-3%	-3%	-3%	-3%	-3%	-4%	-4%	-4%	-4%	-3%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.3 Stanislaus River below Goodwin Dam Flow

Table 5C.3.3.3.1 Stanislaus River below Goodwin, Monthly Flow

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	837	290	306	358	897	1,648	1,633	1,929	1,103	429	390	390
20%	797	200	218	232	409	1,521	1,553	1,555	1,090	310	300	300
30%	774	200	200	232	290	440	1,553	1,296	940	300	284	250
40%	774	200	200	226	236	200	1,400	1,242	855	300	283	250
50%	774	200	200	226	236	200	1,400	1,242	363	271	283	250
60%	636	200	200	219	229	200	812	918	363	265	283	249
70%	636	200	200	219	229	200	767	705	297	265	283	249
80%	578	200	200	214	221	200	767	631	261	265	283	249
90%	577	200	200	213	215	200	505	546	255	265	283	249
Long Term												
Full Simulation Period ^b	723	278	365	518	595	754	1,158	1,123	680	394	361	351
Water Year Types^c												
Wet (23%)	781	499	787	999	1,201	2,016	1,536	1,691	1,140	715	639	692
Above Normal (24%)	714	216	282	663	676	645	1,224	1,146	962	353	292	267
Below Normal (10%)	740	225	225	282	346	365	1,454	1,201	476	269	285	256
Dry (16%)	707	208	216	234	313	200	1,030	930	374	275	277	245
Critical (27%)	683	205	215	227	255	234	741	699	281	269	262	231

Alternative 1

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	350	499	508	508	907	709	1,500	1,500	2,887	360	300	300
20%	350	415	415	415	503	415	1,462	1,500	1,709	306	300	300
30%	331	386	415	408	415	415	1,337	1,434	1,571	300	296	268
40%	286	318	326	318	415	318	991	1,303	845	300	283	268
50%	286	318	318	318	318	318	664	1,303	450	284	283	268
60%	194	247	275	242	318	275	512	1,112	398	268	283	249
70%	194	247	247	242	260	242	461	920	289	268	283	249
80%	173	233	247	242	242	242	424	848	257	265	283	249
90%	164	230	230	200	239	200	378	760	255	265	283	249
Long Term												
Full Simulation Period ^b	291	388	466	584	642	607	884	1,181	1,028	390	347	363
Water Year Types^c												
Wet (23%)	360	612	886	1,060	1,196	1,462	1,488	1,497	2,316	678	580	731
Above Normal (24%)	301	332	376	726	742	523	940	1,225	1,200	354	288	271
Below Normal (10%)	288	373	373	383	418	316	955	1,266	613	272	285	270
Dry (16%)	278	323	331	318	392	262	581	1,094	399	276	283	255
Critical (27%)	230	287	298	275	303	256	464	890	280	283	259	228

Alternative 1 minus No Action Alternative

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-58%	72%	66%	42%	1%	-57%	-8%	-22%	162%	-16%	-23%	-23%
20%	-56%	107%	90%	79%	23%	-73%	-6%	-4%	57%	-1%	0%	0%
30%	-57%	93%	107%	76%	43%	-6%	-14%	11%	67%	0%	4%	7%
40%	-63%	59%	63%	41%	76%	59%	-29%	5%	-1%	0%	0%	7%
50%	-63%	59%	59%	41%	35%	59%	-53%	5%	24%	5%	0%	7%
60%	-69%	23%	38%	10%	39%	38%	-37%	21%	10%	1%	0%	0%
70%	-69%	23%	23%	10%	14%	21%	-40%	30%	-3%	1%	0%	0%
80%	-70%	17%	23%	13%	9%	21%	-45%	35%	-2%	0%	0%	0%
90%	-72%	15%	15%	-6%	11%	0%	-25%	39%	0%	0%	0%	0%
Long Term												
Full Simulation Period ^b	-60%	39%	28%	13%	8%	-19%	-24%	5%	51%	-1%	-4%	3%
Water Year Types^c												
Wet (23%)	-54%	23%	13%	6%	0%	-27%	-3%	-12%	103%	-5%	-9%	6%
Above Normal (24%)	-58%	54%	33%	10%	10%	-19%	-23%	7%	25%	0%	-1%	1%
Below Normal (10%)	-61%	66%	66%	36%	21%	-14%	-34%	5%	29%	1%	0%	5%
Dry (16%)	-61%	55%	53%	36%	25%	31%	-44%	18%	7%	0%	2%	4%
Critical (27%)	-66%	40%	39%	22%	19%	10%	-37%	27%	0%	5%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.3.2 Stanislaus River below Goodwin, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	350	499	508	508	907	709	1,500	1,500	2,887	360	300	300
20%	350	415	415	415	503	415	1,462	1,500	1,709	306	300	300
30%	331	386	415	408	415	415	1,337	1,434	1,571	300	296	268
40%	286	318	326	318	415	318	991	1,303	845	300	283	268
50%	286	318	318	318	318	318	664	1,303	450	284	283	268
60%	194	247	275	242	318	275	512	1,112	398	268	283	249
70%	194	247	247	242	260	242	461	920	289	268	283	249
80%	173	233	247	242	242	242	424	848	257	265	283	249
90%	164	230	230	200	239	200	378	760	255	265	283	249
Long Term												
Full Simulation Period ^b	291	388	466	584	642	607	884	1,181	1,028	390	347	363
Water Year Types^c												
Wet (23%)	360	612	886	1,060	1,196	1,462	1,488	1,497	2,316	678	580	731
Above Normal (24%)	301	332	376	726	742	523	940	1,225	1,200	354	288	271
Below Normal (10%)	288	373	373	383	418	316	955	1,266	613	272	285	270
Dry (16%)	278	323	331	318	392	262	581	1,094	399	276	283	255
Critical (27%)	230	287	298	275	303	256	464	890	280	283	259	228

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	837	290	306	358	897	1,648	1,633	1,929	1,103	429	390	390
20%	797	200	218	232	409	1,521	1,553	1,555	1,090	310	300	300
30%	774	200	200	232	290	440	1,553	1,296	940	300	284	250
40%	774	200	200	226	236	200	1,400	1,242	855	300	283	250
50%	774	200	200	226	236	200	1,400	1,242	363	271	283	250
60%	636	200	200	219	229	200	812	918	363	265	283	249
70%	636	200	200	219	229	200	767	705	297	265	283	249
80%	578	200	200	214	221	200	767	631	261	265	283	249
90%	577	200	200	213	215	200	505	546	255	265	283	249
Long Term												
Full Simulation Period ^b	723	278	365	518	595	754	1,158	1,123	680	394	361	351
Water Year Types^c												
Wet (23%)	781	499	787	999	1,201	2,016	1,536	1,691	1,140	715	639	692
Above Normal (24%)	714	216	282	663	676	645	1,224	1,146	962	353	292	267
Below Normal (10%)	740	225	225	282	346	365	1,454	1,201	476	269	285	256
Dry (16%)	707	208	216	234	313	200	1,030	930	374	275	277	245
Critical (27%)	683	205	215	227	255	234	741	699	281	269	262	231

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	139%	-42%	-40%	-30%	-1%	132%	9%	29%	-62%	19%	30%	30%
20%	128%	-52%	-47%	-44%	-19%	267%	6%	4%	-36%	1%	0%	0%
30%	134%	-48%	-52%	-43%	-30%	6%	16%	-10%	-40%	0%	-4%	-7%
40%	170%	-37%	-39%	-29%	-43%	-37%	41%	-5%	1%	0%	0%	-7%
50%	170%	-37%	-37%	-29%	-26%	-37%	111%	-5%	-19%	-5%	0%	-7%
60%	227%	-19%	-27%	-9%	-28%	-27%	59%	-17%	-9%	-1%	0%	0%
70%	227%	-19%	-19%	-9%	-12%	-17%	66%	-23%	3%	-1%	0%	0%
80%	234%	-14%	-19%	-12%	-9%	-17%	81%	-26%	2%	0%	0%	0%
90%	252%	-13%	-13%	6%	-10%	0%	34%	-28%	0%	0%	0%	0%
Long Term												
Full Simulation Period ^b	149%	-28%	-22%	-11%	-7%	24%	31%	-5%	-34%	1%	4%	-3%
Water Year Types^c												
Wet (23%)	117%	-19%	-11%	-6%	0%	38%	3%	13%	-51%	5%	10%	-5%
Above Normal (24%)	137%	-35%	-25%	-9%	-9%	23%	30%	-6%	-20%	0%	1%	-1%
Below Normal (10%)	157%	-40%	-40%	-26%	-17%	16%	52%	-5%	-22%	-1%	0%	-5%
Dry (16%)	154%	-36%	-35%	-26%	-20%	-24%	77%	-15%	-6%	0%	-2%	-4%
Critical (27%)	197%	-29%	-28%	-18%	-16%	-9%	60%	-22%	0%	-5%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.3.3 Stanislaus River below Goodwin, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	350	499	508	508	907	709	1,500	1,500	2,887	360	300	300
20%	350	415	415	415	503	415	1,462	1,500	1,709	306	300	300
30%	331	386	415	408	415	415	1,337	1,434	1,571	300	296	268
40%	286	318	326	318	415	318	991	1,303	845	300	283	268
50%	286	318	318	318	318	318	664	1,303	450	284	283	268
60%	194	247	275	242	318	275	512	1,112	398	268	283	249
70%	194	247	247	242	260	242	461	920	289	268	283	249
80%	173	233	247	242	242	242	424	848	257	265	283	249
90%	164	230	230	200	239	200	378	760	255	265	283	249
Long Term												
Full Simulation Period ^b	291	388	466	584	642	607	884	1,181	1,028	390	347	363
Water Year Types^c												
Wet (23%)	360	612	886	1,060	1,196	1,462	1,488	1,497	2,316	678	580	731
Above Normal (24%)	301	332	376	726	742	523	940	1,225	1,200	354	288	271
Below Normal (10%)	288	373	373	383	418	316	955	1,266	613	272	285	270
Dry (16%)	278	323	331	318	392	262	581	1,094	399	276	283	255
Critical (27%)	230	287	298	275	303	256	464	890	280	283	259	228

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	300	300	609	1,135	2,548	1,189	1,500	1,165	255	265	283	952
20%	300	300	305	300	1,157	344	1,500	1,165	255	265	283	249
30%	300	300	300	300	333	300	1,500	1,165	255	265	283	249
40%	252	300	300	300	300	300	1,034	963	255	265	283	249
50%	252	300	300	150	176	200	893	829	255	265	283	249
60%	252	300	300	150	173	200	893	829	255	265	283	249
70%	252	300	300	150	173	200	893	829	255	265	283	249
80%	200	200	220	150	173	200	528	466	255	265	283	249
90%	200	200	200	150	173	200	493	466	255	265	283	249
Long Term												
Full Simulation Period ^b	302	349	475	557	814	622	1,060	911	490	421	391	397
Water Year Types^c												
Wet (23%)	368	589	1,001	1,066	2,016	1,599	1,538	1,300	1,279	952	768	885
Above Normal (24%)	323	287	394	705	732	552	1,155	955	255	265	283	260
Below Normal (10%)	269	275	275	483	552	272	1,128	909	255	265	283	249
Dry (16%)	285	285	293	251	371	200	815	730	255	265	283	249
Critical (27%)	246	264	274	191	208	218	680	643	245	254	268	240

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-14%	-40%	20%	123%	181%	68%	0%	-22%	-91%	-26%	-6%	217%
20%	-14%	-28%	-27%	-28%	130%	-17%	3%	-22%	-85%	-13%	-6%	-17%
30%	-9%	-22%	-28%	-27%	-20%	-28%	12%	-19%	-84%	-12%	-4%	-7%
40%	-12%	-6%	-8%	-6%	-28%	-6%	4%	-26%	-70%	-12%	0%	-7%
50%	-12%	-6%	-6%	-53%	-45%	-37%	35%	-36%	-43%	-7%	0%	-7%
60%	30%	22%	9%	-38%	-46%	-27%	74%	-25%	-36%	-1%	0%	0%
70%	30%	22%	22%	-38%	-33%	-17%	94%	-10%	-12%	-1%	0%	0%
80%	15%	-14%	-11%	-38%	-29%	-17%	25%	-45%	0%	0%	0%	0%
90%	22%	-13%	-13%	-25%	-28%	0%	31%	-39%	0%	0%	0%	0%
Long Term												
Full Simulation Period ^b	4%	-10%	2%	-5%	27%	2%	20%	-23%	-52%	8%	13%	9%
Water Year Types^c												
Wet (23%)	2%	-4%	13%	1%	69%	9%	3%	-13%	-45%	40%	33%	21%
Above Normal (24%)	7%	-13%	5%	-3%	-1%	5%	23%	-22%	-79%	-25%	-2%	-4%
Below Normal (10%)	-7%	-26%	-26%	26%	32%	-14%	18%	-28%	-58%	-2%	-1%	-8%
Dry (16%)	3%	-12%	-12%	-21%	-5%	-24%	40%	-33%	-36%	-4%	0%	-2%
Critical (27%)	7%	-8%	-8%	-31%	-31%	-15%	47%	-28%	-12%	-10%	3%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.4 Stanislaus River below Goodwin, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	350	499	508	508	907	709	1,500	1,500	2,887	360	300	300
20%	350	415	415	415	503	415	1,462	1,500	1,709	306	300	300
30%	331	386	415	408	415	415	1,337	1,434	1,571	300	296	268
40%	286	318	326	318	415	318	991	1,303	845	300	283	268
50%	286	318	318	318	318	318	664	1,303	450	284	283	268
60%	194	247	275	242	318	275	512	1,112	398	268	283	249
70%	194	247	247	242	260	242	461	920	289	268	283	249
80%	173	233	247	242	242	242	424	848	257	265	283	249
90%	164	230	230	200	239	200	378	760	255	265	283	249
Long Term												
Full Simulation Period ^b	291	388	466	584	642	607	884	1,181	1,028	390	347	363
Water Year Types^c												
Wet (23%)	360	612	886	1,060	1,196	1,462	1,488	1,497	2,316	678	580	731
Above Normal (24%)	301	332	376	726	742	523	940	1,225	1,200	354	288	271
Below Normal (10%)	288	373	373	383	418	316	955	1,266	613	272	285	270
Dry (16%)	278	323	331	318	392	262	581	1,094	399	276	283	255
Critical (27%)	230	287	298	275	303	256	464	890	280	283	259	228

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	797	200	306	358	885	1,636	1,717	1,958	1,103	423	300	300
20%	797	200	211	232	415	1,521	1,633	1,815	979	307	300	300
30%	774	200	200	232	274	343	1,553	1,595	940	300	283	250
40%	774	200	200	226	236	200	1,487	1,555	759	297	283	250
50%	636	200	200	226	236	200	1,400	1,341	363	265	283	249
60%	636	200	200	219	229	200	1,324	1,242	342	265	283	249
70%	636	200	200	219	222	200	1,134	1,068	270	265	283	249
80%	577	200	200	213	221	200	825	887	255	265	283	249
90%	577	200	200	213	214	200	767	798	255	265	283	249
Long Term												
Full Simulation Period ^b	711	276	345	520	580	712	1,317	1,375	660	369	332	341
Water Year Types^c												
Wet (23%)	766	499	690	998	1,169	1,831	1,502	1,730	1,093	619	523	655
Above Normal (24%)	705	211	298	676	659	645	1,170	1,553	962	353	292	267
Below Normal (10%)	733	225	225	281	345	365	1,416	1,267	462	269	285	256
Dry (16%)	690	208	216	233	312	200	1,454	1,370	366	275	277	245
Critical (27%)	674	200	210	221	242	234	1,175	948	257	260	253	224

Alternative 5 minus Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	128%	-60%	-40%	-30%	-2%	131%	14%	31%	-62%	18%	0%	0%
20%	128%	-52%	-49%	-44%	-17%	267%	12%	21%	-43%	0%	0%	0%
30%	134%	-48%	-52%	-43%	-34%	-17%	16%	11%	-40%	0%	-4%	-7%
40%	170%	-37%	-39%	-29%	-43%	-37%	50%	19%	-10%	-1%	0%	-7%
50%	122%	-37%	-37%	-29%	-26%	-37%	111%	3%	-19%	-7%	0%	-7%
60%	227%	-19%	-27%	-9%	-28%	-27%	159%	12%	-14%	-1%	0%	0%
70%	227%	-19%	-19%	-9%	-15%	-17%	146%	16%	-7%	-1%	0%	0%
80%	233%	-14%	-19%	-12%	-9%	-17%	95%	5%	0%	0%	0%	0%
90%	252%	-13%	-13%	6%	-11%	0%	103%	5%	0%	0%	0%	0%
Long Term												
Full Simulation Period ^b	145%	-29%	-26%	-11%	-10%	17%	49%	16%	-36%	-5%	-4%	-6%
Water Year Types^c												
Wet (23%)	113%	-19%	-22%	-6%	-2%	25%	1%	16%	-53%	-9%	-10%	-10%
Above Normal (24%)	134%	-36%	-21%	-7%	-11%	23%	24%	27%	-20%	0%	1%	-1%
Below Normal (10%)	155%	-40%	-40%	-27%	-17%	16%	48%	0%	-25%	-1%	0%	-5%
Dry (16%)	148%	-36%	-35%	-27%	-20%	-24%	150%	25%	-8%	0%	-2%	-4%
Critical (27%)	194%	-30%	-29%	-20%	-20%	-9%	153%	7%	-8%	-8%	-2%	-2%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.3.4 Stanislaus River at Mouth Flow

Table 5C.3.3.4.1 Stanislaus River at Mouth, Monthly Flow

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,122	463	442	576	1,084	1,969	1,886	1,989	1,536	751	587	646
20%	1,029	384	368	427	643	1,708	1,769	1,647	1,334	606	488	507
30%	982	348	319	368	472	520	1,696	1,536	1,221	502	462	473
40%	958	337	304	347	406	433	1,610	1,362	1,053	442	445	443
50%	879	319	290	337	369	367	1,485	1,289	635	412	445	439
60%	826	292	281	326	331	336	936	873	510	383	416	428
70%	772	267	262	312	279	314	806	755	406	372	395	389
80%	755	260	241	295	253	241	686	646	358	341	371	360
90%	676	248	224	273	230	207	572	576	311	308	331	318
Long Term												
Full Simulation Period ^b	903	398	448	630	719	903	1,279	1,207	883	546	505	533
Water Year Types^c												
Wet (23%)	952	624	881	1,115	1,412	2,258	1,779	1,828	1,456	976	831	946
Above Normal (24%)	907	347	357	776	786	801	1,410	1,244	1,257	534	467	480
Below Normal (10%)	932	354	358	430	517	539	1,556	1,378	669	449	440	429
Dry (16%)	916	322	300	349	405	345	1,064	1,002	530	375	397	399
Critical (27%)	837	310	277	317	319	286	754	695	335	321	346	342

Alternative 1

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	662	653	656	688	1,117	1,153	1,804	1,679	3,009	661	569	673
20%	582	548	522	557	694	613	1,608	1,592	2,016	555	485	508
30%	507	492	464	518	562	562	1,489	1,533	1,772	502	461	481
40%	471	459	427	473	512	522	1,040	1,423	1,092	444	445	457
50%	405	421	378	412	484	446	821	1,331	694	412	443	439
60%	377	388	341	364	423	394	637	1,049	572	386	416	431
70%	346	355	329	339	331	361	529	972	402	378	395	396
80%	327	312	311	318	296	295	440	865	352	350	373	373
90%	249	280	269	283	257	233	406	787	312	318	331	316
Long Term												
Full Simulation Period ^b	471	507	549	696	766	756	1,004	1,265	1,231	542	491	545
Water Year Types^c												
Wet (23%)	530	737	980	1,176	1,407	1,704	1,731	1,634	2,632	939	772	985
Above Normal (24%)	494	463	451	840	852	680	1,126	1,323	1,495	535	463	484
Below Normal (10%)	480	503	506	532	589	489	1,057	1,443	807	452	440	443
Dry (16%)	487	437	415	433	484	407	616	1,166	555	377	404	408
Critical (27%)	384	393	360	366	367	309	476	887	334	335	343	338

Alternative 1 minus No Action Alternative

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-41%	41%	48%	19%	3%	-41%	-4%	-16%	96%	-12%	-3%	4%
20%	-43%	43%	42%	31%	8%	-64%	-9%	-3%	51%	-8%	-1%	0%
30%	-48%	42%	46%	41%	19%	8%	-12%	0%	45%	0%	0%	2%
40%	-51%	36%	40%	36%	26%	21%	-35%	4%	4%	0%	0%	3%
50%	-54%	32%	30%	22%	31%	22%	-45%	3%	9%	0%	0%	0%
60%	-54%	33%	22%	12%	28%	17%	-32%	20%	12%	1%	0%	1%
70%	-55%	33%	26%	9%	19%	15%	-34%	29%	-1%	1%	0%	2%
80%	-57%	20%	29%	8%	17%	22%	-36%	34%	-2%	3%	1%	3%
90%	-63%	13%	20%	3%	12%	12%	-29%	37%	0%	3%	0%	-1%
Long Term												
Full Simulation Period ^b	-48%	28%	23%	10%	7%	-16%	-21%	5%	39%	-1%	-3%	2%
Water Year Types^c												
Wet (23%)	-44%	18%	11%	5%	0%	-25%	-3%	-11%	81%	-4%	-7%	4%
Above Normal (24%)	-46%	33%	26%	8%	8%	-15%	-20%	6%	19%	0%	-1%	1%
Below Normal (10%)	-49%	42%	41%	24%	14%	-9%	-32%	5%	21%	1%	0%	3%
Dry (16%)	-47%	36%	38%	24%	19%	18%	-42%	16%	5%	0%	2%	2%
Critical (27%)	-54%	27%	30%	15%	15%	8%	-37%	28%	0%	4%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.4.2 Stanislaus River at Mouth, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	662	653	656	688	1,117	1,153	1,804	1,679	3,009	661	569	673
20%	582	548	522	557	694	613	1,608	1,592	2,016	555	485	508
30%	507	492	464	518	562	562	1,489	1,533	1,772	502	461	481
40%	471	459	427	473	512	522	1,040	1,423	1,092	444	445	457
50%	405	421	378	412	484	446	821	1,331	694	412	443	439
60%	377	388	341	364	423	394	637	1,049	572	386	416	431
70%	346	355	329	339	331	361	529	972	402	378	395	396
80%	327	312	311	318	296	295	440	865	352	350	373	373
90%	249	280	269	283	257	233	406	787	312	318	331	316
Long Term												
Full Simulation Period ^b	471	507	549	696	766	756	1,004	1,265	1,231	542	491	545
Water Year Types^c												
Wet (23%)	530	737	980	1,176	1,407	1,704	1,731	1,634	2,632	939	772	985
Above Normal (24%)	494	463	451	840	852	680	1,126	1,323	1,495	535	463	484
Below Normal (10%)	480	503	506	532	589	489	1,057	1,443	807	452	440	443
Dry (16%)	487	437	415	433	484	407	616	1,166	555	377	404	408
Critical (27%)	384	393	360	366	367	309	476	887	334	335	343	338

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,122	463	442	576	1,084	1,969	1,886	1,989	1,536	751	587	646
20%	1,029	384	368	427	643	1,708	1,769	1,647	1,334	606	488	507
30%	982	348	319	368	472	520	1,696	1,536	1,221	502	462	473
40%	958	337	304	347	406	433	1,610	1,362	1,053	442	445	443
50%	879	319	290	337	369	367	1,485	1,289	635	412	445	439
60%	826	292	281	326	331	336	936	873	510	383	416	428
70%	772	267	262	312	279	314	806	755	406	372	395	389
80%	755	260	241	295	253	241	686	646	358	341	371	360
90%	676	248	224	273	230	207	572	576	311	308	331	318
Long Term												
Full Simulation Period ^b	903	398	448	630	719	903	1,279	1,207	883	546	505	533
Water Year Types^c												
Wet (23%)	952	624	881	1,115	1,412	2,258	1,779	1,828	1,456	976	831	946
Above Normal (24%)	907	347	357	776	786	801	1,410	1,244	1,257	534	467	480
Below Normal (10%)	932	354	358	430	517	539	1,556	1,378	669	449	440	429
Dry (16%)	916	322	300	349	405	345	1,064	1,002	530	375	397	399
Critical (27%)	837	310	277	317	319	286	754	695	335	321	346	342

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	70%	-29%	-33%	-16%	-3%	71%	5%	19%	-49%	14%	3%	-4%
20%	77%	-30%	-30%	-23%	-7%	178%	10%	3%	-34%	9%	1%	0%
30%	94%	-29%	-31%	-29%	-16%	-8%	14%	0%	-31%	0%	0%	-2%
40%	104%	-27%	-29%	-26%	-21%	-17%	55%	-4%	-4%	0%	0%	-3%
50%	117%	-24%	-23%	-18%	-24%	-18%	81%	-3%	-8%	0%	1%	0%
60%	119%	-25%	-18%	-10%	-22%	-15%	47%	-17%	-11%	-1%	0%	-1%
70%	123%	-25%	-20%	-8%	-16%	-13%	52%	-22%	1%	-1%	0%	-2%
80%	130%	-17%	-22%	-7%	-14%	-18%	56%	-25%	2%	-3%	-1%	-3%
90%	172%	-12%	-17%	-3%	-10%	-11%	41%	-27%	0%	-3%	0%	1%
Long Term												
Full Simulation Period ^b	92%	-22%	-18%	-9%	-6%	19%	27%	-5%	-28%	1%	3%	-2%
Water Year Types^c												
Wet (23%)	79%	-15%	-10%	-5%	0%	33%	3%	12%	-45%	4%	8%	-4%
Above Normal (24%)	84%	-25%	-21%	-8%	-8%	18%	25%	-6%	-16%	0%	1%	-1%
Below Normal (10%)	94%	-29%	-29%	-19%	-12%	10%	47%	-4%	-17%	-1%	0%	-3%
Dry (16%)	88%	-26%	-28%	-19%	-16%	-15%	73%	-14%	-5%	0%	-2%	-2%
Critical (27%)	118%	-21%	-23%	-13%	-13%	-7%	58%	-22%	0%	-4%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.4.3 Stanislaus River at Mouth, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	662	653	656	688	1,117	1,153	1,804	1,679	3,009	661	569	673
20%	582	548	522	557	694	613	1,608	1,592	2,016	555	485	508
30%	507	492	464	518	562	562	1,489	1,533	1,772	502	461	481
40%	471	459	427	473	512	522	1,040	1,423	1,092	444	445	457
50%	405	421	378	412	484	446	821	1,331	694	412	443	439
60%	377	388	341	364	423	394	637	1,049	572	386	416	431
70%	346	355	329	339	331	361	529	972	402	378	395	396
80%	327	312	311	318	296	295	440	865	352	350	373	373
90%	249	280	269	283	257	233	406	787	312	318	331	316
Long Term												
Full Simulation Period ^b	471	507	549	696	766	756	1,004	1,265	1,231	542	491	545
Water Year Types^c												
Wet (23%)	530	737	980	1,176	1,407	1,704	1,731	1,634	2,632	939	772	985
Above Normal (24%)	494	463	451	840	852	680	1,126	1,323	1,495	535	463	484
Below Normal (10%)	480	503	506	532	589	489	1,057	1,443	807	452	440	443
Dry (16%)	487	437	415	433	484	407	616	1,166	555	377	404	408
Critical (27%)	384	393	360	366	367	309	476	887	334	335	343	338

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	679	485	722	1,267	2,628	1,444	1,865	1,414	950	885	571	1,146
20%	557	456	438	518	1,301	734	1,634	1,306	679	535	480	489
30%	482	441	411	410	502	486	1,552	1,233	558	476	457	450
40%	448	424	400	374	416	419	1,240	1,043	428	424	445	439
50%	435	402	381	311	366	367	1,064	920	413	382	440	435
60%	392	372	362	275	308	334	996	882	374	374	410	415
70%	377	359	325	251	238	312	893	829	352	350	390	384
80%	360	333	300	232	201	238	575	550	304	327	367	360
90%	293	260	239	198	180	203	493	489	273	290	347	320
Long Term												
Full Simulation Period ^b	482	469	558	669	938	770	1,180	995	693	573	535	578
Water Year Types^c												
Wet (23%)	539	714	1,096	1,183	2,227	1,841	1,781	1,437	1,596	1,213	961	1,139
Above Normal (24%)	516	418	468	818	843	708	1,341	1,054	550	446	457	473
Below Normal (10%)	461	404	408	632	723	446	1,230	1,086	449	445	438	422
Dry (16%)	495	399	377	365	463	345	849	803	411	365	404	402
Critical (27%)	401	369	336	282	272	271	692	639	299	305	351	351

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3%	-26%	10%	84%	135%	25%	3%	-16%	-68%	34%	0%	70%
20%	-4%	-17%	-16%	-7%	87%	20%	2%	-18%	-66%	-4%	-1%	-4%
30%	-5%	-10%	-12%	-21%	-11%	-14%	4%	-20%	-68%	-5%	-1%	-7%
40%	-5%	-8%	-6%	-21%	-19%	-20%	19%	-27%	-61%	-5%	0%	-4%
50%	7%	-5%	1%	-24%	-25%	-18%	30%	-31%	-41%	-7%	-1%	-1%
60%	4%	-4%	6%	-24%	-27%	-15%	56%	-16%	-35%	-3%	-1%	-4%
70%	9%	1%	-1%	-26%	-28%	-14%	69%	-15%	-12%	-7%	-1%	-3%
80%	10%	7%	-4%	-27%	-32%	-19%	31%	-36%	-14%	-6%	-1%	-3%
90%	18%	-7%	-11%	-30%	-30%	-13%	21%	-38%	-13%	-9%	5%	1%
Long Term												
Full Simulation Period ^b	2%	-8%	2%	-4%	22%	2%	18%	-21%	-44%	6%	9%	6%
Water Year Types^c												
Wet (23%)	2%	-3%	12%	1%	58%	8%	3%	-12%	-39%	29%	24%	16%
Above Normal (24%)	4%	-10%	4%	-3%	-1%	4%	19%	-20%	-63%	-17%	-1%	-2%
Below Normal (10%)	-4%	-20%	-19%	19%	23%	-9%	16%	-25%	-44%	-1%	0%	-5%
Dry (16%)	2%	-9%	-9%	-16%	-4%	-15%	38%	-31%	-26%	-3%	0%	-1%
Critical (27%)	4%	-6%	-7%	-23%	-26%	-12%	45%	-28%	-10%	-9%	3%	4%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.4.4 Stanislaus River at Mouth, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	662	653	656	688	1,117	1,153	1,804	1,679	3,009	661	569	673
20%	582	548	522	557	694	613	1,608	1,592	2,016	555	485	508
30%	507	492	464	518	562	562	1,489	1,533	1,772	502	461	481
40%	471	459	427	473	512	522	1,040	1,423	1,092	444	445	457
50%	405	421	378	412	484	446	821	1,331	694	412	443	439
60%	377	388	341	364	423	394	637	1,049	572	386	416	431
70%	346	355	329	339	331	361	529	972	402	378	395	396
80%	327	312	311	318	296	295	440	865	352	350	373	373
90%	249	280	269	283	257	233	406	787	312	318	331	316
Long Term												
Full Simulation Period ^b	471	507	549	696	766	756	1,004	1,265	1,231	542	491	545
Water Year Types^c												
Wet (23%)	530	737	980	1,176	1,407	1,704	1,731	1,634	2,632	939	772	985
Above Normal (24%)	494	463	451	840	852	680	1,126	1,323	1,495	535	463	484
Below Normal (10%)	480	503	506	532	589	489	1,057	1,443	807	452	440	443
Dry (16%)	487	437	415	433	484	407	616	1,166	555	377	404	408
Critical (27%)	384	393	360	366	367	309	476	887	334	335	343	338

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,121	456	442	570	1,081	1,952	1,950	2,148	1,536	719	571	659
20%	1,029	382	378	416	586	1,708	1,815	1,974	1,319	564	488	501
30%	979	348	319	363	483	495	1,707	1,806	1,139	502	461	473
40%	903	336	304	347	401	415	1,630	1,672	1,034	442	445	443
50%	854	318	290	337	368	365	1,529	1,434	635	407	443	439
60%	818	292	281	326	319	333	1,311	1,290	485	382	413	428
70%	764	267	262	312	272	312	1,168	1,183	383	371	389	389
80%	748	260	241	295	245	241	1,044	962	343	339	367	356
90%	681	248	224	270	230	207	865	752	300	307	305	316
Long Term												
Full Simulation Period ^b	891	396	428	631	704	860	1,437	1,458	863	521	476	522
Water Year Types^c												
Wet (23%)	937	624	784	1,115	1,380	2,073	1,744	1,866	1,409	880	716	909
Above Normal (24%)	898	342	372	790	770	801	1,356	1,651	1,257	534	467	480
Below Normal (10%)	925	354	358	430	516	539	1,518	1,444	656	449	440	429
Dry (16%)	900	322	300	347	403	345	1,488	1,442	522	375	397	399
Critical (27%)	829	306	272	311	306	286	1,187	944	310	311	337	335

Alternative 5 minus Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	69%	-30%	-33%	-17%	-3%	69%	8%	28%	-49%	9%	0%	-2%
20%	77%	-30%	-28%	-25%	-16%	178%	13%	24%	-35%	2%	1%	-1%
30%	93%	-29%	-31%	-30%	-14%	-12%	15%	18%	-36%	0%	0%	-2%
40%	92%	-27%	-29%	-27%	-22%	-20%	57%	17%	-5%	0%	0%	-3%
50%	111%	-25%	-23%	-18%	-24%	-18%	86%	8%	-8%	-1%	0%	0%
60%	117%	-25%	-18%	-10%	-25%	-16%	106%	23%	-15%	-1%	-1%	-1%
70%	121%	-25%	-20%	-8%	-18%	-14%	121%	22%	-5%	-2%	-1%	-2%
80%	129%	-17%	-22%	-7%	-17%	-18%	137%	11%	-3%	-3%	-1%	-4%
90%	174%	-12%	-17%	-4%	-10%	-11%	113%	-4%	-4%	-3%	-8%	0%
Long Term												
Full Simulation Period ^b	89%	-22%	-22%	-9%	-8%	14%	43%	15%	-30%	-4%	-3%	-4%
Water Year Types^c												
Wet (23%)	77%	-15%	-20%	-5%	-2%	22%	1%	14%	-46%	-6%	-7%	-8%
Above Normal (24%)	82%	-26%	-17%	-6%	-10%	18%	20%	25%	-16%	0%	1%	-1%
Below Normal (10%)	93%	-29%	-29%	-19%	-12%	10%	44%	0%	-19%	-1%	0%	-3%
Dry (16%)	85%	-26%	-28%	-20%	-17%	-15%	142%	24%	-6%	0%	-2%	-2%
Critical (27%)	116%	-22%	-24%	-15%	-16%	-7%	149%	7%	-7%	-7%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.3.5 Stanislaus River below New Melones Temperature

Table 5C.3.3.5.1 Stanislaus River below New Melones Reservoir, Monthly Temperature

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	58.8	56.0	53.6	52.1	51.1	50.7	51.0	51.6	52.6	53.7	55.1	57.5
20%	55.6	54.6	52.7	51.5	50.4	49.9	50.2	51.1	51.8	52.5	53.0	54.4
30%	53.4	53.3	52.3	50.9	49.7	49.5	49.9	50.5	51.1	51.8	52.5	53.0
40%	52.9	52.8	51.8	50.6	49.4	49.2	49.7	50.3	50.8	51.4	51.9	52.5
50%	52.4	52.5	51.6	50.2	49.2	49.0	49.3	49.7	50.3	51.1	51.6	52.0
60%	52.0	52.1	51.4	49.9	48.9	48.7	48.9	49.3	49.7	50.4	50.9	51.4
70%	51.4	51.6	51.0	49.6	48.7	48.1	48.4	49.0	49.3	50.0	50.5	51.0
80%	51.1	51.2	50.3	49.2	48.0	47.5	48.0	48.4	48.9	49.6	50.1	50.7
90%	49.9	49.9	49.8	48.3	47.0	46.8	46.9	47.2	47.5	48.5	48.9	49.3
Long Term												
Full Simulation Period ^b	53.4	52.8	51.7	50.2	49.1	48.8	49.2	49.9	50.6	51.3	52.2	53.1
Water Year Types^c												
Wet (32%)	50.0	50.0	49.1	49.4	48.3	48.1	48.1	48.4	48.9	49.3	49.9	50.3
Above Normal (16%)	53.4	53.0	51.6	50.1	48.7	48.3	48.5	49.0	49.5	50.2	51.0	51.6
Below Normal (13%)	52.8	52.5	51.6	50.5	49.4	48.9	49.2	49.8	50.4	51.1	51.9	52.4
Dry (24%)	53.0	52.9	52.0	51.1	50.0	49.6	49.8	50.4	51.1	51.9	52.9	53.9
Critical (15%)	57.4	54.4	52.4	50.4	49.7	49.5	51.0	53.0	54.6	55.8	57.4	60.4

Alternative 1

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	58.1	55.8	53.6	52.1	51.4	50.7	51.0	51.6	52.5	53.6	55.2	56.5
20%	54.2	54.2	52.7	51.4	50.5	50.0	50.2	51.1	51.7	52.4	52.9	53.5
30%	53.1	53.1	52.3	51.0	49.9	49.5	49.9	50.5	51.0	51.7	52.4	52.9
40%	52.5	52.7	51.9	50.7	49.5	49.2	49.7	50.3	50.8	51.4	51.9	52.3
50%	52.1	52.3	51.5	50.3	49.3	49.1	49.3	49.7	50.3	51.0	51.5	51.9
60%	51.8	52.0	51.3	50.0	49.0	48.7	48.9	49.3	49.7	50.3	50.9	51.4
70%	51.2	51.5	51.0	49.6	48.7	48.2	48.5	48.9	49.4	50.0	50.5	50.9
80%	51.0	51.2	50.4	49.3	48.2	47.6	48.0	48.5	48.9	49.6	50.1	50.7
90%	49.6	49.9	49.8	48.5	47.0	46.9	47.0	47.2	47.6	48.4	48.7	49.3
Long Term												
Full Simulation Period ^b	53.0	52.7	51.7	50.3	49.2	48.8	49.2	49.9	50.4	51.3	52.1	52.7
Water Year Types^c												
Wet (32%)	49.7	49.8	49.1	49.5	48.4	48.0	48.2	48.5	48.9	49.4	49.9	50.3
Above Normal (16%)	53.1	52.7	51.5	50.1	48.8	48.4	48.6	49.0	49.5	50.2	51.0	51.5
Below Normal (13%)	52.2	52.1	51.5	50.6	49.5	48.9	49.2	49.7	50.3	51.0	51.7	52.2
Dry (24%)	52.7	52.6	51.9	51.1	50.0	49.6	49.8	50.4	51.1	51.8	52.7	53.5
Critical (15%)	57.3	55.4	52.8	50.7	49.9	49.8	50.8	53.2	53.2	56.4	57.2	58.3

Alternative 1 minus No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-0.7	-0.3	0.0	0.0	0.3	0.1	0.0	0.0	-0.1	-0.1	0.1	-0.9
20%	-1.4	-0.4	0.0	-0.1	0.1	0.1	0.0	0.0	0.0	-0.1	-0.1	-0.9
30%	-0.3	-0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	-0.2	-0.1	-0.1
40%	-0.4	-0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.2
50%	-0.3	-0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	-0.2
60%	-0.2	-0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70%	-0.2	-0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	-0.1
80%	-0.1	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.1	-0.1
90%	-0.3	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	-0.2	0.1
Long Term												
Full Simulation Period ^b	-0.3	-0.1	0.0	0.1	0.1	0.0	0.0	0.0	-0.2	0.1	-0.1	-0.4
Water Year Types^c												
Wet (32%)	-0.3	-0.2	0.0	0.1	0.1	-0.1	0.1	0.0	0.1	0.0	0.0	0.0
Above Normal (16%)	-0.4	-0.3	-0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.1
Below Normal (13%)	-0.6	-0.4	-0.1	0.1	0.1	0.1	0.0	0.0	-0.1	-0.1	-0.2	-0.3
Dry (24%)	-0.3	-0.3	-0.1	0.0	0.1	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.3
Critical (15%)	-0.1	1.0	0.3	0.3	0.3	0.2	-0.3	0.2	-1.4	0.6	-0.1	-2.1

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.5.2 Stanislaus River below New Melones Reservoir, Monthly Temperature

Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	58.1	55.8	53.6	52.1	51.4	50.7	51.0	51.6	52.5	53.6	55.2	56.5
20%	54.2	54.2	52.7	51.4	50.5	50.0	50.2	51.1	51.7	52.4	52.9	53.5
30%	53.1	53.1	52.3	51.0	49.9	49.5	49.9	50.5	51.0	51.7	52.4	52.9
40%	52.5	52.7	51.9	50.7	49.5	49.2	49.7	50.3	50.8	51.4	51.9	52.3
50%	52.1	52.3	51.5	50.3	49.3	49.1	49.3	49.7	50.3	51.0	51.5	51.9
60%	51.8	52.0	51.3	50.0	49.0	48.7	48.9	49.3	49.7	50.3	50.9	51.4
70%	51.2	51.5	51.0	49.6	48.7	48.2	48.5	48.9	49.4	50.0	50.5	50.9
80%	51.0	51.2	50.4	49.3	48.2	47.6	48.0	48.5	48.9	49.6	50.1	50.7
90%	49.6	49.9	49.8	48.5	47.0	46.9	47.0	47.2	47.6	48.4	48.7	49.3
Long Term												
Full Simulation Period ^b	53.0	52.7	51.7	50.3	49.2	48.8	49.2	49.9	50.4	51.3	52.1	52.7
Water Year Types^c												
Wet (32%)	49.7	49.8	49.1	49.5	48.4	48.0	48.2	48.5	48.9	49.4	49.9	50.3
Above Normal (16%)	53.1	52.7	51.5	50.1	48.8	48.4	48.6	49.0	49.5	50.2	51.0	51.5
Below Normal (13%)	52.2	52.1	51.5	50.6	49.5	48.9	49.2	49.7	50.3	51.0	51.7	52.2
Dry (24%)	52.7	52.6	51.9	51.1	50.0	49.6	49.8	50.4	51.1	51.8	52.7	53.5
Critical (15%)	57.3	55.4	52.8	50.7	49.9	49.8	50.8	53.2	53.2	56.4	57.2	58.3

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	58.8	56.0	53.6	52.1	51.1	50.7	51.0	51.6	52.6	53.7	55.1	57.5
20%	55.6	54.6	52.7	51.5	50.4	49.9	50.2	51.1	51.8	52.5	53.0	54.4
30%	53.4	53.3	52.3	50.9	49.7	49.5	49.9	50.5	51.1	51.8	52.5	53.0
40%	52.9	52.8	51.8	50.6	49.4	49.2	49.7	50.3	50.8	51.4	51.9	52.5
50%	52.4	52.5	51.6	50.2	49.2	49.0	49.3	49.7	50.3	51.1	51.6	52.0
60%	52.0	52.1	51.4	49.9	48.9	48.7	48.9	49.3	49.7	50.4	50.9	51.4
70%	51.4	51.6	51.0	49.6	48.7	48.1	48.4	49.0	49.3	50.0	50.5	51.0
80%	51.1	51.2	50.3	49.2	48.0	47.5	48.0	48.4	48.9	49.6	50.1	50.7
90%	49.9	49.9	49.8	48.3	47.0	46.8	46.9	47.2	47.5	48.5	48.9	49.3
Long Term												
Full Simulation Period ^b	53.4	52.8	51.7	50.2	49.1	48.8	49.2	49.9	50.6	51.3	52.2	53.1
Water Year Types^c												
Wet (32%)	50.0	50.0	49.1	49.4	48.3	48.1	48.1	48.4	48.9	49.3	49.9	50.3
Above Normal (16%)	53.4	53.0	51.6	50.1	48.7	48.3	48.5	49.0	49.5	50.2	51.0	51.6
Below Normal (13%)	52.8	52.5	51.6	50.5	49.4	48.9	49.2	49.8	50.4	51.1	51.9	52.4
Dry (24%)	53.0	52.9	52.0	51.1	50.0	49.6	49.8	50.4	51.1	51.9	52.9	53.9
Critical (15%)	57.4	54.4	52.4	50.4	49.7	49.5	51.0	53.0	54.6	55.8	57.4	60.4

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0.7	0.3	0.0	0.0	-0.3	-0.1	0.0	0.0	0.1	0.1	-0.1	0.9
20%	1.4	0.4	0.0	0.1	-0.1	-0.1	0.0	0.0	0.0	0.1	0.1	0.9
30%	0.3	0.1	0.0	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.2	0.1	0.1
40%	0.4	0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
50%	0.3	0.2	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.2
60%	0.2	0.1	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70%	0.2	0.1	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	0.0	0.0	0.1
80%	0.1	0.0	0.0	-0.1	-0.2	-0.1	-0.1	-0.1	0.0	0.0	-0.1	0.1
90%	0.3	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	-0.1	0.0	0.2	-0.1
Long Term												
Full Simulation Period ^b	0.3	0.1	0.0	-0.1	-0.1	0.0	0.0	0.0	0.2	-0.1	0.1	0.4
Water Year Types^c												
Wet (32%)	0.3	0.2	0.0	-0.1	-0.1	0.1	-0.1	0.0	-0.1	0.0	0.0	0.0
Above Normal (16%)	0.4	0.3	0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1
Below Normal (13%)	0.6	0.4	0.1	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.1	0.2	0.3
Dry (24%)	0.3	0.3	0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.3
Critical (15%)	0.1	-1.0	-0.3	-0.3	-0.3	-0.2	0.3	-0.2	1.4	-0.6	0.1	2.1

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.5.3 Stanislaus River below New Melones Reservoir, Monthly Temperature

Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	58.1	55.8	53.6	52.1	51.4	50.7	51.0	51.6	52.5	53.6	55.2	56.5
20%	54.2	54.2	52.7	51.4	50.5	50.0	50.2	51.1	51.7	52.4	52.9	53.5
30%	53.1	53.1	52.3	51.0	49.9	49.5	49.9	50.5	51.0	51.7	52.4	52.9
40%	52.5	52.7	51.9	50.7	49.5	49.2	49.7	50.3	50.8	51.4	51.9	52.3
50%	52.1	52.3	51.5	50.3	49.3	49.1	49.3	49.7	50.3	51.0	51.5	51.9
60%	51.8	52.0	51.3	50.0	49.0	48.7	48.9	49.3	49.7	50.3	50.9	51.4
70%	51.2	51.5	51.0	49.6	48.7	48.2	48.5	48.9	49.4	50.0	50.5	50.9
80%	51.0	51.2	50.4	49.3	48.2	47.6	48.0	48.5	48.9	49.6	50.1	50.7
90%	49.6	49.9	49.8	48.5	47.0	46.9	47.0	47.2	47.6	48.4	48.7	49.3
Long Term												
Full Simulation Period ^b	53.0	52.7	51.7	50.3	49.2	48.8	49.2	49.9	50.4	51.3	52.1	52.7
Water Year Types^c												
Wet (32%)	49.7	49.8	49.1	49.5	48.4	48.0	48.2	48.5	48.9	49.4	49.9	50.3
Above Normal (16%)	53.1	52.7	51.5	50.1	48.8	48.4	48.6	49.0	49.5	50.2	51.0	51.5
Below Normal (13%)	52.2	52.1	51.5	50.6	49.5	48.9	49.2	49.7	50.3	51.0	51.7	52.2
Dry (24%)	52.7	52.6	51.9	51.1	50.0	49.6	49.8	50.4	51.1	51.8	52.7	53.5
Critical (15%)	57.3	55.4	52.8	50.7	49.9	49.8	50.8	53.2	53.2	56.4	57.2	58.3

Alternative 3

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	55.7	55.3	53.2	52.3	51.1	50.8	51.1	51.6	52.2	53.0	53.7	54.9
20%	53.6	53.7	52.5	51.4	50.4	50.1	50.3	50.9	51.6	52.1	52.6	53.3
30%	52.6	52.7	52.1	51.0	49.9	49.6	50.0	50.4	50.9	51.5	52.0	52.5
40%	52.1	52.3	51.7	50.6	49.5	49.3	49.7	50.2	50.5	51.2	51.6	52.0
50%	51.7	51.9	51.4	50.3	49.5	49.2	49.3	49.6	50.0	50.6	51.1	51.5
60%	51.3	51.6	51.3	50.0	49.1	48.7	49.0	49.3	49.7	50.2	50.7	51.2
70%	51.1	51.3	51.0	49.7	48.8	48.5	48.7	49.1	49.5	49.9	50.4	50.8
80%	50.6	50.8	50.5	49.3	48.4	48.1	48.2	48.5	48.9	49.3	49.7	50.4
90%	49.7	49.9	50.0	48.4	47.3	47.1	47.3	47.6	48.0	48.5	48.9	49.4
Long Term												
Full Simulation Period ^b	52.5	52.4	51.6	50.3	49.3	49.0	49.3	49.7	50.3	51.1	51.6	52.1
Water Year Types^c												
Wet (32%)	49.4	49.5	49.0	49.4	48.5	48.2	48.3	48.6	48.9	49.3	49.8	50.2
Above Normal (16%)	52.4	52.2	51.3	50.1	48.9	48.5	48.8	49.1	49.5	50.1	50.6	51.1
Below Normal (13%)	51.5	51.5	51.2	50.4	49.5	49.0	49.3	49.7	50.2	50.8	51.4	51.8
Dry (24%)	52.3	52.4	51.8	50.9	50.0	49.6	49.9	50.3	50.9	51.5	52.1	52.7
Critical (15%)	55.8	55.1	52.9	51.2	50.4	50.1	50.8	51.8	53.5	55.6	56.3	56.7

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-2.5	-0.5	-0.4	0.1	-0.3	0.1	0.1	0.0	-0.3	-0.6	-1.5	-1.6
20%	-0.6	-0.4	-0.2	0.0	0.0	0.1	0.2	-0.1	-0.1	-0.3	-0.3	-0.2
30%	-0.5	-0.4	-0.2	0.0	0.0	0.1	0.0	-0.1	-0.2	-0.2	-0.4	-0.4
40%	-0.5	-0.4	-0.2	-0.1	0.0	0.1	0.0	-0.1	-0.3	-0.2	-0.3	-0.4
50%	-0.4	-0.3	-0.1	0.0	0.1	0.1	0.0	-0.1	-0.3	-0.5	-0.4	-0.4
60%	-0.4	-0.4	-0.1	0.0	0.0	0.1	0.1	0.0	0.0	-0.1	-0.2	-0.2
70%	-0.1	-0.2	0.0	0.1	0.1	0.3	0.3	0.1	0.0	-0.1	-0.1	-0.1
80%	-0.4	-0.4	0.2	0.0	0.2	0.4	0.2	0.0	0.1	-0.3	-0.4	-0.3
90%	0.1	0.0	0.2	-0.1	0.4	0.3	0.3	0.4	0.4	0.1	0.3	0.1
Long Term												
Full Simulation Period ^b	-0.6	-0.3	-0.1	0.0	0.1	0.1	0.1	-0.2	0.0	-0.3	-0.4	-0.6
Water Year Types^c												
Wet (32%)	-0.3	-0.2	-0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	-0.1	-0.1
Above Normal (16%)	-0.6	-0.5	-0.2	0.0	0.1	0.2	0.2	0.1	0.0	-0.2	-0.3	-0.4
Below Normal (13%)	-0.7	-0.6	-0.3	-0.2	0.0	0.1	0.1	0.0	-0.1	-0.2	-0.3	-0.4
Dry (24%)	-0.3	-0.3	-0.1	-0.2	0.0	0.0	0.1	-0.1	-0.2	-0.4	-0.6	-0.9
Critical (15%)	-1.5	-0.3	0.2	0.5	0.5	0.3	0.0	-1.4	0.3	-0.7	-1.0	-1.5

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.5.4 Stanislaus River below New Melones Reservoir, Monthly Temperature

Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	58.1	55.8	53.6	52.1	51.4	50.7	51.0	51.6	52.5	53.6	55.2	56.5
20%	54.2	54.2	52.7	51.4	50.5	50.0	50.2	51.1	51.7	52.4	52.9	53.5
30%	53.1	53.1	52.3	51.0	49.9	49.5	49.9	50.5	51.0	51.7	52.4	52.9
40%	52.5	52.7	51.9	50.7	49.5	49.2	49.7	50.3	50.8	51.4	51.9	52.3
50%	52.1	52.3	51.5	50.3	49.3	49.1	49.3	49.7	50.3	51.0	51.5	51.9
60%	51.8	52.0	51.3	50.0	49.0	48.7	48.9	49.3	49.7	50.3	50.9	51.4
70%	51.2	51.5	51.0	49.6	48.7	48.2	48.5	48.9	49.4	50.0	50.5	50.9
80%	51.0	51.2	50.4	49.3	48.2	47.6	48.0	48.5	48.9	49.6	50.1	50.7
90%	49.6	49.9	49.8	48.5	47.0	46.9	47.0	47.2	47.6	48.4	48.7	49.3
Long Term												
Full Simulation Period ^b	53.0	52.7	51.7	50.3	49.2	48.8	49.2	49.9	50.4	51.3	52.1	52.7
Water Year Types^c												
Wet (32%)	49.7	49.8	49.1	49.5	48.4	48.0	48.2	48.5	48.9	49.4	49.9	50.3
Above Normal (16%)	53.1	52.7	51.5	50.1	48.8	48.4	48.6	49.0	49.5	50.2	51.0	51.5
Below Normal (13%)	52.2	52.1	51.5	50.6	49.5	48.9	49.2	49.7	50.3	51.0	51.7	52.2
Dry (24%)	52.7	52.6	51.9	51.1	50.0	49.6	49.8	50.4	51.1	51.8	52.7	53.5
Critical (15%)	57.3	55.4	52.8	50.7	49.9	49.8	50.8	53.2	53.2	56.4	57.2	58.3

Alternative 5

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	60.7	57.0	53.9	52.0	51.0	50.7	51.2	52.3	53.1	55.4	59.8	63.1
20%	56.7	55.0	52.8	51.4	50.3	50.0	50.4	51.4	52.0	53.4	54.4	55.9
30%	54.4	53.7	52.3	50.9	49.6	49.5	50.0	50.7	51.3	52.2	53.1	53.8
40%	53.2	53.1	51.9	50.4	49.4	49.1	49.8	50.3	50.8	51.5	52.1	52.8
50%	52.5	52.6	51.6	50.2	49.0	49.0	49.3	49.9	50.3	51.2	51.7	52.1
60%	52.1	52.3	51.2	49.7	48.7	48.6	48.9	49.4	49.7	50.4	50.9	51.5
70%	51.5	51.8	51.0	49.4	48.3	48.0	48.5	48.9	49.3	50.0	50.6	51.1
80%	51.1	51.3	50.2	48.9	47.3	47.3	47.6	48.1	48.5	49.5	50.1	50.7
90%	49.9	50.1	49.5	47.8	46.3	46.3	46.7	47.1	47.4	48.4	48.9	49.5
Long Term												
Full Simulation Period ^b	54.0	53.1	51.7	50.0	48.9	48.7	49.2	50.0	50.4	51.7	52.8	53.9
Water Year Types^c												
Wet (32%)	50.7	50.1	49.0	49.2	48.1	47.9	47.9	48.3	48.8	49.3	49.9	50.5
Above Normal (16%)	54.0	53.4	51.8	50.1	48.6	48.2	48.5	49.0	49.6	50.4	51.2	51.9
Below Normal (13%)	53.1	52.3	51.3	50.1	49.1	48.7	49.2	50.0	50.8	51.6	52.6	53.4
Dry (24%)	53.7	53.4	52.3	51.0	49.8	49.5	49.8	50.6	51.4	52.7	54.5	55.8
Critical (15%)	57.9	55.0	52.3	49.7	49.0	49.8	51.8	54.1	52.5	56.5	58.2	60.7

Alternative 5 minus Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2.6	1.2	0.3	-0.2	-0.3	0.0	0.2	0.6	0.6	1.9	4.6	6.6
20%	2.5	0.8	0.1	0.0	-0.1	0.0	0.3	0.3	0.3	0.9	1.5	2.4
30%	1.3	0.6	0.0	0.0	-0.2	0.0	0.1	0.2	0.3	0.6	0.6	0.9
40%	0.7	0.4	0.0	-0.2	-0.1	0.0	0.1	0.0	0.0	0.1	0.2	0.5
50%	0.4	0.3	0.1	-0.1	-0.3	-0.1	0.0	0.1	0.0	0.2	0.2	0.3
60%	0.3	0.3	-0.1	-0.3	-0.3	-0.1	0.0	0.1	-0.1	0.1	0.0	0.1
70%	0.4	0.3	0.0	-0.2	-0.3	-0.2	0.1	0.0	-0.1	0.0	0.1	0.2
80%	0.1	0.1	-0.1	-0.4	-0.9	-0.3	-0.4	-0.4	-0.3	-0.1	0.0	0.0
90%	0.3	0.1	-0.3	-0.7	-0.6	-0.5	-0.3	-0.1	-0.2	0.0	0.2	0.2
Long Term												
Full Simulation Period ^b	1.0	0.4	0.0	-0.3	-0.4	-0.1	0.0	0.2	0.0	0.3	0.8	1.2
Water Year Types^c												
Wet (32%)	1.0	0.4	-0.1	-0.3	-0.3	-0.2	-0.3	-0.2	-0.1	0.0	0.1	0.1
Above Normal (16%)	0.9	0.7	0.2	0.0	-0.1	-0.2	-0.1	0.0	0.1	0.2	0.3	0.4
Below Normal (13%)	0.9	0.2	-0.2	-0.5	-0.3	-0.3	0.0	0.2	0.4	0.7	0.9	1.2
Dry (24%)	1.0	0.8	0.4	-0.1	-0.2	-0.1	0.0	0.1	0.4	0.9	1.8	2.3
Critical (15%)	0.6	-0.4	-0.5	-0.9	-1.0	0.0	1.1	1.0	-0.7	0.1	0.9	2.4

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.6 Stanislaus River below Tulloch Reservoir Temperature

Table 5C.3.3.6.1 Stanislaus River below Tulloch Reservoir, Monthly Temperature

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	60.5	59.0	54.8	50.7	50.2	51.2	52.6	53.6	54.7	56.5	57.4	59.2
20%	57.4	56.6	53.3	50.3	49.5	50.6	52.1	53.0	54.1	55.0	55.7	56.7
30%	55.6	55.1	52.8	49.6	48.8	50.2	51.7	52.6	53.4	54.3	55.0	55.6
40%	55.1	54.6	52.0	49.1	48.5	49.8	51.3	52.4	52.9	53.9	54.5	55.0
50%	54.5	54.1	51.7	48.7	48.0	49.6	51.0	52.1	52.6	53.7	54.1	54.5
60%	54.1	53.9	51.4	48.3	47.8	49.3	50.6	51.6	52.2	52.8	53.5	54.0
70%	53.6	53.2	50.9	47.8	47.5	48.9	50.1	51.3	51.8	52.4	53.2	53.5
80%	53.2	52.6	50.4	47.1	46.7	48.4	49.7	51.0	51.4	51.8	52.8	53.1
90%	52.0	51.8	49.9	46.3	45.8	47.5	48.8	50.2	50.3	50.8	51.5	51.8
Long Term												
Full Simulation Period ^b	55.6	54.7	51.9	48.6	48.1	49.5	50.9	52.1	52.8	53.7	54.6	55.4
Water Year Types^c												
Wet (32%)	51.9	51.5	49.1	47.6	47.5	49.0	49.9	51.1	51.3	51.8	52.5	52.8
Above Normal (16%)	55.8	54.8	51.9	48.5	47.9	49.3	50.6	51.4	52.0	52.7	53.5	54.0
Below Normal (13%)	54.9	54.2	51.5	48.7	47.9	49.6	51.2	52.0	52.5	53.6	54.3	54.9
Dry (24%)	55.2	54.7	52.1	48.9	48.3	49.8	51.5	52.4	53.3	54.4	55.3	56.1
Critical (15%)	60.0	57.4	53.8	50.0	49.2	50.5	52.3	54.3	56.3	58.2	59.3	61.8

Alternative 1

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	59.7	59.0	54.7	50.9	50.3	51.4	52.7	53.7	54.6	56.4	57.2	58.4
20%	56.6	56.3	53.3	50.3	49.7	50.8	51.9	53.2	54.0	55.0	55.6	56.3
30%	55.6	55.1	52.7	49.6	49.0	50.3	51.6	52.8	53.3	54.1	54.9	55.5
40%	55.0	54.5	52.1	49.2	48.7	49.8	51.3	52.4	53.0	53.8	54.5	54.9
50%	54.6	54.2	51.7	48.9	48.2	49.7	51.0	52.2	52.7	53.5	54.0	54.4
60%	54.0	53.9	51.5	48.4	47.9	49.5	50.7	51.8	52.4	52.6	53.4	53.9
70%	53.7	53.3	51.1	48.0	47.7	49.0	50.2	51.5	51.9	52.3	53.1	53.5
80%	53.3	52.8	50.5	47.4	47.2	48.5	49.7	50.9	51.5	51.6	52.7	53.1
90%	52.1	51.9	49.8	46.6	46.1	47.6	48.9	50.2	50.7	50.7	51.5	51.7
Long Term												
Full Simulation Period ^b	55.4	54.7	52.0	48.7	48.3	49.6	50.9	52.2	52.8	53.6	54.5	55.1
Water Year Types^c												
Wet (32%)	51.8	51.4	49.0	47.8	47.7	49.0	50.0	51.2	51.7	51.6	52.4	52.8
Above Normal (16%)	55.6	54.8	52.0	48.7	48.1	49.4	50.6	51.6	52.0	52.6	53.4	53.9
Below Normal (13%)	54.7	54.0	51.4	48.8	48.2	49.7	50.9	52.2	52.4	53.4	54.2	54.6
Dry (24%)	55.1	54.6	52.2	49.0	48.5	50.0	51.5	52.6	53.3	54.3	55.1	55.8
Critical (15%)	59.4	58.1	54.1	50.2	49.5	50.7	52.2	54.5	55.4	58.0	59.5	60.4

Alternative 1 minus No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-0.7	-0.1	0.0	0.2	0.1	0.2	0.0	0.1	-0.1	-0.1	-0.2	-0.7
20%	-0.8	-0.3	0.0	0.0	0.2	0.2	-0.2	0.2	-0.1	0.0	-0.1	-0.4
30%	0.0	0.0	-0.1	0.0	0.2	0.1	-0.1	0.2	-0.1	-0.2	-0.1	-0.1
40%	-0.1	-0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.1	-0.1	0.0	-0.1
50%	0.1	0.1	0.1	0.2	0.2	0.1	0.0	0.1	0.1	-0.2	-0.1	-0.2
60%	-0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-0.1	-0.1	0.0
70%	0.0	0.0	0.2	0.2	0.1	0.1	0.2	0.2	0.1	-0.2	0.0	0.0
80%	0.2	0.2	0.1	0.3	0.5	0.1	0.1	-0.1	0.1	-0.2	0.0	0.0
90%	0.1	0.1	-0.1	0.3	0.3	0.1	0.1	0.0	0.5	0.0	0.0	-0.1
Long Term												
Full Simulation Period ^b	-0.2	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.0	-0.2	-0.1	-0.3
Water Year Types^c												
Wet (32%)	-0.1	-0.1	0.0	0.1	0.2	0.0	0.1	0.0	0.4	-0.2	0.0	0.0
Above Normal (16%)	-0.2	0.1	0.1	0.1	0.2	0.1	-0.1	0.2	0.0	-0.1	-0.1	-0.1
Below Normal (13%)	-0.2	-0.2	-0.1	0.1	0.2	0.1	-0.3	0.3	-0.1	-0.2	-0.2	-0.2
Dry (24%)	-0.2	0.0	0.1	0.2	0.2	0.1	0.0	0.1	-0.1	-0.1	-0.2	-0.3
Critical (15%)	-0.6	0.7	0.3	0.2	0.2	0.2	-0.1	0.2	-0.9	-0.2	0.2	-1.4

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.6.2 Stanislaus River below Tulloch Reservoir, Monthly Temperature

Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	59.7	59.0	54.7	50.9	50.3	51.4	52.7	53.7	54.6	56.4	57.2	58.4
20%	56.6	56.3	53.3	50.3	49.7	50.8	51.9	53.2	54.0	55.0	55.6	56.3
30%	55.6	55.1	52.7	49.6	49.0	50.3	51.6	52.8	53.3	54.1	54.9	55.5
40%	55.0	54.5	52.1	49.2	48.7	49.8	51.3	52.4	53.0	53.8	54.5	54.9
50%	54.6	54.2	51.7	48.9	48.2	49.7	51.0	52.2	52.7	53.5	54.0	54.4
60%	54.0	53.9	51.5	48.4	47.9	49.5	50.7	51.8	52.4	52.6	53.4	53.9
70%	53.7	53.3	51.1	48.0	47.7	49.0	50.2	51.5	51.9	52.3	53.1	53.5
80%	53.3	52.8	50.5	47.4	47.2	48.5	49.7	50.9	51.5	51.6	52.7	53.1
90%	52.1	51.9	49.8	46.6	46.1	47.6	48.9	50.2	50.7	50.7	51.5	51.7
Long Term												
Full Simulation Period ^b	55.4	54.7	52.0	48.7	48.3	49.6	50.9	52.2	52.8	53.6	54.5	55.1
Water Year Types^c												
Wet (32%)	51.8	51.4	49.0	47.8	47.7	49.0	50.0	51.2	51.7	51.6	52.4	52.8
Above Normal (16%)	55.6	54.8	52.0	48.7	48.1	49.4	50.6	51.6	52.0	52.6	53.4	53.9
Below Normal (13%)	54.7	54.0	51.4	48.8	48.2	49.7	50.9	52.2	52.4	53.4	54.2	54.6
Dry (24%)	55.1	54.6	52.2	49.0	48.5	50.0	51.5	52.6	53.3	54.3	55.1	55.8
Critical (15%)	59.4	58.1	54.1	50.2	49.5	50.7	52.2	54.5	55.4	58.0	59.5	60.4

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	60.5	59.0	54.8	50.7	50.2	51.2	52.6	53.6	54.7	56.5	57.4	59.2
20%	57.4	56.6	53.3	50.3	49.5	50.6	52.1	53.0	54.1	55.0	55.7	56.7
30%	55.6	55.1	52.8	49.6	48.8	50.2	51.7	52.6	53.4	54.3	55.0	55.6
40%	55.1	54.6	52.0	49.1	48.5	49.8	51.3	52.4	52.9	53.9	54.5	55.0
50%	54.5	54.1	51.7	48.7	48.0	49.6	51.0	52.1	52.6	53.7	54.1	54.5
60%	54.1	53.9	51.4	48.3	47.8	49.3	50.6	51.6	52.2	52.8	53.5	54.0
70%	53.6	53.2	50.9	47.8	47.5	48.9	50.1	51.3	51.8	52.4	53.2	53.5
80%	53.2	52.6	50.4	47.1	46.7	48.4	49.7	51.0	51.4	51.8	52.8	53.1
90%	52.0	51.8	49.9	46.3	45.8	47.5	48.8	50.2	50.3	50.8	51.5	51.8
Long Term												
Full Simulation Period ^b	55.6	54.7	51.9	48.6	48.1	49.5	50.9	52.1	52.8	53.7	54.6	55.4
Water Year Types^c												
Wet (32%)	51.9	51.5	49.1	47.6	47.5	49.0	49.9	51.1	51.3	51.8	52.5	52.8
Above Normal (16%)	55.8	54.8	51.9	48.5	47.9	49.3	50.6	51.4	52.0	52.7	53.5	54.0
Below Normal (13%)	54.9	54.2	51.5	48.7	47.9	49.6	51.2	52.0	52.5	53.6	54.3	54.9
Dry (24%)	55.2	54.7	52.1	48.9	48.3	49.8	51.5	52.4	53.3	54.4	55.3	56.1
Critical (15%)	60.0	57.4	53.8	50.0	49.2	50.5	52.3	54.3	56.3	58.2	59.3	61.8

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0.7	0.1	0.0	-0.2	-0.1	-0.2	0.0	-0.1	0.1	0.1	0.2	0.7
20%	0.8	0.3	0.0	0.0	-0.2	-0.2	0.2	-0.2	0.1	0.0	0.1	0.4
30%	0.0	0.0	0.1	0.0	-0.2	-0.1	0.1	-0.2	0.1	0.2	0.1	0.1
40%	0.1	0.1	-0.1	-0.1	-0.2	0.0	0.0	0.0	-0.1	0.1	0.0	0.1
50%	-0.1	-0.1	-0.1	-0.2	-0.2	-0.1	0.0	-0.1	-0.1	0.2	0.1	0.2
60%	0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.1	0.1	0.0
70%	0.0	0.0	-0.2	-0.2	-0.1	-0.1	-0.2	-0.2	-0.1	0.2	0.0	0.0
80%	-0.2	-0.2	-0.1	-0.3	-0.5	-0.1	-0.1	0.1	-0.1	0.2	0.0	0.0
90%	-0.1	-0.1	0.1	-0.3	-0.3	-0.1	-0.1	0.0	-0.5	0.0	0.0	0.1
Long Term												
Full Simulation Period ^b	0.2	-0.1	-0.1	-0.1	-0.2	-0.1	0.0	-0.1	0.0	0.2	0.1	0.3
Water Year Types^c												
Wet (32%)	0.1	0.1	0.0	-0.1	-0.2	0.0	-0.1	0.0	-0.4	0.2	0.0	0.0
Above Normal (16%)	0.2	-0.1	-0.1	-0.1	-0.2	-0.1	0.1	-0.2	0.0	0.1	0.1	0.1
Below Normal (13%)	0.2	0.2	0.1	-0.1	-0.2	-0.1	0.3	-0.3	0.1	0.2	0.2	0.2
Dry (24%)	0.2	0.0	-0.1	-0.2	-0.2	-0.1	0.0	-0.1	0.1	0.1	0.2	0.3
Critical (15%)	0.6	-0.7	-0.3	-0.2	-0.2	-0.2	0.1	-0.2	0.9	0.2	-0.2	1.4

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.6.3 Stanislaus River below Tulloch Reservoir, Monthly Temperature

Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	59.7	59.0	54.7	50.9	50.3	51.4	52.7	53.7	54.6	56.4	57.2	58.4
20%	56.6	56.3	53.3	50.3	49.7	50.8	51.9	53.2	54.0	55.0	55.6	56.3
30%	55.6	55.1	52.7	49.6	49.0	50.3	51.6	52.8	53.3	54.1	54.9	55.5
40%	55.0	54.5	52.1	49.2	48.7	49.8	51.3	52.4	53.0	53.8	54.5	54.9
50%	54.6	54.2	51.7	48.9	48.2	49.7	51.0	52.2	52.7	53.5	54.0	54.4
60%	54.0	53.9	51.5	48.4	47.9	49.5	50.7	51.8	52.4	52.6	53.4	53.9
70%	53.7	53.3	51.1	48.0	47.7	49.0	50.2	51.5	51.9	52.3	53.1	53.5
80%	53.3	52.8	50.5	47.4	47.2	48.5	49.7	50.9	51.5	51.6	52.7	53.1
90%	52.1	51.9	49.8	46.6	46.1	47.6	48.9	50.2	50.7	50.7	51.5	51.7
Long Term												
Full Simulation Period ^b	55.4	54.7	52.0	48.7	48.3	49.6	50.9	52.2	52.8	53.6	54.5	55.1
Water Year Types^c												
Wet (32%)	51.8	51.4	49.0	47.8	47.7	49.0	50.0	51.2	51.7	51.6	52.4	52.8
Above Normal (16%)	55.6	54.8	52.0	48.7	48.1	49.4	50.6	51.6	52.0	52.6	53.4	53.9
Below Normal (13%)	54.7	54.0	51.4	48.8	48.2	49.7	50.9	52.2	52.4	53.4	54.2	54.6
Dry (24%)	55.1	54.6	52.2	49.0	48.5	50.0	51.5	52.6	53.3	54.3	55.1	55.8
Critical (15%)	59.4	58.1	54.1	50.2	49.5	50.7	52.2	54.5	55.4	58.0	59.5	60.4

Alternative 3

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	57.8	57.5	54.3	50.8	50.3	51.3	52.7	53.5	54.5	55.7	56.4	57.3
20%	56.4	55.9	53.5	50.0	49.6	50.7	52.0	52.8	53.8	54.8	55.3	55.7
30%	55.1	54.5	52.8	49.5	49.1	50.3	51.5	52.4	53.2	54.0	54.7	55.1
40%	54.6	54.1	51.8	49.0	48.7	49.9	51.4	52.2	52.8	53.6	54.2	54.5
50%	54.2	53.7	51.5	48.7	48.2	49.7	51.0	51.9	52.5	53.3	53.8	54.1
60%	53.7	53.4	51.3	48.5	47.9	49.5	50.8	51.6	52.1	52.9	53.3	53.6
70%	53.5	53.0	50.9	48.0	47.6	49.0	50.4	51.4	51.7	52.6	53.0	53.2
80%	52.9	52.7	50.5	47.5	47.2	48.6	49.9	50.9	51.2	52.1	52.5	52.8
90%	51.9	51.8	49.6	46.8	46.2	47.8	49.2	50.1	50.7	51.3	51.7	51.7
Long Term												
Full Simulation Period ^b	54.8	54.3	51.8	48.6	48.3	49.6	51.0	51.9	52.6	53.6	54.3	54.5
Water Year Types^c												
Wet (32%)	51.6	51.2	49.0	47.8	47.9	49.0	50.1	51.0	51.4	52.1	52.5	52.6
Above Normal (16%)	55.0	54.4	51.9	48.7	48.1	49.4	50.7	51.4	51.9	52.8	53.3	53.6
Below Normal (13%)	53.9	53.5	51.2	48.7	48.1	49.6	51.0	51.9	52.4	53.4	53.9	54.3
Dry (24%)	54.8	54.3	52.0	48.9	48.3	49.9	51.5	52.4	53.2	54.1	54.7	55.1
Critical (15%)	58.0	57.4	53.9	50.1	49.4	50.8	52.3	53.6	55.1	57.5	58.7	59.0

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-2.0	-1.5	-0.4	-0.1	-0.1	-0.1	0.1	-0.2	-0.1	-0.7	-0.8	-1.2
20%	-0.2	-0.4	0.2	-0.3	-0.1	0.0	0.1	-0.3	-0.2	-0.2	-0.3	-0.6
30%	-0.5	-0.6	0.1	-0.1	0.1	0.0	-0.1	-0.4	-0.1	-0.1	-0.2	-0.4
40%	-0.4	-0.4	-0.3	-0.2	0.0	0.0	0.1	-0.2	-0.2	-0.2	-0.3	-0.4
50%	-0.4	-0.4	-0.2	-0.2	0.0	0.0	0.0	-0.3	-0.2	-0.2	-0.3	-0.3
60%	-0.2	-0.5	-0.2	0.1	-0.1	0.0	0.1	-0.2	-0.3	0.2	-0.1	-0.3
70%	-0.2	-0.2	-0.3	0.0	0.0	0.0	0.2	-0.1	-0.2	0.4	-0.1	-0.3
80%	-0.4	-0.1	0.0	0.0	0.1	0.0	0.2	0.0	-0.3	0.5	-0.2	-0.3
90%	-0.1	-0.1	-0.2	0.2	0.1	0.2	0.3	-0.1	-0.1	0.6	0.3	0.0
Long Term												
Full Simulation Period ^b	-0.5	-0.4	-0.1	-0.1	0.0	0.0	0.1	-0.3	-0.2	0.1	-0.3	-0.5
Water Year Types^c												
Wet (32%)	-0.3	-0.2	-0.1	0.0	0.3	0.0	0.1	-0.2	-0.3	0.5	0.0	-0.2
Above Normal (16%)	-0.5	-0.4	-0.2	0.0	0.0	0.0	0.2	-0.2	-0.1	0.1	-0.1	-0.3
Below Normal (13%)	-0.7	-0.5	-0.2	-0.1	-0.1	-0.1	0.1	-0.3	0.0	-0.1	-0.2	-0.3
Dry (24%)	-0.3	-0.3	-0.1	-0.1	-0.3	-0.1	0.1	-0.2	-0.1	-0.2	-0.5	-0.7
Critical (15%)	-1.3	-0.8	-0.2	-0.1	-0.1	0.1	0.1	-0.9	-0.2	-0.5	-0.8	-1.5

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.6.4 Stanislaus River below Tulloch Reservoir, Monthly Temperature

Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	59.7	59.0	54.7	50.9	50.3	51.4	52.7	53.7	54.6	56.4	57.2	58.4
20%	56.6	56.3	53.3	50.3	49.7	50.8	51.9	53.2	54.0	55.0	55.6	56.3
30%	55.6	55.1	52.7	49.6	49.0	50.3	51.6	52.8	53.3	54.1	54.9	55.5
40%	55.0	54.5	52.1	49.2	48.7	49.8	51.3	52.4	53.0	53.8	54.5	54.9
50%	54.6	54.2	51.7	48.9	48.2	49.7	51.0	52.2	52.7	53.5	54.0	54.4
60%	54.0	53.9	51.5	48.4	47.9	49.5	50.7	51.8	52.4	52.6	53.4	53.9
70%	53.7	53.3	51.1	48.0	47.7	49.0	50.2	51.5	51.9	52.3	53.1	53.5
80%	53.3	52.8	50.5	47.4	47.2	48.5	49.7	50.9	51.5	51.6	52.7	53.1
90%	52.1	51.9	49.8	46.6	46.1	47.6	48.9	50.2	50.7	50.7	51.5	51.7
Long Term												
Full Simulation Period ^b	55.4	54.7	52.0	48.7	48.3	49.6	50.9	52.2	52.8	53.6	54.5	55.1
Water Year Types^c												
Wet (32%)	51.8	51.4	49.0	47.8	47.7	49.0	50.0	51.2	51.7	51.6	52.4	52.8
Above Normal (16%)	55.6	54.8	52.0	48.7	48.1	49.4	50.6	51.6	52.0	52.6	53.4	53.9
Below Normal (13%)	54.7	54.0	51.4	48.8	48.2	49.7	50.9	52.2	52.4	53.4	54.2	54.6
Dry (24%)	55.1	54.6	52.2	49.0	48.5	50.0	51.5	52.6	53.3	54.3	55.1	55.8
Critical (15%)	59.4	58.1	54.1	50.2	49.5	50.7	52.2	54.5	55.4	58.0	59.5	60.4

Alternative 5

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	64.5	60.2	55.1	51.0	50.0	51.1	52.9	53.9	55.2	57.1	60.8	63.2
20%	58.4	57.9	53.6	50.2	49.5	50.6	52.2	53.2	54.3	55.4	56.8	57.9
30%	56.4	55.7	52.7	49.4	48.8	50.0	51.8	52.6	53.4	54.7	55.5	56.1
40%	55.3	54.8	52.1	49.0	48.4	49.7	51.6	52.4	52.9	54.0	54.9	55.2
50%	54.7	54.2	51.8	48.7	48.0	49.5	51.0	52.2	52.6	53.7	54.2	54.6
60%	54.4	53.9	51.5	48.3	47.7	49.2	50.6	51.8	52.2	52.8	53.5	54.0
70%	53.7	53.4	50.9	47.9	47.2	48.8	50.1	51.4	51.7	52.4	53.2	53.6
80%	53.3	52.7	50.4	47.1	46.7	48.1	49.6	50.8	51.3	51.9	52.8	53.1
90%	52.1	51.8	49.8	45.9	45.6	47.4	48.7	50.1	50.1	50.7	51.4	52.0
Long Term												
Full Simulation Period ^b	56.2	55.1	52.0	48.6	48.0	49.4	50.9	52.2	52.6	53.9	55.1	56.0
Water Year Types^c												
Wet (32%)	52.7	51.8	49.1	47.7	47.4	48.8	49.7	51.1	51.2	51.7	52.5	52.9
Above Normal (16%)	56.2	55.2	52.1	48.6	47.9	49.2	50.5	51.5	51.9	52.8	53.7	54.3
Below Normal (13%)	55.6	54.3	51.5	48.6	47.9	49.4	51.2	52.1	52.7	54.0	54.9	55.6
Dry (24%)	55.9	55.1	52.3	49.0	48.3	49.7	51.5	52.5	53.5	54.9	56.4	57.7
Critical (15%)	60.5	58.1	53.6	49.7	48.9	50.3	52.9	55.1	55.2	58.0	60.1	62.2

Alternative 5 minus Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	4.8	1.3	0.4	0.1	-0.3	-0.3	0.2	0.2	0.7	0.7	3.5	4.8
20%	1.8	1.7	0.3	-0.1	-0.2	-0.2	0.3	0.1	0.2	0.4	1.3	1.6
30%	0.8	0.6	0.0	-0.2	-0.3	-0.2	0.2	-0.2	0.1	0.6	0.6	0.6
40%	0.3	0.3	0.0	-0.2	-0.3	-0.1	0.3	0.0	-0.1	0.2	0.4	0.3
50%	0.1	0.1	0.1	-0.2	-0.2	-0.2	0.0	0.0	-0.1	0.2	0.2	0.2
60%	0.4	0.0	0.0	0.0	-0.2	-0.3	0.0	0.0	-0.2	0.2	0.1	0.1
70%	0.1	0.1	-0.2	-0.1	-0.4	-0.2	-0.1	-0.1	-0.2	0.2	0.1	0.2
80%	-0.1	-0.1	-0.1	-0.3	-0.5	-0.4	-0.1	-0.2	-0.2	0.2	0.1	0.0
90%	0.0	-0.1	0.0	-0.7	-0.6	-0.2	-0.2	-0.1	-0.6	0.0	0.0	0.3
Long Term												
Full Simulation Period ^b	0.9	0.3	0.0	-0.1	-0.3	-0.2	0.1	0.0	-0.1	0.3	0.6	1.0
Water Year Types^c												
Wet (32%)	0.9	0.4	0.1	-0.1	-0.2	-0.1	-0.2	-0.1	-0.5	0.2	0.1	0.1
Above Normal (16%)	0.7	0.4	0.1	-0.1	-0.2	-0.2	0.0	0.0	-0.1	0.2	0.3	0.4
Below Normal (13%)	0.9	0.2	0.1	-0.2	-0.3	-0.2	0.2	-0.1	0.3	0.6	0.8	1.0
Dry (24%)	0.8	0.5	0.2	-0.1	-0.2	-0.2	0.0	0.0	0.2	0.6	1.3	1.9
Critical (15%)	1.1	0.0	-0.5	-0.5	-0.6	-0.4	0.7	0.7	-0.2	0.0	0.6	1.7

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.7 Stanislaus River below Goodwin Dam Temperature

Table 5C.3.3.7.1 Stanislaus River below Goodwin Dam, Monthly Temperature

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance ^a												
10%	60.7	59.2	54.6	51.1	50.8	51.9	53.1	54.1	55.6	57.6	58.3	60.1
20%	58.0	56.6	53.3	50.3	50.2	51.4	52.4	53.6	54.8	55.9	56.5	57.4
30%	56.1	55.5	52.5	49.7	49.5	50.8	52.1	53.0	54.0	55.1	55.8	56.4
40%	55.5	54.8	51.9	49.3	48.9	50.6	51.7	52.8	53.7	54.6	55.3	55.7
50%	55.0	54.2	51.6	48.9	48.8	50.3	51.4	52.6	53.3	54.4	54.8	55.3
60%	54.5	54.0	51.3	48.4	48.4	50.0	51.0	52.1	52.8	53.5	54.2	54.6
70%	54.0	53.5	51.0	48.0	48.0	49.8	50.6	51.8	52.5	53.2	53.9	54.2
80%	53.5	52.9	50.4	47.3	47.4	49.0	50.1	51.5	52.0	52.6	53.3	53.8
90%	52.4	52.1	49.9	46.5	46.7	48.3	49.2	50.6	50.8	51.5	52.2	52.6
Long Term												
Full Simulation Period ^b	56.0	54.9	51.9	48.8	48.7	50.2	51.3	52.5	53.5	54.6	55.3	56.1
Water Year Types ^c												
Wet (32%)	52.3	51.8	49.1	47.9	48.0	49.4	50.2	51.5	51.8	52.5	53.2	53.4
Above Normal (16%)	56.2	55.1	52.0	48.9	48.6	50.2	51.0	51.9	52.6	53.5	54.2	54.7
Below Normal (13%)	55.3	54.4	51.4	48.8	48.6	50.3	51.5	52.4	53.2	54.4	55.1	55.6
Dry (24%)	55.6	54.8	52.0	49.0	48.9	50.7	51.9	52.9	54.1	55.2	56.0	56.8
Critical (15%)	60.4	57.6	53.6	50.1	49.9	51.3	52.8	54.9	57.2	59.4	60.4	62.6

Alternative 1

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance ^a												
10%	60.3	59.1	54.5	51.1	50.8	51.9	53.1	54.2	55.5	57.4	58.2	59.2
20%	57.3	56.5	53.3	50.3	50.2	51.4	52.4	53.6	54.9	55.9	56.4	57.0
30%	56.4	55.4	52.7	49.7	49.5	50.9	52.0	53.2	53.9	55.0	55.7	56.2
40%	55.7	54.7	52.1	49.3	49.1	50.7	51.7	52.8	53.6	54.6	55.2	55.6
50%	55.2	54.4	51.7	49.0	48.8	50.3	51.4	52.6	53.3	54.2	54.7	55.1
60%	54.9	54.1	51.5	48.5	48.5	50.1	51.1	52.2	53.0	53.4	54.1	54.6
70%	54.5	53.5	51.1	48.2	48.1	49.8	50.7	51.9	52.5	53.0	53.8	54.1
80%	53.9	52.9	50.5	47.6	47.7	49.1	50.2	51.5	52.0	52.4	53.4	53.8
90%	52.7	52.2	49.9	46.9	46.8	48.4	49.4	50.6	51.2	51.2	52.2	52.3
Long Term												
Full Simulation Period ^b	56.0	54.9	51.9	48.9	48.8	50.3	51.3	52.7	53.4	54.4	55.3	55.8
Water Year Types ^c												
Wet (32%)	52.4	51.6	49.1	48.0	48.1	49.5	50.3	51.6	52.1	52.3	53.1	53.4
Above Normal (16%)	56.3	55.1	52.1	49.0	48.8	50.3	51.0	52.0	52.6	53.4	54.1	54.6
Below Normal (13%)	55.3	54.2	51.3	48.9	48.7	50.4	51.4	52.6	53.1	54.2	54.9	55.4
Dry (24%)	55.7	54.8	52.1	49.1	49.1	50.7	52.0	53.0	54.0	55.1	55.9	56.5
Critical (15%)	60.0	58.3	54.0	50.3	50.1	51.5	52.7	55.0	56.4	59.0	60.5	61.3

Alternative 1 minus No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance ^a												
10%	-0.5	-0.1	-0.1	0.0	0.0	0.0	0.0	0.1	-0.1	-0.2	-0.2	-0.9
20%	-0.7	-0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	-0.1	-0.4
30%	0.3	-0.1	0.2	0.1	0.1	0.1	-0.1	0.2	-0.1	-0.2	-0.1	-0.2
40%	0.2	-0.1	0.1	0.0	0.2	0.1	0.0	0.1	0.0	-0.1	0.0	-0.1
50%	0.3	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	-0.2	-0.1	-0.1
60%	0.3	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.3	-0.1	-0.1	0.0
70%	0.5	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.0	-0.1	-0.1	-0.1
80%	0.3	0.0	0.1	0.3	0.3	0.1	0.1	0.0	0.0	-0.2	0.1	0.0
90%	0.3	0.1	0.0	0.4	0.1	0.0	0.1	0.0	0.3	-0.3	0.0	-0.3
Long Term												
Full Simulation Period ^b	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	-0.1	-0.2	-0.1	-0.3
Water Year Types ^c												
Wet (32%)	0.1	-0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.3	-0.2	0.0	0.0
Above Normal (16%)	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.2	0.0	-0.1	-0.1	-0.1
Below Normal (13%)	0.0	-0.2	0.0	0.1	0.1	0.1	-0.2	0.2	-0.1	-0.2	-0.2	-0.2
Dry (24%)	0.1	-0.1	0.1	0.1	0.1	0.1	0.1	0.1	-0.1	-0.1	-0.1	-0.3
Critical (15%)	-0.4	0.7	0.4	0.2	0.2	0.2	0.0	0.1	-0.8	-0.3	0.1	-1.3

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.7.2 Stanislaus River below Goodwin Dam, Monthly Temperature

Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	60.3	59.1	54.5	51.1	50.8	51.9	53.1	54.2	55.5	57.4	58.2	59.2
20%	57.3	56.5	53.3	50.3	50.2	51.4	52.4	53.6	54.9	55.9	56.4	57.0
30%	56.4	55.4	52.7	49.7	49.5	50.9	52.0	53.2	53.9	55.0	55.7	56.2
40%	55.7	54.7	52.1	49.3	49.1	50.7	51.7	52.8	53.6	54.6	55.2	55.6
50%	55.2	54.4	51.7	49.0	48.8	50.3	51.4	52.6	53.3	54.2	54.7	55.1
60%	54.9	54.1	51.5	48.5	48.5	50.1	51.1	52.2	53.0	53.4	54.1	54.6
70%	54.5	53.5	51.1	48.2	48.1	49.8	50.7	51.9	52.5	53.0	53.8	54.1
80%	53.9	52.9	50.5	47.6	47.7	49.1	50.2	51.5	52.0	52.4	53.4	53.8
90%	52.7	52.2	49.9	46.9	46.8	48.4	49.4	50.6	51.2	52.2	52.2	52.3
Long Term												
Full Simulation Period ^b	56.0	54.9	51.9	48.9	48.8	50.3	51.3	52.7	53.4	54.4	55.3	55.8
Water Year Types^c												
Wet (32%)	52.4	51.6	49.1	48.0	48.1	49.5	50.3	51.6	52.1	52.3	53.1	53.4
Above Normal (16%)	56.3	55.1	52.1	49.0	48.8	50.3	51.0	52.0	52.6	53.4	54.1	54.6
Below Normal (13%)	55.3	54.2	51.3	48.9	48.7	50.4	51.4	52.6	53.1	54.2	54.9	55.4
Dry (24%)	55.7	54.8	52.1	49.1	49.1	50.7	52.0	53.0	54.0	55.1	55.9	56.5
Critical (15%)	60.0	58.3	54.0	50.3	50.1	51.5	52.7	55.0	56.4	59.0	60.5	61.3

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	60.7	59.2	54.6	51.1	50.8	51.9	53.1	54.1	55.6	57.6	58.3	60.1
20%	58.0	56.6	53.3	50.3	50.2	51.4	52.4	53.6	54.8	55.9	56.5	57.4
30%	56.1	55.5	52.5	49.7	49.5	50.8	52.1	53.0	54.0	55.1	55.8	56.4
40%	55.5	54.8	51.9	49.3	48.9	50.6	51.7	52.8	53.7	54.6	55.3	55.7
50%	55.0	54.2	51.6	48.9	48.8	50.3	51.4	52.6	53.3	54.4	54.8	55.3
60%	54.5	54.0	51.3	48.4	48.4	50.0	51.0	52.1	52.8	53.5	54.2	54.6
70%	54.0	53.5	51.0	48.0	48.0	49.8	50.6	51.8	52.5	53.2	53.9	54.2
80%	53.5	52.9	50.4	47.3	47.4	49.0	50.1	51.5	52.0	52.6	53.3	53.8
90%	52.4	52.1	49.9	46.5	46.7	48.3	49.2	50.6	50.8	51.5	52.2	52.6
Long Term												
Full Simulation Period ^b	56.0	54.9	51.9	48.8	48.7	50.2	51.3	52.5	53.5	54.6	55.3	56.1
Water Year Types^c												
Wet (32%)	52.3	51.8	49.1	47.9	48.0	49.4	50.2	51.5	51.8	52.5	53.2	53.4
Above Normal (16%)	56.2	55.1	52.0	48.9	48.6	50.2	51.0	51.9	52.6	53.5	54.2	54.7
Below Normal (13%)	55.3	54.4	51.4	48.8	48.6	50.3	51.5	52.4	53.2	54.4	55.1	55.6
Dry (24%)	55.6	54.8	52.0	49.0	48.9	50.7	51.9	52.9	54.1	55.2	56.0	56.8
Critical (15%)	60.4	57.6	53.6	50.1	49.9	51.3	52.8	54.9	57.2	59.4	60.4	62.6

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0.5	0.1	0.1	0.0	0.0	0.0	0.0	-0.1	0.1	0.2	0.2	0.9
20%	0.7	0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	-0.1	0.1	0.4
30%	-0.3	0.1	-0.2	-0.1	-0.1	-0.1	0.1	-0.2	0.1	0.2	0.1	0.2
40%	-0.2	0.1	-0.1	0.0	-0.2	-0.1	0.0	-0.1	0.0	0.1	0.0	0.1
50%	-0.3	-0.1	-0.1	-0.1	0.0	-0.1	0.0	0.0	0.0	0.2	0.1	0.1
60%	-0.3	-0.1	-0.2	-0.1	-0.2	-0.1	-0.1	-0.1	-0.3	0.1	0.1	0.0
70%	-0.5	0.0	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.1	0.1
80%	-0.3	0.0	-0.1	-0.3	-0.3	-0.1	-0.1	0.0	0.0	0.2	-0.1	0.0
90%	-0.3	-0.1	0.0	-0.4	-0.1	0.0	-0.1	0.0	-0.3	0.3	0.0	0.3
Long Term												
Full Simulation Period ^b	0.0	0.0	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	0.1	0.2	0.1	0.3
Water Year Types^c												
Wet (32%)	-0.1	0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.3	0.2	0.0	0.0
Above Normal (16%)	-0.1	0.0	-0.1	-0.1	-0.1	-0.1	0.0	-0.2	0.0	0.1	0.1	0.1
Below Normal (13%)	0.0	0.2	0.0	-0.1	-0.1	-0.1	0.2	-0.2	0.1	0.2	0.2	0.2
Dry (24%)	-0.1	0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.1	0.1	0.1	0.3
Critical (15%)	0.4	-0.7	-0.4	-0.2	-0.2	-0.2	0.0	-0.1	0.8	0.3	-0.1	1.3

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.7.3 Stanislaus River below Goodwin Dam, Monthly Temperature

Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	60.3	59.1	54.5	51.1	50.8	51.9	53.1	54.2	55.5	57.4	58.2	59.2
20%	57.3	56.5	53.3	50.3	50.2	51.4	52.4	53.6	54.9	55.9	56.4	57.0
30%	56.4	55.4	52.7	49.7	49.5	50.9	52.0	53.2	53.9	55.0	55.7	56.2
40%	55.7	54.7	52.1	49.3	49.1	50.7	51.7	52.8	53.6	54.6	55.2	55.6
50%	55.2	54.4	51.7	49.0	48.8	50.3	51.4	52.6	53.3	54.2	54.7	55.1
60%	54.9	54.1	51.5	48.5	48.5	50.1	51.1	52.2	53.0	53.4	54.1	54.6
70%	54.5	53.5	51.1	48.2	48.1	49.8	50.7	51.9	52.5	53.0	53.8	54.1
80%	53.9	52.9	50.5	47.6	47.7	49.1	50.2	51.5	52.0	52.4	53.4	53.8
90%	52.7	52.2	49.9	46.9	46.8	48.4	49.4	50.6	51.2	52.2	52.2	52.3
Long Term												
Full Simulation Period ^b	56.0	54.9	51.9	48.9	48.8	50.3	51.3	52.7	53.4	54.4	55.3	55.8
Water Year Types^c												
Wet (32%)	52.4	51.6	49.1	48.0	48.1	49.5	50.3	51.6	52.1	52.3	53.1	53.4
Above Normal (16%)	56.3	55.1	52.1	49.0	48.8	50.3	51.0	52.0	52.6	53.4	54.1	54.6
Below Normal (13%)	55.3	54.2	51.3	48.9	48.7	50.4	51.4	52.6	53.1	54.2	54.9	55.4
Dry (24%)	55.7	54.8	52.1	49.1	49.1	50.7	52.0	53.0	54.0	55.1	55.9	56.5
Critical (15%)	60.0	58.3	54.0	50.3	50.1	51.5	52.7	55.0	56.4	59.0	60.5	61.3

Alternative 3

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	58.5	57.6	54.1	50.9	50.8	52.1	53.1	54.0	55.3	56.7	57.3	58.2
20%	57.0	56.0	53.3	50.1	50.1	51.4	52.4	53.5	54.7	55.6	56.0	56.6
30%	56.0	54.7	52.8	49.7	49.5	50.9	52.0	52.9	53.9	54.8	55.4	55.9
40%	55.2	54.3	51.7	49.1	49.1	50.7	51.7	52.6	53.5	54.4	54.9	55.2
50%	54.8	53.9	51.5	48.9	48.8	50.4	51.4	52.4	53.2	54.0	54.5	54.8
60%	54.5	53.7	51.3	48.6	48.5	50.1	51.2	52.1	52.8	53.6	54.0	54.4
70%	54.1	53.2	50.8	48.1	48.1	49.8	50.8	51.9	52.5	53.3	53.7	53.9
80%	53.4	52.9	50.5	47.7	47.7	49.0	50.3	51.4	52.0	52.9	53.2	53.4
90%	52.6	52.1	49.7	47.1	46.9	48.6	49.6	50.6	51.4	51.9	52.4	52.4
Long Term												
Full Simulation Period ^b	55.5	54.5	51.8	48.8	48.9	50.4	51.4	52.4	53.4	54.4	55.0	55.3
Water Year Types^c												
Wet (32%)	52.2	51.5	49.0	48.0	48.4	49.6	50.4	51.5	52.1	52.8	53.1	53.2
Above Normal (16%)	55.8	54.7	51.9	49.0	48.8	50.2	51.1	51.9	52.7	53.6	54.0	54.3
Below Normal (13%)	54.6	53.7	51.1	48.8	48.6	50.4	51.4	52.3	53.2	54.2	54.6	55.1
Dry (24%)	55.4	54.5	52.0	49.0	48.9	50.7	51.9	52.9	54.0	54.9	55.4	55.9
Critical (15%)	58.7	57.5	53.8	50.2	50.2	51.6	52.7	54.2	56.0	58.4	59.6	59.8

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-1.7	-1.4	-0.4	-0.1	0.0	0.2	0.0	-0.2	-0.2	-0.7	-0.9	-0.9
20%	-0.3	-0.5	0.1	-0.3	-0.1	0.0	0.1	-0.1	-0.2	-0.3	-0.4	-0.4
30%	-0.4	-0.7	0.1	-0.1	-0.1	0.0	0.0	-0.3	0.0	-0.2	-0.3	-0.3
40%	-0.5	-0.4	-0.3	-0.2	0.0	0.0	0.0	-0.2	-0.1	-0.1	-0.4	-0.4
50%	-0.4	-0.5	-0.2	-0.1	0.0	0.1	0.0	-0.2	-0.1	-0.2	-0.2	-0.3
60%	-0.3	-0.4	-0.2	0.1	-0.1	-0.1	0.0	-0.1	-0.2	0.2	0.0	-0.2
70%	-0.4	-0.2	-0.2	-0.1	0.0	0.0	0.1	-0.1	0.0	0.3	-0.1	-0.3
80%	-0.5	-0.1	-0.1	0.1	0.0	-0.1	0.0	-0.1	0.0	0.4	-0.3	-0.4
90%	-0.1	-0.1	-0.1	0.3	0.1	0.2	0.3	0.0	0.2	0.6	0.2	0.1
Long Term												
Full Simulation Period ^b	-0.5	-0.4	-0.1	-0.1	0.0	0.0	0.0	-0.3	-0.1	0.0	-0.3	-0.5
Water Year Types^c												
Wet (32%)	-0.3	-0.2	-0.1	0.0	0.2	0.1	0.1	-0.1	-0.1	0.5	0.0	-0.2
Above Normal (16%)	-0.5	-0.4	-0.2	0.0	0.0	0.0	0.1	-0.1	0.1	0.2	-0.1	-0.3
Below Normal (13%)	-0.7	-0.5	-0.2	-0.1	-0.1	0.0	0.0	-0.3	0.1	-0.1	-0.2	-0.3
Dry (24%)	-0.3	-0.3	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.2	-0.5	-0.7
Critical (15%)	-1.3	-0.8	-0.2	-0.1	0.0	0.1	0.0	-0.8	-0.4	-0.6	-0.9	-1.5

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.7.4 Stanislaus River below Goodwin Dam, Monthly Temperature

Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance ^a												
10%	60.3	59.1	54.5	51.1	50.8	51.9	53.1	54.2	55.5	57.4	58.2	59.2
20%	57.3	56.5	53.3	50.3	50.2	51.4	52.4	53.6	54.9	55.9	56.4	57.0
30%	56.4	55.4	52.7	49.7	49.5	50.9	52.0	53.2	53.9	55.0	55.7	56.2
40%	55.7	54.7	52.1	49.3	49.1	50.7	51.7	52.8	53.6	54.6	55.2	55.6
50%	55.2	54.4	51.7	49.0	48.8	50.3	51.4	52.6	53.3	54.2	54.7	55.1
60%	54.9	54.1	51.5	48.5	48.5	50.1	51.1	52.2	53.0	53.4	54.1	54.6
70%	54.5	53.5	51.1	48.2	48.1	49.8	50.7	51.9	52.5	53.0	53.8	54.1
80%	53.9	52.9	50.5	47.6	47.7	49.1	50.2	51.5	52.0	52.4	53.4	53.8
90%	52.7	52.2	49.9	46.9	46.8	48.4	49.4	50.6	51.2	52.2	52.2	52.3
Long Term												
Full Simulation Period ^b	56.0	54.9	51.9	48.9	48.8	50.3	51.3	52.7	53.4	54.4	55.3	55.8
Water Year Types ^c												
Wet (32%)	52.4	51.6	49.1	48.0	48.1	49.5	50.3	51.6	52.1	52.3	53.1	53.4
Above Normal (16%)	56.3	55.1	52.1	49.0	48.8	50.3	51.0	52.0	52.6	53.4	54.1	54.6
Below Normal (13%)	55.3	54.2	51.3	48.9	48.7	50.4	51.4	52.6	53.1	54.2	54.9	55.4
Dry (24%)	55.7	54.8	52.1	49.1	49.1	50.7	52.0	53.0	54.0	55.1	55.9	56.5
Critical (15%)	60.0	58.3	54.0	50.3	50.1	51.5	52.7	55.0	56.4	59.0	60.5	61.3

Alternative 5

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance ^a												
10%	64.8	60.4	54.8	51.2	50.7	51.9	53.2	54.3	56.3	58.3	61.3	64.0
20%	58.8	58.0	53.4	50.3	50.2	51.3	52.5	53.7	55.1	56.6	57.6	58.7
30%	56.7	56.0	52.7	49.6	49.4	50.8	52.2	53.0	54.2	55.6	56.3	56.9
40%	55.7	54.9	52.0	49.1	48.9	50.5	51.9	52.9	53.8	54.7	55.6	55.9
50%	55.2	54.4	51.6	48.9	48.8	50.1	51.4	52.7	53.2	54.5	54.9	55.3
60%	54.8	54.1	51.5	48.4	48.3	49.9	51.0	52.2	52.8	53.5	54.2	54.7
70%	54.2	53.6	50.9	48.0	47.8	49.5	50.6	51.8	52.2	53.2	53.9	54.3
80%	53.6	53.0	50.5	47.3	47.4	48.9	50.0	51.2	52.0	52.6	53.4	53.7
90%	52.5	52.1	49.7	46.2	46.7	48.2	49.1	50.5	50.7	51.5	52.2	52.7
Long Term												
Full Simulation Period ^b	56.6	55.3	52.0	48.8	48.6	50.1	51.3	52.7	53.4	54.8	55.9	56.7
Water Year Types ^c												
Wet (32%)	53.1	52.1	49.2	47.9	47.9	49.3	50.1	51.4	51.7	52.5	53.2	53.6
Above Normal (16%)	56.6	55.5	52.2	48.9	48.6	50.1	50.9	52.0	52.5	53.6	54.4	55.0
Below Normal (13%)	56.0	54.4	51.5	48.7	48.5	50.2	51.5	52.5	53.4	54.8	55.6	56.4
Dry (24%)	56.3	55.3	52.2	49.1	48.9	50.6	51.9	53.0	54.3	55.7	57.1	58.4
Critical (15%)	60.9	58.3	53.5	49.8	49.7	51.1	53.3	55.7	56.5	59.3	61.3	63.0

Alternative 5 minus Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance ^a												
10%	4.5	1.4	0.3	0.1	-0.2	-0.1	0.1	0.1	0.8	1.0	3.2	4.8
20%	1.4	1.6	0.1	-0.1	-0.1	-0.1	0.2	0.1	0.3	0.6	1.2	1.7
30%	0.3	0.6	-0.1	-0.1	-0.1	-0.1	0.2	-0.2	0.3	0.6	0.6	0.7
40%	0.0	0.2	-0.1	-0.2	-0.2	-0.2	0.1	0.0	0.2	0.1	0.4	0.3
50%	0.0	0.1	0.0	-0.1	-0.1	-0.2	0.0	0.0	0.0	0.3	0.2	0.1
60%	-0.1	0.0	0.0	-0.1	-0.2	-0.2	-0.1	0.0	-0.2	0.2	0.1	0.1
70%	-0.3	0.2	-0.2	-0.2	-0.3	-0.3	-0.1	-0.1	-0.3	0.1	0.1	0.2
80%	-0.2	0.0	0.0	-0.3	-0.3	-0.2	-0.2	-0.2	0.0	0.2	0.0	-0.1
90%	-0.2	-0.1	-0.2	-0.7	-0.1	-0.2	-0.2	-0.1	-0.5	0.2	0.0	0.4
Long Term												
Full Simulation Period ^b	0.6	0.4	0.0	-0.1	-0.2	-0.2	0.0	0.0	0.0	0.4	0.6	1.0
Water Year Types ^c												
Wet (32%)	0.6	0.4	0.1	-0.1	-0.2	-0.2	-0.2	-0.1	-0.4	0.2	0.1	0.2
Above Normal (16%)	0.3	0.4	0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	0.2	0.3	0.4
Below Normal (13%)	0.7	0.2	0.1	-0.1	-0.2	-0.2	0.1	-0.1	0.3	0.5	0.8	1.0
Dry (24%)	0.5	0.5	0.1	0.0	-0.1	-0.1	-0.1	0.0	0.2	0.6	1.2	1.9
Critical (15%)	0.8	0.0	-0.5	-0.4	-0.5	-0.4	0.5	0.7	0.1	0.3	0.8	1.7

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.8 Stanislaus River at Orange Blossom Bridge Temperature

Table 5C.3.3.8.1 Stanislaus River at Orange Blossom Bridge, Monthly Temperature

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	61.6	58.7	53.5	51.3	52.5	55.8	55.3	57.7	63.9	65.6	65.4	64.5
20%	59.3	56.9	52.6	50.8	51.7	55.1	54.8	56.8	62.5	64.6	64.2	63.3
30%	57.6	56.2	52.3	50.1	51.2	54.6	54.1	56.0	61.6	64.1	63.4	62.0
40%	56.8	55.1	51.5	49.6	50.7	54.0	53.6	55.3	60.7	63.7	62.9	61.7
50%	56.4	54.9	51.1	49.1	50.3	53.7	53.1	55.0	59.3	63.2	62.5	61.2
60%	55.9	54.6	50.7	48.8	50.1	53.2	52.7	54.4	56.6	62.6	62.2	60.7
70%	55.2	54.1	50.5	48.4	49.6	52.1	52.2	53.9	55.9	62.1	61.9	60.4
80%	54.9	53.7	50.2	47.9	49.2	51.0	51.9	53.6	55.3	61.5	61.5	59.9
90%	54.0	52.7	49.8	47.1	48.4	49.7	50.8	52.6	54.4	58.6	59.8	58.2
Long Term												
Full Simulation Period ^b	57.2	55.3	51.4	49.2	50.4	53.2	53.2	55.1	59.0	62.9	62.7	61.5
Water Year Types^c												
Wet (32%)	53.6	52.3	49.0	48.6	49.5	50.8	51.5	53.3	55.2	60.0	60.0	58.5
Above Normal (16%)	57.5	55.7	51.7	49.7	50.7	53.6	52.8	54.6	58.0	62.5	62.2	60.9
Below Normal (13%)	56.5	54.7	50.9	49.1	50.4	53.9	53.4	54.8	59.5	63.4	62.8	61.5
Dry (24%)	56.9	55.2	51.3	49.2	50.7	54.5	54.1	56.0	61.4	64.0	63.5	62.4
Critical (15%)	61.4	57.7	52.6	50.1	51.7	54.9	55.5	58.2	63.7	67.5	67.5	66.9

Alternative 1

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	62.7	58.9	53.4	51.2	52.1	55.3	56.2	56.9	63.5	65.3	65.3	64.1
20%	60.8	57.0	52.7	50.8	51.5	54.8	55.6	55.9	62.4	64.5	64.1	62.9
30%	60.1	55.7	52.4	50.0	50.9	54.3	55.3	55.5	61.6	64.0	63.3	61.9
40%	58.9	55.2	51.7	49.5	50.5	53.6	54.6	55.2	60.0	63.6	62.9	61.5
50%	58.3	54.7	51.3	49.1	50.2	53.1	53.9	54.8	58.4	63.0	62.5	61.0
60%	57.6	54.4	51.0	49.0	49.8	52.8	53.3	54.4	56.3	62.5	62.2	60.6
70%	57.0	54.1	50.7	48.4	49.5	52.2	52.6	54.0	55.4	61.9	61.8	60.1
80%	56.5	53.4	50.3	48.0	49.1	51.5	51.9	53.7	54.8	61.3	61.4	59.6
90%	55.7	52.7	49.9	47.4	48.5	50.5	51.0	52.8	53.5	60.1	60.3	58.2
Long Term												
Full Simulation Period ^b	58.8	55.2	51.5	49.2	50.3	53.1	53.9	54.9	58.5	62.8	62.7	61.2
Water Year Types^c												
Wet (32%)	55.0	52.1	49.0	48.6	49.3	51.2	51.7	53.5	54.5	60.1	60.3	58.4
Above Normal (16%)	59.3	55.5	51.9	49.7	50.5	53.3	53.4	54.4	57.7	62.4	62.2	60.7
Below Normal (13%)	57.9	54.4	50.9	49.1	50.0	53.3	54.1	54.8	58.9	63.3	62.7	61.1
Dry (24%)	58.8	55.1	51.5	49.3	50.6	54.1	55.3	55.6	61.3	63.9	63.4	62.2
Critical (15%)	62.6	58.2	53.1	50.3	51.8	55.0	56.5	57.6	63.3	66.8	67.6	66.5

Alternative 1 minus No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1.1	0.2	-0.1	0.0	-0.4	-0.5	0.9	-0.8	-0.3	-0.2	-0.1	-0.4
20%	1.5	0.1	0.0	0.0	-0.1	-0.2	0.8	-0.9	-0.1	-0.1	-0.1	-0.4
30%	2.5	-0.5	0.1	-0.1	-0.3	-0.3	1.2	-0.4	-0.1	-0.1	-0.1	-0.1
40%	2.1	0.2	0.3	-0.1	-0.2	-0.4	1.0	-0.1	-0.7	-0.1	0.0	-0.2
50%	1.9	-0.2	0.2	0.0	-0.1	-0.6	0.8	-0.2	-0.9	-0.2	0.0	-0.2
60%	1.7	-0.1	0.3	0.2	-0.3	-0.4	0.6	0.0	-0.3	-0.1	0.0	-0.1
70%	1.7	0.0	0.2	0.0	-0.1	0.1	0.4	0.1	-0.5	-0.2	0.0	-0.3
80%	1.6	-0.2	0.1	0.1	-0.2	0.6	0.1	0.1	-0.5	-0.2	-0.1	-0.3
90%	1.7	0.0	0.1	0.3	0.1	0.8	0.2	0.2	-1.0	1.5	0.5	0.1
Long Term												
Full Simulation Period ^b	1.6	-0.1	0.2	0.0	-0.1	-0.1	0.7	-0.2	-0.4	-0.1	0.1	-0.2
Water Year Types^c												
Wet (32%)	1.4	-0.2	0.0	0.0	-0.1	0.5	0.2	0.1	-0.7	0.2	0.3	-0.1
Above Normal (16%)	1.8	-0.2	0.2	0.0	-0.2	-0.3	0.6	-0.2	-0.3	-0.1	-0.1	-0.2
Below Normal (13%)	1.4	-0.3	0.1	0.0	-0.3	-0.6	0.8	0.0	-0.6	-0.2	-0.1	-0.3
Dry (24%)	1.9	-0.1	0.2	0.1	-0.1	-0.5	1.2	-0.5	-0.1	-0.1	-0.1	-0.2
Critical (15%)	1.2	0.5	0.4	0.2	0.1	0.1	1.0	-0.7	-0.4	-0.7	0.1	-0.4

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.8.2 Stanislaus River at Orange Blossom Bridge, Monthly Temperature

Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	62.7	58.9	53.4	51.2	52.1	55.3	56.2	56.9	63.5	65.3	65.3	64.1
20%	60.8	57.0	52.7	50.8	51.5	54.8	55.6	55.9	62.4	64.5	64.1	62.9
30%	60.1	55.7	52.4	50.0	50.9	54.3	55.3	55.5	61.6	64.0	63.3	61.9
40%	58.9	55.2	51.7	49.5	50.5	53.6	54.6	55.2	60.0	63.6	62.9	61.5
50%	58.3	54.7	51.3	49.1	50.2	53.1	53.9	54.8	58.4	63.0	62.5	61.0
60%	57.6	54.4	51.0	49.0	49.8	52.8	53.3	54.4	56.3	62.5	62.2	60.6
70%	57.0	54.1	50.7	48.4	49.5	52.2	52.6	54.0	55.4	61.9	61.8	60.1
80%	56.5	53.4	50.3	48.0	49.1	51.5	51.9	53.7	54.8	61.3	61.4	59.6
90%	55.7	52.7	49.9	47.4	48.5	50.5	51.0	52.8	53.5	60.1	60.3	58.2
Long Term												
Full Simulation Period ^b	58.8	55.2	51.5	49.2	50.3	53.1	53.9	54.9	58.5	62.8	62.7	61.2
Water Year Types^c												
Wet (32%)	55.0	52.1	49.0	48.6	49.3	51.2	51.7	53.5	54.5	60.1	60.3	58.4
Above Normal (16%)	59.3	55.5	51.9	49.7	50.5	53.3	53.4	54.4	57.7	62.4	62.2	60.7
Below Normal (13%)	57.9	54.4	50.9	49.1	50.0	53.3	54.1	54.8	58.9	63.3	62.7	61.1
Dry (24%)	58.8	55.1	51.5	49.3	50.6	54.1	55.3	55.6	61.3	63.9	63.4	62.2
Critical (15%)	62.6	58.2	53.1	50.3	51.8	55.0	56.5	57.6	63.3	66.8	67.6	66.5

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	61.6	58.7	53.5	51.3	52.5	55.8	55.3	57.7	63.9	65.6	65.4	64.5
20%	59.3	56.9	52.6	50.8	51.7	55.1	54.8	56.8	62.5	64.6	64.2	63.3
30%	57.6	56.2	52.3	50.1	51.2	54.6	54.1	56.0	61.6	64.1	63.4	62.0
40%	56.8	55.1	51.5	49.6	50.7	54.0	53.6	55.3	60.7	63.7	62.9	61.7
50%	56.4	54.9	51.1	49.1	50.3	53.7	53.1	55.0	59.3	63.2	62.5	61.2
60%	55.9	54.6	50.7	48.8	50.1	53.2	52.7	54.4	56.6	62.6	62.2	60.7
70%	55.2	54.1	50.5	48.4	49.6	52.1	52.2	53.9	55.9	62.1	61.9	60.4
80%	54.9	53.7	50.2	47.9	49.2	51.0	51.9	53.6	55.3	61.5	61.5	59.9
90%	54.0	52.7	49.8	47.1	48.4	49.7	50.8	52.6	54.4	58.6	59.8	58.2
Long Term												
Full Simulation Period ^b	57.2	55.3	51.4	49.2	50.4	53.2	53.2	55.1	59.0	62.9	62.7	61.5
Water Year Types^c												
Wet (32%)	53.6	52.3	49.0	48.6	49.5	50.8	51.5	53.3	55.2	60.0	60.0	58.5
Above Normal (16%)	57.5	55.7	51.7	49.7	50.7	53.6	52.8	54.6	58.0	62.5	62.2	60.9
Below Normal (13%)	56.5	54.7	50.9	49.1	50.4	53.9	53.4	54.8	59.5	63.4	62.8	61.5
Dry (24%)	56.9	55.2	51.3	49.2	50.7	54.5	54.1	56.0	61.4	64.0	63.5	62.4
Critical (15%)	61.4	57.7	52.6	50.1	51.7	54.9	55.5	58.2	63.7	67.5	67.5	66.9

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-1.1	-0.2	0.1	0.0	0.4	0.5	-0.9	0.8	0.3	0.2	0.1	0.4
20%	-1.5	-0.1	0.0	0.0	0.1	0.2	-0.8	0.9	0.1	0.1	0.1	0.4
30%	-2.5	0.5	-0.1	0.1	0.3	0.3	-1.2	0.4	0.1	0.1	0.1	0.1
40%	-2.1	-0.2	-0.3	0.1	0.2	0.4	-1.0	0.1	0.7	0.1	0.0	0.2
50%	-1.9	0.2	-0.2	0.0	0.1	0.6	-0.8	0.2	0.9	0.2	0.0	0.2
60%	-1.7	0.1	-0.3	-0.2	0.3	0.4	-0.6	0.0	0.3	0.1	0.0	0.1
70%	-1.7	0.0	-0.2	0.0	0.1	-0.1	-0.4	-0.1	0.5	0.2	0.0	0.3
80%	-1.6	0.2	-0.1	-0.1	0.2	-0.6	-0.1	-0.1	0.5	0.2	0.1	0.3
90%	-1.7	0.0	-0.1	-0.3	-0.1	-0.8	-0.2	-0.2	1.0	-1.5	-0.5	-0.1
Long Term												
Full Simulation Period ^b	-1.6	0.1	-0.2	0.0	0.1	0.1	-0.7	0.2	0.4	0.1	-0.1	0.2
Water Year Types^c												
Wet (32%)	-1.4	0.2	0.0	0.0	0.1	-0.5	-0.2	-0.1	0.7	-0.2	-0.3	0.1
Above Normal (16%)	-1.8	0.2	-0.2	0.0	0.2	0.3	-0.6	0.2	0.3	0.1	0.1	0.2
Below Normal (13%)	-1.4	0.3	-0.1	0.0	0.3	0.6	-0.8	0.0	0.6	0.2	0.1	0.3
Dry (24%)	-1.9	0.1	-0.2	-0.1	0.1	0.5	-1.2	0.5	0.1	0.1	0.1	0.2
Critical (15%)	-1.2	-0.5	-0.4	-0.2	-0.1	-0.1	-1.0	0.7	0.4	0.7	-0.1	0.4

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.8.3 Stanislaus River at Orange Blossom Bridge, Monthly Temperature

Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	62.7	58.9	53.4	51.2	52.1	55.3	56.2	56.9	63.5	65.3	65.3	64.1
20%	60.8	57.0	52.7	50.8	51.5	54.8	55.6	55.9	62.4	64.5	64.1	62.9
30%	60.1	55.7	52.4	50.0	50.9	54.3	55.3	55.5	61.6	64.0	63.3	61.9
40%	58.9	55.2	51.7	49.5	50.5	53.6	54.6	55.2	60.0	63.6	62.9	61.5
50%	58.3	54.7	51.3	49.1	50.2	53.1	53.9	54.8	58.4	63.0	62.5	61.0
60%	57.6	54.4	51.0	49.0	49.8	52.8	53.3	54.4	56.3	62.5	62.2	60.6
70%	57.0	54.1	50.7	48.4	49.5	52.2	52.6	54.0	55.4	61.9	61.8	60.1
80%	56.5	53.4	50.3	48.0	49.1	51.5	51.9	53.7	54.8	61.3	61.4	59.6
90%	55.7	52.7	49.9	47.4	48.5	50.5	51.0	52.8	53.5	60.1	60.3	58.2
Long Term												
Full Simulation Period ^b	58.8	55.2	51.5	49.2	50.3	53.1	53.9	54.9	58.5	62.8	62.7	61.2
Water Year Types^c												
Wet (32%)	55.0	52.1	49.0	48.6	49.3	51.2	51.7	53.5	54.5	60.1	60.3	58.4
Above Normal (16%)	59.3	55.5	51.9	49.7	50.5	53.3	53.4	54.4	57.7	62.4	62.2	60.7
Below Normal (13%)	57.9	54.4	50.9	49.1	50.0	53.3	54.1	54.8	58.9	63.3	62.7	61.1
Dry (24%)	58.8	55.1	51.5	49.3	50.6	54.1	55.3	55.6	61.3	63.9	63.4	62.2
Critical (15%)	62.6	58.2	53.1	50.3	51.8	55.0	56.5	57.6	63.3	66.8	67.6	66.5

Alternative 3

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	61.3	57.6	53.2	51.0	52.9	55.8	55.5	57.8	63.9	65.8	64.8	63.5
20%	60.0	56.6	52.7	50.7	51.9	55.2	54.8	56.7	63.2	64.8	63.8	62.6
30%	59.2	55.4	52.2	50.2	51.3	54.6	54.3	56.2	62.6	64.2	63.1	62.1
40%	58.3	54.8	51.6	49.5	50.9	54.1	53.8	55.6	62.1	63.9	62.8	61.4
50%	57.9	54.5	51.1	49.2	50.5	53.7	53.2	55.2	61.7	63.5	62.4	61.1
60%	57.4	54.1	50.9	48.8	50.1	53.4	52.8	54.7	61.3	63.3	62.1	60.8
70%	56.8	53.9	50.5	48.5	49.7	52.6	52.5	54.4	60.8	63.1	61.9	60.3
80%	56.4	53.5	50.2	48.2	49.4	51.6	51.8	53.8	60.3	62.7	61.6	60.0
90%	55.4	52.9	49.9	47.5	48.5	50.5	51.1	53.1	59.0	61.4	60.4	55.8
Long Term												
Full Simulation Period ^b	58.3	55.0	51.4	49.3	50.6	53.4	53.4	55.3	61.3	63.3	62.4	60.8
Water Year Types^c												
Wet (32%)	54.7	52.0	48.9	48.7	49.6	51.5	51.8	53.7	58.8	60.6	59.8	58.2
Above Normal (16%)	58.9	55.3	51.7	49.8	50.7	53.4	53.1	55.0	61.7	63.5	62.2	60.8
Below Normal (13%)	57.5	54.1	50.7	49.0	50.1	54.0	53.5	55.1	61.7	63.7	62.6	61.2
Dry (24%)	58.4	54.9	51.4	49.3	51.0	54.6	54.3	56.3	62.5	64.2	63.1	61.8
Critical (15%)	61.3	57.5	52.8	50.2	52.3	55.2	55.6	57.9	64.0	67.0	66.5	64.9

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-1.4	-1.4	-0.2	-0.3	0.8	0.5	-0.7	0.9	0.4	0.5	-0.5	-0.7
20%	-0.8	-0.5	0.0	-0.1	0.4	0.4	-0.8	0.8	0.7	0.3	-0.3	-0.3
30%	-0.9	-0.3	-0.2	0.2	0.4	0.3	-0.9	0.7	1.0	0.2	-0.2	0.2
40%	-0.7	-0.4	-0.1	0.0	0.4	0.5	-0.8	0.4	2.1	0.3	-0.1	-0.1
50%	-0.4	-0.2	-0.2	0.0	0.3	0.6	-0.6	0.4	3.3	0.5	-0.1	0.1
60%	-0.2	-0.3	-0.1	-0.1	0.3	0.6	-0.5	0.3	5.0	0.7	-0.1	0.2
70%	-0.1	-0.2	-0.2	0.1	0.2	0.4	-0.1	0.4	5.4	1.2	0.1	0.2
80%	-0.1	0.1	-0.1	0.2	0.3	0.1	-0.1	0.1	5.5	1.4	0.2	0.4
90%	-0.3	0.3	-0.1	0.1	0.0	0.0	0.1	0.3	5.5	1.3	0.1	-2.4
Long Term												
Full Simulation Period ^b	-0.5	-0.3	-0.1	0.1	0.3	0.4	-0.5	0.4	2.8	0.5	-0.4	-0.4
Water Year Types^c												
Wet (32%)	-0.3	-0.1	-0.1	0.1	0.3	0.3	0.0	0.2	4.3	0.4	-0.5	-0.3
Above Normal (16%)	-0.4	-0.3	-0.2	0.2	0.2	0.1	-0.4	0.5	4.0	1.1	0.0	0.1
Below Normal (13%)	-0.4	-0.3	-0.2	0.0	0.1	0.7	-0.6	0.4	2.9	0.4	-0.1	0.1
Dry (24%)	-0.4	-0.2	-0.1	0.0	0.4	0.5	-1.0	0.7	1.2	0.3	-0.3	-0.4
Critical (15%)	-1.2	-0.7	-0.3	-0.1	0.5	0.2	-0.9	0.3	0.7	0.2	-1.1	-1.6

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.8.4 Stanislaus River at Orange Blossom Bridge, Monthly Temperature

Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	62.7	58.9	53.4	51.2	52.1	55.3	56.2	56.9	63.5	65.3	65.3	64.1
20%	60.8	57.0	52.7	50.8	51.5	54.8	55.6	55.9	62.4	64.5	64.1	62.9
30%	60.1	55.7	52.4	50.0	50.9	54.3	55.3	55.5	61.6	64.0	63.3	61.9
40%	58.9	55.2	51.7	49.5	50.5	53.6	54.6	55.2	60.0	63.6	62.9	61.5
50%	58.3	54.7	51.3	49.1	50.2	53.1	53.9	54.8	58.4	63.0	62.5	61.0
60%	57.6	54.4	51.0	49.0	49.8	52.8	53.3	54.4	56.3	62.5	62.2	60.6
70%	57.0	54.1	50.7	48.4	49.5	52.2	52.6	54.0	55.4	61.9	61.8	60.1
80%	56.5	53.4	50.3	48.0	49.1	51.5	51.9	53.7	54.8	61.3	61.4	59.6
90%	55.7	52.7	49.9	47.4	48.5	50.5	51.0	52.8	53.5	60.1	60.3	58.2
Long Term												
Full Simulation Period ^b	58.8	55.2	51.5	49.2	50.3	53.1	53.9	54.9	58.5	62.8	62.7	61.2
Water Year Types^c												
Wet (32%)	55.0	52.1	49.0	48.6	49.3	51.2	51.7	53.5	54.5	60.1	60.3	58.4
Above Normal (16%)	59.3	55.5	51.9	49.7	50.5	53.3	53.4	54.4	57.7	62.4	62.2	60.7
Below Normal (13%)	57.9	54.4	50.9	49.1	50.0	53.3	54.1	54.8	58.9	63.3	62.7	61.1
Dry (24%)	58.8	55.1	51.5	49.3	50.6	54.1	55.3	55.6	61.3	63.9	63.4	62.2
Critical (15%)	62.6	58.2	53.1	50.3	51.8	55.0	56.5	57.6	63.3	66.8	67.6	66.5

Alternative 5

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	65.0	59.6	53.4	51.3	52.5	55.7	54.6	56.3	64.0	66.4	67.0	67.3
20%	60.0	58.0	52.6	50.6	51.7	55.0	54.1	55.8	62.7	65.1	65.0	64.2
30%	58.1	56.5	52.2	49.9	51.2	54.5	53.7	55.4	61.8	64.3	63.7	62.7
40%	57.1	55.3	51.6	49.6	50.7	54.0	53.5	55.0	61.0	63.7	63.0	61.8
50%	56.5	55.0	51.2	49.1	50.3	53.6	53.0	54.7	59.2	63.2	62.7	61.3
60%	55.9	54.6	50.8	48.9	50.1	53.3	52.6	54.3	57.0	62.7	62.3	60.9
70%	55.4	54.2	50.6	48.4	49.6	52.0	52.2	53.7	55.9	62.2	61.9	60.6
80%	55.0	53.7	50.3	47.9	49.2	51.0	51.8	53.4	55.3	61.6	61.5	60.0
90%	54.0	53.1	49.8	47.2	48.3	49.6	50.7	52.6	54.4	58.9	60.1	58.1
Long Term												
Full Simulation Period ^b	57.8	55.7	51.5	49.2	50.4	53.1	52.9	54.8	59.1	63.3	63.2	61.9
Water Year Types^c												
Wet (32%)	54.2	52.6	49.0	48.6	49.4	50.8	51.5	53.1	55.2	60.5	60.5	58.8
Above Normal (16%)	57.9	56.0	51.8	49.7	50.8	53.6	52.6	54.2	57.9	62.6	62.3	61.0
Below Normal (13%)	57.2	54.7	50.9	49.0	50.3	53.8	53.2	54.6	59.9	63.7	63.1	62.0
Dry (24%)	57.5	55.6	51.4	49.3	50.8	54.5	53.7	55.4	61.6	64.3	64.2	63.5
Critical (15%)	61.7	58.3	52.6	50.0	51.6	54.7	54.9	58.0	64.2	68.0	68.4	67.3

Alternative 5 minus Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2.3	0.7	0.0	0.1	0.4	0.4	-1.6	-0.6	0.5	1.1	1.7	3.1
20%	-0.8	0.9	0.0	-0.2	0.2	0.2	-1.5	-0.1	0.3	0.6	0.8	1.3
30%	-2.0	0.8	-0.2	0.0	0.3	0.3	-1.6	-0.1	0.2	0.3	0.4	0.8
40%	-1.8	0.1	-0.1	0.0	0.2	0.4	-1.1	-0.2	1.0	0.1	0.1	0.3
50%	-1.8	0.3	-0.1	-0.1	0.1	0.5	-0.8	-0.1	0.8	0.2	0.2	0.3
60%	-1.7	0.2	-0.2	-0.1	0.2	0.5	-0.6	0.0	0.7	0.2	0.1	0.3
70%	-1.5	0.2	-0.1	0.1	0.2	-0.2	-0.3	-0.4	0.5	0.3	0.1	0.4
80%	-1.5	0.3	0.0	-0.1	0.2	-0.6	-0.1	-0.3	0.6	0.3	0.1	0.3
90%	-1.7	0.4	-0.1	-0.2	-0.2	-0.9	-0.3	-0.2	0.9	-1.2	-0.3	-0.2
Long Term												
Full Simulation Period ^b	-1.0	0.4	-0.1	0.0	0.1	0.0	-0.9	-0.1	0.6	0.4	0.5	0.7
Water Year Types^c												
Wet (32%)	-0.8	0.5	0.1	0.0	0.1	-0.4	-0.2	-0.4	0.8	0.3	0.2	0.3
Above Normal (16%)	-1.4	0.5	0.0	0.1	0.2	0.3	-0.8	-0.2	0.2	0.2	0.2	0.4
Below Normal (13%)	-0.7	0.4	0.0	0.0	0.3	0.5	-0.9	-0.2	1.0	0.4	0.5	0.8
Dry (24%)	-1.3	0.5	0.0	0.0	0.2	0.4	-1.6	-0.1	0.2	0.4	0.8	1.3
Critical (15%)	-0.8	0.1	-0.5	-0.3	-0.2	-0.2	-1.5	0.5	0.9	1.1	0.8	0.8

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.9 Stanislaus River at Mouth Temperature

Table 5C.3.3.9.1 Stanislaus River at Mouth, Monthly Temperature

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	64.3	58.6	51.9	51.4	55.1	60.5	62.1	65.5	72.3	76.5	75.2	71.8
20%	62.9	57.4	51.6	50.8	54.3	59.7	61.1	64.6	71.7	75.5	74.4	70.7
30%	61.7	56.8	51.0	50.2	53.8	59.1	60.3	63.6	70.8	74.9	73.8	70.4
40%	60.6	56.5	50.7	49.7	53.2	58.7	58.8	62.1	70.2	74.3	73.4	69.8
50%	60.1	55.7	50.3	49.4	52.9	57.9	57.9	61.0	67.8	73.8	73.0	69.5
60%	59.6	55.2	49.9	49.0	52.6	57.0	57.1	60.7	65.3	73.1	72.6	69.0
70%	59.0	55.0	49.7	48.8	52.1	55.7	56.2	59.8	63.8	72.9	72.4	68.6
80%	58.7	54.7	49.3	48.5	51.5	53.6	55.7	58.7	62.7	71.7	71.9	68.1
90%	58.2	54.2	49.0	47.9	50.6	52.1	54.8	58.0	61.7	69.3	70.7	66.9
Long Term												
Full Simulation Period ^b	60.8	56.0	50.4	49.6	52.9	57.1	58.3	61.6	67.3	73.1	72.6	69.0
Water Year Types^c												
Wet (32%)	57.1	53.3	48.5	49.4	51.8	53.6	55.5	58.8	62.9	70.1	70.2	66.6
Above Normal (16%)	61.2	56.5	51.0	50.5	53.4	57.9	57.9	61.6	66.7	73.1	72.9	69.0
Below Normal (13%)	60.1	55.2	49.8	49.2	52.8	58.0	58.5	61.0	68.6	74.3	73.1	69.5
Dry (24%)	60.7	55.8	50.1	49.2	53.2	58.9	59.8	63.3	70.3	74.7	73.4	70.0
Critical (15%)	63.9	57.8	50.7	49.9	54.3	59.7	62.0	65.5	71.4	76.1	75.3	72.0

Alternative 1

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	66.5	58.4	52.0	51.3	54.5	60.3	63.6	64.1	72.1	76.2	75.1	71.5
20%	65.2	57.8	51.6	50.8	54.0	59.5	63.0	63.5	71.5	75.3	74.3	70.6
30%	64.4	56.9	51.1	50.2	53.6	58.7	62.2	62.7	70.4	74.8	73.8	70.2
40%	63.9	56.3	50.9	49.7	53.0	58.2	60.8	61.5	69.6	74.2	73.4	69.7
50%	62.9	55.9	50.5	49.3	52.5	57.3	60.0	61.2	67.2	73.6	73.0	69.4
60%	62.3	55.3	50.1	49.1	52.2	56.6	58.2	60.8	65.1	73.0	72.6	68.8
70%	61.8	55.1	49.7	48.8	51.9	56.3	56.8	59.8	62.3	72.7	72.4	68.5
80%	61.2	54.6	49.5	48.4	51.4	55.5	56.1	59.1	61.0	71.5	72.0	68.2
90%	60.8	54.2	49.1	47.9	50.4	54.2	55.3	58.5	59.1	70.4	71.3	67.1
Long Term												
Full Simulation Period ^b	63.1	56.1	50.5	49.5	52.7	57.3	59.6	61.3	66.3	73.0	72.7	68.9
Water Year Types^c												
Wet (32%)	59.3	53.2	48.6	49.3	51.6	54.7	55.9	59.2	60.6	70.1	70.7	66.4
Above Normal (16%)	63.8	56.5	51.1	50.4	53.1	57.9	59.2	61.2	66.1	73.0	72.9	68.9
Below Normal (13%)	62.3	55.1	49.9	49.1	52.4	57.7	60.4	60.8	67.8	74.1	73.1	69.3
Dry (24%)	63.4	56.0	50.2	49.3	53.0	58.4	61.8	62.5	70.1	74.6	73.4	70.0
Critical (15%)	65.8	58.2	51.0	49.9	54.2	59.7	63.5	64.3	71.1	75.9	75.2	71.9

Alternative 1 minus No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2.2	-0.2	0.1	-0.1	-0.5	-0.2	1.6	-1.4	-0.2	-0.3	-0.1	-0.4
20%	2.3	0.3	0.1	0.0	-0.2	-0.2	1.9	-1.1	-0.2	-0.1	-0.1	-0.1
30%	2.6	0.1	0.1	0.0	-0.2	-0.4	1.9	-0.9	-0.3	-0.1	0.0	-0.2
40%	3.2	-0.2	0.1	0.0	-0.2	-0.5	2.0	-0.7	-0.6	-0.1	0.0	-0.2
50%	2.8	0.2	0.2	-0.1	-0.4	-0.6	2.1	0.2	-0.6	-0.2	0.0	-0.1
60%	2.6	0.1	0.2	0.0	-0.4	-0.3	1.1	0.1	-0.2	-0.1	0.0	-0.2
70%	2.7	0.1	0.0	0.0	-0.2	0.6	0.6	0.0	-1.5	-0.2	0.0	-0.2
80%	2.6	0.0	0.2	0.0	-0.1	1.9	0.4	0.4	-1.6	-0.2	0.1	0.0
90%	2.5	0.0	0.1	0.1	-0.2	2.1	0.5	0.5	-2.6	1.1	0.6	0.2
Long Term												
Full Simulation Period ^b	2.4	0.1	0.1	0.0	-0.2	0.2	1.3	-0.4	-1.0	-0.1	0.1	-0.1
Water Year Types^c												
Wet (32%)	2.2	-0.1	0.0	-0.1	-0.2	1.1	0.4	0.4	-2.4	0.0	0.5	-0.1
Above Normal (16%)	2.6	0.0	0.1	-0.1	-0.3	0.0	1.3	-0.5	-0.6	-0.1	0.0	-0.1
Below Normal (13%)	2.2	-0.2	0.1	-0.1	-0.4	-0.4	1.9	-0.2	-0.7	-0.2	0.0	-0.2
Dry (24%)	2.7	0.2	0.2	0.0	-0.3	-0.4	2.0	-0.8	-0.2	0.0	0.0	-0.1
Critical (15%)	1.8	0.4	0.3	0.1	0.0	0.0	1.5	-1.2	-0.3	-0.2	-0.1	-0.1

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.9.2 Stanislaus River at Mouth, Monthly Temperature

Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	66.5	58.4	52.0	51.3	54.5	60.3	63.6	64.1	72.1	76.2	75.1	71.5
20%	65.2	57.8	51.6	50.8	54.0	59.5	63.0	63.5	71.5	75.3	74.3	70.6
30%	64.4	56.9	51.1	50.2	53.6	58.7	62.2	62.7	70.4	74.8	73.8	70.2
40%	63.9	56.3	50.9	49.7	53.0	58.2	60.8	61.5	69.6	74.2	73.4	69.7
50%	62.9	55.9	50.5	49.3	52.5	57.3	60.0	61.2	67.2	73.6	73.0	69.4
60%	62.3	55.3	50.1	49.1	52.2	56.6	58.2	60.8	65.1	73.0	72.6	68.8
70%	61.8	55.1	49.7	48.8	51.9	56.3	56.8	59.8	62.3	72.7	72.4	68.5
80%	61.2	54.6	49.5	48.4	51.4	55.5	56.1	59.1	61.0	71.5	72.0	68.2
90%	60.8	54.2	49.1	47.9	50.4	54.2	55.3	58.5	59.1	70.4	71.3	67.1
Long Term												
Full Simulation Period ^b	63.1	56.1	50.5	49.5	52.7	57.3	59.6	61.3	66.3	73.0	72.7	68.9
Water Year Types^c												
Wet (32%)	59.3	53.2	48.6	49.3	51.6	54.7	55.9	59.2	60.6	70.1	70.7	66.4
Above Normal (16%)	63.8	56.5	51.1	50.4	53.1	57.9	59.2	61.2	66.1	73.0	72.9	68.9
Below Normal (13%)	62.3	55.1	49.9	49.1	52.4	57.7	60.4	60.8	67.8	74.1	73.1	69.3
Dry (24%)	63.4	56.0	50.2	49.3	53.0	58.4	61.8	62.5	70.1	74.6	73.4	70.0
Critical (15%)	65.8	58.2	51.0	49.9	54.2	59.7	63.5	64.3	71.1	75.9	75.2	71.9

No Action Alternative

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	64.3	58.6	51.9	51.4	55.1	60.5	62.1	65.5	72.3	76.5	75.2	71.8
20%	62.9	57.4	51.6	50.8	54.3	59.7	61.1	64.6	71.7	75.5	74.4	70.7
30%	61.7	56.8	51.0	50.2	53.8	59.1	60.3	63.6	70.8	74.9	73.8	70.4
40%	60.6	56.5	50.7	49.7	53.2	58.7	58.8	62.1	70.2	74.3	73.4	69.8
50%	60.1	55.7	50.3	49.4	52.9	57.9	57.9	61.0	67.8	73.8	73.0	69.5
60%	59.6	55.2	49.9	49.0	52.6	57.0	57.1	60.7	65.3	73.1	72.6	69.0
70%	59.0	55.0	49.7	48.8	52.1	55.7	56.2	59.8	63.8	72.9	72.4	68.6
80%	58.7	54.7	49.3	48.5	51.5	53.6	55.7	58.7	62.7	71.7	71.9	68.1
90%	58.2	54.2	49.0	47.9	50.6	52.1	54.8	58.0	61.7	69.3	70.7	66.9
Long Term												
Full Simulation Period ^b	60.8	56.0	50.4	49.6	52.9	57.1	58.3	61.6	67.3	73.1	72.6	69.0
Water Year Types^c												
Wet (32%)	57.1	53.3	48.5	49.4	51.8	53.6	55.5	58.8	62.9	70.1	70.2	66.6
Above Normal (16%)	61.2	56.5	51.0	50.5	53.4	57.9	57.9	61.6	66.7	73.1	72.9	69.0
Below Normal (13%)	60.1	55.2	49.8	49.2	52.8	58.0	58.5	61.0	68.6	74.3	73.1	69.5
Dry (24%)	60.7	55.8	50.1	49.2	53.2	58.9	59.8	63.3	70.3	74.7	73.4	70.0
Critical (15%)	63.9	57.8	50.7	49.9	54.3	59.7	62.0	65.5	71.4	76.1	75.3	72.0

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-2.2	0.2	-0.1	0.1	0.5	0.2	-1.6	1.4	0.2	0.3	0.1	0.4
20%	-2.3	-0.3	-0.1	0.0	0.2	0.2	-1.9	1.1	0.2	0.1	0.1	0.1
30%	-2.6	-0.1	-0.1	0.0	0.2	0.4	-1.9	0.9	0.3	0.1	0.0	0.2
40%	-3.2	0.2	-0.1	0.0	0.2	0.5	-2.0	0.7	0.6	0.1	0.0	0.2
50%	-2.8	-0.2	-0.2	0.1	0.4	0.6	-2.1	-0.2	0.6	0.2	0.0	0.1
60%	-2.6	-0.1	-0.2	0.0	0.4	0.3	-1.1	-0.1	0.2	0.1	0.0	0.2
70%	-2.7	-0.1	0.0	0.0	0.2	-0.6	-0.6	0.0	1.5	0.2	0.0	0.2
80%	-2.6	0.0	-0.2	0.0	0.1	-1.9	-0.4	-0.4	1.6	0.2	-0.1	0.0
90%	-2.5	0.0	-0.1	-0.1	0.2	-2.1	-0.5	-0.5	2.6	-1.1	-0.6	-0.2
Long Term												
Full Simulation Period ^b	-2.4	-0.1	-0.1	0.0	0.2	-0.2	-1.3	0.4	1.0	0.1	-0.1	0.1
Water Year Types^c												
Wet (32%)	-2.2	0.1	0.0	0.1	0.2	-1.1	-0.4	-0.4	2.4	0.0	-0.5	0.1
Above Normal (16%)	-2.6	0.0	-0.1	0.1	0.3	0.0	-1.3	0.5	0.6	0.1	0.0	0.1
Below Normal (13%)	-2.2	0.2	-0.1	0.1	0.4	0.4	-1.9	0.2	0.7	0.2	0.0	0.2
Dry (24%)	-2.7	-0.2	-0.2	0.0	0.3	0.4	-2.0	0.8	0.2	0.0	0.0	0.1
Critical (15%)	-1.8	-0.4	-0.3	-0.1	0.0	0.0	-1.5	1.2	0.3	0.2	0.1	0.1

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.9.3 Stanislaus River at Mouth, Monthly Temperature

Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	66.5	58.4	52.0	51.3	54.5	60.3	63.6	64.1	72.1	76.2	75.1	71.5
20%	65.2	57.8	51.6	50.8	54.0	59.5	63.0	63.5	71.5	75.3	74.3	70.6
30%	64.4	56.9	51.1	50.2	53.6	58.7	62.2	62.7	70.4	74.8	73.8	70.2
40%	63.9	56.3	50.9	49.7	53.0	58.2	60.8	61.5	69.6	74.2	73.4	69.7
50%	62.9	55.9	50.5	49.3	52.5	57.3	60.0	61.2	67.2	73.6	73.0	69.4
60%	62.3	55.3	50.1	49.1	52.2	56.6	58.2	60.8	65.1	73.0	72.6	68.8
70%	61.8	55.1	49.7	48.8	51.9	56.3	56.8	59.8	62.3	72.7	72.4	68.5
80%	61.2	54.6	49.5	48.4	51.4	55.5	56.1	59.1	61.0	71.5	72.0	68.2
90%	60.8	54.2	49.1	47.9	50.4	54.2	55.3	58.5	59.1	70.4	71.3	67.1
Long Term												
Full Simulation Period ^b	63.1	56.1	50.5	49.5	52.7	57.3	59.6	61.3	66.3	73.0	72.7	68.9
Water Year Types^c												
Wet (32%)	59.3	53.2	48.6	49.3	51.6	54.7	55.9	59.2	60.6	70.1	70.7	66.4
Above Normal (16%)	63.8	56.5	51.1	50.4	53.1	57.9	59.2	61.2	66.1	73.0	72.9	68.9
Below Normal (13%)	62.3	55.1	49.9	49.1	52.4	57.7	60.4	60.8	67.8	74.1	73.1	69.3
Dry (24%)	63.4	56.0	50.2	49.3	53.0	58.4	61.8	62.5	70.1	74.6	73.4	70.0
Critical (15%)	65.8	58.2	51.0	49.9	54.2	59.7	63.5	64.3	71.1	75.9	75.2	71.9

Alternative 3

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	65.7	58.3	51.9	51.6	55.2	60.9	62.6	65.8	73.2	76.9	75.3	71.7
20%	65.2	57.7	51.5	50.7	54.7	59.7	61.6	64.6	72.4	76.0	74.3	70.7
30%	64.0	56.7	51.0	50.2	53.8	59.2	60.4	63.7	72.1	75.5	73.8	70.2
40%	63.2	56.3	50.8	49.7	53.2	58.7	59.7	62.9	71.7	75.0	73.4	69.9
50%	62.9	55.6	50.4	49.4	52.8	58.2	58.3	62.5	71.1	74.7	73.1	69.4
60%	62.4	55.3	50.0	49.0	52.3	57.3	57.3	61.7	70.3	74.2	72.5	69.0
70%	61.7	55.0	49.6	48.8	52.0	56.7	56.6	60.9	69.3	73.8	72.4	68.7
80%	61.3	54.8	49.4	48.6	51.1	55.0	56.1	60.2	68.5	73.5	72.0	68.1
90%	60.6	54.3	49.0	47.9	50.3	53.5	55.4	59.0	67.4	73.0	71.3	62.2
Long Term												
Full Simulation Period ^b	62.9	56.0	50.4	49.6	52.8	57.5	58.7	62.5	69.9	73.7	72.4	68.6
Water Year Types^c												
Wet (32%)	59.1	53.3	48.6	49.4	51.4	54.9	55.8	60.0	66.7	70.5	69.7	65.8
Above Normal (16%)	63.8	56.5	51.0	50.5	53.1	57.7	58.3	62.4	70.9	74.8	73.1	69.1
Below Normal (13%)	62.2	55.1	49.7	49.1	52.4	58.3	59.2	62.0	70.7	74.8	73.1	69.5
Dry (24%)	63.2	55.9	50.2	49.2	53.5	59.0	60.2	63.9	71.6	75.0	73.4	69.9
Critical (15%)	65.2	57.8	50.8	49.8	54.7	60.0	62.3	65.7	72.3	76.4	75.1	71.4

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-0.8	-0.1	0.0	0.3	0.7	0.5	-1.0	1.7	1.1	0.7	0.2	0.3
20%	-0.1	-0.1	-0.1	0.0	0.6	0.2	-1.5	1.1	0.9	0.6	0.0	0.1
30%	-0.3	-0.2	-0.1	0.0	0.3	0.5	-1.7	1.0	1.6	0.7	0.0	0.0
40%	-0.6	0.0	0.0	0.0	0.2	0.5	-1.1	1.5	2.1	0.8	0.0	0.3
50%	0.0	-0.2	-0.1	0.1	0.3	0.9	-1.7	1.3	3.9	1.1	0.1	0.0
60%	0.1	0.0	-0.1	-0.1	0.1	0.7	-1.0	0.9	5.2	1.2	-0.1	0.2
70%	0.0	-0.1	-0.1	0.0	0.0	0.4	-0.2	1.1	7.0	1.1	0.0	0.2
80%	0.1	0.1	-0.1	0.1	-0.4	-0.4	0.0	1.1	7.5	2.0	0.0	-0.1
90%	-0.2	0.1	-0.1	0.0	-0.1	-0.6	0.1	0.6	8.3	2.6	0.1	-4.8
Long Term												
Full Simulation Period ^b	-0.2	-0.1	-0.1	0.0	0.1	0.3	-0.9	1.2	3.6	0.7	-0.3	-0.2
Water Year Types^c												
Wet (32%)	-0.2	0.0	0.0	0.1	-0.1	0.2	-0.1	0.8	6.1	0.4	-1.1	-0.6
Above Normal (16%)	0.0	0.0	-0.1	0.1	0.0	-0.1	-0.9	1.2	4.9	1.8	0.2	0.2
Below Normal (13%)	-0.2	0.0	-0.2	0.0	0.0	0.6	-1.2	1.2	2.8	0.7	0.0	0.2
Dry (24%)	-0.2	0.0	0.0	0.0	0.5	0.5	-1.6	1.4	1.5	0.4	0.0	-0.1
Critical (15%)	-0.6	-0.4	-0.2	-0.1	0.5	0.3	-1.2	1.4	1.2	0.5	-0.1	-0.5

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.9.4 Stanislaus River at Mouth, Monthly Temperature

Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	66.5	58.4	52.0	51.3	54.5	60.3	63.6	64.1	72.1	76.2	75.1	71.5
20%	65.2	57.8	51.6	50.8	54.0	59.5	63.0	63.5	71.5	75.3	74.3	70.6
30%	64.4	56.9	51.1	50.2	53.6	58.7	62.2	62.7	70.4	74.8	73.8	70.2
40%	63.9	56.3	50.9	49.7	53.0	58.2	60.8	61.5	69.6	74.2	73.4	69.7
50%	62.9	55.9	50.5	49.3	52.5	57.3	60.0	61.2	67.2	73.6	73.0	69.4
60%	62.3	55.3	50.1	49.1	52.2	56.6	58.2	60.8	65.1	73.0	72.6	68.8
70%	61.8	55.1	49.7	48.8	51.9	56.3	56.8	59.8	62.3	72.7	72.4	68.5
80%	61.2	54.6	49.5	48.4	51.4	55.5	56.1	59.1	61.0	71.5	72.0	68.2
90%	60.8	54.2	49.1	47.9	50.4	54.2	55.3	58.5	59.1	70.4	71.3	67.1
Long Term												
Full Simulation Period ^b	63.1	56.1	50.5	49.5	52.7	57.3	59.6	61.3	66.3	73.0	72.7	68.9
Water Year Types^c												
Wet (32%)	59.3	53.2	48.6	49.3	51.6	54.7	55.9	59.2	60.6	70.1	70.7	66.4
Above Normal (16%)	63.8	56.5	51.1	50.4	53.1	57.9	59.2	61.2	66.1	73.0	72.9	68.9
Below Normal (13%)	62.3	55.1	49.9	49.1	52.4	57.7	60.4	60.8	67.8	74.1	73.1	69.3
Dry (24%)	63.4	56.0	50.2	49.3	53.0	58.4	61.8	62.5	70.1	74.6	73.4	70.0
Critical (15%)	65.8	58.2	51.0	49.9	54.2	59.7	63.5	64.3	71.1	75.9	75.2	71.9

Alternative 5

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	65.4	58.6	52.2	51.4	55.1	60.5	60.1	64.4	72.3	76.3	75.4	72.0
20%	63.3	57.7	51.5	50.8	54.4	59.7	59.1	62.6	71.8	75.6	74.6	71.0
30%	62.0	57.0	51.0	50.3	53.7	59.2	58.7	61.5	70.9	75.0	73.9	70.5
40%	61.1	56.7	50.5	49.7	53.2	58.7	58.3	60.8	70.1	74.3	73.5	70.0
50%	60.4	56.0	50.3	49.3	52.9	57.9	57.7	60.1	67.6	73.9	73.1	69.7
60%	59.7	55.4	50.0	49.0	52.6	57.1	57.3	59.5	65.2	73.1	72.6	69.2
70%	59.2	55.1	49.7	48.9	52.0	55.9	56.3	59.0	64.0	72.9	72.4	68.7
80%	58.7	54.8	49.3	48.5	51.5	53.8	55.7	58.3	62.7	72.0	72.0	68.2
90%	58.2	54.2	48.9	47.9	50.6	52.1	55.0	57.9	61.5	69.4	71.3	66.9
Long Term												
Full Simulation Period ^b	61.1	56.2	50.4	49.6	52.9	57.1	57.6	60.6	67.4	73.4	72.9	69.2
Water Year Types^c												
Wet (32%)	57.5	53.4	48.6	49.4	51.8	53.8	55.6	58.4	63.1	70.8	71.0	66.8
Above Normal (16%)	61.5	56.7	51.1	50.5	53.5	57.9	57.5	60.4	66.5	73.1	73.0	69.1
Below Normal (13%)	60.6	55.3	49.8	49.2	52.8	58.0	58.1	60.2	68.7	74.4	73.2	69.7
Dry (24%)	61.0	56.1	50.1	49.3	53.3	58.9	58.7	62.0	70.2	74.7	73.6	70.4
Critical (15%)	64.1	58.1	50.7	49.8	54.3	59.7	60.0	64.0	71.6	76.4	75.6	72.2

Alternative 5 minus Second Basis of Comparison

Statistic	Monthly Temperature (DEG-F)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-1.1	0.3	0.2	0.1	0.6	0.2	-3.5	0.3	0.3	0.1	0.3	0.6
20%	-1.9	0.0	-0.1	0.0	0.3	0.2	-3.9	-0.9	0.4	0.2	0.3	0.4
30%	-2.3	0.1	-0.1	0.1	0.1	0.5	-3.4	-1.1	0.4	0.3	0.1	0.2
40%	-2.8	0.4	-0.4	0.0	0.2	0.5	-2.5	-0.7	0.5	0.1	0.1	0.3
50%	-2.5	0.1	-0.1	0.0	0.4	0.6	-2.3	-1.1	0.4	0.3	0.1	0.3
60%	-2.5	0.1	-0.1	0.0	0.4	0.5	-0.9	-1.3	0.0	0.1	0.0	0.4
70%	-2.6	0.0	0.0	0.1	0.1	-0.4	-0.5	-0.8	1.7	0.2	0.0	0.3
80%	-2.5	0.2	-0.2	0.1	0.1	-1.7	-0.4	-0.8	1.7	0.5	0.0	0.0
90%	-2.5	0.0	-0.2	0.0	0.2	-2.1	-0.3	-0.6	2.4	-1.0	0.0	-0.2
Long Term												
Full Simulation Period ^b	-2.0	0.1	-0.1	0.0	0.3	-0.1	-1.9	-0.6	1.1	0.4	0.2	0.3
Water Year Types^c												
Wet (32%)	-1.8	0.2	0.0	0.1	0.2	-0.9	-0.3	-0.8	2.5	0.7	0.3	0.4
Above Normal (16%)	-2.3	0.1	-0.1	0.1	0.3	0.0	-1.6	-0.8	0.5	0.1	0.0	0.2
Below Normal (13%)	-1.8	0.2	-0.1	0.1	0.4	0.4	-2.3	-0.6	0.9	0.3	0.1	0.3
Dry (24%)	-2.4	0.1	-0.1	0.0	0.4	0.5	-3.1	-0.5	0.1	0.1	0.2	0.4
Critical (15%)	-1.6	0.0	-0.3	-0.1	0.0	0.0	-3.5	-0.3	0.4	0.5	0.4	0.2

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

b Based on an 81-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.10 San Joaquin River at Vernalis Flow

Table 5C.3.3.10.1 San Joaquin River at Vernalis, Monthly Flow

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,498	2,953	4,804	11,135	14,596	15,471	14,974	14,174	9,351	5,890	2,796	3,060
20%	3,161	2,777	2,857	4,812	10,143	10,197	10,637	8,318	4,690	2,628	2,589	2,654
30%	2,980	2,527	2,401	3,610	6,118	8,459	8,616	5,534	3,364	1,985	1,904	2,490
40%	2,796	2,395	2,215	2,629	4,232	5,570	7,564	4,609	2,947	1,735	1,666	2,125
50%	2,601	2,219	2,101	2,402	3,420	3,847	6,017	3,925	2,246	1,487	1,488	1,930
60%	2,401	2,169	2,046	2,293	2,683	3,459	4,832	3,062	1,859	1,366	1,403	1,835
70%	2,247	2,059	1,979	2,114	2,305	2,906	3,776	2,699	1,448	1,154	1,307	1,739
80%	1,994	1,951	1,829	1,884	2,150	2,371	2,789	2,153	1,293	1,087	1,202	1,611
90%	1,849	1,763	1,669	1,699	1,947	2,204	1,887	1,678	1,085	885	1,067	1,476
Long Term												
Full Simulation Period ^b	2,672	2,611	3,391	5,070	6,655	7,278	7,528	6,039	4,194	2,622	1,847	2,223
Water Year Types^c												
Wet (23%)	2,918	3,513	6,545	11,446	15,776	16,863	15,423	14,628	11,335	6,676	3,135	3,416
Above Normal (24%)	2,700	2,416	2,663	4,883	6,881	7,536	8,542	5,264	3,280	1,989	1,975	2,345
Below Normal (10%)	2,538	2,249	3,661	3,507	3,651	4,149	6,337	4,140	2,076	1,463	1,446	1,837
Dry (16%)	2,767	2,569	2,232	2,402	2,549	3,241	3,996	2,805	1,680	1,254	1,347	1,776
Critical (27%)	2,426	2,168	1,915	1,877	2,090	2,288	2,307	1,929	1,115	926	1,060	1,487

Alternative 1

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,015	3,156	4,932	11,157	14,594	15,467	14,666	14,360	10,139	5,612	2,740	3,146
20%	2,692	2,843	2,953	4,819	10,200	9,482	10,169	8,291	5,696	2,636	2,600	2,658
30%	2,520	2,663	2,541	3,655	6,300	7,933	8,421	5,676	3,488	1,990	1,897	2,503
40%	2,331	2,500	2,341	2,692	4,268	5,393	7,435	4,617	3,188	1,742	1,676	2,142
50%	2,157	2,386	2,257	2,544	3,420	3,883	6,016	4,043	2,349	1,506	1,500	1,944
60%	1,952	2,244	2,165	2,343	2,774	3,511	4,349	3,276	1,895	1,379	1,415	1,842
70%	1,752	2,141	2,027	2,153	2,443	2,963	3,119	2,891	1,485	1,170	1,321	1,743
80%	1,597	1,984	1,903	1,923	2,174	2,414	2,442	2,362	1,274	1,088	1,211	1,611
90%	1,411	1,793	1,699	1,733	1,945	2,230	1,779	1,890	1,085	941	1,071	1,478
Long Term												
Full Simulation Period ^b	2,241	2,721	3,492	5,136	6,700	7,131	7,255	6,101	4,547	2,625	1,838	2,238
Water Year Types^c												
Wet (23%)	2,497	3,627	6,644	11,506	15,763	16,308	15,374	14,433	12,512	6,641	3,078	3,456
Above Normal (24%)	2,288	2,532	2,757	4,947	6,946	7,415	8,260	5,348	3,525	1,999	1,977	2,352
Below Normal (10%)	2,086	2,397	3,810	3,608	3,723	4,101	5,842	4,213	2,225	1,481	1,457	1,856
Dry (16%)	2,339	2,684	2,347	2,487	2,628	3,304	3,551	2,976	1,714	1,267	1,362	1,789
Critical (27%)	1,974	2,251	1,998	1,927	2,138	2,311	2,031	2,122	1,116	943	1,059	1,485

Alternative 1 minus No Action Alternative

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-14%	7%	3%	0%	0%	0%	-2%	1%	8%	-5%	-2%	3%
20%	-15%	2%	3%	0%	1%	-7%	-4%	0%	21%	0%	0%	0%
30%	-15%	5%	6%	1%	3%	-6%	-2%	3%	4%	0%	0%	1%
40%	-17%	4%	6%	2%	1%	-3%	-2%	0%	8%	0%	1%	1%
50%	-17%	7%	7%	6%	0%	1%	0%	3%	5%	1%	1%	1%
60%	-19%	3%	6%	2%	3%	2%	-10%	7%	2%	1%	1%	0%
70%	-22%	4%	2%	2%	6%	2%	-17%	7%	3%	1%	1%	0%
80%	-20%	2%	4%	2%	1%	2%	-12%	10%	-1%	0%	1%	0%
90%	-24%	2%	2%	2%	0%	1%	-6%	13%	0%	6%	0%	0%
Long Term												
Full Simulation Period ^b	-16%	4%	3%	1%	1%	-2%	-4%	1%	8%	0%	-1%	1%
Water Year Types^c												
Wet (23%)	-14%	3%	2%	1%	0%	-3%	0%	-1%	10%	-1%	-2%	1%
Above Normal (24%)	-15%	5%	4%	1%	1%	-2%	-3%	2%	7%	0%	0%	0%
Below Normal (10%)	-18%	7%	4%	3%	2%	-1%	-8%	2%	7%	1%	1%	1%
Dry (16%)	-15%	4%	5%	4%	3%	2%	-11%	6%	2%	1%	1%	1%
Critical (27%)	-19%	4%	4%	3%	2%	1%	-12%	10%	0%	2%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.10.2 San Joaquin River at Vernalis, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,015	3,156	4,932	11,157	14,594	15,467	14,666	14,360	10,139	5,612	2,740	3,146
20%	2,692	2,843	2,953	4,819	10,200	9,482	10,169	8,291	5,696	2,636	2,600	2,658
30%	2,520	2,663	2,541	3,655	6,300	7,933	8,421	5,676	3,488	1,990	1,897	2,503
40%	2,331	2,500	2,341	2,692	4,268	5,393	7,435	4,617	3,188	1,742	1,676	2,142
50%	2,157	2,386	2,257	2,544	3,420	3,883	6,016	4,043	2,349	1,506	1,500	1,944
60%	1,952	2,244	2,165	2,343	2,774	3,511	4,349	3,276	1,895	1,379	1,415	1,842
70%	1,752	2,141	2,027	2,153	2,443	2,963	3,119	2,891	1,485	1,170	1,321	1,743
80%	1,597	1,984	1,903	1,923	2,174	2,414	2,442	2,362	1,274	1,088	1,211	1,611
90%	1,411	1,793	1,699	1,733	1,945	2,230	1,779	1,890	1,085	941	1,071	1,478
Long Term												
Full Simulation Period ^b	2,241	2,721	3,492	5,136	6,700	7,131	7,255	6,101	4,547	2,625	1,838	2,238
Water Year Types^c												
Wet (23%)	2,497	3,627	6,644	11,506	15,763	16,308	15,374	14,433	12,512	6,641	3,078	3,456
Above Normal (24%)	2,288	2,532	2,757	4,947	6,946	7,415	8,260	5,348	3,525	1,999	1,977	2,352
Below Normal (10%)	2,086	2,397	3,810	3,608	3,723	4,101	5,842	4,213	2,225	1,481	1,457	1,856
Dry (16%)	2,339	2,684	2,347	2,487	2,628	3,304	3,551	2,976	1,714	1,267	1,362	1,789
Critical (27%)	1,974	2,251	1,998	1,927	2,138	2,311	2,031	2,122	1,116	943	1,059	1,485

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,498	2,953	4,804	11,135	14,596	15,471	14,974	14,174	9,351	5,890	2,796	3,060
20%	3,161	2,777	2,857	4,812	10,143	10,197	10,637	8,318	4,690	2,628	2,589	2,654
30%	2,980	2,527	2,401	3,610	6,118	8,459	8,616	5,534	3,364	1,985	1,904	2,490
40%	2,796	2,395	2,215	2,629	4,232	5,570	7,564	4,609	2,947	1,735	1,666	2,125
50%	2,601	2,219	2,101	2,402	3,420	3,847	6,017	3,925	2,246	1,487	1,488	1,930
60%	2,401	2,169	2,046	2,293	2,683	3,459	4,832	3,062	1,859	1,366	1,403	1,835
70%	2,247	2,059	1,979	2,114	2,305	2,906	3,776	2,699	1,448	1,154	1,307	1,739
80%	1,994	1,951	1,829	1,884	2,150	2,371	2,789	2,153	1,293	1,087	1,202	1,611
90%	1,849	1,763	1,669	1,699	1,947	2,204	1,887	1,678	1,085	885	1,067	1,476
Long Term												
Full Simulation Period ^b	2,672	2,611	3,391	5,070	6,655	7,278	7,528	6,039	4,194	2,622	1,847	2,223
Water Year Types^c												
Wet (23%)	2,918	3,513	6,545	11,446	15,776	16,863	15,423	14,628	11,335	6,676	3,135	3,416
Above Normal (24%)	2,700	2,416	2,663	4,883	6,881	7,536	8,542	5,264	3,280	1,989	1,975	2,345
Below Normal (10%)	2,538	2,249	3,661	3,507	3,651	4,149	6,337	4,140	2,076	1,463	1,446	1,837
Dry (16%)	2,767	2,569	2,232	2,402	2,549	3,241	3,996	2,805	1,680	1,254	1,347	1,776
Critical (27%)	2,426	2,168	1,915	1,877	2,090	2,288	2,307	1,929	1,115	926	1,060	1,487

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	16%	-6%	-3%	0%	0%	0%	2%	-1%	-8%	5%	2%	-3%
20%	17%	-2%	-3%	0%	-1%	8%	5%	0%	-18%	0%	0%	0%
30%	18%	-5%	-6%	-1%	-3%	7%	2%	-3%	-4%	0%	0%	-1%
40%	20%	-4%	-5%	-2%	-1%	3%	2%	0%	-8%	0%	-1%	-1%
50%	21%	-7%	-7%	-6%	0%	-1%	0%	-3%	-4%	-1%	-1%	-1%
60%	23%	-3%	-6%	-2%	-3%	-1%	11%	-7%	-2%	-1%	-1%	0%
70%	28%	-4%	-2%	-2%	-6%	-2%	21%	-7%	-2%	-1%	-1%	0%
80%	25%	-2%	-4%	-2%	-1%	-2%	14%	-9%	2%	0%	-1%	0%
90%	31%	-2%	-2%	-2%	0%	-1%	6%	-11%	0%	-6%	0%	0%
Long Term												
Full Simulation Period ^b	19%	-4%	-3%	-1%	-1%	2%	4%	-1%	-8%	0%	1%	-1%
Water Year Types^c												
Wet (23%)	17%	-3%	-1%	-1%	0%	3%	0%	1%	-9%	1%	2%	-1%
Above Normal (24%)	18%	-5%	-3%	-1%	-1%	2%	3%	-2%	-7%	0%	0%	0%
Below Normal (10%)	22%	-6%	-4%	-3%	-2%	1%	8%	-2%	-7%	-1%	-1%	-1%
Dry (16%)	18%	-4%	-5%	-3%	-3%	-2%	13%	-6%	-2%	-1%	-1%	-1%
Critical (27%)	23%	-4%	-4%	-3%	-2%	-1%	14%	-9%	0%	-2%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.10.3 San Joaquin River at Vernalis, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,015	3,156	4,932	11,157	14,594	15,467	14,666	14,360	10,139	5,612	2,740	3,146
20%	2,692	2,843	2,953	4,819	10,200	9,482	10,169	8,291	5,696	2,636	2,600	2,658
30%	2,520	2,663	2,541	3,655	6,300	7,933	8,421	5,676	3,488	1,990	1,897	2,503
40%	2,331	2,500	2,341	2,692	4,268	5,393	7,435	4,617	3,188	1,742	1,676	2,142
50%	2,157	2,386	2,257	2,544	3,420	3,883	6,016	4,043	2,349	1,506	1,500	1,944
60%	1,952	2,244	2,165	2,343	2,774	3,511	4,349	3,276	1,895	1,379	1,415	1,842
70%	1,752	2,141	2,027	2,153	2,443	2,963	3,119	2,891	1,485	1,170	1,321	1,743
80%	1,597	1,984	1,903	1,923	2,174	2,414	2,442	2,362	1,274	1,088	1,211	1,611
90%	1,411	1,793	1,699	1,733	1,945	2,230	1,779	1,890	1,085	941	1,071	1,478
Long Term												
Full Simulation Period ^b	2,241	2,721	3,492	5,136	6,700	7,131	7,255	6,101	4,547	2,625	1,838	2,238
Water Year Types^c												
Wet (23%)	2,497	3,627	6,644	11,506	15,763	16,308	15,374	14,433	12,512	6,641	3,078	3,456
Above Normal (24%)	2,288	2,532	2,757	4,947	6,946	7,415	8,260	5,348	3,525	1,999	1,977	2,352
Below Normal (10%)	2,086	2,397	3,810	3,608	3,723	4,101	5,842	4,213	2,225	1,481	1,457	1,856
Dry (16%)	2,339	2,684	2,347	2,487	2,628	3,304	3,551	2,976	1,714	1,267	1,362	1,789
Critical (27%)	1,974	2,251	1,998	1,927	2,138	2,311	2,031	2,122	1,116	943	1,059	1,485

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,023	3,053	4,949	12,089	17,246	15,467	14,936	14,309	10,004	6,473	3,525	3,287
20%	2,667	2,830	2,938	4,833	10,213	9,874	10,251	7,931	4,627	2,495	2,587	2,623
30%	2,494	2,583	2,421	3,540	6,797	7,753	8,532	5,438	2,558	1,926	1,892	2,464
40%	2,328	2,478	2,304	2,753	4,210	5,305	7,580	4,344	2,294	1,722	1,667	2,125
50%	2,137	2,313	2,191	2,439	3,215	3,847	6,112	3,821	1,955	1,506	1,495	1,932
60%	1,956	2,244	2,140	2,236	2,668	3,440	4,501	2,907	1,700	1,361	1,415	1,838
70%	1,782	2,148	2,012	2,088	2,360	2,906	3,355	2,502	1,364	1,164	1,319	1,743
80%	1,609	1,974	1,886	1,824	2,090	2,371	2,581	2,158	1,241	1,026	1,211	1,612
90%	1,466	1,763	1,669	1,639	1,849	2,205	1,936	1,650	1,001	930	1,065	1,477
Long Term												
Full Simulation Period ^b	2,252	2,683	3,501	5,108	6,872	7,145	7,431	5,830	4,009	2,655	1,882	2,271
Water Year Types^c												
Wet (23%)	2,505	3,604	6,760	11,512	16,584	16,445	15,425	14,237	11,476	6,916	3,267	3,610
Above Normal (24%)	2,310	2,488	2,775	4,925	6,937	7,444	8,476	5,078	2,579	1,910	1,972	2,341
Below Normal (10%)	2,067	2,299	3,711	3,708	3,857	4,057	6,015	3,856	1,865	1,472	1,454	1,834
Dry (16%)	2,346	2,646	2,309	2,419	2,607	3,241	3,785	2,611	1,568	1,253	1,360	1,782
Critical (27%)	1,991	2,227	1,974	1,842	2,043	2,273	2,247	1,874	1,080	912	1,067	1,497

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0%	-3%	0%	8%	18%	0%	2%	0%	-1%	15%	29%	4%
20%	-1%	0%	-1%	0%	0%	4%	1%	-4%	-19%	-5%	0%	-1%
30%	-1%	-3%	-5%	-3%	8%	-2%	1%	-4%	-27%	-3%	0%	-2%
40%	0%	-1%	-2%	2%	-1%	-2%	2%	-6%	-28%	-1%	-1%	-1%
50%	-1%	-3%	-3%	-4%	-6%	-1%	2%	-5%	-17%	0%	0%	-1%
60%	0%	0%	-1%	-5%	-4%	-2%	3%	-11%	-10%	-1%	0%	0%
70%	2%	0%	-1%	-3%	-3%	-2%	8%	-13%	-8%	0%	0%	0%
80%	1%	0%	-1%	-5%	-4%	-2%	6%	-9%	-3%	-6%	0%	0%
90%	4%	-2%	-2%	-5%	-5%	-1%	9%	-13%	-8%	-1%	-1%	0%
Long Term												
Full Simulation Period ^b	0%	-1%	0%	-1%	3%	0%	2%	-4%	-12%	1%	2%	1%
Water Year Types^c												
Wet (23%)	0%	-1%	2%	0%	5%	1%	0%	-1%	-8%	4%	6%	4%
Above Normal (24%)	1%	-2%	1%	0%	0%	0%	3%	-5%	-27%	-4%	0%	0%
Below Normal (10%)	-1%	-4%	-3%	3%	4%	-1%	3%	-8%	-16%	-1%	0%	-1%
Dry (16%)	0%	-1%	-2%	-3%	-1%	-2%	7%	-12%	-9%	-1%	0%	0%
Critical (27%)	1%	-1%	-1%	-4%	-4%	-2%	11%	-12%	-3%	-3%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.10.4 San Joaquin River at Vernalis, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance ^a												
10%	3,015	3,156	4,932	11,157	14,594	15,467	14,666	14,360	10,139	5,612	2,740	3,146
20%	2,692	2,843	2,953	4,819	10,200	9,482	10,169	8,291	5,696	2,636	2,600	2,658
30%	2,520	2,663	2,541	3,655	6,300	7,933	8,421	5,676	3,488	1,990	1,897	2,503
40%	2,331	2,500	2,341	2,692	4,268	5,393	7,435	4,617	3,188	1,742	1,676	2,142
50%	2,157	2,386	2,257	2,544	3,420	3,883	6,016	4,043	2,349	1,506	1,500	1,944
60%	1,952	2,244	2,165	2,343	2,774	3,511	4,349	3,276	1,895	1,379	1,415	1,842
70%	1,752	2,141	2,027	2,153	2,443	2,963	3,119	2,891	1,485	1,170	1,321	1,743
80%	1,597	1,984	1,903	1,923	2,174	2,414	2,442	2,362	1,274	1,088	1,211	1,611
90%	1,411	1,793	1,699	1,733	1,945	2,230	1,779	1,890	1,085	941	1,071	1,478
Long Term												
Full Simulation Period ^b	2,241	2,721	3,492	5,136	6,700	7,131	7,255	6,101	4,547	2,625	1,838	2,238
Water Year Types ^c												
Wet (23%)	2,497	3,627	6,644	11,506	15,763	16,308	15,374	14,433	12,512	6,641	3,078	3,456
Above Normal (24%)	2,288	2,532	2,757	4,947	6,946	7,415	8,260	5,348	3,525	1,999	1,977	2,352
Below Normal (10%)	2,086	2,397	3,810	3,608	3,723	4,101	5,842	4,213	2,225	1,481	1,457	1,856
Dry (16%)	2,339	2,684	2,347	2,487	2,628	3,304	3,551	2,976	1,714	1,267	1,362	1,789
Critical (27%)	1,974	2,251	1,998	1,927	2,138	2,311	2,031	2,122	1,116	943	1,059	1,485

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance ^a												
10%	3,495	2,953	4,804	11,129	14,597	15,473	14,976	14,176	9,351	5,773	2,776	3,084
20%	3,146	2,777	2,897	4,811	10,142	9,856	10,265	8,232	4,688	2,628	2,589	2,654
30%	2,938	2,527	2,401	3,610	6,118	8,461	8,576	5,670	3,364	1,985	1,904	2,488
40%	2,763	2,395	2,204	2,629	4,232	5,570	7,567	5,162	2,947	1,735	1,666	2,125
50%	2,588	2,219	2,101	2,402	3,420	3,846	6,110	4,183	2,219	1,484	1,488	1,930
60%	2,385	2,169	2,046	2,289	2,683	3,459	5,047	3,554	1,860	1,365	1,402	1,835
70%	2,196	2,059	1,979	2,083	2,303	2,906	4,317	2,916	1,447	1,155	1,307	1,739
80%	1,988	1,951	1,829	1,883	2,145	2,371	3,100	2,401	1,283	1,052	1,202	1,611
90%	1,849	1,763	1,669	1,699	1,947	2,204	2,461	2,245	1,000	885	1,025	1,431
Long Term												
Full Simulation Period ^b	2,660	2,609	3,371	5,071	6,639	7,235	7,686	6,290	4,174	2,597	1,818	2,213
Water Year Types ^c												
Wet (23%)	2,903	3,513	6,448	11,445	15,743	16,679	15,389	14,666	11,287	6,580	3,020	3,379
Above Normal (24%)	2,691	2,411	2,679	4,897	6,864	7,536	8,487	5,671	3,280	1,989	1,975	2,345
Below Normal (10%)	2,531	2,249	3,661	3,506	3,650	4,149	6,299	4,206	2,062	1,462	1,446	1,837
Dry (16%)	2,750	2,569	2,232	2,400	2,547	3,241	4,420	3,245	1,672	1,253	1,346	1,776
Critical (27%)	2,418	2,163	1,910	1,871	2,078	2,288	2,741	2,177	1,090	916	1,051	1,480

Alternative 5 minus Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance ^a												
10%	16%	-6%	-3%	0%	0%	0%	2%	-1%	-8%	3%	1%	-2%
20%	17%	-2%	-2%	0%	-1%	4%	1%	-1%	-18%	0%	0%	0%
30%	17%	-5%	-6%	-1%	-3%	7%	2%	0%	-4%	0%	0%	-1%
40%	19%	-4%	-6%	-2%	-1%	3%	2%	12%	-8%	0%	-1%	-1%
50%	20%	-7%	-7%	-6%	0%	-1%	2%	3%	-6%	-1%	-1%	-1%
60%	22%	-3%	-6%	-2%	-3%	-1%	16%	8%	-2%	-1%	-1%	0%
70%	25%	-4%	-2%	-3%	-6%	-2%	38%	1%	-3%	-1%	-1%	0%
80%	24%	-2%	-4%	-2%	-1%	-2%	27%	2%	1%	-3%	-1%	0%
90%	31%	-2%	-2%	-2%	0%	-1%	38%	19%	-8%	-6%	-4%	-3%
Long Term												
Full Simulation Period ^b	19%	-4%	-3%	-1%	-1%	1%	6%	3%	-8%	-1%	-1%	-1%
Water Year Types ^c												
Wet (23%)	16%	-3%	-3%	-1%	0%	2%	0%	2%	-10%	-1%	-2%	-2%
Above Normal (24%)	18%	-5%	-3%	-1%	-1%	2%	3%	6%	-7%	-1%	0%	0%
Below Normal (10%)	21%	-6%	-4%	-3%	-2%	1%	8%	0%	-7%	-1%	-1%	-1%
Dry (16%)	18%	-4%	-5%	-3%	-3%	-2%	24%	9%	-2%	-1%	-1%	-1%
Critical (27%)	22%	-4%	-4%	-3%	-3%	-1%	35%	3%	-2%	-3%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.3.11 Old and Middle River Flow

Table 5C.3.3.11.1 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

No Action Alternative

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	614	893	4,094	6,333	7,834	5,445	4,160	2,848	1,180	763	277	1,161
20%	586	874	2,112	4,323	4,927	4,179	2,834	1,727	609	688	259	1,134
30%	576	825	1,003	3,149	3,624	2,834	1,795	1,200	548	573	246	909
40%	423	657	761	1,793	2,868	2,092	1,504	1,004	465	497	246	656
50%	270	586	611	1,299	2,037	1,676	1,197	843	431	492	246	261
60%	246	368	359	1,050	1,407	1,204	946	731	422	400	246	201
70%	246	268	315	800	1,023	1,061	758	592	408	307	246	179
80%	246	268	278	586	823	783	598	520	383	307	246	179
90%	184	210	277	486	633	662	564	446	334	246	240	179
Long Term												
Full Simulation Period ^b	401	686	1,416	2,720	3,186	2,697	1,812	1,281	648	495	258	565
Water Year Types^c												
Wet (32%)	520	1,020	2,913	5,509	5,771	5,000	3,288	2,394	1,120	655	273	1,133
Above Normal (16%)	332	742	1,502	3,049	3,807	3,236	1,938	1,201	485	667	251	662
Below Normal (13%)	471	650	582	1,077	2,048	1,113	1,019	789	445	508	254	211
Dry (24%)	341	470	471	981	1,443	1,396	999	680	431	315	257	191
Critical (15%)	253	296	418	723	861	747	559	410	348	249	235	179

Alternative 1

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	357	895	4,054	6,567	8,061	5,795	3,950	2,541	1,167	670	268	260
20%	283	383	2,007	4,470	4,927	4,380	2,580	1,582	679	593	251	240
30%	264	327	950	2,828	3,382	2,653	1,494	954	588	515	246	234
40%	251	291	635	1,564	2,894	2,062	1,215	801	556	492	246	227
50%	246	268	477	1,080	1,904	1,621	855	734	507	475	246	219
60%	246	268	382	833	1,179	1,104	724	674	485	400	246	181
70%	246	268	314	673	908	901	597	563	433	307	246	179
80%	246	268	277	518	698	752	567	535	422	307	232	179
90%	211	208	277	405	562	601	528	437	377	246	215	179
Long Term												
Full Simulation Period ^b	286	506	1,408	2,595	3,126	2,682	1,611	1,161	705	458	252	237
Water Year Types^c												
Wet (32%)	340	791	3,011	5,453	5,779	5,081	3,010	2,178	1,209	605	271	319
Above Normal (16%)	253	566	1,391	2,845	3,822	3,311	1,615	1,026	562	601	249	224
Below Normal (13%)	291	433	545	879	2,062	1,078	813	719	533	437	255	206
Dry (24%)	260	296	439	815	1,269	1,236	879	635	454	310	242	191
Critical (15%)	240	244	364	670	690	680	525	386	346	248	231	179

Alternative 1 minus No Action Alternative

Statistic	Monthly Outflow Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-42%	0%	-1%	4%	3%	6%	-5%	-11%	-1%	-12%	-3%	-78%
20%	-52%	-56%	-5%	3%	0%	5%	-9%	-8%	11%	-14%	-3%	-79%
30%	-54%	-60%	-5%	-10%	-7%	-6%	-17%	-21%	7%	-10%	0%	-74%
40%	-41%	-56%	-17%	-13%	1%	-1%	-19%	-20%	20%	-1%	0%	-65%
50%	-9%	-54%	-22%	-17%	-7%	-3%	-29%	-13%	18%	-3%	0%	-16%
60%	0%	-27%	6%	-21%	-16%	-8%	-23%	-8%	15%	0%	0%	-10%
70%	0%	0%	0%	-16%	-11%	-15%	-21%	-5%	6%	0%	0%	0%
80%	0%	0%	0%	-11%	-15%	-4%	-5%	3%	10%	0%	-6%	0%
90%	15%	-1%	0%	-17%	-11%	-9%	-6%	-2%	13%	0%	-10%	0%
Long Term												
Full Simulation Period ^b	-29%	-26%	-1%	-5%	-2%	-1%	-11%	-9%	9%	-8%	-2%	-58%
Water Year Types^c												
Wet (32%)	-35%	-22%	3%	-1%	0%	2%	-8%	-9%	8%	-8%	-1%	-72%
Above Normal (16%)	-24%	-24%	-7%	-7%	0%	2%	-17%	-15%	16%	-10%	-1%	-66%
Below Normal (13%)	-38%	-33%	-6%	-18%	1%	-3%	-20%	-9%	20%	-14%	0%	-3%
Dry (24%)	-24%	-37%	-7%	-17%	-12%	-11%	-12%	-7%	5%	-2%	0%	0%
Critical (15%)	-5%	-18%	-13%	-7%	-20%	-9%	-6%	-6%	-1%	0%	-2%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.11.2 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Second Basis of Comparison

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	357	895	4,054	6,567	8,061	5,795	3,950	2,541	1,167	670	268	260
20%	283	383	2,007	4,470	4,927	4,380	2,580	1,582	679	593	251	240
30%	264	327	950	2,828	3,382	2,653	1,494	954	588	515	246	234
40%	251	291	635	1,564	2,894	2,062	1,215	801	556	492	246	227
50%	246	268	477	1,080	1,904	1,621	855	734	507	475	246	219
60%	246	268	382	833	1,179	1,104	724	674	485	400	246	181
70%	246	268	314	673	908	901	597	563	433	307	246	179
80%	246	268	277	518	698	752	567	535	422	307	232	179
90%	211	208	277	405	562	601	528	437	377	246	215	179
Long Term												
Full Simulation Period ^b	286	506	1,408	2,595	3,126	2,682	1,611	1,161	705	458	252	237
Water Year Types^c												
Wet (32%)	340	791	3,011	5,453	5,779	5,081	3,010	2,178	1,209	605	271	319
Above Normal (16%)	253	566	1,391	2,845	3,822	3,311	1,615	1,026	562	601	249	224
Below Normal (13%)	291	433	545	879	2,062	1,078	813	719	533	437	255	206
Dry (24%)	260	296	439	815	1,269	1,236	879	635	454	310	242	191
Critical (15%)	240	244	364	670	690	680	525	386	346	248	231	179

No Action Alternative

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	614	893	4,094	6,333	7,834	5,445	4,160	2,848	1,180	763	277	1,161
20%	586	874	2,112	4,323	4,927	4,179	2,834	1,727	609	688	259	1,134
30%	576	825	1,003	3,149	3,624	2,834	1,795	1,200	548	573	246	909
40%	423	657	761	1,793	2,868	2,092	1,504	1,004	465	497	246	656
50%	270	586	611	1,299	2,037	1,676	1,197	843	431	492	246	261
60%	246	368	359	1,050	1,407	1,204	946	731	422	400	246	201
70%	246	268	315	800	1,023	1,061	758	592	408	307	246	179
80%	246	268	278	586	823	783	598	520	383	307	246	179
90%	184	210	277	486	633	662	564	446	334	246	240	179
Long Term												
Full Simulation Period ^b	401	686	1,416	2,720	3,186	2,697	1,812	1,281	648	495	258	565
Water Year Types^c												
Wet (32%)	520	1,020	2,913	5,509	5,771	5,000	3,288	2,394	1,120	655	273	1,133
Above Normal (16%)	332	742	1,502	3,049	3,807	3,236	1,938	1,201	485	667	251	662
Below Normal (13%)	471	650	582	1,077	2,048	1,113	1,019	789	445	508	254	211
Dry (24%)	341	470	471	981	1,443	1,396	999	680	431	315	257	191
Critical (15%)	253	296	418	723	861	747	559	410	348	249	235	179

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Outflow Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	72%	0%	1%	-4%	-3%	-6%	5%	12%	1%	14%	3%	346%
20%	107%	128%	5%	-3%	0%	-5%	10%	9%	-10%	16%	3%	372%
30%	118%	152%	5%	11%	7%	7%	20%	26%	-7%	11%	0%	288%
40%	68%	126%	20%	15%	-1%	1%	24%	25%	-16%	1%	0%	189%
50%	10%	119%	28%	20%	7%	3%	40%	15%	-15%	4%	0%	19%
60%	0%	37%	-6%	26%	19%	9%	31%	8%	-13%	0%	0%	11%
70%	0%	0%	0%	19%	13%	18%	27%	5%	-6%	0%	0%	0%
80%	0%	0%	0%	13%	18%	4%	5%	-3%	-9%	0%	6%	0%
90%	-13%	1%	0%	20%	13%	10%	7%	2%	-12%	0%	11%	0%
Long Term												
Full Simulation Period ^b	40%	36%	1%	5%	2%	1%	12%	10%	-8%	8%	2%	139%
Water Year Types^c												
Wet (32%)	53%	29%	-3%	1%	0%	-2%	9%	10%	-7%	8%	1%	255%
Above Normal (16%)	31%	31%	8%	7%	0%	-2%	20%	17%	-14%	11%	1%	195%
Below Normal (13%)	62%	50%	7%	23%	-1%	3%	25%	10%	-17%	16%	0%	3%
Dry (24%)	31%	59%	7%	20%	14%	13%	14%	7%	-5%	2%	6%	0%
Critical (15%)	5%	21%	15%	8%	25%	10%	6%	6%	1%	0%	2%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.11.3 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Second Basis of Comparison

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	357	895	4,054	6,567	8,061	5,795	3,950	2,541	1,167	670	268	260
20%	283	383	2,007	4,470	4,927	4,380	2,580	1,582	679	593	251	240
30%	264	327	950	2,828	3,382	2,653	1,494	954	588	515	246	234
40%	251	291	635	1,564	2,894	2,062	1,215	801	556	492	246	227
50%	246	268	477	1,080	1,904	1,621	855	734	507	475	246	219
60%	246	268	382	833	1,179	1,104	724	674	485	400	246	181
70%	246	268	314	673	908	901	597	563	433	307	246	179
80%	246	268	277	518	698	752	567	535	422	307	232	179
90%	211	208	277	405	562	601	528	437	377	246	215	179
Long Term												
Full Simulation Period ^b	286	506	1,408	2,595	3,126	2,682	1,611	1,161	705	458	252	237
Water Year Types^c												
Wet (32%)	340	791	3,011	5,453	5,779	5,081	3,010	2,178	1,209	605	271	319
Above Normal (16%)	253	566	1,391	2,845	3,822	3,311	1,615	1,026	562	601	249	224
Below Normal (13%)	291	433	545	879	2,062	1,078	813	719	533	437	255	206
Dry (24%)	260	296	439	815	1,269	1,236	879	635	454	310	242	191
Critical (15%)	240	244	364	670	690	680	525	386	346	248	231	179

Alternative 3

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
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 minus Second Basis of Comparison

Statistic	Monthly Outflow Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-16%	1%	2%	1%	-2%	0%	-3%	-3%	-9%	9%	-1%	0%
20%	-6%	2%	7%	0%	-3%	-2%	0%	-13%	-7%	11%	-2%	2%
30%	-3%	-3%	21%	10%	12%	2%	2%	-4%	-3%	12%	0%	0%
40%	-2%	0%	14%	20%	5%	4%	2%	-6%	-10%	0%	0%	1%
50%	0%	0%	1%	29%	9%	3%	1%	-4%	-6%	4%	0%	1%
60%	0%	0%	4%	27%	20%	7%	4%	-7%	-10%	7%	0%	6%
70%	0%	0%	7%	14%	19%	14%	1%	3%	-2%	0%	0%	0%
80%	0%	0%	0%	16%	18%	5%	0%	-8%	-3%	0%	4%	0%
90%	-13%	0%	0%	23%	13%	9%	-3%	0%	-7%	0%	3%	0%
Long Term												
Full Simulation Period ^b	-3%	0%	4%	7%	4%	1%	0%	-3%	-7%	7%	0%	1%
Water Year Types^c												
Wet (32%)	-2%	0%	4%	3%	1%	-1%	0%	-3%	-8%	7%	0%	0%
Above Normal (16%)	-4%	0%	5%	9%	2%	-1%	1%	-7%	-9%	7%	-1%	1%
Below Normal (13%)	-4%	-3%	4%	32%	6%	4%	5%	-3%	-14%	16%	0%	7%
Dry (24%)	-4%	0%	4%	22%	15%	12%	0%	-4%	-2%	4%	1%	0%
Critical (15%)	-2%	0%	9%	8%	25%	11%	1%	3%	0%	-1%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.11.4 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Second Basis of Comparison

Statistic	Monthly Outflow Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	357	895	4,054	6,567	8,061	5,795	3,950	2,541	1,167	670	268	260
20%	283	383	2,007	4,470	4,927	4,380	2,580	1,582	679	593	251	240
30%	264	327	950	2,828	3,382	2,653	1,494	954	588	515	246	234
40%	251	291	635	1,564	2,894	2,062	1,215	801	556	492	246	227
50%	246	268	477	1,080	1,904	1,621	855	734	507	475	246	219
60%	246	268	382	833	1,179	1,104	724	674	485	400	246	181
70%	246	268	314	673	908	901	597	563	433	307	246	179
80%	246	268	277	518	698	752	567	535	422	307	232	179
90%	211	208	277	405	562	601	528	437	377	246	215	179
Long Term												
Full Simulation Period ^b	286	506	1,408	2,595	3,126	2,682	1,611	1,161	705	458	252	237
Water Year Types^c												
Wet (32%)	340	791	3,011	5,453	5,779	5,081	3,010	2,178	1,209	605	271	319
Above Normal (16%)	253	566	1,391	2,845	3,822	3,311	1,615	1,026	562	601	249	224
Below Normal (13%)	291	433	545	879	2,062	1,078	813	719	533	437	255	206
Dry (24%)	260	296	439	815	1,269	1,236	879	635	454	310	242	191
Critical (15%)	240	244	364	670	690	680	525	386	346	248	231	179

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 minus Second Basis of Comparison

Statistic	Monthly Outflow Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	75%	7%	2%	-3%	-3%	-6%	5%	12%	1%	14%	6%	346%
20%	110%	128%	5%	-3%	0%	-5%	9%	11%	-11%	16%	2%	372%
30%	118%	154%	6%	11%	8%	7%	20%	30%	-11%	15%	0%	288%
40%	68%	127%	20%	14%	-1%	1%	27%	25%	-19%	2%	0%	186%
50%	5%	119%	29%	20%	8%	3%	44%	19%	-17%	4%	0%	17%
60%	0%	38%	-6%	26%	19%	9%	42%	15%	-13%	0%	0%	13%
70%	0%	0%	-1%	19%	13%	17%	37%	12%	-7%	0%	0%	0%
80%	0%	0%	3%	13%	18%	4%	25%	5%	-12%	0%	6%	0%
90%	-13%	1%	0%	20%	13%	10%	18%	6%	-13%	0%	7%	0%
Long Term												
Full Simulation Period ^b	40%	36%	0%	5%	2%	0%	15%	13%	-9%	9%	2%	138%
Water Year Types^c												
Wet (32%)	52%	29%	-3%	1%	0%	-2%	9%	11%	-8%	10%	1%	255%
Above Normal (16%)	32%	35%	8%	7%	-1%	-2%	21%	19%	-14%	11%	1%	195%
Below Normal (13%)	62%	50%	7%	22%	-1%	3%	31%	14%	-19%	17%	0%	4%
Dry (24%)	31%	59%	6%	20%	14%	13%	23%	13%	-7%	2%	6%	0%
Critical (15%)	6%	21%	15%	7%	24%	10%	18%	20%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.12 X2 Position

Table 5C.3.3.12.1 X2, End of Month Position

No Action Alternative

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	93.4	93.6	90.8	84.0	77.3	75.9	78.1	81.0	83.1	86.5	89.7	91.9
20%	91.8	91.4	87.6	82.3	71.7	72.8	73.6	79.3	81.8	84.9	88.1	91.1
30%	91.6	90.9	83.9	79.8	67.2	65.7	70.0	77.3	81.0	84.3	87.5	90.6
40%	91.1	88.1	82.5	73.5	64.0	64.5	66.7	72.3	80.2	82.4	86.2	90.1
50%	89.7	81.1	81.1	71.2	58.5	59.9	64.7	69.9	77.8	80.6	84.8	88.5
60%	81.0	81.0	79.7	64.4	55.2	58.0	60.9	66.3	76.6	78.1	84.6	81.0
70%	74.1	75.1	72.0	55.1	51.9	53.9	58.0	63.8	73.4	77.4	84.1	74.1
80%	74.0	74.0	62.2	51.3	49.4	50.6	53.8	59.1	69.8	76.8	82.7	74.0
90%	74.0	74.0	52.8	49.4	48.2	49.0	49.9	53.3	63.5	74.6	82.2	74.0
Long Term												
Full Simulation Period ^b	84.2	82.3	76.4	68.0	61.1	61.4	64.2	68.8	75.9	80.4	85.4	83.9
Water Year Types^c												
Wet (32%)	73.9	72.9	71.1	54.8	51.2	53.1	55.1	58.4	67.4	74.9	82.7	73.9
Above Normal (16%)	81.0	79.3	75.9	61.0	54.9	55.3	59.1	65.2	75.3	77.9	83.1	74.7
Below Normal (13%)	89.1	87.6	78.8	74.6	64.3	66.9	69.0	72.9	79.1	81.1	85.1	89.3
Dry (24%)	91.5	86.9	75.4	77.7	67.7	65.4	68.8	74.5	80.1	84.5	87.6	90.5
Critical (15%)	93.6	93.6	87.8	82.0	75.3	74.6	77.7	82.3	85.2	87.9	90.3	92.1

Alternative 1

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	92.6	93.1	90.9	87.3	80.8	78.5	78.7	81.5	83.5	86.7	89.9	92.0
20%	91.9	91.4	90.6	85.8	75.6	73.6	75.2	79.5	81.6	84.8	88.6	91.5
30%	91.4	91.0	89.6	83.3	72.0	68.3	73.1	78.5	80.6	84.3	88.0	91.0
40%	91.0	90.8	88.6	78.8	66.2	66.5	69.7	75.3	78.7	82.0	86.6	90.1
50%	90.5	90.3	86.7	75.6	61.4	61.6	67.4	72.9	77.8	80.9	85.3	89.5
60%	90.3	89.6	82.5	67.7	55.7	57.8	64.1	69.2	76.2	79.1	84.7	89.0
70%	90.0	89.1	76.9	56.2	52.4	54.1	59.7	66.0	74.4	78.3	84.5	88.7
80%	89.6	88.0	65.9	52.0	49.3	50.4	54.7	60.2	71.4	77.3	84.0	88.4
90%	88.2	79.6	53.3	49.5	48.3	48.8	50.4	54.6	63.9	74.7	83.0	87.8
Long Term												
Full Simulation Period ^b	90.0	87.6	79.5	70.3	62.9	62.3	65.9	70.6	75.8	80.6	85.9	89.3
Water Year Types^c												
Wet (32%)	87.8	84.8	75.8	55.7	51.6	53.0	56.4	60.2	67.2	75.2	83.3	86.7
Above Normal (16%)	90.3	87.9	80.5	63.6	56.0	55.2	61.2	67.9	75.1	78.2	83.8	81.9
Below Normal (13%)	89.4	88.6	80.6	78.7	66.4	67.6	71.3	74.9	78.2	81.3	85.9	89.7
Dry (24%)	91.2	87.2	76.9	81.1	70.8	67.5	70.7	75.9	80.2	84.4	88.1	90.9
Critical (15%)	93.1	93.4	89.8	83.6	78.1	76.7	78.8	83.3	85.7	88.2	90.6	92.3

Alternative 1 minus No Action Alternative

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-0.7	-0.5	0.1	3.3	3.5	2.6	0.5	0.5	0.3	0.2	0.2	0.1
20%	0.1	-0.1	3.0	3.6	3.9	0.8	1.6	0.3	-0.2	-0.1	0.5	0.4
30%	-0.2	0.1	5.6	3.5	4.8	2.5	3.1	1.3	-0.4	0.0	0.6	0.4
40%	-0.1	2.7	6.1	5.3	2.2	2.0	3.0	3.0	-1.5	-0.4	0.3	0.0
50%	0.8	9.2	5.6	4.4	3.0	1.7	2.7	3.0	0.0	0.3	0.5	1.1
60%	9.3	8.6	2.7	3.4	0.5	-0.2	3.3	2.9	-0.4	1.0	0.1	8.0
70%	15.9	14.0	5.0	1.1	0.5	0.2	1.7	2.2	1.0	0.9	0.4	14.6
80%	15.6	13.9	3.6	0.7	-0.1	-0.2	0.9	1.0	1.6	0.4	1.3	14.4
90%	14.2	5.6	0.5	0.1	0.1	-0.2	0.5	1.2	0.4	0.1	0.8	13.8
Long Term												
Full Simulation Period ^b	5.8	5.3	3.1	2.4	1.8	0.9	1.7	1.8	-0.1	0.2	0.5	5.4
Water Year Types^c												
Wet	13.9	11.9	4.7	0.9	0.4	0.0	1.3	1.9	-0.1	0.4	0.5	12.7
Above Normal	9.3	8.6	4.5	2.6	1.1	0.0	2.1	2.7	-0.2	0.3	0.7	7.2
Below Normal	0.3	1.0	1.8	4.2	2.1	0.8	2.3	2.0	-0.9	0.2	0.8	0.4
Dry	-0.2	0.3	1.5	3.5	3.2	2.2	1.9	1.4	0.1	-0.1	0.4	0.3
Critical	-0.5	-0.2	2.0	1.6	2.9	2.2	1.2	0.9	0.5	0.3	0.3	0.2

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.

Notes: 1) X2 is defined as the position of the 2‰ (grams of salt per kilogram of seawater) bottom salinity value along the axis of the estuary; measured in kilometers from the Golden Gate Bridge. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 4) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.12.2 X2, End of Month Position

Second Basis of Comparison

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	92.6	93.1	90.9	87.3	80.8	78.5	78.7	81.5	83.5	86.7	89.9	92.0
20%	91.9	91.4	90.6	85.8	75.6	73.6	75.2	79.5	81.6	84.8	88.6	91.5
30%	91.4	91.0	89.6	83.3	72.0	68.3	73.1	78.5	80.6	84.3	88.0	91.0
40%	91.0	90.8	88.6	78.8	66.2	66.5	69.7	75.3	78.7	82.0	86.6	90.1
50%	90.5	90.3	86.7	75.6	61.4	61.6	67.4	72.9	77.8	80.9	85.3	89.5
60%	90.3	89.6	82.5	67.7	55.7	57.8	64.1	69.2	76.2	79.1	84.7	89.0
70%	90.0	89.1	76.9	56.2	52.4	54.1	59.7	66.0	74.4	78.3	84.5	88.7
80%	89.6	88.0	65.9	52.0	49.3	50.4	54.7	60.2	71.4	77.3	84.0	88.4
90%	88.2	79.6	53.3	49.5	48.3	48.8	50.4	54.6	63.9	74.7	83.0	87.8
Long Term												
Full Simulation Period ^b	90.0	87.6	79.5	70.3	62.9	62.3	65.9	70.6	75.8	80.6	85.9	89.3
Water Year Types^c												
Wet (32%)	87.8	84.8	75.8	55.7	51.6	53.0	56.4	60.2	67.2	75.2	83.3	86.7
Above Normal (16%)	90.3	87.9	80.5	63.6	56.0	55.2	61.2	67.9	75.1	78.2	83.8	81.9
Below Normal (13%)	89.4	88.6	80.6	78.7	66.4	67.6	71.3	74.9	78.2	81.3	85.9	89.7
Dry (24%)	91.2	87.2	76.9	81.1	70.8	67.5	70.7	75.9	80.2	84.4	88.1	90.9
Critical (15%)	93.1	93.4	89.8	83.6	78.1	76.7	78.8	83.3	85.7	88.2	90.6	92.3

No Action Alternative

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	93.4	93.6	90.8	84.0	77.3	75.9	78.1	81.0	83.1	86.5	89.7	91.9
20%	91.8	91.4	87.6	82.3	71.7	72.8	73.6	79.3	81.8	84.9	88.1	91.1
30%	91.6	90.9	83.9	79.8	67.2	65.7	70.0	77.3	81.0	84.3	87.5	90.6
40%	91.1	88.1	82.5	73.5	64.0	64.5	66.7	72.3	80.2	82.4	86.2	90.1
50%	89.7	81.1	81.1	71.2	58.5	59.9	64.7	69.9	77.8	80.6	84.8	88.5
60%	81.0	81.0	79.7	64.4	55.2	58.0	60.9	66.3	76.6	78.1	84.6	81.0
70%	74.1	75.1	72.0	55.1	51.9	53.9	58.0	63.8	73.4	77.4	84.1	74.1
80%	74.0	74.0	62.2	51.3	49.4	50.6	53.8	59.1	69.8	76.8	82.7	74.0
90%	74.0	74.0	52.8	49.4	48.2	49.0	49.9	53.3	63.5	74.6	82.2	74.0
Long Term												
Full Simulation Period ^b	84.2	82.3	76.4	68.0	61.1	61.4	64.2	68.8	75.9	80.4	85.4	83.9
Water Year Types^c												
Wet (32%)	73.9	72.9	71.1	54.8	51.2	53.1	55.1	58.4	67.4	74.9	82.7	73.9
Above Normal (16%)	81.0	79.3	75.9	61.0	54.9	55.3	59.1	65.2	75.3	77.9	83.1	74.7
Below Normal (13%)	89.1	87.6	78.8	74.6	64.3	66.9	69.0	72.9	79.1	81.1	85.1	89.3
Dry (24%)	91.5	86.9	75.4	77.7	67.7	65.4	68.8	74.5	80.1	84.5	87.6	90.5
Critical (15%)	93.6	93.6	87.8	82.0	75.3	74.6	77.7	82.3	85.2	87.9	90.3	92.1

No Action Alternative minus Second Basis of Comparison

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0.7	0.5	-0.1	-3.3	-3.5	-2.6	-0.5	-0.5	-0.3	-0.2	-0.2	-0.1
20%	-0.1	0.1	-3.0	-3.6	-3.9	-0.8	-1.6	-0.3	0.2	0.1	-0.5	-0.4
30%	0.2	-0.1	-5.6	-3.5	-4.8	-2.5	-3.1	-1.3	0.4	0.0	-0.6	-0.4
40%	0.1	-2.7	-6.1	-5.3	-2.2	-2.0	-3.0	-3.0	1.5	0.4	-0.3	0.0
50%	-0.8	-9.2	-5.6	-4.4	-3.0	-1.7	-2.7	-3.0	0.0	-0.3	-0.5	-1.1
60%	-9.3	-8.6	-2.7	-3.4	-0.5	0.2	-3.3	-2.9	0.4	-1.0	-0.1	-8.0
70%	-15.9	-14.0	-5.0	-1.1	-0.5	-0.2	-1.7	-2.2	-1.0	-0.9	-0.4	-14.6
80%	-15.6	-13.9	-3.6	-0.7	0.1	0.2	-0.9	-1.0	-1.6	-0.4	-1.3	-14.4
90%	-14.2	-5.6	-0.5	-0.1	-0.1	0.2	-0.5	-1.2	-0.4	-0.1	-0.8	-13.8
Long Term												
Full Simulation Period ^b	-5.8	-5.3	-3.1	-2.4	-1.8	-0.9	-1.7	-1.8	0.1	-0.2	-0.5	-5.4
Water Year Types^c												
Wet	-13.9	-11.9	-4.7	-0.9	-0.4	0.0	-1.3	-1.9	0.1	-0.4	-0.5	-12.7
Above Normal	-9.3	-8.6	-4.5	-2.6	-1.1	0.0	-2.1	-2.7	0.2	-0.3	-0.7	-7.2
Below Normal	-0.3	-1.0	-1.8	-4.2	-2.1	-0.8	-2.3	-2.0	0.9	-0.2	-0.8	-0.4
Dry	0.2	-0.3	-1.5	-3.5	-3.2	-2.2	-1.9	-1.4	-0.1	0.1	-0.4	-0.3
Critical	0.5	0.2	-2.0	-1.6	-2.9	-2.2	-1.2	-0.9	-0.5	-0.3	-0.3	-0.2

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.

Notes: 1) X2 is defined as the position of the 2‰ (grams of salt per kilogram of seawater) bottom salinity value along the axis of the estuary; measured in kilometers from the Golden Gate Bridge. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 4) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.12.3 X2, End of Month Position

Second Basis of Comparison

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	92.6	93.1	90.9	87.3	80.8	78.5	78.7	81.5	83.5	86.7	89.9	92.0
20%	91.9	91.4	90.6	85.8	75.6	73.6	75.2	79.5	81.6	84.8	88.6	91.5
30%	91.4	91.0	89.6	83.3	72.0	68.3	73.1	78.5	80.6	84.3	88.0	91.0
40%	91.0	90.8	88.6	78.8	66.2	66.5	69.7	75.3	78.7	82.0	86.6	90.1
50%	90.5	90.3	86.7	75.6	61.4	61.6	67.4	72.9	77.8	80.9	85.3	89.5
60%	90.3	89.6	82.5	67.7	55.7	57.8	64.1	69.2	76.2	79.1	84.7	89.0
70%	90.0	89.1	76.9	56.2	52.4	54.1	59.7	66.0	74.4	78.3	84.5	88.7
80%	89.6	88.0	65.9	52.0	49.3	50.4	54.7	60.2	71.4	77.3	84.0	88.4
90%	88.2	79.6	53.3	49.5	48.3	48.8	50.4	54.6	63.9	74.7	83.0	87.8
Long Term												
Full Simulation Period ^b	90.0	87.6	79.5	70.3	62.9	62.3	65.9	70.6	75.8	80.6	85.9	89.3
Water Year Types^c												
Wet (32%)	87.8	84.8	75.8	55.7	51.6	53.0	56.4	60.2	67.2	75.2	83.3	86.7
Above Normal (16%)	90.3	87.9	80.5	63.6	56.0	55.2	61.2	67.9	75.1	78.2	83.8	81.9
Below Normal (13%)	89.4	88.6	80.6	78.7	66.4	67.6	71.3	74.9	78.2	81.3	85.9	89.7
Dry (24%)	91.2	87.2	76.9	81.1	70.8	67.5	70.7	75.9	80.2	84.4	88.1	90.9
Critical (15%)	93.1	93.4	89.8	83.6	78.1	76.7	78.8	83.3	85.7	88.2	90.6	92.3

Alternative 3

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	93.2	93.6	90.8	86.1	77.8	75.8	78.2	81.5	83.2	86.4	90.0	92.2
20%	91.9	91.5	90.5	83.7	71.7	72.5	74.6	79.6	82.0	84.8	88.4	91.3
30%	91.6	91.1	89.4	81.5	67.6	66.1	71.3	78.4	81.0	84.3	87.7	90.8
40%	91.2	90.8	88.5	74.8	64.1	64.5	69.7	75.6	80.3	81.7	86.0	89.8
50%	90.7	90.6	86.7	71.8	58.8	60.0	67.3	73.1	78.8	80.7	84.9	89.3
60%	90.2	89.8	82.6	64.6	54.4	58.0	63.6	70.4	77.1	78.4	84.6	88.7
70%	89.9	89.0	74.2	55.1	52.2	54.4	59.9	66.8	75.1	77.8	84.2	88.4
80%	89.6	87.9	65.1	51.2	49.3	50.4	54.8	61.7	71.8	77.1	83.2	88.2
90%	88.2	79.6	53.0	49.5	48.1	48.8	50.4	54.8	64.9	75.0	82.4	87.6
Long Term												
Full Simulation Period ^b	90.1	87.8	79.0	68.5	61.2	61.4	65.5	70.8	76.5	80.5	85.6	89.1
Water Year Types^c												
Wet (32%)	87.8	84.8	75.3	54.8	51.3	53.1	56.5	60.8	68.3	75.1	82.9	86.6
Above Normal (16%)	90.3	88.0	80.0	61.5	54.9	55.0	60.9	68.4	76.2	78.0	83.4	81.8
Below Normal (13%)	89.2	88.8	80.2	75.4	64.0	66.6	70.5	74.9	79.6	81.0	85.1	89.2
Dry (24%)	91.4	87.4	76.4	78.8	67.9	65.5	69.9	76.0	80.4	84.3	87.8	90.8
Critical (15%)	93.4	93.7	89.3	82.7	75.6	74.6	78.1	82.8	85.4	88.0	90.5	92.3

Alternative 3 minus Second Basis of Comparison

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0.5	0.5	-0.1	-1.2	-3.0	-2.7	-0.5	-0.1	-0.3	-0.3	0.1	0.2
20%	0.1	0.1	-0.1	-2.2	-3.9	-1.1	-0.6	0.1	0.4	0.0	-0.2	-0.2
30%	0.2	0.1	-0.1	-1.8	-4.4	-2.1	-1.8	-0.1	0.4	0.0	-0.4	-0.2
40%	0.2	0.0	-0.2	-4.0	-2.0	-2.1	0.0	0.3	1.6	-0.3	-0.5	-0.3
50%	0.2	0.3	0.0	-3.9	-2.6	-1.6	-0.2	0.3	1.0	-0.3	-0.4	-0.2
60%	-0.1	0.1	0.2	-3.1	-1.3	0.2	-0.5	1.2	0.9	-0.7	-0.1	-0.3
70%	-0.1	-0.1	-2.7	-1.1	-0.2	0.2	0.2	0.8	0.7	-0.5	-0.2	-0.2
80%	0.0	-0.1	-0.8	-0.8	0.0	0.1	0.1	1.5	0.3	-0.2	-0.8	-0.2
90%	0.0	0.0	-0.3	0.0	-0.2	0.0	0.0	0.2	1.0	0.2	-0.6	-0.1
Long Term												
Full Simulation Period ^b	0.1	0.1	-0.5	-1.8	-1.7	-1.0	-0.4	0.2	0.7	-0.2	-0.3	-0.2
Water Year Types^c												
Wet	0.0	0.0	-0.4	-0.9	-0.3	0.1	0.1	0.5	1.1	-0.1	-0.4	-0.1
Above Normal	0.0	0.1	-0.5	-2.1	-1.1	-0.2	-0.2	0.5	1.1	-0.2	-0.4	-0.1
Below Normal	-0.2	0.2	-0.5	-3.4	-2.4	-1.1	-0.8	0.1	1.4	-0.3	-0.7	-0.5
Dry	0.2	0.2	-0.5	-2.4	-2.9	-2.1	-0.8	0.1	0.3	-0.2	-0.2	-0.1
Critical	0.4	0.3	-0.6	-0.9	-2.5	-2.1	-0.7	-0.4	-0.3	-0.2	-0.1	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.

Notes: 1) X2 is defined as the position of the 2% (grams of salt per kilogram of seawater) bottom salinity value along the axis of the estuary; measured in kilometers from the Golden Gate Bridge. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 4) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.12.4 X2, End of Month Position

Second Basis of Comparison

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	92.6	93.1	90.9	87.3	80.8	78.5	78.7	81.5	83.5	86.7	89.9	92.0
20%	91.9	91.4	90.6	85.8	75.6	73.6	75.2	79.5	81.6	84.8	88.6	91.5
30%	91.4	91.0	89.6	83.3	72.0	68.3	73.1	78.5	80.6	84.3	88.0	91.0
40%	91.0	90.8	88.6	78.8	66.2	66.5	69.7	75.3	78.7	82.0	86.6	90.1
50%	90.5	90.3	86.7	75.6	61.4	61.6	67.4	72.9	77.8	80.9	85.3	89.5
60%	90.3	89.6	82.5	67.7	55.7	57.8	64.1	69.2	76.2	79.1	84.7	89.0
70%	90.0	89.1	76.9	56.2	52.4	54.1	59.7	66.0	74.4	78.3	84.5	88.7
80%	89.6	88.0	65.9	52.0	49.3	50.4	54.7	60.2	71.4	77.3	84.0	88.4
90%	88.2	79.6	53.3	49.5	48.3	48.8	50.4	54.6	63.9	74.7	83.0	87.8
Long Term												
Full Simulation Period ^b	90.0	87.6	79.5	70.3	62.9	62.3	65.9	70.6	75.8	80.6	85.9	89.3
Water Year Types^c												
Wet (32%)	87.8	84.8	75.8	55.7	51.6	53.0	56.4	60.2	67.2	75.2	83.3	86.7
Above Normal (16%)	90.3	87.9	80.5	63.6	56.0	55.2	61.2	67.9	75.1	78.2	83.8	81.9
Below Normal (13%)	89.4	88.6	80.6	78.7	66.4	67.6	71.3	74.9	78.2	81.3	85.9	89.7
Dry (24%)	91.2	87.2	76.9	81.1	70.8	67.5	70.7	75.9	80.2	84.4	88.1	90.9
Critical (15%)	93.1	93.4	89.8	83.6	78.1	76.7	78.8	83.3	85.7	88.2	90.6	92.3

Alternative 5

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	93.2	93.3	90.8	84.0	77.3	75.9	77.2	79.1	83.1	86.5	89.6	91.9
20%	91.9	91.5	87.6	82.3	71.7	72.8	72.5	77.9	81.4	84.9	88.1	91.1
30%	91.6	91.0	83.9	79.8	67.2	65.8	69.5	75.8	81.0	84.2	87.4	90.5
40%	91.0	88.0	82.4	73.5	63.9	64.5	66.4	71.5	79.6	82.3	86.1	90.0
50%	89.5	81.1	81.2	71.2	58.5	59.9	64.2	69.3	77.8	80.7	84.8	88.5
60%	81.0	81.0	79.7	64.4	55.1	57.9	60.8	66.4	76.6	78.2	84.6	81.0
70%	74.1	75.1	71.9	55.1	51.9	53.9	58.0	63.7	73.4	77.5	84.1	74.1
80%	74.0	74.1	62.2	51.3	49.4	50.6	53.5	58.9	69.8	76.8	82.6	74.0
90%	74.0	73.9	53.0	49.4	48.2	49.1	49.9	53.3	63.5	74.6	82.2	74.0
Long Term												
Full Simulation Period ^b	84.2	82.3	76.4	68.0	61.1	61.4	63.8	68.2	75.7	80.4	85.3	83.8
Water Year Types^c												
Wet (32%)	73.9	72.9	71.1	54.7	51.2	53.1	55.1	58.2	67.3	74.7	82.6	73.9
Above Normal (16%)	81.0	79.2	75.9	60.9	54.9	55.3	59.0	65.0	75.2	77.9	83.1	74.8
Below Normal (13%)	89.1	87.2	78.6	74.6	64.3	66.9	68.4	72.1	79.0	81.1	85.0	89.3
Dry (24%)	91.4	87.0	75.4	77.7	67.7	65.4	67.9	73.4	79.8	84.5	87.6	90.5
Critical (15%)	93.5	93.5	87.9	82.1	75.5	74.6	76.7	80.8	84.5	87.7	90.2	92.1

Alternative 5 minus Second Basis of Comparison

Statistic	End of Month Position (km)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0.6	0.2	-0.1	-3.2	-3.5	-2.6	-1.5	-2.4	-0.4	-0.2	-0.3	-0.1
20%	0.0	0.1	-3.0	-3.6	-3.9	-0.8	-2.7	-1.6	-0.2	0.1	-0.4	-0.4
30%	0.2	0.0	-5.6	-3.5	-4.8	-2.5	-3.6	-2.7	0.4	-0.1	-0.6	-0.5
40%	0.0	-2.8	-6.3	-5.3	-2.2	-2.0	-3.2	-3.8	0.9	0.3	-0.5	-0.1
50%	-1.0	-9.2	-5.6	-4.4	-3.0	-1.7	-3.2	-3.5	0.0	-0.2	-0.5	-1.1
60%	-9.3	-8.7	-2.7	-3.3	-0.6	0.1	-3.4	-2.8	0.3	-0.9	-0.1	-8.0
70%	-16.0	-14.0	-5.1	-1.1	-0.5	-0.2	-1.7	-2.3	-1.0	-0.8	-0.4	-14.6
80%	-15.6	-13.9	-3.6	-0.8	0.1	0.2	-1.2	-1.3	-1.6	-0.5	-1.4	-14.4
90%	-14.2	-5.6	-0.3	-0.1	-0.1	0.3	-0.5	-1.2	-0.4	-0.1	-0.8	-13.8
Long Term												
Full Simulation Period ^b	-5.8	-5.4	-3.1	-2.3	-1.7	-0.9	-2.1	-2.4	-0.1	-0.3	-0.6	-5.4
Water Year Types^c												
Wet	-13.9	-11.9	-4.7	-1.0	-0.4	0.0	-1.3	-2.0	0.1	-0.5	-0.6	-12.7
Above Normal	-9.3	-8.6	-4.5	-2.6	-1.1	0.0	-2.1	-2.9	0.1	-0.3	-0.7	-7.1
Below Normal	-0.3	-1.4	-2.0	-4.2	-2.1	-0.7	-2.9	-2.8	0.8	-0.2	-0.9	-0.4
Dry	0.2	-0.2	-1.5	-3.4	-3.1	-2.1	-2.8	-2.5	-0.3	0.1	-0.5	-0.4
Critical	0.4	0.1	-2.0	-1.5	-2.7	-2.1	-2.1	-2.5	-1.2	-0.5	-0.4	-0.2

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.

Notes: 1) X2 is defined as the position of the 2‰ (grams of salt per kilogram of seawater) bottom salinity value along the axis of the estuary; measured in kilometers from the Golden Gate Bridge. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 4) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.13 Delta Outflow

Table 5C.3.3.13.1 Old and Middle River, Monthly Flow

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3,764	-3,724	-3,812	-2,823	-666	-969	3,205	2,797	-1,150	-4,130	-2,453	-3,775
20%	-4,076	-4,560	-4,673	-2,823	-1,771	-1,394	2,207	1,304	-1,570	-6,849	-4,032	-5,147
30%	-4,613	-5,156	-5,244	-3,355	-2,823	-2,738	1,632	561	-3,500	-7,647	-5,770	-6,006
40%	-4,820	-5,627	-5,871	-4,392	-3,314	-3,500	1,268	108	-3,500	-8,888	-7,996	-7,621
50%	-5,328	-6,320	-5,871	-4,710	-3,781	-3,500	612	-182	-3,500	-9,376	-9,956	-9,000
60%	-5,589	-6,564	-5,871	-5,000	-4,878	-4,568	-102	-483	-4,487	-9,746	-10,630	-9,256
70%	-6,253	-7,101	-7,413	-5,000	-5,000	-5,000	-448	-632	-5,000	-10,301	-10,737	-9,653
80%	-6,560	-8,185	-9,537	-5,000	-5,000	-5,000	-995	-1,129	-5,000	-10,602	-10,853	-9,884
90%	-7,404	-9,995	-9,681	-5,000	-5,000	-5,000	-1,247	-1,414	-5,000	-11,108	-11,083	-10,032
Long Term												
Full Simulation Period ^b	-5,476	-6,380	-6,228	-3,535	-2,905	-2,690	919	310	-3,577	-8,496	-7,975	-7,706
Water Year Types^c												
Wet (32%)	-5,847	-7,229	-5,526	-1,900	-1,991	-1,552	3,110	2,011	-4,274	-8,957	-10,532	-9,358
Above Normal (16%)	-5,525	-6,801	-6,850	-3,699	-3,161	-4,176	1,196	412	-4,525	-9,151	-10,873	-9,542
Below Normal (13%)	-5,488	-6,749	-7,669	-4,380	-3,477	-3,919	165	-316	-3,445	-10,539	-9,624	-8,178
Dry (24%)	-5,440	-5,953	-6,676	-4,621	-3,573	-3,072	-670	-906	-3,350	-8,900	-4,745	-6,453
Critical (15%)	-4,671	-4,458	-5,006	-4,314	-2,968	-1,780	-786	-887	-1,539	-4,242	-3,168	-3,793

Alternative 1

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3,392	-4,293	-4,109	-2,581	-1,241	-119	-2,051	-1,611	-2,184	-3,454	-2,880	-3,666
20%	-4,079	-5,433	-6,043	-4,838	-2,865	-1,287	-3,131	-2,897	-2,834	-5,152	-4,631	-5,107
30%	-4,769	-6,994	-6,917	-6,279	-4,367	-3,292	-3,957	-4,177	-3,308	-6,488	-5,837	-6,393
40%	-6,409	-7,620	-7,554	-7,434	-5,806	-4,012	-4,821	-4,673	-4,258	-7,155	-6,876	-8,264
50%	-7,303	-8,686	-8,173	-8,257	-6,422	-4,958	-5,864	-5,200	-4,990	-8,014	-7,941	-9,257
60%	-8,076	-9,256	-8,969	-8,848	-7,346	-5,373	-6,549	-5,517	-5,660	-8,914	-9,236	-9,689
70%	-9,075	-9,598	-9,326	-9,269	-8,323	-6,205	-7,131	-6,008	-6,016	-9,492	-10,081	-9,977
80%	-9,905	-9,959	-9,508	-9,585	-8,873	-6,616	-7,635	-6,451	-6,534	-10,052	-10,364	-10,089
90%	-10,146	-10,023	-9,665	-9,803	-9,509	-7,592	-7,991	-7,302	-6,936	-10,637	-10,683	-10,163
Long Term												
Full Simulation Period ^b	-6,980	-7,844	-7,429	-6,650	-5,206	-3,727	-5,381	-4,842	-4,611	-7,538	-7,489	-7,917
Water Year Types^c												
Wet (32%)	-8,038	-9,112	-7,723	-4,985	-3,160	-1,004	-6,895	-6,376	-4,024	-8,414	-9,609	-9,678
Above Normal (16%)	-6,419	-7,887	-7,960	-8,266	-6,089	-5,331	-7,034	-5,761	-6,024	-8,921	-9,947	-9,886
Below Normal (13%)	-8,051	-8,891	-8,088	-8,590	-5,749	-5,501	-5,370	-4,954	-6,578	-10,111	-8,035	-8,118
Dry (24%)	-6,466	-7,140	-7,171	-7,358	-6,832	-5,646	-4,159	-3,813	-4,591	-6,827	-5,191	-6,639
Critical (15%)	-5,171	-5,266	-6,040	-5,551	-5,474	-3,067	-2,358	-2,134	-2,583	-2,973	-3,561	-3,911

Alternative 1 minus No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	373	-569	-298	241	-575	850	-5,257	-4,408	-1,033	675	-426	109
20%	-3	-873	-1,370	-2,015	-1,094	107	-5,338	-4,202	-1,264	1,697	-599	39
30%	-156	-1,838	-1,673	-2,924	-1,545	-554	-5,589	-4,738	192	1,159	-67	-387
40%	-1,588	-1,993	-1,683	-3,042	-2,492	-512	-6,090	-4,781	-758	1,733	1,120	-644
50%	-1,975	-2,366	-2,302	-3,548	-2,641	-1,458	-6,475	-5,018	-1,490	1,362	2,016	-257
60%	-2,487	-2,692	-3,098	-3,848	-2,467	-806	-6,447	-5,034	-1,173	831	1,394	-433
70%	-2,822	-2,497	-1,913	-4,269	-3,323	-1,205	-6,682	-5,376	-1,016	809	656	-325
80%	-3,345	-1,773	29	-4,585	-3,873	-1,616	-6,640	-5,322	-1,534	550	489	-205
90%	-2,742	-28	16	-4,803	-4,509	-2,592	-6,744	-5,887	-1,936	471	400	-132
Long Term												
Full Simulation Period ^b	-1,504	-1,464	-1,201	-3,115	-2,301	-1,037	-6,300	-5,152	-1,034	958	486	-211
Water Year Types^c												
Wet (32%)	-2,191	-1,882	-2,198	-3,084	-1,169	549	-10,005	-8,387	250	543	923	-320
Above Normal (16%)	-895	-1,086	-1,110	-4,566	-2,928	-1,155	-8,229	-6,173	-1,499	230	926	-344
Below Normal (13%)	-2,563	-2,142	-419	-4,210	-2,273	-1,582	-5,535	-4,638	-3,133	429	1,589	59
Dry (24%)	-1,026	-1,187	-495	-2,737	-3,259	-2,574	-3,489	-2,907	-1,241	2,073	-446	-186
Critical (15%)	-500	-809	-1,034	-1,237	-2,505	-1,287	-1,572	-1,247	-1,044	1,268	-394	-118

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.13.2 Old and Middle River, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3,392	-4,293	-4,109	-2,581	-1,241	-119	-2,051	-1,611	-2,184	-3,454	-2,880	-3,666
20%	-4,079	-5,433	-6,043	-4,838	-2,865	-1,287	-3,131	-2,897	-2,834	-5,152	-4,631	-5,107
30%	-4,769	-6,994	-6,917	-6,279	-4,367	-3,292	-3,957	-4,177	-3,308	-6,488	-5,837	-6,393
40%	-6,409	-7,620	-7,554	-7,434	-5,806	-4,012	-4,821	-4,673	-4,258	-7,155	-6,876	-8,264
50%	-7,303	-8,686	-8,173	-8,257	-6,422	-4,958	-5,864	-5,200	-4,990	-8,014	-7,941	-9,257
60%	-8,076	-9,256	-8,969	-8,848	-7,346	-5,373	-6,549	-5,517	-5,660	-8,914	-9,236	-9,889
70%	-9,075	-9,598	-9,326	-9,269	-8,323	-6,205	-7,131	-6,008	-6,016	-9,492	-10,081	-9,977
80%	-9,905	-9,959	-9,508	-9,585	-8,873	-6,616	-7,635	-6,451	-6,534	-10,052	-10,364	-10,089
90%	-10,146	-10,023	-9,665	-9,803	-9,509	-7,592	-7,991	-7,302	-6,936	-10,637	-10,683	-10,163
Long Term												
Full Simulation Period ^b	-6,980	-7,844	-7,429	-6,650	-5,206	-3,727	-5,381	-4,842	-4,611	-7,538	-7,489	-7,917
Water Year Types^c												
Wet (32%)	-8,038	-9,112	-7,723	-4,985	-3,160	-1,004	-6,895	-6,376	-4,024	-8,414	-9,609	-9,678
Above Normal (16%)	-6,419	-7,887	-7,960	-8,266	-6,089	-5,331	-7,034	-5,761	-6,024	-8,921	-9,947	-9,886
Below Normal (13%)	-8,051	-8,891	-8,088	-8,590	-5,749	-5,501	-5,370	-4,954	-6,578	-10,111	-8,035	-8,118
Dry (24%)	-6,466	-7,140	-7,171	-7,358	-6,832	-5,646	-4,159	-3,813	-4,591	-6,827	-5,191	-6,639
Critical (15%)	-5,171	-5,266	-6,040	-5,551	-5,474	-3,067	-2,358	-2,134	-2,583	-2,973	-3,561	-3,911

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3,764	-3,724	-3,812	-2,823	-666	-969	3,205	2,797	-1,150	-4,130	-2,453	-3,775
20%	-4,076	-4,560	-4,673	-2,823	-1,771	-1,394	2,207	1,304	-1,570	-6,849	-4,032	-5,147
30%	-4,613	-5,156	-5,244	-3,355	-2,823	-2,738	1,632	561	-3,500	-7,647	-5,770	-6,006
40%	-4,820	-5,627	-5,871	-4,392	-3,314	-3,500	1,268	108	-3,500	-8,888	-7,996	-7,621
50%	-5,328	-6,320	-5,871	-4,710	-3,781	-3,500	612	-182	-3,500	-9,376	-9,956	-9,000
60%	-5,589	-6,564	-5,871	-5,000	-4,878	-4,568	-102	-483	-4,487	-9,746	-10,630	-9,256
70%	-6,253	-7,101	-7,413	-5,000	-5,000	-5,000	-448	-632	-5,000	-10,301	-10,737	-9,653
80%	-6,560	-8,185	-9,537	-5,000	-5,000	-5,000	-995	-1,129	-5,000	-10,602	-10,853	-9,884
90%	-7,404	-9,995	-9,681	-5,000	-5,000	-5,000	-1,247	-1,414	-5,000	-11,108	-11,083	-10,032
Long Term												
Full Simulation Period ^b	-5,476	-6,380	-6,228	-3,535	-2,905	-2,690	919	310	-3,577	-8,496	-7,975	-7,706
Water Year Types^c												
Wet (32%)	-5,847	-7,229	-5,526	-1,900	-1,991	-1,552	3,110	2,011	-4,274	-8,957	-10,532	-9,358
Above Normal (16%)	-5,525	-6,801	-6,850	-3,699	-3,161	-4,176	1,196	412	-4,525	-9,151	-10,873	-9,542
Below Normal (13%)	-5,488	-6,749	-7,669	-4,380	-3,477	-3,919	165	-316	-3,445	-10,539	-9,624	-8,178
Dry (24%)	-5,440	-5,953	-6,676	-4,621	-3,573	-3,072	-670	-906	-3,350	-8,900	-4,745	-6,453
Critical (15%)	-4,671	-4,458	-5,006	-4,314	-2,968	-1,780	-786	-887	-1,539	-4,242	-3,168	-3,793

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-373	569	298	-241	575	-850	5,257	4,408	1,033	-675	426	-109
20%	3	873	1,370	2,015	1,094	-107	5,338	4,202	1,264	-1,697	599	-39
30%	156	1,838	1,673	2,924	1,545	554	5,589	4,738	-192	-1,159	67	387
40%	1,588	1,993	1,683	3,042	2,492	512	6,090	4,781	758	-1,733	-1,120	644
50%	1,975	2,366	2,302	3,548	2,641	1,458	6,475	5,018	1,490	-1,362	-2,016	257
60%	2,487	2,692	3,098	3,848	2,467	806	6,447	5,034	1,173	-831	-1,394	433
70%	2,822	2,497	1,913	4,269	3,323	1,205	6,682	5,376	1,016	-809	-656	325
80%	3,345	1,773	-29	4,585	3,873	1,616	6,640	5,322	1,534	-550	-489	205
90%	2,742	28	-16	4,803	4,509	2,592	6,744	5,887	1,936	-471	-400	132
Long Term												
Full Simulation Period ^b	1,504	1,464	1,201	3,115	2,301	1,037	6,300	5,152	1,034	-958	-486	211
Water Year Types^c												
Wet (32%)	2,191	1,882	2,198	3,084	1,169	-549	10,005	8,387	-250	-543	-923	320
Above Normal (16%)	895	1,086	1,110	4,566	2,928	1,155	8,229	6,173	1,499	-230	-926	344
Below Normal (13%)	2,563	2,142	419	4,210	2,273	1,582	5,535	4,638	3,133	-429	-1,589	-59
Dry (24%)	1,026	1,187	495	2,737	3,259	2,574	3,489	2,907	1,241	-2,073	446	186
Critical (15%)	500	809	1,034	1,237	2,505	1,287	1,572	1,247	1,044	-1,268	394	118

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.13.3 Old and Middle River, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3,392	-4,293	-4,109	-2,581	-1,241	-119	-2,051	-1,611	-2,184	-3,454	-2,880	-3,666
20%	-4,079	-5,433	-6,043	-4,838	-2,865	-1,287	-3,131	-2,897	-2,834	-5,152	-4,631	-5,107
30%	-4,769	-6,994	-6,917	-6,279	-4,367	-3,292	-3,957	-4,177	-3,308	-6,488	-5,837	-6,393
40%	-6,409	-7,620	-7,554	-7,434	-5,806	-4,012	-4,821	-4,673	-4,258	-7,155	-6,876	-8,264
50%	-7,303	-8,686	-8,173	-8,257	-6,422	-4,958	-5,864	-5,200	-4,990	-8,014	-7,941	-9,257
60%	-8,076	-9,256	-8,969	-8,848	-7,346	-5,373	-6,549	-5,517	-5,660	-8,914	-9,236	-9,889
70%	-9,075	-9,598	-9,326	-9,269	-8,323	-6,205	-7,131	-6,008	-6,016	-9,492	-10,081	-9,977
80%	-9,905	-9,959	-9,508	-9,585	-8,873	-6,616	-7,635	-6,451	-6,534	-10,052	-10,364	-10,089
90%	-10,146	-10,023	-9,665	-9,803	-9,509	-7,592	-7,991	-7,302	-6,936	-10,637	-10,683	-10,163
Long Term												
Full Simulation Period ^b	-6,980	-7,844	-7,429	-6,650	-5,206	-3,727	-5,381	-4,842	-4,611	-7,538	-7,489	-7,917
Water Year Types^c												
Wet (32%)	-8,038	-9,112	-7,723	-4,985	-3,160	-1,004	-6,895	-6,376	-4,024	-8,414	-9,609	-9,678
Above Normal (16%)	-6,419	-7,887	-7,960	-8,266	-6,089	-5,331	-7,034	-5,761	-6,024	-8,921	-9,947	-9,886
Below Normal (13%)	-8,051	-8,891	-8,088	-8,590	-5,749	-5,501	-5,370	-4,954	-6,578	-10,111	-8,035	-8,118
Dry (24%)	-6,466	-7,140	-7,171	-7,358	-6,832	-5,646	-4,159	-3,813	-4,591	-6,827	-5,191	-6,639
Critical (15%)	-5,171	-5,266	-6,040	-5,551	-5,474	-3,067	-2,358	-2,134	-2,583	-2,973	-3,561	-3,911

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3,471	-4,154	-3,935	-2,361	-447	-819	405	-673	-2,098	-3,660	-3,007	-3,495
20%	-4,101	-5,233	-5,184	-3,500	-1,896	-1,347	-946	-1,150	-4,287	-5,775	-4,278	-5,225
30%	-4,803	-6,947	-6,403	-3,500	-2,838	-2,283	-1,200	-1,150	-4,625	-7,093	-6,258	-6,437
40%	-5,638	-7,541	-6,403	-3,500	-3,500	-3,500	-2,086	-2,560	-5,017	-8,012	-7,669	-8,402
50%	-7,049	-8,326	-6,403	-5,000	-3,500	-3,500	-2,787	-3,326	-5,526	-8,990	-9,396	-9,192
60%	-8,252	-9,400	-6,811	-5,000	-4,273	-3,616	-3,368	-3,500	-5,750	-9,549	-9,845	-9,680
70%	-8,982	-9,810	-7,677	-5,000	-5,000	-5,061	-3,526	-3,500	-5,750	-10,046	-10,212	-9,842
80%	-9,734	-9,990	-8,823	-5,000	-5,621	-6,252	-4,031	-4,451	-6,160	-10,767	-10,624	-10,044
90%	-10,085	-10,084	-9,552	-6,976	-7,500	-7,499	-4,474	-5,149	-7,011	-11,148	-10,797	-10,177
Long Term												
Full Simulation Period ^b	-6,888	-7,771	-6,494	-3,764	-3,283	-3,072	-2,176	-2,623	-4,997	-8,112	-7,831	-7,917
Water Year Types^c												
Wet (32%)	-7,965	-9,052	-5,964	-2,522	-2,581	-1,646	-1,367	-2,399	-5,476	-8,581	-9,731	-9,555
Above Normal (16%)	-6,452	-8,078	-6,997	-3,789	-4,137	-5,220	-3,630	-4,226	-5,981	-9,160	-10,444	-9,839
Below Normal (13%)	-7,685	-8,790	-7,868	-4,451	-3,689	-4,765	-2,676	-2,885	-5,409	-10,929	-10,032	-8,880
Dry (24%)	-6,546	-7,086	-6,848	-4,588	-3,582	-3,358	-2,517	-2,670	-4,927	-8,172	-5,079	-6,457
Critical (15%)	-4,869	-4,871	-5,252	-4,429	-3,011	-1,804	-1,328	-1,054	-2,628	-3,280	-3,450	-3,839

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-79	139	175	220	794	-701	2,456	938	85	-205	-127	172
20%	-22	200	858	1,338	969	-61	2,185	1,747	-1,453	-623	353	-118
30%	-34	47	514	2,779	1,529	1,009	2,757	3,027	-1,317	-605	-421	-43
40%	771	79	1,151	3,934	2,306	512	2,735	2,112	-759	-857	-793	-137
50%	254	360	1,769	3,257	2,922	1,458	3,077	1,874	-536	-976	-1,455	64
60%	-177	-144	2,158	3,848	3,072	1,757	3,181	2,017	-90	-635	-609	10
70%	93	-213	1,648	4,269	3,323	1,144	3,605	2,508	266	-553	-131	136
80%	171	-31	685	4,585	3,252	365	3,604	1,999	375	-715	-259	45
90%	61	-61	112	2,827	2,009	93	3,517	2,153	-75	-511	-114	-14
Long Term												
Full Simulation Period ^b	92	73	934	2,886	1,923	656	3,205	2,219	-386	-574	-342	0
Water Year Types^c												
Wet (32%)	73	60	1,759	2,463	579	-642	5,528	3,977	-1,453	-167	-123	124
Above Normal (16%)	-32	-191	963	4,477	1,952	111	3,403	1,535	43	-240	-497	48
Below Normal (13%)	366	101	220	4,139	2,061	736	2,695	2,069	1,169	-818	-1,997	-762
Dry (24%)	-80	54	323	2,770	3,249	2,288	1,642	1,144	-336	-1,345	112	182
Critical (15%)	302	395	789	1,123	2,462	1,263	1,030	1,081	-45	-307	112	73

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.13.4 Old and Middle River, Monthly Flow

Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3,392	-4,293	-4,109	-2,581	-1,241	-119	-2,051	-1,611	-2,184	-3,454	-2,880	-3,666
20%	-4,079	-5,433	-6,043	-4,838	-2,865	-1,287	-3,131	-2,897	-2,834	-5,152	-4,631	-5,107
30%	-4,769	-6,994	-6,917	-6,279	-4,367	-3,292	-3,957	-4,177	-3,308	-6,488	-5,837	-6,393
40%	-6,409	-7,620	-7,554	-7,434	-5,806	-4,012	-4,821	-4,673	-4,258	-7,155	-6,876	-8,264
50%	-7,303	-8,686	-8,173	-8,257	-6,422	-4,958	-5,864	-5,200	-4,990	-8,014	-7,941	-9,257
60%	-8,076	-9,256	-8,969	-8,848	-7,346	-5,373	-6,549	-5,517	-5,660	-8,914	-9,236	-9,689
70%	-9,075	-9,598	-9,326	-9,269	-8,323	-6,205	-7,131	-6,008	-6,016	-9,492	-10,081	-9,977
80%	-9,905	-9,959	-9,508	-9,585	-8,873	-6,616	-7,635	-6,451	-6,534	-10,052	-10,364	-10,089
90%	-10,146	-10,023	-9,665	-9,803	-9,509	-7,592	-7,991	-7,302	-6,936	-10,637	-10,683	-10,163
Long Term												
Full Simulation Period ^b	-6,980	-7,844	-7,429	-6,650	-5,206	-3,727	-5,381	-4,842	-4,611	-7,538	-7,489	-7,917
Water Year Types^c												
Wet (32%)	-8,038	-9,112	-7,723	-4,985	-3,160	-1,004	-6,895	-6,376	-4,024	-8,414	-9,609	-9,678
Above Normal (16%)	-6,419	-7,887	-7,960	-8,266	-6,089	-5,331	-7,034	-5,761	-6,024	-8,921	-9,947	-9,886
Below Normal (13%)	-8,051	-8,891	-8,088	-8,590	-5,749	-5,501	-5,370	-4,954	-6,578	-10,111	-8,035	-8,118
Dry (24%)	-6,466	-7,140	-7,171	-7,358	-6,832	-5,646	-4,159	-3,813	-4,591	-6,827	-5,191	-6,639
Critical (15%)	-5,171	-5,266	-6,040	-5,551	-5,474	-3,067	-2,358	-2,134	-2,583	-2,973	-3,561	-3,911

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3,722	-3,722	-3,826	-2,823	-641	-965	3,206	2,797	-1,150	-4,455	-3,295	-3,913
20%	-4,102	-4,558	-4,737	-2,823	-1,771	-1,394	2,134	1,335	-2,319	-6,620	-4,451	-5,247
30%	-4,583	-5,162	-5,150	-3,355	-2,820	-2,738	1,566	712	-3,500	-8,001	-6,361	-6,304
40%	-4,858	-5,603	-5,871	-4,378	-3,267	-3,500	1,270	568	-3,500	-9,172	-8,612	-7,552
50%	-5,145	-6,098	-5,871	-4,710	-3,513	-3,500	623	381	-3,500	-9,522	-10,244	-8,864
60%	-5,368	-6,494	-5,871	-5,000	-4,878	-4,568	381	381	-4,467	-9,822	-10,615	-9,232
70%	-6,237	-7,087	-7,453	-5,000	-5,000	-5,000	381	381	-5,000	-10,430	-10,756	-9,654
80%	-6,583	-8,086	-9,466	-5,000	-5,000	-5,000	381	381	-5,000	-10,694	-10,844	-9,915
90%	-7,355	-9,871	-9,681	-5,000	-5,000	-5,000	381	381	-5,000	-11,168	-11,076	-10,031
Long Term												
Full Simulation Period ^b	-5,443	-6,337	-6,246	-3,551	-2,904	-2,710	1,482	1,034	-3,631	-8,687	-8,239	-7,714
Water Year Types^c												
Wet (32%)	-5,812	-7,354	-5,572	-1,900	-1,926	-1,598	3,122	2,182	-4,275	-8,965	-10,573	-9,193
Above Normal (16%)	-5,543	-6,368	-6,838	-3,716	-3,222	-4,174	1,292	780	-4,521	-9,187	-10,817	-9,491
Below Normal (13%)	-5,418	-6,748	-7,637	-4,380	-3,554	-3,971	718	468	-3,444	-10,623	-9,770	-8,460
Dry (24%)	-5,380	-5,893	-6,731	-4,620	-3,578	-3,074	565	453	-3,523	-9,446	-5,313	-6,571
Critical (15%)	-4,661	-4,461	-4,983	-4,409	-2,957	-1,770	363	310	-1,623	-4,501	-3,860	-3,805

Alternative 5 minus Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-331	571	284	-241	600	-846	5,257	4,408	1,033	-1,001	-415	-247
20%	-23	875	1,306	2,015	1,094	-107	5,265	4,233	516	-1,468	180	-140
30%	186	1,832	1,767	2,924	1,548	554	5,522	4,889	-192	-1,514	-524	89
40%	1,551	2,016	1,683	3,056	2,539	512	6,091	5,240	758	-2,017	-1,736	712
50%	2,158	2,588	2,302	3,548	2,909	1,458	6,487	5,582	1,490	-1,507	-2,303	393
60%	2,707	2,762	3,098	3,848	2,467	806	6,930	5,899	1,193	-907	-1,378	458
70%	2,838	2,511	1,873	4,269	3,323	1,205	7,512	6,390	1,016	-937	-675	323
80%	3,322	1,872	42	4,585	3,873	1,616	8,016	6,832	1,534	-642	-479	174
90%	2,791	152	-16	4,803	4,509	2,592	8,372	7,683	1,936	-531	-393	132
Long Term												
Full Simulation Period ^b	1,537	1,508	1,182	3,099	2,302	1,017	6,863	5,876	980	-1,149	-750	203
Water Year Types^c												
Wet (32%)	2,226	1,758	2,151	3,084	1,234	-595	10,017	8,558	-251	-552	-964	485
Above Normal (16%)	876	1,519	1,122	4,550	2,867	1,158	8,325	6,541	1,503	-266	-871	395
Below Normal (13%)	2,633	2,144	450	4,210	2,196	1,530	6,088	5,422	3,134	-512	-1,735	-342
Dry (24%)	1,086	1,247	439	2,738	3,254	2,573	4,724	4,266	1,068	-2,620	-122	68
Critical (15%)	510	805	1,058	1,142	2,516	1,296	2,721	2,445	961	-1,528	-298	107

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.14 Exports through Jones and Banks Pumping Plants

Table 5C.3.3.14.1 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

No Action Alternative

Statistic	Monthly Export Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	517	671	721	604	611	675	242	240	509	714	724	671
20%	454	572	717	490	532	617	181	151	359	708	724	664
30%	434	479	685	427	448	508	158	127	340	694	715	651
40%	400	443	558	419	409	479	138	104	318	667	707	623
50%	370	415	494	406	380	424	128	97	253	634	692	604
60%	336	381	477	396	363	349	121	92	207	588	519	509
70%	310	347	454	377	325	312	113	92	192	501	371	410
80%	286	302	379	321	267	283	104	92	150	444	240	335
90%	250	251	335	280	165	159	89	92	43	232	141	243
Long Term												
Full Simulation Period ^b	378	430	527	426	395	423	154	140	276	558	521	514
Water Year Types^c												
Wet (32%)	410	497	564	513	537	594	204	207	445	669	717	638
Above Normal (16%)	376	450	562	406	401	496	130	105	315	587	709	628
Below Normal (13%)	386	456	590	387	354	394	134	100	209	657	622	542
Dry (24%)	374	398	510	392	315	318	153	126	194	541	296	426
Critical (15%)	314	293	384	349	250	179	93	90	64	223	176	242

Alternative 1

Statistic	Monthly Export Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	694	671	739	803	727	703	526	515	555	694	694	671
20%	680	671	724	769	686	608	503	420	455	694	694	671
30%	627	652	719	747	668	560	477	387	425	680	694	671
40%	553	623	718	741	614	542	427	351	412	624	634	669
50%	489	591	683	730	552	509	390	319	389	551	515	635
60%	433	513	601	635	519	486	321	281	361	474	446	545
70%	318	464	553	565	465	461	258	242	320	404	369	420
80%	273	352	500	499	416	374	188	181	176	300	281	340
90%	209	288	378	391	335	304	109	80	128	160	161	226
Long Term												
Full Simulation Period ^b	471	525	612	638	538	489	351	308	352	494	489	528
Water Year Types^c												
Wet (32%)	549	619	716	724	609	543	476	430	456	632	655	660
Above Normal (16%)	428	521	641	716	584	570	453	363	415	572	647	651
Below Normal (13%)	548	595	623	674	497	500	337	304	414	629	517	539
Dry (24%)	435	475	546	579	518	493	259	228	274	403	325	438
Critical (15%)	340	345	455	433	406	266	134	121	132	139	203	249

Alternative 1 minus No Action Alternative

Statistic	Monthly Export Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	34%	0%	2%	33%	19%	4%	117%	115%	9%	-3%	-4%	0%
20%	50%	17%	1%	57%	29%	-2%	178%	178%	27%	-2%	-4%	1%
30%	44%	36%	5%	75%	49%	10%	202%	203%	25%	-2%	-3%	3%
40%	38%	41%	29%	77%	50%	13%	210%	238%	30%	-6%	-10%	7%
50%	32%	42%	38%	80%	45%	20%	204%	229%	54%	-13%	-26%	5%
60%	29%	34%	26%	60%	43%	39%	166%	204%	74%	-19%	-14%	7%
70%	3%	34%	22%	50%	43%	48%	128%	162%	66%	-20%	-1%	3%
80%	-5%	17%	32%	56%	56%	32%	80%	96%	17%	-33%	17%	1%
90%	-16%	15%	13%	40%	103%	91%	22%	-13%	199%	-31%	14%	-7%
Long Term												
Full Simulation Period ^b	24%	22%	16%	50%	36%	15%	127%	120%	28%	-11%	-6%	3%
Water Year Types^c												
Wet (32%)	34%	25%	27%	41%	13%	-9%	134%	108%	2%	-5%	-9%	3%
Above Normal (16%)	14%	16%	14%	77%	46%	15%	247%	244%	32%	-3%	-9%	4%
Below Normal (13%)	42%	31%	6%	74%	40%	27%	151%	204%	98%	-4%	-17%	-1%
Dry (24%)	16%	19%	7%	48%	64%	55%	69%	81%	41%	-25%	10%	3%
Critical (15%)	8%	18%	19%	24%	62%	49%	44%	34%	104%	-38%	15%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.14.2 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Second Basis of Comparison

Statistic	Monthly Export Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	694	671	739	803	727	703	526	515	555	694	694	671
20%	680	671	724	769	686	608	503	420	455	694	694	671
30%	627	652	719	747	668	560	477	387	425	680	694	671
40%	553	623	718	741	614	542	427	351	412	624	634	669
50%	489	591	683	730	552	509	390	319	389	551	515	635
60%	433	513	601	635	519	486	321	281	361	474	446	545
70%	318	464	553	565	465	461	258	242	320	404	369	420
80%	273	352	500	499	416	374	188	181	176	300	281	340
90%	209	288	378	391	335	304	109	80	128	160	161	226
Long Term												
Full Simulation Period ^b	471	525	612	638	538	489	351	308	352	494	489	528
Water Year Types^c												
Wet (32%)	549	619	716	724	609	543	476	430	456	632	655	660
Above Normal (16%)	428	521	641	716	584	570	453	363	415	572	647	651
Below Normal (13%)	548	595	623	674	497	500	337	304	414	629	517	539
Dry (24%)	435	475	546	579	518	493	259	228	274	403	325	438
Critical (15%)	340	345	455	433	406	266	134	121	132	139	203	249

No Action Alternative

Statistic	Monthly Export Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	517	671	721	604	611	675	242	240	509	714	724	671
20%	454	572	717	490	532	617	181	151	359	708	724	664
30%	434	479	685	427	448	508	158	127	340	694	715	651
40%	400	443	558	419	409	479	138	104	318	667	707	623
50%	370	415	494	406	380	424	128	97	253	634	692	604
60%	336	381	477	396	363	349	121	92	207	588	519	509
70%	310	347	454	377	325	312	113	92	192	501	371	410
80%	286	302	379	321	267	283	104	92	150	444	240	335
90%	250	251	335	280	165	159	89	92	43	232	141	243
Long Term												
Full Simulation Period ^b	378	430	527	426	395	423	154	140	276	558	521	514
Water Year Types^c												
Wet (32%)	410	497	564	513	537	594	204	207	445	669	717	638
Above Normal (16%)	376	450	562	406	401	496	130	105	315	587	709	628
Below Normal (13%)	386	456	590	387	354	394	134	100	209	657	622	542
Dry (24%)	374	398	510	392	315	318	153	126	194	541	296	426
Critical (15%)	314	293	384	349	250	179	93	90	64	223	176	242

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Export Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-25%	0%	-2%	-25%	-16%	-4%	-54%	-53%	-8%	3%	4%	0%
20%	-33%	-15%	-1%	-36%	-22%	2%	-64%	-64%	-21%	2%	4%	-1%
30%	-31%	-27%	-5%	-43%	-33%	-9%	-67%	-67%	-20%	2%	3%	-3%
40%	-28%	-29%	-22%	-43%	-33%	-12%	-68%	-70%	-23%	7%	12%	-7%
50%	-24%	-30%	-28%	-44%	-31%	-17%	-67%	-70%	-35%	15%	34%	-5%
60%	-22%	-26%	-21%	-38%	-30%	-28%	-62%	-67%	-43%	24%	16%	-7%
70%	-3%	-25%	-18%	-33%	-30%	-32%	-56%	-62%	-40%	24%	1%	-2%
80%	5%	-14%	-24%	-36%	-36%	-24%	-44%	-49%	-14%	48%	-15%	-1%
90%	19%	-13%	-11%	-29%	-51%	-48%	-18%	15%	-67%	45%	-13%	7%
Long Term												
Full Simulation Period ^b	-20%	-18%	-14%	-33%	-27%	-13%	-56%	-55%	-22%	13%	7%	-3%
Water Year Types^c												
Wet (32%)	-25%	-20%	-21%	-29%	-12%	9%	-57%	-52%	-2%	6%	10%	-3%
Above Normal (16%)	-12%	-14%	-12%	-43%	-31%	-13%	-71%	-71%	-24%	3%	9%	-3%
Below Normal (13%)	-30%	-23%	-5%	-43%	-29%	-21%	-60%	-67%	-50%	4%	20%	1%
Dry (24%)	-14%	-16%	-7%	-32%	-39%	-36%	-41%	-45%	-29%	34%	-9%	-3%
Critical (15%)	-8%	-15%	-16%	-19%	-38%	-33%	-31%	-25%	-51%	60%	-13%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.14.3 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Second Basis of Comparison

Statistic	Monthly Export Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	694	671	739	803	727	703	526	515	555	694	694	671
20%	680	671	724	769	686	608	503	420	455	694	694	671
30%	627	652	719	747	668	560	477	387	425	680	694	671
40%	553	623	718	741	614	542	427	351	412	624	634	669
50%	489	591	683	730	552	509	390	319	389	551	515	635
60%	433	513	601	635	519	486	321	281	361	474	446	545
70%	318	464	553	565	465	461	258	242	320	404	369	420
80%	273	352	500	499	416	374	188	181	176	300	281	340
90%	209	288	378	391	335	304	109	80	128	160	161	226
Long Term												
Full Simulation Period ^b	471	525	612	638	538	489	351	308	352	494	489	528
Water Year Types^c												
Wet (32%)	549	619	716	724	609	543	476	430	456	632	655	660
Above Normal (16%)	428	521	641	716	584	570	453	363	415	572	647	651
Below Normal (13%)	548	595	623	674	497	500	337	304	414	629	517	539
Dry (24%)	435	475	546	579	518	493	259	228	274	403	325	438
Critical (15%)	340	345	455	433	406	266	134	121	132	139	203	249

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 minus Second Basis of Comparison

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%	-3%	-19%	0%	3%	4%	9%	20%	0%	0%	0%
20%	-1%	0%	-5%	-27%	-12%	2%	1%	18%	1%	0%	0%	0%
30%	0%	0%	-13%	-41%	-21%	3%	-3%	17%	-6%	2%	0%	0%
40%	0%	1%	-19%	-43%	-27%	-2%	2%	10%	-9%	9%	9%	-2%
50%	-3%	-3%	-20%	-44%	-29%	-10%	-5%	3%	-9%	14%	21%	1%
60%	-12%	-2%	-13%	-38%	-30%	-28%	0%	0%	-6%	19%	13%	5%
70%	1%	0%	-9%	-33%	-31%	-31%	-1%	-5%	-3%	11%	7%	-1%
80%	-3%	-2%	-4%	-34%	-37%	-23%	0%	-31%	43%	27%	-5%	1%
90%	4%	-4%	0%	-22%	-40%	-48%	14%	26%	8%	19%	5%	1%
Long Term												
Full Simulation Period ^b	-1%	-1%	-10%	-31%	-21%	-9%	1%	7%	3%	8%	5%	0%
Water Year Types^c												
Wet (32%)	-1%	-1%	-16%	-23%	-2%	9%	4%	14%	14%	3%	2%	-1%
Above Normal (16%)	0%	2%	-10%	-42%	-20%	-1%	-3%	14%	-4%	2%	5%	-1%
Below Normal (13%)	-4%	-1%	-3%	-42%	-25%	-10%	-7%	-12%	-20%	9%	26%	9%
Dry (24%)	1%	-1%	-4%	-33%	-39%	-32%	4%	6%	6%	22%	-2%	-3%
Critical (15%)	-6%	-7%	-12%	-18%	-38%	-32%	-5%	-17%	0%	14%	-3%	-2%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.14.4 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Second Basis of Comparison

Statistic	Monthly Export Volume (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	694	671	739	803	727	703	526	515	555	694	694	671
20%	680	671	724	769	686	608	503	420	455	694	694	671
30%	627	652	719	747	668	560	477	387	425	680	694	671
40%	553	623	718	741	614	542	427	351	412	624	634	669
50%	489	591	683	730	552	509	390	319	389	551	515	635
60%	433	513	601	635	519	486	321	281	361	474	446	545
70%	318	464	553	565	465	461	258	242	320	404	369	420
80%	273	352	500	499	416	374	188	181	176	300	281	340
90%	209	288	378	391	335	304	109	80	128	160	161	226
Long Term												
Full Simulation Period ^b	471	525	612	638	538	489	351	308	352	494	489	528
Water Year Types^c												
Wet (32%)	549	619	716	724	609	543	476	430	456	632	655	660
Above Normal (16%)	428	521	641	716	584	570	453	363	415	572	647	651
Below Normal (13%)	548	595	623	674	497	500	337	304	414	629	517	539
Dry (24%)	435	475	546	579	518	493	259	228	274	403	325	438
Critical (15%)	340	345	455	433	406	266	134	121	132	139	203	249

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 minus Second Basis of Comparison

Statistic	Monthly Export Volume (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-26%	0%	-2%	-25%	-16%	-4%	-58%	-58%	-8%	3%	4%	0%
20%	-33%	-18%	-1%	-36%	-23%	1%	-67%	-70%	-21%	2%	4%	-1%
30%	-32%	-26%	-5%	-43%	-33%	-6%	-72%	-77%	-20%	2%	3%	-4%
40%	-32%	-29%	-22%	-43%	-32%	-12%	-71%	-77%	-23%	9%	11%	-6%
50%	-26%	-31%	-27%	-45%	-31%	-17%	-71%	-78%	-35%	17%	35%	-6%
60%	-23%	-27%	-20%	-38%	-30%	-28%	-70%	-82%	-43%	28%	28%	-7%
70%	-2%	-25%	-18%	-33%	-30%	-32%	-69%	-84%	-40%	41%	9%	-1%
80%	6%	-14%	-23%	-36%	-36%	-24%	-76%	-87%	1%	49%	-1%	2%
90%	17%	-13%	-11%	-29%	-51%	-48%	-72%	-91%	-67%	69%	19%	12%
Long Term												
Full Simulation Period ^b	-20%	-19%	-14%	-33%	-27%	-13%	-65%	-68%	-21%	15%	10%	-3%
Water Year Types^c												
Wet (32%)	-26%	-19%	-21%	-29%	-13%	9%	-58%	-53%	-3%	6%	10%	-5%
Above Normal (16%)	-12%	-19%	-12%	-43%	-31%	-13%	-72%	-75%	-24%	3%	9%	-4%
Below Normal (13%)	-30%	-23%	-6%	-43%	-28%	-21%	-69%	-82%	-50%	5%	22%	4%
Dry (24%)	-15%	-17%	-6%	-32%	-39%	-36%	-69%	-82%	-25%	43%	2%	-1%
Critical (15%)	-8%	-15%	-16%	-18%	-39%	-33%	-75%	-83%	-48%	72%	10%	-2%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.15 CVP Deliveries

Table 5C.3.3.15.1.1 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

				Alternative 1	No Action Alternative	Alternative 1 minus No Action Alternative
Water Supply Reliability						
Sacramento River Hydrologic Region						
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,858	1,859	-1
			Dry	1,905	1,906	0
			Critical	1,734	1,737	-3
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	155	146	8
			Dry	151	146	6
			Critical	105	102	3
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	214	207	7
			Dry	192	186	6
			Critical	152	152	0
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term	221	185	36
			Dry	124	86	39
			Critical	38	24	14
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries)						
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term	852	852	0
			Dry	875	875	0
			Critical	741	741	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	261	261	0
			Dry	268	269	0
			Critical	224	224	0
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	0	0	0
			Dry	0	0	0
			Critical	0	0	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	350	269	82
			Dry	206	140	67
			Critical	65	41	24
San Francisco Bay Hydrologic Region						
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	289	275	13
			Dry	284	274	10
			Critical	270	264	6
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	43	33	11
			Dry	25	17	8
			Critical	8	5	3
Central Coast Hydrologic Region						
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)						
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	0
			Dry	12	12	0
			Critical	10	10	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term	715	545	169
			Dry	430	288	143
			Critical	137	85	51
Total For All Regions						
Total Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	4,971	4,646	325
			Dry	4,475	4,198	277
			Critical	3,484	3,385	99

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text.

Table 5C.3.3.15.1.2 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

				Alternative 1	No Action Alternative	Alternative 1 minus No Action Alternative
Water Supply Reliability						
North of Delta						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	221	185	36
			Dry	124	86	39
			Critical	38	24	14
CVP M&I (Including American River)	Contract Delivery (annual average)	(TAF/year)	Long Term	486	467	19
			Dry	461	447	14
			Critical	410	405	5
CVP M&I American River	Contract Delivery (annual average)	(TAF/year)	Long Term	120	113	8
			Dry	105	97	9
			Critical	80	75	6
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,858	1,859	-1
			Dry	1,905	1,906	0
			Critical	1,734	1,737	-3
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	155	146	8
			Dry	151	146	6
			Critical	105	102	3
Total CVP North of Delta						
Total CVP Ag, M&I, Settlement, and Refuge Deliveries	Contract Delivery (CVP) (annual average)	(TAF/year)	Long Term	2,720	2,658	62
			Dry	2,642	2,584	58
			Critical	2,287	2,268	19
South of Delta (Does not include Eastside Contractors deliveries)						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	1,108	847	262
			Dry	662	445	218
			Critical	210	131	78
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	17	15	2
			Dry	15	14	1
			Critical	12	11	1
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	261	261	0
			Dry	268	269	0
			Critical	224	224	0
Total CVP South of Delta (Does not include Eastside Contractors deliveries)						
Total CVP Ag, M&I, Settlement, and Refuge Deliveries	Contract Delivery (annual average)	(TAF/year)	Long Term	1,386	1,123	263
			Dry	946	727	219
			Critical	445	366	79
Eastside Contractors deliveries						
Water Rights	Delivery (annual average)	(TAF/year)	Long Term	510	508	2
			Dry	524	524	0
			Critical	460	445	16
CVP Service Contracts	Contract Delivery (annual average)	(TAF/year)	Long Term	108	104	5
			Dry	87	84	2
			Critical	4	4	0
Total Eastside Contractors Deliveries						
Total Water Rights and CVP Service Contracts Deliveries	Delivery (annual average)	(TAF/year)	Long Term	618	611	7
			Dry	611	608	2
			Critical	465	449	16

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text. 6) Contra Costa Water District accounted for as part of North of Delta deliveries.

Table 5C.3.3.15.2.1 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

				No Action Alternative	Second Basis of Comparison	No Action Alternative minus Second Basis of Comparison
Water Supply Reliability						
Sacramento River Hydrologic Region						
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,859	1,858	1
			Dry	1,906	1,905	0
			Critical	1,737	1,734	3
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	146	155	-8
			Dry	146	151	-6
			Critical	102	105	-3
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	207	214	-7
			Dry	186	192	-6
			Critical	152	152	0
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term	185	221	-36
			Dry	86	124	-39
			Critical	24	38	-14
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries)						
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term	852	852	0
			Dry	875	875	0
			Critical	741	741	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	261	261	0
			Dry	269	268	0
			Critical	224	224	0
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	0	0	0
			Dry	0	0	0
			Critical	0	0	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	269	350	-82
			Dry	140	206	-67
			Critical	41	65	-24
San Francisco Bay Hydrologic Region						
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	275	289	-13
			Dry	274	284	-10
			Critical	264	270	-6
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	33	43	-11
			Dry	17	25	-8
			Critical	5	8	-3
Central Coast Hydrologic Region						
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)						
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	0
			Dry	12	12	0
			Critical	10	10	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term	545	715	-169
			Dry	288	430	-143
			Critical	85	137	-51
Total For All Regions						
Total Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	4,646	4,971	-325
			Dry	4,198	4,475	-277
			Critical	3,385	3,484	-99

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text.

Table 5C.3.3.15.2.2 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

				No Action Alternative	Second Basis of Comparison	No Action Alternative minus Second Basis of Comparison
Water Supply Reliability						
North of Delta						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	185	221	-36
			Dry	86	124	-39
			Critical	24	38	-14
CVP M&I (Including American River)	Contract Delivery (annual average)	(TAF/year)	Long Term	467	486	-19
			Dry	447	461	-14
			Critical	405	410	-5
CVP M&I American River	Contract Delivery (annual average)	(TAF/year)	Long Term	113	120	-8
			Dry	97	105	-9
			Critical	75	80	-6
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,859	1,858	1
			Dry	1,906	1,905	0
			Critical	1,737	1,734	3
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	146	155	-8
			Dry	146	151	-6
			Critical	102	105	-3
Total CVP North of Delta						
Total CVP Ag, M&I, Settlement, and Refuge Deliveries	Contract Delivery (CVP) (annual average)	(TAF/year)	Long Term	2,658	2,720	-62
			Dry	2,584	2,642	-58
			Critical	2,268	2,287	-19
South of Delta (Does not include Eastside Contractors deliveries)						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	847	1,108	-262
			Dry	445	662	-218
			Critical	131	210	-78
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	15	17	-2
			Dry	14	15	-1
			Critical	11	12	-1
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	261	261	0
			Dry	269	268	0
			Critical	224	224	0
Total CVP South of Delta (Does not include Eastside Contractors deliveries)						
Total CVP Ag, M&I, Settlement, and Refuge Deliveries	Contract Delivery (annual average)	(TAF/year)	Long Term	1,123	1,386	-263
			Dry	727	946	-219
			Critical	366	445	-79
Eastside Contractors deliveries						
Water Rights	Delivery (annual average)	(TAF/year)	Long Term	508	510	-2
			Dry	524	524	0
			Critical	445	460	-16
CVP Service Contracts	Contract Delivery (annual average)	(TAF/year)	Long Term	104	108	-5
			Dry	84	87	-2
			Critical	4	4	0
Total Eastside Contractors Deliveries						
Total Water Rights and CVP Service Contracts Deliveries	Delivery (annual average)	(TAF/year)	Long Term	611	618	-7
			Dry	608	611	-2
			Critical	449	465	-16

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text. 6) Contra Costa Water District accounted for as part of North of Delta deliveries.

Table 5C.3.3.15.3.1 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

				Alternative 3	Second Basis of Comparison	Alternative 3 minus Second Basis of Comparison
Water Supply Reliability						
Sacramento River Hydrologic Region						
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,860	1,858	2
			Dry	1,906	1,905	0
			Critical	1,742	1,734	8
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	153	155	-1
			Dry	149	151	-2
			Critical	103	105	-2
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	214	214	-1
			Dry	192	192	0
			Critical	152	152	1
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term	209	221	-12
			Dry	111	124	-13
			Critical	31	38	-7
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries)						
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term	852	852	0
			Dry	875	875	0
			Critical	741	741	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	261	261	0
			Dry	269	268	0
			Critical	224	224	0
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	0	0	0
			Dry	0	0	0
			Critical	0	0	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	342	350	-9
			Dry	185	206	-21
			Critical	53	65	-12
San Francisco Bay Hydrologic Region						
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	286	289	-3
			Dry	283	284	-1
			Critical	267	270	-4
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	42	43	-1
			Dry	23	25	-2
			Critical	6	8	-2
Central Coast Hydrologic Region						
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)						
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	0
			Dry	12	12	0
			Critical	10	10	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term	696	715	-19
			Dry	387	430	-43
			Critical	108	137	-28
Total For All Regions						
Total Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	4,927	4,971	-44
			Dry	4,392	4,475	-82
			Critical	3,437	3,484	-46

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text.

Table 5C.3.3.15.3.2 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

				Alternative 3	Second Basis of Comparison	Alternative 3 minus Second Basis of Comparison
Water Supply Reliability						
North of Delta						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	209	221	-12
			Dry	111	124	-13
			Critical	31	38	-7
CVP M&I (Including American River)	Contract Delivery (annual average)	(TAF/year)	Long Term	483	486	-3
			Dry	460	461	-1
			Critical	408	410	-3
CVP M&I American River	Contract Delivery (annual average)	(TAF/year)	Long Term	118	120	-2
			Dry	104	105	-2
			Critical	78	80	-3
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,860	1,858	2
			Dry	1,906	1,905	0
			Critical	1,742	1,734	8
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	153	155	-1
			Dry	149	151	-2
			Critical	103	105	-2
Total CVP North of Delta						
Total CVP Ag, M&I, Settlement, and Refuge Deliveries	Contract Delivery (CVP) (annual average)	(TAF/year)	Long Term	2,706	2,720	-15
			Dry	2,626	2,642	-16
			Critical	2,284	2,287	-4
South of Delta (Does not include Eastside Contractors deliveries)						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	1,079	1,108	-29
			Dry	596	662	-67
			Critical	168	210	-42
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	17	17	0
			Dry	15	15	0
			Critical	11	12	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	261	261	0
			Dry	269	268	0
			Critical	224	224	0
Total CVP South of Delta (Does not include Eastside Contractors deliveries)						
Total CVP Ag, M&I, Settlement, and Refuge Deliveries	Contract Delivery (annual average)	(TAF/year)	Long Term	1,357	1,386	-29
			Dry	879	946	-66
			Critical	403	445	-43
Eastside Contractors deliveries						
Water Rights	Delivery (annual average)	(TAF/year)	Long Term	513	510	3
			Dry	524	524	0
			Critical	478	460	17
CVP Service Contracts	Contract Delivery (annual average)	(TAF/year)	Long Term	123	108	15
			Dry	109	87	22
			Critical	36	4	32
Total Eastside Contractors Deliveries						
Total Water Rights and CVP Service Contracts Deliveries	Delivery (annual average)	(TAF/year)	Long Term	636	618	18
			Dry	633	611	22
			Critical	514	465	50

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text. 6) Contra Costa Water District accounted for as part of North of Delta deliveries.

Table 5C.3.3.15.4.1 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

				Alternative 5	Second Basis of Comparison	Alternative 5 minus Second Basis of Comparison
Water Supply Reliability						
Sacramento River Hydrologic Region						
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,861	1,858	3
			Dry	1,906	1,905	0
			Critical	1,747	1,734	13
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	146	155	-9
			Dry	145	151	-6
			Critical	103	105	-2
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	207	214	-7
			Dry	186	192	-6
			Critical	152	152	0
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term	185	221	-36
			Dry	85	124	-39
			Critical	24	38	-14
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries)						
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term	852	852	0
			Dry	875	875	0
			Critical	741	741	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	261	261	0
			Dry	269	268	0
			Critical	222	224	-2
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	0	0	0
			Dry	0	0	0
			Critical	0	0	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	264	350	-87
			Dry	135	206	-71
			Critical	40	65	-25
San Francisco Bay Hydrologic Region						
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	275	289	-13
			Dry	275	284	-9
			Critical	264	270	-6
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	32	43	-11
			Dry	17	25	-8
			Critical	5	8	-3
Central Coast Hydrologic Region						
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)						
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	0
			Dry	12	12	0
			Critical	10	10	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term	538	715	-176
			Dry	281	430	-149
			Critical	85	137	-52
Total For All Regions						
Total Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	4,634	4,971	-337
			Dry	4,186	4,475	-288
			Critical	3,393	3,484	-91

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text.

Table 5C.3.3.15.4.2 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

				Alternative 5	Second Basis of Comparison	Alternative 5 minus Second Basis of Comparison
Water Supply Reliability						
North of Delta						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	185	221	-36
			Dry	85	124	-39
			Critical	24	38	-14
CVP M&I (Including American River)	Contract Delivery (annual average)	(TAF/year)	Long Term	467	486	-18
			Dry	447	461	-13
			Critical	405	410	-5
CVP M&I American River	Contract Delivery (annual average)	(TAF/year)	Long Term	112	120	-8
			Dry	96	105	-9
			Critical	74	80	-7
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,861	1,858	3
			Dry	1,906	1,905	0
			Critical	1,747	1,734	13
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	146	155	-9
			Dry	145	151	-6
			Critical	103	105	-2
Total CVP North of Delta						
Total CVP Ag, M&I, Settlement, and Refuge Deliveries	Contract Delivery (CVP) (annual average)	(TAF/year)	Long Term	2,660	2,720	-60
			Dry	2,584	2,642	-58
			Critical	2,279	2,287	-8
South of Delta (Does not include Eastside Contractors deliveries)						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	834	1,108	-274
			Dry	433	662	-229
			Critical	130	210	-80
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	15	17	-2
			Dry	14	15	-1
			Critical	11	12	-1
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	261	261	0
			Dry	269	268	0
			Critical	222	224	-2
Total CVP South of Delta (Does not include Eastside Contractors deliveries)						
Total CVP Ag, M&I, Settlement, and Refuge Deliveries	Contract Delivery (annual average)	(TAF/year)	Long Term	1,110	1,386	-276
			Dry	715	946	-230
			Critical	363	445	-83
Eastside Contractors deliveries						
Water Rights	Delivery (annual average)	(TAF/year)	Long Term	502	510	-8
			Dry	524	524	0
			Critical	406	460	-55
CVP Service Contracts	Contract Delivery (annual average)	(TAF/year)	Long Term	100	108	-8
			Dry	69	87	-18
			Critical	8	4	4
Total Eastside Contractors Deliveries						
Total Water Rights and CVP Service Contracts Deliveries	Delivery (annual average)	(TAF/year)	Long Term	602	618	-16
			Dry	593	611	-18
			Critical	414	465	-50

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text. 6) Contra Costa Water District accounted for as part of North of Delta deliveries.

Table 5C.3.3.15.5 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

	Stanislaus Deliveries		Difference from No Action Alternative		Difference from Second Basis of Comparison	
	CVP	Water Rights	CVP	Water Rights	CVP	Water Rights
	(TAF)	(TAF)	(TAF)	(TAF)	(TAF)	(TAF)
No Action Alternative	103.5	507.8				
Second Basis of Comparison	108.1	510.1	4.5	2.3		
Alternative 2	103.5	507.8			-4.5	-2.3
Alternative 3	123.2	512.7	19.6	4.9	15.1	2.6
Alternative 5	99.7	502.1	-3.8	-5.7	-8.4	-8.1

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.3.16 CVP Total Generating Capacity

Table 5C.3.3.16.1 CVP Total Capacity, Monthly Capacity

No Action Alternative

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,688	1,743	1,810	1,854	1,883	1,895	1,877	1,848	1,785	1,749	1,670	1,647
20%	1,638	1,724	1,772	1,829	1,858	1,872	1,842	1,806	1,719	1,695	1,623	1,615
30%	1,600	1,694	1,744	1,802	1,837	1,842	1,825	1,782	1,671	1,623	1,585	1,599
40%	1,579	1,635	1,710	1,776	1,811	1,812	1,793	1,736	1,634	1,583	1,545	1,553
50%	1,550	1,611	1,681	1,732	1,778	1,782	1,757	1,711	1,607	1,543	1,510	1,516
60%	1,529	1,556	1,622	1,700	1,749	1,752	1,725	1,652	1,564	1,504	1,481	1,473
70%	1,465	1,519	1,588	1,661	1,712	1,714	1,685	1,618	1,524	1,457	1,433	1,432
80%	1,354	1,428	1,521	1,584	1,666	1,675	1,637	1,578	1,440	1,353	1,332	1,342
90%	1,137	1,293	1,403	1,455	1,476	1,502	1,454	1,384	1,203	1,120	1,085	1,103
Long Term												
Full Simulation Period ^b	1,476	1,542	1,612	1,685	1,727	1,734	1,705	1,648	1,542	1,468	1,429	1,430
Water Year Types^c												
Wet (32%)	1,621	1,696	1,761	1,824	1,860	1,877	1,859	1,831	1,753	1,717	1,645	1,628
Above Normal (16%)	1,465	1,580	1,676	1,762	1,814	1,814	1,793	1,741	1,633	1,590	1,545	1,541
Below Normal (13%)	1,530	1,580	1,669	1,719	1,764	1,757	1,728	1,665	1,559	1,491	1,478	1,483
Dry (24%)	1,441	1,491	1,556	1,637	1,690	1,709	1,680	1,607	1,508	1,434	1,418	1,433
Critical (15%)	1,180	1,221	1,264	1,348	1,374	1,355	1,299	1,205	1,025	832	808	825

Alternative 1

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,767	1,807	1,854	1,883	1,910	1,941	1,942	1,899	1,825	1,767	1,751	1,733
20%	1,731	1,790	1,829	1,862	1,891	1,923	1,907	1,856	1,739	1,676	1,669	1,677
30%	1,687	1,768	1,809	1,849	1,876	1,899	1,890	1,808	1,695	1,620	1,608	1,647
40%	1,645	1,727	1,787	1,832	1,865	1,879	1,857	1,770	1,654	1,590	1,571	1,574
50%	1,583	1,686	1,750	1,811	1,846	1,855	1,832	1,745	1,612	1,550	1,541	1,544
60%	1,561	1,629	1,710	1,768	1,811	1,831	1,788	1,701	1,584	1,509	1,487	1,488
70%	1,482	1,568	1,650	1,714	1,771	1,786	1,760	1,669	1,550	1,471	1,439	1,448
80%	1,379	1,450	1,576	1,644	1,719	1,747	1,713	1,616	1,490	1,391	1,387	1,375
90%	1,197	1,360	1,427	1,535	1,569	1,552	1,523	1,429	1,335	1,222	1,183	1,134
Long Term												
Full Simulation Period ^b	1,532	1,606	1,675	1,735	1,780	1,795	1,772	1,693	1,574	1,492	1,469	1,474
Water Year Types^c												
Wet (32%)	1,679	1,756	1,811	1,857	1,892	1,926	1,920	1,871	1,773	1,717	1,694	1,701
Above Normal (16%)	1,522	1,652	1,747	1,810	1,856	1,877	1,860	1,778	1,653	1,584	1,567	1,564
Below Normal (13%)	1,606	1,671	1,754	1,792	1,830	1,838	1,807	1,718	1,593	1,496	1,481	1,487
Dry (24%)	1,476	1,536	1,607	1,689	1,746	1,771	1,746	1,652	1,533	1,463	1,445	1,456
Critical (15%)	1,250	1,290	1,342	1,416	1,466	1,419	1,366	1,262	1,106	948	902	904

Alternative 1 minus No Action Alternative

Statistic	Monthly Capacity (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	5%	4%	2%	2%	1%	2%	3%	3%	2%	1%	5%	5%
20%	6%	4%	3%	2%	2%	3%	3%	3%	1%	-1%	3%	4%
30%	5%	4%	4%	3%	2%	3%	4%	1%	1%	0%	1%	3%
40%	4%	6%	4%	3%	3%	4%	4%	2%	1%	0%	2%	1%
50%	2%	5%	4%	5%	4%	4%	4%	2%	0%	0%	2%	2%
60%	2%	5%	5%	4%	4%	5%	4%	3%	1%	0%	0%	1%
70%	1%	3%	4%	3%	3%	4%	4%	3%	2%	1%	0%	1%
80%	2%	2%	4%	4%	3%	4%	5%	2%	4%	3%	4%	2%
90%	5%	5%	2%	6%	6%	3%	5%	3%	11%	9%	9%	3%
Long Term												
Full Simulation Period ^b	4%	4%	4%	3%	3%	4%	4%	3%	2%	2%	3%	3%
Water Year Types^c												
Wet (32%)	4%	4%	3%	2%	2%	3%	3%	2%	1%	0%	3%	4%
Above Normal (16%)	4%	5%	4%	3%	2%	3%	4%	2%	1%	0%	1%	2%
Below Normal (13%)	5%	6%	5%	4%	4%	5%	5%	3%	2%	0%	0%	0%
Dry (24%)	2%	3%	3%	3%	3%	4%	4%	3%	2%	2%	2%	2%
Critical (15%)	6%	6%	6%	5%	7%	5%	5%	5%	8%	14%	12%	10%

^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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.16.2 CVP Total Capacity, Monthly Capacity

Second Basis of Comparison

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,767	1,807	1,854	1,883	1,910	1,941	1,942	1,899	1,825	1,767	1,751	1,733
20%	1,731	1,790	1,829	1,862	1,891	1,923	1,907	1,856	1,739	1,676	1,669	1,677
30%	1,687	1,768	1,809	1,849	1,876	1,899	1,890	1,808	1,695	1,620	1,608	1,647
40%	1,645	1,727	1,787	1,832	1,865	1,879	1,857	1,770	1,654	1,590	1,571	1,574
50%	1,583	1,686	1,750	1,811	1,846	1,855	1,832	1,745	1,612	1,550	1,541	1,544
60%	1,561	1,629	1,710	1,768	1,811	1,831	1,788	1,701	1,584	1,509	1,487	1,488
70%	1,482	1,568	1,650	1,714	1,771	1,786	1,760	1,669	1,550	1,471	1,439	1,448
80%	1,379	1,450	1,576	1,644	1,719	1,747	1,713	1,616	1,490	1,391	1,387	1,375
90%	1,197	1,360	1,427	1,535	1,569	1,552	1,523	1,429	1,335	1,222	1,183	1,134
Long Term												
Full Simulation Period ^b	1,532	1,606	1,675	1,735	1,780	1,795	1,772	1,693	1,574	1,492	1,469	1,474
Water Year Types^c												
Wet (32%)	1,679	1,756	1,811	1,857	1,892	1,926	1,920	1,871	1,773	1,717	1,694	1,701
Above Normal (16%)	1,522	1,652	1,747	1,810	1,856	1,877	1,860	1,778	1,653	1,584	1,567	1,564
Below Normal (13%)	1,606	1,671	1,754	1,792	1,830	1,838	1,807	1,718	1,593	1,496	1,481	1,487
Dry (24%)	1,476	1,536	1,607	1,689	1,746	1,771	1,746	1,652	1,533	1,463	1,445	1,456
Critical (15%)	1,250	1,290	1,342	1,416	1,466	1,419	1,366	1,262	1,106	948	902	904

No Action Alternative

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,688	1,743	1,810	1,854	1,883	1,895	1,877	1,848	1,785	1,749	1,670	1,647
20%	1,638	1,724	1,772	1,829	1,858	1,872	1,842	1,806	1,719	1,695	1,623	1,615
30%	1,600	1,694	1,744	1,802	1,837	1,842	1,825	1,782	1,671	1,623	1,585	1,599
40%	1,579	1,635	1,710	1,776	1,811	1,812	1,793	1,736	1,634	1,583	1,545	1,553
50%	1,550	1,611	1,681	1,732	1,778	1,782	1,757	1,711	1,607	1,543	1,510	1,516
60%	1,529	1,556	1,622	1,700	1,749	1,752	1,725	1,652	1,564	1,504	1,481	1,473
70%	1,465	1,519	1,588	1,661	1,712	1,714	1,685	1,618	1,524	1,457	1,433	1,432
80%	1,354	1,428	1,521	1,584	1,666	1,675	1,637	1,578	1,440	1,353	1,332	1,342
90%	1,137	1,293	1,403	1,455	1,476	1,502	1,454	1,384	1,203	1,120	1,085	1,103
Long Term												
Full Simulation Period ^b	1,476	1,542	1,612	1,685	1,727	1,734	1,705	1,648	1,542	1,468	1,429	1,430
Water Year Types^c												
Wet (32%)	1,621	1,696	1,761	1,824	1,860	1,877	1,859	1,831	1,753	1,717	1,645	1,628
Above Normal (16%)	1,465	1,580	1,676	1,762	1,814	1,814	1,793	1,741	1,633	1,590	1,545	1,541
Below Normal (13%)	1,530	1,580	1,669	1,719	1,764	1,757	1,728	1,665	1,559	1,491	1,478	1,483
Dry (24%)	1,441	1,491	1,556	1,637	1,690	1,709	1,680	1,607	1,508	1,434	1,418	1,433
Critical (15%)	1,180	1,221	1,264	1,348	1,374	1,355	1,299	1,205	1,025	832	808	825

No Action Alternative minus Second Basis of Comparison

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

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.16.3 CVP Total Capacity, Monthly Capacity

Second Basis of Comparison

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,767	1,807	1,854	1,883	1,910	1,941	1,942	1,899	1,825	1,767	1,751	1,733
20%	1,731	1,790	1,829	1,862	1,891	1,923	1,907	1,856	1,739	1,676	1,669	1,677
30%	1,687	1,768	1,809	1,849	1,876	1,899	1,890	1,808	1,695	1,620	1,608	1,647
40%	1,645	1,727	1,787	1,832	1,865	1,879	1,857	1,770	1,654	1,590	1,571	1,574
50%	1,583	1,686	1,750	1,811	1,846	1,855	1,832	1,745	1,612	1,550	1,541	1,544
60%	1,561	1,629	1,710	1,768	1,811	1,831	1,788	1,701	1,584	1,509	1,487	1,488
70%	1,482	1,568	1,650	1,714	1,771	1,786	1,760	1,669	1,550	1,471	1,439	1,448
80%	1,379	1,450	1,576	1,644	1,719	1,747	1,713	1,616	1,490	1,391	1,387	1,375
90%	1,197	1,360	1,427	1,535	1,569	1,552	1,523	1,429	1,335	1,222	1,183	1,134
Long Term												
Full Simulation Period ^b	1,532	1,606	1,675	1,735	1,780	1,795	1,772	1,693	1,574	1,492	1,469	1,474
Water Year Types^c												
Wet (32%)	1,679	1,756	1,811	1,857	1,892	1,926	1,920	1,871	1,773	1,717	1,694	1,701
Above Normal (16%)	1,522	1,652	1,747	1,810	1,856	1,877	1,860	1,778	1,653	1,584	1,567	1,564
Below Normal (13%)	1,606	1,671	1,754	1,792	1,830	1,838	1,807	1,718	1,593	1,496	1,481	1,487
Dry (24%)	1,476	1,536	1,607	1,689	1,746	1,771	1,746	1,652	1,533	1,463	1,445	1,456
Critical (15%)	1,250	1,290	1,342	1,416	1,466	1,419	1,366	1,262	1,106	948	902	904

Alternative 3

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,778	1,818	1,852	1,884	1,910	1,945	1,947	1,910	1,837	1,777	1,759	1,753
20%	1,749	1,789	1,828	1,860	1,894	1,930	1,930	1,883	1,766	1,692	1,687	1,696
30%	1,708	1,772	1,814	1,851	1,884	1,900	1,895	1,828	1,717	1,654	1,633	1,659
40%	1,663	1,741	1,781	1,838	1,866	1,882	1,849	1,777	1,670	1,601	1,604	1,600
50%	1,609	1,689	1,744	1,800	1,840	1,851	1,821	1,760	1,644	1,572	1,554	1,569
60%	1,579	1,639	1,695	1,748	1,797	1,814	1,781	1,711	1,603	1,542	1,511	1,510
70%	1,499	1,557	1,632	1,703	1,768	1,784	1,755	1,665	1,567	1,487	1,453	1,465
80%	1,394	1,457	1,570	1,624	1,708	1,738	1,707	1,620	1,506	1,408	1,378	1,372
90%	1,231	1,365	1,434	1,496	1,518	1,545	1,519	1,453	1,343	1,229	1,190	1,181
Long Term												
Full Simulation Period ^b	1,551	1,613	1,676	1,732	1,777	1,794	1,775	1,705	1,592	1,512	1,486	1,493
Water Year Types^c												
Wet (32%)	1,690	1,756	1,806	1,856	1,894	1,929	1,928	1,885	1,791	1,730	1,713	1,716
Above Normal (16%)	1,527	1,640	1,746	1,802	1,852	1,875	1,862	1,786	1,679	1,615	1,591	1,589
Below Normal (13%)	1,629	1,676	1,751	1,790	1,829	1,832	1,788	1,718	1,607	1,529	1,504	1,501
Dry (24%)	1,504	1,551	1,612	1,686	1,748	1,768	1,745	1,660	1,555	1,479	1,459	1,475
Critical (15%)	1,283	1,319	1,355	1,411	1,444	1,422	1,386	1,288	1,113	967	909	930

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Capacity (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%	0%	1%	1%	1%	0%	1%
20%	1%	0%	0%	0%	0%	0%	1%	1%	2%	1%	1%	1%
30%	1%	0%	0%	0%	0%	0%	0%	1%	1%	2%	2%	1%
40%	1%	1%	0%	0%	0%	0%	0%	0%	1%	1%	2%	2%
50%	2%	0%	0%	-1%	0%	0%	-1%	1%	2%	1%	1%	2%
60%	1%	1%	-1%	-1%	-1%	-1%	0%	1%	1%	2%	2%	1%
70%	1%	-1%	-1%	-1%	0%	0%	0%	0%	1%	1%	1%	1%
80%	1%	0%	0%	-1%	-1%	-1%	0%	0%	1%	1%	-1%	0%
90%	3%	0%	0%	-3%	-3%	-1%	0%	2%	1%	1%	1%	4%
Long Term												
Full Simulation Period ^b	1%	0%	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%
Water Year Types^c												
Wet (32%)	1%	0%	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%
Above Normal (16%)	0%	-1%	0%	0%	0%	0%	0%	0%	2%	2%	1%	2%
Below Normal (13%)	1%	0%	0%	0%	0%	0%	-1%	0%	1%	2%	2%	1%
Dry (24%)	2%	1%	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%
Critical (15%)	3%	2%	1%	0%	-1%	0%	1%	2%	1%	2%	1%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.16.4 CVP Total Capacity, Monthly Capacity

Second Basis of Comparison

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,767	1,807	1,854	1,883	1,910	1,941	1,942	1,899	1,825	1,767	1,751	1,733
20%	1,731	1,790	1,829	1,862	1,891	1,923	1,907	1,856	1,739	1,676	1,669	1,677
30%	1,687	1,768	1,809	1,849	1,876	1,899	1,890	1,808	1,695	1,620	1,608	1,647
40%	1,645	1,727	1,787	1,832	1,865	1,879	1,857	1,770	1,654	1,590	1,571	1,574
50%	1,583	1,686	1,750	1,811	1,846	1,855	1,832	1,745	1,612	1,550	1,541	1,544
60%	1,561	1,629	1,710	1,768	1,811	1,831	1,788	1,701	1,584	1,509	1,487	1,488
70%	1,482	1,568	1,650	1,714	1,771	1,786	1,760	1,669	1,550	1,471	1,439	1,448
80%	1,379	1,450	1,576	1,644	1,719	1,747	1,713	1,616	1,490	1,391	1,387	1,375
90%	1,197	1,360	1,427	1,535	1,569	1,552	1,523	1,429	1,335	1,222	1,183	1,134
Long Term												
Full Simulation Period ^b	1,532	1,606	1,675	1,735	1,780	1,795	1,772	1,693	1,574	1,492	1,469	1,474
Water Year Types^c												
Wet (32%)	1,679	1,756	1,811	1,857	1,892	1,926	1,920	1,871	1,773	1,717	1,694	1,701
Above Normal (16%)	1,522	1,652	1,747	1,810	1,856	1,877	1,860	1,778	1,653	1,584	1,567	1,564
Below Normal (13%)	1,606	1,671	1,754	1,792	1,830	1,838	1,807	1,718	1,593	1,496	1,481	1,487
Dry (24%)	1,476	1,536	1,607	1,689	1,746	1,771	1,746	1,652	1,533	1,463	1,445	1,456
Critical (15%)	1,250	1,290	1,342	1,416	1,466	1,419	1,366	1,262	1,106	948	902	904

Alternative 5

Statistic	Monthly Capacity (MW)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,693	1,746	1,805	1,849	1,882	1,891	1,879	1,849	1,777	1,748	1,671	1,650
20%	1,635	1,721	1,772	1,829	1,859	1,867	1,843	1,806	1,725	1,690	1,624	1,612
30%	1,599	1,680	1,744	1,797	1,836	1,839	1,816	1,766	1,655	1,616	1,576	1,579
40%	1,566	1,638	1,710	1,767	1,801	1,801	1,785	1,732	1,619	1,571	1,538	1,547
50%	1,538	1,596	1,668	1,726	1,775	1,774	1,737	1,700	1,598	1,555	1,504	1,510
60%	1,516	1,552	1,617	1,687	1,737	1,733	1,701	1,643	1,537	1,484	1,460	1,457
70%	1,458	1,512	1,571	1,650	1,694	1,699	1,673	1,596	1,506	1,415	1,413	1,413
80%	1,327	1,399	1,504	1,574	1,644	1,639	1,616	1,532	1,439	1,324	1,302	1,310
90%	1,044	1,242	1,372	1,427	1,440	1,483	1,450	1,351	1,173	1,061	1,046	1,029
Long Term												
Full Simulation Period ^b	1,460	1,532	1,603	1,672	1,716	1,717	1,692	1,633	1,525	1,450	1,410	1,410
Water Year Types^c												
Wet (32%)	1,609	1,690	1,755	1,819	1,856	1,873	1,858	1,830	1,748	1,715	1,641	1,625
Above Normal (16%)	1,458	1,576	1,671	1,757	1,808	1,806	1,785	1,735	1,624	1,577	1,536	1,532
Below Normal (13%)	1,504	1,559	1,648	1,712	1,755	1,743	1,710	1,653	1,546	1,474	1,465	1,468
Dry (24%)	1,428	1,478	1,545	1,622	1,676	1,686	1,657	1,585	1,485	1,403	1,383	1,391
Critical (15%)	1,152	1,205	1,253	1,308	1,344	1,310	1,274	1,159	985	793	768	794

Alternative 5 minus Second Basis of Comparison

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

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.17 CVP Total Generation

Table 5C.3.3.17.1 CVP Total Generation, Monthly Generation

No Action Alternative

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	409	413	641	689	671	696	492	616	619	756	585	630
20%	372	380	338	490	622	569	397	549	577	729	549	597
30%	329	310	240	381	471	363	358	514	561	705	536	469
40%	292	274	190	235	245	267	334	478	544	662	511	414
50%	270	231	175	201	205	229	318	464	527	644	496	342
60%	239	183	167	179	173	194	302	442	495	630	476	285
70%	210	162	146	152	141	171	282	415	479	598	451	250
80%	186	140	131	137	130	151	249	350	435	551	421	215
90%	159	118	105	120	110	141	217	291	350	474	359	184
Long Term												
Full Simulation Period ^b	273	255	260	317	322	329	343	461	514	631	487	376
Water Year Types^c												
Wet (32%)	317	318	441	558	513	557	447	580	568	683	542	598
Above Normal (16%)	268	263	259	320	454	367	370	484	544	708	527	421
Below Normal (13%)	310	258	175	186	266	220	318	455	540	679	529	289
Dry (24%)	254	232	154	183	145	183	263	406	511	607	457	246
Critical (15%)	184	149	123	134	111	135	242	271	345	431	333	145

Alternative 1

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	415	295	659	692	684	702	486	626	696	779	637	441
20%	339	256	436	584	637	584	393	572	655	757	588	370
30%	303	233	242	439	446	357	350	535	623	732	569	334
40%	268	220	194	266	287	256	325	507	602	711	549	315
50%	236	204	182	211	220	232	313	493	577	683	525	297
60%	212	180	169	177	175	194	289	470	553	654	501	278
70%	201	168	148	156	141	177	276	445	530	627	477	258
80%	172	138	134	143	133	154	248	372	481	571	436	225
90%	152	125	112	121	115	141	217	318	390	470	389	186
Long Term												
Full Simulation Period ^b	256	215	278	336	331	334	334	481	569	655	514	305
Water Year Types^c												
Wet (32%)	297	269	491	582	521	549	428	586	636	697	573	399
Above Normal (16%)	245	215	245	362	479	396	341	513	618	740	571	341
Below Normal (13%)	282	221	188	231	280	246	323	496	612	724	575	306
Dry (24%)	243	183	158	179	150	181	262	433	542	637	463	251
Critical (15%)	180	145	134	134	107	140	253	286	376	442	357	154

Alternative 1 minus No Action Alternative

Statistic	Monthly Generation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2%	-29%	3%	0%	2%	1%	-1%	2%	12%	3%	9%	-30%
20%	-9%	-33%	29%	19%	2%	3%	-1%	4%	14%	4%	7%	-38%
30%	-8%	-25%	1%	15%	-5%	-2%	-2%	4%	11%	4%	6%	-29%
40%	-8%	-20%	2%	13%	17%	-4%	-3%	6%	11%	7%	7%	-24%
50%	-12%	-12%	4%	5%	7%	1%	-2%	6%	9%	6%	6%	-13%
60%	-12%	-2%	1%	-1%	1%	0%	-4%	6%	12%	4%	5%	-2%
70%	-4%	3%	1%	3%	0%	4%	-2%	7%	11%	5%	6%	3%
80%	-8%	-2%	3%	4%	2%	2%	0%	6%	11%	4%	4%	4%
90%	-4%	6%	7%	1%	5%	0%	0%	9%	11%	-1%	8%	1%
Long Term												
Full Simulation Period ^b	-6%	-16%	7%	6%	3%	2%	-3%	5%	11%	4%	6%	-19%
Water Year Types^c												
Wet (32%)	-6%	-15%	11%	4%	1%	-1%	-4%	1%	12%	2%	6%	-33%
Above Normal (16%)	-8%	-18%	-6%	13%	6%	8%	-8%	6%	14%	5%	8%	-19%
Below Normal (13%)	-9%	-14%	7%	24%	5%	12%	1%	9%	13%	7%	9%	6%
Dry (24%)	-4%	-21%	2%	-2%	4%	-1%	0%	7%	6%	5%	1%	2%
Critical (15%)	-2%	-3%	9%	0%	-4%	4%	5%	6%	9%	3%	7%	6%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.17.2 CVP Total Generation, Monthly Generation

Second Basis of Comparison

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	415	295	659	692	684	702	486	626	696	779	637	441
20%	339	256	436	584	637	584	393	572	655	757	588	370
30%	303	233	242	439	446	357	350	535	623	732	569	334
40%	268	220	194	266	287	256	325	507	602	711	549	315
50%	236	204	182	211	220	232	313	493	577	683	525	297
60%	212	180	169	177	175	194	289	470	553	654	501	278
70%	201	168	148	156	141	177	276	445	530	627	477	258
80%	172	138	134	143	133	154	248	372	481	571	436	225
90%	152	125	112	121	115	141	217	318	390	470	389	186
Long Term												
Full Simulation Period ^b	256	215	278	336	331	334	334	481	569	655	514	305
Water Year Types^c												
Wet (32%)	297	269	491	582	521	549	428	586	636	697	573	399
Above Normal (16%)	245	215	245	362	479	396	341	513	618	740	571	341
Below Normal (13%)	282	221	188	231	280	246	323	496	612	724	575	306
Dry (24%)	243	183	158	179	150	181	262	433	542	637	463	251
Critical (15%)	180	145	134	134	107	140	253	286	376	442	357	154

No Action Alternative

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	409	413	641	689	671	696	492	616	619	756	585	630
20%	372	380	338	490	622	569	397	549	577	729	549	597
30%	329	310	240	381	471	363	358	514	561	705	536	469
40%	292	274	190	235	245	267	334	478	544	662	511	414
50%	270	231	175	201	205	229	318	464	527	644	496	342
60%	239	183	167	179	173	194	302	442	495	630	476	285
70%	210	162	146	152	141	171	282	415	479	598	451	250
80%	186	140	131	137	130	151	249	350	435	551	421	215
90%	159	118	105	120	110	141	217	291	350	474	359	184
Long Term												
Full Simulation Period ^b	273	255	260	317	322	329	343	461	514	631	487	376
Water Year Types^c												
Wet (32%)	317	318	441	558	513	557	447	580	568	683	542	598
Above Normal (16%)	268	263	259	320	454	367	370	484	544	708	527	421
Below Normal (13%)	310	258	175	186	266	220	318	455	540	679	529	289
Dry (24%)	254	232	154	183	145	183	263	406	511	607	457	246
Critical (15%)	184	149	123	134	111	135	242	271	345	431	333	145

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Generation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-2%	40%	-3%	0%	-2%	-1%	1%	-1%	-11%	-3%	-8%	43%
20%	10%	49%	-22%	-16%	-2%	-2%	1%	-4%	-12%	-4%	-6%	61%
30%	8%	33%	-1%	-13%	6%	2%	2%	-4%	-10%	-4%	-6%	40%
40%	9%	25%	-2%	-11%	-14%	4%	3%	-6%	-10%	-7%	-7%	31%
50%	14%	13%	-4%	-5%	-7%	-1%	2%	-6%	-9%	-6%	-6%	15%
60%	13%	2%	-1%	1%	-1%	0%	4%	-6%	-10%	-4%	-5%	3%
70%	5%	-3%	-1%	-3%	0%	-4%	2%	-7%	-10%	-5%	-5%	-3%
80%	8%	2%	-2%	-4%	-2%	-2%	0%	-6%	-10%	-4%	-3%	-4%
90%	5%	-5%	-7%	-1%	-5%	0%	0%	-9%	-10%	1%	-8%	-1%
Long Term												
Full Simulation Period ^b	7%	19%	-6%	-6%	-3%	-2%	3%	-4%	-10%	-4%	-5%	23%
Water Year Types^c												
Wet (32%)	7%	18%	-10%	-4%	-1%	1%	5%	-1%	-11%	-2%	-5%	50%
Above Normal (16%)	9%	22%	6%	-12%	-5%	-7%	8%	-6%	-12%	-4%	-8%	23%
Below Normal (13%)	10%	17%	-7%	-19%	-5%	-11%	-1%	-8%	-12%	-6%	-8%	-5%
Dry (24%)	5%	27%	-2%	2%	-4%	1%	0%	-6%	-6%	-5%	-1%	-2%
Critical (15%)	2%	3%	-8%	0%	4%	-4%	-4%	-5%	-8%	-2%	-7%	-6%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.17.3 CVP Total Generation, Monthly Generation

Second Basis of Comparison

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	415	295	659	692	684	702	486	626	696	779	637	441
20%	339	256	436	584	637	584	393	572	655	757	588	370
30%	303	233	242	439	446	357	350	535	623	732	569	334
40%	268	220	194	266	287	256	325	507	602	711	549	315
50%	236	204	182	211	220	232	313	493	577	683	525	297
60%	212	180	169	177	175	194	289	470	553	654	501	278
70%	201	168	148	156	141	177	276	445	530	627	477	258
80%	172	138	134	143	133	154	248	372	481	571	436	225
90%	152	125	112	121	115	141	217	318	390	470	389	186
Long Term												
Full Simulation Period ^b	256	215	278	336	331	334	334	481	569	655	514	305
Water Year Types^c												
Wet (32%)	297	269	491	582	521	549	428	586	636	697	573	399
Above Normal (16%)	245	215	245	362	479	396	341	513	618	740	571	341
Below Normal (13%)	282	221	188	231	280	246	323	496	612	724	575	306
Dry (24%)	243	183	158	179	150	181	262	433	542	637	463	251
Critical (15%)	180	145	134	134	107	140	253	286	376	442	357	154

Alternative 3

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	415	306	662	691	701	710	489	598	648	775	610	459
20%	342	256	426	590	650	583	393	551	635	759	578	387
30%	314	227	242	427	458	367	360	507	590	741	557	358
40%	275	216	199	254	283	258	330	493	564	720	538	328
50%	245	204	181	203	220	223	314	469	548	678	525	302
60%	222	180	170	173	179	192	291	442	518	657	513	279
70%	202	164	149	156	142	171	271	421	511	624	482	257
80%	176	145	133	134	128	153	250	363	453	561	445	227
90%	158	124	113	122	109	136	222	300	381	474	387	191
Long Term												
Full Simulation Period ^b	262	215	279	333	336	335	338	462	542	658	512	314
Water Year Types^c												
Wet (32%)	298	268	493	584	537	551	430	562	593	712	576	407
Above Normal (16%)	249	222	245	350	477	401	346	482	580	736	550	341
Below Normal (13%)	284	211	187	228	283	245	332	476	580	711	557	347
Dry (24%)	256	184	162	175	146	180	265	416	532	635	471	251
Critical (15%)	189	150	132	130	113	139	253	285	373	445	360	160

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Generation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0%	4%	1%	0%	2%	1%	1%	-4%	-7%	0%	-4%	4%
20%	1%	0%	-2%	1%	2%	0%	0%	-4%	-3%	0%	-2%	5%
30%	4%	-3%	0%	-3%	3%	3%	3%	-5%	-5%	1%	-2%	7%
40%	2%	-2%	3%	-4%	-1%	1%	2%	-3%	-6%	1%	-2%	4%
50%	4%	0%	-1%	-4%	0%	-4%	0%	-5%	-5%	-1%	0%	2%
60%	5%	0%	1%	-2%	2%	-1%	1%	-6%	-6%	1%	2%	0%
70%	1%	-2%	1%	0%	1%	-3%	-2%	-5%	-4%	-1%	1%	0%
80%	2%	5%	-1%	-6%	-4%	-1%	1%	-3%	-6%	-2%	2%	1%
90%	4%	-1%	1%	0%	-6%	-4%	2%	-6%	-2%	1%	-1%	3%
Long Term												
Full Simulation Period ^b	2%	0%	1%	-1%	2%	0%	1%	-4%	-5%	0%	0%	3%
Water Year Types^c												
Wet (32%)	0%	-1%	1%	0%	3%	0%	1%	-4%	-7%	2%	1%	2%
Above Normal (16%)	2%	3%	0%	-3%	0%	1%	1%	-6%	-6%	-1%	-4%	0%
Below Normal (13%)	1%	-5%	0%	-1%	1%	-1%	3%	-4%	-5%	-2%	-3%	14%
Dry (24%)	5%	1%	3%	-2%	-3%	0%	1%	-4%	-2%	0%	2%	0%
Critical (15%)	5%	4%	-2%	-3%	6%	-1%	0%	0%	-1%	1%	1%	4%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.17.4 CVP Total Generation, Monthly Generation

Second Basis of Comparison

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	415	295	659	692	684	702	486	626	696	779	637	441
20%	339	256	436	584	637	584	393	572	655	757	588	370
30%	303	233	242	439	446	357	350	535	623	732	569	334
40%	268	220	194	266	287	256	325	507	602	711	549	315
50%	236	204	182	211	220	232	313	493	577	683	525	297
60%	212	180	169	177	175	194	289	470	553	654	501	278
70%	201	168	148	156	141	177	276	445	530	627	477	258
80%	172	138	134	143	133	154	248	372	481	571	436	225
90%	152	125	112	121	115	141	217	318	390	470	389	186
Long Term												
Full Simulation Period ^b	256	215	278	336	331	334	334	481	569	655	514	305
Water Year Types^c												
Wet (32%)	297	269	491	582	521	549	428	586	636	697	573	399
Above Normal (16%)	245	215	245	362	479	396	341	513	618	740	571	341
Below Normal (13%)	282	221	188	231	280	246	323	496	612	724	575	306
Dry (24%)	243	183	158	179	150	181	262	433	542	637	463	251
Critical (15%)	180	145	134	134	107	140	253	286	376	442	357	154

Alternative 5

Statistic	Monthly Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	404	410	647	689	671	694	491	627	618	752	574	628
20%	365	380	341	486	622	563	404	562	578	722	553	598
30%	328	316	236	381	459	362	368	513	557	705	534	468
40%	284	281	188	233	245	266	334	482	541	660	514	418
50%	269	226	173	201	205	229	327	460	525	648	498	351
60%	244	182	163	178	173	199	304	439	493	634	471	277
70%	220	161	145	153	139	170	281	412	472	601	451	248
80%	183	140	131	137	127	151	258	343	432	548	416	217
90%	155	113	102	120	108	136	233	308	350	463	365	184
Long Term												
Full Simulation Period ^b	273	254	258	317	321	328	348	463	509	628	485	378
Water Year Types^c												
Wet (32%)	313	320	438	558	512	554	446	585	567	685	538	598
Above Normal (16%)	266	254	259	321	454	368	370	489	542	708	523	419
Below Normal (13%)	307	257	173	186	265	221	334	458	533	675	520	294
Dry (24%)	254	231	153	183	145	183	273	404	505	604	459	247
Critical (15%)	192	149	120	135	110	132	250	270	336	414	337	153

Alternative 5 minus Second Basis of Comparison

Statistic	Monthly Generation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-3%	39%	-2%	0%	-2%	-1%	1%	0%	-11%	-3%	-10%	42%
20%	8%	48%	-22%	-17%	-2%	-4%	3%	-2%	-12%	-5%	-6%	62%
30%	8%	36%	-2%	-13%	3%	1%	5%	-4%	-11%	-4%	-6%	40%
40%	6%	28%	-3%	-12%	-14%	4%	3%	-5%	-10%	-7%	-6%	33%
50%	14%	11%	-5%	-5%	-7%	-1%	4%	-7%	-9%	-5%	-5%	18%
60%	15%	1%	-4%	1%	-1%	3%	5%	-7%	-11%	-3%	-6%	0%
70%	10%	-4%	-2%	-2%	-2%	-4%	2%	-7%	-11%	-4%	-5%	-4%
80%	6%	1%	-2%	-4%	-4%	-2%	4%	-8%	-10%	-4%	-5%	-4%
90%	2%	-9%	-9%	-1%	-6%	-3%	7%	-3%	-10%	-2%	-6%	-1%
Long Term												
Full Simulation Period ^b	6%	18%	-7%	-6%	-3%	-2%	4%	-4%	-10%	-4%	-6%	24%
Water Year Types^c												
Wet (32%)	6%	19%	-11%	-4%	-2%	1%	4%	0%	-11%	-2%	-6%	50%
Above Normal (16%)	8%	18%	6%	-11%	-5%	-7%	8%	-5%	-12%	-4%	-8%	23%
Below Normal (13%)	9%	16%	-7%	-20%	-5%	-10%	3%	-8%	-13%	-7%	-10%	-4%
Dry (24%)	4%	26%	-3%	3%	-4%	1%	4%	-7%	-7%	-5%	-1%	-2%
Critical (15%)	7%	3%	-10%	0%	3%	-6%	-1%	-6%	-11%	-6%	-5%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.18 CVP Total Energy Use

Table 5C.3.3.18.1 CVP Total Energy Use, Monthly Energy Use

No Action Alternative

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	111	171	154	153	146	149	60	69	128	153	133	106
20%	95	150	149	131	133	138	43	46	103	139	122	105
30%	85	139	142	118	115	109	37	41	88	122	114	103
40%	76	129	134	113	99	98	35	39	78	114	109	96
50%	72	105	129	110	94	75	32	36	65	104	102	87
60%	67	93	123	105	85	65	31	33	58	93	94	76
70%	62	81	115	95	72	61	29	30	44	84	79	68
80%	57	65	96	83	47	46	25	26	34	69	59	58
90%	54	58	74	71	31	22	21	21	21	42	36	45
Long Term												
Full Simulation Period ^b	76	111	121	108	92	86	36	40	71	101	93	82
Water Year Types^c												
Wet (32%)	81	125	130	124	125	122	50	58	113	132	119	94
Above Normal (16%)	74	120	123	97	91	104	36	40	85	99	108	87
Below Normal (13%)	79	122	132	107	84	76	30	33	61	106	106	92
Dry (24%)	76	103	120	108	77	64	30	30	42	90	65	72
Critical (15%)	65	73	89	85	52	31	21	22	22	51	56	57

Alternative 1

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	137	151	163	173	183	144	83	90	114	161	182	109
20%	121	141	160	167	149	127	81	65	105	156	154	108
30%	117	139	157	164	143	101	80	59	96	145	132	107
40%	96	134	156	162	139	80	75	54	91	140	128	106
50%	74	124	152	160	135	69	69	47	88	131	124	104
60%	67	109	144	158	116	67	59	45	78	119	109	90
70%	57	96	127	151	84	62	49	38	65	98	86	81
80%	46	80	111	124	55	52	36	29	43	85	63	68
90%	34	66	87	81	27	30	22	23	26	43	39	49
Long Term												
Full Simulation Period ^b	85	115	136	149	115	84	60	51	78	119	113	93
Water Year Types^c												
Wet (32%)	100	132	154	168	139	94	77	69	102	145	150	110
Above Normal (16%)	76	116	136	151	128	94	78	58	100	129	135	117
Below Normal (13%)	92	134	148	158	104	85	61	52	85	146	137	94
Dry (24%)	86	103	124	143	104	83	44	36	55	107	68	75
Critical (15%)	53	78	106	105	79	50	30	26	30	46	63	56

Alternative 1 minus No Action Alternative

Statistic	Monthly Energy Use (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	23%	-12%	6%	13%	26%	-3%	39%	31%	-11%	6%	37%	3%
20%	27%	-6%	7%	27%	12%	-8%	89%	41%	2%	12%	27%	3%
30%	38%	-1%	11%	40%	24%	-7%	113%	44%	10%	19%	16%	3%
40%	26%	4%	16%	43%	41%	-19%	116%	38%	17%	23%	18%	10%
50%	4%	18%	18%	45%	44%	-8%	112%	33%	34%	26%	22%	20%
60%	0%	17%	17%	50%	36%	3%	92%	36%	34%	28%	16%	17%
70%	-8%	18%	10%	58%	17%	2%	69%	25%	46%	17%	9%	19%
80%	-20%	24%	15%	51%	17%	13%	44%	11%	28%	23%	6%	18%
90%	-38%	14%	17%	15%	-13%	34%	4%	8%	23%	2%	7%	10%
Long Term												
Full Simulation Period ^b	11%	4%	13%	37%	26%	-2%	67%	26%	9%	17%	21%	13%
Water Year Types^c												
Wet (32%)	22%	5%	19%	35%	12%	-23%	54%	18%	-10%	9%	26%	17%
Above Normal (16%)	2%	-3%	11%	56%	41%	-10%	118%	42%	18%	30%	25%	34%
Below Normal (13%)	17%	10%	12%	48%	24%	11%	104%	56%	38%	38%	30%	2%
Dry (24%)	12%	0%	3%	32%	35%	30%	44%	20%	32%	19%	4%	4%
Critical (15%)	-18%	6%	19%	22%	51%	64%	46%	15%	34%	-9%	12%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.18.2 CVP Total Energy Use, Monthly Energy Use

Second Basis of Comparison

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	137	151	163	173	183	144	83	90	114	161	182	109
20%	121	141	160	167	149	127	81	65	105	156	154	108
30%	117	139	157	164	143	101	80	59	96	145	132	107
40%	96	134	156	162	139	80	75	54	91	140	128	106
50%	74	124	152	160	135	69	69	47	88	131	124	104
60%	67	109	144	158	116	67	59	45	78	119	109	90
70%	57	96	127	151	84	62	49	38	65	98	86	81
80%	46	80	111	124	55	52	36	29	43	85	63	68
90%	34	66	87	81	27	30	22	23	26	43	39	49
Long Term												
Full Simulation Period ^b	85	115	136	149	115	84	60	51	78	119	113	93
Water Year Types^c												
Wet (32%)	100	132	154	168	139	94	77	69	102	145	150	110
Above Normal (16%)	76	116	136	151	128	94	78	58	100	129	135	117
Below Normal (13%)	92	134	148	158	104	85	61	52	85	146	137	94
Dry (24%)	86	103	124	143	104	83	44	36	55	107	68	75
Critical (15%)	53	78	106	105	79	50	30	26	30	46	63	56

No Action Alternative

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	111	171	154	153	146	149	60	69	128	153	133	106
20%	95	150	149	131	133	138	43	46	103	139	122	105
30%	85	139	142	118	115	109	37	41	88	122	114	103
40%	76	129	134	113	99	98	35	39	78	114	109	96
50%	72	105	129	110	94	75	32	36	65	104	102	87
60%	67	93	123	105	85	65	31	33	58	93	94	76
70%	62	81	115	95	72	61	29	30	44	84	79	68
80%	57	65	96	83	47	46	25	26	34	69	59	58
90%	54	58	74	71	31	22	21	21	21	42	36	45
Long Term												
Full Simulation Period ^b	76	111	121	108	92	86	36	40	71	101	93	82
Water Year Types^c												
Wet (32%)	81	125	130	124	125	122	50	58	113	132	119	94
Above Normal (16%)	74	120	123	97	91	104	36	40	85	99	108	87
Below Normal (13%)	79	122	132	107	84	76	30	33	61	106	106	92
Dry (24%)	76	103	120	108	77	64	30	30	42	90	65	72
Critical (15%)	65	73	89	85	52	31	21	22	22	51	56	57

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Energy Use (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-19%	14%	-5%	-12%	-20%	3%	-28%	-24%	12%	-5%	-27%	-3%
20%	-21%	7%	-7%	-22%	-10%	9%	-47%	-29%	-2%	-11%	-21%	-2%
30%	-28%	1%	-10%	-28%	-20%	7%	-53%	-31%	-9%	-16%	-14%	-3%
40%	-21%	-4%	-14%	-30%	-29%	23%	-54%	-28%	-15%	-19%	-15%	-9%
50%	-4%	-15%	-15%	-31%	-30%	8%	-53%	-25%	-26%	-21%	-18%	-17%
60%	0%	-15%	-15%	-33%	-26%	-3%	-48%	-27%	-25%	-22%	-14%	-15%
70%	9%	-16%	-9%	-37%	-15%	-2%	-41%	-20%	-31%	-14%	-8%	-16%
80%	25%	-19%	-13%	-34%	-15%	-12%	-30%	-10%	-22%	-19%	-6%	-15%
90%	62%	-12%	-15%	-13%	15%	-26%	-4%	-7%	-19%	-2%	-6%	-9%
Long Term												
Full Simulation Period ^b	-10%	-3%	-11%	-27%	-21%	2%	-40%	-21%	-8%	-15%	-18%	-12%
Water Year Types^c												
Wet (32%)	-18%	-5%	-16%	-26%	-10%	30%	-35%	-15%	11%	-9%	-20%	-15%
Above Normal (16%)	-2%	3%	-10%	-36%	-29%	11%	-54%	-30%	-15%	-23%	-20%	-26%
Below Normal (13%)	-14%	-9%	-11%	-32%	-19%	-10%	-51%	-36%	-28%	-28%	-23%	-2%
Dry (24%)	-11%	0%	-3%	-24%	-26%	-23%	-30%	-17%	-24%	-16%	-4%	-4%
Critical (15%)	22%	-6%	-16%	-18%	-34%	-39%	-31%	-13%	-25%	10%	-11%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.18.3 CVP Total Energy Use, Monthly Energy Use

Second Basis of Comparison

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	137	151	163	173	183	144	83	90	114	161	182	109
20%	121	141	160	167	149	127	81	65	105	156	154	108
30%	117	139	157	164	143	101	80	59	96	145	132	107
40%	96	134	156	162	139	80	75	54	91	140	128	106
50%	74	124	152	160	135	69	69	47	88	131	124	104
60%	67	109	144	158	116	67	59	45	78	119	109	90
70%	57	96	127	151	84	62	49	38	65	98	86	81
80%	46	80	111	124	55	52	36	29	43	85	63	68
90%	34	66	87	81	27	30	22	23	26	43	39	49
Long Term												
Full Simulation Period ^b	85	115	136	149	115	84	60	51	78	119	113	93
Water Year Types^c												
Wet (32%)	100	132	154	168	139	94	77	69	102	145	150	110
Above Normal (16%)	76	116	136	151	128	94	78	58	100	129	135	117
Below Normal (13%)	92	134	148	158	104	85	61	52	85	146	137	94
Dry (24%)	86	103	124	143	104	83	44	36	55	107	68	75
Critical (15%)	53	78	106	105	79	50	30	26	30	46	63	56

Alternative 3

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	143	149	161	165	151	147	87	99	142	154	156	139
20%	124	140	157	131	142	139	82	89	122	146	134	112
30%	119	138	154	120	126	100	81	79	106	139	132	107
40%	108	128	143	117	105	78	79	72	100	128	128	106
50%	86	118	140	110	91	72	72	66	91	118	113	105
60%	70	107	131	104	75	64	64	53	80	103	99	95
70%	63	95	122	93	65	62	46	40	59	87	83	85
80%	52	82	102	84	54	51	35	30	41	71	62	63
90%	46	66	73	76	31	24	23	23	24	46	41	45
Long Term												
Full Simulation Period ^b	91	113	129	109	95	85	62	62	85	109	106	97
Water Year Types^c												
Wet (32%)	101	130	144	128	135	108	83	87	125	139	140	113
Above Normal (16%)	83	113	122	93	96	125	77	74	105	115	121	111
Below Normal (13%)	94	130	144	111	85	78	56	58	86	123	117	126
Dry (24%)	97	104	126	108	75	65	49	44	54	98	75	74
Critical (15%)	64	78	97	85	53	31	30	25	27	43	55	58

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Energy Use (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	4%	-1%	-1%	-5%	-18%	2%	5%	11%	24%	-5%	-14%	27%
20%	2%	-1%	-1%	-21%	-5%	9%	1%	38%	17%	-7%	-13%	4%
30%	2%	0%	-2%	-27%	-12%	-1%	2%	34%	11%	-4%	0%	1%
40%	13%	-5%	-8%	-28%	-25%	-2%	6%	34%	10%	-9%	0%	0%
50%	15%	-4%	-8%	-31%	-32%	4%	4%	40%	3%	-10%	-8%	0%
60%	5%	-2%	-9%	-34%	-35%	-4%	9%	19%	3%	-14%	-9%	7%
70%	10%	-1%	-3%	-39%	-23%	0%	-6%	5%	-9%	-12%	-4%	5%
80%	14%	3%	-8%	-32%	-2%	-2%	-2%	5%	-4%	-16%	-1%	-8%
90%	36%	0%	-16%	-7%	12%	-21%	6%	0%	-7%	8%	7%	-7%
Long Term												
Full Simulation Period ^b	7%	-1%	-5%	-27%	-17%	2%	4%	22%	10%	-8%	-6%	5%
Water Year Types^c												
Wet (32%)	1%	-1%	-7%	-24%	-3%	15%	8%	26%	23%	-4%	-6%	2%
Above Normal (16%)	10%	-3%	-10%	-38%	-25%	33%	-2%	29%	5%	-11%	-10%	-5%
Below Normal (13%)	2%	-3%	-2%	-30%	-18%	-8%	-9%	13%	2%	-16%	-15%	34%
Dry (24%)	13%	1%	2%	-24%	-28%	-21%	12%	20%	-2%	-8%	11%	-1%
Critical (15%)	20%	0%	-8%	-18%	-33%	-39%	0%	-2%	-11%	-7%	-12%	4%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.18.4 CVP Total Energy Use, Monthly Energy Use

Second Basis of Comparison

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	137	151	163	173	183	144	83	90	114	161	182	109
20%	121	141	160	167	149	127	81	65	105	156	154	108
30%	117	139	157	164	143	101	80	59	96	145	132	107
40%	96	134	156	162	139	80	75	54	91	140	128	106
50%	74	124	152	160	135	69	69	47	88	131	124	104
60%	67	109	144	158	116	67	59	45	78	119	109	90
70%	57	96	127	151	84	62	49	38	65	98	86	81
80%	46	80	111	124	55	52	36	29	43	85	63	68
90%	34	66	87	81	27	30	22	23	26	43	39	49
Long Term												
Full Simulation Period ^b	85	115	136	149	115	84	60	51	78	119	113	93
Water Year Types^c												
Wet (32%)	100	132	154	168	139	94	77	69	102	145	150	110
Above Normal (16%)	76	116	136	151	128	94	78	58	100	129	135	117
Below Normal (13%)	92	134	148	158	104	85	61	52	85	146	137	94
Dry (24%)	86	103	124	143	104	83	44	36	55	107	68	75
Critical (15%)	53	78	106	105	79	50	30	26	30	46	63	56

Alternative 5

Statistic	Monthly Energy Use (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	106	174	154	153	146	153	59	68	128	155	132	106
20%	94	153	151	134	134	138	41	44	103	140	121	105
30%	85	140	142	120	116	109	35	40	86	122	113	102
40%	75	126	135	114	104	99	32	37	77	115	110	95
50%	72	106	128	110	94	75	30	33	65	105	102	90
60%	69	92	123	104	86	65	29	30	57	94	94	76
70%	63	74	115	95	71	61	24	22	46	88	80	70
80%	59	65	92	83	46	48	18	16	32	74	63	58
90%	54	56	68	71	32	22	13	12	24	50	49	47
Long Term												
Full Simulation Period ^b	76	110	121	109	92	86	33	36	71	103	95	82
Water Year Types^c												
Wet (32%)	81	129	131	125	124	123	50	58	113	132	119	93
Above Normal (16%)	75	112	122	100	90	104	35	40	84	100	107	86
Below Normal (13%)	76	122	132	107	90	77	28	30	62	106	100	96
Dry (24%)	74	101	121	108	77	64	23	21	43	96	71	74
Critical (15%)	69	73	86	88	54	30	13	13	22	56	64	56

Alternative 5 minus Second Basis of Comparison

Statistic	Monthly Energy Use (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-23%	16%	-5%	-12%	-20%	6%	-29%	-25%	12%	-4%	-27%	-3%
20%	-22%	9%	-5%	-20%	-10%	8%	-49%	-32%	-1%	-10%	-22%	-2%
30%	-27%	1%	-10%	-27%	-19%	8%	-56%	-32%	-10%	-16%	-15%	-4%
40%	-21%	-6%	-13%	-30%	-25%	23%	-57%	-32%	-16%	-18%	-14%	-10%
50%	-3%	-15%	-16%	-31%	-30%	9%	-56%	-31%	-26%	-20%	-17%	-14%
60%	4%	-16%	-15%	-34%	-26%	-3%	-51%	-33%	-26%	-21%	-14%	-15%
70%	11%	-23%	-9%	-37%	-15%	-3%	-52%	-41%	-29%	-10%	-7%	-14%
80%	28%	-19%	-17%	-33%	-16%	-8%	-49%	-44%	-26%	-13%	0%	-16%
90%	60%	-16%	-21%	-13%	17%	-26%	-41%	-49%	-8%	17%	27%	-4%
Long Term												
Full Simulation Period ^b	-10%	-4%	-11%	-27%	-20%	2%	-46%	-29%	-8%	-13%	-16%	-11%
Water Year Types^c												
Wet (32%)	-19%	-2%	-16%	-26%	-11%	30%	-36%	-15%	10%	-9%	-20%	-16%
Above Normal (16%)	0%	-4%	-10%	-34%	-30%	11%	-55%	-31%	-16%	-23%	-21%	-26%
Below Normal (13%)	-17%	-9%	-11%	-32%	-14%	-9%	-54%	-43%	-27%	-28%	-27%	3%
Dry (24%)	-13%	-2%	-2%	-25%	-26%	-23%	-48%	-42%	-21%	-10%	5%	-2%
Critical (15%)	29%	-6%	-18%	-16%	-31%	-40%	-56%	-48%	-26%	21%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.19 CVP Net Energy Use

Table 5C.3.3.19.1 CVP Net Generation, Monthly Net Generation

No Action Alternative

Statistic	Monthly Net Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	324	257	523	556	567	564	449	560	543	664	474	528
20%	283	220	218	372	491	444	355	513	500	624	446	491
30%	249	195	116	257	358	262	325	468	476	596	427	366
40%	216	162	72	147	163	169	304	441	452	558	418	344
50%	200	112	49	104	110	150	285	424	438	537	405	246
60%	154	96	42	71	94	133	270	404	426	508	381	198
70%	134	71	30	50	71	109	248	383	410	480	366	183
80%	119	56	18	37	54	95	225	327	377	450	347	150
90%	86	40	-1	24	36	72	198	262	332	400	302	104
Long Term												
Full Simulation Period ^b	197	145	139	209	230	243	307	420	443	530	393	295
Water Year Types^c												
Wet (32%)	236	193	311	433	389	435	397	522	455	551	423	504
Above Normal (16%)	193	143	136	223	363	263	334	443	459	608	419	334
Below Normal (13%)	231	137	43	79	181	144	288	422	478	573	423	198
Dry (24%)	178	128	34	74	67	119	233	376	469	518	391	174
Critical (15%)	118	76	34	48	59	104	221	249	323	380	276	89

Alternative 1

Statistic	Monthly Net Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	285	162	524	558	567	562	404	561	600	638	480	291
20%	239	132	272	412	486	482	324	519	577	622	463	256
30%	195	103	114	288	296	288	297	481	531	602	438	227
40%	173	87	72	135	208	188	273	461	517	579	422	217
50%	162	81	43	78	114	155	255	444	488	547	405	205
60%	152	75	33	30	74	132	238	413	469	518	393	189
70%	138	58	24	18	53	108	214	384	454	493	369	179
80%	106	50	12	6	20	86	194	343	407	463	356	155
90%	92	32	-10	-8	-7	65	162	292	363	398	321	98
Long Term												
Full Simulation Period ^b	172	100	142	187	215	251	274	431	491	537	401	213
Water Year Types^c												
Wet (32%)	197	138	336	414	382	455	351	517	533	552	423	289
Above Normal (16%)	169	99	109	211	351	302	263	456	517	611	436	224
Below Normal (13%)	189	87	40	73	176	161	262	444	527	577	438	212
Dry (24%)	158	80	34	35	46	98	219	397	487	530	395	176
Critical (15%)	126	67	28	30	28	90	223	261	346	395	294	98

Alternative 1 minus No Action Alternative

Statistic	Monthly Net Generation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-12%	-37%	0%	0%	0%	0%	-10%	0%	11%	-4%	1%	-45%
20%	-16%	-40%	25%	11%	-1%	9%	-9%	1%	15%	0%	4%	-48%
30%	-22%	-47%	-1%	12%	-17%	10%	-9%	3%	11%	1%	3%	-38%
40%	-20%	-46%	0%	-8%	28%	11%	-10%	4%	14%	4%	1%	-37%
50%	-19%	-28%	-12%	-25%	4%	3%	-10%	5%	11%	2%	0%	-17%
60%	-2%	-22%	-22%	-57%	-22%	-1%	-12%	2%	10%	2%	3%	-5%
70%	3%	-17%	-19%	-64%	-26%	-1%	-14%	0%	11%	3%	1%	-2%
80%	-11%	-10%	-32%	-84%	-63%	-10%	-14%	5%	8%	3%	2%	3%
90%	7%	-19%	1388%	-134%	-120%	-10%	-18%	11%	9%	0%	6%	-5%
Long Term												
Full Simulation Period ^b	-13%	-31%	2%	-10%	-6%	3%	-11%	2%	11%	1%	2%	-28%
Water Year Types^c												
Wet (32%)	-16%	-29%	8%	-5%	-2%	5%	-12%	-1%	17%	0%	0%	-43%
Above Normal (16%)	-12%	-31%	-20%	-5%	-3%	15%	-21%	3%	13%	0%	4%	-33%
Below Normal (13%)	-18%	-36%	-7%	-8%	-3%	12%	-9%	5%	10%	1%	4%	7%
Dry (24%)	-11%	-38%	0%	-52%	-32%	-18%	-6%	6%	4%	2%	1%	1%
Critical (15%)	7%	-12%	-18%	-38%	-53%	-14%	1%	5%	7%	4%	6%	11%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.19.2 CVP Net Generation, Monthly Net Generation

Second Basis of Comparison

Statistic	Monthly Net Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	285	162	524	558	567	562	404	561	600	638	480	291
20%	239	132	272	412	486	482	324	519	577	622	463	256
30%	195	103	114	288	296	288	297	481	531	602	438	227
40%	173	87	72	135	208	188	273	461	517	579	422	217
50%	162	81	43	78	114	155	255	444	488	547	405	205
60%	152	75	33	30	74	132	238	413	469	518	393	189
70%	138	58	24	18	53	108	214	384	454	493	369	179
80%	106	50	12	6	20	86	194	343	407	463	356	155
90%	92	32	-10	-8	-7	65	162	292	363	398	321	98
Long Term												
Full Simulation Period ^b	172	100	142	187	215	251	274	431	491	537	401	213
Water Year Types^c												
Wet (32%)	197	138	336	414	382	455	351	517	533	552	423	289
Above Normal (16%)	169	99	109	211	351	302	263	456	517	611	436	224
Below Normal (13%)	189	87	40	73	176	161	262	444	527	577	438	212
Dry (24%)	158	80	34	35	46	98	219	397	487	530	395	176
Critical (15%)	126	67	28	30	28	90	223	261	346	395	294	98

No Action Alternative

Statistic	Monthly Net Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	324	257	523	556	567	564	449	560	543	664	474	528
20%	283	220	218	372	491	444	355	513	500	624	446	491
30%	249	195	116	257	358	262	325	468	476	596	427	366
40%	216	162	72	147	163	169	304	441	452	558	418	344
50%	200	112	49	104	110	150	285	424	438	537	405	246
60%	154	96	42	71	94	133	270	404	426	508	381	198
70%	134	71	30	50	71	109	248	383	410	480	366	183
80%	119	56	18	37	54	95	225	327	377	450	347	150
90%	86	40	-1	24	36	72	198	262	332	400	302	104
Long Term												
Full Simulation Period ^b	197	145	139	209	230	243	307	420	443	530	393	295
Water Year Types^c												
Wet (32%)	236	193	311	433	389	435	397	522	455	551	423	504
Above Normal (16%)	193	143	136	223	363	263	334	443	459	608	419	334
Below Normal (13%)	231	137	43	79	181	144	288	422	478	573	423	198
Dry (24%)	178	128	34	74	67	119	233	376	469	518	391	174
Critical (15%)	118	76	34	48	59	104	221	249	323	380	276	89

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Net Generation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	14%	59%	0%	0%	0%	0%	11%	0%	-10%	4%	-1%	81%
20%	18%	66%	-20%	-10%	1%	-8%	10%	-1%	-13%	0%	-4%	92%
30%	27%	90%	1%	-11%	21%	-9%	10%	-3%	-10%	-1%	-2%	61%
40%	25%	86%	0%	8%	-22%	-10%	12%	-4%	-13%	-4%	-1%	58%
50%	24%	39%	14%	34%	-3%	-3%	12%	-4%	-10%	-2%	0%	20%
60%	2%	29%	29%	134%	27%	1%	13%	-2%	-9%	-2%	-3%	5%
70%	-3%	21%	24%	176%	34%	1%	16%	0%	-10%	-3%	-1%	2%
80%	12%	12%	47%	513%	167%	11%	16%	-4%	-7%	-3%	-2%	-3%
90%	-7%	24%	-93%	-394%	-606%	11%	22%	-10%	-9%	0%	-6%	6%
Long Term												
Full Simulation Period ^b	15%	44%	-2%	11%	7%	-3%	12%	-2%	-10%	-1%	-2%	38%
Water Year Types^c												
Wet (32%)	19%	40%	-8%	5%	2%	-4%	13%	1%	-15%	0%	0%	74%
Above Normal (16%)	14%	44%	25%	5%	3%	-13%	27%	-3%	-11%	0%	-4%	49%
Below Normal (13%)	22%	57%	8%	9%	3%	-11%	10%	-5%	-9%	-1%	-3%	-7%
Dry (24%)	13%	61%	0%	110%	47%	22%	7%	-5%	-4%	-2%	-1%	-1%
Critical (15%)	-6%	14%	22%	62%	111%	16%	-1%	-5%	-7%	-4%	-6%	-10%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.19.3 CVP Net Generation, Monthly Net Generation

Second Basis of Comparison

Statistic	Monthly Net Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	285	162	524	558	567	562	404	561	600	638	480	291
20%	239	132	272	412	486	482	324	519	577	622	463	256
30%	195	103	114	288	296	288	297	481	531	602	438	227
40%	173	87	72	135	208	188	273	461	517	579	422	217
50%	162	81	43	78	114	155	255	444	488	547	405	205
60%	152	75	33	30	74	132	238	413	469	518	393	189
70%	138	58	24	18	53	108	214	384	454	493	369	179
80%	106	50	12	6	20	86	194	343	407	463	356	155
90%	92	32	-10	-8	-7	65	162	292	363	398	321	98
Long Term												
Full Simulation Period ^b	172	100	142	187	215	251	274	431	491	537	401	213
Water Year Types^c												
Wet (32%)	197	138	336	414	382	455	351	517	533	552	423	289
Above Normal (16%)	169	99	109	211	351	302	263	456	517	611	436	224
Below Normal (13%)	189	87	40	73	176	161	262	444	527	577	438	212
Dry (24%)	158	80	34	35	46	98	219	397	487	530	395	176
Critical (15%)	126	67	28	30	28	90	223	261	346	395	294	98

Alternative 3

Statistic	Monthly Net Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	291	182	530	558	606	583	437	534	563	674	481	336
20%	235	125	266	480	511	511	316	479	531	638	465	266
30%	193	104	114	332	334	287	298	459	508	622	441	246
40%	173	91	74	160	183	189	268	439	473	596	424	216
50%	158	77	52	112	122	150	251	392	448	544	409	205
60%	147	66	39	72	84	122	229	374	433	528	387	195
70%	133	60	25	51	71	106	216	348	411	506	374	181
80%	113	52	12	36	56	92	200	316	387	469	362	155
90%	88	31	-6	18	41	71	174	260	340	397	326	104
Long Term												
Full Simulation Period ^b	172	102	150	224	241	250	275	400	457	549	406	217
Water Year Types^c												
Wet (32%)	197	137	349	456	402	443	347	475	467	572	436	294
Above Normal (16%)	166	109	123	257	381	276	269	408	475	621	429	230
Below Normal (13%)	190	81	42	117	198	167	276	418	493	588	440	221
Dry (24%)	160	81	36	67	71	115	217	372	478	537	396	177
Critical (15%)	125	73	35	45	60	108	223	260	346	402	305	101

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Net Generation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2%	13%	1%	0%	7%	4%	8%	-5%	-6%	6%	0%	15%
20%	-2%	-5%	-2%	16%	5%	6%	-2%	-8%	-8%	3%	0%	4%
30%	-1%	2%	0%	16%	13%	-1%	1%	-5%	-4%	3%	1%	8%
40%	0%	5%	2%	18%	-12%	1%	-2%	-5%	-8%	3%	1%	-1%
50%	-3%	-4%	19%	44%	7%	-3%	-2%	-12%	-8%	-1%	1%	0%
60%	-3%	-12%	18%	138%	13%	-7%	-4%	-9%	-8%	2%	-2%	3%
70%	-4%	2%	3%	181%	36%	-3%	1%	-9%	-10%	3%	1%	1%
80%	6%	4%	-5%	490%	174%	7%	3%	-8%	-5%	1%	2%	0%
90%	-4%	-3%	-44%	-317%	-682%	10%	7%	-11%	-6%	0%	2%	6%
Long Term												
Full Simulation Period ^b	0%	2%	6%	20%	12%	0%	0%	-7%	-7%	2%	1%	2%
Water Year Types^c												
Wet (32%)	0%	0%	4%	10%	5%	-3%	-1%	-8%	-12%	4%	3%	2%
Above Normal (16%)	-2%	10%	13%	22%	9%	-9%	2%	-10%	-8%	2%	-2%	3%
Below Normal (13%)	1%	-7%	7%	61%	13%	3%	6%	-6%	-6%	2%	0%	4%
Dry (24%)	1%	1%	6%	89%	54%	18%	-1%	-6%	-2%	1%	0%	1%
Critical (15%)	-1%	9%	24%	51%	113%	21%	0%	0%	0%	2%	4%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.19.4 CVP Net Generation, Monthly Net Generation

Second Basis of Comparison

Statistic	Monthly Net Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	285	162	524	558	567	562	404	561	600	638	480	291
20%	239	132	272	412	486	482	324	519	577	622	463	256
30%	195	103	114	288	296	288	297	481	531	602	438	227
40%	173	87	72	135	208	188	273	461	517	579	422	217
50%	162	81	43	78	114	155	255	444	488	547	405	205
60%	152	75	33	30	74	132	238	413	469	518	393	189
70%	138	58	24	18	53	108	214	384	454	493	369	179
80%	106	50	12	6	20	86	194	343	407	463	356	155
90%	92	32	-10	-8	-7	65	162	292	363	398	321	98
Long Term												
Full Simulation Period ^b	172	100	142	187	215	251	274	431	491	537	401	213
Water Year Types^c												
Wet (32%)	197	138	336	414	382	455	351	517	533	552	423	289
Above Normal (16%)	169	99	109	211	351	302	263	456	517	611	436	224
Below Normal (13%)	189	87	40	73	176	161	262	444	527	577	438	212
Dry (24%)	158	80	34	35	46	98	219	397	487	530	395	176
Critical (15%)	126	67	28	30	28	90	223	261	346	395	294	98

Alternative 5

Statistic	Monthly Net Generation (GWh)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	323	255	511	557	567	559	451	559	528	654	468	527
20%	285	219	219	356	495	444	360	514	496	620	442	495
30%	233	186	113	253	363	270	330	469	475	589	426	365
40%	217	160	72	146	159	168	310	447	450	551	415	343
50%	194	116	48	104	107	148	294	426	437	531	402	243
60%	158	99	39	72	92	131	274	409	424	509	377	199
70%	134	71	28	52	67	105	254	389	404	485	366	177
80%	110	57	18	38	52	84	237	323	368	425	346	146
90%	84	31	-2	25	35	72	210	288	322	396	304	107
Long Term												
Full Simulation Period ^b	197	144	137	208	229	242	315	427	438	524	390	296
Water Year Types^c												
Wet (32%)	233	191	307	433	388	431	397	527	454	553	419	506
Above Normal (16%)	190	142	136	221	364	264	335	449	458	608	416	333
Below Normal (13%)	230	135	42	79	175	144	305	428	471	569	420	198
Dry (24%)	179	130	32	75	67	119	250	383	461	508	388	173
Critical (15%)	123	76	34	47	56	102	237	257	314	358	273	97

Alternative 5 minus Second Basis of Comparison

Statistic	Monthly Net Generation (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	13%	58%	-3%	0%	0%	0%	12%	0%	-12%	3%	-2%	81%
20%	19%	65%	-20%	-14%	2%	-8%	11%	-1%	-14%	0%	-4%	94%
30%	19%	81%	-1%	-12%	23%	-6%	11%	-3%	-10%	-2%	-3%	60%
40%	25%	83%	-1%	8%	-23%	-11%	14%	-3%	-13%	-5%	-2%	58%
50%	20%	44%	10%	33%	-6%	-5%	15%	-4%	-10%	-3%	-1%	19%
60%	4%	32%	19%	138%	24%	0%	15%	-1%	-9%	-2%	-4%	5%
70%	-3%	21%	14%	182%	27%	-3%	19%	1%	-11%	-2%	-1%	-1%
80%	3%	14%	46%	522%	159%	-2%	23%	-6%	-10%	-8%	-3%	-6%
90%	-8%	-4%	-82%	-404%	-603%	10%	29%	-1%	-11%	0%	-5%	9%
Long Term												
Full Simulation Period ^b	14%	44%	-3%	11%	6%	-4%	15%	-1%	-11%	-2%	-3%	39%
Water Year Types^c												
Wet (32%)	18%	39%	-9%	5%	2%	-5%	13%	2%	-15%	0%	-1%	75%
Above Normal (16%)	12%	44%	25%	4%	4%	-13%	27%	-1%	-11%	-1%	-5%	48%
Below Normal (13%)	22%	55%	5%	8%	0%	-11%	17%	-4%	-11%	-1%	-4%	-7%
Dry (24%)	14%	63%	-6%	113%	47%	22%	14%	-4%	-5%	-4%	-2%	-1%
Critical (15%)	-3%	14%	21%	57%	99%	14%	6%	-1%	-9%	-9%	-7%	-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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.20 Stanislaus River Percent Mortality – Fall-run Chinook Salmon

Table 5C.3.3.20 Stanislaus River Percent Mortality - Fall-Run Chinook Salmon

	Percent Mortality	Difference from No Action Alternative	Difference from Second Basis of Comparison
	%	%	%
No Action Alternative			
Long-term Average	7.0	---	-0.4
Wet	1.6	---	0.1
Above Normal	5.3	---	-0.1
Below Normal	4.4	---	0.3
Dry	4.9	---	-0.3
Critical	14.4	---	-1.5
Second Basis of Comparison			
Long-term Average	7.4	0.4	
Wet	1.5	-0.1	---
Above Normal	5.4	0.1	---
Below Normal	4.1	-0.3	---
Dry	5.1	0.3	---
Critical	15.9	1.5	---
Alternative 3			
Long-term Average	6.2	-0.8	-1.2
Wet	1.6	0.0	0.1
Above Normal	4.0	-1.3	-1.4
Below Normal	3.8	-0.6	-0.3
Dry	4.2	-0.7	-0.9
Critical	13.4	-1.0	-2.5
Alternative 5			
Long-term Average	8.5	1.5	1.0
Wet	1.8	0.2	0.3
Above Normal	6.4	1.1	1.0
Below Normal	6.1	1.6	2.0
Dry	7.0	2.2	1.9
Critical	16.9	2.5	1.0

Notes: All results are based on the 82-year simulation period. The water year types are defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

5C.3.3.21 New Melones Large Mouth Bass Nest Survival Percentage

Table 5C.3.3.21.1 New Melones Large Mouth Bass Nest Survival Percentage, Monthly Percentage

No Action Alternative

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	66	38	80
20%	100	100	100	100	100	100	100	100	100	49	30	64
30%	84	100	100	100	100	100	100	100	100	31	25	59
40%	74	100	100	100	100	100	100	100	100	25	23	57
50%	67	100	100	100	100	100	80	100	98	22	20	55
60%	59	100	100	100	100	100	72	100	63	18	19	50
70%	50	100	100	100	100	100	49	40	42	13	16	43
80%	43	100	100	100	100	100	27	29	27	10	12	38
90%	29	100	100	100	100	100	13	14	15	1	4	34
Long Term												
Full Simulation Period ^b	66	99	100	100	97	95	68	72	69	29	23	54
Water Year Types^c												
Wet (23%)	67	100	100	100	96	94	83	98	95	47	24	51
Above Normal (24%)	74	100	100	100	100	100	88	100	72	26	20	60
Below Normal (10%)	60	100	100	100	98	95	58	65	61	22	19	58
Dry (16%)	63	99	100	100	97	98	66	51	54	14	16	49
Critical (27%)	65	97	100	100	93	87	29	25	43	28	37	58

Alternative 1

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	61	34	81
20%	100	100	100	100	100	100	100	100	100	43	30	64
30%	100	100	100	100	100	100	100	100	100	31	26	60
40%	100	100	100	100	100	100	100	100	100	27	24	56
50%	100	100	100	100	100	100	100	100	68	24	21	55
60%	100	100	100	100	100	100	98	100	51	21	18	49
70%	100	100	100	100	100	100	81	33	32	17	14	45
80%	91	100	100	100	100	100	52	21	25	12	10	39
90%	80	98	100	100	100	100	40	9	16	5	5	31
Long Term												
Full Simulation Period ^b	95	98	100	100	96	97	82	69	64	29	22	54
Water Year Types^c												
Wet (23%)	98	100	100	100	96	97	92	98	82	45	24	51
Above Normal (24%)	95	98	100	100	100	100	95	100	69	25	20	59
Below Normal (10%)	93	100	100	100	98	100	79	63	55	25	19	56
Dry (16%)	91	98	100	100	95	98	84	46	54	15	16	51
Critical (27%)	93	96	100	100	94	87	44	19	43	24	30	61

Alternative 1 minus No Action Alternative

Statistic	Monthly Percentage (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%	-8%	-9%	1%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-14%	1%	0%
30%	19%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	3%	1%
40%	35%	0%	0%	0%	0%	0%	0%	0%	0%	6%	5%	0%
50%	48%	0%	0%	0%	0%	0%	26%	0%	-30%	5%	3%	0%
60%	70%	0%	0%	0%	0%	0%	37%	0%	-20%	15%	-4%	0%
70%	99%	0%	0%	0%	0%	0%	64%	-18%	-22%	34%	-16%	4%
80%	113%	0%	0%	0%	0%	0%	95%	-27%	-9%	16%	-17%	2%
90%	180%	-2%	0%	0%	0%	0%	219%	-36%	8%	302%	48%	-9%
Long Term												
Full Simulation Period ^b	44%	-1%	0%	0%	0%	2%	20%	-3%	-8%	-1%	-5%	1%
Water Year Types^c												
Wet (23%)	48%	0%	0%	0%	0%	4%	11%	0%	-13%	-4%	-1%	-2%
Above Normal (24%)	29%	-1%	0%	0%	0%	0%	9%	0%	-5%	-4%	-2%	-2%
Below Normal (10%)	55%	0%	0%	0%	0%	5%	36%	-4%	-9%	15%	-4%	-2%
Dry (16%)	44%	-1%	0%	0%	-2%	0%	28%	-9%	0%	12%	2%	3%
Critical (27%)	44%	-2%	0%	0%	0%	0%	53%	-23%	0%	-12%	-18%	7%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.2.1.2 New Melones Large Mouth Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	61	34	81
20%	100	100	100	100	100	100	100	100	100	43	30	64
30%	100	100	100	100	100	100	100	100	100	31	26	60
40%	100	100	100	100	100	100	100	100	100	27	24	56
50%	100	100	100	100	100	100	100	100	68	24	21	55
60%	100	100	100	100	100	100	98	100	51	21	18	49
70%	100	100	100	100	100	100	81	33	32	17	14	45
80%	91	100	100	100	100	100	52	21	25	12	10	39
90%	80	98	100	100	100	100	40	9	16	5	5	31
Long Term												
Full Simulation Period ^b	95	98	100	100	96	97	82	69	64	29	22	54
Water Year Types^c												
Wet (23%)	98	100	100	100	96	97	92	98	82	45	24	51
Above Normal (24%)	95	98	100	100	100	100	95	100	69	25	20	59
Below Normal (10%)	93	100	100	100	98	100	79	63	55	25	19	56
Dry (16%)	91	98	100	100	95	98	84	46	54	15	16	51
Critical (27%)	93	96	100	100	94	87	44	19	43	24	30	61

No Action Alternative

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	66	38	80
20%	100	100	100	100	100	100	100	100	100	49	30	64
30%	84	100	100	100	100	100	100	100	100	31	25	59
40%	74	100	100	100	100	100	100	100	100	25	23	57
50%	67	100	100	100	100	100	80	100	98	22	20	55
60%	59	100	100	100	100	100	72	100	63	18	19	50
70%	50	100	100	100	100	100	49	40	42	13	16	43
80%	43	100	100	100	100	100	27	29	27	10	12	38
90%	29	100	100	100	100	100	13	14	15	1	4	34
Long Term												
Full Simulation Period ^b	66	99	100	100	97	95	68	72	69	29	23	54
Water Year Types^c												
Wet (23%)	67	100	100	100	96	94	83	98	95	47	24	51
Above Normal (24%)	74	100	100	100	100	100	88	100	72	26	20	60
Below Normal (10%)	60	100	100	100	98	95	58	65	61	22	19	58
Dry (16%)	63	99	100	100	97	98	66	51	54	14	16	49
Critical (27%)	65	97	100	100	93	87	29	25	43	28	37	58

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Percentage (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%	8%	10%	-1%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	16%	-1%	0%
30%	-16%	0%	0%	0%	0%	0%	0%	0%	0%	2%	-3%	-1%
40%	-26%	0%	0%	0%	0%	0%	0%	0%	0%	-5%	-5%	0%
50%	-33%	0%	0%	0%	0%	0%	-20%	0%	44%	-5%	-3%	0%
60%	-41%	0%	0%	0%	0%	0%	-27%	0%	25%	-13%	4%	0%
70%	-50%	0%	0%	0%	0%	0%	-39%	22%	29%	-25%	19%	-4%
80%	-53%	0%	0%	0%	0%	0%	-49%	37%	10%	-14%	21%	-1%
90%	-64%	2%	0%	0%	0%	0%	-69%	56%	-7%	-75%	-32%	10%
Long Term												
Full Simulation Period ^b	-31%	1%	0%	0%	0%	-2%	-17%	3%	8%	1%	5%	-1%
Water Year Types^c												
Wet (23%)	-32%	0%	0%	0%	0%	-3%	-10%	0%	16%	4%	1%	2%
Above Normal (24%)	-22%	1%	0%	0%	0%	0%	-8%	0%	5%	4%	2%	2%
Below Normal (10%)	-35%	0%	0%	0%	0%	-5%	-26%	4%	10%	-13%	4%	2%
Dry (16%)	-31%	1%	0%	0%	2%	0%	-22%	10%	0%	-11%	-2%	-3%
Critical (27%)	-31%	2%	0%	0%	0%	0%	-35%	30%	0%	13%	21%	-6%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.21.3 New Melones Large Mouth Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	61	34	81
20%	100	100	100	100	100	100	100	100	100	43	30	64
30%	100	100	100	100	100	100	100	100	100	31	26	60
40%	100	100	100	100	100	100	100	100	100	27	24	56
50%	100	100	100	100	100	100	100	100	68	24	21	55
60%	100	100	100	100	100	100	98	100	51	21	18	49
70%	100	100	100	100	100	100	81	33	32	17	14	45
80%	91	100	100	100	100	100	52	21	25	12	10	39
90%	80	98	100	100	100	100	40	9	16	5	5	31
Long Term												
Full Simulation Period ^b	95	98	100	100	96	97	82	69	64	29	22	54
Water Year Types^c												
Wet (23%)	98	100	100	100	96	97	92	98	82	45	24	51
Above Normal (24%)	95	98	100	100	100	100	95	100	69	25	20	59
Below Normal (10%)	93	100	100	100	98	100	79	63	55	25	19	56
Dry (16%)	91	98	100	100	95	98	84	46	54	15	16	51
Critical (27%)	93	96	100	100	94	87	44	19	43	24	30	61

Alternative 3

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	43	78
20%	100	100	100	100	100	100	100	100	100	57	37	69
30%	100	100	100	100	100	100	100	100	100	43	29	61
40%	100	100	100	100	100	100	100	100	100	31	27	56
50%	100	100	100	100	100	100	97	100	100	24	23	55
60%	100	100	100	100	100	100	75	92	55	21	20	48
70%	100	100	100	100	100	100	57	44	35	18	18	42
80%	94	100	100	100	100	100	43	21	28	11	11	31
90%	84	100	100	100	100	100	23	0	14	0	0	23
Long Term												
Full Simulation Period ^b	95	99	99	100	99	96	73	70	67	35	24	51
Water Year Types^c												
Wet (23%)	99	100	100	100	96	98	92	91	77	66	30	53
Above Normal (24%)	98	99	100	100	100	100	94	100	90	34	22	58
Below Normal (10%)	96	100	91	100	100	100	62	73	64	23	18	56
Dry (16%)	89	100	100	100	100	98	68	46	59	16	20	42
Critical (27%)	94	97	100	100	100	83	30	30	40	15	25	50

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Percentage (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%	64%	27%	-3%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	34%	22%	8%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	39%	14%	3%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%	13%	0%
50%	0%	0%	0%	0%	0%	0%	-3%	0%	47%	1%	9%	0%
60%	0%	0%	0%	0%	0%	0%	-23%	-8%	8%	-2%	11%	-3%
70%	0%	0%	0%	0%	0%	0%	-29%	34%	8%	4%	32%	-6%
80%	3%	0%	0%	0%	0%	0%	-18%	-4%	11%	-2%	9%	-19%
90%	5%	2%	0%	0%	0%	0%	-43%	-96%	-14%	-100%	-99%	-24%
Long Term												
Full Simulation Period ^b	0%	1%	-1%	0%	3%	0%	-10%	1%	6%	22%	11%	-6%
Water Year Types^c												
Wet (23%)	0%	0%	0%	0%	0%	0%	0%	-7%	-6%	45%	25%	5%
Above Normal (24%)	3%	1%	0%	0%	0%	0%	-1%	0%	31%	38%	10%	-1%
Below Normal (10%)	3%	0%	-9%	0%	2%	0%	-21%	15%	15%	-10%	-2%	0%
Dry (16%)	-3%	2%	0%	0%	5%	0%	-20%	1%	8%	2%	21%	-17%
Critical (27%)	1%	1%	0%	0%	7%	-4%	-31%	56%	-5%	-37%	-16%	-18%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.21.4 New Melones Large Mouth Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	61	34	81
20%	100	100	100	100	100	100	100	100	100	43	30	64
30%	100	100	100	100	100	100	100	100	100	31	26	60
40%	100	100	100	100	100	100	100	100	100	27	24	56
50%	100	100	100	100	100	100	100	100	68	24	21	55
60%	100	100	100	100	100	100	98	100	51	21	18	49
70%	100	100	100	100	100	100	81	33	32	17	14	45
80%	91	100	100	100	100	100	52	21	25	12	10	39
90%	80	98	100	100	100	100	40	9	16	5	5	31
Long Term												
Full Simulation Period ^b	95	98	100	100	96	97	82	69	64	29	22	54
Water Year Types^c												
Wet (23%)	98	100	100	100	96	97	92	98	82	45	24	51
Above Normal (24%)	95	98	100	100	100	100	95	100	69	25	20	59
Below Normal (10%)	93	100	100	100	98	100	79	63	55	25	19	56
Dry (16%)	91	98	100	100	95	98	84	46	54	15	16	51
Critical (27%)	93	96	100	100	94	87	44	19	43	24	30	61

Alternative 5

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	75	36	98
20%	100	100	100	100	100	100	100	100	100	42	24	62
30%	88	100	100	100	100	100	100	100	100	30	22	57
40%	75	100	100	100	100	100	100	100	100	23	20	55
50%	69	100	100	100	100	100	72	100	100	20	19	50
60%	57	100	100	100	100	100	43	60	79	16	16	44
70%	51	100	100	100	100	100	24	29	43	12	11	39
80%	46	100	100	100	100	100	10	1	25	5	5	35
90%	35	100	100	100	100	95	0	0	7	0	0	13
Long Term												
Full Simulation Period ^b	67	100	100	100	98	95	60	64	70	28	21	50
Water Year Types^c												
Wet (23%)	71	100	100	100	96	95	87	93	97	41	19	47
Above Normal (24%)	73	99	100	100	100	100	79	94	61	21	17	53
Below Normal (10%)	58	100	100	100	98	95	50	58	59	18	14	44
Dry (16%)	58	99	100	100	100	98	45	37	52	10	13	45
Critical (27%)	73	100	100	100	99	85	14	19	60	44	50	67

Alternative 5 minus Second Basis of Comparison

Statistic	Monthly Percentage (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%	22%	5%	21%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-20%	-3%
30%	-12%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-15%	-4%
40%	-25%	0%	0%	0%	0%	0%	0%	0%	0%	-13%	-17%	-2%
50%	-31%	0%	0%	0%	0%	0%	-28%	0%	47%	-17%	-12%	-9%
60%	-43%	0%	0%	0%	0%	0%	-56%	-40%	56%	-24%	-8%	-11%
70%	-49%	0%	0%	0%	0%	0%	-70%	-11%	33%	-30%	-18%	-13%
80%	-50%	0%	0%	0%	0%	0%	-81%	-94%	0%	-61%	-46%	-9%
90%	-57%	2%	0%	0%	0%	-5%	-100%	-100%	-56%	-98%	-99%	-58%
Long Term												
Full Simulation Period ^b	-29%	1%	0%	0%	2%	-2%	-27%	-8%	9%	-5%	-2%	-8%
Water Year Types^c												
Wet (23%)	-28%	0%	0%	0%	0%	-3%	-5%	-5%	19%	-9%	-19%	-8%
Above Normal (24%)	-23%	1%	0%	0%	0%	0%	-17%	-6%	-12%	-16%	-14%	-10%
Below Normal (10%)	-38%	0%	0%	0%	0%	-5%	-37%	-8%	6%	-29%	-26%	-22%
Dry (16%)	-36%	1%	0%	0%	5%	0%	-47%	-19%	-3%	-35%	-23%	-11%
Critical (27%)	-21%	5%	0%	0%	5%	-1%	-69%	-1%	40%	82%	66%	9%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.3.22 New Melones Small Mouth Bass Nest Survival Percentage

Table 5C.3.3.22.1 New Melones Small Mouth Bass Nest Survival Percentage, Monthly Percentage

No Action Alternative

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	56	32	67
20%	84	100	100	100	100	100	100	100	100	42	26	54
30%	71	100	100	100	100	100	100	100	100	27	22	50
40%	62	100	100	100	100	100	100	100	100	22	20	48
50%	57	100	100	100	100	100	67	100	86	20	18	46
60%	50	100	100	100	100	100	60	91	53	16	17	42
70%	43	100	100	100	100	100	42	34	35	12	15	37
80%	37	100	100	100	100	100	23	25	24	9	11	33
90%	25	100	100	100	100	85	12	13	14	2	4	29
Long Term												
Full Simulation Period ^b	58	98	100	100	96	94	65	70	66	26	21	47
Water Year Types^c												
Wet (23%)	59	100	100	100	96	93	81	97	93	42	21	43
Above Normal (24%)	64	98	100	100	100	100	86	99	68	22	18	52
Below Normal (10%)	54	100	100	100	97	94	55	63	59	19	17	50
Dry (16%)	55	97	100	100	97	98	59	48	50	12	15	43
Critical (27%)	58	95	100	99	92	82	26	23	40	25	36	53

Alternative 1

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	51	30	68
20%	100	100	100	100	100	100	100	100	100	36	26	54
30%	100	100	100	100	100	100	100	100	100	26	22	50
40%	100	100	100	100	100	100	100	100	100	23	21	48
50%	100	100	100	100	100	100	100	100	57	21	19	46
60%	92	100	100	100	100	100	82	96	43	18	16	42
70%	87	100	100	100	100	100	68	28	28	15	12	38
80%	76	91	100	100	100	100	44	19	22	11	9	33
90%	67	82	100	100	100	100	35	8	14	5	6	26
Long Term												
Full Simulation Period ^b	89	95	100	100	96	96	77	68	61	26	19	47
Water Year Types^c												
Wet (23%)	93	100	100	100	96	97	88	98	79	41	21	43
Above Normal (24%)	91	95	100	100	100	100	94	100	65	22	18	51
Below Normal (10%)	84	98	100	100	97	100	73	61	53	22	17	49
Dry (16%)	84	92	100	100	95	97	78	44	50	14	15	44
Critical (27%)	92	90	100	99	92	82	39	18	40	22	29	56

Alternative 1 minus No Action Alternative

Statistic	Monthly Percentage (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%	-8%	-9%	1%
20%	19%	0%	0%	0%	0%	0%	0%	0%	0%	-13%	1%	0%
30%	42%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	3%	1%
40%	61%	0%	0%	0%	0%	0%	0%	0%	0%	5%	5%	0%
50%	76%	0%	0%	0%	0%	0%	50%	0%	-34%	5%	3%	0%
60%	84%	0%	0%	0%	0%	0%	37%	6%	-20%	14%	-4%	0%
70%	104%	0%	0%	0%	0%	0%	63%	-18%	-22%	30%	-15%	4%
80%	109%	-9%	0%	0%	0%	0%	90%	-26%	-9%	14%	-15%	1%
90%	171%	-18%	0%	0%	0%	18%	196%	-33%	7%	136%	34%	-9%
Long Term												
Full Simulation Period ^b	54%	-3%	0%	0%	0%	2%	20%	-3%	-8%	-1%	-5%	1%
Water Year Types^c												
Wet (23%)	59%	0%	0%	0%	0%	4%	9%	0%	-15%	-3%	0%	-1%
Above Normal (24%)	41%	-2%	0%	0%	0%	0%	10%	0%	-4%	-4%	-2%	-2%
Below Normal (10%)	57%	-2%	0%	0%	0%	6%	34%	-3%	-10%	14%	-3%	-2%
Dry (16%)	52%	-5%	0%	0%	-2%	-1%	32%	-8%	0%	11%	2%	3%
Critical (27%)	58%	-5%	0%	0%	0%	0%	51%	-22%	1%	-11%	-19%	6%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.22.2 New Melones Small Mouth Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Probability of Exceedance^a													
10%	100	100	100	100	100	100	100	100	100	100	51	30	68
20%	100	100	100	100	100	100	100	100	100	100	36	26	54
30%	100	100	100	100	100	100	100	100	100	100	26	22	50
40%	100	100	100	100	100	100	100	100	100	100	23	21	48
50%	100	100	100	100	100	100	100	100	100	57	21	19	46
60%	92	100	100	100	100	100	82	96	43	18	16	42	
70%	87	100	100	100	100	100	68	28	28	15	12	38	
80%	76	91	100	100	100	100	44	19	22	11	9	33	
90%	67	82	100	100	100	100	35	8	14	5	6	26	
Long Term													
Full Simulation Period ^b	89	95	100	100	96	96	77	68	61	26	19	47	
Water Year Types^c													
Wet (23%)	93	100	100	100	96	97	88	98	79	41	21	43	
Above Normal (24%)	91	95	100	100	100	100	94	100	65	22	18	51	
Below Normal (10%)	84	98	100	100	97	100	73	61	53	22	17	49	
Dry (16%)	84	92	100	100	95	97	78	44	50	14	15	44	
Critical (27%)	92	90	100	99	92	82	39	18	40	22	29	56	

No Action Alternative

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	56	32	67
20%	84	100	100	100	100	100	100	100	100	42	26	54
30%	71	100	100	100	100	100	100	100	100	27	22	50
40%	62	100	100	100	100	100	100	100	100	22	20	48
50%	57	100	100	100	100	100	67	100	86	20	18	46
60%	50	100	100	100	100	100	60	91	53	16	17	42
70%	43	100	100	100	100	100	42	34	35	12	15	37
80%	37	100	100	100	100	100	23	25	24	9	11	33
90%	25	100	100	100	100	85	12	13	14	2	4	29
Long Term												
Full Simulation Period ^b	58	98	100	100	96	94	65	70	66	26	21	47
Water Year Types^c												
Wet (23%)	59	100	100	100	96	93	81	97	93	42	21	43
Above Normal (24%)	64	98	100	100	100	100	86	99	68	22	18	52
Below Normal (10%)	54	100	100	100	97	94	55	63	59	19	17	50
Dry (16%)	55	97	100	100	97	98	59	48	50	12	15	43
Critical (27%)	58	95	100	99	92	82	26	23	40	25	36	53

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Percentage (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%	8%	10%	-1%
20%	-16%	0%	0%	0%	0%	0%	0%	0%	0%	16%	-1%	0%
30%	-29%	0%	0%	0%	0%	0%	0%	0%	0%	2%	-3%	-1%
40%	-38%	0%	0%	0%	0%	0%	0%	0%	0%	-5%	-5%	0%
50%	-43%	0%	0%	0%	0%	0%	-33%	0%	51%	-5%	-3%	0%
60%	-46%	0%	0%	0%	0%	0%	-27%	-5%	25%	-12%	4%	0%
70%	-51%	0%	0%	0%	0%	0%	-38%	21%	27%	-23%	17%	-3%
80%	-52%	10%	0%	0%	0%	0%	-47%	34%	10%	-12%	18%	-1%
90%	-63%	22%	0%	0%	0%	-15%	-66%	48%	-7%	-58%	-25%	10%
Long Term												
Full Simulation Period ^b	-35%	3%	0%	0%	0%	-2%	-17%	3%	9%	1%	6%	-1%
Water Year Types^c												
Wet (23%)	-37%	0%	0%	0%	0%	-4%	-9%	0%	17%	3%	0%	1%
Above Normal (24%)	-29%	2%	0%	0%	0%	0%	-9%	0%	4%	4%	2%	2%
Below Normal (10%)	-37%	2%	0%	0%	0%	-6%	-25%	3%	11%	-12%	3%	2%
Dry (16%)	-34%	5%	0%	0%	2%	1%	-24%	8%	0%	-10%	-2%	-3%
Critical (27%)	-37%	5%	0%	0%	0%	0%	-34%	28%	-1%	13%	24%	-6%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.22.3 New Melones Small Mouth Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Probability of Exceedance^a													
10%	100	100	100	100	100	100	100	100	100	100	51	30	68
20%	100	100	100	100	100	100	100	100	100	100	36	26	54
30%	100	100	100	100	100	100	100	100	100	100	26	22	50
40%	100	100	100	100	100	100	100	100	100	100	23	21	48
50%	100	100	100	100	100	100	100	100	100	57	21	19	46
60%	92	100	100	100	100	100	82	96	43	18	16	42	
70%	87	100	100	100	100	100	68	28	28	15	12	38	
80%	76	91	100	100	100	100	44	19	22	11	9	33	
90%	67	82	100	100	100	100	35	8	14	5	6	26	
Long Term													
Full Simulation Period ^b	89	95	100	100	96	96	77	68	61	26	19	47	
Water Year Types^c													
Wet (23%)	93	100	100	100	96	97	88	98	79	41	21	43	
Above Normal (24%)	91	95	100	100	100	100	94	100	65	22	18	51	
Below Normal (10%)	84	98	100	100	97	100	73	61	53	22	17	49	
Dry (16%)	84	92	100	100	95	97	78	44	50	14	15	44	
Critical (27%)	92	90	100	99	92	82	39	18	40	22	29	56	

Alternative 3

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	37	66
20%	100	100	100	100	100	100	100	100	100	48	31	58
30%	100	100	100	100	100	100	100	100	100	36	25	52
40%	100	100	100	100	100	100	100	100	100	27	23	48
50%	99	100	100	100	100	100	81	100	100	21	20	46
60%	97	100	100	100	100	100	63	81	46	18	18	41
70%	84	100	100	100	100	100	48	38	30	16	16	36
80%	79	100	100	100	100	100	36	18	24	11	10	27
90%	70	88	100	100	100	100	20	0	13	0	0	20
Long Term												
Full Simulation Period ^b	90	98	99	100	99	96	70	69	65	32	21	44
Water Year Types^c												
Wet (23%)	94	100	100	100	96	98	89	90	77	62	26	45
Above Normal (24%)	93	98	100	100	100	100	93	100	88	30	19	50
Below Normal (10%)	90	100	91	100	100	100	57	69	61	20	16	49
Dry (16%)	81	96	100	100	100	97	62	44	54	14	18	37
Critical (27%)	90	92	100	100	99	79	27	27	37	13	23	44

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Percentage (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%	94%	26%	-3%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	21%	7%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	37%	13%	2%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	12%	0%
50%	-1%	0%	0%	0%	0%	0%	-19%	0%	74%	1%	9%	0%
60%	6%	0%	0%	0%	0%	0%	-23%	-16%	8%	-2%	11%	-3%
70%	-4%	0%	0%	0%	0%	0%	-29%	32%	8%	3%	29%	-6%
80%	3%	10%	0%	0%	0%	0%	-18%	-4%	11%	-2%	8%	-18%
90%	5%	8%	0%	0%	0%	0%	-42%	-95%	-12%	-91%	-97%	-23%
Long Term												
Full Simulation Period ^b	1%	2%	-1%	0%	3%	0%	-10%	1%	7%	25%	8%	-6%
Water Year Types^c												
Wet (23%)	1%	0%	0%	0%	0%	0%	1%	-7%	-3%	53%	24%	4%
Above Normal (24%)	3%	3%	0%	0%	0%	0%	-2%	0%	35%	37%	8%	-1%
Below Normal (10%)	7%	2%	-9%	0%	3%	0%	-23%	15%	16%	-10%	-3%	0%
Dry (16%)	-4%	4%	0%	0%	5%	0%	-20%	0%	7%	1%	19%	-16%
Critical (27%)	-2%	3%	0%	1%	8%	-4%	-30%	51%	-8%	-40%	-19%	-22%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.22.4 New Melones Small Mouth Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Probability of Exceedance^a													
10%	100	100	100	100	100	100	100	100	100	100	51	30	68
20%	100	100	100	100	100	100	100	100	100	100	36	26	54
30%	100	100	100	100	100	100	100	100	100	100	26	22	50
40%	100	100	100	100	100	100	100	100	100	100	23	21	48
50%	100	100	100	100	100	100	100	100	100	57	21	19	46
60%	92	100	100	100	100	100	82	96	43	18	16	42	
70%	87	100	100	100	100	100	68	28	28	15	12	38	
80%	76	91	100	100	100	100	44	19	22	11	9	33	
90%	67	82	100	100	100	100	35	8	14	5	6	26	
Long Term													
Full Simulation Period ^b	89	95	100	100	96	96	77	68	61	26	19	47	
Water Year Types^c													
Wet (23%)	93	100	100	100	96	97	88	98	79	41	21	43	
Above Normal (24%)	91	95	100	100	100	100	94	100	65	22	18	51	
Below Normal (10%)	84	98	100	100	97	100	73	61	53	22	17	49	
Dry (16%)	84	92	100	100	95	97	78	44	50	14	15	44	
Critical (27%)	92	90	100	99	92	82	39	18	40	22	29	56	

Alternative 5

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	63	31	88
20%	87	100	100	100	100	100	100	100	100	36	21	53
30%	74	100	100	100	100	100	100	100	100	26	19	48
40%	63	100	100	100	100	100	100	100	100	20	17	47
50%	58	100	100	100	100	100	60	100	100	18	17	42
60%	48	100	100	100	100	100	37	51	66	14	15	37
70%	43	100	100	100	100	100	21	25	37	11	10	34
80%	39	100	100	100	100	100	9	2	22	5	6	30
90%	30	100	100	100	100	80	0	0	7	0	1	12
Long Term												
Full Simulation Period ^b	59	99	100	100	98	94	57	62	67	25	20	44
Water Year Types^c												
Wet (23%)	61	100	100	100	96	95	84	90	94	36	17	40
Above Normal (24%)	65	98	100	100	100	100	76	93	58	18	15	46
Below Normal (10%)	51	100	100	100	97	94	47	56	57	16	12	39
Dry (16%)	52	97	100	100	100	97	43	36	49	9	12	39
Critical (27%)	68	98	100	100	98	81	13	19	58	43	50	63

Alternative 5 minus Second Basis of Comparison

Statistic	Monthly Percentage (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%	22%	5%	29%
20%	-13%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-20%	-3%
30%	-26%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-15%	-4%
40%	-37%	0%	0%	0%	0%	0%	0%	0%	0%	-12%	-16%	-2%
50%	-42%	0%	0%	0%	0%	0%	-40%	0%	74%	-16%	-11%	-8%
60%	-47%	0%	0%	0%	0%	0%	-56%	-48%	54%	-22%	-7%	-11%
70%	-51%	0%	0%	0%	0%	0%	-69%	-11%	32%	-28%	-17%	-12%
80%	-49%	10%	0%	0%	0%	0%	-79%	-88%	0%	-54%	-40%	-9%
90%	-56%	22%	0%	0%	0%	-20%	-100%	-100%	-51%	-96%	-78%	-55%
Long Term												
Full Simulation Period ^b	-34%	3%	0%	0%	2%	-2%	-26%	-9%	11%	-3%	0%	-7%
Water Year Types^c												
Wet (23%)	-34%	0%	0%	0%	0%	-3%	-5%	-7%	19%	-10%	-19%	-7%
Above Normal (24%)	-28%	2%	0%	0%	0%	0%	-19%	-7%	-11%	-16%	-13%	-9%
Below Normal (10%)	-39%	2%	0%	0%	0%	-6%	-37%	-7%	8%	-28%	-25%	-21%
Dry (16%)	-39%	5%	0%	0%	5%	0%	-45%	-19%	-3%	-34%	-22%	-11%
Critical (27%)	-26%	10%	0%	1%	6%	-1%	-67%	5%	45%	92%	72%	12%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.3.23 New Melones Spotted Bass Nest Survival Percentage

Table 5C.3.3.23.1 New Melones Spotted Bass Nest Survival Percentage, Monthly Percentage

No Action Alternative

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	100	100
20%	100	100	100	100	100	100	100	100	100	100	100	91
30%	100	100	100	100	100	100	100	100	100	100	93	85
40%	100	100	100	100	100	100	100	100	100	100	85	81
50%	100	100	100	100	100	100	100	100	100	100	81	78
60%	100	100	100	100	100	100	100	100	100	100	75	76
70%	100	100	100	100	100	100	100	100	100	100	68	73
80%	100	100	100	100	100	100	100	87	91	88	64	66
90%	90	100	100	100	100	100	100	68	69	71	51	55
Long Term												
Full Simulation Period ^b	94	100	100	100	99	99	90	91	91	91	77	76
Water Year Types^c												
Wet (23%)	88	100	100	100	98	96	88	100	96	84	79	96
Above Normal (24%)	99	100	100	100	100	100	98	100	99	77	78	100
Below Normal (10%)	91	100	100	100	100	100	90	90	94	80	77	99
Dry (16%)	97	100	100	100	100	100	97	92	89	69	72	99
Critical (27%)	99	100	100	100	100	100	73	62	72	75	75	94

Alternative 1

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	98	100
20%	100	100	100	100	100	100	100	100	100	100	92	100
30%	100	100	100	100	100	100	100	100	100	100	93	86
40%	100	100	100	100	100	100	100	100	100	100	87	83
50%	100	100	100	100	100	100	100	100	100	100	83	79
60%	100	100	100	100	100	100	100	100	100	100	79	75
70%	100	100	100	100	100	100	100	96	95	74	69	100
80%	100	100	100	100	100	100	100	80	85	66	63	100
90%	100	100	100	100	100	100	100	62	72	57	57	93
Long Term												
Full Simulation Period ^b	100	100	100	100	98	100	98	89	92	80	77	98
Water Year Types^c												
Wet (23%)	100	100	100	100	97	100	100	100	99	93	83	96
Above Normal (24%)	100	100	100	100	100	100	100	100	96	78	77	100
Below Normal (10%)	100	100	100	100	100	100	100	90	92	84	76	99
Dry (16%)	100	100	100	100	97	100	100	87	90	71	73	99
Critical (27%)	98	100	100	100	100	100	87	56	78	62	71	96

Alternative 1 minus No Action Alternative

Statistic	Monthly Percentage (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%	-2%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	-1%	0%
70%	0%	0%	0%	0%	0%	0%	0%	-4%	-5%	9%	-5%	0%
80%	0%	0%	0%	0%	0%	0%	15%	-12%	-4%	4%	-4%	0%
90%	11%	0%	0%	0%	0%	0%	48%	-10%	2%	10%	4%	-5%
Long Term												
Full Simulation Period ^b	6%	0%	0%	0%	-1%	1%	9%	-2%	1%	3%	1%	0%
Water Year Types^c												
Wet (23%)	13%	0%	0%	0%	-1%	4%	13%	0%	3%	11%	6%	0%
Above Normal (24%)	1%	0%	0%	0%	0%	0%	2%	0%	-3%	1%	-1%	0%
Below Normal (10%)	10%	0%	0%	0%	0%	0%	11%	-1%	-2%	5%	-1%	0%
Dry (16%)	3%	0%	0%	0%	-3%	0%	3%	-5%	1%	3%	1%	0%
Critical (27%)	-1%	0%	0%	0%	0%	0%	20%	-10%	9%	-17%	-4%	2%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.23.2 New Melones Spotted Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	98	100
20%	100	100	100	100	100	100	100	100	100	100	92	100
30%	100	100	100	100	100	100	100	100	100	93	86	100
40%	100	100	100	100	100	100	100	100	100	87	83	100
50%	100	100	100	100	100	100	100	100	100	83	79	100
60%	100	100	100	100	100	100	100	100	100	79	75	100
70%	100	100	100	100	100	100	100	96	95	74	69	100
80%	100	100	100	100	100	100	100	80	85	66	63	100
90%	100	100	100	100	100	100	100	62	72	57	57	93
Long Term												
Full Simulation Period ^b	100	100	100	100	98	100	98	89	92	80	77	98
Water Year Types^c												
Wet (23%)	100	100	100	100	97	100	100	100	99	93	83	96
Above Normal (24%)	100	100	100	100	100	100	100	100	96	78	77	100
Below Normal (10%)	100	100	100	100	100	100	100	90	92	84	76	99
Dry (16%)	100	100	100	100	97	100	100	87	90	71	73	99
Critical (27%)	98	100	100	100	100	100	87	56	78	62	71	96

No Action Alternative

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	100	100
20%	100	100	100	100	100	100	100	100	100	100	91	100
30%	100	100	100	100	100	100	100	100	100	93	85	100
40%	100	100	100	100	100	100	100	100	100	85	81	100
50%	100	100	100	100	100	100	100	100	100	81	78	100
60%	100	100	100	100	100	100	100	100	100	75	76	100
70%	100	100	100	100	100	100	100	100	100	68	73	100
80%	100	100	100	100	100	100	87	91	88	64	66	100
90%	90	100	100	100	100	100	68	69	71	51	55	97
Long Term												
Full Simulation Period ^b	94	100	100	100	99	99	90	91	91	77	76	97
Water Year Types^c												
Wet (23%)	88	100	100	100	98	96	88	100	96	84	79	96
Above Normal (24%)	99	100	100	100	100	100	98	100	99	77	78	100
Below Normal (10%)	91	100	100	100	100	100	90	90	94	80	77	99
Dry (16%)	97	100	100	100	100	100	97	92	89	69	72	99
Critical (27%)	99	100	100	100	100	100	73	62	72	75	75	94

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Percentage (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%	2%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-2%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-5%	2%	0%
70%	0%	0%	0%	0%	0%	0%	0%	4%	5%	-8%	5%	0%
80%	0%	0%	0%	0%	0%	0%	-13%	14%	4%	-3%	5%	0%
90%	-10%	0%	0%	0%	0%	0%	-32%	11%	-2%	-9%	-4%	5%
Long Term												
Full Simulation Period ^b	-6%	0%	0%	0%	1%	-1%	-8%	2%	-1%	-3%	-1%	0%
Water Year Types^c												
Wet (23%)	-12%	0%	0%	0%	1%	-4%	-12%	0%	-3%	-10%	-5%	0%
Above Normal (24%)	-1%	0%	0%	0%	0%	0%	-2%	0%	3%	-1%	1%	0%
Below Normal (10%)	-9%	0%	0%	0%	0%	0%	-10%	1%	2%	-5%	1%	0%
Dry (16%)	-3%	0%	0%	0%	3%	0%	-3%	5%	-1%	-3%	-1%	0%
Critical (27%)	1%	0%	0%	0%	0%	0%	-17%	11%	-8%	21%	5%	-2%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.23.3 New Melones Spotted Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	98	100
20%	100	100	100	100	100	100	100	100	100	100	92	100
30%	100	100	100	100	100	100	100	100	100	93	86	100
40%	100	100	100	100	100	100	100	100	100	87	83	100
50%	100	100	100	100	100	100	100	100	100	83	79	100
60%	100	100	100	100	100	100	100	100	100	79	75	100
70%	100	100	100	100	100	100	100	96	95	74	69	100
80%	100	100	100	100	100	100	100	80	85	66	63	100
90%	100	100	100	100	100	100	100	62	72	57	57	93
Long Term												
Full Simulation Period ^b	100	100	100	100	98	100	98	89	92	80	77	98
Water Year Types^c												
Wet (23%)	100	100	100	100	97	100	100	100	99	93	83	96
Above Normal (24%)	100	100	100	100	100	100	100	100	96	78	77	100
Below Normal (10%)	100	100	100	100	100	100	100	90	92	84	76	99
Dry (16%)	100	100	100	100	97	100	100	87	90	71	73	99
Critical (27%)	98	100	100	100	100	100	87	56	78	62	71	96

Alternative 3

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	100	100
20%	100	100	100	100	100	100	100	100	100	100	100	100
30%	100	100	100	100	100	100	100	100	100	100	91	100
40%	100	100	100	100	100	100	100	100	100	94	87	100
50%	100	100	100	100	100	100	100	100	100	83	82	100
60%	100	100	100	100	100	100	100	100	100	79	78	100
70%	100	100	100	100	100	100	100	100	98	75	75	100
80%	100	100	100	100	100	100	100	79	88	66	65	94
90%	100	100	100	100	100	100	82	38	69	48	38	82
Long Term												
Full Simulation Period ^b	100	100	99	100	99	99	94	86	88	78	75	91
Water Year Types^c												
Wet (23%)	100	100	100	100	98	100	100	92	77	98	87	98
Above Normal (24%)	100	100	100	100	100	100	100	100	99	80	68	92
Below Normal (10%)	100	100	91	100	100	100	90	95	97	69	66	98
Dry (16%)	100	100	100	100	100	100	93	73	93	67	74	79
Critical (27%)	100	100	100	100	100	92	79	71	83	63	70	89

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Percentage (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%	2%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	6%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	5%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	4%	0%
70%	0%	0%	0%	0%	0%	0%	0%	4%	3%	1%	9%	0%
80%	0%	0%	0%	0%	0%	0%	0%	-1%	5%	0%	2%	-6%
90%	0%	0%	0%	0%	0%	0%	-18%	-39%	-4%	-14%	-34%	-11%
Long Term												
Full Simulation Period ^b	0%	0%	-1%	0%	1%	-1%	-4%	-3%	-5%	-2%	-2%	-7%
Water Year Types^c												
Wet (23%)	0%	0%	0%	0%	1%	0%	0%	-8%	-22%	5%	5%	3%
Above Normal (24%)	0%	0%	0%	0%	0%	0%	0%	0%	3%	3%	-13%	-8%
Below Normal (10%)	0%	0%	-9%	0%	0%	0%	-10%	6%	5%	-18%	-12%	-1%
Dry (16%)	0%	0%	0%	0%	3%	0%	-7%	-15%	4%	-6%	2%	-21%
Critical (27%)	2%	0%	0%	0%	0%	-8%	-10%	26%	5%	1%	-3%	-7%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.23.4 New Melones Spotted Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	98	100
20%	100	100	100	100	100	100	100	100	100	100	92	100
30%	100	100	100	100	100	100	100	100	100	93	86	100
40%	100	100	100	100	100	100	100	100	100	87	83	100
50%	100	100	100	100	100	100	100	100	100	83	79	100
60%	100	100	100	100	100	100	100	100	100	79	75	100
70%	100	100	100	100	100	100	100	96	95	74	69	100
80%	100	100	100	100	100	100	100	80	85	66	63	100
90%	100	100	100	100	100	100	100	62	72	57	57	93
Long Term												
Full Simulation Period ^b	100	100	100	100	98	100	98	89	92	80	77	98
Water Year Types^c												
Wet (23%)	100	100	100	100	97	100	100	100	99	93	83	96
Above Normal (24%)	100	100	100	100	100	100	100	100	96	78	77	100
Below Normal (10%)	100	100	100	100	100	100	100	90	92	84	76	99
Dry (16%)	100	100	100	100	97	100	100	87	90	71	73	99
Critical (27%)	98	100	100	100	100	100	87	56	78	62	71	96

Alternative 5

Statistic	Monthly Percentage (Percent Survival)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	100	100	100	100	100	100	100	100	99	100
20%	100	100	100	100	100	100	100	100	100	100	83	100
30%	100	100	100	100	100	100	100	100	100	92	80	100
40%	100	100	100	100	100	100	100	100	100	82	77	100
50%	100	100	100	100	100	100	100	100	100	78	76	100
60%	100	100	100	100	100	100	100	100	100	72	73	100
70%	100	100	100	100	100	100	84	91	100	67	65	100
80%	100	100	100	100	100	100	63	52	84	56	57	99
90%	98	100	100	100	100	100	27	9	60	33	50	68
Long Term												
Full Simulation Period ^b	96	100	100	100	99	100	81	80	88	72	71	91
Water Year Types^c												
Wet (23%)	99	100	100	100	97	99	99	100	100	90	76	94
Above Normal (24%)	99	100	100	100	100	100	90	100	76	66	74	92
Below Normal (10%)	87	100	100	100	100	100	78	74	92	65	65	79
Dry (16%)	93	100	100	100	100	100	78	71	85	56	59	93
Critical (27%)	97	100	100	100	100	100	38	38	80	73	80	92

Alternative 5 minus Second Basis of Comparison

Statistic	Monthly Percentage (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%	2%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-9%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-7%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-6%	-7%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-7%	-4%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-9%	-3%	0%
70%	0%	0%	0%	0%	0%	0%	-16%	-5%	5%	-10%	-5%	0%
80%	0%	0%	0%	0%	0%	0%	-37%	-35%	0%	-15%	-10%	-1%
90%	-2%	0%	0%	0%	0%	0%	-73%	-85%	-17%	-41%	-13%	-27%
Long Term												
Full Simulation Period ^b	-4%	0%	0%	0%	1%	0%	-18%	-10%	-4%	-9%	-8%	-7%
Water Year Types^c												
Wet (23%)	-1%	0%	0%	0%	-1%	-1%	-1%	0%	1%	-3%	-8%	-1%
Above Normal (24%)	-1%	0%	0%	0%	0%	0%	-10%	0%	-21%	-16%	-5%	-8%
Below Normal (10%)	-13%	0%	0%	0%	0%	0%	-22%	-18%	-1%	-22%	-15%	-20%
Dry (16%)	-7%	0%	0%	0%	3%	0%	-22%	-18%	-6%	-21%	-18%	-6%
Critical (27%)	-1%	0%	0%	0%	0%	0%	-57%	-31%	2%	18%	13%	-4%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.24 Temperature Threshold Exceedances

Species	Lifestage	River	Reach	Water Year Type	Month	Temperature Objective (Degree F)	Temperature Objective Reference ¹	No Action Alternative	Second Basis of Comparison (Alternative 1)	Alternative 3	Alternative 5	Alternative 1 minus No Action Alternative	No Action Alternative minus Second Basis of Comparison	Alternative 3 minus Second Basis of Comparison	Alternative 5 minus Second Basis of Comparison
Steelhead	Adult Migration	Stanislaus	Orange Blossom Bridge	All	October	56	NMFS BIOP 2009	57%	85%	87%	58%	28%	-28%	2%	-27%
Steelhead	Adult Migration	Stanislaus	Orange Blossom Bridge	All	November	56	NMFS BIOP 2009	33%	28%	24%	36%	-5%	5%	-4%	8%
Steelhead	Adult Migration	Stanislaus	Orange Blossom Bridge	All	December	56	NMFS BIOP 2009	0%	0%	0%	3%	0%	0%	0%	3%
Steelhead	Smoltification	Stanislaus	Knights Ferry (*Used Below Goodwin Dam)	All	January	52	NMFS BIOP 2009	0%	2%	2%	2%	2%	-2%	0%	0%
Steelhead	Smoltification	Stanislaus	Knights Ferry (*Used Below Goodwin Dam)	All	February	52	NMFS BIOP 2009	0%	2%	2%	0%	2%	-2%	0%	-2%
Steelhead	Smoltification	Stanislaus	Knights Ferry (*Used Below Goodwin Dam)	All	March	52	NMFS BIOP 2009	8%	9%	12%	8%	1%	-1%	3%	-1%
Steelhead	Smoltification	Stanislaus	Knights Ferry (*Used Below Goodwin Dam)	All	April	52	NMFS BIOP 2009	33%	31%	30%	37%	-2%	2%	-1%	6%
Steelhead	Smoltification	Stanislaus	Knights Ferry (*Used Below Goodwin Dam)	All	May	52	NMFS BIOP 2009	63%	66%	63%	68%	3%	-3%	-3%	2%
Steelhead	Smoltification	Stanislaus	Orange Blossom Bridge	All	January	57	NMFS BIOP 2009	0%	0%	0%	0%	0%	0%	0%	0%
Steelhead	Smoltification	Stanislaus	Orange Blossom Bridge	All	February	57	NMFS BIOP 2009	0%	0%	0%	0%	0%	0%	0%	0%
Steelhead	Smoltification	Stanislaus	Orange Blossom Bridge	All	March	57	NMFS BIOP 2009	0%	0%	0%	0%	0%	0%	0%	0%
Steelhead	Smoltification	Stanislaus	Orange Blossom Bridge	All	April	57	NMFS BIOP 2009	2%	8%	3%	0%	6%	-6%	-4%	-8%
Steelhead	Smoltification	Stanislaus	Orange Blossom Bridge	All	May	57	NMFS BIOP 2009	18%	10%	17%	8%	-8%	8%	7%	-3%
Steelhead	Spawning	Stanislaus	Orange Blossom Bridge	All	January	55	NMFS BIOP 2009	0%	0%	0%	0%	0%	0%	0%	0%
Steelhead	Spawning	Stanislaus	Orange Blossom Bridge	All	February	55	NMFS BIOP 2009	0%	0%	1%	0%	0%	0%	1%	0%
Steelhead	Spawning	Stanislaus	Orange Blossom Bridge	All	March	55	NMFS BIOP 2009	21%	16%	25%	21%	-5%	5%	8%	4%
Steelhead	Spawning	Stanislaus	Orange Blossom Bridge	All	April	55	NMFS BIOP 2009	16%	34%	17%	7%	17%	-17%	-16%	-26%
Steelhead	Spawning	Stanislaus	Orange Blossom Bridge	All	May	55	NMFS BIOP 2009	49%	43%	53%	40%	-5%	5%	10%	-3%
Steelhead	Rearing	Stanislaus	Orange Blossom Bridge	All	June	65	NMFS BIOP 2009	6%	2%	4%	6%	-3%	3%	2%	3%
Steelhead	Rearing	Stanislaus	Orange Blossom Bridge	All	July	65	NMFS BIOP 2009	16%	16%	19%	21%	-1%	1%	4%	6%
Steelhead	Rearing	Stanislaus	Orange Blossom Bridge	All	August	65	NMFS BIOP 2009	15%	13%	9%	21%	-2%	2%	-4%	8%
Steelhead	Rearing	Stanislaus	Orange Blossom Bridge	All	September	65	NMFS BIOP 2009	11%	10%	7%	18%	0%	0%	-3%	8%
Steelhead	Rearing	Stanislaus	Orange Blossom Bridge	All	October	65	NMFS BIOP 2009	7%	8%	4%	11%	1%	-1%	-4%	3%
Steelhead	Rearing	Stanislaus	Orange Blossom Bridge	All	November	65	NMFS BIOP 2009	0%	0%	0%	0%	0%	0%	0%	0%

¹See Appendix 9N, Section C for the full reference

Table 5C.3.3.25 CVP Annual Power Generation Summary

				No Action Alternative	Second Basis of Comparison (Alternative 1)	Alternative 3	Alternative 5	Alternative 1 vs. No Action Alternative (Percent Difference)	No Action Alternative vs. Second Basis of Comparison (Percent Difference)	Alternative 3 vs. Second Basis of Comparison (Percent Difference)	Alternative 5 vs. Second Basis of Comparison (Percent Difference)
CVP Generation Facilities											
Capacity	At load center	(MW)	Long Term	1,583	1,633	1,642	1,568	3%	-3%	1%	-4%
			Dry and Critical	1,203	1,277	1,291	1,173	6%	-6%	1%	-8%
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term	4,558	4,604	4,582	4,552	1%	-1%	0%	-1%
			Dry and Critical	2,696	2,773	2,798	2,684	3%	-3%	1%	-3%
CVP Pumping Facilities											
Energy Use	Total of all Facilities at load center	(GWh)	Long Term	1,113	1,289	1,238	1,110	16%	-14%	-4%	-14%
			Dry and Critical	699	773	715	699	11%	-10%	-8%	-10%
All CVP Facilities											
Net Generation	Total of all Facilities	(GWh)	Long Term	3,445	3,315	3,344	3,442	-4%	4%	1%	4%
			Dry and Critical	1,997	2,000	2,084	1,986	0%	0%	4%	-1%

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in text.

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1 **Appendix 5D**

2 **Municipal and Industrial Water**
3 **Demands and Supplies**

4 **5D.1 Introduction**

5 Most water supply agencies in California that serve more than 3,000 connections
6 or more than 3,000 acre-feet of water prepare Urban Water Management Plans
7 (UWMPs) for submittal to the California Department of Water Resources. The
8 UWMPs include water demand and water supply projections through at least
9 2030. The future water demands include assumptions for implementation of
10 water conservation measures to meet the statewide mandate to reduce municipal
11 and industrial (M&I) water demand by 20 percent by 2020.

12 Information from the UWMPs for Central Valley Project (CVP) and State Water
13 Project (SWP) water users was used as input information in the CWEST model
14 (see Appendix 19A, CWEST Model) to project M&I water supply economic
15 changes. For small water users that did not prepare a UWMP, information was
16 obtained from water master plans and integrated regional water management
17 plans. This information is summarized in the following sections of this appendix.
18 The tabular format is consistent for each water user and was established to be
19 consistent with the input files for the CWEST model; therefore, there are rows in
20 the tabular format that are not used for some M&I water users.

21 **5D.2 Central Valley Region**

22 This section includes summaries of water demand and water supply projections
23 for M&I users of CVP and SWP water supplies in the Central Valley Region,
24 including water rights users on the Sacramento and American rivers. The M&I
25 water users are generally organized geographically in this section from north to
26 south. See Tables 5D.1 through 5D.31.

1 **Table 5D.1 Bella Vista Water District (BVWD)**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	14,567	BVWD serves portions of Redding. Assumed growth rate from City of Redding <i>2010 Urban Water Management Plan</i> .
Water Sales to Others	–	–
Total Demand	14,567	–
Water Supplies for No Action Alternative (NAA)		
CVP Water Supplies	14,445	CVP Water Service Contract 24,578 acre-feet, includes 24,000 acre-feet (14-06-200-851A-LTR1) and 578 acre-feet assigned from Shasta County Water Agency initial CVP Water Service Contract (14-06-200-3464A-LTR1).
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	–	–
Groundwater	122	Assumed no increase in wells.
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	14,567	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	–	–

1 **Table 5D.2 Centerville Community Services District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	3,185	–
Water Sales to Others	–	–
Total Demand	3,185	–
Water Supplies for NAA		
CVP Water Supplies	3,185	CVP Water Exchange Contract 900 acre-feet (pre-1914 water right on Clear Creek) and CVP Water Service Contract 2,900 acre-feet, (14-06-200-3367A-LTR1).
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	–	–
Groundwater	–	–
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	3,185	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	–	–
Other Information	–	Sanitary Survey states that 25% of 35-mgd Water Treatment Plant is owned by Centerville Community Services District (Redding Area Water Suppliers. 2011. <i>Redding Area Watershed Sanitary Survey</i>).

2 Note:
3 mgd = million gallons per day

1 **Table 5D.3 City of Shasta Lake**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	2,455	City of Shasta Lake. 2014. 2010 Urban Water Management Plan, Administrative Draft. July.
Water Sales to Others	470	–
Total Demand	2,925	–
Water Supplies for NAA		
CVP Water Supplies	2,885	CVP Water Exchange Contract 900 acre-feet (pre-1914 water right on Clear Creek) and CVP Water Service Contract 2,900 acre-feet, (14-06-200-3367A-LTR1).
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	–	–
Groundwater	–	–
Recycled Wastewater	112	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	2,997	
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Other Information	–	Supplies do not include transfers not approved by Reclamation due to cold water pool issues: Anderson-Cottonwood Irrigation District 2,000 acre-feet, MCM Properties at 325 acre-feet. Future project would develop facilities that would allow these transfers and result in 2,325 acre-feet normal year and 2,093 acre-feet in 3rd multiple dry years per 2010 UWMP (with reference to support from Reclamation).
Total Potential Future Water Supplies	2,997	–

1 **Table 5D.4 Clear Creek Community Services District (CCCSD)**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	7,410	CCCSD serves areas near Redding. Assumed growth rate from City of Redding <i>2010 Urban Water Management Plan</i> .
Water Sales to Others	–	–
Total Demand	7,410	–
Water Supplies for NAA		
CVP Water Supplies	7,410	CVP Water Service Contract 15,300 acre-feet, (14-06-200-4894A-LTR1).
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	–	–
Groundwater	–	–
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	7,410	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	–	–
Other Information	–	Sanitary Survey states that 25% of 35-mgd Water Treatment Plant is owned by Centerville Community Services District (Redding Area Water Suppliers. 2011. <i>Redding Area Watershed Sanitary Survey</i>).

1 **Table 5D.5 City of Redding**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	27,852	City of Redding. 2012. <i>2010 Urban Water Management Plan</i> . July 17.
Water Sales to Others	–	–
Total Demand	27,852	–
Water Supplies for NAA		
CVP Water Supplies	27,140	CVP Sacramento River Settlement Contract 21,000 acre-feet. CVP Water Service Contract (Buckeye Zone) 6,140 acre-feet (14-06-200-5272A-LTR1).
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	–	–
Groundwater	13,405	Increased supply from new wells.
Recycled Wastewater	19	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	40,564	–
Possible Future Water Supplies	–	Not quantified. Historical transfers up to 4,000 acre-feet (3,000 acre-feet during drought) from Anderson-Cottonwood Irrigation District.
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	–	–

1 **Table 5D.6 Mountain Gate Community Services District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	2,180	Assume full use of CVP water supplies.
Water Sales to Others	–	–
Total Demand	2,180	
Water Supplies for NAA		
CVP Water Supplies	1,350	Assume full use of CVP water supplies.
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	–	–
Groundwater	830	Assume no increase in wells.
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	2,180	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	2,180	–

1 **Table 5D.7 Shasta Community Services District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	1,000	Assume full use of CVP water supplies.
Water Sales to Others	-	-
Total Demand	1,000	-
Water Supplies for NAA		
CVP Water Supplies	1,000	Assume full use of CVP water supplies.
SWP Water Supplies	-	-
Other Imported Water Supplies	-	-
Local Surface Water Supplies	-	-
Groundwater	-	-
Recycled Wastewater	-	-
Recycled Stormwater	-	-
Desalination	-	-
Transfers/Exchanges	-	-
Conservation	-	-
Total Water Supplies for NAA	1,000	
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	-	-
Total Potential Future Water Supplies	1,000	-

1 **Table 5D.8 Shasta County Water Agency**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	1,022	Assume full use of CVP water supplies.
Water Sales to Others	-	-
Total Demand	1,022	-
Water Supplies for NAA		
CVP Water Supplies	1,022	Assume full use of CVP water supplies.
SWP Water Supplies	-	-
Other Imported Water Supplies	-	-
Local Surface Water Supplies	-	-
Groundwater	-	-
Recycled Wastewater	-	-
Recycled Stormwater	-	-
Desalination	-	-
Transfers/Exchanges	-	-
Conservation	-	-
Total Water Supplies for NAA	1,022	-
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	-	-
Total Potential Future Water Supplies	1,022	-

1 **Table 5D.9 City of Yuba City**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	29,041	Yuba City. 2011. <i>2010 Urban Water Management Plan, Public Review Document</i> . June.
Water Sales to Others	-	-
Total Demand	29,041	-
Water Supplies for NAA		
CVP Water Supplies	-	-
SWP Water Supplies	8,000	SWP Contract 9,600 acre-feet. Long-term average based on Department of Water Resources. 2013. <i>Final Initial Study/Negative Declaration State Water Project Supply Allocation Settlement Agreement</i> . September.
Other Imported Water Supplies	-	-
Local Surface Water Supplies	15,500	Up to 6,500 acre-feet State Water Resources Control Board (SWRCB) Permit 14045. Up to 9,000 acre-feet SWRCB Permit 18558.
Groundwater	3,248	In the future, a second well could be constructed for 4 mgd; assume 4,500 acre-feet based on same production as existing well.
Recycled Wastewater	-	Reclamation use is limited to 140 acre-feet of landscape irrigation at the Wastewater Treatment Facility.
Recycled Stormwater	-	-
Desalination	-	-
Transfers/Exchanges	4,500	Up to 4,500 acre-feet from North Yuba Water District.
Conservation	-	-
Total Water Supplies for NAA	31,248	-
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	-	-
Total Potential Future Water Supplies	31,248	-

1 **Table 5D.10 City of West Sacramento**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	20,123	City of West Sacramento. 2011. <i>2010 Urban Water Management Plan, Public Review Document</i> . October.
Water Sales to Others	–	–
Total Demand	20,123	
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	23,600	CVP Sacramento River Settlement Contract 23,600 acre-feet (0-07-20-W0187) in accordance with Appropriative Water Right on Sacramento River (State Water Resources Control Board Permit Number 18150).
Other Imported Water Supplies	–	–
Local Surface Water Supplies	5,000	5,000 acre-feet as part of North Delta Water Agency water rights, in accordance with agreements with the State of California.
Groundwater	–	–
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	28,600	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	28,600	–

1 **Table 5D.11 El Dorado County Water Agency**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	12,054	11,741 acre-feet for Georgetown Divide Public Utility District and 313 acre-feet for Grizzly Flats Community Service District (including County areas) per El Dorado County Water Agency. 2014. <i>Water Resources Development & Management Plan (December 2007) 2014 West Slope Update, Final Draft.</i> October. Includes agricultural expansion for trees, vines, and pasture. Remaining areas of community development within El Dorado Irrigation District (EID).
Water Sales to Others	–	–
Total Demand	12,054	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	12,200	12,200 acre-feet from Stumpy Meadows Reservoir on Pilot Creek per Georgetown Divide Public Utility District. 2011. <i>2010 Urban Water Management Plan.</i> July 22.
Groundwater	150	150 acre-feet for Grizzly Flats Community Service District per El Dorado County Water Agency. 2014. <i>Water Resources Development & Management Plan (December 2007) 2014 West Slope Update, Final Draft.</i> October.
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	12,350	–

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Possible Future Water Supplies	–	<p>9,000 acre-feet of the 15,000-acre-foot CVP water service contract authorized by Public Law 101-514 (also known as “Fazio Water”) for Georgetown Divide Public Utility District per El Dorado County Water Agency. 2014. <i>Water Resources Development & Management Plan (December 2007) 2014 West Slope Update, Final Draft</i>. October. Assumed that 6,000 acre-feet would be used by EID.</p> <p>150 acre-feet from a new reservoir (not planned) per El Dorado County Water Agency. 2014. <i>Water Resources Development & Management Plan (December 2007) 2014 West Slope Update, Final Draft</i>. October.</p> <p>670 acre-feet from lining canals in Georgetown Divide Public Utilities District per El Dorado County Water Agency. 2014. <i>Water Resources Development & Management Plan (December 2007) 2014 West Slope Update, Final Draft</i>. October.</p> <p>40,000 acre-feet from water rights applications State Water Resources Control Board Filed Applications Nos. 5644 and 5645 for storage of water from Sacramento Municipal Utility District (SMUD) Upper American River Project and diversion at Folsom Lake with an exchange with an upstream water rights holder. To be shared with EID. Per El Dorado County Water Agency. 2014. <i>Water Resources Development & Management Plan (December 2007) 2014 West Slope Update, Final Draft</i>. October.</p> <p>10,300 acre-feet from diversion of water from South Fork of the Rubicon River with a negotiation under the El Dorado-SMUD Cooperation Agreement per El Dorado County Water Agency. 2014. <i>Water Resources Development & Management Plan (December 2007) 2014 West Slope Update, Final Draft</i>. October.</p> <p>1,000 acre-feet from dry year conservation efforts per El Dorado County Water Agency. 2014. <i>Water Resources Development & Management Plan (December 2007) 2014 West Slope Update, Final Draft</i>. October.</p>

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Subtotal Possible Future Water Supplies	9,000	All future projects not included for M&I No Action Alternative assumptions since some of the future projects are not fully defined or analyzed.
Total Potential Future Water Supplies	21,350	It is assumed that not all future projects would be implemented. Therefore, total potential future water supplies would be substantially less.

1 **Table 5D.12 El Dorado Irrigation District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	55,709	Per El Dorado Irrigation District. 2011. <i>Urban Water Management Plan, 2010 Update</i> . July.
Water Sales to Others	1,330	–
Total Demand	57,039	–
Water Supplies for NAA		
CVP Water Supplies	7,550	CVP Water Service Contract (C 14-06-200-1357A-LTR1) 7,550 acre-feet diverted from Folsom Lake for portion of El Dorado Hills per El Dorado Irrigation District. 2011. <i>Urban Water Management Plan, 2010 Update</i> . July.
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	59,640	<p>23,000 acre-feet from Jenkinson Lake on Park Creek (actually 33,400 acre-foot water right L11835 and L11836, with restriction of 23,000 acre-feet/two years).</p> <p>4,560 acre-feet from Weber Creek (Farmer’s Free Ditch) and Reservoir, Slab Creek (Summerfield Ditch), and Hangtown Creek (Gold Hill Ditch) diverted from Folsom Lake using a 40-year Warren Act Contract (signed March 1, 2011).</p> <p>17,000 acre-foot El Dorado Hydroelectric Project 184 at Folsom Lake under State Water Resources Control Board Permit 21112.</p> <p>15,080 acre-feet from Project 184 at El Dorado Forebay pre-1914 water rights.</p> <p>El Dorado Irrigation District. 2011. <i>Urban Water Management Plan, 2010 Update</i>. July; and El Dorado Irrigation District. 2012. <i>United States Bureau of Reclamation Five-Year Water Management Plan, 2010 Update</i>. July.</p> <p>El Dorado Irrigation District (EID) acquired Project 184 from Pacific Gas & Electric Company in 1999 with water rights from the South Fork American River and conveyed in the El Dorado Canal to El Dorado Forebay and Jenkinson Lake; however, needs a Warren Act Contract to divert at Folsom Reservoir.</p>

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Local Surface Water Supplies (continued)		Jenkinson Lake supply could be reduced from 23,000 to 20,920 acre-feet per El Dorado Irrigation District. 2013. <i>2013 Water Resources and Service Reliability Report</i> August 12.
Groundwater	–	–
Recycled Wastewater	3,804	3,804 acre-feet per El Dorado Irrigation District. 2011. <i>Urban Water Management Plan, 2010 Update</i> . July.
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	70,994	–
Possible Future Water Supplies	47,500	Up to 40,000 acre-feet under the Sacramento Municipal Utility District (SMUD)-El Dorado Agreement from SMUD reservoirs per El Dorado Irrigation District. 2011. <i>Urban Water Management Plan, 2010 Update</i> . July. 7,500 acre-feet of the 15,000-acre-foot CVP water service contract authorized by Public Law 101-514 (also known as “Fazio Water”) per El Dorado Irrigation District. 2011. <i>Urban Water Management Plan, 2010 Update</i> . July. However, the available supply may only be 6,000 acre-feet per El Dorado County Water Agency. 2014. <i>Water Resources Development & Management Plan (December 2007) 2014 West Slope Update, Final Draft</i> . October.
Subtotal Possible Future Water Supplies	47,500	–
Total Potential Future Water Supplies	118,494	–

1 **Table 5D.13 City of Folsom**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	36,259	City of Folsom. 2011. <i>2010 Urban Water Management Plan</i> . June.
Water Sales to Others	–	–
Total Demand	36,259	–
Water Supplies for NAA		
CVP Water Supplies	7,000	7,000 acre-foot Water Service Contract (C 6-07-20-W1372) under Public Law 101-514 (Fazio Water).
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	28,540	22,000 acre-feet pre-1914 water right diverted from South Fork American River at Folsom Lake and Folsom Canal. 5,000 acre-feet pre-1914 diverted from South Fork American River at Folsom Lake and Folsom Canal. 1,540 acre-feet from American River at Folsom Lake purchased from San Juan Water District for use in the Ashland Service Area.
Groundwater	3,250	Groundwater extraction and treatment produced by Aerojet groundwater cleanup process.
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	38,790	–
Possible Future Water Supplies	8,000	8,000 acre-feet purchase water from Natomas Central Mutual Water Company Sacramento Settlement Contract (14-06-200-885A) to be diverted at Freeport on the Sacramento River and conveyance to Folsom South area in accordance with the City of Folsom-Sacramento County Water Agency Memorandum of Agreement.
Subtotal Possible Future Water Supplies	8,000	–
Total Potential Future Water Supplies	46,790	–

1

Table 5D.14 Placer County Water Agency

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	109,130	46,701 acre-feet domestic and 62,429 acre-feet irrigation per Placer County Water Agency. 2011. <i>2010 Urban Water Management Plan</i> . June 16.
Water Sales to Others	109,871	29,805 acre-foot sale of treated water to Lincoln, Cal-Am Water Company, and others. 79,411 acre-foot sale of untreated water to San Juan Water District, Roseville, and Sacramento Suburban Water District. 571 acre-foot sale of untreated water to Alpine Meadows Water Association, Dutch Flt Water, Heather Glen Community Services District, Meadow Vista County Water District, and Weimar Water Company.
Total Demand	219,001	–
Water Supplies for NAA		
CVP Water Supplies	35,000	35,000 acre-foot CVP Water Service Contract (14-06-200-5082A) diverted from the American River upstream of and from Folsom Lake.
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	248,800	125,400 af purchase from Pacific Gas & Electric Company under two pre-1914 water rights on the Yuba and Bear rivers. 120,000 acre-foot water right on the American River for the Middle Fork Project diverted from the American River upstream of and from Folsom Lake. Used by San Juan Water District, Sacramento Suburban Water District, Rio Linda/Elverta Community Water District, and Roseville. 12,000 acre-foot purchase from South Sutter Water District (SSWD) is only available when SSWD purchases surplus water from Nevada Irrigation District and not considered part of long-term supplies. Assumed average of 3,400 acre-feet/year from four pre-1914 appropriative water rights on Canyon Creek, tributary to Auburn Ravine, South Fork Dry Creek tributary to Coon Creek, and North Fork Dry Creek tributary to Coon Creek.
Groundwater	707	Limited groundwater available in Martis Valley Basin.

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Recycled Wastewater	6,987	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	291,494	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	291,494	–

1 **Table 5D.15 City of Roseville**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	49,334	City of Roseville. 2011. <i>2010 Urban Water Management Plan</i> . August.
Water Sales to Others	–	–
Total Demand	49,334	–
Water Supplies for NAA		
CVP Water Supplies	32,000	CVP Water Service Contract (14-06-200-3474A).
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	–	–
Groundwater	–	–
Recycled Wastewater	3,397	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	34,000	30,000 acre-foot purchase from Placer County Water Agency. 4,000 acre-foot purchase from San Juan Water District.
Conservation	–	–
Total Water Supplies for NAA	69,397	–
Possible Future Water Supplies	–	Under Water Forum Agreement, can transfer up to 20,000 acre-feet from Placer County Water Agency. Also may be able to purchase up to 7,000 acre-feet from other CVP water users. Up to 23,200 acre-feet from new wells.
Subtotal Possible Future Water Supplies	–	All future projects not included for M&I No Action Alternative assumptions since some of the future projects are not fully defined or analyzed.
Total Potential Future Water Supplies	69,397	Future water supplies used when existing water supplies not fully available.

1 **Table 5D.16 Sacramento County Water Agency**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	68,976	Sacramento County Water Agency. 2011. <i>2010 Zone 41 Urban Water Management Plan</i> . July.
Water Sales to Others	8,560	Sales to Elk Grove Water Service and Cal-Am Water Company.
Total Demand	77,535	–
Water Supplies for NAA		
CVP Water Supplies	40,000	15,000 acre-foot CVP Water Service Contract authorized by Public Law 101-514 (Fazio Water). Assume 12,320 acre-feet for long-time average based on capacity of conveyance. 30,000 acre-foot CVP Water Service Contract assigned from Sacramento Municipal Utility District (14-06-200-5198A) to Sacramento County Water Agency under two assignments.
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	17,500	Up to 71,000 acre-feet intermittent water from American and Sacramento rivers water rights under State Water Resources Control Board Permit 21209. Use 17,500 acre-feet for long-term average.
Groundwater	38,500	31,000 acre-feet from wells and 7,500 acre-feet from groundwater treatment processes.
Recycled Wastewater	4,400	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	14,498	14,498 acre-foot purchase from City of Sacramento in accordance with the Water Forum Agreement.
Conservation	–	–
Total Water Supplies for NAA	114,898	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	114,898	–

1 **Table 5D.17 Sacramento Suburban Water District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	40,389	Sacramento Suburban Water District. 2011. <i>2010 Urban Water Management Plan</i> . July.
Water Sales to Others	1,800	1,700 acre-feet sold to Cal-Am Water Company and 100 acre-feet to Rio Linda/Elverta Community Water District.
Total Demand	43,189	–
Water Supplies for NAA		
CVP Water Supplies	1,000	NOT CVP WATER SUPPLY. Surplus Section 215 water. Assume 12,000 acre-feet in wet years and long-term average of 1,000 acre-feet.
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	–	–
Groundwater	31,241	–
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	21,300	12,000-29,000 acre-feet purchased from Placer County Water Agency, diverted from Folsom Lake, and treated by San Juan Water District in wet years. 9,300 acre-feet purchased from City of Sacramento.
Conservation	–	–
Total Water Supplies for NAA	53,541	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	53,541	–

1 **Table 5D.18 San Juan Water District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	55,657	San Juan Water District. 2011. <i>2010 Urban Water Management Plan</i> . June 22. Includes 38,591 acre-feet purchased for conjunctive use which is not required each year.
Water Sales to Others	44,199	18,765 acre-feet to Citrus Heights Water District. 14,894 acre-feet to Fair Oaks Water District. 5,000 acre-feet to Orange Vale Water Company. 1,540 acre-feet to Folsom. 4,000 acre-feet to Roseville.
Total Demand	99,856	61,265 acre-feet without conjunctive use component.
Water Supplies for NAA		
CVP Water Supplies	24,200	11,200 acre-foot CVP Water Service Contract (06-07-20-W1373). 13,000 acre-foot CVP Water Service Contracts diverted from Folsom Lake as authorized under Public Law 101-514 (Fazio Water) (06-07-20-W1373).
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	33,000	33,000 acre-feet pre-1914 water rights.
Groundwater	–	–
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	25,000	25,000 acre-foot purchase from Placer County Water Agency.
Conservation	–	–
Total Water Supplies for NAA	82,200	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	82,200	–

1 **Table 5D.19 Golden State Water Company – Rancho Cordova**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	16,932	Golden State Water Company. 2011. <i>Final Report, 2010 Urban Water Management Plan, Cordova.</i> July.
Water Sales to Others	–	–
Total Demand	16,932	–
Water Supplies for NAA		
CVP Water Supplies	–	Assumes no renewal of transfer of water from SMUD.
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	10,000	Up to 10,000 acre-feet pre-1914 water right from American River conveyed through the Folsom South Canal. However, only 5,000 acre-feet retained for Golden State Water Company and leases 5,000 acre-feet to City of Folsom. Up to 5,000 acre-feet replacement water from American River conveyed through the Folsom South Canal provided under a settlement with Gencorp/Aerojet Corporation, plus up to 10,200 acre-feet if necessary.
Groundwater	14,850	–
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	24,850	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	24,850	–

1 **Table 5D.20 Carmichael Water District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	9,571	Carmichael Water District. 2011. <i>2010 Urban Water Management Plan</i> . June 20.
Water Sales to Others	–	–
Total Demand	9,571	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	32,627	Long-term average of 32,627 acre-feet of water rights on the American River under State Water Resources Control Board permits 1387 (10,859 acre-feet), 8731 (3,669 acre-feet), and 7356 (18,099 acre-feet).
Groundwater	8,156	6,646 acre-feet from local wells and 1,510 acre-feet from groundwater treatment processes.
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	40,783	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	40,783	–

1 **Table 5D.21 City of Sacramento**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	160,100	City of Sacramento. 2011. <i>2010 Urban Water Management Plan</i> . October.
Water Sales to Others	60,062	5,293 acre-feet sold to Sacramento International Airport. 16,593 acre-feet sold to Sacramento Suburban Water District. 11,553 acre-feet sold to Cal-Am Water Company. 22,994 acre-feet sold to Sacramento County Water Agency. 3,629 acre-feet sold to Fruitridge Vista Water Company.
Total Demand	220,162	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	238,684	Up to 81,800 acre-feet of water rights from Sacramento River under State Water Resources Control Board (SWRCB) Permit 992. Up to 245,000 acre-feet of water rights from American River and tributaries of the American River under SWRCB permits 11358, 11359, 11360, 11361.
Groundwater	22,300	–
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	260,984	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	260,984	–

1 **Table 5D.22 Solano County Water Agency**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	82,750	238,050 acre-feet Ag (Solano Irrigation District and Maine Prairie Water District) and M&I demands only include demands met by SWP entitlement and Reclamation Solano Project. Does not include demands met by local surface water and groundwater supplies. Solano County Water Agency. 2011. <i>2010 Solano County Water Agency Urban Water Management Plan, Final Draft.</i>
Water Sales to Others	-	-
Total Demand	82,750	238,050 Total Demand
Water Supplies for NAA		
CVP Water Supplies	-	-
SWP Water Supplies	30,564	47,756 acre-foot SWP Entitlement.
Other Imported Water Supplies	205,276	207,350 acre-feet with Reclamation Solano Project.
Local Surface Water Supplies	-	-
Groundwater	-	-
Recycled Wastewater	-	-
Recycled Stormwater	-	-
Desalination	-	-
Transfers/Exchanges	-	-
Conservation	-	-
Total Water Supplies for NAA	235,840	-
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	-	-
Total Potential Future Water Supplies	235,840	-

1 **Table 5D.23 Napa County Flood Control and Water Conservation District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	21,572	5,712 acre-feet for American Canyon per City of American Canyon. 2011. <i>Final Urban Water Management Plan, 2010, Final</i> . September. 1,469 acre-feet for Calistoga per Napa County. 2007. <i>Draft Environmental Impact Report for Napa County General Plan</i> . February. 14,391 acre-feet for Napa per City of Napa. 2011. <i>Urban Water Management Plan, 2010 Update</i> . June 21.
Water Sales to Others	-	-
Total Demand	21,572	-
Water Supplies for NAA		
CVP Water Supplies	-	-
SWP Water Supplies	26,028	3,120 acre-feet for American Canyon per City of American Canyon. 2011. <i>Final Urban Water Management Plan, 2010, Final</i> . September. 1,008 acre-feet for Calistoga treated by City of Napa. Total 1,925 acre-foot SWP entitlement in 2010 per Napa County. 2007. <i>Draft Environmental Impact Report for Napa County General Plan</i> . February. Total amount available is limited 1,008 acre-feet due to conveyance limitations. 21,900 acre-feet for Napa per City of Napa. 2011. <i>Urban Water Management Plan, 2010 Update</i> . June 21. Assume 19,900 acre-feet due to conveyance limitations.
Other Imported Water Supplies	-	-
Local Surface Water Supplies	32,092	392 acre-feet for Calistoga from Kimball Reservoir per Napa County. 2007. <i>Draft Environmental Impact Report for Napa County General Plan</i> . February. 31,700 acre-feet for Napa from Lake Hennessey and Milliken Reservoir per City of Napa. 2011. <i>Urban Water Management Plan, 2010 Update</i> . June 21.
Groundwater	-	-

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Recycled Wastewater	5,605	1,065 acre-feet for American Canyon per City of American Canyon. 2011. <i>Final Urban Water Management Plan, 2010, Final</i> . September. 4,540 acre-feet for Napa per City of Napa. 2011. <i>Urban Water Management Plan, 2010 Update</i> . June 21.
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	1,527	1,027 acre-foot purchase by American Canyon from City of Vallejo, which diverts water from the Delta. Can be expanded to 1,527 acre-feet when SWP water reliability is reduced per City of American Canyon. 2011. <i>Final Urban Water Management Plan, 2010, Final</i> . September.
Conservation	–	–
Total Water Supplies for NAA	65,252	–
Possible Future Water Supplies	–	American Canyon can purchase water from Napa during emergencies per City of American Canyon. 2011. <i>Final Urban Water Management Plan, 2010, Final</i> . September.
Subtotal Possible Future Water Supplies	–	All future projects not included for M&I No Action Alternative assumptions since some of the future projects are not fully defined or analyzed.
Total Potential Future Water Supplies	65,252	–

1 **Table 5D.24 Stockton East Water District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	64,960	64,960 acre-feet of demand met by Stockton East Water District within City of Stockton, California Water Service Company – Stockton District, and San Joaquin County per Stockton East Water District. 2011. <i>2010 Stockton East Water District Urban Water Management Plan Update</i> . June.
Water Sales to Others	–	–
Total Demand	64,960	–
Water Supplies for NAA		
CVP Water Supplies	24,000	24,000 acre-foot CVP water service contract on Stanislaus River from New Melones Reservoir.
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	20,000	20,000 acre-foot water rights on Calaveras River diverted from New Hogan Reservoir.
Groundwater	43,680	From groundwater bank.
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	30,000	Transfer from Oakdale Irrigation District and South San Joaquin Irrigation District.
Conservation	–	–
Total Water Supplies for NAA	117,680	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	117,680	–

1 **Table 5D.25 City of Tracy**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	31,000	City of Tracy. 2011. <i>2010 Urban Water Management Plan</i> . May.
Water Sales to Others	–	–
Total Demand	31,000	–
Water Supplies for NAA		
CVP Water Supplies	31,000	10,000 acre-foot CVP Water Service Contract (14-06-200-7858A), 5,000 acre-feet assigned CVP Water Service Contract from Banta-Carbona Irrigation District (14-06-200-4305A), and 5,000 acre-feet from assigned CVP Water Service Contract from West Side Irrigation District (7-07-20-W-0045). 11,000 acre-foot CVP Water Service Contract assigned from Byron-Bethany Irrigation District from acquisition from Plainview Water District (14-06-200-785).
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	16,000	13,000 acre-feet from pre-1914 water rights on the Stanislaus River from South County Water Supply Project. 3,000 acre-feet pre-1914 water rights from Byron-Bethany Irrigation District for annexations in City of Tracy.
Groundwater	2,500	Approximately up to 2,500 acre-feet/year. Up to 3,500 acre-feet banked in Semitropic Water Storage District Groundwater Bank, and 3,000 acre-feet in local groundwater.
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	49,500	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Total Potential Future Water Supplies	49,500	–

1 **Table 5D.26 City of Avenal**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	3,500	Includes demands for Avenal State Prison. Bureau of Reclamation. 2014. <i>Central Valley Project Municipal and Industrial Water Shortage Policy, Draft Environmental Impact Statement</i> . November.
Water Sales to Others	–	–
Total Demand	3,500	–
Water Supplies for NAA		
CVP Water Supplies	3,500	3,500 acre-foot CVP Water Service Contract (14-06-200-4619A).
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	–	–
Groundwater	–	–
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	3,500	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	3,500	–

1 **Table 5D.27 City of Coalinga**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	10,000	Includes demands for Coalinga State Hospital. Bureau of Reclamation. 2014. <i>Central Valley Project Municipal and Industrial Water Shortage Policy, Draft Environmental Impact Statement</i> . November.
Water Sales to Others	–	–
Total Demand	10,000	–
Water Supplies for NAA		
CVP Water Supplies	10,000	10,000 acre-foot CVP Water Service Contract (14-06-200-4173A).
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	–	–
Groundwater	–	CVP Water Service Contract signed in 1968 required Coalinga to abandon groundwater wells.
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	10,000	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	10,000	–

1 **Table 5D.28 City of Huron**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	3,000	Bureau of Reclamation. 2014. <i>Central Valley Project Municipal and Industrial Water Shortage Policy, Draft Environmental Impact Statement</i> . November.
Water Sales to Others	–	–
Total Demand	3,000	–
Water Supplies for NAA		
CVP Water Supplies	3,000	3,000 acre-foot CVP Water Service Contract (14-06-200-7081A).
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	–	–
Groundwater	–	–
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	3,000	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	3,000	–

1 **Table 5D.29 City of Fresno**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	201,000	City of Fresno. 2012. <i>2010 Urban Water Management Plan</i> . November. Does not include 69,400 acre-feet for groundwater recharge.
Water Sales to Others	100	–
Total Demand	201,100	–
Water Supplies for NAA		
CVP Water Supplies	58,200	60,000 acre-foot CVP Water Service Contract from Friant-Kern Canal.
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	134,600	Basic allocation of 120,800 acre-feet from Fresno Irrigation District (FID) water rights on Kings River. City of Fresno receives 13,800 acre-feet from FID water rights on Kings River in exchange for recycled wastewater that recharges the groundwater in a portion of FID service area.
Groundwater	69,200	–
Recycled Wastewater	25,000	Recycled Wastewater. Could be combined with future transfers in exchange with surface water.
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	287,000	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	287,000	–

1 **Table 5D.30 City of Lindsay**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	2,689	City of Lindsay. 2013. <i>Water Feasibility Study, Draft Final Report</i> . October.
Water Sales to Others	–	–
Total Demand	2,689	–
Water Supplies for NAA		
CVP Water Supplies	1,450	Assumes 2,500 acre-foot CVP Water Service Contract (5-07-20-W0428) only available in summer months due to availability of Friant Kern Canal per City of Lindsay. 2013. <i>Water Feasibility Study, Draft Final Report</i> . October.
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	–	–
Groundwater	1,210	1,210 acre-feet from Well #14 per City of Lindsay. 2013. <i>Water Feasibility Study, Draft Final Report</i> . October. Well #15 can produce 1,937 acre-feet; however, not included in firm capacity.
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	2,660	–
Possible Future Water Supplies	3,630	3 new wells and treatment plant and distribution facilities improvements per City of Lindsay. 2013. <i>Water Feasibility Study, Draft Final Report</i> . October.
Subtotal Possible Future Water Supplies	3,630	–
Total Potential Future Water Supplies	6,290	–

1 **Table 5D.31 Kern County Water Agency Improvement District No. 4 and North of**
 2 **the River Municipal Water District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	62,750	Kern County Water Agency Improvement District No. 4 and North of the River Municipal Water District. 2011. <i>2010 Urban Water Management Plan, Final.</i> June.
Water Sales to Others	–	–
Total Demand	62,750	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	82,946	Assumes 82,946 acre-feet of the 82,946-acre-foot SWP Water Service Entitlement.
Other Imported Water Supplies	–	–
Local Surface Water Supplies	–	–
Groundwater	68,126	Including Kern Water Bank, Pioneer Project Bank, and Allen Road Complex Well Field.
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	151,072	–
Possible Future Water Supplies	–	Including up to 96,000 acre-feet of transfers with Kern Delta Water District, Kern-Tulare Water District, Rosedale-Rio Bravo Water Storage District, and North Kern Water Storage District.
Subtotal Possible Future Water Supplies	–	All future projects not included for M&I No Action Alternative assumptions since some of the future projects are not fully defined or analyzed.
Total Potential Future Water Supplies	151,072	–

1 **5D.3 San Francisco Bay Area Region**

2 This section includes summaries of water demand and water supply projections
 3 for M&I users of CVP and SWP water supplies in the San Francisco Bay Area
 4 Region (see Tables 5D.32 through 5D.37). The M&I water users are generally
 5 organized geographically in this section from north to south.

6 **Table 5D.32 Contra Costa Water District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	225,160	Contra Costa Water District. 2011. <i>Urban Water Management Plan</i> . June.
Water Sales to Others	–	–
Total Demand	225,160	–
Water Supplies for NAA		
CVP Water Supplies	195,000	195,000 acre-foot CVP Water Service Contract (175r-3401A-LTR1).
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	19,500	3,100 acre-foot water right from Mallard Slough. 6,400 acre-foot water right from San Joaquin River by City of Antioch. 10,000 acre-foot water right from San Joaquin River by industrial water users in Contra Costa Water District (CCWD) service area.
Groundwater	3,000	–
Recycled Wastewater	14,100	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	8,200	Purchase surplus water from East Contra Costa Irrigation District.
Conservation	–	–
Total Water Supplies for NAA	239,800	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	239,800	–

1 **Table 5D.33 East Bay Municipal Utility District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	349,440 (Projected 2040 Water Demand)	East Bay Municipal Utility District. 2011. <i>Urban Water Management Plan 2010 Document</i> . June.
Water Sales to Others	–	–
Total Demand	349,440	–
Water Supplies for NAA		
CVP Water Supplies	Dry year supply	Up to 133,000 acre-feet in a dry year, with a maximum of 165,000 acre-feet over three dry years, CVP Water Service Contract (14-08-200-5183A-LTR1) from the American River.
SWP Water Supplies	–	–
Other Imported Water Supplies	Up to 240,800	East Bay Municipal Utility District has up to 364,037 acre-feet of water rights on the Mokelumne River, but available amount varies depending on hydrology per 2011. <i>Urban Water Management Plan 2010 Document</i> . June. “Other Imported Water Supplies” include East Bay Municipal Utility District’s entitlements on the Mokelumne River. Although East Bay Municipal Utility District has water rights up to 364,037 acre-feet, the actual amount available in any given year varies depending on hydrology, required releases to senior downstream water rights holders, and releases to meet instream flow requirements.
Local Surface Water Supplies	16,800	Water rights from local watersheds within the East Bay Municipal Utility District (EBMUD) watershed average 16,800 to 28,000 acre-feet per East Bay Municipal Utility District. 2011. <i>Urban Water Management Plan 2010 Document</i> .
Groundwater	Dry year supply	Up to 1,120 acre-feet in dry years from Bayside Groundwater Project Phase 1 groundwater recharge facility within EBMUD service area per East Bay Municipal Utility District. 2011. <i>Urban Water Management Plan 2010 Document</i> . June.

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Recycled Wastewater	22,400	22,400 acre-feet in East Bay Municipal Utility District. 2011. <i>Urban Water Management Plan 2010 Document</i> . June. East Bay Municipal Utility District's goal is to deliver 22,400 acre-feet of recycled water by the year 2040.
Recycled Stormwater	–	–
Desalination		
Transfers/Exchanges ^a	Dry year supply	5,040 to 49,952 acre-feet in dry years transfers from Northern California water users per East Bay Municipal Utility District. 2012. <i>Water Supply Management Program 2040 Plan</i> . April.
Conservation	69,440	East Bay Municipal Utility District's Water Conservation Master Plan is based on 69,440 acre-feet conservation in 2040 per East Bay Municipal Utility District. 2011. <i>Urban Water Management Plan 2010 Document</i> . June. East Bay Municipal Utility District's goal for conservation is 69,440 acre-feet by the year 2040.
Other Projects: Bayside Groundwater Project Phase 2 ^a	Dry year supply	2,240 to 10,080 acre-feet in dry years Bayside Groundwater Project Phase 2 per East Bay Municipal Utility District. 2011. <i>Urban Water Management Plan 2010 Document</i> . June.
Total Water Supplies for NAA	349,440 Non-Dry year supply	Does not include CVP water supply for dry years, up to 15 percent rationing in dry years, or other dry year supply projects. During normal years, East Bay Municipal Utility District anticipates having sufficient supplies to meet demands. Meeting customer demands during dry years will depend on the use of CVP supplies, rationing, and the implementation of additional water supply projects.
Possible Future Water Supplies		
Other Projects: Groundwater Banking outside of East Bay Municipal Utility District Service Area ^a	Dry year supply	Dry year supply of 4,704 acre-feet of groundwater banking in Sacramento Valley and/or 19,500 acre-feet in San Joaquin Valley; not anticipated until 2040 per East Bay Municipal Utility District. 2012. <i>Water Supply Management Program 2040 Plan</i> . April.

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Regional Desalination Facility ^a	Dry year supply–	Up to 22,400 acre-feet from regional desalination facility; however, not anticipated until 2040 per East Bay Municipal Utility District. 2012. <i>Water Supply Management Program 2040 Plan</i> . April.
Other Projects: Enlarge Lower Bear Reservoir ^a	Dry year supply–	Up to 4,500 acre-feet in dry years; however, not in plan for 2030 per East Bay Municipal Utility District. 2012. <i>Water Supply Management Program 2040 Plan</i> . April.
Other Projects: Expand Los Vaqueros Reservoir ^a	Dry year supply–	Exact amount available to be determined and additional study needed per East Bay Municipal Utility District. 2011. <i>Urban Water Management Plan 2010 Document</i> . June.
Subtotal Possible Future Water Supplies	–	All future projects not included for M&I No Action Alternative assumptions since some of the future projects are not fully defined or analyzed, or are scheduled to be completed after 2030.
Total Potential Future Water Supplies	349,440 Non-Dry year supply	Does not include CVP water supply for dry years, up to 15 percent rationing in dry years, or other dry year supply projects.

1 ^a East Bay Municipal Utility District has identified a range of water supply projects that it
2 will pursue simultaneously to meet future water needs. By considering a broad mix of
3 projects, with inherent scalability and the ability to adjust implementation schedules for a
4 particular component, East Bay Municipal Utility District will be able to minimize the risks
5 associated with future uncertainties such as project implementation challenges and
6 climate change. If East Bay Municipal Utility District is able to successfully develop one
7 component, this could result in deferral of other additional water supply components over
8 the planning period.

1 **Table 5D.34 Zone 7 Water Agency**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	66,300	Assume Low Water Demand to serve a portion of Livermore, Pleasanton, Dublin-San Ramon Services District, and Cal-Water Water Company, plus local retail treated and untreated water. Does not include 9,200 acre-feet for groundwater recharge. Zone 7 Water Agency. 2010. <i>2010 Urban Water Management Plan</i> . December 15.
Water Sales to Others	–	–
Total Demand	66,300	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	51,545	51,400 acre-feet from the 80,619 acre-foot SWP Water Entitlement. 145 acre-feet of SWP water from Yuba Accord. Portions are stored in Semitropic Water Storage District and Cawelo Water District groundwater banks, Lake Del Valle, and local groundwater.
Other Imported Water Supplies	–	–
Local Surface Water Supplies	7,100	Arroyo del Valle water rights.
Groundwater	9,200	Recharged by Zone 7 Water Agency; wells owned and operated by local agencies.
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	4,500	2,000 to 5,000 acre-feet from Byron-Bethany Irrigation District. Assume 4,500 acre-feet for long-term average.
Conservation	–	–
Total Water Supplies for NAA	72,345	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	72,345	–
Total Potential Future Water Supplies	–	–

1 **Table 5D.35 Alameda County Water District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	71,800	Alameda County Water District. 2011 <i>Urban Water Management Plan, 2010-2015</i> . June 9.
Water Sales to Others	–	–
Total Demand	71,800	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	27,500	27,500 acre-feet of the 42,000-acre-foot SWP Water Entitlement, including SWP water stored in Semitropic Water Storage District groundwater bank. Could receive 13,500 to 33,500 acre-feet from groundwater bank.
Other Imported Water Supplies	15,400	15,400 acre-feet from the 15,400 acre-foot contract with San Francisco Public Utility Commission.
Local Surface Water Supplies	5,800	Up to 18,500 acre-feet from Del Valle Reservoir.
Groundwater	24,500	Up to 44,400 acre-feet for groundwater recharge and storage.
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	5,100	Newark Desalination Facility.
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	78,300	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	78,300	–

1 **Table 5D.36 Santa Clara Valley Water District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	409,370	Santa Clara Valley Water District. 2011. <i>Urban Water Management Plan 2010</i> . June.
Water Sales to Others	-	-
Total Demand	409,370	-
Water Supplies for NAA		
CVP Water Supplies	108,120	152,500 acre-foot CVP Water Service Contract (7-07-20-W0023). Assume 108,120 acre-feet on long-term average per Santa Clara Valley Water District. 2011. <i>Urban Water Management Plan 2010</i> . April.
SWP Water Supplies	64,000	100,000 acre-foot SWP Water Entitlement. Assume 64,000 acre-feet on long-term average per Santa Clara Valley Water District. 2011. <i>Urban Water Management Plan 2010</i> . April.
Other Imported Water Supplies	61,000	61,000 acre-feet per Santa Clara Valley Water District. 2012. <i>Water Supply and Infrastructure Master Plan</i> . October. Up to 63,850 acre-feet from San Francisco Public Utility Commission per Santa Clara Valley Water District. 2011. <i>Urban Water Management Plan 2010</i> . April.
Local Surface Water Supplies	95,000	102,000 acre-feet per Santa Clara Valley Water District. 2012. <i>Water Supply and Infrastructure Master Plan</i> . October. Includes about 11,000 -12,000 acre-feet non-district surface water supplies. 93,500 acre-feet based upon reported local supplies minus groundwater component per Santa Clara Valley Water District. 2011. <i>Urban Water Management Plan 2010</i> . April.
Groundwater	61,000	61,000 acre-feet per Santa Clara Valley Water District. 2012. <i>Water Supply and Infrastructure Master Plan</i> . October. 60,300 acre-feet of effective natural groundwater recharge in Santa Clara Plain, Coyote Valley, and Llagas Subbasin basins per Santa Clara Valley Water District. 2011. <i>Urban Water Management Plan 2010</i> . April.
Recycled Wastewater	29,000	Per Santa Clara Valley Water District. 2012. <i>Water Supply and Infrastructure Master Plan</i> . October.

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	4,000	<p>Transfer from Patterson Irrigation District initiated in 2009 extended through 2024. This water is from Replacement Water, CVP Water Service Contract Water, and pre-1914 San Joaquin River water rights per Bureau of Reclamation. 2014. <i>Draft Findings of No Significant Impact, Patterson Irrigation District 10-Year Transfer and/or Warren Act Contract for up to 36,000 acre-feet of Available Surface Water Supply to Santa Clara Valley Water District.</i> May. Assume that this transfer is continued through 2030.</p> <p>Purchase of up to 20,000 acre-feet over a 20-year period from Pajaro Valley Water Management Agency during dry years; not included in long-term supply calculations. Assume 108,120 acre-feet on long-term average per Santa Clara Valley Water District. 2011. <i>Urban Water Management Plan 2010.</i> April.</p>
Conservation	–	–
Total Water Supplies for NAA	422,120	–
Possible Future Water Supplies		
Brackish Groundwater Treatment in Pajaro Watershed	–	Per Santa Clara Valley Water District. 2011. <i>Urban Water Management Plan 2010.</i> April. Not included in Santa Clara Valley Water District. 2014. <i>FY 2014-15 Protection and Augmentation of Water Supplies.</i> February.
Regional Desalination Facility	–	Per Santa Clara Valley Water District. 2011. <i>Urban Water Management Plan 2010.</i> April. Not recommended at this time 61,000 acre-feet per Santa Clara Valley Water District. 2012. <i>Water Supply and Infrastructure Master Plan.</i> October; or per Santa Clara Valley Water District. 2014. <i>FY 2014-15 Protection and Augmentation of Water Supplies.</i> February.
Subtotal Possible Future Water Supplies	–	All future projects not included for M&I No Action Alternative assumptions since some of the future projects are not fully defined or analyzed.
Total Potential Future Water Supplies	422,120	–

1 **Table 5D.37 San Benito County Water District, Zone 6**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	11,583	Per San Benito County Water District et al. (San Benito County Water District, Sunnyslope County Water District, and City of Hollister). 2011. <i>Draft Hollister Urban Area 2010 Urban Water Management Plan</i> . June 14. Does not include agricultural demands or groundwater use in San Juan Bautista, which does not directly use CVP water.
Water Sales to Others	100	–
Total Demand	11,683	–
Water Supplies for NAA		
CVP Water Supplies	8,250	43,800 acre-foot CVP Water Service Contract (8-07-20-W0130), including 8,250 acre-feet for Municipal & Industrial uses within Hollister and Sunnyslope County Water District. This use is limited by the Lessalt Water Treatment Plant capacity per San Benito County Water District et al. (San Benito County Water District, Sunnyslope County Water District, and City of Hollister). 2011. <i>Draft Hollister Urban Area 2010 Urban Water Management Plan</i> . June 14. Assumes expansion of water treatment plant capacity per Urban Water Management Plan and San Benito County Water District. 2014. <i>West Hills Water Treatment Plant Project, Draft Environmental Impact Report</i> . January. Remaining portion of the water supply, up to 35,550 acre-feet, is delivered to agricultural users and for groundwater recharge, which benefits Hollister, Sunnyslope, and San Juan Bautista communities.
SWP Water Supplies	–	–
Other Imported Water Supplies	–	–
Local Surface Water Supplies	–	–

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Groundwater	4,004	Per San Benito County Water District et al. (San Benito County Water District, Sunnyslope County Water District, and City of Hollister). 2011. <i>Draft Hollister Urban Area 2010 Urban Water Management Plan</i> . June 14. Storage has been purchased in Semitropic Water Storage District groundwater banking per San Benito County Water District. 2014. <i>West Hills Water Treatment Plant Project, Draft Environmental Impact Report</i> . January.
Recycled Wastewater	1,170	Per San Benito County Water District et al. (San Benito County Water District, Sunnyslope County Water District, and City of Hollister). 2011. <i>Draft Hollister Urban Area 2010 Urban Water Management Plan</i> . June 14.
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	13,424	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	13,424	–

1 **5D.4 Central Coast Region**

2 This section includes summaries of water demand and water supply projections
 3 for M&I users of SWP water supplies in the Central Coast Region (see
 4 Tables 5D.38 and 5D.39). The M&I water users are organized geographically in
 5 this section from north to south. The following water users contract with Central
 6 Coast Water Agency for SWP water supplies.

7 **Table 5D.38 San Luis Obispo County Flood Control and Water Conservation**
 8 **District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	8,250	1,505 acre-feet for City of Morro Bay per City of Morro Bay. 2011. <i>Final Report, 2010 Urban Water Management Plan</i> June. 2,364 acre-feet for City of Pismo Beach per City of Pismo Beach. 2011. <i>2010 Urban Water Management Plan</i> . September. 1,135 acre-feet for California Men's Colony; 94 acre-feet for County Operations Center; 125 acre-feet for Cuesta College; 1,419 acre-feet for Oceano Community Services District; 393 acre-feet for San Miguelito Mutual Water Company; 170 acre-feet for Avila Beach Community Services District; 32 acre-feet for Avila Valley Mutual Water Company; 7 acre-feet for San Luis Coastal Unified School District through San Luis Obispo County Service Area No. 12; and 1,100 acre-feet for Shandon (San Luis Obispo County Service Area No. 16) per San Luis Obispo County Flood Control and Water Conservation District. 2012. <i>San Luis Obispo County Master Water Report</i> . May.
Water Sales to Others	-100	100 acre-feet from Oceano Community Services District to the City of Arroyo Grande.
Total Demand	8,150	-
Water Supplies for NAA		
CVP Water Supplies	-	-

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
SWP Water Supplies	5,007	<p>1,313 acre-feet for City of Morro Bay of Central Coast Water Authority SWP Water Entitlement per City of Morro Bay. 2011. <i>Final Report, 2010 Urban Water Management Plan</i>. June.</p> <p>1,740 acre-feet for City of Pismo Beach per City of Pismo Beach. 2011. <i>2010 Urban Water Management Plan</i>. September.</p> <p>735 acre-feet for California Men's Colony; 150 acre-feet for County Operations Center; 140 acre-feet Cuesta College; 495 acre-feet for Oceano Community Services District; 275 acre-feet for San Miguelito Mutual Water Company; 66 acre-feet Avila Beach Community Services District; 20 acre-feet for Avila Valley Mutual Water Company; 7 acre-feet for San Luis Coastal Unified School District through San Luis Obispo County Service Area No. 12; and 66 acre-feet for Shandon (San Luis Obispo County Service Area No. 16) per San Luis Obispo County Flood Control and Water Conservation District. 2012. <i>San Luis Obispo County Master Water Report</i>. May.</p>
Other Imported Water Supplies	–	–
Local Surface Water Supplies	2,015	<p>896 acre-feet from Lopez Lake Reservoir for City of Pismo Beach per City of Pismo Beach. 2011. <i>2010 Urban Water Management Plan</i>. September.</p> <p>445 acre-feet from Whale Rock Reservoir and Chorro Reservoir for California Men's Colony; 28 acre-feet from Whale Rock Reservoir for County Operations Center; 303 acre-feet from Lopez Lake Reservoir for Oceano Community Services District; 263 acre-feet from San Miguelito Mutual Water Company; 68 acre-feet from Lopez Lake Reservoir for Avila Beach Community Services District; and 12 acre-feet from Lopez Lake Reservoir for Avila Valley Mutual Water Company per San Luis Obispo County Flood Control and Water Conservation District. 2012. <i>San Luis Obispo County Master Water Report</i>. May.</p>

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Groundwater	3,588	<p>1,723 acre-feet for City of Morro Bay per City of Morro Bay. 2011. <i>Final Report, 2010 Urban Water Management Plan</i>. June.</p> <p>700 acre-feet for City of Pismo Beach per City of Pismo Beach. 2011. <i>2010 Urban Water Management Plan</i>. September.</p> <p>900 acre-feet for Oceano Community Services District; 118 acre-feet for San Miguelito Mutual Water Company; and 147 acre-feet for Shandon (San Luis Obispo County Service Area No. 16) per San Luis Obispo County Flood Control and Water Conservation District. 2012. <i>San Luis Obispo County Master Water Report</i>. May.</p>
Recycled Wastewater	2,040	<p>1,840 acre-feet for City of Pismo Beach per City of Pismo Beach. 2011. <i>2010 Urban Water Management Plan</i>. September.</p> <p>200 acre-feet for California Men's Colony per San Luis Obispo Regional Water Management Group. 2014. <i>San Luis Obispo Integrated Regional Water Management Plan</i>. July.</p>
Recycled Stormwater	–	–
Desalination	645	645 acre-feet for City of Morro Bay per City of Morro Bay. 2011. <i>Final Report, 2010 Urban Water Management Plan</i> . June.
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	13,295	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	13,295	–

1 **Table 5D.39 Santa Barbara County Flood Control and Water Conservation District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	72,515	<p>1,635 acre-feet for City of Guadalupe per City of Guadalupe. 2014. <i>Water Master Plan Update</i>. May 13.</p> <p>12,355 acre-feet for City of Santa Barbara per City of Santa Barbara. 2011. <i>Urban Water Management Plan, 2010 Update</i>. June.</p> <p>19,564 acre-feet for City of Santa Maria per City of Santa Maria. 2011. <i>2010 Urban Water Management Plan</i>. July.</p> <p>4,325 acre-feet for Carpinteria Valley Water District per Carpinteria Valley Water District. 2011. <i>Final 2010 Urban Water Management Plan Update</i>. June.</p> <p>14,113 acre-feet for Goleta Water District per Goleta Water District. 2011. <i>Final 2010 Urban Water Management Plan Update</i>. November.</p> <p>8,123 acre-feet for Golden State Water Company per Golden State Water Company. 2011. <i>Final Report, 2010 Urban Water Management Plan, Orcutt</i>. August.</p> <p>1,434 acre-feet for City of Buellton; 1,868 acre-feet for La Cumbre Mutual Water Company; 5,633 acre-feet for Montecito Water District; 1,929 acre-feet for Santa Ynez River Water Conservation District, Improvement District #1; and 1,371 acre-feet for Vandenberg Air Force Base per Santa Barbara County. 2014. <i>Integrated Regional Water Management Plan 2013</i>.</p> <p>33 acre-feet for Raytheon Systems Company and 132 acre-feet for Morehart Land Company (Naples Water Company) for SWP water demand only, per Central Coast Water Authority. 2011. <i>2010 Urban Water Management Plan</i>. June.</p>
Water Sales to Others	3,420	3,420 acre-feet for Golden State Water Company, Orcutt community, and Nipomo Community Services District from City of Santa Maria per City of Santa Maria. 2011. <i>2010 Urban Water Management Plan</i> . July.
Total Demand	75,935	–

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	39,440	<p>367 acre-feet of the 550-acre-foot allocation of the Central Coast Water Authority SWP Water Entitlement for City of Guadalupe per City of Guadalupe. 2014. <i>Water Master Plan Update</i>. May 13.</p> <p>1,802 acre-feet of the 3,000-acre-foot allocation of the Central Coast Water Authority SWP Water Entitlement for City of Santa Barbara per City of Santa Barbara. 2011. <i>Urban Water Management Plan, 2010 Update</i>. June.</p> <p>22,936 acre-feet of the 16,200-acre-foot allocation of the Central Coast Water Authority SWP Water Entitlement for City of Santa Maria per City of Santa Maria. 2011. <i>2010 Urban Water Management Plan</i>. July.</p> <p>1,200 acre-feet of the 2,000-acre-foot allocation of the Central Coast Water Authority SWP Water Entitlement for Carpinteria Valley Water District per Carpinteria Valley Water District. 2011. <i>Final 2010 Urban Water Management Plan Update</i>. June.</p> <p>3,800 acre-feet of the 4,500-acre-foot allocation of the Central Coast Water Authority SWP Water Entitlement for Goleta Water District per Goleta Water District. 2011. <i>Final 2010 Urban Water Management Plan Update</i>. November.</p> <p>1,109 acre-feet of the 500-acre-foot allocation of the Central Coast Water Authority SWP Water Entitlement for Golden State Water Company per Golden State Water Company. 2011. <i>Final Report, 2010 Urban Water Management Plan, Orcutt</i>. August.</p>

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
SWP Water Supplies (continued)	–	<p>386 acre-feet of the 578-acre-foot allocation of the Central Coast Water Authority SWP Water Entitlement for City of Buellton; 667 acre-feet of the 1,000-acre-foot allocation of the Central Coast Water Authority SWP Water Entitlement for La Cumbre Mutual Water Company; 2,002 acre-feet of the 3,000-acre-foot allocation of the Central Coast Water Authority SWP Water Entitlement for Montecito Water District; 1,335 acre-feet of the 2,000-acre-foot allocation of the Central Coast Water Authority SWP Water Entitlement for Santa Ynez River Water Conservation District, Improvement District #1; and 3,670 acre-feet of the 5,500-acre-foot allocation of the Central Coast Water Authority SWP Water Entitlement for Vandenberg Air Force Base per Santa Barbara County. 2014. <i>Integrated Regional Water Management Plan 2013</i>.</p> <p>33 acre-feet of the 50-acre-foot allocation of the Central Coast Water Authority SWP Water Entitlement for Raytheon Systems Company; and 133 acre-feet of the 200-acre-foot allocation of the Central Coast Water Authority SWP Water Entitlement for Morehart Land Company (Naples Water Company) per Central Coast Water Authority. 2011. <i>2010 Urban Water Management Plan</i>. June.</p>
Water Supplies from Reclamation Cachuma Project	23,534	<p>6,566 acre-feet for City of Santa Barbara per City of Santa Barbara. 2011. <i>Urban Water Management Plan, 2010 Update</i>. June.</p> <p>2,250 acre-feet for Carpinteria Valley Water District per Carpinteria Valley Water District. 2011. <i>Final 2010 Urban Water Management Plan Update</i>. June.</p> <p>9,322 acre-feet for Goleta Water District per Goleta Water District. 2011. <i>Final 2010 Urban Water Management Plan Update</i>. November.</p> <p>2,777 acre-feet for Montecito Water District; and 2,619 acre-feet for Santa Ynez River Water Conservation District, Improvement District #1 per Santa Barbara County. 2014. <i>Integrated Regional Water Management Plan 2013</i>.</p>

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Local Surface Water Supplies	21,742	<p>4,331 acre-feet of water rights on Santa Ynez River and Devils Canyon Creek for City of Santa Barbara per City of Santa Barbara. 2011. <i>Urban Water Management Plan, 2010 Update</i>. June.</p> <p>14,300 acre-feet from Twitchell Reservoir for City of Santa Maria per City of Santa Maria. 2011. <i>2010 Urban Water Management Plan</i>. July.</p> <p>611 acre-feet for City of Buellton; 1,500 acre-feet for Montecito Water District; and 1,000 acre-feet for Santa Ynez River Water Conservation District, Improvement District #1 per Santa Barbara County. 2014. <i>Integrated Regional Water Management Plan 2013</i>.</p>
Groundwater	29,664	<p>1,300 acre-feet with well modifications for City of Guadalupe per City of Guadalupe. 2014. <i>Water Master Plan Update</i>. May 13.</p> <p>1,125 acre-feet for City of Santa Barbara per City of Santa Barbara. 2011. <i>Urban Water Management Plan, 2010 Update</i>. June.</p> <p>12,795 acre-feet for City of Santa Maria per City of Santa Maria. 2011. <i>2010 Urban Water Management Plan</i>. July.</p> <p>2,000 acre-feet for Carpinteria Valley Water District per Carpinteria Valley Water District. 2011. <i>Final 2010 Urban Water Management Plan Update</i>. June.</p> <p>2,350 acre-feet for Goleta Water District per Goleta Water District. 2011. <i>Final 2010 Urban Water Management Plan Update</i>. November.</p> <p>10,094 acre-feet for Golden State Water Company per Golden State Water Company. 2011. <i>Final Report, 2010 Urban Water Management Plan, Orcutt</i>. August.</p> <p>Not quantified use for City of Buellton; La Cumbre Mutual Water Company; Montecito Water District; Santa Ynez River Water Conservation District, Improvement District #1; and Vandenberg Air Force Base per Santa Barbara County. 2014. <i>Integrated Regional Water Management Plan 2013</i>; and Central Coast Water Authority. 2011. <i>2010 Urban Water Management Plan</i>. June.</p>

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Recycled Wastewater	2,250	1,100 acre-feet for City of Santa Barbara per City of Santa Barbara. 2011. <i>Urban Water Management Plan, 2010 Update</i> . June. 1,150 acre-feet for Goleta Water District per Goleta Water District. 2011. <i>Final 2010 Urban Water Management Plan Update</i> . November.
Recycled Stormwater	–	–
Desalination	7,500	7,500 acre-feet Santa Barbara (based on websites accessed in January 2015 for City of Santa Barbara).
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	124,130	–
Possible Future Water Supplies	–	Modifications in groundwater management, desalination, and expansion of reclamation facilities for City of Santa Barbara per City of Santa Barbara. 2011. <i>Urban Water Management Plan, 2010 Update</i> . June. Desalination capacity of 3,125 acre-feet per Santa Barbara County. 2014. <i>Integrated Regional Water Management Plan 2013</i> . Additional wells, use of recycled water, increased use of local water rights per Carpinteria Valley Water District. 2011. <i>Final 2010 Urban Water Management Plan Update</i> . June. Water system improvements and additional groundwater facilities for cities of Buellton, Guadalupe, Santa Barbara, and Santa Maria, and Goleta Water District per Santa Barbara County. 2014. <i>Integrated Regional Water Management Plan 2013</i> .
Subtotal Possible Future Water Supplies	–	All future projects not included for M&I No Action Alternative assumptions since some of the future projects are not fully defined or analyzed.
Total Potential Future Water Supplies	124,130	–

1 **5D.5 Southern California Region**

2 This section includes summaries of water demand and water supply projections
 3 for M&I users of SWP water supplies in the Southern California Region (see
 4 Tables 5D.40 through 5D.50). The M&I water users are generally organized
 5 geographically in this section from north to south.

6 **Table 5D.40 Antelope Valley-East Kern Water Agency**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	96,558	Antelope Valley-East Kern Water Agency. 2011. <i>2010 Urban Water Management Plan</i> . June.
Water Sales to Others	–	–
Total Demand	96,558	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	87,688	87,688 acre-feet of the 141,400-acre-foot SWP Water Entitlement.
Other Imported Water Supplies	–	–
Local Surface Water Supplies	–	–
Groundwater	20,000	–
Recycled Wastewater	–	Recycled water is used by member agencies. The total is not quantified for the district.
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	107,688	–
Possible Future Water Supplies		
Subtotal Possible Future Water Supplies	–	–
Total Potential Future Water Supplies	107,688	–

1 **Table 5D.41 Castaic Lake Water Agency**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	105,313	Castaic Lake Water Agency, Newhall County Water District, and Valencia Water Company. 2011. <i>2010 Urban Water Management Plan, Final</i> . June.
Water Sales to Others	–	–
Total Demand	105,313	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	57,400	57,400 acre-feet of the 95,200-acre-foot SWP Water Entitlement.
Other Imported Water Supplies	17,287	17,287 from Flexible Storage Accounts with Ventura County; contracts with Buena Vista-Rosedale; and Newhall Land.
Local Surface Water Supplies	–	–
Groundwater	60,175	35,225 acre-feet of local groundwater and 24,950 acre-feet from groundwater banks in Kern County.
Recycled Wastewater	325	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	135,187	–
Possible Future Water Supplies		
–	14,375	Additional groundwater use, including groundwater banking.
–	7,775	Additional recycled wastewater.
Subtotal Possible Future Water Supplies	22,150	–
Total Potential Future Water Supplies	157,337	–

1 **Table 5D.42 Coachella Valley Water District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	212,000	212,000 acre-feet for urban water use. Total water use of 670,800 acre-feet includes water demands for agricultural users and groundwater recharge per Coachella Valley Water District. 2011. <i>2010 Urban Water Management Plan, Final Report.</i> July.
Water Sales to Others	–	–
Total Demand	212,000	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	–	23,100 acre-foot SWP Water Entitlement plus 88,100 acre-feet from transfer of Metropolitan Water District of Southern California (MWDSC) SWP Entitlement and 27,150 acre-feet from transfers of SWP Entitlements from Kern County Water Users.
Other Imported Water Supplies	78,500	78,500 acre-foot Colorado River water supply for municipal and industrial uses. Approximately 428,000 acre-feet of Colorado River water supply for agricultural and groundwater recharge uses including 330,000 acre-foot Colorado R water right and additional 129,000 acre-feet from the Quantification Settlement Agreement (including SWP Water Entitlement that is exchanged with MWDSC).
Local Surface Water Supplies	–	–
Groundwater	133,500	–
Recycled Wastewater	26,840	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	238,840	–
Possible Future Water Supplies	–	Treated groundwater could provide 10,000 acre-feet additional supplies for agricultural supplies; scheduled for 2035. Additional water transfers.

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Subtotal Possible Future Water Supplies	–	All future projects not included for M&I No Action Alternative assumptions since some of the future projects are not fully defined or analyzed.
Total Potential Future Water Supplies	238,840	–

1 **Table 5D.43 Crestline-Lake Arrowhead Water Agency**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	2,250	Crestline-Lake Arrowhead Water Agency. 2011. <i>2010 Urban Water Management Plan</i> . August.
Water Sales to Others	–	–
Total Demand	2,250	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	3,480	5,800 SWP Water Entitlement.
Other Imported Water Supplies	–	–
Local Surface Water Supplies	481	Water right on Houston Creek conveyed through Lake Silverwood.
Groundwater	–	–
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	3,961	–
Possible Future Water Supplies	–	Potential future water transfers, including from SWP water users. Potential recycled water use for limited use due to high elevation within service area.
Subtotal Possible Future Water Supplies	–	All future projects not included for M&I No Action Alternative assumptions since some of the future projects are not fully defined or analyzed.
Total Potential Future Water Supplies	3,961	–

1 **Table 5D.44 Desert Water Agency**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	69,400	Desert Water Agency. 2011. <i>2010 Urban Water Management Plan</i> . March.
Water Sales to Others	–	–
Total Demand	69,400	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies		38,100 acre-foot SWP Water Entitlement plus 11,900 acre-feet from transfer of MWDSC SWP Entitlement and 5,750 acre-feet from transfers of SWP Entitlements from Kern County Water Users.
Other Imported Water Supplies	27,200	27,200 acre-foot Colorado River water supply for groundwater recharge including SWP water that is exchanged with MWDSC.
Local Surface Water Supplies	5,900	Water rights on Snow Creek, Falls Creek, Chino Creek, and Whitewater River.
Groundwater	7,000	–
Recycled Wastewater	8,400	–
Recycled Stormwater	21,400	21,400 acre-feet in nonconsumptive returns to aquifer.
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	69,900	–
Possible Future Water Supplies	–	Potential future water transfers.
Subtotal Possible Future Water Supplies	–	All future projects not included for M&I No Action Alternative assumptions since some of the future projects are not fully defined or analyzed.
Total Potential Future Water Supplies	69,900	–

1 **Table 5D.45 Mojave Water Agency**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	192,969	Mojave Water Agency. 2011. <i>Final 2010 Urban Water Management Plan</i> . June.
Water Sales to Others	–	–
Total Demand	192,969	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	54,778	82,800 acre-foot SWP Water Entitlement and 14,000 acre-feet of SWP Water transferred from Dudley Ridge Water District.
Other Imported Water Supplies	–	–
Local Surface Water Supplies	54,045	–
Groundwater	92,789	Includes 10,425 for agricultural depletion and 82,364 from return flows returned to the groundwater and reused.
Recycled Wastewater	6,087	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	207,699	–
Possible Future Water Supplies	–	Potential water transfers, improved groundwater banking programs, and approaches to protect groundwater quality.
Subtotal Possible Future Water Supplies	–	All future projects not included for M&I No Action Alternative assumptions since some of the future projects are not fully defined or analyzed.
Total Potential Future Water Supplies	207,699	–

1 **Table 5D.46 Palmdale Water District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	55,000	Palmdale Water District. 2011. <i>Urban Water Management Plan</i> . June.
Water Sales to Others	300	Sales to Littlerock Creek Irrigation District.
Total Demand	55,300	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	12,800	21,300 acre-foot SWP Water Entitlement.
Other Imported Water Supplies	–	–
Local Surface Water Supplies	4,000	Water rights on Little Rock and Big Rock creeks.
Groundwater	20,600	12,000 acre-feet of groundwater and 8,600 acre-feet from groundwater banking.
Recycled Wastewater	9,000	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	46,400	–
Possible Future Water Supplies	9,600	Future groundwater banking projects.
Subtotal Possible Future Water Supplies	9,600	–
Total Potential Future Water Supplies	55,000	–

1 **Table 5D.47 San Bernardino Valley Municipal Water District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	305,447	San Bernardino Municipal Water District; East Valley Water District; cities of Loma Linda, Redlands, Colton, and San Bernardino; West Valley Water District; and Yucaipa Valley Water District. 2011. <i>2010 San Bernardino Valley Regional Urban Water Management Plan</i> . June.
Water Sales to Others	–	–
Total Demand	305,447	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	61,560	27,090 acre-foot direct delivery from 102,600-acre-foot SWP Water Entitlement, and 34,470 acre-feet from storage.
Other Imported Water Supplies	–	–
Local Surface Water Supplies	50,150	Water rights in the Santa Ana River watershed.
Groundwater	264,075	–
Recycled Wastewater	–	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	375,785	–
Possible Future Water Supplies	–	Water transfers.
Subtotal Possible Future Water Supplies	–	All future projects not included for M&I No Action Alternative assumptions since some of the future projects are not fully defined or analyzed.
Total Potential Future Water Supplies	375,785	–

1 **Table 5D.48 San Gorgonio Pass Water Agency**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	66,420	San Gorgonio Pass Water Agency. 2010. <i>2010 Urban Water Management Plan</i> . December.
Water Sales to Others	–	–
Total Demand	66,420	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	8,000	17,300 acre-foot SWP Water Entitlement primarily used for groundwater recharge.
Other Imported Water Supplies	–	–
Local Surface Water Supplies	3,000	Noble and Little San Gorgonio creeks used by Beaumont Cherry Valley Water District.
Groundwater	23,045	–
Recycled Wastewater	17,907	–
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	51,952	–
Possible Future Water Supplies	11,717	Expanded groundwater facilities.
–	–	Future water transfers.
Subtotal Possible Future Water Supplies	11,717	–
Total Potential Future Water Supplies	63,669	–

1 **Table 5D.49 Ventura County Watershed Protection District**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	10,365	The only portion of Ventura County Watershed Protection District that uses SWP Water not from Metropolitan Water District of Southern California is the Oxnard-Hueneme System of United Water Conservation District per United Water Conservation District. 2011 <i>Public Review Final, 2010 Urban Water Management Plan Update</i> . June.
Water Sales to Others	–	–
Total Demand	10,365	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	–	5,000 acre-feet for United Water Conservation District of the Ventura County Watershed Conservation District 20,000 acre-foot SWP Water Entitlement. The water is used for groundwater recharge. The 5,000 acre-feet for Casitas Municipal Water District and 10,000 acre-feet for the City of San Buenaventura (Ventura) cannot be conveyed to those areas and are transferred to others.
Other Imported Water Supplies	–	–
Local Surface Water Supplies	–	Surface water from Lake Piru is used for groundwater recharge.
Groundwater	10,365	–
Recycled Wastewater	–	49,000 acre-feet of recycled water used for groundwater recharge (32,000 acre-feet), wildlife habitat (8,000 acre-feet), and agriculture (9,000 acre-feet).
Recycled Stormwater	–	–
Desalination	–	–
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	10,365	–
Possible Future Water Supplies	–	Additional groundwater recharge and recycling.

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Subtotal Possible Future Water Supplies	–	All future projects not included for M&I No Action Alternative assumptions since some of the future projects are not fully defined or analyzed.
Total Potential Future Water Supplies	10,365	–

1 **Table 5D.50 Metropolitan Water District of Southern California**

Items	Water Demand and Supplies (acre-feet)	Notes
Water Demand		
Service Area Water Demand	4,454,000	Based on retail municipal and industrial and agricultural water demands. Metropolitan Water District of Southern California. 2010. <i>The Regional Urban Water Management Plan</i> . November.
Water Sales to Others	–	–
Total Demand	4,454,000	–
Water Supplies for NAA		
CVP Water Supplies	–	–
SWP Water Supplies	1,441,000	1,911,500 acre-foot SWP Water Entitlement (Table A); transfer of SWP with Desert Water Agency and Coachella Valley Water District; San Luis Reservoir carryover storage; Article 21 supplies; and Yuba River Accord purchases.
Other Imported Water Supplies	1,480,000	1,250,000 acre-feet from Colorado River. 230,000 acre-feet from Los Angeles Aqueduct.
Local Surface Water Supplies	102,000	
Groundwater	1,530,000	1,430,000 acre-feet for groundwater pumping and 100,000 acre-feet for groundwater recovery.
Recycled Wastewater	333,000	–
Recycled Stormwater	–	–
Desalination	166,000	11,000 acre-feet Long Beach; 16,000 acre-feet West Basin; 72,000 acre-feet Metropolitan Water District of Orange County from Huntington Beach and Doheny projects; 11,000 acre-feet Oceanside; 56,000 acre-feet San Diego County Water Agency from Camp Pendleton (based on websites accessed in January 2015 for the cities of Long Beach and Oceanside, Metropolitan Water District of Orange County, San Diego County Water Authority, and West Basin Municipal Water District).
Transfers/Exchanges	–	–
Conservation	–	–
Total Water Supplies for NAA	5,052,000	–

Appendix 5D: Municipal and Industrial Water Demands and Supplies

Items	Water Demand and Supplies (acre-feet)	Notes
Possible Future Water Supplies	–	605,000 acre-feet of Delta improvements and other programs not approved at this time.
Subtotal Possible Future Water Supplies	–	All future projects not included for M&I No Action Alternative assumptions since some of the future projects are not fully defined or analyzed.
Total Potential Future Water Supplies	5,052,000	–

1

1 **Appendix 5E**

2 **Sensitivity Analysis - Revised Second**
3 **Basis of Comparison with no Fremont**
4 **Weir Notch**

5 Comment Number 90 from State Water Contractors on the Draft LTO EIS
6 discussed that the Reasonable and Prudent Alternative (RPA) actions from the
7 2008 USFWS BO and 2009 NMFS BO should not have been included in the
8 Second Basis of Comparison, including a specific reference to restoration of tidal
9 habitat under Component 4 of the RPA in the USFWS BO and restoration of
10 floodplain habitat under Action I.6.1 of the RPA in the NMFS BO.

11 As described in Section 3.3.1.2 of Chapter 3, Description of Alternatives, in the
12 Draft EIS, tidal wetlands restoration activities under Component 4 of the USFWS
13 BO include actions adopted, initiated, or constructed since 2012 (e.g., Suisun
14 Marsh Habitat Management, Preservation, and Restoration Plan and restoration
15 activities in the Cache Slough area); and therefore, were considered to be included
16 in all of the alternatives and the Second Basis of Comparison.

17 As described in Section 3.3.1.2, substantial efforts have been completed to
18 develop floodplain restoration activities under Action I.6.1 of the NMFS BO;
19 however, specific details of the floodplain restoration activities have not been
20 completed at this time. Therefore, the EIS analysis used published assumptions
21 related to water operations associated with Action I.6.1, including use of an
22 operable gate to convey water from Sacramento River near Fremont Weir into
23 Yolo Bypass.

24 Although inclusion of an operable gate at the Fremont Weir is considered
25 reasonable and foreseeable and is included in the Second Basis of Comparison, a
26 sensitivity analysis without the operable gate was conducted to analyze possible
27 effects of the operable gate on overall system operations.

28 The inclusion of an operable gate at the Fremont Weir would primarily affect
29 flows in the Yolo Bypass and have minimal, if any effects, on flows in the
30 Sacramento River downstream of the Fremont Weir or in the Delta, as shown in
31 this sensitivity analysis. The model results of this sensitivity analysis are
32 presented in Section 5E.3 of this appendix.

33 **5E.1 Methodology**

34 CalSim II model simulation representing the Revised Second Basis of
35 Comparison¹ is rerun without an operable gate (notch) in the Fremont Weir. The
36 Revised Second Basis of Comparison 2 (SBC_R_2) is compared against the

¹ Please refer to Appendix 5C for detailed description of the Revised Second Basis of Comparison.

1 Revised Second Basis of Comparison (SBC_R) to identify the extent of the
2 effects of this change. As presented in the next section, the results show that the
3 effects of the removal of the Fremont Weir notch are primarily contained within
4 the Yolo Bypass and the Sacramento River downstream of the Fremont Weir.

5 **5E.2 Analysis Results**

6 Model results comparing Revised Second Basis of Comparison without an
7 operable gate (notch) in the Fremont Weir (SBC_R_2) to the Revised Second
8 Basis of Comparison (SBC_R) presented in Section 5E.3.1. Except for flow over
9 Fremont Weir from the Sacramento River, flow in the Yolo Bypass, and
10 Sacramento River flows at Freeport, all of the parameters are similar (less than 5
11 percent change) under both model runs.

12 In general, with the removal of the Fremont Weir notch, Fremont Weir spills to
13 Yolo Bypass are reduced. As a results of this, Yolo Bypass flows are reduced,
14 Sacramento River flows at Freeport are increased, and Sacramento River flows at
15 Rio Vista are similar. Because this is a rerouting of high flows, no additional
16 changes are observed in overall system.

17 **5E.3 Model Run Results**

18 Model results for the Revised Second Basis of Comparison compared with
19 Second Basis of Comparison Results are presented on the following pages.

20 5E.3.1 Trinity Storage

21 5E.3.2 Shasta Storage

22 5E.3.3 Oroville Storage

23 5E.3.4 Folsom Storage

24 5E.3.5 New Melones Storage

25 5E.3.6 Delta Outflow

26 5E.3.7 Exports through Jones and Banks Pumping Plants

27 5E.3.8 Trinity River below Lewiston Dam

28 5E.3.9 Clear Creek below Whiskeytown Dam

29 5E.3.10 Sacramento River downstream of Keswick Dam

30 5E.3.11 Feather River downstream of Thermalito Afterbay

31 5E.3.12 Fremont Weir Spills

32 5E.3.13 American River below Nimbus Dam

33 5E.3.14 Sacramento River at Freeport

- 1 5E.3.15 Yolo Bypass Flow
- 2 5E.3.16 Sacramento River at Rio Vista
- 3 5E.3.17 San Joaquin River at Vernalis Flow
- 4 5E.3.18 San Joaquin River at Vernalis Salinity
- 5 5E.3.19 Stanislaus River below Goodwin Flow
- 6 5E.3.20 Stanislaus River at Mouth Flow
- 7 5E.3.21 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry
8 and Critical Year Averages, CVP Deliveries
- 9 5E.3.22 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry
10 and Critical Year Averages, CVP
- 11 5E.3.23 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry
12 and Critical Year Averages, SWP Deliveries
- 13 5E.3.24 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry
14 and Critical Year Averages, SWP

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Table 5E.3.1. Trinity Lake, End of Month Storage

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Revised Second Basis of Comparison												
Probability of Exceedance^a												
10%	1,850	1,850	1,850	1,900	2,000	2,100	2,298	2,345	2,303	2,253	2,143	1,975
20%	1,805	1,840	1,850	1,900	2,000	2,100	2,257	2,276	2,199	2,059	1,922	1,822
30%	1,577	1,591	1,725	1,816	1,979	2,084	2,222	2,159	2,074	1,924	1,791	1,643
40%	1,386	1,446	1,567	1,701	1,865	2,023	2,131	2,029	1,919	1,767	1,588	1,422
50%	1,265	1,284	1,398	1,563	1,694	1,820	2,024	1,915	1,777	1,599	1,419	1,307
60%	1,173	1,200	1,226	1,341	1,538	1,709	1,778	1,749	1,671	1,497	1,329	1,218
70%	1,105	1,092	1,183	1,209	1,356	1,483	1,643	1,592	1,533	1,398	1,221	1,106
80%	942	958	979	1,053	1,143	1,267	1,442	1,429	1,332	1,166	1,054	972
90%	633	630	640	720	808	921	1,064	994	939	816	690	640
Long Term												
Full Simulation Period ^b	1,270	1,288	1,352	1,431	1,554	1,678	1,819	1,796	1,727	1,583	1,435	1,319
Water Year Types^c												
Wet (32%)	1,502	1,536	1,645	1,768	1,931	2,055	2,224	2,250	2,194	2,068	1,939	1,804
Above Normal (16%)	1,207	1,245	1,363	1,524	1,718	1,902	2,082	2,056	1,959	1,819	1,650	1,517
Below Normal (13%)	1,446	1,467	1,486	1,551	1,638	1,726	1,868	1,796	1,692	1,510	1,334	1,203
Dry (24%)	1,178	1,184	1,210	1,230	1,322	1,452	1,585	1,536	1,466	1,299	1,151	1,055
Critical (15%)	825	806	817	827	870	951	1,002	966	933	814	673	600

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Revised Second Basis of Comparison 2												
Probability of Exceedance^a												
10%	1,850	1,850	1,850	1,900	2,000	2,100	2,298	2,345	2,303	2,253	2,143	1,975
20%	1,805	1,840	1,850	1,900	2,000	2,100	2,254	2,276	2,193	2,056	1,920	1,822
30%	1,577	1,591	1,725	1,816	1,979	2,084	2,222	2,159	2,074	1,924	1,791	1,643
40%	1,386	1,446	1,567	1,701	1,865	2,022	2,131	2,029	1,919	1,766	1,588	1,422
50%	1,265	1,284	1,392	1,563	1,694	1,820	2,022	1,908	1,778	1,600	1,419	1,306
60%	1,175	1,199	1,226	1,341	1,538	1,709	1,778	1,749	1,671	1,496	1,330	1,219
70%	1,105	1,092	1,183	1,209	1,357	1,483	1,643	1,591	1,533	1,398	1,217	1,106
80%	941	958	979	1,052	1,143	1,266	1,442	1,429	1,332	1,166	1,054	972
90%	633	630	639	719	807	921	1,064	994	939	816	690	640
Long Term												
Full Simulation Period ^b	1,269	1,288	1,351	1,431	1,554	1,678	1,819	1,796	1,727	1,582	1,434	1,319
Water Year Types^c												
Wet (32%)	1,502	1,536	1,645	1,768	1,931	2,055	2,224	2,250	2,194	2,068	1,939	1,804
Above Normal (16%)	1,206	1,244	1,361	1,522	1,717	1,901	2,080	2,054	1,958	1,818	1,649	1,516
Below Normal (13%)	1,446	1,467	1,486	1,551	1,638	1,726	1,866	1,794	1,690	1,509	1,332	1,202
Dry (24%)	1,178	1,184	1,210	1,230	1,322	1,452	1,585	1,536	1,466	1,300	1,151	1,055
Critical (15%)	824	805	816	827	869	950	1,001	965	932	814	672	599

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison												
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%)	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.
 Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Appendix 5E: Sensitivity Analysis - Revised Second Basis of Comparison with no Fremont Weir Notch

Table 5E.3.2. Shasta Lake, End of Month Storage

Revised Second Basis of Comparison												
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	3,359	3,632	3,911	4,220	4,499	4,552	4,434	3,902	3,563	3,400
20%	3,247	3,252	3,333	3,552	3,771	4,118	4,448	4,552	4,283	3,766	3,379	3,354
30%	3,117	3,191	3,302	3,513	3,674	4,020	4,384	4,532	4,155	3,550	3,183	3,095
40%	2,931	3,015	3,253	3,380	3,569	3,980	4,290	4,364	3,907	3,289	2,969	2,942
50%	2,687	2,782	3,116	3,320	3,492	3,917	4,175	4,238	3,704	3,139	2,777	2,749
60%	2,505	2,583	2,937	3,167	3,356	3,713	4,064	3,961	3,482	2,960	2,646	2,599
70%	2,364	2,479	2,619	2,922	3,252	3,513	3,906	3,729	3,335	2,793	2,536	2,456
80%	2,096	2,142	2,178	2,617	2,973	3,390	3,643	3,536	2,977	2,449	2,139	2,114
90%	1,404	1,374	1,488	2,077	2,347	2,775	2,720	2,950	2,583	1,968	1,590	1,536
Long Term												
Full Simulation Period ^b	2,534	2,582	2,755	3,023	3,287	3,641	3,916	3,907	3,539	3,009	2,677	2,613
Water Year Types^c												
Wet (32%)	2,819	2,925	3,153	3,405	3,597	3,841	4,301	4,453	4,225	3,732	3,362	3,255
Above Normal (16%)	2,513	2,592	2,819	3,326	3,521	4,038	4,415	4,415	3,977	3,347	2,974	2,926
Below Normal (13%)	2,822	2,840	2,972	3,293	3,642	3,963	4,163	4,042	3,599	3,012	2,604	2,576
Dry (24%)	2,411	2,434	2,579	2,756	3,170	3,647	3,866	3,774	3,333	2,804	2,543	2,501
Critical (15%)	1,881	1,835	1,920	2,065	2,234	2,471	2,397	2,275	1,864	1,418	1,162	1,102

Revised Second Basis of Comparison 2												
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	3,359	3,632	3,911	4,220	4,499	4,552	4,434	3,902	3,563	3,400
20%	3,247	3,252	3,333	3,552	3,771	4,118	4,448	4,552	4,283	3,766	3,378	3,354
30%	3,117	3,191	3,302	3,513	3,674	4,020	4,384	4,532	4,155	3,550	3,183	3,095
40%	2,930	3,015	3,253	3,380	3,569	3,980	4,290	4,364	3,907	3,289	2,967	2,941
50%	2,687	2,782	3,116	3,320	3,492	3,917	4,175	4,241	3,707	3,139	2,776	2,749
60%	2,505	2,582	2,936	3,167	3,356	3,712	4,064	3,961	3,481	2,960	2,646	2,599
70%	2,359	2,480	2,619	2,922	3,252	3,513	3,906	3,729	3,335	2,793	2,536	2,456
80%	2,096	2,142	2,178	2,617	2,973	3,390	3,643	3,536	2,979	2,451	2,139	2,114
90%	1,403	1,374	1,487	2,073	2,347	2,775	2,720	2,950	2,582	1,967	1,590	1,535
Long Term												
Full Simulation Period ^b	2,534	2,581	2,755	3,023	3,287	3,641	3,916	3,907	3,539	3,009	2,677	2,613
Water Year Types^c												
Wet (32%)	2,819	2,925	3,153	3,405	3,597	3,841	4,301	4,453	4,225	3,732	3,362	3,255
Above Normal (16%)	2,512	2,591	2,818	3,325	3,521	4,038	4,415	4,415	3,977	3,346	2,974	2,926
Below Normal (13%)	2,822	2,840	2,972	3,292	3,642	3,963	4,165	4,043	3,601	3,013	2,606	2,577
Dry (24%)	2,411	2,434	2,579	2,756	3,169	3,647	3,865	3,774	3,333	2,804	2,542	2,501
Critical (15%)	1,880	1,833	1,919	2,063	2,232	2,470	2,395	2,273	1,862	1,416	1,161	1,101

Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison												
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%	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%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5E.3.3. Lake Oroville, End of Month Storage

Revised Second Basis of Comparison

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2,613	2,547	2,788	2,807	2,948	3,052	3,352	3,538	3,538	3,037	2,860	2,729
20%	2,277	2,324	2,490	2,788	2,831	2,990	3,298	3,538	3,532	2,959	2,592	2,458
30%	1,932	1,996	2,165	2,565	2,788	2,937	3,268	3,474	3,274	2,756	2,385	2,112
40%	1,687	1,759	2,023	2,372	2,780	2,844	3,209	3,275	2,945	2,340	1,988	1,789
50%	1,406	1,421	1,705	2,204	2,574	2,788	3,084	3,022	2,634	2,121	1,785	1,601
60%	1,143	1,078	1,383	1,682	2,133	2,621	2,885	2,777	2,418	1,913	1,588	1,376
70%	1,034	1,001	1,047	1,307	1,868	2,209	2,499	2,470	2,053	1,723	1,392	1,228
80%	998	959	985	1,109	1,538	1,789	1,938	2,034	1,805	1,443	1,255	1,097
90%	913	876	851	1,003	1,198	1,471	1,575	1,584	1,335	1,113	994	891
Long Term												
Full Simulation Period ^b	1,584	1,580	1,736	1,972	2,253	2,470	2,732	2,792	2,561	2,152	1,891	1,721
Water Year Types^c												
Wet (32%)	1,940	1,983	2,353	2,633	2,869	2,942	3,300	3,478	3,392	2,969	2,730	2,571
Above Normal (16%)	1,465	1,521	1,697	2,166	2,644	2,939	3,274	3,359	3,079	2,491	2,085	1,823
Below Normal (13%)	1,831	1,796	1,839	2,046	2,376	2,642	2,892	2,844	2,460	1,933	1,635	1,413
Dry (24%)	1,354	1,306	1,327	1,456	1,745	2,101	2,345	2,339	2,012	1,668	1,409	1,248
Critical (15%)	1,101	1,028	1,032	1,119	1,227	1,398	1,415	1,398	1,210	1,018	904	840

Revised Second Basis of Comparison 2

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	2,613	2,547	2,788	2,807	2,948	3,052	3,352	3,538	3,538	3,037	2,860	2,729
20%	2,277	2,323	2,490	2,788	2,831	2,990	3,298	3,538	3,531	2,959	2,592	2,458
30%	1,931	1,996	2,165	2,565	2,788	2,937	3,268	3,474	3,273	2,756	2,384	2,112
40%	1,687	1,759	2,023	2,372	2,780	2,844	3,209	3,275	2,945	2,340	1,988	1,790
50%	1,407	1,421	1,705	2,204	2,574	2,788	3,084	3,021	2,636	2,120	1,785	1,600
60%	1,143	1,077	1,383	1,709	2,133	2,621	2,886	2,777	2,417	1,913	1,588	1,377
70%	1,035	1,001	1,035	1,307	1,880	2,230	2,498	2,470	2,053	1,723	1,392	1,229
80%	998	960	985	1,107	1,538	1,790	1,938	2,034	1,805	1,462	1,266	1,097
90%	914	876	851	1,003	1,198	1,471	1,577	1,582	1,333	1,113	994	892
Long Term												
Full Simulation Period ^b	1,584	1,579	1,736	1,972	2,253	2,471	2,733	2,792	2,562	2,153	1,892	1,721
Water Year Types^c												
Wet (32%)	1,940	1,983	2,353	2,633	2,869	2,942	3,300	3,478	3,392	2,969	2,730	2,571
Above Normal (16%)	1,466	1,519	1,695	2,164	2,642	2,939	3,274	3,359	3,079	2,490	2,085	1,822
Below Normal (13%)	1,831	1,796	1,839	2,046	2,376	2,643	2,892	2,844	2,461	1,937	1,640	1,417
Dry (24%)	1,355	1,307	1,330	1,459	1,748	2,104	2,348	2,342	2,015	1,671	1,412	1,248
Critical (15%)	1,097	1,025	1,030	1,117	1,226	1,396	1,414	1,396	1,208	1,016	903	838

Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison

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%	2%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	0%	-1%	0%	1%	1%	0%	0%	0%	0%	0%	0%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	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%)	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5E.3.4. Folsom Lake, End of Month Storage

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Revised Second Basis of Comparison												
Probability of Exceedance ^a												
10%	692	567	567	567	567	661	792	967	967	903	792	750
20%	580	558	567	567	567	657	792	967	967	816	685	631
30%	548	520	566	563	559	653	792	967	965	725	634	608
40%	472	498	523	554	555	646	792	967	908	639	567	526
50%	396	429	493	523	541	633	792	955	797	546	461	424
60%	349	394	456	470	498	621	790	858	731	497	438	403
70%	329	353	405	428	457	600	733	760	631	432	386	360
80%	285	337	358	388	432	563	635	655	545	376	329	315
90%	253	260	267	304	392	453	484	471	428	311	244	233
Long Term												
Full Simulation Period ^b	430	422	456	474	494	592	715	823	755	577	502	469
Water Year Types ^c												
Wet (32%)	483	469	522	524	515	632	785	951	936	793	687	646
Above Normal (16%)	388	410	465	537	538	640	787	946	851	584	517	479
Below Normal (13%)	505	488	501	514	541	626	762	848	739	476	404	385
Dry (24%)	402	396	421	437	486	585	699	768	662	486	432	407
Critical (15%)	336	315	322	323	367	433	467	479	429	349	290	257

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Revised Second Basis of Comparison 2												
Probability of Exceedance ^a												
10%	692	567	567	567	567	661	792	967	967	903	792	750
20%	580	558	567	567	567	657	792	967	967	816	685	631
30%	548	520	566	563	559	653	792	967	965	725	634	608
40%	472	498	523	554	555	646	792	967	908	639	567	526
50%	396	430	493	523	541	633	792	955	797	546	462	424
60%	349	394	456	470	498	621	790	858	731	497	438	403
70%	329	353	405	428	457	600	733	760	631	432	386	360
80%	284	336	358	388	432	563	636	655	545	376	329	314
90%	253	260	267	304	392	453	485	471	427	310	244	233
Long Term												
Full Simulation Period ^b	430	422	456	474	494	592	715	823	755	577	502	469
Water Year Types ^c												
Wet (32%)	483	469	522	524	515	632	785	951	936	793	687	646
Above Normal (16%)	389	411	465	537	538	640	787	946	851	584	517	479
Below Normal (13%)	505	488	501	514	541	626	762	848	739	476	405	386
Dry (24%)	402	396	421	437	486	585	699	768	662	486	432	407
Critical (15%)	335	314	321	323	367	432	467	479	429	348	290	256

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison												
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%)	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5E.3.5. New Melones Reservoir, End of Month Storage

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Revised Second Basis of Comparison												
Probability of Exceedance^a												
10%	1,879	1,859	1,935	1,954	1,970	2,030	2,043	2,167	2,141	2,080	1,971	1,911
20%	1,775	1,776	1,788	1,823	1,966	1,979	1,955	1,999	2,045	1,947	1,838	1,781
30%	1,666	1,660	1,703	1,764	1,807	1,896	1,885	1,955	1,912	1,817	1,712	1,661
40%	1,508	1,514	1,596	1,693	1,771	1,801	1,788	1,756	1,711	1,634	1,541	1,496
50%	1,364	1,362	1,396	1,478	1,611	1,671	1,625	1,668	1,621	1,512	1,417	1,360
60%	1,257	1,260	1,320	1,353	1,393	1,474	1,492	1,532	1,474	1,381	1,300	1,249
70%	1,074	1,086	1,146	1,224	1,231	1,230	1,250	1,343	1,299	1,204	1,111	1,055
80%	843	824	852	894	999	1,049	1,078	1,094	1,039	975	902	861
90%	705	711	716	724	802	806	749	817	842	775	722	718
Long Term												
Full Simulation Period ^b	1,316	1,321	1,355	1,411	1,470	1,522	1,522	1,564	1,559	1,470	1,373	1,319
Water Year Types^c												
Wet (32%)	1,534	1,539	1,596	1,700	1,784	1,864	1,901	2,027	2,087	2,001	1,880	1,802
Above Normal (16%)	1,225	1,252	1,315	1,405	1,501	1,594	1,613	1,686	1,664	1,566	1,468	1,420
Below Normal (13%)	1,479	1,484	1,500	1,522	1,576	1,605	1,579	1,581	1,555	1,457	1,359	1,313
Dry (24%)	1,285	1,280	1,287	1,303	1,335	1,369	1,351	1,338	1,291	1,197	1,112	1,067
Critical (15%)	845	843	858	869	887	885	837	789	751	682	617	587

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Revised Second Basis of Comparison 2												
Probability of Exceedance^a												
10%	1,879	1,859	1,935	1,954	1,970	2,030	2,043	2,167	2,141	2,080	1,971	1,911
20%	1,775	1,776	1,788	1,823	1,966	1,979	1,955	1,999	2,045	1,947	1,838	1,781
30%	1,666	1,660	1,703	1,764	1,807	1,896	1,885	1,955	1,912	1,817	1,712	1,661
40%	1,508	1,514	1,596	1,693	1,771	1,801	1,788	1,756	1,711	1,634	1,541	1,496
50%	1,364	1,362	1,396	1,478	1,611	1,671	1,625	1,668	1,621	1,512	1,417	1,360
60%	1,257	1,260	1,320	1,353	1,393	1,474	1,492	1,532	1,474	1,381	1,300	1,249
70%	1,074	1,086	1,146	1,224	1,231	1,230	1,250	1,343	1,299	1,204	1,111	1,055
80%	843	824	852	894	999	1,049	1,078	1,094	1,039	975	902	861
90%	705	711	716	724	802	806	749	817	842	775	722	718
Long Term												
Full Simulation Period ^b	1,316	1,321	1,355	1,411	1,470	1,522	1,522	1,564	1,559	1,470	1,373	1,319
Water Year Types^c												
Wet (32%)	1,534	1,539	1,596	1,700	1,784	1,864	1,901	2,027	2,087	2,001	1,880	1,802
Above Normal (16%)	1,225	1,252	1,315	1,405	1,501	1,594	1,613	1,686	1,664	1,566	1,468	1,420
Below Normal (13%)	1,479	1,484	1,500	1,522	1,576	1,605	1,579	1,581	1,555	1,457	1,359	1,313
Dry (24%)	1,285	1,280	1,287	1,303	1,335	1,369	1,351	1,338	1,291	1,197	1,112	1,067
Critical (15%)	845	843	858	869	887	885	837	789	751	682	617	587

Statistic	End of Month Storage (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison												
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%)	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.
 Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5E.3.6. Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Revised Second Basis of Comparison													
Statistic	Monthly Outflow Volume (TAF)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	TOT
Probability of Exceedance^a													
10%	373	895	4,048	6,551	8,106	5,795	3,956	2,541	1,141	670	271	259	30,929
20%	286	384	2,029	4,469	4,884	4,375	2,589	1,579	658	581	247	240	24,158
30%	269	329	947	2,826	3,377	2,686	1,466	952	591	508	246	234	18,772
40%	257	291	635	1,561	2,882	2,060	1,215	790	559	492	246	229	14,349
50%	246	269	464	1,078	1,898	1,614	859	715	512	461	246	221	9,721
60%	246	268	371	829	1,168	1,103	726	675	495	400	246	184	8,015
70%	246	268	312	665	918	899	599	560	439	307	246	179	6,505
80%	246	268	277	501	720	751	565	533	422	307	236	179	5,871
90%	232	208	277	405	596	601	528	437	369	246	215	179	5,025
Long Term													
Full Simulation Period ^b	289	508	1,407	2,590	3,140	2,678	1,609	1,159	704	457	252	238	15,030
Water Year Types^c													
Wet (32%)	345	794	3,009	5,453	5,819	5,073	3,004	2,182	1,199	607	271	321	28,075
Above Normal (16%)	252	566	1,394	2,837	3,821	3,313	1,620	1,021	569	599	250	223	16,464
Below Normal (13%)	294	433	540	878	2,078	1,075	812	715	532	429	254	208	8,248
Dry (24%)	267	297	433	821	1,268	1,232	879	627	455	310	244	191	7,025
Critical (15%)	241	244	367	640	692	680	525	385	346	247	229	179	4,774

Revised Second Basis of Comparison 2													
Statistic	Monthly Outflow Volume (TAF)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	TOT
Probability of Exceedance^a													
10%	373	895	4,048	6,551	8,106	5,795	3,956	2,541	1,141	670	271	259	30,930
20%	286	384	2,017	4,469	4,884	4,375	2,589	1,579	658	581	247	240	24,159
30%	269	329	947	2,826	3,377	2,686	1,466	952	591	508	246	234	18,773
40%	257	291	635	1,561	2,882	2,060	1,215	790	559	492	246	229	14,348
50%	246	269	464	1,078	1,898	1,614	859	715	513	461	246	221	9,720
60%	246	268	371	839	1,168	1,103	726	675	495	400	246	184	8,015
70%	246	268	312	665	918	899	599	560	439	307	246	179	6,504
80%	246	268	277	501	720	751	565	534	422	307	236	179	5,872
90%	233	208	277	405	596	601	528	437	369	246	215	179	5,025
Long Term													
Full Simulation Period ^b	289	508	1,406	2,591	3,140	2,677	1,609	1,159	704	457	253	238	15,031
Water Year Types^c													
Wet (32%)	345	794	3,008	5,453	5,819	5,073	3,004	2,182	1,199	607	271	321	28,075
Above Normal (16%)	252	566	1,393	2,837	3,822	3,311	1,620	1,021	570	599	250	223	16,464
Below Normal (13%)	294	433	540	878	2,077	1,075	812	716	532	428	254	208	8,247
Dry (24%)	267	297	434	821	1,268	1,232	879	628	455	310	245	191	7,026
Critical (15%)	241	244	365	643	692	680	525	385	346	247	229	179	4,774

Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison													
Statistic	Monthly Outflow Volume (Percent Change)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	TOT
Probability of Exceedance^a													
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	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%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	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%	0%
90%	1%	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%	0%
Water Year Types^c													
Wet (32%)	0%	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%	0%
Below Normal (13%)	0%	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%	0%
Critical (15%)	0%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5E.3.7. Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Revised Second Basis of Comparison													
Statistic	Monthly Export Volume (TAF)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	TOT
Probability of Exceedance^a													
10%	694	671	738	803	722	707	530	515	526	694	694	671	7,327
20%	681	671	723	769	684	619	508	417	450	694	694	671	6,944
30%	626	659	719	746	666	563	481	369	429	691	694	671	6,761
40%	551	622	717	738	602	542	433	351	408	609	621	668	6,571
50%	488	590	683	724	552	512	391	314	392	555	529	628	6,266
60%	426	502	609	645	512	489	336	277	353	474	468	549	5,943
70%	327	460	554	562	461	459	264	228	316	390	364	408	5,000
80%	249	349	492	499	393	373	189	169	176	306	281	338	4,572
90%	196	286	382	371	309	301	109	81	128	146	183	228	3,458
Long Term													
Full Simulation Period ^b	467	524	613	638	528	491	355	302	349	494	487	526	5,775
Water Year Types^c													
Wet (32%)	544	620	717	724	587	554	485	428	451	632	653	660	7,055
Above Normal (16%)	419	520	641	719	590	568	455	359	411	574	647	648	6,553
Below Normal (13%)	544	595	629	670	471	498	342	296	413	631	525	543	6,156
Dry (24%)	434	472	550	567	516	491	262	221	273	401	323	431	4,941
Critical (15%)	336	340	444	451	405	264	135	110	132	138	195	249	3,199

Revised Second Basis of Comparison 2													
Statistic	Monthly Export Volume (TAF)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	TOT
Probability of Exceedance^a													
10%	694	671	738	803	722	707	530	515	526	694	694	671	7,325
20%	681	671	723	769	684	618	508	417	450	694	694	671	6,943
30%	626	659	719	746	666	563	481	369	428	691	694	671	6,760
40%	551	622	717	738	607	542	433	351	408	609	620	668	6,571
50%	488	590	683	724	552	512	391	314	392	556	529	629	6,277
60%	426	502	609	640	512	489	336	278	353	473	471	550	5,942
70%	346	460	554	562	461	458	264	228	316	390	364	408	4,999
80%	265	349	491	499	393	373	189	168	176	306	281	337	4,572
90%	196	286	382	371	309	301	107	81	128	146	183	228	3,458
Long Term													
Full Simulation Period ^b	468	524	613	637	528	491	355	302	349	494	488	526	5,775
Water Year Types^c													
Wet (32%)	544	620	717	724	587	554	485	428	451	632	653	660	7,055
Above Normal (16%)	424	520	642	719	591	567	455	359	411	574	647	648	6,558
Below Normal (13%)	544	594	629	670	471	498	341	296	413	628	524	543	6,151
Dry (24%)	435	472	550	567	516	491	262	220	273	401	323	431	4,941
Critical (15%)	339	340	444	448	405	264	135	110	132	138	195	249	3,199

Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison													
Statistic	Monthly Export Volume (Percent Change)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	TOT
Probability of Exceedance^a													
10%	0%	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%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	1%	0%	0%
70%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
80%	6%	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%	0%
Long Term													
Full Simulation Period ^b	0%	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%	0%
Above Normal (16%)	1%	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%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	1%	0%	0%	-1%	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.
 Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5E.3.8. Trinity River below Lewiston Reservoir, Monthly Flow

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Revised Second Basis of Comparison												
Probability of Exceedance ^a												
10%	373	300	300	1,448	2,151	387	600	4,709	4,626	1,102	450	450
20%	373	300	300	300	300	300	540	4,709	2,526	1,102	450	450
30%	373	300	300	300	300	300	540	4,570	2,526	1,102	450	450
40%	373	300	300	300	300	300	521	4,570	2,526	1,102	450	450
50%	373	300	300	300	300	300	493	4,189	2,120	1,102	450	450
60%	373	300	300	300	300	300	493	4,189	2,120	1,102	450	450
70%	373	300	300	300	300	300	460	2,924	783	450	450	450
80%	373	300	300	300	300	300	460	2,924	783	450	450	450
90%	373	300	300	300	300	300	427	1,498	783	450	450	450
Long Term												
Full Simulation Period ^b	366	361	659	738	747	668	555	3,753	2,210	890	450	445
Water Year Types ^c												
Wet (32%)	373	504	1,432	1,645	1,319	1,380	632	4,556	3,413	1,136	450	450
Above Normal (16%)	373	300	300	374	801	462	457	4,597	2,948	1,102	450	450
Below Normal (13%)	373	300	300	300	630	303	517	3,585	1,755	924	450	450
Dry (24%)	354	300	300	300	300	300	528	3,250	1,271	678	450	450
Critical (15%)	357	275	300	300	300	300	575	2,092	783	450	450	413

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Revised Second Basis of Comparison 2												
Probability of Exceedance ^a												
10%	373	300	300	1,448	2,149	380	600	4,709	4,626	1,102	450	450
20%	373	300	300	300	300	300	540	4,709	2,526	1,102	450	450
30%	373	300	300	300	300	300	540	4,570	2,526	1,102	450	450
40%	373	300	300	300	300	300	521	4,570	2,526	1,102	450	450
50%	373	300	300	300	300	300	493	4,189	2,120	1,102	450	450
60%	373	300	300	300	300	300	493	4,189	2,120	1,102	450	450
70%	373	300	300	300	300	300	460	2,924	783	450	450	450
80%	373	300	300	300	300	300	460	2,924	783	450	450	450
90%	373	300	300	300	300	300	427	1,498	783	450	450	450
Long Term												
Full Simulation Period ^b	364	361	659	738	746	668	556	3,753	2,210	890	450	445
Water Year Types ^c												
Wet (32%)	373	504	1,432	1,645	1,317	1,380	633	4,556	3,413	1,136	450	450
Above Normal (16%)	373	300	300	374	801	462	457	4,597	2,948	1,102	450	450
Below Normal (13%)	373	300	300	300	630	303	517	3,585	1,755	924	450	450
Dry (24%)	354	300	300	300	300	300	528	3,250	1,271	678	450	450
Critical (15%)	344	275	300	300	300	300	575	2,092	783	450	450	413

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison												
Probability of Exceedance ^a												
10%	0%	0%	0%	0%	0%	-2%	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%)	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%)	-3%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5E.3.9. Clear Creek below Whiskeytown, Monthly Flow

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Revised Second Basis of Comparison												
Probability of Exceedance ^a												
10%	200	200	200	200	200	200	200	200	200	85	85	150
20%	200	200	200	200	200	200	200	200	200	85	85	150
30%	200	200	200	200	200	200	200	200	200	85	85	150
40%	200	200	200	200	200	200	200	200	200	85	85	150
50%	200	200	200	200	200	200	200	200	200	85	85	150
60%	200	200	200	200	200	200	200	200	200	85	85	150
70%	200	200	200	200	200	200	200	200	200	85	85	150
80%	200	200	200	200	200	200	200	200	150	85	85	150
90%	150	150	150	150	150	150	150	150	150	85	85	150
Long Term												
Full Simulation Period ^b	185	188	190	225	241	214	191	192	181	85	85	148
Water Year Types ^c												
Wet (32%)	200	200	200	309	356	272	200	200	200	85	85	150
Above Normal (16%)	181	182	188	192	196	196	196	200	200	85	85	150
Below Normal (13%)	195	195	195	195	195	195	195	195	191	85	85	150
Dry (24%)	178	184	188	190	190	190	190	190	183	85	85	150
Critical (15%)	163	167	167	167	167	167	167	167	111	85	85	133

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Revised Second Basis of Comparison 2												
Probability of Exceedance ^a												
10%	200	200	200	200	200	200	200	200	200	85	85	150
20%	200	200	200	200	200	200	200	200	200	85	85	150
30%	200	200	200	200	200	200	200	200	200	85	85	150
40%	200	200	200	200	200	200	200	200	200	85	85	150
50%	200	200	200	200	200	200	200	200	200	85	85	150
60%	200	200	200	200	200	200	200	200	200	85	85	150
70%	200	200	200	200	200	200	200	200	200	85	85	150
80%	200	200	200	200	200	200	200	200	150	85	85	150
90%	150	150	150	150	150	150	150	150	150	85	85	150
Long Term												
Full Simulation Period ^b	185	188	190	225	241	214	191	192	181	85	85	148
Water Year Types ^c												
Wet (32%)	200	200	200	309	356	272	200	200	200	85	85	150
Above Normal (16%)	181	182	188	192	196	196	196	200	200	85	85	150
Below Normal (13%)	195	195	195	195	195	195	195	195	191	85	85	150
Dry (24%)	178	184	188	190	190	190	190	190	183	85	85	150
Critical (15%)	163	167	167	167	167	167	167	167	111	85	85	133

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison												
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%)	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5E.3.10. Sacramento River d/s of Keswick Dam, Monthly Flow

Revised Second Basis of Comparison												
Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	8,508	7,567	19,509	20,470	31,560	18,571	10,172	10,229	14,458	15,000	12,700	8,243
20%	7,898	6,796	11,485	15,018	21,412	12,718	8,215	9,227	13,000	15,000	11,702	6,412
30%	7,349	5,700	6,189	8,978	12,892	8,359	6,962	8,481	12,266	15,000	11,187	5,953
40%	6,205	5,230	4,374	4,500	5,302	4,500	6,305	8,011	11,426	14,606	10,732	5,680
50%	5,651	4,873	4,016	4,184	4,500	4,500	5,732	7,437	11,089	14,001	10,234	5,500
60%	5,260	4,407	3,976	3,798	3,656	3,872	5,144	7,099	10,345	13,365	9,823	5,180
70%	4,873	4,180	3,680	3,251	3,250	3,250	4,500	6,543	9,975	12,759	9,256	4,650
80%	4,295	4,000	3,274	3,250	3,250	3,250	4,500	6,091	9,205	11,861	9,034	4,318
90%	4,000	3,502	3,250	3,250	3,250	3,250	3,713	5,573	8,400	10,741	8,139	4,013
Long Term												
Full Simulation Period ^b	6,057	5,625	7,681	9,345	11,729	8,578	6,745	7,749	11,210	13,425	10,387	5,801
Water Year Types^c												
Wet (32%)	6,381	6,742	14,046	18,182	20,764	16,037	8,702	8,399	10,291	13,215	11,128	7,264
Above Normal (16%)	5,874	5,793	7,473	8,992	17,811	8,881	6,317	7,819	11,981	14,792	11,359	5,970
Below Normal (13%)	6,540	5,702	4,124	4,784	7,119	5,064	6,094	8,130	12,326	14,507	11,942	5,416
Dry (24%)	6,237	4,756	3,898	4,123	3,573	3,701	5,074	7,334	11,725	13,439	8,903	4,782
Critical (15%)	4,808	4,399	3,682	3,463	3,382	3,440	6,347	6,608	10,486	11,383	8,776	4,501

Revised Second Basis of Comparison 2												
Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	8,508	7,568	19,508	20,466	31,555	18,571	10,172	10,229	14,462	15,000	12,690	8,199
20%	8,021	6,797	11,488	15,013	21,412	12,718	8,215	9,227	12,983	15,000	11,701	6,412
30%	7,345	5,700	6,102	8,978	12,849	8,359	6,962	8,481	12,266	15,000	11,187	5,952
40%	6,205	5,230	4,373	4,500	5,297	4,500	6,305	8,011	11,426	14,606	10,734	5,674
50%	5,649	4,873	4,020	4,184	4,500	4,500	5,732	7,445	11,090	14,001	10,234	5,501
60%	5,261	4,407	3,976	3,798	3,654	3,872	5,144	7,099	10,345	13,365	9,823	5,180
70%	4,870	4,180	3,677	3,251	3,250	3,250	4,500	6,543	9,975	12,763	9,265	4,650
80%	4,303	4,000	3,274	3,250	3,250	3,250	4,500	6,091	9,205	11,861	9,033	4,318
90%	4,000	3,502	3,250	3,250	3,250	3,250	3,713	5,573	8,400	10,740	8,139	4,013
Long Term												
Full Simulation Period ^b	6,062	5,626	7,679	9,344	11,727	8,578	6,745	7,748	11,212	13,425	10,389	5,801
Water Year Types^c												
Wet (32%)	6,382	6,743	14,043	18,180	20,764	16,037	8,702	8,401	10,291	13,216	11,128	7,264
Above Normal (16%)	5,900	5,796	7,456	8,992	17,809	8,878	6,317	7,819	11,985	14,792	11,362	5,966
Below Normal (13%)	6,542	5,700	4,124	4,784	7,110	5,064	6,092	8,132	12,333	14,507	11,943	5,415
Dry (24%)	6,236	4,755	3,904	4,123	3,572	3,701	5,075	7,327	11,724	13,438	8,910	4,784
Critical (15%)	4,814	4,405	3,682	3,465	3,382	3,440	6,347	6,608	10,488	11,387	8,776	4,501

Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison												
Statistic	Monthly Flow (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%	-1%
20%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	-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%	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%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5E.3.11. Feather River d/s of Thermalito Afterbay, Monthly Flow

Revised Second Basis of Comparison												
Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	4,000	2,500	4,835	14,314	19,368	14,789	8,396	8,275	7,856	9,422	7,708	5,582
20%	4,000	2,500	3,418	3,405	11,381	11,022	3,686	6,274	6,941	9,008	6,567	5,294
30%	4,000	2,154	2,155	1,700	6,094	7,843	2,757	5,155	6,254	8,564	5,571	4,549
40%	3,846	1,700	1,700	1,700	2,096	5,528	1,853	3,512	5,303	7,944	4,680	3,736
50%	3,257	1,700	1,700	1,700	1,700	2,556	1,251	2,546	4,170	6,005	3,576	2,541
60%	2,524	1,700	1,700	1,700	1,700	1,700	1,000	2,029	3,830	4,794	2,735	1,630
70%	1,907	1,700	1,700	1,200	1,700	1,700	1,000	1,368	3,414	3,703	2,365	1,194
80%	1,700	1,200	1,233	960	1,200	1,000	1,000	1,000	2,670	3,289	1,809	1,044
90%	1,200	900	947	900	900	800	853	1,000	1,896	2,030	1,206	1,000
Long Term												
Full Simulation Period ^b	2,883	1,975	3,118	4,822	5,809	6,464	3,131	4,034	4,728	6,028	4,104	3,030
Water Year Types^c												
Wet (32%)	3,088	2,647	5,483	11,721	12,717	13,752	6,587	7,095	4,508	6,870	4,216	3,247
Above Normal (16%)	2,619	1,600	2,558	2,517	5,107	8,076	2,259	3,064	4,892	8,869	6,442	4,473
Below Normal (13%)	3,268	1,918	1,782	1,582	3,049	2,066	1,394	3,522	6,283	7,619	4,328	3,469
Dry (24%)	2,761	1,611	1,960	1,360	1,497	1,323	1,191	2,421	4,994	4,330	3,640	2,475
Critical (15%)	2,572	1,582	1,754	1,108	1,317	1,523	1,410	1,609	3,159	2,495	1,898	1,521

Revised Second Basis of Comparison 2												
Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	4,000	2,500	4,835	14,314	19,370	14,789	8,396	8,275	7,859	9,427	7,721	5,582
20%	4,000	2,500	3,419	3,408	11,382	11,022	3,686	6,268	6,944	9,031	6,566	5,294
30%	4,000	2,153	2,155	1,700	6,094	7,843	2,757	5,155	6,254	8,559	5,571	4,553
40%	3,845	1,700	1,700	1,700	2,090	5,528	1,853	3,528	5,318	7,938	4,666	3,738
50%	3,257	1,700	1,700	1,700	1,700	2,436	1,251	2,547	4,173	6,001	3,573	2,544
60%	2,644	1,700	1,700	1,700	1,700	1,700	1,000	2,030	3,830	4,785	2,724	1,632
70%	1,932	1,700	1,700	1,200	1,700	1,700	1,000	1,368	3,418	3,704	2,364	1,197
80%	1,700	1,200	1,233	990	1,200	1,000	1,000	1,000	2,670	3,285	1,942	1,044
90%	1,200	900	947	900	900	800	853	1,000	1,896	2,030	1,206	1,000
Long Term												
Full Simulation Period ^b	2,897	1,974	3,115	4,822	5,808	6,457	3,131	4,034	4,727	6,021	4,108	3,032
Water Year Types^c												
Wet (32%)	3,087	2,647	5,484	11,722	12,717	13,752	6,588	7,093	4,509	6,866	4,210	3,245
Above Normal (16%)	2,680	1,600	2,560	2,517	5,106	8,033	2,259	3,064	4,898	8,869	6,439	4,473
Below Normal (13%)	3,268	1,918	1,782	1,582	3,046	2,066	1,394	3,522	6,270	7,583	4,327	3,480
Dry (24%)	2,763	1,613	1,960	1,360	1,498	1,323	1,191	2,425	4,993	4,328	3,648	2,480
Critical (15%)	2,604	1,577	1,726	1,111	1,317	1,523	1,410	1,609	3,160	2,492	1,932	1,520

Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison												
Statistic	Monthly Flow (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%	-5%	0%	0%	0%	0%	0%	0%
60%	5%	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%	3%	0%	0%	0%	0%	0%	0%	7%	0%
90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period ^b	1%	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%)	2%	0%	0%	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%	0%	0%	0%
Critical (15%)	1%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	2%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Appendix 5E: Sensitivity Analysis - Revised Second Basis of Comparison with no Fremont Weir Notch

Table 5E.3.12. Fremont Weir, Monthly Spills

Revised Second Basis of Comparison												
Statistic	Monthly Spills (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	100	100	10,536	30,202	45,235	18,332	5,859	100	100	0	0	100
20%	100	100	3,758	10,563	13,794	7,393	4,170	100	100	0	0	100
30%	100	100	1,561	5,232	8,155	5,246	957	100	100	0	0	100
40%	100	100	532	2,826	5,590	3,433	341	100	100	0	0	100
50%	100	100	188	1,638	3,268	2,065	119	100	100	0	0	100
60%	100	100	100	851	2,291	1,093	100	100	100	0	0	100
70%	100	100	100	153	1,142	482	100	100	100	0	0	100
80%	100	100	100	100	184	201	100	100	100	0	0	100
90%	100	100	100	100	100	100	100	100	100	0	0	100
Long Term												
Full Simulation Period ^b	113	386	3,702	9,547	13,182	7,929	2,213	160	104	0	0	100
Water Year Types^c												
Wet (32%)	142	1,002	9,898	25,426	30,534	18,973	5,611	289	113	0	0	100
Above Normal (16%)	100	100	2,664	6,376	15,112	8,541	1,765	100	100	0	0	100
Below Normal (13%)	100	100	262	1,251	3,971	1,167	292	100	100	0	0	100
Dry (24%)	100	100	346	931	2,024	1,405	410	100	100	0	0	100
Critical (15%)	100	100	149	542	536	407	106	100	100	0	0	100

Revised Second Basis of Comparison 2												
Statistic	Monthly Spills (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	0	0	7,600	28,436	44,415	16,589	475	0	0	0	0	0
20%	0	0	504	7,797	12,992	5,175	0	0	0	0	0	0
30%	0	0	0	2,064	6,252	595	0	0	0	0	0	0
40%	0	0	0	0	1,634	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	14	287	2,870	8,218	11,714	6,350	1,075	61	4	0	0	0
Water Year Types^c												
Wet (32%)	43	907	8,057	23,791	28,683	17,011	3,300	192	14	0	0	0
Above Normal (16%)	0	0	1,990	3,956	13,631	5,957	138	0	0	0	0	0
Below Normal (13%)	0	0	0	0	2,263	3	0	0	0	0	0	0
Dry (24%)	0	0	0	196	634	48	26	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison												
Statistic	Monthly Spills (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-100%	-100%	-28%	-6%	-2%	-10%	-92%	-100%	-100%	0%	0%	-100%
20%	-100%	-100%	-87%	-26%	-6%	-30%	-100%	-100%	-100%	0%	0%	-100%
30%	-100%	-100%	-100%	-61%	-23%	-89%	-100%	-100%	-100%	0%	0%	-100%
40%	-100%	-100%	-100%	-100%	-71%	-100%	-100%	-100%	-100%	0%	0%	-100%
50%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	0%	0%	-100%
60%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	0%	0%	-100%
70%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	0%	0%	-100%
80%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	0%	0%	-100%
90%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	0%	0%	-100%
Long Term												
Full Simulation Period ^b	-88%	-26%	-22%	-14%	-11%	-20%	-51%	-62%	-96%	0%	0%	-100%
Water Year Types^c												
Wet (32%)	-70%	-9%	-19%	-6%	-6%	-10%	-41%	-34%	-88%	0%	0%	-100%
Above Normal (16%)	-100%	-100%	-25%	-38%	-10%	-30%	-92%	-100%	-100%	0%	0%	-100%
Below Normal (13%)	-100%	-100%	-100%	-100%	-43%	-100%	-100%	-100%	-100%	0%	0%	-100%
Dry (24%)	-100%	-100%	-100%	-79%	-69%	-97%	-94%	-100%	-100%	0%	0%	-100%
Critical (15%)	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	0%	0%	-100%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5E.3.13. American River d/s of Nimbus Dam, Monthly Flow

Revised Second Basis of Comparison												
Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,967	3,951	9,359	12,160	14,655	9,754	6,737	7,450	4,652	5,000	3,200	1,766
20%	1,500	3,208	4,325	7,873	10,804	6,804	5,084	4,486	3,799	5,000	2,779	1,546
30%	1,500	2,078	2,528	5,706	7,391	5,044	4,483	3,543	3,623	4,965	2,299	1,533
40%	1,500	1,925	2,000	3,592	5,756	4,172	3,491	2,851	3,235	4,227	1,968	1,533
50%	1,500	1,827	2,000	1,750	3,739	3,042	2,499	2,060	2,954	3,616	1,750	1,533
60%	1,500	1,683	1,921	1,700	2,602	2,015	2,084	1,750	2,267	2,923	1,750	1,533
70%	1,389	1,438	1,676	1,700	1,445	1,747	1,750	1,614	1,916	2,515	1,659	1,493
80%	994	1,116	1,172	1,359	1,264	1,012	1,146	1,079	1,715	2,373	1,003	800
90%	800	800	800	819	978	800	800	800	1,070	1,377	800	800
Long Term												
Full Simulation Period ^b	1,461	2,384	3,819	5,098	6,026	4,282	3,390	3,085	3,012	3,445	1,905	1,407
Water Year Types^c												
Wet (32%)	1,666	3,308	7,234	10,515	10,615	7,209	5,522	5,541	4,239	3,582	2,611	1,749
Above Normal (16%)	1,269	2,552	3,616	5,637	7,965	6,117	3,572	2,527	2,973	4,780	1,902	1,553
Below Normal (13%)	1,656	2,274	2,654	2,356	5,177	2,187	2,471	1,914	2,895	4,586	1,752	1,205
Dry (24%)	1,321	1,682	1,603	1,572	2,313	2,377	2,209	1,947	2,426	3,001	1,466	1,223
Critical (15%)	1,279	1,469	1,400	1,171	950	1,047	1,383	1,340	1,479	1,395	1,249	1,002

Revised Second Basis of Comparison 2												
Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	1,967	3,951	9,359	12,160	14,655	9,754	6,737	7,450	4,652	5,000	3,200	1,766
20%	1,500	3,207	4,325	7,873	10,804	6,804	5,084	4,486	3,799	5,000	2,779	1,546
30%	1,500	2,078	2,528	5,703	7,391	5,044	4,483	3,543	3,623	4,946	2,299	1,533
40%	1,500	1,925	2,000	3,591	5,756	4,172	3,491	2,851	3,235	4,228	1,968	1,533
50%	1,500	1,827	2,000	1,765	3,739	3,041	2,500	2,061	2,955	3,616	1,750	1,533
60%	1,500	1,683	1,921	1,700	2,602	2,015	2,084	1,750	2,267	2,923	1,750	1,533
70%	1,388	1,438	1,679	1,700	1,445	1,747	1,750	1,616	1,917	2,515	1,659	1,493
80%	994	1,110	1,171	1,359	1,264	1,010	1,133	1,079	1,716	2,373	1,003	800
90%	800	800	800	819	978	800	800	800	1,066	1,381	800	800
Long Term												
Full Simulation Period ^b	1,461	2,384	3,819	5,100	6,026	4,282	3,389	3,086	3,012	3,444	1,904	1,407
Water Year Types^c												
Wet (32%)	1,665	3,307	7,234	10,514	10,615	7,209	5,522	5,541	4,239	3,583	2,611	1,749
Above Normal (16%)	1,269	2,553	3,616	5,648	7,965	6,117	3,572	2,527	2,975	4,780	1,902	1,553
Below Normal (13%)	1,656	2,274	2,654	2,356	5,177	2,187	2,465	1,915	2,893	4,581	1,751	1,205
Dry (24%)	1,321	1,682	1,604	1,572	2,313	2,377	2,209	1,947	2,426	3,001	1,466	1,223
Critical (15%)	1,281	1,469	1,400	1,171	950	1,047	1,383	1,341	1,477	1,395	1,249	1,002

Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison												
Statistic	Monthly Flow (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%	1%	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%	-1%	0%	0%	0%	0%	-1%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5E.3.14. Sacramento River at Freeport, Monthly Flow

Revised Second Basis of Comparison												
Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	14,551	22,359	54,045	64,879	70,451	63,654	46,240	38,579	20,776	23,195	16,663	15,098
20%	14,090	15,039	34,473	56,266	61,709	51,427	32,544	27,639	18,975	21,635	15,939	14,531
30%	13,193	13,786	22,326	41,578	51,524	41,506	22,932	17,452	18,150	20,277	15,193	14,129
40%	11,535	13,341	18,577	26,629	45,616	29,974	19,982	15,203	16,964	19,565	14,570	13,918
50%	10,865	12,102	15,606	23,009	33,290	24,772	16,394	13,797	15,808	18,216	13,980	13,211
60%	10,117	11,213	14,404	18,460	24,623	20,971	12,918	12,876	14,539	16,370	12,432	12,035
70%	9,064	10,188	12,929	15,002	19,808	18,571	11,683	12,087	13,047	14,608	10,714	9,785
80%	8,007	8,873	10,823	13,487	16,579	15,219	11,109	11,037	12,359	13,049	9,752	8,533
90%	7,029	7,552	9,350	11,866	14,216	11,491	10,200	9,036	11,481	9,999	8,703	7,301
Long Term												
Full Simulation Period ^b	11,166	14,169	23,197	31,223	37,970	31,864	22,160	18,740	16,877	17,261	13,039	12,099
Water Year Types^c												
Wet (32%)	12,847	18,563	38,684	50,414	56,964	48,443	35,068	30,178	21,009	19,004	14,907	14,667
Above Normal (16%)	10,044	15,450	24,213	39,681	47,790	42,769	24,411	18,103	16,671	21,742	15,918	14,124
Below Normal (13%)	12,260	14,350	15,660	19,252	31,672	19,432	14,555	14,839	17,909	20,529	14,052	12,119
Dry (24%)	10,515	10,941	13,654	17,397	23,786	21,469	15,030	12,638	14,681	14,800	10,736	10,279
Critical (15%)	8,820	8,470	11,351	14,500	15,588	12,846	10,613	8,393	10,858	9,733	8,780	7,353

Revised Second Basis of Comparison 2												
Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	14,651	22,458	55,976	65,447	70,579	63,789	51,294	38,678	20,876	23,228	16,663	15,196
20%	14,190	15,138	36,295	58,195	63,665	55,064	36,926	27,738	19,001	21,635	15,939	14,631
30%	13,290	13,884	23,779	43,298	54,603	45,366	23,699	17,552	18,253	20,275	15,190	14,229
40%	11,635	13,441	18,903	29,560	46,582	33,968	20,452	15,302	17,073	19,252	14,568	14,018
50%	10,964	12,201	16,092	24,328	36,049	26,279	16,499	13,897	15,909	18,229	13,976	13,338
60%	10,191	11,313	14,562	19,337	26,819	22,007	13,114	12,983	14,653	16,368	12,432	12,139
70%	9,213	10,320	13,046	15,141	20,860	19,568	11,783	12,187	13,147	14,602	10,712	9,887
80%	8,265	8,973	10,922	13,587	16,690	15,554	11,209	11,137	12,459	13,048	9,750	8,631
90%	7,130	7,652	9,450	11,989	14,317	11,591	10,300	9,136	11,581	9,999	8,703	7,397
Long Term												
Full Simulation Period ^b	11,285	14,267	24,020	32,553	39,431	33,434	23,297	18,838	16,977	17,253	13,041	12,199
Water Year Types^c												
Wet (32%)	12,946	18,658	40,520	52,046	58,813	50,404	37,375	30,275	21,109	19,007	14,908	14,767
Above Normal (16%)	10,230	15,551	24,861	42,109	49,311	45,306	26,037	18,203	16,783	21,741	15,917	14,219
Below Normal (13%)	12,361	14,448	15,920	20,503	33,322	20,596	14,840	14,942	18,001	20,474	14,040	12,219
Dry (24%)	10,616	11,042	14,007	18,132	25,157	22,825	15,413	12,733	14,778	14,796	10,751	10,386
Critical (15%)	8,960	8,570	11,473	15,048	16,123	13,253	10,719	8,492	10,958	9,732	8,779	7,453

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

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5E.3.15. Yolo Bypass, Monthly Flow

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	164	575	15,106	37,291	53,011	25,260	10,346	335	168	48	183	240
20%	162	245	6,371	16,098	21,931	11,070	7,372	178	168	48	55	159
30%	160	146	2,509	8,217	12,355	8,556	2,043	173	168	48	55	159
40%	154	110	803	5,020	10,223	5,190	499	170	168	48	55	159
50%	147	108	496	2,405	5,513	2,988	272	168	167	48	55	159
60%	142	105	259	970	3,254	1,402	229	165	167	48	55	159
70%	132	100	146	470	1,202	754	211	163	166	48	55	157
80%	116	100	107	167	345	225	186	159	164	48	55	155
90%	106	100	100	123	129	149	173	153	162	48	54	152
Long Term												
Full Simulation Period ^b	186	574	5,171	12,736	17,111	10,707	3,656	311	185	48	101	175
Water Year Types^c												
Wet (32%)	227	1,354	13,411	32,911	38,549	25,268	8,882	560	227	48	147	173
Above Normal (16%)	137	345	4,161	9,622	19,789	11,595	3,242	273	166	48	92	165
Below Normal (13%)	246	299	470	1,969	5,903	1,665	546	169	166	48	130	192
Dry (24%)	156	131	585	1,582	3,393	2,185	908	175	167	48	61	170
Critical (15%)	145	124	365	857	900	687	210	167	165	48	55	188

Revised Second Basis of Comparison 2

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	64	475	12,246	36,406	53,010	23,707	6,806	236	68	48	183	140
20%	62	145	3,079	13,238	20,732	8,689	3,203	78	68	48	55	59
30%	60	46	973	5,270	9,602	3,589	635	73	68	48	55	59
40%	54	10	342	2,005	7,094	2,154	190	70	68	48	55	59
50%	47	8	165	540	2,456	917	135	68	67	48	55	59
60%	42	5	60	327	729	279	111	65	67	48	55	59
70%	32	0	20	80	261	115	88	63	66	48	55	57
80%	17	0	0	32	82	45	78	59	64	48	55	55
90%	6	0	0	7	19	7	56	53	62	48	54	52
Long Term												
Full Simulation Period ^b	86	476	4,342	11,408	15,651	9,129	2,518	212	86	48	101	75
Water Year Types^c												
Wet (32%)	127	1,259	11,572	31,277	36,700	23,307	6,575	463	128	48	147	73
Above Normal (16%)	38	245	3,498	7,204	18,311	9,012	1,616	173	66	48	92	65
Below Normal (13%)	146	199	208	718	4,240	501	253	69	66	48	130	92
Dry (24%)	56	31	238	846	2,005	828	525	75	67	48	61	70
Critical (15%)	45	24	216	314	365	279	105	67	65	48	55	88

Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison

Statistic	Monthly Flow (Percent Change)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	-61%	-17%	-19%	-2%	0%	-6%	-34%	-30%	-60%	0%	0%	-42%
20%	-62%	-41%	-52%	-18%	-5%	-22%	-57%	-56%	-60%	0%	0%	-63%
30%	-63%	-69%	-61%	-36%	-22%	-58%	-69%	-58%	-60%	0%	0%	-63%
40%	-65%	-91%	-57%	-60%	-31%	-59%	-62%	-59%	-60%	0%	0%	-63%
50%	-68%	-92%	-67%	-78%	-55%	-69%	-50%	-60%	-60%	0%	0%	-63%
60%	-70%	-95%	-77%	-66%	-78%	-80%	-51%	-61%	-60%	0%	0%	-63%
70%	-76%	-100%	-86%	-83%	-78%	-85%	-58%	-61%	-60%	0%	0%	-64%
80%	-85%	-100%	-100%	-81%	-76%	-80%	-58%	-63%	-61%	0%	0%	-65%
90%	-94%	-100%	-100%	-94%	-85%	-96%	-68%	-65%	-62%	0%	0%	-66%
Long Term												
Full Simulation Period ^b	-54%	-17%	-16%	-10%	-9%	-15%	-31%	-32%	-54%	0%	0%	-57%
Water Year Types^c												
Wet (32%)	-44%	-7%	-14%	-5%	-5%	-8%	-26%	-17%	-44%	0%	0%	-58%
Above Normal (16%)	-72%	-29%	-16%	-25%	-7%	-22%	-50%	-37%	-60%	0%	0%	-61%
Below Normal (13%)	-41%	-33%	-56%	-64%	-28%	-70%	-54%	-59%	-60%	0%	0%	-52%
Dry (24%)	-64%	-76%	-59%	-46%	-41%	-62%	-42%	-57%	-60%	0%	0%	-59%
Critical (15%)	-69%	-81%	-41%	-63%	-59%	-59%	-50%	-60%	-61%	0%	0%	-53%

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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Appendix 5E: Sensitivity Analysis - Revised Second Basis of Comparison with no Fremont Weir Notch

Table 5E.3.16. Sacramento River at Rio Vista, Monthly Flow

Revised Second Basis of Comparison												
Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	8,459	16,168	59,604	92,211	116,167	75,834	51,782	32,159	12,425	13,392	9,476	8,745
20%	8,183	9,840	34,954	61,221	73,778	55,512	33,674	22,346	11,245	12,430	9,155	8,380
30%	7,549	8,910	18,359	44,979	56,260	41,456	20,337	13,432	10,594	11,499	8,516	8,130
40%	6,476	8,546	13,684	26,298	48,706	29,686	16,926	11,454	9,811	10,960	8,025	7,948
50%	6,002	7,675	11,332	19,987	32,704	23,249	12,770	10,161	9,037	10,125	7,654	7,450
60%	5,495	6,993	10,012	15,044	23,444	18,024	9,786	9,537	8,236	8,857	6,551	6,677
70%	4,778	6,275	8,684	11,678	17,211	16,060	8,764	8,824	7,064	7,639	5,379	5,305
80%	4,057	5,284	7,025	9,829	13,407	12,147	8,230	7,916	6,689	6,606	4,772	4,252
90%	3,427	4,334	5,914	8,722	11,278	8,663	7,375	6,205	6,140	4,513	3,929	3,460
Long Term												
Full Simulation Period ^b	6,332	10,109	23,121	38,692	49,363	37,209	21,381	14,750	10,295	9,421	7,013	6,738
Water Year Types^c												
Wet (32%)	7,656	14,701	45,362	76,406	87,481	66,334	37,923	24,956	14,319	10,606	8,326	8,455
Above Normal (16%)	5,503	10,915	22,930	43,450	60,792	47,545	22,896	14,185	9,632	12,460	8,973	8,077
Below Normal (13%)	7,045	9,835	11,545	16,974	32,611	17,199	11,548	11,149	10,482	11,626	7,741	6,775
Dry (24%)	5,767	6,823	9,877	14,836	23,168	19,626	12,445	9,307	8,227	7,775	5,404	5,497
Critical (15%)	4,650	5,015	7,821	11,491	13,412	10,555	7,804	5,622	5,568	4,282	4,059	3,603

Revised Second Basis of Comparison 2												
Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	8,428	16,142	59,025	92,089	116,148	75,586	51,297	32,145	12,395	13,415	9,476	8,712
20%	8,151	9,817	34,545	60,928	73,557	55,099	33,255	22,332	11,216	12,430	9,155	8,348
30%	7,516	8,884	17,961	44,810	55,851	40,962	20,159	13,419	10,567	11,499	8,516	8,098
40%	6,444	8,520	13,599	27,198	48,210	29,162	16,842	11,440	9,789	10,794	8,031	7,918
50%	5,971	7,648	11,239	19,694	32,308	22,975	12,756	10,140	9,008	10,134	7,661	7,436
60%	5,445	6,968	9,965	14,823	23,422	17,897	9,762	9,530	8,217	8,856	6,551	6,648
70%	4,772	6,250	8,649	11,658	17,060	15,945	8,751	8,811	7,034	7,634	5,377	5,273
80%	4,138	5,258	7,001	9,809	13,388	12,103	8,217	7,886	6,659	6,607	4,766	4,219
90%	3,395	4,308	5,892	8,693	11,265	8,650	7,362	6,192	6,111	4,513	3,929	3,426
Long Term												
Full Simulation Period ^b	6,316	10,086	22,983	38,581	49,172	36,995	21,230	14,736	10,267	9,416	7,015	6,708
Water Year Types^c												
Wet (32%)	7,625	14,677	45,087	76,184	87,237	66,076	37,619	24,943	14,295	10,608	8,326	8,423
Above Normal (16%)	5,537	10,894	22,791	43,255	60,634	47,165	22,682	14,172	9,611	12,460	8,972	8,042
Below Normal (13%)	7,014	9,810	11,490	16,939	32,379	17,045	11,502	11,140	10,447	11,592	7,733	6,744
Dry (24%)	5,737	6,798	9,823	14,788	22,971	19,447	12,394	9,290	8,196	7,773	5,415	5,469
Critical (15%)	4,647	4,994	7,765	11,534	13,341	10,502	7,790	5,609	5,539	4,281	4,058	3,581

Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison												
Statistic	Monthly Flow (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%	-1%	0%	0%	0%	0%	0%
20%	0%	0%	-1%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%
30%	0%	0%	-2%	0%	-1%	-1%	-1%	0%	0%	0%	0%	0%
40%	0%	0%	-1%	3%	-1%	-2%	0%	0%	0%	-2%	0%	0%
50%	-1%	0%	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%
60%	-1%	0%	0%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%
70%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	-1%
80%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
90%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
Long Term												
Full Simulation Period ^b	0%	0%	-1%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%
Water Year Types^c												
Wet (32%)	0%	0%	-1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%
Above Normal (16%)	1%	0%	-1%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%
Dry (24%)	-1%	0%	-1%	0%	-1%	-1%	0%	0%	0%	0%	0%	-1%
Critical (15%)	0%	0%	-1%	0%	-1%	-1%	0%	0%	-1%	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.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5E.3.17. San Joaquin River at Vernalis, Monthly Flow

Revised Second Basis of Comparison												
Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,058	3,088	4,931	11,054	17,256	15,467	14,774	14,101	9,720	6,052	2,996	3,315
20%	2,699	2,813	2,924	4,859	10,259	9,401	10,359	8,202	4,768	2,636	2,599	2,659
30%	2,470	2,631	2,462	3,635	6,228	7,841	8,536	5,452	3,364	1,988	1,896	2,484
40%	2,326	2,448	2,299	2,606	4,252	5,343	7,507	4,488	2,947	1,742	1,675	2,152
50%	2,089	2,342	2,226	2,481	3,420	3,825	6,018	3,916	2,205	1,503	1,499	1,934
60%	1,895	2,218	2,100	2,247	2,681	3,460	4,432	2,913	1,824	1,384	1,415	1,837
70%	1,697	2,100	1,988	2,070	2,379	2,870	3,224	2,493	1,420	1,170	1,322	1,743
80%	1,511	1,954	1,866	1,827	2,153	2,327	2,452	1,994	1,271	1,087	1,211	1,611
90%	1,338	1,753	1,671	1,638	1,931	2,115	1,813	1,564	1,085	941	1,099	1,503
Long Term												
Full Simulation Period ^b	2,200	2,673	3,455	5,082	6,806	7,116	7,330	5,903	4,350	2,668	1,876	2,266
Water Year Types^c												
Wet (23%)	2,472	3,596	6,642	11,484	16,260	16,444	15,398	14,493	12,009	6,823	3,227	3,582
Above Normal (24%)	2,234	2,469	2,712	4,887	6,916	7,376	8,371	5,184	3,310	1,997	1,976	2,348
Below Normal (10%)	2,052	2,330	3,742	3,561	3,837	4,077	5,974	3,968	2,025	1,478	1,455	1,847
Dry (16%)	2,305	2,644	2,306	2,421	2,623	3,227	3,656	2,625	1,661	1,266	1,362	1,783
Critical (27%)	1,926	2,205	1,952	1,854	2,092	2,228	2,079	1,780	1,114	951	1,077	1,490

Revised Second Basis of Comparison 2												
Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	3,058	3,088	4,931	11,054	17,256	15,467	14,774	14,101	9,720	6,052	2,996	3,315
20%	2,699	2,813	2,924	4,859	10,259	9,401	10,359	8,202	4,768	2,636	2,599	2,659
30%	2,470	2,631	2,462	3,635	6,228	7,841	8,536	5,452	3,364	1,988	1,896	2,484
40%	2,326	2,448	2,299	2,606	4,252	5,343	7,507	4,488	2,947	1,742	1,675	2,152
50%	2,089	2,342	2,226	2,481	3,420	3,825	6,018	3,916	2,205	1,503	1,499	1,934
60%	1,895	2,218	2,100	2,247	2,681	3,460	4,432	2,913	1,824	1,383	1,415	1,837
70%	1,697	2,100	1,988	2,070	2,379	2,870	3,224	2,493	1,420	1,169	1,322	1,743
80%	1,511	1,954	1,866	1,827	2,153	2,327	2,452	1,994	1,271	1,087	1,211	1,611
90%	1,338	1,753	1,671	1,638	1,931	2,115	1,813	1,564	1,085	941	1,099	1,503
Long Term												
Full Simulation Period ^b	2,200	2,673	3,455	5,082	6,806	7,116	7,330	5,903	4,350	2,668	1,876	2,266
Water Year Types^c												
Wet (23%)	2,472	3,596	6,642	11,484	16,260	16,444	15,398	14,493	12,009	6,823	3,227	3,582
Above Normal (24%)	2,234	2,469	2,712	4,887	6,916	7,376	8,371	5,184	3,310	1,997	1,976	2,348
Below Normal (10%)	2,052	2,330	3,742	3,561	3,837	4,077	5,974	3,968	2,025	1,478	1,455	1,847
Dry (16%)	2,305	2,644	2,306	2,421	2,623	3,227	3,656	2,625	1,661	1,266	1,362	1,783
Critical (27%)	1,926	2,205	1,952	1,854	2,092	2,228	2,079	1,780	1,114	951	1,077	1,490

Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison												
Statistic	Monthly Flow (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 (23%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (10%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (27%)	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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5E.3.18. San Joaquin River at Vernalis, Monthly EC

Revised Second Basis of Comparison

Statistic	Monthly EC (UMHOS/CM)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	752	643	807	807	948	865	577	597	649	649	622	603
20%	714	611	784	781	911	824	524	572	645	648	603	584
30%	677	584	770	754	840	744	436	528	631	647	580	568
40%	642	572	758	723	790	686	383	493	606	638	571	552
50%	609	555	740	704	693	612	324	395	572	628	557	539
60%	570	538	730	691	631	499	303	363	500	617	543	520
70%	551	522	716	643	469	352	282	346	464	607	526	489
80%	522	495	691	572	316	306	261	294	420	587	451	478
90%	477	467	611	380	261	255	201	192	366	487	410	418
Long Term												
Full Simulation Period ^b	613	547	714	661	642	573	372	419	526	597	533	522
Water Year Types^c												
Wet (23%)	585	518	623	520	357	306	220	229	365	489	405	405
Above Normal (24%)	608	548	728	628	485	421	301	365	494	617	515	506
Below Normal (10%)	618	566	688	673	692	606	313	388	555	611	563	551
Dry (16%)	597	526	742	725	818	698	413	502	593	635	579	559
Critical (27%)	648	577	772	772	909	854	563	594	643	645	623	607

Revised Second Basis of Comparison 2

Statistic	Monthly EC (UMHOS/CM)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	752	643	807	807	948	865	577	597	649	649	622	603
20%	714	611	784	781	911	824	524	572	645	648	603	584
30%	677	584	770	754	840	744	436	528	631	647	580	568
40%	642	572	758	723	790	686	383	493	606	638	571	552
50%	609	555	740	704	693	612	324	395	572	628	557	539
60%	570	538	730	691	631	499	303	363	500	617	543	520
70%	551	522	716	643	469	352	282	346	464	607	526	489
80%	522	495	691	572	316	306	261	294	420	587	451	478
90%	477	467	611	380	261	255	201	192	366	487	410	418
Long Term												
Full Simulation Period ^b	613	547	714	661	642	573	372	419	526	597	533	522
Water Year Types^c												
Wet (23%)	585	518	623	520	357	306	220	229	365	489	405	405
Above Normal (24%)	608	548	728	628	485	421	301	365	494	617	515	506
Below Normal (10%)	618	566	688	673	692	606	313	388	555	611	563	551
Dry (16%)	597	526	742	725	818	698	413	502	593	635	579	559
Critical (27%)	648	577	772	772	909	854	563	594	643	645	623	607

Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison

Statistic	Monthly EC (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 (23%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (10%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (27%)	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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5E.3.19. Stanislaus River below Goodwin, Monthly Flow

Revised Second Basis of Comparison												
Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	350	399	400	400	1,825	999	1,500	1,500	1,502	491	319	300
20%	349	356	358	359	863	400	1,500	1,498	1,243	313	300	300
30%	318	334	340	336	400	344	1,429	1,380	948	300	285	281
40%	260	305	323	318	364	312	1,241	1,134	713	296	283	250
50%	193	246	280	250	339	267	879	855	399	283	283	249
60%	146	217	230	183	304	200	649	725	300	271	283	249
70%	123	207	214	152	239	159	517	612	265	265	283	249
80%	115	202	206	136	176	140	462	507	255	265	283	249
90%	104	188	188	122	133	123	403	439	255	265	283	249
Long Term												
Full Simulation Period ^b	250	340	429	530	748	593	958	984	830	433	386	391
Water Year Types^c												
Wet (23%)	334	581	884	1,038	1,692	1,597	1,511	1,556	1,813	860	729	857
Above Normal (24%)	248	269	331	666	712	484	1,051	1,062	986	352	287	268
Below Normal (10%)	254	306	306	336	532	292	1,087	1,021	414	269	283	261
Dry (16%)	245	282	290	253	387	185	686	743	346	276	283	249
Critical (27%)	181	242	252	203	256	174	511	548	278	291	277	233

Revised Second Basis of Comparison 2												
Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	350	399	400	400	1,825	999	1,500	1,500	1,502	491	319	300
20%	349	356	358	359	863	400	1,500	1,498	1,243	313	300	300
30%	318	334	340	336	400	344	1,429	1,380	948	300	285	281
40%	260	305	323	318	364	312	1,241	1,134	713	296	283	250
50%	193	246	280	250	339	267	879	855	399	283	283	249
60%	146	217	230	183	304	200	649	725	300	271	283	249
70%	123	207	214	152	239	159	517	612	265	265	283	249
80%	115	202	206	136	176	140	462	507	255	265	283	249
90%	104	188	188	122	133	123	403	439	255	265	283	249
Long Term												
Full Simulation Period ^b	250	340	429	530	748	593	958	984	830	433	386	391
Water Year Types^c												
Wet (23%)	334	581	884	1,038	1,692	1,597	1,511	1,556	1,813	860	729	857
Above Normal (24%)	248	269	331	666	712	484	1,051	1,062	986	352	287	268
Below Normal (10%)	254	306	306	336	532	292	1,087	1,021	414	269	283	261
Dry (16%)	245	282	290	253	387	185	686	743	346	276	283	249
Critical (27%)	181	242	252	203	256	174	511	548	278	291	277	233

Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison												
Statistic	Monthly Flow (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 (23%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (10%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (27%)	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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Appendix 5E: Sensitivity Analysis - Revised Second Basis of Comparison with no Fremont Weir Notch

Table 5E.3.20. Stanislaus River at Mouth, Monthly Flow

Revised Second Basis of Comparison

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	653	567	590	624	2,437	1,243	1,824	1,680	1,791	932	588	706
20%	577	482	480	506	987	615	1,626	1,588	1,545	564	488	506
30%	491	441	431	462	560	531	1,495	1,515	1,261	499	458	473
40%	424	409	382	434	498	458	1,303	1,285	1,041	443	445	446
50%	377	386	336	392	442	405	1,022	903	726	412	441	439
60%	314	344	312	279	399	311	716	756	418	389	420	431
70%	284	313	291	248	320	277	584	601	375	374	396	397
80%	248	270	270	229	232	226	469	541	347	349	374	370
90%	185	243	204	199	178	146	424	471	312	317	347	320
Long Term												
Full Simulation Period ^b	430	460	512	642	872	741	1,079	1,067	1,034	585	530	573
Water Year Types^c												
Wet (23%)	505	706	978	1,155	1,903	1,839	1,754	1,693	2,130	1,121	921	1,111
Above Normal (24%)	441	400	406	779	822	641	1,237	1,160	1,281	533	461	480
Below Normal (10%)	445	435	438	484	703	466	1,189	1,197	607	449	438	434
Dry (16%)	454	397	375	368	479	330	720	816	502	376	404	402
Critical (27%)	336	347	314	294	320	226	524	544	332	343	361	344

Revised Second Basis of Comparison 2

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance^a												
10%	653	567	590	624	2,437	1,243	1,824	1,680	1,791	932	588	706
20%	577	482	480	506	987	615	1,626	1,588	1,545	564	488	506
30%	491	441	431	462	560	531	1,495	1,515	1,261	499	458	473
40%	424	409	382	434	498	458	1,303	1,285	1,041	443	445	446
50%	377	386	336	392	442	405	1,022	903	726	412	441	439
60%	314	344	312	279	399	311	716	756	418	389	420	431
70%	284	313	291	248	320	277	584	601	375	374	396	397
80%	248	270	270	229	232	226	469	541	347	349	374	370
90%	185	243	204	199	178	146	424	471	312	317	347	320
Long Term												
Full Simulation Period ^b	430	460	512	642	872	741	1,079	1,067	1,034	585	530	573
Water Year Types^c												
Wet (23%)	505	706	978	1,155	1,903	1,839	1,754	1,693	2,130	1,121	921	1,111
Above Normal (24%)	441	400	406	779	822	641	1,237	1,160	1,281	533	461	480
Below Normal (10%)	445	435	438	484	703	466	1,189	1,197	607	449	438	434
Dry (16%)	454	397	375	368	479	330	720	816	502	376	404	402
Critical (27%)	336	347	314	294	320	226	524	544	332	343	361	344

Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison

Statistic	Monthly Flow (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 (23%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (10%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (27%)	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 San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Appendix 5E: Sensitivity Analysis - Revised Second Basis of Comparison with no Fremont Weir Notch

Table 5E.3.21. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

				Revised Second Basis of Comparison 2	Revised Second Basis of Comparison	Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison
Water Supply Reliability						
Sacramento River Hydrologic Region						
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,858	1,858	0%
			Dry	1,905	1,905	0%
			Critical	1,734	1,732	0%
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	155	155	0%
			Dry	151	151	0%
			Critical	105	105	0%
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	214	214	0%
			Dry	192	192	0%
			Critical	151	151	0%
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term	220	219	0%
			Dry	122	122	0%
			Critical	35	35	0%
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries)						
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term	852	852	0%
			Dry	875	875	0%
			Critical	741	741	0%
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	260	260	0%
			Dry	268	268	0%
			Critical	221	221	0%
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	17	17	0%
			Dry	15	15	0%
			Critical	12	12	0%
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	348	348	0%
			Dry	203	203	0%
			Critical	61	61	0%
San Francisco Bay Hydrologic Region						
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	286	286	0%
			Dry	292	292	0%
			Critical	305	305	0%
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	43	43	0%
			Dry	25	25	-1%
			Critical	8	7	0%
Central Coast Hydrologic Region						
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)						
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	0%
			Dry	12	12	0%
			Critical	10	10	0%
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term	709	709	0%
			Dry	424	422	0%
			Critical	127	127	0%
Total For All Regions						
Total Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	4,974	4,973	0%
			Dry	4,483	4,483	0%
			Critical	3,510	3,508	0%

Notes:

- 1) Long-term Average is the average quantity for the 82-year simulation period.
- 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
- 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.
- 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text.
- 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text.
- 6) Annual deliveries are based on March to February Average.
- 7) In the table on the following page, San Francisco Bay Hydrologic Region M&I deliveries are divided between North of Delta M&I deliveries (Contra Costa Water District) and South of Delta M&I deliveries (San Felipe Division); and San Francisco Bay Hydrologic Region Ag deliveries are only included in South of Delta Ag deliveries.

Appendix 5E: Sensitivity Analysis - Revised Second Basis of Comparison with no Fremont Weir Notch

Table 5E.3.22. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

				Revised Second Basis of Comparison 2	Revised Second Basis of Comparison	Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison
Water Supply Reliability						
North of Delta						
CVP Ag	Contract Delivery (annual average; does not include Settlement contractors)	(TAF/year)	Long Term	220	219	0%
			Dry	122	122	0%
			Critical	35	35	0%
CVP M&I (Including American River)	Contract Delivery (annual average)	(TAF/year)	Long Term	392	392	0%
			Dry	390	390	0%
			Critical	383	383	0%
CVP M&I American River	Contract Delivery (annual average)	(TAF/year)	Long Term	120	120	0%
			Dry	105	105	0%
			Critical	79	79	0%
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,858	1,858	0%
			Dry	1,905	1,905	0%
			Critical	1,734	1,732	0%
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	155	155	0%
			Dry	151	151	0%
			Critical	105	105	0%
Total CVP North of Delta Ag and M&I Deliveries						
Total CVP Ag and M&I Deliveries	Contract Delivery (CVP) (annual average)	(TAF/year)	Long Term	612	612	0%
			Dry	512	512	0%
			Critical	418	418	0%
South of Delta (Not including Eastside Contractors deliveries, or Friant-Kern Canal or Madera Canal water users)						
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term	1,100	1,100	0%
			Dry	652	650	0%
			Critical	195	195	0%
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	124	125	0%
			Dry	109	109	-1%
			Critical	85	85	0%
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term	852	852	0%
			Dry	875	875	0%
			Critical	741	741	0%
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	272	272	0%
			Dry	280	280	0%
			Critical	232	232	0%
Total CVP South of Delta Ag and M&I Deliveries						
Total CVP Ag and M&I Deliveries	Contract Delivery (annual average)	(TAF/year)	Long Term	1,225	1,225	0%
			Dry	760	759	0%
			Critical	280	280	0%
Eastside Contractors deliveries						
Water Rights	Delivery (annual average)	(TAF/year)	Long Term	514	514	0%
			Dry	524	524	0%
			Critical	486	486	0%
CVP Service Contracts	Contract Delivery (annual average)	(TAF/year)	Long Term	118	118	0%
			Dry	98	98	0%
			Critical	25	25	0%
Total Eastside Contractors Deliveries						
Total Water Rights and CVP Service Contracts Deliveries	Delivery (annual average)	(TAF/year)	Long Term	632	632	0%
			Dry	621	621	0%
			Critical	511	511	0%

Notes:

- 1) Long-term Average is the average quantity for the 82-year simulation period.
- 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
- 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.
- 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text.
- 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text.
- 6) Annual deliveries are based on March to February Average.

Appendix 5E: Sensitivity Analysis - Revised Second Basis of Comparison with no Fremont Weir Notch

Table 5E.3.23. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, SWP Deliveries

				Revised Second Basis of Comparison 2	Revised Second Basis of Comparison	Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison
Water Supply Reliability						
Sacramento River Hydrologic Region						
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term	930	931	0%
			Dry	946	946	0%
			Critical	707	709	0%
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	27	26	0%
			Dry	19	19	0%
			Critical	12	12	0%
San Joaquin River Hydrologic Region						
SWP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	4	4	0%
			Dry	3	3	0%
			Critical	2	2	0%
San Francisco Bay Hydrologic Region						
SWP M&I (w/o Article 21)	Contract Delivery (includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term	220	219	0%
			Dry	167	166	0%
			Critical	103	103	0%
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	21	22	-1%
			Dry	20	20	-1%
			Critical	12	12	-1%
Central Coast Hydrologic Region						
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	52	52	0%
			Dry	39	39	0%
			Critical	24	24	3%
Tulare Lake Hydrologic Region						
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	99	99	0%
			Dry	75	75	0%
			Critical	45	45	0%
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	737	735	0%
			Dry	555	554	0%
			Critical	339	337	1%
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	174	174	0%
			Dry	142	143	0%
			Critical	29	29	0%
South Lahontan Hydrologic Region						
SWP M&I (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	325	325	0%
			Dry	253	252	0%
			Critical	157	156	1%
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	4	4	0%
			Dry	4	4	0%
			Critical	2	2	0%
South Coast Hydrologic Region						
SWP M&I (w/o Article 21)	Contract Delivery (includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term	1,539	1,540	0%
			Dry	1,236	1,235	0%
			Critical	779	783	-1%
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	89	89	0%
			Dry	74	74	-1%
			Critical	9	9	-1%
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	9	9	1%
			Dry	7	7	0%
			Critical	4	4	4%
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	2	2	1%
			Dry	1	1	4%
			Critical	1	1	0%
Total For All Regions						
Total Supplies (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	3,942	3,941	0%
			Dry	3,300	3,296	0%
			Critical	2,172	2,174	0%
Total Article 21 Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	290	291	0%
			Dry	241	243	-1%
			Critical	52	52	-1%

Notes:

- 1) Long-term Average is the average quantity for the 82-year simulation period.
- 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
- 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.
- 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text.
- 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Appendix 5E: Sensitivity Analysis - Revised Second Basis of Comparison with no Fremont Weir Notch

Table 5E.3.24. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, SWP Deliveries

				Revised Second Basis of Comparison 2	Revised Second Basis of Comparison	Revised Second Basis of Comparison 2 minus Revised Second Basis of Comparison
Water Supply Reliability						
North of Delta						
SWP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	0	0	0%
			Dry	0	0	0%
			Critical	0	0	0%
SWP M&I (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	83	83	0%
			Dry	62	62	0%
			Critical	53	53	0%
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	-1%
			Dry	13	13	-1%
			Critical	12	12	-1%
Total SWP North of Delta						
Total SWP Ag and M&I NOD (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	83	83	0%
			Dry	62	62	0%
			Critical	53	53	0%
Total SWP Ag and M&I Article 21 NOD	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	-1%
			Dry	13	13	-1%
			Critical	12	12	-1%
South of Delta						
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	750	749	0%
			Dry	566	564	0%
			Critical	483	481	0%
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	176	176	0%
			Dry	143	144	0%
			Critical	100	101	0%
SWP M&I (w/o Article 21)	Contract Delivery (includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term	2,178	2,179	0%
			Dry	1,727	1,725	0%
			Critical	1,485	1,484	0%
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	102	103	0%
			Dry	85	86	-1%
			Critical	58	59	-1%
Total SWP South of Delta						
Total SWP Ag and M&I SOD (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	2,929	2,928	0%
			Dry	2,292	2,289	0%
			Critical	1,968	1,965	0%
Total SWP Ag and M&I Article 21 SOD	Contract Delivery (annual average)	(TAF/year)	Long Term	278	279	0%
			Dry	228	230	-1%
			Critical	159	159	-1%

Notes:

- 1) Long-term Average is the average quantity for the 82-year simulation period.
- 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
- 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions.
- 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text.
- 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text.

Appendix 6A was not used in this document.

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