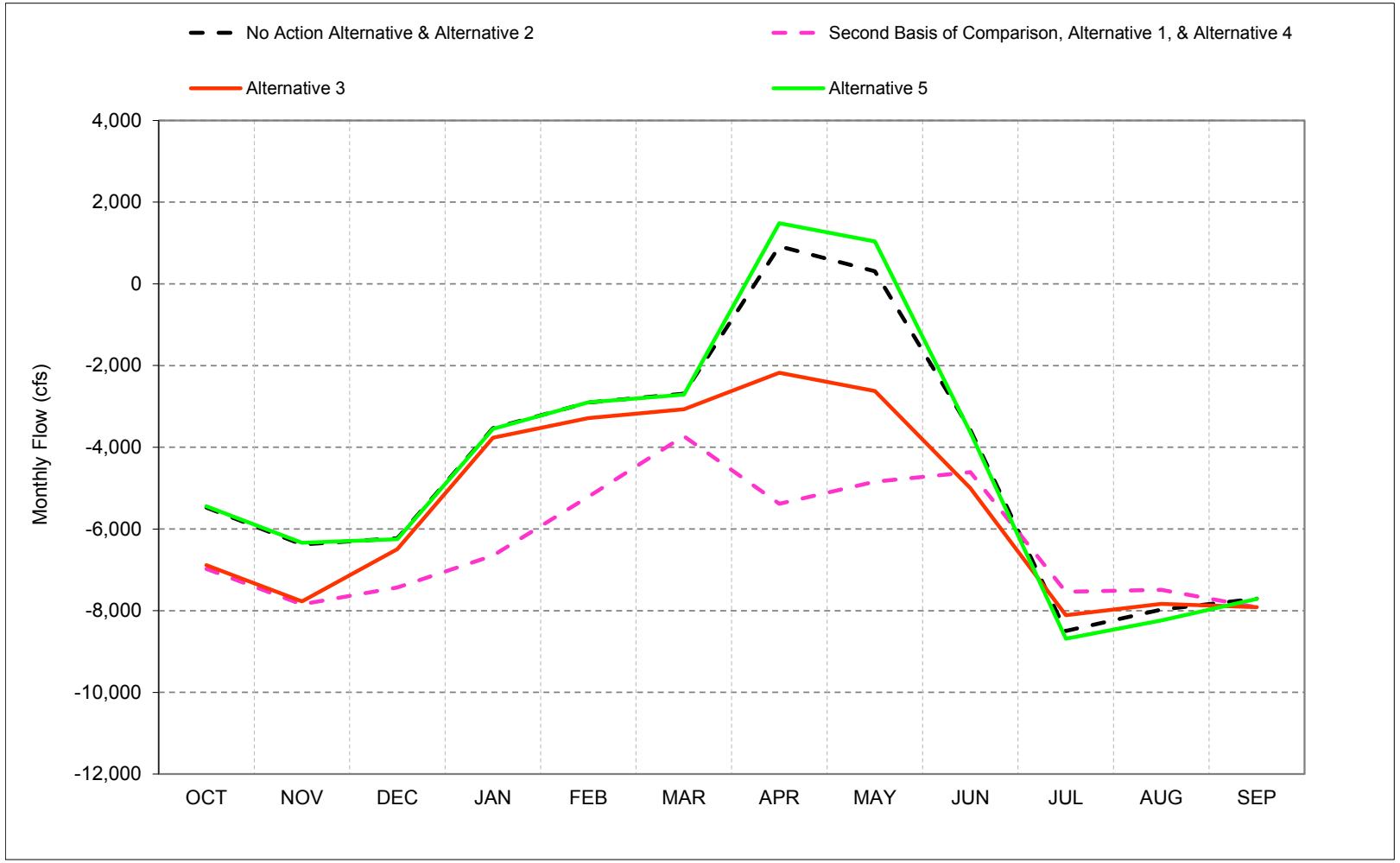
C.17. Old and Middle River Flow

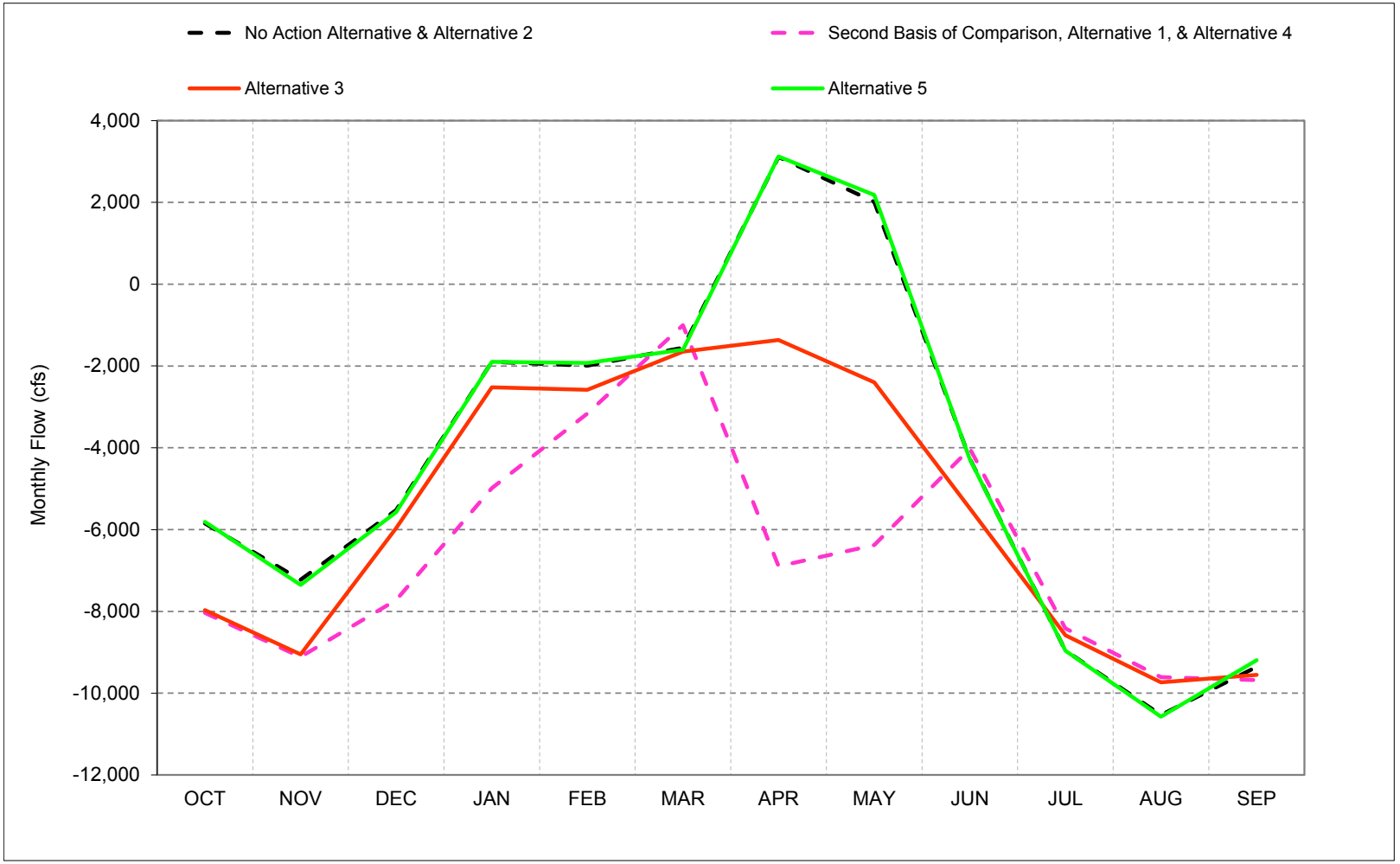
Figure C-17-1. Old and Middle River, Long-Term* Average Flow



*Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-17-2. Old and Middle River, Wet Year* Long-Term Average Flow**

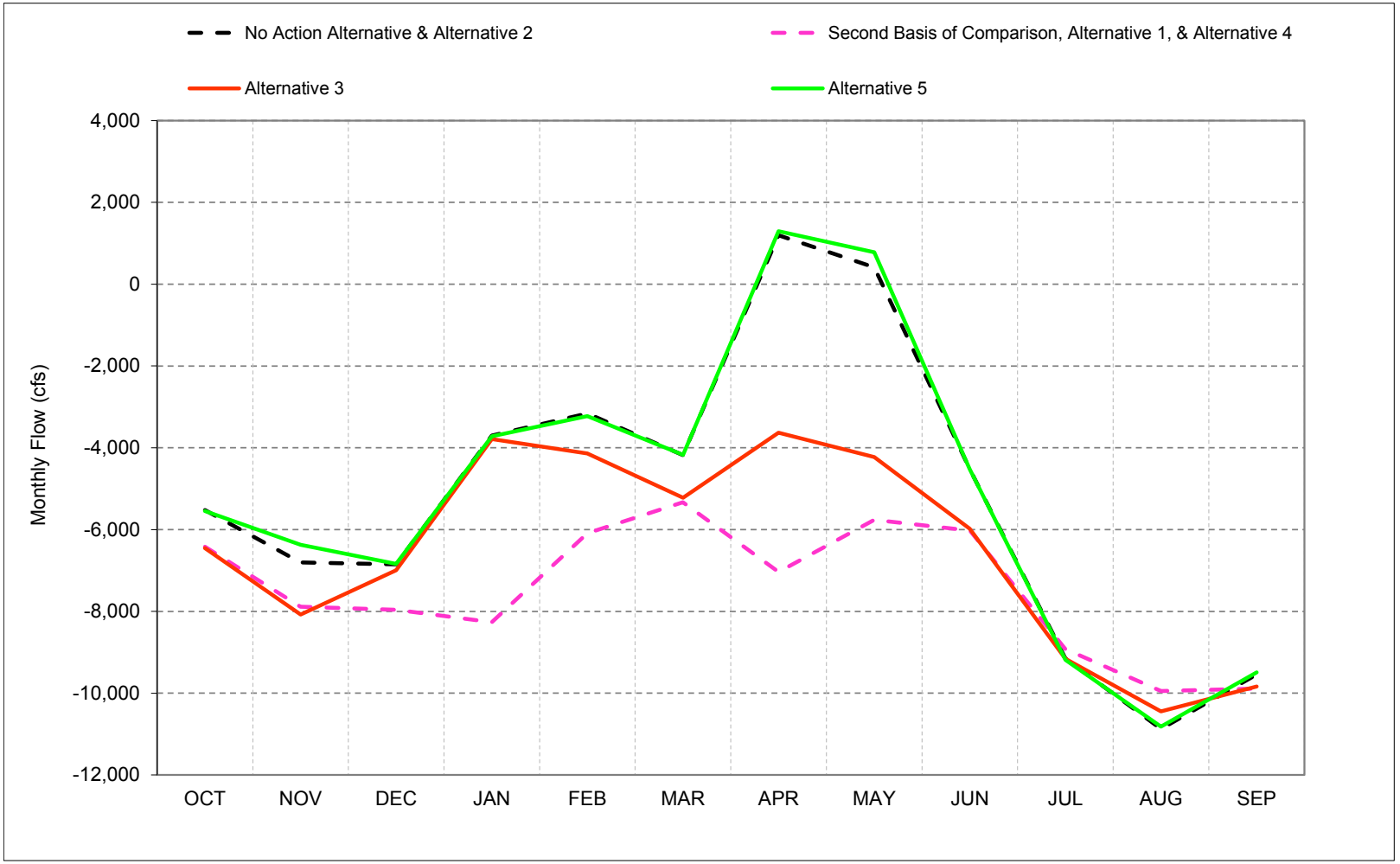


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-17-3. Old and Middle River, Above Normal Year* Long-Term Average Flow**

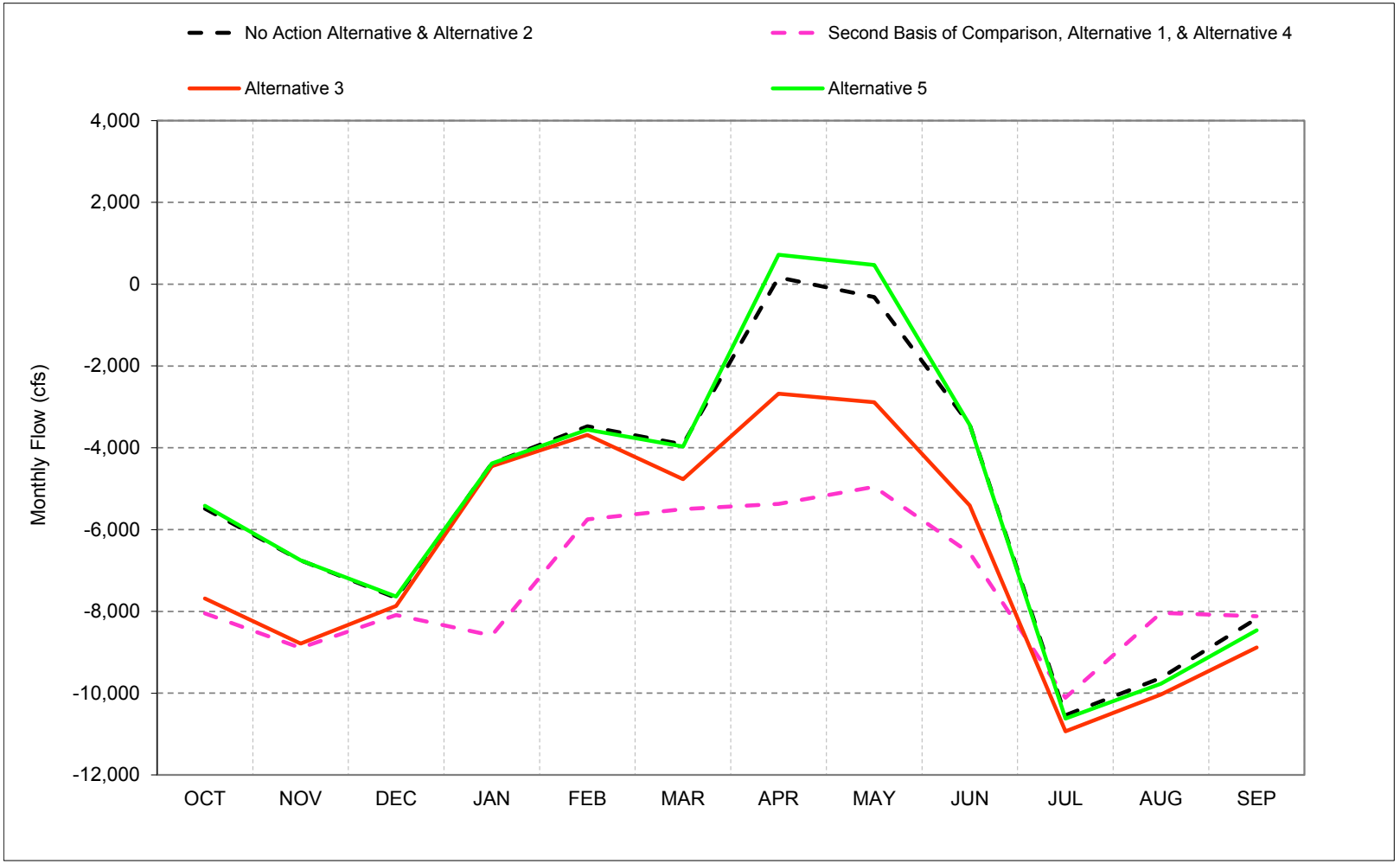


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-17-4. Old and Middle River, Below Normal Year* Long-Term Average Flow**

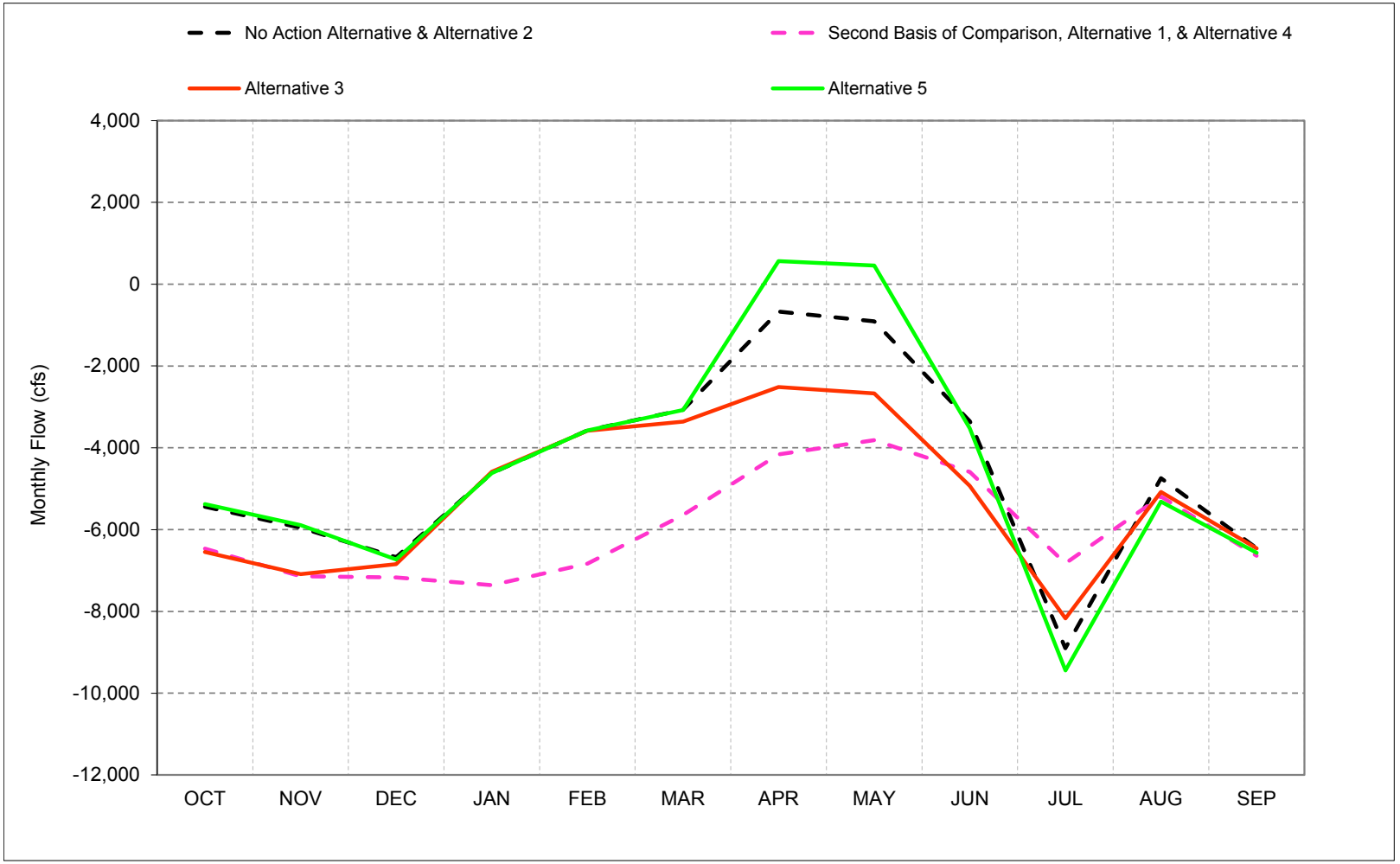


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-17-5. Old and Middle River, Dry Year* Long-Term Average Flow**

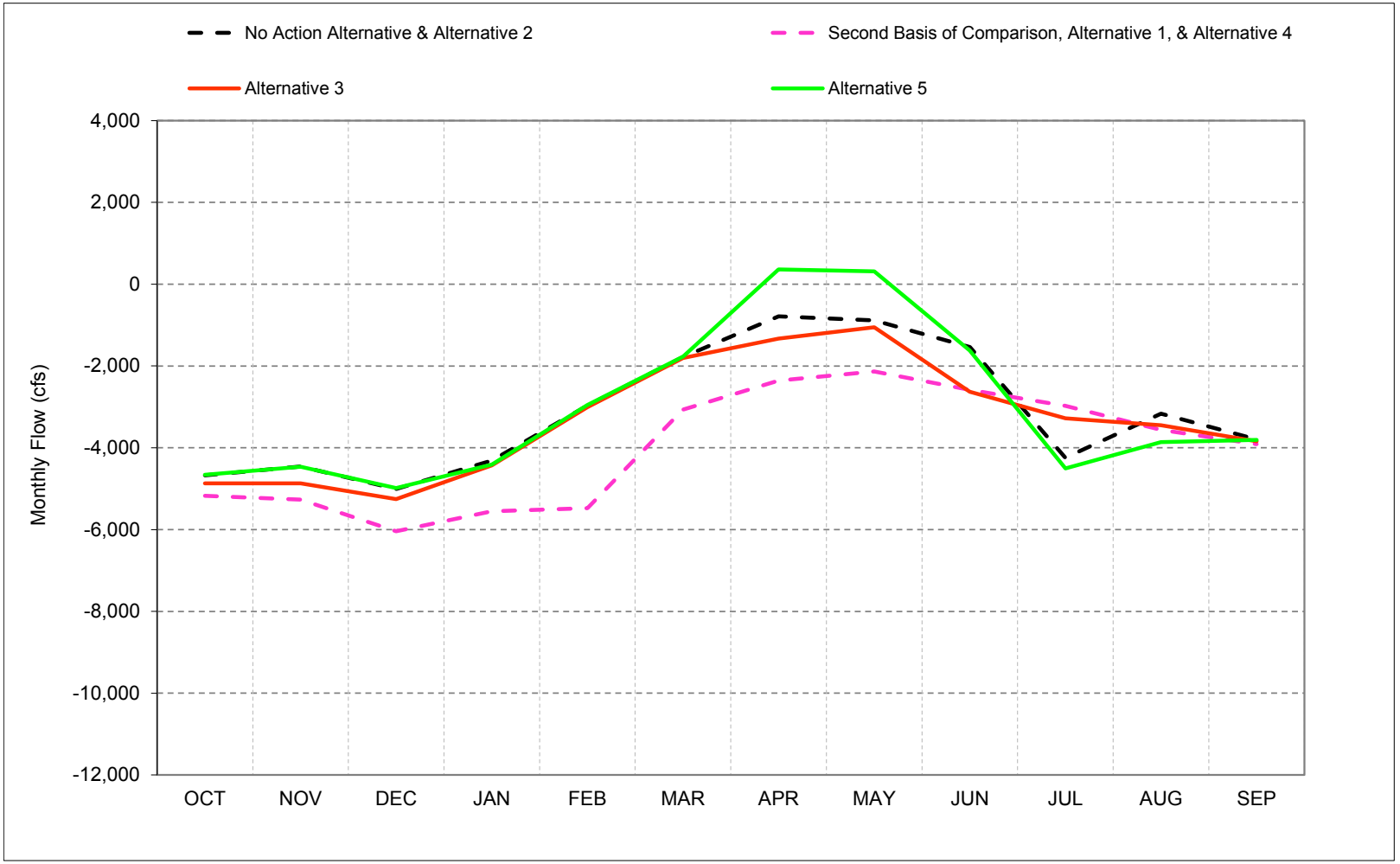


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-17-6. Old and Middle River, Critical Year* Long-Term Average Flow**



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

**Based on the 82-year simulation period.

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 Alternatives 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 C-17-1. 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 C-17-2. 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 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 No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	293	-431	-123	462	219	149	-2,801	-3,470	-948	470	-554	280
20%	-24	-673	-512	-677	-125	46	-3,153	-2,455	-2,717	1,074	-246	-79
30%	-190	-1,791	-1,159	-145	-16	455	-2,832	-1,711	-1,125	554	-488	-431
40%	-817	-1,914	-532	892	-186	0	-3,354	-2,668	-1,517	876	326	-781
50%	-1,721	-2,006	-532	-290	281	0	-3,399	-3,144	-2,026	386	560	-193
60%	-2,663	-2,836	-940	0	605	951	-3,266	-3,017	-1,263	196	785	-423
70%	-2,729	-2,709	-265	0	0	-61	-3,078	-2,868	-750	256	525	-189
80%	-3,174	-1,805	713	0	-621	-1,252	-3,036	-3,323	-1,160	-165	230	-160
90%	-2,681	-89	129	-1,976	-2,500	-2,499	-3,227	-3,735	-2,011	-39	286	-146
Long Term												
Full Simulation Period[b]	-1,412	-1,391	-267	-230	-379	-382	-3,095	-2,933	-1,420	384	144	-211
Water Year Types[c]												
Wet (32%)	-2,119	-1,823	-438	-622	-590	-93	-4,477	-4,410	-1,202	376	800	-197
Above Normal (16%)	-927	-1,277	-147	-89	-975	-1,044	-4,826	-4,637	-1,456	-10	429	-297
Below Normal (13%)	-2,197	-2,041	-199	-71	-212	-846	-2,841	-2,569	-1,964	-389	-408	-703
Dry (24%)	-1,106	-1,133	-172	33	-9	-286	-1,847	-1,764	-1,577	728	-334	-4
Critical (15%)	-198	-414	-246	-115	-43	-24	-541	-167	-1,089	962	-282	-46

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 C-17-3. 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 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 No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	42	2	-14	0	25	4	0	0	0	-325	-841	-138
20%	-26	2	-64	0	0	0	-73	31	-748	229	-419	-101
30%	29	-6	94	0	3	0	-67	152	0	-355	-591	-299
40%	-37	23	0	14	46	0	2	460	0	-284	-617	68
50%	183	222	0	0	268	0	11	563	0	-145	-287	136
60%	221	70	0	0	0	0	483	864	19	-76	15	25
70%	16	14	-40	0	0	0	830	1,014	0	-128	-19	-1
80%	-23	99	71	0	0	0	1,376	1,510	0	-92	10	-31
90%	49	124	0	0	0	0	1,629	1,796	0	-60	7	1
Long Term												
Full Simulation Period[b]	34	43	-19	-16	1	-20	563	725	-54	-191	-263	-8
Water Year Types[c]												
Wet (32%)	35	-124	-46	0	65	-46	12	171	-1	-9	-41	165
Above Normal (16%)	-19	433	12	-16	-61	2	96	368	4	-36	56	51
Below Normal (13%)	70	1	32	0	-77	-53	552	785	1	-84	-145	-283
Dry (24%)	60	60	-56	1	-5	-1	1,235	1,359	-173	-546	-568	-118
Critical (15%)	10	-4	23	-95	11	10	1,150	1,197	-84	-260	-692	-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 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 C-17-4. Old and Middle River, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	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

No Action Alternative

	Monthly Flow (cfs)											
Statistic	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

	Monthly Flow (cfs)											
Statistic	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 C-17-5. Old and Middle River, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	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 3

	Monthly Flow (cfs)											
Statistic	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

	Monthly Flow (cfs)											
Statistic	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 C-17-6. 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.

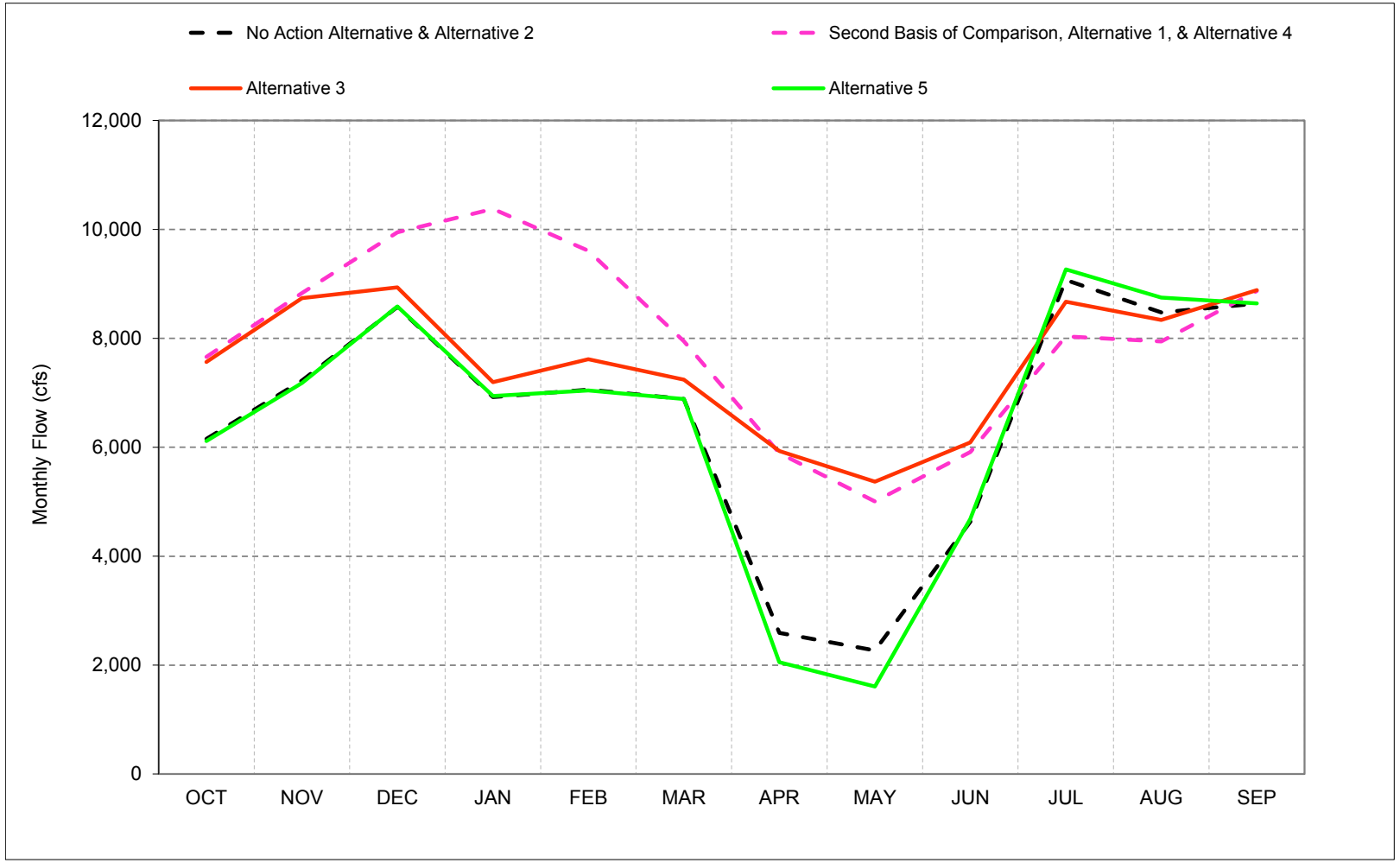
b Based on the 82-year simulation period.

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.

C.18. Exports through Jones and Banks Pumping Plants

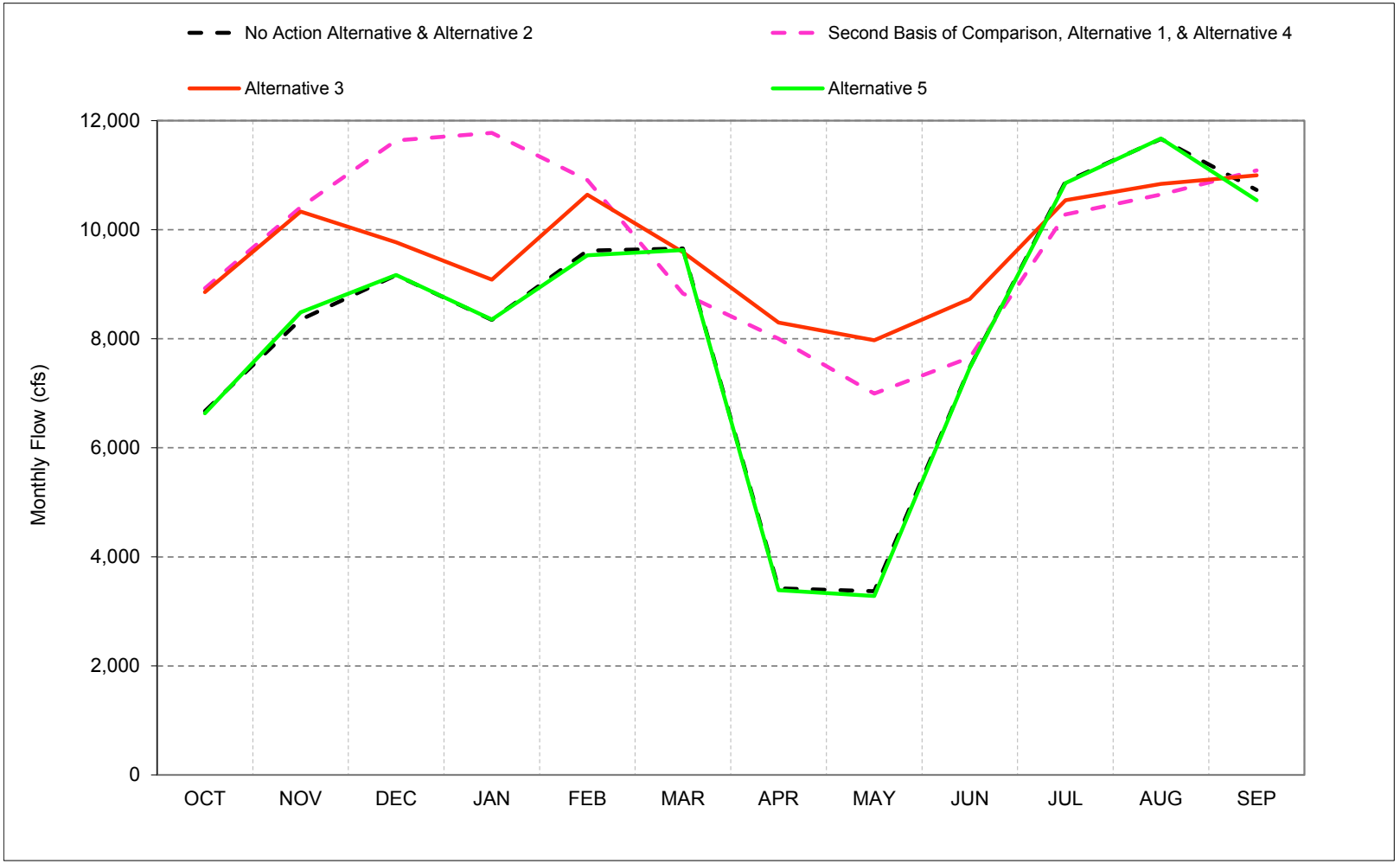
Figure C-18-1-1. Exports Through Jones and Banks Pumping Plants, Long-Term* Average Flow



*Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-18-1-2. Exports Through Jones and Banks Pumping Plants, Wet Year* Long-Term Average Flow**

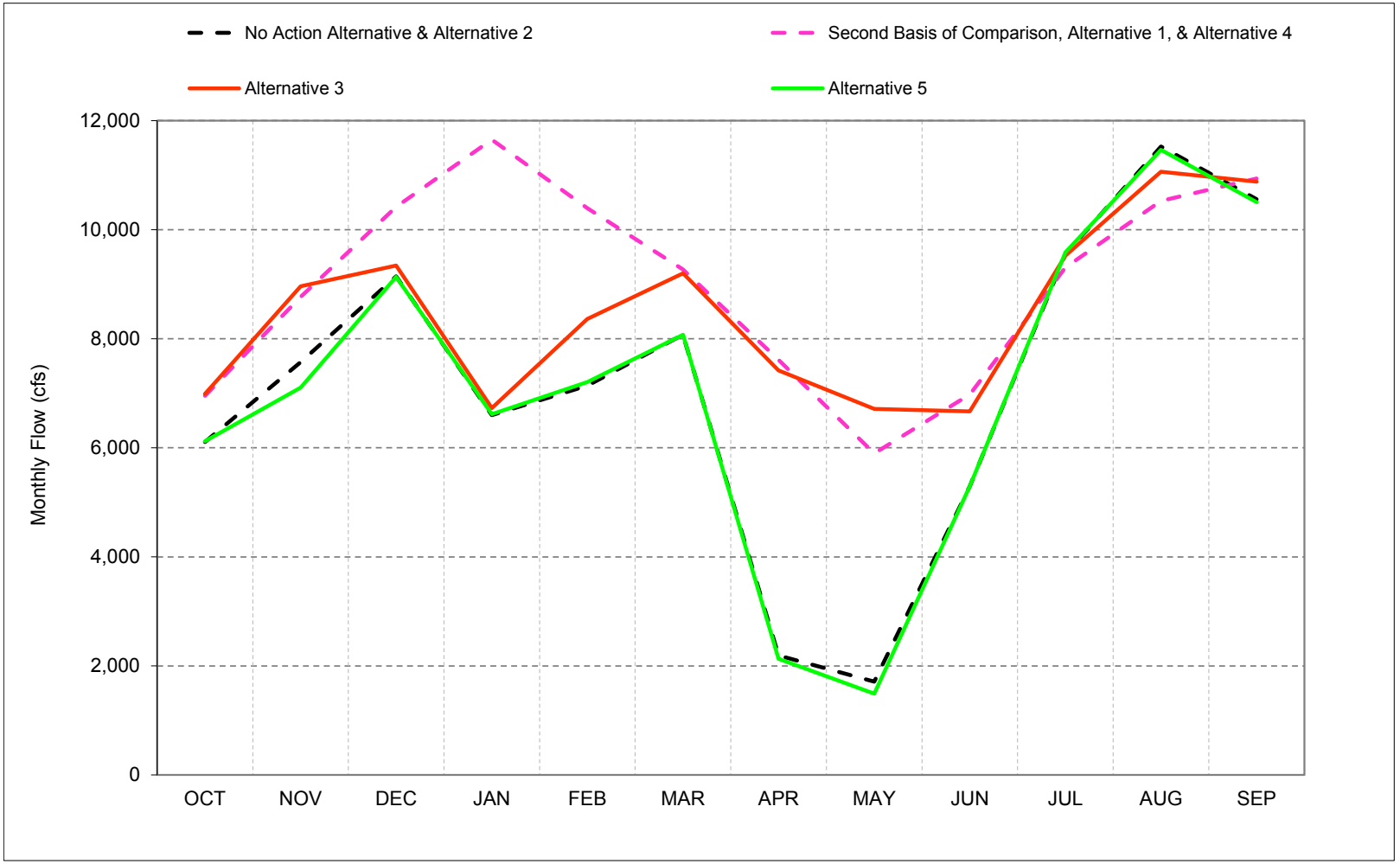


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-18-1-3. Exports Through Jones and Banks Pumping Plants, Above Normal Year* Long-Term Average Flow**

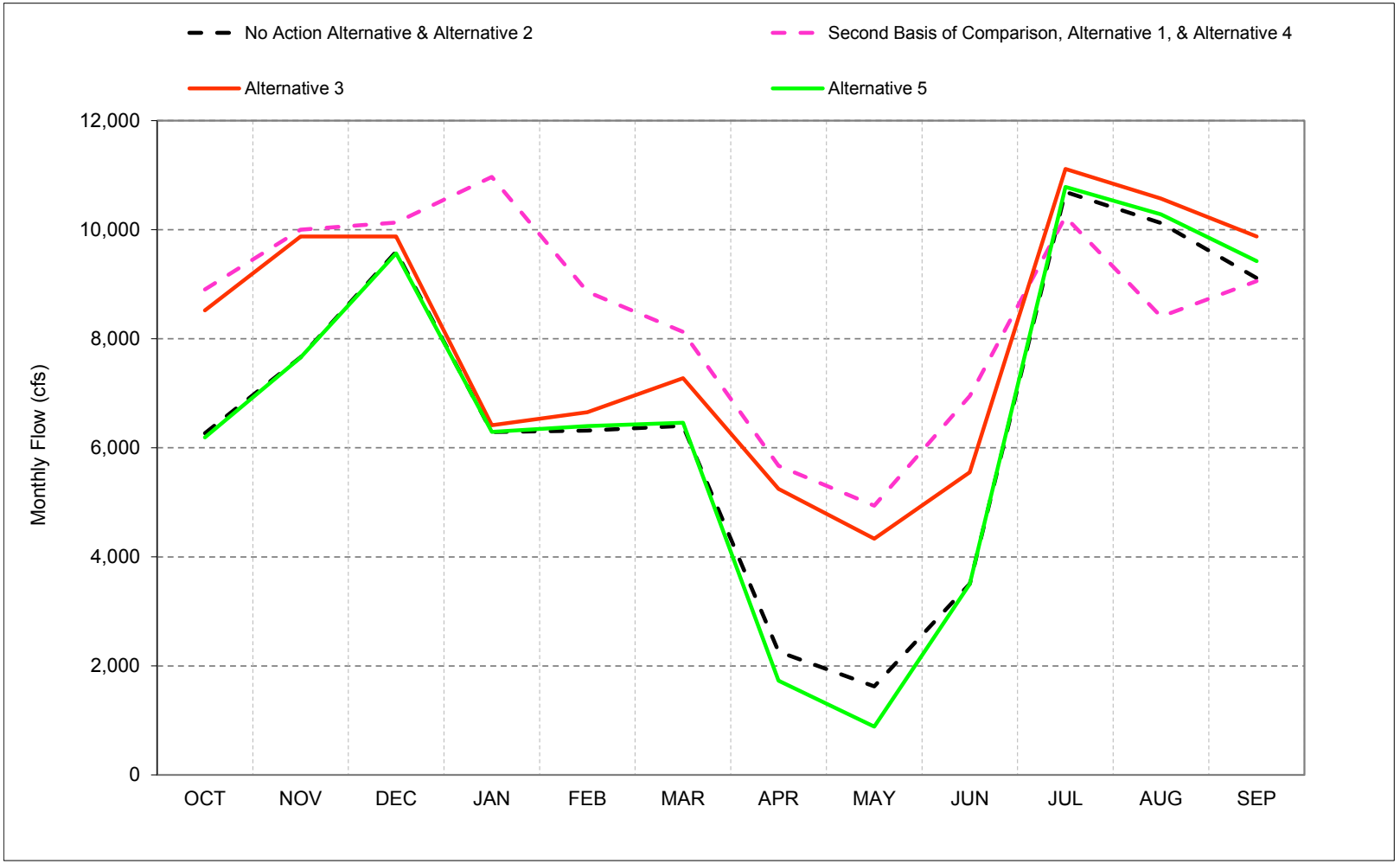


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-18-1-4. Exports Through Jones and Banks Pumping Plants, Below Normal Year* Long-Term Average Flow**

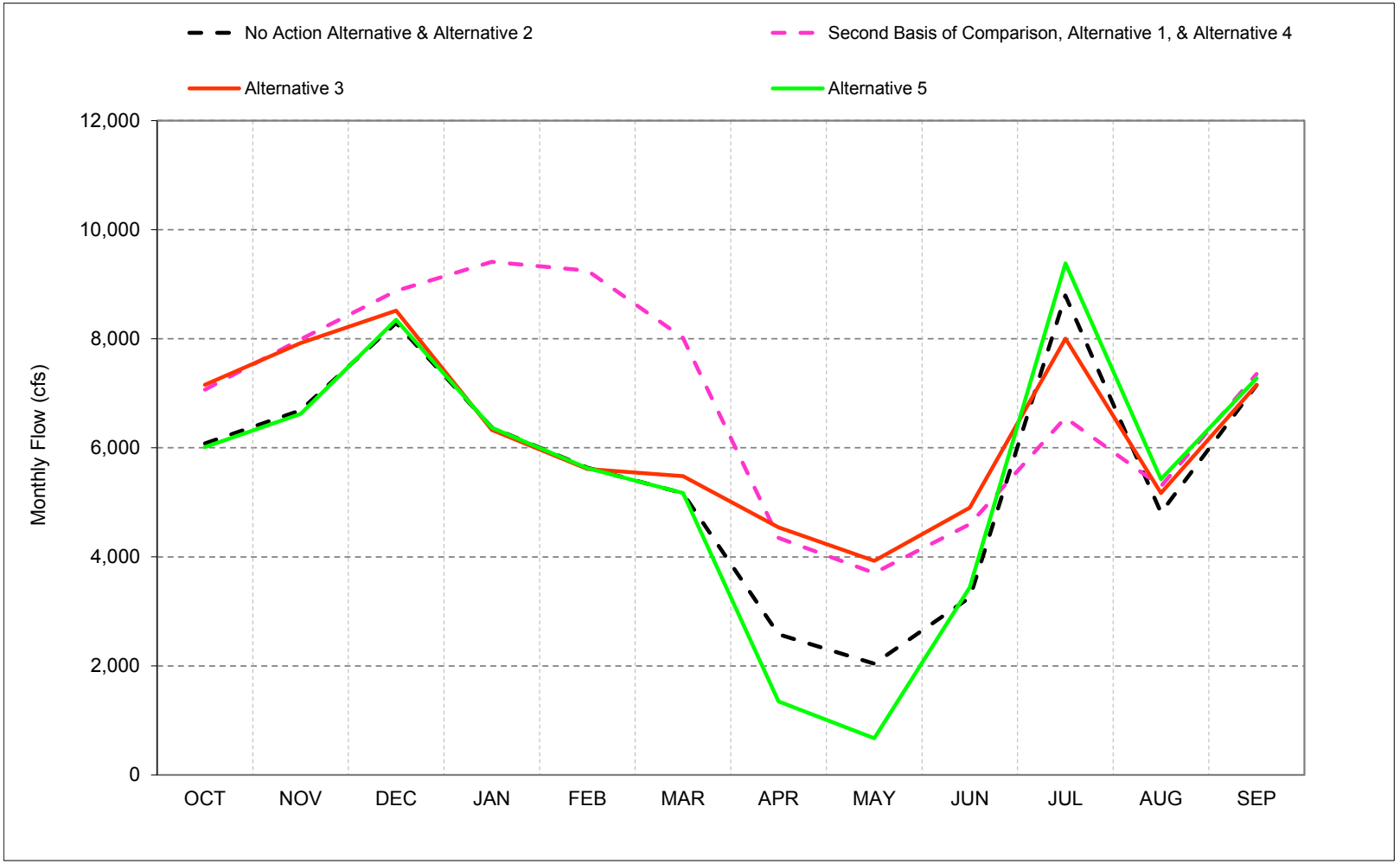


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-18-1-5. Exports Through Jones and Banks Pumping Plants, Dry Year* Long-Term Average Flow**

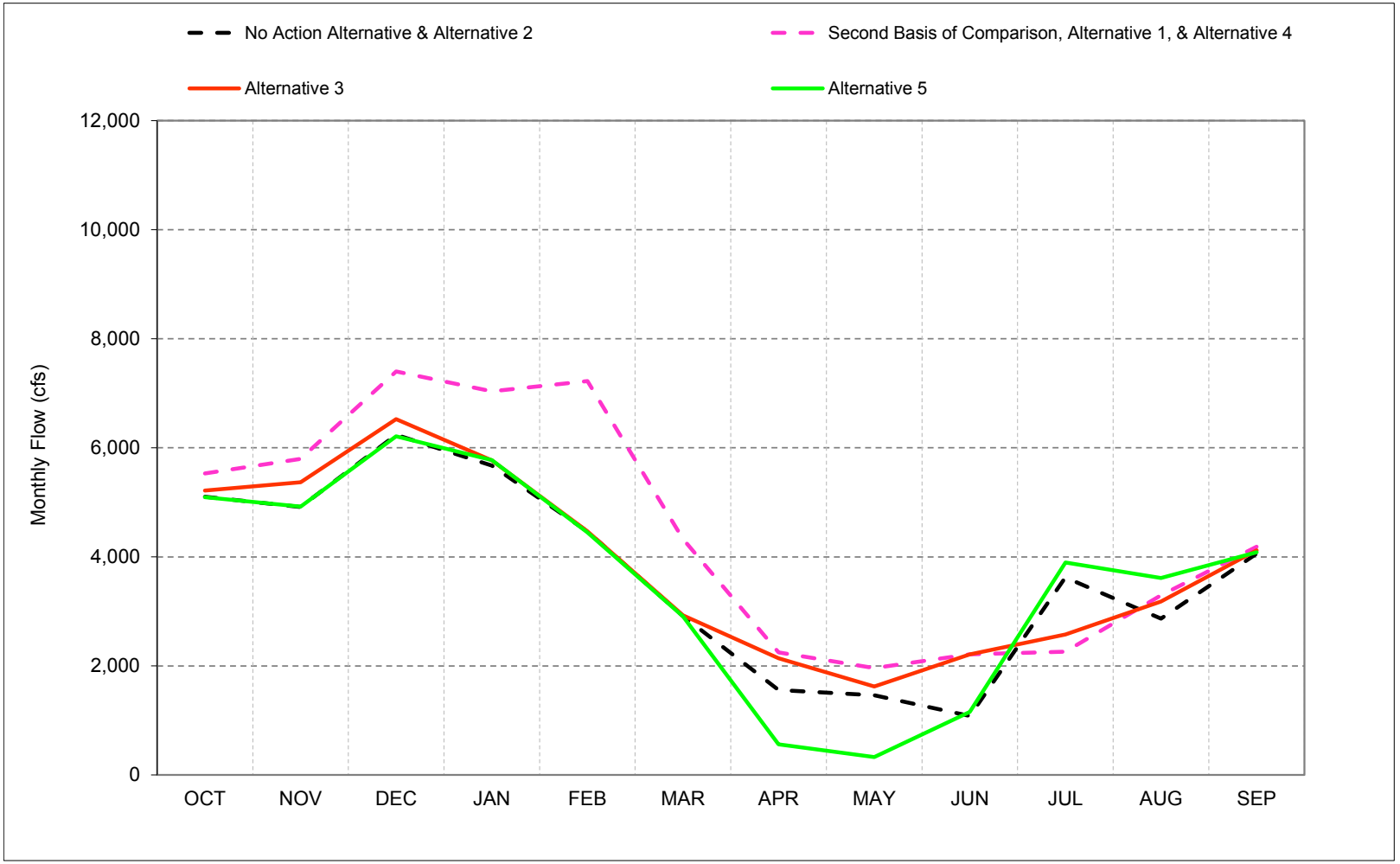


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-18-1-6. Exports Through Jones and Banks Pumping Plants, Critical Year* Long-Term Average Flow**

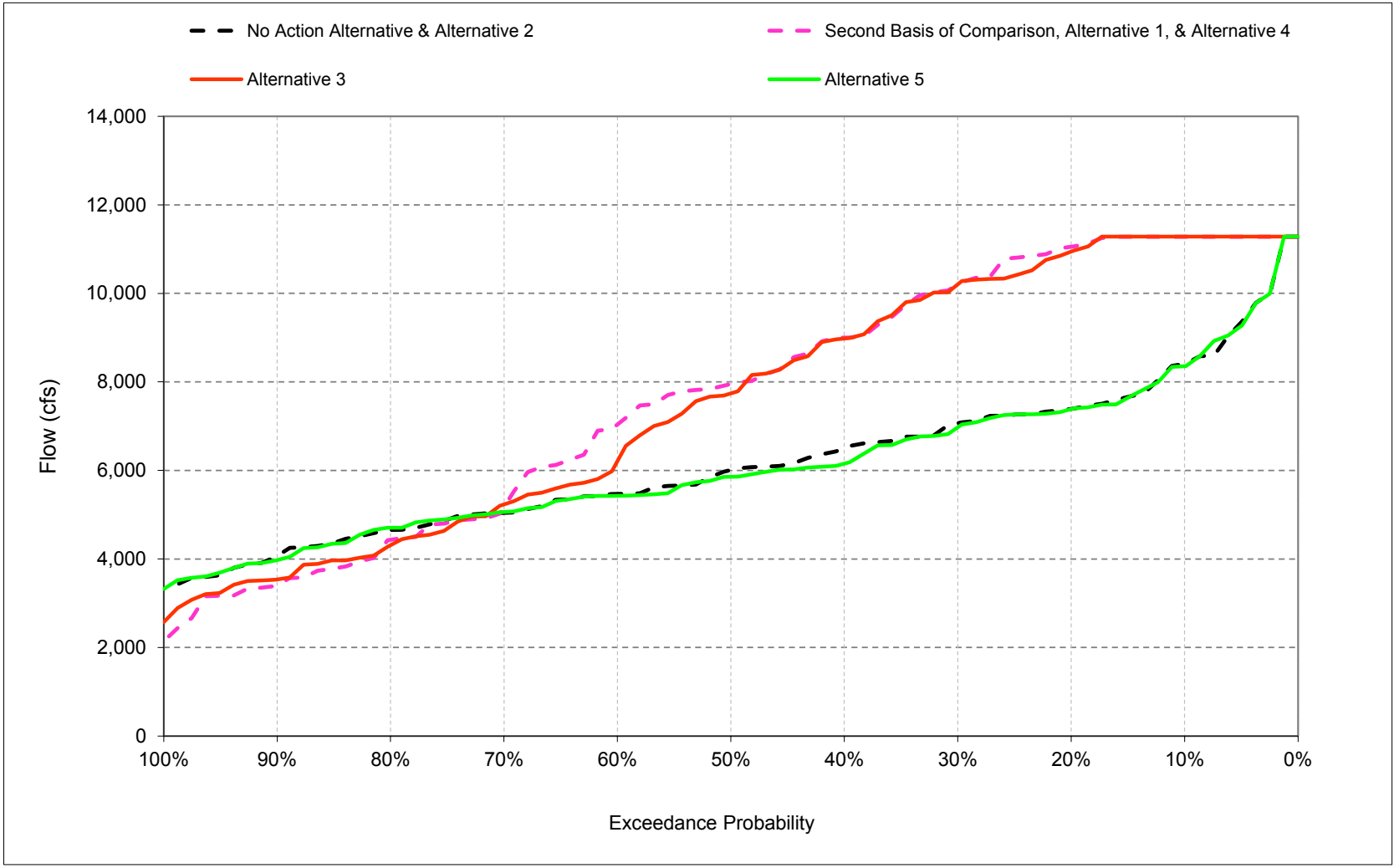


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

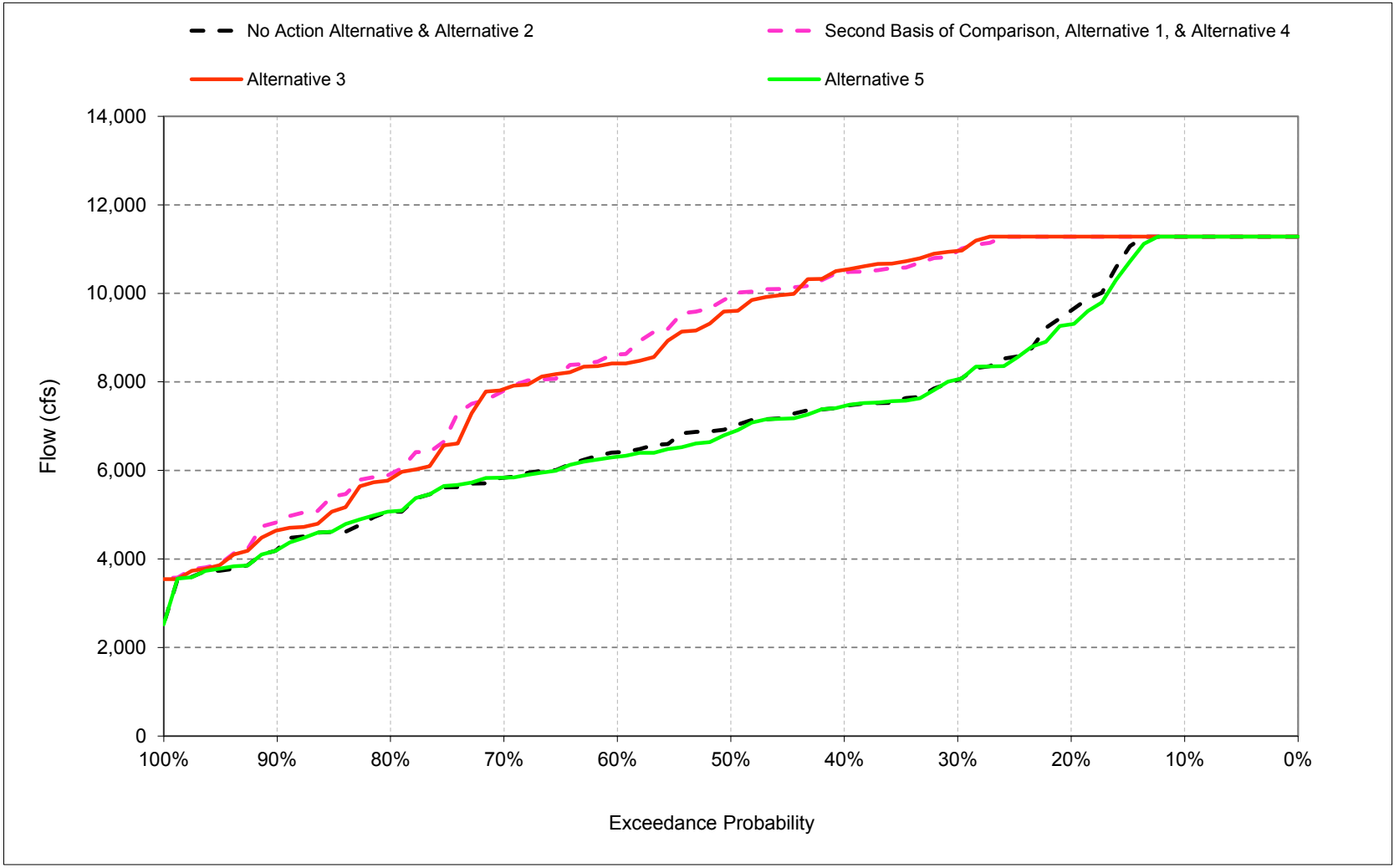
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed 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.

Figure C-18-2-1. Exports Through Jones and Banks Pumping Plants, October



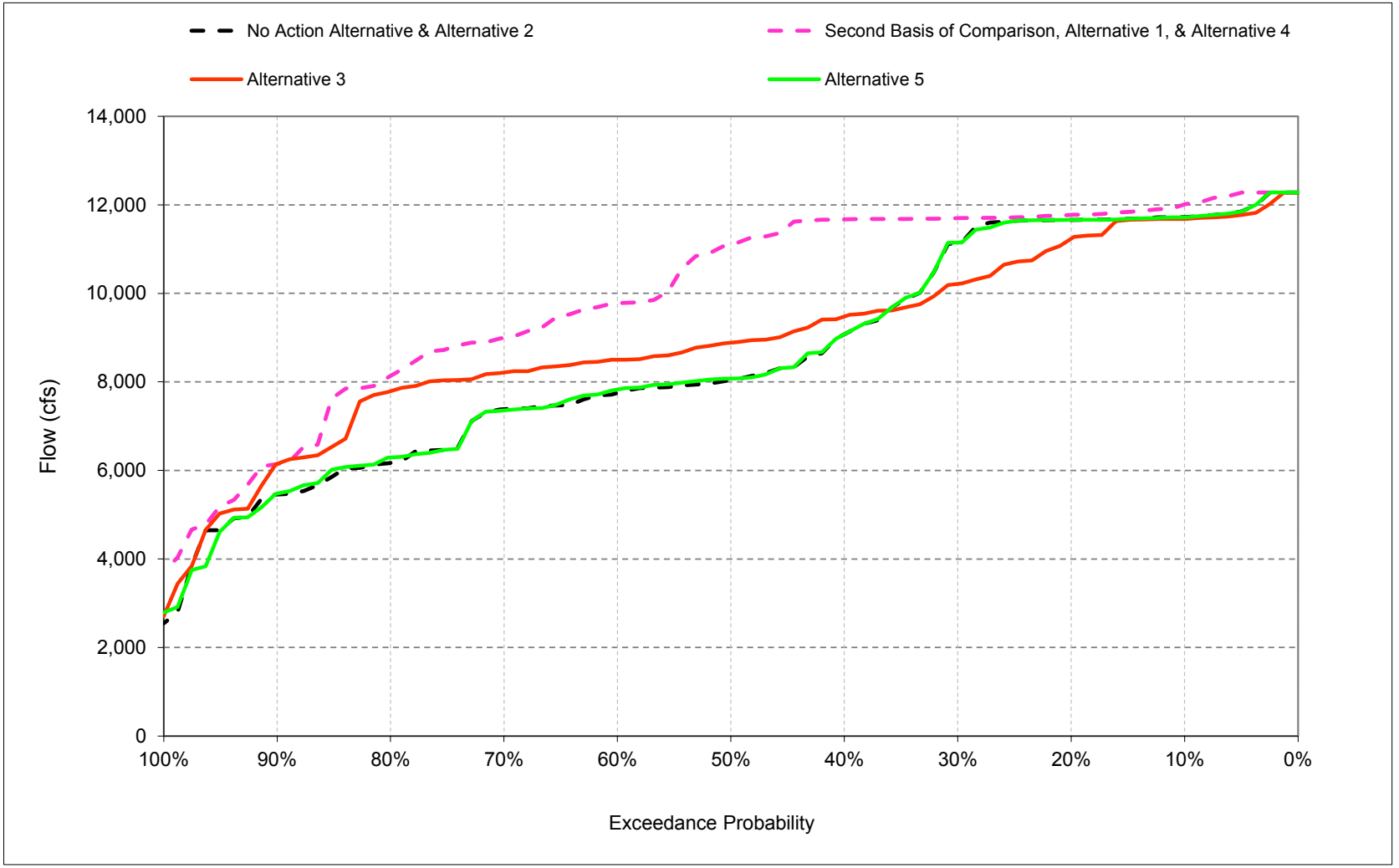
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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.

Figure C-18-2-2. Exports Through Jones and Banks Pumping Plants, November



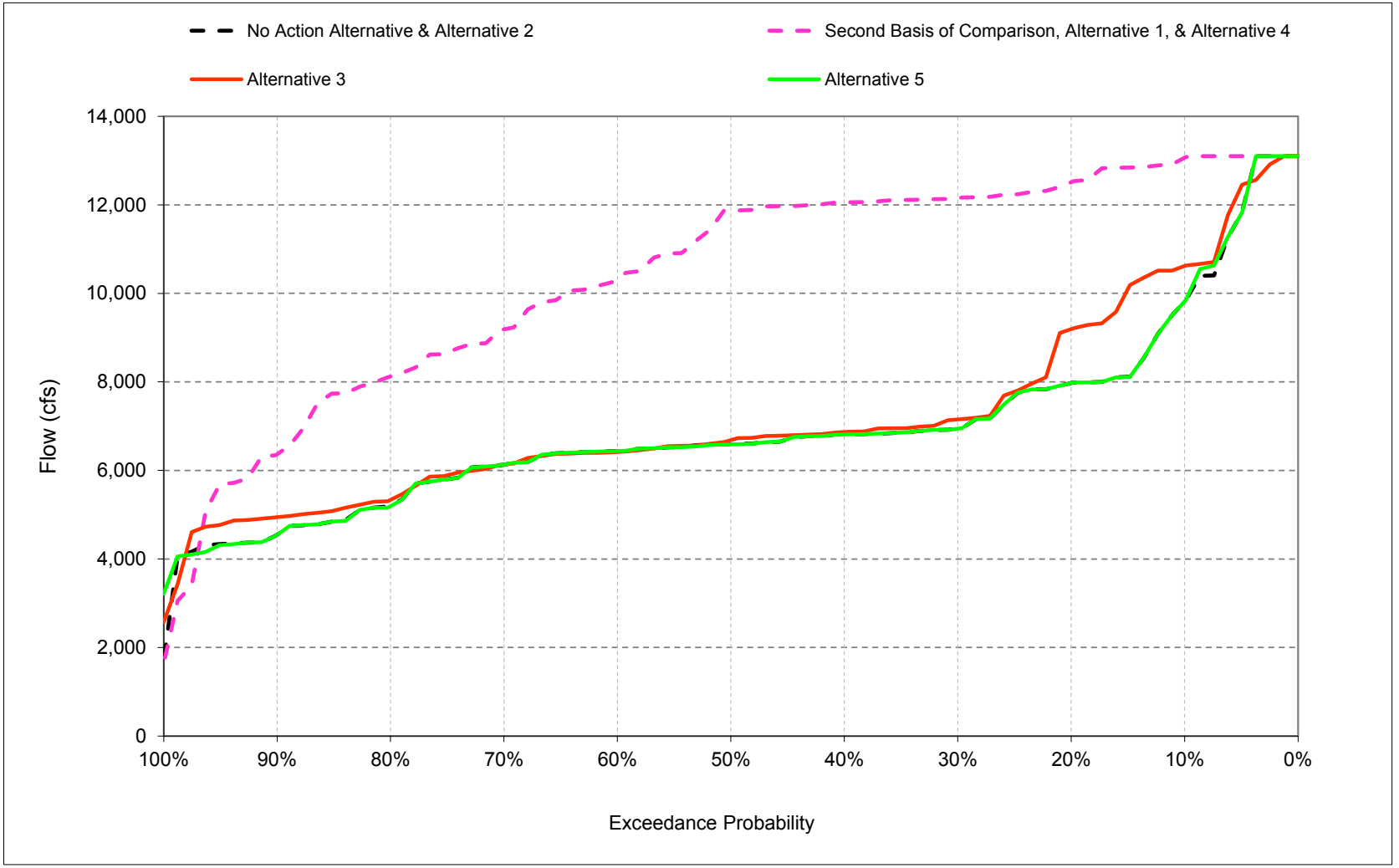
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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.

Figure C-18-2-3. Exports Through Jones and Banks Pumping Plants, December



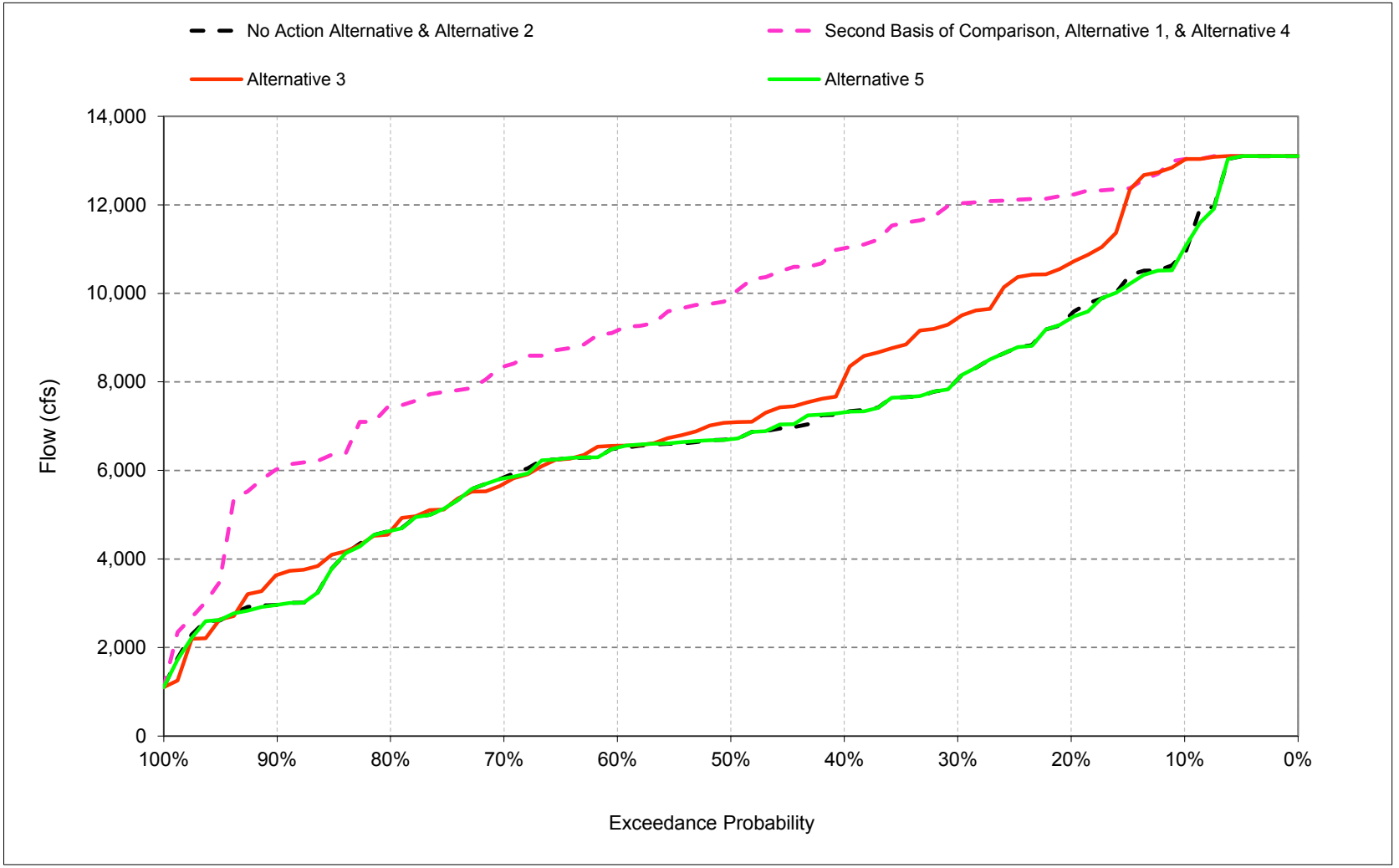
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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.

Figure C-18-2-4. Exports Through Jones and Banks Pumping Plants, January



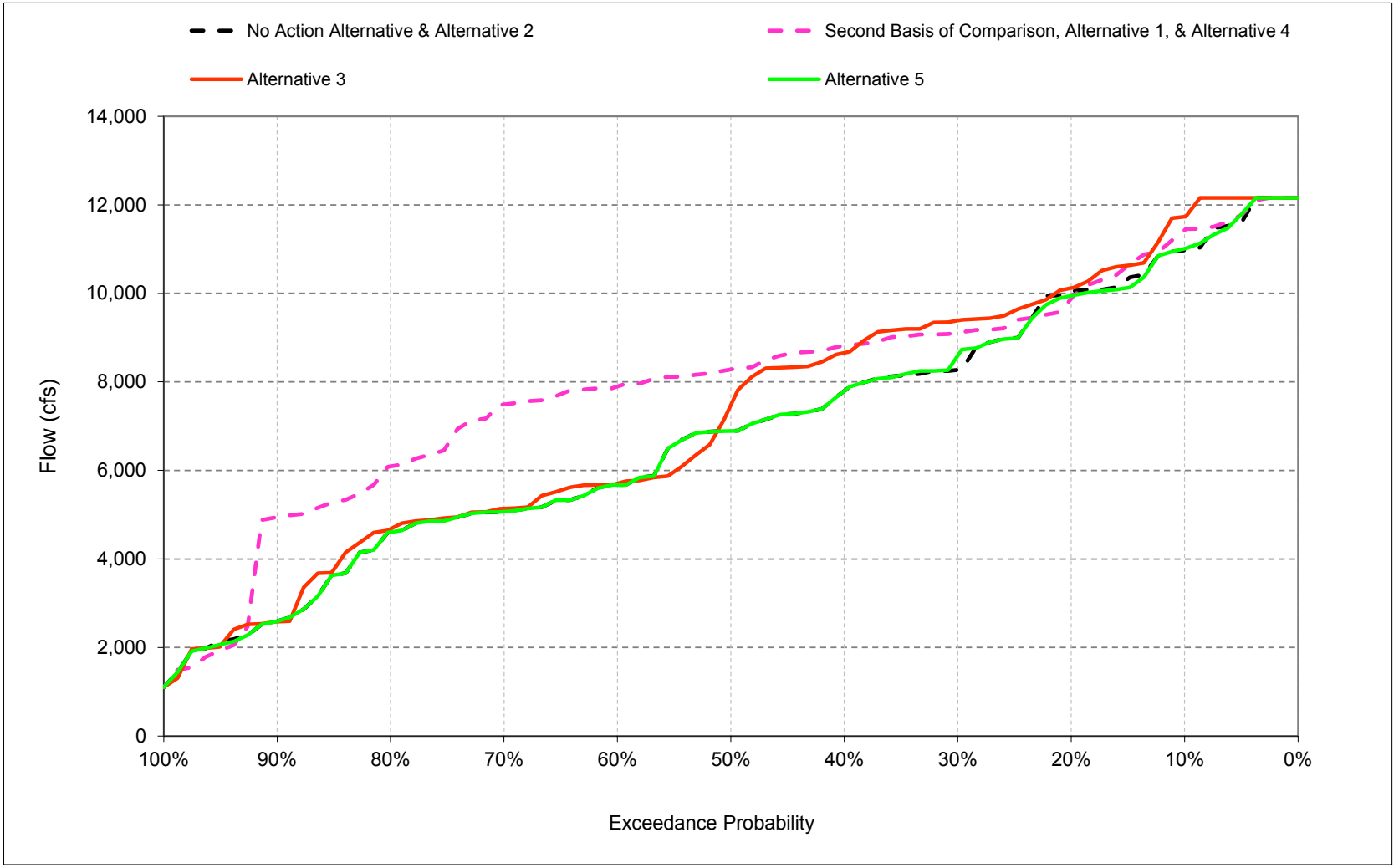
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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.

Figure C-18-2-5. Exports Through Jones and Banks Pumping Plants, February



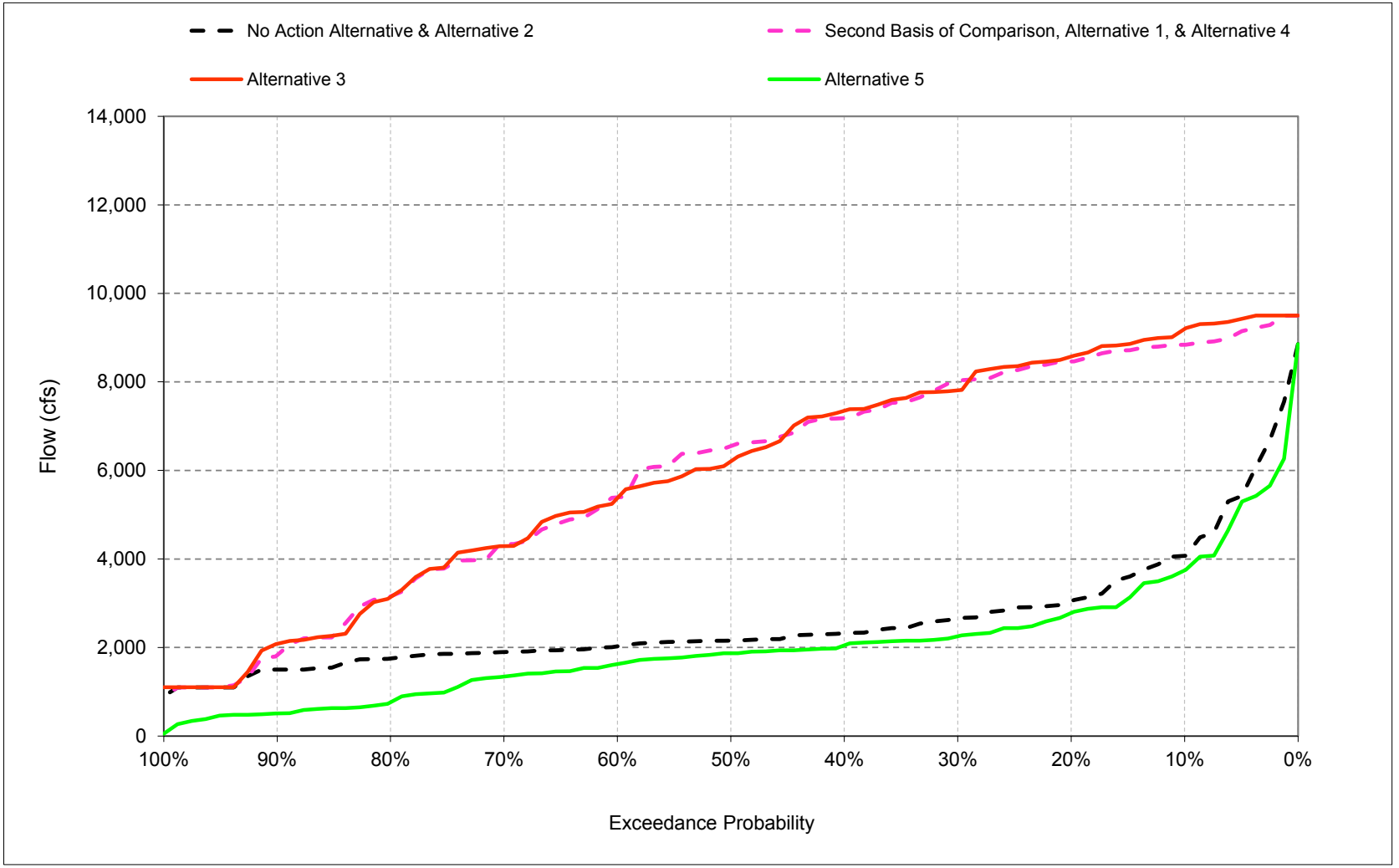
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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.

Figure C-18-2-6. Exports Through Jones and Banks Pumping Plants, March



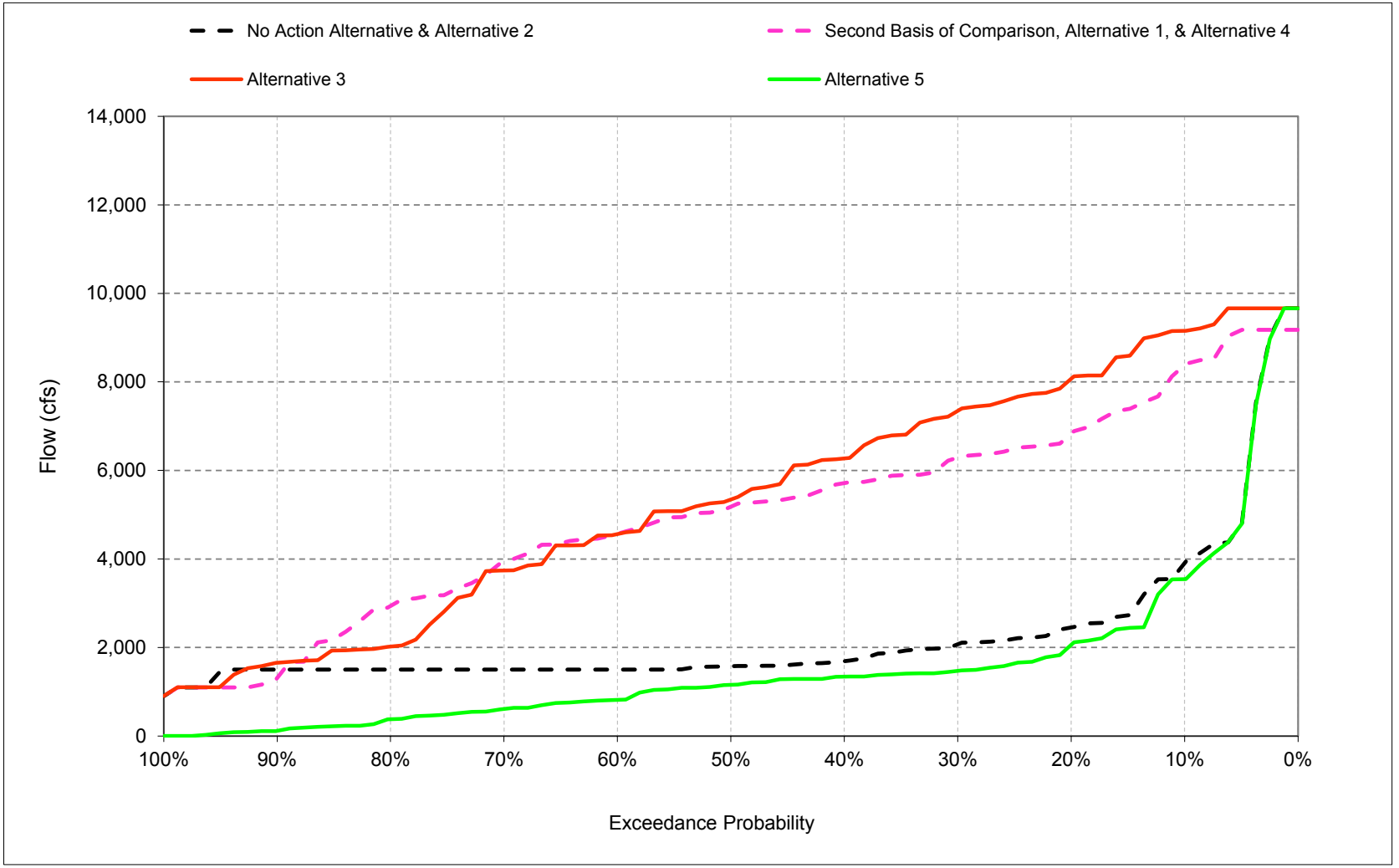
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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.

Figure C-18-2-7. Exports Through Jones and Banks Pumping Plants, April



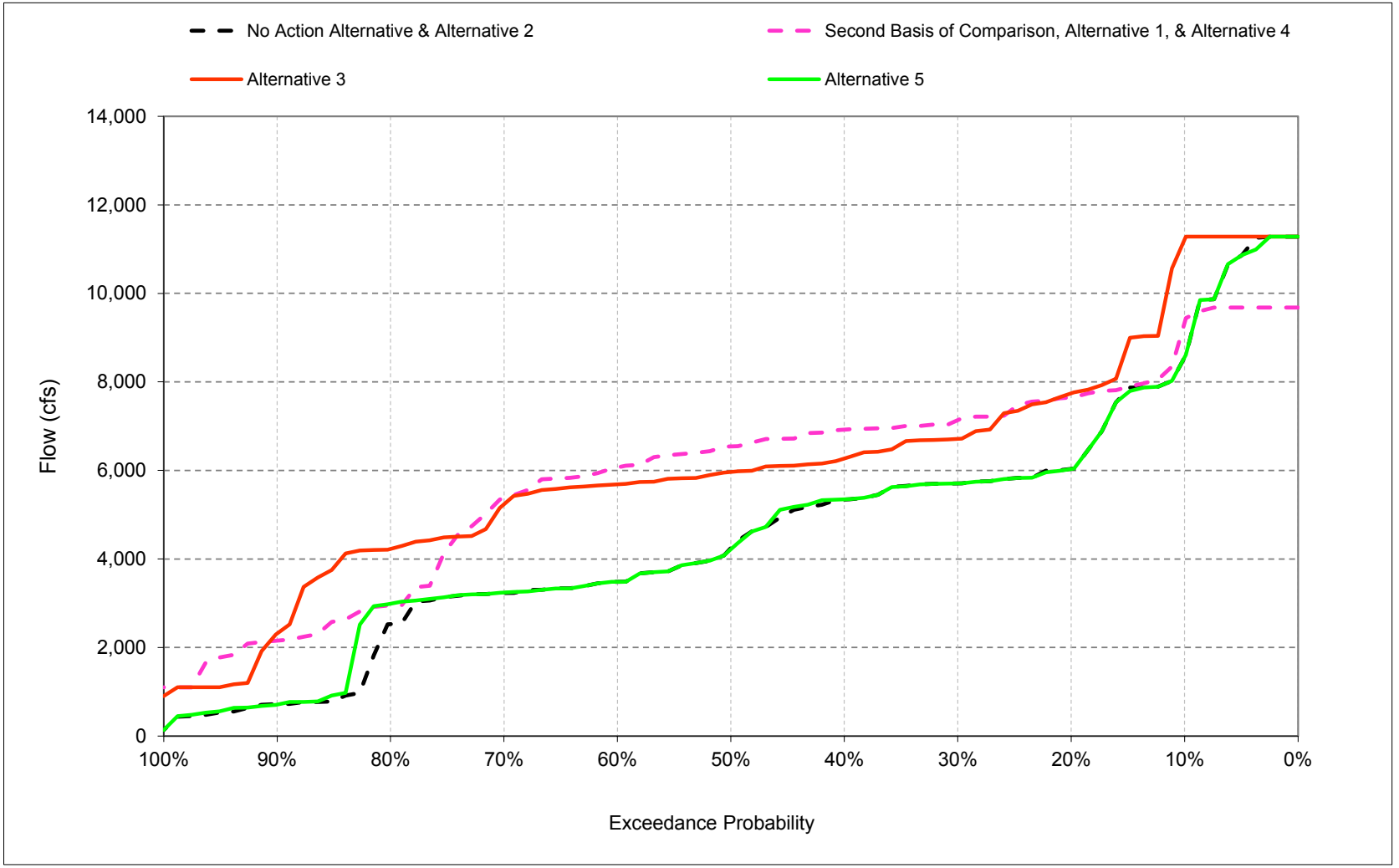
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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.

Figure C-18-2-8. Exports Through Jones and Banks Pumping Plants, May



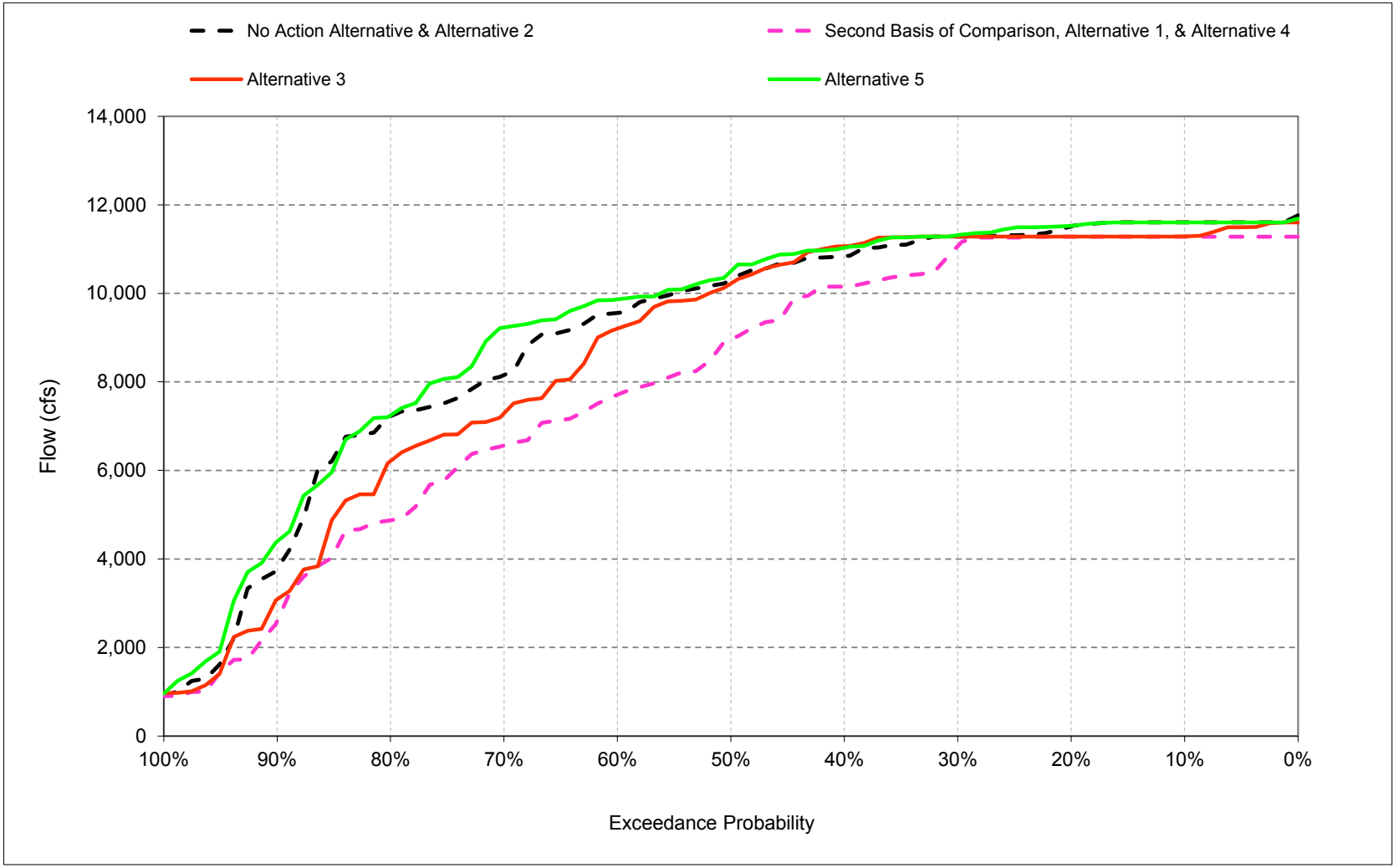
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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.

Figure C-18-2-9. Exports Through Jones and Banks Pumping Plants, June



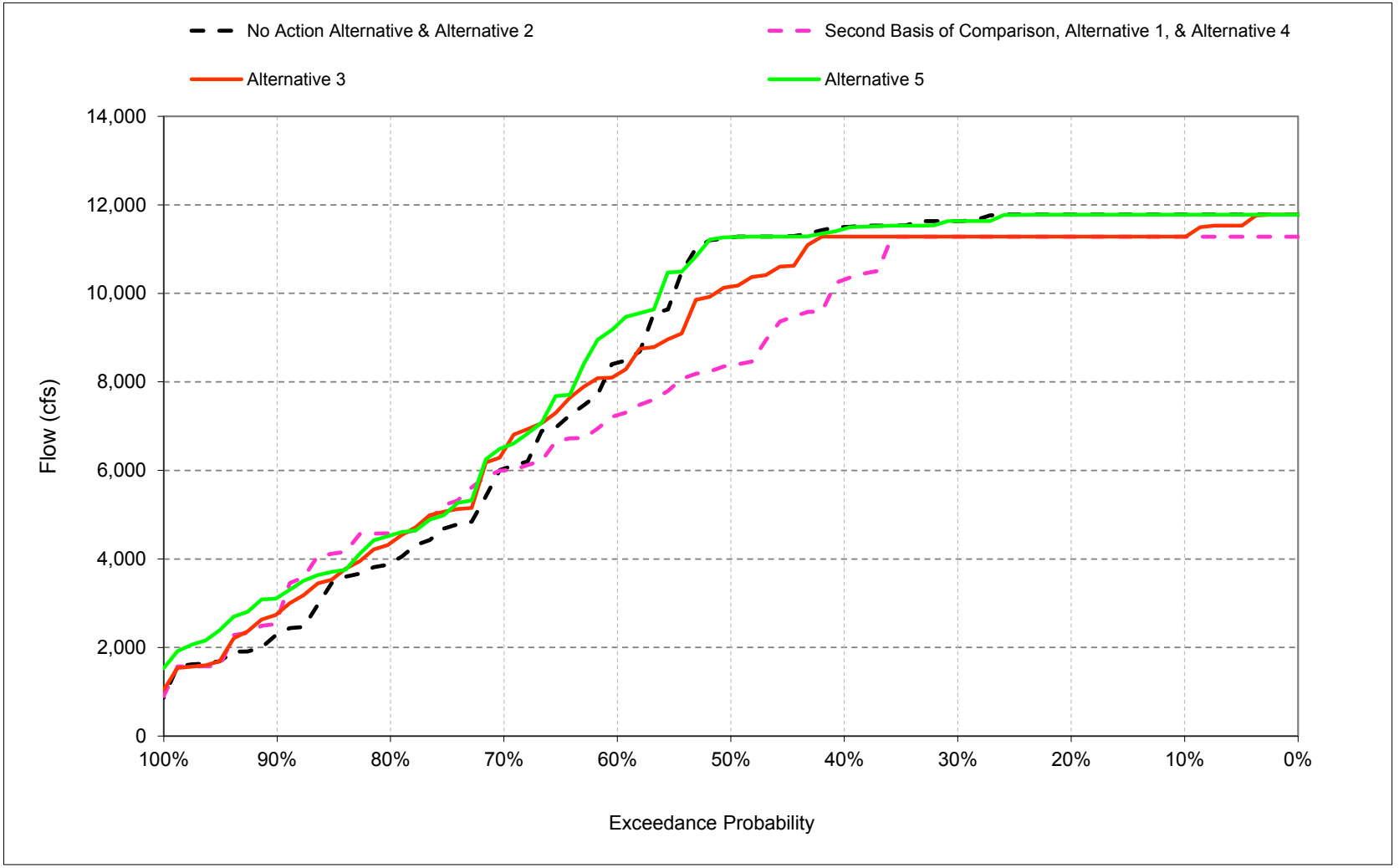
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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.

Figure C-18-2-10. Exports Through Jones and Banks Pumping Plants, July



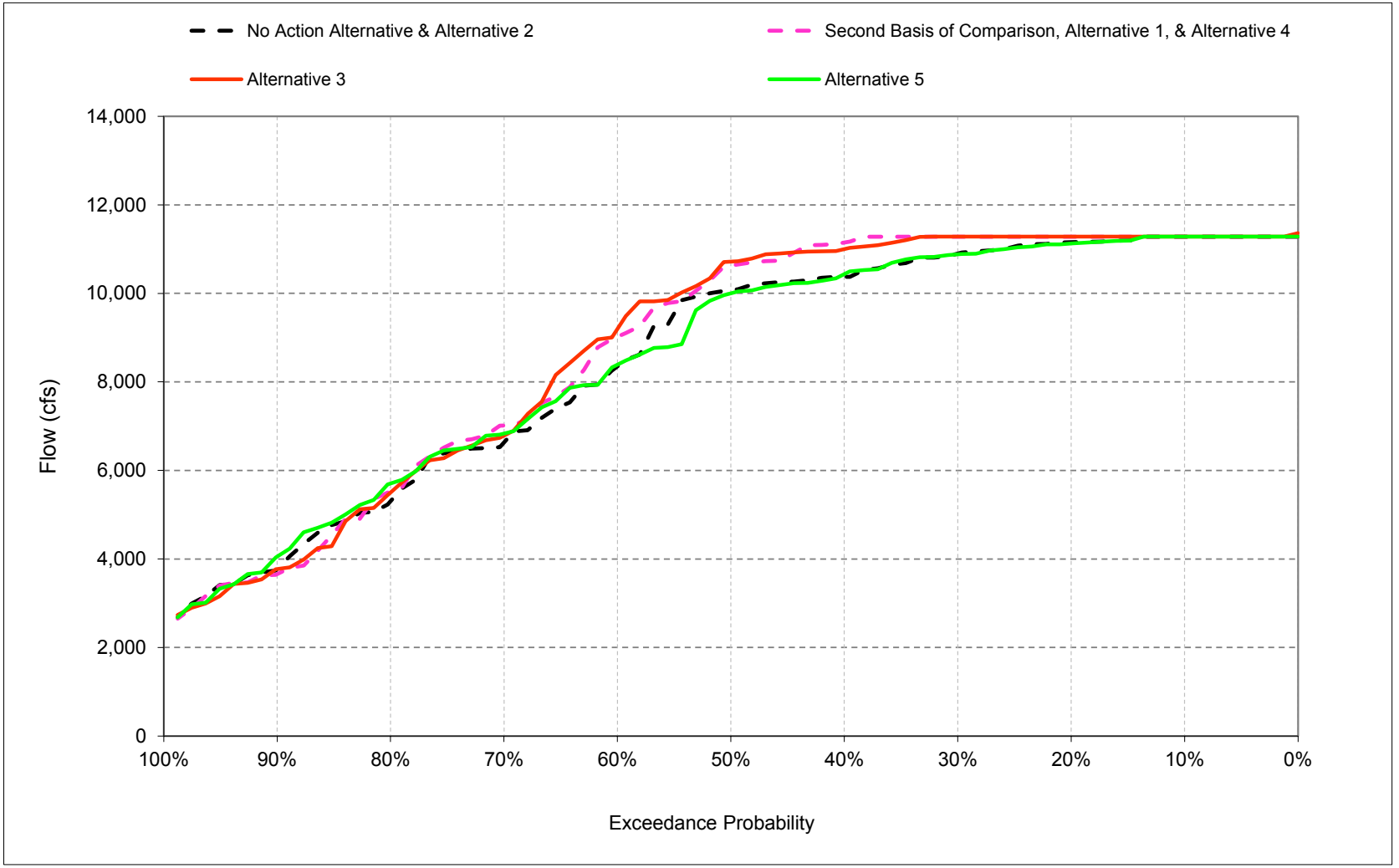
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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.

Figure C-18-2-11. Exports Through Jones and Banks Pumping Plants, August



Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 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 Alternatives 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.

Figure C-18-2-12. Exports Through Jones and Banks Pumping Plants, September



Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 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 Alternatives 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 C-18-1-1. Exports Through Jones and Banks Pumping Plants, Monthly Export Rate

No Action Alternative

Statistic	Monthly Export Rate (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	8,412	11,280	11,725	9,816	10,924	10,973	4,073	3,906	8,550	11,605	11,780	11,280
20%	7,390	9,616	11,661	7,974	9,529	10,037	3,049	2,454	6,033	11,512	11,780	11,158
30%	7,065	8,047	11,142	6,944	8,059	8,270	2,653	2,073	5,707	11,280	11,630	10,941
40%	6,502	7,448	9,074	6,813	7,307	7,796	2,320	1,690	5,343	10,841	11,500	10,468
50%	6,011	6,980	8,042	6,597	6,707	6,893	2,157	1,575	4,248	10,312	11,257	10,146
60%	5,469	6,409	7,751	6,440	6,495	5,672	2,027	1,500	3,484	9,557	8,434	8,546
70%	5,041	5,834	7,383	6,130	5,846	5,073	1,898	1,500	3,232	8,156	6,039	6,891
80%	4,653	5,070	6,170	5,217	4,636	4,607	1,752	1,500	2,529	7,224	3,907	5,631
90%	4,068	4,215	5,455	4,546	2,963	2,592	1,500	1,500	720	3,768	2,291	4,090
Long Term												
Full Simulation Period[b]	6,155	7,225	8,578	6,921	7,056	6,887	2,593	2,270	4,634	9,071	8,476	8,636
Water Year Types[c]												
Wet (32%)	6,674	8,350	9,168	8,346	9,616	9,656	3,424	3,371	7,479	10,876	11,663	10,727
Above Normal (16%)	6,108	7,568	9,145	6,598	7,142	8,074	2,193	1,712	5,297	9,549	11,524	10,558
Below Normal (13%)	6,270	7,660	9,597	6,291	6,316	6,402	2,260	1,625	3,509	10,692	10,123	9,114
Dry (24%)	6,080	6,687	8,287	6,372	5,633	5,167	2,578	2,041	3,255	8,793	4,808	7,151
Critical (15%)	5,104	4,916	6,238	5,672	4,467	2,915	1,558	1,465	1,083	3,621	2,869	4,060

Alternative 1

Statistic	Monthly Export Rate (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	11,280	11,280	12,011	13,065	13,032	11,429	8,841	8,382	9,334	11,280	11,280	11,280
20%	11,055	11,280	11,772	12,511	12,226	9,882	8,461	6,831	7,652	11,280	11,280	11,280
30%	10,198	10,956	11,699	12,155	12,020	9,114	8,015	6,289	7,137	11,065	11,280	11,280
40%	9,001	10,469	11,672	12,056	11,020	8,815	7,182	5,713	6,920	10,154	10,308	11,235
50%	7,952	9,934	11,110	11,874	9,946	8,283	6,552	5,183	6,543	8,966	8,374	10,679
60%	7,037	8,619	9,776	10,334	9,164	7,898	5,392	4,566	6,067	7,712	7,250	9,166
70%	5,177	7,803	8,992	9,187	8,353	7,489	4,337	3,930	5,372	6,565	6,000	7,066
80%	4,433	5,919	8,133	8,123	7,442	6,091	3,152	2,936	2,951	4,873	4,578	5,708
90%	3,405	4,838	6,145	6,367	6,030	4,944	1,825	1,309	2,153	2,596	2,623	3,805
Long Term												
Full Simulation Period[b]	7,660	8,828	9,949	10,376	9,608	7,948	5,893	5,006	5,913	8,036	7,945	8,870
Water Year Types[c]												
Wet (32%)	8,927	10,409	11,637	11,774	10,908	8,829	7,999	6,994	7,657	10,279	10,645	11,087
Above Normal (16%)	6,953	8,763	10,418	11,650	10,392	9,269	7,610	5,897	6,980	9,306	10,525	10,937
Below Normal (13%)	8,905	9,999	10,129	10,967	8,862	8,126	5,670	4,939	6,952	10,234	8,407	9,055
Dry (24%)	7,067	7,987	8,879	9,410	9,250	8,016	4,349	3,704	4,602	6,552	5,293	7,354
Critical (15%)	5,530	5,798	7,399	7,037	7,223	4,330	2,248	1,961	2,213	2,260	3,297	4,187

Alternative 1 minus No Action Alternative

Statistic	Monthly Export Rate (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,868	0	286	3,249	2,108	456	4,767	4,476	784	-325	-500	0
20%	3,665	1,664	111	4,538	2,696	-155	5,412	4,377	1,619	-232	-500	122
30%	3,133	2,909	557	5,211	3,961	844	5,362	4,216	1,430	-215	-350	339
40%	2,499	3,022	2,598	5,242	3,713	1,019	4,862	4,023	1,577	-687	-1,192	767
50%	1,941	2,954	3,069	5,277	3,239	1,390	4,395	3,608	2,296	-1,346	-2,884	533
60%	1,569	2,209	2,025	3,894	2,669	2,226	3,365	3,066	2,583	-1,845	-1,184	620
70%	136	1,969	1,609	3,057	2,508	2,416	2,439	2,430	2,141	-1,591	-39	175
80%	-220	849	1,963	2,906	2,806	1,484	1,400	1,436	422	-2,351	671	77
90%	-663	623	690	1,821	3,067	2,352	325	-191	1,433	-1,172	332	-285
Long Term												
Full Simulation Period[b]	1,505	1,603	1,370	3,456	2,552	1,060	3,300	2,735	1,279	-1,035	-531	234
Water Year Types[c]												
Wet (32%)	2,253	2,060	2,469	3,428	1,292	-827	4,575	3,624	178	-597	-1,018	360
Above Normal (16%)	845	1,195	1,273	5,052	3,249	1,195	5,417	4,185	1,682	-243	-999	379
Below Normal (13%)	2,636	2,339	532	4,676	2,546	1,724	3,410	3,313	3,443	-457	-1,716	-59
Dry (24%)	987	1,300	592	3,038	3,616	2,848	1,771	1,663	1,347	-2,241	485	203
Critical (15%)	427	882	1,161	1,364	2,756	1,415	690	497	1,131	-1,361	427	127

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 C-18-1-2. Exports Through Jones and Banks Pumping Plants, Monthly Export Rate

No Action Alternative

Statistic	Monthly Export Rate (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	8,412	11,280	11,725	9,816	10,924	10,973	4,073	3,906	8,550	11,605	11,780	11,280
20%	7,390	9,616	11,661	7,974	9,529	10,037	3,049	2,454	6,033	11,512	11,780	11,158
30%	7,065	8,047	11,142	6,944	8,059	8,270	2,653	2,073	5,707	11,280	11,630	10,941
40%	6,502	7,448	9,074	6,813	7,307	7,796	2,320	1,690	5,343	10,841	11,500	10,468
50%	6,011	6,980	8,042	6,597	6,707	6,893	2,157	1,575	4,248	10,312	11,257	10,146
60%	5,469	6,409	7,751	6,440	6,495	5,672	2,027	1,500	3,484	9,557	8,434	8,546
70%	5,041	5,834	7,383	6,130	5,846	5,073	1,898	1,500	3,232	8,156	6,039	6,891
80%	4,653	5,070	6,170	5,217	4,636	4,607	1,752	1,500	2,529	7,224	3,907	5,631
90%	4,068	4,215	5,455	4,546	2,963	2,592	1,500	1,500	720	3,768	2,291	4,090
Long Term												
Full Simulation Period[b]	6,155	7,225	8,578	6,921	7,056	6,887	2,593	2,270	4,634	9,071	8,476	8,636
Water Year Types[c]												
Wet (32%)	6,674	8,350	9,168	8,346	9,616	9,656	3,424	3,371	7,479	10,876	11,663	10,727
Above Normal (16%)	6,108	7,568	9,145	6,598	7,142	8,074	2,193	1,712	5,297	9,549	11,524	10,558
Below Normal (13%)	6,270	7,660	9,597	6,291	6,316	6,402	2,260	1,625	3,509	10,692	10,123	9,114
Dry (24%)	6,080	6,687	8,287	6,372	5,633	5,167	2,578	2,041	3,255	8,793	4,808	7,151
Critical (15%)	5,104	4,916	6,238	5,672	4,467	2,915	1,558	1,465	1,083	3,621	2,869	4,060

Alternative 3

Statistic	Monthly Export Rate (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	11,280	11,280	11,683	10,617	13,018	11,734	9,192	9,155	11,208	11,289	11,280	11,280
20%	10,943	11,280	11,237	9,194	10,692	10,122	8,575	8,070	7,741	11,280	11,280	11,280
30%	10,200	10,959	10,215	7,153	9,440	9,388	7,808	7,344	6,712	11,280	11,280	11,280
40%	8,979	10,530	9,478	6,871	8,078	8,658	7,349	6,270	6,269	11,065	11,280	11,044
50%	7,738	9,599	8,885	6,684	7,085	7,475	6,203	5,343	5,964	10,221	10,153	10,755
60%	6,211	8,419	8,500	6,416	6,557	5,707	5,374	4,562	5,684	9,204	8,172	9,621
70%	5,232	7,840	8,213	6,136	5,700	5,140	4,288	3,738	5,232	7,285	6,446	7,012
80%	4,310	5,809	7,790	5,334	4,623	4,679	3,138	2,021	4,227	6,212	4,356	5,780
90%	3,539	4,644	6,148	4,944	3,641	2,584	2,083	1,654	2,317	3,087	2,763	3,830
Long Term												
Full Simulation Period[b]	7,566	8,739	8,934	7,195	7,616	7,239	5,932	5,370	6,087	8,671	8,335	8,884
Water Year Types[c]												
Wet (32%)	8,853	10,333	9,769	9,084	10,641	9,584	8,298	7,973	8,726	10,540	10,840	10,996
Above Normal (16%)	6,987	8,959	9,342	6,729	8,362	9,199	7,419	6,714	6,667	9,523	11,061	10,878
Below Normal (13%)	8,517	9,873	9,875	6,415	6,652	7,278	5,247	4,331	5,550	11,113	10,568	9,877
Dry (24%)	7,156	7,923	8,512	6,325	5,613	5,481	4,543	3,929	4,900	8,000	5,172	7,156
Critical (15%)	5,214	5,369	6,525	5,770	4,472	2,927	2,139	1,626	2,210	2,576	3,183	4,118

Alternative 3 minus No Action Alternative

Statistic	Monthly Export Rate (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,868	0	-42	801	2,094	762	5,119	5,249	2,658	-316	-500	0
20%	3,553	1,664	-424	1,221	1,163	84	5,526	5,616	1,709	-232	-500	122
30%	3,135	2,911	-927	209	1,381	1,118	5,154	5,271	1,005	0	-350	339
40%	2,476	3,082	405	57	772	862	5,029	4,580	926	224	-220	576
50%	1,727	2,619	843	87	378	581	4,046	3,768	1,717	-92	-1,105	608
60%	742	2,009	749	-25	61	35	3,347	3,062	2,200	-353	-262	1,074
70%	191	2,006	830	6	-145	66	2,389	2,238	2,001	-871	407	121
80%	-343	739	1,620	117	-12	72	1,387	521	1,699	-1,013	449	149
90%	-529	429	693	399	678	-8	583	154	1,597	-681	472	-260
Long Term												
Full Simulation Period[b]	1,410	1,514	356	274	559	352	3,339	3,099	1,452	-400	-140	248
Water Year Types[c]												
Wet (32%)	2,179	1,983	602	738	1,025	-72	4,874	4,602	1,246	-335	-824	269
Above Normal (16%)	879	1,391	197	131	1,220	1,126	5,226	5,002	1,370	-26	-463	320
Below Normal (13%)	2,248	2,213	277	123	336	876	2,987	2,706	2,042	422	445	763
Dry (24%)	1,076	1,236	225	-47	-20	314	1,965	1,888	1,645	-792	363	5
Critical (15%)	110	453	287	98	5	12	581	161	1,127	-1,045	313	58

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 C-18-1-3. Exports Through Jones and Banks Pumping Plants, Monthly Export Rate

No Action Alternative

	Monthly Export Rate (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	8,412	11,280	11,725	9,816	10,924	10,973	4,073	3,906	8,550	11,605	11,780	11,280
20%	7,390	9,616	11,661	7,974	9,529	10,037	3,049	2,454	6,033	11,512	11,780	11,158
30%	7,065	8,047	11,142	6,944	8,059	8,270	2,653	2,073	5,707	11,280	11,630	10,941
40%	6,502	7,448	9,074	6,813	7,307	7,796	2,320	1,690	5,343	10,841	11,500	10,468
50%	6,011	6,980	8,042	6,597	6,707	6,893	2,157	1,575	4,248	10,312	11,257	10,146
60%	5,469	6,409	7,751	6,440	6,495	5,672	2,027	1,500	3,484	9,557	8,434	8,546
70%	5,041	5,834	7,383	6,130	5,846	5,073	1,898	1,500	3,232	8,156	6,039	6,891
80%	4,653	5,070	6,170	5,217	4,636	4,607	1,752	1,500	2,529	7,224	3,907	5,631
90%	4,068	4,215	5,455	4,546	2,963	2,592	1,500	1,500	720	3,768	2,291	4,090
Long Term												
Full Simulation Period[b]	6,155	7,225	8,578	6,921	7,056	6,887	2,593	2,270	4,634	9,071	8,476	8,636
Water Year Types[c]												
Wet (32%)	6,674	8,350	9,168	8,346	9,616	9,656	3,424	3,371	7,479	10,876	11,663	10,727
Above Normal (16%)	6,108	7,568	9,145	6,598	7,142	8,074	2,193	1,712	5,297	9,549	11,524	10,558
Below Normal (13%)	6,270	7,660	9,597	6,291	6,316	6,402	2,260	1,625	3,509	10,692	10,123	9,114
Dry (24%)	6,080	6,687	8,287	6,372	5,633	5,167	2,578	2,041	3,255	8,793	4,808	7,151
Critical (15%)	5,104	4,916	6,238	5,672	4,467	2,915	1,558	1,465	1,083	3,621	2,869	4,060

Alternative 5

	Monthly Export Rate (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	8,356	11,280	11,719	9,816	11,019	11,008	3,744	3,544	8,550	11,605	11,780	11,280
20%	7,383	9,301	11,661	7,974	9,441	9,947	2,778	2,058	6,031	11,526	11,780	11,128
30%	6,974	8,056	11,147	6,944	8,059	8,592	2,254	1,472	5,707	11,315	11,630	10,883
40%	6,151	7,452	9,074	6,813	7,314	7,796	2,048	1,342	5,347	11,030	11,458	10,513
50%	5,859	6,850	8,073	6,590	6,707	6,893	1,871	1,158	4,221	10,499	11,271	10,056
60%	5,426	6,310	7,828	6,438	6,513	5,672	1,624	817	3,484	9,864	9,291	8,537
70%	5,061	5,838	7,355	6,130	5,822	5,069	1,346	612	3,242	9,231	6,523	6,972
80%	4,703	5,072	6,294	5,196	4,635	4,607	762	378	2,989	7,243	4,528	5,828
90%	3,977	4,203	5,478	4,546	2,963	2,592	510	120	710	4,400	3,124	4,271
Long Term												
Full Simulation Period[b]	6,116	7,178	8,583	6,939	7,045	6,883	2,057	1,609	4,684	9,266	8,748	8,643
Water Year Types[c]												
Wet (32%)	6,634	8,483	9,172	8,352	9,528	9,624	3,389	3,282	7,464	10,853	11,670	10,537
Above Normal (16%)	6,122	7,102	9,132	6,616	7,206	8,071	2,130	1,490	5,293	9,588	11,463	10,502
Below Normal (13%)	6,190	7,658	9,563	6,291	6,399	6,459	1,731	887	3,499	10,782	10,280	9,421
Dry (24%)	6,012	6,621	8,345	6,367	5,626	5,169	1,351	674	3,440	9,384	5,422	7,278
Critical (15%)	5,093	4,920	6,213	5,776	4,448	2,905	564	330	1,157	3,894	3,612	4,085

Alternative 5 minus No Action Alternative

	Monthly Export Rate (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-56	0	-6	0	95	36	-329	-362	0	0	0	0
20%	-7	-315	0	0	-88	-91	-271	-396	-2	14	0	-30
30%	-91	9	5	0	0	322	-400	-601	0	35	0	-58
40%	-351	5	0	0	7	0	-272	-349	4	188	-43	44
50%	-152	-130	31	-7	0	0	-286	-417	-27	187	14	-91
60%	-42	-100	77	-2	18	0	-404	-683	0	307	857	-9
70%	21	4	-28	0	-23	-4	-553	-888	11	1,075	484	81
80%	50	2	124	-21	-1	0	-990	-1,122	460	19	622	197
90%	-91	-11	23	0	0	0	-990	-1,380	-9	632	832	181
Long Term												
Full Simulation Period[b]	-39	-47	5	18	-11	-4	-537	-662	49	195	272	7
Water Year Types[c]												
Wet (32%)	-40	133	4	5	-89	-31	-35	-88	-15	-22	6	-190
Above Normal (16%)	14	-465	-13	17	64	-3	-63	-222	-4	39	-61	-56
Below Normal (13%)	-79	-2	-35	-1	84	58	-528	-738	-10	90	157	307
Dry (24%)	-68	-66	58	-5	-7	1	-1,226	-1,367	185	591	614	127
Critical (15%)	-10	4	-26	104	-18	-11	-994	-1,135	74	273	743	25

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 C-18-1-4. Exports Through Jones and Banks Pumping Plants, Monthly Export Rate

Second Basis of Comparison

Statistic	Monthly Export Rate (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	11,280	11,280	12,011	13,065	13,032	11,429	8,841	8,382	9,334	11,280	11,280	11,280
20%	11,055	11,280	11,772	12,511	12,226	9,882	8,461	6,831	7,652	11,280	11,280	11,280
30%	10,198	10,956	11,699	12,155	12,020	9,114	8,015	6,289	7,137	11,065	11,280	11,280
40%	9,001	10,469	11,672	12,056	11,020	8,815	7,182	5,713	6,920	10,154	10,308	11,235
50%	7,952	9,934	11,110	11,874	9,946	8,283	6,552	5,183	6,543	8,966	8,374	10,679
60%	7,037	8,619	9,776	10,334	9,164	7,898	5,392	4,566	6,067	7,712	7,250	9,166
70%	5,177	7,803	8,992	9,187	8,353	7,489	4,337	3,930	5,372	6,565	6,000	7,066
80%	4,433	5,919	8,133	8,123	7,442	6,091	3,152	2,936	2,951	4,873	4,578	5,708
90%	3,405	4,838	6,145	6,367	6,030	4,944	1,825	1,309	2,153	2,596	2,623	3,805
Long Term												
Full Simulation Period[b]	7,660	8,828	9,949	10,376	9,608	7,948	5,893	5,006	5,913	8,036	7,945	8,870
Water Year Types[c]												
Wet (32%)	8,927	10,409	11,637	11,774	10,908	8,829	7,999	6,994	7,657	10,279	10,645	11,087
Above Normal (16%)	6,953	8,763	10,418	11,650	10,392	9,269	7,610	5,897	6,980	9,306	10,525	10,937
Below Normal (13%)	8,905	9,999	10,129	10,967	8,862	8,126	5,670	4,939	6,952	10,234	8,407	9,055
Dry (24%)	7,067	7,987	8,879	9,410	9,250	8,016	4,349	3,704	4,602	6,552	5,293	7,354
Critical (15%)	5,530	5,798	7,399	7,037	7,223	4,330	2,248	1,961	2,213	2,260	3,297	4,187

No Action Alternative

Statistic	Monthly Export Rate (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	8,412	11,280	11,725	9,816	10,924	10,973	4,073	3,906	8,550	11,605	11,780	11,280
20%	7,390	9,616	11,661	7,974	9,529	10,037	3,049	2,454	6,033	11,512	11,780	11,158
30%	7,065	8,047	11,142	6,944	8,059	8,270	2,653	2,073	5,707	11,280	11,630	10,941
40%	6,502	7,448	9,074	6,813	7,307	7,796	2,320	1,690	5,343	10,841	11,500	10,468
50%	6,011	6,980	8,042	6,597	6,707	6,893	2,157	1,575	4,248	10,312	11,257	10,146
60%	5,469	6,409	7,751	6,440	6,495	5,672	2,027	1,500	3,484	9,557	8,434	8,546
70%	5,041	5,834	7,383	6,130	5,846	5,073	1,898	1,500	3,232	8,156	6,039	6,891
80%	4,653	5,070	6,170	5,217	4,636	4,607	1,752	1,500	2,529	7,224	3,907	5,631
90%	4,068	4,215	5,455	4,546	2,963	2,592	1,500	1,500	720	3,768	2,291	4,090
Long Term												
Full Simulation Period[b]	6,155	7,225	8,578	6,921	7,056	6,887	2,593	2,270	4,634	9,071	8,476	8,636
Water Year Types[c]												
Wet (32%)	6,674	8,350	9,168	8,346	9,616	9,656	3,424	3,371	7,479	10,876	11,663	10,727
Above Normal (16%)	6,108	7,568	9,145	6,598	7,142	8,074	2,193	1,712	5,297	9,549	11,524	10,558
Below Normal (13%)	6,270	7,660	9,597	6,291	6,316	6,402	2,260	1,625	3,509	10,692	10,123	9,114
Dry (24%)	6,080	6,687	8,287	6,372	5,633	5,167	2,578	2,041	3,255	8,793	4,808	7,151
Critical (15%)	5,104	4,916	6,238	5,672	4,467	2,915	1,558	1,465	1,083	3,621	2,869	4,060

No Action Alternative minus Second Basis of Comparison

Statistic	Monthly Export Rate (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-2,868	0	-286	-3,249	-2,108	-456	-4,767	-4,476	-784	325	500	0
20%	-3,665	-1,664	-111	-4,538	-2,696	155	-5,412	-4,377	-1,619	232	500	-122
30%	-3,133	-2,909	-557	-5,211	-3,961	-844	-5,362	-4,216	-1,430	215	350	-339
40%	-2,499	-3,022	-2,598	-5,242	-3,713	-1,019	-4,862	-4,023	-1,577	687	1,192	-767
50%	-1,941	-2,954	-3,069	-5,277	-3,239	-1,390	-4,395	-3,608	-2,296	1,346	2,884	-533
60%	-1,569	-2,209	-2,025	-3,894	-2,669	-2,226	-3,365	-3,066	-2,583	1,845	1,184	-620
70%	-136	-1,969	-1,609	-3,057	-2,508	-2,416	-2,439	-2,430	-2,141	1,591	39	-175
80%	220	-849	-1,963	-2,906	-2,806	-1,484	-1,400	-1,436	-422	2,351	-671	-77
90%	663	-623	-690	-1,821	-3,067	-2,352	-325	191	-1,433	1,172	-332	285
Long Term												
Full Simulation Period[b]	-1,505	-1,603	-1,370	-3,456	-2,552	-1,060	-3,300	-2,735	-1,279	1,035	531	-234
Water Year Types[c]												
Wet (32%)	-2,253	-2,060	-2,469	-3,428	-1,292	827	-4,575	-3,624	-178	597	1,018	-360
Above Normal (16%)	-845	-1,195	-1,273	-5,052	-3,249	-1,195	-5,417	-4,185	-1,682	243	999	-379
Below Normal (13%)	-2,636	-2,339	-532	-4,676	-2,546	-1,724	-3,410	-3,313	-3,443	457	1,716	59
Dry (24%)	-987	-1,300	-592	-3,038	-3,616	-2,848	-1,771	-1,663	-1,347	2,241	-485	-203
Critical (15%)	-427	-882	-1,161	-1,364	-2,756	-1,415	-690	-497	-1,131	1,361	-427	-127

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 C-18-1-5. Exports Through Jones and Banks Pumping Plants, Monthly Export Rate

Second Basis of Comparison

Statistic	Monthly Export Rate (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	11,280	11,280	12,011	13,065	13,032	11,429	8,841	8,382	9,334	11,280	11,280	11,280
20%	11,055	11,280	11,772	12,511	12,226	9,882	8,461	6,831	7,652	11,280	11,280	11,280
30%	10,198	10,956	11,699	12,155	12,020	9,114	8,015	6,289	7,137	11,065	11,280	11,280
40%	9,001	10,469	11,672	12,056	11,020	8,815	7,182	5,713	6,920	10,154	10,308	11,235
50%	7,952	9,934	11,110	11,874	9,946	8,283	6,552	5,183	6,543	8,966	8,374	10,679
60%	7,037	8,619	9,776	10,334	9,164	7,898	5,392	4,566	6,067	7,712	7,250	9,166
70%	5,177	7,803	8,992	9,187	8,353	7,489	4,337	3,930	5,372	6,565	6,000	7,066
80%	4,433	5,919	8,133	8,123	7,442	6,091	3,152	2,936	2,951	4,873	4,578	5,708
90%	3,405	4,838	6,145	6,367	6,030	4,944	1,825	1,309	2,153	2,596	2,623	3,805
Long Term												
Full Simulation Period[b]	7,660	8,828	9,949	10,376	9,608	7,948	5,893	5,006	5,913	8,036	7,945	8,870
Water Year Types[c]												
Wet (32%)	8,927	10,409	11,637	11,774	10,908	8,829	7,999	6,994	7,657	10,279	10,645	11,087
Above Normal (16%)	6,953	8,763	10,418	11,650	10,392	9,269	7,610	5,897	6,980	9,306	10,525	10,937
Below Normal (13%)	8,905	9,999	10,129	10,967	8,862	8,126	5,670	4,939	6,952	10,234	8,407	9,055
Dry (24%)	7,067	7,987	8,879	9,410	9,250	8,016	4,349	3,704	4,602	6,552	5,293	7,354
Critical (15%)	5,530	5,798	7,399	7,037	7,223	4,330	2,248	1,961	2,213	2,260	3,297	4,187

Alternative 3

Statistic	Monthly Export Rate (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	11,280	11,280	11,683	10,617	13,018	11,734	9,192	9,155	11,208	11,289	11,280	11,280
20%	10,943	11,280	11,237	9,194	10,692	10,122	8,575	8,070	7,741	11,280	11,280	11,280
30%	10,200	10,959	10,215	7,153	9,440	9,388	7,808	7,344	6,712	11,280	11,280	11,280
40%	8,979	10,530	9,478	6,871	8,078	8,658	7,349	6,270	6,269	11,065	11,280	11,044
50%	7,738	9,599	8,885	6,684	7,085	7,475	6,203	5,343	5,964	10,221	10,153	10,755
60%	6,211	8,419	8,500	6,416	6,557	5,707	5,374	4,562	5,684	9,204	8,172	9,621
70%	5,232	7,840	8,213	6,136	5,700	5,140	4,288	3,738	5,232	7,285	6,446	7,012
80%	4,310	5,809	7,790	5,334	4,623	4,679	3,138	2,021	4,227	6,212	4,356	5,780
90%	3,539	4,644	6,148	4,944	3,641	2,584	2,083	1,654	2,317	3,087	2,763	3,830
Long Term												
Full Simulation Period[b]	7,566	8,739	8,934	7,195	7,616	7,239	5,932	5,370	6,087	8,671	8,335	8,884
Water Year Types[c]												
Wet (32%)	8,853	10,333	9,769	9,084	10,641	9,584	8,298	7,973	8,726	10,540	10,840	10,996
Above Normal (16%)	6,987	8,959	9,342	6,729	8,362	9,199	7,419	6,714	6,667	9,523	11,061	10,878
Below Normal (13%)	8,517	9,873	9,875	6,415	6,652	7,278	5,247	4,331	5,550	11,113	10,568	9,877
Dry (24%)	7,156	7,923	8,512	6,325	5,613	5,481	4,543	3,929	4,900	8,000	5,172	7,156
Critical (15%)	5,214	5,369	6,525	5,770	4,472	2,927	2,139	1,626	2,210	2,576	3,183	4,118

Alternative 3 minus Second Basis of Comparison

Statistic	Monthly Export Rate (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	-328	-2,448	-15	306	351	772	1,874	9	0	0
20%	-112	0	-535	-3,317	-1,534	239	114	1,239	90	0	0	0
30%	2	2	-1,484	-5,001	-2,579	274	-208	1,055	-425	215	0	0
40%	-22	60	-2,193	-5,185	-2,941	-158	167	557	-652	911	972	-191
50%	-214	-335	-2,225	-5,190	-2,861	-809	-349	160	-579	1,255	1,779	76
60%	-826	-200	-1,276	-3,918	-2,607	-2,191	-18	-4	-383	1,492	922	454
70%	55	37	-779	-3,051	-2,653	-2,350	-49	-191	-140	720	447	-54
80%	-123	-110	-343	-2,789	-2,818	-1,412	-13	-915	1,277	1,339	-222	71
90%	134	-194	3	-1,422	-2,389	-2,361	257	346	164	490	140	25
Long Term												
Full Simulation Period[b]	-95	-89	-1,014	-3,181	-1,992	-709	39	364	173	635	390	14
Water Year Types[c]												
Wet (32%)	-74	-77	-1,867	-2,690	-266	755	300	978	1,069	262	195	-91
Above Normal (16%)	34	196	-1,076	-4,921	-2,029	-69	-191	817	-313	217	536	-59
Below Normal (13%)	-388	-126	-254	-4,552	-2,210	-848	-423	-608	-1,402	879	2,160	822
Dry (24%)	89	-64	-367	-3,084	-3,637	-2,535	194	225	298	1,449	-121	-198
Critical (15%)	-316	-429	-874	-1,266	-2,751	-1,403	-109	-336	-4	316	-114	-70

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 C-18-1-6. Exports Through Jones and Banks Pumping Plants, Monthly Export Rate

Second Basis of Comparison

Statistic	Monthly Export Rate (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	11,280	11,280	12,011	13,065	13,032	11,429	8,841	8,382	9,334	11,280	11,280	11,280
20%	11,055	11,280	11,772	12,511	12,226	9,882	8,461	6,831	7,652	11,280	11,280	11,280
30%	10,198	10,956	11,699	12,155	12,020	9,114	8,015	6,289	7,137	11,065	11,280	11,280
40%	9,001	10,469	11,672	12,056	11,020	8,815	7,182	5,713	6,920	10,154	10,308	11,235
50%	7,952	9,934	11,110	11,874	9,946	8,283	6,552	5,183	6,543	8,966	8,374	10,679
60%	7,037	8,619	9,776	10,334	9,164	7,898	5,392	4,566	6,067	7,712	7,250	9,166
70%	5,177	7,803	8,992	9,187	8,353	7,489	4,337	3,930	5,372	6,565	6,000	7,066
80%	4,433	5,919	8,133	8,123	7,442	6,091	3,152	2,936	2,951	4,873	4,578	5,708
90%	3,405	4,838	6,145	6,367	6,030	4,944	1,825	1,309	2,153	2,596	2,623	3,805
Long Term												
Full Simulation Period[b]	7,660	8,828	9,949	10,376	9,608	7,948	5,893	5,006	5,913	8,036	7,945	8,870
Water Year Types[c]												
Wet (32%)	8,927	10,409	11,637	11,774	10,908	8,829	7,999	6,994	7,657	10,279	10,645	11,087
Above Normal (16%)	6,953	8,763	10,418	11,650	10,392	9,269	7,610	5,897	6,980	9,306	10,525	10,937
Below Normal (13%)	8,905	9,999	10,129	10,967	8,862	8,126	5,670	4,939	6,952	10,234	8,407	9,055
Dry (24%)	7,067	7,987	8,879	9,410	9,250	8,016	4,349	3,704	4,602	6,552	5,293	7,354
Critical (15%)	5,530	5,798	7,399	7,037	7,223	4,330	2,248	1,961	2,213	2,260	3,297	4,187

Alternative 5

Statistic	Monthly Export Rate (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	8,356	11,280	11,719	9,816	11,019	11,008	3,744	3,544	8,550	11,605	11,780	11,280
20%	7,383	9,301	11,661	7,974	9,441	9,947	2,778	2,058	6,031	11,526	11,780	11,128
30%	6,974	8,056	11,147	6,944	8,059	8,592	2,254	1,472	5,707	11,315	11,630	10,883
40%	6,151	7,452	9,074	6,813	7,314	7,796	2,048	1,342	5,347	11,030	11,458	10,513
50%	5,859	6,850	8,073	6,590	6,707	6,893	1,871	1,158	4,221	10,499	11,271	10,056
60%	5,426	6,310	7,828	6,438	6,513	5,672	1,624	817	3,484	9,864	9,291	8,537
70%	5,061	5,838	7,355	6,130	5,822	5,069	1,346	612	3,242	9,231	6,523	6,972
80%	4,703	5,072	6,294	5,196	4,635	4,607	762	378	2,989	7,243	4,528	5,828
90%	3,977	4,203	5,478	4,546	2,963	2,592	510	120	710	4,400	3,124	4,271
Long Term												
Full Simulation Period[b]	6,116	7,178	8,583	6,939	7,045	6,883	2,057	1,609	4,684	9,266	8,748	8,643
Water Year Types[c]												
Wet (32%)	6,634	8,483	9,172	8,352	9,528	9,624	3,389	3,282	7,464	10,853	11,670	10,537
Above Normal (16%)	6,122	7,102	9,132	6,616	7,206	8,071	2,130	1,490	5,293	9,588	11,463	10,502
Below Normal (13%)	6,190	7,658	9,563	6,291	6,399	6,459	1,731	887	3,499	10,782	10,280	9,421
Dry (24%)	6,012	6,621	8,345	6,367	5,626	5,169	1,351	674	3,440	9,384	5,422	7,278
Critical (15%)	5,093	4,920	6,213	5,776	4,448	2,905	564	330	1,157	3,894	3,612	4,085

Alternative 5 minus Second Basis of Comparison

Statistic	Monthly Export Rate (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-2,924	0	-292	-3,249	-2,013	-420	-5,097	-4,838	-784	325	500	0
20%	-3,672	-1,979	-111	-4,538	-2,784	64	-5,683	-4,773	-1,621	246	500	-152
30%	-3,224	-2,900	-553	-5,211	-3,961	-522	-5,762	-4,817	-1,430	251	350	-397
40%	-2,850	-3,017	-2,598	-5,242	-3,706	-1,019	-5,134	-4,371	-1,574	876	1,149	-722
50%	-2,093	-3,084	-3,037	-5,284	-3,239	-1,390	-4,681	-4,025	-2,322	1,533	2,898	-623
60%	-1,611	-2,309	-1,948	-3,896	-2,651	-2,227	-3,768	-3,749	-2,583	2,152	2,041	-629
70%	-115	-1,965	-1,637	-3,057	-2,531	-2,420	-2,992	-3,318	-2,130	2,666	523	-94
80%	270	-848	-1,839	-2,927	-2,807	-1,483	-2,390	-2,558	39	2,371	-49	120
90%	572	-634	-667	-1,821	-3,067	-2,352	-1,315	-1,189	-1,443	1,804	500	466
Long Term												
Full Simulation Period[b]	-1,544	-1,650	-1,365	-3,437	-2,563	-1,064	-3,836	-3,397	-1,230	1,230	803	-228
Water Year Types[c]												
Wet (32%)	-2,293	-1,927	-2,465	-3,423	-1,380	796	-4,610	-3,712	-193	574	1,025	-550
Above Normal (16%)	-832	-1,661	-1,286	-5,035	-3,185	-1,198	-5,481	-4,407	-1,687	282	938	-435
Below Normal (13%)	-2,715	-2,341	-567	-4,676	-2,463	-1,667	-3,939	-4,052	-3,453	548	1,873	366
Dry (24%)	-1,055	-1,366	-534	-3,042	-3,623	-2,847	-2,998	-3,030	-1,162	2,832	129	-76
Critical (15%)	-437	-878	-1,187	-1,260	-2,775	-1,425	-1,684	-1,631	-1,056	1,635	316	-103

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 C-18-2-1. Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

No Action Alternative

	Monthly Export Volume (TAF)											
Statistic	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

	Monthly Export Volume (TAF)											
Statistic	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

	Monthly Export Volume (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	176	0	18	200	116	28	284	275	47	-20	-31	0
20%	225	99	7	279	154	-10	322	269	96	-14	-31	7
30%	193	173	34	320	220	52	319	259	85	-13	-22	20
40%	154	180	160	322	205	63	289	247	94	-42	-73	46
50%	119	176	189	324	172	85	262	222	137	-83	-177	32
60%	96	131	125	239	156	137	200	189	154	-113	-73	37
70%	8	117	99	188	140	149	145	149	127	-98	-2	10
80%	-14	51	121	179	150	91	83	88	25	-145	41	5
90%	-41	37	42	112	170	145	19	-12	85	-72	20	-17
Long Term												
Full Simulation Period[b]	93	95	84	212	143	65	196	168	76	-64	-33	14
Water Year Types[c]												
Wet (32%)	139	123	152	211	72	-51	272	223	11	-37	-63	21
Above Normal (16%)	52	71	78	311	183	73	322	257	100	-15	-61	23
Below Normal (13%)	162	139	33	287	143	106	203	204	205	-28	-105	-4
Dry (24%)	61	77	36	187	202	175	105	102	80	-138	30	12
Critical (15%)	26	52	71	84	156	87	41	31	67	-84	26	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 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 C-18-2-2. 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 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 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%	176	0	-3	49	114	47	305	323	158	-19	-31	0
20%	218	99	-26	75	71	5	329	345	102	-14	-31	7
30%	193	173	-57	13	77	69	307	324	60	0	-22	20
40%	152	183	25	4	41	53	299	282	55	14	-14	34
50%	106	156	52	5	13	36	241	232	102	-6	-68	36
60%	46	120	46	-2	2	2	199	188	131	-22	-16	64
70%	12	119	51	0	-5	4	142	138	119	-54	25	7
80%	-21	44	100	7	-3	4	83	32	101	-62	28	9
90%	-33	26	43	25	38	-1	35	9	95	-42	29	-15
Long Term												
Full Simulation Period[b]	87	90	22	17	31	22	199	191	86	-25	-9	15
Water Year Types[c]												
Wet (32%)	134	118	37	45	57	-4	290	283	74	-21	-51	16
Above Normal (16%)	54	83	12	8	68	69	311	308	81	-2	-28	19
Below Normal (13%)	138	132	17	8	19	54	178	166	121	26	27	45
Dry (24%)	66	74	14	-3	-1	19	117	116	98	-49	22	0
Critical (15%)	7	27	18	6	0	1	35	10	67	-64	19	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 C-18-2-3. Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

No Action Alternative

	Monthly Export Volume (TAF)											
Statistic	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 5

	Monthly Export Volume (TAF)											
Statistic	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 No Action Alternative

	Monthly Export Volume (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-3	0	0	0	2	2	-20	-22	0	0	0	0
20%	0	-19	0	0	-4	-6	-16	-24	0	1	0	-2
30%	-6	1	0	0	0	20	-24	-37	0	2	0	-3
40%	-22	0	0	0	8	0	-16	-21	0	12	-3	3
50%	-9	-8	2	0	0	0	-17	-26	-2	11	1	-5
60%	-3	-6	5	0	0	0	-24	-42	0	19	53	-1
70%	1	0	-2	0	-1	0	-33	-55	1	66	30	5
80%	3	0	8	-1	0	0	-59	-69	27	1	38	12
90%	-6	-1	1	0	0	0	-59	-85	-1	39	51	11
Long Term												
Full Simulation Period[b]	-2	-3	0	1	-1	0	-32	-41	3	12	17	0
Water Year Types[c]												
Wet (32%)	-2	8	0	0	-5	-2	-2	-5	-1	-1	0	-11
Above Normal (16%)	1	-28	-1	1	4	0	-4	-14	0	2	-4	-3
Below Normal (13%)	-5	0	-2	0	5	4	-31	-45	-1	6	10	18
Dry (24%)	-4	-4	4	0	0	0	-73	-84	11	36	38	8
Critical (15%)	-1	0	-2	6	-1	-1	-59	-70	4	17	46	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 C-18-2-4. Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Second Basis of Comparison

	Monthly Export Volume (TAF)											
Statistic	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

	Monthly Export Volume (TAF)											
Statistic	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

	Monthly Export Volume (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-176	0	-18	-200	-116	-28	-284	-275	-47	20	31	0
20%	-225	-99	-7	-279	-154	10	-322	-269	-96	14	31	-7
30%	-193	-173	-34	-320	-220	-52	-319	-259	-85	13	22	-20
40%	-154	-180	-160	-322	-205	-63	-289	-247	-94	42	73	-46
50%	-119	-176	-189	-324	-172	-85	-262	-222	-137	83	177	-32
60%	-96	-131	-125	-239	-156	-137	-200	-189	-154	113	73	-37
70%	-8	-117	-99	-188	-140	-149	-145	-149	-127	98	2	-10
80%	14	-51	-121	-179	-150	-91	-83	-88	-25	145	-41	-5
90%	41	-37	-42	-112	-170	-145	-19	12	-85	72	-20	17
Long Term												
Full Simulation Period[b]	-93	-95	-84	-212	-143	-65	-196	-168	-76	64	33	-14
Water Year Types[c]												
Wet (32%)	-139	-123	-152	-211	-72	51	-272	-223	-11	37	63	-21
Above Normal (16%)	-52	-71	-78	-311	-183	-73	-322	-257	-100	15	61	-23
Below Normal (13%)	-162	-139	-33	-287	-143	-106	-203	-204	-205	28	105	4
Dry (24%)	-61	-77	-36	-187	-202	-175	-105	-102	-80	138	-30	-12
Critical (15%)	-26	-52	-71	-84	-156	-87	-41	-31	-67	84	-26	-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 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 C-18-2-5. Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Second Basis of Comparison

	Monthly Export Volume (TAF)											
Statistic	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

	Monthly Export Volume (TAF)											
Statistic	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

	Monthly Export Volume (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	-20	-151	-2	19	21	47	112	1	0	0
20%	-7	0	-33	-204	-83	15	7	76	5	0	0	0
30%	0	0	-91	-308	-143	17	-12	65	-25	13	0	0
40%	-1	4	-135	-319	-165	-10	10	34	-39	56	60	-11
50%	-13	-20	-137	-319	-159	-50	-21	10	-34	77	109	5
60%	-51	-12	-78	-241	-154	-135	-1	0	-23	92	57	27
70%	3	2	-48	-188	-145	-144	-3	-12	-8	44	27	-3
80%	-8	-7	-21	-172	-152	-87	-1	-56	76	82	-14	4
90%	8	-12	0	-87	-133	-145	15	21	10	30	9	1
Long Term												
Full Simulation Period[b]	-6	-5	-62	-196	-112	-44	2	22	10	39	24	1
Water Year Types[c]												
Wet (32%)	-5	-5	-115	-165	-15	46	18	60	64	16	12	-5
Above Normal (16%)	2	12	-66	-303	-115	-4	-11	50	-19	13	33	-3
Below Normal (13%)	-24	-7	-16	-280	-124	-52	-25	-37	-83	54	133	49
Dry (24%)	5	-4	-23	-190	-203	-156	12	14	18	89	-7	-12
Critical (15%)	-19	-26	-54	-78	-156	-86	-6	-21	0	19	-7	-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 C-18-2-6. Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Second Basis of Comparison

	Monthly Export Volume (TAF)											
Statistic	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

	Monthly Export Volume (TAF)											
Statistic	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

	Monthly Export Volume (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-180	0	-18	-200	-114	-26	-303	-298	-47	20	31	0
20%	-226	-118	-7	-279	-158	4	-338	-294	-96	15	31	-9
30%	-198	-173	-34	-320	-220	-32	-343	-296	-85	15	22	-24
40%	-175	-180	-160	-322	-198	-63	-306	-269	-94	54	71	-43
50%	-129	-184	-187	-325	-172	-85	-279	-247	-138	94	178	-37
60%	-99	-137	-120	-240	-156	-137	-224	-230	-154	132	125	-37
70%	-7	-117	-101	-188	-141	-149	-178	-204	-127	164	32	-6
80%	17	-50	-113	-180	-150	-91	-142	-157	2	146	-3	7
90%	35	-38	-41	-112	-170	-145	-78	-73	-86	111	31	28
Long Term												
Full Simulation Period[b]	-95	-98	-84	-211	-144	-65	-228	-209	-73	76	49	-14
Water Year Types[c]												
Wet (32%)	-141	-115	-152	-210	-77	49	-274	-228	-11	35	63	-33
Above Normal (16%)	-51	-99	-79	-310	-179	-74	-326	-271	-100	17	58	-26
Below Normal (13%)	-167	-139	-35	-288	-138	-102	-234	-249	-205	34	115	22
Dry (24%)	-65	-81	-33	-187	-203	-175	-178	-186	-69	174	8	-5
Critical (15%)	-27	-52	-73	-77	-157	-88	-100	-100	-63	101	19	-6

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

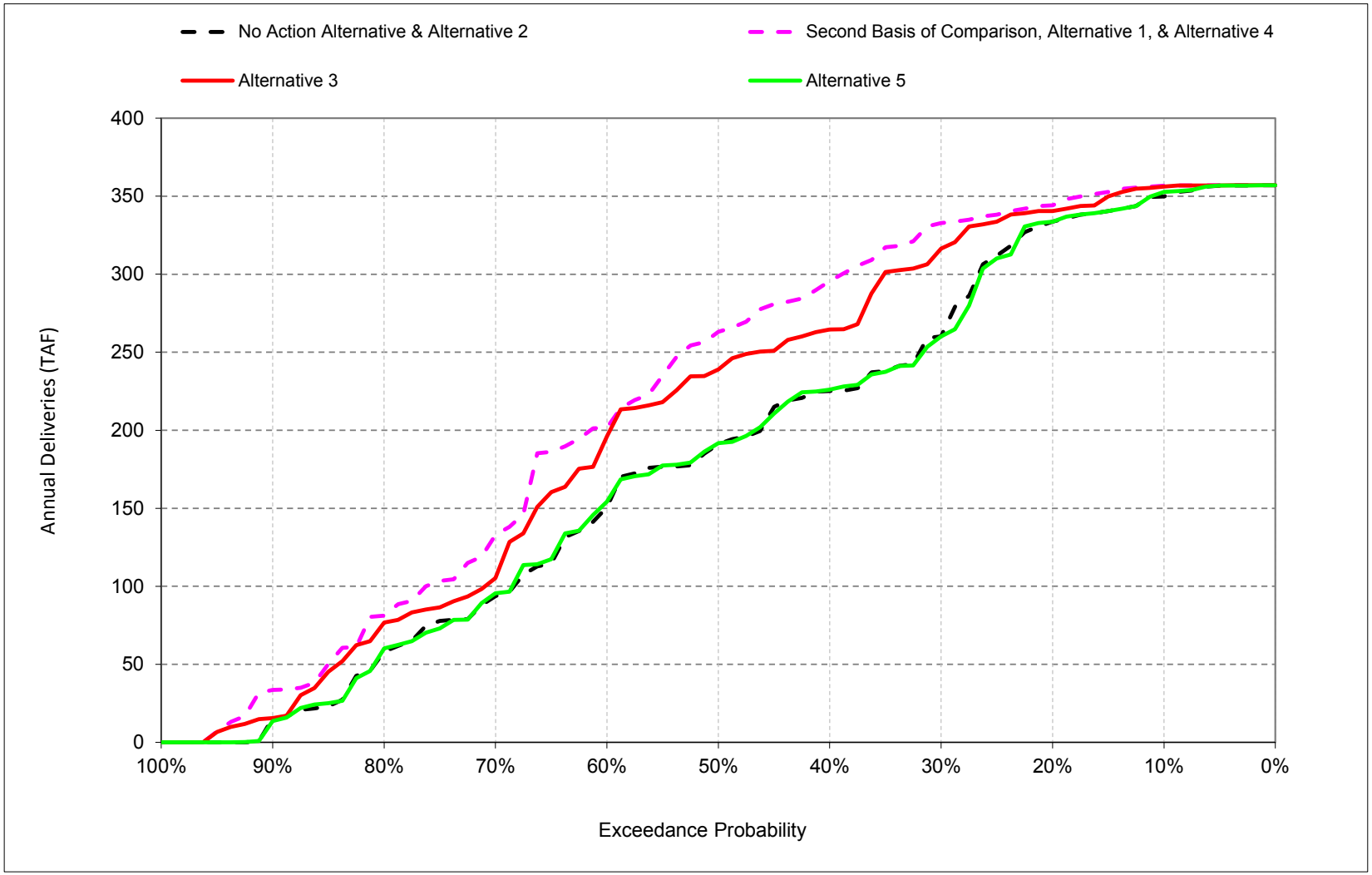
b Based on the 82-year simulation period.

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 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.

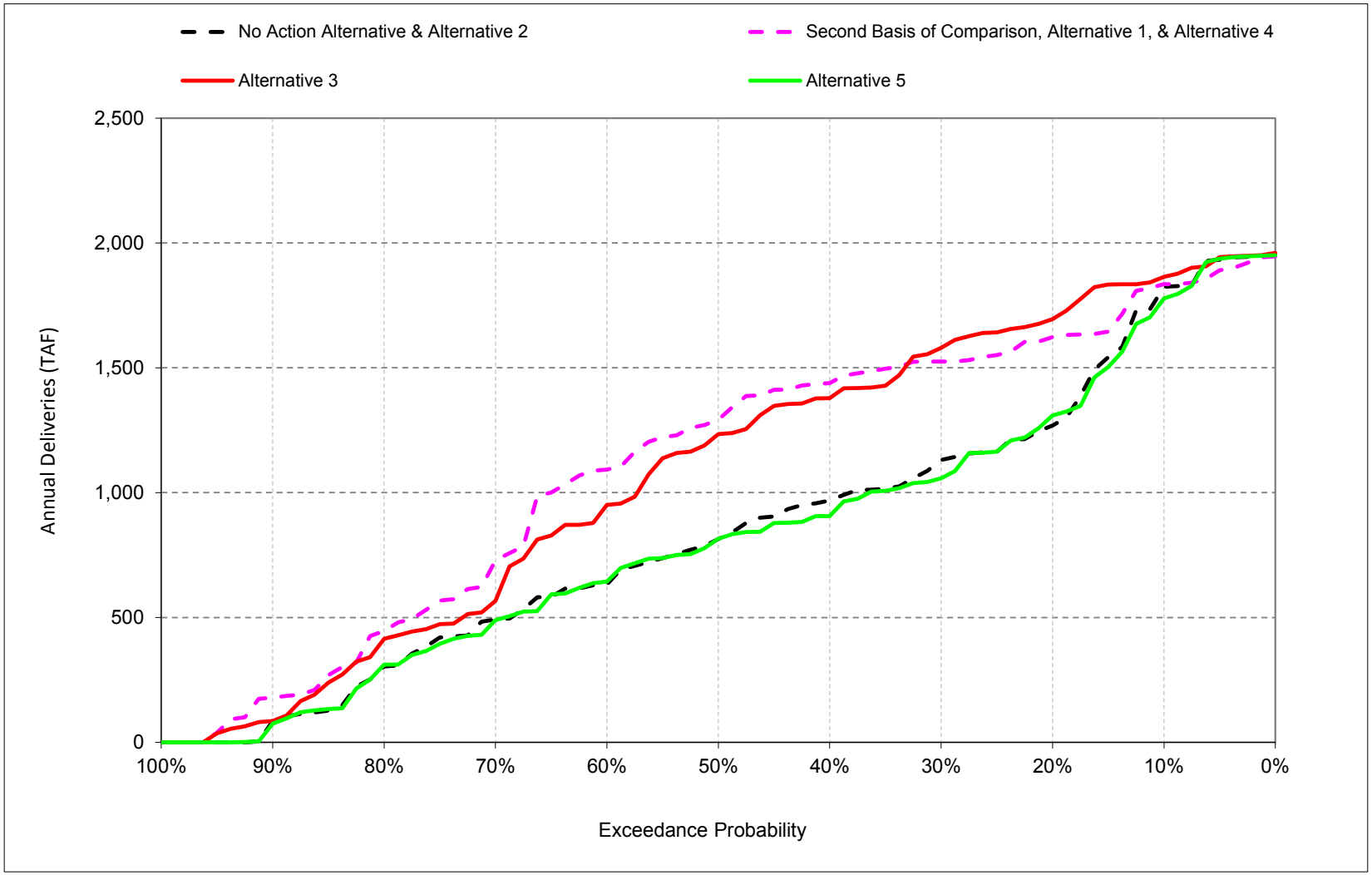
C.19. CVP Deliveries

Figure C-19-1-1. Annual CVP North of Delta Agricultural Water Service Contract Deliveries



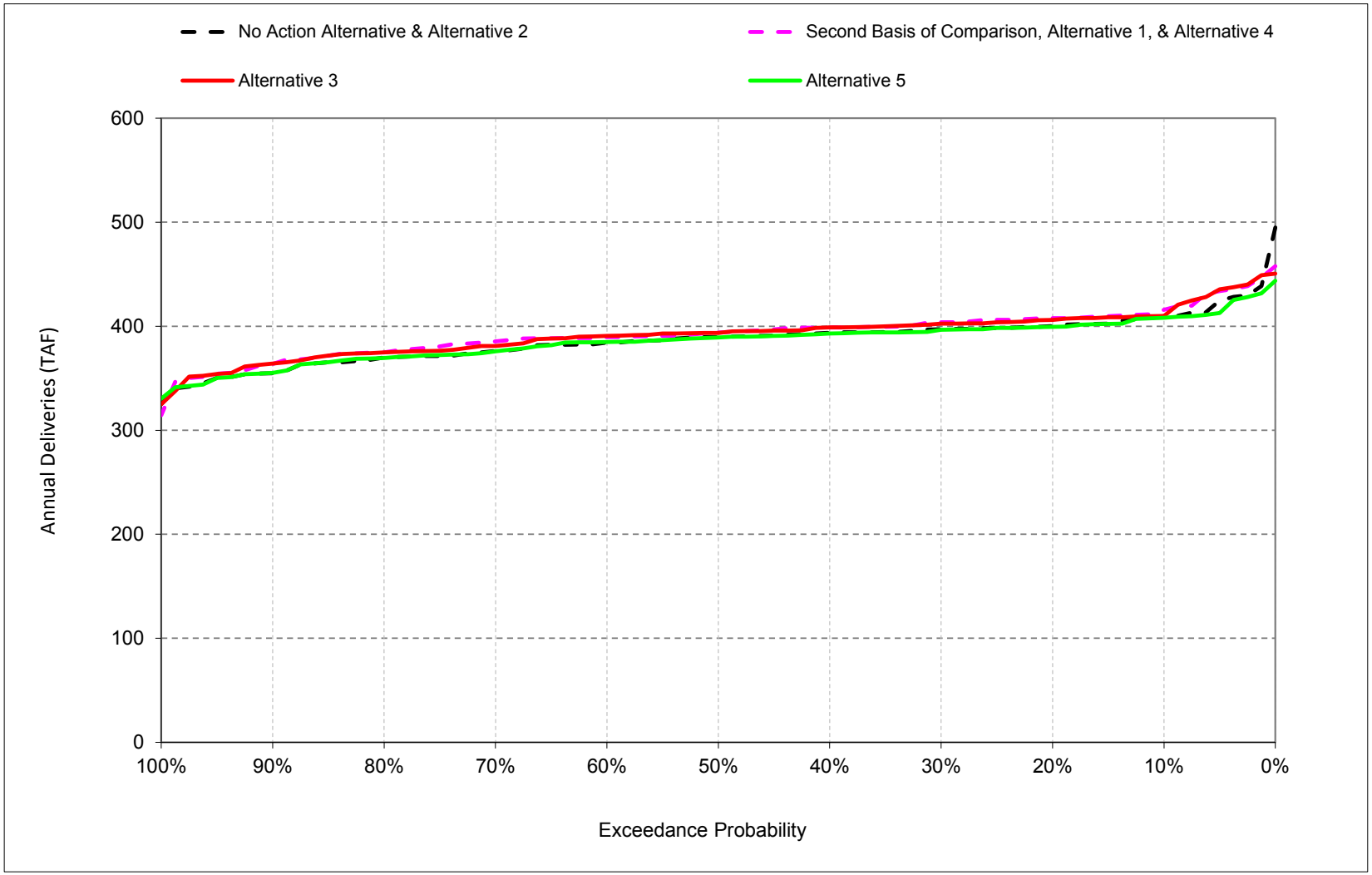
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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. 5) Annual deliveries are based on March to February Average.

Figure C-19-1-2. Annual CVP South of Delta Agricultural Water Service Contract Deliveries



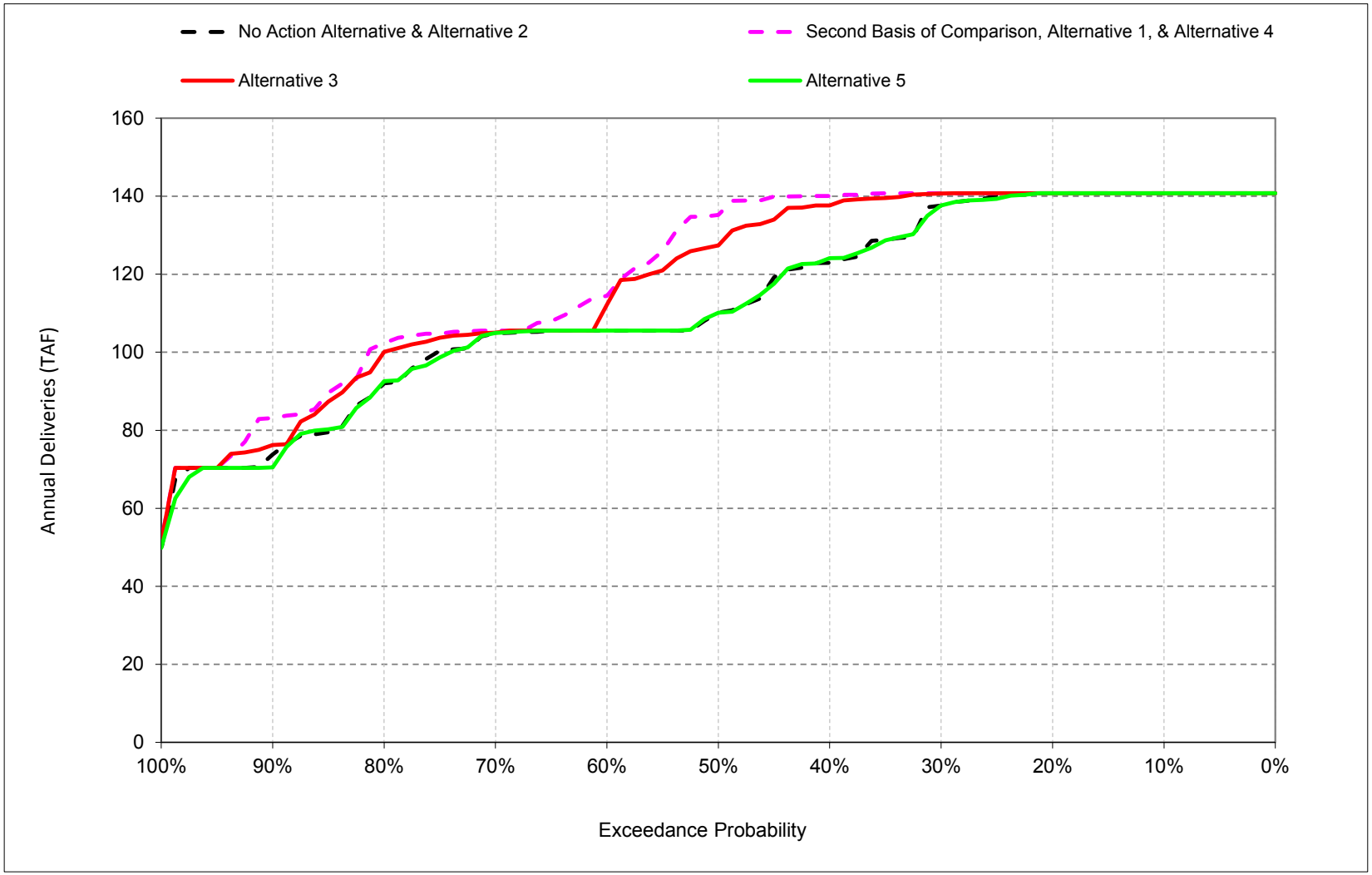
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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. 5) Does not include Eastside Contractors deliveries. 6) Annual deliveries are based on March to February Average.

Figure C-19-1-3. Annual CVP North of Delta M&I Water Service Contract Deliveries



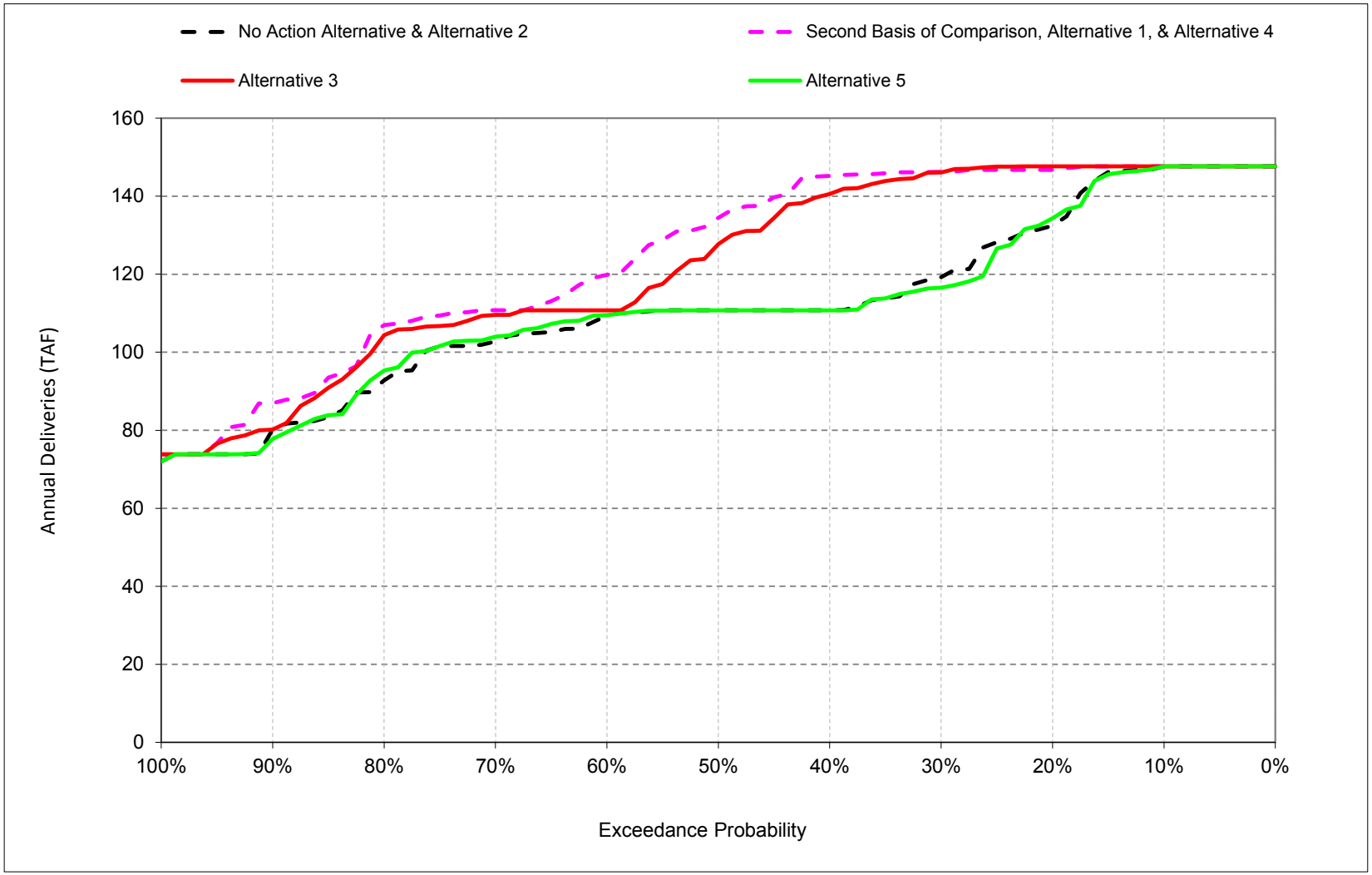
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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. 6) Annual deliveries are based on March to February Average.

Figure C-19-1-4. Annual CVP American River M&I Water Service Contract Deliveries



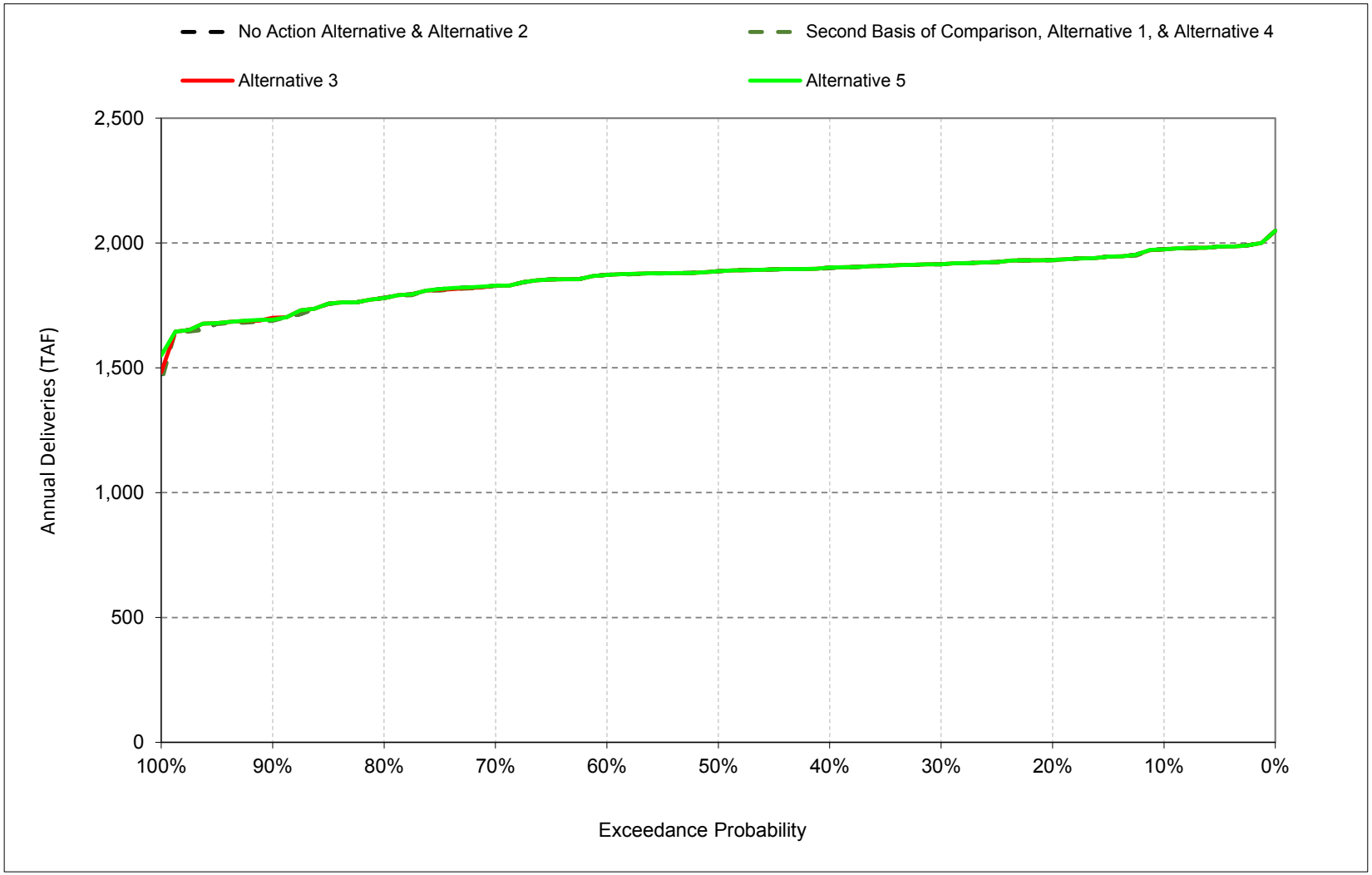
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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. 5) Annual deliveries are based on March to February Average.

Figure C-19-1-5. Annual CVP South of Delta M&I Water Service Contract Deliveries



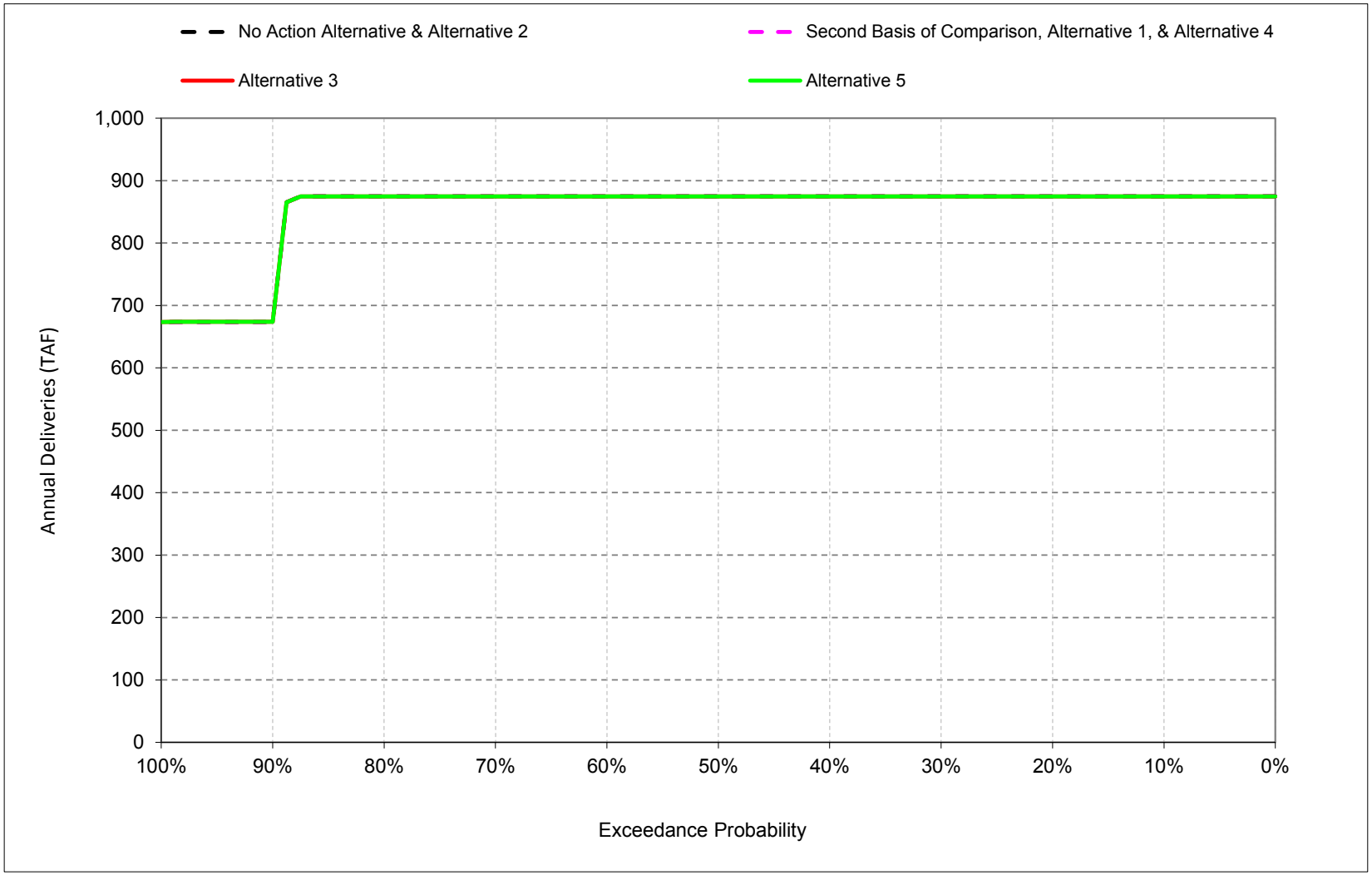
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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. 5) Does not include Eastside Contractors deliveries. 6) Annual deliveries are based on March to February Average.

Figure C-19-1-6. Annual CVP Settlement Contractors Deliveries



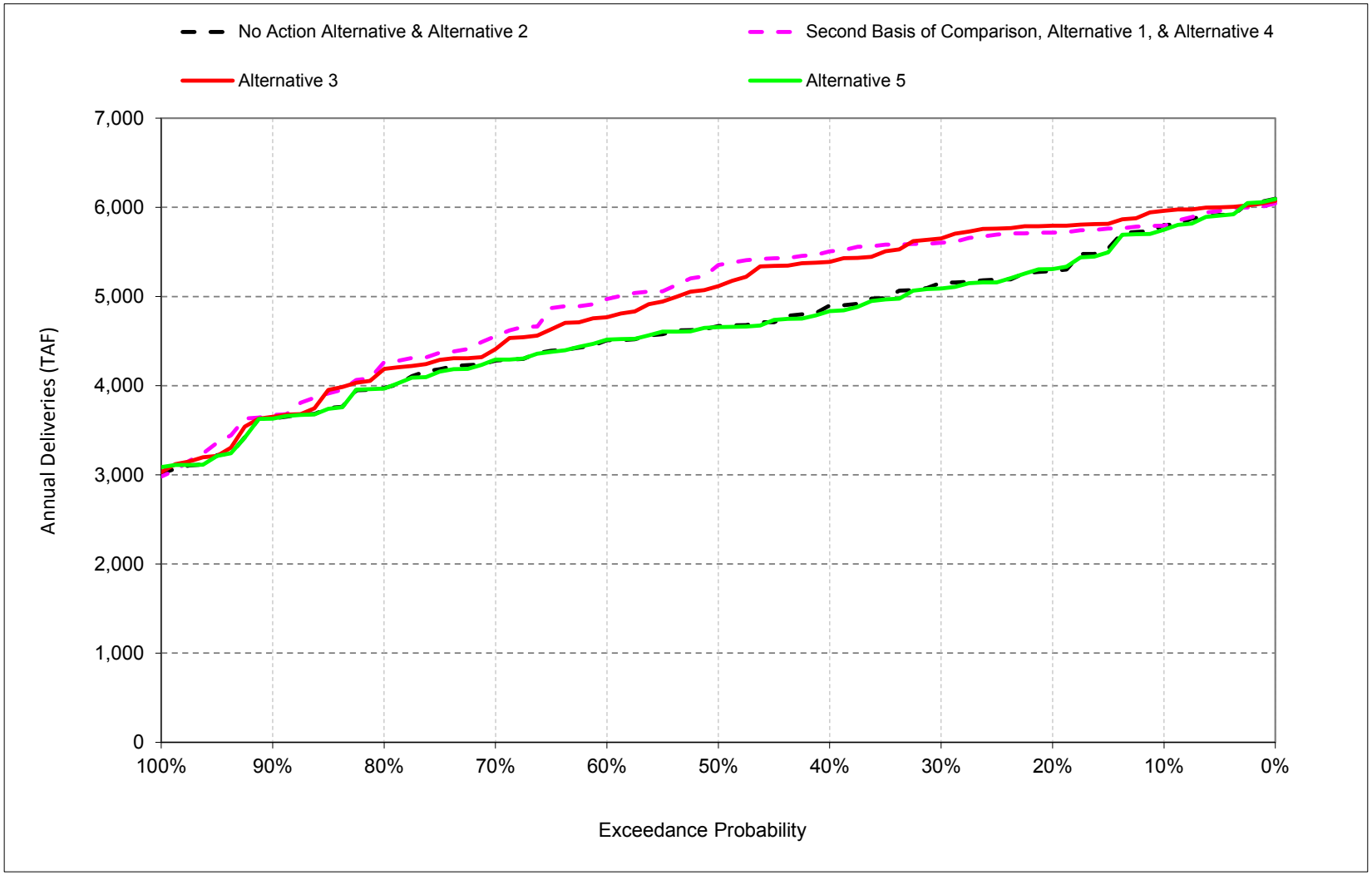
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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. 5) Annual deliveries are based on March to February Average.

Figure C-19-1-7. Annual CVP Exchange Contractors Deliveries



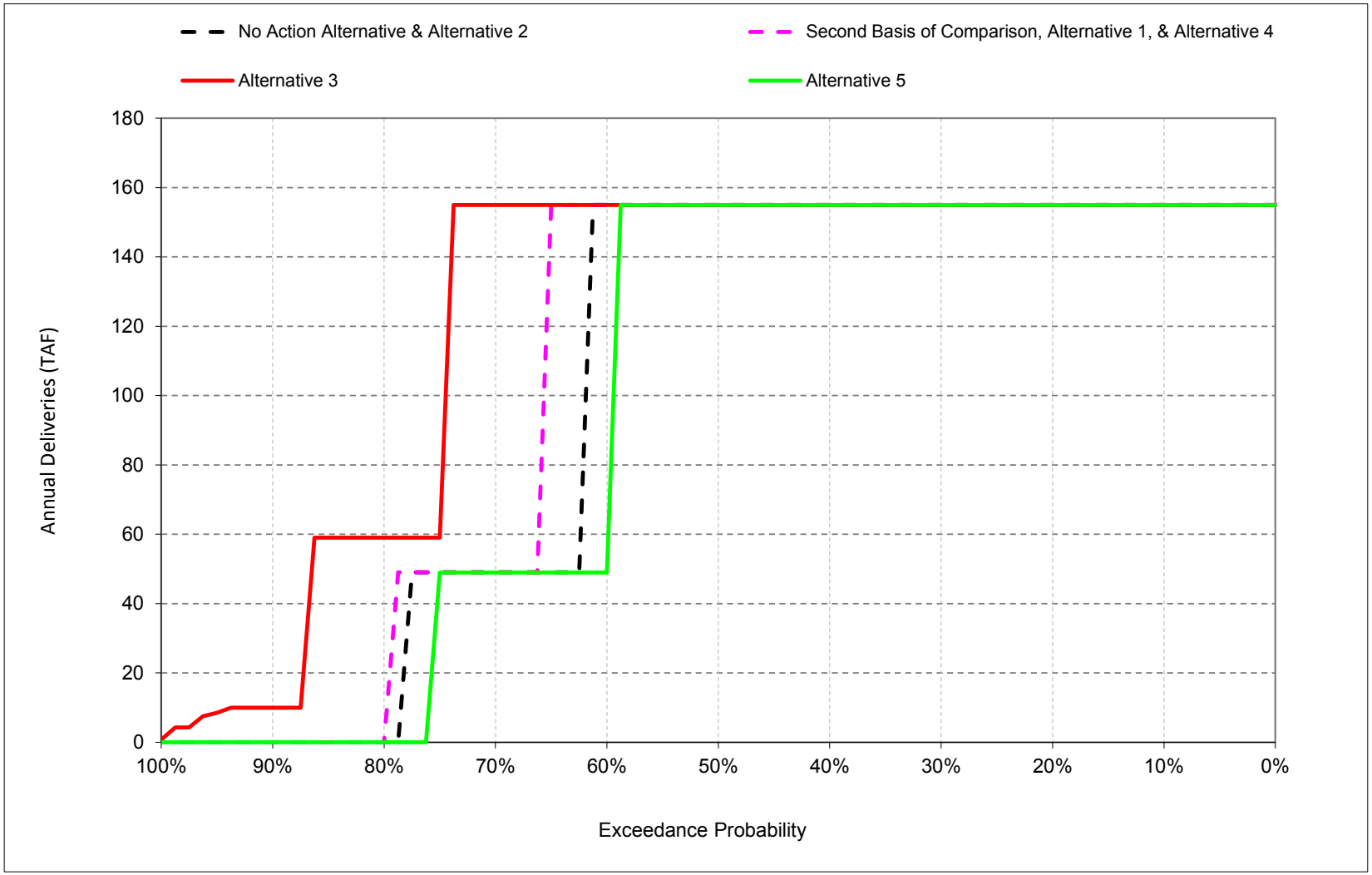
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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. 5) Annual deliveries are based on March to February Average.

Figure C-19-1-8. Annual CVP Total Deliveries



Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 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 Alternatives 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. 5) Does not include Eastside Contractors deliveries. 6) Annual deliveries are based on March to February Average.

Figure C-19-1-9. Annual CVP Eastside Contractors Deliveries



Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 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 Alternatives 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. 5) Annual deliveries are based on March to February Average.

Table C-19-1-1. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

				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. 6) Annual deliveries are based on March to February Average.

Table C-19-1-2. 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 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 C-19-2-1. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

				Alternative 3	No Action Alternative	Alternative 3 minus No Action Alternative
Water Supply Reliability						
Sacramento River Hydrologic Region						
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,860	1,859	1
			Dry	1,906	1,906	0
			Critical	1,742	1,737	5
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	153	146	7
			Dry	149	146	4
			Critical	103	102	1
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	214	207	6
			Dry	192	186	6
			Critical	152	152	1
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term	209	185	24
			Dry	111	86	25
			Critical	31	24	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	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	342	269	73
			Dry	185	140	45
			Critical	53	41	12
San Francisco Bay Hydrologic Region						
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	286	275	11
			Dry	283	274	8
			Critical	267	264	2
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	42	33	9
			Dry	23	17	6
			Critical	6	5	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	545	150
			Dry	387	288	99
			Critical	108	85	23
Total For All Regions						
Total Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	4,927	4,646	281
			Dry	4,392	4,198	194
			Critical	3,437	3,385	52

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 C-19-2-2. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

					Alternative 3	No Action Alternative	Alternative 3 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		209	185	24
			Dry		111	86	25
			Critical		31	24	7
CVP M&I (Including American River)	Contract Delivery (annual average)	(TAF/year)	Long Term		483	467	15
			Dry		460	447	13
			Critical		408	405	2
CVP M&I American River	Contract Delivery (annual average)	(TAF/year)	Long Term		118	113	6
			Dry		104	97	7
			Critical		78	75	3
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term		1,860	1,859	1
			Dry		1,906	1,906	0
			Critical		1,742	1,737	5
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		153	146	7
			Dry		149	146	4
			Critical		103	102	1
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	2,658	47
			Dry		2,626	2,584	42
			Critical		2,284	2,268	16
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	847	233
			Dry		596	445	151
			Critical		168	131	36
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		17	15	1
			Dry		15	14	1
			Critical		11	11	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		261	261	0
			Dry		269	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		1,357	1,123	234
			Dry		879	727	152
			Critical		403	366	37
Eastside Contractors deliveries							
Water Rights	Delivery (annual average)	(TAF/year)	Long Term		513	508	5
			Dry		524	524	0
			Critical		478	445	33
CVP Service Contracts	Contract Delivery (annual average)	(TAF/year)	Long Term		123	104	20
			Dry		109	84	25
			Critical		36	4	32
Total Eastside Contractors Deliveries							
Total Water Rights and CVP Service Contracts Deliveries	Delivery (annual average)	(TAF/year)	Long Term		636	611	25
			Dry		633	608	25
			Critical		514	449	66

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 C-19-3-1. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

				Alternative 5	No Action Alternative	Alternative 5 minus No Action Alternative
Water Supply Reliability						
Sacramento River Hydrologic Region						
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,861	1,859	2
			Dry	1,906	1,906	0
			Critical	1,747	1,737	10
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	146	146	0
			Dry	145	146	0
			Critical	103	102	1
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	207	207	0
			Dry	186	186	0
			Critical	152	152	0
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term	185	185	0
			Dry	85	86	0
			Critical	24	24	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	261	261	0
			Dry	269	269	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	269	-5
			Dry	135	140	-5
			Critical	40	41	-1
San Francisco Bay Hydrologic Region						
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	275	275	0
			Dry	275	274	1
			Critical	264	264	0
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	32	33	0
			Dry	17	17	0
			Critical	5	5	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	538	545	-7
			Dry	281	288	-7
			Critical	85	85	0
Total For All Regions						
Total Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	4,634	4,646	-11
			Dry	4,186	4,198	-12
			Critical	3,393	3,385	7

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 C-19-3-2. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

					Alternative 5	No Action Alternative	Alternative 5 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		185	185	0
			Dry		85	86	0
			Critical		24	24	0
CVP M&I (Including American River)	Contract Delivery (annual average)	(TAF/year)	Long Term		467	467	0
			Dry		447	447	0
			Critical		405	405	0
CVP M&I American River	Contract Delivery (annual average)	(TAF/year)	Long Term		112	113	0
			Dry		96	97	0
			Critical		74	75	-1
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term		1,861	1,859	2
			Dry		1,906	1,906	0
			Critical		1,747	1,737	10
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		146	146	0
			Dry		145	146	0
			Critical		103	102	1
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	2,658	1
			Dry		2,584	2,584	0
			Critical		2,279	2,268	11
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	847	-13
			Dry		433	445	-12
			Critical		130	131	-1
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		15	15	0
			Dry		14	14	0
			Critical		11	11	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		261	261	0
			Dry		269	269	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	1,123	-13
			Dry		715	727	-12
			Critical		363	366	-4
Eastside Contractors deliveries							
Water Rights	Delivery (annual average)	(TAF/year)	Long Term		502	508	-6
			Dry		524	524	0
			Critical		406	445	-39
CVP Service Contracts	Contract Delivery (annual average)	(TAF/year)	Long Term		100	104	-4
			Dry		69	84	-16
			Critical		8	4	4
Total Eastside Contractors Deliveries							
Total Water Rights and CVP Service Contracts Deliveries	Delivery (annual average)	(TAF/year)	Long Term		602	611	-10
			Dry		593	608	-16
			Critical		414	449	-35

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 C-19-4-1. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

				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. 6) Annual deliveries are based on March to February Average.

Table C-19-4-2. 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 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 C-19-5-1. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

				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. 6) Annual deliveries are based on March to February Average.

Table C-19-5-2. 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 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 C-19-6-1. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

				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. 6) Annual deliveries are based on March to February Average.

Table C-19-6-2. 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 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.

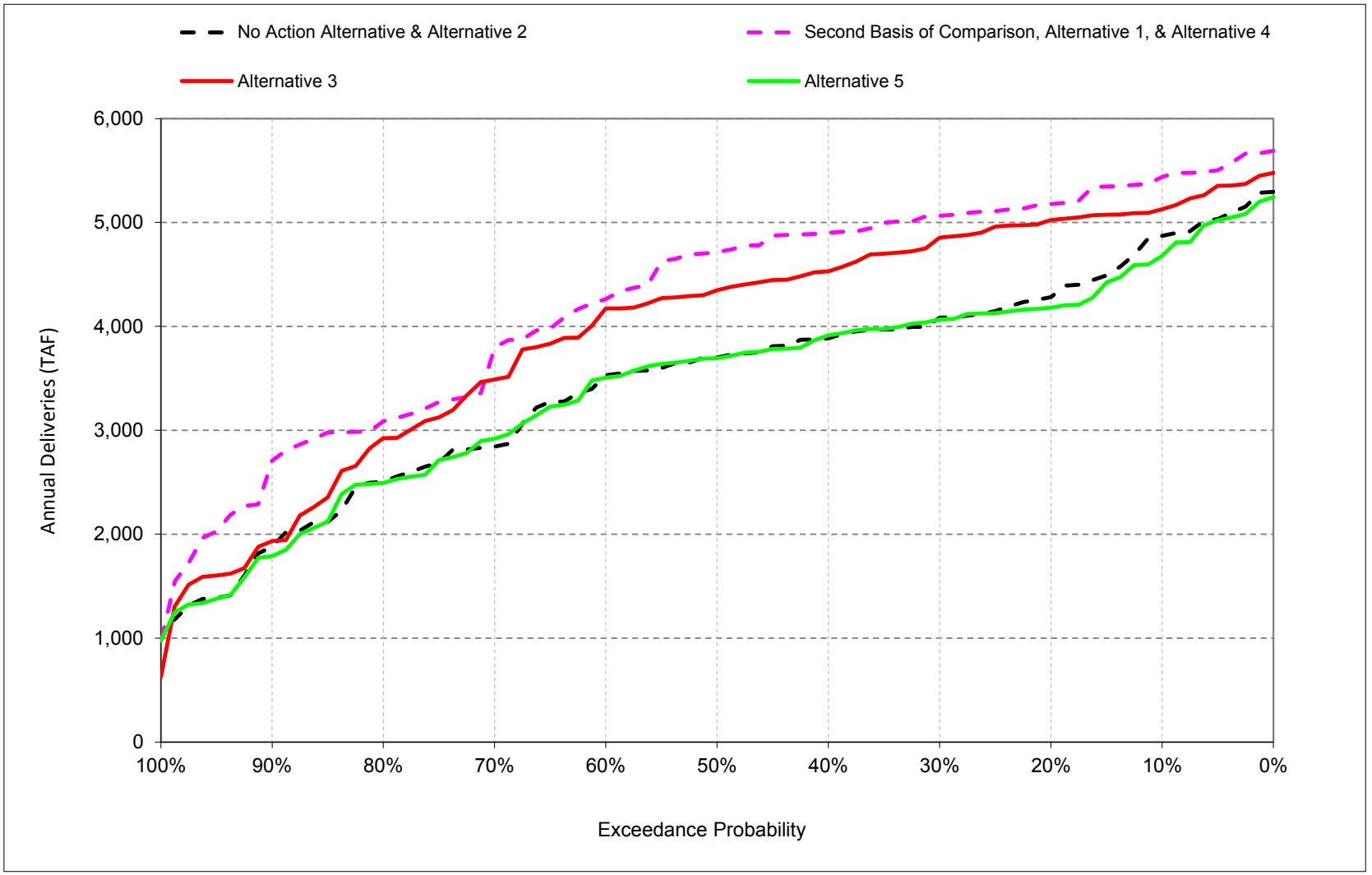
Table C-19-9. Stanislaus CVP and Water Rights Deliveries, Long-Term Averages

	Stanislaus Deliveries		Difference from No Action Alternative		Difference from Second Basis of Comparison	
	CVP (TAF)	Water Rights (TAF)	CVP (TAF)	Water Rights (TAF)	CVP (TAF)	Water Rights (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.

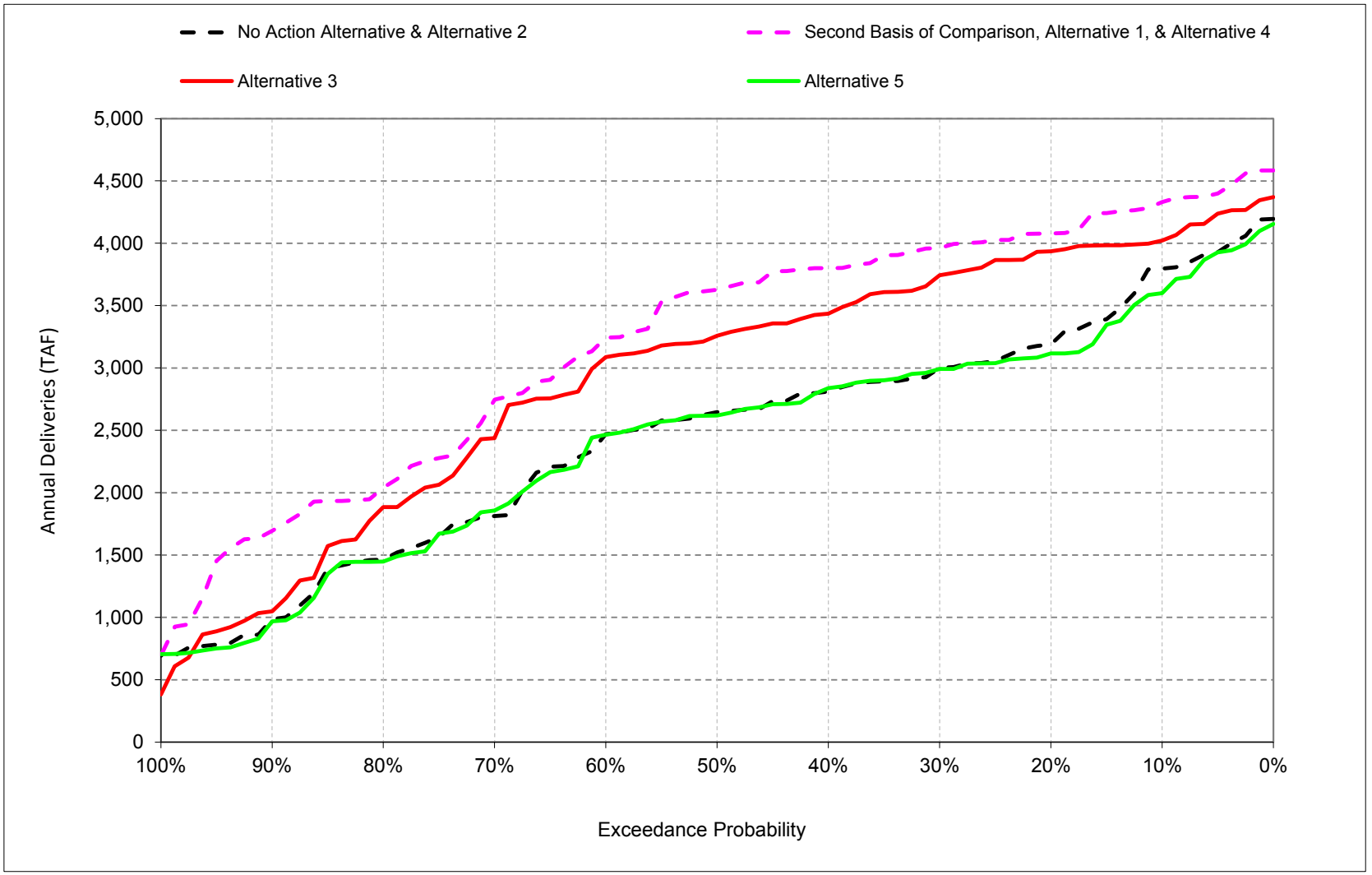
C.20. SWP Deliveries

Figure C-20-1-1. Total Annual SWP Deliveries



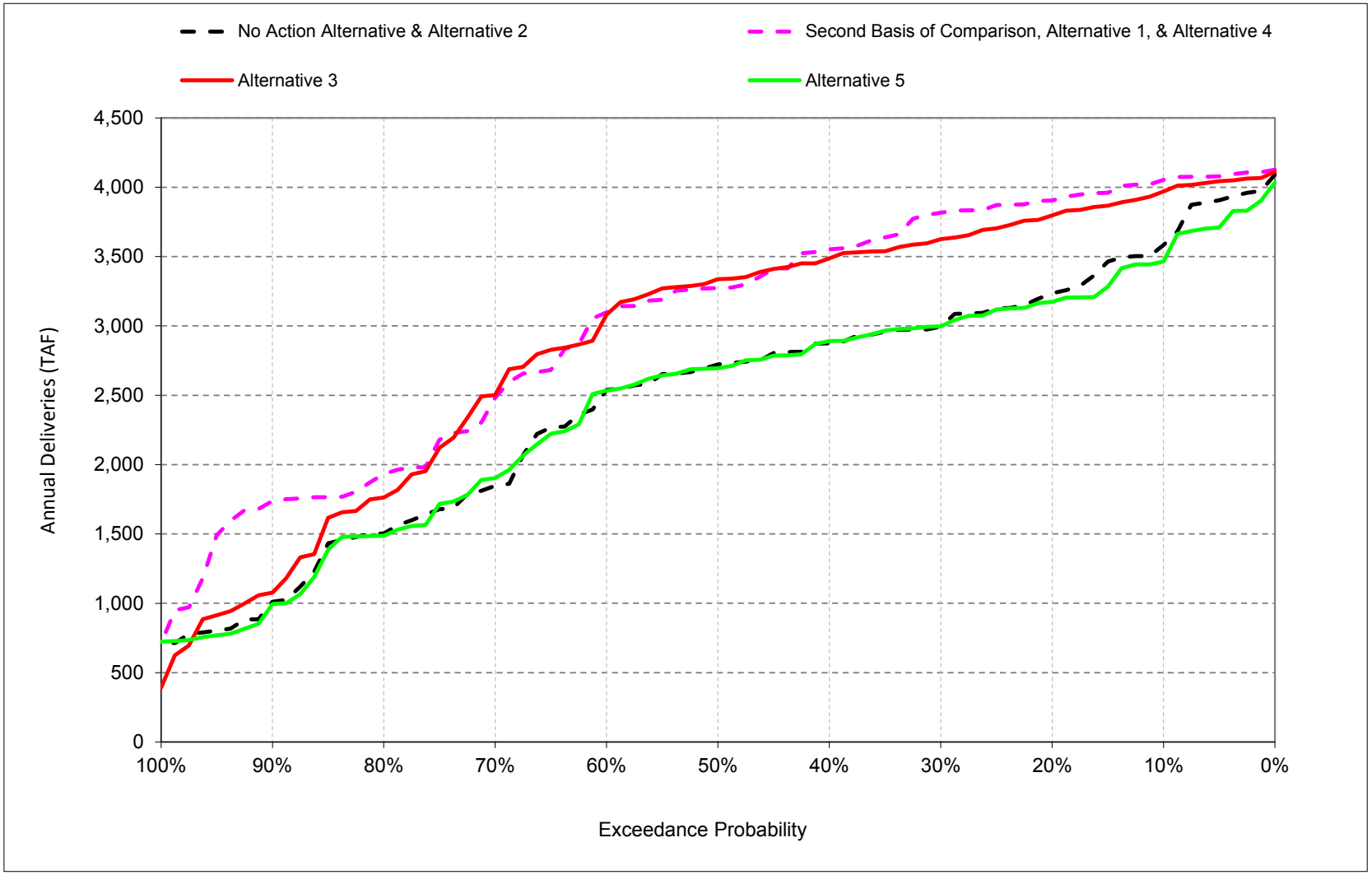
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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. 6) Annual deliveries are based on January to December average.

Figure C-20-1-2. Total Annual SWP South of Delta Deliveries including Article 21 and 56



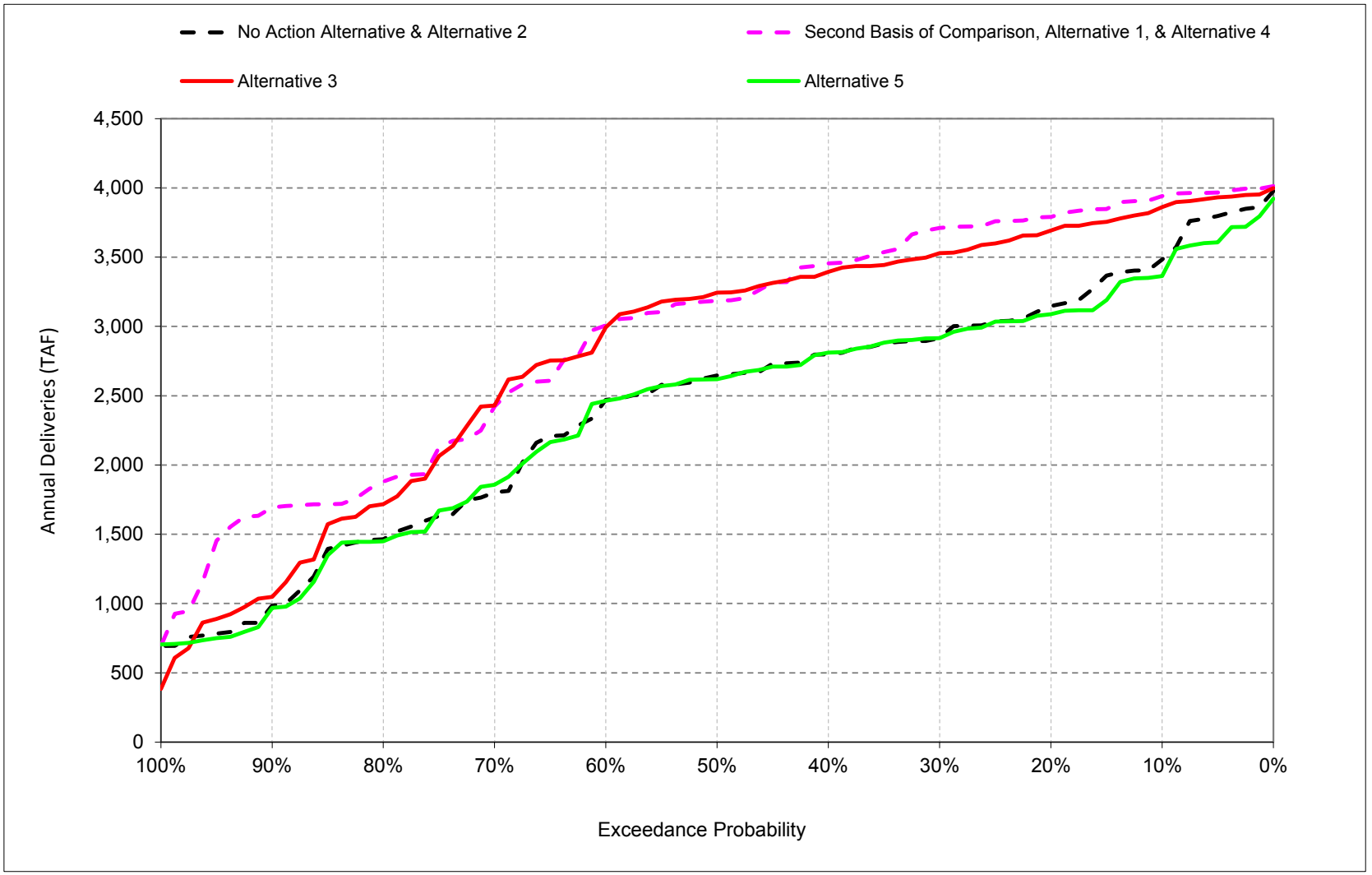
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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. 6) Annual deliveries are based on January to December average.

Figure C-20-1-3. Annual SWP Table A Deliveries with Article 56



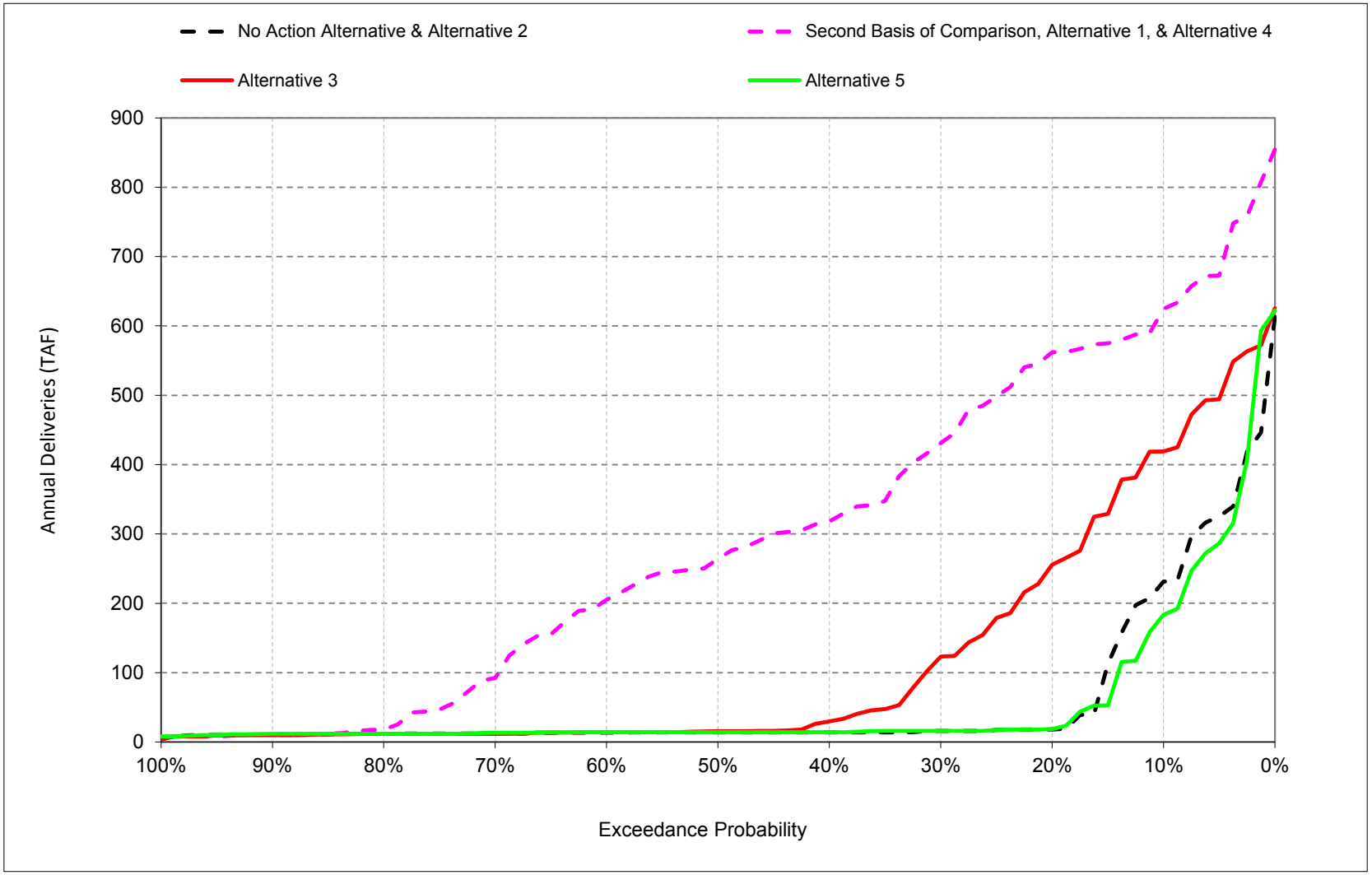
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 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. 6) Annual deliveries are based on January to December average.

Figure C-20-1-4. Annual SWP South of Delta Table A Deliveries with Article 56



Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 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 Alternatives 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. 6) Annual deliveries are based on January to December average.

Figure C-20-1-5. Annual SWP Article 21 Deliveries



Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 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 Alternatives 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. 6) Annual deliveries are based on January to December average.

Table C-20-1-1. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, SWP

				Alternative 1	No Action Alternative	Alternative 1 minus No Action Alternative
Water Supply Reliability						
Sacramento River Hydrologic Region						
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term	931	931	0
			Dry	946	946	0
			Critical	709	710	-1
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	27	22	5
			Dry	19	16	3
			Critical	12	9	3
San Joaquin River Hydrologic Region						
SWP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	4	3	1
			Dry	3	3	1
			Critical	2	1	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	181	39
			Dry	167	137	30
			Critical	103	76	27
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	22	15	7
			Dry	21	14	6
			Critical	12	13	-1
Central Coast Hydrologic Region						
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	52	42	10
			Dry	39	31	8
			Critical	24	17	7
Tulare Lake Hydrologic Region						
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	99	81	18
			Dry	75	60	15
			Critical	46	33	14
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	736	599	137
			Dry	557	447	110
			Critical	340	246	94
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	176	26	150
			Dry	141	5	136
			Critical	28	10	18
South Lahontan Hydrologic Region						
SWP M&I (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	325	266	59
			Dry	253	204	50
			Critical	156	115	41
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	4	0	4
			Dry	4	0	4
			Critical	2	1	1
South Coast Hydrologic Region						
SWP M&I (w/o Article 21)	Contract Delivery (includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term	1,544	1,276	268
			Dry	1,240	1,008	232
			Critical	792	563	229
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	90	18	72
			Dry	75	4	70
			Critical	7	4	3
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	9	8	2
			Dry	7	6	1
			Critical	4	3	1
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	2	0	2
			Dry	1	0	1
			Critical	0	0	0
Total For All Regions						
Total Supplies (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	3,947	3,409	537
			Dry	3,308	2,858	450
			Critical	2,189	1,773	415
Total Article 21 Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	294	60	234
			Dry	242	24	218
			Critical	49	27	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 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) Annual deliveries are based on January to December average.

Table C-20-1-2. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, SWP

					Alternative 1	No Action Alternative	Alternative 1 minus No Action Alternative
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	68	15
			Dry		62	51	11
			Critical		53	43	11
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		12	13	-1
			Dry		13	14	-1
			Critical		12	13	-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	68	15
			Dry		62	51	11
			Critical		53	43	11
Total SWP Ag and M&I Article 21 NOD	Contract Delivery (annual average)	(TAF/year)	Long Term		12	13	-1
			Dry		13	14	-1
			Critical		12	13	-1
South of Delta							
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term		750	610	139
			Dry		567	455	112
			Critical		484	378	106
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		178	27	152
			Dry		143	5	138
			Critical		100	7	93
SWP M&I (w/o Article 21)	Contract Delivery (includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		2,183	1,800	383
			Dry		1,732	1,406	327
			Critical		1,494	1,173	321
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		104	20	84
			Dry		86	5	82
			Critical		58	5	53
Total SWP South of Delta							
Total SWP Ag and M&I SOD (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term		2,933	2,410	523
			Dry		2,299	1,861	439
			Critical		1,978	1,551	427
Total SWP Ag and M&I Article 21 SOD	Contract Delivery (annual average)	(TAF/year)	Long Term		282	47	236
			Dry		229	10	219
			Critical		158	12	146

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 January to December average.

Table C-20-2-1. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, SWP

					Alternative 3	No Action Alternative	Alternative 3 minus No Action Alternative
Water Supply Reliability							
Sacramento River Hydrologic Region							
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term		932	931	1
			Dry		946	946	0
			Critical		721	710	10
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		25	22	4
			Dry		18	16	3
			Critical		9	9	0
San Joaquin River Hydrologic Region							
SWP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term		4	3	1
			Dry		3	3	0
			Critical		1	1	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		211	181	30
			Dry		160	137	23
			Critical		77	76	1
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		17	15	2
			Dry		16	14	1
			Critical		12	13	-1
Central Coast Hydrologic Region							
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		50	42	7
			Dry		37	31	5
			Critical		18	17	1
Tulare Lake Hydrologic Region							
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		95	81	14
			Dry		71	60	11
			Critical		35	33	2
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term		703	599	104
			Dry		523	447	76
			Critical		253	246	8
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		72	26	46
			Dry		36	5	31
			Critical		13	10	3
South Lahontan Hydrologic Region							
SWP M&I (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term		312	266	46
			Dry		240	204	36
			Critical		118	115	4
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		2	0	2
			Dry		2	0	2
			Critical		1	1	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		1,493	1,276	216
			Dry		1,182	1,008	174
			Critical		596	563	33
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		26	18	8
			Dry		6	4	2
			Critical		7	4	3
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term		9	8	1
			Dry		7	6	1
			Critical		3	3	0
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		1	0	1
			Dry		0	0	0
			Critical		0	0	0
Total For All Regions							
Total Supplies (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term		3,834	3,409	425
			Dry		3,187	2,858	329
			Critical		1,832	1,773	58
Total Article 21 Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term		119	60	59
			Dry		60	24	36
			Critical		33	27	6

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) Annual deliveries are based on January to December average.

Table C-20-2-2. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, SWP

					Alternative 3	No Action Alternative	Alternative 3 minus No Action Alternative
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		80	68	11
			Dry		60	51	8
			Critical		48	43	5
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		12	13	-1
			Dry		13	14	-1
			Critical		12	13	-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		80	68	11
			Dry		60	51	8
			Critical		48	43	5
Total SWP Ag and M&I Article 21 NOD	Contract Delivery (annual average)	(TAF/year)	Long Term		12	13	-1
			Dry		13	14	-1
			Critical		12	13	-1
South of Delta							
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term		716	610	106
			Dry		533	455	78
			Critical		430	378	52
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		73	27	47
			Dry		36	5	31
			Critical		27	7	21
SWP M&I (w/o Article 21)	Contract Delivery (includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		2,106	1,800	306
			Dry		1,649	1,406	243
			Critical		1,340	1,173	167
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		33	20	13
			Dry		11	5	6
			Critical		10	5	5
Total SWP South of Delta							
Total SWP Ag and M&I SOD (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term		2,822	2,410	412
			Dry		2,182	1,861	321
			Critical		1,770	1,551	219
Total SWP Ag and M&I Article 21 SOD	Contract Delivery (annual average)	(TAF/year)	Long Term		106	47	60
			Dry		47	10	37
			Critical		38	12	26

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 January to December average.

Table C-20-3-1. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, SWP

				Alternative 5	No Action Alternative	Alternative 5 minus No Action Alternative
Water Supply Reliability						
Sacramento River Hydrologic Region						
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term	932	931	1
			Dry	946	946	0
			Critical	717	710	6
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	21	22	0
			Dry	16	16	0
			Critical	9	9	0
San Joaquin River Hydrologic Region						
SWP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	3	3	0
			Dry	3	3	0
			Critical	1	1	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	178	181	-3
			Dry	136	137	-1
			Critical	74	76	-2
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	15	15	0
			Dry	15	14	1
			Critical	12	13	0
Central Coast Hydrologic Region						
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	42	42	-1
			Dry	31	31	0
			Critical	17	17	-1
Tulare Lake Hydrologic Region						
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	80	81	-1
			Dry	60	60	0
			Critical	32	33	-1
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	588	599	-12
			Dry	440	447	-6
			Critical	233	246	-13
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	24	26	-2
			Dry	6	5	1
			Critical	0	10	-9
South Lahontan Hydrologic Region						
SWP M&I (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	263	266	-3
			Dry	203	204	-1
			Critical	109	115	-6
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	0	0	0
			Dry	0	0	0
			Critical	0	1	-1
South Coast Hydrologic Region						
SWP M&I (w/o Article 21)	Contract Delivery (includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term	1,268	1,276	-8
			Dry	1,002	1,008	-6
			Critical	545	563	-18
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	17	18	-1
			Dry	4	4	0
			Critical	0	4	-4
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	7	8	0
			Dry	6	6	0
			Critical	3	3	0
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	0	0	0
			Dry	0	0	0
			Critical	0	0	0
Total For All Regions						
Total Supplies (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	3,382	3,409	-27
			Dry	2,842	2,858	-16
			Critical	1,739	1,773	-35
Total Article 21 Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	56	60	-3
			Dry	25	24	2
			Critical	13	27	-14

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) Annual deliveries are based on January to December average.

Table C-20-3-2. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, SWP

					Alternative 5	No Action Alternative	Alternative 5 minus No Action Alternative
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		67	68	-1
			Dry		51	51	0
			Critical		42	43	-1
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		13	13	0
			Dry		14	14	1
			Critical		13	13	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		67	68	-1
			Dry		51	51	0
			Critical		42	43	-1
Total SWP Ag and M&I Article 21 NOD	Contract Delivery (annual average)	(TAF/year)	Long Term		13	13	0
			Dry		14	14	1
			Critical		13	13	1
South of Delta							
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term		598	610	-12
			Dry		449	455	-7
			Critical		369	378	-9
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		24	27	-2
			Dry		6	5	1
			Critical		4	7	-3
SWP M&I (w/o Article 21)	Contract Delivery (includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		1,784	1,800	-15
			Dry		1,397	1,406	-9
			Critical		1,157	1,173	-16
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		19	20	-1
			Dry		5	5	0
			Critical		3	5	-2
Total SWP South of Delta							
Total SWP Ag and M&I SOD (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term		2,383	2,410	-27
			Dry		1,845	1,861	-15
			Critical		1,526	1,551	-25
Total SWP Ag and M&I Article 21 SOD	Contract Delivery (annual average)	(TAF/year)	Long Term		43	47	-4
			Dry		11	10	1
			Critical		7	12	-5

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 January to December average.

Table C-20-4-1. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, SWP

				No Action Alternative	Second Basis of Comparison	No Action Alternative minus Second Basis of Comparison
Water Supply Reliability						
Sacramento River Hydrologic Region						
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term	931	931	0
			Dry	946	946	0
			Critical	710	709	1
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	22	27	-5
			Dry	16	19	-3
			Critical	9	12	-3
San Joaquin River Hydrologic Region						
SWP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	3	4	-1
			Dry	3	3	-1
			Critical	1	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	181	220	-39
			Dry	137	167	-30
			Critical	76	103	-27
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	15	22	-7
			Dry	14	21	-6
			Critical	13	12	1
Central Coast Hydrologic Region						
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	42	52	-10
			Dry	31	39	-8
			Critical	17	24	-7
Tulare Lake Hydrologic Region						
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	81	99	-18
			Dry	60	75	-15
			Critical	33	46	-14
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	599	736	-137
			Dry	447	557	-110
			Critical	246	340	-94
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	26	176	-150
			Dry	5	141	-136
			Critical	10	28	-18
South Lahontan Hydrologic Region						
SWP M&I (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	266	325	-59
			Dry	204	253	-50
			Critical	115	156	-41
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	0	4	-4
			Dry	0	4	-4
			Critical	1	2	-1
South Coast Hydrologic Region						
SWP M&I (w/o Article 21)	Contract Delivery (includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term	1,276	1,544	-268
			Dry	1,008	1,240	-232
			Critical	563	792	-229
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	18	90	-72
			Dry	4	75	-70
			Critical	4	7	-3
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	8	9	-2
			Dry	6	7	-1
			Critical	3	4	-1
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	0	2	-2
			Dry	0	1	-1
			Critical	0	0	0
Total For All Regions						
Total Supplies (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	3,409	3,947	-537
			Dry	2,858	3,308	-450
			Critical	1,773	2,189	-415
Total Article 21 Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	60	294	-234
			Dry	24	242	-218
			Critical	27	49	-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, 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) Annual deliveries are based on January to December average.

Table C-20-4-2. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, SWP

					No Action Alternative	Second Basis of Comparison	No Action Alternative minus 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		68	83	-15
			Dry		51	62	-11
			Critical		43	53	-11
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		13	12	1
			Dry		14	13	1
			Critical		13	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		68	83	-15
			Dry		51	62	-11
			Critical		43	53	-11
Total SWP Ag and M&I Article 21 NOD	Contract Delivery (annual average)	(TAF/year)	Long Term		13	12	1
			Dry		14	13	1
			Critical		13	12	1
South of Delta							
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term		610	750	-139
			Dry		455	567	-112
			Critical		378	484	-106
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		27	178	-152
			Dry		5	143	-138
			Critical		7	100	-93
SWP M&I (w/o Article 21)	Contract Delivery (includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		1,800	2,183	-383
			Dry		1,406	1,732	-327
			Critical		1,173	1,494	-321
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term		20	104	-84
			Dry		5	86	-82
			Critical		5	58	-53
Total SWP South of Delta							
Total SWP Ag and M&I SOD (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term		2,410	2,933	-523
			Dry		1,861	2,299	-439
			Critical		1,551	1,978	-427
Total SWP Ag and M&I Article 21 SOD	Contract Delivery (annual average)	(TAF/year)	Long Term		47	282	-236
			Dry		10	229	-219
			Critical		12	158	-146

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 January to December average.

Table C-20-5-1. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, SWP

				Alternative 3	Second Basis of Comparison	Alternative 3 minus Second Basis of Comparison
Water Supply Reliability						
Sacramento River Hydrologic Region						
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term	932	931	2
			Dry	946	946	0
			Critical	721	709	11
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	25	27	-1
			Dry	18	19	-1
			Critical	9	12	-3
San Joaquin River Hydrologic Region						
SWP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	4	4	0
			Dry	3	3	0
			Critical	1	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	211	220	-8
			Dry	160	167	-7
			Critical	77	103	-26
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	17	22	-5
			Dry	16	21	-5
			Critical	12	12	0
Central Coast Hydrologic Region						
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	50	52	-2
			Dry	37	39	-2
			Critical	18	24	-6
Tulare Lake Hydrologic Region						
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	95	99	-4
			Dry	71	75	-4
			Critical	35	46	-12
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	703	736	-33
			Dry	523	557	-33
			Critical	253	340	-86
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	72	176	-104
			Dry	36	141	-106
			Critical	13	28	-15
South Lahontan Hydrologic Region						
SWP M&I (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	312	325	-13
			Dry	240	253	-14
			Critical	118	156	-38
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	2	4	-1
			Dry	2	4	-2
			Critical	1	2	-1
South Coast Hydrologic Region						
SWP M&I (w/o Article 21)	Contract Delivery (includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term	1,493	1,544	-51
			Dry	1,182	1,240	-59
			Critical	596	792	-196
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	26	90	-64
			Dry	6	75	-68
			Critical	7	7	0
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	9	9	0
			Dry	7	7	0
			Critical	3	4	-1
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	1	2	-1
			Dry	0	1	-1
			Critical	0	0	0
Total For All Regions						
Total Supplies (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	3,834	3,947	-113
			Dry	3,187	3,308	-120
			Critical	1,832	2,189	-357
Total Article 21 Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	119	294	-175
			Dry	60	242	-182
			Critical	33	49	-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) Annual deliveries are based on January to December average.

Table C-20-5-2. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, SWP

				Alternative 3	Second Basis of Comparison	Alternative 3 minus 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	80	83	-3
			Dry	60	62	-3
			Critical	48	53	-5
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	1
			Dry	13	13	0
			Critical	12	12	0
Total SWP North of Delta						
Total SWP Ag and M&I NOD (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	80	83	-3
			Dry	60	62	-3
			Critical	48	53	-5
Total SWP Ag and M&I Article 21 NOD	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	1
			Dry	13	13	0
			Critical	12	12	0
South of Delta						
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	716	750	-34
			Dry	533	567	-34
			Critical	430	484	-54
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	73	178	-105
			Dry	36	143	-107
			Critical	27	100	-72
SWP M&I (w/o Article 21)	Contract Delivery (includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term	2,106	2,183	-77
			Dry	1,649	1,732	-84
			Critical	1,340	1,494	-154
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	33	104	-71
			Dry	11	86	-75
			Critical	10	58	-48
Total SWP South of Delta						
Total SWP Ag and M&I SOD (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	2,822	2,933	-111
			Dry	2,182	2,299	-118
			Critical	1,770	1,978	-208
Total SWP Ag and M&I Article 21 SOD	Contract Delivery (annual average)	(TAF/year)	Long Term	106	282	-176
			Dry	47	229	-182
			Critical	38	158	-120

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 January to December average.

Table C-20-6-1. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, SWP

				Alternative 5	Second Basis of Comparison	Alternative 5 minus Second Basis of Comparison
Water Supply Reliability						
Sacramento River Hydrologic Region						
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term	932	931	1
			Dry	946	946	0
			Critical	717	709	7
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	21	27	-5
			Dry	16	19	-3
			Critical	9	12	-3
San Joaquin River Hydrologic Region						
SWP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	3	4	-1
			Dry	3	3	-1
			Critical	1	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	178	220	-42
			Dry	136	167	-31
			Critical	74	103	-30
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	15	22	-7
			Dry	15	21	-6
			Critical	12	12	1
Central Coast Hydrologic Region						
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	42	52	-10
			Dry	31	39	-8
			Critical	17	24	-8
Tulare Lake Hydrologic Region						
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	80	99	-20
			Dry	60	75	-16
			Critical	32	46	-15
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	588	736	-148
			Dry	440	557	-116
			Critical	233	340	-107
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	24	176	-152
			Dry	6	141	-135
			Critical	0	28	-27
South Lahontan Hydrologic Region						
SWP M&I (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	263	325	-63
			Dry	203	253	-51
			Critical	109	156	-47
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	0	4	-4
			Dry	0	4	-4
			Critical	0	2	-2
South Coast Hydrologic Region						
SWP M&I (w/o Article 21)	Contract Delivery (includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term	1,268	1,544	-276
			Dry	1,002	1,240	-238
			Critical	545	792	-247
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	17	90	-73
			Dry	4	75	-70
			Critical	0	7	-7
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	7	9	-2
			Dry	6	7	-1
			Critical	3	4	-1
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	0	2	-2
			Dry	0	1	-1
			Critical	0	0	0
Total For All Regions						
Total Supplies (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	3,382	3,947	-565
			Dry	2,842	3,308	-465
			Critical	1,739	2,189	-450
Total Article 21 Supplies	Contract Delivery (annual average)	(TAF/year)	Long Term	56	294	-238
			Dry	25	242	-217
			Critical	13	49	-36

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) Annual deliveries are based on January to December average.

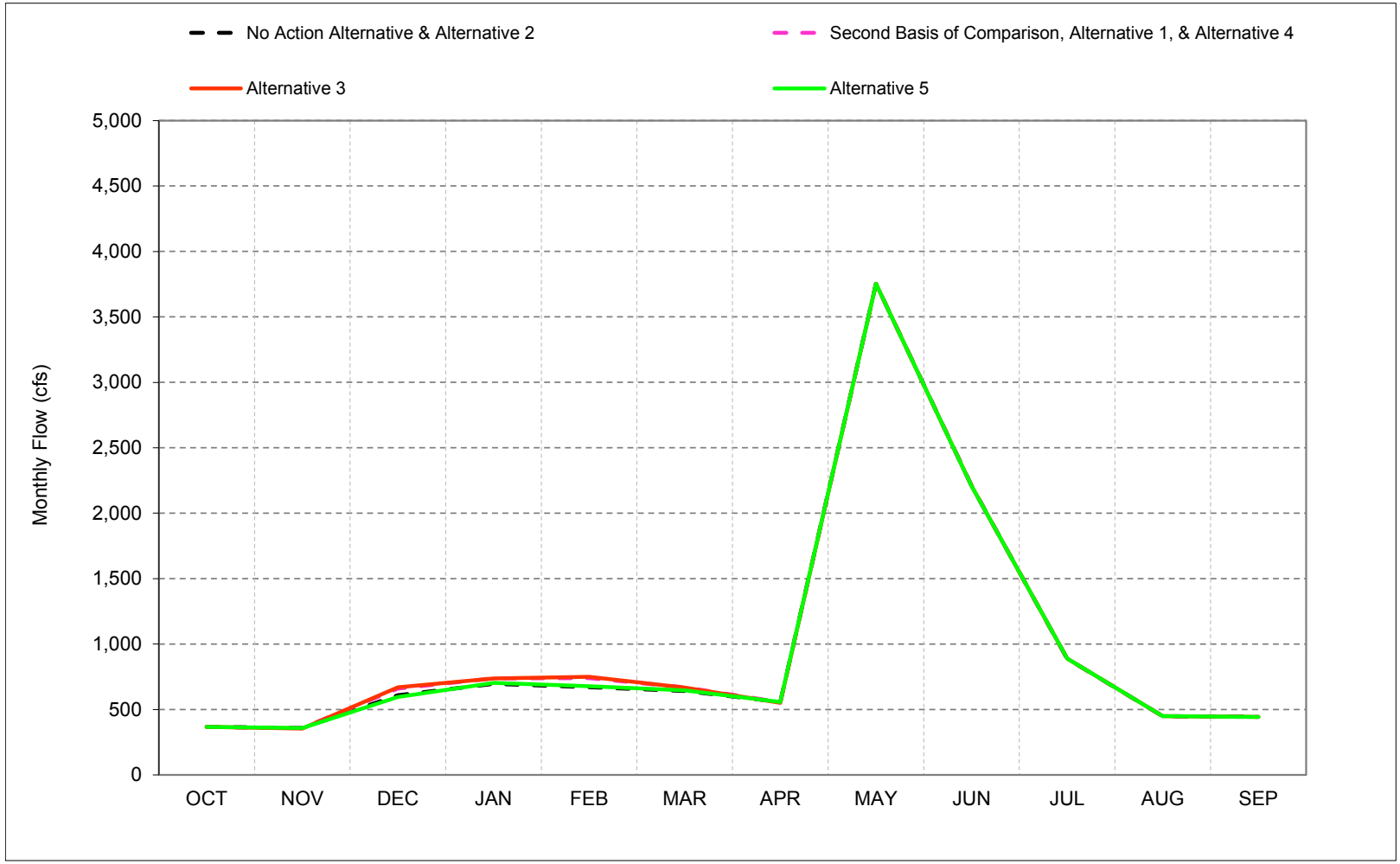
Table C-20-6-2. CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, SWP

				Alternative 5	Second Basis of Comparison	Alternative 5 minus 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	67	83	-16
			Dry	51	62	-11
			Critical	42	53	-11
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	13	12	2
			Dry	14	13	1
			Critical	13	12	2
Total SWP North of Delta						
Total SWP Ag and M&I NOD (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	67	83	-16
			Dry	51	62	-11
			Critical	42	53	-11
Total SWP Ag and M&I Article 21 NOD	Contract Delivery (annual average)	(TAF/year)	Long Term	13	12	2
			Dry	14	13	1
			Critical	13	12	2
South of Delta						
SWP Ag (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	598	750	-151
			Dry	449	567	-118
			Critical	369	484	-115
SWP Ag Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	24	178	-154
			Dry	6	143	-137
			Critical	4	100	-96
SWP M&I (w/o Article 21)	Contract Delivery (includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term	1,784	2,183	-399
			Dry	1,397	1,732	-336
			Critical	1,157	1,494	-337
SWP M&I Article 21	Contract Delivery (annual average)	(TAF/year)	Long Term	19	104	-85
			Dry	5	86	-81
			Critical	3	58	-55
Total SWP South of Delta						
Total SWP Ag and M&I SOD (w/o Article 21)	Contract Delivery (annual average)	(TAF/year)	Long Term	2,383	2,933	-550
			Dry	1,845	2,299	-454
			Critical	1,526	1,978	-451
Total SWP Ag and M&I Article 21 SOD	Contract Delivery (annual average)	(TAF/year)	Long Term	43	282	-239
			Dry	11	229	-218
			Critical	7	158	-151

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 January to December average.

C.21. Trinity River Flow below Lewiston

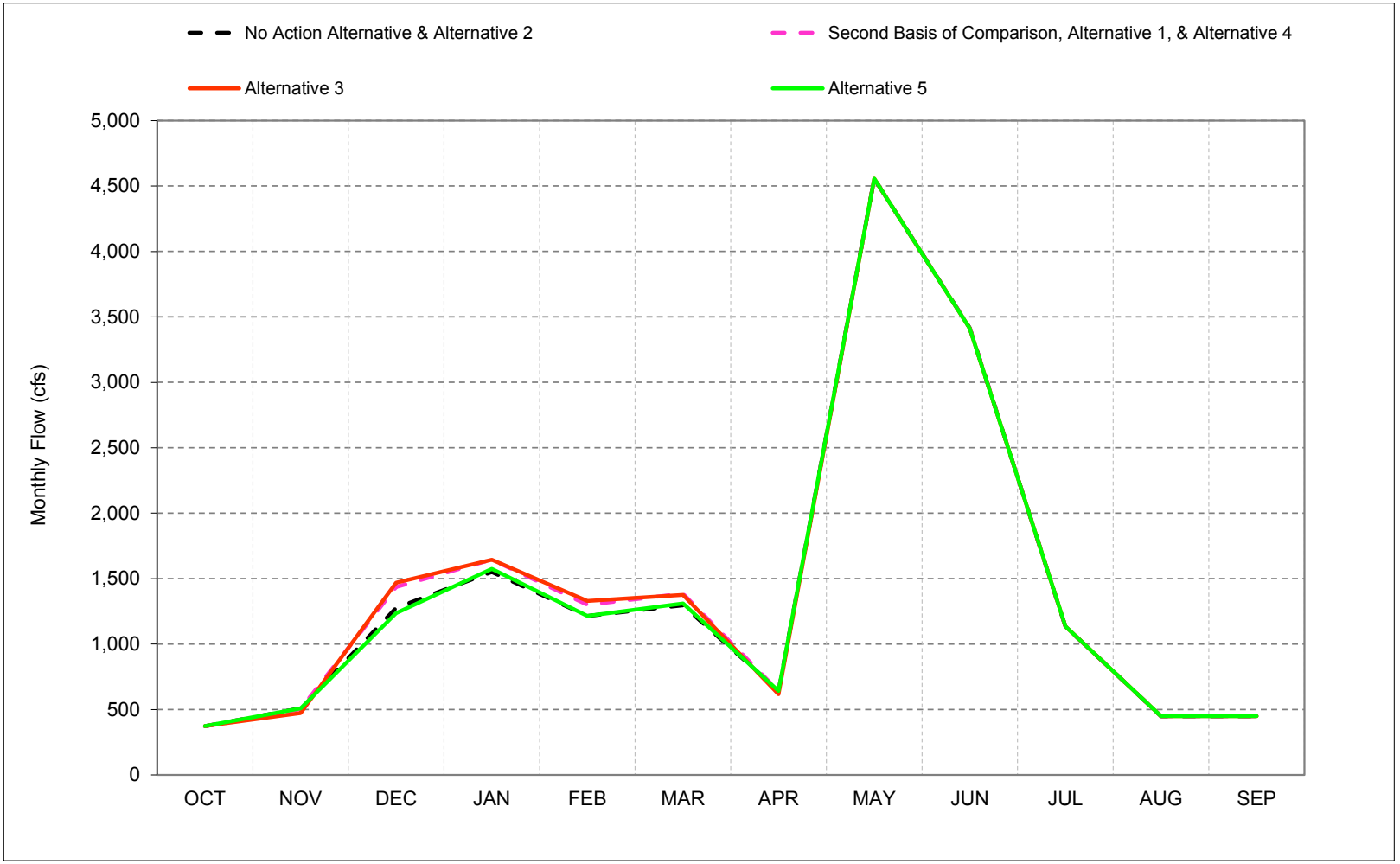
Figure C-21-1. Trinity River below Lewiston Reservoir, Long-Term* Average Flow



*Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-21-2. Trinity River below Lewiston Reservoir, Wet Year* Long-Term Average Flow**

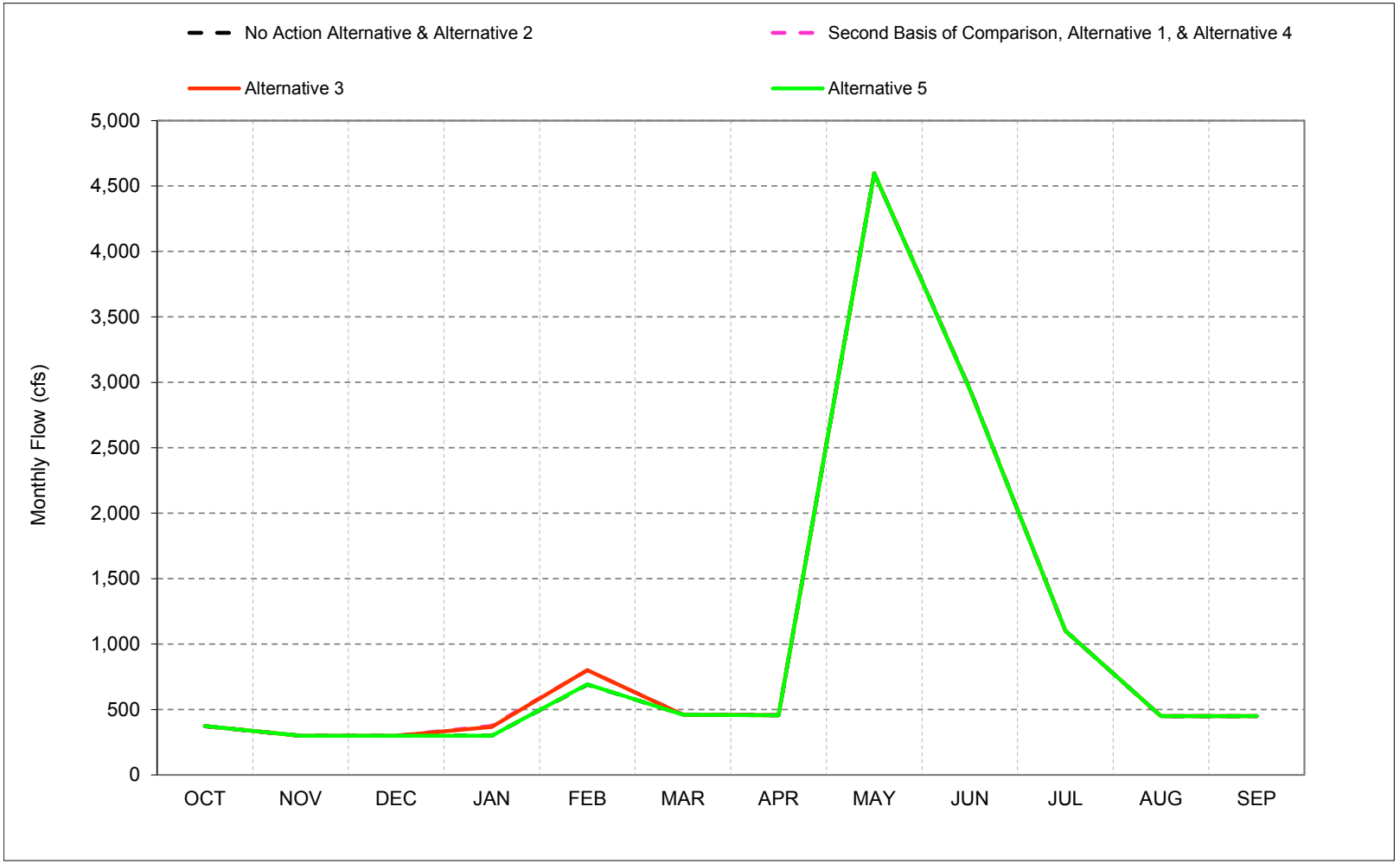


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-21-3. Trinity River below Lewiston Reservoir, Above Normal Year* Long-Term Average Flow**

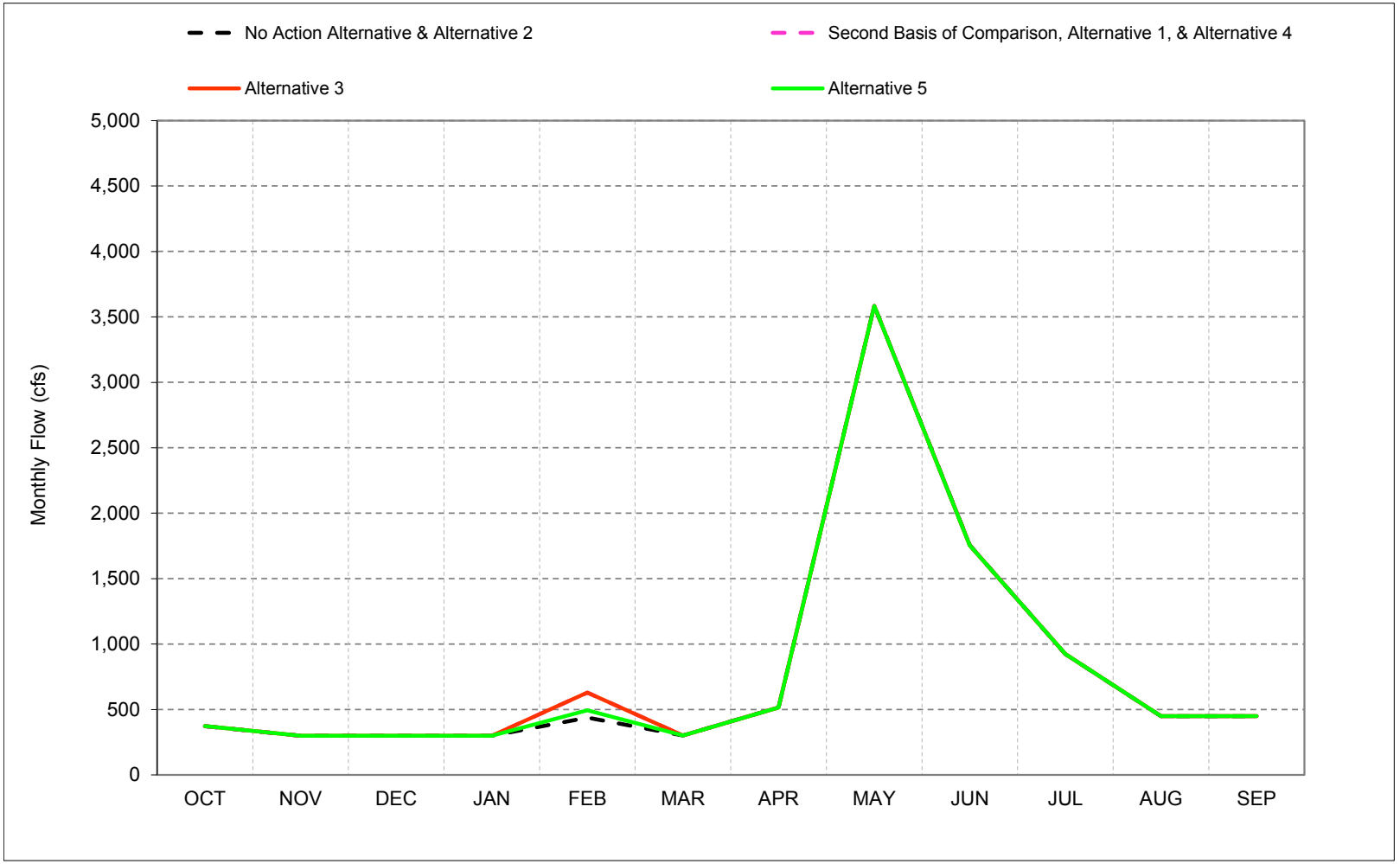


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-21-4. Trinity River below Lewiston Reservoir, Below Normal Year* Long-Term Average Flow**

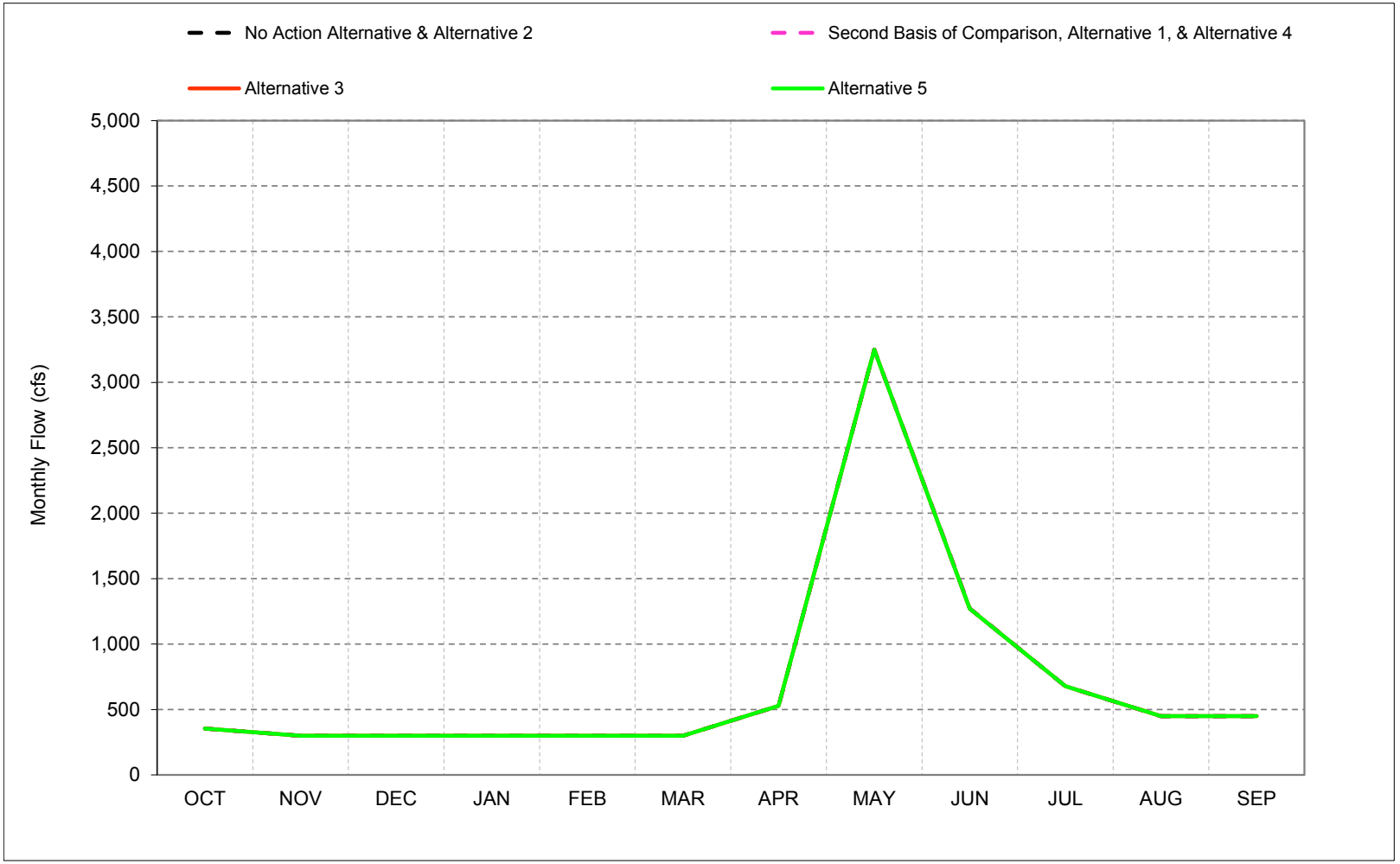


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-21-5. Trinity River below Lewiston Reservoir, Dry Year* Long-Term Average Flow**

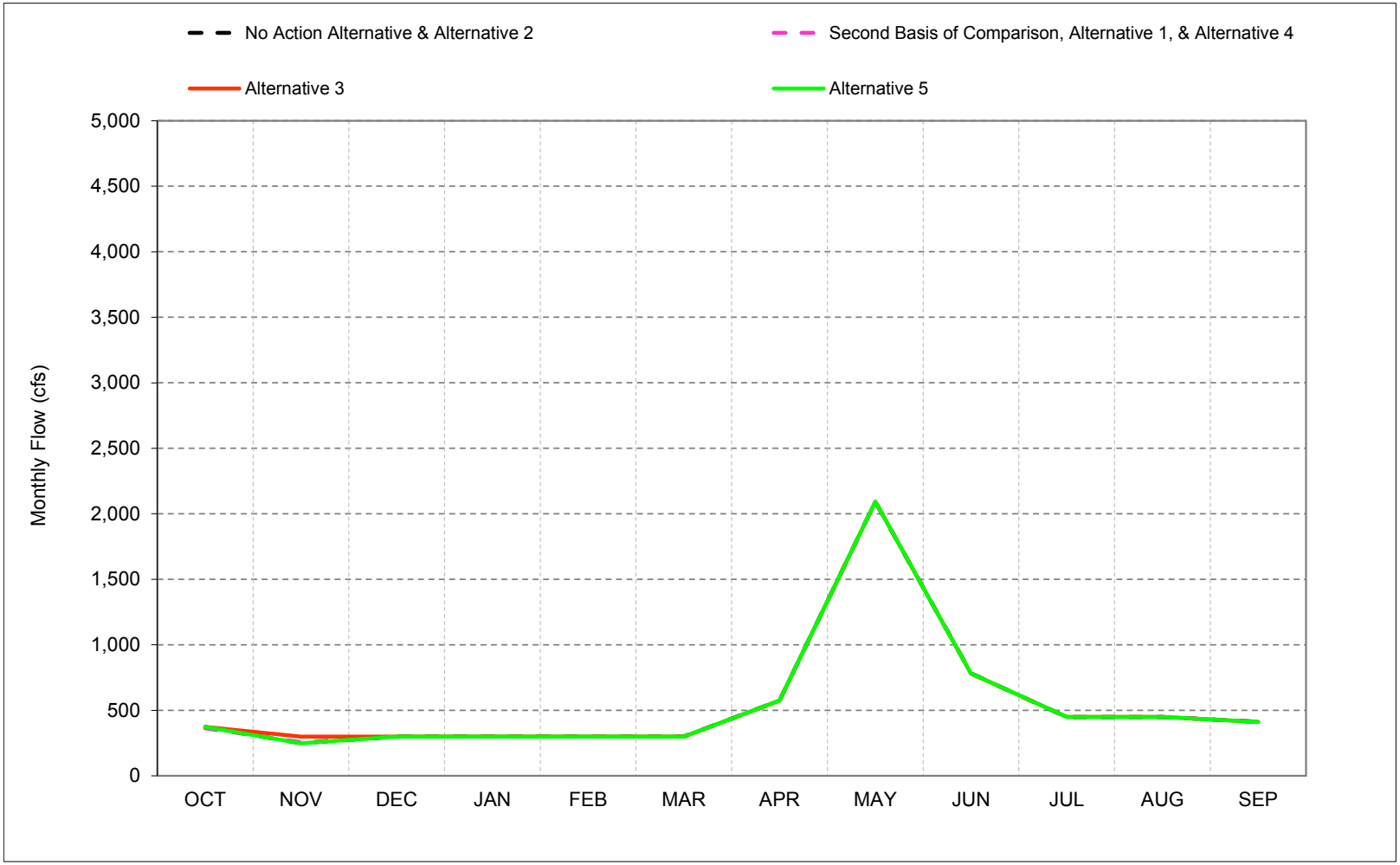


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-21-6. Trinity River below Lewiston Reservoir, Critical Year* Long-Term Average Flow**



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

**Based on the 82-year simulation period.

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 Alternatives 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 C-21-1. Trinity River below Lewiston Reservoir, Monthly Flow

No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	373	300	300	552	1,240	328	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]	368	359	610	697	671	642	559	3,753	2,210	890	450	445
Water Year Types[c]												
Wet (32%)	373	510	1,277	1,552	1,215	1,297	643	4,556	3,413	1,136	450	450
Above Normal (16%)	373	300	300	300	691	462	457	4,597	2,948	1,102	450	450
Below Normal (13%)	373	300	300	300	438	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%)	373	250	300	300	300	300	575	2,092	783	450	450	413

Alternative 1

	Monthly Flow (cfs)											
Statistic	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

Alternative 1 minus No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	0	896	866	198	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]	-1	-1	51	42	70	28	-1	0	0	0	0	0
Water Year Types[c]												
Wet (32%)	0	-6	160	94	86	89	-4	0	0	0	0	0
Above Normal (16%)	0	0	0	74	110	0	0	0	0	0	0	0
Below Normal (13%)	0	0	0	0	192	0	0	0	0	0	0	0
Dry (24%)	0	0	0	0	0	0	0	0	0	0	0	0
Critical (15%)	-9	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 C-21-2. Trinity River below Lewiston Reservoir, Monthly Flow

No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	373	300	300	552	1,240	328	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]	368	359	610	697	671	642	559	3,753	2,210	890	450	445
Water Year Types[c]												
Wet (32%)	373	510	1,277	1,552	1,215	1,297	643	4,556	3,413	1,136	450	450
Above Normal (16%)	373	300	300	300	691	462	457	4,597	2,948	1,102	450	450
Below Normal (13%)	373	300	300	300	438	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%)	373	250	300	300	300	300	575	2,092	783	450	450	413

Alternative 3

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	373	300	300	1,439	2,157	328	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	493	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	473	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]	368	355	671	737	750	667	551	3,753	2,210	890	450	445
Water Year Types[c]												
Wet (32%)	373	474	1,469	1,645	1,329	1,376	618	4,556	3,413	1,136	450	450
Above Normal (16%)	373	300	300	367	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%)	373	300	300	300	300	300	575	2,092	783	450	450	413

Alternative 3 minus No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	0	887	916	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	-28	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	-20	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	-4	61	40	79	25	-8	0	0	0	0	0
Water Year Types[c]												
Wet (32%)	0	-36	193	93	114	79	-26	0	0	0	0	0
Above Normal (16%)	0	0	0	67	110	0	0	0	0	0	0	0
Below Normal (13%)	0	0	0	0	192	0	0	0	0	0	0	0
Dry (24%)	0	0	0	0	0	0	0	0	0	0	0	0
Critical (15%)	0	50	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 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 C-21-3. Trinity River below Lewiston Reservoir, Monthly Flow

No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	373	300	300	552	1,240	328	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]	368	359	610	697	671	642	559	3,753	2,210	890	450	445
Water Year Types[c]												
Wet (32%)	373	510	1,277	1,552	1,215	1,297	643	4,556	3,413	1,136	450	450
Above Normal (16%)	373	300	300	300	691	462	457	4,597	2,948	1,102	450	450
Below Normal (13%)	373	300	300	300	438	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%)	373	250	300	300	300	300	575	2,092	783	450	450	413

Alternative 5

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	373	300	300	553	1,747	328	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]	368	359	597	704	679	647	559	3,753	2,210	890	450	445
Water Year Types[c]												
Wet (32%)	373	510	1,237	1,575	1,217	1,311	643	4,556	3,413	1,136	450	450
Above Normal (16%)	373	300	300	300	694	462	457	4,597	2,948	1,102	450	450
Below Normal (13%)	373	300	300	300	495	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%)	373	250	300	300	300	300	575	2,092	783	450	450	413

Alternative 5 minus No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	0	1	506	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	-13	7	9	5	0	0	0	0	0	0
Water Year Types[c]												
Wet (32%)	0	0	-40	23	2	14	0	0	0	0	0	0
Above Normal (16%)	0	0	0	0	3	0	0	0	0	0	0	0
Below Normal (13%)	0	0	0	0	56	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 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 C-21-4. Trinity River below Lewiston Reservoir, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	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

No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	373	300	300	552	1,240	328	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]	368	359	610	697	671	642	559	3,753	2,210	890	450	445
Water Year Types[c]												
Wet (32%)	373	510	1,277	1,552	1,215	1,297	643	4,556	3,413	1,136	450	450
Above Normal (16%)	373	300	300	300	691	462	457	4,597	2,948	1,102	450	450
Below Normal (13%)	373	300	300	300	438	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%)	373	250	300	300	300	300	575	2,092	783	450	450	413

No Action Alternative minus Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	0	-896	-866	-198	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]	1	1	-51	-42	-70	-28	1	0	0	0	0	0
Water Year Types[c]												
Wet (32%)	0	6	-160	-94	-86	-89	4	0	0	0	0	0
Above Normal (16%)	0	0	0	-74	-110	0	0	0	0	0	0	0
Below Normal (13%)	0	0	0	0	-192	0	0	0	0	0	0	0
Dry (24%)	0	0	0	0	0	0	0	0	0	0	0	0
Critical (15%)	9	-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 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 C-21-5. Trinity River below Lewiston Reservoir, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	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

Alternative 3

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	373	300	300	1,439	2,157	328	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	493	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	473	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]	368	355	671	737	750	667	551	3,753	2,210	890	450	445
Water Year Types[c]												
Wet (32%)	373	474	1,469	1,645	1,329	1,376	618	4,556	3,413	1,136	450	450
Above Normal (16%)	373	300	300	367	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%)	373	300	300	300	300	300	575	2,092	783	450	450	413

Alternative 3 minus Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	0	-9	51	-198	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	-28	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	-20	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]	1	-3	10	-2	9	-3	-7	0	0	0	0	0
Water Year Types[c]												
Wet (32%)	0	-30	32	-2	29	-10	-22	0	0	0	0	0
Above Normal (16%)	0	0	0	-7	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%)	9	43	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 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 C-21-6. 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

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	373	300	300	553	1,747	328	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]	368	359	597	704	679	647	559	3,753	2,210	890	450	445
Water Year Types[c]												
Wet (32%)	373	510	1,237	1,575	1,217	1,311	643	4,556	3,413	1,136	450	450
Above Normal (16%)	373	300	300	300	694	462	457	4,597	2,948	1,102	450	450
Below Normal (13%)	373	300	300	300	495	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%)	373	250	300	300	300	300	575	2,092	783	450	450	413

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%	0	0	0	-895	-359	-198	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]	1	1	-63	-34	-62	-24	1	0	0	0	0	0
Water Year Types[c]												
Wet (32%)	0	6	-200	-71	-84	-75	4	0	0	0	0	0
Above Normal (16%)	0	0	0	-74	-107	0	0	0	0	0	0	0
Below Normal (13%)	0	0	0	0	-135	0	0	0	0	0	0	0
Dry (24%)	0	0	0	0	0	0	0	0	0	0	0	0
Critical (15%)	9	-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.

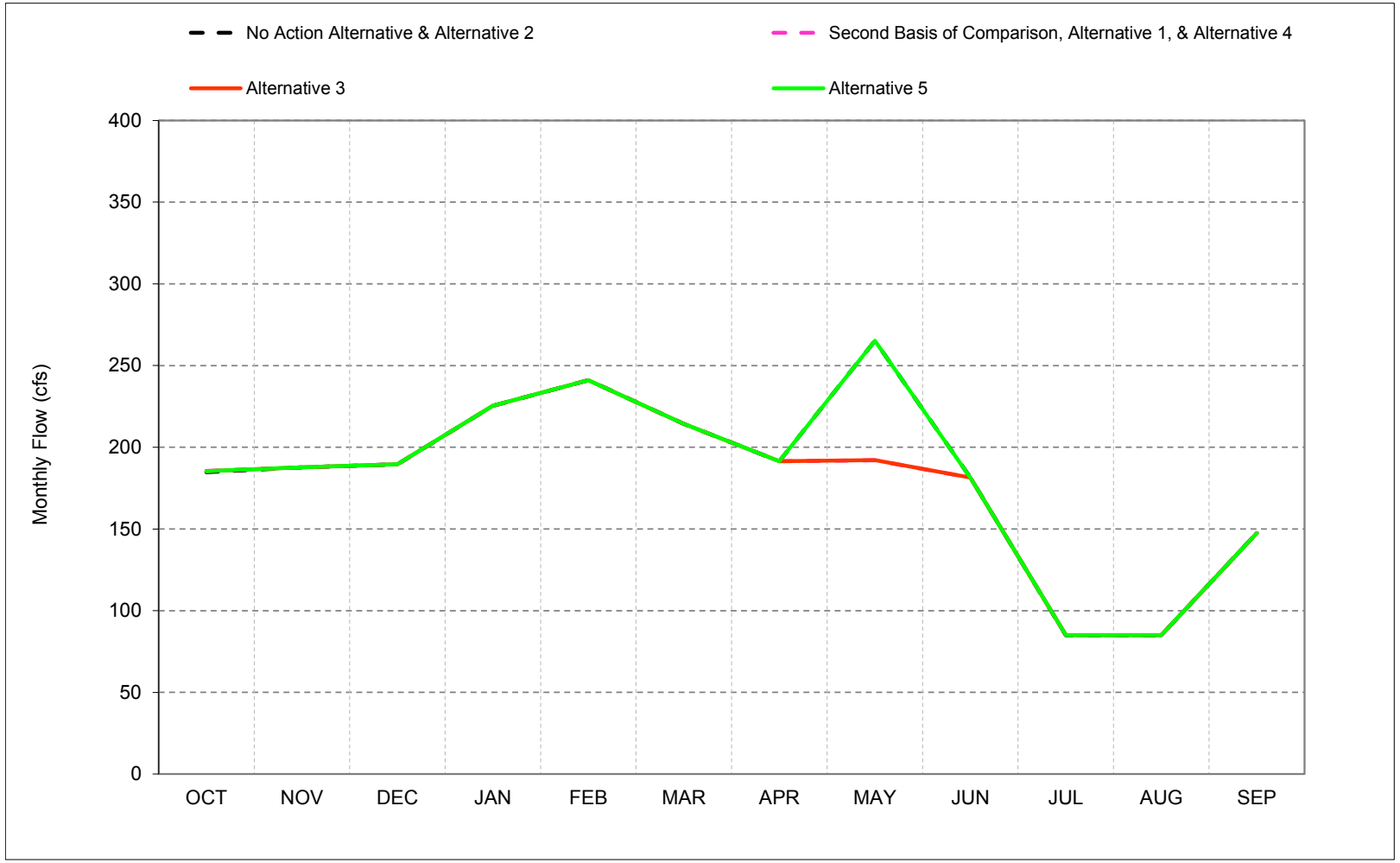
b Based on the 82-year simulation period.

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 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.

C.22. Clear Creek Flow below Whiskeytown

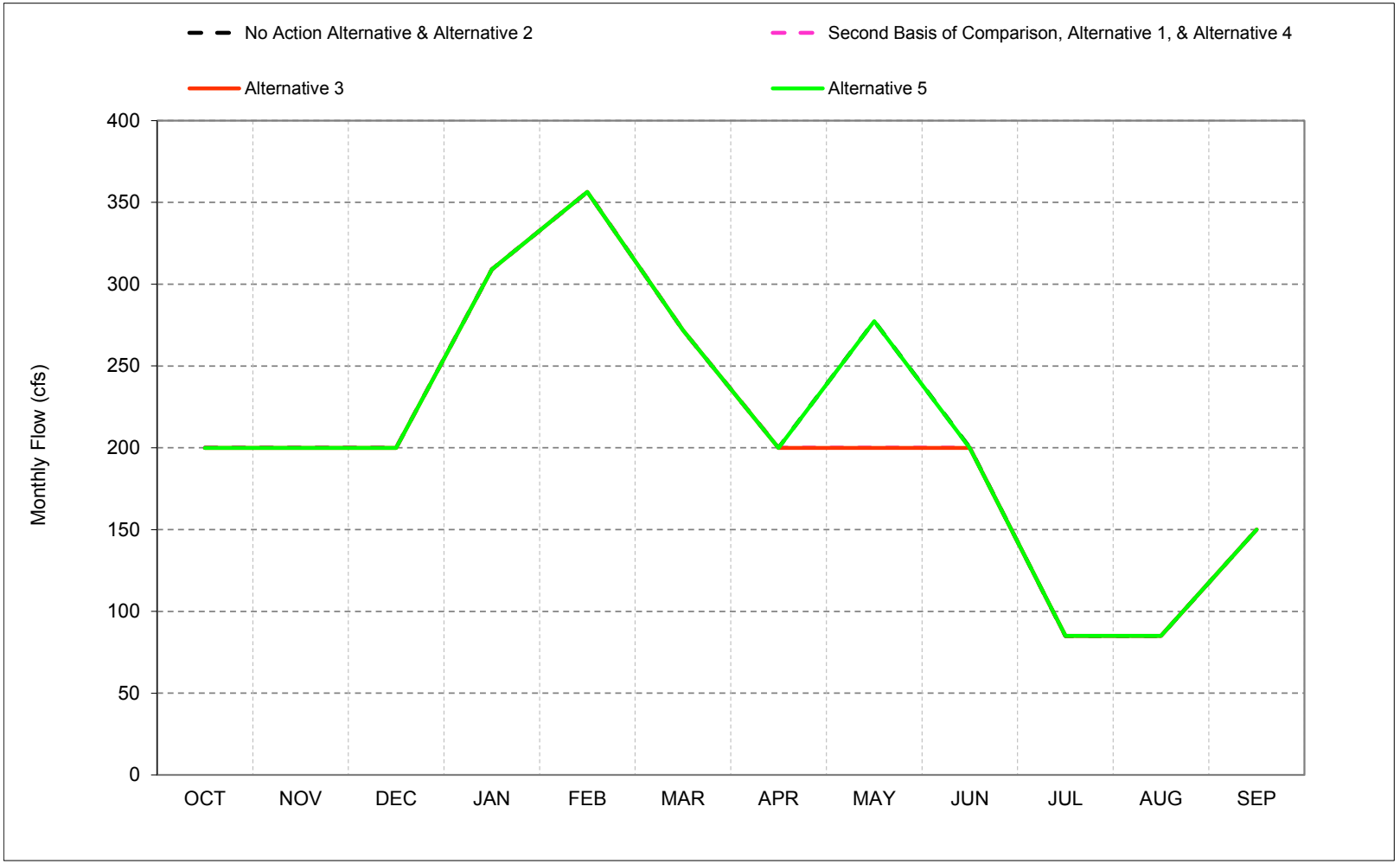
Figure C-22-1. Clear Creek below Whiskeytown, Long-Term* Average Flow



*Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-22-2. Clear Creek below Whiskeytown, Wet Year* Long-Term Average Flow**

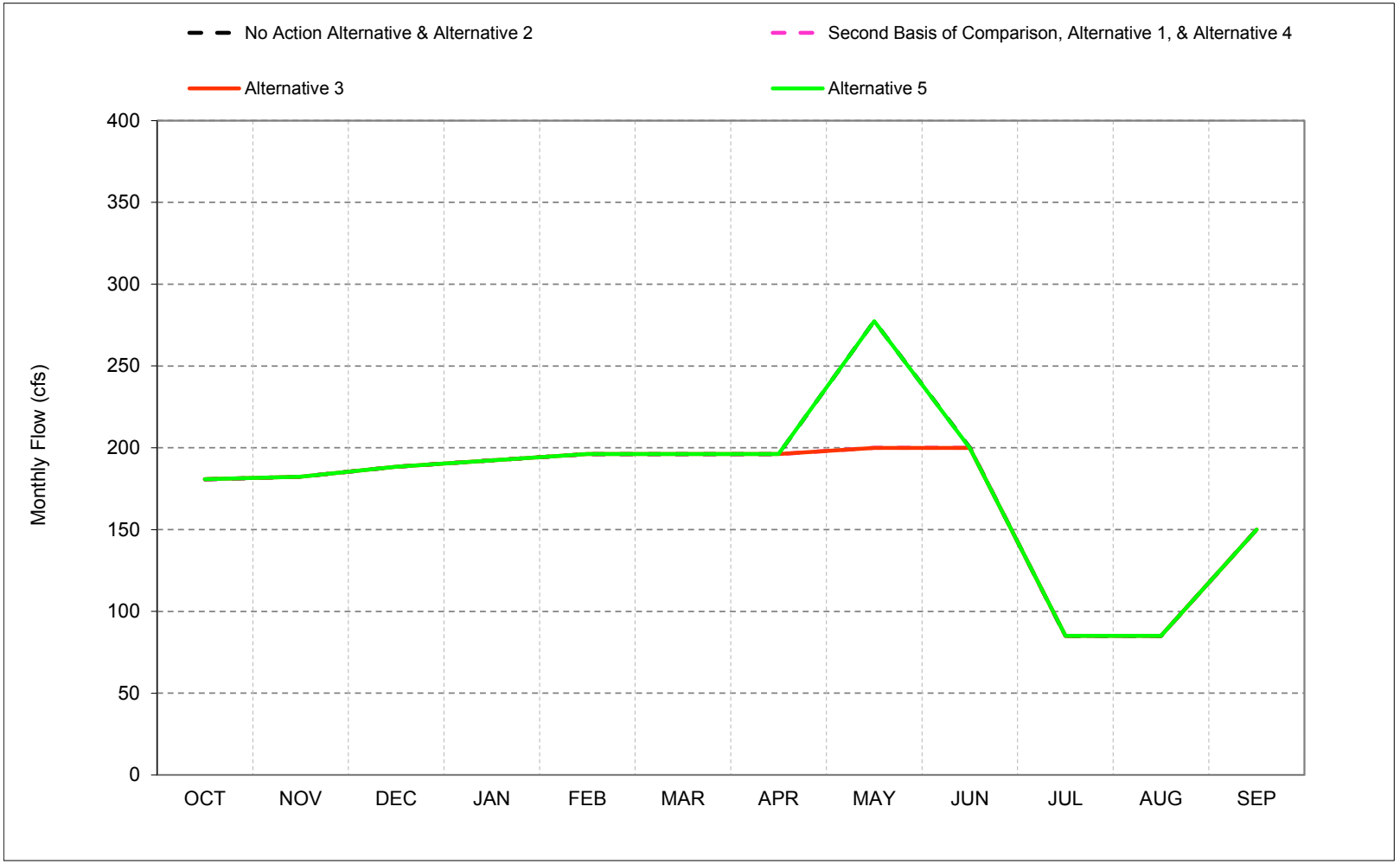


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-22-3. Clear Creek below Whiskeytown, Above Normal Year* Long-Term Average Flow**

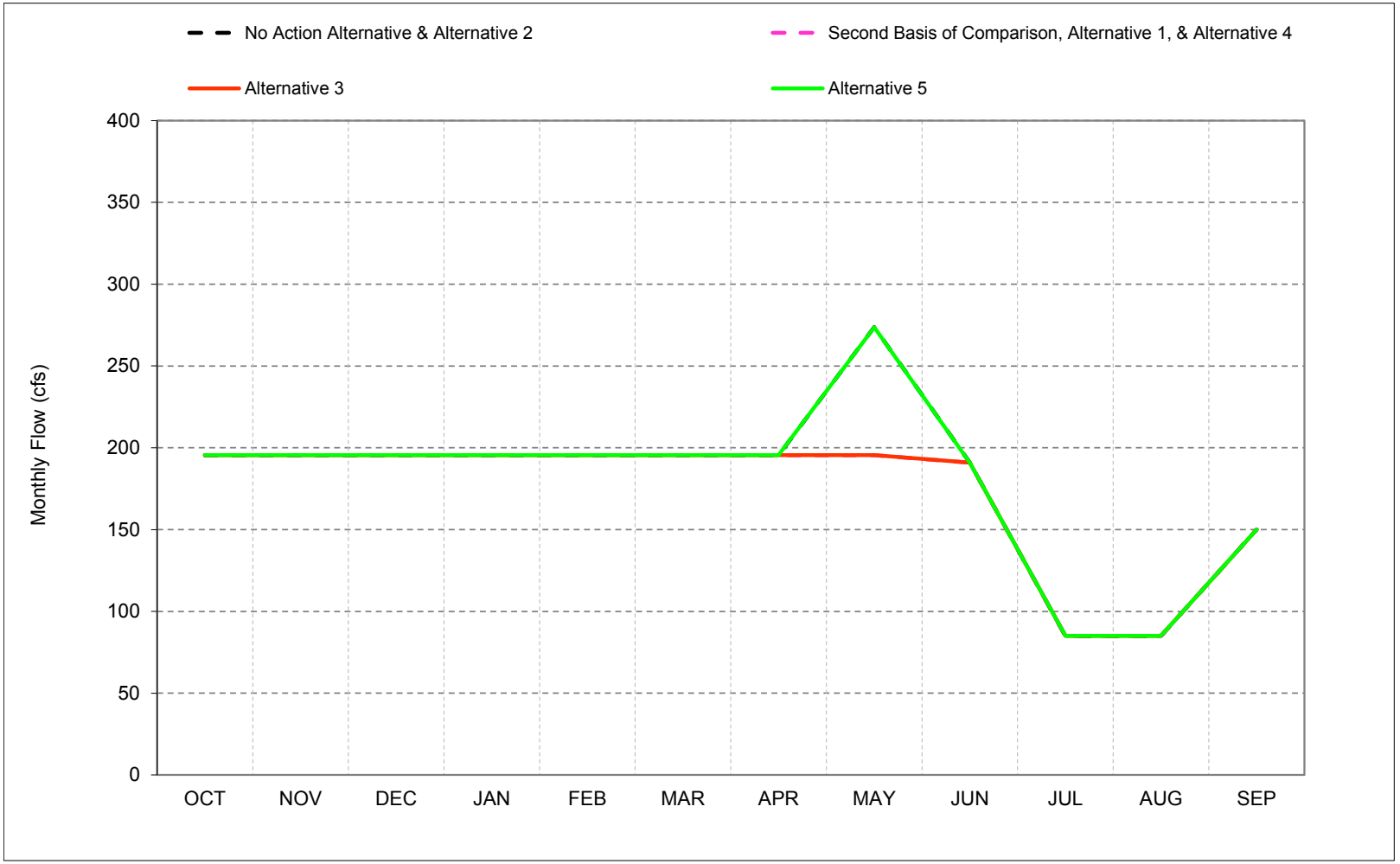


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-22-4. Clear Creek below Whiskeytown, Below Normal Year* Long-Term Average Flow**

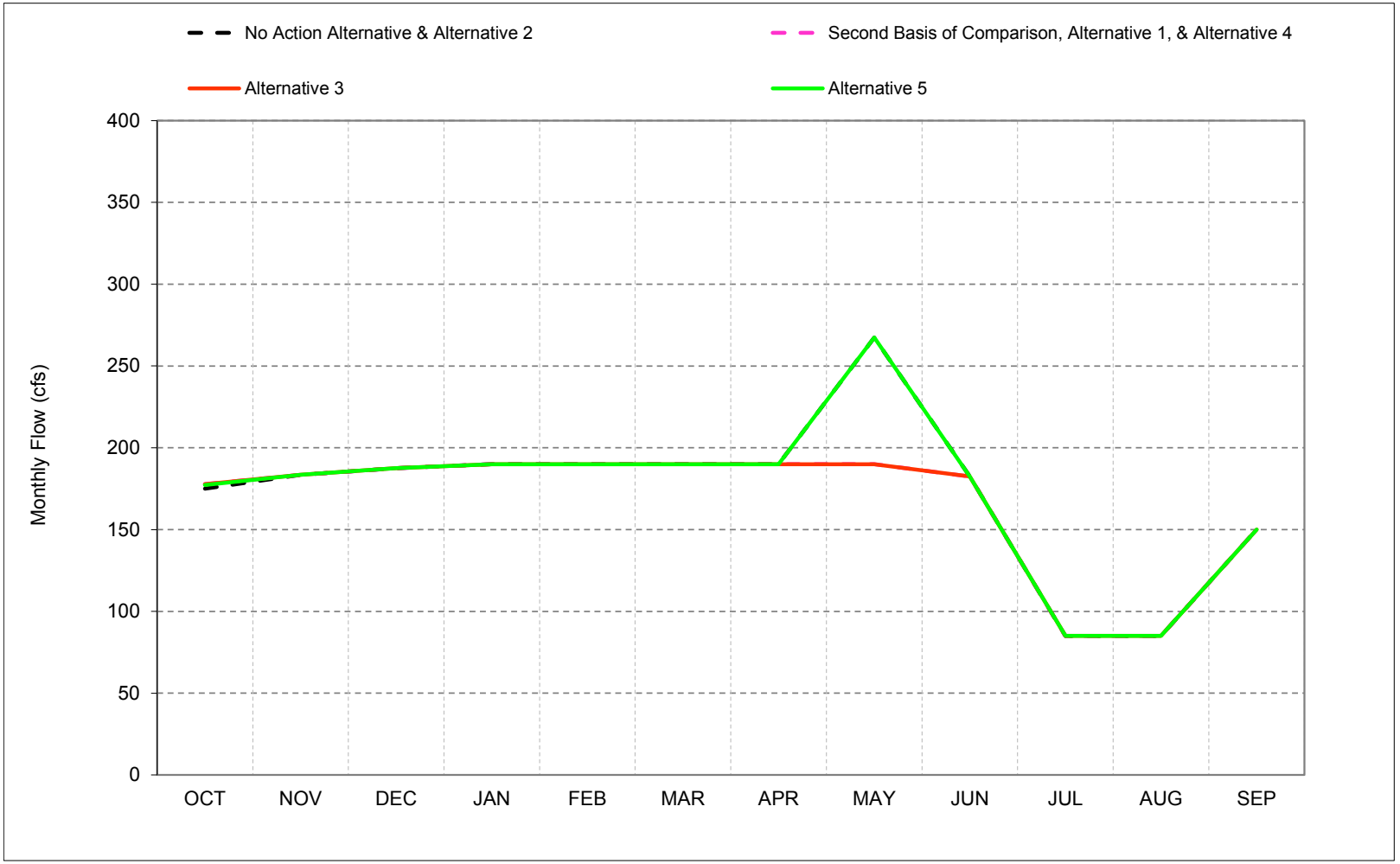


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-22-5. Clear Creek below Whiskeytown, Dry Year* Long-Term Average Flow**

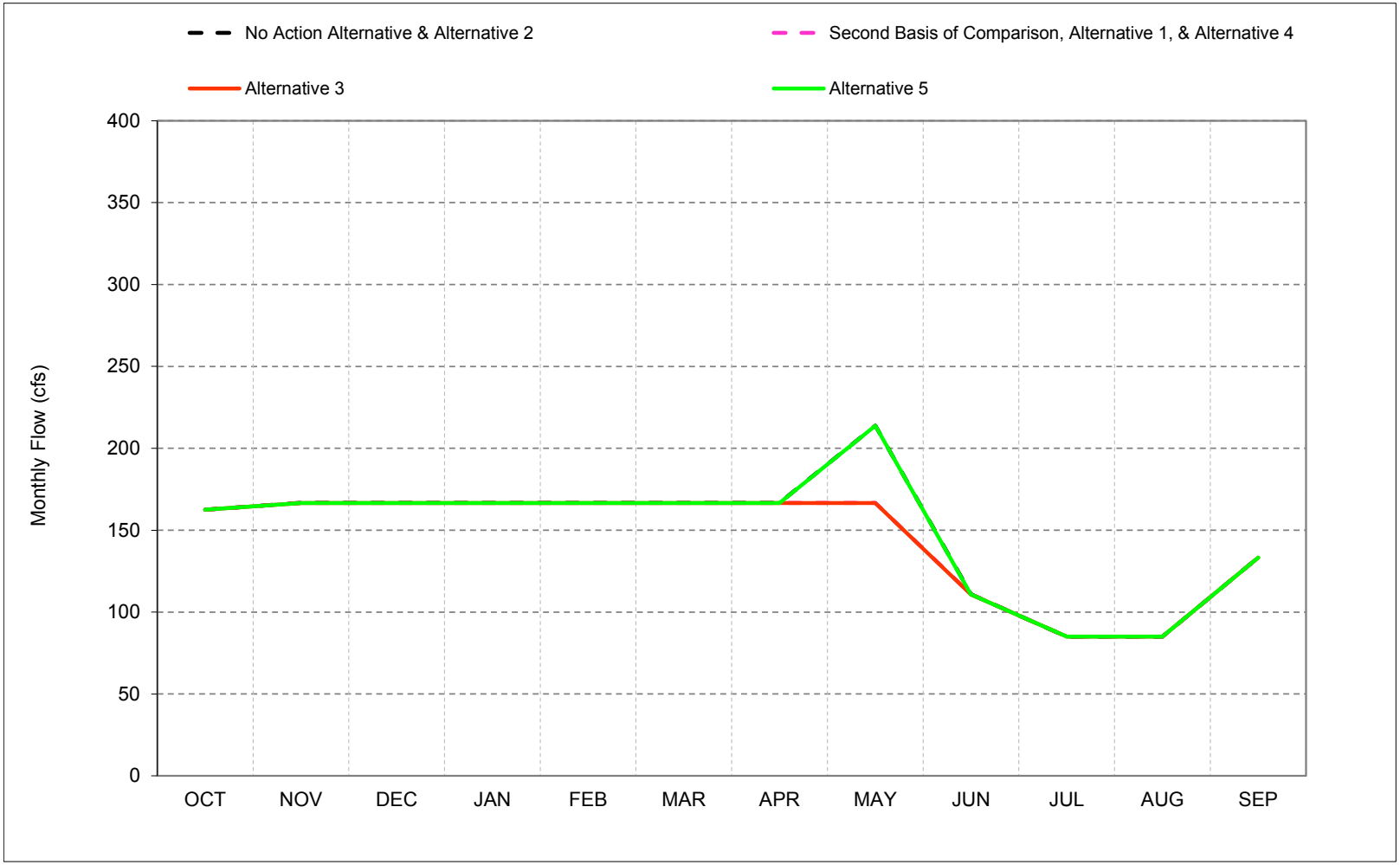


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-22-6. Clear Creek below Whiskeytown, Critical Year* Long-Term Average Flow**



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

**Based on the 82-year simulation period.

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 Alternatives 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 C-22-1. Clear Creek below Whiskeytown, Monthly Flow

No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	200	200	200	200	200	200	200	277	200	85	85	150
20%	200	200	200	200	200	200	200	277	200	85	85	150
30%	200	200	200	200	200	200	200	277	200	85	85	150
40%	200	200	200	200	200	200	200	277	200	85	85	150
50%	200	200	200	200	200	200	200	277	200	85	85	150
60%	200	200	200	200	200	200	200	277	200	85	85	150
70%	200	200	200	200	200	200	200	277	200	85	85	150
80%	200	200	200	200	200	200	200	277	150	85	85	150
90%	150	150	150	150	150	150	150	237	150	85	85	150
Long Term												
Full Simulation Period[b]	185	188	190	225	241	214	191	265	181	85	85	148
Water Year Types[c]												
Wet (32%)	200	200	200	309	356	272	200	277	200	85	85	150
Above Normal (16%)	181	182	188	192	196	196	196	277	200	85	85	150
Below Normal (13%)	195	195	195	195	195	195	195	274	191	85	85	150
Dry (24%)	175	184	188	190	190	190	190	267	183	85	85	150
Critical (15%)	163	167	167	167	167	167	167	214	111	85	85	133

Alternative 1

	Monthly Flow (cfs)											
Statistic	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

Alternative 1 minus No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	0	0	0	0	0	-77	0	0	0	0
20%	0	0	0	0	0	0	0	-77	0	0	0	0
30%	0	0	0	0	0	0	0	-77	0	0	0	0
40%	0	0	0	0	0	0	0	-77	0	0	0	0
50%	0	0	0	0	0	0	0	-77	0	0	0	0
60%	0	0	0	0	0	0	0	-77	0	0	0	0
70%	0	0	0	0	0	0	0	-77	0	0	0	0
80%	0	0	0	0	0	0	0	-77	0	0	0	0
90%	0	0	0	0	0	0	0	-87	0	0	0	0
Long Term												
Full Simulation Period[b]	1	0	0	0	0	0	0	-73	0	0	0	0
Water Year Types[c]												
Wet (32%)	0	0	0	0	0	0	0	-77	0	0	0	0
Above Normal (16%)	0	0	0	0	0	0	0	-77	0	0	0	0
Below Normal (13%)	0	0	0	0	0	0	0	-78	0	0	0	0
Dry (24%)	3	0	0	0	0	0	0	-77	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	-47	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 C-22-2. Clear Creek below Whiskeytown, Monthly Flow

No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	200	200	200	200	200	200	200	277	200	85	85	150
20%	200	200	200	200	200	200	200	277	200	85	85	150
30%	200	200	200	200	200	200	200	277	200	85	85	150
40%	200	200	200	200	200	200	200	277	200	85	85	150
50%	200	200	200	200	200	200	200	277	200	85	85	150
60%	200	200	200	200	200	200	200	277	200	85	85	150
70%	200	200	200	200	200	200	200	277	200	85	85	150
80%	200	200	200	200	200	200	200	277	150	85	85	150
90%	150	150	150	150	150	150	150	237	150	85	85	150
Long Term												
Full Simulation Period[b]	185	188	190	225	241	214	191	265	181	85	85	148
Water Year Types[c]												
Wet (32%)	200	200	200	309	356	272	200	277	200	85	85	150
Above Normal (16%)	181	182	188	192	196	196	196	277	200	85	85	150
Below Normal (13%)	195	195	195	195	195	195	195	274	191	85	85	150
Dry (24%)	175	184	188	190	190	190	190	267	183	85	85	150
Critical (15%)	163	167	167	167	167	167	167	214	111	85	85	133

Alternative 3

	Monthly Flow (cfs)											
Statistic	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

Alternative 3 minus No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	0	0	0	0	0	-77	0	0	0	0
20%	0	0	0	0	0	0	0	-77	0	0	0	0
30%	0	0	0	0	0	0	0	-77	0	0	0	0
40%	0	0	0	0	0	0	0	-77	0	0	0	0
50%	0	0	0	0	0	0	0	-77	0	0	0	0
60%	0	0	0	0	0	0	0	-77	0	0	0	0
70%	0	0	0	0	0	0	0	-77	0	0	0	0
80%	0	0	0	0	0	0	0	-77	0	0	0	0
90%	0	0	0	0	0	0	0	-87	0	0	0	0
Long Term												
Full Simulation Period[b]	1	0	0	0	0	0	0	-73	0	0	0	0
Water Year Types[c]												
Wet (32%)	0	0	0	0	0	0	0	-77	0	0	0	0
Above Normal (16%)	0	0	0	0	0	0	0	-77	0	0	0	0
Below Normal (13%)	0	0	0	0	0	0	0	-78	0	0	0	0
Dry (24%)	3	0	0	0	0	0	0	-77	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	-47	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 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 C-22-3. Clear Creek below Whiskeytown, Monthly Flow

No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	200	200	200	200	200	200	200	277	200	85	85	150
20%	200	200	200	200	200	200	200	277	200	85	85	150
30%	200	200	200	200	200	200	200	277	200	85	85	150
40%	200	200	200	200	200	200	200	277	200	85	85	150
50%	200	200	200	200	200	200	200	277	200	85	85	150
60%	200	200	200	200	200	200	200	277	200	85	85	150
70%	200	200	200	200	200	200	200	277	200	85	85	150
80%	200	200	200	200	200	200	200	277	150	85	85	150
90%	150	150	150	150	150	150	150	237	150	85	85	150
Long Term												
Full Simulation Period[b]	185	188	190	225	241	214	191	265	181	85	85	148
Water Year Types[c]												
Wet (32%)	200	200	200	309	356	272	200	277	200	85	85	150
Above Normal (16%)	181	182	188	192	196	196	196	277	200	85	85	150
Below Normal (13%)	195	195	195	195	195	195	195	274	191	85	85	150
Dry (24%)	175	184	188	190	190	190	190	267	183	85	85	150
Critical (15%)	163	167	167	167	167	167	167	214	111	85	85	133

Alternative 5

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	200	200	200	200	200	200	200	277	200	85	85	150
20%	200	200	200	200	200	200	200	277	200	85	85	150
30%	200	200	200	200	200	200	200	277	200	85	85	150
40%	200	200	200	200	200	200	200	277	200	85	85	150
50%	200	200	200	200	200	200	200	277	200	85	85	150
60%	200	200	200	200	200	200	200	277	200	85	85	150
70%	200	200	200	200	200	200	200	277	200	85	85	150
80%	200	200	200	200	200	200	200	277	150	85	85	150
90%	150	150	150	150	150	150	150	237	150	85	85	150
Long Term												
Full Simulation Period[b]	185	188	190	225	241	214	191	265	181	85	85	148
Water Year Types[c]												
Wet (32%)	200	200	200	309	356	272	200	277	200	85	85	150
Above Normal (16%)	181	182	188	192	196	196	196	277	200	85	85	150
Below Normal (13%)	195	195	195	195	195	195	195	274	191	85	85	150
Dry (24%)	177	184	188	190	190	190	190	267	183	85	85	150
Critical (15%)	163	167	167	167	167	167	167	214	111	85	85	133

Alternative 5 minus No Action Alternative

	Monthly Flow (cfs)											
Statistic	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]	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%)	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%)	2	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 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 C-22-4. Clear Creek below Whiskeytown, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	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

No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	200	200	200	200	200	200	200	277	200	85	85	150
20%	200	200	200	200	200	200	200	277	200	85	85	150
30%	200	200	200	200	200	200	200	277	200	85	85	150
40%	200	200	200	200	200	200	200	277	200	85	85	150
50%	200	200	200	200	200	200	200	277	200	85	85	150
60%	200	200	200	200	200	200	200	277	200	85	85	150
70%	200	200	200	200	200	200	200	277	200	85	85	150
80%	200	200	200	200	200	200	200	277	150	85	85	150
90%	150	150	150	150	150	150	150	237	150	85	85	150
Long Term												
Full Simulation Period[b]	185	188	190	225	241	214	191	265	181	85	85	148
Water Year Types[c]												
Wet (32%)	200	200	200	309	356	272	200	277	200	85	85	150
Above Normal (16%)	181	182	188	192	196	196	196	277	200	85	85	150
Below Normal (13%)	195	195	195	195	195	195	195	274	191	85	85	150
Dry (24%)	175	184	188	190	190	190	190	267	183	85	85	150
Critical (15%)	163	167	167	167	167	167	167	214	111	85	85	133

No Action Alternative minus Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	0	0	0	0	0	77	0	0	0	0
20%	0	0	0	0	0	0	0	77	0	0	0	0
30%	0	0	0	0	0	0	0	77	0	0	0	0
40%	0	0	0	0	0	0	0	77	0	0	0	0
50%	0	0	0	0	0	0	0	77	0	0	0	0
60%	0	0	0	0	0	0	0	77	0	0	0	0
70%	0	0	0	0	0	0	0	77	0	0	0	0
80%	0	0	0	0	0	0	0	77	0	0	0	0
90%	0	0	0	0	0	0	0	87	0	0	0	0
Long Term												
Full Simulation Period[b]	-1	0	0	0	0	0	0	73	0	0	0	0
Water Year Types[c]												
Wet (32%)	0	0	0	0	0	0	0	77	0	0	0	0
Above Normal (16%)	0	0	0	0	0	0	0	77	0	0	0	0
Below Normal (13%)	0	0	0	0	0	0	0	78	0	0	0	0
Dry (24%)	-3	0	0	0	0	0	0	77	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	47	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 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 C-22-5. Clear Creek below Whiskeytown, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	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

Alternative 3

	Monthly Flow (cfs)											
Statistic	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

Alternative 3 minus Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	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 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 C-22-6. Clear Creek below Whiskeytown, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	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

Alternative 5

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	200	200	200	200	200	200	200	277	200	85	85	150
20%	200	200	200	200	200	200	200	277	200	85	85	150
30%	200	200	200	200	200	200	200	277	200	85	85	150
40%	200	200	200	200	200	200	200	277	200	85	85	150
50%	200	200	200	200	200	200	200	277	200	85	85	150
60%	200	200	200	200	200	200	200	277	200	85	85	150
70%	200	200	200	200	200	200	200	277	200	85	85	150
80%	200	200	200	200	200	200	200	277	150	85	85	150
90%	150	150	150	150	150	150	150	237	150	85	85	150
Long Term												
Full Simulation Period[b]	185	188	190	225	241	214	191	265	181	85	85	148
Water Year Types[c]												
Wet (32%)	200	200	200	309	356	272	200	277	200	85	85	150
Above Normal (16%)	181	182	188	192	196	196	196	277	200	85	85	150
Below Normal (13%)	195	195	195	195	195	195	195	274	191	85	85	150
Dry (24%)	177	184	188	190	190	190	190	267	183	85	85	150
Critical (15%)	163	167	167	167	167	167	167	214	111	85	85	133

Alternative 5 minus Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	0	0	0	0	0	77	0	0	0	0
20%	0	0	0	0	0	0	0	77	0	0	0	0
30%	0	0	0	0	0	0	0	77	0	0	0	0
40%	0	0	0	0	0	0	0	77	0	0	0	0
50%	0	0	0	0	0	0	0	77	0	0	0	0
60%	0	0	0	0	0	0	0	77	0	0	0	0
70%	0	0	0	0	0	0	0	77	0	0	0	0
80%	0	0	0	0	0	0	0	77	0	0	0	0
90%	0	0	0	0	0	0	0	87	0	0	0	0
Long Term												
Full Simulation Period[b]	0	0	0	0	0	0	0	73	0	0	0	0
Water Year Types[c]												
Wet (32%)	0	0	0	0	0	0	0	77	0	0	0	0
Above Normal (16%)	0	0	0	0	0	0	0	77	0	0	0	0
Below Normal (13%)	0	0	0	0	0	0	0	78	0	0	0	0
Dry (24%)	-1	0	0	0	0	0	0	77	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	47	0	0	0	0

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

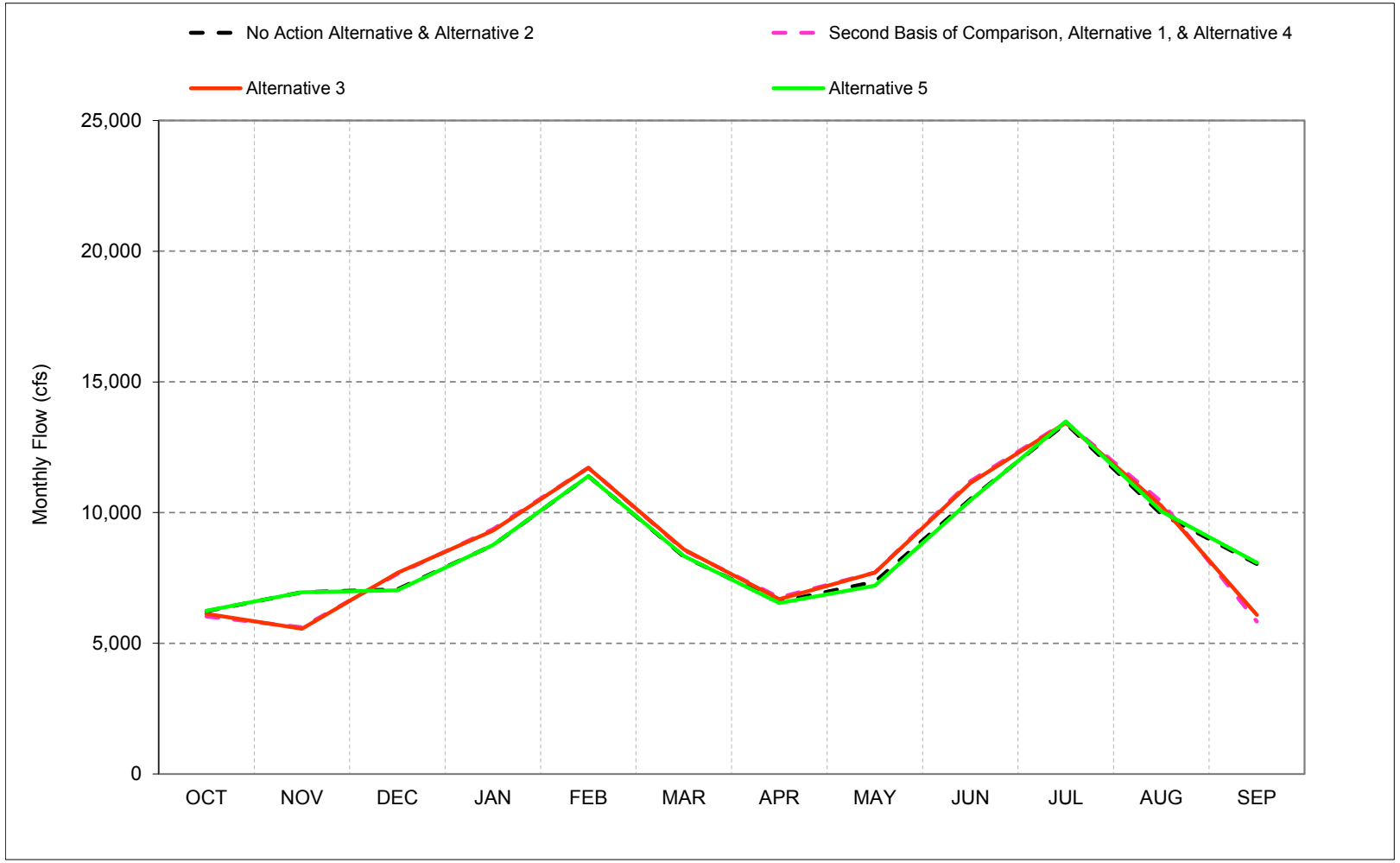
b Based on the 82-year simulation period.

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 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.

C.23. Sacramento River Flow downstream of Keswick Reservoir

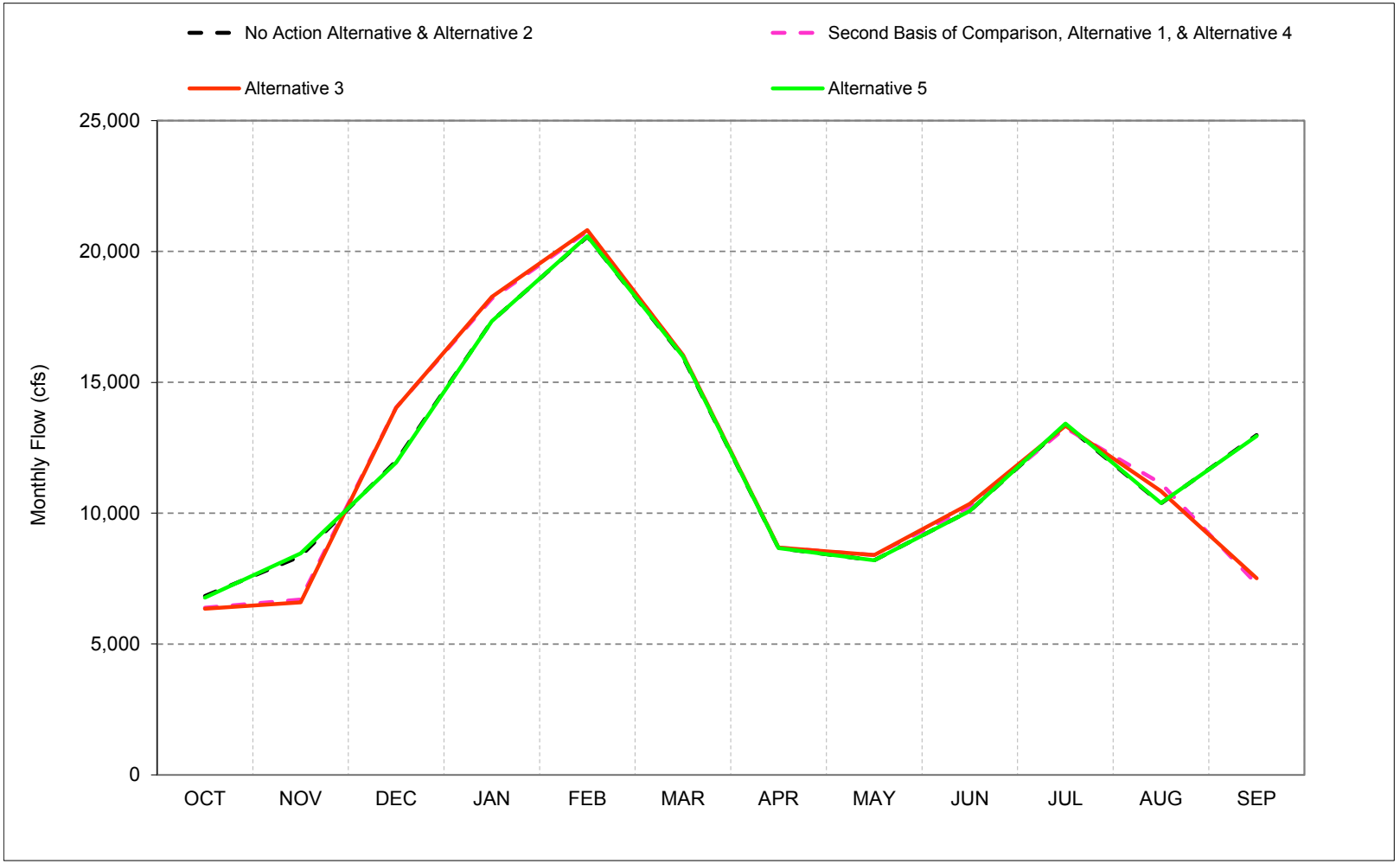
Figure C-23-1. Sacramento River d/s of Keswick Reservoir, Long-Term* Average Flow



*Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-23-2. Sacramento River d/s of Keswick Reservoir, Wet Year* Long-Term Average Flow**

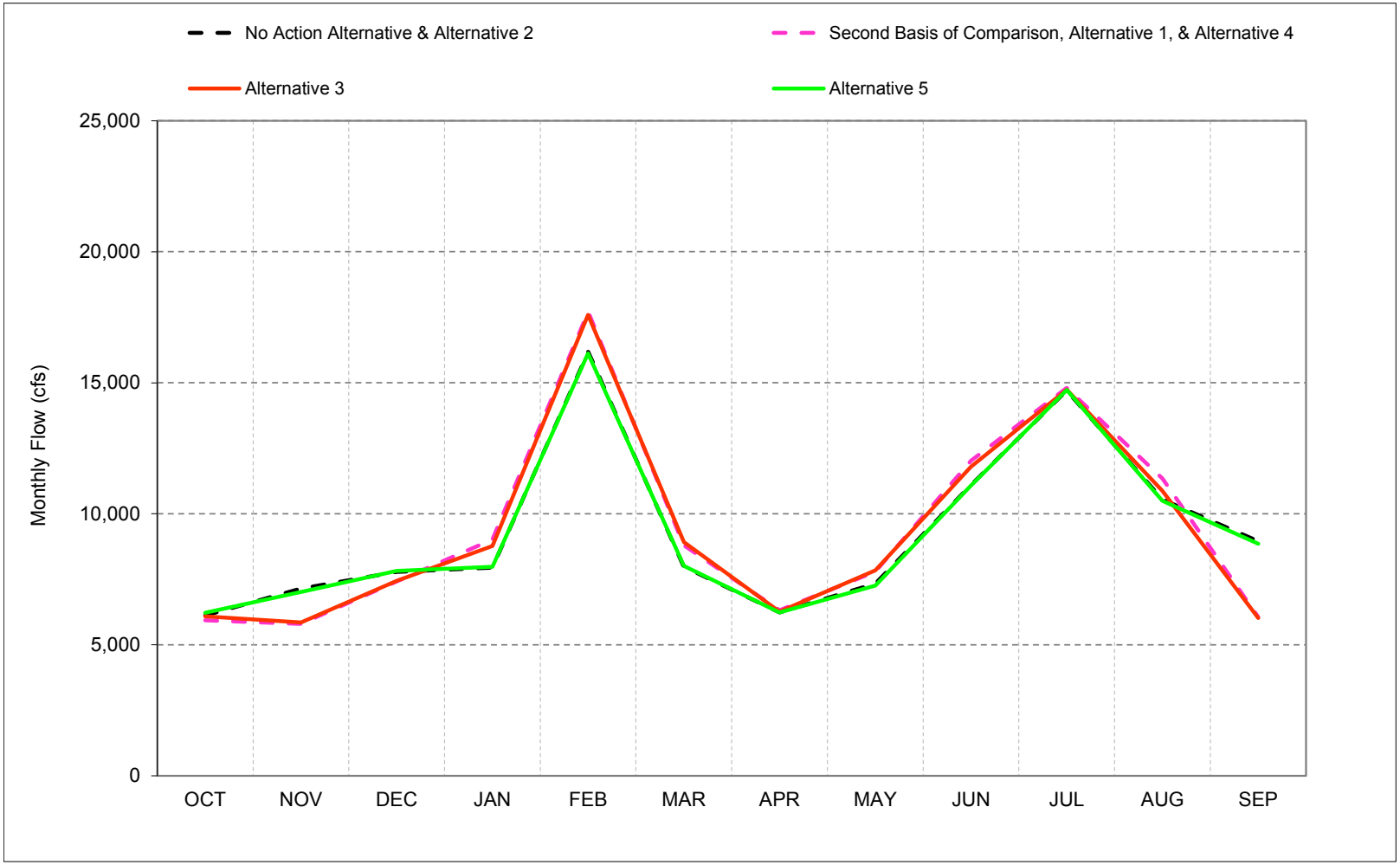


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-23-3. Sacramento River d/s of Keswick Reservoir, Above Normal Year* Long-Term Average Flow**

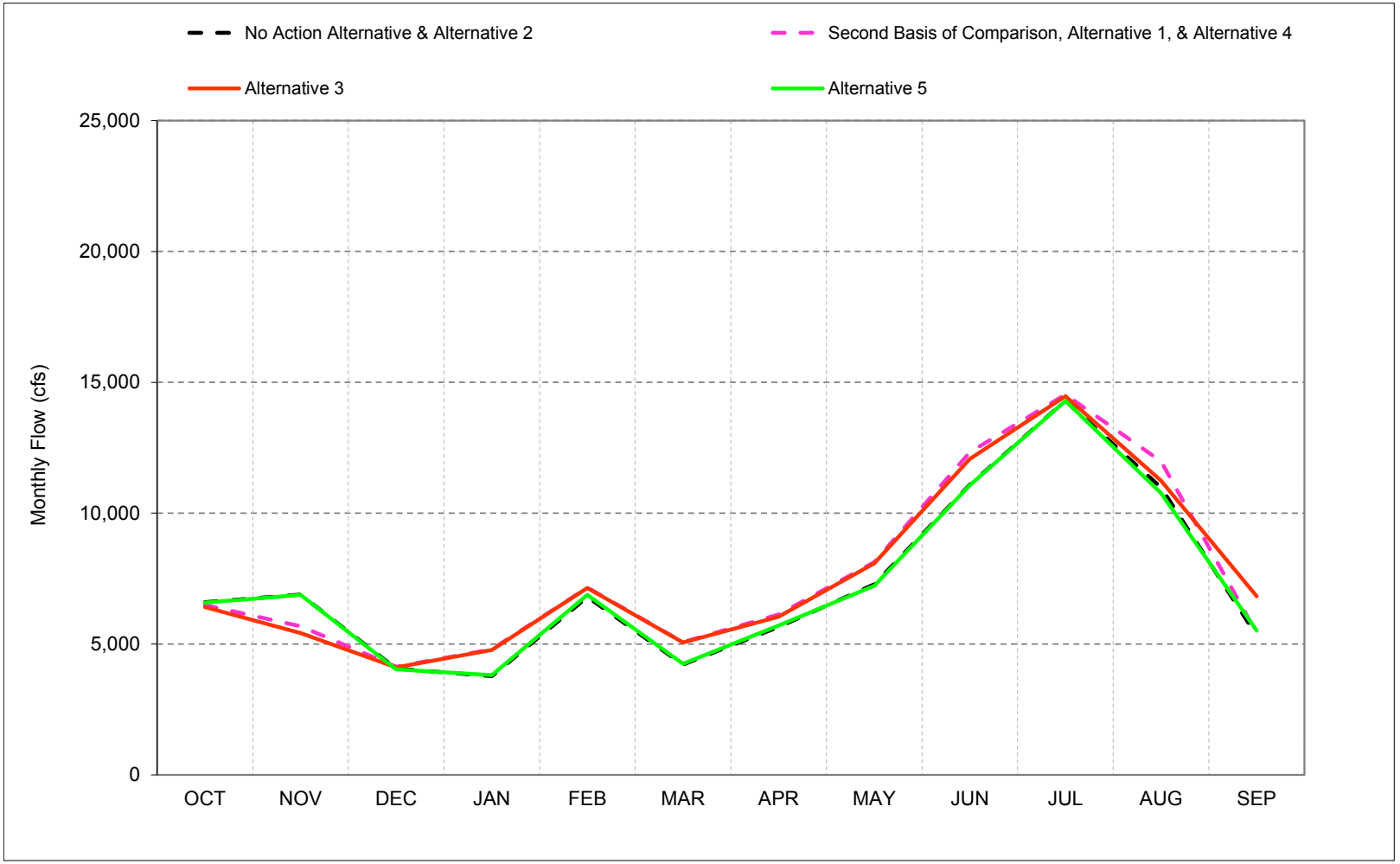


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-23-4. Sacramento River d/s of Keswick Reservoir, Below Normal Year* Long-Term Average Flow**

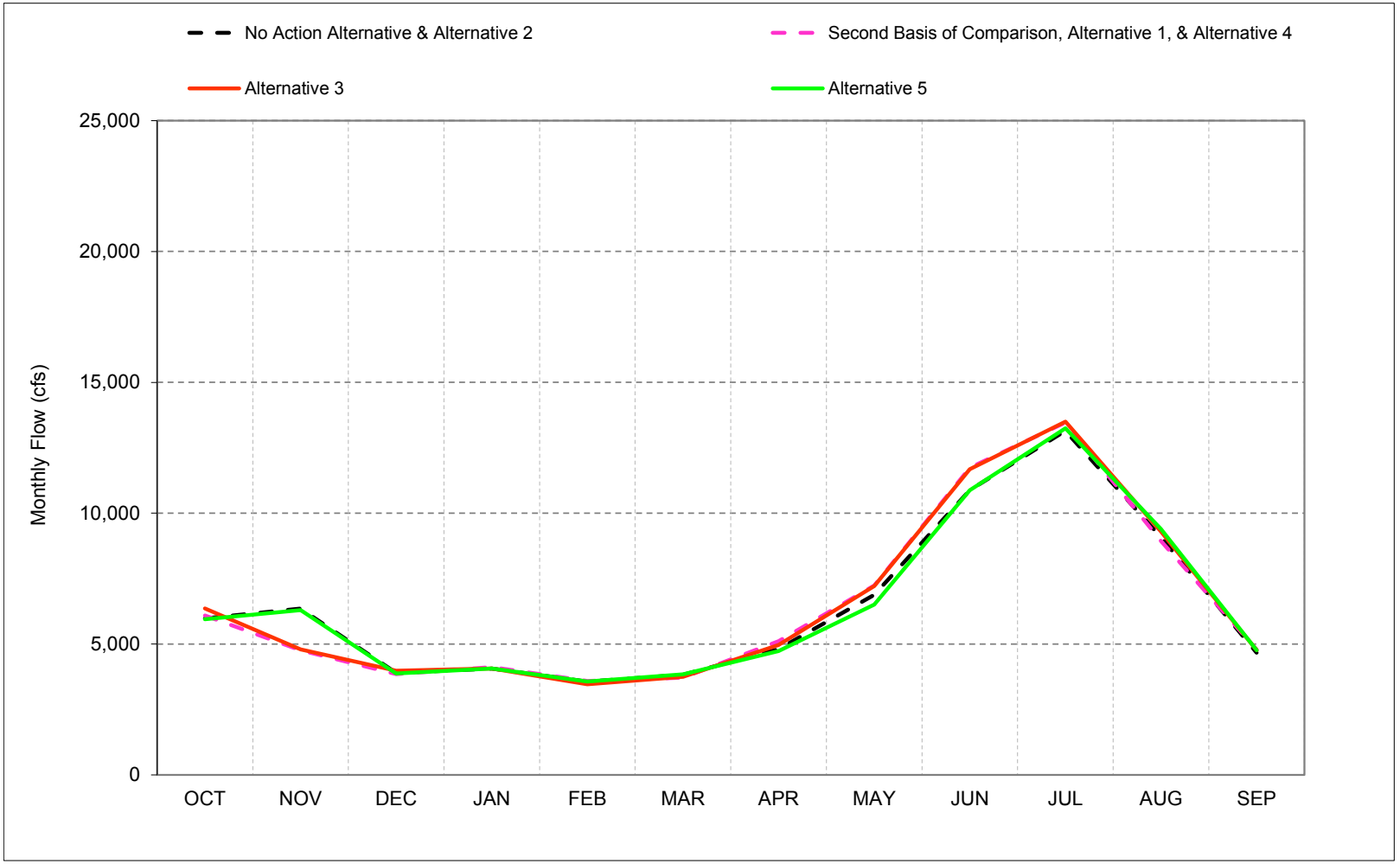


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-23-5. Sacramento River d/s of Keswick Reservoir, Dry Year* Long-Term Average Flow**

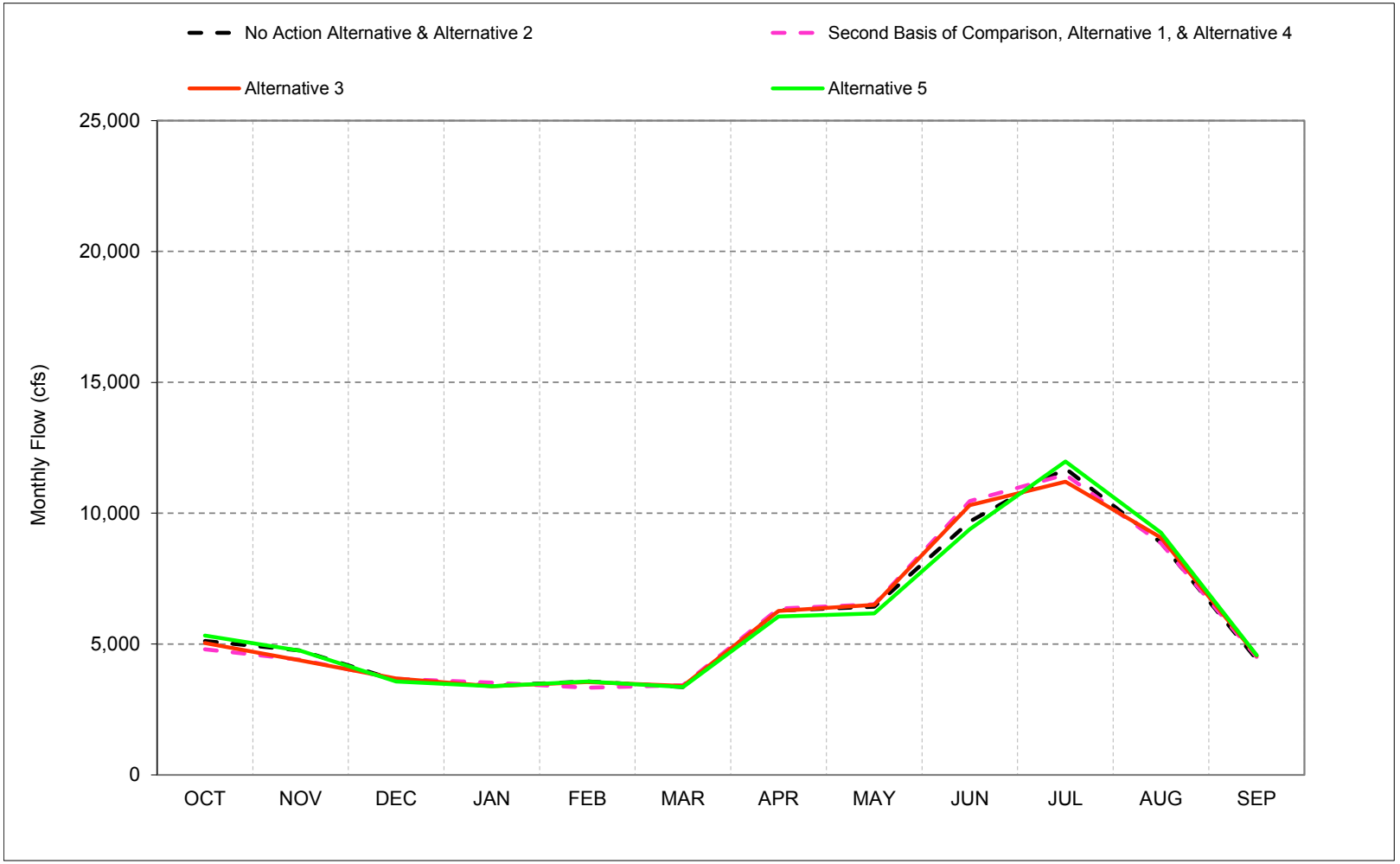


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-23-6. Sacramento River d/s of Keswick Reservoir, Critical Year* Long-Term Average Flow**



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

**Based on the 82-year simulation period.

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 Alternatives 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 C-23-1. Sacramento River d/s of Keswick Reservoir, 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%	8,539	11,351	16,050	19,967	30,773	18,389	10,234	9,624	13,028	15,000	11,592	14,752
20%	7,985	10,020	9,276	12,176	21,412	12,120	7,602	8,744	11,826	15,000	10,909	12,155
30%	7,297	8,317	5,359	7,873	10,878	7,676	6,731	8,256	11,248	15,000	10,724	10,381
40%	6,760	7,008	4,368	4,500	5,039	4,500	5,853	7,615	10,563	14,570	10,286	8,919
50%	5,983	5,888	4,000	4,126	4,500	4,214	5,356	7,192	10,254	13,991	9,978	6,151
60%	5,404	4,822	3,976	3,640	3,565	3,513	5,000	6,503	9,958	13,279	9,568	5,274
70%	5,001	4,379	3,524	3,251	3,250	3,250	4,500	6,168	9,430	12,770	9,152	4,693
80%	4,618	4,000	3,253	3,250	3,250	3,250	4,500	5,666	8,828	11,848	8,861	4,391
90%	4,292	3,502	3,250	3,250	3,250	3,250	3,702	5,145	8,406	10,797	8,089	4,145
Long Term												
Full Simulation Period[b]	6,232	6,954	7,064	8,758	11,392	8,318	6,589	7,361	10,520	13,413	9,951	8,038
Water Year Types[c]												
Wet (32%)	6,837	8,356	11,995	17,343	20,568	15,965	8,669	8,200	10,089	13,385	10,377	12,981
Above Normal (16%)	6,122	7,147	7,783	7,948	16,181	7,984	6,239	7,340	11,102	14,701	10,545	8,958
Below Normal (13%)	6,600	6,895	4,067	3,778	6,800	4,216	5,660	7,283	11,096	14,296	10,988	5,333
Dry (24%)	5,981	6,359	3,899	4,070	3,569	3,827	4,807	6,887	10,885	13,146	9,085	4,673
Critical (15%)	5,119	4,757	3,621	3,410	3,571	3,360	6,285	6,428	9,683	11,714	8,877	4,418

Alternative 1

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

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%	-31	-3,775	3,459	179	101	182	-58	568	1,506	0	1,131	-5,781
20%	-95	-3,227	2,186	2,985	0	598	618	487	1,215	0	976	-5,746
30%	59	-2,731	728	1,105	2,261	682	240	215	994	0	485	-4,352
40%	-624	-1,798	-39	237	336	0	467	313	870	69	440	-3,252
50%	-268	-1,029	0	207	0	286	375	266	760	93	369	-676
60%	-147	-458	-27	158	170	155	202	595	416	230	323	-27
70%	-130	-198	150	0	0	0	0	328	545	281	129	-57
80%	-229	0	23	0	0	0	0	428	381	14	124	-79
90%	-292	0	0	0	0	0	11	358	-4	-106	62	2
Long Term												
Full Simulation Period[b]	-204	-1,340	596	608	326	251	164	347	684	50	466	-2,202
Water Year Types[c]												
Wet (32%)	-446	-1,651	2,044	848	205	73	17	198	154	-131	766	-5,675
Above Normal (16%)	-182	-1,346	-366	1,076	1,528	816	78	449	926	103	806	-2,893
Below Normal (13%)	-109	-1,215	67	1,027	356	860	467	846	1,238	238	1,000	96
Dry (24%)	111	-1,591	-44	53	22	-111	300	353	852	319	-146	121
Critical (15%)	-314	-353	54	123	-236	71	70	91	782	-239	-23	96

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 C-23-2. Sacramento River d/s of Keswick Reservoir, 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%	8,539	11,351	16,050	19,967	30,773	18,389	10,234	9,624	13,028	15,000	11,592	14,752
20%	7,985	10,020	9,276	12,176	21,412	12,120	7,602	8,744	11,826	15,000	10,909	12,155
30%	7,297	8,317	5,359	7,873	10,878	7,676	6,731	8,256	11,248	15,000	10,724	10,381
40%	6,760	7,008	4,368	4,500	5,039	4,500	5,853	7,615	10,563	14,570	10,286	8,919
50%	5,983	5,888	4,000	4,126	4,500	4,214	5,356	7,192	10,254	13,991	9,978	6,151
60%	5,404	4,822	3,976	3,640	3,565	3,513	5,000	6,503	9,958	13,279	9,568	5,274
70%	5,001	4,379	3,524	3,251	3,250	3,250	4,500	6,168	9,430	12,770	9,152	4,693
80%	4,618	4,000	3,253	3,250	3,250	3,250	4,500	5,666	8,828	11,848	8,861	4,391
90%	4,292	3,502	3,250	3,250	3,250	3,250	3,702	5,145	8,406	10,797	8,089	4,145
Long Term												
Full Simulation Period[b]	6,232	6,954	7,064	8,758	11,392	8,318	6,589	7,361	10,520	13,413	9,951	8,038
Water Year Types[c]												
Wet (32%)	6,837	8,356	11,995	17,343	20,568	15,965	8,669	8,200	10,089	13,385	10,377	12,981
Above Normal (16%)	6,122	7,147	7,783	7,948	16,181	7,984	6,239	7,340	11,102	14,701	10,545	8,958
Below Normal (13%)	6,600	6,895	4,067	3,778	6,800	4,216	5,660	7,283	11,096	14,296	10,988	5,333
Dry (24%)	5,981	6,359	3,899	4,070	3,569	3,827	4,807	6,887	10,885	13,146	9,085	4,673
Critical (15%)	5,119	4,757	3,621	3,410	3,571	3,360	6,285	6,428	9,683	11,714	8,877	4,418

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	8,508	7,587	19,593	21,351	32,017	18,576	10,175	10,159	14,138	15,000	11,998	8,758
20%	8,095	6,362	11,532	15,117	21,412	12,718	8,146	9,311	13,148	15,000	11,420	7,492
30%	7,291	5,638	5,887	8,978	12,526	8,359	6,954	8,617	12,022	15,000	11,107	6,335
40%	6,536	5,073	4,450	4,500	6,142	4,500	6,056	7,930	11,316	14,717	10,669	5,916
50%	5,729	4,755	4,077	4,184	4,500	4,500	5,368	7,437	10,905	14,368	10,087	5,590
60%	5,223	4,361	3,976	3,706	3,565	3,547	5,053	7,055	10,464	13,336	9,838	5,137
70%	4,867	4,160	3,655	3,250	3,250	3,250	4,500	6,478	10,022	12,638	9,556	4,817
80%	4,503	4,000	3,294	3,250	3,250	3,250	4,500	6,060	9,302	11,876	8,943	4,361
90%	4,114	3,501	3,250	3,250	3,250	3,250	3,717	5,503	8,397	10,803	8,489	4,186
Long Term												
Full Simulation Period[b]	6,130	5,556	7,692	9,315	11,713	8,592	6,689	7,706	11,131	13,440	10,268	6,083
Water Year Types[c]												
Wet (32%)	6,352	6,595	14,028	18,268	20,814	16,038	8,692	8,405	10,360	13,341	10,845	7,512
Above Normal (16%)	6,088	5,850	7,442	8,771	17,594	8,923	6,263	7,839	11,793	14,732	10,881	6,029
Below Normal (13%)	6,415	5,424	4,116	4,781	7,144	5,061	6,045	8,088	12,075	14,472	11,247	6,827
Dry (24%)	6,362	4,793	3,982	4,073	3,468	3,755	4,970	7,223	11,682	13,500	9,299	4,770
Critical (15%)	5,047	4,375	3,694	3,396	3,555	3,398	6,266	6,501	10,302	11,206	9,074	4,555

Alternative 3 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%	-31	-3,764	3,543	1,383	1,245	187	-59	535	1,110	0	406	-5,995
20%	110	-3,659	2,256	2,941	0	598	544	567	1,322	0	510	-4,663
30%	-6	-2,680	528	1,105	1,648	682	223	361	774	0	383	-4,047
40%	-224	-1,935	82	0	1,102	0	203	315	754	147	383	-3,002
50%	-254	-1,133	77	57	0	286	13	246	651	377	109	-561
60%	-181	-461	0	66	0	34	52	552	506	57	270	-137
70%	-134	-219	131	-1	0	0	0	310	592	-132	404	123
80%	-116	0	42	0	0	0	0	393	474	29	81	-29
90%	-178	0	0	0	0	0	15	357	-9	6	401	42
Long Term												
Full Simulation Period[b]	-102	-1,399	628	557	321	273	100	345	612	27	318	-1,954
Water Year Types[c]												
Wet (32%)	-485	-1,760	2,033	925	246	73	23	205	270	-44	468	-5,469
Above Normal (16%)	-34	-1,296	-341	823	1,413	939	24	499	692	32	336	-2,929
Below Normal (13%)	-186	-1,472	49	1,002	344	845	385	805	979	176	258	1,493
Dry (24%)	381	-1,566	84	3	-101	-72	163	337	797	355	215	97
Critical (15%)	-73	-382	73	-14	-16	38	-19	73	618	-508	197	137

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 C-23-3. Sacramento River d/s of Keswick Reservoir, Monthly Flow

No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	8,539	11,351	16,050	19,967	30,773	18,389	10,234	9,624	13,028	15,000	11,592	14,752
20%	7,985	10,020	9,276	12,176	21,412	12,120	7,602	8,744	11,826	15,000	10,909	12,155
30%	7,297	8,317	5,359	7,873	10,878	7,676	6,731	8,256	11,248	15,000	10,724	10,381
40%	6,760	7,008	4,368	4,500	5,039	4,500	5,853	7,615	10,563	14,570	10,286	8,919
50%	5,983	5,888	4,000	4,126	4,500	4,214	5,356	7,192	10,254	13,991	9,978	6,151
60%	5,404	4,822	3,976	3,640	3,565	3,513	5,000	6,503	9,958	13,279	9,568	5,274
70%	5,001	4,379	3,524	3,251	3,250	3,250	4,500	6,168	9,430	12,770	9,152	4,693
80%	4,618	4,000	3,253	3,250	3,250	3,250	4,500	5,666	8,828	11,848	8,861	4,391
90%	4,292	3,502	3,250	3,250	3,250	3,250	3,702	5,145	8,406	10,797	8,089	4,145
Long Term												
Full Simulation Period[b]	6,232	6,954	7,064	8,758	11,392	8,318	6,589	7,361	10,520	13,413	9,951	8,038
Water Year Types[c]												
Wet (32%)	6,837	8,356	11,995	17,343	20,568	15,965	8,669	8,200	10,089	13,385	10,377	12,981
Above Normal (16%)	6,122	7,147	7,783	7,948	16,181	7,984	6,239	7,340	11,102	14,701	10,545	8,958
Below Normal (13%)	6,600	6,895	4,067	3,778	6,800	4,216	5,660	7,283	11,096	14,296	10,988	5,333
Dry (24%)	5,981	6,359	3,899	4,070	3,569	3,827	4,807	6,887	10,885	13,146	9,085	4,673
Critical (15%)	5,119	4,757	3,621	3,410	3,571	3,360	6,285	6,428	9,683	11,714	8,877	4,418

Alternative 5

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	8,668	11,324	15,764	19,967	30,605	18,389	10,163	9,387	12,940	15,000	11,641	14,750
20%	7,868	10,000	9,191	12,163	21,412	12,271	7,595	8,527	11,910	15,000	11,065	11,992
30%	7,258	8,490	5,272	7,912	10,813	7,676	6,656	7,950	11,187	15,000	10,814	10,346
40%	6,651	7,099	4,275	4,500	5,039	4,500	5,875	7,559	10,628	14,598	10,451	8,736
50%	5,959	5,836	4,000	4,126	4,500	4,214	5,314	7,068	10,168	14,173	10,062	5,933
60%	5,518	4,834	3,975	3,671	3,565	3,547	5,003	6,436	9,875	13,393	9,635	5,357
70%	5,048	4,341	3,522	3,250	3,250	3,250	4,500	6,075	9,405	12,954	9,326	4,944
80%	4,818	4,000	3,253	3,250	3,250	3,250	4,500	5,822	8,795	11,851	8,818	4,505
90%	4,427	3,483	3,250	3,250	3,250	3,250	3,702	5,146	8,384	10,611	8,326	4,231
Long Term												
Full Simulation Period[b]	6,247	6,952	7,033	8,765	11,399	8,336	6,545	7,214	10,464	13,490	10,050	8,082
Water Year Types[c]												
Wet (32%)	6,770	8,471	11,936	17,340	20,582	15,979	8,670	8,203	10,080	13,420	10,387	12,950
Above Normal (16%)	6,222	7,015	7,819	7,984	16,119	8,008	6,238	7,262	11,075	14,723	10,501	8,858
Below Normal (13%)	6,583	6,886	4,038	3,814	6,882	4,245	5,705	7,231	11,063	14,293	10,767	5,512
Dry (24%)	5,947	6,300	3,874	4,070	3,576	3,848	4,737	6,509	10,882	13,247	9,397	4,768
Critical (15%)	5,330	4,741	3,569	3,396	3,569	3,363	6,060	6,177	9,388	11,977	9,259	4,574

Alternative 5 minus No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	128	-26	-286	0	-167	0	-71	-237	-88	0	49	-2
20%	-117	-20	-85	-13	0	151	-7	-217	84	0	156	-163
30%	-39	172	-87	39	-65	0	-75	-306	-61	0	90	-36
40%	-108	91	-93	0	0	0	22	-56	65	28	165	-183
50%	-24	-51	0	0	0	0	-42	-124	-86	181	84	-218
60%	114	12	0	30	0	34	3	-67	-83	114	67	84
70%	47	-38	-2	-1	0	0	0	-93	-24	184	173	251
80%	200	0	0	0	0	0	0	156	-33	3	-44	114
90%	136	-19	0	0	0	0	0	0	-22	-187	237	87
Long Term												
Full Simulation Period[b]	15	-2	-31	8	7	18	-44	-147	-56	78	99	44
Water Year Types[c]												
Wet (32%)	-67	115	-59	-3	14	15	0	3	-10	36	10	-31
Above Normal (16%)	100	-132	36	36	-62	24	-1	-78	-27	23	-43	-100
Below Normal (13%)	-18	-10	-29	36	82	29	46	-52	-33	-3	-221	179
Dry (24%)	-33	-59	-25	0	7	21	-70	-378	-3	101	312	94
Critical (15%)	210	-16	-52	-14	-2	3	-225	-251	-295	263	381	157

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 C-23-4. Sacramento River d/s of Keswick Reservoir, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	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

No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	8,539	11,351	16,050	19,967	30,773	18,389	10,234	9,624	13,028	15,000	11,592	14,752
20%	7,985	10,020	9,276	12,176	21,412	12,120	7,602	8,744	11,826	15,000	10,909	12,155
30%	7,297	8,317	5,359	7,873	10,878	7,676	6,731	8,256	11,248	15,000	10,724	10,381
40%	6,760	7,008	4,368	4,500	5,039	4,500	5,853	7,615	10,563	14,570	10,286	8,919
50%	5,983	5,888	4,000	4,126	4,500	4,214	5,356	7,192	10,254	13,991	9,978	6,151
60%	5,404	4,822	3,976	3,640	3,565	3,513	5,000	6,503	9,958	13,279	9,568	5,274
70%	5,001	4,379	3,524	3,251	3,250	3,250	4,500	6,168	9,430	12,770	9,152	4,693
80%	4,618	4,000	3,253	3,250	3,250	3,250	4,500	5,666	8,828	11,848	8,861	4,391
90%	4,292	3,502	3,250	3,250	3,250	3,250	3,702	5,145	8,406	10,797	8,089	4,145
Long Term												
Full Simulation Period[b]	6,232	6,954	7,064	8,758	11,392	8,318	6,589	7,361	10,520	13,413	9,951	8,038
Water Year Types[c]												
Wet (32%)	6,837	8,356	11,995	17,343	20,568	15,965	8,669	8,200	10,089	13,385	10,377	12,981
Above Normal (16%)	6,122	7,147	7,783	7,948	16,181	7,984	6,239	7,340	11,102	14,701	10,545	8,958
Below Normal (13%)	6,600	6,895	4,067	3,778	6,800	4,216	5,660	7,283	11,096	14,296	10,988	5,333
Dry (24%)	5,981	6,359	3,899	4,070	3,569	3,827	4,807	6,887	10,885	13,146	9,085	4,673
Critical (15%)	5,119	4,757	3,621	3,410	3,571	3,360	6,285	6,428	9,683	11,714	8,877	4,418

No Action Alternative minus Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	31	3,775	-3,459	-179	-101	-182	58	-568	-1,506	0	-1,131	5,781
20%	95	3,227	-2,186	-2,985	0	-598	-618	-487	-1,215	0	-976	5,746
30%	-59	2,731	-728	-1,105	-2,261	-682	-240	-215	-994	0	-485	4,352
40%	624	1,798	39	-237	-336	0	-467	-313	-870	-69	-440	3,252
50%	268	1,029	0	-207	0	-286	-375	-266	-760	-93	-369	676
60%	147	458	27	-158	-170	-155	-202	-595	-416	-230	-323	27
70%	130	198	-150	0	0	0	0	-328	-545	-281	-129	57
80%	229	0	-23	0	0	0	0	-428	-381	-14	-124	79
90%	292	0	0	0	0	0	-11	-358	4	106	-62	-2
Long Term												
Full Simulation Period[b]	204	1,340	-596	-608	-326	-251	-164	-347	-684	-50	-466	2,202
Water Year Types[c]												
Wet (32%)	446	1,651	-2,044	-848	-205	-73	-17	-198	-154	131	-766	5,675
Above Normal (16%)	182	1,346	366	-1,076	-1,528	-816	-78	-449	-926	-103	-806	2,893
Below Normal (13%)	109	1,215	-67	-1,027	-356	-860	-467	-846	-1,238	-238	-1,000	-96
Dry (24%)	-111	1,591	44	-53	-22	111	-300	-353	-852	-319	146	-121
Critical (15%)	314	353	-54	-123	236	-71	-70	-91	-782	239	23	-96

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 C-23-5. 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

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	8,508	7,587	19,593	21,351	32,017	18,576	10,175	10,159	14,138	15,000	11,998	8,758
20%	8,095	6,362	11,532	15,117	21,412	12,718	8,146	9,311	13,148	15,000	11,420	7,492
30%	7,291	5,638	5,887	8,978	12,526	8,359	6,954	8,617	12,022	15,000	11,107	6,335
40%	6,536	5,073	4,450	4,500	6,142	4,500	6,056	7,930	11,316	14,717	10,669	5,916
50%	5,729	4,755	4,077	4,184	4,500	4,500	5,368	7,437	10,905	14,368	10,087	5,590
60%	5,223	4,361	3,976	3,706	3,565	3,547	5,053	7,055	10,464	13,336	9,838	5,137
70%	4,867	4,160	3,655	3,250	3,250	3,250	4,500	6,478	10,022	12,638	9,556	4,817
80%	4,503	4,000	3,294	3,250	3,250	3,250	4,500	6,060	9,302	11,876	8,943	4,361
90%	4,114	3,501	3,250	3,250	3,250	3,250	3,717	5,503	8,397	10,803	8,489	4,186
Long Term												
Full Simulation Period[b]	6,130	5,556	7,692	9,315	11,713	8,592	6,689	7,706	11,131	13,440	10,268	6,083
Water Year Types[c]												
Wet (32%)	6,352	6,595	14,028	18,268	20,814	16,038	8,692	8,405	10,360	13,341	10,845	7,512
Above Normal (16%)	6,088	5,850	7,442	8,771	17,594	8,923	6,263	7,839	11,793	14,732	10,881	6,029
Below Normal (13%)	6,415	5,424	4,116	4,781	7,144	5,061	6,045	8,088	12,075	14,472	11,247	6,827
Dry (24%)	6,362	4,793	3,982	4,073	3,468	3,755	4,970	7,223	11,682	13,500	9,299	4,770
Critical (15%)	5,047	4,375	3,694	3,396	3,555	3,398	6,266	6,501	10,302	11,206	9,074	4,555

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%	0	11	84	1,205	1,143	5	-2	-33	-395	0	-725	-213
20%	205	-432	70	-44	0	0	-74	79	107	0	-465	1,083
30%	-65	51	-201	0	-613	0	-17	146	-220	0	-102	305
40%	400	-136	121	-237	766	0	-264	2	-117	78	-56	250
50%	14	-103	77	-150	0	0	-362	-21	-109	284	-260	114
60%	-34	-3	27	-92	-170	-121	-149	-43	90	-173	-53	-109
70%	-4	-20	-19	-1	0	0	0	-18	47	-413	275	180
80%	113	0	19	0	0	0	0	-35	93	15	-42	50
90%	114	0	0	0	0	0	4	0	-6	112	339	39
Long Term												
Full Simulation Period[b]	102	-59	32	-51	-5	22	-64	-2	-72	-23	-148	247
Water Year Types[c]												
Wet (32%)	-38	-109	-11	78	41	0	5	7	116	87	-298	206
Above Normal (16%)	148	50	25	-253	-115	123	-54	50	-235	-72	-470	-36
Below Normal (13%)	-76	-256	-18	-24	-12	-15	-82	-41	-259	-61	-742	1,398
Dry (24%)	270	25	128	-50	-123	39	-137	-16	-55	36	360	-24
Critical (15%)	241	-29	18	-137	220	-33	-89	-18	-164	-269	221	41

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 C-23-6. Sacramento River d/s of Keswick Reservoir, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	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

Alternative 5

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	8,668	11,324	15,764	19,967	30,605	18,389	10,163	9,387	12,940	15,000	11,641	14,750
20%	7,868	10,000	9,191	12,163	21,412	12,271	7,595	8,527	11,910	15,000	11,065	11,992
30%	7,258	8,490	5,272	7,912	10,813	7,676	6,656	7,950	11,187	15,000	10,814	10,346
40%	6,651	7,099	4,275	4,500	5,039	4,500	5,875	7,559	10,628	14,598	10,451	8,736
50%	5,959	5,836	4,000	4,126	4,500	4,214	5,314	7,068	10,168	14,173	10,062	5,933
60%	5,518	4,834	3,975	3,671	3,565	3,547	5,003	6,436	9,875	13,393	9,635	5,357
70%	5,048	4,341	3,522	3,250	3,250	3,250	4,500	6,075	9,405	12,954	9,326	4,944
80%	4,818	4,000	3,253	3,250	3,250	3,250	4,500	5,822	8,795	11,851	8,818	4,505
90%	4,427	3,483	3,250	3,250	3,250	3,250	3,702	5,146	8,384	10,611	8,326	4,231
Long Term												
Full Simulation Period[b]	6,247	6,952	7,033	8,765	11,399	8,336	6,545	7,214	10,464	13,490	10,050	8,082
Water Year Types[c]												
Wet (32%)	6,770	8,471	11,936	17,340	20,582	15,979	8,670	8,203	10,080	13,420	10,387	12,950
Above Normal (16%)	6,222	7,015	7,819	7,984	16,119	8,008	6,238	7,262	11,075	14,723	10,501	8,858
Below Normal (13%)	6,583	6,886	4,038	3,814	6,882	4,245	5,705	7,231	11,063	14,293	10,767	5,512
Dry (24%)	5,947	6,300	3,874	4,070	3,576	3,848	4,737	6,509	10,882	13,247	9,397	4,768
Critical (15%)	5,330	4,741	3,569	3,396	3,569	3,363	6,060	6,177	9,388	11,977	9,259	4,574

Alternative 5 minus Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	159	3,749	-3,745	-179	-269	-182	-14	-805	-1,594	0	-1,082	5,779
20%	-22	3,206	-2,271	-2,998	0	-447	-625	-704	-1,131	0	-820	5,583
30%	-98	2,903	-816	-1,065	-2,326	-682	-315	-521	-1,055	0	-395	4,316
40%	515	1,889	-54	-237	-336	0	-445	-369	-805	-41	-275	3,070
50%	244	978	0	-207	0	-286	-417	-390	-845	88	-285	458
60%	261	470	26	-127	-170	-121	-199	-661	-499	-116	-256	111
70%	177	160	-152	-1	0	0	0	-421	-569	-97	44	307
80%	429	0	-23	0	0	0	0	-272	-414	-11	-167	193
90%	427	-19	0	0	0	0	-11	-357	-18	-81	175	84
Long Term												
Full Simulation Period[b]	219	1,337	-627	-600	-319	-233	-208	-494	-740	28	-367	2,246
Water Year Types[c]												
Wet (32%)	380	1,766	-2,103	-850	-191	-58	-17	-195	-164	166	-756	5,644
Above Normal (16%)	283	1,214	403	-1,040	-1,590	-792	-79	-527	-953	-81	-850	2,793
Below Normal (13%)	92	1,206	-96	-991	-274	-831	-422	-897	-1,271	-241	-1,221	83
Dry (24%)	-144	1,532	19	-53	-15	132	-370	-731	-855	-218	458	-26
Critical (15%)	524	337	-107	-137	235	-68	-295	-342	-1,077	502	405	61

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

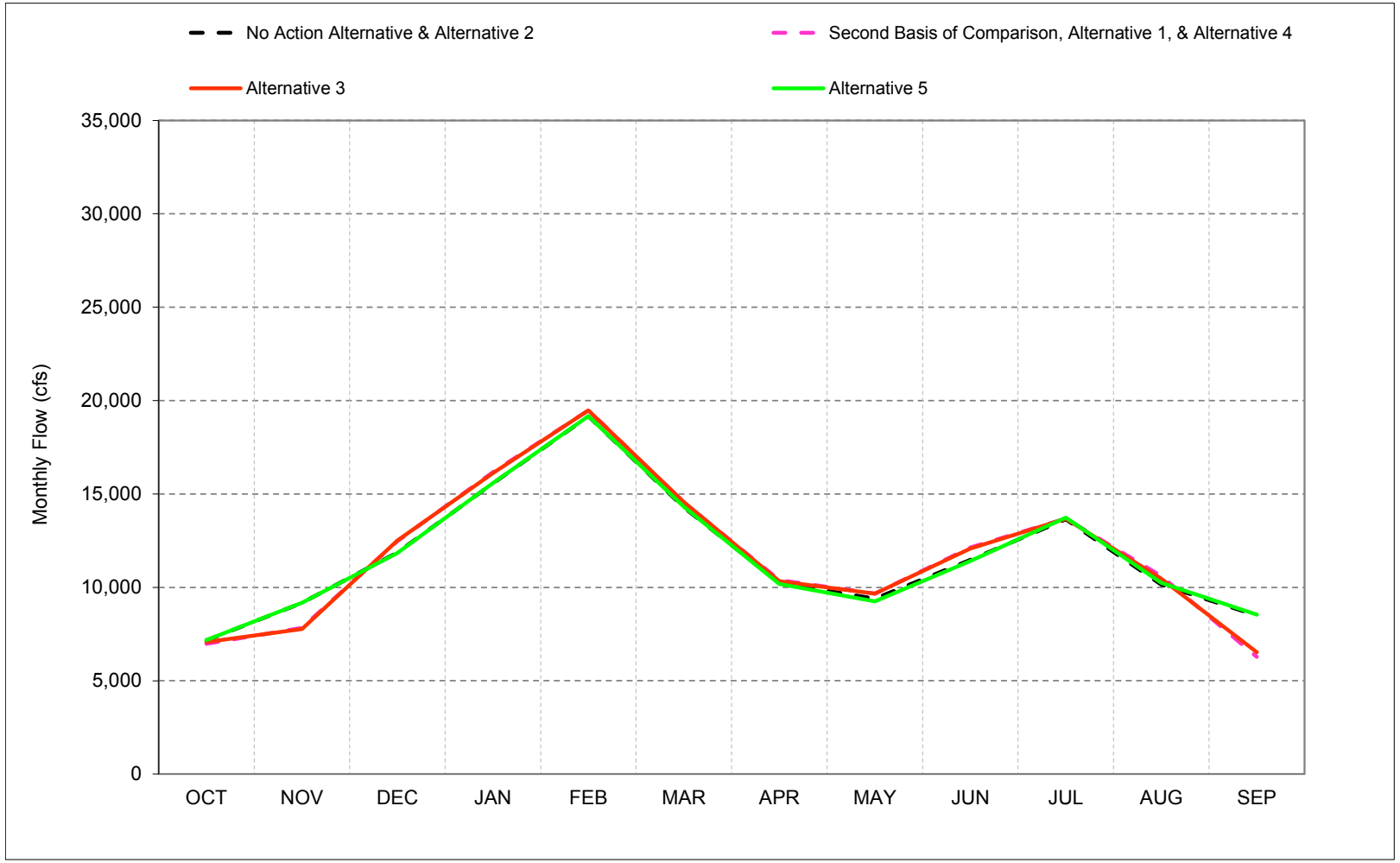
b Based on the 82-year simulation period.

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.

C.24. Sacramento River Flow at Bend Bridge

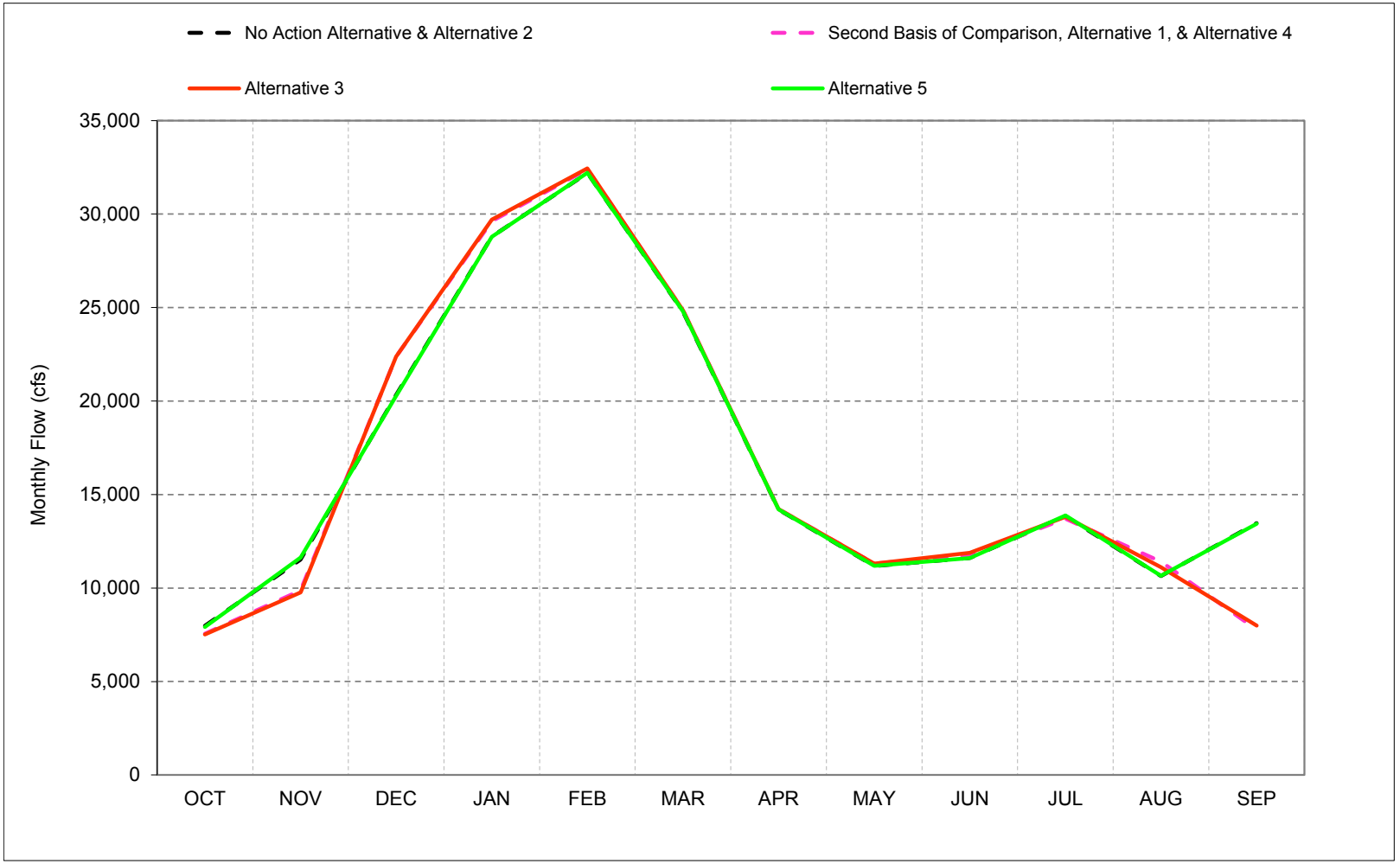
Figure C-24-1. Sacramento River at Bend Bridge, Long-Term* Average Flow



*Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-24-2. Sacramento River at Bend Bridge, Wet Year* Long-Term Average Flow**

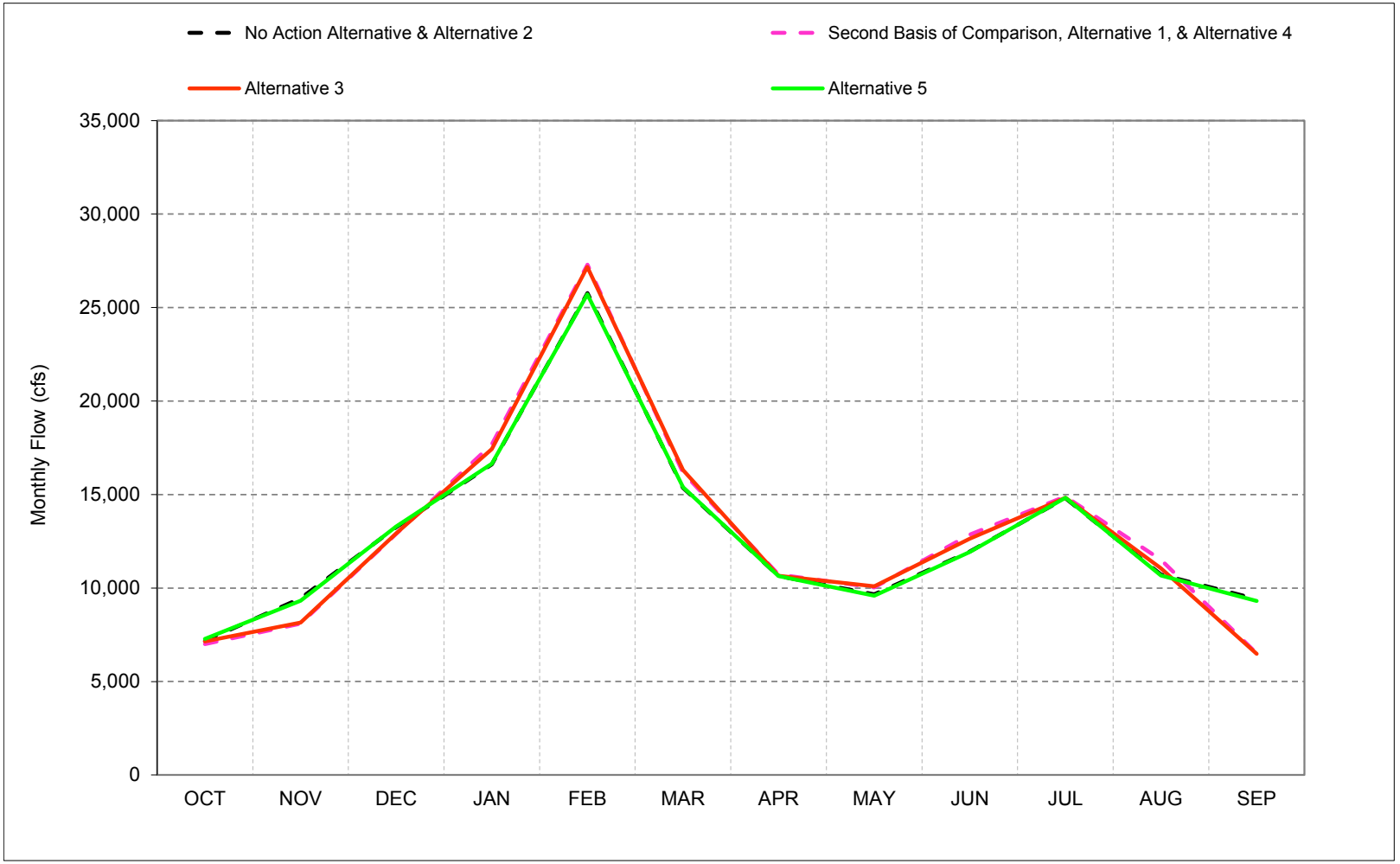


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-24-3. Sacramento River at Bend Bridge, Above Normal Year* Long-Term Average Flow**

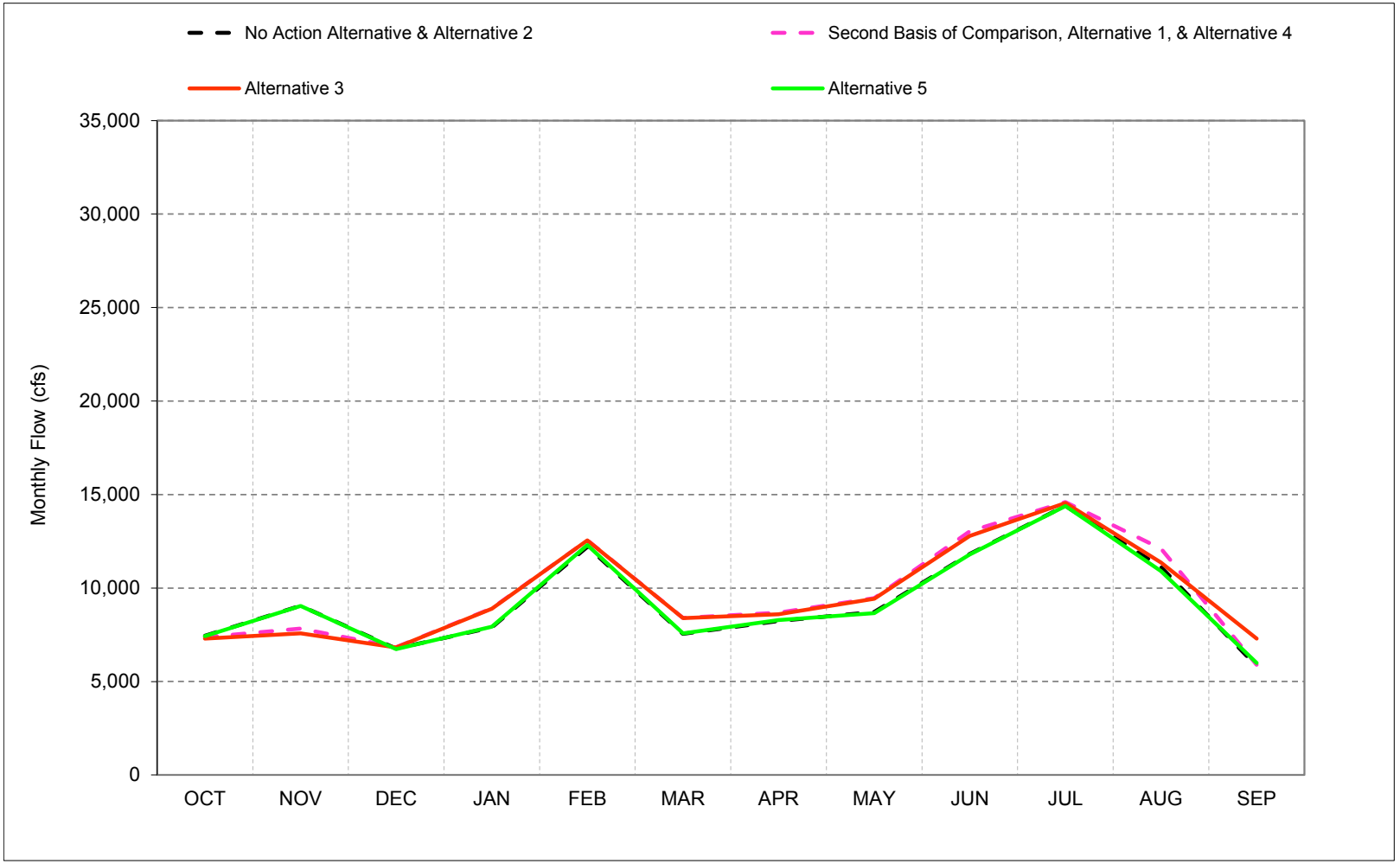


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-24-4. Sacramento River at Bend Bridge, Below Normal Year* Long-Term Average Flow**

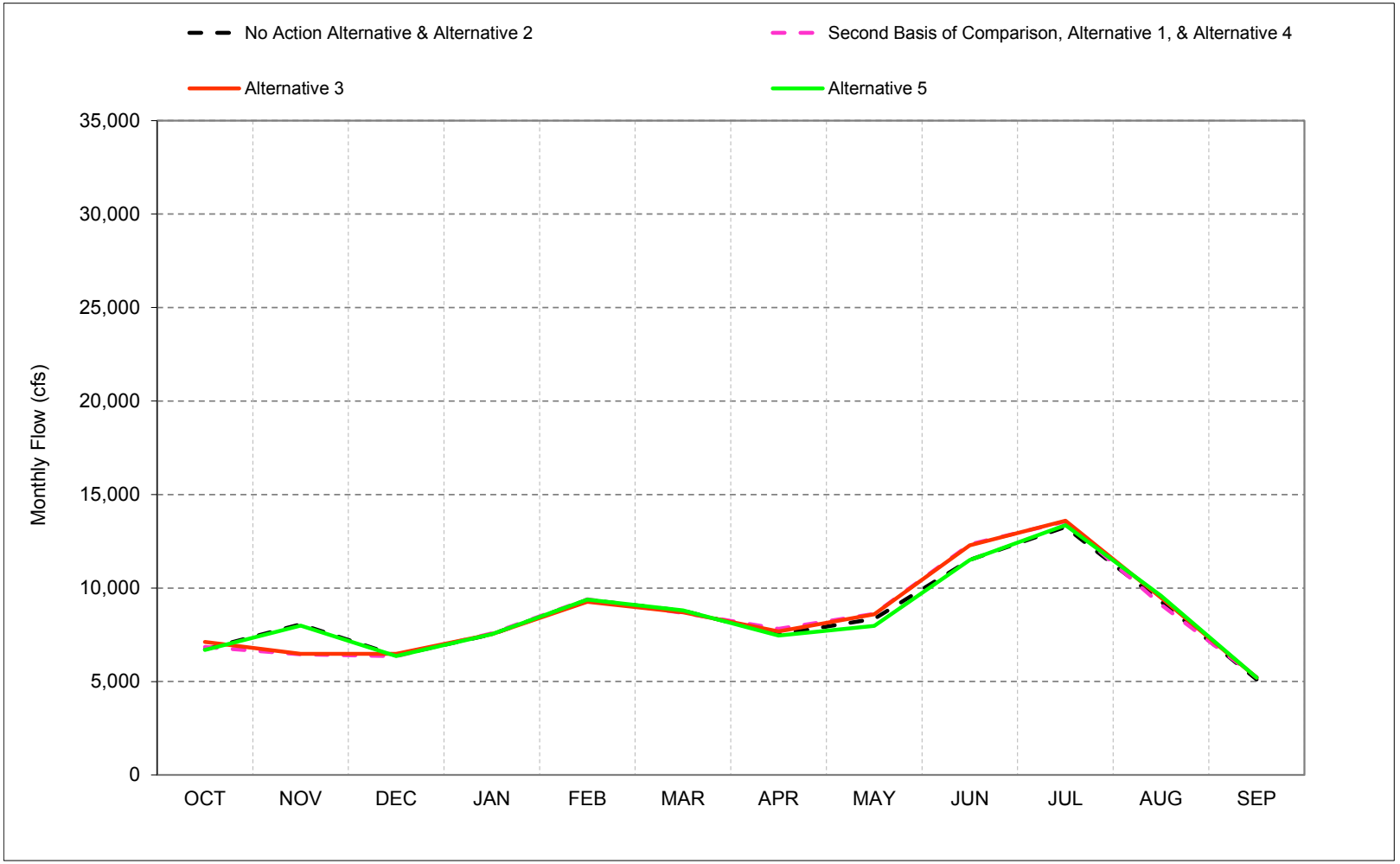


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-24-5. Sacramento River at Bend Bridge, Dry Year* Long-Term Average Flow**

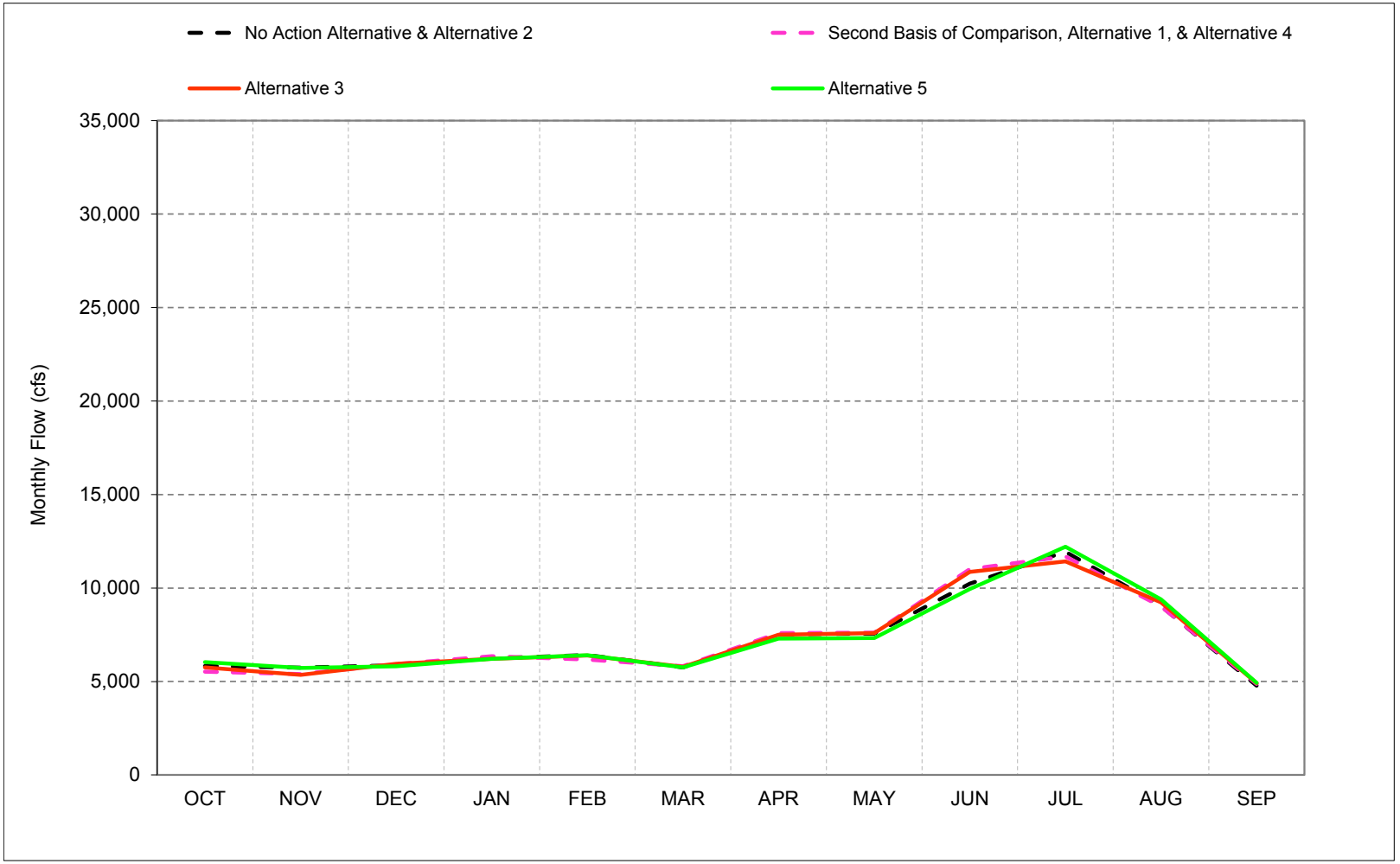


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-24-6. Sacramento River at Bend Bridge, Critical Year* Long-Term Average Flow**



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

**Based on the 82-year simulation period.

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 Alternatives 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 C-24-1. Sacramento River at Bend Bridge, 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%	9,666	12,952	25,817	35,635	46,146	29,257	16,364	12,625	13,670	15,334	11,928	15,074
20%	8,705	12,051	16,957	23,582	31,477	19,298	12,989	10,628	12,322	15,096	11,025	12,855
30%	8,311	10,913	11,251	15,985	21,153	13,887	9,331	9,895	12,023	15,004	10,833	10,819
40%	7,595	10,007	8,517	11,441	12,917	10,373	8,599	9,317	11,432	14,799	10,430	9,267
50%	6,667	8,244	7,016	9,051	10,692	8,819	8,344	8,693	11,146	14,437	10,242	6,727
60%	6,367	7,281	6,534	7,486	8,639	7,841	7,824	8,246	10,849	13,548	9,732	5,623
70%	5,897	6,739	6,023	6,528	7,662	7,207	7,219	7,687	10,648	12,954	9,282	5,068
80%	5,567	5,663	5,334	5,902	6,520	5,947	6,917	7,374	10,107	12,203	8,933	4,647
90%	5,271	5,119	5,060	4,956	5,074	4,966	6,354	6,894	9,650	11,155	8,487	4,541
Long Term												
Full Simulation Period[b]	7,162	9,170	11,871	15,570	19,157	14,290	10,232	9,392	11,467	13,652	10,151	8,489
Water Year Types[c]												
Wet (32%)	7,983	11,521	20,328	28,792	32,195	24,782	14,201	11,182	11,611	13,851	10,642	13,466
Above Normal (16%)	7,175	9,450	13,251	16,613	25,773	15,371	10,643	9,666	11,952	14,807	10,718	9,412
Below Normal (13%)	7,451	9,047	6,762	7,891	12,211	7,549	8,235	8,715	11,826	14,395	11,126	5,819
Dry (24%)	6,724	8,054	6,390	7,526	9,373	8,779	7,528	8,354	11,505	13,262	9,276	5,112
Critical (15%)	5,833	5,748	5,872	6,235	6,415	5,750	7,525	7,567	10,241	11,940	9,035	4,780

Alternative 1

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	9,210	11,246	30,228	37,208	47,106	29,294	16,401	12,695	14,989	15,329	12,928	9,537
20%	8,808	8,825	18,528	25,046	31,478	18,689	12,991	11,024	13,990	15,135	12,090	6,805
30%	8,518	7,602	11,795	16,326	22,727	14,977	9,942	10,267	12,778	14,969	11,260	6,468
40%	7,130	7,155	8,883	13,229	13,125	10,879	9,199	9,671	12,147	14,760	10,984	6,129
50%	6,545	6,725	7,032	9,590	10,802	8,958	8,529	9,034	11,715	14,420	10,409	5,846
60%	6,018	6,351	6,364	7,482	8,684	7,944	7,994	8,497	11,355	13,635	10,207	5,609
70%	5,634	5,821	5,840	6,526	7,561	7,207	7,475	8,070	11,099	13,202	9,502	5,157
80%	5,395	5,462	5,274	5,906	6,519	5,949	7,110	7,596	10,536	12,408	9,024	4,642
90%	4,882	4,940	4,878	4,979	5,147	5,080	6,586	7,102	10,064	11,119	8,382	4,526
Long Term												
Full Simulation Period[b]	6,974	7,830	12,476	16,171	19,478	14,539	10,390	9,657	12,139	13,686	10,606	6,279
Water Year Types[c]												
Wet (32%)	7,555	9,871	22,382	29,625	32,396	24,855	14,217	11,299	11,760	13,714	11,404	7,783
Above Normal (16%)	7,009	8,103	12,892	17,688	27,292	16,180	10,714	10,030	12,864	14,893	11,513	6,508
Below Normal (13%)	7,368	7,826	6,836	8,912	12,557	8,405	8,681	9,459	13,033	14,597	12,101	5,898
Dry (24%)	6,848	6,461	6,360	7,577	9,392	8,666	7,821	8,617	12,341	13,561	9,116	5,227
Critical (15%)	5,523	5,398	5,929	6,357	6,178	5,823	7,592	7,607	11,018	11,691	9,009	4,874

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%	-456	-1,706	4,411	1,573	961	37	37	70	1,319	-5	1,000	-5,537
20%	103	-3,226	1,571	1,464	0	-609	2	396	1,668	39	1,066	-6,050
30%	207	-3,311	544	341	1,574	1,090	611	372	754	-34	427	-4,351
40%	-465	-2,852	366	1,788	208	506	599	354	715	-39	553	-3,138
50%	-121	-1,519	16	539	109	139	186	341	569	-17	167	-881
60%	-350	-930	-170	-4	45	102	170	252	506	87	475	-14
70%	-264	-918	-182	-1	-101	0	257	383	451	248	220	89
80%	-172	-201	-60	4	-1	2	194	222	430	205	91	-5
90%	-389	-179	-182	22	73	113	232	208	413	-36	-105	-16
Long Term												
Full Simulation Period[b]	-188	-1,340	605	601	321	250	158	265	671	34	456	-2,210
Water Year Types[c]												
Wet (32%)	-427	-1,650	2,054	832	201	73	17	118	149	-137	763	-5,682
Above Normal (16%)	-166	-1,347	-359	1,076	1,520	809	71	364	912	85	795	-2,904
Below Normal (13%)	-83	-1,221	74	1,020	347	856	446	744	1,207	202	975	79
Dry (24%)	124	-1,593	-31	50	20	-112	294	262	836	299	-160	114
Critical (15%)	-309	-350	57	122	-237	73	66	40	777	-250	-26	94

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 C-24-2. Sacramento River at Bend Bridge, 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%	9,666	12,952	25,817	35,635	46,146	29,257	16,364	12,625	13,670	15,334	11,928	15,074
20%	8,705	12,051	16,957	23,582	31,477	19,298	12,989	10,628	12,322	15,096	11,025	12,855
30%	8,311	10,913	11,251	15,985	21,153	13,887	9,331	9,895	12,023	15,004	10,833	10,819
40%	7,595	10,007	8,517	11,441	12,917	10,373	8,599	9,317	11,432	14,799	10,430	9,267
50%	6,667	8,244	7,016	9,051	10,692	8,819	8,344	8,693	11,146	14,437	10,242	6,727
60%	6,367	7,281	6,534	7,486	8,639	7,841	7,824	8,246	10,849	13,548	9,732	5,623
70%	5,897	6,739	6,023	6,528	7,662	7,207	7,219	7,687	10,648	12,954	9,282	5,068
80%	5,567	5,663	5,334	5,902	6,520	5,947	6,917	7,374	10,107	12,203	8,933	4,647
90%	5,271	5,119	5,060	4,956	5,074	4,966	6,354	6,894	9,650	11,155	8,487	4,541
Long Term												
Full Simulation Period[b]	7,162	9,170	11,871	15,570	19,157	14,290	10,232	9,392	11,467	13,652	10,151	8,489
Water Year Types[c]												
Wet (32%)	7,983	11,521	20,328	28,792	32,195	24,782	14,201	11,182	11,611	13,851	10,642	13,466
Above Normal (16%)	7,175	9,450	13,251	16,613	25,773	15,371	10,643	9,666	11,952	14,807	10,718	9,412
Below Normal (13%)	7,451	9,047	6,762	7,891	12,211	7,549	8,235	8,715	11,826	14,395	11,126	5,819
Dry (24%)	6,724	8,054	6,390	7,526	9,373	8,779	7,528	8,354	11,505	13,262	9,276	5,112
Critical (15%)	5,833	5,748	5,872	6,235	6,415	5,750	7,525	7,567	10,241	11,940	9,035	4,780

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	9,386	11,729	30,238	38,412	47,106	29,297	16,363	12,678	14,680	15,332	12,196	9,287
20%	8,822	8,548	19,566	25,043	31,476	18,693	12,990	10,993	13,862	15,171	11,609	8,174
30%	8,250	7,629	11,041	16,361	22,570	14,976	9,843	10,357	12,690	14,979	11,239	6,799
40%	7,642	7,085	8,883	12,757	12,818	10,771	9,030	9,720	12,023	14,799	10,753	6,356
50%	6,481	6,796	7,033	9,562	10,750	8,962	8,465	9,155	11,717	14,463	10,351	5,959
60%	6,047	6,280	6,540	7,482	8,683	7,944	7,957	8,529	11,338	13,601	10,114	5,491
70%	5,790	5,826	5,947	6,525	7,686	7,207	7,277	8,103	11,119	12,957	9,773	5,224
80%	5,423	5,462	5,360	5,903	6,587	5,951	6,964	7,646	10,568	12,254	9,075	4,828
90%	5,263	5,120	4,897	4,956	5,145	4,977	6,580	6,967	10,057	11,151	8,644	4,543
Long Term												
Full Simulation Period[b]	7,074	7,769	12,509	16,120	19,474	14,561	10,327	9,658	12,070	13,667	10,462	6,529
Water Year Types[c]												
Wet (32%)	7,512	9,763	22,373	29,702	32,436	24,855	14,223	11,307	11,877	13,801	11,107	7,992
Above Normal (16%)	7,153	8,152	12,917	17,436	27,179	16,303	10,662	10,086	12,635	14,830	11,050	6,478
Below Normal (13%)	7,291	7,570	6,819	8,887	12,545	8,390	8,603	9,424	12,780	14,543	11,365	7,301
Dry (24%)	7,120	6,483	6,487	7,525	9,270	8,705	7,686	8,605	12,290	13,602	9,481	5,203
Critical (15%)	5,763	5,362	5,948	6,220	6,399	5,788	7,505	7,592	10,857	11,426	9,234	4,914

Alternative 3 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%	-280	-1,223	4,420	2,777	961	40	-1	53	1,010	-2	268	-5,786
20%	117	-3,503	2,609	1,461	-1	-605	2	365	1,540	75	585	-4,681
30%	-61	-3,284	-210	377	1,417	1,088	512	462	667	-24	406	-4,020
40%	47	-2,922	366	1,316	-99	397	430	403	591	1	322	-2,911
50%	-186	-1,448	17	511	58	143	122	462	571	26	109	-768
60%	-320	-1,001	7	-3	44	103	133	283	488	53	382	-132
70%	-108	-913	-76	-3	24	0	58	416	471	3	491	156
80%	-144	-201	26	1	67	3	47	272	462	52	142	181
90%	-8	2	-162	0	71	11	226	73	406	-4	158	2
Long Term												
Full Simulation Period[b]	-88	-1,401	638	550	317	271	95	266	602	15	311	-1,960
Water Year Types[c]												
Wet (32%)	-471	-1,758	2,044	910	241	73	22	125	266	-50	465	-5,474
Above Normal (16%)	-21	-1,297	-333	823	1,406	932	19	420	683	23	332	-2,934
Below Normal (13%)	-160	-1,477	57	995	334	840	367	709	954	149	239	1,482
Dry (24%)	396	-1,571	96	-1	-103	-73	158	250	785	340	204	90
Critical (15%)	-70	-386	76	-15	-16	38	-20	25	616	-514	199	134

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 C-24-3. Sacramento River at Bend Bridge, 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%	9,666	12,952	25,817	35,635	46,146	29,257	16,364	12,625	13,670	15,334	11,928	15,074
20%	8,705	12,051	16,957	23,582	31,477	19,298	12,989	10,628	12,322	15,096	11,025	12,855
30%	8,311	10,913	11,251	15,985	21,153	13,887	9,331	9,895	12,023	15,004	10,833	10,819
40%	7,595	10,007	8,517	11,441	12,917	10,373	8,599	9,317	11,432	14,799	10,430	9,267
50%	6,667	8,244	7,016	9,051	10,692	8,819	8,344	8,693	11,146	14,437	10,242	6,727
60%	6,367	7,281	6,534	7,486	8,639	7,841	7,824	8,246	10,849	13,548	9,732	5,623
70%	5,897	6,739	6,023	6,528	7,662	7,207	7,219	7,687	10,648	12,954	9,282	5,068
80%	5,567	5,663	5,334	5,902	6,520	5,947	6,917	7,374	10,107	12,203	8,933	4,647
90%	5,271	5,119	5,060	4,956	5,074	4,966	6,354	6,894	9,650	11,155	8,487	4,541
Long Term												
Full Simulation Period[b]	7,162	9,170	11,871	15,570	19,157	14,290	10,232	9,392	11,467	13,652	10,151	8,489
Water Year Types[c]												
Wet (32%)	7,983	11,521	20,328	28,792	32,195	24,782	14,201	11,182	11,611	13,851	10,642	13,466
Above Normal (16%)	7,175	9,450	13,251	16,613	25,773	15,371	10,643	9,666	11,952	14,807	10,718	9,412
Below Normal (13%)	7,451	9,047	6,762	7,891	12,211	7,549	8,235	8,715	11,826	14,395	11,126	5,819
Dry (24%)	6,724	8,054	6,390	7,526	9,373	8,779	7,528	8,354	11,505	13,262	9,276	5,112
Critical (15%)	5,833	5,748	5,872	6,235	6,415	5,750	7,525	7,567	10,241	11,940	9,035	4,780

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	9,789	12,949	24,963	35,641	46,144	29,257	16,362	12,591	13,596	15,332	11,804	15,055
20%	8,691	12,012	16,908	23,582	31,478	19,315	12,989	10,466	12,322	15,055	11,114	12,857
30%	8,252	10,947	11,254	16,024	21,199	13,888	9,226	9,619	11,944	14,998	10,911	10,789
40%	7,661	10,173	8,517	11,441	13,003	10,373	8,599	9,122	11,370	14,799	10,628	9,087
50%	6,707	8,257	7,029	9,051	10,692	8,819	8,223	8,549	11,111	14,479	10,289	6,638
60%	6,317	7,328	6,463	7,486	8,626	7,901	7,672	8,111	10,850	13,795	9,962	5,726
70%	5,926	6,741	5,964	6,528	7,662	7,207	7,203	7,641	10,528	12,962	9,498	5,306
80%	5,589	5,403	5,333	5,966	6,520	5,947	6,917	7,371	10,102	12,211	8,998	4,896
90%	5,372	4,947	4,951	4,959	5,074	4,966	6,519	6,860	9,601	11,095	8,442	4,609
Long Term												
Full Simulation Period[b]	7,177	9,168	11,841	15,578	19,164	14,308	10,188	9,245	11,413	13,730	10,245	8,532
Water Year Types[c]												
Wet (32%)	7,916	11,637	20,268	28,790	32,209	24,797	14,201	11,185	11,601	13,886	10,652	13,435
Above Normal (16%)	7,275	9,317	13,289	16,649	25,711	15,396	10,643	9,588	11,926	14,830	10,675	9,313
Below Normal (13%)	7,434	9,037	6,733	7,928	12,293	7,578	8,281	8,663	11,793	14,391	10,905	5,999
Dry (24%)	6,692	7,996	6,366	7,527	9,380	8,800	7,457	7,977	11,505	13,362	9,588	5,204
Critical (15%)	6,040	5,731	5,820	6,222	6,414	5,753	7,301	7,318	9,947	12,204	9,390	4,933

Alternative 5 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%	123	-2	-855	6	-1	0	-2	-34	-74	-2	-124	-19
20%	-14	-40	-49	0	1	17	1	-162	0	-41	89	2
30%	-59	34	3	39	45	1	-104	-277	-79	-5	78	-30
40%	67	166	0	0	87	0	0	-195	-61	1	198	-181
50%	41	14	13	0	0	1	-121	-143	-35	42	46	-88
60%	-50	47	-71	1	-13	60	-152	-135	1	247	230	104
70%	28	2	-59	0	0	0	-15	-46	-120	8	216	237
80%	22	-259	-1	64	0	0	0	-2	-4	8	65	249
90%	101	-172	-108	3	0	0	165	-34	-50	-59	-45	68
Long Term												
Full Simulation Period[b]	15	-2	-30	8	7	18	-44	-147	-55	77	95	44
Water Year Types[c]												
Wet (32%)	-66	116	-60	-2	14	15	0	3	-10	35	10	-31
Above Normal (16%)	100	-132	38	36	-62	25	-1	-78	-26	23	-43	-99
Below Normal (13%)	-17	-10	-29	36	82	29	45	-52	-33	-3	-221	180
Dry (24%)	-32	-58	-24	0	7	21	-70	-377	-1	101	311	92
Critical (15%)	207	-17	-52	-13	-2	3	-225	-249	-293	264	355	153

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 C-24-4. Sacramento River at Bend Bridge, 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%	9,210	11,246	30,228	37,208	47,106	29,294	16,401	12,695	14,989	15,329	12,928	9,537
20%	8,808	8,825	18,528	25,046	31,478	18,689	12,991	11,024	13,990	15,135	12,090	6,805
30%	8,518	7,602	11,795	16,326	22,727	14,977	9,942	10,267	12,778	14,969	11,260	6,468
40%	7,130	7,155	8,883	13,229	13,125	10,879	9,199	9,671	12,147	14,760	10,984	6,129
50%	6,545	6,725	7,032	9,590	10,802	8,958	8,529	9,034	11,715	14,420	10,409	5,846
60%	6,018	6,351	6,364	7,482	8,684	7,944	7,994	8,497	11,355	13,635	10,207	5,609
70%	5,634	5,821	5,840	6,526	7,561	7,207	7,475	8,070	11,099	13,202	9,502	5,157
80%	5,395	5,462	5,274	5,906	6,519	5,949	7,110	7,596	10,536	12,408	9,024	4,642
90%	4,882	4,940	4,878	4,979	5,147	5,080	6,586	7,102	10,064	11,119	8,382	4,526
Long Term												
Full Simulation Period[b]	6,974	7,830	12,476	16,171	19,478	14,539	10,390	9,657	12,139	13,686	10,606	6,279
Water Year Types[c]												
Wet (32%)	7,555	9,871	22,382	29,625	32,396	24,855	14,217	11,299	11,760	13,714	11,404	7,783
Above Normal (16%)	7,009	8,103	12,892	17,688	27,292	16,180	10,714	10,030	12,864	14,893	11,513	6,508
Below Normal (13%)	7,368	7,826	6,836	8,912	12,557	8,405	8,681	9,459	13,033	14,597	12,101	5,898
Dry (24%)	6,848	6,461	6,360	7,577	9,392	8,666	7,821	8,617	12,341	13,561	9,116	5,227
Critical (15%)	5,523	5,398	5,929	6,357	6,178	5,823	7,592	7,607	11,018	11,691	9,009	4,874

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	9,666	12,952	25,817	35,635	46,146	29,257	16,364	12,625	13,670	15,334	11,928	15,074
20%	8,705	12,051	16,957	23,582	31,477	19,298	12,989	10,628	12,322	15,096	11,025	12,855
30%	8,311	10,913	11,251	15,985	21,153	13,887	9,331	9,895	12,023	15,004	10,833	10,819
40%	7,595	10,007	8,517	11,441	12,917	10,373	8,599	9,317	11,432	14,799	10,430	9,267
50%	6,667	8,244	7,016	9,051	10,692	8,819	8,344	8,693	11,146	14,437	10,242	6,727
60%	6,367	7,281	6,534	7,486	8,639	7,841	7,824	8,246	10,849	13,548	9,732	5,623
70%	5,897	6,739	6,023	6,528	7,662	7,207	7,219	7,687	10,648	12,954	9,282	5,068
80%	5,567	5,663	5,334	5,902	6,520	5,947	6,917	7,374	10,107	12,203	8,933	4,647
90%	5,271	5,119	5,060	4,956	5,074	4,966	6,354	6,894	9,650	11,155	8,487	4,541
Long Term												
Full Simulation Period[b]	7,162	9,170	11,871	15,570	19,157	14,290	10,232	9,392	11,467	13,652	10,151	8,489
Water Year Types[c]												
Wet (32%)	7,983	11,521	20,328	28,792	32,195	24,782	14,201	11,182	11,611	13,851	10,642	13,466
Above Normal (16%)	7,175	9,450	13,251	16,613	25,773	15,371	10,643	9,666	11,952	14,807	10,718	9,412
Below Normal (13%)	7,451	9,047	6,762	7,891	12,211	7,549	8,235	8,715	11,826	14,395	11,126	5,819
Dry (24%)	6,724	8,054	6,390	7,526	9,373	8,779	7,528	8,354	11,505	13,262	9,276	5,112
Critical (15%)	5,833	5,748	5,872	6,235	6,415	5,750	7,525	7,567	10,241	11,940	9,035	4,780

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%	456	1,706	-4,411	-1,573	-961	-37	-37	-70	-1,319	5	-1,000	5,537
20%	-103	3,226	-1,571	-1,464	0	609	-2	-396	-1,668	-39	-1,066	6,050
30%	-207	3,311	-544	-341	-1,574	-1,090	-611	-372	-754	34	-427	4,351
40%	465	2,852	-366	-1,788	-208	-506	-599	-354	-715	39	-553	3,138
50%	121	1,519	-16	-539	-109	-139	-186	-341	-569	17	-167	881
60%	350	930	170	4	-45	-102	-170	-252	-506	-87	-475	14
70%	264	918	182	1	101	0	-257	-383	-451	-248	-220	-89
80%	172	201	60	-4	1	-2	-194	-222	-430	-205	-91	5
90%	389	179	182	-22	-73	-113	-232	-208	-413	36	105	16
Long Term												
Full Simulation Period[b]	188	1,340	-605	-601	-321	-250	-158	-265	-671	-34	-456	2,210
Water Year Types[c]												
Wet (32%)	427	1,650	-2,054	-832	-201	-73	-17	-118	-149	137	-763	5,682
Above Normal (16%)	166	1,347	359	-1,076	-1,520	-809	-71	-364	-912	-85	-795	2,904
Below Normal (13%)	83	1,221	-74	-1,020	-347	-856	-446	-744	-1,207	-202	-975	-79
Dry (24%)	-124	1,593	31	-50	-20	112	-294	-262	-836	-299	160	-114
Critical (15%)	309	350	-57	-122	237	-73	-66	-40	-777	250	26	-94

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 C-24-5. Sacramento River at Bend Bridge, 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%	9,210	11,246	30,228	37,208	47,106	29,294	16,401	12,695	14,989	15,329	12,928	9,537
20%	8,808	8,825	18,528	25,046	31,478	18,689	12,991	11,024	13,990	15,135	12,090	6,805
30%	8,518	7,602	11,795	16,326	22,727	14,977	9,942	10,267	12,778	14,969	11,260	6,468
40%	7,130	7,155	8,883	13,229	13,125	10,879	9,199	9,671	12,147	14,760	10,984	6,129
50%	6,545	6,725	7,032	9,590	10,802	8,958	8,529	9,034	11,715	14,420	10,409	5,846
60%	6,018	6,351	6,364	7,482	8,684	7,944	7,994	8,497	11,355	13,635	10,207	5,609
70%	5,634	5,821	5,840	6,526	7,561	7,207	7,475	8,070	11,099	13,202	9,502	5,157
80%	5,395	5,462	5,274	5,906	6,519	5,949	7,110	7,596	10,536	12,408	9,024	4,642
90%	4,882	4,940	4,878	4,979	5,147	5,080	6,586	7,102	10,064	11,119	8,382	4,526
Long Term												
Full Simulation Period[b]	6,974	7,830	12,476	16,171	19,478	14,539	10,390	9,657	12,139	13,686	10,606	6,279
Water Year Types[c]												
Wet (32%)	7,555	9,871	22,382	29,625	32,396	24,855	14,217	11,299	11,760	13,714	11,404	7,783
Above Normal (16%)	7,009	8,103	12,892	17,688	27,292	16,180	10,714	10,030	12,864	14,893	11,513	6,508
Below Normal (13%)	7,368	7,826	6,836	8,912	12,557	8,405	8,681	9,459	13,033	14,597	12,101	5,898
Dry (24%)	6,848	6,461	6,360	7,577	9,392	8,666	7,821	8,617	12,341	13,561	9,116	5,227
Critical (15%)	5,523	5,398	5,929	6,357	6,178	5,823	7,592	7,607	11,018	11,691	9,009	4,874

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	9,386	11,729	30,238	38,412	47,106	29,297	16,363	12,678	14,680	15,332	12,196	9,287
20%	8,822	8,548	19,566	25,043	31,476	18,693	12,990	10,993	13,862	15,171	11,609	8,174
30%	8,250	7,629	11,041	16,361	22,570	14,976	9,843	10,357	12,690	14,979	11,239	6,799
40%	7,642	7,085	8,883	12,757	12,818	10,771	9,030	9,720	12,023	14,799	10,753	6,356
50%	6,481	6,796	7,033	9,562	10,750	8,962	8,465	9,155	11,717	14,463	10,351	5,959
60%	6,047	6,280	6,540	7,482	8,683	7,944	7,957	8,529	11,338	13,601	10,114	5,491
70%	5,790	5,826	5,947	6,525	7,686	7,207	7,277	8,103	11,119	12,957	9,773	5,224
80%	5,423	5,462	5,360	5,903	6,587	5,951	6,964	7,646	10,568	12,254	9,075	4,828
90%	5,263	5,120	4,897	4,956	5,145	4,977	6,580	6,967	10,057	11,151	8,644	4,543
Long Term												
Full Simulation Period[b]	7,074	7,769	12,509	16,120	19,474	14,561	10,327	9,658	12,070	13,667	10,462	6,529
Water Year Types[c]												
Wet (32%)	7,512	9,763	22,373	29,702	32,436	24,855	14,223	11,307	11,877	13,801	11,107	7,992
Above Normal (16%)	7,153	8,152	12,917	17,436	27,179	16,303	10,662	10,086	12,635	14,830	11,050	6,478
Below Normal (13%)	7,291	7,570	6,819	8,887	12,545	8,390	8,603	9,424	12,780	14,543	11,365	7,301
Dry (24%)	7,120	6,483	6,487	7,525	9,270	8,705	7,686	8,605	12,290	13,602	9,481	5,203
Critical (15%)	5,763	5,362	5,948	6,220	6,399	5,788	7,505	7,592	10,857	11,426	9,234	4,914

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%	176	483	10	1,204	0	4	-38	-17	-309	3	-732	-249
20%	14	-277	1,038	-3	-2	4	-1	-31	-129	36	-481	1,369
30%	-268	28	-754	36	-157	-1	-99	90	-87	10	-21	331
40%	512	-71	0	-472	-307	-109	-169	49	-125	39	-231	227
50%	-64	71	1	-27	-51	4	-64	121	2	43	-58	113
60%	29	-71	177	1	-1	0	-36	32	-18	-34	-93	-118
70%	156	5	106	-2	124	0	-198	33	20	-245	271	67
80%	28	0	87	-3	67	2	-146	50	32	-153	51	186
90%	380	180	20	-22	-2	-103	-6	-135	-7	32	262	17
Long Term												
Full Simulation Period[b]	100	-61	33	-52	-5	22	-63	1	-69	-18	-145	250
Water Year Types[c]												
Wet (32%)	-44	-108	-10	77	40	0	5	8	117	87	-297	209
Above Normal (16%)	145	50	25	-252	-113	124	-52	56	-228	-63	-463	-30
Below Normal (13%)	-77	-256	-17	-25	-13	-16	-79	-36	-253	-54	-736	1,403
Dry (24%)	272	22	127	-52	-123	39	-136	-12	-50	41	364	-24
Critical (15%)	240	-35	19	-137	221	-35	-87	-15	-161	-265	225	41

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 C-24-6. Sacramento River at Bend Bridge, 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%	9,210	11,246	30,228	37,208	47,106	29,294	16,401	12,695	14,989	15,329	12,928	9,537
20%	8,808	8,825	18,528	25,046	31,478	18,689	12,991	11,024	13,990	15,135	12,090	6,805
30%	8,518	7,602	11,795	16,326	22,727	14,977	9,942	10,267	12,778	14,969	11,260	6,468
40%	7,130	7,155	8,883	13,229	13,125	10,879	9,199	9,671	12,147	14,760	10,984	6,129
50%	6,545	6,725	7,032	9,590	10,802	8,958	8,529	9,034	11,715	14,420	10,409	5,846
60%	6,018	6,351	6,364	7,482	8,684	7,944	7,994	8,497	11,355	13,635	10,207	5,609
70%	5,634	5,821	5,840	6,526	7,561	7,207	7,475	8,070	11,099	13,202	9,502	5,157
80%	5,395	5,462	5,274	5,906	6,519	5,949	7,110	7,596	10,536	12,408	9,024	4,642
90%	4,882	4,940	4,878	4,979	5,147	5,080	6,586	7,102	10,064	11,119	8,382	4,526
Long Term												
Full Simulation Period[b]	6,974	7,830	12,476	16,171	19,478	14,539	10,390	9,657	12,139	13,686	10,606	6,279
Water Year Types[c]												
Wet (32%)	7,555	9,871	22,382	29,625	32,396	24,855	14,217	11,299	11,760	13,714	11,404	7,783
Above Normal (16%)	7,009	8,103	12,892	17,688	27,292	16,180	10,714	10,030	12,864	14,893	11,513	6,508
Below Normal (13%)	7,368	7,826	6,836	8,912	12,557	8,405	8,681	9,459	13,033	14,597	12,101	5,898
Dry (24%)	6,848	6,461	6,360	7,577	9,392	8,666	7,821	8,617	12,341	13,561	9,116	5,227
Critical (15%)	5,523	5,398	5,929	6,357	6,178	5,823	7,592	7,607	11,018	11,691	9,009	4,874

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	9,789	12,949	24,963	35,641	46,144	29,257	16,362	12,591	13,596	15,332	11,804	15,055
20%	8,691	12,012	16,908	23,582	31,478	19,315	12,989	10,466	12,322	15,055	11,114	12,857
30%	8,252	10,947	11,254	16,024	21,199	13,888	9,226	9,619	11,944	14,998	10,911	10,789
40%	7,661	10,173	8,517	11,441	13,003	10,373	8,599	9,122	11,370	14,799	10,628	9,087
50%	6,707	8,257	7,029	9,051	10,692	8,819	8,223	8,549	11,111	14,479	10,289	6,638
60%	6,317	7,328	6,463	7,486	8,626	7,901	7,672	8,111	10,850	13,795	9,962	5,726
70%	5,926	6,741	5,964	6,528	7,662	7,207	7,203	7,641	10,528	12,962	9,498	5,306
80%	5,589	5,403	5,333	5,966	6,520	5,947	6,917	7,371	10,102	12,211	8,998	4,896
90%	5,372	4,947	4,951	4,959	5,074	4,966	6,519	6,860	9,601	11,095	8,442	4,609
Long Term												
Full Simulation Period[b]	7,177	9,168	11,841	15,578	19,164	14,308	10,188	9,245	11,413	13,730	10,245	8,532
Water Year Types[c]												
Wet (32%)	7,916	11,637	20,268	28,790	32,209	24,797	14,201	11,185	11,601	13,886	10,652	13,435
Above Normal (16%)	7,275	9,317	13,289	16,649	25,711	15,396	10,643	9,588	11,926	14,830	10,675	9,313
Below Normal (13%)	7,434	9,037	6,733	7,928	12,293	7,578	8,281	8,663	11,793	14,391	10,905	5,999
Dry (24%)	6,692	7,996	6,366	7,527	9,380	8,800	7,457	7,977	11,505	13,362	9,588	5,204
Critical (15%)	6,040	5,731	5,820	6,222	6,414	5,753	7,301	7,318	9,947	12,204	9,390	4,933

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%	579	1,703	-5,266	-1,567	-962	-37	-39	-104	-1,393	3	-1,124	5,519
20%	-117	3,187	-1,620	-1,465	0	626	-2	-557	-1,668	-80	-976	6,052
30%	-266	3,345	-541	-301	-1,528	-1,089	-715	-649	-833	29	-349	4,321
40%	532	3,018	-366	-1,788	-121	-506	-600	-549	-777	39	-355	2,958
50%	162	1,533	-3	-539	-109	-139	-306	-484	-604	59	-120	792
60%	299	977	99	5	-58	-42	-322	-386	-505	160	-246	118
70%	292	920	123	1	100	0	-272	-429	-571	-240	-4	148
80%	194	-59	59	60	1	-2	-194	-225	-434	-197	-26	254
90%	490	7	74	-20	-72	-114	-66	-242	-463	-23	60	83
Long Term												
Full Simulation Period[b]	203	1,338	-635	-593	-314	-232	-202	-411	-726	44	-361	2,254
Water Year Types[c]												
Wet (32%)	361	1,766	-2,114	-835	-187	-59	-16	-114	-159	172	-753	5,652
Above Normal (16%)	266	1,215	397	-1,039	-1,582	-784	-71	-442	-937	-62	-838	2,805
Below Normal (13%)	66	1,211	-103	-984	-265	-827	-401	-797	-1,240	-206	-1,196	101
Dry (24%)	-156	1,535	6	-50	-12	134	-364	-640	-836	-198	471	-22
Critical (15%)	517	333	-108	-135	236	-71	-291	-290	-1,071	513	381	60

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

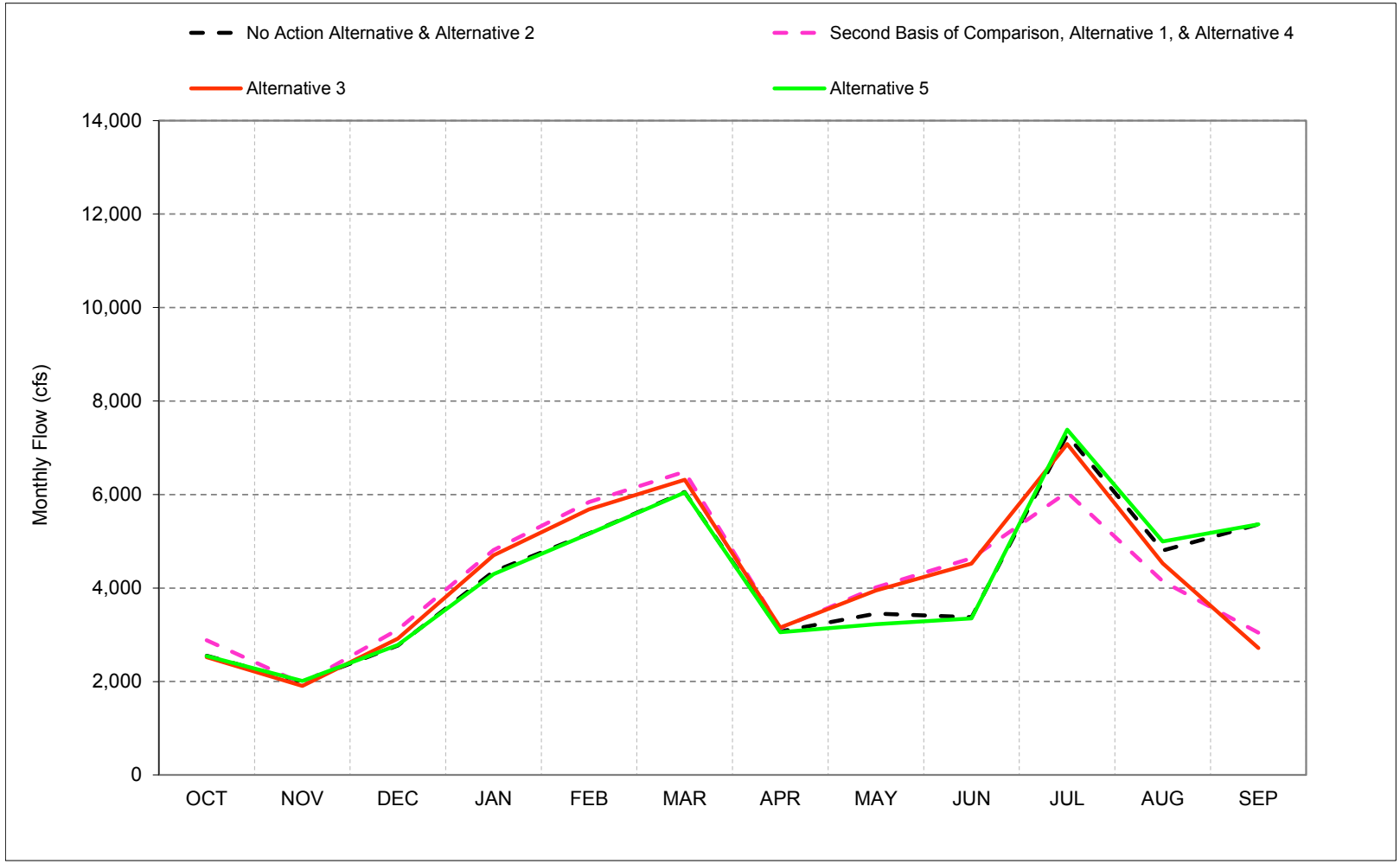
b Based on the 82-year simulation period.

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.

C.25. Feather River Flow downstream of Thermalito

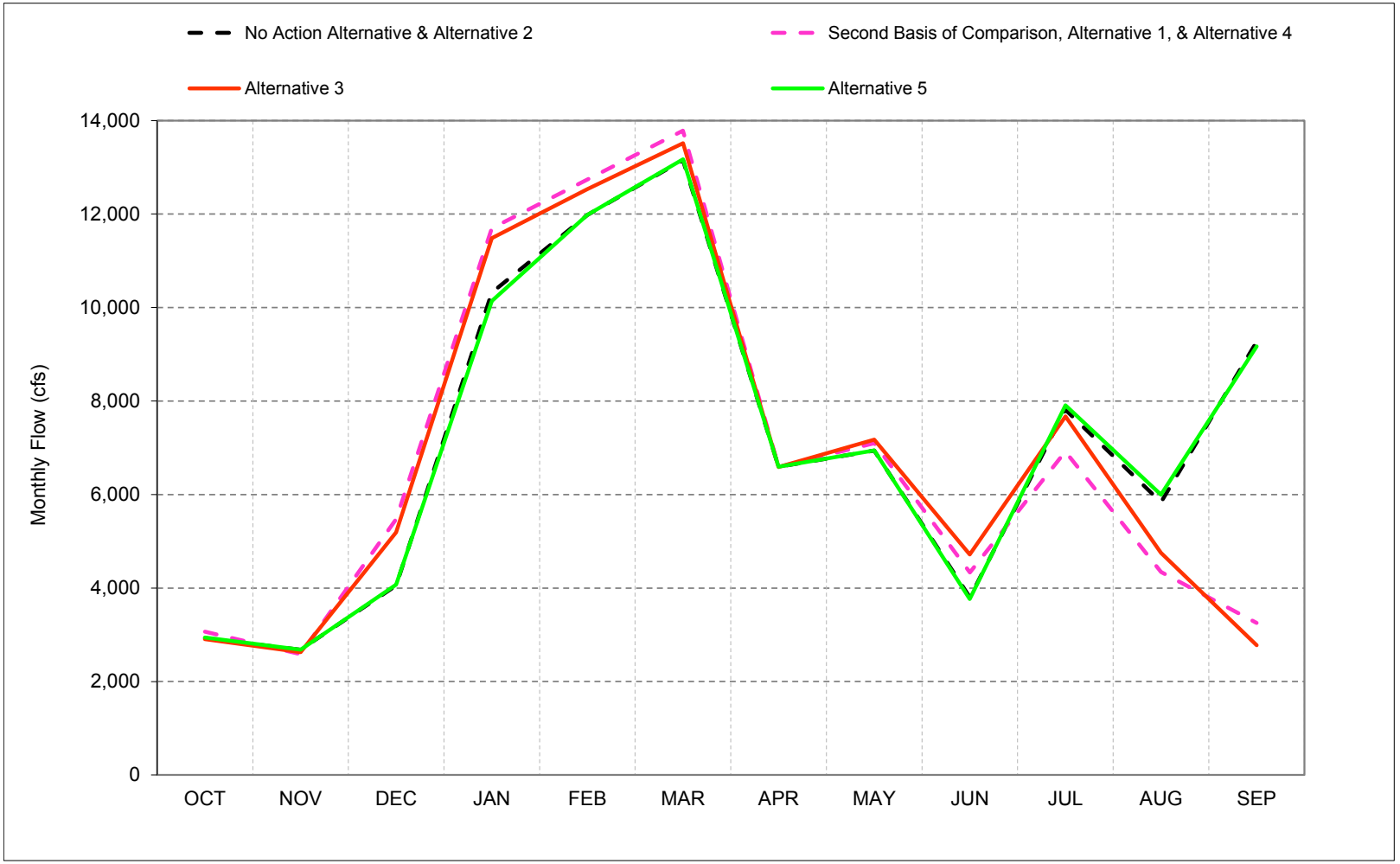
Figure C-25-1. Feather River d/s of Thermalito, Long-Term* Average Flow



*Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-25-2. Feather River d/s of Thermalito, Wet Year* Long-Term Average Flow**

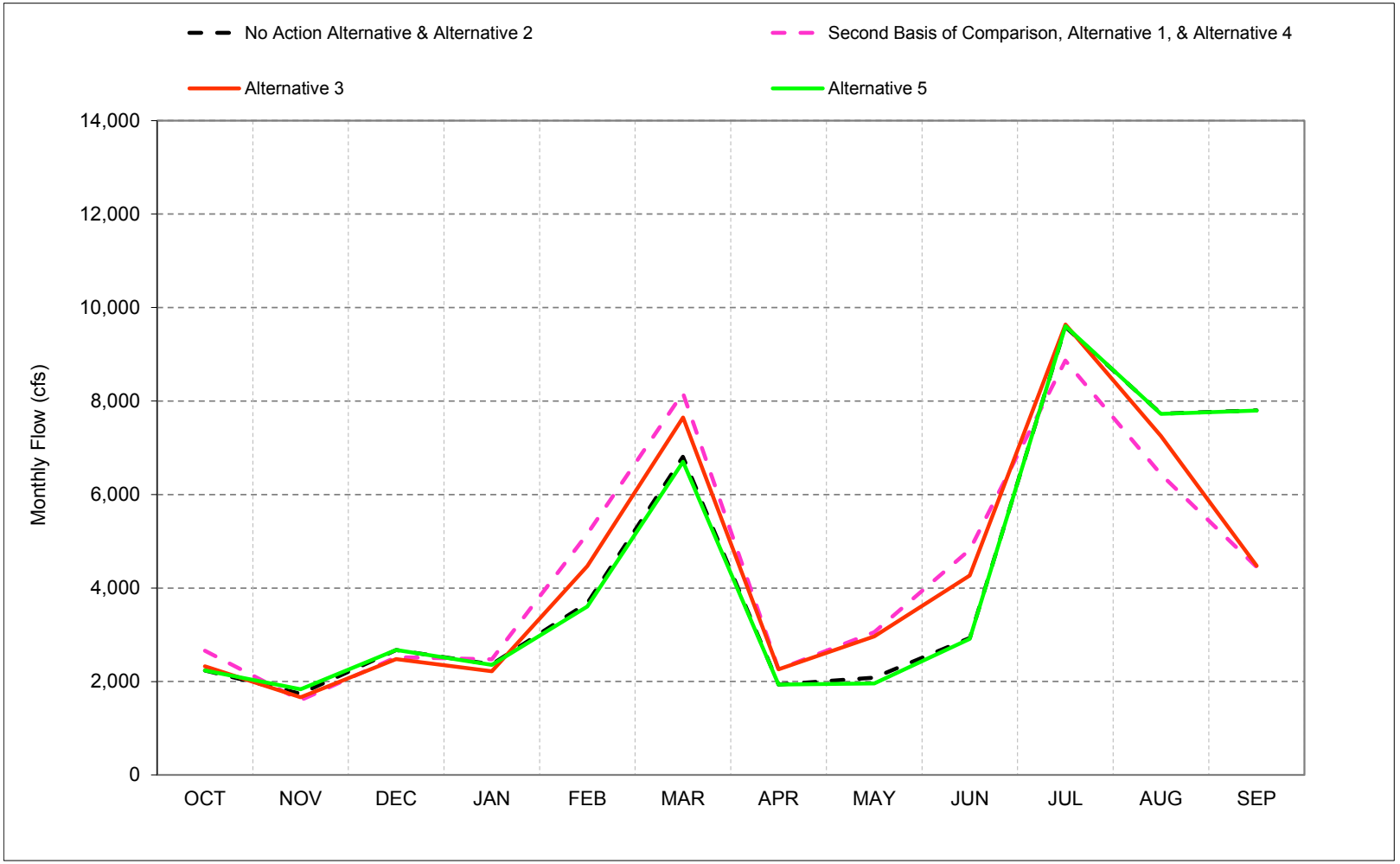


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-25-3. Feather River d/s of Thermalito, Above Normal Year* Long-Term Average Flow**

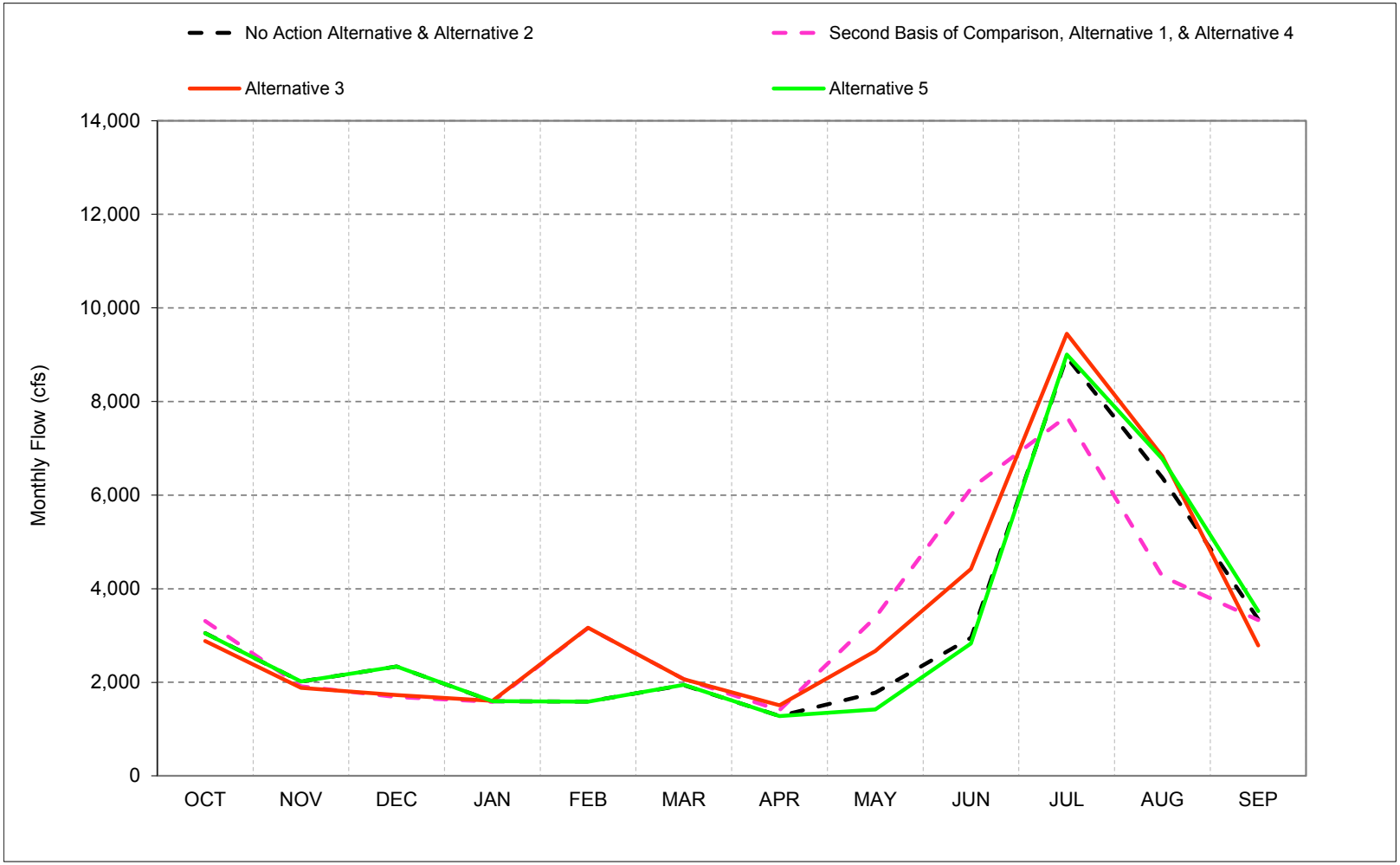


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-25-4. Feather River d/s of Thermalito, Below Normal Year* Long-Term Average Flow**

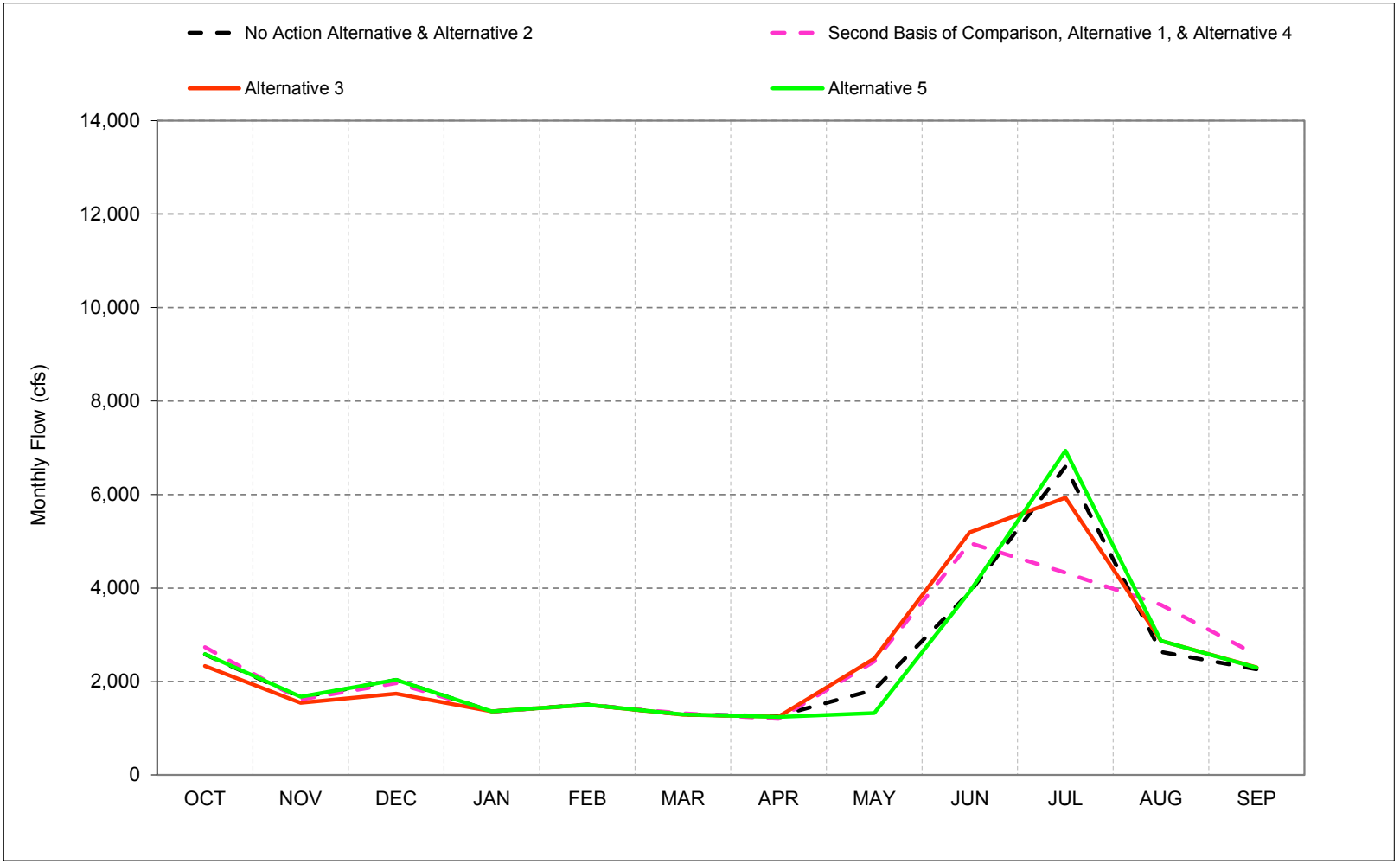


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-25-5. Feather River d/s of Thermalito, Dry Year* Long-Term Average Flow**

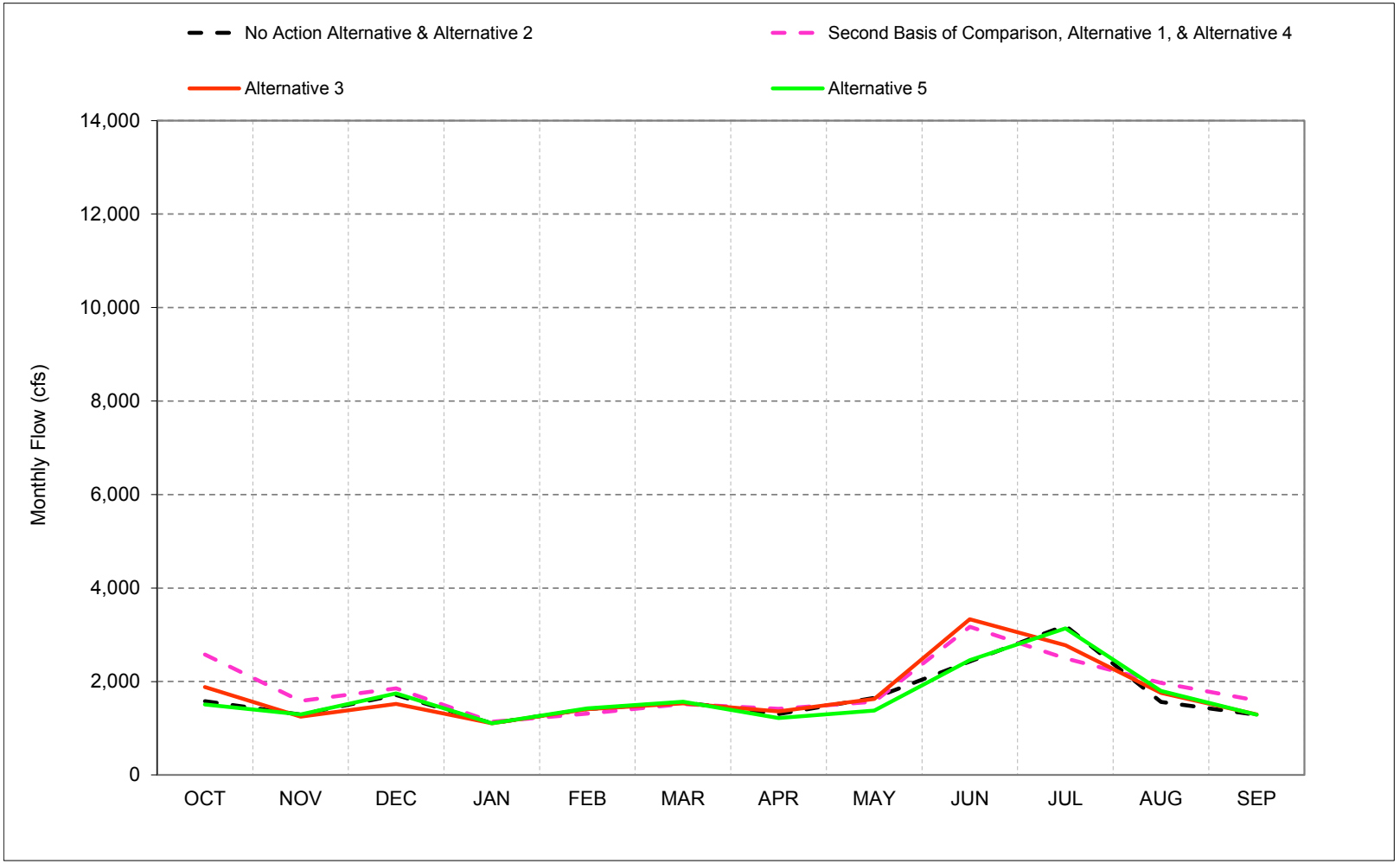


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-25-6. Feather River d/s of Thermalito, Critical Year* Long-Term Average Flow**



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

**Based on the 82-year simulation period.

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 Alternatives 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 C-25-1. Feather River d/s of Thermalito, 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%	4,000	2,500	5,220	13,743	14,312	13,576	8,403	8,298	5,577	10,000	8,144	10,000
20%	4,000	2,500	3,630	2,003	9,837	9,026	3,608	5,429	4,391	9,787	7,695	9,593
30%	4,000	2,500	1,823	1,700	3,741	6,580	2,690	2,791	3,939	9,427	7,343	8,157
40%	4,000	1,972	1,700	1,700	1,700	4,666	1,806	2,430	3,712	8,907	6,401	7,651
50%	1,898	1,700	1,700	1,700	1,700	1,700	1,104	1,920	3,311	8,572	4,991	5,642
60%	1,700	1,700	1,700	1,700	1,700	1,700	1,000	1,427	2,787	8,170	3,941	3,548
70%	1,700	1,200	1,700	1,200	1,700	1,700	1,000	1,000	2,524	6,244	2,167	1,424
80%	1,200	1,200	1,200	960	1,200	1,000	1,000	1,000	1,922	4,207	1,665	1,170
90%	902	900	901	900	900	800	759	1,000	1,378	2,246	1,229	1,000
Long Term												
Full Simulation Period[b]	2,553	1,991	2,769	4,356	5,170	6,055	3,069	3,455	3,376	7,275	4,802	5,364
Water Year Types[c]												
Wet (32%)	2,929	2,680	4,053	10,322	11,983	13,155	6,595	6,942	3,800	7,817	5,835	9,265
Above Normal (16%)	2,235	1,740	2,676	2,369	3,681	6,808	1,938	2,081	2,935	9,586	7,727	7,802
Below Normal (13%)	3,050	2,018	2,338	1,595	1,589	1,941	1,281	1,778	2,954	8,948	6,371	3,350
Dry (24%)	2,583	1,662	2,032	1,360	1,505	1,296	1,264	1,821	3,909	6,594	2,635	2,261
Critical (15%)	1,578	1,295	1,709	1,108	1,413	1,555	1,305	1,650	2,431	3,196	1,566	1,290

Alternative 1

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

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%	0	0	-147	146	5,081	1,214	-14	-23	2,333	-580	-415	-4,420
20%	0	0	-210	985	1,663	1,996	78	924	2,244	-733	-1,039	-4,346
30%	0	-446	395	0	2,510	1,263	67	2,543	2,309	-806	-1,662	-3,603
40%	-26	-272	0	0	679	862	47	939	1,510	-885	-1,656	-3,856
50%	1,541	0	0	0	0	835	150	575	961	-2,408	-1,345	-3,160
60%	792	0	0	0	0	0	0	529	1,047	-3,333	-1,250	-1,644
70%	146	500	0	0	0	0	0	334	832	-2,604	196	-181
80%	500	0	174	240	0	0	0	0	604	-1,177	290	-119
90%	298	0	47	0	0	0	209	0	336	-202	-6	0
Long Term												
Full Simulation Period[b]	330	-36	344	455	671	433	66	558	1,261	-1,224	-657	-2,319
Water Year Types[c]												
Wet (32%)	139	-94	1,423	1,373	757	628	-8	159	533	-897	-1,490	-6,011
Above Normal (16%)	425	-140	-157	107	1,485	1,365	322	977	1,888	-720	-1,294	-3,354
Below Normal (13%)	262	-105	-651	-13	1,573	125	125	1,611	3,192	-1,267	-2,111	-17
Dry (24%)	154	-46	-66	0	-8	24	-61	610	1,052	-2,268	1,004	313
Critical (15%)	999	287	144	31	-96	-36	109	-81	739	-701	403	305

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 C-25-2. Feather River d/s of Thermalito, Monthly Flow

No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	4,000	2,500	5,220	13,743	14,312	13,576	8,403	8,298	5,577	10,000	8,144	10,000
20%	4,000	2,500	3,630	2,003	9,837	9,026	3,608	5,429	4,391	9,787	7,695	9,593
30%	4,000	2,500	1,823	1,700	3,741	6,580	2,690	2,791	3,939	9,427	7,343	8,157
40%	4,000	1,972	1,700	1,700	1,700	4,666	1,806	2,430	3,712	8,907	6,401	7,651
50%	1,898	1,700	1,700	1,700	1,700	1,700	1,104	1,920	3,311	8,572	4,991	5,642
60%	1,700	1,700	1,700	1,700	1,700	1,700	1,000	1,427	2,787	8,170	3,941	3,548
70%	1,700	1,200	1,700	1,200	1,700	1,700	1,000	1,000	2,524	6,244	2,167	1,424
80%	1,200	1,200	1,200	960	1,200	1,000	1,000	1,000	1,922	4,207	1,665	1,170
90%	902	900	901	900	900	800	759	1,000	1,378	2,246	1,229	1,000
Long Term												
Full Simulation Period[b]	2,553	1,991	2,769	4,356	5,170	6,055	3,069	3,455	3,376	7,275	4,802	5,364
Water Year Types[c]												
Wet (32%)	2,929	2,680	4,053	10,322	11,983	13,155	6,595	6,942	3,800	7,817	5,835	9,265
Above Normal (16%)	2,235	1,740	2,676	2,369	3,681	6,808	1,938	2,081	2,935	9,586	7,727	7,802
Below Normal (13%)	3,050	2,018	2,338	1,595	1,589	1,941	1,281	1,778	2,954	8,948	6,371	3,350
Dry (24%)	2,583	1,662	2,032	1,360	1,505	1,296	1,264	1,821	3,909	6,594	2,635	2,261
Critical (15%)	1,578	1,295	1,709	1,108	1,413	1,555	1,305	1,650	2,431	3,196	1,566	1,290

Alternative 3

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	4,000	2,500	5,285	14,314	16,714	13,573	8,396	8,298	6,837	10,000	8,031	5,388
20%	4,000	2,500	3,006	1,816	11,330	9,458	3,706	6,213	5,940	9,849	7,592	4,833
30%	4,000	1,700	1,755	1,700	5,977	7,640	2,833	4,432	5,428	9,452	6,512	3,781
40%	3,443	1,700	1,700	1,700	1,894	5,140	1,854	3,105	5,005	9,028	5,444	2,799
50%	2,035	1,700	1,700	1,700	1,700	2,508	1,230	2,641	4,563	8,667	4,544	2,222
60%	1,700	1,700	1,700	1,700	1,700	1,700	1,000	2,157	4,262	8,162	3,199	1,345
70%	1,700	1,200	1,700	1,200	1,700	1,700	1,000	1,669	3,798	5,497	2,312	1,197
80%	1,200	1,200	1,200	960	1,200	1,000	1,000	1,000	2,837	3,032	1,710	1,009
90%	902	900	904	900	900	800	853	1,000	2,107	2,030	1,231	1,000
Long Term												
Full Simulation Period[b]	2,522	1,908	2,918	4,703	5,682	6,314	3,153	3,950	4,520	7,081	4,530	2,715
Water Year Types[c]												
Wet (32%)	2,908	2,630	5,192	11,483	12,535	13,516	6,589	7,176	4,718	7,672	4,754	2,778
Above Normal (16%)	2,325	1,662	2,480	2,222	4,471	7,646	2,262	2,966	4,267	9,637	7,249	4,476
Below Normal (13%)	2,884	1,880	1,730	1,606	3,168	2,067	1,509	2,669	4,424	9,449	6,830	2,788
Dry (24%)	2,330	1,542	1,738	1,362	1,505	1,290	1,247	2,494	5,190	5,932	2,869	2,301
Critical (15%)	1,885	1,251	1,524	1,108	1,410	1,533	1,360	1,627	3,335	2,775	1,757	1,296

Alternative 3 minus No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	65	571	2,402	-3	-7	0	1,260	0	-113	-4,612
20%	0	0	-624	-187	1,493	432	98	784	1,550	63	-103	-4,760
30%	0	-800	-68	0	2,236	1,060	143	1,641	1,489	25	-830	-4,376
40%	-557	-272	0	0	194	474	48	675	1,294	121	-956	-4,853
50%	137	0	0	0	0	808	126	721	1,252	95	-447	-3,419
60%	0	0	0	0	0	0	0	731	1,474	-8	-742	-2,202
70%	0	0	0	0	0	0	0	669	1,274	-747	146	-227
80%	0	0	0	0	0	0	0	0	916	-1,174	45	-161
90%	0	0	3	0	0	0	94	0	729	-216	2	0
Long Term												
Full Simulation Period[b]	-31	-83	150	346	512	259	84	495	1,144	-194	-272	-2,649
Water Year Types[c]												
Wet (32%)	-20	-50	1,139	1,161	552	360	-6	235	918	-145	-1,082	-6,487
Above Normal (16%)	90	-79	-195	-148	790	838	324	885	1,332	50	-478	-3,326
Below Normal (13%)	-166	-139	-608	11	1,580	125	228	891	1,470	501	459	-562
Dry (24%)	-253	-120	-294	2	0	-6	-17	673	1,281	-661	234	40
Critical (15%)	307	-44	-186	0	-2	-22	55	-22	904	-421	191	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 C-25-3. Feather River d/s of Thermalito, 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%	4,000	2,500	5,220	13,743	14,312	13,576	8,403	8,298	5,577	10,000	8,144	10,000
20%	4,000	2,500	3,630	2,003	9,837	9,026	3,608	5,429	4,391	9,787	7,695	9,593
30%	4,000	2,500	1,823	1,700	3,741	6,580	2,690	2,791	3,939	9,427	7,343	8,157
40%	4,000	1,972	1,700	1,700	1,700	4,666	1,806	2,430	3,712	8,907	6,401	7,651
50%	1,898	1,700	1,700	1,700	1,700	1,700	1,104	1,920	3,311	8,572	4,991	5,642
60%	1,700	1,700	1,700	1,700	1,700	1,700	1,000	1,427	2,787	8,170	3,941	3,548
70%	1,700	1,200	1,700	1,200	1,700	1,700	1,000	1,000	2,524	6,244	2,167	1,424
80%	1,200	1,200	1,200	960	1,200	1,000	1,000	1,000	1,922	4,207	1,665	1,170
90%	902	900	901	900	900	800	759	1,000	1,378	2,246	1,229	1,000
Long Term												
Full Simulation Period[b]	2,553	1,991	2,769	4,356	5,170	6,055	3,069	3,455	3,376	7,275	4,802	5,364
Water Year Types[c]												
Wet (32%)	2,929	2,680	4,053	10,322	11,983	13,155	6,595	6,942	3,800	7,817	5,835	9,265
Above Normal (16%)	2,235	1,740	2,676	2,369	3,681	6,808	1,938	2,081	2,935	9,586	7,727	7,802
Below Normal (13%)	3,050	2,018	2,338	1,595	1,589	1,941	1,281	1,778	2,954	8,948	6,371	3,350
Dry (24%)	2,583	1,662	2,032	1,360	1,505	1,296	1,264	1,821	3,909	6,594	2,635	2,261
Critical (15%)	1,578	1,295	1,709	1,108	1,413	1,555	1,305	1,650	2,431	3,196	1,566	1,290

Alternative 5

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	5,231	13,726	14,296	13,578	8,400	8,302	5,058	10,000	8,153	10,000
20%	4,000	2,500	3,623	2,007	10,475	9,029	3,609	5,429	4,304	9,954	7,732	9,613
30%	4,000	2,500	1,829	1,700	3,773	6,115	2,576	2,423	4,000	9,417	7,482	8,113
40%	4,000	2,031	1,700	1,700	1,700	4,669	1,805	1,708	3,726	8,981	6,683	7,599
50%	1,898	1,700	1,700	1,700	1,700	1,700	1,062	1,434	3,282	8,651	5,737	5,685
60%	1,700	1,700	1,700	1,700	1,700	1,700	1,000	1,156	2,772	8,291	3,988	3,116
70%	1,700	1,222	1,700	1,200	1,700	1,700	1,000	1,000	2,483	6,076	2,503	1,553
80%	1,200	1,200	1,200	960	1,200	1,000	1,000	1,000	1,915	4,810	1,766	1,190
90%	900	900	901	900	900	800	751	1,000	1,313	2,253	1,284	1,000
Long Term												
Full Simulation Period[b]	2,547	2,010	2,781	4,298	5,160	6,046	3,051	3,229	3,351	7,389	4,998	5,365
Water Year Types[c]												
Wet (32%)	2,942	2,681	4,073	10,143	11,984	13,175	6,596	6,943	3,764	7,907	5,996	9,171
Above Normal (16%)	2,237	1,834	2,674	2,357	3,602	6,700	1,937	1,959	2,913	9,601	7,728	7,796
Below Normal (13%)	3,049	2,018	2,338	1,595	1,589	1,946	1,281	1,420	2,828	9,007	6,773	3,521
Dry (24%)	2,584	1,675	2,038	1,360	1,505	1,296	1,242	1,328	3,924	6,938	2,869	2,298
Critical (15%)	1,507	1,295	1,743	1,108	1,426	1,566	1,218	1,382	2,459	3,139	1,798	1,287

Alternative 5 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%	0	0	11	-18	-16	3	-3	5	-519	0	9	0
20%	0	0	-7	4	638	3	1	1	-87	168	37	20
30%	0	0	6	0	32	-465	-114	-368	62	-9	139	-44
40%	0	59	0	0	0	3	-1	-722	15	74	282	-52
50%	0	0	0	0	0	0	-42	-486	-29	79	746	43
60%	0	0	0	0	0	0	0	-270	-16	121	46	-431
70%	0	22	0	0	0	0	0	0	-40	-168	336	128
80%	0	0	0	0	0	0	0	0	-6	604	101	21
90%	-2	0	0	0	0	0	-8	0	-65	7	55	0
Long Term												
Full Simulation Period[b]	-5	19	13	-59	-10	-9	-18	-226	-24	114	196	1
Water Year Types[c]												
Wet (32%)	13	1	20	-180	2	20	1	1	-36	90	161	-94
Above Normal (16%)	2	94	-2	-12	-79	-108	-1	-122	-23	15	1	-6
Below Normal (13%)	0	0	-1	0	0	4	0	-358	-126	58	401	171
Dry (24%)	1	14	6	0	0	0	-22	-493	15	344	234	37
Critical (15%)	-71	-1	34	0	13	11	-87	-268	27	-57	232	-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 C-25-4. 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

No Action Alternative

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	5,220	13,743	14,312	13,576	8,403	8,298	5,577	10,000	8,144	10,000
20%	4,000	2,500	3,630	2,003	9,837	9,026	3,608	5,429	4,391	9,787	7,695	9,593
30%	4,000	2,500	1,823	1,700	3,741	6,580	2,690	2,791	3,939	9,427	7,343	8,157
40%	4,000	1,972	1,700	1,700	1,700	4,666	1,806	2,430	3,712	8,907	6,401	7,651
50%	1,898	1,700	1,700	1,700	1,700	1,700	1,104	1,920	3,311	8,572	4,991	5,642
60%	1,700	1,700	1,700	1,700	1,700	1,700	1,000	1,427	2,787	8,170	3,941	3,548
70%	1,700	1,200	1,700	1,200	1,700	1,700	1,000	1,000	2,524	6,244	2,167	1,424
80%	1,200	1,200	1,200	960	1,200	1,000	1,000	1,000	1,922	4,207	1,665	1,170
90%	902	900	901	900	900	800	759	1,000	1,378	2,246	1,229	1,000
Long Term												
Full Simulation Period[b]	2,553	1,991	2,769	4,356	5,170	6,055	3,069	3,455	3,376	7,275	4,802	5,364
Water Year Types[c]												
Wet (32%)	2,929	2,680	4,053	10,322	11,983	13,155	6,595	6,942	3,800	7,817	5,835	9,265
Above Normal (16%)	2,235	1,740	2,676	2,369	3,681	6,808	1,938	2,081	2,935	9,586	7,727	7,802
Below Normal (13%)	3,050	2,018	2,338	1,595	1,589	1,941	1,281	1,778	2,954	8,948	6,371	3,350
Dry (24%)	2,583	1,662	2,032	1,360	1,505	1,296	1,264	1,821	3,909	6,594	2,635	2,261
Critical (15%)	1,578	1,295	1,709	1,108	1,413	1,555	1,305	1,650	2,431	3,196	1,566	1,290

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%	0	0	147	-146	-5,081	-1,214	14	23	-2,333	580	415	4,420
20%	0	0	210	-985	-1,663	-1,996	-78	-924	-2,244	733	1,039	4,346
30%	0	446	-395	0	-2,510	-1,263	-67	-2,543	-2,309	806	1,662	3,603
40%	26	272	0	0	-679	-862	-47	-939	-1,510	885	1,656	3,856
50%	-1,541	0	0	0	0	-835	-150	-575	-961	2,408	1,345	3,160
60%	-792	0	0	0	0	0	0	-529	-1,047	3,333	1,250	1,644
70%	-146	-500	0	0	0	0	0	-334	-832	2,604	-196	181
80%	-500	0	-174	-240	0	0	0	0	-604	1,177	-290	119
90%	-298	0	-47	0	0	0	-209	0	-336	202	6	0
Long Term												
Full Simulation Period[b]	-330	36	-344	-455	-671	-433	-66	-558	-1,261	1,224	657	2,319
Water Year Types[c]												
Wet (32%)	-139	94	-1,423	-1,373	-757	-628	8	-159	-533	897	1,490	6,011
Above Normal (16%)	-425	140	157	-107	-1,485	-1,365	-322	-977	-1,888	720	1,294	3,354
Below Normal (13%)	-262	105	651	13	-1,573	-125	-125	-1,611	-3,192	1,267	2,111	17
Dry (24%)	-154	46	66	0	8	-24	61	-610	-1,052	2,268	-1,004	-313
Critical (15%)	-999	-287	-144	-31	96	36	-109	81	-739	701	-403	-305

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 C-25-5. Feather River d/s of Thermalito, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	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

Alternative 3

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	4,000	2,500	5,285	14,314	16,714	13,573	8,396	8,298	6,837	10,000	8,031	5,388
20%	4,000	2,500	3,006	1,816	11,330	9,458	3,706	6,213	5,940	9,849	7,592	4,833
30%	4,000	1,700	1,755	1,700	5,977	7,640	2,833	4,432	5,428	9,452	6,512	3,781
40%	3,443	1,700	1,700	1,700	1,894	5,140	1,854	3,105	5,005	9,028	5,444	2,799
50%	2,035	1,700	1,700	1,700	1,700	2,508	1,230	2,641	4,563	8,667	4,544	2,222
60%	1,700	1,700	1,700	1,700	1,700	1,700	1,000	2,157	4,262	8,162	3,199	1,345
70%	1,700	1,200	1,700	1,200	1,700	1,700	1,000	1,669	3,798	5,497	2,312	1,197
80%	1,200	1,200	1,200	960	1,200	1,000	1,000	1,000	2,837	3,032	1,710	1,009
90%	902	900	904	900	900	800	853	1,000	2,107	2,030	1,231	1,000
Long Term												
Full Simulation Period[b]	2,522	1,908	2,918	4,703	5,682	6,314	3,153	3,950	4,520	7,081	4,530	2,715
Water Year Types[c]												
Wet (32%)	2,908	2,630	5,192	11,483	12,535	13,516	6,589	7,176	4,718	7,672	4,754	2,778
Above Normal (16%)	2,325	1,662	2,480	2,222	4,471	7,646	2,262	2,966	4,267	9,637	7,249	4,476
Below Normal (13%)	2,884	1,880	1,730	1,606	3,168	2,067	1,509	2,669	4,424	9,449	6,830	2,788
Dry (24%)	2,330	1,542	1,738	1,362	1,505	1,290	1,247	2,494	5,190	5,932	2,869	2,301
Critical (15%)	1,885	1,251	1,524	1,108	1,410	1,533	1,360	1,627	3,335	2,775	1,757	1,296

Alternative 3 minus Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	212	424	**-2,679**	**-1,216**	8	23	**-1,073**	580	302	**-192**
20%	0	0	**-414**	**-1,172**	**-171**	**-1,564**	21	**-140**	**-695**	796	936	**-415**
30%	0	**-354**	**-463**	0	**-275**	**-203**	76	**-901**	**-820**	831	832	**-773**
40%	**-531**	0	0	0	**-485**	**-387**	1	**-264**	**-216**	1,005	700	**-997**
50%	**-1,403**	0	0	0	0	**-27**	**-24**	146	291	2,503	898	**-259**
60%	**-792**	0	0	0	0	0	0	202	428	3,325	508	**-559**
70%	**-146**	**-500**	0	0	0	0	0	335	442	1,857	**-50**	**-47**
80%	**-500**	0	**-174**	**-240**	0	0	0	0	312	2	**-245**	**-42**
90%	**-298**	0	**-44**	0	0	0	**-114**	0	393	**-14**	8	0
Long Term												
Full Simulation Period[b]	**-361**	**-47**	**-194**	**-109**	**-159**	**-174**	18	**-63**	**-117**	1,031	385	**-330**
Water Year Types[c]												
Wet (32%)	**-159**	44	**-284**	**-213**	**-205**	**-268**	2	75	385	753	408	**-476**
Above Normal (16%)	**-335**	62	**-39**	**-255**	**-695**	**-528**	3	**-92**	**-556**	770	816	27
Below Normal (13%)	**-428**	**-33**	43	24	7	0	103	**-719**	**-1,722**	1,768	2,569	**-545**
Dry (24%)	**-407**	**-73**	**-228**	2	8	**-31**	44	63	228	1,606	**-770**	**-274**
Critical (15%)	**-692**	**-331**	**-329**	**-31**	94	13	**-54**	59	165	280	**-212**	**-299**

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 C-25-6. 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

Alternative 5

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	5,231	13,726	14,296	13,578	8,400	8,302	5,058	10,000	8,153	10,000
20%	4,000	2,500	3,623	2,007	10,475	9,029	3,609	5,429	4,304	9,954	7,732	9,613
30%	4,000	2,500	1,829	1,700	3,773	6,115	2,576	2,423	4,000	9,417	7,482	8,113
40%	4,000	2,031	1,700	1,700	1,700	4,669	1,805	1,708	3,726	8,981	6,683	7,599
50%	1,898	1,700	1,700	1,700	1,700	1,700	1,062	1,434	3,282	8,651	5,737	5,685
60%	1,700	1,700	1,700	1,700	1,700	1,700	1,000	1,156	2,772	8,291	3,988	3,116
70%	1,700	1,222	1,700	1,200	1,700	1,700	1,000	1,000	2,483	6,076	2,503	1,553
80%	1,200	1,200	1,200	960	1,200	1,000	1,000	1,000	1,915	4,810	1,766	1,190
90%	900	900	901	900	900	800	751	1,000	1,313	2,253	1,284	1,000
Long Term												
Full Simulation Period[b]	2,547	2,010	2,781	4,298	5,160	6,046	3,051	3,229	3,351	7,389	4,998	5,365
Water Year Types[c]												
Wet (32%)	2,942	2,681	4,073	10,143	11,984	13,175	6,596	6,943	3,764	7,907	5,996	9,171
Above Normal (16%)	2,237	1,834	2,674	2,357	3,602	6,700	1,937	1,959	2,913	9,601	7,728	7,796
Below Normal (13%)	3,049	2,018	2,338	1,595	1,589	1,946	1,281	1,420	2,828	9,007	6,773	3,521
Dry (24%)	2,584	1,675	2,038	1,360	1,505	1,296	1,242	1,328	3,924	6,938	2,869	2,298
Critical (15%)	1,507	1,295	1,743	1,108	1,426	1,566	1,218	1,382	2,459	3,139	1,798	1,287

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%	0	0	158	-164	-5,097	-1,211	11	27	-2,852	580	425	4,420
20%	0	0	203	-981	-1,026	-1,993	-77	-923	-2,331	901	1,076	4,366
30%	0	446	-389	0	-2,478	-1,728	-181	-2,911	-2,247	797	1,801	3,559
40%	26	331	0	0	-679	-859	-48	-1,661	-1,495	958	1,938	3,803
50%	-1,541	0	0	0	0	-835	-192	-1,061	-990	2,488	2,091	3,203
60%	-792	0	0	0	0	0	0	-800	-1,062	3,454	1,297	1,212
70%	-146	-478	0	0	0	0	0	-334	-872	2,436	140	309
80%	-500	0	-174	-240	0	0	0	0	-610	1,781	-189	139
90%	-300	0	-47	0	0	0	-217	0	-400	209	61	0
Long Term												
Full Simulation Period[b]	-336	54	-331	-514	-681	-442	-84	-785	-1,286	1,339	853	2,320
Water Year Types[c]												
Wet (32%)	-126	95	-1,403	-1,553	-756	-609	9	-158	-569	988	1,651	5,917
Above Normal (16%)	-423	234	155	-119	-1,564	-1,474	-322	-1,099	-1,911	735	1,295	3,348
Below Normal (13%)	-262	105	650	13	-1,573	-121	-125	-1,969	-3,317	1,325	2,512	188
Dry (24%)	-152	60	72	0	8	-25	39	-1,103	-1,038	2,612	-770	-276
Critical (15%)	-1,070	-287	-110	-31	109	47	-196	-187	-712	644	-171	-307

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

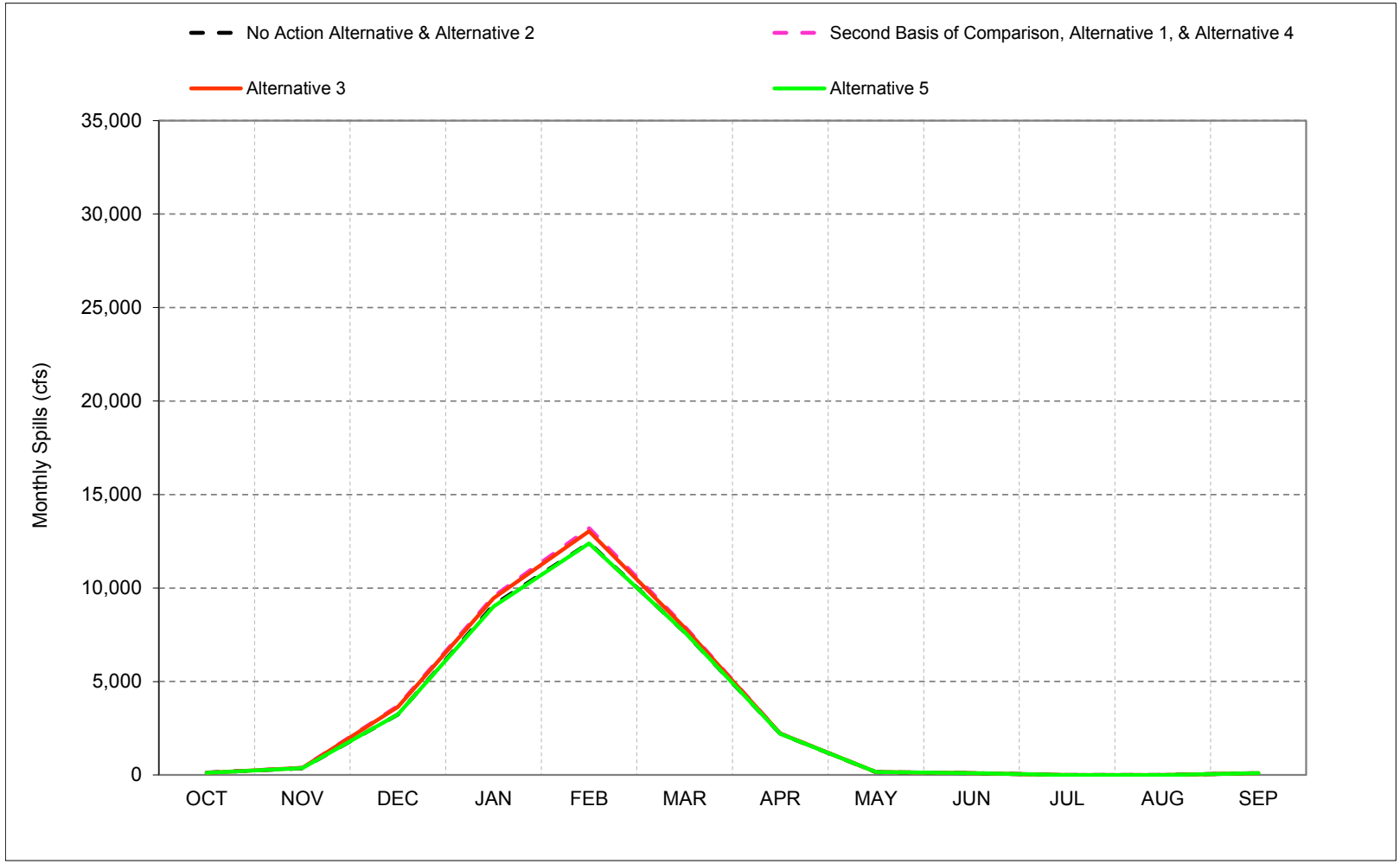
b Based on the 82-year simulation period.

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.

C.26. Fremont Weir Spills

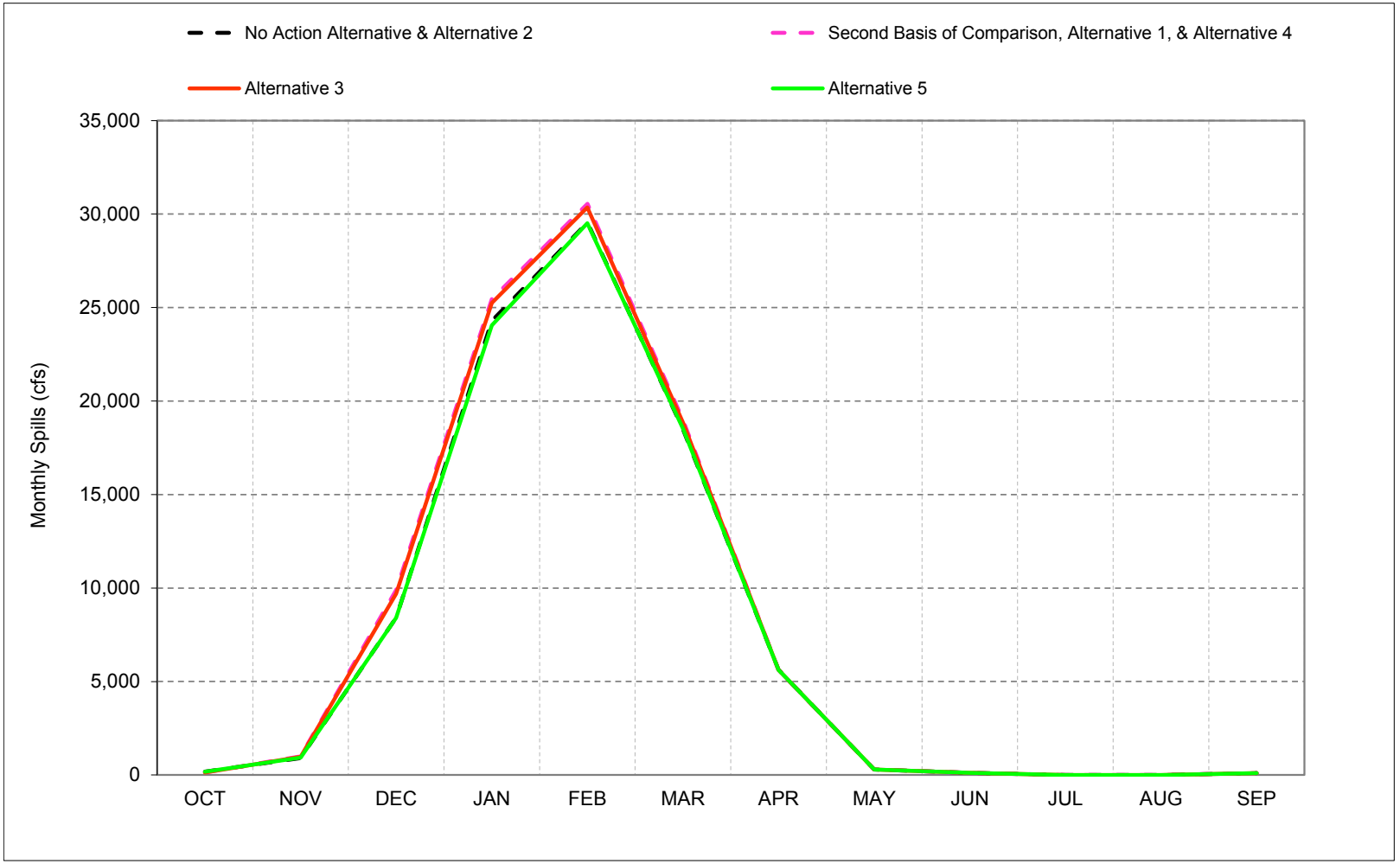
Figure C-26-1. Fremont Weir, Long-Term* Average Spills



*Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-26-2. Fremont Weir, Wet Year* Long-Term Average Spills**

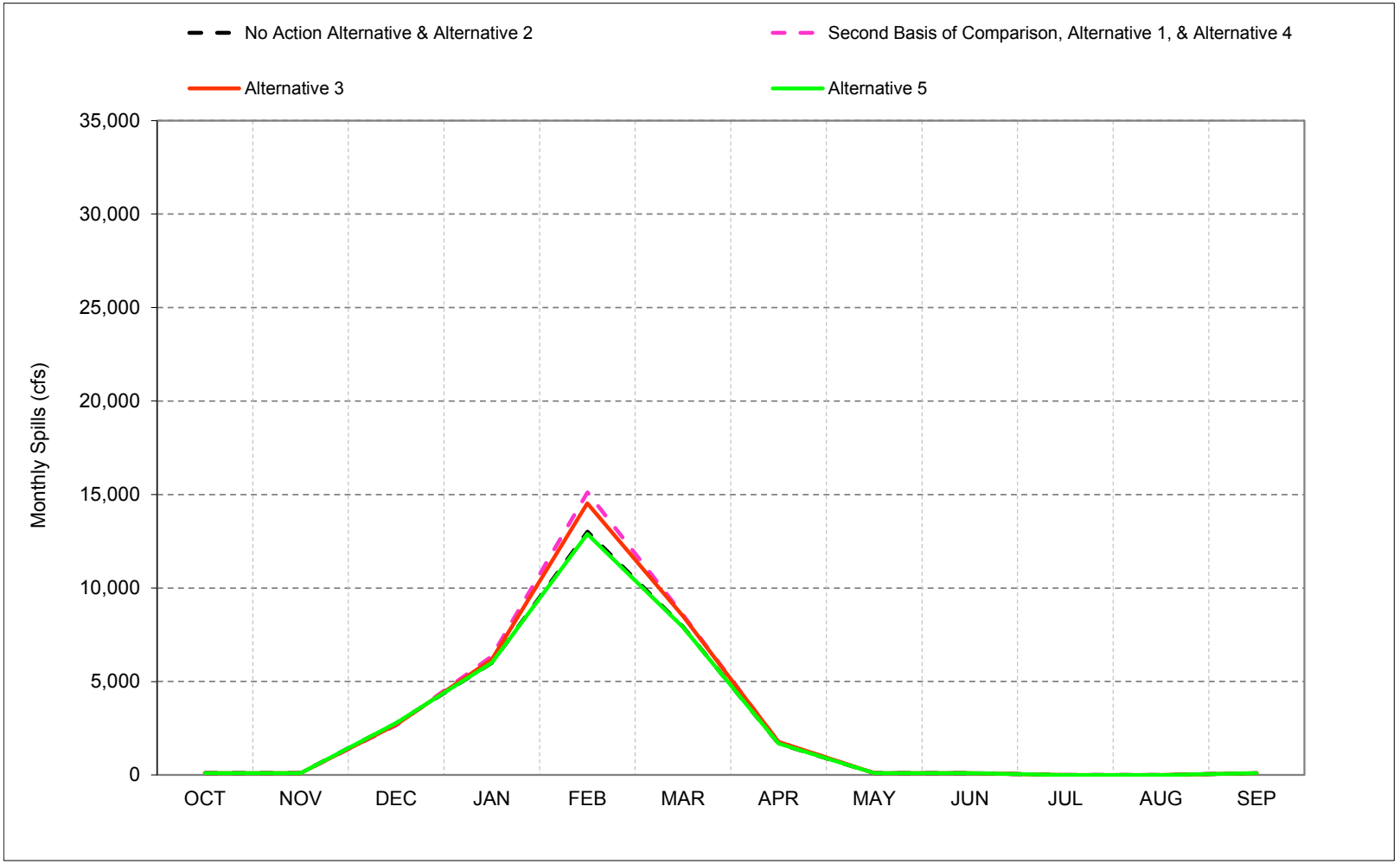


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-26-3. Fremont Weir, Above Normal Year* Long-Term Average Spills**

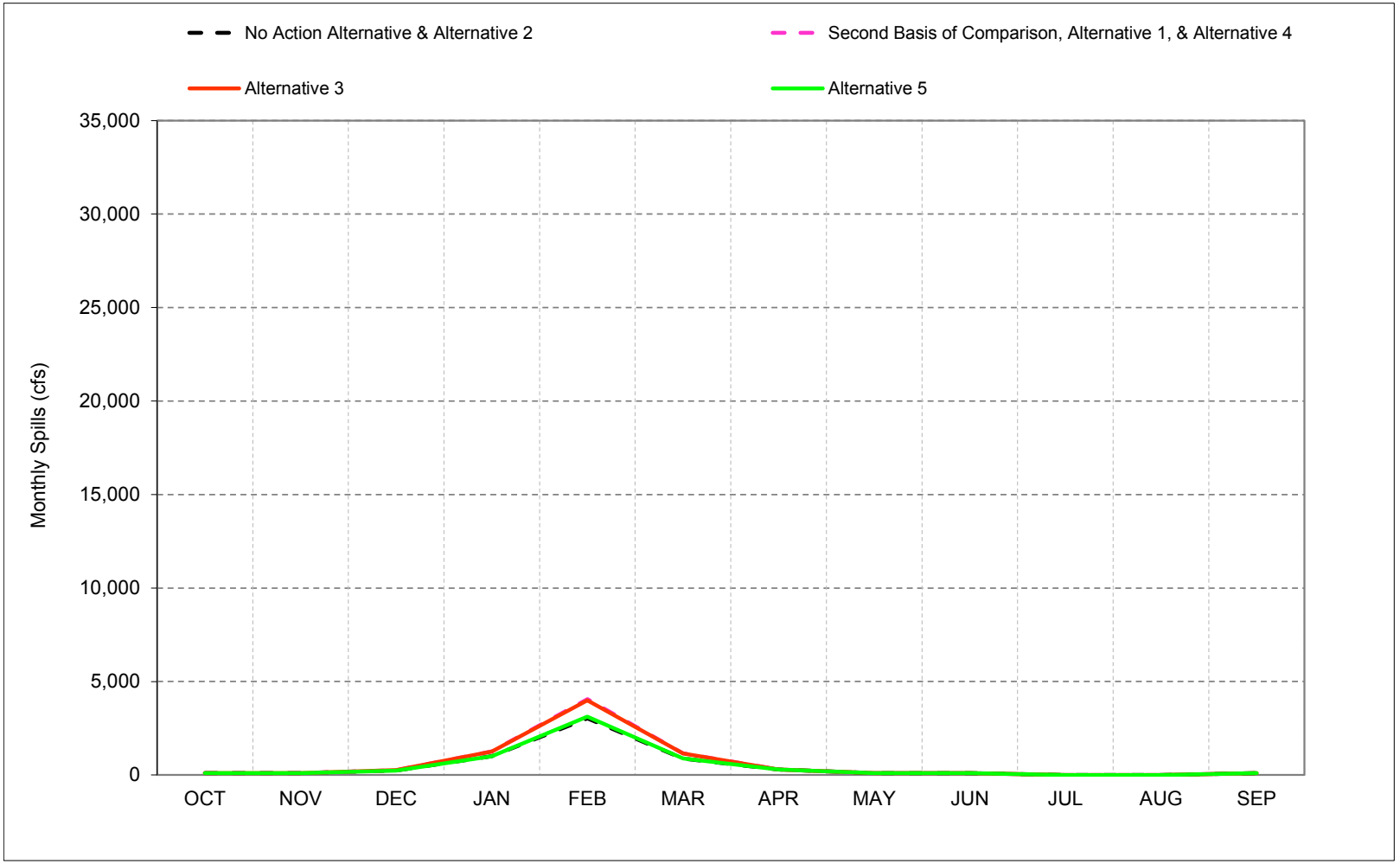


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-26-4. Fremont Weir, Below Normal Year* Long-Term Average Spills**

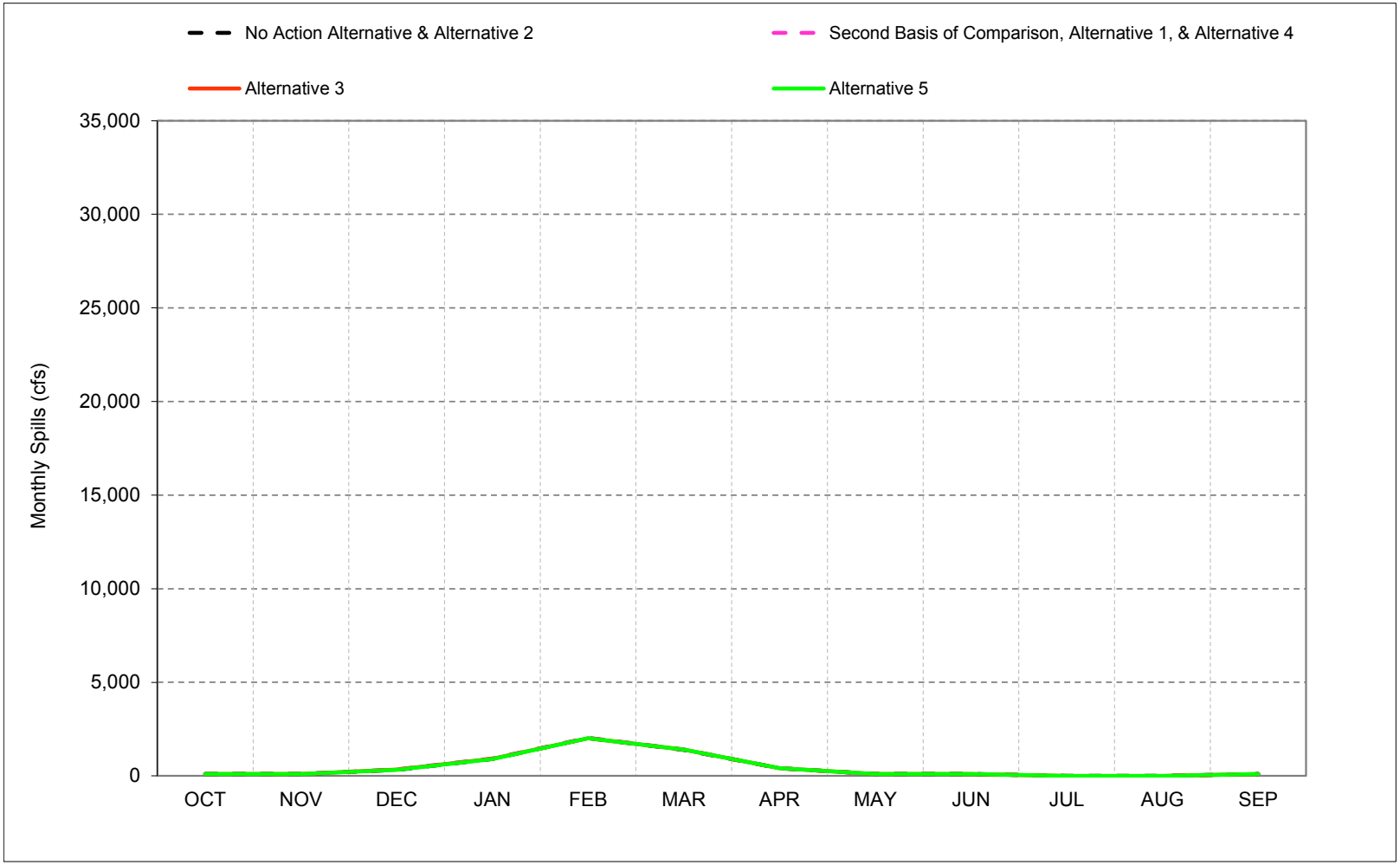


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-26-5. Fremont Weir, Dry Year* Long-Term Average Spills**

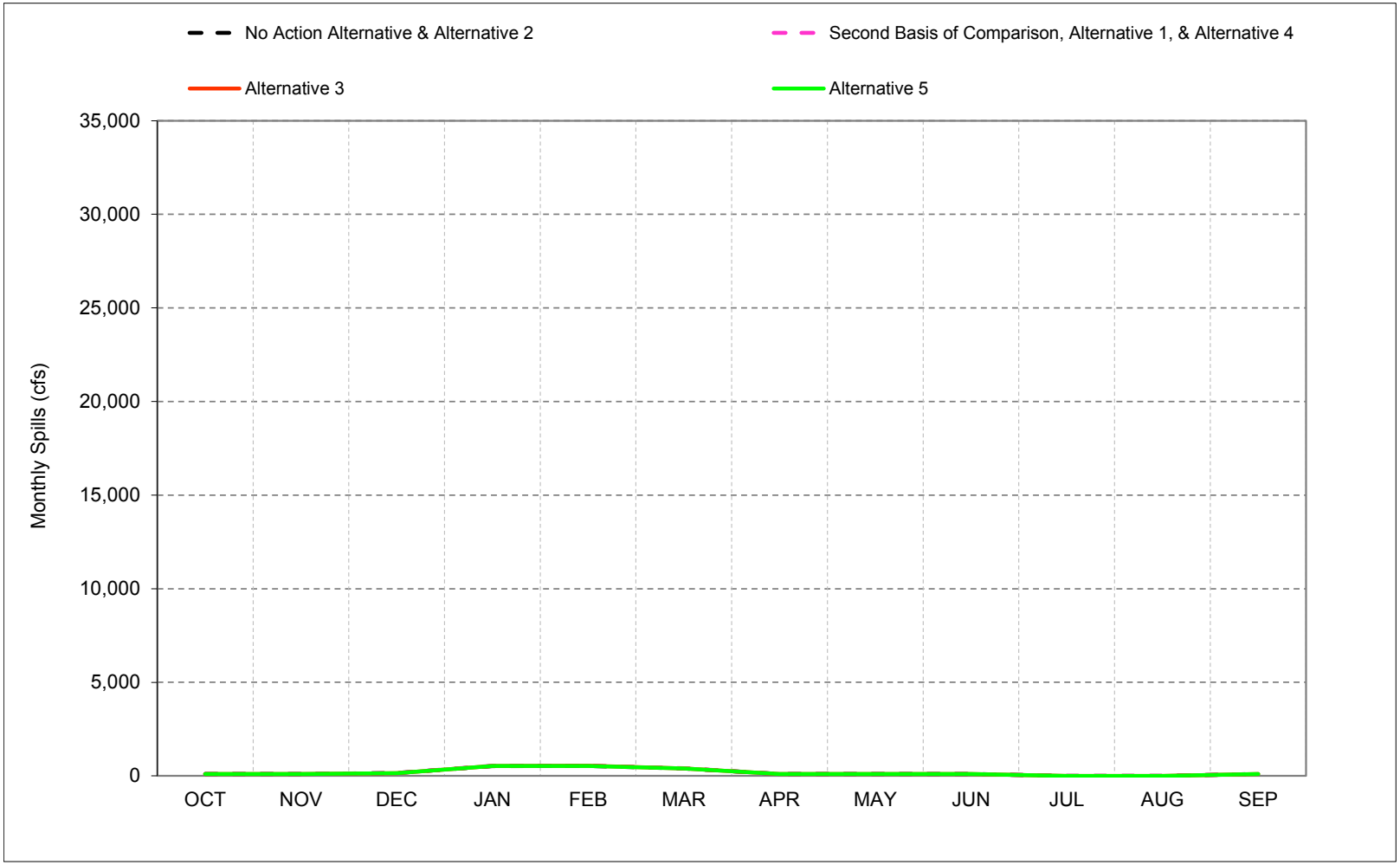


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-26-6. Fremont Weir, Critical Year* Long-Term Average Spills**



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

**Based on the 82-year simulation period.

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 Alternatives 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 C-26-1. Fremont Weir, Monthly Spills

No Action Alternative

Statistic	Monthly Spills (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	100	100	7,229	23,972	40,788	16,077	5,836	100	100	0	0	100
20%	100	100	3,479	10,411	12,582	6,630	3,995	100	100	0	0	100
30%	100	100	1,219	5,246	7,068	4,531	884	100	100	0	0	100
40%	100	100	507	2,721	5,249	3,462	340	100	100	0	0	100
50%	100	100	185	1,412	3,305	1,749	114	100	100	0	0	100
60%	100	100	100	683	2,173	975	100	100	100	0	0	100
70%	100	100	100	145	932	321	100	100	100	0	0	100
80%	100	100	100	100	187	176	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]	126	357	3,241	9,085	12,410	7,637	2,206	160	104	0	0	100
Water Year Types[c]												
Wet (32%)	183	910	8,420	24,291	29,547	18,493	5,627	289	113	0	0	100
Above Normal (16%)	100	100	2,765	5,997	13,013	7,928	1,688	100	100	0	0	100
Below Normal (13%)	100	100	242	1,004	3,031	883	293	100	100	0	0	100
Dry (24%)	100	100	322	902	2,024	1,393	407	100	100	0	0	100
Critical (15%)	100	100	149	528	534	396	106	100	100	0	0	100

Alternative 1

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

Alternative 1 minus No Action Alternative

Statistic	Monthly Spills (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	3,314	6,220	3,920	2,254	23	0	0	0	0	0
20%	0	0	194	105	1,312	749	174	0	0	0	0	0
30%	0	0	341	-15	1,273	735	82	0	0	0	0	0
40%	0	0	26	105	221	-29	1	0	0	0	0	0
50%	0	0	1	218	-36	316	5	0	0	0	0	0
60%	0	0	0	168	118	126	0	0	0	0	0	0
70%	0	0	0	8	76	161	0	0	0	0	0	0
80%	0	0	0	0	-2	25	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]	-12	27	456	464	790	305	5	0	0	0	0	0
Water Year Types[c]												
Wet (32%)	-37	86	1,468	1,151	1,000	504	-25	0	0	0	0	0
Above Normal (16%)	0	0	-106	352	2,102	638	77	0	0	0	0	0
Below Normal (13%)	0	0	20	253	1,026	283	-1	0	0	0	0	0
Dry (24%)	0	0	20	30	7	17	4	0	0	0	0	0
Critical (15%)	0	0	1	15	-1	12	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 C-26-2. Fremont Weir, Monthly Spills

No Action Alternative

Statistic	Monthly Spills (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	100	100	7,229	23,972	40,788	16,077	5,836	100	100	0	0	100
20%	100	100	3,479	10,411	12,582	6,630	3,995	100	100	0	0	100
30%	100	100	1,219	5,246	7,068	4,531	884	100	100	0	0	100
40%	100	100	507	2,721	5,249	3,462	340	100	100	0	0	100
50%	100	100	185	1,412	3,305	1,749	114	100	100	0	0	100
60%	100	100	100	683	2,173	975	100	100	100	0	0	100
70%	100	100	100	145	932	321	100	100	100	0	0	100
80%	100	100	100	100	187	176	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]	126	357	3,241	9,085	12,410	7,637	2,206	160	104	0	0	100
Water Year Types[c]												
Wet (32%)	183	910	8,420	24,291	29,547	18,493	5,627	289	113	0	0	100
Above Normal (16%)	100	100	2,765	5,997	13,013	7,928	1,688	100	100	0	0	100
Below Normal (13%)	100	100	242	1,004	3,031	883	293	100	100	0	0	100
Dry (24%)	100	100	322	902	2,024	1,393	407	100	100	0	0	100
Critical (15%)	100	100	149	528	534	396	106	100	100	0	0	100

Alternative 3

Statistic	Monthly Spills (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	100	100	10,562	27,452	43,972	18,326	5,842	100	100	0	0	100
20%	100	100	3,657	10,624	13,753	6,816	4,163	100	100	0	0	100
30%	100	100	1,554	5,215	8,000	4,697	961	100	100	0	0	100
40%	100	100	535	2,831	5,471	3,406	341	100	100	0	0	100
50%	100	100	215	1,519	3,328	2,006	114	100	100	0	0	100
60%	100	100	100	789	2,202	1,123	100	100	100	0	0	100
70%	100	100	100	152	1,089	440	100	100	100	0	0	100
80%	100	100	100	100	203	179	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]	112	377	3,640	9,456	13,036	7,875	2,216	160	104	0	0	100
Water Year Types[c]												
Wet (32%)	139	973	9,693	25,241	30,361	18,837	5,617	289	113	0	0	100
Above Normal (16%)	100	100	2,686	6,188	14,531	8,490	1,768	100	100	0	0	100
Below Normal (13%)	100	100	262	1,250	4,001	1,153	293	100	100	0	0	100
Dry (24%)	100	100	342	923	2,007	1,406	410	100	100	0	0	100
Critical (15%)	100	100	150	534	545	397	106	100	100	0	0	100

Alternative 3 minus No Action Alternative

Statistic	Monthly Spills (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	3,333	3,480	3,184	2,249	6	0	0	0	0	0
20%	0	0	178	213	1,170	186	168	0	0	0	0	0
30%	0	0	335	-32	932	166	78	0	0	0	0	0
40%	0	0	28	110	221	-55	2	0	0	0	0	0
50%	0	0	29	107	23	256	0	0	0	0	0	0
60%	0	0	0	106	29	147	0	0	0	0	0	0
70%	0	0	0	7	157	119	0	0	0	0	0	0
80%	0	0	0	0	16	3	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	20	399	371	626	238	10	0	0	0	0	0
Water Year Types[c]												
Wet (32%)	-45	64	1,273	950	813	344	-10	1	0	0	0	0
Above Normal (16%)	0	0	-78	192	1,519	562	80	0	0	0	0	0
Below Normal (13%)	0	0	20	247	970	271	-1	0	0	0	0	0
Dry (24%)	0	0	19	22	-17	13	3	0	0	0	0	0
Critical (15%)	0	0	1	7	11	1	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 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 C-26-3. Fremont Weir, Monthly Spills

No Action Alternative

Statistic	Monthly Spills (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	100	100	7,229	23,972	40,788	16,077	5,836	100	100	0	0	100
20%	100	100	3,479	10,411	12,582	6,630	3,995	100	100	0	0	100
30%	100	100	1,219	5,246	7,068	4,531	884	100	100	0	0	100
40%	100	100	507	2,721	5,249	3,462	340	100	100	0	0	100
50%	100	100	185	1,412	3,305	1,749	114	100	100	0	0	100
60%	100	100	100	683	2,173	975	100	100	100	0	0	100
70%	100	100	100	145	932	321	100	100	100	0	0	100
80%	100	100	100	100	187	176	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]	126	357	3,241	9,085	12,410	7,637	2,206	160	104	0	0	100
Water Year Types[c]												
Wet (32%)	183	910	8,420	24,291	29,547	18,493	5,627	289	113	0	0	100
Above Normal (16%)	100	100	2,765	5,997	13,013	7,928	1,688	100	100	0	0	100
Below Normal (13%)	100	100	242	1,004	3,031	883	293	100	100	0	0	100
Dry (24%)	100	100	322	902	2,024	1,393	407	100	100	0	0	100
Critical (15%)	100	100	149	528	534	396	106	100	100	0	0	100

Alternative 5

Statistic	Monthly Spills (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	100	100	7,431	23,953	40,288	16,133	5,836	100	100	0	0	100
20%	100	100	3,445	10,420	12,539	6,538	3,992	100	100	0	0	100
30%	100	100	1,217	5,246	7,057	4,576	884	100	100	0	0	100
40%	100	100	507	2,676	5,250	3,467	341	100	100	0	0	100
50%	100	100	198	1,412	3,305	1,717	114	100	100	0	0	100
60%	100	100	100	683	2,148	963	100	100	100	0	0	100
70%	100	100	100	144	932	336	100	100	100	0	0	100
80%	100	100	100	100	187	176	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]	122	364	3,237	9,006	12,386	7,638	2,206	160	104	0	0	100
Water Year Types[c]												
Wet (32%)	170	933	8,400	24,048	29,507	18,512	5,627	289	113	0	0	100
Above Normal (16%)	100	100	2,786	6,000	12,885	7,895	1,688	100	100	0	0	100
Below Normal (13%)	100	100	242	1,004	3,115	886	293	100	100	0	0	100
Dry (24%)	100	100	317	896	2,015	1,398	407	100	100	0	0	100
Critical (15%)	100	100	151	525	531	393	106	100	100	0	0	100

Alternative 5 minus No Action Alternative

Statistic	Monthly Spills (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	202	-19	-501	56	0	0	0	0	0	0
20%	0	0	-34	10	-43	-92	-3	0	0	0	0	0
30%	0	0	-2	-1	-11	45	0	0	0	0	0	0
40%	0	0	0	-44	1	6	1	0	0	0	0	0
50%	0	0	13	0	0	-32	0	0	0	0	0	0
60%	0	0	0	0	-25	-12	0	0	0	0	0	0
70%	0	0	0	-1	0	15	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]	-4	7	-4	-78	-24	2	0	0	0	0	0	0
Water Year Types[c]												
Wet (32%)	-13	23	-20	-243	-40	18	0	0	0	0	0	0
Above Normal (16%)	0	0	22	4	-128	-34	0	0	0	0	0	0
Below Normal (13%)	0	0	-1	0	84	3	0	0	0	0	0	0
Dry (24%)	0	0	-5	-6	-10	4	0	0	0	0	0	0
Critical (15%)	0	0	2	-3	-3	-3	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 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 C-26-4. Fremont Weir, Monthly Spills

Second Basis of Comparison

	Monthly Spills (cfs)											
Statistic	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

No Action Alternative

	Monthly Spills (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	100	100	7,229	23,972	40,788	16,077	5,836	100	100	0	0	100
20%	100	100	3,479	10,411	12,582	6,630	3,995	100	100	0	0	100
30%	100	100	1,219	5,246	7,068	4,531	884	100	100	0	0	100
40%	100	100	507	2,721	5,249	3,462	340	100	100	0	0	100
50%	100	100	185	1,412	3,305	1,749	114	100	100	0	0	100
60%	100	100	100	683	2,173	975	100	100	100	0	0	100
70%	100	100	100	145	932	321	100	100	100	0	0	100
80%	100	100	100	100	187	176	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]	126	357	3,241	9,085	12,410	7,637	2,206	160	104	0	0	100
Water Year Types[c]												
Wet (32%)	183	910	8,420	24,291	29,547	18,493	5,627	289	113	0	0	100
Above Normal (16%)	100	100	2,765	5,997	13,013	7,928	1,688	100	100	0	0	100
Below Normal (13%)	100	100	242	1,004	3,031	883	293	100	100	0	0	100
Dry (24%)	100	100	322	902	2,024	1,393	407	100	100	0	0	100
Critical (15%)	100	100	149	528	534	396	106	100	100	0	0	100

No Action Alternative minus Second Basis of Comparison

	Monthly Spills (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	-3,314	-6,220	-3,920	-2,254	-23	0	0	0	0	0
20%	0	0	-194	-105	-1,312	-749	-174	0	0	0	0	0
30%	0	0	-341	15	-1,273	-735	-82	0	0	0	0	0
40%	0	0	-26	-105	-221	29	-1	0	0	0	0	0
50%	0	0	-1	-218	36	-316	-5	0	0	0	0	0
60%	0	0	0	-168	-118	-126	0	0	0	0	0	0
70%	0	0	0	-8	-76	-161	0	0	0	0	0	0
80%	0	0	0	0	2	-25	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]	12	-27	-456	-464	-790	-305	-5	0	0	0	0	0
Water Year Types[c]												
Wet (32%)	37	-86	-1,468	-1,151	-1,000	-504	25	0	0	0	0	0
Above Normal (16%)	0	0	106	-352	-2,102	-638	-77	0	0	0	0	0
Below Normal (13%)	0	0	-20	-253	-1,026	-283	1	0	0	0	0	0
Dry (24%)	0	0	-20	-30	-7	-17	-4	0	0	0	0	0
Critical (15%)	0	0	-1	-15	1	-12	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 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 C-26-5. Fremont Weir, Monthly Spills

Second Basis of Comparison

	Monthly Spills (cfs)											
Statistic	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

Alternative 3

	Monthly Spills (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	100	100	10,562	27,452	43,972	18,326	5,842	100	100	0	0	100
20%	100	100	3,657	10,624	13,753	6,816	4,163	100	100	0	0	100
30%	100	100	1,554	5,215	8,000	4,697	961	100	100	0	0	100
40%	100	100	535	2,831	5,471	3,406	341	100	100	0	0	100
50%	100	100	215	1,519	3,328	2,006	114	100	100	0	0	100
60%	100	100	100	789	2,202	1,123	100	100	100	0	0	100
70%	100	100	100	152	1,089	440	100	100	100	0	0	100
80%	100	100	100	100	203	179	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]	112	377	3,640	9,456	13,036	7,875	2,216	160	104	0	0	100
Water Year Types[c]												
Wet (32%)	139	973	9,693	25,241	30,361	18,837	5,617	289	113	0	0	100
Above Normal (16%)	100	100	2,686	6,188	14,531	8,490	1,768	100	100	0	0	100
Below Normal (13%)	100	100	262	1,250	4,001	1,153	293	100	100	0	0	100
Dry (24%)	100	100	342	923	2,007	1,406	410	100	100	0	0	100
Critical (15%)	100	100	150	534	545	397	106	100	100	0	0	100

Alternative 3 minus Second Basis of Comparison

	Monthly Spills (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0	0	19	-2,740	-736	-5	-17	0	0	0	0	0
20%	0	0	-16	108	-141	-563	-7	0	0	0	0	0
30%	0	0	-6	-16	-342	-569	-5	0	0	0	0	0
40%	0	0	2	5	1	-26	1	0	0	0	0	0
50%	0	0	29	-111	59	-59	-5	0	0	0	0	0
60%	0	0	0	-61	-89	22	0	0	0	0	0	0
70%	0	0	0	-1	81	-42	0	0	0	0	0	0
80%	0	0	0	0	19	-21	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]	-3	-7	-58	-93	-163	-67	5	0	0	0	0	0
Water Year Types[c]												
Wet (32%)	-8	-23	-195	-201	-187	-160	15	0	0	0	0	0
Above Normal (16%)	0	0	28	-161	-583	-76	4	0	0	0	0	0
Below Normal (13%)	0	0	0	-6	-56	-13	0	0	0	0	0	0
Dry (24%)	0	0	-1	-9	-24	-4	-2	0	0	0	0	0
Critical (15%)	0	0	0	-8	12	-11	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 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 C-26-6. 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

Alternative 5

Statistic	Monthly Spills (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	100	100	7,431	23,953	40,288	16,133	5,836	100	100	0	0	100
20%	100	100	3,445	10,420	12,539	6,538	3,992	100	100	0	0	100
30%	100	100	1,217	5,246	7,057	4,576	884	100	100	0	0	100
40%	100	100	507	2,676	5,250	3,467	341	100	100	0	0	100
50%	100	100	198	1,412	3,305	1,717	114	100	100	0	0	100
60%	100	100	100	683	2,148	963	100	100	100	0	0	100
70%	100	100	100	144	932	336	100	100	100	0	0	100
80%	100	100	100	100	187	176	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]	122	364	3,237	9,006	12,386	7,638	2,206	160	104	0	0	100
Water Year Types[c]												
Wet (32%)	170	933	8,400	24,048	29,507	18,512	5,627	289	113	0	0	100
Above Normal (16%)	100	100	2,786	6,000	12,885	7,895	1,688	100	100	0	0	100
Below Normal (13%)	100	100	242	1,004	3,115	886	293	100	100	0	0	100
Dry (24%)	100	100	317	896	2,015	1,398	407	100	100	0	0	100
Critical (15%)	100	100	151	525	531	393	106	100	100	0	0	100

Alternative 5 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	-3,112	-6,239	-4,421	-2,197	-23	0	0	0	0	0
20%	0	0	-228	-96	-1,355	-841	-177	0	0	0	0	0
30%	0	0	-343	15	-1,284	-690	-82	0	0	0	0	0
40%	0	0	-26	-149	-220	34	0	0	0	0	0	0
50%	0	0	12	-219	36	-347	-5	0	0	0	0	0
60%	0	0	0	-168	-143	-138	0	0	0	0	0	0
70%	0	0	0	-9	-76	-145	0	0	0	0	0	0
80%	0	0	0	0	2	-25	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]	7	-20	-460	-542	-814	-303	-5	0	0	0	0	0
Water Year Types[c]												
Wet (32%)	23	-63	-1,488	-1,394	-1,040	-486	25	0	0	0	0	0
Above Normal (16%)	0	0	128	-349	-2,230	-671	-77	0	0	0	0	0
Below Normal (13%)	0	0	-20	-252	-942	-280	1	0	0	0	0	0
Dry (24%)	0	0	-25	-36	-17	-13	-4	0	0	0	0	0
Critical (15%)	0	0	2	-17	-2	-15	0	0	0	0	0	0

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

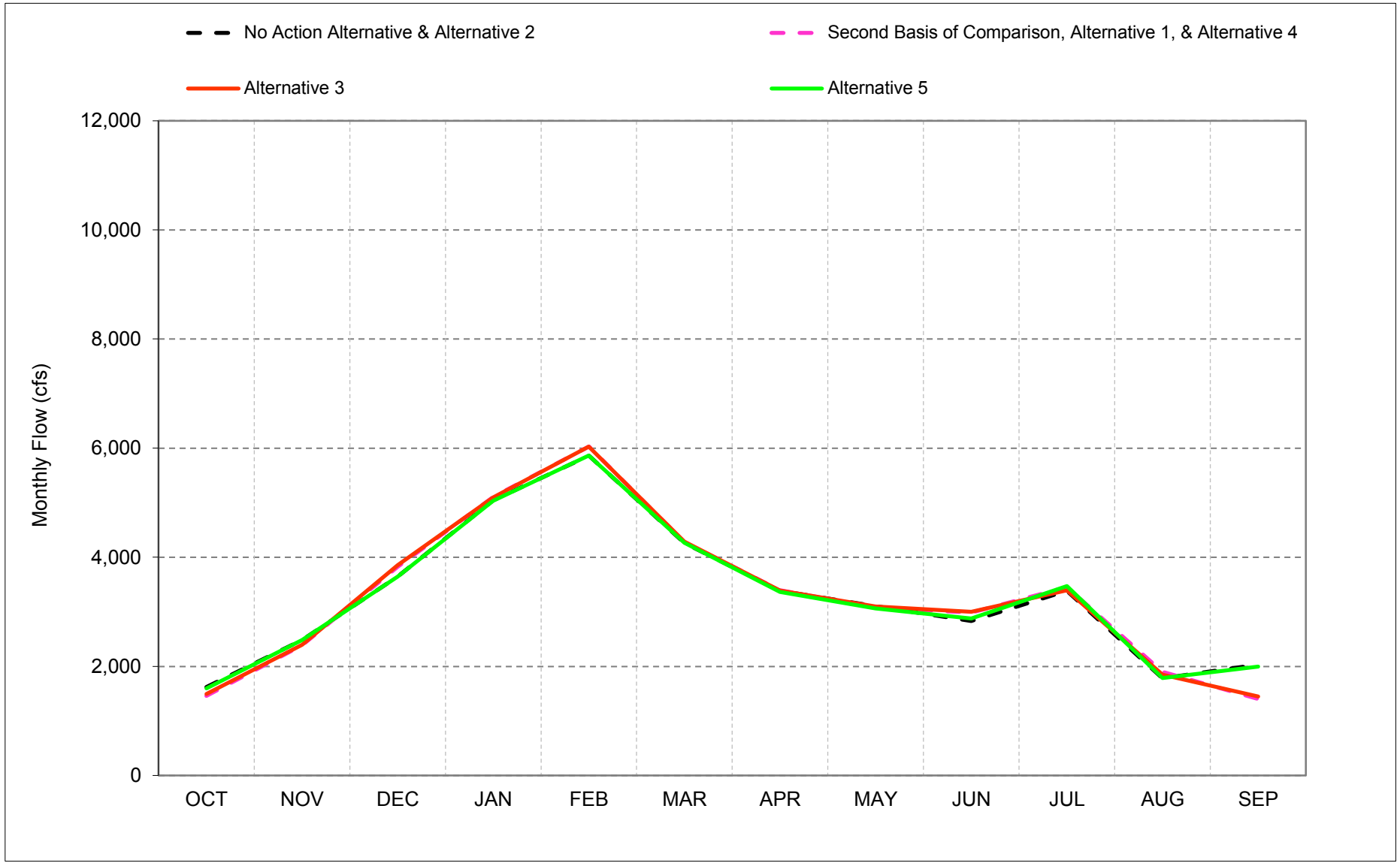
b Based on the 82-year simulation period.

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 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.

C.27. American River Flow downstream of Nimbus

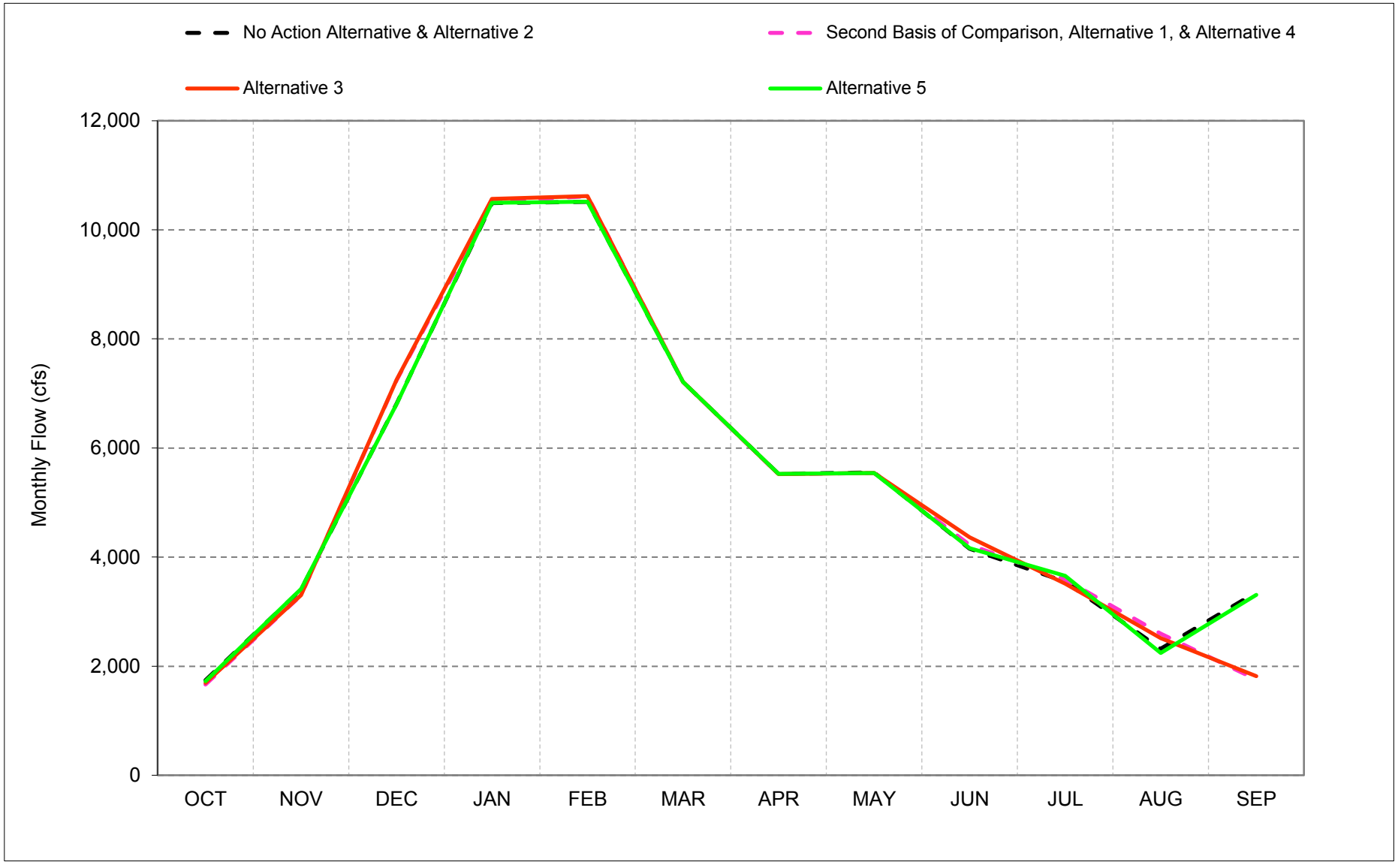
Figure C-27-1. American River d/s of Nimbus Dam, Long-Term* Average Flow



*Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-27-2. American River d/s of Nimbus Dam, Wet Year* Long-Term Average Flow**

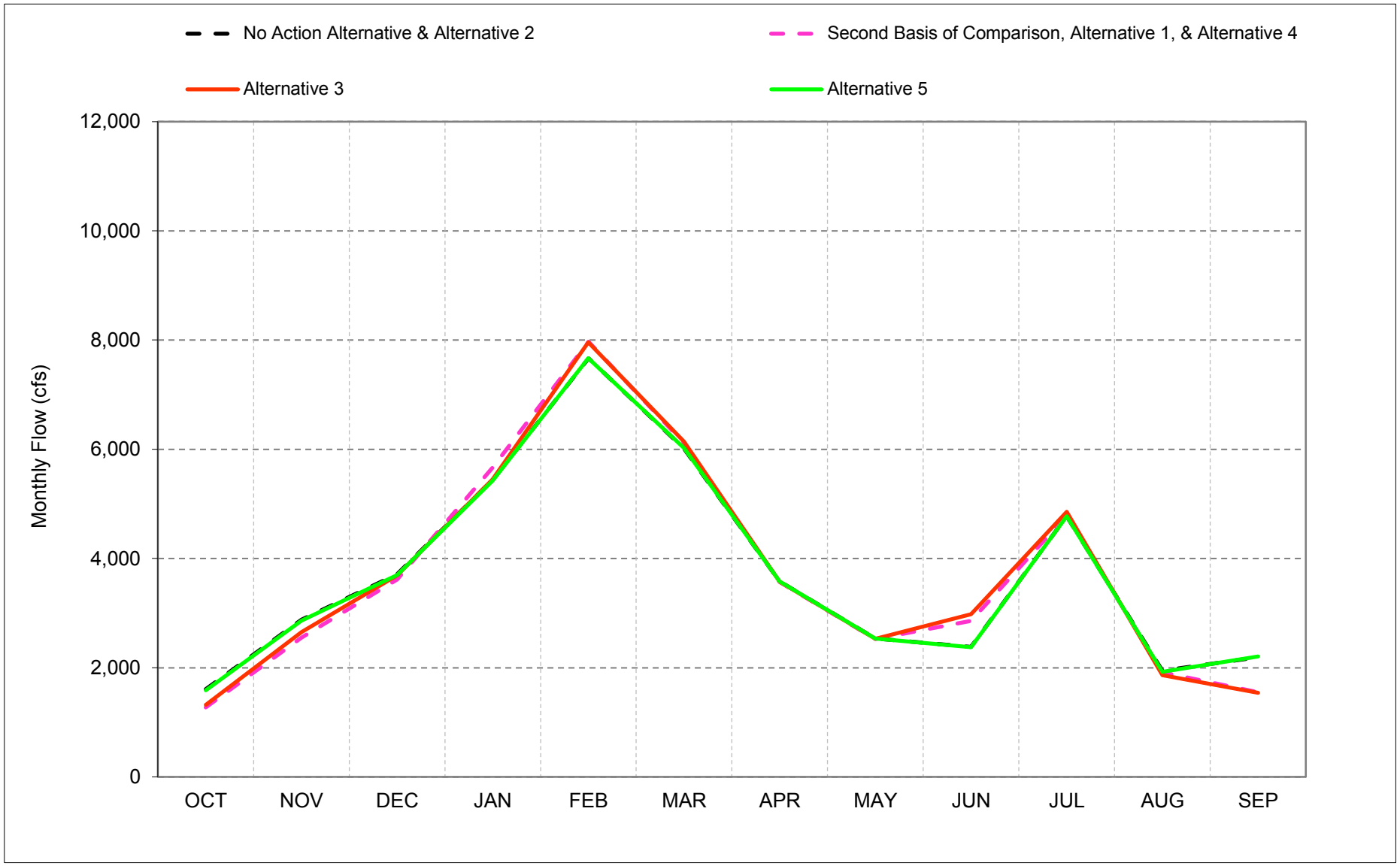


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-27-3. American River d/s of Nimbus Dam, Above Normal Year* Long-Term Average Flow**

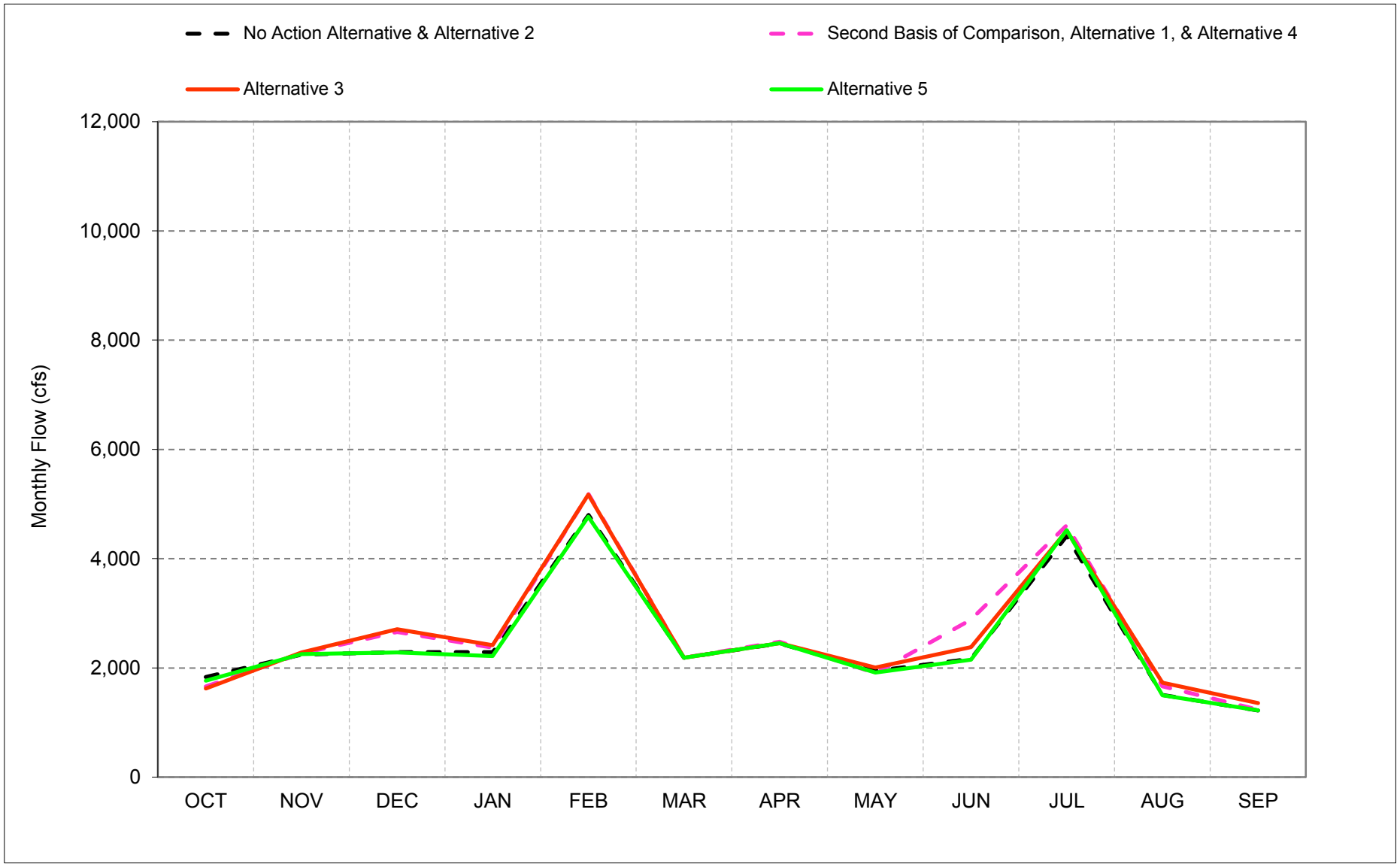


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-27-4. American River d/s of Nimbus Dam, Below Normal Year* Long-Term Average Flow**

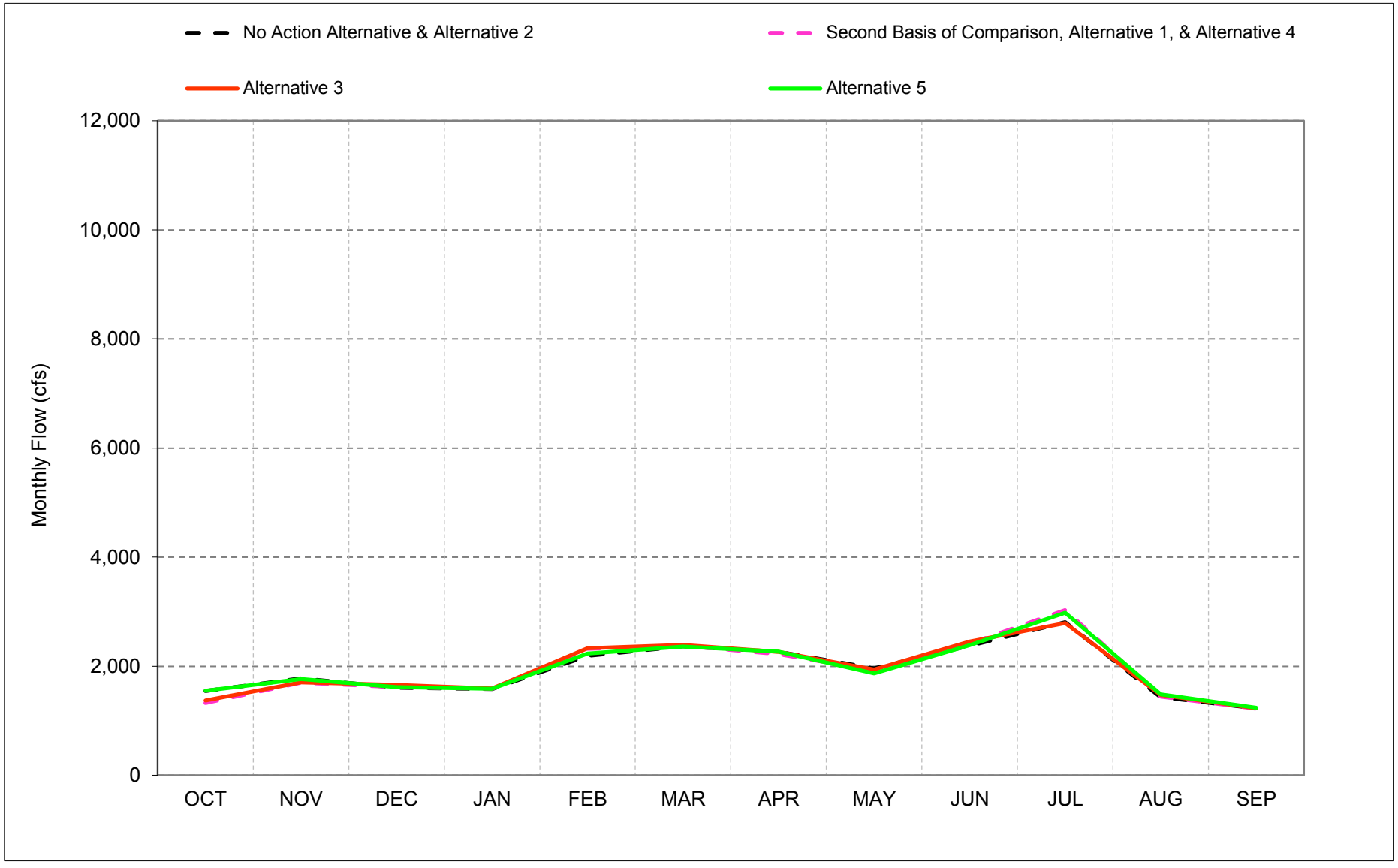


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-27-5. American River d/s of Nimbus Dam, Dry Year* Long-Term Average Flow**

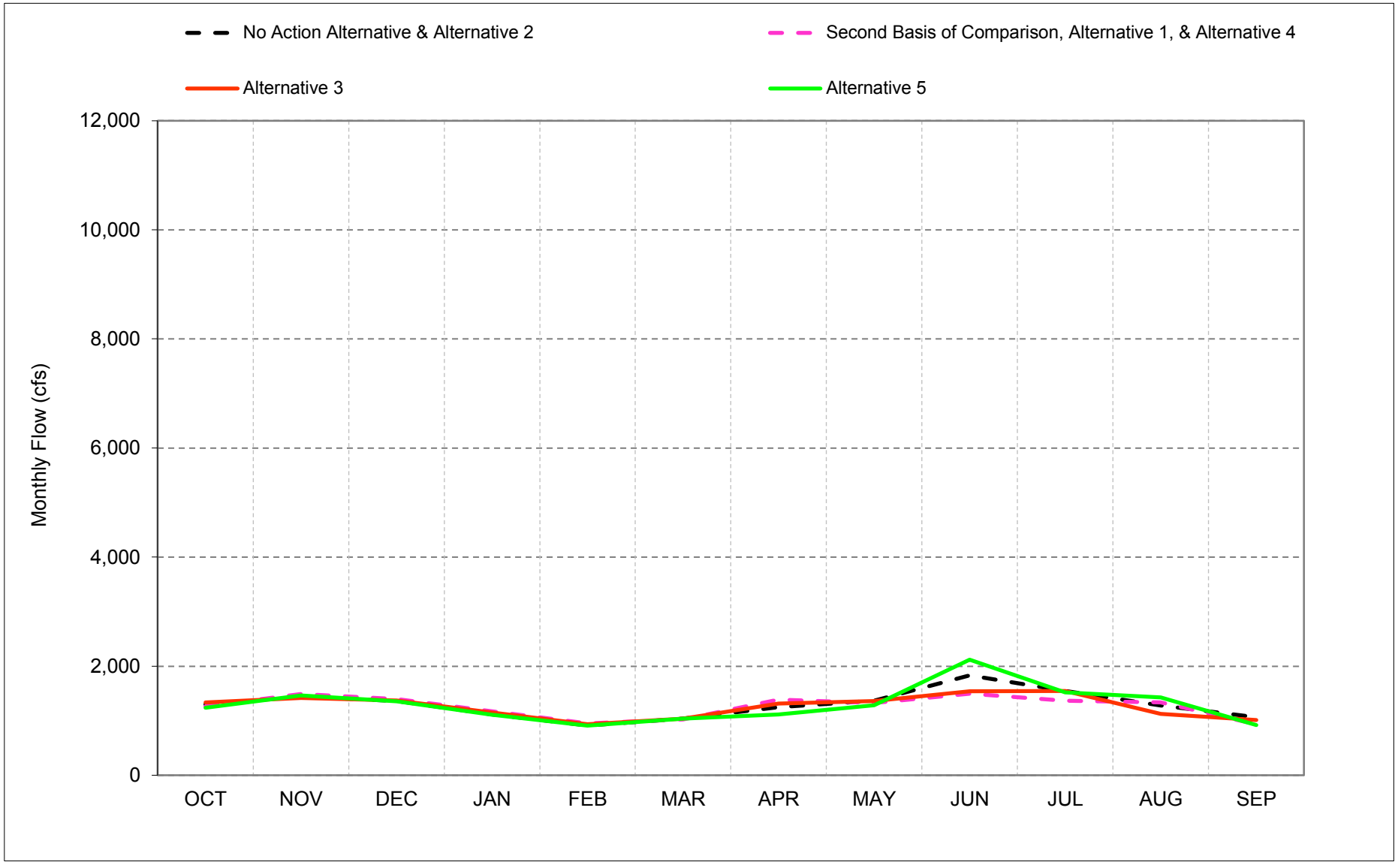


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-27-6. American River d/s of Nimbus Dam, Critical Year* Long-Term Average Flow**



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

**Based on the 82-year simulation period.

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 Alternatives 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 C-27-1. American River d/s of Nimbus Dam, 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%	2,600	3,783	8,379	12,160	14,655	9,756	6,737	7,450	4,753	5,000	3,083	3,957
20%	1,962	3,343	3,880	7,656	10,890	6,820	5,085	4,489	3,837	5,000	2,265	3,182
30%	1,639	2,565	2,076	5,303	7,117	5,044	4,494	3,543	3,507	4,916	1,967	2,426
40%	1,500	1,981	2,000	3,583	5,759	4,176	3,491	2,861	2,722	3,856	1,768	1,932
50%	1,500	1,925	2,000	1,750	3,087	3,057	2,544	2,268	2,293	3,567	1,750	1,565
60%	1,500	1,683	1,845	1,700	1,796	2,022	2,111	1,750	1,951	2,854	1,750	1,533
70%	1,500	1,515	1,595	1,700	1,445	1,747	1,747	1,609	1,750	2,510	1,630	1,480
80%	1,182	1,226	1,368	1,362	1,264	854	1,021	1,119	1,401	2,350	895	808
90%	800	800	800	985	901	800	800	800	904	1,137	800	800
Long Term												
Full Simulation Period[b]	1,622	2,483	3,648	5,045	5,861	4,263	3,384	3,103	2,833	3,385	1,783	2,031
Water Year Types[c]												
Wet (32%)	1,743	3,407	6,812	10,489	10,512	7,212	5,524	5,554	4,155	3,549	2,319	3,356
Above Normal (16%)	1,607	2,879	3,712	5,445	7,665	6,015	3,579	2,534	2,383	4,775	1,946	2,193
Below Normal (13%)	1,834	2,246	2,291	2,288	4,800	2,188	2,451	1,946	2,168	4,416	1,508	1,222
Dry (24%)	1,547	1,778	1,608	1,582	2,193	2,366	2,266	1,962	2,375	2,806	1,432	1,230
Critical (15%)	1,303	1,443	1,365	1,114	914	1,042	1,251	1,369	1,832	1,545	1,280	1,064

Alternative 1

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

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%	-633	52	957	0	0	-2	0	0	-103	0	152	-2,120
20%	-462	-125	444	217	-84	-15	-1	-3	-38	0	413	-1,579
30%	-139	-495	452	510	274	-1	-11	0	116	41	333	-893
40%	0	-56	0	4	-3	-4	0	-26	501	394	145	-399
50%	0	-107	0	26	665	-18	-45	-247	541	24	0	-32
60%	0	0	91	0	806	-7	-22	0	294	82	0	0
70%	-51	-15	107	0	0	0	3	16	82	79	51	13
80%	-191	-90	-222	78	0	67	141	-45	326	23	62	-8
90%	0	0	0	-166	132	0	0	0	156	190	0	-20
Long Term												
Full Simulation Period[b]	-160	-96	178	64	169	15	11	-26	154	69	116	-628
Water Year Types[c]												
Wet (32%)	-79	-107	430	25	102	-3	-3	-13	72	42	278	-1,600
Above Normal (16%)	-332	-330	-98	225	304	101	-8	-7	477	6	-33	-640
Below Normal (13%)	-173	17	369	82	381	-1	27	-39	713	194	159	14
Dry (24%)	-219	-80	11	5	128	12	-43	-38	37	222	14	-8
Critical (15%)	-40	49	35	56	38	-15	140	-42	-336	-177	56	-129

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 C-27-2. American River d/s of Nimbus Dam, 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%	2,600	3,783	8,379	12,160	14,655	9,756	6,737	7,450	4,753	5,000	3,083	3,957
20%	1,962	3,343	3,880	7,656	10,890	6,820	5,085	4,489	3,837	5,000	2,265	3,182
30%	1,639	2,565	2,076	5,303	7,117	5,044	4,494	3,543	3,507	4,916	1,967	2,426
40%	1,500	1,981	2,000	3,583	5,759	4,176	3,491	2,861	2,722	3,856	1,768	1,932
50%	1,500	1,925	2,000	1,750	3,087	3,057	2,544	2,268	2,293	3,567	1,750	1,565
60%	1,500	1,683	1,845	1,700	1,796	2,022	2,111	1,750	1,951	2,854	1,750	1,533
70%	1,500	1,515	1,595	1,700	1,445	1,747	1,747	1,609	1,750	2,510	1,630	1,480
80%	1,182	1,226	1,368	1,362	1,264	854	1,021	1,119	1,401	2,350	895	808
90%	800	800	800	985	901	800	800	800	904	1,137	800	800
Long Term												
Full Simulation Period[b]	1,622	2,483	3,648	5,045	5,861	4,263	3,384	3,103	2,833	3,385	1,783	2,031
Water Year Types[c]												
Wet (32%)	1,743	3,407	6,812	10,489	10,512	7,212	5,524	5,554	4,155	3,549	2,319	3,356
Above Normal (16%)	1,607	2,879	3,712	5,445	7,665	6,015	3,579	2,534	2,383	4,775	1,946	2,193
Below Normal (13%)	1,834	2,246	2,291	2,288	4,800	2,188	2,451	1,946	2,168	4,416	1,508	1,222
Dry (24%)	1,547	1,778	1,608	1,582	2,193	2,366	2,266	1,962	2,375	2,806	1,432	1,230
Critical (15%)	1,303	1,443	1,365	1,114	914	1,042	1,251	1,369	1,832	1,545	1,280	1,064

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 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%	-578	91	1,244	0	0	0	0	0	191	0	8	-2,008
20%	-248	-136	445	217	-93	-4	0	-3	168	0	277	-1,495
30%	-139	-496	657	261	274	-1	-10	0	154	83	52	-893
40%	0	-56	0	-4	-3	-4	0	-24	479	-15	108	-399
50%	0	-32	0	140	631	-10	4	-28	371	-32	0	-32
60%	0	0	115	0	809	-5	41	0	279	46	0	0
70%	-75	-67	2	0	0	0	0	7	101	69	18	13
80%	-32	-75	-125	12	0	206	52	-7	198	-338	186	-8
90%	0	0	0	-160	81	0	0	4	106	113	0	0
Long Term												
Full Simulation Period[b]	-126	-86	207	50	166	25	7	-2	165	10	67	-583
Water Year Types[c]												
Wet (32%)	-47	-106	442	76	103	-3	-3	-13	207	-38	197	-1,541
Above Normal (16%)	-284	-228	-19	2	296	126	-5	-5	600	79	-83	-654
Below Normal (13%)	-213	39	420	128	374	0	3	63	212	98	221	133
Dry (24%)	-174	-73	53	11	134	23	-4	-21	77	-14	44	-1
Critical (15%)	33	-24	6	39	24	-1	62	-7	-290	1	-155	-52

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 C-27-3. American River d/s of Nimbus Dam, 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%	2,600	3,783	8,379	12,160	14,655	9,756	6,737	7,450	4,753	5,000	3,083	3,957
20%	1,962	3,343	3,880	7,656	10,890	6,820	5,085	4,489	3,837	5,000	2,265	3,182
30%	1,639	2,565	2,076	5,303	7,117	5,044	4,494	3,543	3,507	4,916	1,967	2,426
40%	1,500	1,981	2,000	3,583	5,759	4,176	3,491	2,861	2,722	3,856	1,768	1,932
50%	1,500	1,925	2,000	1,750	3,087	3,057	2,544	2,268	2,293	3,567	1,750	1,565
60%	1,500	1,683	1,845	1,700	1,796	2,022	2,111	1,750	1,951	2,854	1,750	1,533
70%	1,500	1,515	1,595	1,700	1,445	1,747	1,747	1,609	1,750	2,510	1,630	1,480
80%	1,182	1,226	1,368	1,362	1,264	854	1,021	1,119	1,401	2,350	895	808
90%	800	800	800	985	901	800	800	800	904	1,137	800	800
Long Term												
Full Simulation Period[b]	1,622	2,483	3,648	5,045	5,861	4,263	3,384	3,103	2,833	3,385	1,783	2,031
Water Year Types[c]												
Wet (32%)	1,743	3,407	6,812	10,489	10,512	7,212	5,524	5,554	4,155	3,549	2,319	3,356
Above Normal (16%)	1,607	2,879	3,712	5,445	7,665	6,015	3,579	2,534	2,383	4,775	1,946	2,193
Below Normal (13%)	1,834	2,246	2,291	2,288	4,800	2,188	2,451	1,946	2,168	4,416	1,508	1,222
Dry (24%)	1,547	1,778	1,608	1,582	2,193	2,366	2,266	1,962	2,375	2,806	1,432	1,230
Critical (15%)	1,303	1,443	1,365	1,114	914	1,042	1,251	1,369	1,832	1,545	1,280	1,064

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 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%	-9	7	6	0	0	0	0	0	245	0	-102	-85
20%	-104	41	13	-3	-1	0	1	2	46	0	89	-37
30%	-96	-26	16	0	198	0	-4	0	106	-12	-71	-3
40%	0	-20	0	0	0	0	0	-128	164	228	-18	-23
50%	0	0	0	0	7	0	-20	-260	36	49	0	-32
60%	0	0	-22	0	0	0	-73	0	14	90	0	0
70%	-63	-17	13	0	0	0	-112	0	0	161	1	-124
80%	6	-7	-106	-6	0	-8	3	-127	107	41	70	-8
90%	0	0	0	7	6	0	0	0	101	-4	0	0
Long Term												
Full Simulation Period[b]	-26	1	-4	-11	5	0	-19	-43	44	88	6	-33
Water Year Types[c]												
Wet (32%)	-16	8	-7	4	0	0	0	-11	10	105	-77	-50
Above Normal (16%)	-19	-18	-14	-20	1	9	1	1	-9	-1	-19	11
Below Normal (13%)	-66	5	-9	-70	-34	-4	0	-29	-17	108	-9	0
Dry (24%)	3	-10	11	5	39	-3	1	-96	9	176	53	9
Critical (15%)	-64	19	-7	-4	-2	-1	-134	-85	289	-22	150	-145

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 C-27-4. 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

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,600	3,783	8,379	12,160	14,655	9,756	6,737	7,450	4,753	5,000	3,083	3,957
20%	1,962	3,343	3,880	7,656	10,890	6,820	5,085	4,489	3,837	5,000	2,265	3,182
30%	1,639	2,565	2,076	5,303	7,117	5,044	4,494	3,543	3,507	4,916	1,967	2,426
40%	1,500	1,981	2,000	3,583	5,759	4,176	3,491	2,861	2,722	3,856	1,768	1,932
50%	1,500	1,925	2,000	1,750	3,087	3,057	2,544	2,268	2,293	3,567	1,750	1,565
60%	1,500	1,683	1,845	1,700	1,796	2,022	2,111	1,750	1,951	2,854	1,750	1,533
70%	1,500	1,515	1,595	1,700	1,445	1,747	1,747	1,609	1,750	2,510	1,630	1,480
80%	1,182	1,226	1,368	1,362	1,264	854	1,021	1,119	1,401	2,350	895	808
90%	800	800	800	985	901	800	800	800	904	1,137	800	800
Long Term												
Full Simulation Period[b]	1,622	2,483	3,648	5,045	5,861	4,263	3,384	3,103	2,833	3,385	1,783	2,031
Water Year Types[c]												
Wet (32%)	1,743	3,407	6,812	10,489	10,512	7,212	5,524	5,554	4,155	3,549	2,319	3,356
Above Normal (16%)	1,607	2,879	3,712	5,445	7,665	6,015	3,579	2,534	2,383	4,775	1,946	2,193
Below Normal (13%)	1,834	2,246	2,291	2,288	4,800	2,188	2,451	1,946	2,168	4,416	1,508	1,222
Dry (24%)	1,547	1,778	1,608	1,582	2,193	2,366	2,266	1,962	2,375	2,806	1,432	1,230
Critical (15%)	1,303	1,443	1,365	1,114	914	1,042	1,251	1,369	1,832	1,545	1,280	1,064

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%	633	-52	-957	0	0	2	0	0	103	0	-152	2,120
20%	462	125	-444	-217	84	15	1	3	38	0	-413	1,579
30%	139	495	-452	-510	-274	1	11	0	-116	-41	-333	893
40%	0	56	0	-4	3	4	0	26	-501	-394	-145	399
50%	0	107	0	-26	-665	18	45	247	-541	-24	0	32
60%	0	0	-91	0	-806	7	22	0	-294	-82	0	0
70%	51	15	-107	0	0	0	-3	-16	-82	-79	-51	-13
80%	191	90	222	-78	0	-67	-141	45	-326	-23	-62	8
90%	0	0	0	166	-132	0	0	0	-156	-190	0	20
Long Term												
Full Simulation Period[b]	160	96	-178	-64	-169	-15	-11	26	-154	-69	-116	628
Water Year Types[c]												
Wet (32%)	79	107	-430	-25	-102	3	3	13	-72	-42	-278	1,600
Above Normal (16%)	332	330	98	-225	-304	-101	8	7	-477	-6	33	640
Below Normal (13%)	173	-17	-369	-82	-381	1	-27	39	-713	-194	-159	-14
Dry (24%)	219	80	-11	-5	-128	-12	43	38	-37	-222	-14	8
Critical (15%)	40	-49	-35	-56	-38	15	-140	42	336	177	-56	129

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 C-27-5. 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

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 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%	55	39	286	0	0	2	0	0	294	0	-144	112
20%	214	-11	1	0	-9	11	1	0	206	0	-137	84
30%	0	-1	205	-250	0	0	1	0	38	42	-281	0
40%	0	0	0	-8	0	0	0	2	-22	-410	-37	0
50%	0	75	0	113	-34	7	49	219	-171	-56	0	0
60%	0	0	24	0	3	2	63	0	-14	-35	0	0
70%	-24	-52	-105	0	0	0	-3	-9	18	-10	-33	0
80%	159	15	98	-66	0	138	-89	38	-129	-360	124	0
90%	0	0	0	6	-51	0	0	4	-50	-77	0	20
Long Term												
Full Simulation Period[b]	34	10	29	-14	-3	9	-4	23	11	-58	-49	45
Water Year Types[c]												
Wet (32%)	32	1	12	51	1	0	1	0	135	-80	-82	59
Above Normal (16%)	49	103	79	-223	-8	25	2	2	123	72	-50	-14
Below Normal (13%)	-39	22	51	46	-7	1	-23	102	-501	-96	62	119
Dry (24%)	45	6	42	6	6	12	39	17	40	-236	29	7
Critical (15%)	73	-73	-29	-18	-14	14	-77	34	46	178	-211	76

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 C-27-6. 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

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 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%	624	-44	-951	0	0	2	0	0	347	0	-255	2,035
20%	358	166	-431	-220	83	15	2	6	84	0	-324	1,541
30%	44	469	-435	-510	-76	0	7	0	-10	-54	-404	890
40%	0	36	0	-5	3	3	0	-102	-336	-166	-162	376
50%	0	107	0	-26	-658	18	25	-12	-505	25	0	0
60%	0	0	-113	0	-806	7	-51	0	-279	8	0	0
70%	-12	-2	-93	0	0	0	-116	-16	-82	82	-50	-137
80%	197	83	116	-84	0	-76	-138	-82	-219	19	8	0
90%	0	0	0	173	-126	0	0	0	-55	-194	0	20
Long Term												
Full Simulation Period[b]	135	97	-182	-75	-164	-15	-30	-17	-110	19	-110	595
Water Year Types[c]												
Wet (32%)	63	115	-437	-21	-102	3	3	2	-61	63	-355	1,550
Above Normal (16%)	314	312	84	-245	-303	-92	9	8	-486	-7	13	651
Below Normal (13%)	107	-12	-378	-152	-416	-3	-27	10	-730	-86	-167	-14
Dry (24%)	221	70	-1	0	-89	-14	44	-58	-28	-45	39	17
Critical (15%)	-24	-29	-42	-60	-40	14	-273	-43	625	155	93	-16

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

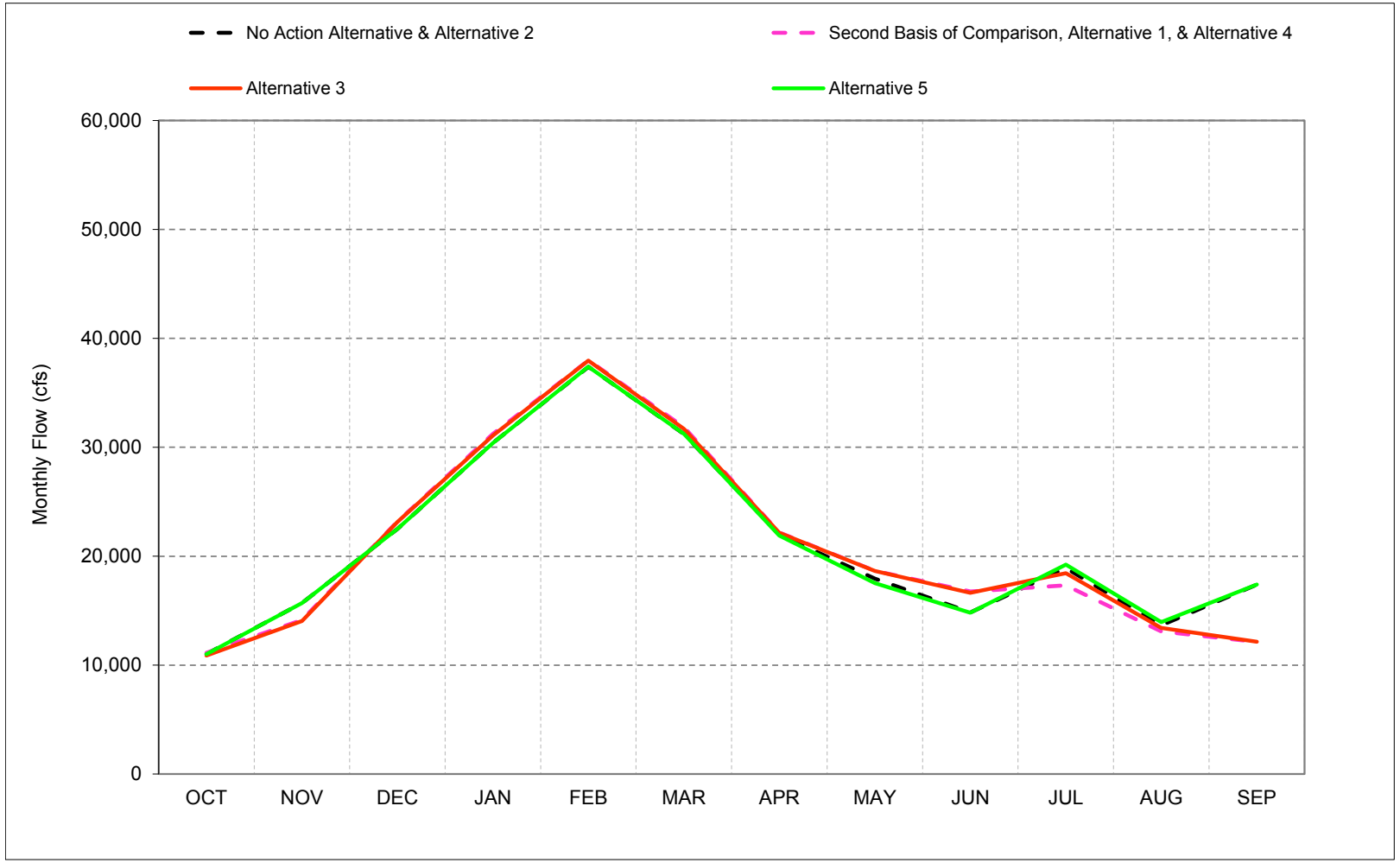
b Based on the 82-year simulation period.

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 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.

C.28. Sacramento River Flow at Freeport

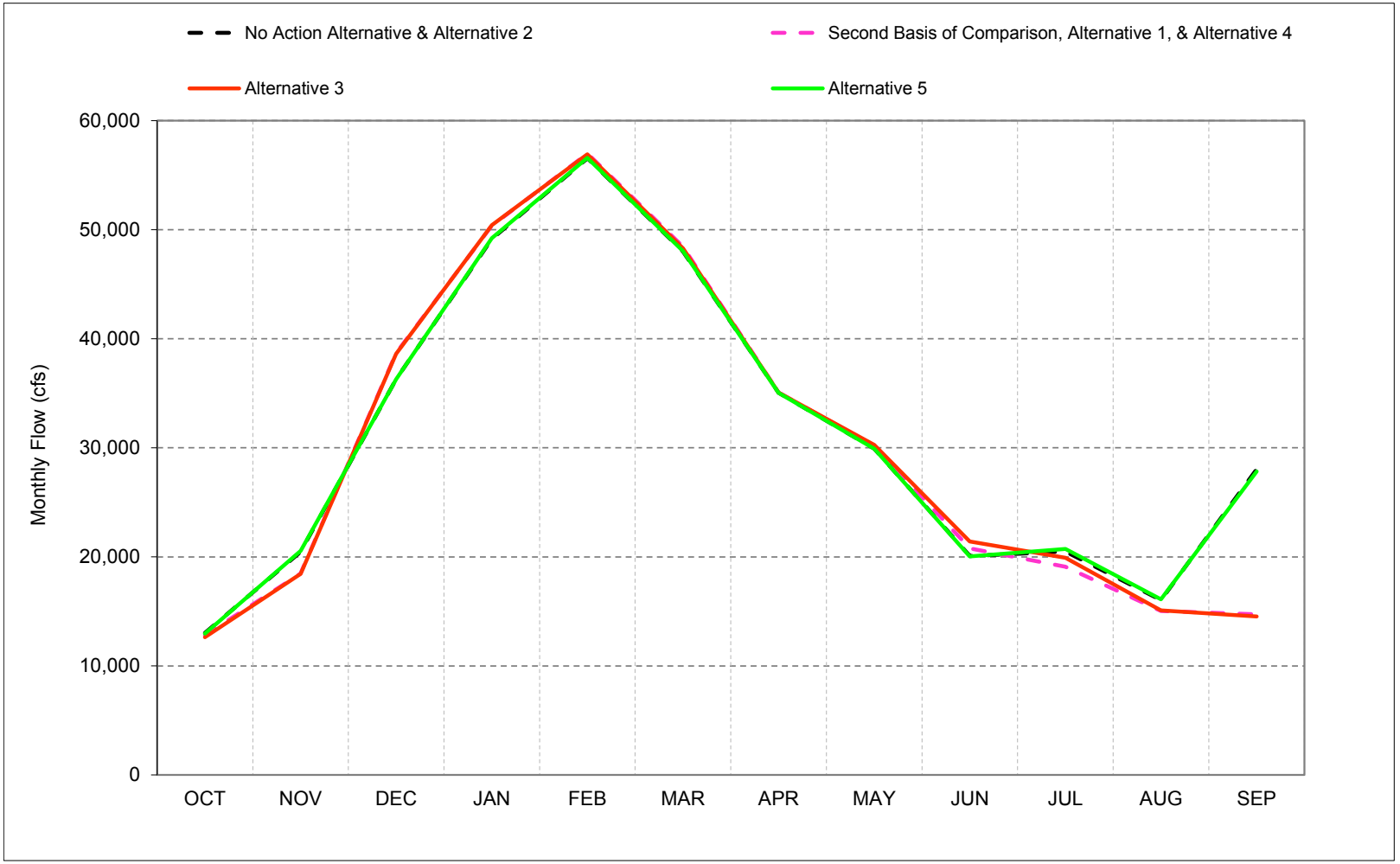
Figure C-28-1. Sacramento River at Freeport, Long-Term* Average Flow



*Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-28-2. Sacramento River at Freeport, Wet Year* Long-Term Average Flow**

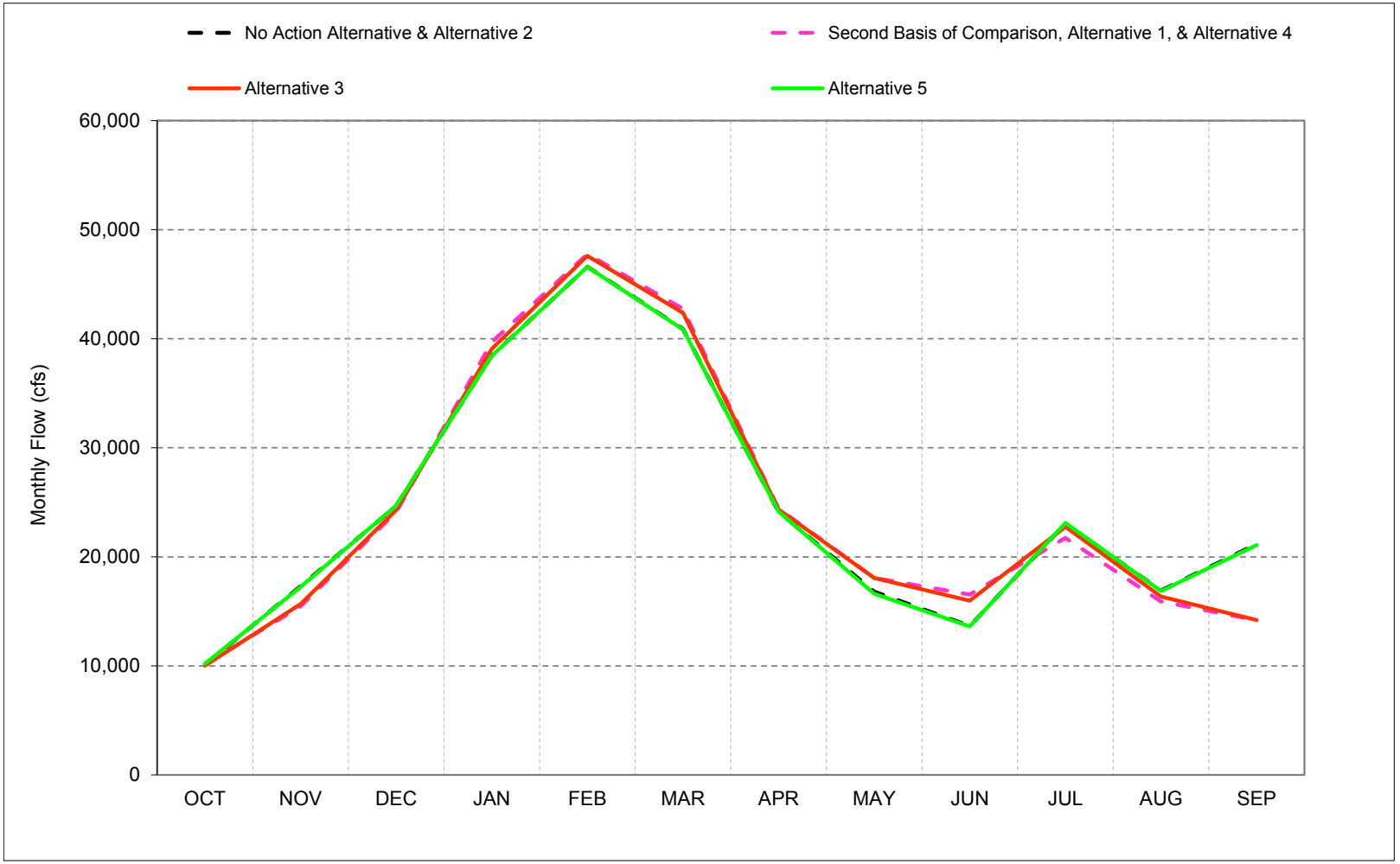


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-28-3. Sacramento River at Freeport, Above Normal Year* Long-Term Average Flow**

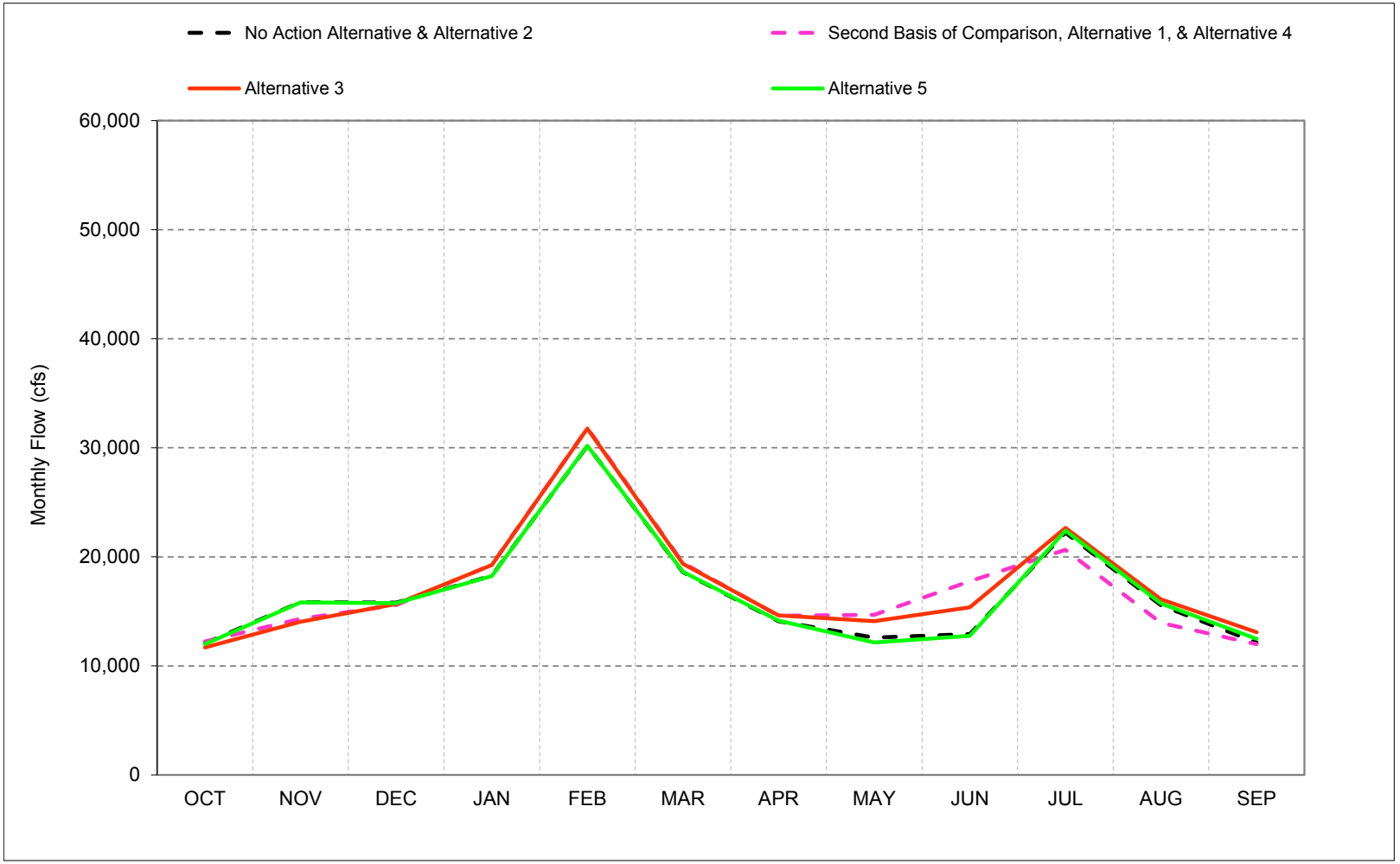


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-28-4. Sacramento River at Freeport, Below Normal Year* Long-Term Average Flow**

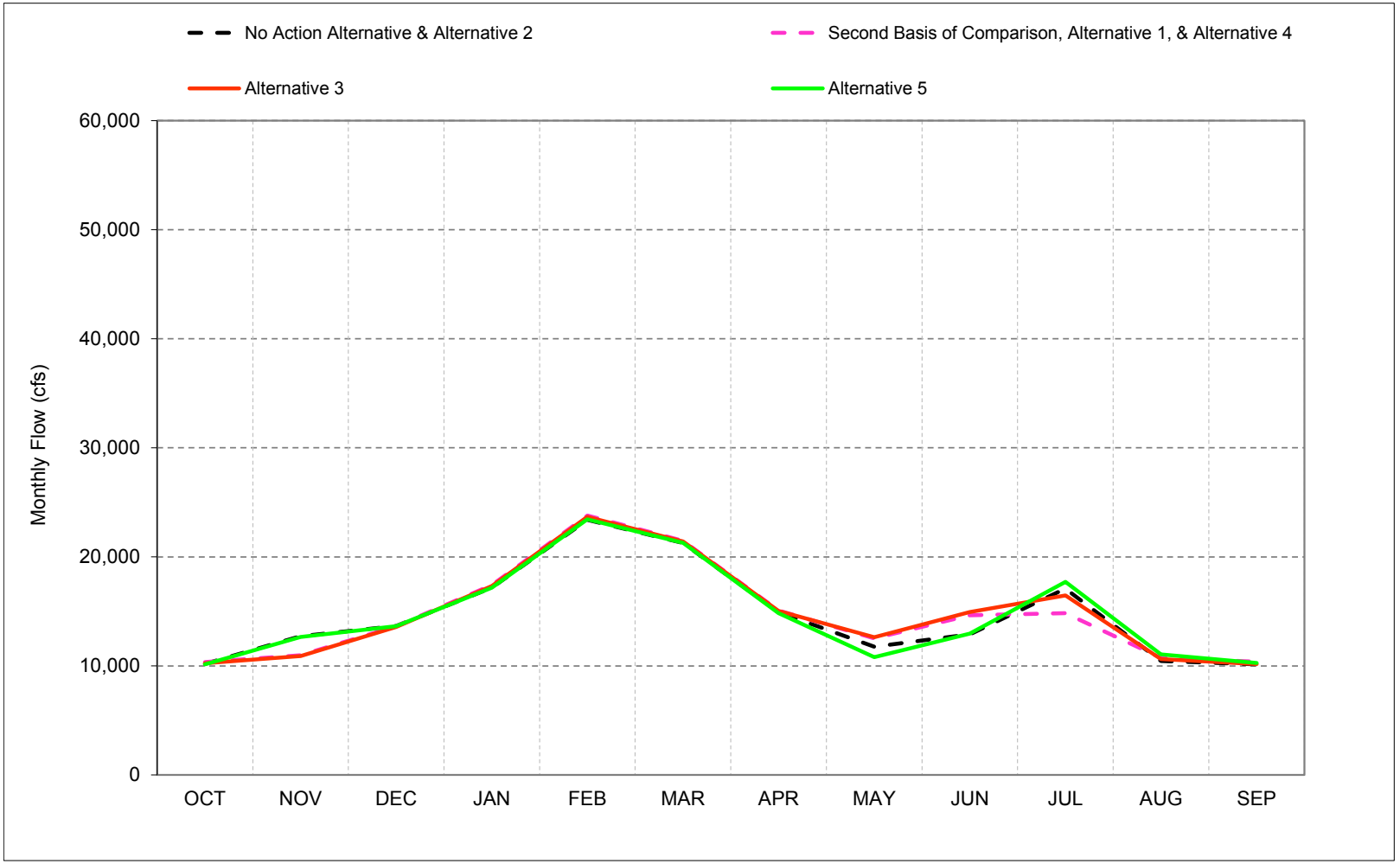


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-28-5. Sacramento River at Freeport, Dry Year* Long-Term Average Flow**

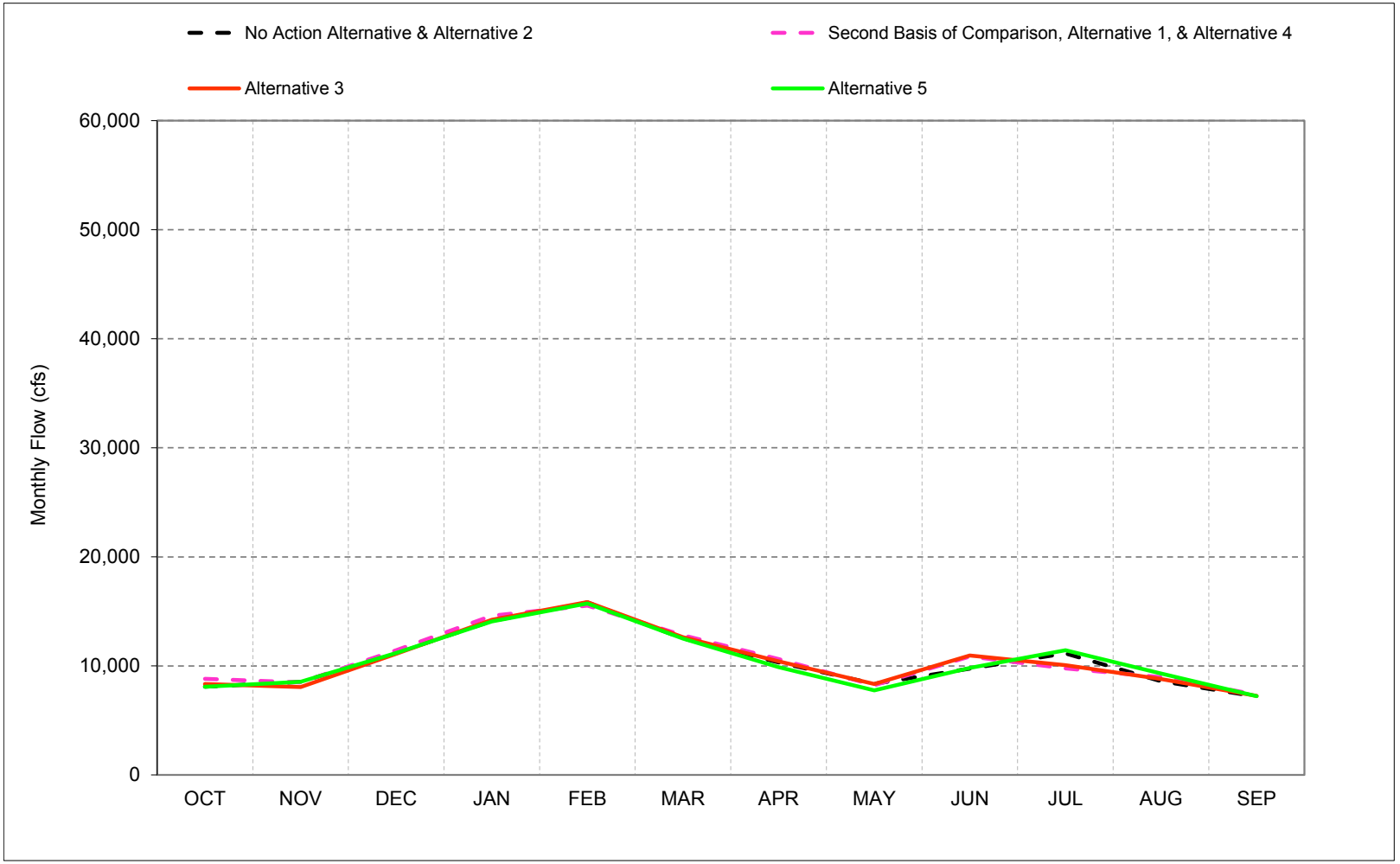


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-28-6. Sacramento River at Freeport, Critical Year* Long-Term Average Flow**



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

**Based on the 82-year simulation period.

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 Alternatives 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 C-28-1. Sacramento River at Freeport, 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%	14,943	22,413	49,061	63,978	70,378	62,016	46,176	38,567	19,878	24,622	17,168	29,174
20%	14,024	18,968	32,387	52,720	61,625	51,028	32,558	25,925	16,015	24,044	16,812	28,630
30%	13,242	18,223	21,284	38,363	49,339	37,119	22,938	16,497	13,891	22,798	16,216	22,285
40%	12,114	16,756	17,972	24,564	42,829	29,446	19,999	13,452	13,365	20,928	15,920	21,314
50%	10,960	15,237	15,541	20,767	32,462	24,475	15,899	12,324	13,076	19,016	14,837	14,553
60%	9,175	13,091	15,097	18,151	24,481	20,699	12,818	11,385	12,593	17,772	13,961	12,554
70%	8,278	10,048	13,503	14,788	19,200	18,284	11,560	11,000	12,084	16,743	11,450	10,186
80%	7,916	8,600	10,754	13,471	16,242	14,866	10,757	10,413	11,011	15,241	9,408	8,418
90%	6,406	7,499	9,330	11,750	13,930	11,376	9,707	8,994	10,151	11,748	8,218	6,959
Long Term												
Full Simulation Period[b]	11,027	15,700	22,511	30,389	37,384	31,227	21,984	17,938	14,845	18,927	13,660	17,395
Water Year Types[c]												
Wet (32%)	13,028	20,442	36,300	49,140	56,543	48,019	35,045	29,928	20,087	20,487	16,031	28,019
Above Normal (16%)	10,118	17,302	24,668	38,462	46,588	40,888	24,137	16,812	13,665	23,051	16,920	21,159
Below Normal (13%)	12,085	15,834	15,808	18,273	30,185	18,600	14,108	12,602	12,927	22,211	15,563	12,132
Dry (24%)	10,191	12,717	13,654	17,185	23,392	21,285	14,927	11,770	12,904	17,081	10,453	10,150
Critical (15%)	8,102	8,539	11,205	14,132	15,821	12,526	10,333	8,354	9,755	11,143	8,590	7,198

Alternative 1

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

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%	-408	69	5,471	857	73	1,638	65	12	1,211	-1,546	-521	-14,121
20%	73	-3,978	1,994	3,543	414	397	-16	1,708	2,910	-2,368	-873	-13,985
30%	-218	-4,496	1,083	3,216	2,211	4,386	-9	645	4,070	-2,378	-821	-8,157
40%	-534	-3,515	608	2,066	2,892	528	55	1,722	3,156	-1,498	-1,142	-7,383
50%	-142	-3,150	65	2,242	828	296	495	1,300	2,512	-676	-1,042	-1,156
60%	855	-1,866	-728	316	253	267	98	1,352	1,974	-1,119	-1,954	-597
70%	741	146	-923	217	638	164	148	916	1,000	-2,145	-557	-289
80%	94	257	45	15	339	350	472	461	1,343	-2,363	360	228
90%	303	38	30	121	288	111	493	-72	1,138	-1,409	327	157
Long Term												
Full Simulation Period[b]	108	-1,553	669	847	596	635	195	725	1,907	-1,601	-566	-5,254
Water Year Types[c]												
Wet (32%)	-200	-1,979	2,389	1,235	433	431	15	253	685	-1,381	-993	-13,293
Above Normal (16%)	32	-1,852	-547	1,230	1,175	1,870	273	1,252	2,868	-1,304	-1,014	-6,966
Below Normal (13%)	169	-1,516	-223	1,007	1,623	842	491	2,088	4,831	-1,568	-1,611	-132
Dry (24%)	163	-1,733	-22	233	396	190	157	750	1,742	-2,243	287	237
Critical (15%)	707	-40	226	469	-286	292	293	-113	1,108	-1,357	379	172

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 C-28-2. Sacramento River at Freeport, 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%	14,943	22,413	49,061	63,978	70,378	62,016	46,176	38,567	19,878	24,622	17,168	29,174
20%	14,024	18,968	32,387	52,720	61,625	51,028	32,558	25,925	16,015	24,044	16,812	28,630
30%	13,242	18,223	21,284	38,363	49,339	37,119	22,938	16,497	13,891	22,798	16,216	22,285
40%	12,114	16,756	17,972	24,564	42,829	29,446	19,999	13,452	13,365	20,928	15,920	21,314
50%	10,960	15,237	15,541	20,767	32,462	24,475	15,899	12,324	13,076	19,016	14,837	14,553
60%	9,175	13,091	15,097	18,151	24,481	20,699	12,818	11,385	12,593	17,772	13,961	12,554
70%	8,278	10,048	13,503	14,788	19,200	18,284	11,560	11,000	12,084	16,743	11,450	10,186
80%	7,916	8,600	10,754	13,471	16,242	14,866	10,757	10,413	11,011	15,241	9,408	8,418
90%	6,406	7,499	9,330	11,750	13,930	11,376	9,707	8,994	10,151	11,748	8,218	6,959
Long Term												
Full Simulation Period[b]	11,027	15,700	22,511	30,389	37,384	31,227	21,984	17,938	14,845	18,927	13,660	17,395
Water Year Types[c]												
Wet (32%)	13,028	20,442	36,300	49,140	56,543	48,019	35,045	29,928	20,087	20,487	16,031	28,019
Above Normal (16%)	10,118	17,302	24,668	38,462	46,588	40,888	24,137	16,812	13,665	23,051	16,920	21,159
Below Normal (13%)	12,085	15,834	15,808	18,273	30,185	18,600	14,108	12,602	12,927	22,211	15,563	12,132
Dry (24%)	10,191	12,717	13,654	17,185	23,392	21,285	14,927	11,770	12,904	17,081	10,453	10,150
Critical (15%)	8,102	8,539	11,205	14,132	15,821	12,526	10,333	8,354	9,755	11,143	8,590	7,198

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 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%	-421	363	5,288	569	48	1,634	17	5	-261	-498	-186	-13,869
20%	-8	-3,535	2,626	3,092	390	401	-4	956	2,676	-506	-390	-13,880
30%	-314	-4,349	1,155	3,212	2,219	2,797	3	728	2,731	61	-582	-8,213
40%	-498	-3,820	528	1,874	2,450	526	-1	1,698	2,714	170	-677	-7,679
50%	-301	-3,158	48	1,664	552	283	507	1,052	2,364	556	-464	-1,253
60%	88	-1,938	-1,098	30	251	249	7	975	2,040	-450	-456	-191
70%	-9	246	-612	-54	1,205	363	436	712	2,084	-1,258	125	-227
80%	-3	227	285	20	14	336	119	663	1,488	-1,553	218	506
90%	45	33	-22	40	257	50	485	206	1,204	-1,267	193	-18
Long Term												
Full Simulation Period[b]	-145	-1,634	623	680	564	464	153	720	1,789	-477	-234	-5,239
Water Year Types[c]												
Wet (32%)	-397	-1,991	2,320	1,261	375	259	11	346	1,335	-583	-933	-13,490
Above Normal (16%)	-108	-1,615	-386	622	1,019	1,475	222	1,262	2,321	-294	-548	-6,952
Below Normal (13%)	-382	-1,777	-141	994	1,567	754	524	1,493	2,440	452	536	962
Dry (24%)	57	-1,800	-82	130	272	122	126	870	2,027	-615	188	19
Critical (15%)	243	-472	-88	111	47	116	93	-13	1,204	-1,066	209	50

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 C-28-3. Sacramento River at Freeport, 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%	14,943	22,413	49,061	63,978	70,378	62,016	46,176	38,567	19,878	24,622	17,168	29,174
20%	14,024	18,968	32,387	52,720	61,625	51,028	32,558	25,925	16,015	24,044	16,812	28,630
30%	13,242	18,223	21,284	38,363	49,339	37,119	22,938	16,497	13,891	22,798	16,216	22,285
40%	12,114	16,756	17,972	24,564	42,829	29,446	19,999	13,452	13,365	20,928	15,920	21,314
50%	10,960	15,237	15,541	20,767	32,462	24,475	15,899	12,324	13,076	19,016	14,837	14,553
60%	9,175	13,091	15,097	18,151	24,481	20,699	12,818	11,385	12,593	17,772	13,961	12,554
70%	8,278	10,048	13,503	14,788	19,200	18,284	11,560	11,000	12,084	16,743	11,450	10,186
80%	7,916	8,600	10,754	13,471	16,242	14,866	10,757	10,413	11,011	15,241	9,408	8,418
90%	6,406	7,499	9,330	11,750	13,930	11,376	9,707	8,994	10,151	11,748	8,218	6,959
Long Term												
Full Simulation Period[b]	11,027	15,700	22,511	30,389	37,384	31,227	21,984	17,938	14,845	18,927	13,660	17,395
Water Year Types[c]												
Wet (32%)	13,028	20,442	36,300	49,140	56,543	48,019	35,045	29,928	20,087	20,487	16,031	28,019
Above Normal (16%)	10,118	17,302	24,668	38,462	46,588	40,888	24,137	16,812	13,665	23,051	16,920	21,159
Below Normal (13%)	12,085	15,834	15,808	18,273	30,185	18,600	14,108	12,602	12,927	22,211	15,563	12,132
Dry (24%)	10,191	12,717	13,654	17,185	23,392	21,285	14,927	11,770	12,904	17,081	10,453	10,150
Critical (15%)	8,102	8,539	11,205	14,132	15,821	12,526	10,333	8,354	9,755	11,143	8,590	7,198

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 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%	-3	-10	-103	-240	-15	9	1	7	75	3	17	-24
20%	-271	13	0	-65	-27	10	1	-111	126	-32	29	-244
30%	-131	105	20	0	228	92	12	-7	51	451	-2	7
40%	-143	-29	20	-60	15	14	5	-551	38	171	40	-2
50%	36	-52	0	24	252	-96	2	-418	-21	721	631	193
60%	0	28	2	-50	1	1	-301	-289	26	592	582	602
70%	24	-22	81	-11	2	-84	217	-869	10	708	414	121
80%	-3	-5	-1	-4	-1	-3	-452	-1,012	-249	389	381	271
90%	38	12	-37	-49	-30	-12	-122	-991	-24	137	757	419
Long Term												
Full Simulation Period[b]	-24	15	-14	15	4	-4	-82	-415	-20	298	291	14
Water Year Types[c]												
Wet (32%)	-55	110	-22	92	31	15	0	-8	-37	230	88	-180
Above Normal (16%)	78	-47	9	-13	-9	-47	4	-195	-47	54	-61	-89
Below Normal (13%)	-82	-6	-42	-33	-4	17	38	-450	-172	184	165	354
Dry (24%)	-34	-48	4	-7	39	-5	-92	-957	47	614	596	135
Critical (15%)	-1	3	-26	-42	-92	-19	-450	-602	71	285	719	31

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 C-28-4. 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

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	14,943	22,413	49,061	63,978	70,378	62,016	46,176	38,567	19,878	24,622	17,168	29,174
20%	14,024	18,968	32,387	52,720	61,625	51,028	32,558	25,925	16,015	24,044	16,812	28,630
30%	13,242	18,223	21,284	38,363	49,339	37,119	22,938	16,497	13,891	22,798	16,216	22,285
40%	12,114	16,756	17,972	24,564	42,829	29,446	19,999	13,452	13,365	20,928	15,920	21,314
50%	10,960	15,237	15,541	20,767	32,462	24,475	15,899	12,324	13,076	19,016	14,837	14,553
60%	9,175	13,091	15,097	18,151	24,481	20,699	12,818	11,385	12,593	17,772	13,961	12,554
70%	8,278	10,048	13,503	14,788	19,200	18,284	11,560	11,000	12,084	16,743	11,450	10,186
80%	7,916	8,600	10,754	13,471	16,242	14,866	10,757	10,413	11,011	15,241	9,408	8,418
90%	6,406	7,499	9,330	11,750	13,930	11,376	9,707	8,994	10,151	11,748	8,218	6,959
Long Term												
Full Simulation Period[b]	11,027	15,700	22,511	30,389	37,384	31,227	21,984	17,938	14,845	18,927	13,660	17,395
Water Year Types[c]												
Wet (32%)	13,028	20,442	36,300	49,140	56,543	48,019	35,045	29,928	20,087	20,487	16,031	28,019
Above Normal (16%)	10,118	17,302	24,668	38,462	46,588	40,888	24,137	16,812	13,665	23,051	16,920	21,159
Below Normal (13%)	12,085	15,834	15,808	18,273	30,185	18,600	14,108	12,602	12,927	22,211	15,563	12,132
Dry (24%)	10,191	12,717	13,654	17,185	23,392	21,285	14,927	11,770	12,904	17,081	10,453	10,150
Critical (15%)	8,102	8,539	11,205	14,132	15,821	12,526	10,333	8,354	9,755	11,143	8,590	7,198

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%	408	-69	-5,471	-857	-73	-1,638	-65	-12	-1,211	1,546	521	14,121
20%	-73	3,978	-1,994	-3,543	-414	-397	16	-1,708	-2,910	2,368	873	13,985
30%	218	4,496	-1,083	-3,216	-2,211	-4,386	9	-645	-4,070	2,378	821	8,157
40%	534	3,515	-608	-2,066	-2,892	-528	-55	-1,722	-3,156	1,498	1,142	7,383
50%	142	3,150	-65	-2,242	-828	-296	-495	-1,300	-2,512	676	1,042	1,156
60%	-855	1,866	728	-316	-253	-267	-98	-1,352	-1,974	1,119	1,954	597
70%	-741	-146	923	-217	-638	-164	-148	-916	-1,000	2,145	557	289
80%	-94	-257	-45	-15	-339	-350	-472	-461	-1,343	2,363	-360	-228
90%	-303	-38	-30	-121	-288	-111	-493	72	-1,138	1,409	-327	-157
Long Term												
Full Simulation Period[b]	-108	1,553	-669	-847	-596	-635	-195	-725	-1,907	1,601	566	5,254
Water Year Types[c]												
Wet (32%)	200	1,979	-2,389	-1,235	-433	-431	-15	-253	-685	1,381	993	13,293
Above Normal (16%)	-32	1,852	547	-1,230	-1,175	-1,870	-273	-1,252	-2,868	1,304	1,014	6,966
Below Normal (13%)	-169	1,516	223	-1,007	-1,623	-842	-491	-2,088	-4,831	1,568	1,611	132
Dry (24%)	-163	1,733	22	-233	-396	-190	-157	-750	-1,742	2,243	-287	-237
Critical (15%)	-707	40	-226	-469	286	-292	-293	113	-1,108	1,357	-379	-172

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 C-28-5. 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

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 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%	-13	294	-183	-288	-25	-4	-47	-8	-1,472	1,049	336	252
20%	-81	443	632	-451	-24	4	11	-753	-234	1,862	484	106
30%	-97	147	73	-4	8	-1,588	12	83	-1,339	2,439	239	-56
40%	36	-305	-79	-192	-442	-2	-56	-25	-442	1,668	465	-296
50%	-159	-8	-17	-578	-276	-14	12	-248	-147	1,232	578	-97
60%	-767	-72	-370	-286	-1	-19	-90	-377	67	669	1,498	406
70%	-750	100	310	-271	567	199	288	-203	1,084	887	682	62
80%	-97	-30	241	4	-325	-14	-353	202	146	810	-142	278
90%	-258	-4	-52	-81	-31	-61	-8	278	66	142	-134	-174
Long Term												
Full Simulation Period[b]	-253	-81	-46	-168	-32	-171	-42	-5	-118	1,124	332	15
Water Year Types[c]												
Wet (32%)	-197	-12	-69	26	-58	-172	-4	93	650	798	60	-198
Above Normal (16%)	-140	237	161	-608	-156	-395	-51	10	-547	1,010	466	14
Below Normal (13%)	-551	-260	82	-13	-57	-88	33	-595	-2,390	2,019	2,148	1,094
Dry (24%)	-107	-67	-60	-103	-124	-68	-31	120	285	1,629	-100	-219
Critical (15%)	-464	-432	-314	-358	333	-176	-201	101	96	290	-170	-121

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 C-28-6. 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

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 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%	405	-79	-5,574	-1,097	-88	-1,629	-63	-5	-1,136	1,550	538	14,097
20%	-344	3,991	-1,994	-3,608	-441	-387	16	-1,819	-2,783	2,336	903	13,742
30%	86	4,601	-1,063	-3,216	-1,983	-4,293	21	-652	-4,019	2,829	820	8,164
40%	390	3,486	-588	-2,126	-2,877	-513	-50	-2,273	-3,118	1,670	1,181	7,381
50%	178	3,098	-65	-2,218	-575	-393	-494	-1,719	-2,533	1,397	1,672	1,349
60%	-855	1,894	730	-366	-252	-266	-399	-1,641	-1,948	1,712	2,537	1,199
70%	-716	-168	1,004	-228	-636	-247	69	-1,785	-990	2,853	971	410
80%	-97	-262	-46	-19	-339	-354	-924	-1,474	-1,591	2,752	21	43
90%	-265	-25	-67	-170	-318	-123	-615	-919	-1,162	1,545	430	263
Long Term												
Full Simulation Period[b]	-132	1,568	-683	-832	-592	-640	-278	-1,140	-1,927	1,898	857	5,268
Water Year Types[c]												
Wet (32%)	146	2,089	-2,411	-1,143	-403	-416	-15	-261	-722	1,611	1,081	13,113
Above Normal (16%)	46	1,804	555	-1,243	-1,184	-1,917	-270	-1,447	-2,914	1,358	952	6,878
Below Normal (13%)	-251	1,511	180	-1,040	-1,627	-825	-453	-2,538	-5,003	1,752	1,776	486
Dry (24%)	-197	1,685	26	-240	-357	-195	-249	-1,707	-1,695	2,858	309	-102
Critical (15%)	-709	43	-251	-511	195	-311	-743	-489	-1,037	1,641	339	-140

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

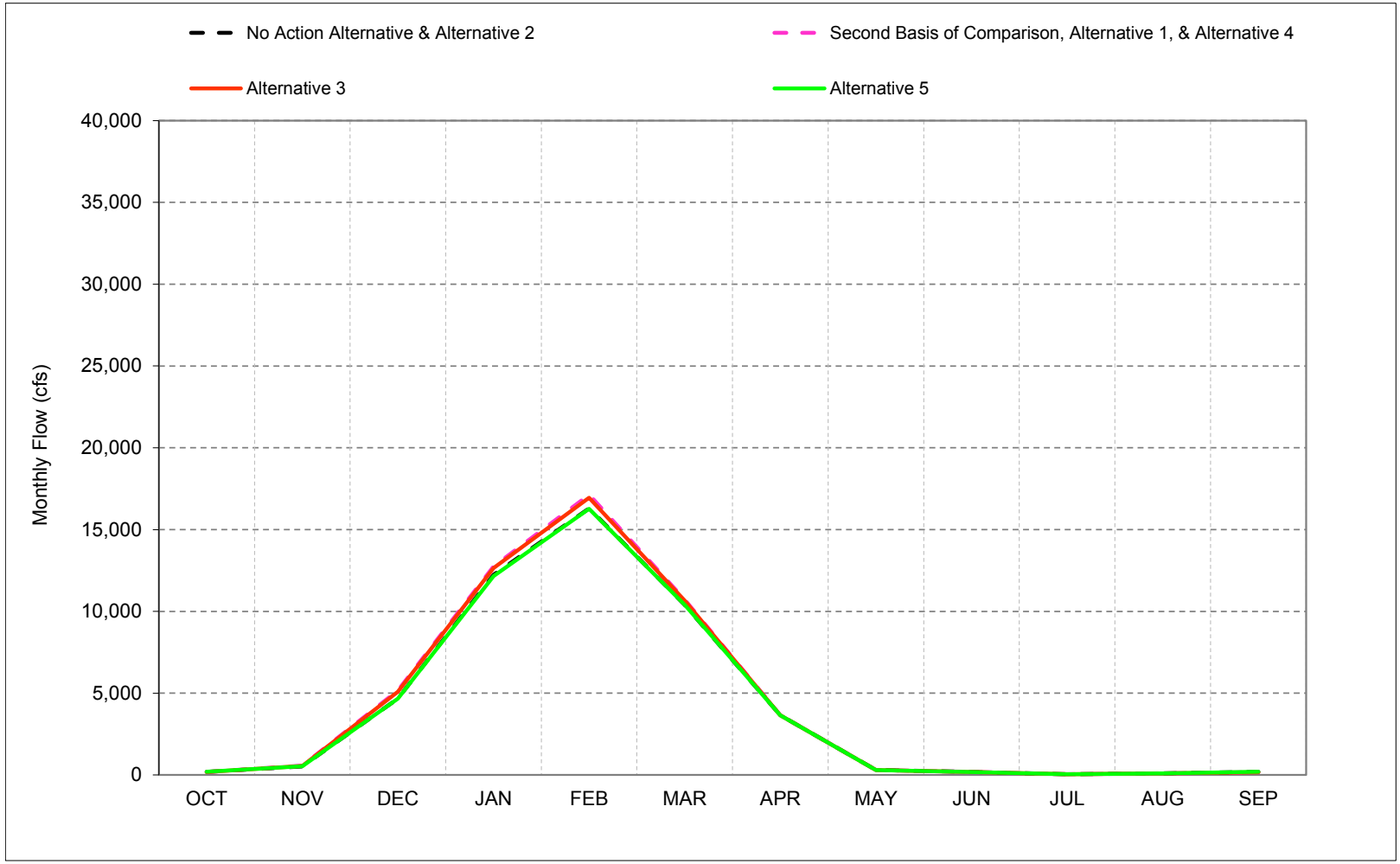
b Based on the 82-year simulation period.

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.

C.29. Yolo Bypass Flow

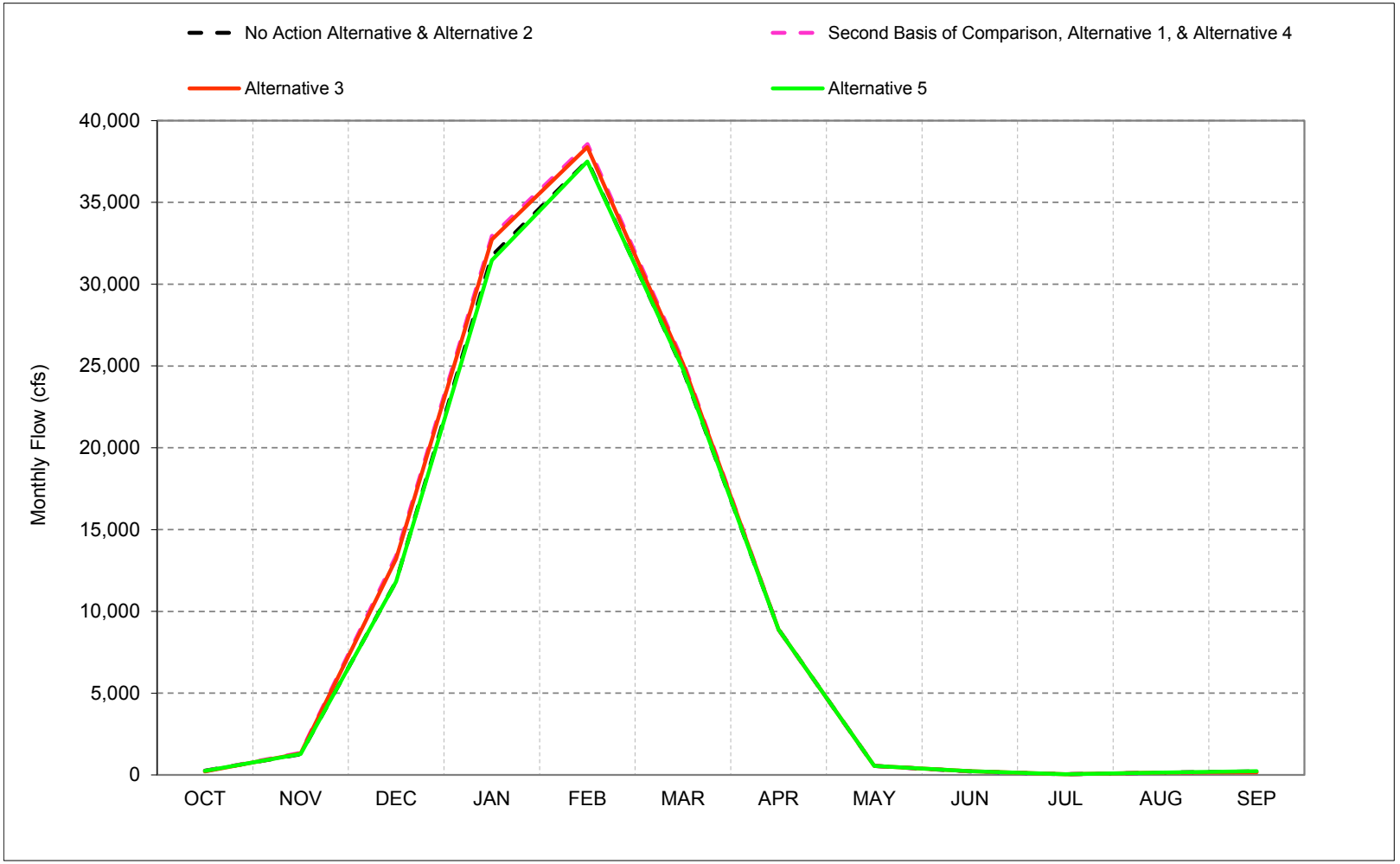
Figure C-29-1. Yolo Bypass, Long-Term* Average Flow



*Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-29-2. Yolo Bypass, Wet Year* Long-Term Average Flow**

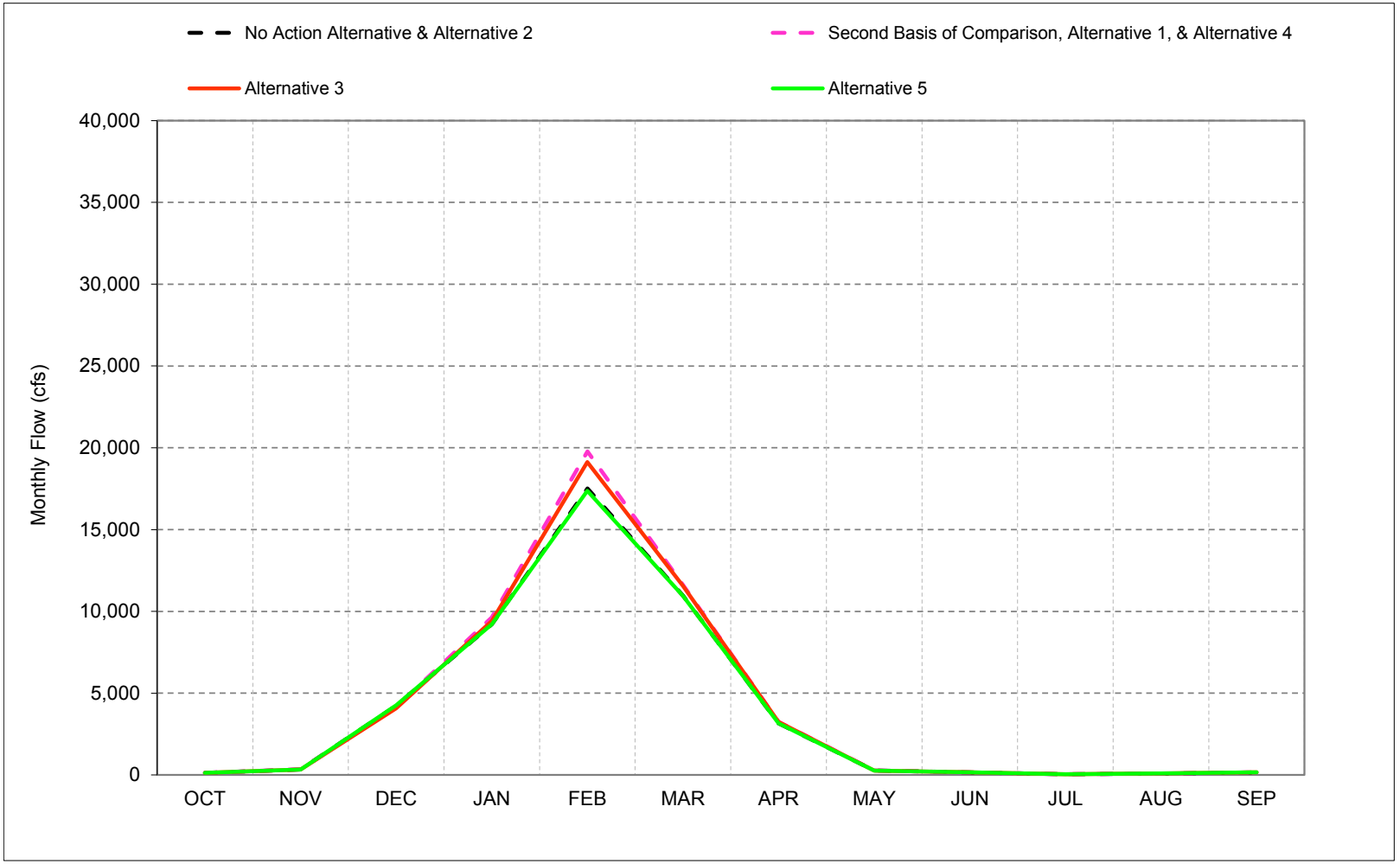


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-29-3. Yolo Bypass, Above Normal Year* Long-Term Average Flow**

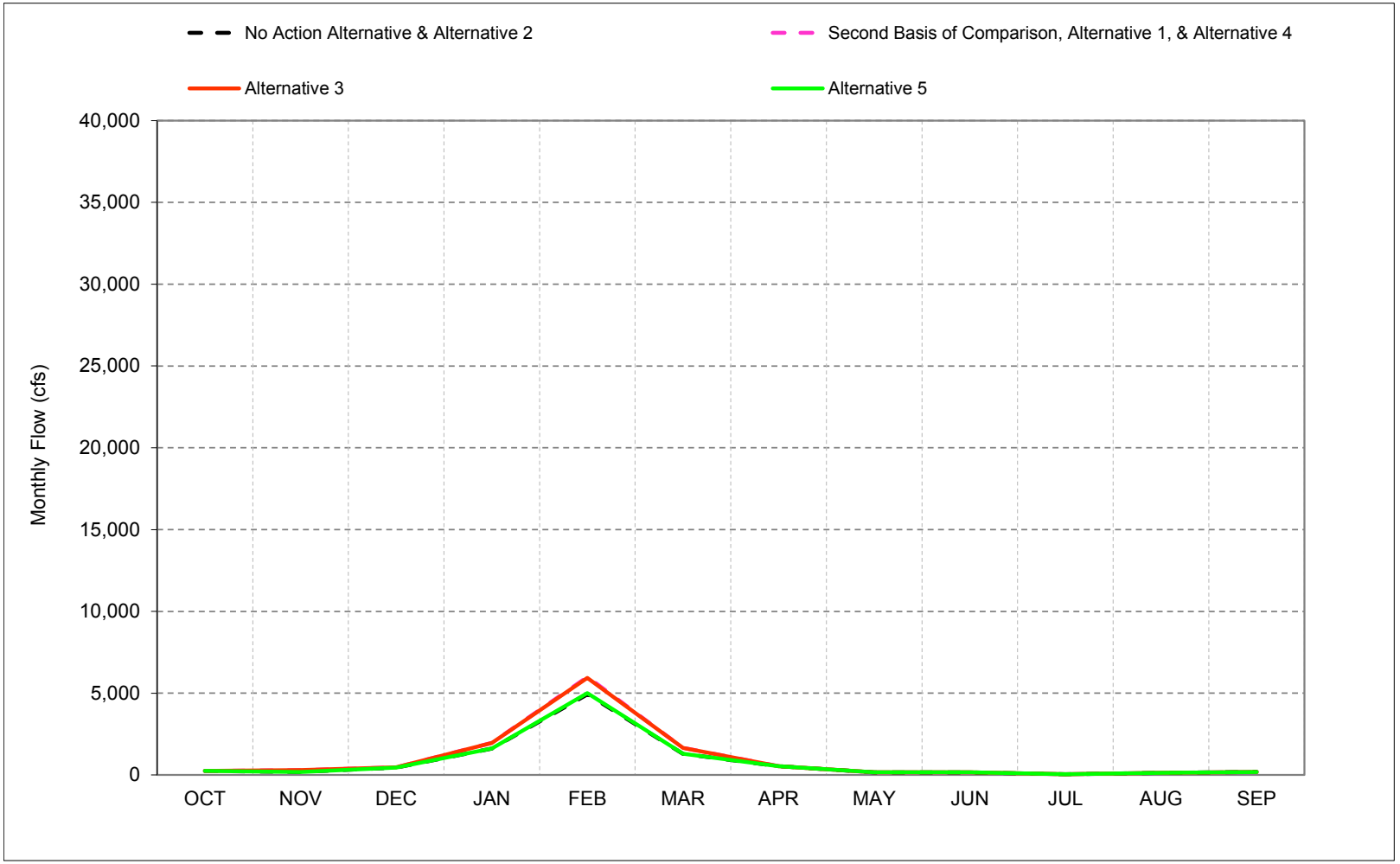


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-29-4. Yolo Bypass, Below Normal Year* Long-Term Average Flow**

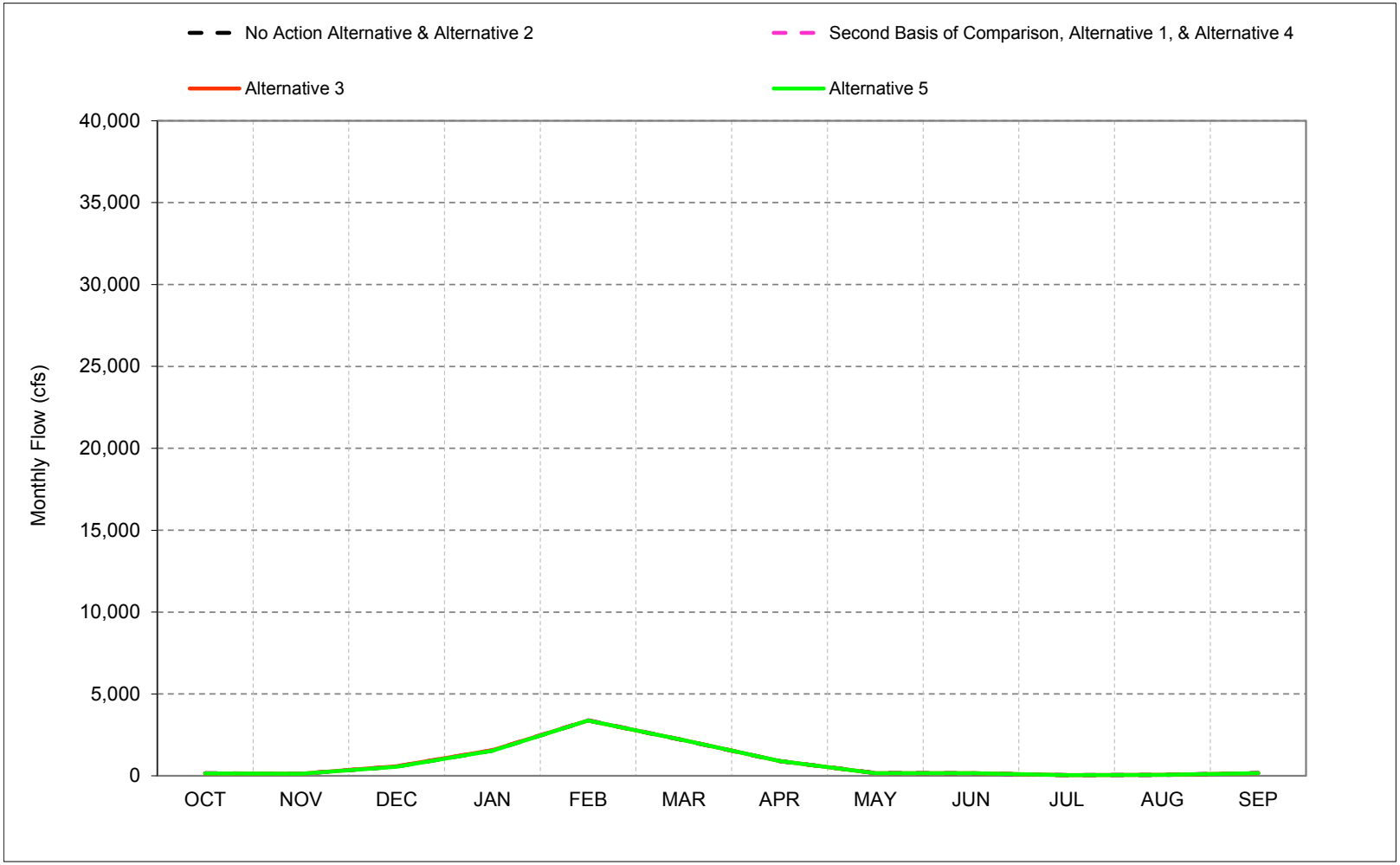


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-29-5. Yolo Bypass, Dry Year* Long-Term Average Flow**

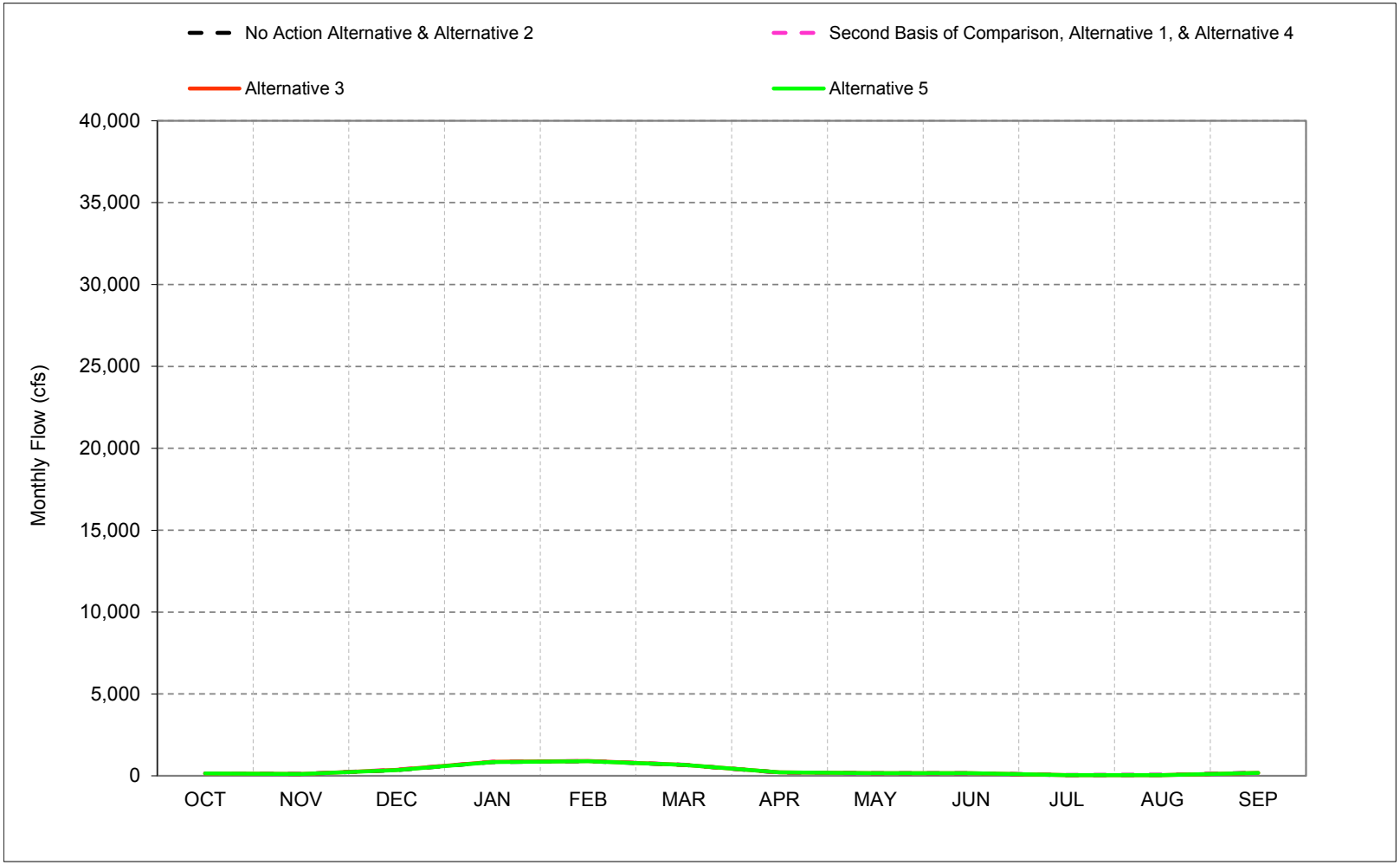


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-29-6. Yolo Bypass, Critical Year* Long-Term Average Flow**



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

**Based on the 82-year simulation period.

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 Alternatives 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 C-29-1. Yolo Bypass, 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%	163	575	11,441	34,478	52,474	20,341	10,435	335	168	48	183	290
20%	162	245	6,247	15,620	20,921	10,931	7,063	178	168	48	55	194
30%	159	146	2,165	8,237	12,308	7,941	2,042	173	168	48	55	159
40%	153	110	798	4,526	8,343	4,740	497	170	168	48	55	159
50%	146	108	558	1,883	5,503	2,825	267	168	167	48	55	159
60%	141	105	258	776	2,879	1,254	229	165	167	48	55	159
70%	129	100	157	466	951	616	211	163	166	48	55	158
80%	115	100	110	164	321	220	186	159	164	48	55	156
90%	104	100	100	123	152	146	170	153	162	48	54	152
Long Term												
Full Simulation Period[b]	198	531	4,678	12,239	16,299	10,398	3,648	311	185	48	101	193
Water Year Types[c]												
Wet (32%)	269	1,266	11,844	31,732	37,542	24,774	8,899	560	227	48	147	227
Above Normal (16%)	131	337	4,234	9,213	17,513	10,972	3,165	273	166	48	92	165
Below Normal (13%)	245	192	447	1,617	4,933	1,299	547	169	166	48	130	192
Dry (24%)	156	131	569	1,540	3,384	2,173	905	175	167	48	61	170
Critical (15%)	145	124	357	847	897	675	210	167	165	48	55	188

Alternative 1

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

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%	1	0	3,672	2,819	539	5,406	-89	0	0	0	0	-50
20%	1	0	-8	426	1,394	138	309	0	0	0	0	-35
30%	1	0	345	-21	211	616	1	0	0	0	0	0
40%	0	0	3	493	1,881	450	0	0	0	0	0	0
50%	2	0	-63	522	10	163	4	0	0	0	0	0
60%	1	0	1	194	379	148	0	0	0	0	0	-1
70%	3	0	-11	4	118	138	0	0	0	0	0	-1
80%	1	0	-1	3	12	6	0	0	0	0	0	-1
90%	2	0	0	-1	0	3	3	0	0	0	0	0
Long Term												
Full Simulation Period[b]	-11	42	492	507	831	323	5	0	0	0	0	-17
Water Year Types[c]												
Wet (32%)	-38	82	1,561	1,201	1,020	519	-25	0	0	0	0	-55
Above Normal (16%)	6	7	-78	426	2,264	651	77	0	0	0	0	0
Below Normal (13%)	1	108	23	356	1,065	365	-1	0	0	0	0	0
Dry (24%)	0	0	14	39	20	17	4	0	0	0	0	0
Critical (15%)	0	0	19	9	7	12	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 C-29-2. Yolo Bypass, 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%	163	575	11,441	34,478	52,474	20,341	10,435	335	168	48	183	290
20%	162	245	6,247	15,620	20,921	10,931	7,063	178	168	48	55	194
30%	159	146	2,165	8,237	12,308	7,941	2,042	173	168	48	55	159
40%	153	110	798	4,526	8,343	4,740	497	170	168	48	55	159
50%	146	108	558	1,883	5,503	2,825	267	168	167	48	55	159
60%	141	105	258	776	2,879	1,254	229	165	167	48	55	159
70%	129	100	157	466	951	616	211	163	166	48	55	158
80%	115	100	110	164	321	220	186	159	164	48	55	156
90%	104	100	100	123	152	146	170	153	162	48	54	152
Long Term												
Full Simulation Period[b]	198	531	4,678	12,239	16,299	10,398	3,648	311	185	48	101	193
Water Year Types[c]												
Wet (32%)	269	1,266	11,844	31,732	37,542	24,774	8,899	560	227	48	147	227
Above Normal (16%)	131	337	4,234	9,213	17,513	10,972	3,165	273	166	48	92	165
Below Normal (13%)	245	192	447	1,617	4,933	1,299	547	169	166	48	130	192
Dry (24%)	156	131	569	1,540	3,384	2,173	905	175	167	48	61	170
Critical (15%)	145	124	357	847	897	675	210	167	165	48	55	188

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	163	575	15,105	36,977	52,994	23,562	10,346	335	168	48	183	240
20%	162	245	6,398	16,162	20,780	10,937	7,383	178	168	48	55	159
30%	159	146	2,014	8,057	12,403	8,314	2,042	173	168	48	55	159
40%	153	110	802	5,022	10,223	5,060	498	170	168	48	55	159
50%	146	108	496	2,336	5,513	2,933	272	168	167	48	55	159
60%	141	105	287	945	2,888	1,421	229	165	167	48	55	159
70%	129	100	149	466	1,114	738	211	163	166	48	55	157
80%	116	100	114	166	323	220	186	159	164	48	55	155
90%	104	100	100	123	152	149	170	153	162	48	54	152
Long Term												
Full Simulation Period[b]	184	564	5,096	12,644	16,954	10,652	3,658	311	185	48	101	175
Water Year Types[c]												
Wet (32%)	223	1,325	13,210	32,736	38,378	25,127	8,889	561	227	48	147	173
Above Normal (16%)	132	338	4,083	9,412	19,135	11,550	3,246	273	166	48	92	165
Below Normal (13%)	246	299	471	1,968	5,929	1,651	546	169	166	48	130	192
Dry (24%)	156	131	590	1,571	3,376	2,186	908	175	167	48	61	170
Critical (15%)	145	124	365	856	908	676	210	167	165	48	55	188

Alternative 3 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%	0	0	3,663	2,500	520	3,221	-89	0	0	0	0	-50
20%	0	0	151	542	-140	6	321	0	0	0	0	-35
30%	0	0	-150	-180	95	373	0	0	0	0	0	0
40%	0	0	4	496	1,881	320	1	0	0	0	0	0
50%	0	0	-62	453	10	108	4	0	0	0	0	0
60%	0	0	29	169	9	167	0	0	0	0	0	-1
70%	1	0	-8	0	163	122	0	0	0	0	0	-1
80%	1	0	3	3	2	0	0	0	0	0	0	-1
90%	0	0	0	0	0	3	0	0	0	0	0	0
Long Term												
Full Simulation Period[b]	-14	33	419	406	655	254	10	0	0	0	0	-17
Water Year Types[c]												
Wet (32%)	-46	59	1,366	1,004	836	353	-10	1	0	0	0	-55
Above Normal (16%)	1	1	-151	198	1,622	579	80	0	0	0	0	0
Below Normal (13%)	1	108	24	351	996	352	-1	0	0	0	0	0
Dry (24%)	1	0	21	30	-8	13	3	0	0	0	0	0
Critical (15%)	0	0	8	9	11	1	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 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 C-29-3. Yolo Bypass, 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%	163	575	11,441	34,478	52,474	20,341	10,435	335	168	48	183	290
20%	162	245	6,247	15,620	20,921	10,931	7,063	178	168	48	55	194
30%	159	146	2,165	8,237	12,308	7,941	2,042	173	168	48	55	159
40%	153	110	798	4,526	8,343	4,740	497	170	168	48	55	159
50%	146	108	558	1,883	5,503	2,825	267	168	167	48	55	159
60%	141	105	258	776	2,879	1,254	229	165	167	48	55	159
70%	129	100	157	466	951	616	211	163	166	48	55	158
80%	115	100	110	164	321	220	186	159	164	48	55	156
90%	104	100	100	123	152	146	170	153	162	48	54	152
Long Term												
Full Simulation Period[b]	198	531	4,678	12,239	16,299	10,398	3,648	311	185	48	101	193
Water Year Types[c]												
Wet (32%)	269	1,266	11,844	31,732	37,542	24,774	8,899	560	227	48	147	227
Above Normal (16%)	131	337	4,234	9,213	17,513	10,972	3,165	273	166	48	92	165
Below Normal (13%)	245	192	447	1,617	4,933	1,299	547	169	166	48	130	192
Dry (24%)	156	131	569	1,540	3,384	2,173	905	175	167	48	61	170
Critical (15%)	145	124	357	847	897	675	210	167	165	48	55	188

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	163	575	11,727	33,139	52,516	20,378	10,436	335	168	48	183	290
20%	162	245	6,221	15,644	20,577	10,932	7,063	178	168	48	55	194
30%	159	146	2,160	8,237	12,384	8,053	2,042	173	168	48	55	159
40%	153	110	824	4,526	8,343	4,746	497	170	168	48	55	159
50%	146	108	533	1,874	5,503	2,793	267	168	167	48	55	159
60%	141	105	258	770	2,873	1,250	229	165	167	48	55	159
70%	129	100	157	466	951	616	211	163	166	48	55	158
80%	115	100	106	164	321	220	186	159	164	48	55	156
90%	104	100	100	126	150	146	170	153	162	48	54	152
Long Term												
Full Simulation Period[b]	194	538	4,670	12,152	16,274	10,399	3,649	311	185	48	101	193
Water Year Types[c]												
Wet (32%)	255	1,289	11,815	31,464	37,505	24,793	8,899	560	227	48	147	227
Above Normal (16%)	131	337	4,256	9,217	17,377	10,938	3,165	273	166	48	92	165
Below Normal (13%)	245	192	451	1,617	5,013	1,302	546	169	166	48	130	192
Dry (24%)	156	131	556	1,533	3,378	2,177	906	175	167	48	61	170
Critical (15%)	145	124	359	846	897	673	210	167	165	48	55	188

Alternative 5 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%	0	0	285	-1,339	42	37	1	0	0	0	0	0
20%	0	0	-26	24	-343	0	1	0	0	0	0	0
30%	0	0	-5	-1	76	112	0	0	0	0	0	0
40%	0	0	26	0	0	6	0	0	0	0	0	0
50%	0	0	-25	-9	0	-32	0	0	0	0	0	0
60%	0	0	0	-7	-7	-4	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	-5	0	0	0	0	0	0	0	0	0
90%	0	0	0	3	-2	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[b]	-4	7	-8	-86	-24	2	0	0	0	0	0	0
Water Year Types[c]												
Wet (32%)	-14	23	-29	-268	-37	19	0	0	0	0	0	0
Above Normal (16%)	0	0	22	4	-137	-33	0	0	0	0	0	0
Below Normal (13%)	0	0	4	0	81	3	0	0	0	0	0	0
Dry (24%)	0	0	-13	-7	-7	4	0	0	0	0	0	0
Critical (15%)	0	0	1	0	-1	-3	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 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 C-29-4. 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

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	163	575	11,441	34,478	52,474	20,341	10,435	335	168	48	183	290
20%	162	245	6,247	15,620	20,921	10,931	7,063	178	168	48	55	194
30%	159	146	2,165	8,237	12,308	7,941	2,042	173	168	48	55	159
40%	153	110	798	4,526	8,343	4,740	497	170	168	48	55	159
50%	146	108	558	1,883	5,503	2,825	267	168	167	48	55	159
60%	141	105	258	776	2,879	1,254	229	165	167	48	55	159
70%	129	100	157	466	951	616	211	163	166	48	55	158
80%	115	100	110	164	321	220	186	159	164	48	55	156
90%	104	100	100	123	152	146	170	153	162	48	54	152
Long Term												
Full Simulation Period[b]	198	531	4,678	12,239	16,299	10,398	3,648	311	185	48	101	193
Water Year Types[c]												
Wet (32%)	269	1,266	11,844	31,732	37,542	24,774	8,899	560	227	48	147	227
Above Normal (16%)	131	337	4,234	9,213	17,513	10,972	3,165	273	166	48	92	165
Below Normal (13%)	245	192	447	1,617	4,933	1,299	547	169	166	48	130	192
Dry (24%)	156	131	569	1,540	3,384	2,173	905	175	167	48	61	170
Critical (15%)	145	124	357	847	897	675	210	167	165	48	55	188

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%	-1	0	-3,672	-2,819	-539	-5,406	89	0	0	0	0	50
20%	-1	0	8	-426	-1,394	-138	-309	0	0	0	0	35
30%	-1	0	-345	21	-211	-616	-1	0	0	0	0	0
40%	0	0	-3	-493	-1,881	-450	0	0	0	0	0	0
50%	-2	0	63	-522	-10	-163	-4	0	0	0	0	0
60%	-1	0	-1	-194	-379	-148	0	0	0	0	0	1
70%	-3	0	11	-4	-118	-138	0	0	0	0	0	1
80%	-1	0	1	-3	-12	-6	0	0	0	0	0	1
90%	-2	0	0	1	0	-3	-3	0	0	0	0	0
Long Term												
Full Simulation Period[b]	11	-42	-492	-507	-831	-323	-5	0	0	0	0	17
Water Year Types[c]												
Wet (32%)	38	-82	-1,561	-1,201	-1,020	-519	25	0	0	0	0	55
Above Normal (16%)	-6	-7	78	-426	-2,264	-651	-77	0	0	0	0	0
Below Normal (13%)	-1	-108	-23	-356	-1,065	-365	1	0	0	0	0	0
Dry (24%)	0	0	-14	-39	-20	-17	-4	0	0	0	0	0
Critical (15%)	0	0	-19	-9	-7	-12	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 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 C-29-5. 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

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	163	575	15,105	36,977	52,994	23,562	10,346	335	168	48	183	240
20%	162	245	6,398	16,162	20,780	10,937	7,383	178	168	48	55	159
30%	159	146	2,014	8,057	12,403	8,314	2,042	173	168	48	55	159
40%	153	110	802	5,022	10,223	5,060	498	170	168	48	55	159
50%	146	108	496	2,336	5,513	2,933	272	168	167	48	55	159
60%	141	105	287	945	2,888	1,421	229	165	167	48	55	159
70%	129	100	149	466	1,114	738	211	163	166	48	55	157
80%	116	100	114	166	323	220	186	159	164	48	55	155
90%	104	100	100	123	152	149	170	153	162	48	54	152
Long Term												
Full Simulation Period[b]	184	564	5,096	12,644	16,954	10,652	3,658	311	185	48	101	175
Water Year Types[c]												
Wet (32%)	223	1,325	13,210	32,736	38,378	25,127	8,889	561	227	48	147	173
Above Normal (16%)	132	338	4,083	9,412	19,135	11,550	3,246	273	166	48	92	165
Below Normal (13%)	246	299	471	1,968	5,929	1,651	546	169	166	48	130	192
Dry (24%)	156	131	590	1,571	3,376	2,186	908	175	167	48	61	170
Critical (15%)	145	124	365	856	908	676	210	167	165	48	55	188

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%	-1	0	-8	-319	-19	-2,185	0	0	0	0	0	0
20%	-1	0	159	116	-1,534	-131	11	0	0	0	0	0
30%	-1	0	-495	-159	-116	-243	-1	0	0	0	0	0
40%	0	0	1	3	0	-130	1	0	0	0	0	0
50%	-2	0	1	-68	0	-55	0	0	0	0	0	0
60%	-1	0	28	-24	-370	19	0	0	0	0	0	0
70%	-3	0	3	-4	45	-16	0	0	0	0	0	0
80%	0	0	4	-1	-9	-6	0	0	0	0	0	0
90%	-2	0	0	2	0	0	-3	0	0	0	0	0
Long Term												
Full Simulation Period[b]	-3	-8	-73	-101	-176	-68	5	0	0	0	0	0
Water Year Types[c]												
Wet (32%)	-8	-23	-195	-197	-185	-166	15	0	0	0	0	0
Above Normal (16%)	-5	-6	-73	-228	-642	-72	4	0	0	0	0	0
Below Normal (13%)	0	0	0	-5	-69	-13	0	0	0	0	0	0
Dry (24%)	1	0	7	-9	-28	-4	-2	0	0	0	0	0
Critical (15%)	0	0	-11	0	4	-11	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 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 C-29-6. Yolo Bypass, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	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

Alternative 5

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	163	575	11,727	33,139	52,516	20,378	10,436	335	168	48	183	290
20%	162	245	6,221	15,644	20,577	10,932	7,063	178	168	48	55	194
30%	159	146	2,160	8,237	12,384	8,053	2,042	173	168	48	55	159
40%	153	110	824	4,526	8,343	4,746	497	170	168	48	55	159
50%	146	108	533	1,874	5,503	2,793	267	168	167	48	55	159
60%	141	105	258	770	2,873	1,250	229	165	167	48	55	159
70%	129	100	157	466	951	616	211	163	166	48	55	158
80%	115	100	106	164	321	220	186	159	164	48	55	156
90%	104	100	100	126	150	146	170	153	162	48	54	152
Long Term												
Full Simulation Period[b]	194	538	4,670	12,152	16,274	10,399	3,649	311	185	48	101	193
Water Year Types[c]												
Wet (32%)	255	1,289	11,815	31,464	37,505	24,793	8,899	560	227	48	147	227
Above Normal (16%)	131	337	4,256	9,217	17,377	10,938	3,165	273	166	48	92	165
Below Normal (13%)	245	192	451	1,617	5,013	1,302	546	169	166	48	130	192
Dry (24%)	156	131	556	1,533	3,378	2,177	906	175	167	48	61	170
Critical (15%)	145	124	359	846	897	673	210	167	165	48	55	188

Alternative 5 minus Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-1	0	-3,386	-4,158	-497	-5,369	90	0	0	0	0	50
20%	-1	0	-17	-402	-1,737	-137	-309	0	0	0	0	35
30%	-1	0	-350	20	-135	-504	-1	0	0	0	0	0
40%	0	0	22	-493	-1,880	-444	0	0	0	0	0	0
50%	-2	0	38	-530	-9	-194	-4	0	0	0	0	0
60%	-1	0	-1	-200	-386	-152	0	0	0	0	0	1
70%	-3	0	11	-4	-118	-138	0	0	0	0	0	1
80%	-1	0	-4	-3	-12	-6	0	0	0	0	0	1
90%	-2	0	0	4	-2	-3	-3	0	0	0	0	0
Long Term												
Full Simulation Period[b]	6	-34	-500	-593	-856	-321	-5	0	0	0	0	17
Water Year Types[c]												
Wet (32%)	24	-59	-1,590	-1,468	-1,057	-500	26	0	0	0	0	55
Above Normal (16%)	-6	-7	100	-422	-2,401	-684	-77	0	0	0	0	0
Below Normal (13%)	-1	-108	-19	-355	-984	-362	1	0	0	0	0	0
Dry (24%)	0	0	-27	-46	-26	-13	-4	0	0	0	0	0
Critical (15%)	0	0	-18	-9	-8	-15	0	0	0	0	0	0

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

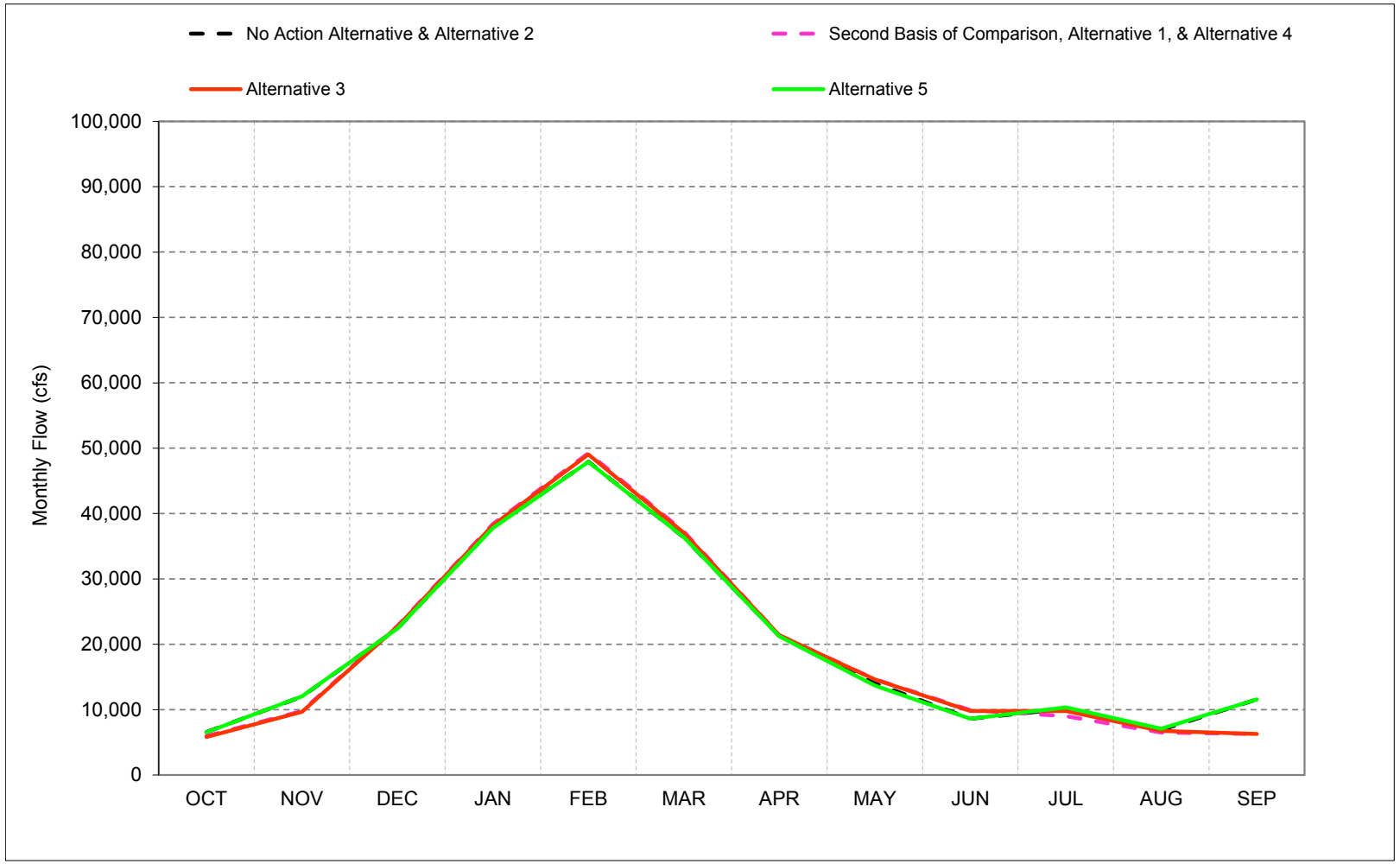
b Based on the 82-year simulation period.

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 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.

C.30. Sacramento River Flow at Rio Vista

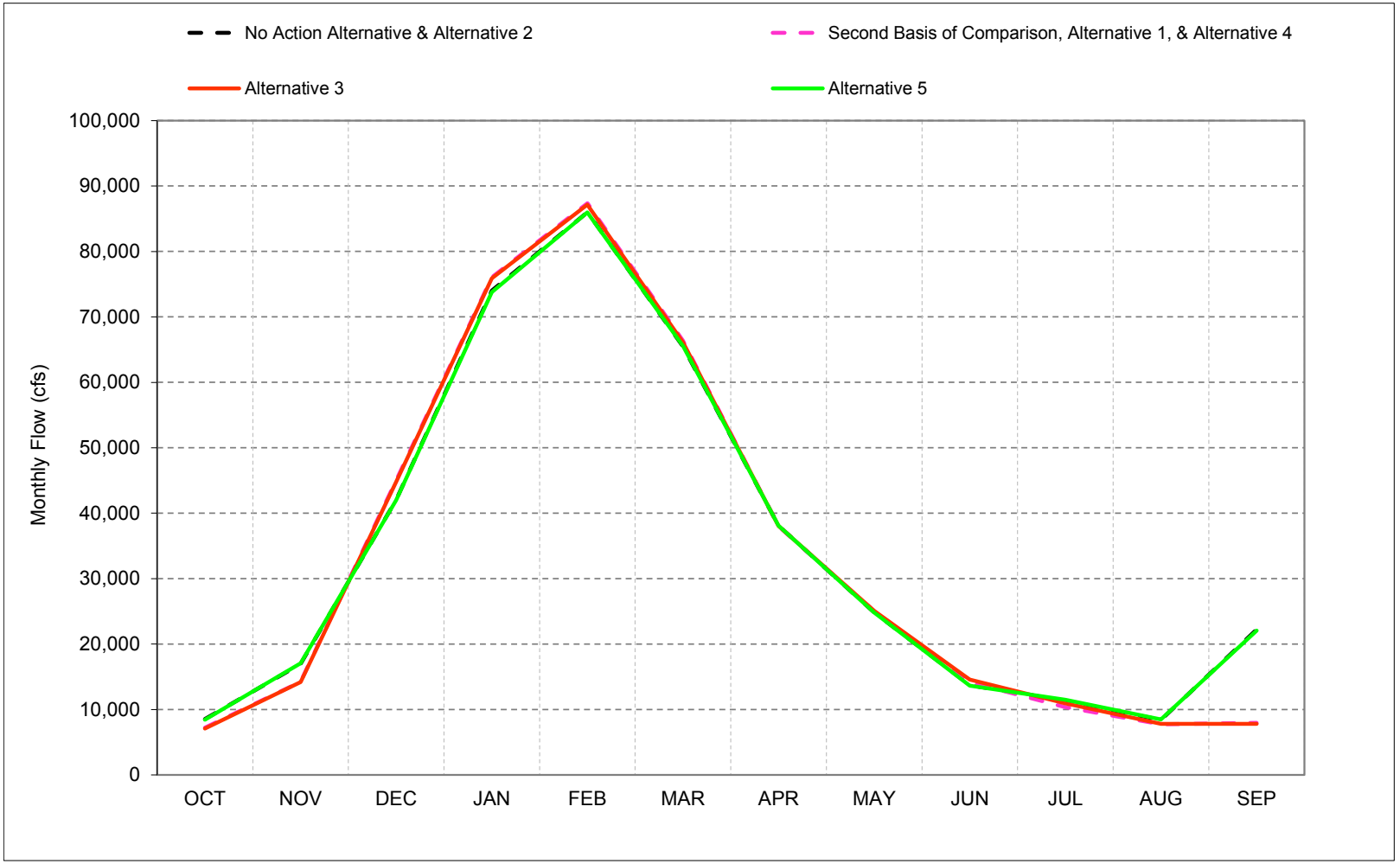
Figure C-30-1. Sacramento River at Rio Vista, Long-Term* Average Flow



*Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-30-2. Sacramento River at Rio Vista, Wet Year* Long-Term Average Flow**

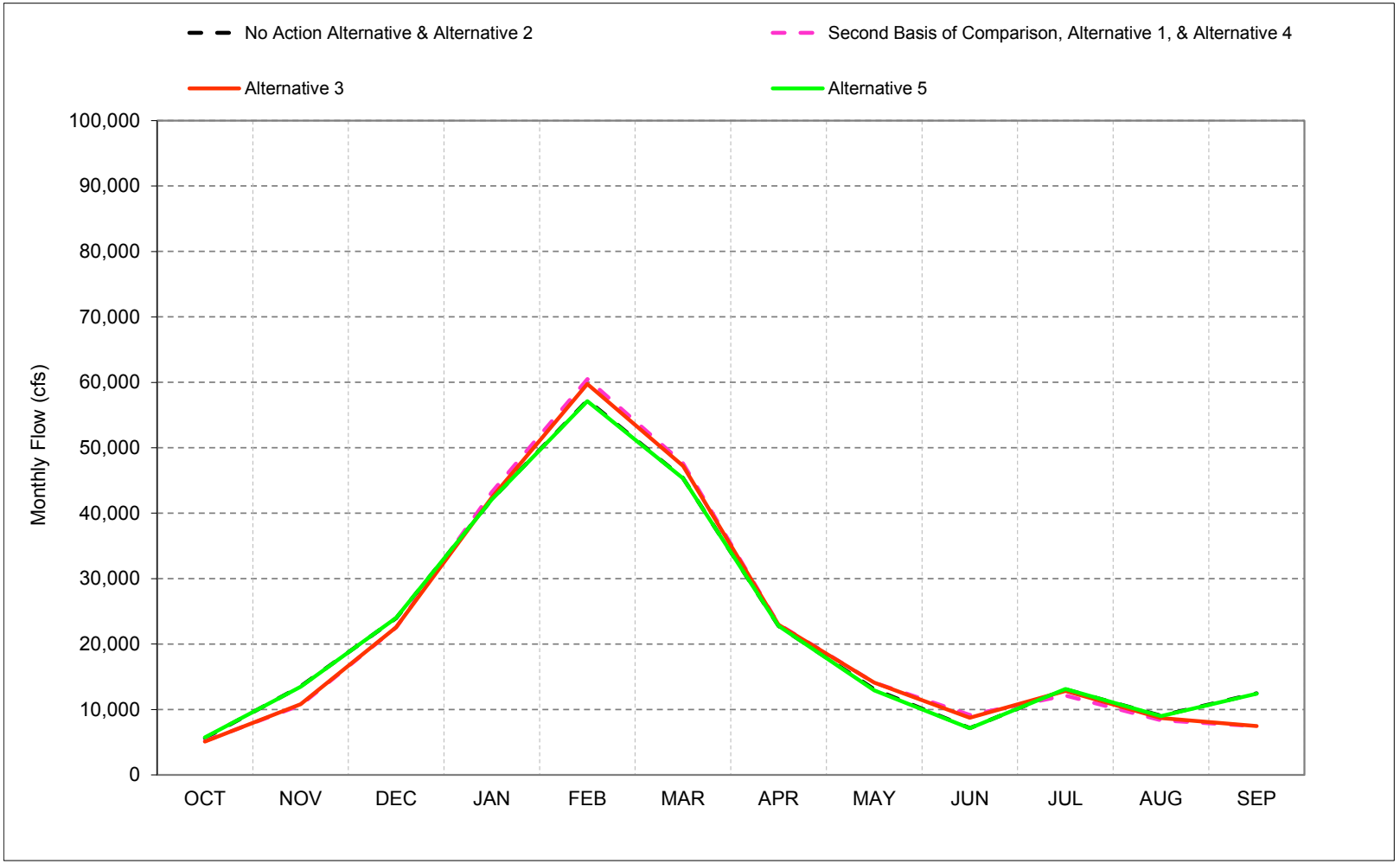


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-30-3. Sacramento River at Rio Vista, Above Normal Year* Long-Term Average Flow**

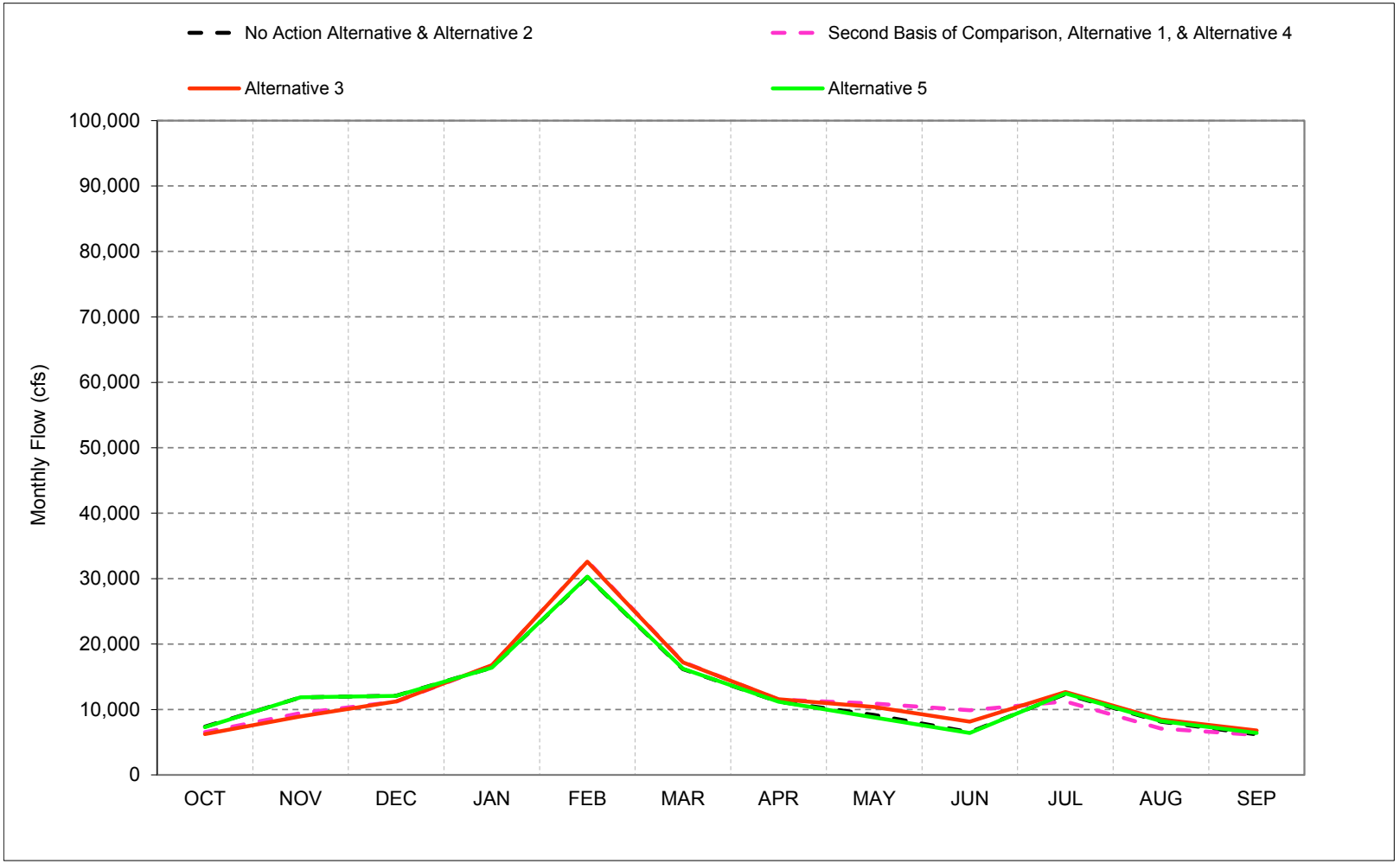


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-30-4. Sacramento River at Rio Vista, Below Normal Year* Long-Term Average Flow**

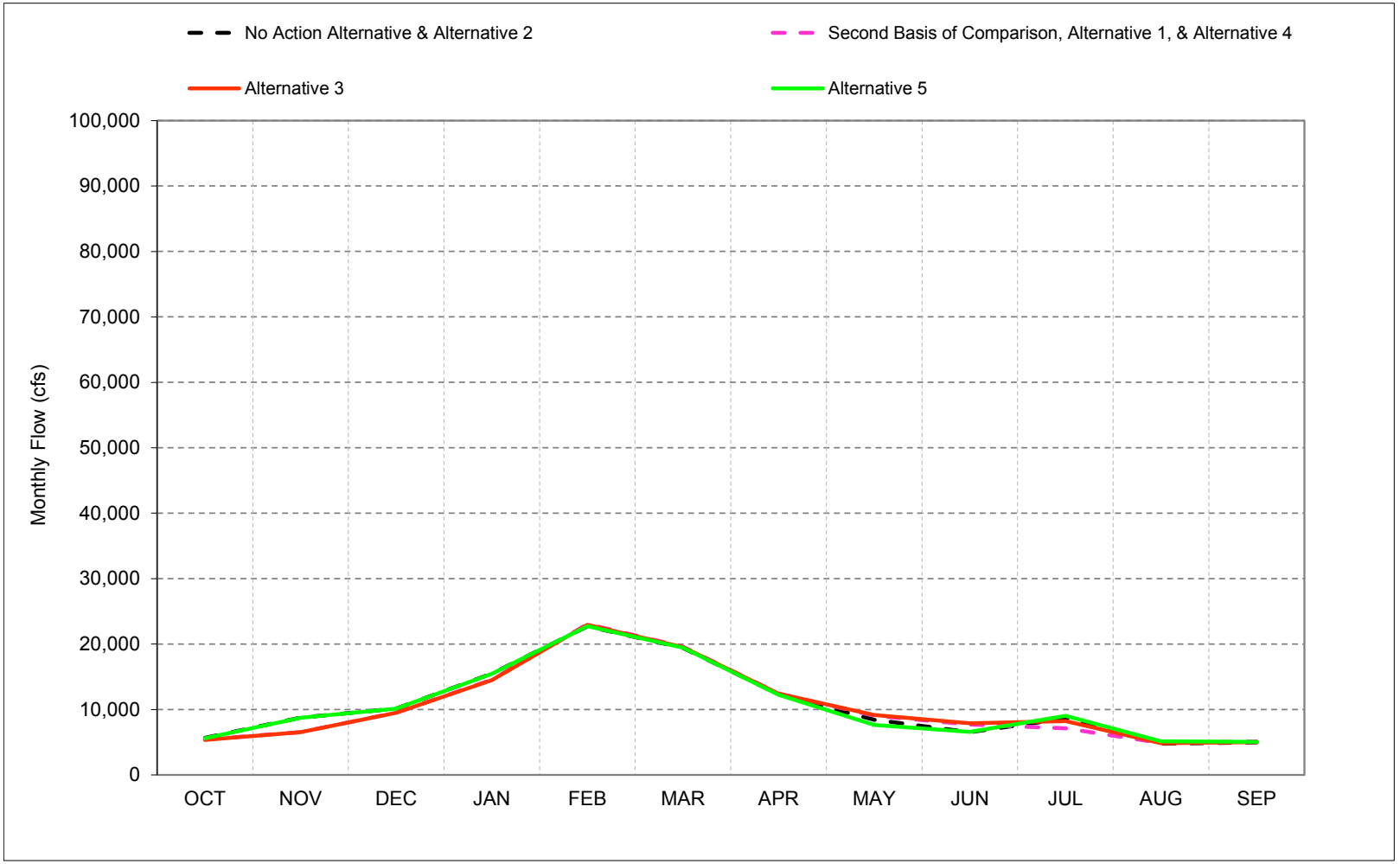


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-30-5. Sacramento River at Rio Vista, Dry Year* Long-Term Average Flow**

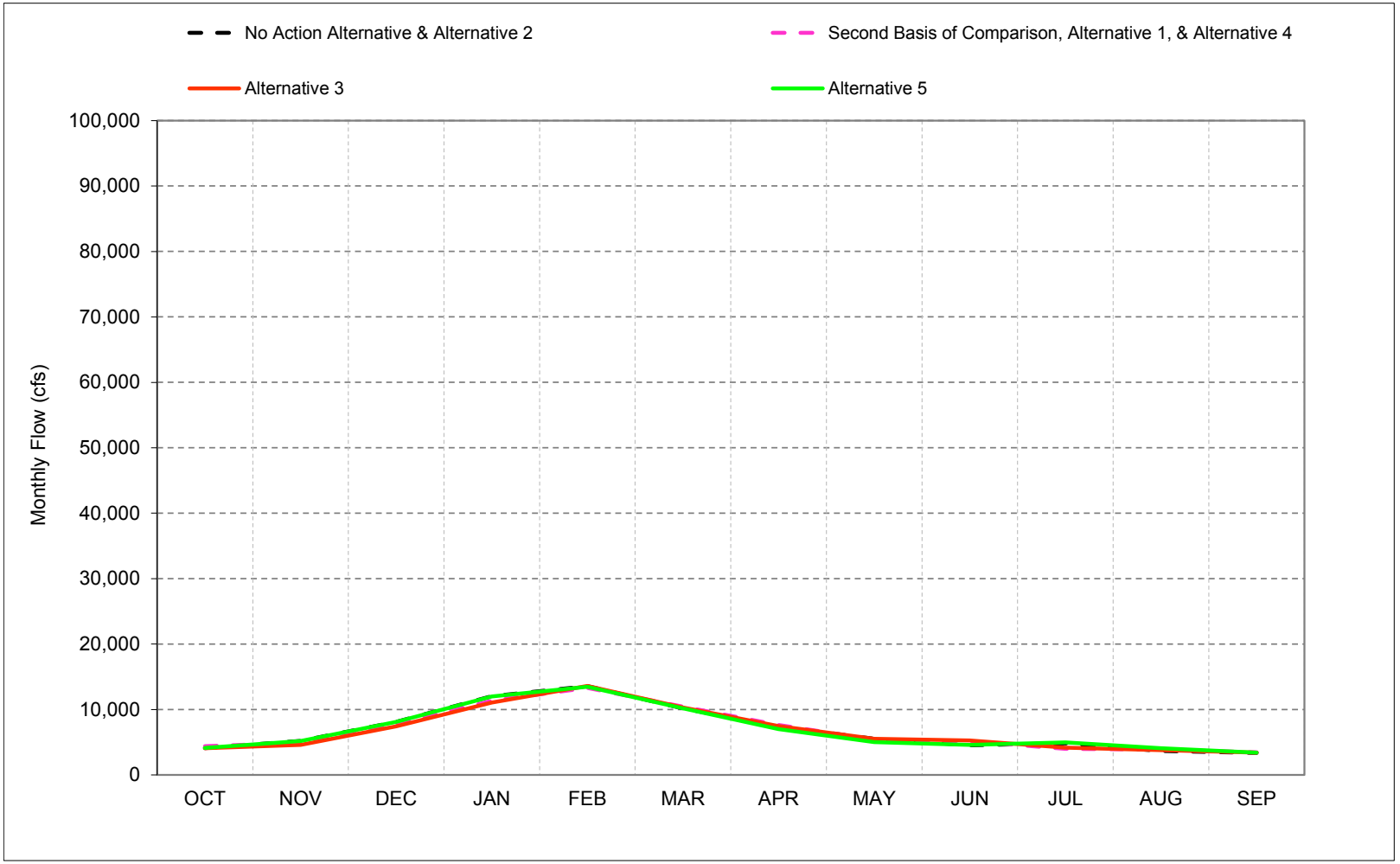


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-30-6. Sacramento River at Rio Vista, Critical Year* Long-Term Average Flow**



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

**Based on the 82-year simulation period.

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 Alternatives 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 C-30-1. Sacramento River at Rio Vista, Monthly Flow

No Action Alternative & Alternative 2

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	10,070	18,978	58,014	88,870	115,150	71,556	52,709	32,159	12,044	14,311	9,331	23,977
20%	9,164	15,087	33,016	59,223	73,063	55,386	33,858	21,120	9,112	13,769	9,021	23,320
30%	7,820	14,319	19,139	43,990	55,265	39,150	20,511	12,940	7,154	12,689	8,637	13,495
40%	6,837	12,410	15,044	26,918	43,815	28,806	17,119	9,913	6,800	11,527	8,237	12,638
50%	5,696	10,612	11,920	19,664	32,125	23,004	12,566	9,009	6,655	10,242	7,597	7,728
60%	4,657	8,444	10,519	15,734	23,143	17,885	9,773	8,093	6,402	9,294	7,198	6,444
70%	4,247	6,189	10,183	12,389	16,301	15,737	8,487	7,678	5,975	8,594	5,139	4,865
80%	3,935	4,800	6,794	10,428	13,181	11,784	7,768	7,067	5,215	7,289	4,202	3,999
90%	3,260	4,011	5,682	9,124	11,209	8,346	6,927	5,954	4,837	5,221	3,592	3,294
Long Term												
Full Simulation Period[b]	6,582	12,014	22,422	37,879	47,932	36,375	21,273	14,053	8,621	10,146	6,909	11,570
Water Year Types[c]												
Wet (32%)	8,546	16,954	42,039	73,996	85,996	65,510	38,081	24,838	13,700	11,352	8,425	22,213
Above Normal (16%)	5,650	13,536	23,981	42,104	57,259	45,401	22,762	13,104	7,166	13,089	9,057	12,475
Below Normal (13%)	7,377	11,863	12,133	16,417	30,256	16,204	11,190	9,160	6,541	12,354	8,153	6,213
Dry (24%)	5,672	8,760	10,143	15,485	22,720	19,433	12,329	8,452	6,559	8,641	4,784	5,005
Critical (15%)	4,120	5,220	8,128	12,048	13,576	10,197	7,390	5,535	4,537	4,827	3,696	3,381

Alternative 1

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	7,936	16,012	59,280	91,700	115,954	76,198	51,404	32,132	12,280	13,021	8,831	8,155
20%	7,592	9,452	34,803	60,639	73,800	55,589	33,804	22,340	11,036	12,187	8,574	7,770
30%	7,001	8,564	18,270	44,793	56,713	41,187	20,362	13,312	10,122	11,113	7,943	7,501
40%	6,038	8,016	13,391	26,341	49,187	29,860	17,124	11,207	9,247	10,377	7,536	7,315
50%	5,520	7,275	10,877	19,788	32,753	23,496	12,771	9,869	8,418	9,640	7,185	6,894
60%	5,002	6,617	9,412	14,739	23,353	18,189	9,629	9,369	7,891	8,661	5,815	6,014
70%	4,528	5,979	8,074	11,402	17,101	16,023	8,714	8,559	6,652	6,929	4,952	4,858
80%	4,107	5,091	6,604	9,443	13,382	12,111	8,104	7,695	6,268	5,965	4,428	4,138
90%	3,389	4,022	5,717	8,429	11,115	8,501	7,405	5,936	5,654	4,150	3,632	3,255
Long Term												
Full Simulation Period[b]	5,963	9,788	22,796	38,425	49,250	37,228	21,405	14,644	9,919	9,034	6,503	6,284
Water Year Types[c]												
Wet (32%)	7,239	14,226	45,019	76,053	87,371	66,392	38,027	25,019	14,188	10,354	7,761	7,961
Above Normal (16%)	5,193	10,653	22,550	43,221	60,499	47,632	23,011	14,132	9,164	12,139	8,384	7,447
Below Normal (13%)	6,564	9,456	11,190	16,732	32,676	17,278	11,534	10,910	9,888	11,233	7,092	6,118
Dry (24%)	5,418	6,568	9,526	14,565	23,057	19,592	12,439	9,069	7,718	7,116	4,894	5,129
Critical (15%)	4,392	4,907	7,671	11,351	13,313	10,450	7,643	5,432	5,181	3,991	3,883	3,465

Alternative 1 minus No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-2,134	-2,966	1,266	2,830	804	4,642	-1,305	-28	236	-1,290	-500	-15,822
20%	-1,572	-5,635	1,788	1,416	737	203	-54	1,221	1,924	-1,583	-447	-15,550
30%	-819	-5,755	-869	803	1,448	2,037	-149	372	2,968	-1,576	-694	-5,994
40%	-799	-4,394	-1,653	-577	5,372	1,054	4	1,295	2,446	-1,150	-701	-5,323
50%	-176	-3,337	-1,043	124	628	492	205	859	1,763	-602	-412	-834
60%	344	-1,827	-1,107	-995	210	304	-144	1,276	1,489	-633	-1,383	-430
70%	281	-210	-2,109	-986	801	286	228	881	677	-1,665	-186	-7
80%	172	291	-191	-985	201	327	336	628	1,054	-1,324	227	139
90%	129	12	35	-696	-93	155	477	-19	817	-1,070	40	-39
Long Term												
Full Simulation Period[b]	-618	-2,226	374	545	1,318	853	133	591	1,297	-1,111	-406	-5,286
Water Year Types[c]												
Wet (32%)	-1,308	-2,728	2,980	2,056	1,376	882	-54	181	488	-998	-664	-14,251
Above Normal (16%)	-458	-2,884	-1,431	1,118	3,240	2,231	249	1,027	1,998	-950	-673	-5,029
Below Normal (13%)	-813	-2,407	-943	315	2,420	1,075	344	1,750	3,347	-1,121	-1,062	-94
Dry (24%)	-254	-2,193	-617	-919	337	158	111	617	1,159	-1,524	110	124
Critical (15%)	272	-313	-457	-698	-263	252	253	-102	645	-836	187	84

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 C-30-2. Sacramento River at Rio Vista, Monthly Flow

No Action Alternative & Alternative 2

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	10,070	18,978	58,014	88,870	115,150	71,556	52,709	32,159	12,044	14,311	9,331	23,977
20%	9,164	15,087	33,016	59,223	73,063	55,386	33,858	21,120	9,112	13,769	9,021	23,320
30%	7,820	14,319	19,139	43,990	55,265	39,150	20,511	12,940	7,154	12,689	8,637	13,495
40%	6,837	12,410	15,044	26,918	43,815	28,806	17,119	9,913	6,800	11,527	8,237	12,638
50%	5,696	10,612	11,920	19,664	32,125	23,004	12,566	9,009	6,655	10,242	7,597	7,728
60%	4,657	8,444	10,519	15,734	23,143	17,885	9,773	8,093	6,402	9,294	7,198	6,444
70%	4,247	6,189	10,183	12,389	16,301	15,737	8,487	7,678	5,975	8,594	5,139	4,865
80%	3,935	4,800	6,794	10,428	13,181	11,784	7,768	7,067	5,215	7,289	4,202	3,999
90%	3,260	4,011	5,682	9,124	11,209	8,346	6,927	5,954	4,837	5,221	3,592	3,294
Long Term												
Full Simulation Period[b]	6,582	12,014	22,422	37,879	47,932	36,375	21,273	14,053	8,621	10,146	6,909	11,570
Water Year Types[c]												
Wet (32%)	8,546	16,954	42,039	73,996	85,996	65,510	38,081	24,838	13,700	11,352	8,425	22,213
Above Normal (16%)	5,650	13,536	23,981	42,104	57,259	45,401	22,762	13,104	7,166	13,089	9,057	12,475
Below Normal (13%)	7,377	11,863	12,133	16,417	30,256	16,204	11,190	9,160	6,541	12,354	8,153	6,213
Dry (24%)	5,672	8,760	10,143	15,485	22,720	19,433	12,329	8,452	6,559	8,641	4,784	5,005
Critical (15%)	4,120	5,220	8,128	12,048	13,576	10,197	7,390	5,535	4,537	4,827	3,696	3,381

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	7,954	16,006	60,411	91,548	115,759	74,068	51,953	32,121	11,790	13,871	9,089	8,186
20%	7,349	9,732	35,930	60,659	74,471	55,585	33,797	21,564	10,764	13,398	8,857	7,898
30%	6,676	8,627	18,042	44,626	56,689	40,207	20,482	13,162	9,187	13,034	8,204	7,468
40%	6,159	7,822	13,466	26,035	49,055	29,853	17,049	11,324	8,737	11,626	7,879	7,156
50%	5,457	7,283	10,961	19,032	32,637	23,522	12,775	9,807	8,372	10,267	7,266	6,934
60%	4,540	6,524	9,468	14,903	23,481	18,149	9,676	8,808	7,718	9,308	6,754	6,239
70%	4,137	6,021	8,437	11,280	17,194	16,114	8,836	8,317	7,279	7,631	5,433	4,830
80%	3,947	4,912	6,649	9,425	13,173	12,063	8,010	7,821	6,326	6,527	4,278	4,140
90%	3,255	4,020	5,536	8,233	11,220	8,370	7,342	6,223	5,519	4,434	3,543	3,164
Long Term												
Full Simulation Period[b]	5,814	9,693	22,698	38,205	49,065	37,021	21,373	14,632	9,809	9,824	6,741	6,305
Water Year Types[c]												
Wet (32%)	7,114	14,209	44,782	75,904	87,147	66,076	38,034	25,087	14,587	10,942	7,814	7,836
Above Normal (16%)	5,095	10,808	22,598	42,408	59,743	47,228	22,970	14,131	8,754	12,872	8,695	7,468
Below Normal (13%)	6,235	8,981	11,261	16,777	32,582	17,195	11,575	10,388	8,166	12,666	8,512	6,807
Dry (24%)	5,377	6,530	9,495	14,518	22,947	19,552	12,408	9,167	7,914	8,224	4,861	5,010
Critical (15%)	4,118	4,626	7,447	11,093	13,627	10,298	7,468	5,518	5,265	4,164	3,812	3,424

Alternative 3 minus No Action Alternative & Alternative 2

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-2,116	-2,971	2,397	2,677	609	2,512	-756	-39	-254	-440	-242	-15,791
20%	-1,814	-5,355	2,914	1,436	1,408	199	-61	445	1,652	-371	-163	-15,422
30%	-1,144	-5,693	-1,097	637	1,423	1,057	-29	222	2,033	345	-433	-6,027
40%	-678	-4,588	-1,578	-883	5,240	1,047	-71	1,411	1,937	98	-358	-5,482
50%	-238	-3,329	-959	-632	512	518	209	798	1,717	25	-331	-794
60%	-117	-1,920	-1,051	-831	338	264	-97	715	1,316	15	-443	-204
70%	-110	-168	-1,746	-1,108	893	377	349	639	1,304	-963	294	-35
80%	11	112	-145	-1,002	-8	279	242	754	1,111	-762	76	141
90%	-6	10	-145	-891	11	24	414	268	681	-786	-49	-130
Long Term												
Full Simulation Period[b]	-768	-2,321	276	326	1,134	646	101	579	1,188	-321	-167	-5,265
Water Year Types[c]												
Wet (32%)	-1,433	-2,745	2,743	1,908	1,151	566	-47	249	887	-410	-611	-14,377
Above Normal (16%)	-555	-2,728	-1,383	304	2,485	1,827	209	1,027	1,588	-217	-362	-5,007
Below Normal (13%)	-1,142	-2,881	-872	359	2,326	992	385	1,228	1,625	312	359	594
Dry (24%)	-295	-2,230	-648	-966	227	118	80	715	1,355	-417	77	5
Critical (15%)	-2	-594	-681	-956	50	101	79	-17	728	-663	116	42

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 C-30-3. Sacramento River at Rio Vista, Monthly Flow

No Action Alternative & Alternative 2

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	10,070	18,978	58,014	88,870	115,150	71,556	52,709	32,159	12,044	14,311	9,331	23,977
20%	9,164	15,087	33,016	59,223	73,063	55,386	33,858	21,120	9,112	13,769	9,021	23,320
30%	7,820	14,319	19,139	43,990	55,265	39,150	20,511	12,940	7,154	12,689	8,637	13,495
40%	6,837	12,410	15,044	26,918	43,815	28,806	17,119	9,913	6,800	11,527	8,237	12,638
50%	5,696	10,612	11,920	19,664	32,125	23,004	12,566	9,009	6,655	10,242	7,597	7,728
60%	4,657	8,444	10,519	15,734	23,143	17,885	9,773	8,093	6,402	9,294	7,198	6,444
70%	4,247	6,189	10,183	12,389	16,301	15,737	8,487	7,678	5,975	8,594	5,139	4,865
80%	3,935	4,800	6,794	10,428	13,181	11,784	7,768	7,067	5,215	7,289	4,202	3,999
90%	3,260	4,011	5,682	9,124	11,209	8,346	6,927	5,954	4,837	5,221	3,592	3,294
Long Term												
Full Simulation Period[b]	6,582	12,014	22,422	37,879	47,932	36,375	21,273	14,053	8,621	10,146	6,909	11,570
Water Year Types[c]												
Wet (32%)	8,546	16,954	42,039	73,996	85,996	65,510	38,081	24,838	13,700	11,352	8,425	22,213
Above Normal (16%)	5,650	13,536	23,981	42,104	57,259	45,401	22,762	13,104	7,166	13,089	9,057	12,475
Below Normal (13%)	7,377	11,863	12,133	16,417	30,256	16,204	11,190	9,160	6,541	12,354	8,153	6,213
Dry (24%)	5,672	8,760	10,143	15,485	22,720	19,433	12,329	8,452	6,559	8,641	4,784	5,005
Critical (15%)	4,120	5,220	8,128	12,048	13,576	10,197	7,390	5,535	4,537	4,827	3,696	3,381

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	10,094	18,906	58,192	87,361	115,151	71,563	52,709	32,164	12,098	14,214	9,400	23,931
20%	8,702	15,066	33,012	59,113	73,118	55,358	33,862	21,077	9,063	13,803	9,066	23,141
30%	7,616	14,401	19,148	43,992	55,699	39,157	20,576	12,945	7,163	13,152	8,660	13,501
40%	6,915	12,559	15,050	26,809	43,815	28,822	17,139	9,532	6,803	11,639	8,257	12,562
50%	5,973	10,603	11,923	19,684	32,387	22,896	12,582	8,592	6,633	10,511	7,890	7,921
60%	4,624	8,466	10,503	15,733	23,141	17,883	9,449	7,823	6,441	9,531	7,392	6,668
70%	4,312	6,202	10,097	12,390	16,303	15,706	8,668	6,906	5,981	9,114	5,457	4,960
80%	3,990	4,799	6,804	10,462	13,181	11,781	7,452	6,414	5,162	7,510	4,448	4,211
90%	3,291	4,017	5,656	9,117	11,173	8,346	6,712	5,188	4,806	5,427	3,831	3,370
Long Term												
Full Simulation Period[b]	6,555	12,049	22,404	37,806	47,909	36,373	21,208	13,710	8,608	10,348	7,081	11,562
Water Year Types[c]												
Wet (32%)	8,465	17,099	41,993	73,808	85,986	65,543	38,083	24,834	13,674	11,515	8,488	22,059
Above Normal (16%)	5,746	13,499	24,025	42,096	57,115	45,328	22,768	12,943	7,133	13,127	9,015	12,411
Below Normal (13%)	7,311	11,858	12,095	16,389	30,330	16,221	11,220	8,790	6,427	12,485	8,257	6,438
Dry (24%)	5,628	8,744	10,132	15,472	22,747	19,433	12,263	7,651	6,588	9,060	5,144	5,080
Critical (15%)	4,145	5,217	8,105	12,011	13,488	10,178	7,021	5,047	4,594	4,996	4,087	3,400

Alternative 5 minus No Action Alternative & Alternative 2

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	24	-72	178	-1,510	1	7	0	5	54	-96	68	-46
20%	-461	-21	-4	-110	55	-28	4	-43	-49	34	45	-179
30%	-204	82	8	2	434	7	65	4	9	463	23	6
40%	77	149	6	-110	0	15	20	-380	2	112	20	-76
50%	278	-9	3	20	261	-108	16	-417	-23	269	293	193
60%	-33	22	-16	-1	-2	-2	-324	-270	38	237	194	224
70%	65	13	-86	2	2	-31	182	-772	6	520	319	95
80%	54	0	10	34	-1	-3	-315	-653	-52	222	246	212
90%	31	6	-26	-8	-36	0	-216	-767	-31	207	239	76
Long Term												
Full Simulation Period[b]	-27	35	-19	-73	-22	-2	-64	-343	-13	202	172	-7
Water Year Types[c]												
Wet (32%)	-81	145	-46	-188	-9	33	1	-4	-26	163	63	-153
Above Normal (16%)	96	-37	44	-7	-144	-74	6	-161	-33	39	-42	-64
Below Normal (13%)	-67	-5	-38	-28	74	17	31	-370	-114	131	104	226
Dry (24%)	-44	-16	-11	-13	27	0	-65	-801	30	419	360	75
Critical (15%)	26	-3	-23	-37	-88	-19	-369	-488	57	168	391	19

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 C-30-4. Sacramento River at Rio Vista, 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%	7,936	16,012	59,280	91,700	115,954	76,198	51,404	32,132	12,280	13,021	8,831	8,155
20%	7,592	9,452	34,803	60,639	73,800	55,589	33,804	22,340	11,036	12,187	8,574	7,770
30%	7,001	8,564	18,270	44,793	56,713	41,187	20,362	13,312	10,122	11,113	7,943	7,501
40%	6,038	8,016	13,391	26,341	49,187	29,860	17,124	11,207	9,247	10,377	7,536	7,315
50%	5,520	7,275	10,877	19,788	32,753	23,496	12,771	9,869	8,418	9,640	7,185	6,894
60%	5,002	6,617	9,412	14,739	23,353	18,189	9,629	9,369	7,891	8,661	5,815	6,014
70%	4,528	5,979	8,074	11,402	17,101	16,023	8,714	8,559	6,652	6,929	4,952	4,858
80%	4,107	5,091	6,604	9,443	13,382	12,111	8,104	7,695	6,268	5,965	4,428	4,138
90%	3,389	4,022	5,717	8,429	11,115	8,501	7,405	5,936	5,654	4,150	3,632	3,255
Long Term												
Full Simulation Period[b]	5,963	9,788	22,796	38,425	49,250	37,228	21,405	14,644	9,919	9,034	6,503	6,284
Water Year Types[c]												
Wet (32%)	7,239	14,226	45,019	76,053	87,371	66,392	38,027	25,019	14,188	10,354	7,761	7,961
Above Normal (16%)	5,193	10,653	22,550	43,221	60,499	47,632	23,011	14,132	9,164	12,139	8,384	7,447
Below Normal (13%)	6,564	9,456	11,190	16,732	32,676	17,278	11,534	10,910	9,888	11,233	7,092	6,118
Dry (24%)	5,418	6,568	9,526	14,565	23,057	19,592	12,439	9,069	7,718	7,116	4,894	5,129
Critical (15%)	4,392	4,907	7,671	11,351	13,313	10,450	7,643	5,432	5,181	3,991	3,883	3,465

No Action Alternative & Alternative 2

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	10,070	18,978	58,014	88,870	115,150	71,556	52,709	32,159	12,044	14,311	9,331	23,977
20%	9,164	15,087	33,016	59,223	73,063	55,386	33,858	21,120	9,112	13,769	9,021	23,320
30%	7,820	14,319	19,139	43,990	55,265	39,150	20,511	12,940	7,154	12,689	8,637	13,495
40%	6,837	12,410	15,044	26,918	43,815	28,806	17,119	9,913	6,800	11,527	8,237	12,638
50%	5,696	10,612	11,920	19,664	32,125	23,004	12,566	9,009	6,655	10,242	7,597	7,728
60%	4,657	8,444	10,519	15,734	23,143	17,885	9,773	8,093	6,402	9,294	7,198	6,444
70%	4,247	6,189	10,183	12,389	16,301	15,737	8,487	7,678	5,975	8,594	5,139	4,865
80%	3,935	4,800	6,794	10,428	13,181	11,784	7,768	7,067	5,215	7,289	4,202	3,999
90%	3,260	4,011	5,682	9,124	11,209	8,346	6,927	5,954	4,837	5,221	3,592	3,294
Long Term												
Full Simulation Period[b]	6,582	12,014	22,422	37,879	47,932	36,375	21,273	14,053	8,621	10,146	6,909	11,570
Water Year Types[c]												
Wet (32%)	8,546	16,954	42,039	73,996	85,996	65,510	38,081	24,838	13,700	11,352	8,425	22,213
Above Normal (16%)	5,650	13,536	23,981	42,104	57,259	45,401	22,762	13,104	7,166	13,089	9,057	12,475
Below Normal (13%)	7,377	11,863	12,133	16,417	30,256	16,204	11,190	9,160	6,541	12,354	8,153	6,213
Dry (24%)	5,672	8,760	10,143	15,485	22,720	19,433	12,329	8,452	6,559	8,641	4,784	5,005
Critical (15%)	4,120	5,220	8,128	12,048	13,576	10,197	7,390	5,535	4,537	4,827	3,696	3,381

No Action Alternative & Alternative 2 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%	2,134	2,966	-1,266	-2,830	-804	-4,642	1,305	28	-236	1,290	500	15,822
20%	1,572	5,635	-1,788	-1,416	-737	-203	54	-1,221	-1,924	1,583	447	15,550
30%	819	5,755	869	-803	-1,448	-2,037	149	-372	-2,968	1,576	694	5,994
40%	799	4,394	1,653	577	-5,372	-1,054	-4	-1,295	-2,446	1,150	701	5,323
50%	176	3,337	1,043	-124	-628	-492	-205	-859	-1,763	602	412	834
60%	-344	1,827	1,107	995	-210	-304	144	-1,276	-1,489	633	1,383	430
70%	-281	210	2,109	986	-801	-286	-228	-881	-677	1,665	186	7
80%	-172	-291	191	985	-201	-327	-336	-628	-1,054	1,324	-227	-139
90%	-129	-12	-35	696	93	-155	-477	19	-817	1,070	-40	39
Long Term												
Full Simulation Period[b]	618	2,226	-374	-545	-1,318	-853	-133	-591	-1,297	1,111	406	5,286
Water Year Types[c]												
Wet (32%)	1,308	2,728	-2,980	-2,056	-1,376	-882	54	-181	-488	998	664	14,251
Above Normal (16%)	458	2,884	1,431	-1,118	-3,240	-2,231	-249	-1,027	-1,998	950	673	5,029
Below Normal (13%)	813	2,407	943	-315	-2,420	-1,075	-344	-1,750	-3,347	1,121	1,062	94
Dry (24%)	254	2,193	617	919	-337	-158	-111	-617	-1,159	1,524	-110	-124
Critical (15%)	-272	313	457	698	263	-252	-253	102	-645	836	-187	-84

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 C-30-5. Sacramento River at Rio Vista, 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%	7,936	16,012	59,280	91,700	115,954	76,198	51,404	32,132	12,280	13,021	8,831	8,155
20%	7,592	9,452	34,803	60,639	73,800	55,589	33,804	22,340	11,036	12,187	8,574	7,770
30%	7,001	8,564	18,270	44,793	56,713	41,187	20,362	13,312	10,122	11,113	7,943	7,501
40%	6,038	8,016	13,391	26,341	49,187	29,860	17,124	11,207	9,247	10,377	7,536	7,315
50%	5,520	7,275	10,877	19,788	32,753	23,496	12,771	9,869	8,418	9,640	7,185	6,894
60%	5,002	6,617	9,412	14,739	23,353	18,189	9,629	9,369	7,891	8,661	5,815	6,014
70%	4,528	5,979	8,074	11,402	17,101	16,023	8,714	8,559	6,652	6,929	4,952	4,858
80%	4,107	5,091	6,604	9,443	13,382	12,111	8,104	7,695	6,268	5,965	4,428	4,138
90%	3,389	4,022	5,717	8,429	11,115	8,501	7,405	5,936	5,654	4,150	3,632	3,255
Long Term												
Full Simulation Period[b]	5,963	9,788	22,796	38,425	49,250	37,228	21,405	14,644	9,919	9,034	6,503	6,284
Water Year Types[c]												
Wet (32%)	7,239	14,226	45,019	76,053	87,371	66,392	38,027	25,019	14,188	10,354	7,761	7,961
Above Normal (16%)	5,193	10,653	22,550	43,221	60,499	47,632	23,011	14,132	9,164	12,139	8,384	7,447
Below Normal (13%)	6,564	9,456	11,190	16,732	32,676	17,278	11,534	10,910	9,888	11,233	7,092	6,118
Dry (24%)	5,418	6,568	9,526	14,565	23,057	19,592	12,439	9,069	7,718	7,116	4,894	5,129
Critical (15%)	4,392	4,907	7,671	11,351	13,313	10,450	7,643	5,432	5,181	3,991	3,883	3,465

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	7,954	16,006	60,411	91,548	115,759	74,068	51,953	32,121	11,790	13,871	9,089	8,186
20%	7,349	9,732	35,930	60,659	74,471	55,585	33,797	21,564	10,764	13,398	8,857	7,898
30%	6,676	8,627	18,042	44,626	56,689	40,207	20,482	13,162	9,187	13,034	8,204	7,468
40%	6,159	7,822	13,466	26,035	49,055	29,853	17,049	11,324	8,737	11,626	7,879	7,156
50%	5,457	7,283	10,961	19,032	32,637	23,522	12,775	9,807	8,372	10,267	7,266	6,934
60%	4,540	6,524	9,468	14,903	23,481	18,149	9,676	8,808	7,718	9,308	6,754	6,239
70%	4,137	6,021	8,437	11,280	17,194	16,114	8,836	8,317	7,279	7,631	5,433	4,830
80%	3,947	4,912	6,649	9,425	13,173	12,063	8,010	7,821	6,326	6,527	4,278	4,140
90%	3,255	4,020	5,536	8,233	11,220	8,370	7,342	6,223	5,519	4,434	3,543	3,164
Long Term												
Full Simulation Period[b]	5,814	9,693	22,698	38,205	49,065	37,021	21,373	14,632	9,809	9,824	6,741	6,305
Water Year Types[c]												
Wet (32%)	7,114	14,209	44,782	75,904	87,147	66,076	38,034	25,087	14,587	10,942	7,814	7,836
Above Normal (16%)	5,095	10,808	22,598	42,408	59,743	47,228	22,970	14,131	8,754	12,872	8,695	7,468
Below Normal (13%)	6,235	8,981	11,261	16,777	32,582	17,195	11,575	10,388	8,166	12,666	8,512	6,807
Dry (24%)	5,377	6,530	9,495	14,518	22,947	19,552	12,408	9,167	7,914	8,224	4,861	5,010
Critical (15%)	4,118	4,626	7,447	11,093	13,627	10,298	7,468	5,518	5,265	4,164	3,812	3,424

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%	18	-6	1,131	-153	-195	-2,130	549	-11	-490	850	258	31
20%	-243	280	1,126	20	671	-4	-7	-776	-272	1,211	284	128
30%	-325	62	-228	-166	-24	-980	120	-150	-935	1,921	260	-33
40%	121	-195	75	-306	-132	-8	-75	116	-510	1,248	343	-159
50%	-62	8	83	-756	-116	25	4	-61	-46	627	82	40
60%	-461	-93	56	164	127	-40	47	-561	-173	647	939	225
70%	-391	42	363	-122	92	91	121	-241	627	702	481	-28
80%	-160	-179	46	-17	-209	-48	-93	126	57	562	-150	2
90%	-134	-2	-180	-195	104	-132	-63	287	-136	284	-89	-91
Long Term												
Full Simulation Period[b]	-149	-95	-98	-219	-184	-207	-32	-12	-110	790	238	21
Water Year Types[c]												
Wet (32%)	-125	-17	-237	-148	-224	-316	7	68	399	588	53	-125
Above Normal (16%)	-98	156	48	-814	-755	-404	-40	0	-410	733	311	22
Below Normal (13%)	-329	-474	72	45	-93	-83	41	-522	-1,722	1,433	1,421	689
Dry (24%)	-41	-38	-31	-47	-110	-40	-31	98	196	1,107	-33	-119
Critical (15%)	-274	-282	-224	-258	314	-152	-174	85	83	173	-71	-42

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 C-30-6. Sacramento River at Rio Vista, 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%	7,936	16,012	59,280	91,700	115,954	76,198	51,404	32,132	12,280	13,021	8,831	8,155
20%	7,592	9,452	34,803	60,639	73,800	55,589	33,804	22,340	11,036	12,187	8,574	7,770
30%	7,001	8,564	18,270	44,793	56,713	41,187	20,362	13,312	10,122	11,113	7,943	7,501
40%	6,038	8,016	13,391	26,341	49,187	29,860	17,124	11,207	9,247	10,377	7,536	7,315
50%	5,520	7,275	10,877	19,788	32,753	23,496	12,771	9,869	8,418	9,640	7,185	6,894
60%	5,002	6,617	9,412	14,739	23,353	18,189	9,629	9,369	7,891	8,661	5,815	6,014
70%	4,528	5,979	8,074	11,402	17,101	16,023	8,714	8,559	6,652	6,929	4,952	4,858
80%	4,107	5,091	6,604	9,443	13,382	12,111	8,104	7,695	6,268	5,965	4,428	4,138
90%	3,389	4,022	5,717	8,429	11,115	8,501	7,405	5,936	5,654	4,150	3,632	3,255
Long Term												
Full Simulation Period[b]	5,963	9,788	22,796	38,425	49,250	37,228	21,405	14,644	9,919	9,034	6,503	6,284
Water Year Types[c]												
Wet (32%)	7,239	14,226	45,019	76,053	87,371	66,392	38,027	25,019	14,188	10,354	7,761	7,961
Above Normal (16%)	5,193	10,653	22,550	43,221	60,499	47,632	23,011	14,132	9,164	12,139	8,384	7,447
Below Normal (13%)	6,564	9,456	11,190	16,732	32,676	17,278	11,534	10,910	9,888	11,233	7,092	6,118
Dry (24%)	5,418	6,568	9,526	14,565	23,057	19,592	12,439	9,069	7,718	7,116	4,894	5,129
Critical (15%)	4,392	4,907	7,671	11,351	13,313	10,450	7,643	5,432	5,181	3,991	3,883	3,465

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	10,094	18,906	58,192	87,361	115,151	71,563	52,709	32,164	12,098	14,214	9,400	23,931
20%	8,702	15,066	33,012	59,113	73,118	55,358	33,862	21,077	9,063	13,803	9,066	23,141
30%	7,616	14,401	19,148	43,992	55,699	39,157	20,576	12,945	7,163	13,152	8,660	13,501
40%	6,915	12,559	15,050	26,809	43,815	28,822	17,139	9,532	6,803	11,639	8,257	12,562
50%	5,973	10,603	11,923	19,684	32,387	22,896	12,582	8,592	6,633	10,511	7,890	7,921
60%	4,624	8,466	10,503	15,733	23,141	17,883	9,449	7,823	6,441	9,531	7,392	6,668
70%	4,312	6,202	10,097	12,390	16,303	15,706	8,668	6,906	5,981	9,114	5,457	4,960
80%	3,990	4,799	6,804	10,462	13,181	11,781	7,452	6,414	5,162	7,510	4,448	4,211
90%	3,291	4,017	5,656	9,117	11,173	8,346	6,712	5,188	4,806	5,427	3,831	3,370
Long Term												
Full Simulation Period[b]	6,555	12,049	22,404	37,806	47,909	36,373	21,208	13,710	8,608	10,348	7,081	11,562
Water Year Types[c]												
Wet (32%)	8,465	17,099	41,993	73,808	85,986	65,543	38,083	24,834	13,674	11,515	8,488	22,059
Above Normal (16%)	5,746	13,499	24,025	42,096	57,115	45,328	22,768	12,943	7,133	13,127	9,015	12,411
Below Normal (13%)	7,311	11,858	12,095	16,389	30,330	16,221	11,220	8,790	6,427	12,485	8,257	6,438
Dry (24%)	5,628	8,744	10,132	15,472	22,747	19,433	12,263	7,651	6,588	9,060	5,144	5,080
Critical (15%)	4,145	5,217	8,105	12,011	13,488	10,178	7,021	5,047	4,594	4,996	4,087	3,400

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%	2,157	2,894	-1,088	-4,340	-803	-4,635	1,305	33	-182	1,193	569	15,776
20%	1,110	5,615	-1,791	-1,527	-682	-231	58	-1,263	-1,973	1,617	492	15,371
30%	615	5,837	877	-801	-1,014	-2,030	214	-367	-2,959	2,039	717	5,999
40%	876	4,542	1,659	468	-5,372	-1,039	16	-1,675	-2,444	1,262	720	5,247
50%	453	3,328	1,046	-104	-366	-601	-190	-1,277	-1,785	871	705	1,027
60%	-378	1,849	1,091	994	-212	-305	-180	-1,546	-1,450	870	1,577	654
70%	-216	223	2,023	988	-799	-316	-46	-1,652	-671	2,185	505	102
80%	-118	-292	201	1,019	-202	-330	-651	-1,281	-1,106	1,546	19	73
90%	-98	-5	-61	688	58	-155	-693	-748	-848	1,277	199	115
Long Term												
Full Simulation Period[b]	592	2,261	-393	-618	-1,340	-855	-197	-934	-1,311	1,314	578	5,279
Water Year Types[c]												
Wet (32%)	1,226	2,873	-3,026	-2,245	-1,385	-849	55	-185	-514	1,160	727	14,098
Above Normal (16%)	553	2,847	1,475	-1,125	-3,384	-2,305	-243	-1,189	-2,030	989	631	4,965
Below Normal (13%)	747	2,402	906	-343	-2,345	-1,057	-314	-2,120	-3,461	1,252	1,166	320
Dry (24%)	210	2,176	606	906	-310	-158	-176	-1,419	-1,130	1,944	250	-49
Critical (15%)	-247	310	434	660	175	-271	-621	-386	-588	1,004	204	-65

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

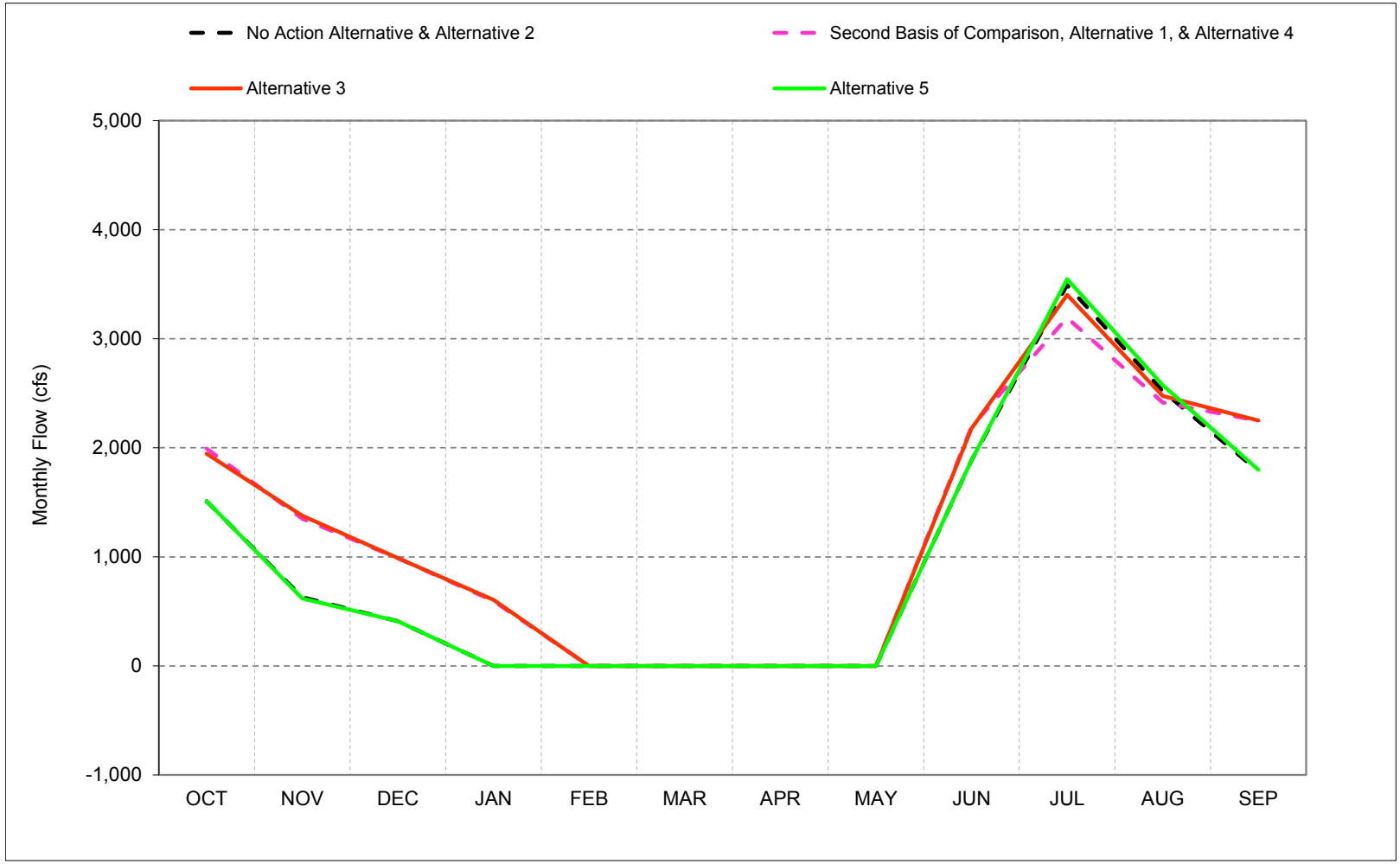
b Based on the 82-year simulation period.

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.

C.31. Delta Cross Channel Flow

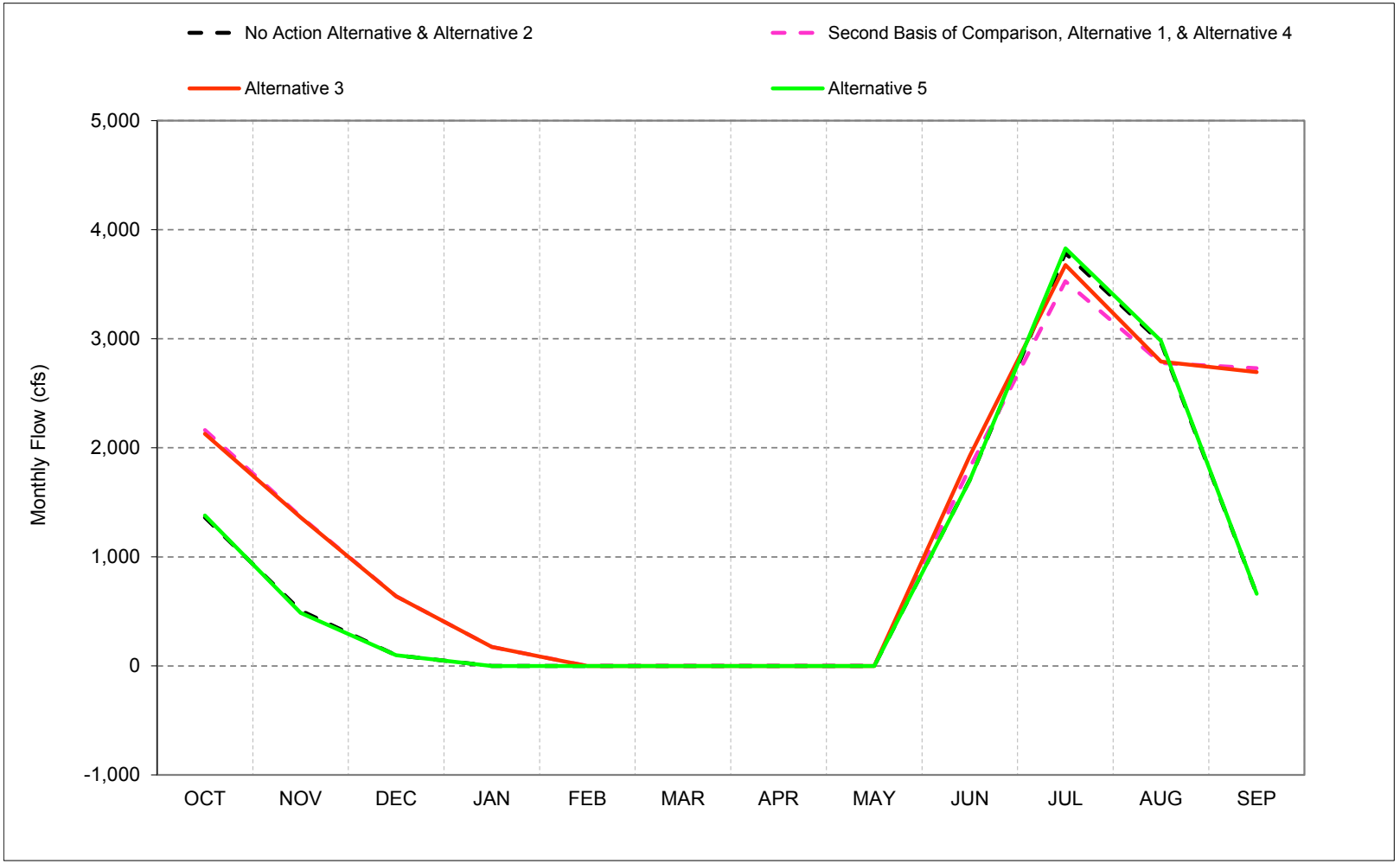
Figure C-31-1. Delta Cross Channel, Long-Term* Average Flow



*Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-31-2. Delta Cross Channel, Wet Year* Long-Term Average Flow**

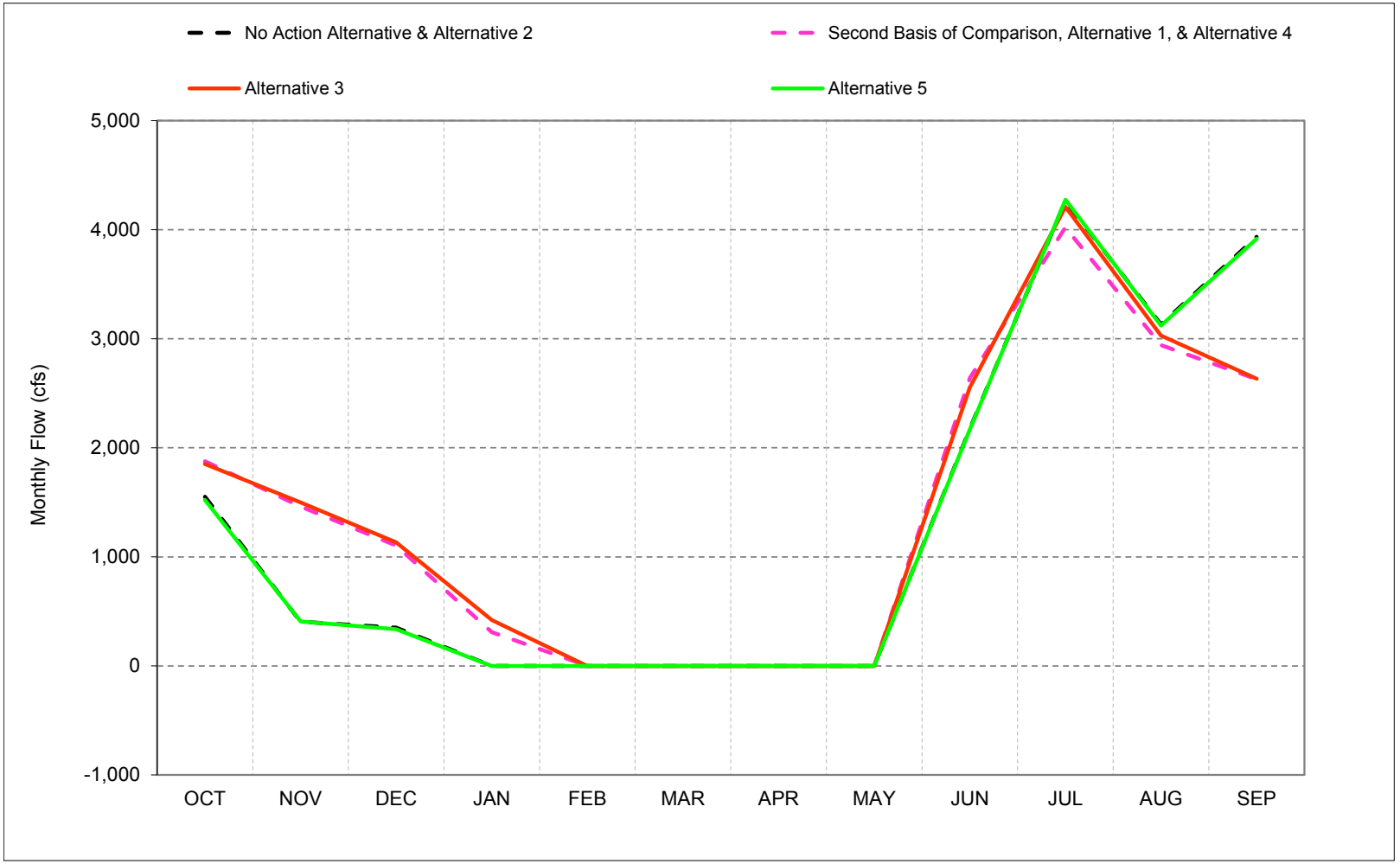


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-31-3. Delta Cross Channel, Above Normal Year* Long-Term Average Flow**

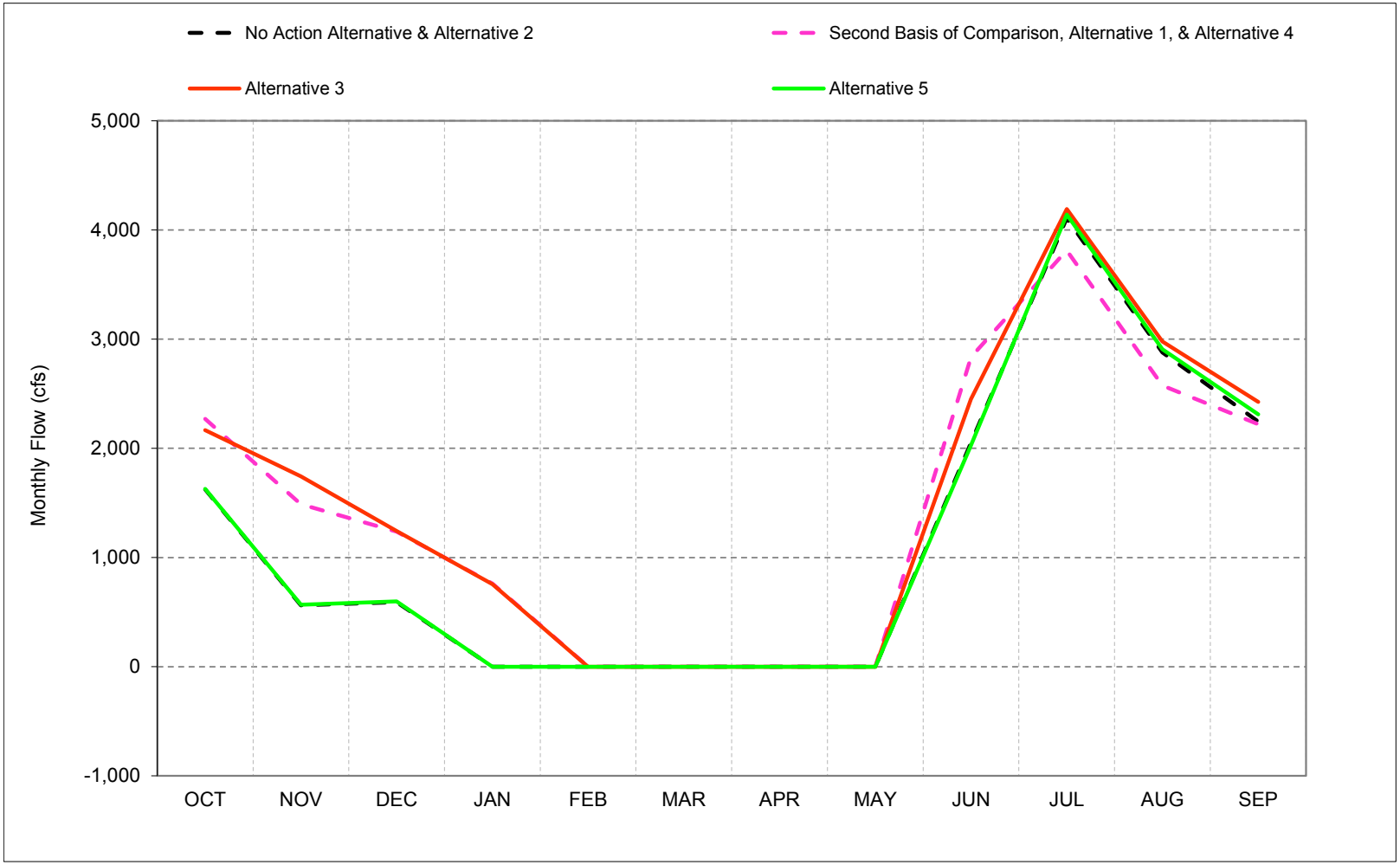


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-31-4. Delta Cross Channel, Below Normal Year* Long-Term Average Flow**

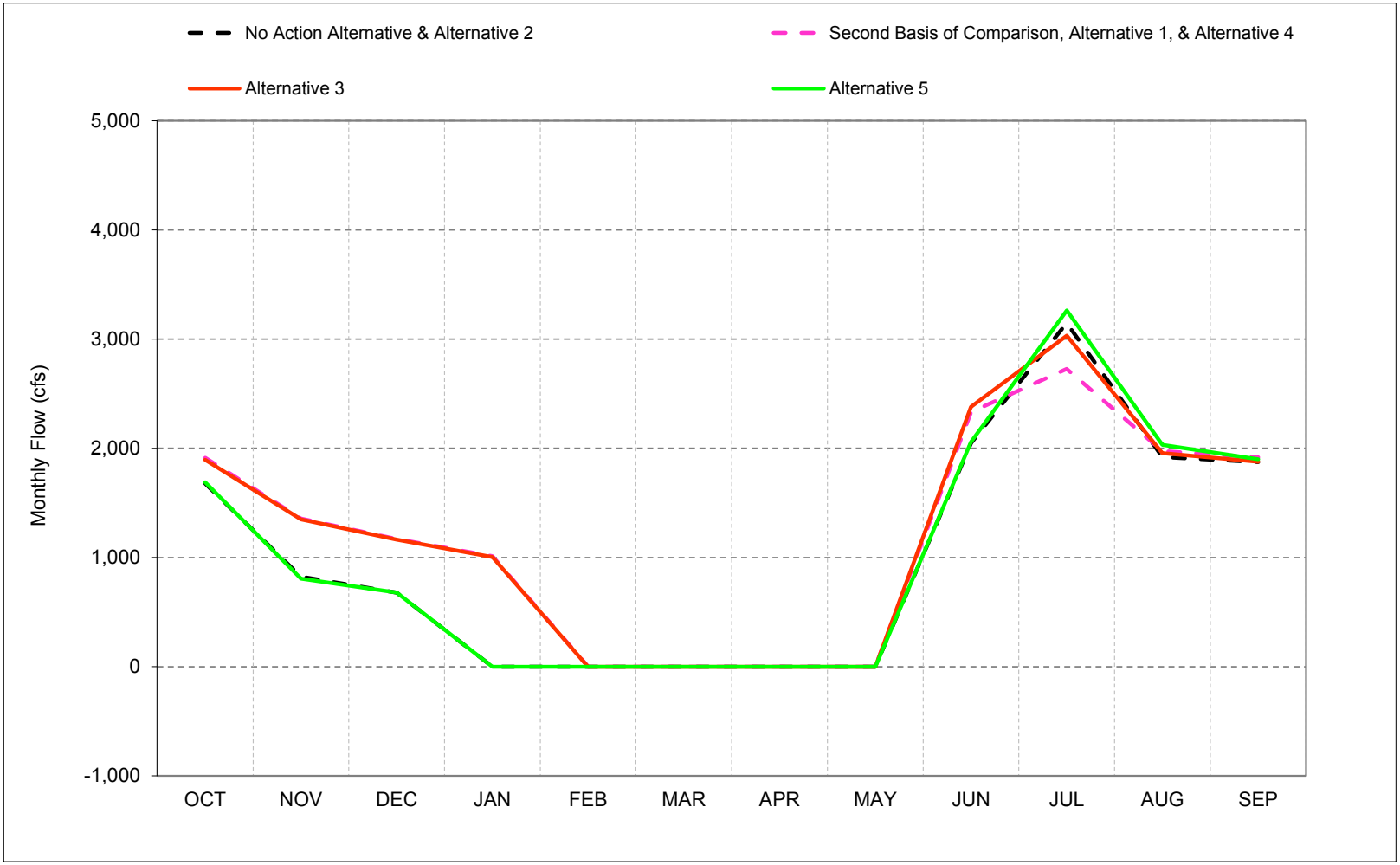


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-31-5. Delta Cross Channel, Dry Year* Long-Term Average Flow**

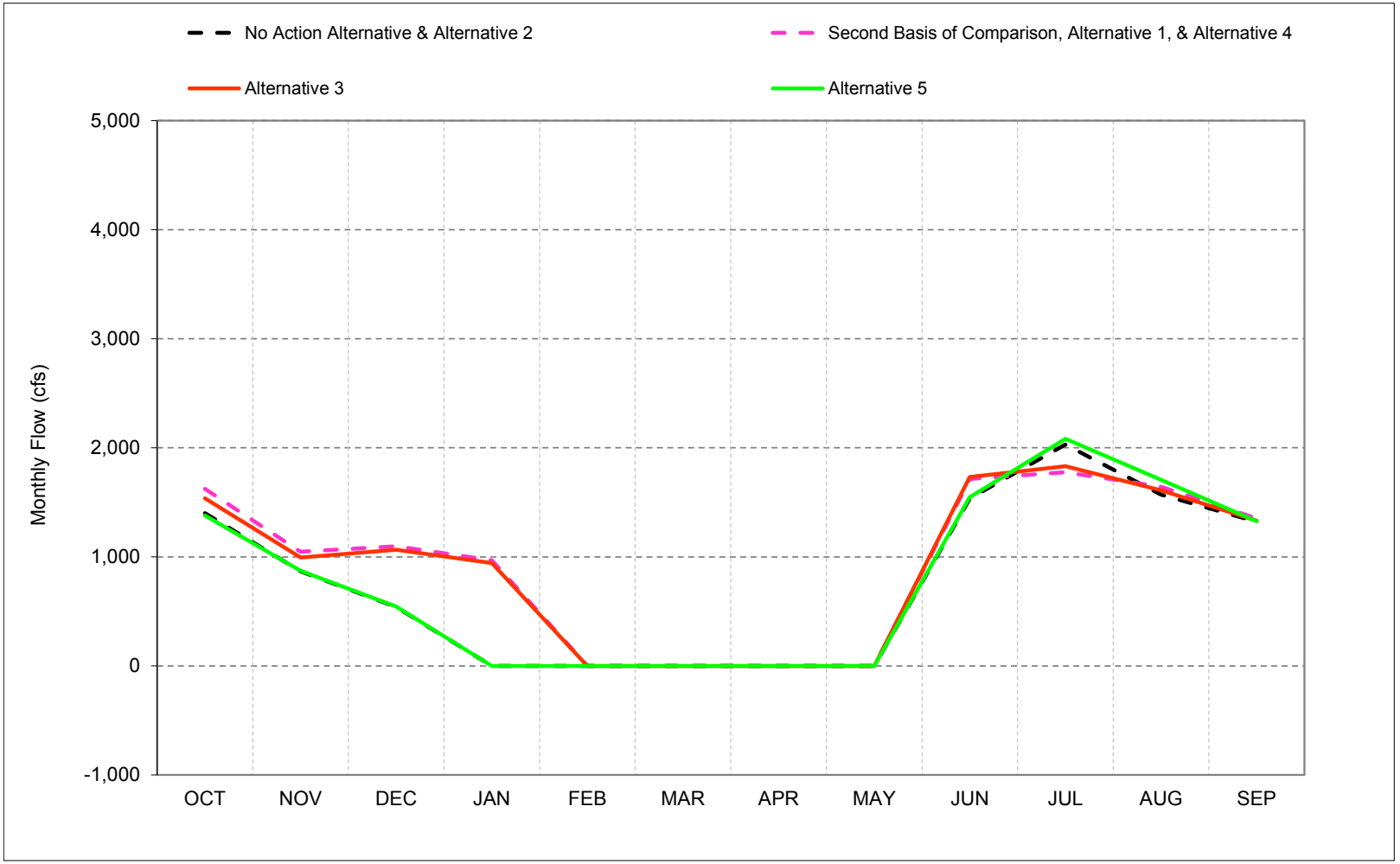


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-31-6. Delta Cross Channel, Critical Year* Long-Term Average Flow**



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

**Based on the 82-year simulation period.

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 Alternatives 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 C-31-1. Delta Cross Channel, 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%	2,113	1,241	917	0	0	0	0	0	2,565	4,561	3,177	4,016
20%	1,890	1,053	822	0	0	0	0	0	2,240	4,452	3,109	3,318
30%	1,745	953	725	0	0	0	0	0	2,130	4,216	2,999	2,471
40%	1,611	813	627	0	0	0	0	0	2,088	3,867	2,944	1,929
50%	1,494	768	415	0	0	0	0	0	2,004	3,510	2,739	1,632
60%	1,444	474	0	0	0	0	0	0	1,935	3,272	2,577	1,442
70%	1,248	246	0	0	0	0	0	0	1,755	3,086	2,107	1,171
80%	1,142	0	0	0	0	0	0	0	1,615	2,802	1,727	0
90%	986	0	0	0	0	0	0	0	1,176	2,140	1,501	0
Long Term												
Full Simulation Period[b]	1,509	629	411	0	0	0	0	0	1,887	3,491	2,521	1,785
Water Year Types[c]												
Wet (32%)	1,362	509	99	0	0	0	0	0	1,709	3,785	2,964	660
Above Normal (16%)	1,552	406	351	0	0	0	0	0	2,175	4,264	3,131	3,933
Below Normal (13%)	1,624	562	591	0	0	0	0	0	2,054	4,106	2,877	2,246
Dry (24%)	1,677	824	678	0	0	0	0	0	2,050	3,146	1,921	1,874
Critical (15%)	1,401	869	542	0	0	0	0	0	1,536	2,030	1,572	1,321

Alternative 1

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,682	1,880	1,855	1,359	0	0	0	0	3,057	4,269	3,079	2,792
20%	2,598	1,713	1,538	1,154	0	0	0	0	2,903	4,011	2,947	2,714
30%	2,387	1,645	1,421	935	0	0	0	0	2,679	3,772	2,844	2,617
40%	2,119	1,509	1,256	868	0	0	0	0	2,495	3,585	2,731	2,582
50%	1,987	1,391	1,094	739	0	0	0	0	2,350	3,385	2,547	2,483
60%	1,839	1,269	936	0	0	0	0	0	2,091	3,068	2,210	2,212
70%	1,642	1,108	781	0	0	0	0	0	1,978	2,681	2,003	1,826
80%	1,468	962	0	0	0	0	0	0	1,840	2,356	1,791	1,591
90%	1,192	768	0	0	0	0	0	0	1,369	1,878	1,565	1,305
Long Term												
Full Simulation Period[b]	1,992	1,350	989	595	0	0	0	0	2,196	3,192	2,415	2,246
Water Year Types[c]												
Wet (32%)	2,162	1,371	638	174	0	0	0	0	1,819	3,527	2,779	2,730
Above Normal (16%)	1,877	1,462	1,104	309	0	0	0	0	2,640	4,020	2,941	2,630
Below Normal (13%)	2,270	1,488	1,237	761	0	0	0	0	2,837	3,813	2,575	2,221
Dry (24%)	1,914	1,358	1,170	1,012	0	0	0	0	2,332	2,727	1,975	1,919
Critical (15%)	1,624	1,047	1,096	968	0	0	0	0	1,716	1,776	1,643	1,354

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%	569	638	938	1,359	0	0	0	0	492	-292	-97	-1,224
20%	709	660	716	1,154	0	0	0	0	663	-441	-162	-604
30%	641	692	697	935	0	0	0	0	549	-444	-155	146
40%	507	697	629	868	0	0	0	0	408	-282	-213	653
50%	493	623	679	739	0	0	0	0	346	-125	-193	850
60%	396	795	936	0	0	0	0	0	156	-204	-367	770
70%	394	862	781	0	0	0	0	0	222	-406	-104	655
80%	325	962	0	0	0	0	0	0	225	-446	64	1,591
90%	205	768	0	0	0	0	0	0	192	-262	64	1,305
Long Term												
Full Simulation Period[b]	483	721	578	595	0	0	0	0	309	-299	-106	462
Water Year Types[c]												
Wet (32%)	801	862	540	174	0	0	0	0	111	-258	-186	2,069
Above Normal (16%)	325	1,056	753	309	0	0	0	0	465	-244	-190	-1,303
Below Normal (13%)	647	926	646	761	0	0	0	0	783	-293	-301	-25
Dry (24%)	237	534	492	1,012	0	0	0	0	283	-420	54	44
Critical (15%)	224	178	555	968	0	0	0	0	180	-254	71	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 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 C-31-2. Delta Cross Channel, 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%	2,113	1,241	917	0	0	0	0	0	2,565	4,561	3,177	4,016
20%	1,890	1,053	822	0	0	0	0	0	2,240	4,452	3,109	3,318
30%	1,745	953	725	0	0	0	0	0	2,130	4,216	2,999	2,471
40%	1,611	813	627	0	0	0	0	0	2,088	3,867	2,944	1,929
50%	1,494	768	415	0	0	0	0	0	2,004	3,510	2,739	1,632
60%	1,444	474	0	0	0	0	0	0	1,935	3,272	2,577	1,442
70%	1,248	246	0	0	0	0	0	0	1,755	3,086	2,107	1,171
80%	1,142	0	0	0	0	0	0	0	1,615	2,802	1,727	0
90%	986	0	0	0	0	0	0	0	1,176	2,140	1,501	0
Long Term												
Full Simulation Period[b]	1,509	629	411	0	0	0	0	0	1,887	3,491	2,521	1,785
Water Year Types[c]												
Wet (32%)	1,362	509	99	0	0	0	0	0	1,709	3,785	2,964	660
Above Normal (16%)	1,552	406	351	0	0	0	0	0	2,175	4,264	3,131	3,933
Below Normal (13%)	1,624	562	591	0	0	0	0	0	2,054	4,106	2,877	2,246
Dry (24%)	1,677	824	678	0	0	0	0	0	2,050	3,146	1,921	1,874
Critical (15%)	1,401	869	542	0	0	0	0	0	1,536	2,030	1,572	1,321

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,673	1,943	1,853	1,448	0	0	0	0	3,006	4,466	3,141	2,838
20%	2,573	1,787	1,552	1,160	0	0	0	0	2,654	4,357	3,037	2,735
30%	2,297	1,665	1,422	941	0	0	0	0	2,571	4,228	2,892	2,608
40%	2,123	1,523	1,294	864	0	0	0	0	2,474	3,893	2,818	2,527
50%	1,967	1,388	1,093	746	0	0	0	0	2,354	3,609	2,653	2,463
60%	1,697	1,291	916	0	0	0	0	0	2,265	3,191	2,494	2,287
70%	1,513	1,113	738	0	0	0	0	0	2,000	2,848	2,129	1,840
80%	1,456	961	0	0	0	0	0	0	1,823	2,514	1,765	1,644
90%	1,166	771	0	0	0	0	0	0	1,288	1,902	1,540	1,276
Long Term												
Full Simulation Period[b]	1,946	1,378	989	606	0	0	0	0	2,177	3,402	2,477	2,249
Water Year Types[c]												
Wet (32%)	2,129	1,362	639	174	0	0	0	0	1,925	3,676	2,790	2,693
Above Normal (16%)	1,851	1,499	1,134	419	0	0	0	0	2,551	4,209	3,029	2,633
Below Normal (13%)	2,167	1,743	1,242	756	0	0	0	0	2,450	4,191	2,977	2,426
Dry (24%)	1,894	1,350	1,164	1,005	0	0	0	0	2,378	3,031	1,956	1,878
Critical (15%)	1,537	993	1,066	945	0	0	0	0	1,731	1,830	1,611	1,331

Alternative 3 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%	561	701	935	1,448	0	0	0	0	441	-95	-36	-1,178
20%	684	734	730	1,160	0	0	0	0	415	-95	-72	-582
30%	551	712	697	941	0	0	0	0	441	12	-107	137
40%	512	711	667	864	0	0	0	0	386	26	-126	598
50%	473	620	678	746	0	0	0	0	350	99	-86	831
60%	253	817	916	0	0	0	0	0	330	-80	-84	845
70%	265	867	738	0	0	0	0	0	244	-238	23	669
80%	314	961	0	0	0	0	0	0	208	-289	38	1,644
90%	180	771	0	0	0	0	0	0	111	-238	39	1,276
Long Term												
Full Simulation Period[b]	436	749	578	606	0	0	0	0	290	-89	-44	465
Water Year Types[c]												
Wet (32%)	767	853	540	174	0	0	0	0	216	-109	-175	2,032
Above Normal (16%)	299	1,093	783	419	0	0	0	0	376	-55	-102	-1,301
Below Normal (13%)	544	1,181	651	756	0	0	0	0	396	84	100	180
Dry (24%)	217	525	487	1,005	0	0	0	0	329	-115	35	3
Critical (15%)	137	124	525	945	0	0	0	0	195	-200	39	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 C-31-3. Delta Cross Channel, 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%	2,113	1,241	917	0	0	0	0	0	2,565	4,561	3,177	4,016
20%	1,890	1,053	822	0	0	0	0	0	2,240	4,452	3,109	3,318
30%	1,745	953	725	0	0	0	0	0	2,130	4,216	2,999	2,471
40%	1,611	813	627	0	0	0	0	0	2,088	3,867	2,944	1,929
50%	1,494	768	415	0	0	0	0	0	2,004	3,510	2,739	1,632
60%	1,444	474	0	0	0	0	0	0	1,935	3,272	2,577	1,442
70%	1,248	246	0	0	0	0	0	0	1,755	3,086	2,107	1,171
80%	1,142	0	0	0	0	0	0	0	1,615	2,802	1,727	0
90%	986	0	0	0	0	0	0	0	1,176	2,140	1,501	0
Long Term												
Full Simulation Period[b]	1,509	629	411	0	0	0	0	0	1,887	3,491	2,521	1,785
Water Year Types[c]												
Wet (32%)	1,362	509	99	0	0	0	0	0	1,709	3,785	2,964	660
Above Normal (16%)	1,552	406	351	0	0	0	0	0	2,175	4,264	3,131	3,933
Below Normal (13%)	1,624	562	591	0	0	0	0	0	2,054	4,106	2,877	2,246
Dry (24%)	1,677	824	678	0	0	0	0	0	2,050	3,146	1,921	1,874
Critical (15%)	1,401	869	542	0	0	0	0	0	1,536	2,030	1,572	1,321

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,136	1,242	913	0	0	0	0	0	2,583	4,560	3,180	3,993
20%	1,977	1,034	823	0	0	0	0	0	2,241	4,446	3,116	3,329
30%	1,719	952	725	0	0	0	0	0	2,134	4,301	3,000	2,471
40%	1,585	813	639	0	0	0	0	0	2,085	3,897	2,950	1,922
50%	1,491	769	376	0	0	0	0	0	2,010	3,644	2,859	1,673
60%	1,451	386	0	0	0	0	0	0	1,952	3,387	2,687	1,472
70%	1,261	228	0	0	0	0	0	0	1,723	3,219	2,184	1,169
80%	1,161	0	0	0	0	0	0	0	1,606	2,875	1,796	0
90%	988	0	0	0	0	0	0	0	1,186	2,173	1,651	0
Long Term												
Full Simulation Period[b]	1,511	620	410	0	0	0	0	0	1,883	3,547	2,575	1,798
Water Year Types[c]												
Wet (32%)	1,380	487	99	0	0	0	0	0	1,702	3,828	2,981	661
Above Normal (16%)	1,521	407	338	0	0	0	0	0	2,167	4,275	3,120	3,917
Below Normal (13%)	1,628	567	597	0	0	0	0	0	2,026	4,141	2,908	2,312
Dry (24%)	1,690	807	679	0	0	0	0	0	2,057	3,261	2,033	1,899
Critical (15%)	1,379	872	545	0	0	0	0	0	1,548	2,083	1,706	1,327

Alternative 5 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%	23	1	-4	0	0	0	0	0	19	0	3	-23
20%	88	-19	1	0	0	0	0	0	1	-6	6	11
30%	-26	-2	0	0	0	0	0	0	5	85	1	0
40%	-26	0	12	0	0	0	0	0	-3	30	7	-7
50%	-3	0	-39	0	0	0	0	0	7	134	119	40
60%	7	-88	0	0	0	0	0	0	17	115	110	30
70%	13	-18	0	0	0	0	0	0	-32	133	77	-2
80%	18	0	0	0	0	0	0	0	-9	72	69	0
90%	1	0	0	0	0	0	0	0	10	33	150	0
Long Term												
Full Simulation Period[b]	1	-10	-1	0	0	0	0	0	-3	56	54	13
Water Year Types[c]												
Wet (32%)	18	-22	0	0	0	0	0	0	-6	43	17	1
Above Normal (16%)	-31	1	-13	0	0	0	0	0	-8	10	-11	-17
Below Normal (13%)	5	5	6	0	0	0	0	0	-28	34	31	66
Dry (24%)	13	-17	1	0	0	0	0	0	8	115	112	25
Critical (15%)	-22	3	3	0	0	0	0	0	12	53	134	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 C-31-4. Delta Cross Channel, 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%	2,682	1,880	1,855	1,359	0	0	0	0	3,057	4,269	3,079	2,792
20%	2,598	1,713	1,538	1,154	0	0	0	0	2,903	4,011	2,947	2,714
30%	2,387	1,645	1,421	935	0	0	0	0	2,679	3,772	2,844	2,617
40%	2,119	1,509	1,256	868	0	0	0	0	2,495	3,585	2,731	2,582
50%	1,987	1,391	1,094	739	0	0	0	0	2,350	3,385	2,547	2,483
60%	1,839	1,269	936	0	0	0	0	0	2,091	3,068	2,210	2,212
70%	1,642	1,108	781	0	0	0	0	0	1,978	2,681	2,003	1,826
80%	1,468	962	0	0	0	0	0	0	1,840	2,356	1,791	1,591
90%	1,192	768	0	0	0	0	0	0	1,369	1,878	1,565	1,305
Long Term												
Full Simulation Period[b]	1,992	1,350	989	595	0	0	0	0	2,196	3,192	2,415	2,246
Water Year Types[c]												
Wet (32%)	2,162	1,371	638	174	0	0	0	0	1,819	3,527	2,779	2,730
Above Normal (16%)	1,877	1,462	1,104	309	0	0	0	0	2,640	4,020	2,941	2,630
Below Normal (13%)	2,270	1,488	1,237	761	0	0	0	0	2,837	3,813	2,575	2,221
Dry (24%)	1,914	1,358	1,170	1,012	0	0	0	0	2,332	2,727	1,975	1,919
Critical (15%)	1,624	1,047	1,096	968	0	0	0	0	1,716	1,776	1,643	1,354

No Action Alternative

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,113	1,241	917	0	0	0	0	0	2,565	4,561	3,177	4,016
20%	1,890	1,053	822	0	0	0	0	0	2,240	4,452	3,109	3,318
30%	1,745	953	725	0	0	0	0	0	2,130	4,216	2,999	2,471
40%	1,611	813	627	0	0	0	0	0	2,088	3,867	2,944	1,929
50%	1,494	768	415	0	0	0	0	0	2,004	3,510	2,739	1,632
60%	1,444	474	0	0	0	0	0	0	1,935	3,272	2,577	1,442
70%	1,248	246	0	0	0	0	0	0	1,755	3,086	2,107	1,171
80%	1,142	0	0	0	0	0	0	0	1,615	2,802	1,727	0
90%	986	0	0	0	0	0	0	0	1,176	2,140	1,501	0
Long Term												
Full Simulation Period[b]	1,509	629	411	0	0	0	0	0	1,887	3,491	2,521	1,785
Water Year Types[c]												
Wet (32%)	1,362	509	99	0	0	0	0	0	1,709	3,785	2,964	660
Above Normal (16%)	1,552	406	351	0	0	0	0	0	2,175	4,264	3,131	3,933
Below Normal (13%)	1,624	562	591	0	0	0	0	0	2,054	4,106	2,877	2,246
Dry (24%)	1,677	824	678	0	0	0	0	0	2,050	3,146	1,921	1,874
Critical (15%)	1,401	869	542	0	0	0	0	0	1,536	2,030	1,572	1,321

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%	-569	-638	-938	-1,359	0	0	0	0	-492	292	97	1,224
20%	-709	-660	-716	-1,154	0	0	0	0	-663	441	162	604
30%	-641	-692	-697	-935	0	0	0	0	-549	444	155	-146
40%	-507	-697	-629	-868	0	0	0	0	-408	282	213	-653
50%	-493	-623	-679	-739	0	0	0	0	-346	125	193	-850
60%	-396	-795	-936	0	0	0	0	0	-156	204	367	-770
70%	-394	-862	-781	0	0	0	0	0	-222	406	104	-655
80%	-325	-962	0	0	0	0	0	0	-225	446	-64	-1,591
90%	-205	-768	0	0	0	0	0	0	-192	262	-64	-1,305
Long Term												
Full Simulation Period[b]	-483	-721	-578	-595	0	0	0	0	-309	299	106	-462
Water Year Types[c]												
Wet (32%)	-801	-862	-540	-174	0	0	0	0	-111	258	186	-2,069
Above Normal (16%)	-325	-1,056	-753	-309	0	0	0	0	-465	244	190	1,303
Below Normal (13%)	-647	-926	-646	-761	0	0	0	0	-783	293	301	25
Dry (24%)	-237	-534	-492	-1,012	0	0	0	0	-283	420	-54	-44
Critical (15%)	-224	-178	-555	-968	0	0	0	0	-180	254	-71	-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 C-31-5. Delta Cross Channel, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,682	1,880	1,855	1,359	0	0	0	0	3,057	4,269	3,079	2,792
20%	2,598	1,713	1,538	1,154	0	0	0	0	2,903	4,011	2,947	2,714
30%	2,387	1,645	1,421	935	0	0	0	0	2,679	3,772	2,844	2,617
40%	2,119	1,509	1,256	868	0	0	0	0	2,495	3,585	2,731	2,582
50%	1,987	1,391	1,094	739	0	0	0	0	2,350	3,385	2,547	2,483
60%	1,839	1,269	936	0	0	0	0	0	2,091	3,068	2,210	2,212
70%	1,642	1,108	781	0	0	0	0	0	1,978	2,681	2,003	1,826
80%	1,468	962	0	0	0	0	0	0	1,840	2,356	1,791	1,591
90%	1,192	768	0	0	0	0	0	0	1,369	1,878	1,565	1,305
Long Term												
Full Simulation Period[b]	1,992	1,350	989	595	0	0	0	0	2,196	3,192	2,415	2,246
Water Year Types[c]												
Wet (32%)	2,162	1,371	638	174	0	0	0	0	1,819	3,527	2,779	2,730
Above Normal (16%)	1,877	1,462	1,104	309	0	0	0	0	2,640	4,020	2,941	2,630
Below Normal (13%)	2,270	1,488	1,237	761	0	0	0	0	2,837	3,813	2,575	2,221
Dry (24%)	1,914	1,358	1,170	1,012	0	0	0	0	2,332	2,727	1,975	1,919
Critical (15%)	1,624	1,047	1,096	968	0	0	0	0	1,716	1,776	1,643	1,354

Alternative 3

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,673	1,943	1,853	1,448	0	0	0	0	3,006	4,466	3,141	2,838
20%	2,573	1,787	1,552	1,160	0	0	0	0	2,654	4,357	3,037	2,735
30%	2,297	1,665	1,422	941	0	0	0	0	2,571	4,228	2,892	2,608
40%	2,123	1,523	1,294	864	0	0	0	0	2,474	3,893	2,818	2,527
50%	1,967	1,388	1,093	746	0	0	0	0	2,354	3,609	2,653	2,463
60%	1,697	1,291	916	0	0	0	0	0	2,265	3,191	2,494	2,287
70%	1,513	1,113	738	0	0	0	0	0	2,000	2,848	2,129	1,840
80%	1,456	961	0	0	0	0	0	0	1,823	2,514	1,765	1,644
90%	1,166	771	0	0	0	0	0	0	1,288	1,902	1,540	1,276
Long Term												
Full Simulation Period[b]	1,946	1,378	989	606	0	0	0	0	2,177	3,402	2,477	2,249
Water Year Types[c]												
Wet (32%)	2,129	1,362	639	174	0	0	0	0	1,925	3,676	2,790	2,693
Above Normal (16%)	1,851	1,499	1,134	419	0	0	0	0	2,551	4,209	3,029	2,633
Below Normal (13%)	2,167	1,743	1,242	756	0	0	0	0	2,450	4,191	2,977	2,426
Dry (24%)	1,894	1,350	1,164	1,005	0	0	0	0	2,378	3,031	1,956	1,878
Critical (15%)	1,537	993	1,066	945	0	0	0	0	1,731	1,830	1,611	1,331

Alternative 3 minus Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-8	63	-3	89	0	0	0	0	-51	197	62	47
20%	-25	74	14	6	0	0	0	0	-248	347	90	22
30%	-90	20	0	6	0	0	0	0	-108	456	48	-9
40%	4	14	38	-4	0	0	0	0	-21	308	88	-55
50%	-21	-3	-1	7	0	0	0	0	4	224	106	-19
60%	-142	22	-20	0	0	0	0	0	174	123	284	75
70%	-129	5	-44	0	0	0	0	0	22	168	127	14
80%	-12	-1	0	0	0	0	0	0	-18	157	-26	54
90%	-25	3	0	0	0	0	0	0	-81	24	-25	-30
Long Term												
Full Simulation Period[b]	-46	27	0	12	0	0	0	0	-19	210	62	3
Water Year Types[c]												
Wet (32%)	-34	-9	0	0	0	0	0	0	105	149	11	-37
Above Normal (16%)	-26	38	30	110	0	0	0	0	-89	189	87	3
Below Normal (13%)	-103	255	5	-4	0	0	0	0	-388	378	402	205
Dry (24%)	-20	-8	-6	-7	0	0	0	0	46	305	-19	-41
Critical (15%)	-87	-54	-30	-24	0	0	0	0	16	54	-32	-23

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 C-31-6. Delta Cross Channel, 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%	2,682	1,880	1,855	1,359	0	0	0	0	3,057	4,269	3,079	2,792
20%	2,598	1,713	1,538	1,154	0	0	0	0	2,903	4,011	2,947	2,714
30%	2,387	1,645	1,421	935	0	0	0	0	2,679	3,772	2,844	2,617
40%	2,119	1,509	1,256	868	0	0	0	0	2,495	3,585	2,731	2,582
50%	1,987	1,391	1,094	739	0	0	0	0	2,350	3,385	2,547	2,483
60%	1,839	1,269	936	0	0	0	0	0	2,091	3,068	2,210	2,212
70%	1,642	1,108	781	0	0	0	0	0	1,978	2,681	2,003	1,826
80%	1,468	962	0	0	0	0	0	0	1,840	2,356	1,791	1,591
90%	1,192	768	0	0	0	0	0	0	1,369	1,878	1,565	1,305
Long Term												
Full Simulation Period[b]	1,992	1,350	989	595	0	0	0	0	2,196	3,192	2,415	2,246
Water Year Types[c]												
Wet (32%)	2,162	1,371	638	174	0	0	0	0	1,819	3,527	2,779	2,730
Above Normal (16%)	1,877	1,462	1,104	309	0	0	0	0	2,640	4,020	2,941	2,630
Below Normal (13%)	2,270	1,488	1,237	761	0	0	0	0	2,837	3,813	2,575	2,221
Dry (24%)	1,914	1,358	1,170	1,012	0	0	0	0	2,332	2,727	1,975	1,919
Critical (15%)	1,624	1,047	1,096	968	0	0	0	0	1,716	1,776	1,643	1,354

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,136	1,242	913	0	0	0	0	0	2,583	4,560	3,180	3,993
20%	1,977	1,034	823	0	0	0	0	0	2,241	4,446	3,116	3,329
30%	1,719	952	725	0	0	0	0	0	2,134	4,301	3,000	2,471
40%	1,585	813	639	0	0	0	0	0	2,085	3,897	2,950	1,922
50%	1,491	769	376	0	0	0	0	0	2,010	3,644	2,859	1,673
60%	1,451	386	0	0	0	0	0	0	1,952	3,387	2,687	1,472
70%	1,261	228	0	0	0	0	0	0	1,723	3,219	2,184	1,169
80%	1,161	0	0	0	0	0	0	0	1,606	2,875	1,796	0
90%	988	0	0	0	0	0	0	0	1,186	2,173	1,651	0
Long Term												
Full Simulation Period[b]	1,511	620	410	0	0	0	0	0	1,883	3,547	2,575	1,798
Water Year Types[c]												
Wet (32%)	1,380	487	99	0	0	0	0	0	1,702	3,828	2,981	661
Above Normal (16%)	1,521	407	338	0	0	0	0	0	2,167	4,275	3,120	3,917
Below Normal (13%)	1,628	567	597	0	0	0	0	0	2,026	4,141	2,908	2,312
Dry (24%)	1,690	807	679	0	0	0	0	0	2,057	3,261	2,033	1,899
Critical (15%)	1,379	872	545	0	0	0	0	0	1,548	2,083	1,706	1,327

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%	-546	-637	-942	-1,359	0	0	0	0	-474	291	100	1,201
20%	-621	-679	-715	-1,154	0	0	0	0	-662	435	169	615
30%	-668	-694	-697	-935	0	0	0	0	-545	529	156	-146
40%	-533	-696	-617	-868	0	0	0	0	-410	312	220	-660
50%	-496	-623	-718	-739	0	0	0	0	-339	259	312	-810
60%	-388	-883	-936	0	0	0	0	0	-139	319	477	-740
70%	-381	-880	-781	0	0	0	0	0	-254	539	181	-657
80%	-307	-962	0	0	0	0	0	0	-234	518	5	-1,591
90%	-204	-768	0	0	0	0	0	0	-182	296	86	-1,305
Long Term												
Full Simulation Period[b]	-481	-731	-579	-595	0	0	0	0	-313	355	160	-448
Water Year Types[c]												
Wet (32%)	-783	-884	-540	-174	0	0	0	0	-117	301	202	-2,069
Above Normal (16%)	-356	-1,054	-766	-309	0	0	0	0	-473	254	178	1,287
Below Normal (13%)	-642	-921	-640	-761	0	0	0	0	-811	328	332	91
Dry (24%)	-224	-551	-491	-1,012	0	0	0	0	-275	535	58	-19
Critical (15%)	-245	-175	-552	-968	0	0	0	0	-168	307	64	-26

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

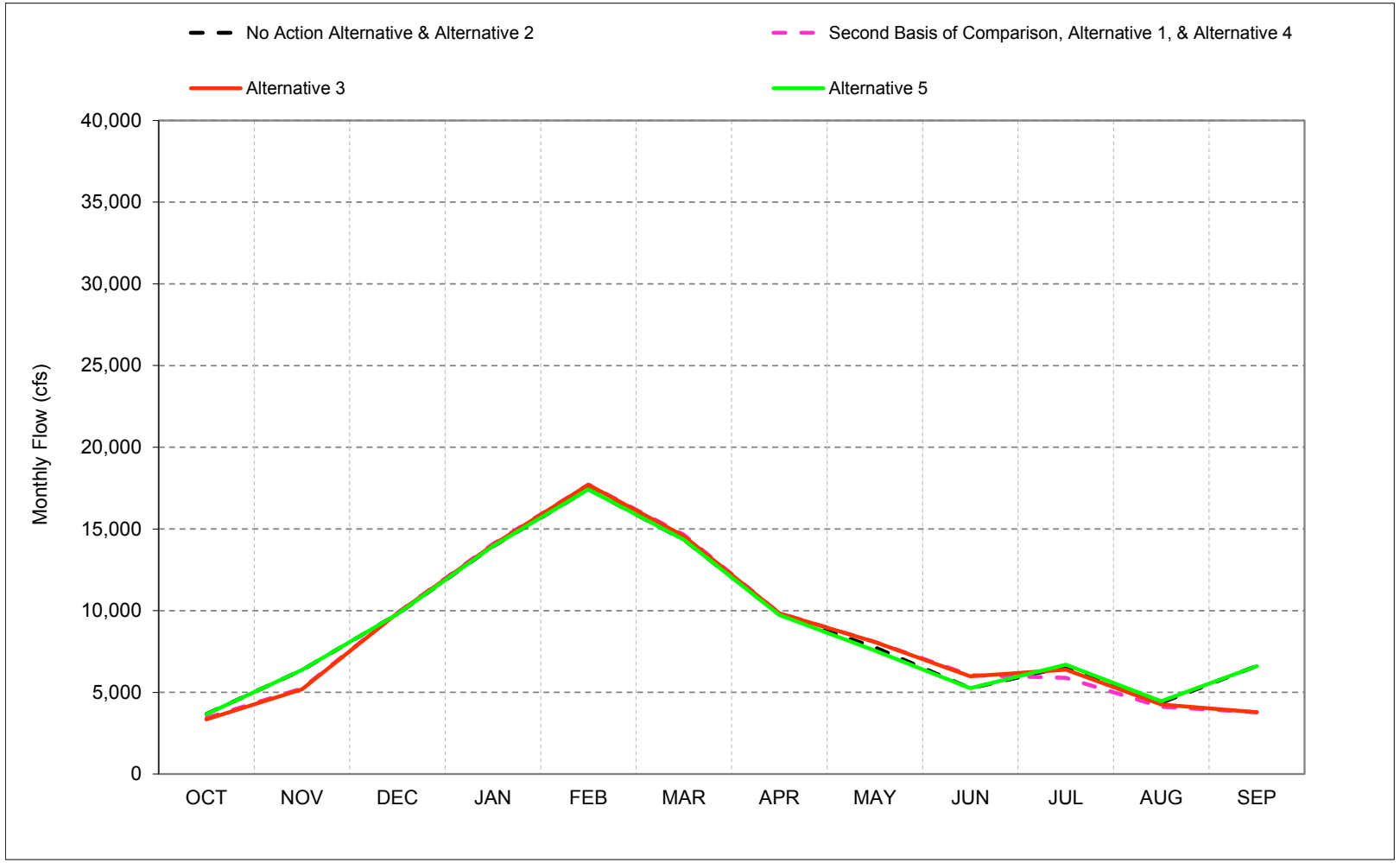
b Based on the 82-year simulation period.

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.

C.32. Sutter and Steamboat Slough Flows

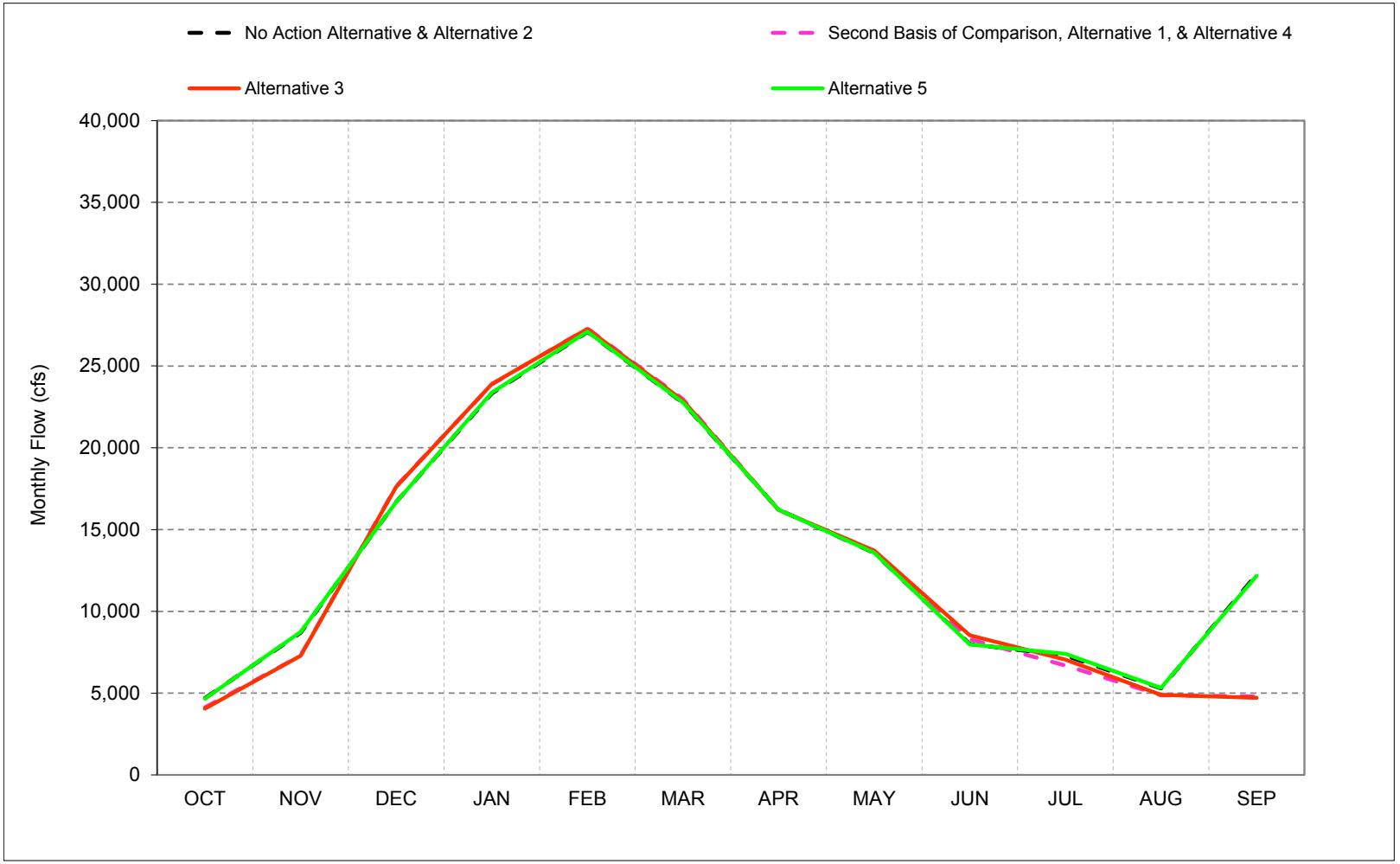
Figure C-32-1. Sutter and Steamboat Slough, Long-Term* Average Flow



*Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-32-2. Sutter and Steamboat Slough, Wet Year* Long-Term Average Flow**

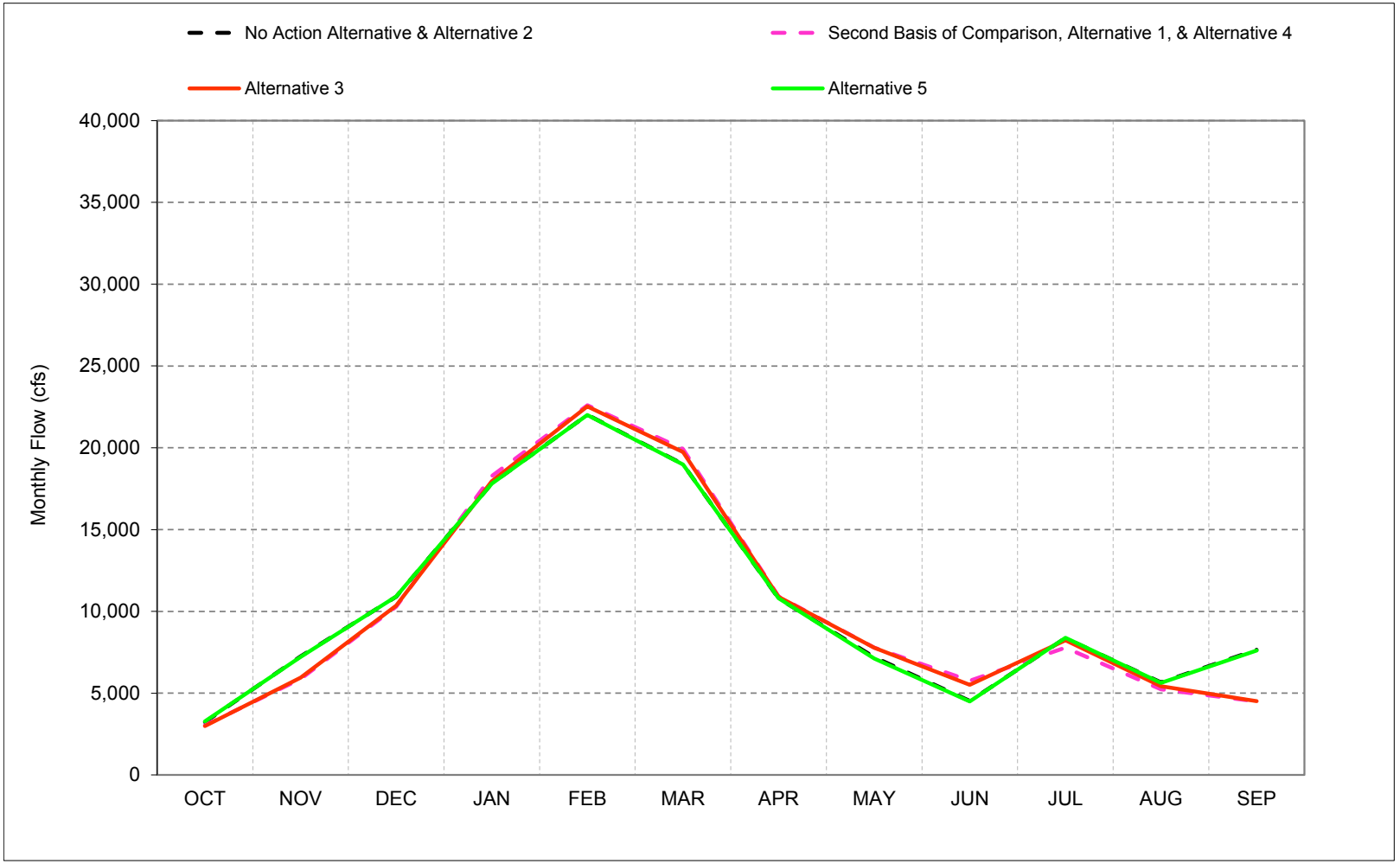


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-32-3. Sutter and Steamboat Slough, Above Normal Year* Long-Term Average Flow**

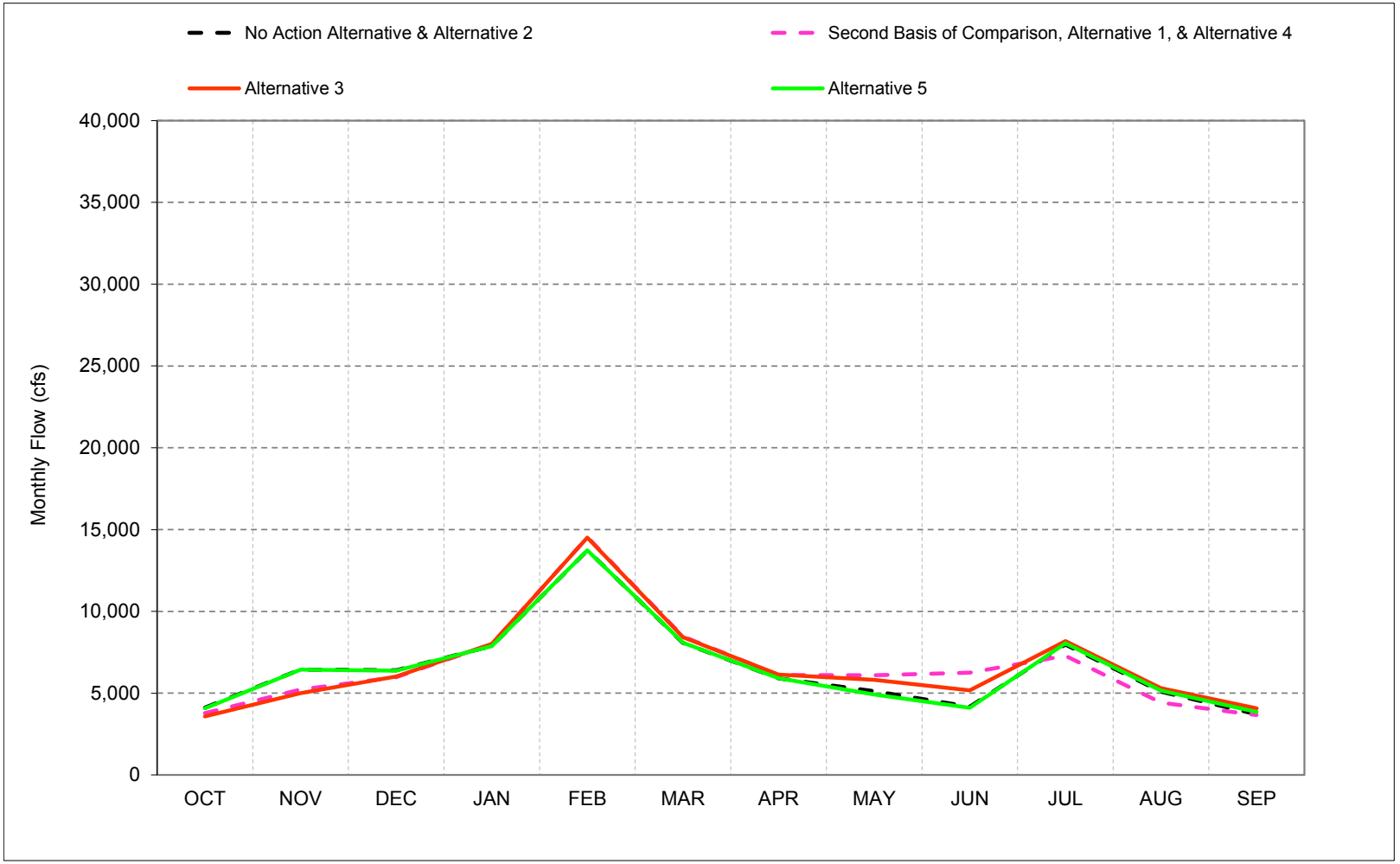


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-32-4. Sutter and Steamboat Slough, Below Normal Year* Long-Term Average Flow**

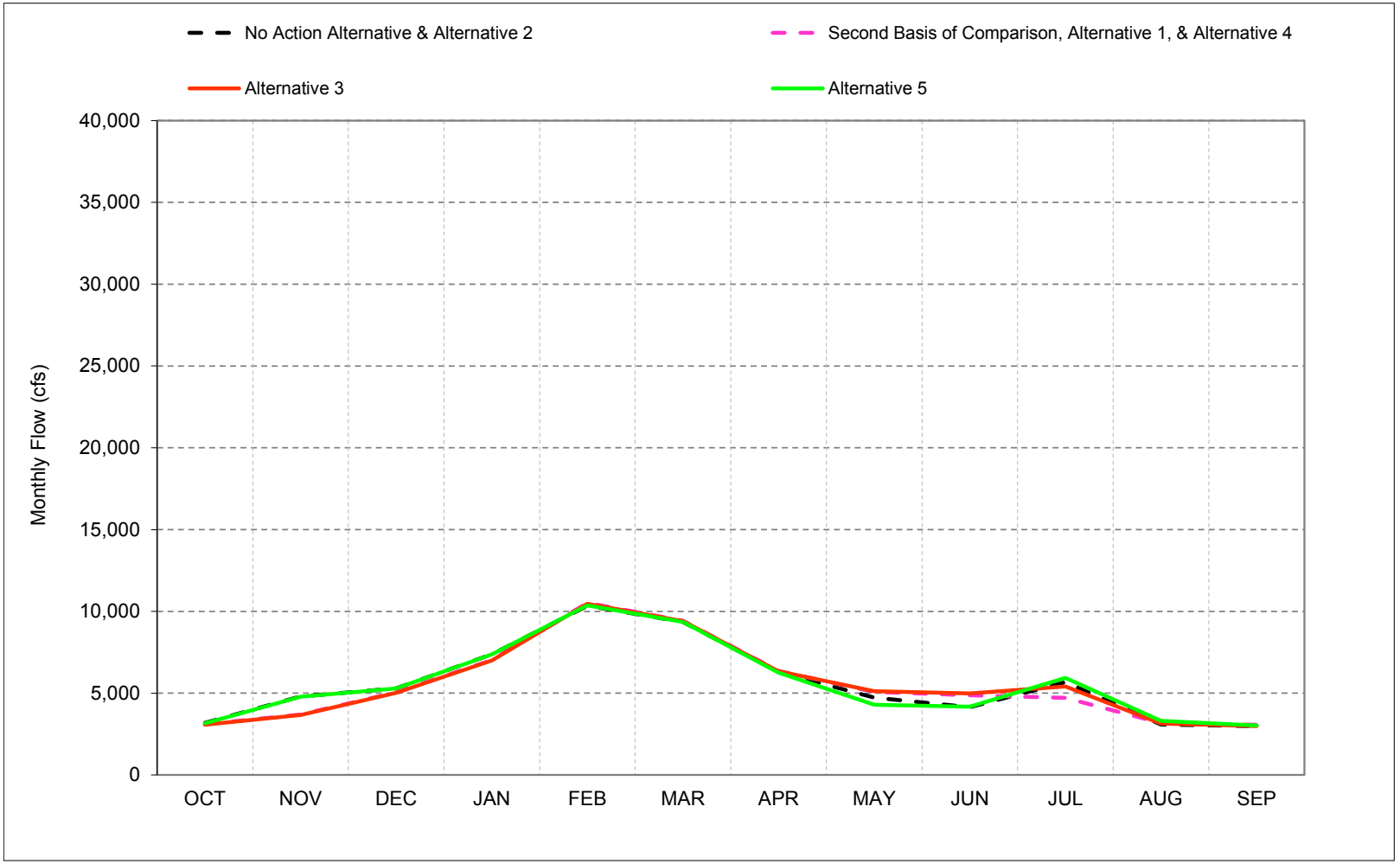


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-32-5. Sutter and Steamboat Slough, Dry Year* Long-Term Average Flow**

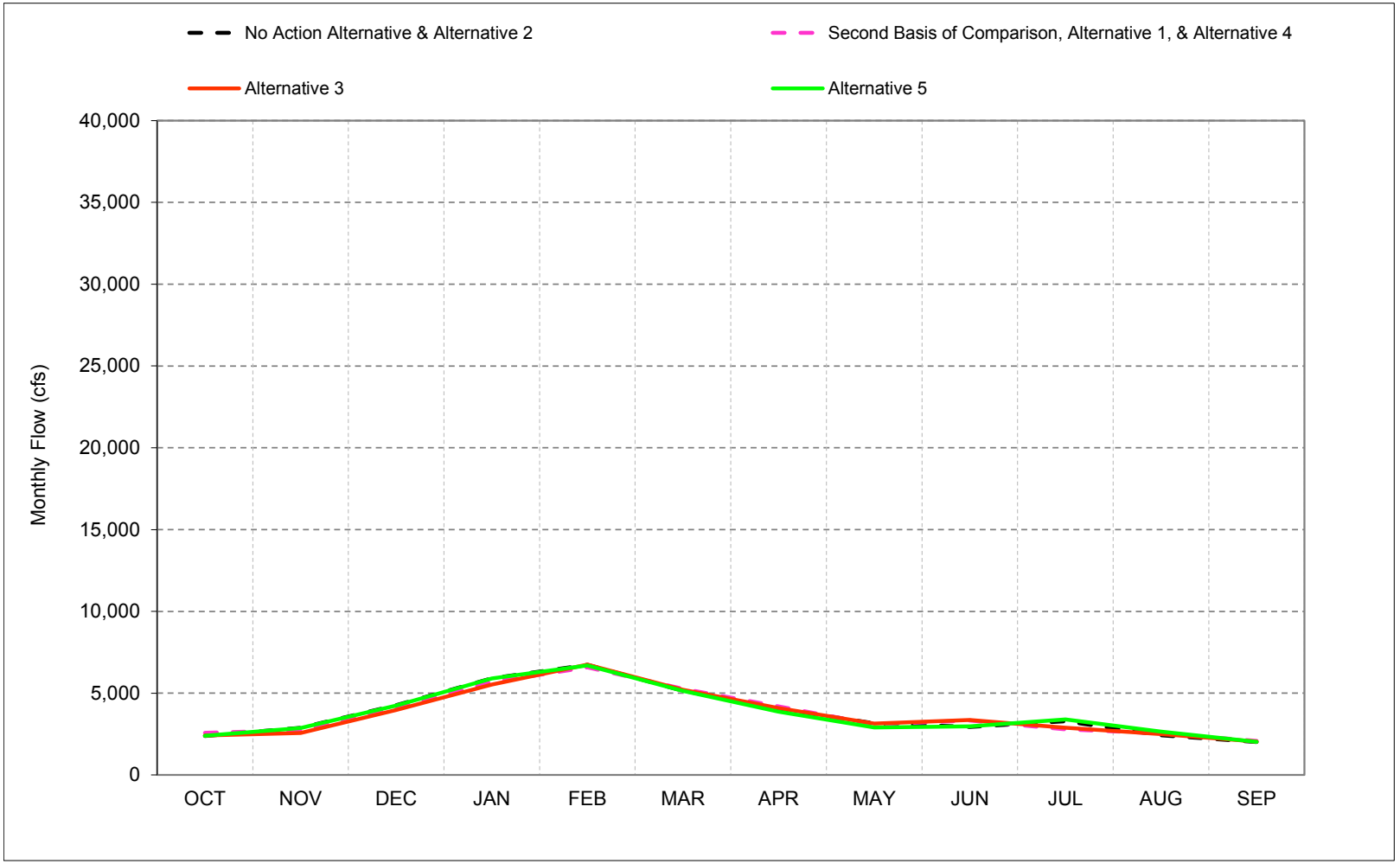


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

**Based on the 82-year simulation period.

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 Alternatives 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.

Figure C-32-6. Sutter and Steamboat Slough, Critical Year* Long-Term Average Flow**



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

**Based on the 82-year simulation period.

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 Alternatives 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 C-32-1. Sutter and Steamboat Slough, Monthly Flow

No Action Alternative & Alternative 2

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	5,638	9,919	22,841	30,715	34,265	29,738	21,623	17,660	7,388	9,072	5,798	13,044
20%	5,118	8,100	14,561	24,952	29,584	24,030	14,768	11,502	5,656	8,823	5,613	12,752
30%	4,445	7,825	9,289	17,508	23,047	16,979	10,185	7,102	4,575	8,224	5,352	8,255
40%	3,969	6,762	7,709	10,939	19,729	13,223	8,773	5,574	4,298	7,420	5,249	7,773
50%	3,370	5,910	6,296	9,129	14,750	10,865	6,774	4,994	4,232	6,552	4,790	4,655
60%	2,635	4,713	5,846	7,832	10,867	9,111	5,302	4,528	4,067	6,086	4,392	3,813
70%	2,379	3,412	5,350	6,231	8,435	8,001	4,678	4,374	3,812	5,689	3,357	2,914
80%	2,250	2,743	3,796	5,556	6,943	6,224	4,254	4,044	3,359	4,870	2,687	2,371
90%	1,805	2,331	3,187	4,712	5,838	4,541	3,788	3,408	3,114	3,427	2,335	1,940
Long Term												
Full Simulation Period[b]	3,683	6,361	9,793	13,944	17,426	14,344	9,777	7,750	5,259	6,577	4,367	6,623
Water Year Types[c]												
Wet (32%)	4,698	8,688	16,691	23,326	27,078	22,752	16,223	13,578	7,999	7,304	5,292	12,260
Above Normal (16%)	3,238	7,246	10,898	17,822	22,015	19,003	10,799	7,201	4,525	8,363	5,657	7,657
Below Normal (13%)	4,119	6,441	6,401	7,889	13,734	8,070	5,902	5,121	4,183	7,975	5,088	3,714
Dry (24%)	3,189	4,806	5,295	7,376	10,343	9,354	6,297	4,734	4,153	5,670	3,092	2,985
Critical (15%)	2,392	2,881	4,260	5,913	6,733	5,150	4,058	3,153	2,947	3,294	2,430	2,020

Alternative 1

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	4,649	8,840	25,683	31,237	34,303	30,702	21,643	17,648	7,769	8,400	5,588	4,885
20%	4,462	5,375	15,531	26,676	29,803	24,242	14,740	12,352	6,848	7,765	5,301	4,690
30%	4,036	4,788	8,986	19,028	24,301	19,273	10,157	7,389	6,374	7,223	5,023	4,489
40%	3,478	4,540	7,230	11,878	21,140	13,509	8,783	6,343	5,760	6,752	4,743	4,405
50%	3,213	4,085	5,858	9,554	15,013	11,030	6,949	5,561	5,277	6,271	4,326	4,186
60%	2,961	3,716	5,257	7,428	10,947	9,190	5,286	5,226	4,945	5,615	3,628	3,595
70%	2,608	3,328	4,481	5,870	8,705	8,062	4,739	4,793	4,229	4,603	3,209	2,840
80%	2,277	2,840	3,740	5,110	7,084	6,387	4,461	4,306	4,016	3,932	2,803	2,441
90%	1,891	2,345	3,143	4,381	5,968	4,614	4,053	3,378	3,595	2,947	2,385	1,997
Long Term												
Full Simulation Period[b]	3,435	5,243	9,859	14,083	17,717	14,650	9,854	8,085	6,059	5,895	4,116	3,779
Water Year Types[c]												
Wet (32%)	4,134	7,289	17,643	23,870	27,298	22,969	16,213	13,686	8,296	6,695	4,872	4,797
Above Normal (16%)	3,037	5,861	10,293	18,272	22,598	19,927	10,909	7,780	5,769	7,790	5,239	4,495
Below Normal (13%)	3,787	5,220	5,987	8,000	14,534	8,463	6,113	6,100	6,251	7,289	4,427	3,664
Dry (24%)	3,103	3,694	5,048	7,023	10,521	9,433	6,359	5,082	4,871	4,713	3,171	3,069
Critical (15%)	2,582	2,741	4,090	5,680	6,582	5,275	4,189	3,102	3,328	2,799	2,552	2,083

Alternative 1 minus No Action Alternative

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-989	-1,080	2,841	522	38	964	20	-12	381	-672	-210	-8,159
20%	-656	-2,725	970	1,724	220	212	-28	849	1,192	-1,059	-312	-8,062
30%	-409	-3,037	-303	1,520	1,254	2,293	-28	287	1,799	-1,001	-329	-3,766
40%	-491	-2,222	-479	938	1,411	286	10	769	1,462	-668	-507	-3,368
50%	-156	-1,825	-437	425	263	165	175	567	1,045	-280	-464	-469
60%	326	-997	-589	-404	80	80	-16	697	878	-470	-764	-218
70%	229	-85	-869	-360	270	62	60	420	417	-1,085	-148	-74
80%	26	97	-56	-446	141	163	207	262	657	-938	115	70
90%	86	14	-44	-331	130	74	265	-31	481	-480	50	57
Long Term												
Full Simulation Period[b]	-249	-1,118	65	138	291	306	77	335	799	-682	-251	-2,844
Water Year Types[c]												
Wet (32%)	-564	-1,398	952	544	219	217	-10	108	297	-609	-420	-7,462
Above Normal (16%)	-201	-1,385	-605	450	583	924	111	579	1,244	-572	-418	-3,162
Below Normal (13%)	-332	-1,221	-414	111	800	393	211	978	2,068	-685	-661	-50
Dry (24%)	-86	-1,111	-247	-353	178	79	62	348	717	-957	79	84
Critical (15%)	189	-140	-169	-233	-151	125	131	-51	381	-495	122	64

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 C-32-2. Sutter and Steamboat Slough, Monthly Flow

No Action Alternative & Alternative 2

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	5,638	9,919	22,841	30,715	34,265	29,738	21,623	17,660	7,388	9,072	5,798	13,044
20%	5,118	8,100	14,561	24,952	29,584	24,030	14,768	11,502	5,656	8,823	5,613	12,752
30%	4,445	7,825	9,289	17,508	23,047	16,979	10,185	7,102	4,575	8,224	5,352	8,255
40%	3,969	6,762	7,709	10,939	19,729	13,223	8,773	5,574	4,298	7,420	5,249	7,773
50%	3,370	5,910	6,296	9,129	14,750	10,865	6,774	4,994	4,232	6,552	4,790	4,655
60%	2,635	4,713	5,846	7,832	10,867	9,111	5,302	4,528	4,067	6,086	4,392	3,813
70%	2,379	3,412	5,350	6,231	8,435	8,001	4,678	4,374	3,812	5,689	3,357	2,914
80%	2,250	2,743	3,796	5,556	6,943	6,224	4,254	4,044	3,359	4,870	2,687	2,371
90%	1,805	2,331	3,187	4,712	5,838	4,541	3,788	3,408	3,114	3,427	2,335	1,940
Long Term												
Full Simulation Period[b]	3,683	6,361	9,793	13,944	17,426	14,344	9,777	7,750	5,259	6,577	4,367	6,623
Water Year Types[c]												
Wet (32%)	4,698	8,688	16,691	23,326	27,078	22,752	16,223	13,578	7,999	7,304	5,292	12,260
Above Normal (16%)	3,238	7,246	10,898	17,822	22,015	19,003	10,799	7,201	4,525	8,363	5,657	7,657
Below Normal (13%)	4,119	6,441	6,401	7,889	13,734	8,070	5,902	5,121	4,183	7,975	5,088	3,714
Dry (24%)	3,189	4,806	5,295	7,376	10,343	9,354	6,297	4,734	4,153	5,670	3,092	2,985
Critical (15%)	2,392	2,881	4,260	5,913	6,733	5,150	4,058	3,153	2,947	3,294	2,430	2,020

Alternative 3

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	4,655	8,981	25,614	31,086	34,292	30,700	21,619	17,642	7,301	8,858	5,700	4,979
20%	4,421	5,559	15,854	26,457	29,791	24,240	14,741	11,882	6,721	8,591	5,460	4,771
30%	3,987	4,855	9,051	19,041	24,281	18,210	10,159	7,348	5,733	8,316	5,118	4,459
40%	3,479	4,405	7,191	11,812	20,933	13,506	8,757	6,313	5,545	7,487	4,917	4,257
50%	3,160	4,087	5,828	9,280	15,030	11,028	6,954	5,489	5,237	6,799	4,586	4,171
60%	2,671	3,707	5,172	7,323	10,944	9,183	5,259	4,982	4,866	6,018	4,198	3,755
70%	2,363	3,356	4,611	5,757	8,923	8,175	4,870	4,670	4,636	4,952	3,458	2,880
80%	2,252	2,811	3,783	5,111	6,950	6,390	4,327	4,406	3,987	4,296	2,763	2,528
90%	1,806	2,339	3,122	4,359	5,955	4,566	4,038	3,499	3,589	2,985	2,378	1,943
Long Term												
Full Simulation Period[b]	3,348	5,199	9,841	14,017	17,709	14,570	9,835	8,077	5,988	6,384	4,261	3,789
Water Year Types[c]												
Wet (32%)	4,062	7,287	17,615	23,896	27,272	22,880	16,209	13,724	8,547	7,056	4,904	4,720
Above Normal (16%)	2,990	5,960	10,354	17,956	22,528	19,733	10,885	7,780	5,512	8,240	5,425	4,511
Below Normal (13%)	3,591	5,007	6,025	8,024	14,513	8,425	6,131	5,817	5,182	8,181	5,314	4,079
Dry (24%)	3,075	3,671	5,021	6,996	10,476	9,410	6,344	5,131	4,986	5,414	3,147	2,994
Critical (15%)	2,418	2,576	3,971	5,537	6,755	5,204	4,098	3,146	3,368	2,888	2,500	2,047

Alternative 3 minus No Action Alternative & Alternative 2

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-983	-938	2,773	371	27	962	-4	-18	-87	-214	-98	-8,065
20%	-697	-2,541	1,293	1,505	207	210	-27	380	1,064	-233	-153	-7,981
30%	-458	-2,970	-238	1,533	1,234	1,231	-26	245	1,158	92	-234	-3,796
40%	-490	-2,358	-518	872	1,204	283	-17	739	1,247	67	-332	-3,517
50%	-209	-1,823	-468	151	280	163	180	494	1,005	248	-204	-485
60%	35	-1,007	-674	-509	77	72	-44	454	799	-67	-194	-59
70%	-16	-56	-739	-473	488	174	192	296	824	-737	101	-33
80%	1	68	-13	-445	7	166	73	363	628	-573	75	157
90%	1	8	-65	-353	116	26	250	91	474	-442	43	3
Long Term												
Full Simulation Period[b]	-336	-1,162	48	72	283	226	57	327	729	-192	-106	-2,834
Water Year Types[c]												
Wet (32%)	-635	-1,401	924	570	193	128	-14	146	547	-248	-389	-7,540
Above Normal (16%)	-248	-1,286	-543	134	513	730	87	579	987	-122	-233	-3,146
Below Normal (13%)	-527	-1,434	-376	135	779	355	229	695	999	206	226	365
Dry (24%)	-114	-1,134	-274	-380	133	56	47	397	833	-257	55	9
Critical (15%)	26	-305	-288	-376	22	54	40	-8	421	-406	70	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 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 C-32-3. Sutter and Steamboat Slough, Monthly Flow

No Action Alternative & Alternative 2

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	5,638	9,919	22,841	30,715	34,265	29,738	21,623	17,660	7,388	9,072	5,798	13,044
20%	5,118	8,100	14,561	24,952	29,584	24,030	14,768	11,502	5,656	8,823	5,613	12,752
30%	4,445	7,825	9,289	17,508	23,047	16,979	10,185	7,102	4,575	8,224	5,352	8,255
40%	3,969	6,762	7,709	10,939	19,729	13,223	8,773	5,574	4,298	7,420	5,249	7,773
50%	3,370	5,910	6,296	9,129	14,750	10,865	6,774	4,994	4,232	6,552	4,790	4,655
60%	2,635	4,713	5,846	7,832	10,867	9,111	5,302	4,528	4,067	6,086	4,392	3,813
70%	2,379	3,412	5,350	6,231	8,435	8,001	4,678	4,374	3,812	5,689	3,357	2,914
80%	2,250	2,743	3,796	5,556	6,943	6,224	4,254	4,044	3,359	4,870	2,687	2,371
90%	1,805	2,331	3,187	4,712	5,838	4,541	3,788	3,408	3,114	3,427	2,335	1,940
Long Term												
Full Simulation Period[b]	3,683	6,361	9,793	13,944	17,426	14,344	9,777	7,750	5,259	6,577	4,367	6,623
Water Year Types[c]												
Wet (32%)	4,698	8,688	16,691	23,326	27,078	22,752	16,223	13,578	7,999	7,304	5,292	12,260
Above Normal (16%)	3,238	7,246	10,898	17,822	22,015	19,003	10,799	7,201	4,525	8,363	5,657	7,657
Below Normal (13%)	4,119	6,441	6,401	7,889	13,734	8,070	5,902	5,121	4,183	7,975	5,088	3,714
Dry (24%)	3,189	4,806	5,295	7,376	10,343	9,354	6,297	4,734	4,153	5,670	3,092	2,985
Critical (15%)	2,392	2,881	4,260	5,913	6,733	5,150	4,058	3,153	2,947	3,294	2,430	2,020

Alternative 5

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	5,626	9,905	22,792	30,588	34,257	29,735	21,624	17,663	7,422	9,036	5,798	13,038
20%	4,926	8,064	14,561	24,919	29,567	24,035	14,767	11,460	5,622	8,816	5,637	12,659
30%	4,384	7,838	9,295	17,508	23,186	17,024	10,189	7,100	4,590	8,434	5,396	8,258
40%	3,981	6,857	7,720	10,911	19,737	13,224	8,781	5,314	4,324	7,483	5,249	7,767
50%	3,389	5,901	6,295	9,140	14,814	10,820	6,789	4,834	4,212	6,792	5,044	4,773
60%	2,635	4,723	5,839	7,807	10,869	9,110	5,156	4,448	4,061	6,246	4,650	4,065
70%	2,416	3,424	5,412	6,225	8,436	7,959	4,761	3,942	3,881	5,959	3,524	2,956
80%	2,249	2,744	3,795	5,556	6,943	6,223	4,081	3,599	3,269	5,075	2,826	2,449
90%	1,805	2,334	3,173	4,689	5,828	4,536	3,731	2,973	3,110	3,529	2,566	2,075
Long Term												
Full Simulation Period[b]	3,669	6,373	9,787	13,951	17,428	14,342	9,745	7,565	5,251	6,703	4,471	6,620
Water Year Types[c]												
Wet (32%)	4,660	8,749	16,681	23,370	27,094	22,759	16,223	13,576	7,984	7,406	5,330	12,175
Above Normal (16%)	3,288	7,225	10,908	17,816	22,010	18,979	10,801	7,113	4,505	8,386	5,631	7,617
Below Normal (13%)	4,077	6,437	6,377	7,873	13,732	8,078	5,925	4,919	4,113	8,055	5,154	3,851
Dry (24%)	3,166	4,793	5,295	7,373	10,362	9,351	6,264	4,299	4,171	5,939	3,312	3,028
Critical (15%)	2,401	2,879	4,250	5,893	6,689	5,141	3,866	2,902	2,978	3,393	2,656	2,030

Alternative 5 minus No Action Alternative & Alternative 2

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-12	-15	-50	-127	-8	-3	1	3	34	-36	1	-6
20%	-192	-36	0	-34	-16	5	-1	-43	-34	-8	24	-93
30%	-61	13	6	0	139	44	3	-2	15	210	44	3
40%	12	95	11	-29	8	0	8	-260	27	62	-1	-6
50%	19	-9	-1	11	64	-45	15	-161	-20	240	254	118
60%	0	10	-7	-25	2	-1	-147	-80	-6	161	258	252
70%	37	11	62	-5	1	-41	82	-432	69	270	167	42
80%	-2	1	-1	0	0	-2	-174	-445	-91	205	139	78
90%	0	3	-14	-23	-11	-5	-56	-436	-4	102	231	135
Long Term												
Full Simulation Period[b]	-14	12	-6	7	2	-2	-33	-185	-8	127	104	-3
Water Year Types[c]												
Wet (32%)	-37	61	-10	44	16	7	0	-2	-15	102	38	-84
Above Normal (16%)	50	-21	10	-6	-5	-24	2	-88	-20	23	-26	-40
Below Normal (13%)	-42	-5	-24	-16	-2	8	23	-202	-70	80	66	137
Dry (24%)	-23	-12	1	-3	19	-2	-33	-436	18	268	220	42
Critical (15%)	9	-2	-10	-20	-44	-9	-192	-251	31	99	226	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 C-32-4. Sutter and Steamboat Slough, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	4,649	8,840	25,683	31,237	34,303	30,702	21,643	17,648	7,769	8,400	5,588	4,885
20%	4,462	5,375	15,531	26,676	29,803	24,242	14,740	12,352	6,848	7,765	5,301	4,690
30%	4,036	4,788	8,986	19,028	24,301	19,273	10,157	7,389	6,374	7,223	5,023	4,489
40%	3,478	4,540	7,230	11,878	21,140	13,509	8,783	6,343	5,760	6,752	4,743	4,405
50%	3,213	4,085	5,858	9,554	15,013	11,030	6,949	5,561	5,277	6,271	4,326	4,186
60%	2,961	3,716	5,257	7,428	10,947	9,190	5,286	5,226	4,945	5,615	3,628	3,595
70%	2,608	3,328	4,481	5,870	8,705	8,062	4,739	4,793	4,229	4,603	3,209	2,840
80%	2,277	2,840	3,740	5,110	7,084	6,387	4,461	4,306	4,016	3,932	2,803	2,441
90%	1,891	2,345	3,143	4,381	5,968	4,614	4,053	3,378	3,595	2,947	2,385	1,997
Long Term												
Full Simulation Period[b]	3,435	5,243	9,859	14,083	17,717	14,650	9,854	8,085	6,059	5,895	4,116	3,779
Water Year Types[c]												
Wet (32%)	4,134	7,289	17,643	23,870	27,298	22,969	16,213	13,686	8,296	6,695	4,872	4,797
Above Normal (16%)	3,037	5,861	10,293	18,272	22,598	19,927	10,909	7,780	5,769	7,790	5,239	4,495
Below Normal (13%)	3,787	5,220	5,987	8,000	14,534	8,463	6,113	6,100	6,251	7,289	4,427	3,664
Dry (24%)	3,103	3,694	5,048	7,023	10,521	9,433	6,359	5,082	4,871	4,713	3,171	3,069
Critical (15%)	2,582	2,741	4,090	5,680	6,582	5,275	4,189	3,102	3,328	2,799	2,552	2,083

No Action Alternative & Alternative 2

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	5,638	9,919	22,841	30,715	34,265	29,738	21,623	17,660	7,388	9,072	5,798	13,044
20%	5,118	8,100	14,561	24,952	29,584	24,030	14,768	11,502	5,656	8,823	5,613	12,752
30%	4,445	7,825	9,289	17,508	23,047	16,979	10,185	7,102	4,575	8,224	5,352	8,255
40%	3,969	6,762	7,709	10,939	19,729	13,223	8,773	5,574	4,298	7,420	5,249	7,773
50%	3,370	5,910	6,296	9,129	14,750	10,865	6,774	4,994	4,232	6,552	4,790	4,655
60%	2,635	4,713	5,846	7,832	10,867	9,111	5,302	4,528	4,067	6,086	4,392	3,813
70%	2,379	3,412	5,350	6,231	8,435	8,001	4,678	4,374	3,812	5,689	3,357	2,914
80%	2,250	2,743	3,796	5,556	6,943	6,224	4,254	4,044	3,359	4,870	2,687	2,371
90%	1,805	2,331	3,187	4,712	5,838	4,541	3,788	3,408	3,114	3,427	2,335	1,940
Long Term												
Full Simulation Period[b]	3,683	6,361	9,793	13,944	17,426	14,344	9,777	7,750	5,259	6,577	4,367	6,623
Water Year Types[c]												
Wet (32%)	4,698	8,688	16,691	23,326	27,078	22,752	16,223	13,578	7,999	7,304	5,292	12,260
Above Normal (16%)	3,238	7,246	10,898	17,822	22,015	19,003	10,799	7,201	4,525	8,363	5,657	7,657
Below Normal (13%)	4,119	6,441	6,401	7,889	13,734	8,070	5,902	5,121	4,183	7,975	5,088	3,714
Dry (24%)	3,189	4,806	5,295	7,376	10,343	9,354	6,297	4,734	4,153	5,670	3,092	2,985
Critical (15%)	2,392	2,881	4,260	5,913	6,733	5,150	4,058	3,153	2,947	3,294	2,430	2,020

No Action Alternative & Alternative 2 minus Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	989	1,080	-2,841	-522	-38	-964	-20	12	-381	672	210	8,159
20%	656	2,725	-970	-1,724	-220	-212	28	-849	-1,192	1,059	312	8,062
30%	409	3,037	303	-1,520	-1,254	-2,293	28	-287	-1,799	1,001	329	3,766
40%	491	2,222	479	-938	-1,411	-286	-10	-769	-1,462	668	507	3,368
50%	156	1,825	437	-425	-263	-165	-175	-567	-1,045	280	464	469
60%	-326	997	589	404	-80	-80	16	-697	-878	470	764	218
70%	-229	85	869	360	-270	-62	-60	-420	-417	1,085	148	74
80%	-26	-97	56	446	-141	-163	-207	-262	-657	938	-115	-70
90%	-86	-14	44	331	-130	-74	-265	31	-481	480	-50	-57
Long Term												
Full Simulation Period[b]	249	1,118	-65	-138	-291	-306	-77	-335	-799	682	251	2,844
Water Year Types[c]												
Wet (32%)	564	1,398	-952	-544	-219	-217	10	-108	-297	609	420	7,462
Above Normal (16%)	201	1,385	605	-450	-583	-924	-111	-579	-1,244	572	418	3,162
Below Normal (13%)	332	1,221	414	-111	-800	-393	-211	-978	-2,068	685	661	50
Dry (24%)	86	1,111	247	353	-178	-79	-62	-348	-717	957	-79	-84
Critical (15%)	-189	140	169	233	151	-125	-131	51	-381	495	-122	-64

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 C-32-5. Sutter and Steamboat Slough, 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%	4,649	8,840	25,683	31,237	34,303	30,702	21,643	17,648	7,769	8,400	5,588	4,885
20%	4,462	5,375	15,531	26,676	29,803	24,242	14,740	12,352	6,848	7,765	5,301	4,690
30%	4,036	4,788	8,986	19,028	24,301	19,273	10,157	7,389	6,374	7,223	5,023	4,489
40%	3,478	4,540	7,230	11,878	21,140	13,509	8,783	6,343	5,760	6,752	4,743	4,405
50%	3,213	4,085	5,858	9,554	15,013	11,030	6,949	5,561	5,277	6,271	4,326	4,186
60%	2,961	3,716	5,257	7,428	10,947	9,190	5,286	5,226	4,945	5,615	3,628	3,595
70%	2,608	3,328	4,481	5,870	8,705	8,062	4,739	4,793	4,229	4,603	3,209	2,840
80%	2,277	2,840	3,740	5,110	7,084	6,387	4,461	4,306	4,016	3,932	2,803	2,441
90%	1,891	2,345	3,143	4,381	5,968	4,614	4,053	3,378	3,595	2,947	2,385	1,997
Long Term												
Full Simulation Period[b]	3,435	5,243	9,859	14,083	17,717	14,650	9,854	8,085	6,059	5,895	4,116	3,779
Water Year Types[c]												
Wet (32%)	4,134	7,289	17,643	23,870	27,298	22,969	16,213	13,686	8,296	6,695	4,872	4,797
Above Normal (16%)	3,037	5,861	10,293	18,272	22,598	19,927	10,909	7,780	5,769	7,790	5,239	4,495
Below Normal (13%)	3,787	5,220	5,987	8,000	14,534	8,463	6,113	6,100	6,251	7,289	4,427	3,664
Dry (24%)	3,103	3,694	5,048	7,023	10,521	9,433	6,359	5,082	4,871	4,713	3,171	3,069
Critical (15%)	2,582	2,741	4,090	5,680	6,582	5,275	4,189	3,102	3,328	2,799	2,552	2,083

Alternative 3

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	4,655	8,981	25,614	31,086	34,292	30,700	21,619	17,642	7,301	8,858	5,700	4,979
20%	4,421	5,559	15,854	26,457	29,791	24,240	14,741	11,882	6,721	8,591	5,460	4,771
30%	3,987	4,855	9,051	19,041	24,281	18,210	10,159	7,348	5,733	8,316	5,118	4,459
40%	3,479	4,405	7,191	11,812	20,933	13,506	8,757	6,313	5,545	7,487	4,917	4,257
50%	3,160	4,087	5,828	9,280	15,030	11,028	6,954	5,489	5,237	6,799	4,586	4,171
60%	2,671	3,707	5,172	7,323	10,944	9,183	5,259	4,982	4,866	6,018	4,198	3,755
70%	2,363	3,356	4,611	5,757	8,923	8,175	4,870	4,670	4,636	4,952	3,458	2,880
80%	2,252	2,811	3,783	5,111	6,950	6,390	4,327	4,406	3,987	4,296	2,763	2,528
90%	1,806	2,339	3,122	4,359	5,955	4,566	4,038	3,499	3,589	2,985	2,378	1,943
Long Term												
Full Simulation Period[b]	3,348	5,199	9,841	14,017	17,709	14,570	9,835	8,077	5,988	6,384	4,261	3,789
Water Year Types[c]												
Wet (32%)	4,062	7,287	17,615	23,896	27,272	22,880	16,209	13,724	8,547	7,056	4,904	4,720
Above Normal (16%)	2,990	5,960	10,354	17,956	22,528	19,733	10,885	7,780	5,512	8,240	5,425	4,511
Below Normal (13%)	3,591	5,007	6,025	8,024	14,513	8,425	6,131	5,817	5,182	8,181	5,314	4,079
Dry (24%)	3,075	3,671	5,021	6,996	10,476	9,410	6,344	5,131	4,986	5,414	3,147	2,994
Critical (15%)	2,418	2,576	3,971	5,537	6,755	5,204	4,098	3,146	3,368	2,888	2,500	2,047

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%	6	141	-69	-151	-11	-3	-24	-6	-469	458	112	94
20%	-41	184	324	-219	-12	-3	1	-470	-128	826	159	80
30%	-49	67	65	13	-20	-1,063	2	-42	-641	1,093	95	-30
40%	1	-136	-39	-66	-207	-3	-26	-31	-215	735	175	-149
50%	-53	3	-30	-274	18	-2	5	-72	-40	528	260	-16
60%	-290	-9	-85	-105	-3	-8	-28	-244	-79	403	570	159
70%	-245	28	129	-113	218	112	131	-124	407	348	248	40
80%	-25	-29	43	1	-134	3	-133	101	-29	365	-40	87
90%	-85	-6	-21	-21	-13	-48	-15	122	-7	37	-7	-55
Long Term												
Full Simulation Period[b]	-87	-43	-18	-66	-8	-80	-20	-8	-71	489	145	10
Water Year Types[c]												
Wet (32%)	-71	-2	-28	26	-26	-89	-4	38	251	361	31	-78
Above Normal (16%)	-48	99	62	-316	-69	-194	-24	0	-257	450	185	16
Below Normal (13%)	-195	-213	38	24	-21	-38	18	-283	-1,070	892	887	415
Dry (24%)	-28	-23	-27	-26	-45	-23	-15	49	116	701	-24	-75
Critical (15%)	-164	-165	-119	-143	172	-71	-91	43	40	88	-52	-36

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 C-32-6. Sutter and Steamboat Slough, 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%	4,649	8,840	25,683	31,237	34,303	30,702	21,643	17,648	7,769	8,400	5,588	4,885
20%	4,462	5,375	15,531	26,676	29,803	24,242	14,740	12,352	6,848	7,765	5,301	4,690
30%	4,036	4,788	8,986	19,028	24,301	19,273	10,157	7,389	6,374	7,223	5,023	4,489
40%	3,478	4,540	7,230	11,878	21,140	13,509	8,783	6,343	5,760	6,752	4,743	4,405
50%	3,213	4,085	5,858	9,554	15,013	11,030	6,949	5,561	5,277	6,271	4,326	4,186
60%	2,961	3,716	5,257	7,428	10,947	9,190	5,286	5,226	4,945	5,615	3,628	3,595
70%	2,608	3,328	4,481	5,870	8,705	8,062	4,739	4,793	4,229	4,603	3,209	2,840
80%	2,277	2,840	3,740	5,110	7,084	6,387	4,461	4,306	4,016	3,932	2,803	2,441
90%	1,891	2,345	3,143	4,381	5,968	4,614	4,053	3,378	3,595	2,947	2,385	1,997
Long Term												
Full Simulation Period[b]	3,435	5,243	9,859	14,083	17,717	14,650	9,854	8,085	6,059	5,895	4,116	3,779
Water Year Types[c]												
Wet (32%)	4,134	7,289	17,643	23,870	27,298	22,969	16,213	13,686	8,296	6,695	4,872	4,797
Above Normal (16%)	3,037	5,861	10,293	18,272	22,598	19,927	10,909	7,780	5,769	7,790	5,239	4,495
Below Normal (13%)	3,787	5,220	5,987	8,000	14,534	8,463	6,113	6,100	6,251	7,289	4,427	3,664
Dry (24%)	3,103	3,694	5,048	7,023	10,521	9,433	6,359	5,082	4,871	4,713	3,171	3,069
Critical (15%)	2,582	2,741	4,090	5,680	6,582	5,275	4,189	3,102	3,328	2,799	2,552	2,083

Alternative 5

Statistic	Monthly Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	5,626	9,905	22,792	30,588	34,257	29,735	21,624	17,663	7,422	9,036	5,798	13,038
20%	4,926	8,064	14,561	24,919	29,567	24,035	14,767	11,460	5,622	8,816	5,637	12,659
30%	4,384	7,838	9,295	17,508	23,186	17,024	10,189	7,100	4,590	8,434	5,396	8,258
40%	3,981	6,857	7,720	10,911	19,737	13,224	8,781	5,314	4,324	7,483	5,249	7,767
50%	3,389	5,901	6,295	9,140	14,814	10,820	6,789	4,834	4,212	6,792	5,044	4,773
60%	2,635	4,723	5,839	7,807	10,869	9,110	5,156	4,448	4,061	6,246	4,650	4,065
70%	2,416	3,424	5,412	6,225	8,436	7,959	4,761	3,942	3,881	5,959	3,524	2,956
80%	2,249	2,744	3,795	5,556	6,943	6,223	4,081	3,599	3,269	5,075	2,826	2,449
90%	1,805	2,334	3,173	4,689	5,828	4,536	3,731	2,973	3,110	3,529	2,566	2,075
Long Term												
Full Simulation Period[b]	3,669	6,373	9,787	13,951	17,428	14,342	9,745	7,565	5,251	6,703	4,471	6,620
Water Year Types[c]												
Wet (32%)	4,660	8,749	16,681	23,370	27,094	22,759	16,223	13,576	7,984	7,406	5,330	12,175
Above Normal (16%)	3,288	7,225	10,908	17,816	22,010	18,979	10,801	7,113	4,505	8,386	5,631	7,617
Below Normal (13%)	4,077	6,437	6,377	7,873	13,732	8,078	5,925	4,919	4,113	8,055	5,154	3,851
Dry (24%)	3,166	4,793	5,295	7,373	10,362	9,351	6,264	4,299	4,171	5,939	3,312	3,028
Critical (15%)	2,401	2,879	4,250	5,893	6,689	5,141	3,866	2,902	2,978	3,393	2,656	2,030

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%	977	1,065	-2,891	-649	-46	-967	-19	15	-348	636	211	8,153
20%	464	2,689	-970	-1,757	-236	-207	27	-892	-1,227	1,051	337	7,968
30%	348	3,050	309	-1,520	-1,115	-2,249	32	-289	-1,784	1,211	373	3,770
40%	502	2,317	490	-967	-1,403	-286	-2	-1,030	-1,436	730	506	3,361
50%	176	1,816	437	-414	-198	-210	-160	-727	-1,065	521	717	587
60%	-326	1,007	582	380	-78	-81	-131	-777	-884	631	1,023	470
70%	-192	96	930	355	-269	-103	22	-851	-348	1,355	314	116
80%	-28	-96	55	446	-141	-164	-380	-707	-747	1,143	23	8
90%	-86	-10	30	308	-140	-78	-322	-405	-485	582	181	78
Long Term												
Full Simulation Period[b]	235	1,131	-72	-131	-289	-308	-110	-519	-808	808	354	2,841
Water Year Types[c]												
Wet (32%)	527	1,459	-962	-500	-204	-210	10	-110	-312	711	458	7,378
Above Normal (16%)	250	1,364	616	-456	-588	-947	-108	-667	-1,264	595	392	3,122
Below Normal (13%)	290	1,217	390	-127	-802	-385	-188	-1,180	-2,138	766	727	187
Dry (24%)	63	1,099	247	350	-159	-81	-95	-783	-700	1,226	141	-42
Critical (15%)	-180	138	159	213	107	-134	-323	-201	-350	594	104	-54

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.