

C-4 MODEL RESULTS – WATER SUPPLY AND MANAGEMENT

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Introduction

This appendix presents a summary of CalSim II model results for the project alternatives. For 2005 level of development, the project alternatives are compared to the Existing Condition. For 2030 level of development, the project alternatives are compared to the Future Without Project condition.

2005 Level of Development, Severe Fishery Restrictions

Model results for each project alternative are presented in **Table C4-1(A-D)** as average values for the full hydrologic study period (1921 to 2003) and a six-year dry period (1987 to 1992). These results include upstream and Delta flows and diversions (e.g. flow in Sacramento River and major tributaries, San Joaquin River flow, exports at Banks and Jones Pumping Plants, Net Delta Outflow, X2 position and QWEST), CVP and SWP south of Delta deliveries, CVP and SWP reservoir carry-over storages (at Folsom, Oroville, San Luis, Shasta and Trinity Reservoirs), and parameters specific to project alternative operations (CCWD and Los Vaqueros Reservoir (LV) diversions; additional south of Delta Environmental Water Supply deliveries; and Delta Supply Restoration deliveries to South Bay water agencies).

Table C4-2 and **Table C4-3** present the change in Delta channel flows and indices, upstream reservoir storages and local operation parameters for each project alternative as compared to the Existing Condition. Results are summarized in these tables as averages by water year type and by month, respectively.

Table C4-4 (A-D) presents the changes from the Existing Condition in monthly Banks and Jones export diversions for each project alternative, and **Table C4-5 (A-D)** presents the changes from the Existing Condition in monthly CCWD and Los Vaqueros Reservoir (LV) diversions for each project alternative. These tables also indicate whether the Delta is in excess or balanced conditions.

Monthly and year type average changes in various Delta parameters (Sacramento River flow at Hood, San Joaquin River flow at Vernalis, Delta Outflow, combined Banks and Jones diversions, and combined CCWD and LV diversions) are presented in **Figure C4-1** through **Figure C4-5** and **Figure C4-11** through **Figure C4-15**, respectively. **Figure C4-6** shows the monthly average Los Vaqueros storage and **Figure C4-7** through **Figure C4-10** show time-series of storage for each alternative and the Existing Conditions.

Figure C4-16 through **Figure C4-21** are exceedence plots of the end of September storage in upstream reservoirs (Trinity, Shasta, Oroville, and Folsom) and San Luis Reservoir (CVP and SWP).

**TABLE C4-1:
SUMMARY COMPARISON OF ANNUAL AVERAGE DIVERSIONS, DELIVERIES, RIVER FLOWS, AND
CARRYOVER STORAGE, 2005 LOD, SEVERE FISHERY RESTRICTIONS**

(A) ALTERNATIVE 1 COMPARED TO EXISTING CONDITION (NO ACTION)

	Existing Condition		Alternative 1		Difference (Alt - Ex. Cond.)		Percent Difference	
	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92
Diversions (TAF/yr)								
CCWD and LV Diversions	127	133	362	278	235	145	184%	109%
Banks Pumping Plant	2626	1508	2421	1374	-205	-133	-8%	-9%
Jones Pumping Plant	2151	1722	2153	1722	2	0	0%	0%
Total	4904	3363	4936	3375	32	12	1%	0%
Delta (cfs)								
Sacramento River at Hood	22,408	12,922	22,406	12,920	-2	-2	0%	0%
San Joaquin River at Vernalis	4,284	1,595	4,284	1,595	0	0	0%	0%
Delta Outflow	22,461	8,648	22,417	8,630	-44	-18	0%	0%
QWEST	3,258	223	3,215	212	-42	-11	-1%	-5%
X2 Position (km)	74.82	81.53	74.86	81.55	0.04	0.01	0%	0%
Upstream River Flows (cfs)								
Sacramento River at Keswick Dam	8,550	6,310	8,549	6,311	-1	1	0%	0%
American River below Nimbus Dam	3,491	1,651	3,490	1,651	0	0	0%	0%
Feather River below Thermalito	4,402	2,324	4,402	2,320	0	-4	0%	0%
Reservoir Carryover Storage (TAF)								
Trinity	1,419	841	1,422	836	3	-5	0%	-1%
Shasta	2,798	1,798	2,789	1,780	-8	-18	0%	-1%
Oroville	2,183	1,248	2,184	1,255	1	7	0%	1%
Folsom	544	344	541	338	-2	-6	0%	-2%
CVP San Luis (August)	158	94	159	94	1	0	1%	0%
SWP San Luis (August)	244	119	243	119	0	0	0%	0%
Deliveries (TAF/yr)								
CVP SOD Ag	823	393	823	393	1	-1	0%	0%
CVP SOD M&I	114	99	114	100	0	1	0%	1%
SWP Table A + Article 56	2,486	1,467	2,486	1,480	0	13	0%	1%
SWP Article 21	85	0	85	0	0	0	0%	NA
Delta Supply Restoration + Dry Year	0	0	27	30	27	30	NA	NA

(B) ALTERNATIVE 2 COMPARED TO EXISTING CONDITION (NO ACTION)

	Existing Condition		Alternative 2		Difference (Alt - Ex. Cond.)		Percent Difference	
	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92
Diversions (TAF/yr)								
CCWD and LV Diversions	127	133	381	291	253	158	199%	119%
Banks Pumping Plant	2626	1508	2425	1373	-201	-135	-8%	-9%
Jones Pumping Plant	2151	1722	2151	1720	0	-2	0%	0%
Total	4904	3363	4957	3384	52	21	1%	1%
Delta (cfs)								
Sacramento River at Hood	22,408	12,922	22,410	12,920	2	-2	0%	0%
San Joaquin River at Vernalis	4,284	1,595	4,284	1,595	0	0	0%	0%
Delta Outflow	22,461	8,648	22,390	8,618	-71	-30	0%	0%
QWEST	3,258	223	3,189	199	-69	-24	-2%	-11%
X2 Position (km)	75	82	75	82	0	0	0%	0%
Upstream River Flows (cfs)								
Sacramento River at Keswick Dam	8,550	6,310	8,549	6,313	-1	3	0%	0%
American River below Nimbus Dam	3,491	1,651	3,491	1,651	0	0	0%	0%
Feather River below Thermalito	4,402	2,324	4,402	2,317	0	-8	0%	0%
Reservoir Carryover Storage (TAF)								
Trinity	1,419	841	1,420	834	2	-7	0%	-1%
Shasta	2,798	1,798	2,788	1,771	-10	-27	0%	-1%
Oroville	2,183	1,248	2,181	1,257	-2	9	0%	1%
Folsom	544	344	541	338	-2	-6	0%	-2%
CVP San Luis (August)	158	94	158	94	1	0	1%	0%
SWP San Luis (August)	244	119	243	119	0	0	0%	0%
Deliveries (TAF/yr)								
CVP SOD Ag	823	393	822	391	-1	-3	0%	-1%
CVP SOD M&I	114	99	114	100	0	1	0%	1%
SWP Table A + Article 56	2,486	1,467	2,484	1,478	-1	11	0%	1%
SWP Article 21	85	0	85	0	-1	0	-1%	NA
Additional SOD Env Water Supply	0	0	51	43	51	43	NA	NA

**TABLE C4-1:
SUMMARY COMPARISON OF ANNUAL AVERAGE DIVERSIONS, DELIVERIES, RIVER FLOWS, AND
CARRYOVER STORAGE, 2005 LOD, SEVERE FISHERY RESTRICTIONS**

(C) ALTERNATIVE 3 COMPARED TO EXISTING CONDITION (NO ACTION)

	Existing Condition		Alternative 3		Difference (Alt – Ex. Cond.)		Percent Difference	
	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92
Diversion (TAF/yr)								
CCWD and LV Diversions	127	133	130	106	3	-27	2%	-21%
Banks Pumping Plant	2626	1508	2643	1515	17	8	1%	1%
Jones Pumping Plant	2151	1722	2155	1740	4	18	0%	1%
Total	4904	3363	4928	3361	24	-2	0%	0%
Delta (cfs)								
Sacramento River at Hood	22,408	12,922	22,406	12,921	-2	0	0%	0%
San Joaquin River at Vernalis	4,284	1,595	4,284	1,595	0	0	0%	0%
Delta Outflow	22,461	8,648	22,424	8,651	-38	3	0%	0%
QWEST	3,258	223	3,225	231	-33	8	-1%	4%
X2 Position (km)	75	82	75	82	0	0	0%	0%
Upstream River Flows (cfs)								
Sacramento River at Keswick Dam	8,550	6,310	8,547	6,299	-2	-11	0%	0%
American River below Nimbus Dam	3,491	1,651	3,491	1,656	0	5	0%	0%
Feather River below Thermalito	4,402	2,324	4,402	2,326	0	1	0%	0%
Reservoir Carryover Storage (TAF)								
Trinity	1,419	841	1,424	852	6	11	0%	1%
Shasta	2,798	1,798	2,796	1,803	-1	5	0%	0%
Oroville	2,183	1,248	2,178	1,246	-5	-3	0%	0%
Folsom	544	344	542	332	-2	-12	0%	-3%
CVP San Luis (August)	158	94	157	94	0	0	0%	0%
SWP San Luis (August)	244	119	244	114	0	-5	0%	-5%
Deliveries (TAF/yr)								
CVP SOD Ag	823	393	823	394	1	1	0%	0%
CVP SOD M&I	114	99	114	99	0	0	0%	0%
SWP Table A + Article 56	2,486	1,467	2,492	1,473	6	7	0%	0%
SWP Article 21	85	0	93	0	8	0	9%	NA
Additional SOD Env Water Supply	0	0	7	24	7	24	NA	NA

(D) ALTERNATIVE 4 COMPARED TO EXISTING CONDITION (NO ACTION)

	Existing Condition		Alternative 4		Difference (Alt – Ex. Cond.)		Percent Difference	
	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92
Diversion (TAF/yr)								
CCWD and LV Diversions	127	133	128	124	1	-9	1%	-7%
Banks Pumping Plant	2626	1508	2628	1510	2	2	0%	0%
Jones Pumping Plant	2151	1722	2153	1729	2	7	0%	0%
Total	4904	3363	4909	3363	5	0	0%	0%
Delta (cfs)								
Sacramento River at Hood	22,408	12,922	22,410	12,915	2	-7	0%	0%
San Joaquin River at Vernalis	4,284	1,595	4,284	1,595	0	0	0%	0%
Delta Outflow	22,461	8,648	22,452	8,642	-9	-7	0%	0%
QWEST	3,258	223	3,251	224	-7	1	0%	0%
X2 Position (km)	75	82	75	82	0	0	0%	0%
Upstream River Flows (cfs)								
Sacramento River at Keswick Dam	8,550	6,310	8,548	6,307	-1	-3	0%	0%
American River below Nimbus Dam	3,491	1,651	3,491	1,651	0	0	0%	0%
Feather River below Thermalito	4,402	2,324	4,402	2,322	0	-2	0%	0%
Reservoir Carryover Storage (TAF)								
Trinity	1,419	841	1,421	850	2	9	0%	1%
Shasta	2,798	1,798	2,800	1,804	2	6	0%	0%
Oroville	2,183	1,248	2,180	1,251	-3	2	0%	0%
Folsom	544	344	543	345	0	1	0%	0%
CVP San Luis (August)	158	94	157	94	-1	0	0%	0%
SWP San Luis (August)	244	119	243	119	0	0	0%	0%
Deliveries (TAF/yr)								
CVP SOD Ag	823	393	825	399	2	6	0%	2%
CVP SOD M&I	114	99	114	100	0	1	0%	1%
SWP Table A + Article 56	2,486	1,467	2,488	1,469	2	2	0%	0%
SWP Article 21	85	0	86	0	0	0	0%	NA

**TABLE C4-2:
ANNUAL VALUES BY WATER YEAR TYPE, 2005 LOD, SEVERE FISHERY RESTRICTIONS**

Parameter	Long Term Average	Dry Period (87-92)	Wet	Above Normal	Below Normal	Dry	Critical
CCWD and LV Diversions (TAF/yr)							
Average Total Diversions Existing Condition	127	133	122	137	136	129	116
Changes under Alternative 1	235	145	279	243	242	224	137
Changes under Alternative 2	253	158	300	265	262	239	152
Changes under Alternative 3	3	-27	12	18	9	2	-36
Changes under Alternative 4	1	-9	8	8	1	-8	-9
Improved Fish Screening Existing Condition	0	0	0	0	0	0	0
Changes under Alternative 1	189	135	228	188	190	167	139
Changes under Alternative 2	184	135	222	184	180	163	138
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
Delta (cfs)							
Sacramento River at Hood Existing Condition	22,408	12,922	33,127	25,434	18,639	15,481	10,943
Changes under Alternative 1	-2	-2	-17	16	8	7	-14
Changes under Alternative 2	2	-2	-18	22	13	17	-8
Changes under Alternative 3	-2	0	-12	1	7	14	-19
Changes under Alternative 4	2	-7	3	0	2	-2	8
San Joaquin River at Vernalis Existing Condition	4,284	1,595	7,529	4,016	3,336	2,244	1,686
Changes under Alternative 1	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
Delta Outflow Existing Condition	22,461	8,648	40,636	24,479	15,117	10,915	6,955
Changes under Alternative 1	-44	-18	-65	-30	-44	-42	-16
Changes under Alternative 2	-71	-30	-110	-70	-58	-58	-21
Changes under Alternative 3	-38	3	-57	-27	-41	-26	-19
Changes under Alternative 4	-9	-7	-18	-19	6	-10	5
Banks Pumping Plant Existing Condition	3,617	2,082	4,677	3,807	3,545	3,101	1,991
Changes under Alternative 1	-282	-184	-339	-285	-283	-255	-193
Changes under Alternative 2	-278	-186	-330	-281	-279	-249	-202
Changes under Alternative 3	24	11	24	3	34	21	39
Changes under Alternative 4	4	3	1	-1	-1	10	11
Jones Pumping Plant Existing Condition	2,964	2,378	3,443	3,084	2,943	2,719	2,198
Changes under Alternative 1	2	0	4	2	2	-4	7
Changes under Alternative 2	-1	-2	4	-1	-10	-4	6
Changes under Alternative 3	5	25	-1	-3	2	18	10
Changes under Alternative 4	3	10	0	5	-4	9	4
Banks + Jones Exports Existing Condition	6,581	4,461	8,119	6,891	6,489	5,820	4,189
Changes under Alternative 1	-280	-184	-335	-283	-281	-259	-187
Changes under Alternative 2	-278	-189	-326	-282	-289	-253	-196
Changes under Alternative 3	29	35	24	0	36	39	49
Changes under Alternative 4	6	13	1	4	-5	19	15
Banks + Jones + CCWD + LV Diversions Existing Condition	6,757	4,644	8,288	7,080	6,676	5,997	4,348
Changes under Alternative 1	43	16	49	51	52	49	2
Changes under Alternative 2	70	28	87	83	71	75	14
Changes under Alternative 3	33	-3	40	24	48	41	-1
Changes under Alternative 4	7	0	12	15	-4	7	2
QWEST Existing Condition	3,258	223	7,543	3,285	1,654	293	265
Changes under Alternative 1	-42	-11	-52	-47	-49	-45	-4
Changes under Alternative 2	-69	-24	-90	-78	-66	-69	-15
Changes under Alternative 3	-33	8	-42	-22	-47	-35	-3
Changes under Alternative 4	-7	1	-12	-15	4	-7	-1
X2 Position (km) Existing Condition	74.82	81.53	68.47	73.01	76.20	78.96	82.53
Changes under Alternative 1	0.04	0.01	0.05	0.02	0.04	0.05	0.02
Changes under Alternative 2	0.06	0.02	0.07	0.05	0.04	0.06	0.03
Changes under Alternative 3	0.02	0.00	0.04	0.01	0.02	0.02	0.01
Changes under Alternative 4	0.00	0.01	0.01	0.01	0.00	0.01	-0.01
Upstream River Flows (cfs)							
Sacramento River at Keswick Existing Condition	8,550	6,310	11,630	8,688	7,033	6,798	6,134
Changes under Alternative 1	-1	1	-13	13	16	7	-18
Changes under Alternative 2	-1	3	-17	12	13	12	-15
Changes under Alternative 3	-2	-11	-15	11	15	13	-31
Changes under Alternative 4	-1	-3	-3	10	-3	-3	-4
American River below Nimbus Existing Condition	3,491	1,651	5,476	3,901	2,958	2,144	1,419
Changes under Alternative 1	0	0	-1	1	-7	5	-1
Changes under Alternative 2	0	0	-1	1	-8	6	0
Changes under Alternative 3	0	5	0	-1	2	1	-2
Changes under Alternative 4	0	0	0	0	-2	1	0

**TABLE C4-2:
ANNUAL VALUES BY WATER YEAR TYPE, 2005 LOD, SEVERE FISHERY RESTRICTIONS**

Parameter	Long Term Average	Dry Period (87-92)	Wet	Above Normal	Below Normal	Dry	Critical
Feather River below Thermalito							
Existing Condition	4,402	2,324	6,783	4,419	3,529	3,059	2,261
Changes under Alternative 1	0	-4	-3	9	1	-6	5
Changes under Alternative 2	0	-8	-6	1	6	-2	7
Changes under Alternative 3	0	1	3	-12	-9	0	16
Changes under Alternative 4	0	-2	-2	-14	4	0	12
Reservoir Carryover Storage (TAF)							
Trinity Existing Condition	1,419	841	1,863	1,645	1,298	1,172	743
Changes under Alternative 1	3	-5	0	6	8	3	5
Changes under Alternative 2	2	-7	0	2	3	1	4
Changes under Alternative 3	6	11	1	12	9	2	11
Changes under Alternative 4	2	9	0	1	3	1	7
Shasta Existing Condition	2,798	1,798	3,344	3,245	2,920	2,522	1,438
Changes under Alternative 1	-8	-18	0	-5	-26	-12	-4
Changes under Alternative 2	-10	-27	-1	-5	-26	-14	-10
Changes under Alternative 3	-1	5	-1	-4	-10	-9	21
Changes under Alternative 4	2	6	0	0	5	2	6
Oroville Existing Condition	2,183	1,248	3,055	2,453	2,068	1,530	1,137
Changes under Alternative 1	1	7	2	-2	1	3	0
Changes under Alternative 2	-2	9	1	-3	-13	0	-1
Changes under Alternative 3	-5	-3	-1	-3	-2	-8	-17
Changes under Alternative 4	-3	2	-1	-1	-4	-1	-8
Folsom Existing Condition	544	344	646	609	584	465	326
Changes under Alternative 1	-2	-6	0	-1	-2	-7	-1
Changes under Alternative 2	-2	-6	0	-1	-2	-8	-1
Changes under Alternative 3	-2	-12	0	0	-2	-5	-1
Changes under Alternative 4	0	1	0	0	0	-1	1
CVP San Luis (August) Existing Condition	158	94	223	146	123	114	134
Changes under Alternative 1	1	0	1	-2	7	-1	2
Changes under Alternative 2	1	0	1	-2	5	-1	2
Changes under Alternative 3	0	0	1	-2	3	-2	-1
Changes under Alternative 4	-1	0	0	0	-5	0	0
SWP San Luis (August) Existing Condition	244	119	473	167	137	132	115
Changes under Alternative 1	0	0	1	-3	-1	0	0
Changes under Alternative 2	0	0	1	-3	-1	0	0
Changes under Alternative 3	0	-5	3	-5	0	-2	0
Changes under Alternative 4	0	0	-1	-1	0	0	0
CVP and SWP Deliveries (TAF/year)							
CVP SOD Ag Existing Condition	823	393	1,256	892	740	551	319
Changes under Alternative 1	1	-1	5	3	-3	1	-5
Changes under Alternative 2	-1	-3	4	1	-10	0	-6
Changes under Alternative 3	1	1	1	1	-4	3	1
Changes under Alternative 4	2	6	0	-2	2	8	2
CVP SOD M&I Existing Condition	114	99	128	112	112	108	96
Changes under Alternative 1	0	1	0	0	0	1	0
Changes under Alternative 2	0	1	0	-1	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	1	0	0	0	0	0
SWP Table A + Article 56 Existing Condition	2,486	1,467	3,025	2,627	2,576	2,267	1,399
Changes under Alternative 1	0	13	0	-1	-1	-3	8
Changes under Alternative 2	-1	11	0	-2	-2	-5	2
Changes under Alternative 3	6	7	-2	-3	8	9	26
Changes under Alternative 4	-2	2	0	-2	-1	7	9
SWP Article 21 Existing Condition	85	0	191	76	50	21	3
Changes under Alternative 1	0	0	0	0	1	0	0
Changes under Alternative 2	-1	0	0	0	-3	0	0
Changes under Alternative 3	8	0	18	2	12	0	0
Changes under Alternative 4	0	0	1	0	0	0	0
Improved Fish Screening for CVP South Bay	0	0	0	0	0	0	0
Changes under Alternative 1	76	73	79	75	77	73	73
Changes under Alternative 2	74	74	76	73	74	71	74
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
Improved Fish Screening for SWP South Bay	0	0	0	0	0	0	0
Changes under Alternative 1	129	71	167	129	129	108	76
Changes under Alternative 2	125	70	164	126	122	105	76
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
CVP Delta Supply Restoration							
Existing Condition	0	0	0	0	0	0	0
Changes under Alternative 1	6	5	5	5	6	8	8
Changes under Alternative 2	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0

**TABLE C4-2:
ANNUAL VALUES BY WATER YEAR TYPE, 2005 LOD, SEVERE FISHERY RESTRICTIONS**

Parameter	Long Term Average	Dry Period (87-92)	Wet	Above Normal	Below Normal	Dry	Critical
SWP Delta Supply Restoration Existing Condition	0	0	0	0	0	0	0
Changes under Alternative 1	21	25	12	13	15	27	44
Changes under Alternative 2	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
Additional CVP SOD Environmental Water from Dedicated Storage Existing Condition	0	0	0	0	0	0	0
Changes under Alternative 1	0	0	0	0	0	0	0
Changes under Alternative 2	51	43	42	43	50	64	64
Changes under Alternative 3	7	24	1	4	5	19	8
Changes under Alternative 4	0	0	0	0	0	0	0

**TABLE C4-3:
AVERAGE MONTHLY VALUES, 2005 LOD, SEVERE FISHERY RESTRICTIONS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
CCWD and LV Diversions (TAF)												
Average Total Diversions Existing Condition	7	6	6	6	7	7	2	11	22	22	18	12
Changes under Alternative 1	13	17	20	21	17	27	-2	33	20	22	23	25
Changes under Alternative 2	15	20	24	25	19	28	-1	33	21	23	23	25
Changes under Alternative 3	-1	-1	0	0	1	1	-2	7	-6	4	0	0
Changes under Alternative 4	0	0	0	0	0	0	-1	0	0	0	1	0
Improved Fish Screening Existing Condition	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	12	15	18	19	14	23	0	10	14	18	22	24
Changes under Alternative 2	12	15	17	19	14	22	0	10	13	17	22	23
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Delta (cfs)												
Sacramento River at Hood Existing Condition	11,910	15,539	25,741	34,475	40,240	34,931	24,085	19,836	15,575	18,272	14,880	13,410
Changes under Alternative 1	-10	-33	-18	-13	-25	10	-40	33	76	69	-56	-17
Changes under Alternative 2	-12	-35	-22	-18	-8	-7	-37	25	86	125	-35	-34
Changes under Alternative 3	-20	-1	-23	-16	13	-9	-28	-9	-59	27	-2	103
Changes under Alternative 4	-1	5	10	3	-6	4	-16	0	-5	8	18	3
San Joaquin River at Vernalis Existing Condition	2,547	2,731	3,484	4,857	6,598	6,478	6,022	6,065	4,681	3,244	2,129	2,570
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Delta Outflow Existing Condition	5,161	9,743	24,095	43,797	55,745	46,645	29,756	22,275	14,065	8,116	4,652	5,488
Changes under Alternative 1	-39	-56	-62	-10	-75	-51	137	-319	-23	30	-29	-31
Changes under Alternative 2	-73	-104	-150	-47	-124	-93	135	-338	-37	42	-26	-38
Changes under Alternative 3	-29	-7	-126	-114	-15	-47	-11	-130	38	-20	-3	12
Changes under Alternative 4	-3	14	-26	-81	-14	2	8	8	-8	1	4	-12
Banks Pumping Plant Existing Condition	4,312	4,755	4,875	4,088	3,401	2,193	1,280	1,471	1,401	5,168	5,522	4,944
Changes under Alternative 1	-196	-262	-302	-317	-256	-366	-237	-166	-232	-294	-364	-389
Changes under Alternative 2	-192	-265	-298	-345	-250	-354	-233	-161	-217	-261	-355	-401
Changes under Alternative 3	-4	24	72	77	5	34	24	8	-1	-3	-7	63
Changes under Alternative 4	-2	-6	12	32	-5	0	2	-1	0	4	3	3
Jones Pumping Plant Existing Condition	3,963	3,965	3,683	3,555	2,649	1,789	1,372	1,390	1,208	3,866	4,092	4,033
Changes under Alternative 1	8	3	7	2	-9	-2	90	-13	-3	-25	-29	-9
Changes under Alternative 2	7	3	11	-25	-2	-2	88	-14	-5	-29	-31	-9
Changes under Alternative 3	25	-3	16	32	-8	-10	-11	-5	0	-8	0	34
Changes under Alternative 4	2	1	0	31	10	3	-11	0	0	-5	-1	3
Banks + Jones Exports Existing Condition	8,275	8,719	8,558	7,643	6,050	3,982	2,652	2,861	2,609	9,034	9,614	8,977
Changes under Alternative 1	-188	-259	-295	-314	-264	-368	-147	-178	-235	-319	-393	-398
Changes under Alternative 2	-186	-262	-287	-370	-252	-355	-145	-174	-222	-289	-386	-409
Changes under Alternative 3	21	21	87	108	-3	24	13	3	-1	-11	-7	97
Changes under Alternative 4	0	-5	12	63	6	3	-9	-1	0	-1	2	6
Banks + Jones + CCWD + LV Diversions Existing Condition	8,390	8,827	8,659	7,741	6,180	4,090	2,689	3,044	2,982	9,384	9,914	9,181
Changes under Alternative 1	29	23	38	22	35	64	-175	353	99	39	-27	14
Changes under Alternative 2	55	67	105	38	93	94	-170	364	123	83	-9	4
Changes under Alternative 3	8	7	81	109	12	39	-17	121	-97	46	1	90
Changes under Alternative 4	1	-9	12	68	8	2	-24	-8	4	7	14	14

**TABLE C4-3:
AVERAGE MONTHLY VALUES, 2005 LOD, SEVERE FISHERY RESTRICTIONS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
QWEST Existing Condition	-929	-929	1,395	6,159	9,780	9,815	8,085	6,456	5,097	-1,353	-2,944	-1,535
Changes under Alternative 1	-30	-28	-41	-24	-38	-63	169	-348	-78	-19	10	-19
Changes under Alternative 2	-56	-72	-109	-41	-94	-95	165	-360	-99	-47	-1	-14
Changes under Alternative 3	-13	-6	-86	-111	-10	-40	13	-122	81	-38	-1	-60
Changes under Alternative 4	-1	9	-10	-67	-9	-1	22	8	-5	-4	-8	-14
X2 Position (km) Existing Condition	85.09	85.39	82.44	76.93	69.63	64.10	63.27	66.17	69.29	73.92	78.19	83.37
Changes under Alternative 1	0.05	0.05	0.06	0.04	0.03	0.03	0.03	-0.03	0.12	0.06	-0.02	0.04
Changes under Alternative 2	0.07	0.09	0.10	0.10	0.05	0.04	0.04	-0.03	0.14	0.07	-0.02	0.03
Changes under Alternative 3	-0.03	0.03	0.01	0.06	0.07	0.03	0.02	0.01	0.06	-0.01	0.02	0.01
Changes under Alternative 4	0.01	0.01	-0.01	-0.01	0.02	0.01	0.00	0.00	-0.01	0.01	0.00	-0.01
E/I Ratio Existing Condition	0.57	0.52	0.42	0.27	0.14	0.09	0.08	0.10	0.10	0.41	0.54	0.57
Changes under Alternative 1	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00
Changes under Alternative 2	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00
Changes under Alternative 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Changes under Alternative 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Upstream River Flows (cfs)												
Sacramento River at Keswick Existing Condition	6,233	5,899	7,359	8,707	10,924	8,733	6,979	7,822	10,193	12,961	10,288	6,498
Changes under Alternative 1	-10	-19	-16	3	-9	6	-16	19	38	41	-20	-23
Changes under Alternative 2	-28	-17	-17	-1	-2	-1	-16	11	31	64	-12	-23
Changes under Alternative 3	-6	-8	-56	18	-10	1	-11	-8	-44	11	28	58
Changes under Alternative 4	0	1	-17	0	0	5	-4	3	-6	0	4	-3
American River below Nimbus Existing Condition	1,764	2,790	3,486	4,559	5,298	3,836	3,461	3,889	3,625	3,859	2,698	2,622
Changes under Alternative 1	-1	-8	-5	4	-21	1	-7	4	16	27	-24	12
Changes under Alternative 2	7	-14	-6	1	-18	-3	-8	4	25	42	-19	-12
Changes under Alternative 3	-3	-2	1	-8	0	-6	-4	-3	-9	33	-8	10
Changes under Alternative 4	-3	1	0	-3	2	1	0	0	0	1	3	-1
Feather River below Thermalito Existing Condition	3,270	2,576	4,298	5,593	6,567	6,749	3,157	3,747	3,151	6,538	4,996	2,187
Changes under Alternative 1	-1	-6	-4	3	-7	7	-13	7	23	7	-11	-8
Changes under Alternative 2	1	-7	-26	-11	-8	3	-11	8	30	26	-3	-3
Changes under Alternative 3	-7	6	26	-21	10	-1	-15	3	-3	-19	-18	39
Changes under Alternative 4	3	3	3	-15	-8	-2	-15	0	2	5	13	7
CVP and SWP Deliveries (TAF)												
CVP SOD Ag Existing Condition	27	19	27	48	56	39	54	86	137	168	121	40
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	1	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	-1	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	1	0	0	0
CVP SOD M&I Existing Condition	9	11	11	8	3	12	9	9	9	10	11	12
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
SWP Table A + Article 56 Existing Condition	197	168	151	126	121	118	179	235	265	348	336	242
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	-1	0	0	0
Changes under Alternative 3	0	0	0	1	0	-2	1	1	2	1	1	1
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	1	0	0

**TABLE C4-3:
AVERAGE MONTHLY VALUES, 2005 LOD, SEVERE FISHERY RESTRICTIONS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
SWP Article 21 Existing Condition	6	7	7	11	22	18	5	3	1	1	1	3
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	1	2	5	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Improved Fish Screening for CVP South Bay Existing Condition	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	7	10	9	5	2	8	5	3	4	6	7	9
Changes under Alternative 2	7	10	9	5	2	8	5	3	4	5	7	9
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Improved Fish Screening for SWP South Bay Existing Condition	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	5	5	9	14	12	15	10	8	10	12	15	14
Changes under Alternative 2	5	5	9	14	12	14	10	7	9	11	14	14
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
CVP South Bay Delta Supply Restoration Existing Condition	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	1	1	1	1	0	1	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
SWP South Bay Delta Supply Restoration Existing Condition	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	4	3	3	0	1	1	0	1	2	0	2	3
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Additional CVP SOD Environmental Water from Dedicated Storage Existing Condition	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	13	10	6	4	5	2	1	2	2	1	2	3
Changes under Alternative 3	1	0	0	0	0	0	0	0	0	0	2	4
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0

**TABLE C4-4:
CHANGES IN BANKS + JONES EXPORTS (CFS), 2005 LOD, SEVERE FISHERY RESTRICTIONS**

(A) Alternative 1												
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	-470	-395	-449	-163	-114	-431	-165	0	-354	-393	-426	-431
1923	-120	-241	-309	-479	-300	-470	-157	-138	-327	-377	-510	-412
1924	-164	-230	-299	-253	-214	-300	-133	-172	-194	-111	-147	-154
1925	19	-336	-128	-95	-112	-300	0	0	0	54	-410	-423
1926	-217	-250	-298	-240	-210	-300	-143	-218	0	-240	-617	-342
1927	-125	-174	0	0	0	-189	-153	0	-190	-475	-347	-446
1928	-189	-268	-340	-468	-427	-469	-62	-219	-300	-329	-240	-393
1929	-152	-236	-280	-246	-213	-385	-119	-173	-194	-371	-454	-240
1930	48	-16	-134	0	0	-406	-243	-251	0	5	-343	-421
1931	-142	-205	-275	-218	-175	-300	-32	-155	-169	-202	-91	-214
1932	-120	-97	-128	0	-47	-338	0	0	0	0	-1034	-257
1933	-130	-165	-145	631	264	-350	-193	-178	-204	-70	-258	-212
1934	20	15	96	-667	0	-381	0	-202	0	0	-200	-319
1935	-155	34	-167	-121	-126	-351	0	0	-358	3	2	-366
1936	-257	-255	-310	-281	-249	0	-156	-322	-1	-272	-594	-279
1937	-299	-239	-44	-260	-504	-508	-322	-42	-261	-413	-230	-435
1938	-183	-244	-315	-939	-489	-468	-301	-223	-470	-482	-408	-470
1939	-529	-472	-471	-470	-89	-377	-9	-289	-300	-147	-555	-431
1940	-173	-190	-323	-191	-160	-439	-165	0	0	-622	-262	-424
1941	-165	-219	-305	-307	-289	-313	-271	-248	-430	-455	-481	-470
1942	-214	-306	-376	-465	-445	-470	-169	-232	-440	-477	-481	-469
1943	-222	-302	-465	-470	-314	-364	-316	-557	-451	-494	-494	-470
1944	-233	180	-878	-470	-439	-470	-143	-5	-188	-376	-512	-430
1945	-321	-211	-276	-240	-428	43	-147	-217	-300	-507	-105	-452
1946	-184	-254	-326	-455	-890	-470	-157	-219	-313	-388	-438	-395
1947	-148	-250	-284	-254	-223	-454	-143	0	0	-391	-422	-553
1948	-148	-233	-358	-364	-300	-411	-157	0	0	-314	-391	-370
1949	-160	-228	-266	-271	-199	-435	-268	-290	0	0	-406	-445
1950	-131	-225	-309	-252	0	-431	-157	0	-182	-361	-377	-334
1951	-150	-219	-285	-486	-464	-305	-85	-220	-398	-460	-457	-463
1952	-356	-265	-336	-453	-150	-469	-261	-222	-391	-429	-461	-470
1953	-466	-477	-356	-443	-167	-179	0	-215	-385	-272	-450	-437
1954	-180	-247	-320	-454	-422	-470	-165	-105	-300	-418	-261	-421
1955	-285	-234	-303	-214	-312	-470	-143	-252	-68	-534	-537	-549
1956	-134	-195	-267	-245	0	-468	-169	-225	-446	-489	-492	-467
1957	-225	-302	-332	-470	-470	-470	-320	-49	-212	-371	-392	-432
1958	-158	-228	-292	-323	-328	-330	-349	-241	-470	-482	-470	-470
1959	-287	-472	-470	-348	-470	-470	-26	-111	-300	-179	-391	-439
1960	-153	-216	-355	-299	-249	-401	-143	-272	0	0	-330	-425
1961	-149	-221	-529	-238	-208	-325	-124	-282	0	-15	-411	-540
1962	-184	-248	-275	-149	-187	-439	-157	-294	0	1	1	-455
1963	-195	0	-321	-292	-264	-463	-169	-143	-355	-391	-263	-416
1964	-162	-235	-361	-370	-334	-414	-143	-280	-136	-378	-482	-434
1965	-183	-229	-21	0	-254	-460	0	-216	-372	-641	-748	-429
1966	-154	-239	-311	-440	-409	-470	0	-280	-300	-540	-393	-636
1967	-123	-229	-294	-264	-253	-470	-316	0	-284	-431	-470	-470
1968	-468	-480	-471	-432	-162	-179	-273	-218	-300	-445	-450	-429
1969	-133	-244	-312	-429	-89	-444	-310	-221	-470	-470	-470	-470
1970	-470	-471	-252	-471	-467	-318	-11	-216	-443	-463	-469	-458
1971	-238	-303	-374	-465	-470	-470	-169	-221	-24	-329	-345	-361
1972	-121	-188	-254	-470	-136	-178	-236	-219	-300	-504	-429	-432
1973	-138	-240	-152	-425	-408	-462	-165	-218	-391	-415	-450	-397
1974	-190	-249	-321	-492	-418	-337	-154	-222	-470	-485	-469	-470
1975	-253	-331	-400	-470	-470	-460	-169	-222	-385	-406	-440	-445
1976	-173	-249	-470	-470	-177	-168	-133	-284	-300	-533	-539	-401
1977	-159	-226	-249	311	-276	-300	0	-5	-117	-768	-78	-153
1978	-85	-87	-122	-82	-38	-308	-209	-170	-212	176	-346	0
1979	-232	-327	-247	-470	0	-327	-157	-219	-324	-429	-374	-408
1980	344	-225	-470	-774	-271	-423	-165	-222	-488	-459	-470	-470
1981	-270	-331	-400	-470	-470	-470	-58	0	-207	-475	-470	-444
1982	-135	-218	-25	-259	-463	-437	-316	-233	-470	-470	-470	-470
1983	-284	-357	-448	-470	-408	-434	-315	-238	-468	-469	-470	-469
1984	-469	-455	-451	-470	-355	-296	0	-219	-389	-464	-499	-447
1985	-176	-254	-326	-470	-343	-178	-118	-184	-300	-440	-472	-456
1986	-179	-669	-307	-408	-373	421	-316	-78	-426	-413	-209	-470
1987	-202	-563	-210	-590	-433	-470	-268	-254	0	-344	-330	-377
1988	-146	-193	-265	-227	-193	-300	-133	-186	0	244	-380	-274
1989	-175	41	-100	-117	-86	-334	-91	-293	0	3	-427	-470
1990	-283	-196	-516	-217	-181	-300	0	-151	-126	336	494	11
1991	185	-771	58	147	-78	-313	0	-143	-37	-179	-493	-210
1992	-43	-282	-138	66	-47	-248	0	-197	-79	-425	-428	-299
1993	-132	-123	-153	-130	-139	-432	0	0	0	0	-627	-435
1994	-172	-246	-313	-431	-390	-300	-94	-243	-134	-353	-428	-446
1995	21	-115	-279	-216	3	-467	-2	-187	-1	0	0	0
1996	-451	-472	-252	-466	-464	-750	-169	-228	-422	-487	-487	-469
1997	-247	-326	-395	-465	-470	-419	-159	-218	-417	-483	-469	-465
1998	-117	-281	-350	-470	-450	-349	-231	-237	-470	-470	-470	-470
1999	-467	-467	-452	-466	-351	-322	-147	-223	-416	-445	-478	-468
2000	-201	-278	-349	-470	-422	-470	-165	-220	-347	-575	-214	-412
2001	-183	-236	-301	-299	-267	-460	-143	0	0	-377	-534	-394
2002	-45	-389	-293	-240	0	-425	-143	-246	-156	0	-369	-373
2003	-158	-210	-277	0	-290	-437	-165	-228	-133	-136	-407	-408
Average	-188	-259	-295	-314	-264	-368	-147	-178	-235	-319	-393	-398

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-4:
CHANGES IN BANKS + JONES EXPORTS (CFS), 2005 LOD, SEVERE FISHERY RESTRICTIONS**

Water Year	(B) Alternative 2											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	-470	-395	-449	-163	-114	-431	-165	0	-354	-393	-426	-431
1923	-120	-241	-309	-373	-300	-470	-157	-29	-327	-377	-510	-412
1924	-164	-230	-298	-253	-214	-300	-133	-172	-194	-113	-148	-151
1925	21	-331	-124	-95	-112	-300	0	0	0	61	-407	-422
1926	-215	-249	-296	-241	-210	-300	0	-218	0	-169	-569	-333
1927	-129	-174	0	0	0	-189	-169	0	0	-429	-288	-527
1928	-151	-268	-340	-468	-427	-469	-62	-219	-300	-329	-240	-389
1929	-155	-235	-291	-246	-213	-385	-133	-173	-194	-375	-441	-246
1930	57	-19	-134	0	0	-405	-244	-250	0	-4	-351	-429
1931	-149	-210	-279	-218	-175	-300	0	-155	-169	-209	-85	-214
1932	-110	-125	-128	0	-47	-338	0	0	0	0	-1016	-257
1933	-130	-165	-143	631	251	-350	-223	-178	-203	-61	-258	-211
1934	30	-254	714	-2830	569	-381	0	-200	0	581	11	-316
1935	-212	100	-277	-120	-114	-350	0	0	-359	3	2	-426
1936	-205	-257	-312	-275	-242	0	-156	-326	-1	-238	-292	-479
1937	-150	-239	-326	-260	-456	-510	-324	-45	-119	-393	-386	-434
1938	-185	-242	-134	-664	-460	-452	-316	-221	-470	-482	-502	-470
1939	-427	-470	-470	-470	-89	-377	-10	-289	-300	-140	-548	-433
1940	-176	-188	-326	-191	-160	-439	-165	0	0	-614	-262	-424
1941	-164	-219	-305	-306	-289	-11	-272	-248	-427	-453	-481	-470
1942	-214	-306	-376	-426	-446	-470	-169	-232	-440	-472	-481	-469
1943	-222	-302	-465	-436	-314	-364	-316	-557	-451	-493	-493	-470
1944	-233	184	-882	-470	-439	-470	-143	-5	0	-376	-512	-431
1945	-325	-211	-276	-240	-428	63	-147	-14	-300	-509	-105	-452
1946	-188	-254	-261	-455	-888	-470	-157	-219	-313	-388	-433	-395
1947	-148	-258	-284	-254	-223	-454	-143	0	0	-8	-421	-554
1948	-150	-234	-482	-364	-300	-411	-157	0	0	0	-380	-827
1949	-122	-238	-340	-119	-199	-432	-268	-289	0	0	-404	-455
1950	-194	-265	-295	-248	0	-429	-157	0	0	0	-378	-370
1951	-147	-219	-242	-415	-480	-305	-85	-220	-398	-459	-457	-463
1952	-356	-265	-336	-453	-17	-469	-261	-222	-391	-429	-461	-470
1953	-466	-477	-356	-443	-167	-179	0	-215	-385	-273	-458	-437
1954	-180	-247	-320	-454	-422	-470	-165	-117	-300	-417	-261	-450
1955	-280	-234	-303	-104	-313	-470	-143	-252	0	-523	-527	-521
1956	-147	-196	-267	-245	0	-105	-169	-225	-446	-493	-495	-467
1957	-225	-302	-332	-573	-470	-470	-320	-62	-211	-368	-391	-431
1958	-157	-227	-292	-384	-279	-330	-352	-249	-470	-482	-470	-470
1959	-287	-473	-470	-348	-470	-470	-26	-118	-300	-180	-391	-439
1960	-161	-221	-357	-299	-249	-401	-143	-272	0	0	-334	-407
1961	-146	-242	-654	-238	-208	-325	-143	-281	0	15	-383	-570
1962	-197	-259	-274	-148	-187	-438	0	-294	0	1	1	-459
1963	-195	0	0	-292	-264	-464	-169	-144	-356	-390	-264	-415
1964	-163	-235	-487	-369	-333	-414	-143	-280	-142	-378	-481	-366
1965	-235	-229	-21	0	-250	-459	0	-216	-373	-652	-755	-430
1966	-127	-240	-237	-440	-409	-470	0	-280	-300	-540	-393	-641
1967	-134	-229	-293	-264	-253	-470	-316	0	-121	-431	-470	-470
1968	-468	-480	-470	-432	-162	-179	-314	-218	-300	-433	-431	-429
1969	-125	-247	-312	-429	0	-302	-316	-221	-470	-470	-470	-470
1970	-470	-471	-252	-438	-467	-318	-12	-216	-443	-464	-469	-458
1971	-236	-303	-275	-465	-470	-470	-169	-221	-24	-329	-345	-361
1972	-132	-187	-254	-3168	-211	-450	-294	-219	-302	-24	-101	-497
1973	-131	-242	-1	-423	-406	-462	-165	-218	-393	-414	-449	-400
1974	-207	-250	-323	-360	-418	-335	-169	-222	-470	-475	-470	-470
1975	-253	-330	-399	-470	-470	-460	-169	-222	-385	-405	-440	-444
1976	-173	-249	-470	-470	-177	-168	-133	-284	-300	-533	-540	-399
1977	-161	-226	-296	-214	-246	-300	0	-69	-115	-463	-122	-151
1978	-86	-101	-122	-82	-38	-300	-215	-157	-211	152	-370	0
1979	-233	-327	-231	-470	0	-185	-157	-219	-324	-430	-375	-408
1980	381	-225	-470	-812	-271	-423	-165	-222	-488	-459	-470	-470
1981	-271	-331	-400	-470	-470	-470	-58	0	-162	-475	-470	-444
1982	-135	-218	0	-259	-470	-441	-316	-233	-470	-470	-470	-470
1983	-284	-357	-448	-421	-398	-409	-316	-239	-470	-470	-470	-470
1984	-470	-456	-452	-469	-354	-296	0	-217	-389	-465	-500	-448
1985	-176	-254	-326	-470	-343	-178	-143	-185	-300	-417	-449	-457
1986	-180	-671	-307	-408	-394	423	-316	0	-332	-447	-270	-470
1987	-202	-500	-240	-565	-433	-470	-268	-254	0	-344	-330	-381
1988	-150	-193	-264	-227	-193	-300	-133	-186	0	240	-381	-274
1989	-170	31	-74	-117	-86	-334	0	-293	0	3	-427	-524
1990	-256	-196	-493	-218	-182	-300	0	-150	-126	240	430	-26
1991	147	-698	58	73	-69	-309	0	-143	-43	-193	-514	-208
1992	-39	-288	-139	71	-47	-247	0	-195	-79	-595	-500	-307
1993	-163	-38	-211	-130	-139	-432	0	0	0	-6	-637	-432
1994	-186	-245	-312	-430	-390	-300	-127	-243	-134	-354	-404	-444
1995	21	-120	-279	-216	3	-436	-2	-212	-1	0	0	0
1996	-451	-472	-252	-443	-425	-750	-169	-228	-422	-487	-487	-469
1997	-248	-326	-395	-443	-470	-419	-159	-218	-417	-483	-469	-465
1998	-117	-281	-350	-470	-450	-141	-231	-237	-470	-470	-470	-470
1999	-467	-467	-452	-466	-351	-322	-157	-244	-416	-436	-469	-467
2000	-201	-278	-349	-470	-422	-435	-165	-220	-347	-577	-214	-412
2001	-184	-236	-301	-299	-267	-460	-143	0	0	-232	-536	-392
2002	13	-468	-293	-240	0	-425	-143	-245	-156	0	-379	-372
2003	-152	-210	-277	0	-168	-437	-165	-170	-134	-175	-408	-412
Average	-186	-262	-287	-370	-252	-355	-145	-174	-222	-289	-386	-409

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-4:
CHANGES IN BANKS + JONES EXPORTS (CFS), 2005 LOD, SEVERE FISHERY RESTRICTIONS**

Water Year	(C) Alternative 3											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	0	1	0	0	0	0	0	0	0	0	-11	0
1923	111	0	0	701	0	0	0	0	0	0	4	1
1924	58	56	-7	0	0	0	0	0	0	80	59	89
1925	127	-193	2	0	0	0	0	0	0	-79	-24	540
1926	306	-24	8	0	0	0	0	0	-1	-172	-131	290
1927	-31	-1	0	0	0	0	0	0	0	1	1	81
1928	-122	0	0	0	0	0	0	0	0	-88	0	228
1929	-14	94	-141	0	0	0	0	23	0	-14	-53	20
1930	113	139	0	0	0	0	0	23	0	-74	-111	-73
1931	-53	-52	-31	0	0	0	0	0	0	-30	68	196
1932	151	209	0	0	0	0	0	0	0	0	-688	17
1933	-6	-5	-4	740	1050	0	0	0	0	-167	357	45
1934	36	159	304	201	1076	0	0	0	1	0	-73	11
1935	45	114	286	0	0	0	0	0	0	-3	-2	356
1936	46	6	105	0	2	0	0	-216	0	-76	-60	127
1937	-104	40	285	0	-101	2877	474	281	0	-587	-372	38
1938	18	0	0	859	-10	-332	35	38	0	-12	114	0
1939	53	31	16	0	0	0	0	0	0	0	0	27
1940	16	32	-1	0	0	0	0	0	0	-20	1	1
1941	-92	29	0	0	0	0	160	0	-46	-44	-11	0
1942	0	0	0	0	0	0	0	0	0	-12	-11	0
1943	0	0	0	0	-147	11	3	-26	0	24	24	0
1944	-22	521	-390	0	0	0	0	-1	0	30	7	-76
1945	-152	0	0	0	41	401	0	0	0	-33	289	-1
1946	35	0	0	0	-407	0	0	0	0	-35	0	37
1947	84	333	0	27	0	0	0	0	0	-278	-197	227
1948	215	234	387	0	0	0	0	0	0	-1	-1	52
1949	88	44	-11	128	0	0	0	23	0	0	0	192
1950	-55	-3	65	0	0	0	0	0	0	0	0	41
1951	-3	0	0	134	-93	224	0	0	0	20	0	37
1952	-90	0	0	0	0	0	0	0	0	0	0	0
1953	-2	-2	0	0	0	0	0	0	0	0	-22	0
1954	-5	0	0	0	0	0	0	0	0	-187	0	290
1955	-27	0	0	2781	0	0	0	23	2	121	92	914
1956	350	130	-1	1	-6	1	0	0	0	17	19	-4
1957	-2	-2	-163	0	0	0	0	0	0	150	1	258
1958	1	0	0	1214	0	-2	-44	0	0	-12	0	0
1959	0	-2	4	0	0	0	0	0	0	20	0	226
1960	23	16	597	0	0	0	0	0	0	0	0	814
1961	78	-86	0	0	0	0	0	15	0	-386	-331	250
1962	-179	-113	234	105	0	0	0	0	0	1	1	-145
1963	1	0	0	0	0	0	0	0	0	108	0	117
1964	0	0	-2	0	0	0	0	63	0	0	0	-231
1965	105	0	0	0	0	0	0	0	0	29	52	0
1966	22	0	0	0	0	0	0	0	0	45	0	27
1967	9	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	-1	0	0	0	0	0	0	0	149	25
1969	15	47	4086	1505	-1474	-2517	-101	24	0	169	26	0
1970	0	29	0	26	0	0	0	0	0	41	89	-5
1971	-15	0	0	0	0	0	0	0	0	0	0	0
1972	-49	6	0	0	0	0	0	0	0	39	98	0
1973	-17	0	0	0	0	0	0	0	0	1	-43	73
1974	25	0	0	-109	0	0	0	0	0	1	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	2	2	3
1977	-3	0	1255	826	-62	0	0	132	0	-604	86	0
1978	26	13	0	0	0	-5	-92	-222	-170	225	-296	0
1979	-353	-1	262	0	0	0	0	0	0	80	77	-2
1980	459	0	0	-429	0	0	0	0	71	-34	99	0
1981	102	39	0	0	0	0	0	0	0	48	39	1
1982	31	0	0	0	0	15	0	0	0	170	0	0
1983	0	0	0	0	-73	7	9	9	10	9	0	9
1984	9	8	4	0	60	745	0	0	0	10	10	17
1985	0	0	0	0	0	0	0	23	0	-29	-29	4
1986	1	22	0	0	25	-17	453	26	0	-164	262	0
1987	-5	-501	81	-32	0	0	0	0	0	-44	-9	728
1988	11	136	179	0	1	0	0	20	0	52	-40	233
1989	-13	153	160	0	0	0	0	0	0	0	0	692
1990	-272	120	-580	0	0	0	0	0	0	516	679	529
1991	214	-478	173	23	-11	0	0	0	0	18	-301	0
1992	62	-135	-1	166	0	0	0	0	0	88	-87	19
1993	-49	102	-4	0	0	0	0	0	0	-6	-453	0
1994	-11	81	-15	0	0	0	0	0	0	-4	-30	-11
1995	157	117	0	0	2	105	-1	-27	0	0	0	0
1996	0	-2	0	0	0	113	0	0	49	-23	-23	0
1997	15	0	0	0	0	310	0	0	0	0	0	0
1998	10	287	0	0	0	0	141	0	0	0	0	0
1999	16	14	0	0	7	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	48	-15	-7
2001	116	80	29	0	0	0	0	0	0	0	62	306
2002	131	-122	0	0	0	0	0	0	0	0	85	298
2003	-19	0	0	0	-117	0	0	0	0	166	-1	28
Average	21	21	87	108	-3	24	13	3	-1	-11	-7	97

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-4:
CHANGES IN BANKS + JONES EXPORTS (CFS), 2005 LOD, SEVERE FISHERY RESTRICTIONS**

(D) Alternative 4

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	0	0	0	0	0	0	0	0	0	0	-4	0
1923	-13	0	0	0	0	0	0	0	0	0	-6	0
1924	0	0	-4	0	0	0	0	0	0	3	2	95
1925	124	-178	0	0	0	0	0	0	0	58	-21	-16
1926	-50	-16	-3	0	0	0	0	0	0	4	86	8
1927	-5	0	0	0	0	0	0	0	0	0	0	-101
1928	184	0	0	0	0	0	0	0	0	-9	0	29
1929	6	-1	-7	0	0	0	0	0	0	-1	-52	16
1930	110	138	0	0	0	0	0	0	0	-8	-3	-27
1931	-16	-13	-8	0	0	0	0	0	0	-10	90	0
1932	-12	22	0	0	0	0	0	0	0	0	-8	0
1933	-4	-3	0	51	0	0	0	0	0	11	-2	1
1934	0	0	0	-1	0	0	0	0	0	0	77	-5
1935	-13	25	-64	0	0	0	0	0	0	-1	0	25
1936	-17	0	-1	0	0	0	0	0	0	-1	-1	-46
1937	43	-1	-19	0	6	1	0	0	0	2	-113	0
1938	0	0	0	116	0	0	0	0	0	-31	-3	0
1939	35	0	0	0	0	0	0	0	0	0	0	-6
1940	-6	2	-4	0	0	0	0	0	0	-4	0	0
1941	8	-11	0	0	0	0	-4	0	0	0	-144	0
1942	0	0	0	0	0	0	0	0	0	22	-4	0
1943	0	0	0	-1	0	0	0	1	0	4	4	0
1944	-2	3	3	0	0	0	0	0	0	0	0	0
1945	1	0	0	0	1	0	0	0	0	0	-62	0
1946	-94	0	0	0	171	0	0	0	0	5	0	0
1947	0	-3	0	0	0	0	0	0	0	-2	-1	-3
1948	-2	3	-30	0	0	0	0	0	0	0	0	-4
1949	0	0	3	-1	0	0	0	0	0	0	0	-7
1950	-404	1	22	0	0	0	0	0	0	4	3	69
1951	3	1	0	66	455	224	0	0	0	-112	-3	0
1952	-170	-1	0	0	2	-1	-1	0	0	0	0	0
1953	-7	-7	0	0	0	0	0	0	0	3	-10	4
1954	-2	1	0	0	0	0	0	0	0	-25	-1	7
1955	-13	0	0	2781	0	0	0	1	2	216	204	358
1956	350	59	-1	1	-6	1	0	0	0	24	25	-4
1957	-2	-1	-235	0	0	0	0	0	0	-14	1	0
1958	1	0	0	1214	0	-1	-497	0	0	-4	0	0
1959	0	-1	0	0	0	0	0	0	0	-21	0	0
1960	5	3	6	0	0	0	0	0	0	0	0	1
1961	2	0	0	0	0	0	0	0	0	-2	-2	-1
1962	-1	-1	26	-18	0	0	0	0	0	0	0	-2
1963	0	0	0	0	0	0	0	0	0	-199	0	2
1964	0	0	-18	0	0	0	0	-1	0	0	0	6
1965	-17	0	0	0	0	0	0	0	0	-1	-1	0
1966	2	0	0	0	0	0	0	0	0	-11	0	4
1967	-5	0	0	0	0	0	0	0	0	0	0	0
1968	-1	-1	-1	0	0	0	0	0	0	0	0	0
1969	-3	1	0	0	0	3	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	-9	0	-3
1971	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	-5	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	-7
1974	-5	0	0	12	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	3
1977	-3	0	1104	841	-369	0	0	0	0	-275	88	0
1978	-13	43	0	0	0	-1	-267	-51	0	86	0	0
1979	-194	-1	20	0	0	0	0	0	0	10	-194	0
1980	-10	0	0	19	216	0	0	0	0	1	0	0
1981	-5	0	0	0	0	0	0	0	0	-1	-1	-26
1982	-1	0	0	0	0	23	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	-3	-3	-3
1985	0	0	0	0	0	0	0	0	0	1	1	-3
1986	-2	4	0	0	3	-4	0	0	0	0	-60	0
1987	-4	66	-87	46	0	0	0	0	0	-3	-5	-10
1988	6	0	-2	0	0	0	0	0	0	28	14	3
1989	21	129	187	0	0	0	0	0	1	4	3	41
1990	-35	48	-110	0	0	0	0	0	0	185	451	105
1991	203	-453	173	12	-5	0	0	0	0	-18	-133	0
1992	27	-55	1	60	0	0	0	0	0	72	-19	9
1993	-9	14	0	0	0	0	0	0	0	-4	-3	-1
1994	-6	0	0	0	0	0	0	0	0	0	0	-1
1995	0	0	0	0	0	2	0	0	0	0	0	0
1996	0	-197	0	0	0	3	0	0	-4	2	2	0
1997	-10	0	0	0	0	0	0	0	0	-9	0	0
1998	17	0	0	0	0	0	8	0	0	0	0	0
1999	1	1	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	-7	1	-3
2001	0	0	0	0	0	0	0	0	0	0	-1	0
2002	3	-12	0	0	0	0	0	0	0	0	0	0
2003	-10	0	0	0	15	0	0	0	0	-2	0	4
Average	0	-5	12	63	6	3	-9	-1	0	-1	2	6

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-5:
CHANGES IN CCWD + LV DIVERSIONS (CFS), 2005 LOD, SEVERE FISHERY RESTRICTIONS**

Water Year	(A) Alternative 1											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	470	395	470	198	126	370	0	670	355	342	426	458
1923	175	402	372	459	301	472	0	646	296	371	404	459
1924	170	236	299	257	268	305	0	180	193	89	135	154
1925	-12	27	77	-12	55	300	-162	634	470	470	189	408
1926	171	237	300	275	223	300	-57	207	470	437	217	314
1927	137	273	470	470	470	349	0	670	470	270	324	458
1928	309	223	480	470	436	470	0	670	170	383	250	395
1929	165	231	295	249	279	468	0	304	197	28	238	240
1930	-40	16	59	470	470	370	0	485	470	449	295	386
1931	145	200	274	239	82	304	-181	19	-56	-8	199	214
1932	102	140	181	470	-144	489	0	524	470	470	470	286
1933	130	165	144	151	31	313	-181	184	204	379	226	212
1934	-77	-15	-21	26	470	468	0	202	387	423	190	319
1935	122	24	18	-13	131	470	0	465	287	470	429	394
1936	192	255	303	217	259	570	-34	654	470	470	296	457
1937	190	249	311	293	249	370	0	670	470	229	375	424
1938	182	381	470	433	463	469	0	670	348	482	481	478
1939	474	472	470	476	114	478	0	289	300	374	326	441
1940	173	247	315	216	179	470	-121	470	470	470	89	413
1941	174	239	425	313	302	570	0	670	320	467	481	478
1942	323	347	413	461	454	472	0	670	355	477	481	478
1943	332	342	468	466	323	451	0	670	347	482	481	458
1944	237	323	399	471	459	472	0	670	470	185	308	392
1945	150	311	326	250	474	570	-115	651	297	242	334	458
1946	171	274	592	461	419	473	0	670	324	371	386	383
1947	151	222	433	256	216	472	0	597	470	381	382	429
1948	165	239	302	263	201	404	-136	452	470	470	218	411
1949	144	218	286	170	107	464	0	458	470	470	375	418
1950	171	235	298	153	470	470	-136	470	470	190	206	459
1951	123	233	575	468	240	366	0	670	340	432	467	451
1952	179	418	393	456	470	369	0	670	297	478	481	478
1953	475	470	417	447	179	339	0	670	343	290	433	478
1954	179	316	358	459	430	370	0	663	272	398	272	449
1955	167	474	398	470	222	470	0	470	470	242	335	358
1956	134	193	313	249	460	547	0	670	297	395	481	477
1957	335	301	405	469	469	470	0	670	297	260	402	399
1958	295	381	350	325	338	467	0	661	371	482	480	478
1959	397	472	470	353	470	470	0	670	127	303	402	469
1960	153	216	284	290	197	470	0	471	470	372	287	467
1961	150	343	167	116	102	379	-162	433	470	378	338	409
1962	166	148	165	113	101	396	-136	274	470	470	366	463
1963	350	470	448	278	273	470	0	580	358	398	276	458
1964	318	295	386	374	349	470	0	467	470	356	394	412
1965	166	306	67	422	105	403	0	670	349	405	423	458
1966	164	325	430	443	418	470	0	460	491	386	404	473
1967	166	360	347	248	64	370	0	653	470	359	481	478
1968	475	471	470	446	170	431	0	670	317	407	438	421
1969	176	250	373	443	442	364	0	670	297	457	481	478
1970	473	471	314	463	471	359	0	670	344	479	481	458
1971	233	394	477	470	472	472	0	670	69	344	395	432
1972	178	188	300	477	169	433	0	670	257	406	439	495
1973	177	372	350	247	415	471	0	670	260	422	455	455
1974	381	328	379	469	432	471	0	670	347	481	481	478
1975	363	373	436	475	462	469	0	670	349	416	480	478
1976	472	391	471	477	207	267	0	316	336	289	221	260
1977	-15	83	160	175	106	309	-181	-67	-7	128	141	153
1978	86	128	158	85	44	470	0	455	470	470	470	391
1979	236	487	409	477	470	631	0	670	179	382	397	447
1980	335	300	270	565	214	472	0	670	342	481	481	458
1981	268	344	480	474	470	370	0	643	470	187	327	427
1982	161	332	470	7	470	467	0	670	357	482	481	476
1983	392	393	468	464	429	463	0	670	364	482	480	477
1984	474	466	465	471	368	332	0	670	345	423	456	458
1985	346	266	435	470	357	398	0	639	126	399	403	455
1986	179	254	396	431	406	471	-104	653	297	278	358	459
1987	202	287	363	471	454	473	0	258	470	134	325	383
1988	145	200	275	286	193	300	0	307	470	405	234	274
1989	113	32	24	-5	-59	376	-162	293	470	398	384	472
1990	185	145	182	147	190	440	-181	151	102	2	169	223
1991	96	129	115	86	47	403	0	143	16	180	191	210
1992	105	150	141	98	66	325	0	197	-60	8	457	286
1993	126	170	157	151	187	470	0	408	470	470	470	373
1994	185	261	327	477	456	480	0	243	133	343	277	243
1995	-18	93	309	215	470	270	-114	634	470	470	533	658
1996	500	472	312	465	466	472	0	670	352	482	481	478
1997	246	410	428	462	472	474	0	670	345	451	480	456
1998	237	390	403	482	467	520	0	670	297	350	481	478
1999	475	470	464	469	373	473	0	670	347	449	481	478
2000	207	339	355	477	441	518	0	670	306	398	269	412
2001	195	256	318	361	297	473	0	653	470	244	334	446
2002	185	249	416	256	470	470	0	496	259	379	365	364
2003	158	186	228	470	212	470	-121	637	161	93	297	461
Average	218	282	333	336	299	432	-28	531	334	359	366	412

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-5:
CHANGES IN CCWD + LV DIVERSIONS (CFS), 2005 LOD, SEVERE FISHERY RESTRICTIONS**

(B) Alternative 2												
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	470	395	470	419	114	370	0	670	355	342	426	458
1923	175	473	473	540	301	471	0	646	296	371	404	459
1924	168	234	298	256	344	304	0	178	190	86	132	151
1925	-15	25	323	101	44	300	-76	634	470	470	189	408
1926	171	236	300	476	239	300	-57	207	470	437	218	310
1927	134	473	470	470	470	470	0	670	470	470	324	458
1928	475	383	568	470	471	470	0	670	170	383	250	395
1929	169	235	297	250	347	476	0	485	198	28	241	246
1930	-36	19	350	470	470	370	0	488	470	449	295	389
1931	146	201	274	436	60	341	-181	22	-55	138	199	214
1932	102	140	470	470	-70	490	0	524	470	470	470	286
1933	130	165	144	351	4	344	-181	306	203	379	226	211
1934	-77	-15	-21	280	470	470	0	200	387	423	187	316
1935	121	23	17	237	114	470	0	465	288	470	429	394
1936	194	257	304	380	307	570	-34	654	470	470	533	457
1937	193	252	313	476	293	370	0	670	470	403	373	422
1938	185	484	470	459	463	469	0	670	348	482	481	478
1939	474	472	470	477	228	480	0	289	300	374	326	444
1940	176	249	317	454	172	470	-121	470	470	470	382	413
1941	182	246	476	471	391	570	0	670	320	467	481	478
1942	474	471	470	461	470	472	0	670	355	477	481	478
1943	474	469	468	466	446	471	0	670	347	482	481	458
1944	242	327	400	473	473	475	0	670	470	194	308	393
1945	154	480	478	474	476	570	-115	651	297	242	334	458
1946	175	362	678	470	419	473	0	670	324	371	386	383
1947	155	225	474	258	333	473	0	601	470	381	382	429
1948	165	238	302	351	201	403	-136	452	470	470	461	411
1949	158	228	292	173	109	471	0	473	470	470	373	431
1950	179	242	302	357	470	470	-136	470	470	470	313	459
1951	153	356	684	468	355	374	0	670	340	432	467	451
1952	199	481	477	475	470	369	0	670	297	478	481	478
1953	475	470	464	469	302	470	0	670	343	290	442	478
1954	179	469	477	474	470	370	0	665	272	398	272	449
1955	183	487	483	470	220	470	0	487	470	280	335	358
1956	147	203	476	470	460	570	0	670	297	395	481	477
1957	474	301	475	472	473	470	0	670	297	259	401	398
1958	476	549	468	465	413	472	0	661	371	482	480	478
1959	475	472	473	472	473	470	0	670	127	303	402	475
1960	161	221	288	293	300	473	0	480	470	372	290	474
1961	154	419	169	118	222	381	-162	432	470	378	337	412
1962	166	148	165	112	219	470	0	274	470	470	366	472
1963	472	470	470	672	395	470	0	580	358	398	276	458
1964	411	476	513	468	463	470	0	473	470	356	394	423
1965	177	478	446	422	315	403	0	670	349	406	420	458
1966	173	478	546	469	471	470	0	460	491	386	403	486
1967	175	480	475	455	95	370	0	653	470	359	481	478
1968	475	471	470	466	289	472	0	670	324	407	438	421
1969	184	256	485	484	442	517	0	670	297	457	481	478
1970	473	471	466	463	471	393	0	670	344	479	481	458
1971	238	477	515	470	472	472	0	670	347	344	395	478
1972	246	188	480	453	459	474	0	670	154	404	436	499
1973	178	490	350	331	467	471	0	670	262	424	458	455
1974	482	358	585	469	472	471	0	670	347	481	481	478
1975	474	472	468	478	459	469	0	670	349	417	480	478
1976	472	472	471	480	311	483	0	323	344	294	226	267
1977	-13	85	161	168	99	335	-181	-2	115	126	139	151
1978	85	127	470	154	38	470	0	455	470	470	470	391
1979	237	488	410	477	470	631	0	670	179	382	397	447
1980	442	490	270	651	331	472	0	670	342	481	481	458
1981	269	344	480	474	470	370	0	643	470	187	327	428
1982	162	491	470	277	593	467	0	670	357	482	481	476
1983	472	465	468	464	466	465	0	670	364	482	480	477
1984	474	466	465	471	471	365	0	670	345	423	456	458
1985	483	421	522	470	471	470	0	640	126	399	403	456
1986	180	255	485	489	486	471	-104	653	470	278	358	459
1987	202	287	365	472	473	476	0	260	470	133	325	388
1988	148	202	277	475	192	300	0	470	470	405	234	274
1989	113	32	24	-5	-59	376	-105	293	470	398	384	472
1990	184	145	181	344	187	470	-181	150	101	193	206	221
1991	95	128	115	86	47	470	0	143	53	179	190	208
1992	105	150	141	98	174	470	0	195	-61	8	456	284
1993	124	168	151	402	181	470	0	408	470	470	470	373
1994	185	261	327	477	471	480	0	243	133	343	277	242
1995	-18	105	466	439	470	270	-114	634	470	470	533	658
1996	500	472	464	465	466	472	0	670	352	482	481	478
1997	246	468	464	462	472	474	0	670	345	451	480	456
1998	237	495	485	482	478	520	0	670	297	350	481	478
1999	475	470	464	469	473	473	0	670	347	449	481	478
2000	207	469	354	477	480	570	0	670	306	398	269	412
2001	194	255	317	479	372	473	0	652	470	358	334	440
2002	181	245	479	478	470	470	0	497	470	379	365	364
2003	152	391	372	470	470	470	-121	637	296	93	297	459
Average	240	329	392	408	345	449	-24	538	345	373	377	413

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-5:
CHANGES IN CCWD + LV DIVERSIONS (CFS), 2005 LOD, SEVERE FISHERY RESTRICTIONS**

Water Year	(C) Alternative 3											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	0	0	0	0	0	104	0	152	-173	-51	11	8
1923	3	2	2	-13	1	2	0	213	-174	-6	11	7
1924	7	7	6	4	3	-38	0	8	-105	-120	-89	-89
1925	-119	-114	-100	-111	-65	-109	-162	-235	370	370	258	1
1926	9	7	6	5	0	-109	-57	-199	-433	337	86	15
1927	11	11	370	370	359	0	0	198	-174	-170	-3	8
1928	-2	4	-2	0	1	0	0	-149	180	12	11	8
1929	2	2	2	1	1	1	0	5	2	241	5	-20
1930	-160	-139	-128	370	370	-22	0	14	81	-170	-30	11
1931	7	5	4	-36	-121	-131	-181	-140	-226	-223	-213	-196
1932	-182	-157	-142	370	142	12	0	424	370	370	327	10
1933	6	5	4	-17	-123	-131	-181	-143	0	279	0	-45
1934	-188	-159	-147	-135	370	0	0	0	-455	323	3	17
1935	-17	-161	-148	-141	0	0	-136	-370	-71	370	329	0
1936	-8	-6	-20	-99	-11	470	-34	554	370	-91	-111	8
1937	-12	-9	-6	-3	-6	226	0	255	-173	-170	-58	8
1938	-21	-13	43	-11	-7	-1	0	144	-122	12	11	8
1939	4	2	0	-7	-7	-10	0	0	0	258	-64	-25
1940	-16	-12	-8	-5	-10	0	-121	370	-68	39	-174	-38
1941	-30	-22	-16	-4	-4	116	0	117	-150	12	11	8
1942	4	1	-12	3	0	2	0	133	-115	12	11	8
1943	4	-1	-2	-4	0	1	0	144	-123	12	11	8
1944	-26	-18	-10	-6	-6	-16	0	570	-58	-170	-39	-7
1945	-19	-17	-15	-14	-13	391	-115	150	-173	-170	-112	8
1946	-36	10	25	0	-102	96	0	168	-146	12	11	8
1947	-26	-23	-14	-11	-31	-10	0	440	-433	281	0	-50
1948	-22	-17	-16	-132	-127	-82	-136	352	370	135	-174	-37
1949	-37	-25	-17	-68	-101	-16	0	-43	370	287	-5	-44
1950	-22	-17	-13	-125	370	0	-136	187	-173	-170	-171	8
1951	-56	58	-5	-2	0	3	0	151	-130	12	11	8
1952	-38	-33	-19	-36	292	-101	0	143	-173	8	11	8
1953	5	0	-6	-1	3	0	0	150	-127	12	11	8
1954	5	1	-37	-8	0	49	0	-149	-28	207	11	8
1955	-31	-26	-40	177	-183	0	0	-46	-433	449	46	6
1956	-13	-9	-5	-15	360	-59	0	140	-173	-74	11	7
1957	4	2	-16	-5	-6	0	0	344	-173	-114	11	8
1958	-35	41	-2	-5	-16	-13	0	137	-99	12	10	8
1959	5	2	-14	-5	-15	-92	0	400	-421	171	11	-25
1960	-24	-16	-10	-16	-82	-7	0	-29	-433	272	0	-30
1961	-15	-13	-127	-128	-125	-100	-162	0	-433	278	0	-48
1962	-19	-98	-141	-137	-104	-86	-136	309	-71	370	266	-14
1963	-9	370	370	474	-1	0	0	131	-112	12	11	8
1964	-1	-1	4	-2	3	0	0	-2	67	-22	0	4
1965	4	3	2	254	-201	-67	0	-149	178	12	10	8
1966	-2	-1	3	-1	1	0	0	178	-153	12	11	-1
1967	0	0	0	-24	142	91	0	125	-175	-111	11	8
1968	5	1	0	-4	0	2	0	168	-146	12	9	8
1969	-11	-8	-8	-9	231	-106	0	145	-173	-13	11	8
1970	3	1	-4	-7	1	3	0	149	-126	12	11	8
1971	-19	-15	29	0	-93	88	0	144	-123	12	11	8
1972	5	0	-9	-9	19	4	0	168	-146	12	11	-26
1973	-9	-13	226	-184	-3	1	0	154	-131	12	11	8
1974	-29	29	-3	-1	2	1	0	143	-123	11	11	8
1975	4	2	-2	-15	14	-1	0	143	-121	12	10	8
1976	2	2	1	-8	-5	-10	0	-38	-30	-157	-249	-230
1977	-198	-165	-152	-147	-161	-144	-181	-222	-255	-265	-114	0
1978	0	0	0	-20	0	0	0	355	370	370	370	291
1979	355	8	6	3	370	374	0	167	-146	12	11	0
1980	9	9	31	-45	-4	2	0	149	-128	11	11	8
1981	8	6	4	2	0	215	0	193	-173	-170	-22	10
1982	6	7	223	-257	0	-3	0	132	-113	12	11	6
1983	2	-5	-2	-6	-4	-5	0	126	-106	12	10	7
1984	4	-4	-5	1	1	3	0	148	-125	12	11	8
1985	-7	6	-1	0	1	0	0	196	-174	12	11	-4
1986	-1	-1	-1	-1	-1	371	-104	239	-173	-170	-112	7
1987	5	2	-8	-4	-4	-11	0	-169	-433	266	0	-24
1988	-13	-10	-7	-5	-127	-144	0	0	-455	305	0	-9
1989	-23	-152	-142	-131	-161	-100	-162	-199	370	298	0	-10
1990	-7	-108	-135	-129	0	0	-181	0	-280	-214	-240	-173
1991	0	0	0	0	0	0	0	0	-28	0	0	0
1992	0	0	0	0	0	0	0	0	27	8	-34	0
1993	0	0	0	0	0	0	0	308	370	370	370	27
1994	17	18	12	6	1	9	0	0	0	0	-87	-140
1995	-156	-140	-118	-75	370	205	-114	534	370	370	433	22
1996	5	2	-6	-5	-4	2	0	137	-118	12	11	8
1997	4	-2	-6	-8	2	4	0	147	-125	12	10	8
1998	22	15	9	7	5	123	0	128	-173	-120	11	8
1999	5	0	-6	-1	3	3	0	142	-123	12	11	8
2000	5	1	3	3	5	23	0	151	-164	12	10	8
2001	14	10	8	5	6	2	0	548	-433	131	-35	20
2002	14	12	6	6	-332	0	0	26	0	279	0	0
2003	19	-78	-97	370	106	0	-121	110	-174	-171	-111	-13
Average	-13	-14	-7	0	15	16	-29	118	-96	57	8	-7

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-5:
CHANGES IN CCWD + LV DIVERSIONS (CFS), 2005 LOD, SEVERE FISHERY RESTRICTIONS**

(D) Alternative 4

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	0	0	0	0	0	0	0	0	0	14	4	3
1923	2	2	2	-7	1	1	0	0	0	13	4	3
1924	4	4	4	3	2	3	0	4	-4	-126	-95	-95
1925	-124	-117	-104	-114	-69	0	-112	-26	0	0	0	1
1926	6	5	4	3	0	0	-19	0	0	0	0	7
1927	5	5	0	0	0	0	0	0	0	0	171	51
1928	5	45	203	202	200	101	0	0	10	4	4	3
1929	4	3	2	1	1	2	0	6	2	0	7	-16
1930	-158	-138	-127	0	0	0	0	16	0	0	0	17
1931	9	7	5	-35	-120	-130	-181	-109	0	0	0	0
1932	0	0	0	0	0	9	0	0	0	0	0	9
1933	4	3	2	-18	-26	0	0	0	0	0	0	-1
1934	0	0	0	0	0	0	0	0	0	0	0	5
1935	-5	0	0	0	0	0	0	0	-71	0	0	0
1936	0	0	68	0	0	0	0	0	0	0	63	44
1937	1	1	1	0	1	0	0	0	0	0	116	172
1938	-2	-2	0	194	234	116	0	0	51	31	4	3
1939	1	1	0	1	1	1	0	0	0	0	0	7
1940	6	5	3	2	3	0	-121	-200	0	0	0	6
1941	-7	-5	-4	-1	-1	0	0	0	23	182	143	3
1942	1	0	-1	-2	0	1	0	0	8	4	4	3
1943	2	0	-1	-2	0	0	0	0	10	4	4	3
1944	-2	-1	-1	0	0	-1	0	0	0	0	0	0
1945	0	0	0	0	0	0	-115	-19	0	0	62	57
1946	-3	10	54	0	1	1	0	0	10	4	4	3
1947	1	1	0	0	-23	0	0	0	0	0	0	7
1948	5	4	-4	-118	-97	-65	-136	-200	0	0	0	0
1949	-3	-2	-1	-61	-91	-1	0	-2	0	0	0	-3
1950	-2	-1	-4	-117	0	0	0	0	0	0	2	66
1951	-3	58	214	208	202	98	0	0	43	86	4	3
1952	13	11	7	5	0	0	0	0	-26	0	4	3
1953	2	0	-2	0	1	0	0	0	10	4	4	3
1954	2	0	4	2	0	-1	0	0	-28	37	4	3
1955	14	12	10	0	-40	0	0	10	0	5	4	3
1956	11	8	5	6	0	0	0	0	0	-18	4	3
1957	1	1	0	0	0	0	0	0	0	13	4	3
1958	-3	5	-1	-2	-2	-2	0	0	9	4	4	3
1959	2	1	-3	-1	-3	0	0	0	0	21	4	-5
1960	-5	-3	-2	-11	-79	-2	0	-5	0	0	0	-2
1961	-1	0	-120	-122	-119	-92	-162	0	0	0	0	-2
1962	-1	-84	-131	-17	0	0	0	-20	0	0	0	-1
1963	0	0	0	202	214	0	0	0	61	182	184	91
1964	10	8	43	37	1	0	0	4	0	11	0	14
1965	14	11	7	0	0	-39	0	0	9	4	4	3
1966	9	7	-16	0	0	0	0	0	12	4	4	11
1967	8	7	4	-18	0	0	0	0	0	2	4	3
1968	2	0	0	-1	0	1	0	-1	10	4	3	3
1969	3	3	2	3	0	0	0	0	0	0	4	3
1970	1	0	-1	-3	0	1	0	0	10	4	4	3
1971	-4	-2	4	0	1	1	0	0	9	4	4	3
1972	2	0	-1	-1	2	2	0	0	10	4	4	0
1973	0	1	0	-2	-1	0	0	0	10	4	4	3
1974	-4	4	-1	-1	1	0	0	0	9	4	4	3
1975	1	1	-1	-1	1	0	0	0	10	4	4	3
1976	1	1	0	-1	-1	-1	0	-2	-1	-130	-226	-202
1977	-189	-160	-26	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	1
1979	193	0	0	0	0	61	0	0	28	182	184	0
1980	17	16	0	181	107	1	0	0	10	4	4	3
1981	16	11	8	3	0	0	0	0	0	0	-7	26
1982	14	15	0	-64	0	-1	0	0	9	4	4	2
1983	1	-2	-1	-2	-2	-2	0	0	9	4	4	3
1984	2	-2	-2	0	0	1	0	0	10	4	4	3
1985	-2	1	0	0	0	0	0	0	0	15	4	2
1986	2	2	1	2	2	-57	-104	-17	0	0	62	121
1987	4	1	-5	-2	-3	-7	0	-7	0	0	0	-10
1988	-6	-4	-3	-2	0	0	0	0	0	0	0	-3
1989	-20	-149	-140	-127	-149	-98	-162	0	0	0	0	-2
1990	-2	-50	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	1	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0	0	63	188
1996	193	197	209	137	-1	1	0	0	9	4	4	3
1997	1	-1	-2	-3	1	1	0	0	10	4	4	3
1998	10	7	4	3	2	0	0	0	0	-19	4	3
1999	2	0	-2	0	1	1	0	0	9	4	4	3
2000	2	0	1	1	1	0	0	0	7	4	4	3
2001	4	3	3	1	2	1	0	0	0	0	0	11
2002	7	6	3	3	0	0	0	14	0	0	0	0
2003	10	-87	-103	0	0	0	-121	-33	0	0	67	-1
Average	1	-4	1	4	2	-1	-15	-7	4	7	11	8

NOTE: Values with a grey background indicate months of Delta excess conditions.

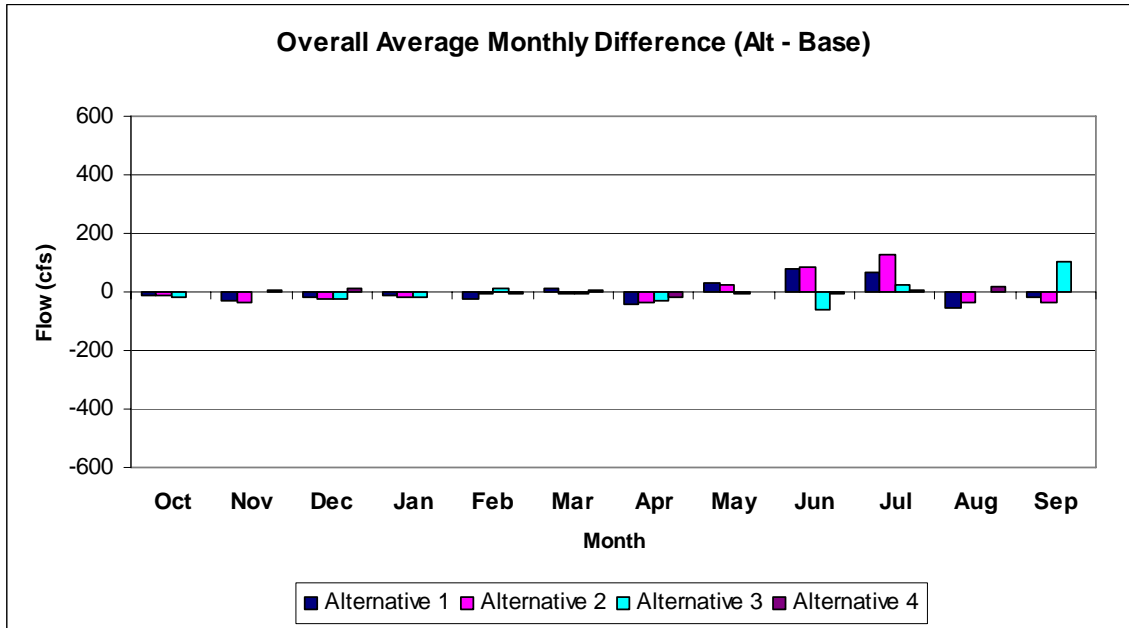


Figure C4-1: Changes in Average Monthly Sacramento River at Hood flow, 2005 LOD, Severe Fishery Restrictions

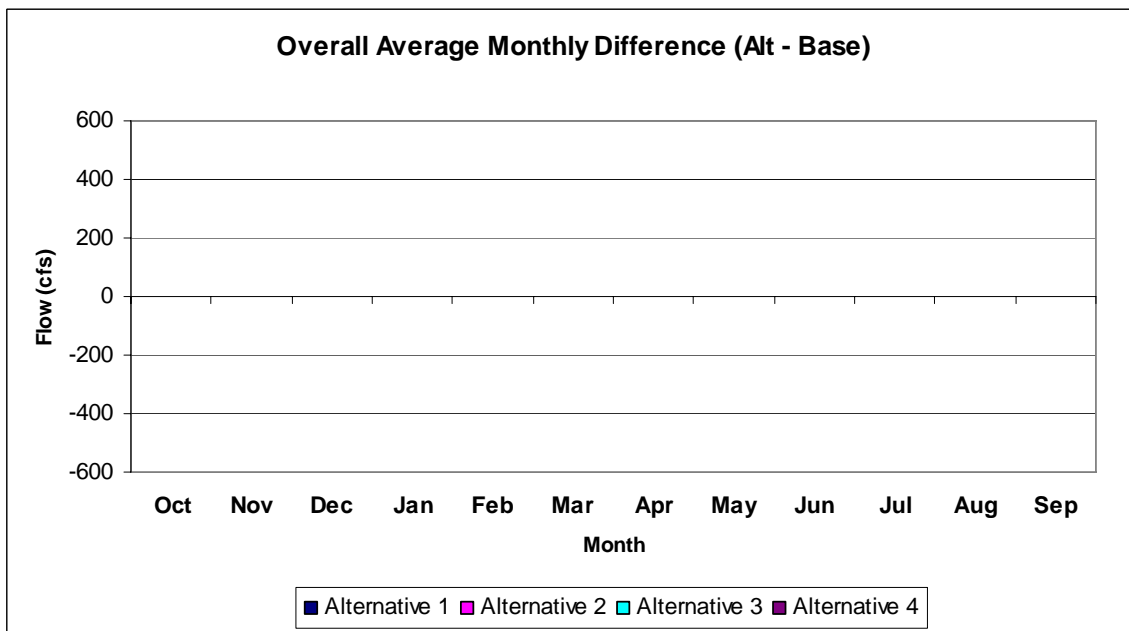


Figure C4-2: Changes in Average Monthly San Joaquin River at Vernalis Flow, 2005 LOD, Severe Fishery Restrictions

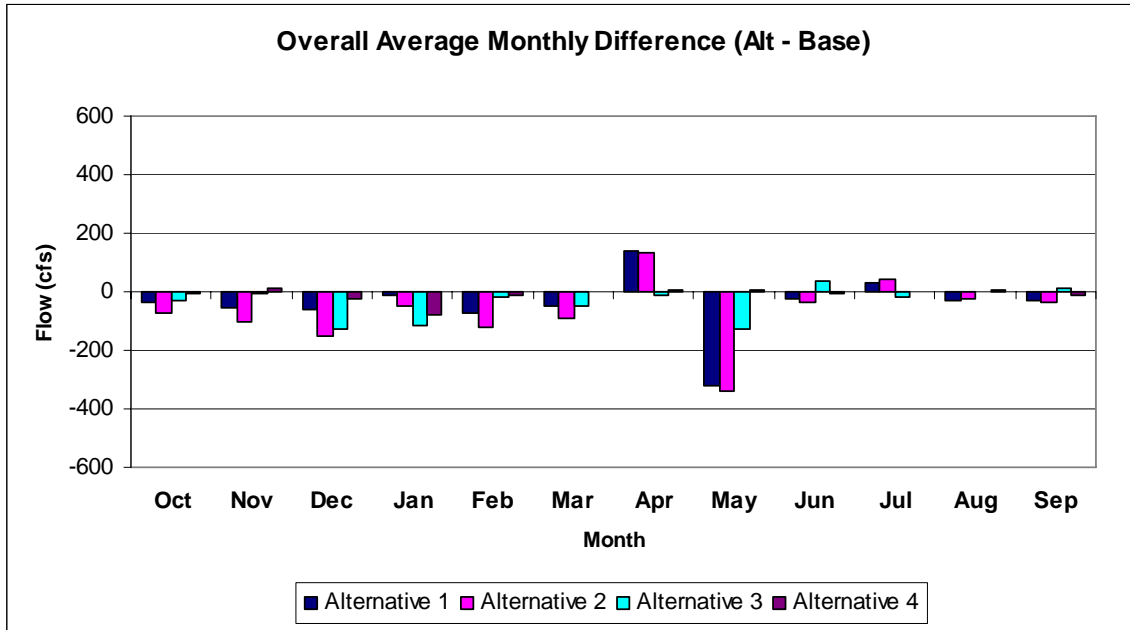


Figure C4-3: Changes in Average Monthly Delta Outflow, 2005 LOD, Severe Fishery Restrictions

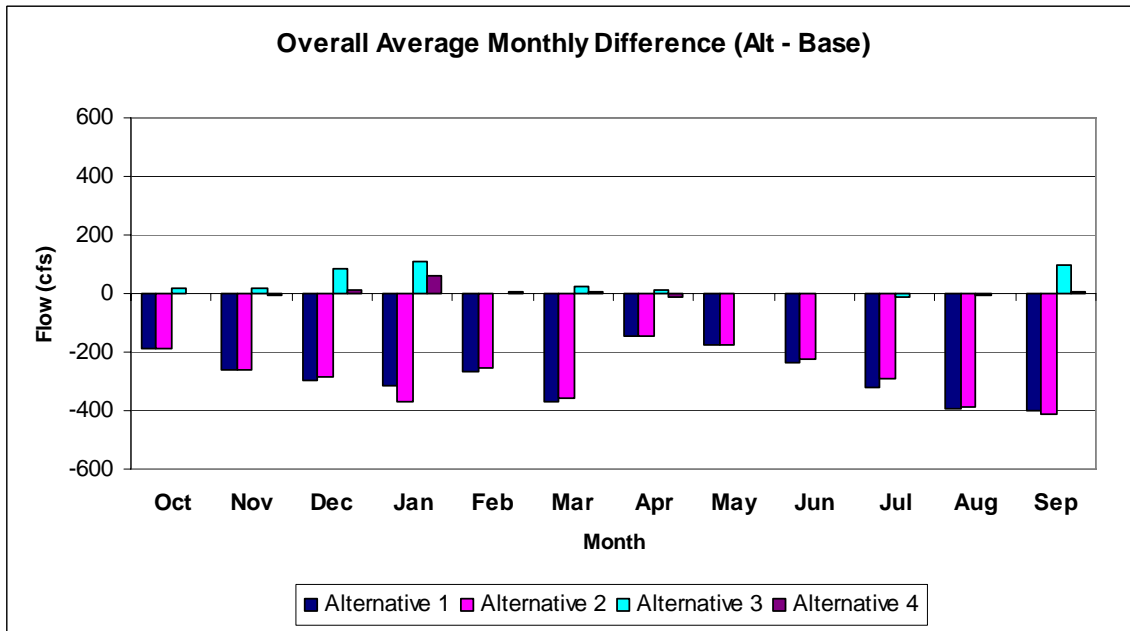


Figure C4-4: Changes in Average Monthly Banks + Jones Diversions, 2005 LOD, Severe Fishery Restrictions

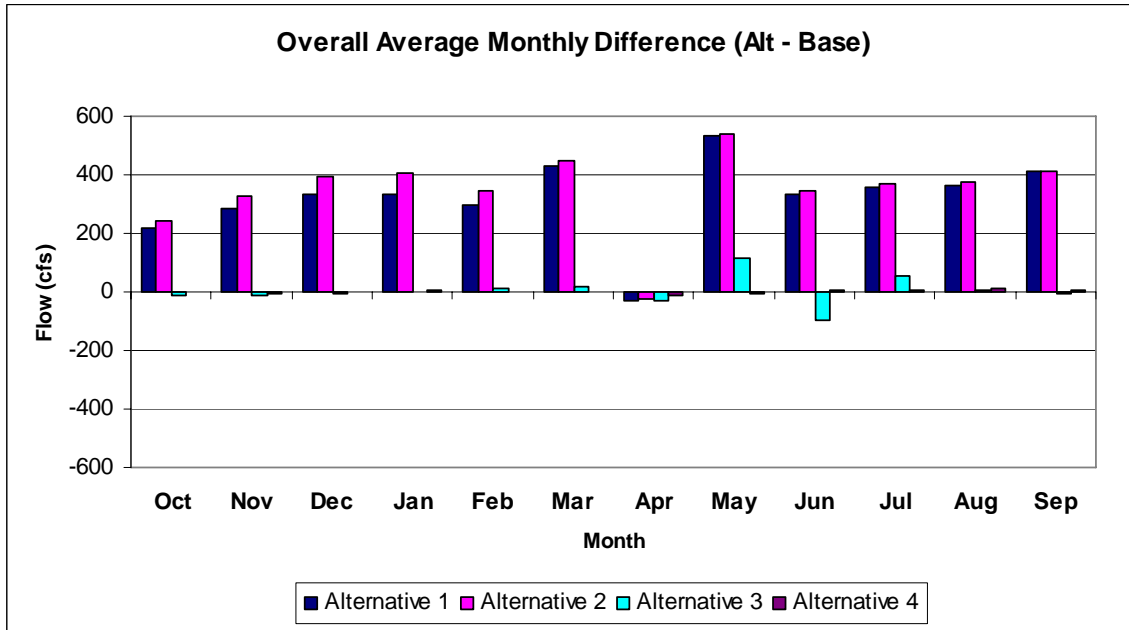


Figure C4-5: Changes in Average Monthly CCWD + LV Diversions, 2005 LOD, Severe Fishery Restrictions

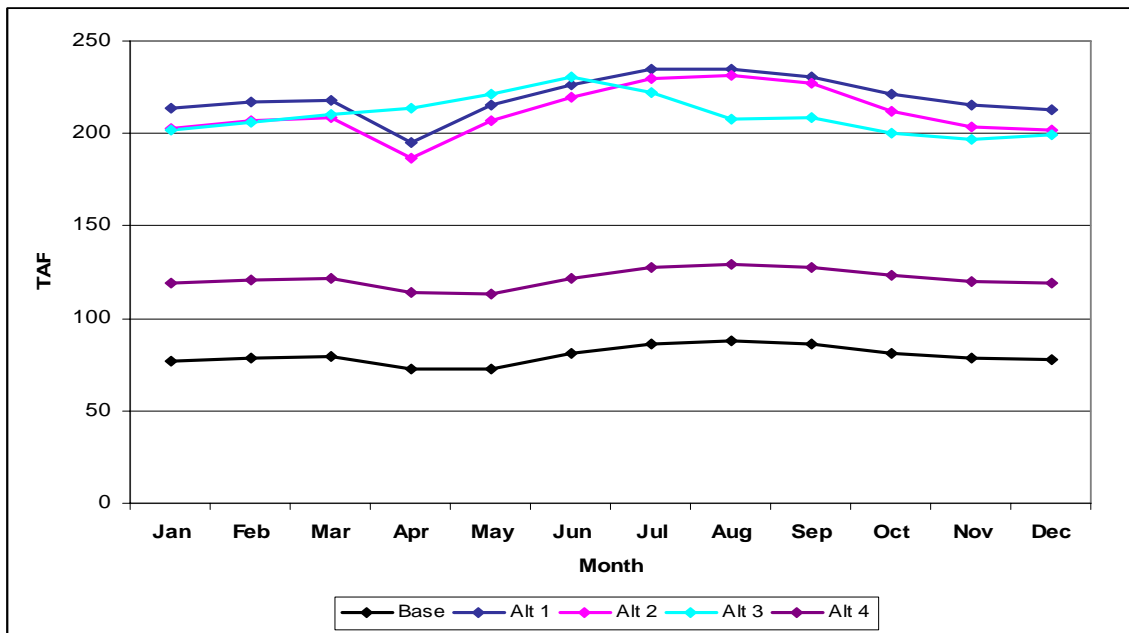


Figure C4-6: Average Los Vaqueros storage 2005 LOD, Severe Fishery Restrictions

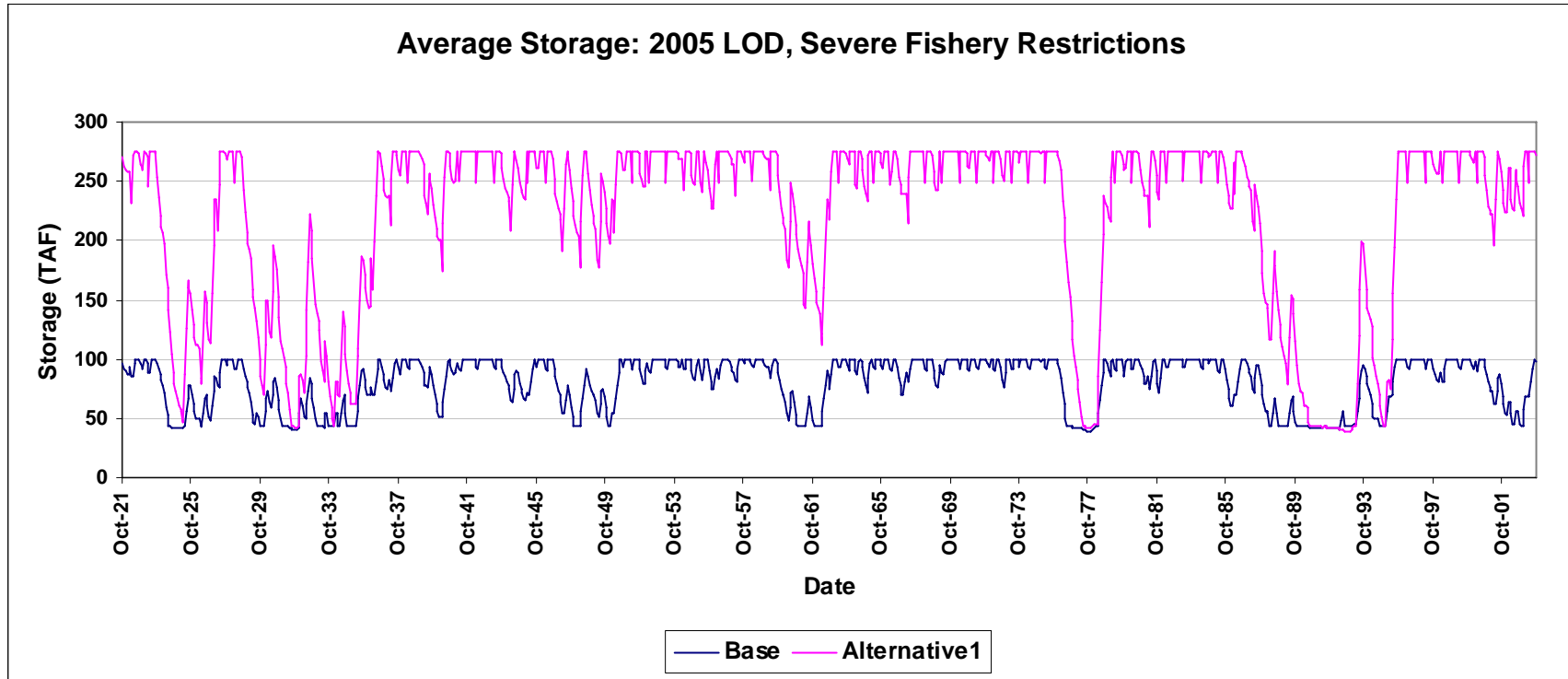


Figure C4-7: Timeseries of Alternative 1 and Base Los Vaqueros storage 2005 LOD, Severe Fishery Restrictions

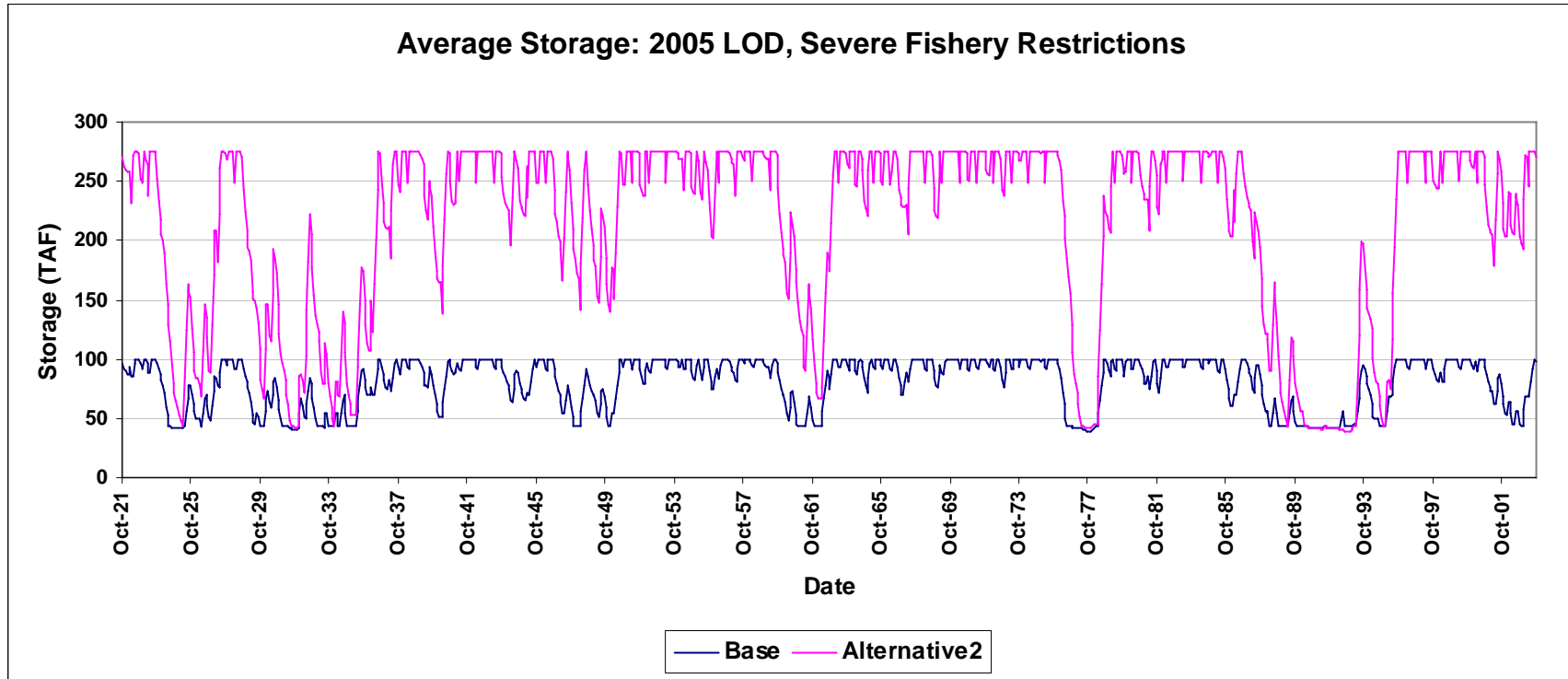


Figure C4-8: Timeseries of Alternative 2 and Base Los Vaqueros storage 2005 LOD, Severe Fishery Restrictions

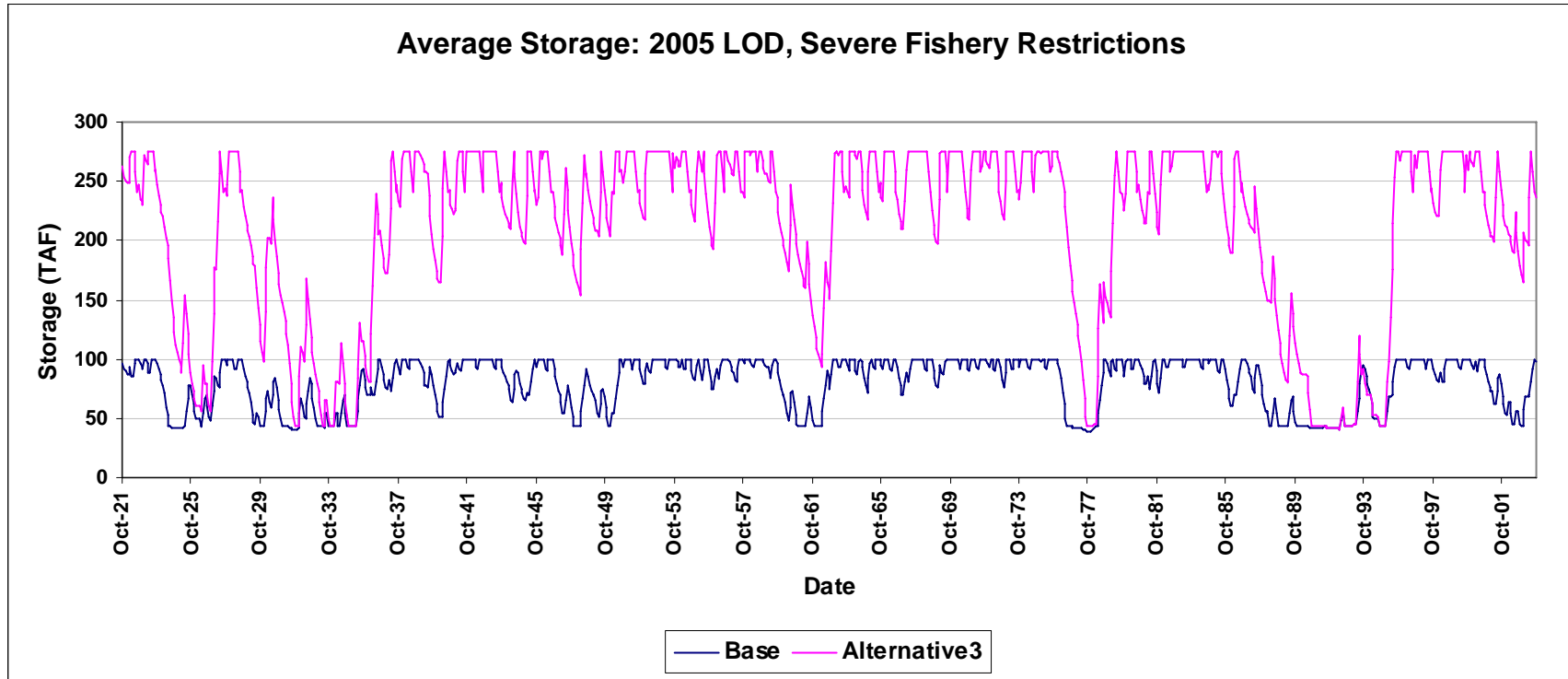


Figure C4-9: Timeseries of Alternative 3 and Base Los Vaqueros storage 2005 LOD, Severe Fishery Restrictions

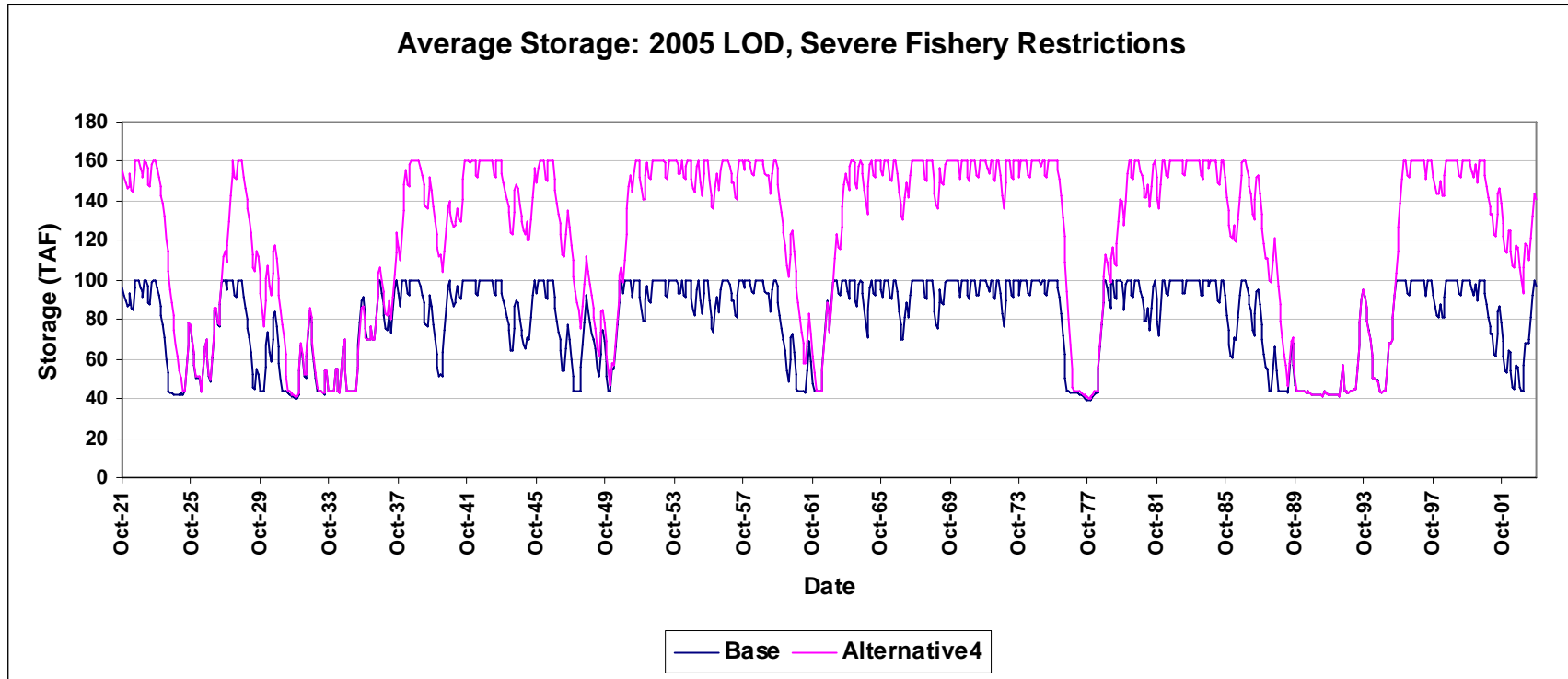


Figure C4-10: Timeseries of Alternative 4 and Base Los Vaqueros storage 2005 LOD, Severe Fishery Restrictions

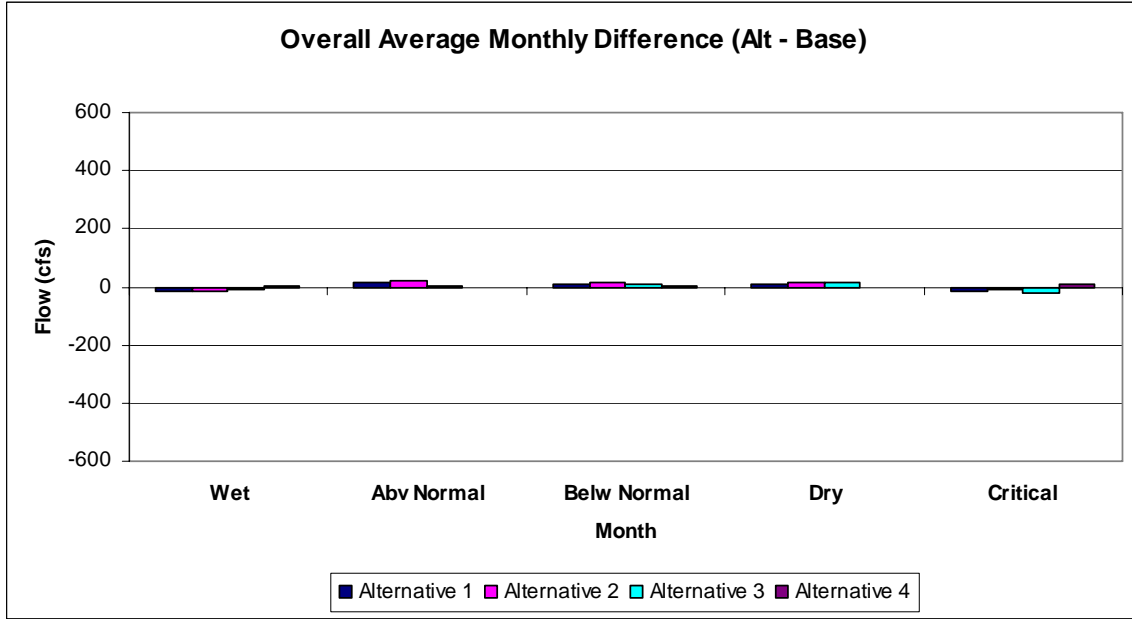


Figure C4-11: Changes in Sacramento River at Hood flow by water year type, 2005 LOD, Severe Fishery Restrictions

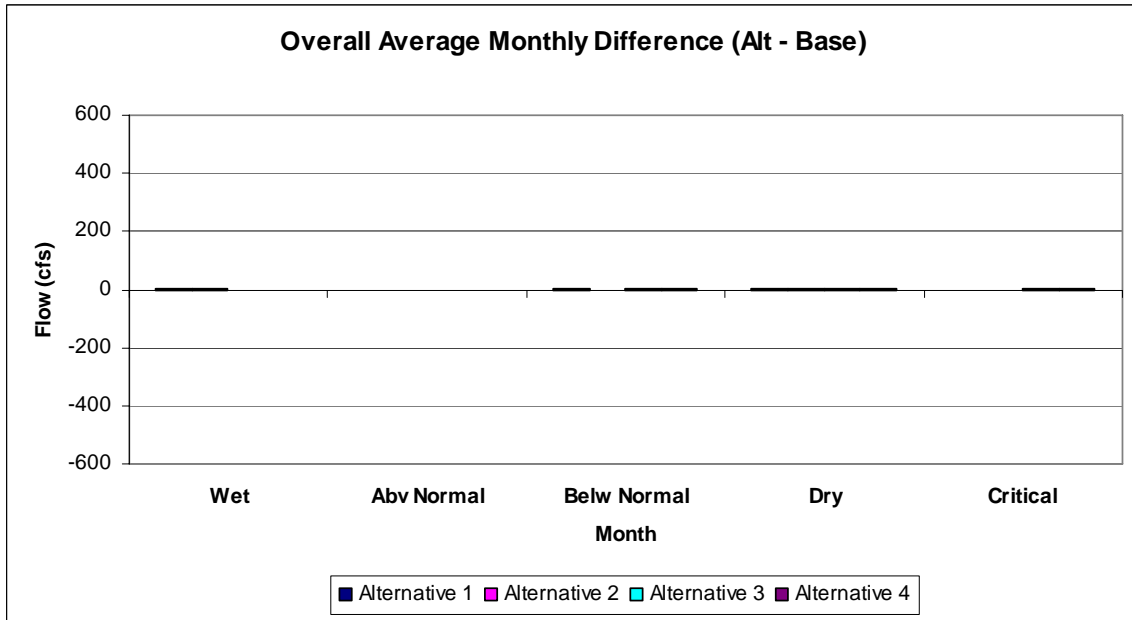


Figure C4-12: Changes in San Joaquin River at Vernalis flow by water year type, 2005 LOD, Severe Fishery Restrictions

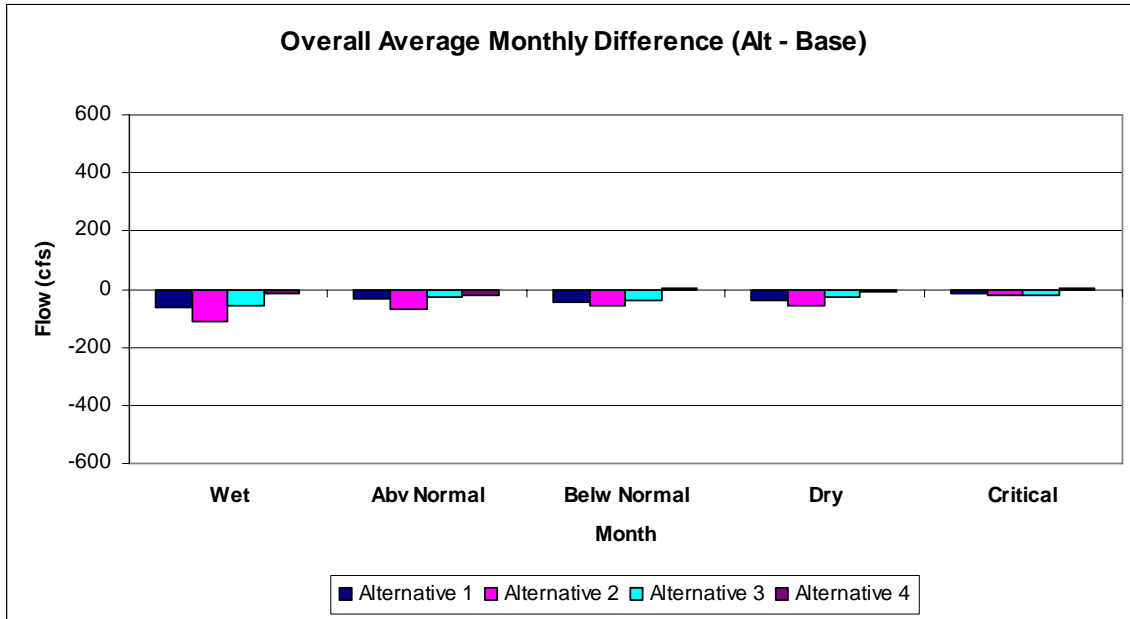


Figure C4-13: Changes in Delta Outflow by Year Type, 2005 LOD, Severe Fishery Restrictions

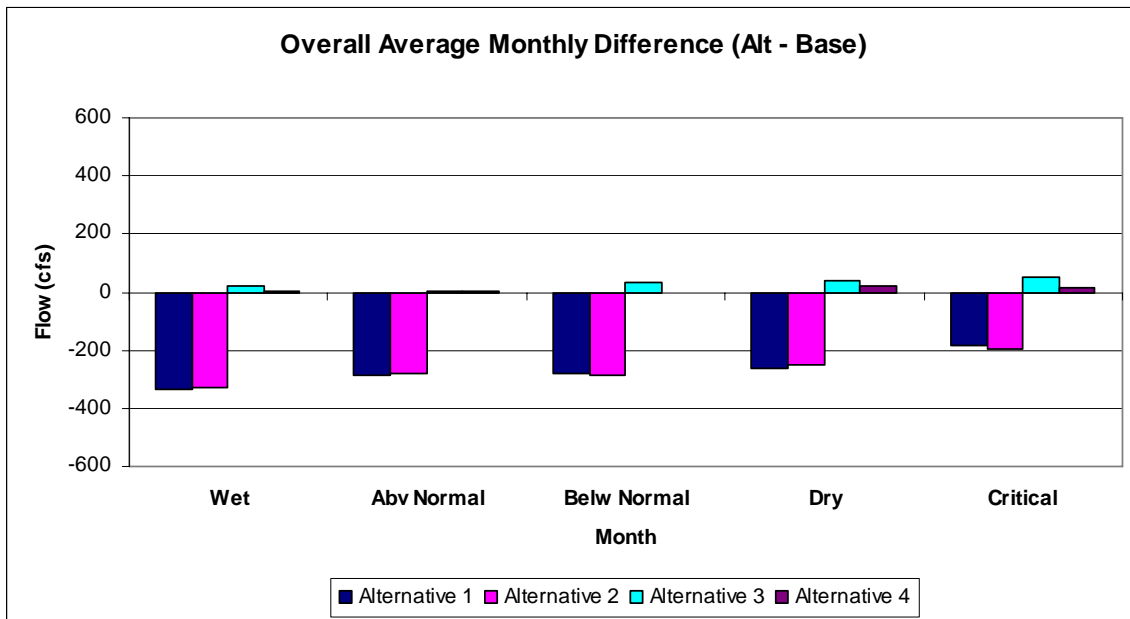


Figure C4-14: Changes in Banks + Jones Diversions by Year Type, 2005 LOD, Severe Fishery Restrictions

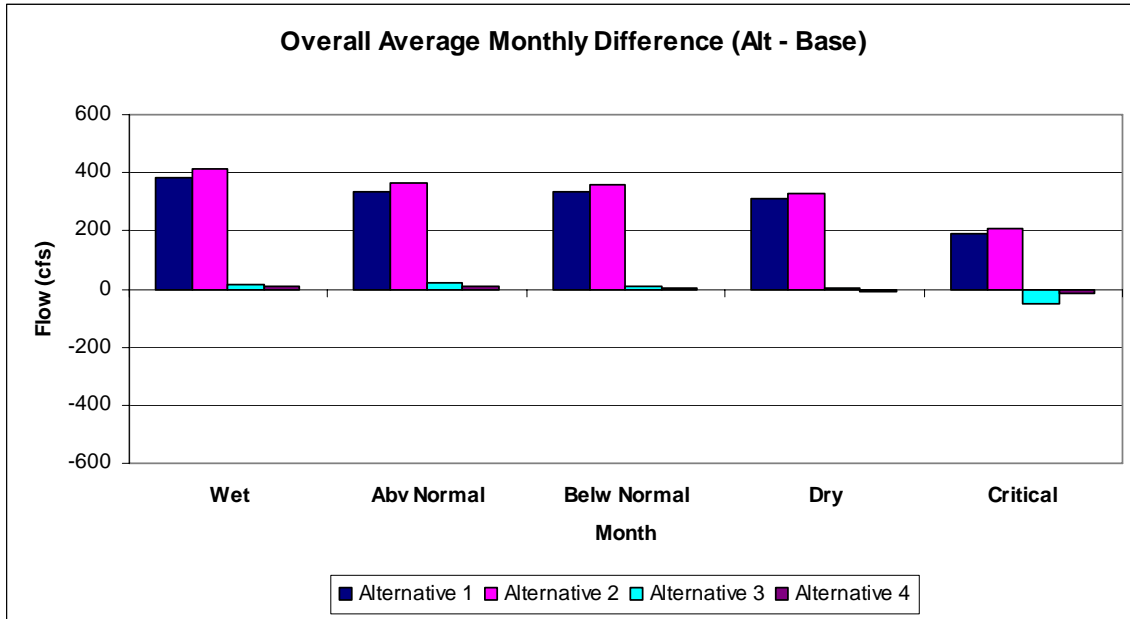


Figure C4-15: Changes in Project diversions by water year type, 2005 LOD, Severe Fishery Restrictions

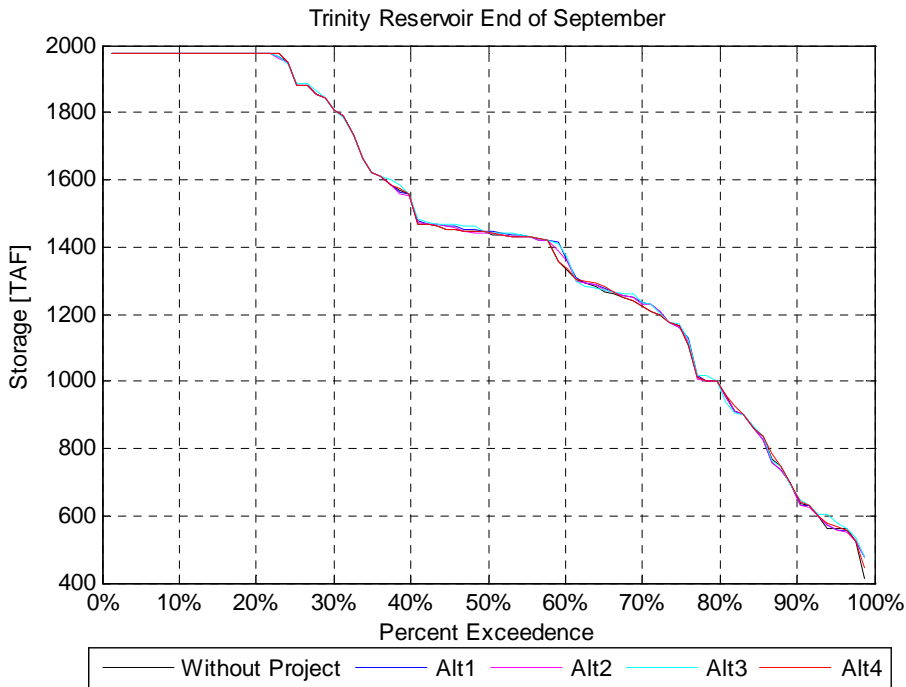


Figure C4-16: Trinity Reservoir end of September storage, 2005 LOD, Severe Fishery Restrictions

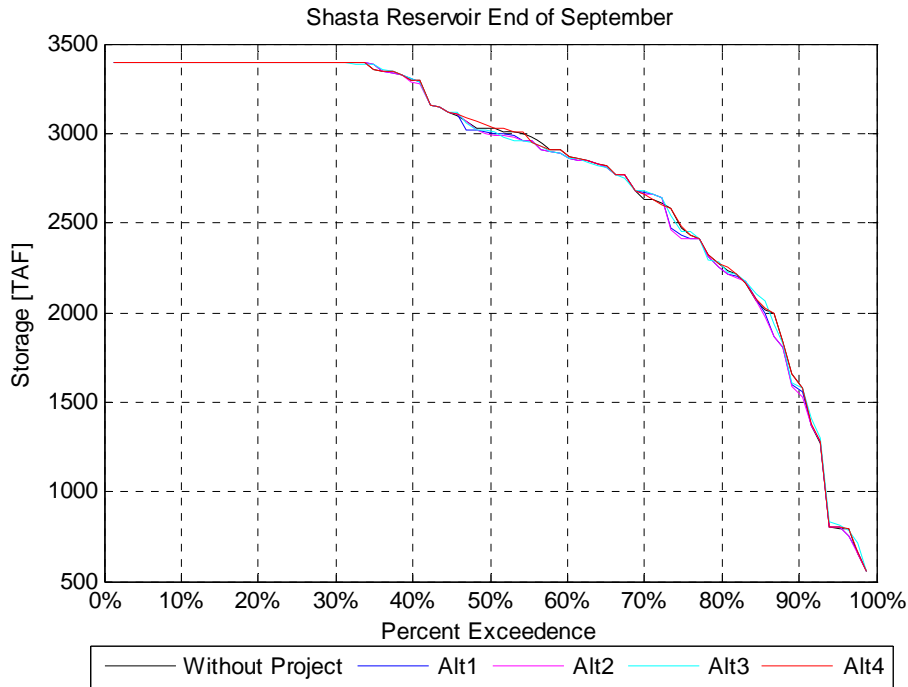


Figure C4-17: Shasta Reservoir end of September storage, 2005 LOD, Severe Fishery Restrictions

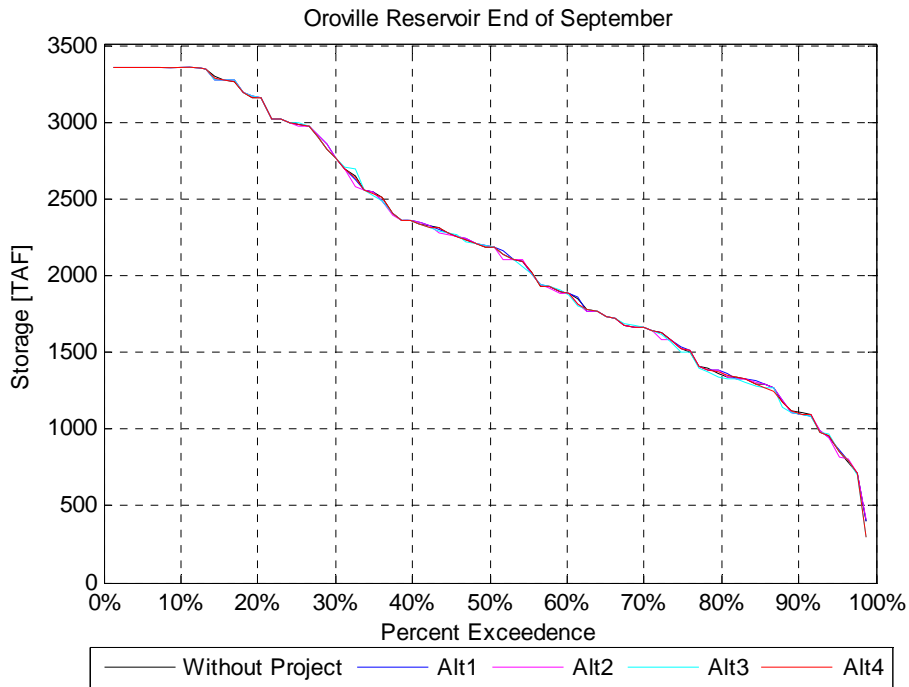


Figure C4-18: Oroville Reservoir end of September storage, 2005 LOD, Severe Fishery Restrictions

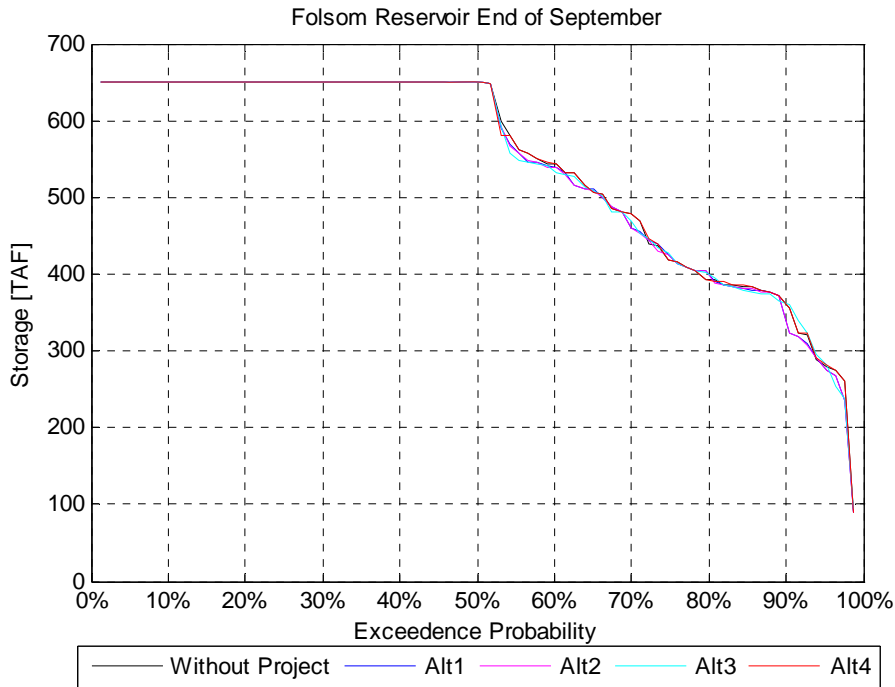


Figure C4-19: Folsom Reservoir end of September storage, 2005 LOD, Severe Fishery Restrictions

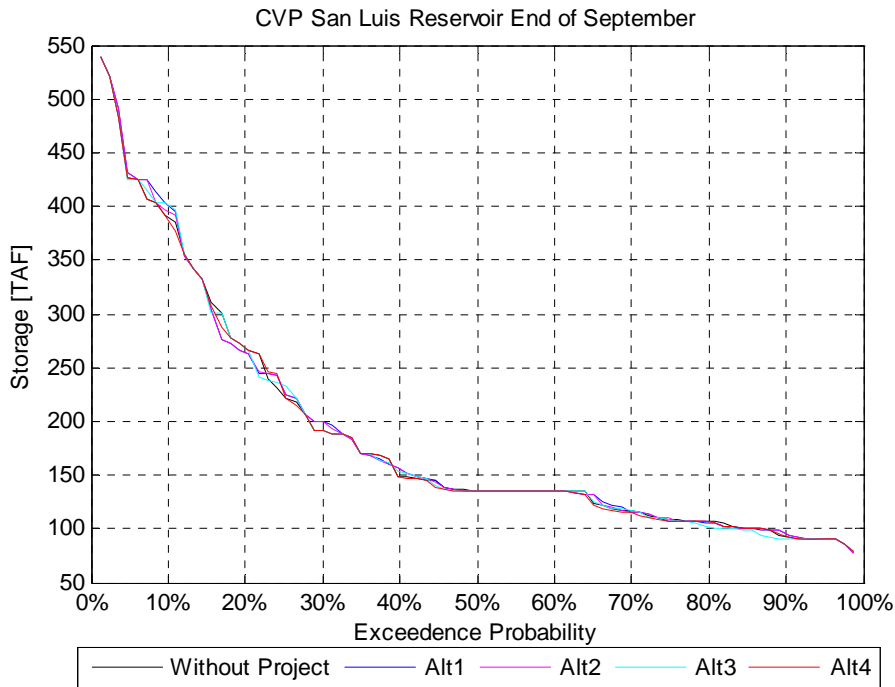


Figure C4-20: CVP San Luis Reservoir end of September storage, 2005 LOD, Severe Fishery Restrictions

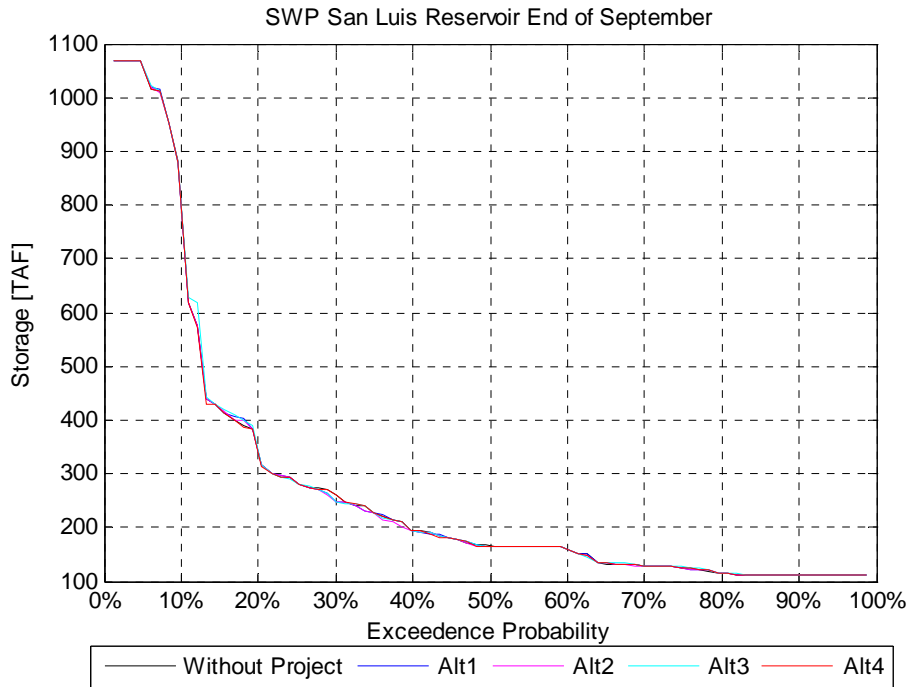


Figure C4-21: SWP San Luis Reservoir end of September storage, 2005 LOD, Severe Fishery Restrictions

2005 Level of Development, Moderate Fishery Restrictions

Model results for each project alternative are presented in **Table C4-6 (A-D)** as average values for full hydrologic study period (1921 to 2003) and a six-year dry period (1987 to 1992). These results include upstream and Delta flows and diversions (e.g. flow in Sacramento River and major tributaries, San Joaquin River flow, exports at Banks and Jones Pumping Plants, Net Delta Outflow, X2 position and QWEST), CVP and SWP south of Delta deliveries, CVP and SWP reservoir carry-over storages (at Folsom, Oroville, San Luis, Shasta and Trinity Reservoirs), and parameters specific to project alternative operations (CCWD and Los Vaqueros Reservoir (LV) diversions; additional south of Delta Environmental Water Supply deliveries; and Delta Supply Restoration deliveries to South Bay water agencies).

Table C4-7 and **Table C4-8** present the change in Delta channel flows and indices, upstream reservoir storages and local operation parameters for each project alternative as compared to the Existing Condition. Results are summarized in these tables as averages by water year type and by month, respectively.

Table C4-9 (A-D) presents the changes from the Existing Condition in monthly Banks and Jones export diversions for each project alternative, and **Table C4-10 (A-D)** presents the changes from the Existing Condition in monthly CCWD and Los Vaqueros Reservoir (LV) diversions for each project alternative. These tables also indicate whether the Delta is in excess or balanced conditions.

Monthly and year type average changes in various Delta parameters (Sacramento River flow at Hood, San Joaquin River flow at Vernalis, Delta Outflow, Combined Banks and Jones diversions, and combined CCWD and LV diversions) are presented in **Figure C4-22** through **Figure C4-26** and **Figure C4-32** through **Figure C4-36**, respectively. **Figure C4-27** shows the monthly average Los Vaqueros storage and **Figure C4-28** through **Figure C4-31** show time-series of storage for each alternative and the Existing Condition.

Figure C4-37 through **Figure C4-42** are exceedence plots of the end of September storage in upstream reservoirs (Trinity, Shasta, Oroville, and Folsom) and San Luis Reservoir (CVP and SWP).

**TABLE C4-6:
SUMMARY COMPARISON OF ANNUAL AVERAGE DIVERSIONS, DELIVERIES, RIVER FLOWS, AND
CARRYOVER STORAGE, 2005 LOD, MODERATE FISHERY RESTRICTIONS**

(A) ALTERNATIVE 1 COMPARED TO EXISTING CONDITION (NO ACTION)

	Existing Condition		Alternative 1		Difference (Alt - Ex. Cond.)		Percent Difference	
	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92
Diversions (TAF/yr)								
CCWD and LV Diversions	127	135	368	295	241	159	189%	118%
Banks Pumping Plant	2781	1597	2569	1465	-212	-132	-8%	-8%
Jones Pumping Plant	2287	1750	2287	1739	0	-11	0%	-1%
Total	5195	3482	5224	3499	29	16	1%	0%
Delta (cfs)								
Sacramento River at Hood	22,427	12,975	22,423	12,956	-4	-19	0%	0%
San Joaquin River at Vernalis	4,285	1,596	4,285	1,596	0	0	0%	0%
Delta Outflow	22,064	8,535	22,021	8,494	-43	-41	0%	0%
QWEST	2,861	43	2,820	20	-41	-24	-1%	-55%
X2 Position (km)	75.03	81.60	75.06	81.65	0.03	0.05	0%	0%
Upstream River Flows (cfs)								
Sacramento River at Keswick Dam	8,559	6,348	8,558	6,343	0	-5	0%	0%
American River below Nimbus Dam	3,492	1,667	3,492	1,666	0	-1	0%	0%
Feather River below Thermalito	4,403	2,315	4,401	2,305	-2	-10	0%	0%
Reservoir Carryover Storage (TAF)								
Trinity	1,399	780	1,397	767	-2	-13	0%	-2%
Shasta	2,749	1,615	2,744	1,606	-5	-10	0%	-1%
Oroville	2,184	1,246	2,191	1,271	7	24	0%	2%
Folsom	539	336	538	334	-1	-3	0%	-1%
CVP San Luis (August)	174	97	176	97	2	0	1%	0%
SWP San Luis (August)	255	124	253	124	-1	0	-1%	0%
Deliveries (TAF/yr)								
CVP SOD Ag	951	424	952	423	0	-1	0%	0%
CVP SOD M&I	118	100	118	100	0	0	0%	0%
SWP Table A + Article 56	2,630	1,566	2,637	1,568	7	2	0%	0%
SWP Article 21	97	0	97	0	0	0	0%	NA
Delta Supply Restoration + Dry Year	0	0	20	33	20	33	NA	NA

(B) ALTERNATIVE 2 COMPARED TO EXISTING CONDITION (NO ACTION)

	Existing Condition		Alternative 2		Difference (Alt - Ex. Cond.)		Percent Difference	
	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92
Diversions (TAF/yr)								
CCWD and LV Diversions	127	135	387	311	260	176	204%	130%
Banks Pumping Plant	2781	1597	2577	1457	-204	-140	-7%	-9%
Jones Pumping Plant	2287	1750	2287	1750	0	0	0%	0%
Total	5195	3482	5251	3518	56	36	1%	1%
Delta (cfs)								
Sacramento River at Hood	22,427	12,975	22,425	13,010	-2	35	0%	0%
San Joaquin River at Vernalis	4,285	1,596	4,285	1,596	0	0	0%	0%
Delta Outflow	22,064	8,535	21,986	8,510	-78	-25	0%	0%
QWEST	2,861	43	2,783	-9	-79	-53	-3%	-122%
X2 Position (km)	75	82	75	82	0	0	0%	0%
Upstream River Flows (cfs)								
Sacramento River at Keswick Dam	8,559	6,348	8,557	6,376	-2	28	0%	0%
American River below Nimbus Dam	3,492	1,667	3,492	1,680	0	13	0%	1%
Feather River below Thermalito	4,403	2,315	4,402	2,313	-2	-2	0%	0%
Reservoir Carryover Storage (TAF)								
Trinity	1,399	780	1,395	760	-5	-20	0%	-3%
Shasta	2,749	1,615	2,738	1,554	-11	-62	0%	-4%
Oroville	2,184	1,246	2,188	1,253	4	7	0%	1%
Folsom	539	336	536	322	-3	-14	-1%	-4%
CVP San Luis (August)	174	97	174	97	-1	0	0%	0%
SWP San Luis (August)	255	124	255	122	0	-2	0%	-2%
Deliveries (TAF/yr)								
CVP SOD Ag	951	424	952	422	0	-2	0%	-1%
CVP SOD M&I	118	100	118	100	0	0	0%	0%
SWP Table A + Article 56	2,630	1,566	2,636	1,579	6	13	0%	1%
SWP Article 21	97	0	97	0	0	0	0%	NA
Additional SOD Env Water Supply	0	0	46	51	46	51	NA	NA

**TABLE C4-6:
SUMMARY COMPARISON OF ANNUAL AVERAGE DIVERSIONS, DELIVERIES, RIVER FLOWS, AND
CARRYOVER STORAGE, 2005 LOD, MODERATE FISHERY RESTRICTIONS**

(C) ALTERNATIVE 3 COMPARED TO EXISTING CONDITION (NO ACTION)

	Existing Condition		Alternative 3		Difference (Alt – Ex. Cond.)		Percent Difference	
	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92
Diversion (TAF/yr)								
CCWD and LV Diversions	127	135	131	122	3	-13	3%	-10%
Banks Pumping Plant	2781	1597	2804	1628	23	31	1%	2%
Jones Pumping Plant	2287	1750	2292	1748	5	-2	0%	0%
Total	5195	3483	5227	3498	31	15	1%	0%
Delta (cfs)								
Sacramento River at Hood	22,427	12,975	22,423	12,997	-4	22	0%	0%
San Joaquin River at Vernalis	4,285	1,596	4,285	1,595	0	0	0%	0%
Delta Outflow	22,064	8,535	22,016	8,536	-47	2	0%	0%
QWEST	2,861	43	2,815	25	-46	-18	-2%	-41%
X2 Position (km)	75	82	75	82	0	0	0%	0%
Upstream River Flows (cfs)								
Sacramento River at Keswick Dam	8,559	6,348	8,557	6,362	-2	14	0%	0%
American River below Nimbus Dam	3,492	1,667	3,492	1,667	0	0	0%	0%
Feather River below Thermalito	4,403	2,315	4,402	2,317	-1	2	0%	0%
Reservoir Carryover Storage (TAF)								
Trinity	1,399	780	1,403	763	4	-17	0%	-2%
Shasta	2,749	1,615	2,744	1,593	-5	-23	0%	-1%
Oroville	2,184	1,246	2,191	1,271	7	25	0%	2%
Folsom	539	336	538	333	0	-3	0%	-1%
CVP San Luis (August)	174	97	177	96	2	-1	1%	-1%
SWP San Luis (August)	255	124	252	123	-3	-2	-1%	-1%
Deliveries (TAF/yr)								
CVP SOD Ag	951	424	950	419	-2	-5	0%	-1%
CVP SOD M&I	118	100	118	100	0	0	0%	0%
SWP Table A + Article 56	2,630	1,566	2,638	1,581	8	15	0%	1%
SWP Article 21	97	0	106	0	9	0	10%	NA
Additional SOD Env Water Supply	0	0	12	31	12	31	NA	NA

(D) ALTERNATIVE 4 COMPARED TO EXISTING CONDITION (NO ACTION)

	Existing Condition		Alternative 4		Difference (Alt – Ex. Cond.)		Percent Difference	
	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92
Diversion (TAF/yr)								
CCWD and LV Diversions	127	135	128	126	1	-9	1%	-7%
Banks Pumping Plant	2781	1597	2785	1597	4	-1	0%	0%
Jones Pumping Plant	2287	1750	2287	1749	0	-1	0%	0%
Total	5195	3483	5200	3471	5	-11	0%	0%
Delta (cfs)								
Sacramento River at Hood	22,427	12,975	22,421	12,956	-5	-19	0%	0%
San Joaquin River at Vernalis	4,285	1,596	4,285	1,596	0	0	0%	0%
Delta Outflow	22,064	8,535	22,054	8,531	-10	-4	0%	0%
QWEST	2,861	43	2,852	55	-9	12	0%	27%
X2 Position (km)	75	82	75	82	0	0	0%	0%
Upstream River Flows (cfs)								
Sacramento River at Keswick Dam	8,559	6,348	8,558	6,332	-1	-16	0%	0%
American River below Nimbus Dam	3,492	1,667	3,492	1,666	0	-1	0%	0%
Feather River below Thermalito	4,403	2,315	4,403	2,313	-1	-2	0%	0%
Reservoir Carryover Storage (TAF)								
Trinity	1,399	780	1,399	789	-1	9	0%	1%
Shasta	2,749	1,615	2,748	1,636	-1	20	0%	1%
Oroville	2,184	1,246	2,187	1,251	3	4	0%	0%
Folsom	539	336	539	337	0	1	0%	0%
CVP San Luis (August)	174	97	176	97	1	0	1%	0%
SWP San Luis (August)	255	124	253	125	-2	1	-1%	1%
Deliveries (TAF/yr)								
CVP SOD Ag	951	424	952	424	0	0	0%	0%
CVP SOD M&I	118	100	118	100	0	0	0%	0%
SWP Table A + Article 56	2,630	1,566	2,633	1,564	3	-3	0%	0%
SWP Article 21	97	0	97	0	1	0	1%	NA

**TABLE C4-7:
ANNUAL VALUES BY WATER YEAR TYPE, 2005 LOD, MODERATE FISHERY RESTRICTIONS**

Parameter	Long Term Average	Dry Period (87-92)	Wet	Above Normal	Below Normal	Dry	Critical
CCWD and LV Diversions (TAF/yr)							
Average Total Diversions Existing Condition	127	135	122	132	134	133	119
Changes under Alternative 1	241	159	281	253	249	231	146
Changes under Alternative 2	260	176	302	274	269	248	161
Changes under Alternative 3	3	-13	8	17	10	9	-37
Changes under Alternative 4	1	-9	8	5	3	-3	-13
Improved Fish Screening Existing Condition	0	0	0	0	0	0	0
Changes under Alternative 1	202	130	242	204	204	179	144
Changes under Alternative 2	195	127	234	200	192	171	143
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
Delta (cfs)							
Sacramento River at Hood Existing Condition	22,427	12,975	33,129	25,438	18,578	15,496	11,113
Changes under Alternative 1	-4	-19	0	27	-21	3	-30
Changes under Alternative 2	-2	35	-1	3	-34	13	5
Changes under Alternative 3	-4	22	0	22	8	18	-86
Changes under Alternative 4	-5	-19	-9	15	-1	1	-32
San Joaquin River at Vernalis Existing Condition	4,285	1,596	7,529	4,017	3,337	2,246	1,686
Changes under Alternative 1	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
Delta Outflow Existing Condition	22,064	8,535	40,180	24,043	14,617	10,505	6,857
Changes under Alternative 1	-43	-41	-39	-34	-39	-61	-35
Changes under Alternative 2	-78	-25	-88	-82	-91	-88	-23
Changes under Alternative 3	-47	2	-45	-30	-18	-42	-111
Changes under Alternative 4	-10	-4	-8	-9	-3	-18	-8
Banks Pumping Plant Existing Condition	3,833	2,206	4,933	4,076	3,740	3,241	2,207
Changes under Alternative 1	-291	-182	-358	-283	-301	-253	-203
Changes under Alternative 2	-282	-185	-341	-286	-288	-244	-201
Changes under Alternative 3	32	43	26	29	26	29	60
Changes under Alternative 4	6	-1	3	15	4	15	-7
Jones Pumping Plant Existing Condition	3,153	2,417	3,596	3,295	3,193	2,994	2,241
Changes under Alternative 1	1	-15	12	4	-24	-1	7
Changes under Alternative 2	1	3	9	0	-26	5	6
Changes under Alternative 3	7	-3	9	-2	-12	20	15
Changes under Alternative 4	1	-2	0	-3	-7	8	2
Banks + Jones Exports Existing Condition	6,986	4,623	8,529	7,371	6,934	6,235	4,448
Changes under Alternative 1	-290	-197	-346	-279	-325	-254	-196
Changes under Alternative 2	-282	-182	-332	-285	-314	-239	-195
Changes under Alternative 3	39	40	34	28	14	49	75
Changes under Alternative 4	7	-3	3	12	-3	24	-5
Banks + Jones + CCWD + LV Diversions Existing Condition	7,162	4,810	8,697	7,552	7,118	6,419	4,612
Changes under Alternative 1	41	22	42	69	17	64	4
Changes under Alternative 2	76	60	85	90	57	102	27
Changes under Alternative 3	43	20	45	50	28	61	24
Changes under Alternative 4	8	-15	13	19	1	19	-23
QWEST Existing Condition	2,861	43	7,142	2,839	1,205	-125	21
Changes under Alternative 1	-41	-24	-42	-62	-22	-63	-8
Changes under Alternative 2	-79	-53	-84	-107	-65	-98	-25
Changes under Alternative 3	-46	-18	-45	-61	-24	-59	-40
Changes under Alternative 4	-9	12	-14	-16	-2	-21	17
X2 Position (km) Existing Condition	75.03	81.60	68.64	73.21	76.51	79.24	82.64
Changes under Alternative 1	0.03	0.05	0.02	0.03	0.03	0.06	0.04
Changes under Alternative 2	0.06	0.03	0.05	0.05	0.08	0.08	0.03
Changes under Alternative 3	0.03	0.05	0.01	0.01	0.00	0.05	0.11
Changes under Alternative 4	0.01	0.00	0.01	0.01	0.00	0.02	0.00
Upstream River Flows (cfs)							
Sacramento River at Keswick Existing Condition	8,559	6,348	11,610	8,649	7,042	6,834	6,215
Changes under Alternative 1	0	-5	4	7	-14	9	-16
Changes under Alternative 2	-2	28	-1	-6	-27	16	4
Changes under Alternative 3	-2	14	-1	14	-6	16	-44
Changes under Alternative 4	-1	-16	2	0	-3	6	-15
American River below Nimbus Existing Condition	3,492	1,667	5,471	3,894	2,944	2,169	1,425
Changes under Alternative 1	0	-1	0	1	-9	7	-2
Changes under Alternative 2	0	13	-1	-6	-9	9	5
Changes under Alternative 3	0	0	-1	0	0	7	-10
Changes under Alternative 4	0	-1	0	0	0	0	-1

**TABLE C4-7:
ANNUAL VALUES BY WATER YEAR TYPE, 2005 LOD, MODERATE FISHERY RESTRICTIONS**

Parameter	Long Term Average	Dry Period (87-92)	Wet	Above Normal	Below Normal	Dry	Critical
Feather River below Thermalito							
Existing Condition	4,403	2,315	6,777	4,514	3,462	3,012	2,335
Changes under Alternative 1	-2	-10	-2	29	-6	-14	-11
Changes under Alternative 2	-2	-2	-1	19	-4	-13	-2
Changes under Alternative 3	-1	2	1	8	17	-6	-32
Changes under Alternative 4	-1	-2	3	10	1	-4	-17
Reservoir Carryover Storage (TAF)							
Trinity Existing Condition	1,399	780	1,856	1,635	1,274	1,134	719
Changes under Alternative 1	-2	-13	-1	-2	-3	-2	-3
Changes under Alternative 2	-5	-20	-1	-8	-5	-5	-9
Changes under Alternative 3	4	-17	1	4	8	5	3
Changes under Alternative 4	-1	9	-1	-1	-2	0	0
Shasta Existing Condition	2,749	1,615	3,335	3,229	2,874	2,431	1,328
Changes under Alternative 1	-5	-10	0	-2	-9	-9	-7
Changes under Alternative 2	-11	-62	0	-3	-11	-14	-37
Changes under Alternative 3	-5	-23	0	-2	-1	-15	-9
Changes under Alternative 4	-1	20	-1	0	-1	-5	7
Oroville Existing Condition	2,184	1,246	3,042	2,394	2,106	1,582	1,110
Changes under Alternative 1	7	24	1	2	1	10	26
Changes under Alternative 2	4	7	1	1	-3	7	16
Changes under Alternative 3	7	25	0	10	-5	9	32
Changes under Alternative 4	3	4	-2	-1	2	6	14
Folsom Existing Condition	539	336	646	605	590	447	318
Changes under Alternative 1	-1	-3	0	-1	0	-5	1
Changes under Alternative 2	-3	-14	0	-1	-2	-7	-5
Changes under Alternative 3	0	-3	0	0	-2	-4	6
Changes under Alternative 4	0	1	0	0	0	0	1
CVP San Luis (August) Existing Condition	174	97	240	147	150	132	152
Changes under Alternative 1	2	0	0	-2	-3	4	10
Changes under Alternative 2	-1	0	-3	-3	-8	3	9
Changes under Alternative 3	2	-1	5	-1	-2	2	4
Changes under Alternative 4	1	0	0	0	-2	3	5
SWP San Luis (August) Existing Condition	255	124	487	176	144	140	132
Changes under Alternative 1	-1	0	1	-1	-1	1	-11
Changes under Alternative 2	0	-2	4	-2	0	0	-9
Changes under Alternative 3	-3	-2	1	0	-1	-2	-14
Changes under Alternative 4	-2	1	-2	-1	0	0	-8
CVP and SWP Deliveries (TAF/year)							
CVP SOD Ag Existing Condition	951	424	1,346	1,046	923	737	355
Changes under Alternative 1	0	-1	6	3	-11	4	-7
Changes under Alternative 2	0	-2	6	3	-10	4	-9
Changes under Alternative 3	-2	-5	0	0	-10	4	-7
Changes under Alternative 4	0	0	0	-2	-1	6	-3
CVP SOD M&I Existing Condition	118	100	133	118	116	111	97
Changes under Alternative 1	0	0	0	1	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	1	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
SWP Table A + Article 56 Existing Condition	2,630	1,566	3,184	2,825	2,710	2,365	1,539
Changes under Alternative 1	7	2	1	7	2	10	19
Changes under Alternative 2	6	13	2	4	-2	13	18
Changes under Alternative 3	8	15	3	1	5	5	38
Changes under Alternative 4	3	-3	4	0	3	5	3
SWP Article 21 Existing Condition	97	0	215	97	54	19	5
Changes under Alternative 1	0	0	0	2	0	0	0
Changes under Alternative 2	0	0	-1	1	0	0	0
Changes under Alternative 3	9	0	17	1	3	5	15
Changes under Alternative 4	1	0	-2	3	0	5	0
Improved Fish Screening for CVP South Bay							
Existing Condition	0	0	0	0	0	0	0
Changes under Alternative 1	78	70	79	79	82	76	73
Changes under Alternative 2	75	71	76	76	78	73	73
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
Improved Fish Screening for SWP South Bay							
Existing Condition	0	0	0	0	0	0	0
Changes under Alternative 1	140	70	181	141	138	118	82
Changes under Alternative 2	135	69	177	139	131	113	81
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
CVP Delta Supply Restoration							
Existing Condition	0	0	0	0	0	0	0
Changes under Alternative 1	4	4	3	3	3	4	6
Changes under Alternative 2	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0

**TABLE C4-7:
ANNUAL VALUES BY WATER YEAR TYPE, 2005 LOD, MODERATE FISHERY RESTRICTIONS**

Parameter	Long Term Average	Dry Period (87-92)	Wet	Above Normal	Below Normal	Dry	Critical
SWP Delta Supply Restoration	0	0	0	0	0	0	0
Existing Condition							
Changes under Alternative 1	16	29	8	9	11	20	41
Changes under Alternative 2	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
Additional CVP SOD Environmental Water from Dedicated Storage Existing Condition	0	0	0	0	0	0	0
Changes under Alternative 1	0	0	0	0	0	0	0
Changes under Alternative 2	46	51	35	37	45	54	69
Changes under Alternative 3	12	31	1	5	16	23	23
Changes under Alternative 4	0	0	0	0	0	0	0

**TABLE C4-8:
AVERAGE MONTHLY VALUES, 2005 LOD, MODERATE FISHERY RESTRICTIONS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
CCWD and LV Diversions (TAF)												
Average Total Diversions												
Existing Condition	7	6	6	6	8	8	2	11	22	21	18	12
Changes under Alternative 1	14	17	20	21	17	27	-1	35	19	23	24	25
Changes under Alternative 2	15	20	24	25	19	29	-1	35	20	24	24	25
Changes under Alternative 3	-1	-1	-1	0	1	3	-1	8	-9	5	0	0
Changes under Alternative 4	0	0	0	0	0	0	-1	0	0	0	1	0
CVP-SWP Improved Fish Screening												
Existing Condition	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	13	16	19	20	16	23	0	11	17	20	23	24
Changes under Alternative 2	13	16	18	19	15	20	0	10	17	19	23	24
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Delta (cfs)												
Sacramento River at Hood												
Existing Condition	12,136	15,406	25,620	34,425	40,290	35,005	24,146	19,826	16,705	17,866	14,287	13,406
Changes under Alternative 1	43	9	-3	-5	-89	39	-87	65	63	39	-86	-32
Changes under Alternative 2	5	-3	-12	-23	-36	39	-84	55	82	54	-78	-23
Changes under Alternative 3	20	26	9	9	-128	75	-1	-10	-114	35	-90	120
Changes under Alternative 4	-24	-16	-1	6	-21	40	-7	9	-5	-9	-54	20
San Joaquin River at Vernalis												
Existing Condition	2,548	2,731	3,484	4,857	6,595	6,478	6,023	6,066	4,684	3,247	2,131	2,571
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Delta Outflow Existing Condition												
Existing Condition	5,216	9,457	23,899	43,760	54,987	44,781	29,264	21,649	13,342	8,461	4,492	5,456
Changes under Alternative 1	-9	-18	-37	-104	-84	-42	95	-311	29	16	-31	-18
Changes under Alternative 2	-66	-76	-115	-230	-89	-108	91	-332	24	27	-39	-24
Changes under Alternative 3	-4	28	-7	-176	-186	-128	1	-140	49	-14	1	8
Changes under Alternative 4	15	-20	2	-72	-33	-12	-1	15	-6	2	2	-8
Banks Pumping Plant Existing Condition												
Existing Condition	4,451	4,860	4,977	4,092	3,788	3,270	1,472	1,799	2,420	4,728	5,229	4,915
Changes under Alternative 1	-165	-261	-302	-269	-301	-367	-247	-171	-280	-323	-403	-409
Changes under Alternative 2	-174	-265	-310	-259	-292	-327	-246	-160	-268	-310	-377	-400
Changes under Alternative 3	20	19	36	167	44	132	34	3	-4	-30	-113	77
Changes under Alternative 4	20	1	11	46	0	29	-1	-2	-3	5	-53	18
Jones Pumping Plant Existing Condition												
Existing Condition	3,998	4,010	3,652	3,515	2,982	2,619	1,719	1,676	2,039	3,574	3,957	4,094
Changes under Alternative 1	-5	9	16	23	-5	10	88	-28	-10	-25	-40	-18
Changes under Alternative 2	-12	8	22	46	4	9	89	-30	-14	-48	-53	-14
Changes under Alternative 3	20	0	10	8	-9	16	-13	-4	-5	1	19	41
Changes under Alternative 4	-10	3	-8	27	6	12	9	1	3	-23	-15	2
Banks + Jones Exports												
Existing Condition	8,448	8,869	8,629	7,607	6,770	5,889	3,191	3,475	4,459	8,302	9,186	9,009
Changes under Alternative 1	-170	-251	-287	-245	-306	-356	-159	-199	-290	-348	-443	-428
Changes under Alternative 2	-185	-256	-288	-213	-288	-317	-157	-189	-282	-358	-430	-414
Changes under Alternative 3	40	18	46	175	34	147	21	0	-9	-29	-94	119
Changes under Alternative 4	10	4	3	73	6	41	8	0	1	-18	-69	21

**TABLE C4-8:
AVERAGE MONTHLY VALUES, 2005 LOD, MODERATE FISHERY RESTRICTIONS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Banks + Jones + CCWD + LV Diversions												
Existing Condition	8,564	8,977	8,722	7,698	6,912	6,024	3,218	3,659	4,837	8,636	9,482	9,213
Changes under Alternative 1	50	28	46	102	-3	87	-182	376	34	23	-55	-13
Changes under Alternative 2	62	73	109	201	54	152	-175	387	58	27	-39	1
Changes under Alternative 3	22	3	33	175	49	200	-2	130	-162	50	-91	112
Changes under Alternative 4	12	5	5	77	5	42	-6	-6	1	-11	-56	28
QWEST Existing Condition	-1,036	-1,104	1,354	6,195	9,051	7,891	7,564	5,840	3,552	-720	-2,684	-1,568
Changes under Alternative 1	-35	-27	-46	-103	-9	-82	170	-368	-17	-11	30	4
Changes under Alternative 2	-58	-74	-145	-205	-59	-147	164	-380	-36	-11	16	-8
Changes under Alternative 3	-15	2	-65	-173	-66	-190	2	-131	131	-39	64	-77
Changes under Alternative 4	-13	-8	-4	-77	-8	-36	5	8	-2	9	40	-22
X2 Position (km) Existing Condition	85.22	85.33	82.71	76.84	69.57	64.18	63.91	66.55	69.78	74.56	78.06	83.60
Changes under Alternative 1	0.04	0.00	0.02	0.03	0.06	0.06	0.03	-0.01	0.13	0.02	-0.02	0.04
Changes under Alternative 2	0.05	0.07	0.09	0.09	0.12	0.06	0.05	0.00	0.14	0.03	-0.03	0.05
Changes under Alternative 3	-0.02	-0.01	-0.02	0.04	0.10	0.13	0.07	0.02	0.07	-0.01	0.01	0.00
Changes under Alternative 4	0.01	0.00	0.02	0.00	0.04	0.03	0.01	0.00	-0.01	0.00	0.00	-0.01
E/I Ratio Existing Condition	0.57	0.53	0.41	0.27	0.15	0.15	0.11	0.14	0.21	0.38	0.53	0.57
Changes under Alternative 1	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00
Changes under Alternative 2	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00
Changes under Alternative 3	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Changes under Alternative 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Upstream River Flows (cfs)												
Sacramento River at Keswick Dam												
Existing Condition	6,305	5,876	7,238	8,658	10,907	8,800	7,015	7,797	10,501	13,005	10,107	6,498
Changes under Alternative 1	3	21	4	-2	-51	23	-14	29	17	10	-18	-27
Changes under Alternative 2	-43	21	1	-17	-6	25	-14	16	24	23	-20	-30
Changes under Alternative 3	10	31	-5	-9	-106	2	-3	-25	-88	25	62	77
Changes under Alternative 4	14	-13	-7	-2	-13	10	-5	8	2	-11	10	0
American River below Nimbus Dam												
Existing Condition	1,807	2,770	3,441	4,541	5,301	3,875	3,482	3,892	3,793	3,788	2,582	2,630
Changes under Alternative 1	-1	-12	2	3	-19	7	-13	8	32	19	-32	6
Changes under Alternative 2	12	-23	-2	-11	-24	11	-14	7	38	18	-25	13
Changes under Alternative 3	-3	-13	8	-6	-5	13	0	4	-24	50	-26	0
Changes under Alternative 4	-9	-3	-2	10	-3	2	-2	1	2	-6	-9	18
Feather River below Thermalito												
Existing Condition	3,367	2,492	4,357	5,576	6,565	6,730	3,148	3,758	3,806	6,195	4,694	2,153
Changes under Alternative 1	42	2	7	-3	-18	8	-58	26	15	6	-38	-13
Changes under Alternative 2	29	-3	0	0	-5	-2	-56	29	20	16	-37	-9
Changes under Alternative 3	24	9	19	11	-25	44	5	11	-1	-44	-120	48
Changes under Alternative 4	26	0	18	-1	-13	17	0	-1	-9	8	-57	3
CVP and SWP Deliveries (TAF)												
CVP SOD Ag Existing Condition	30	22	32	55	65	43	62	99	159	197	141	46
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	1	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	-1	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0

**TABLE C4-8:
AVERAGE MONTHLY VALUES, 2005 LOD, MODERATE FISHERY RESTRICTIONS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
CVP SOD M&I Existing Condition	9	11	12	8	4	12	10	9	9	11	11	13
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
SWP Table A + Article 56												
Existing Condition	207	177	163	139	134	131	190	246	307	347	340	248
Changes under Alternative 1	0	0	0	0	0	0	0	1	2	1	1	0
Changes under Alternative 2	0	0	0	0	0	0	0	1	2	1	0	0
Changes under Alternative 3	1	1	1	1	1	1	0	0	2	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
SWP Article 21 Existing Condition	6	7	9	11	23	25	5	4	1	1	1	2
Changes under Alternative 1	0	0	0	0	1	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	1	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	1	6	2	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	1	1	0	0	0	0	0	0
Improved Fish Screening for CVP South Bay Existing Condition	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	7	10	10	5	2	8	5	2	6	6	8	9
Changes under Alternative 2	7	10	9	5	2	7	5	2	5	6	7	9
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Improved Fish Screening for SWP South Bay Existing Condition	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	6	6	9	15	14	15	11	9	12	14	15	15
Changes under Alternative 2	6	6	9	14	13	14	11	8	11	13	15	15
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
CVP South Bay Delta Supply Restoration Existing Condition	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	1	1	1	1	0	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
SWP South Bay Delta Supply Restoration Existing Condition	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	4	3	3	0	0	1	0	0	1	0	2	2
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Additional CVP SOD Environmental Water from Dedicated Storage Existing Condition	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	13	9	6	5	4	1	0	1	1	0	2	2
Changes under Alternative 3	2	0	0	0	0	0	0	0	0	1	2	7
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0

**TABLE C4-9:
CHANGES IN BANKS + JONES EXPORTS (CFS), 2005 LOD, MODERATE FISHERY RESTRICTIONS**

(A) Alternative 1												
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	-470	-395	-449	-159	-112	-419	-165	-219	-405	-428	-475	-470
1923	-198	-274	-346	-521	-382	-470	-157	-195	-335	-384	-535	-424
1924	-170	-168	-312	-260	-214	-300	-251	-177	222	-267	-278	-162
1925	39	-361	-17	2845	-370	-267	0	0	0	-793	-780	-229
1926	-188	-95	-265	-226	-200	-300	-143	-135	-1	-623	-733	-601
1927	-129	-167	-1	0	-468	-204	-166	-222	-459	-456	-628	-804
1928	186	-305	-376	-468	-458	-469	-165	-210	-348	-329	-412	-632
1929	-180	-369	-4	-289	-246	-393	0	-314	-183	-209	-399	-268
1930	-105	-194	-136	0	0	-399	337	-220	-112	-386	-947	-206
1931	-133	-179	-239	-199	-169	-291	-249	-193	606	773	233	-83
1932	-136	173	-132	0	-122	-377	111	0	-146	0	500	-42
1933	-137	-176	102	-53	-32	-353	-249	-192	0	-243	-299	-288
1934	-10	-218	554	-666	-127	-384	0	-206	0	37	-255	-328
1935	-162	-135	276	-147	-131	-352	0	0	191	-905	-788	-428
1936	-206	-273	-316	-152	-121	0	-294	-361	-372	-340	-436	-429
1937	-189	-239	-310	-235	-270	-470	-329	-165	-1103	-398	-1036	-629
1938	-189	-249	-320	585	-463	-232	-304	-221	-470	-482	114	-470
1939	-1041	-470	-470	-470	-278	-179	-240	-310	-394	-124	-433	-431
1940	-101	-168	-339	-193	-161	0	-167	0	-387	-202	-438	-460
1941	-225	-307	-318	-319	-305	-354	-316	-248	-469	-479	-480	-470
1942	-240	-325	-394	-467	-464	-470	-248	-232	-470	-482	-480	-470
1943	-254	-464	-465	-470	-319	-401	-316	-641	-470	-470	-470	-470
1944	207	86	-1013	-470	-467	-470	-143	-93	-330	-390	-409	-717
1945	-612	-237	-301	-282	-419	321	-157	-217	-433	-753	-253	-473
1946	-237	-288	-358	-470	-871	-470	-157	-219	-338	-460	-537	-363
1947	-133	-245	-305	-270	-232	-455	-143	24	-117	-430	-552	-458
1948	-182	346	-611	-204	0	-347	-140	-228	-217	-396	-413	-240
1949	-196	-236	-231	-350	-208	-433	-286	-289	0	-77	-328	-363
1950	-106	-194	-322	-248	0	-400	-157	-218	-318	-457	-451	-325
1951	-129	-221	-286	-462	-223	-742	-163	-220	-442	-446	-469	-470
1952	-244	-302	-372	-443	-241	-468	-316	-222	-428	-456	-470	-470
1953	-471	-470	-243	-409	-406	-183	-157	-223	-416	-437	-495	-466
1954	-206	-267	-339	-470	-459	-470	-165	-197	-393	-427	-448	-413
1955	-157	-252	-323	2560	-404	-470	0	-223	-720	-500	-356	-836
1956	-126	-218	-210	438	2	-125	-169	-225	-470	-467	-470	-469
1957	-260	-333	-400	-470	-470	-470	-320	-227	-355	-441	-423	-421
1958	-187	-259	-323	-1497	-394	-371	241	-284	-470	-482	-470	-470
1959	-347	-472	-469	-348	-470	-470	0	-300	-362	-546	-375	-411
1960	-215	-198	-337	-412	-352	-470	-279	0	0	-156	-191	-345
1961	-73	-200	-542	-226	-201	-429	0	-291	-10	333	-420	-462
1962	-254	-628	-199	-369	-238	-456	-157	-300	0	-409	-94	-429
1963	-169	-246	-318	-423	-391	-469	-169	-236	-348	-379	-410	-418
1964	-61	-239	-340	-320	-283	-470	-134	-292	-334	-401	-434	-624
1965	43	-237	-21	-126	-206	-444	-169	-195	-576	-275	-428	-421
1966	-145	-234	-306	-414	-384	-470	-157	-236	-371	-453	-394	-434
1967	-162	-242	-314	-417	-404	-132	-316	-240	-401	-431	-468	-474
1968	-455	-469	-456	-438	-163	-323	-381	-218	-427	-380	-470	-451
1969	-215	-291	-359	1042	-1390	-529	-303	-208	-470	-470	-470	-470
1970	-470	-458	-252	-459	-467	-329	-10	-216	-470	-394	-468	-469
1971	-190	-328	-398	-467	-470	-470	-169	-221	-213	-390	-407	-424
1972	-171	-238	-300	-272	-235	-470	-314	-219	-373	-554	-530	-435
1973	41	-247	-290	-416	-397	-462	-165	-218	-438	-441	-479	-449
1974	-217	-286	-357	-466	-470	-365	-169	-222	-470	-495	-469	-460
1975	-275	-352	-420	-470	-470	-460	-169	-222	-430	-448	-470	-471
1976	-213	-288	-470	-470	-200	-172	0	-301	-381	-607	-605	-430
1977	-160	-104	-312	-232	-300	-335	-208	-113	-37	-132	-1503	-356
1978	2144	496	-123	-83	-170	-373	-1	1	1	-51	-469	1
1979	-280	-363	-408	-367	0	-414	-73	-219	-354	-498	-472	-404
1980	-144	-239	-307	-441	-316	-425	-309	-222	-470	-469	-469	-469
1981	-253	-248	-404	-470	-470	-212	0	-266	-345	-385	-392	-755
1982	-115	-235	-77	-316	-463	-449	-319	-233	-470	-469	-470	-470
1983	-284	-357	-497	-470	-390	-435	-316	-239	-470	-470	-470	-470
1984	-470	-456	-451	-470	-354	-396	0	-217	-429	-450	-467	-435
1985	-153	-287	-358	-470	-463	-470	0	-217	-377	-527	-557	-421
1986	-79	-221	-313	-416	-382	-36	-316	-123	-421	536	-1168	-470
1987	-209	-284	103	-1438	-425	-470	-344	0	-330	-334	-364	-493
1988	-169	-229	-298	-248	-208	6	-133	-375	-171	-230	-195	-245
1989	-122	-153	-199	-112	-58	-302	-225	0	0	-17	-295	-483
1990	-232	-365	-312	-288	-246	0	-244	-156	57	-128	-264	-216
1991	81	-30	45	55	-48	-319	0	-152	-166	-693	-196	-216
1992	-107	-97	-187	-75	-49	-265	0	158	0	257	-478	-263
1993	-86	-21	-31	-111	-139	-444	-23	0	0	-27	-685	-475
1994	-53	-267	-320	-467	-434	-468	-133	-289	-233	-406	-425	-396
1995	-273	-135	-321	-253	3	-469	-558	0	0	0	0	-422
1996	-419	-472	-252	-467	-464	-464	-169	-228	-497	-455	-455	-469
1997	-273	-346	-415	-467	-470	-419	-169	-218	-411	-448	-469	-469
1998	-151	-295	-349	-470	-440	-355	-253	-237	-470	-470	-470	-470
1999	-470	-470	-452	-466	-365	-331	-166	-223	-451	-465	-465	-469
2000	-231	-330	-330	-470	-454	-470	-8	-367	-392	-355	-380	-442
2001	-177	-228	-310	-427	-381	-13	-143	-220	-318	-434	-466	-545
2002	-223	-572	-285	-242	0	-428	-143	-252	-183	-442	-445	-433
2003	-194	-190	-269	-56	-240	-447	-165	-232	-230	-307	-283	-491
Average	-170	-251	-287	-245	-306	-356	-159	-199	-290	-348	-443	-428

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-9:
CHANGES IN BANKS + JONES EXPORTS (CFS), 2005 LOD, MODERATE FISHERY RESTRICTIONS**

Water Year	(B) Alternative 2											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	-470	-395	-449	-159	-112	-408	-165	-219	-405	-428	-475	-470
1923	-198	-274	-346	-364	-382	-470	-157	-122	-335	-384	-535	-424
1924	-170	-150	-311	-260	-214	-300	-254	-174	213	-271	-282	-159
1925	41	-359	-259	2845	-133	-300	0	0	0	-793	-965	-114
1926	-221	-121	-263	-225	-199	-300	-143	-128	-1	-593	-710	-566
1927	-135	-169	-1	0	0	-9	-169	-222	-459	-456	-522	-804
1928	182	-304	-375	-468	-458	-469	-165	-210	-348	-331	-412	-629
1929	-172	-369	5	-290	-246	-394	0	-312	-179	-204	-396	-255
1930	-98	-188	-136	0	0	0	337	-1	-112	-381	-943	-207
1931	-131	-177	-237	-199	-169	-291	-249	-193	616	756	222	-74
1932	-234	42	-132	0	-121	-375	108	0	-148	0	257	-38
1933	-135	-173	208	-71	-56	-353	-249	-192	0	-243	-320	-285
1934	-5	-223	562	-675	-127	-385	0	-206	0	34	-254	-328
1935	-162	-134	277	-147	-131	-352	0	0	191	-896	-778	-430
1936	-208	-275	-316	-151	-121	0	-294	-362	-372	-70	-688	-428
1937	-195	-239	-310	-261	462	-478	-329	-167	-1094	-387	-1200	-629
1938	-195	-249	-167	1052	-463	-167	-317	-222	-470	-482	114	-470
1939	-1044	-471	-470	-470	-278	-179	-287	-310	-394	-86	-427	-429
1940	-82	-152	-342	-194	-162	0	-167	0	-387	-424	-438	-457
1941	-98	-188	-318	-347	-332	0	-316	-240	-447	-457	-481	-470
1942	-241	-325	-395	-426	-457	-470	-248	-232	-470	-482	-480	-470
1943	-254	-464	-465	-436	-321	-401	-316	-642	-470	-470	-470	-470
1944	215	87	-1019	-470	-467	-470	-143	-92	-91	-390	-409	-726
1945	-623	-237	-301	-282	-419	433	-157	-125	-432	-756	-255	-473
1946	-242	-288	-307	-470	-868	-470	-157	-219	-338	-460	-537	-363
1947	-133	-246	-305	-270	-232	-455	-143	26	0	-294	-558	-456
1948	-190	-249	-315	-190	0	0	-157	-224	-217	-393	-411	-236
1949	-195	-236	-238	-345	-208	-433	-286	-290	0	156	-268	-339
1950	-76	-172	-338	-249	0	0	-157	0	-271	-532	-516	-323
1951	-138	-220	-240	-439	-223	-743	-163	-220	-442	-446	-469	-469
1952	-150	-303	-373	-449	-262	-469	-316	-222	-428	-456	-470	-470
1953	-468	-468	-243	-405	-411	-183	-132	-223	-416	-439	-494	-468
1954	-206	-268	-339	-470	-460	-470	-165	-197	-393	-428	-448	-403
1955	-154	-252	-324	2679	-405	-470	0	-223	-720	-500	-359	-836
1956	-132	-217	-209	424	2	99	-169	-225	-470	-467	-470	-469
1957	-260	-333	-400	-470	-470	-470	-320	-227	-355	-441	-423	-421
1958	-187	-259	-323	-283	-452	-428	-291	-284	-470	-482	-470	-470
1959	-358	-472	-470	-348	-470	-474	0	-300	-362	-545	-374	-411
1960	-211	-202	-336	-412	-352	-470	-283	0	0	34	-193	-345
1961	-74	-233	-746	-226	-201	-429	0	-290	-9	567	-427	-447
1962	-331	-820	-156	-366	-232	-453	-157	-300	0	-405	252	-432
1963	-170	0	-319	-424	-391	-469	-169	-236	-348	-379	-410	-413
1964	-47	-239	-457	-320	-283	-470	-144	-291	-334	-388	-422	-666
1965	33	-236	-21	0	-206	-445	-169	-195	-575	-275	-428	-421
1966	-146	-234	-281	-414	-384	-470	-157	-235	-371	-453	-396	-431
1967	-164	-269	-314	-417	-404	0	-316	-115	-401	-431	-468	-442
1968	-460	-473	-462	-442	-158	-323	-380	-218	-427	-379	-469	-451
1969	-214	-293	-359	1042	-1282	-504	-303	-208	-470	-470	-470	-470
1970	-470	-458	-252	-427	-467	-329	-12	-216	-470	-394	-467	-469
1971	-180	-328	-398	-465	-470	-470	-169	-221	-213	-389	-407	-424
1972	-203	-238	-300	-272	-235	-470	-314	-219	-373	-538	-514	-436
1973	21	-247	-104	-415	-396	-462	-165	-218	-439	-444	-480	-450
1974	-217	-286	-357	-462	-470	-368	-169	-222	-470	-491	-469	-459
1975	-275	-352	-420	-470	-470	-460	-169	-222	-430	-448	-470	-471
1976	-213	-288	-470	-470	-201	-172	0	-301	-381	-650	-636	-422
1977	-160	-157	-312	-228	-297	-343	0	-109	-70	-132	-1495	6
1978	1096	270	-123	-83	-170	-371	1	-189	4	64	-470	-1
1979	-280	-363	-473	-344	0	-309	-72	-219	-355	-488	-465	-408
1980	-153	-240	-308	-221	-273	-425	-309	-222	-470	-469	-469	-469
1981	-253	-248	-404	-470	-470	-65	0	-266	-345	-378	-388	-756
1982	-119	-235	0	-315	-470	-456	-319	-233	-470	-469	-470	-470
1983	-284	-357	-472	-421	-389	-409	-316	-239	-470	-470	-470	-470
1984	-470	-456	-452	-469	-354	-396	0	-217	-429	-450	-468	-440
1985	-156	-287	-355	-470	-463	-470	0	-217	-377	-527	-557	-426
1986	-77	-216	-313	-416	-382	-32	-316	0	-375	-902	215	-470
1987	-209	-284	-398	-16	-427	-470	-341	0	-337	-343	-369	-271
1988	-182	-234	-294	-255	-218	5	-133	-372	-38	-306	-241	-247
1989	-117	-158	-180	-110	-57	-296	-268	0	0	36	-324	-481
1990	-217	-270	-312	-285	-239	0	-245	-157	157	-101	-240	-217
1991	70	-11	44	1	-49	-321	0	-152	-167	-653	-196	-216
1992	-107	-111	-165	-116	-49	-261	0	0	0	-79	-269	-265
1993	-143	-21	-44	-110	-134	-442	0	0	0	6	-673	-465
1994	-208	-268	-330	-464	-429	-470	-133	-287	-232	-406	-425	-424
1995	-277	-135	-336	-252	3	-469	-526	0	0	0	0	-52
1996	-412	-472	-252	-443	-423	-464	-169	-228	-497	-455	-456	-469
1997	-272	-346	-415	-443	-470	-419	-169	-218	-411	-448	-469	-469
1998	-151	-295	-349	-1684	-440	-3	282	-212	-470	-470	-470	-470
1999	-470	-470	-452	-466	-365	-331	-166	-223	-451	-465	-465	-469
2000	-231	-331	-329	-470	-454	-422	-7	-367	-392	-355	-381	-443
2001	-173	-227	-306	-427	-381	0	-143	0	-317	-438	-488	-527
2002	-187	-227	-285	-242	0	-83	-143	-251	-183	-510	-512	-473
2003	-220	-188	-268	0	-270	-447	-165	-232	-230	-302	-284	-501
Average	-185	-256	-288	-213	-288	-317	-157	-189	-282	-358	-430	-414

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-9:
CHANGES IN BANKS + JONES EXPORTS (CFS), 2005 LOD, MODERATE FISHERY RESTRICTIONS**

Water Year	(C) Alternative 3											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	0	0	0	0	0	0	0	0	0	0	-11	0
1923	-8	0	0	0	0	0	0	0	0	0	0	0
1924	53	55	-6	0	0	0	-1	-7	207	-178	-124	77
1925	127	-189	110	2940	0	2988	0	0	0	-786	-3529	873
1926	-177	-8	8	0	0	0	0	59	0	-18	117	811
1927	-7	0	0	0	0	0	0	0	0	43	0	85
1928	-42	0	0	0	0	0	0	0	0	-363	0	504
1929	-13	247	-445	0	0	2	0	-73	-94	-25	65	43
1930	-17	-30	0	0	0	0	0	0	29	196	146	-12
1931	2	1	0	0	0	76	0	130	74	-50	-32	168
1932	233	29	0	0	0	-179	104	0	-52	0	789	259
1933	4	3	1188	3160	1618	0	0	0	0	0	-1882	39
1934	547	-505	1372	998	1659	-2	0	0	0	-233	502	-6
1935	-110	53	506	0	0	0	0	0	191	201	143	147
1936	-3	-213	99	0	0	0	0	0	-1	-26	80	234
1937	9	44	35	1	-332	439	447	90	-854	-349	-955	-147
1938	25	-1	0	2138	-31	-263	-25	-2	0	-12	133	0
1939	-128	-1	-1	0	0	0	0	0	0	-8	7	187
1940	31	27	14	0	0	0	0	0	0	245	0	0
1941	-177	-183	0	0	0	1	0	50	-52	-50	-10	0
1942	0	0	0	0	0	24	0	0	0	-12	-11	0
1943	0	0	0	0	5	0	3	-146	-2	-2	-2	0
1944	196	145	-233	0	0	0	0	-44	0	-1	-1	-76
1945	-441	0	0	0	42	480	0	0	0	-131	378	-3
1946	-74	-1	0	0	-543	0	0	0	0	0	0	15
1947	-15	85	0	24	0	0	0	6	0	-10	158	368
1948	17	68	-5	0	0	0	0	0	0	0	0	192
1949	-201	229	18	88	0	0	0	0	0	-317	-198	284
1950	-121	-85	87	0	0	0	0	0	0	195	183	73
1951	50	0	0	174	0	844	0	0	0	21	0	0
1952	-138	0	0	0	0	0	0	0	0	0	0	0
1953	-4	-4	0	0	0	0	0	0	0	1	-23	2
1954	-5	0	0	0	0	0	0	0	0	-186	0	186
1955	-111	0	0	2781	-2	0	0	0	-459	-110	-35	88
1956	31	48	1	771	2	1903	0	0	0	2	99	0
1957	0	0	0	0	0	0	0	0	0	53	0	191
1958	0	0	0	-1214	0	99	552	0	0	-12	0	0
1959	0	-2	4	0	0	1	0	0	0	-278	117	393
1960	-256	458	-189	0	0	0	0	0	0	-114	-102	502
1961	-24	9	101	0	0	0	0	0	124	-282	16	542
1962	-120	550	-84	310	0	8	0	0	0	18	87	59
1963	0	0	0	0	0	0	0	0	0	6	0	-47
1964	111	0	-32	0	-1	0	77	0	0	-62	-62	-5
1965	-62	0	0	0	0	0	0	0	0	-2	-35	0
1966	-1	0	0	0	0	0	0	-15	0	-11	14	-19
1967	18	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	599	87	0	0	0	-73	149	177
1969	-43	68	0	1512	-1324	-65	14	13	0	170	27	0
1970	0	13	0	12	0	1008	-43	0	0	43	111	-1
1971	-37	0	0	0	0	0	0	0	0	0	0	0
1972	-49	10	0	0	0	0	0	0	0	-148	204	71
1973	-70	0	0	0	0	0	0	0	0	-7	-7	51
1974	0	0	0	0	0	1056	0	0	0	-520	0	0
1975	0	0	0	0	0	0	0	0	0	-132	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	676
1977	244	-456	0	161	826	-58	0	-19	49	0	-931	-344
1978	2229	623	0	0	0	132	-571	75	186	-350	-363	1
1979	147	-1	24	0	0	0	0	0	0	98	6	-17
1980	177	0	0	-133	82	-1	0	0	0	173	100	1
1981	69	-1	0	0	0	0	0	0	0	-240	-169	444
1982	130	0	0	0	0	9	-12	0	0	171	0	0
1983	0	0	-281	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	795	0	0	0	86	6	-32
1985	49	0	0	0	0	0	0	0	0	-1	0	-11
1986	-58	-13	0	0	0	-5	445	47	0	2467	-1418	0
1987	2	-2	768	475	257	740	0	0	0	-381	-1003	237
1988	796	135	167	0	-35	-3	0	-356	0	-247	-70	359
1989	-2	-6	2	0	0	0	0	0	0	37	6	477
1990	144	-171	0	0	-4	0	0	0	-73	156	168	-1
1991	168	120	175	131	0	0	0	0	0	-318	0	209
1992	95	64	-41	-1	0	0	0	176	0	-405	-83	5
1993	16	147	119	0	0	0	0	0	0	5	-519	4
1994	30	76	-16	0	0	0	0	0	-1	-6	-4	719
1995	-28	127	235	-1	3	1	-32	0	0	0	0	0
1996	0	-2	0	0	0	0	0	0	-26	13	13	0
1997	-4	0	0	0	0	1197	0	0	0	-93	-140	43
1998	59	15	0	0	0	0	787	0	0	0	0	0
1999	-2	-2	0	0	0	772	0	0	0	-12	-12	0
2000	0	-7	30	0	0	0	0	-12	0	-135	199	105
2001	-99	-56	58	0	0	0	0	0	0	28	5	322
2002	142	-1	0	0	0	0	0	0	0	-74	25	238
2003	-11	0	0	0	-8	0	0	0	0	-7	0	-15
Average	40	18	46	175	34	147	21	0	-9	-29	-94	119

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-9:
CHANGES IN BANKS + JONES EXPORTS (CFS), 2005 LOD, MODERATE FISHERY RESTRICTIONS**

Water Year	(D) Alternative 4											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	0	0	0	0	0	0	0	0	0	0	-4	0
1923	-3	0	0	0	0	0	0	0	0	0	0	0
1924	0	0	-3	0	0	0	0	-4	-5	4	3	82
1925	114	-164	107	2940	0	2988	0	0	0	-1030	-3789	872
1926	-179	-6	9	0	0	0	0	83	0	204	293	297
1927	105	0	0	0	0	0	0	0	0	-5	-1	459
1928	-162	0	0	0	0	0	0	0	0	-9	0	77
1929	-11	36	-79	0	0	0	0	-47	-46	-55	-41	-21
1930	-5	-21	0	0	0	0	0	0	-44	26	-27	-21
1931	-6	-5	-4	0	0	69	0	-4	362	0	1	0
1932	-59	125	0	0	0	0	104	0	22	0	589	246
1933	-4	-3	-555	35	42	0	0	0	0	0	96	7
1934	-19	45	-66	96	0	0	0	0	0	196	-27	-4
1935	-1	-3	40	0	0	0	0	0	191	-582	-503	40
1936	-6	-4	853	0	0	0	0	0	0	-21	-145	0
1937	-4	1	0	0	129	-1	-2	-5	-5	-4	-5	0
1938	0	0	0	-40	-4	-8	0	0	0	-4	-12	0
1939	17	0	0	0	0	0	0	0	0	0	0	-7
1940	-2	1	-3	0	0	0	0	0	0	23	0	-1
1941	112	42	0	0	0	0	0	0	-4	-3	-4	0
1942	0	0	0	0	0	0	0	0	0	-4	-4	0
1943	0	0	0	0	-1	0	0	0	0	0	0	0
1944	5	0	1	0	0	0	0	0	0	0	0	-4
1945	6	0	0	0	4	-4	0	0	0	1	-65	0
1946	-10	0	0	0	68	0	0	0	0	0	0	-2
1947	-1	-4	0	0	0	0	0	1	0	-1	-14	-1
1948	4	0	2	0	0	0	0	0	0	0	0	-59
1949	6	2	-8	34	0	0	0	0	0	-73	-64	-22
1950	-27	-19	7	0	0	0	0	0	0	49	45	-54
1951	8	0	0	138	0	-6	0	0	0	-9	0	0
1952	14	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	-8	0
1954	-2	0	0	0	0	0	0	0	0	-24	0	-3
1955	2	0	0	2781	-2	0	0	0	-459	-219	-29	-249
1956	4	-22	1	1034	2	249	0	0	0	3	0	0
1957	0	-1	0	0	0	0	0	0	0	-9	0	-2
1958	0	0	0	0	0	0	7	0	0	-4	0	0
1959	0	-1	0	35	0	0	0	0	0	-8	0	0
1960	2	0	-2	0	0	0	0	0	0	0	0	1
1961	0	0	7	0	0	0	0	0	0	-7	0	0
1962	-3	7	2	0	0	-2	0	0	0	0	0	14
1963	0	0	0	0	0	0	0	0	0	-142	0	1
1964	0	0	5	0	-1	0	3	0	0	-5	-4	-15
1965	1	0	0	0	1	0	0	0	0	2	0	0
1966	1	0	0	0	0	0	0	0	0	-7	1	-2
1967	1	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	1	0	0	0	0	-7	0	0
1969	-1	1	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	-7	0	0
1971	-4	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	-7	-1	0
1973	8	0	0	0	0	0	0	0	0	0	-2	0
1974	0	0	0	0	0	2	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	8	127	0	125	0	54	0	-7	23	0	-1374	165
1978	1247	395	0	0	0	-2	1	-191	4	81	4	-1
1979	-190	2	-41	0	0	0	0	0	0	15	-171	-38
1980	-212	0	0	237	217	1	0	0	0	1	1	1
1981	1	9	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0	0	1	0	0
1983	0	0	-1	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	-4
1985	-8	0	0	0	0	0	0	0	0	0	0	-1
1986	-3	0	0	0	0	-1	0	0	0	135	-196	0
1987	-1	0	-12	-133	0	0	0	0	0	1	-23	-52
1988	4	1	-3	0	1	0	0	0	0	-2	-1	-1
1989	-1	0	0	0	0	0	0	0	0	7	5	-2
1990	6	0	0	0	-2	0	0	0	12	5	-12	-1
1991	10	-6	23	-88	0	0	0	0	0	34	0	0
1992	0	-5	1	6	0	0	0	165	0	40	-167	2
1993	50	0	-57	0	0	0	0	0	0	-6	-1	-2
1994	27	2	9	0	0	1	0	0	0	0	0	2
1995	2	1	5	0	0	0	0	0	0	0	0	0
1996	0	-196	0	0	0	0	0	0	9	-4	-4	0
1997	0	0	0	0	0	0	0	0	0	-10	0	0
1998	16	-4	0	-1214	0	-3	544	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	2	2	0
2000	0	-8	5	0	0	0	0	0	0	-10	1	-3
2001	3	-2	3	0	0	0	0	2	0	-5	-4	-1
2002	-5	0	0	0	0	0	0	0	0	3	3	2
2003	-2	0	0	0	0	0	0	0	0	-4	0	1
Average	10	4	3	73	6	41	8	0	1	-18	-69	21

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-10:
CHANGES IN CCWD + LV DIVERSIONS (CFS), 2005 LOD, MODERATE FISHERY RESTRICTIONS**

Water Year	(A) Alternative 1											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	470	395	470	182	-54	636	0	670	339	440	475	458
1923	247	327	390	535	383	452	0	670	328	397	414	459
1924	175	249	312	264	257	305	0	177	202	182	168	162
1925	-12	26	60	-12	261	311	-162	645	470	470	470	378
1926	142	204	277	252	12	300	0	415	470	384	249	360
1927	136	222	470	470	384	199	0	670	333	482	481	458
1928	312	251	487	470	465	470	0	670	217	400	420	446
1929	184	247	311	294	292	388	0	178	424	363	245	267
1930	124	160	125	470	470	570	0	670	102	138	216	335
1931	133	179	239	240	190	287	-181	13	-1	27	49	83
1932	-61	71	152	470	-72	370	0	670	470	470	470	294
1933	138	176	155	184	160	394	-42	304	470	62	288	288
1934	-48	1	17	23	-59	385	0	206	470	470	181	328
1935	147	56	15	18	-65	270	-111	615	470	470	532	430
1936	206	273	338	183	-59	570	0	670	300	497	436	457
1937	190	259	326	265	232	370	0	670	470	237	470	432
1938	195	362	461	440	420	469	0	670	348	482	481	478
1939	474	472	470	477	298	352	0	310	394	402	308	470
1940	203	271	337	217	185	541	-117	653	319	234	327	458
1941	172	246	397	323	313	570	0	670	298	482	481	478
1942	306	352	418	462	470	472	0	670	355	482	481	478
1943	321	469	468	466	326	446	0	670	347	482	481	458
1944	258	339	407	471	471	370	0	670	470	216	335	401
1945	178	322	349	291	474	570	0	670	259	285	435	458
1946	208	285	601	470	456	473	0	670	192	400	416	439
1947	172	240	420	267	245	470	0	670	470	244	362	451
1948	180	252	324	218	470	552	-136	657	261	224	300	457
1949	150	222	291	231	202	470	0	440	470	470	328	414
1950	161	227	294	258	470	570	-73	652	145	194	268	459
1951	123	211	556	468	237	372	0	670	340	477	481	458
1952	334	288	405	439	470	369	0	670	336	482	481	478
1953	475	470	277	411	415	275	0	670	347	452	481	478
1954	206	317	361	467	377	558	0	670	340	426	458	458
1955	220	347	377	470	290	474	0	670	93	300	318	311
1956	127	177	265	344	414	433	0	670	349	482	481	477
1957	327	333	424	467	467	512	0	670	308	416	433	446
1958	300	355	361	282	396	469	0	670	408	482	480	478
1959	414	472	467	350	469	474	0	480	496	413	296	440
1960	164	239	313	410	344	370	0	670	470	220	245	368
1961	132	318	271	224	211	370	0	442	470	439	285	428
1962	174	240	306	174	161	457	-136	280	470	470	411	436
1963	292	368	167	425	399	471	0	670	237	400	421	458
1964	257	274	375	323	287	473	0	443	472	401	407	421
1965	153	312	59	470	65	447	0	670	341	398	428	449
1966	154	190	457	417	391	474	0	670	224	402	436	426
1967	157	338	359	419	213	570	0	670	295	424	481	478
1968	475	471	470	445	173	361	0	670	280	461	479	449
1969	204	285	434	467	442	364	0	670	325	482	481	478
1970	473	471	288	463	471	352	0	670	344	482	481	458
1971	313	355	439	470	472	472	0	670	190	401	454	453
1972	228	237	326	277	265	474	0	670	226	406	439	438
1973	270	297	356	397	402	471	0	670	308	471	481	458
1974	343	354	395	469	472	471	0	670	347	481	481	460
1975	359	379	443	469	468	469	0	670	349	463	480	478
1976	400	369	471	471	219	213	0	301	388	409	444	339
1977	7	115	179	228	157	268	-181	-33	-91	-79	99	158
1978	87	129	147	65	175	470	0	470	470	470	470	406
1979	287	477	441	376	470	658	0	670	208	403	424	458
1980	181	347	153	689	265	466	0	670	342	481	481	458
1981	266	249	478	474	275	670	0	670	173	397	389	440
1982	180	328	470	89	470	467	0	670	357	482	481	476
1983	348	379	468	464	418	450	0	670	364	482	480	477
1984	474	466	465	471	364	419	0	670	304	465	481	458
1985	221	311	512	470	471	471	0	670	204	409	413	447
1986	177	251	386	430	395	529	-86	653	297	272	358	477
1987	210	284	361	472	441	370	0	670	228	297	377	420
1988	170	235	298	295	11	570	0	670	446	36	179	245
1989	122	171	157	113	-54	470	-162	655	470	384	338	437
1990	170	244	207	233	250	570	-80	149	102	27	24	63
1991	-68	-17	-21	-50	-102	233	-181	100	148	36	196	216
1992	107	152	142	100	62	303	0	623	470	433	219	303
1993	132	21	17	4	85	470	-121	470	470	470	470	365
1994	208	280	348	476	475	470	0	288	233	401	450	438
1995	38	135	217	195	470	270	-114	634	470	470	533	658
1996	475	472	282	465	466	472	0	670	352	482	481	478
1997	273	395	434	462	472	474	0	670	345	446	480	458
1998	220	295	400	479	451	521	0	670	297	394	481	478
1999	475	470	464	469	379	354	0	670	347	482	481	478
2000	237	356	383	474	466	532	0	670	218	413	459	444
2001	191	272	342	466	398	570	0	670	144	190	284	405
2002	157	226	387	249	470	561	0	429	470	163	328	370
2003	140	240	315	470	73	479	0	670	109	295	295	433
Average	220	279	332	348	303	444	-23	575	324	371	388	414

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-10:
CHANGES IN CCWD + LV DIVERSIONS (CFS), 2005 LOD, MODERATE FISHERY RESTRICTIONS**

Water Year	(B) Alternative 2											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	470	395	470	415	-62	636	0	670	339	440	475	458
1923	247	473	473	535	382	452	0	670	328	397	414	459
1924	174	248	311	263	343	304	0	176	199	180	167	159
1925	-14	24	322	102	16	470	-162	645	470	470	470	375
1926	141	200	275	473	11	300	0	471	470	384	251	359
1927	134	478	470	470	470	570	0	670	333	482	481	458
1928	473	389	565	470	471	470	0	670	217	401	420	446
1929	176	241	307	292	380	388	0	178	410	363	235	255
1930	116	155	417	470	470	570	0	670	396	138	216	330
1931	131	177	237	450	165	284	-181	9	-5	20	41	74
1932	106	151	452	470	9	370	0	670	470	470	470	291
1933	135	173	152	394	135	470	-42	304	470	62	286	285
1934	-49	0	15	270	-73	385	0	206	470	470	181	328
1935	146	55	15	271	-69	270	0	615	470	470	532	430
1936	208	275	340	419	-68	570	0	670	300	497	654	457
1937	195	264	330	482	303	370	0	670	470	412	348	433
1938	201	490	470	459	463	469	0	670	348	482	481	478
1939	474	472	470	479	419	470	0	310	394	402	308	473
1940	207	274	340	461	181	541	-117	653	319	470	327	458
1941	180	252	475	471	464	570	0	670	298	482	481	478
1942	474	471	469	462	470	472	0	670	355	482	481	478
1943	474	469	468	466	452	471	0	670	347	482	481	458
1944	265	343	410	473	473	370	0	670	470	216	334	401
1945	184	482	479	480	477	570	0	670	259	284	435	458
1946	213	370	678	470	456	473	0	670	192	400	416	439
1947	176	244	472	270	365	470	0	670	470	410	362	457
1948	184	255	326	448	470	552	-136	657	296	223	299	457
1949	152	223	291	231	202	470	0	441	470	470	329	420
1950	168	233	298	467	470	570	-73	652	470	192	267	459
1951	132	362	684	468	355	402	0	670	340	478	481	458
1952	462	412	466	467	470	369	0	670	336	482	481	478
1953	475	470	464	469	473	473	0	670	347	452	481	478
1954	206	469	469	469	381	555	0	670	340	427	458	458
1955	226	467	467	470	290	474	0	670	92	300	318	319
1956	132	182	463	344	414	587	0	670	349	482	481	477
1957	474	333	470	470	470	507	0	670	308	416	433	446
1958	466	492	468	465	464	469	0	670	408	482	480	478
1959	475	472	470	470	470	469	0	480	496	413	296	440
1960	169	244	315	413	444	370	0	670	470	411	245	375
1961	136	442	273	226	333	370	0	441	470	439	284	433
1962	178	243	308	169	276	455	-136	280	470	470	411	441
1963	471	470	475	467	469	471	0	670	237	400	421	458
1964	469	469	493	468	286	473	0	442	472	400	406	424
1965	158	469	440	470	168	448	0	670	349	398	428	458
1966	159	399	681	469	471	474	0	670	224	402	436	432
1967	164	406	471	472	270	570	0	670	295	424	481	478
1968	475	471	470	466	289	391	0	670	280	461	479	449
1969	211	290	471	471	442	516	0	670	325	482	481	478
1970	473	471	466	463	471	398	0	670	344	482	481	458
1971	473	471	481	470	472	472	0	670	347	401	454	458
1972	294	237	473	473	524	474	0	670	226	406	439	438
1973	265	474	356	447	467	471	0	670	308	471	481	458
1974	469	375	578	469	472	471	0	670	347	481	481	460
1975	491	472	468	472	465	469	0	670	349	463	480	478
1976	472	472	471	473	330	470	0	301	395	416	451	345
1977	11	119	182	228	157	270	-181	-27	-50	132	145	158
1978	5	129	470	156	170	470	0	470	470	470	470	406
1979	287	480	442	475	470	658	0	670	209	404	425	458
1980	183	481	270	689	382	472	0	670	342	481	481	458
1981	266	249	479	474	275	670	0	670	173	397	389	440
1982	180	482	470	304	550	467	0	670	357	482	481	476
1983	472	465	468	464	466	465	0	670	364	482	480	477
1984	474	466	465	471	471	465	0	670	304	465	481	458
1985	222	417	672	470	471	471	0	670	204	409	413	451
1986	180	254	480	482	477	529	-86	653	470	272	358	477
1987	210	284	364	474	474	370	0	670	423	304	385	435
1988	182	244	306	475	18	570	0	670	446	33	176	247
1989	124	171	157	114	-52	470	-162	655	470	384	338	444
1990	174	248	210	374	247	570	-80	150	106	32	28	67
1991	-66	-16	-21	-40	48	467	0	114	149	184	196	216
1992	107	152	142	100	176	470	0	623	470	433	218	302
1993	132	21	17	257	77	470	0	470	470	470	470	365
1994	207	282	350	477	475	470	0	287	231	399	451	438
1995	38	135	216	411	470	270	-114	634	470	470	533	658
1996	475	472	464	465	466	472	0	670	352	482	481	478
1997	273	468	464	462	472	474	0	670	345	446	480	458
1998	222	297	482	480	475	521	0	670	297	394	481	478
1999	475	470	464	469	473	400	0	670	347	482	481	478
2000	237	451	384	474	477	570	0	670	218	413	459	444
2001	191	272	342	475	476	570	0	670	249	190	284	404
2002	156	225	473	470	470	570	0	470	470	163	327	369
2003	137	471	471	470	281	473	0	670	110	295	295	433
Average	247	329	397	414	343	470	-18	576	340	385	391	415

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-10:
CHANGES IN CCWD + LV DIVERSIONS (CFS), 2005 LOD, MODERATE FISHERY RESTRICTIONS**

Water Year	(C) Alternative 3											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	0	0	0	0	30	-29	0	152	-131	12	11	8
1923	4	4	4	-17	1	5	0	161	-142	12	11	7
1924	7	7	6	4	3	-44	0	9	-100	-25	-52	-77
1925	-116	-113	-100	-108	-114	0	-162	-224	-433	370	370	5
1926	7	6	6	5	157	-109	0	1	-433	284	96	5
1927	4	4	370	370	369	-94	0	142	-137	12	11	8
1928	1	1	-2	0	1	0	0	-149	-375	547	11	8
1929	10	8	6	3	3	0	0	-222	-455	263	15	20
1930	13	9	-47	370	370	142	0	192	-173	-170	-85	-4
1931	-2	-1	-1	-1	-1	-76	-181	-170	-255	-197	-185	-168
1932	-168	-147	-133	370	240	244	0	570	370	125	-174	-7
1933	-4	-3	-2	-1	-2	0	-42	113	-455	210	-7	-17
1934	-178	-156	-142	-137	173	0	0	-222	-455	370	4	8
1935	4	-129	-145	-137	209	282	-136	-226	370	370	432	15
1936	7	6	4	2	122	203	0	164	-175	-144	11	8
1937	-10	-7	-5	-3	-6	131	0	379	-173	-170	-94	8
1938	-20	-13	41	-11	-7	-1	0	144	-122	12	11	8
1939	4	2	0	-6	-7	0	0	0	-233	302	-14	-17
1940	-14	-11	-7	-5	-10	441	-117	239	-173	-170	-112	8
1941	-39	-28	-20	-7	-5	160	0	117	-172	12	11	8
1942	4	1	-15	6	0	2	0	133	-115	12	11	8
1943	4	-1	-2	-4	0	1	0	144	-123	12	11	8
1944	-33	-24	-12	-8	-10	278	0	255	-174	-170	-45	-2
1945	-37	-33	-32	-28	-27	-192	0	570	32	-170	-35	8
1946	-40	44	-5	0	-102	96	0	168	-146	12	11	8
1947	-32	-28	-21	-16	-11	0	0	570	-433	277	-61	-55
1948	-31	-26	-13	-16	-327	452	-136	437	-174	-170	-112	8
1949	-54	-39	-28	-13	-16	0	0	151	370	-50	-50	-44
1950	-39	-31	-22	-14	370	48	-73	149	-173	-170	-112	8
1951	-56	58	-5	-2	0	3	0	151	-130	12	11	8
1952	-53	-40	-21	-34	269	-101	0	143	-134	12	11	8
1953	5	0	-6	-1	3	3	0	142	-123	12	11	8
1954	5	1	-26	-11	40	1	0	-149	-24	207	11	8
1955	-37	-27	-28	190	-203	87	0	151	-428	298	11	-50
1956	-31	-24	-21	0	213	-73	0	140	-121	12	11	7
1957	4	2	-1	-8	-10	53	0	144	-162	12	11	8
1958	-51	58	-2	-5	-7	-1	0	81	-62	12	10	8
1959	5	2	-20	-7	-7	-177	0	180	-395	447	11	5
1960	-24	-18	-9	-10	-33	298	0	151	-433	309	-85	-48
1961	-26	-21	-13	-13	-12	360	0	151	-433	339	46	-58
1962	-29	-23	-16	-137	-100	-92	-136	-20	-71	370	149	-46
1963	-30	113	-198	-3	-1	1	0	129	-111	12	11	8
1964	-38	-26	67	-2	3	3	0	151	-129	12	9	-35
1965	-37	-28	-22	262	-148	3	0	-149	178	12	10	8
1966	-34	38	-3	-1	1	4	0	169	-147	12	11	-38
1967	-28	-23	-12	-23	304	-25	0	125	-175	-46	11	8
1968	5	1	0	-4	0	2	0	168	-394	251	9	8
1969	-33	-25	-21	-25	247	-106	0	145	-145	12	11	8
1970	3	1	-4	-7	1	3	0	149	-126	12	11	8
1971	-34	-15	44	0	-93	88	0	144	-123	12	11	8
1972	5	-5	-17	-16	41	4	0	168	-394	251	11	7
1973	-22	-26	59	-23	-3	1	0	154	-131	12	11	8
1974	-34	35	-3	-1	2	1	0	143	-123	11	11	-9
1975	20	2	-2	-16	15	-1	0	143	-121	12	10	8
1976	2	2	1	-13	-9	0	0	-222	-155	-37	-40	-138
1977	-187	-153	-147	-141	-161	-144	-181	-222	-255	-259	-258	-22
1978	0	0	0	-27	0	0	0	370	370	370	370	306
1979	400	1	1	1	370	328	0	167	-394	251	11	8
1980	5	4	-7	-6	-4	2	0	149	-128	11	11	8
1981	5	2	4	2	-10	0	0	193	-431	262	11	6
1982	4	4	215	-230	0	-3	0	132	-113	12	11	6
1983	2	-5	-2	-6	-4	-5	0	126	-106	12	10	7
1984	4	-4	-5	1	1	3	0	148	-125	12	11	8
1985	-7	6	-1	0	1	1	0	194	-173	12	11	-13
1986	-8	-7	-5	-7	-5	429	-86	200	-173	-170	-112	7
1987	5	2	-6	-3	-4	102	0	-199	-433	369	54	-20
1988	-12	-9	-7	-4	-327	-244	0	570	-455	356	0	-8
1989	-4	-2	-2	-2	-114	0	-162	-214	370	284	60	-13
1990	-8	-6	-11	-109	0	470	-80	-7	-255	-188	-200	-178
1991	-175	-153	-152	-140	-161	-133	-181	-52	-18	-219	-222	-209
1992	-95	0	0	0	-1	0	0	523	370	333	0	26
1993	7	-147	-133	-111	-63	0	-121	370	370	370	370	19
1994	5	8	6	4	3	-144	0	0	-255	0	21	-14
1995	-148	-127	-109	-63	370	259	-114	534	370	303	-111	8
1996	5	2	-6	-5	-4	2	0	137	-118	12	11	8
1997	4	-2	-6	-8	2	4	0	147	-125	12	10	8
1998	6	4	3	2	1	121	0	128	-173	-76	11	8
1999	5	0	-6	-1	3	3	0	142	-123	12	11	8
2000	5	1	-1	0	-1	55	0	151	-418	237	10	8
2001	-1	0	-40	0	0	315	0	191	-433	79	-67	-8
2002	-5	-4	-2	0	-332	470	0	244	-174	-171	4	-1
2003	-14	-14	-10	166	-265	121	0	140	-121	12	10	8
Average	-18	-16	-14	0	15	52	-23	130	-153	78	3	-6

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-10:
CHANGES IN CCWD + LV DIVERSIONS (CFS), 2005 LOD, MODERATE FISHERY RESTRICTIONS**

Water Year	(D) Alternative 4											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	0	0	0	0	0	-1	0	0	10	4	4	3
1923	2	2	2	-9	1	2	0	0	9	4	4	3
1924	4	4	4	3	2	3	0	6	8	-28	-56	-82
1925	-121	-117	-104	-111	-118	0	-162	-25	0	0	0	4
1926	5	4	4	3	0	0	0	1	0	0	0	6
1927	4	4	0	0	0	0	0	0	38	182	184	69
1928	11	46	203	150	0	0	0	0	10	4	4	3
1929	10	8	6	3	3	0	0	0	0	0	16	20
1930	13	10	-47	0	0	0	0	0	0	0	0	9
1931	6	5	3	3	3	-70	-181	-161	-198	-187	-147	0
1932	0	0	-6	0	0	0	0	0	0	0	0	5
1933	4	3	2	2	2	0	-42	-15	0	0	8	-7
1934	0	0	0	0	0	0	0	0	0	0	0	4
1935	2	-5	0	0	0	0	0	0	0	0	62	15
1936	4	3	2	1	0	0	0	0	-71	27	184	43
1937	6	4	3	2	3	0	0	0	0	0	79	113
1938	0	0	0	194	234	98	0	0	10	4	4	3
1939	1	1	0	1	1	0	0	0	0	0	17	5
1940	6	5	3	2	4	-29	-117	-17	-68	0	62	54
1941	-5	-4	-3	-1	-1	0	0	0	2	123	4	3
1942	1	0	-2	-1	0	1	0	0	8	4	4	3
1943	2	0	-1	-2	0	0	0	0	5	9	4	3
1944	-4	-3	-2	-1	-1	0	0	0	0	0	0	5
1945	-4	-3	-3	-3	-2	0	0	0	0	0	62	3
1946	-5	7	-2	0	1	1	0	0	10	4	4	3
1947	-4	-3	-3	-2	-1	0	0	0	0	0	0	-6
1948	-4	-3	-2	-2	0	-18	-136	-13	0	0	62	45
1949	-7	-5	-4	-2	-2	0	0	0	0	0	0	-5
1950	-7	-6	-4	-3	0	0	-73	-18	0	0	62	46
1951	-7	61	142	-1	0	1	0	0	10	4	4	3
1952	-6	-4	-3	-2	0	0	0	0	21	4	4	3
1953	2	0	-2	0	1	1	0	0	9	4	4	3
1954	2	0	-1	-1	3	1	0	0	-24	37	4	3
1955	-4	-3	-3	0	10	1	0	0	4	9	4	-4
1956	-3	-3	-2	0	0	13	0	0	9	4	4	3
1957	1	1	0	0	-1	0	0	0	10	4	4	3
1958	-4	-6	-1	-2	-2	0	0	0	8	4	4	3
1959	2	1	-2	-1	-1	4	0	0	10	4	4	2
1960	-5	-4	-2	-2	-28	0	0	0	0	0	0	-8
1961	-5	-4	-2	-2	-2	0	0	0	0	0	0	-10
1962	-6	-5	-4	-121	-92	0	-136	-200	0	0	0	-13
1963	-10	0	5	219	214	102	0	0	62	137	4	3
1964	-4	-3	8	-1	1	1	0	0	2	12	4	-3
1965	-4	-3	-3	0	16	1	0	0	9	4	4	3
1966	-4	5	-1	0	0	2	0	0	10	4	4	-3
1967	-2	-2	-1	-2	0	0	0	0	0	22	4	3
1968	2	0	0	-1	0	1	0	0	10	4	4	3
1969	-3	-2	-2	-2	0	0	0	0	16	4	4	3
1970	1	0	-1	-3	0	1	0	0	10	4	4	3
1971	-5	-1	4	0	1	1	0	0	9	4	4	3
1972	2	0	-2	-2	5	2	0	0	10	4	4	3
1973	-3	-4	0	3	-1	0	0	0	10	4	4	3
1974	-5	5	-1	-1	1	0	0	0	9	4	4	-1
1975	5	1	-1	-2	1	0	0	0	10	4	4	3
1976	1	1	0	-2	-1	0	0	0	-5	-3	-2	-109
1977	-170	-134	-138	-130	-147	-119	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	16
1979	193	-1	-1	0	0	88	0	0	28	182	184	47
1980	12	11	0	219	-2	1	0	0	10	4	4	3
1981	11	-8	7	3	-13	0	0	0	1	13	4	18
1982	11	11	0	-40	0	-1	0	0	9	4	4	2
1983	1	-2	-1	-2	-2	-2	0	0	9	4	4	3
1984	2	-2	-2	0	0	1	0	0	10	4	4	3
1985	-1	0	0	0	0	0	0	0	1	13	4	-1
1986	0	0	0	0	0	0	-86	-17	0	0	62	60
1987	2	1	-2	-1	-2	0	0	0	0	19	4	-4
1988	-2	-2	-1	-1	0	0	0	0	0	0	0	1
1989	1	1	1	1	-112	0	-162	-15	0	0	0	-8
1990	-5	-4	-110	-107	0	0	-80	-7	-86	-182	-19	0
1991	0	0	0	0	0	0	0	-36	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	-6
1993	6	0	0	0	0	0	0	0	0	0	0	0
1994	-1	-1	-1	0	0	0	0	0	0	0	-2	5
1995	0	0	0	0	0	0	0	0	0	0	63	188
1996	193	197	209	137	-1	1	0	0	9	4	4	3
1997	1	-1	-2	-3	1	1	0	0	10	4	4	3
1998	5	4	2	2	1	0	0	0	0	-6	4	3
1999	2	0	-2	0	1	1	0	0	9	4	4	3
2000	2	0	0	0	0	0	0	0	0	12	4	3
2001	0	0	0	0	0	0	0	0	0	0	5	2
2002	2	2	1	0	0	0	0	0	0	0	15	0
2003	2	2	1	0	10	1	0	0	9	4	4	3
Average	1	1	2	5	0	1	-14	-6	0	6	13	8

NOTE: Values with a grey background indicate months of Delta excess conditions.

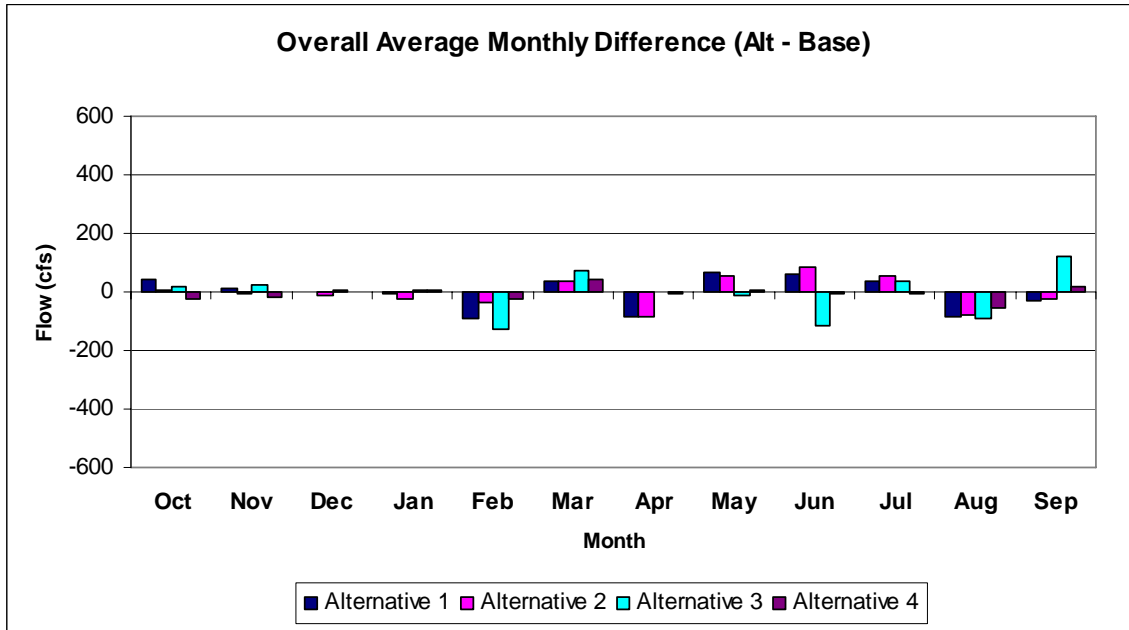


Figure C4-22: Changes in Average Monthly Sacramento River at Hood flow, 2005 LOD, Moderate Fishery Restrictions

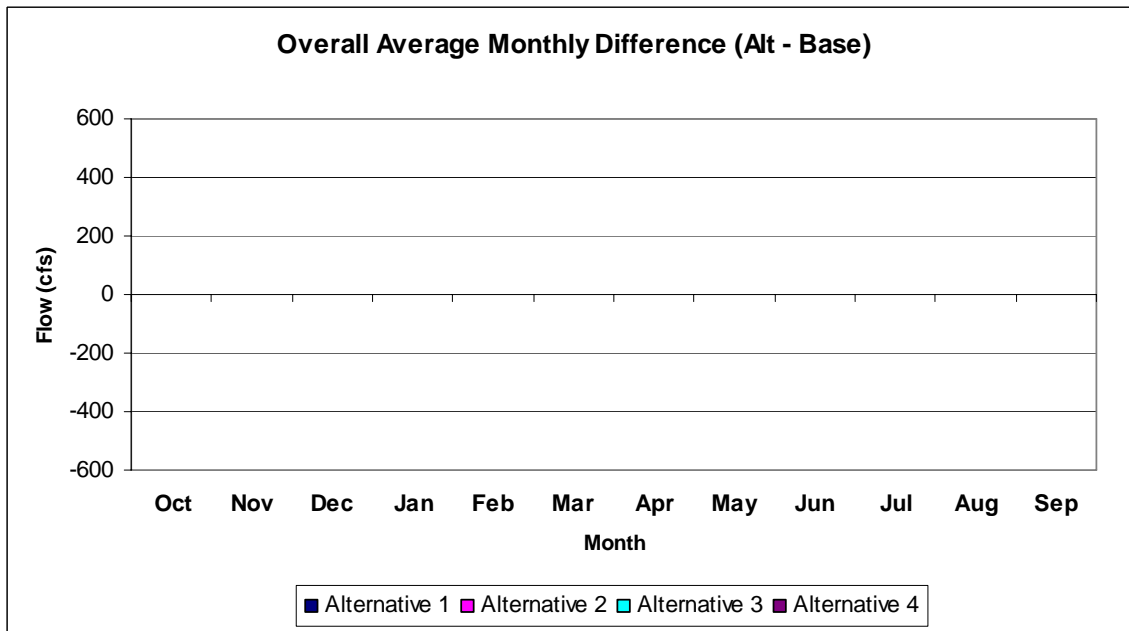


Figure C4-23: Changes in Average Monthly San Joaquin River at Vernalis Flow, 2005 LOD, Moderate Fishery Restrictions

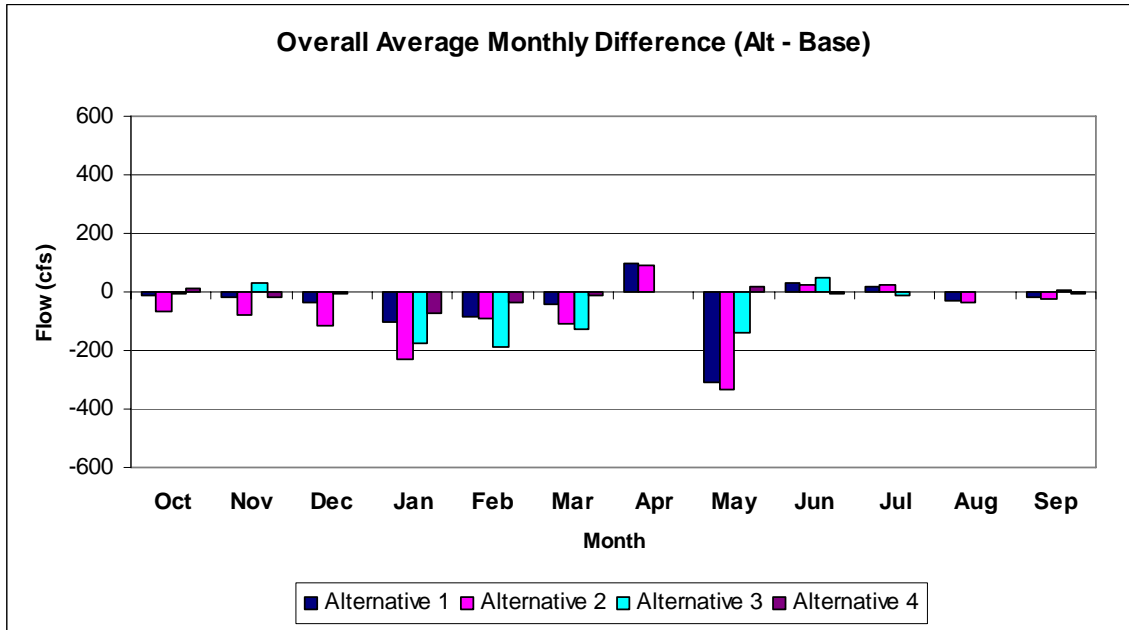


Figure C4-24: Changes in Average Monthly Delta Outflow, 2005 LOD, Moderate Fishery Restrictions

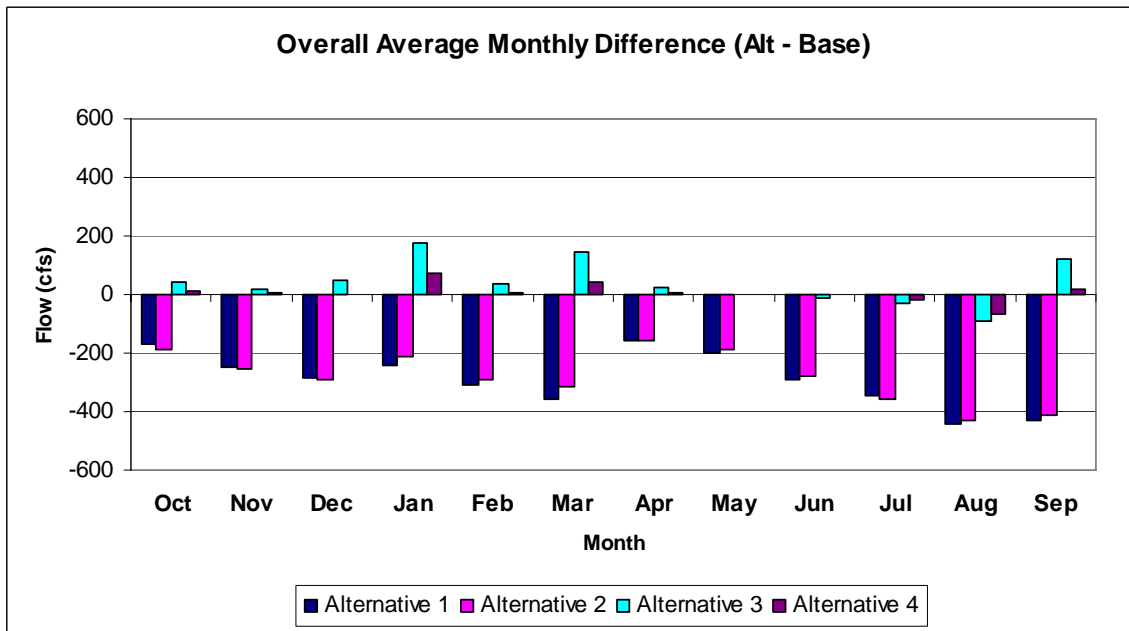


Figure C4-25: Changes in Average Monthly Banks + Jones Diversions, 2005 LOD, Moderate Fishery Restrictions

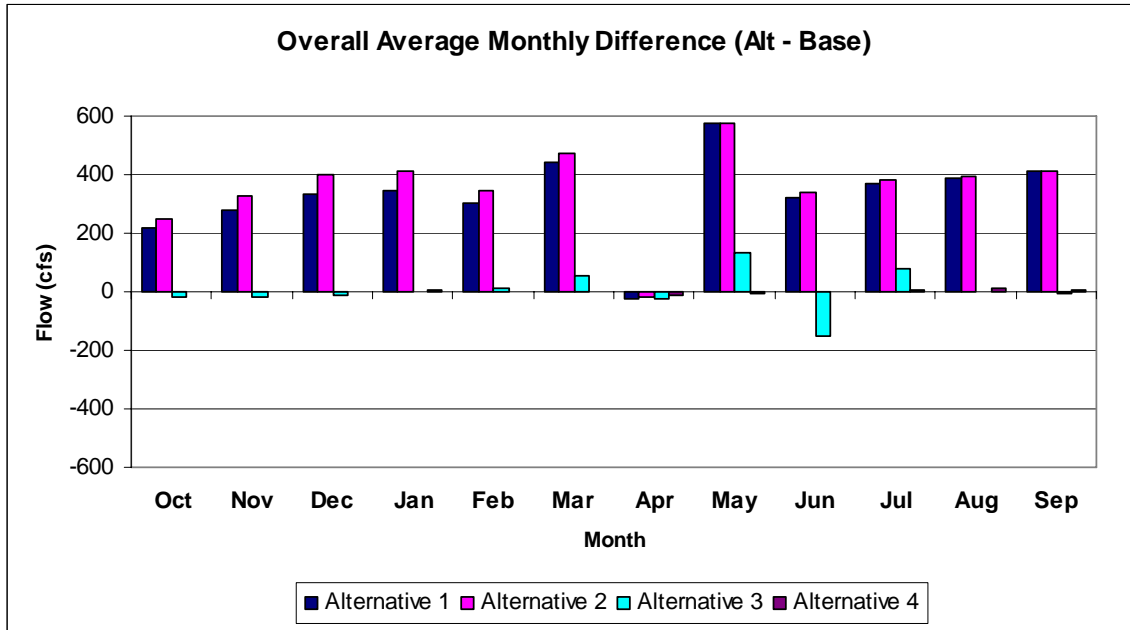


Figure C4-26: Changes in Average Monthly CCWD + LV Diversions, 2005 LOD, Moderate Fishery Restrictions

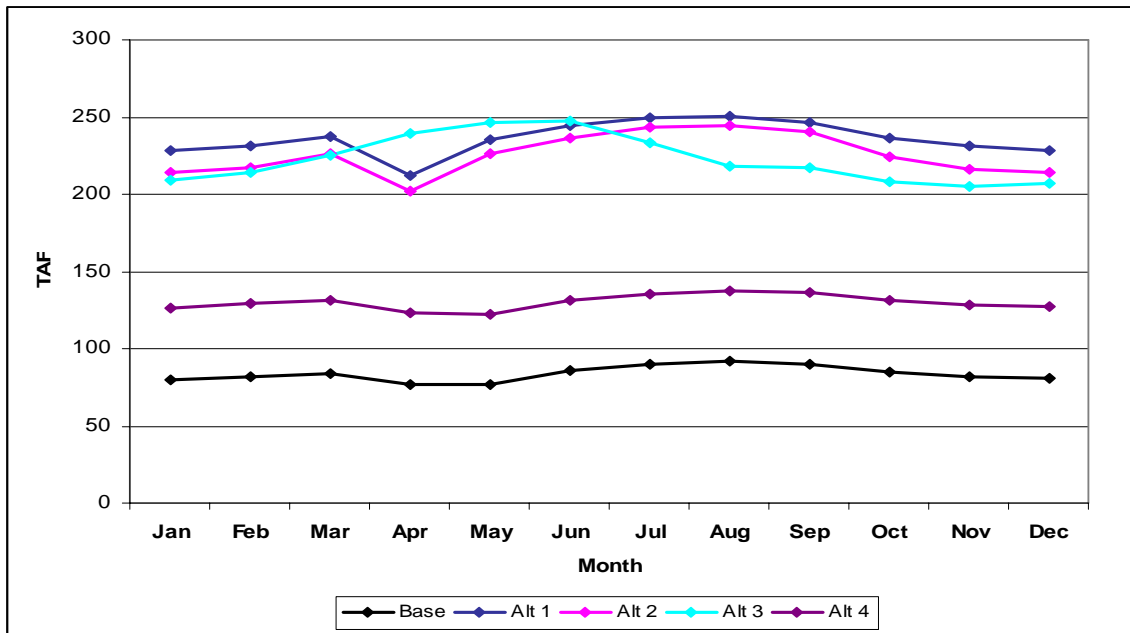


Figure C4-27: Monthly Average Los Vaqueros storage, 2005 LOD, Moderate Fishery Restrictions

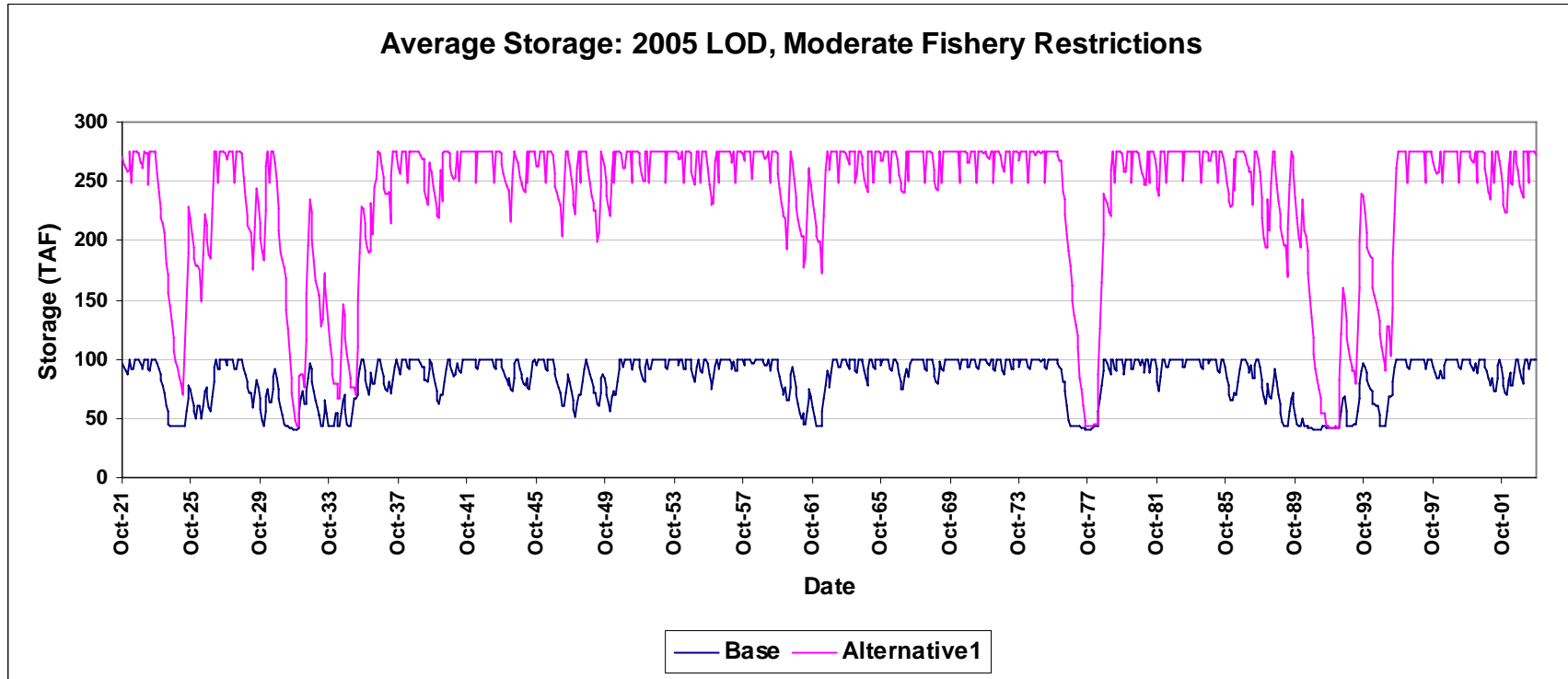


Figure C4-28: Timeseries of Alternative 1 and Base Los Vaqueros storage 2005 LOD, Moderate Fishery Restrictions

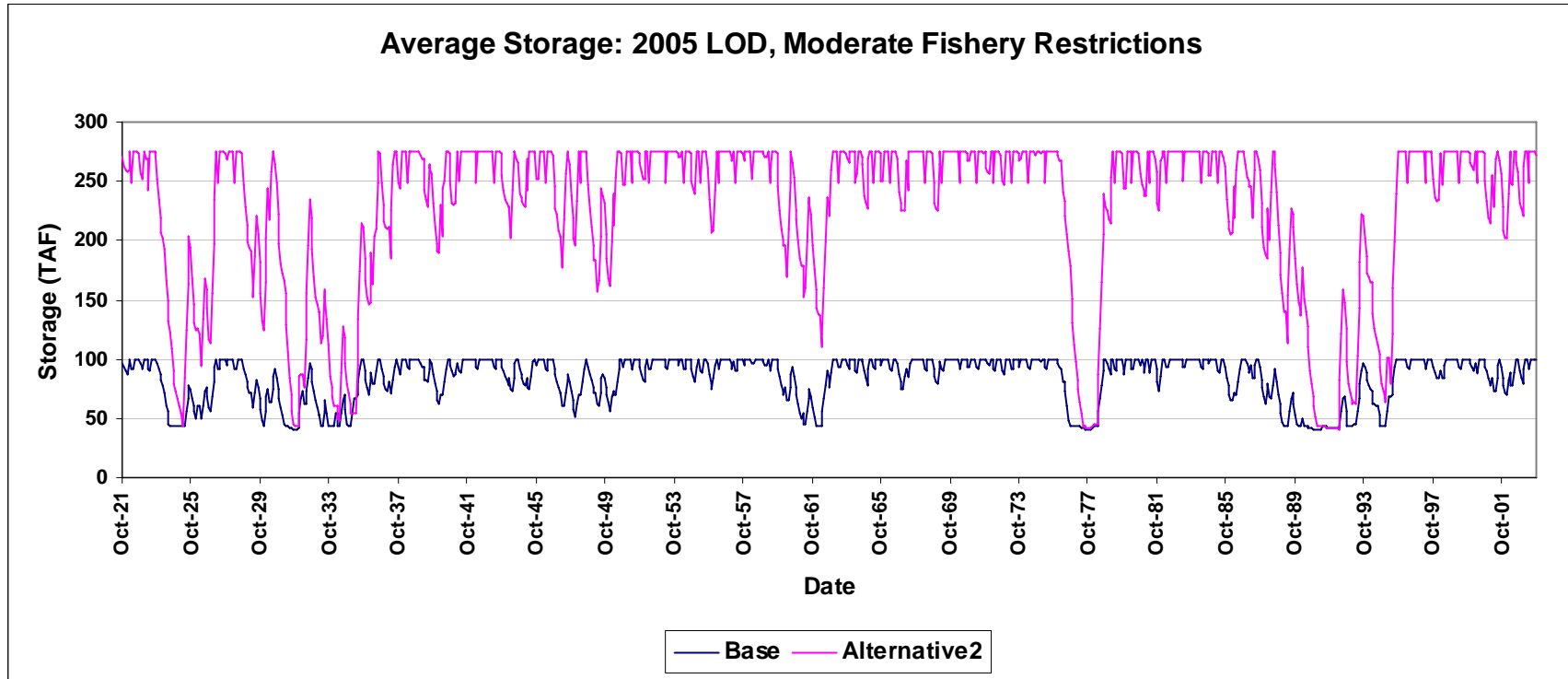


Figure C4-29: Timeseries of Alternative 2 and Base Los Vaqueros storage 2005 LOD, Moderate Fishery Restrictions

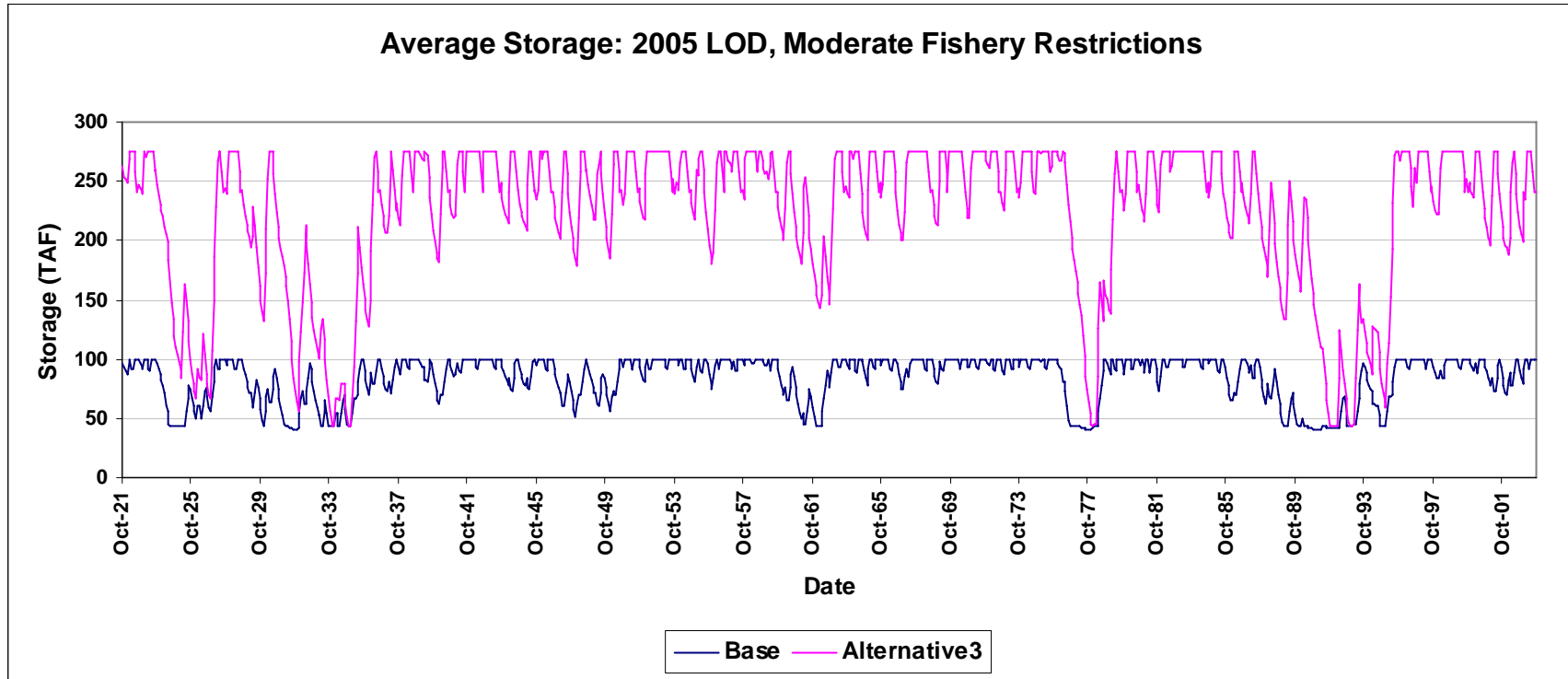


Figure C4-30: Timeseries of Alternative 3 and Base Los Vaqueros storage 2005 LOD, Moderate Fishery Restrictions

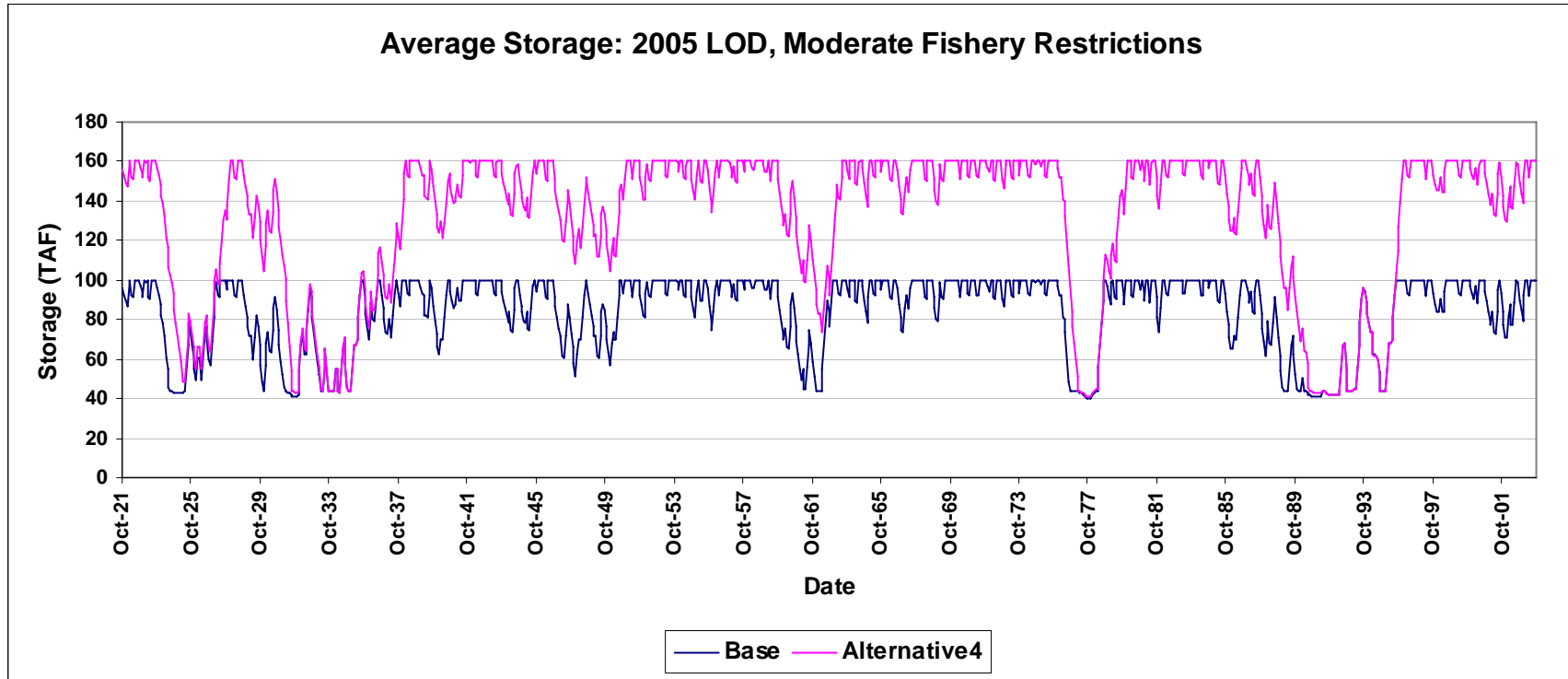


Figure C4-31: Timeseries of Alternative 4 and Base Los Vaqueros storage 2005 LOD, Moderate Fishery Restrictions

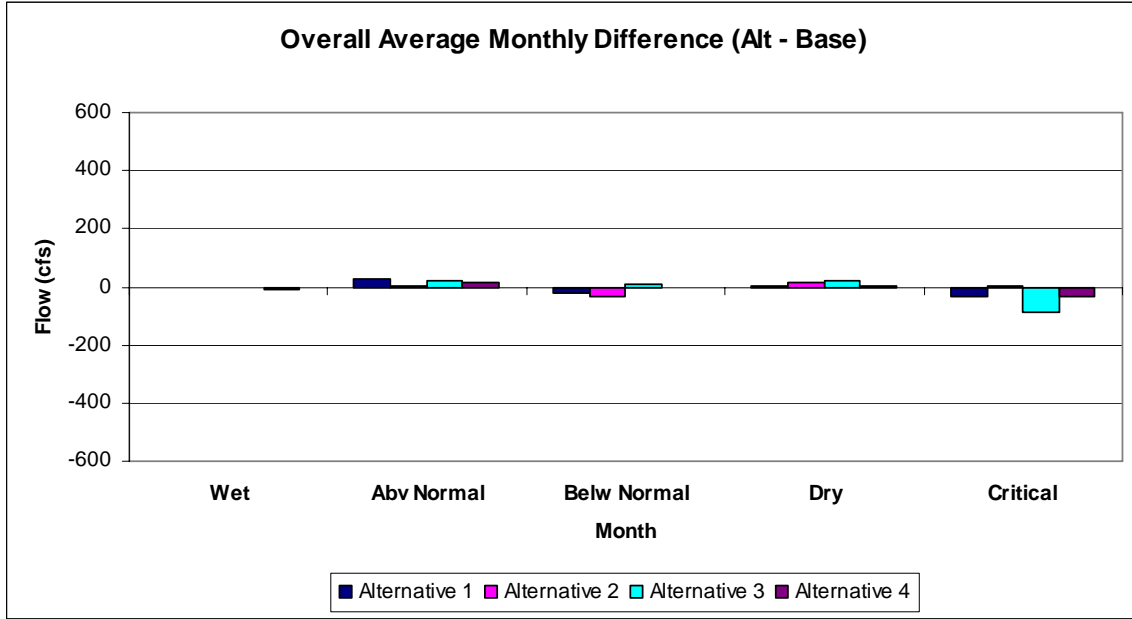


Figure C4-32: Changes in Sacramento River at Hood flow by water year type, 2005 LOD, Moderate Fishery Restrictions

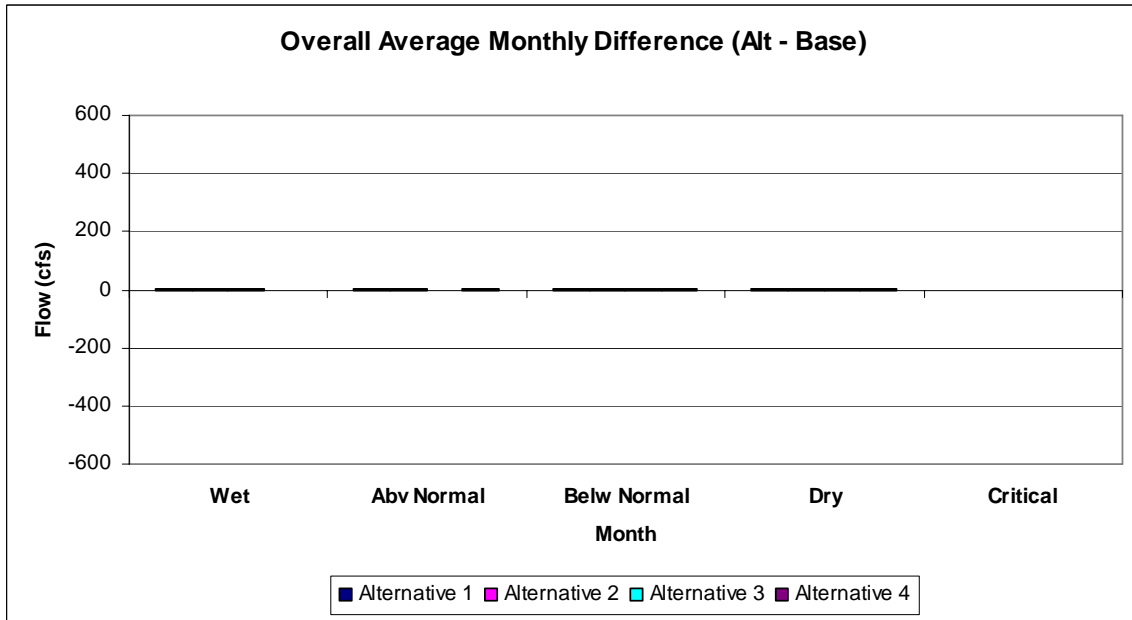


Figure C4-33: Changes in San Joaquin River at Vernalis flow by water year type, 2005 LOD, Moderate Fishery Restrictions

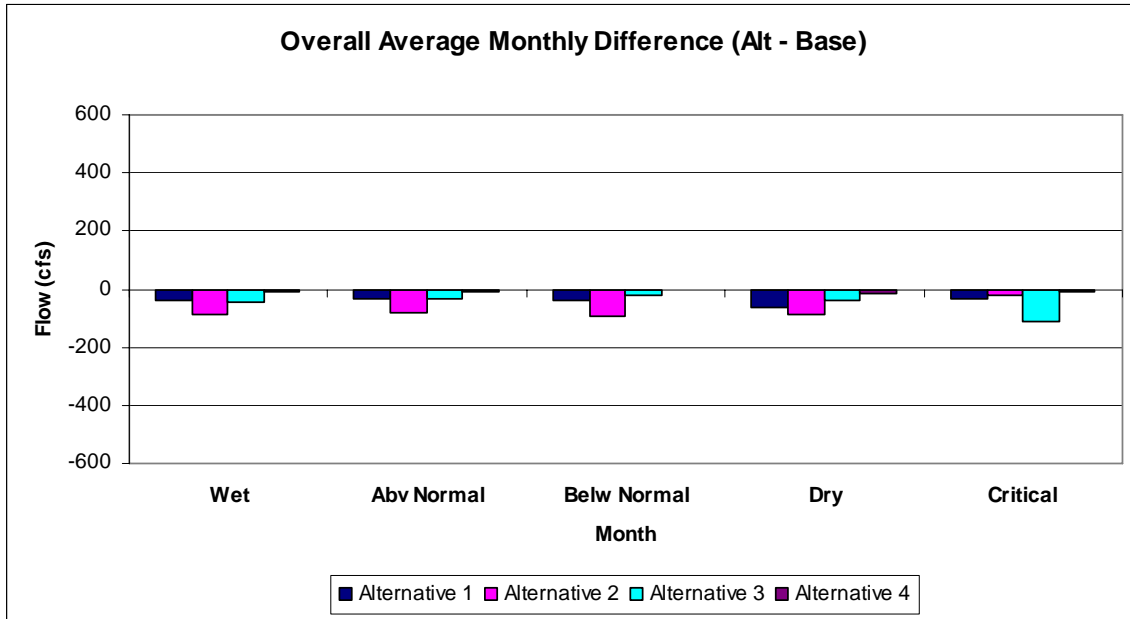


Figure C4-34: Changes in Delta Outflow by Year Type, 2005 LOD, Moderate Fishery Restrictions

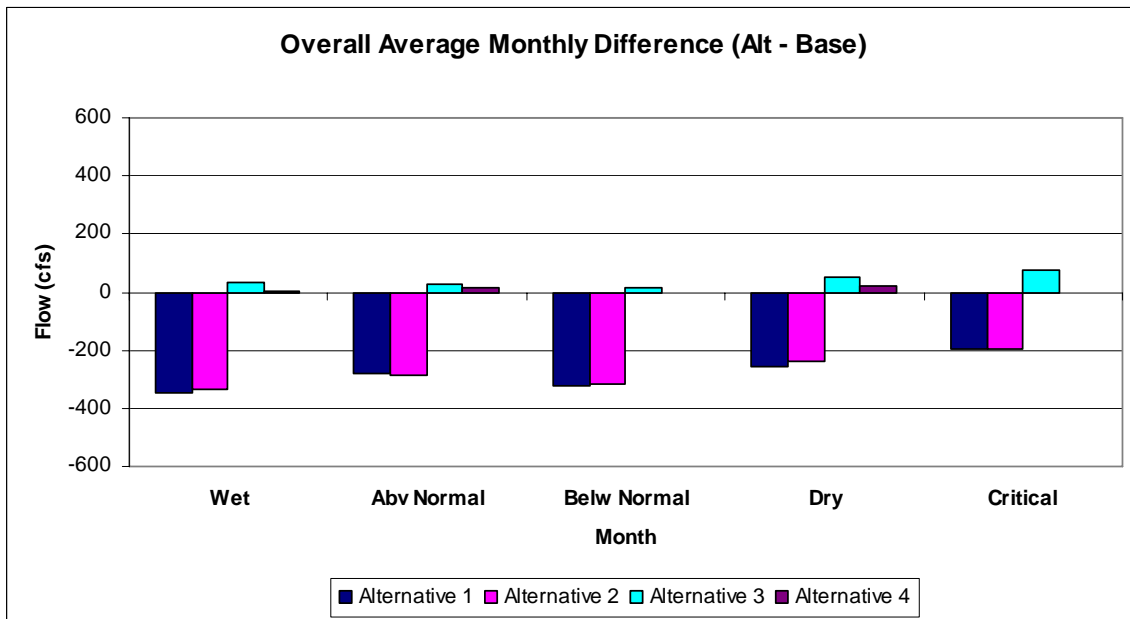


Figure C4-35: Changes in Banks + Jones Diversions by Year Type, 2005 LOD, Moderate Fishery Restrictions

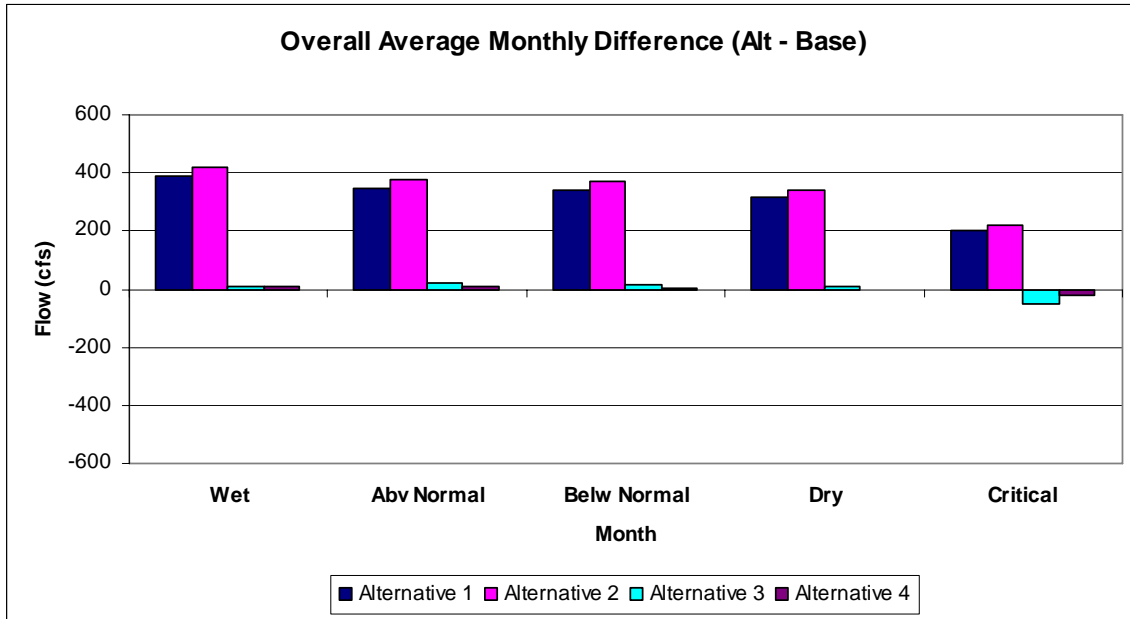


Figure C4-36: Changes in Project diversions by water year type, 2005 LOD, Moderate Fishery Restrictions

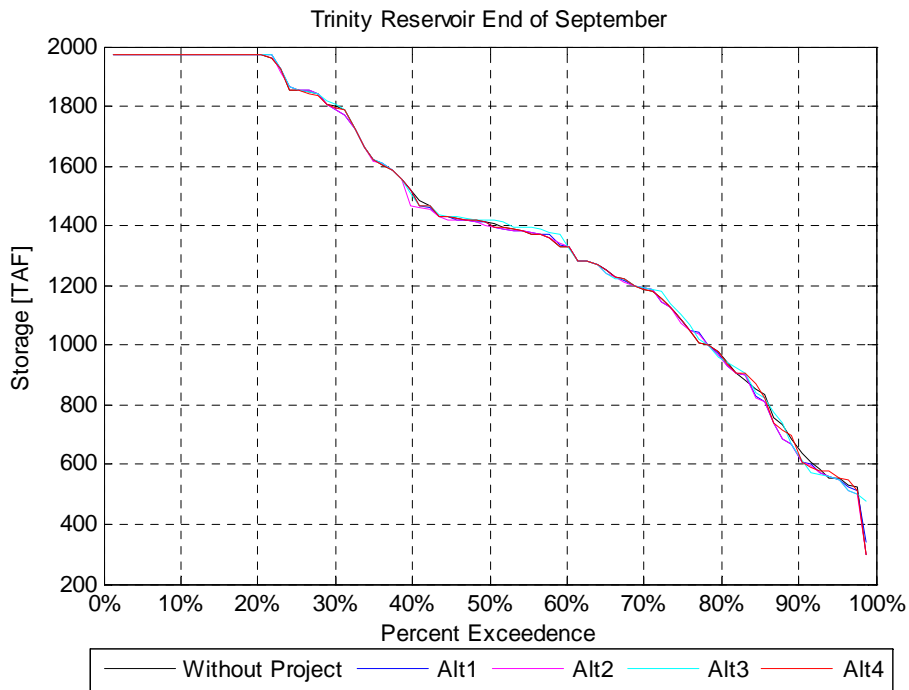


Figure C4-37: Trinity Reservoir end of September storage, 2005 LOD, Moderate Fishery Restrictions

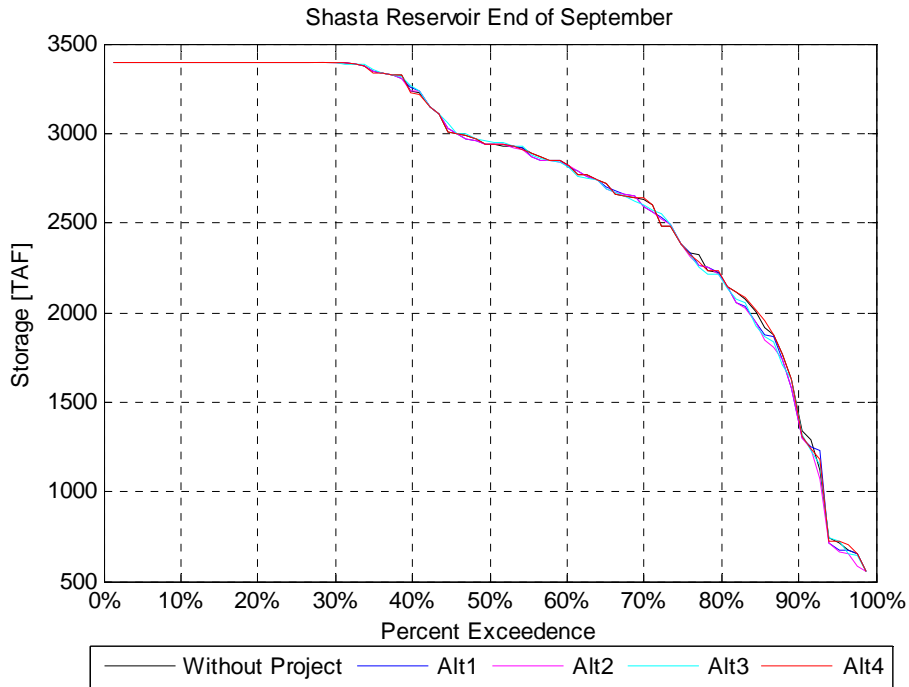


Figure C4-38: Shasta Reservoir end of September storage, 2005 LOD, Moderate Fishery Restrictions

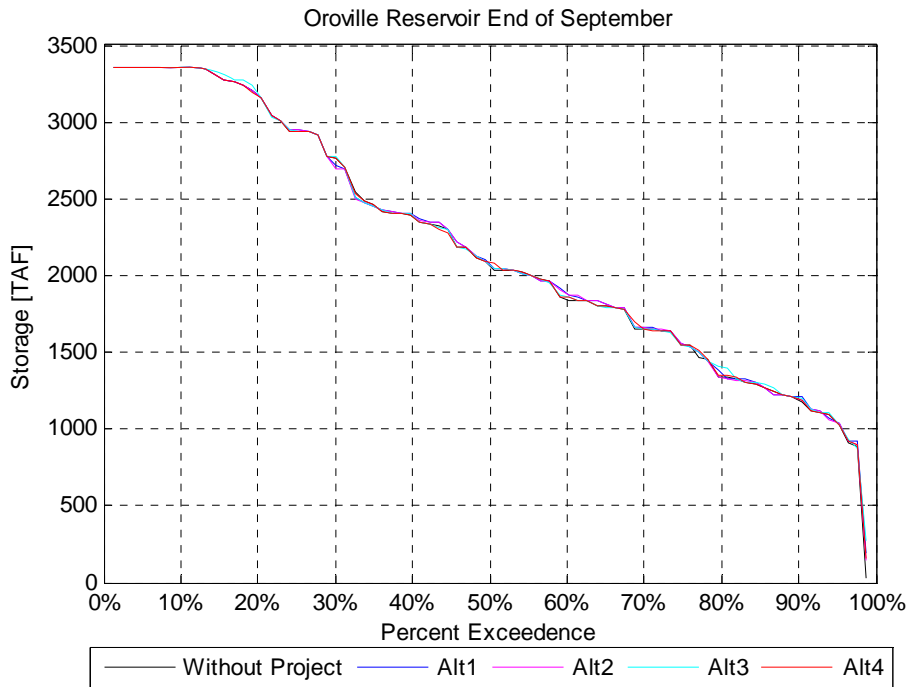


Figure C4-39: Oroville Reservoir end of September storage, 2005 LOD, Moderate Fishery Restrictions

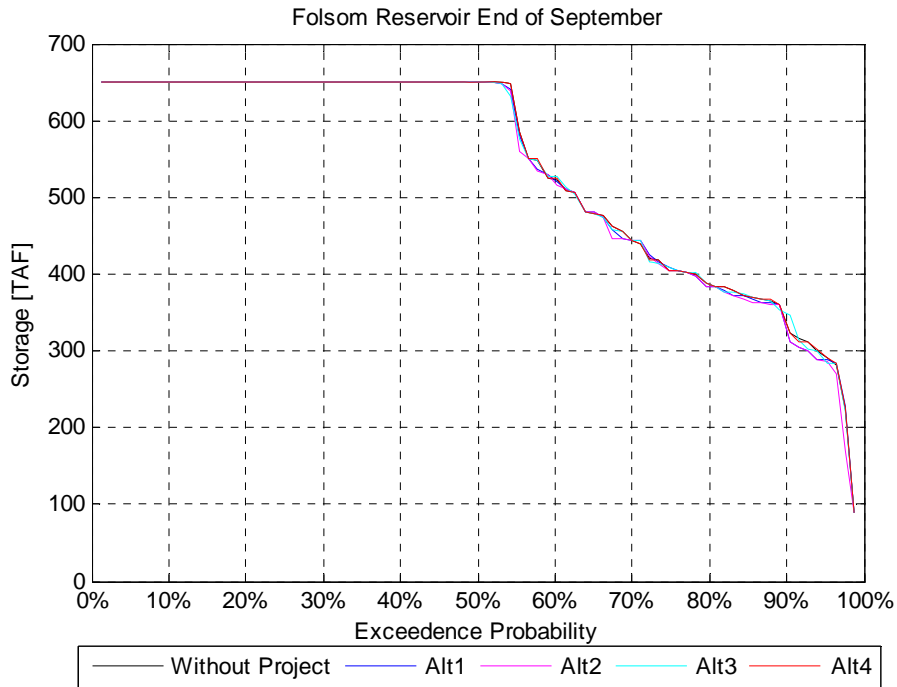


Figure C4-40: Folsom Reservoir end of September storage, 2005 LOD, Moderate Fishery Restrictions

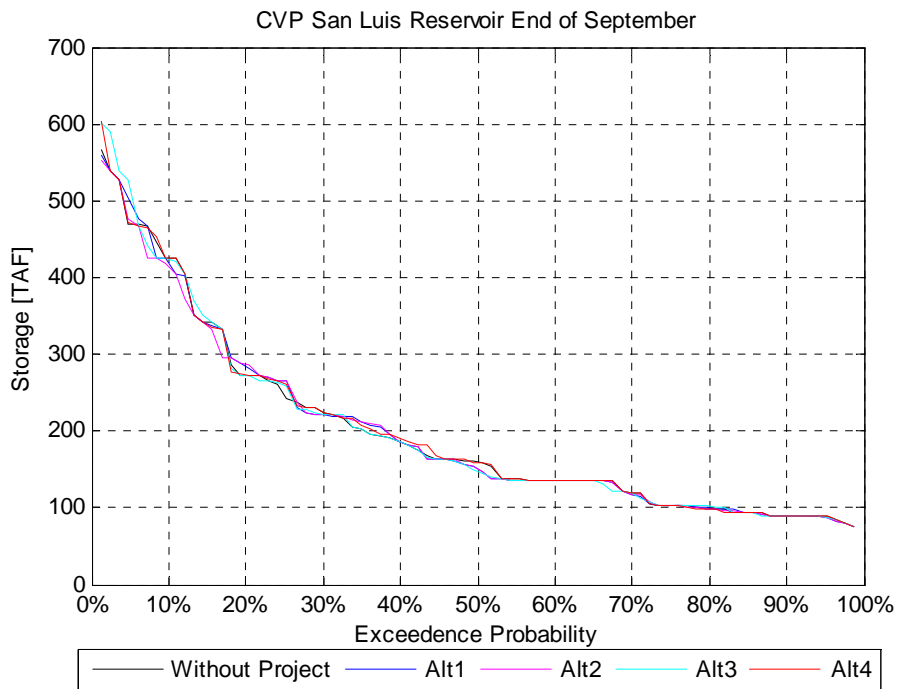


Figure C4-41: CVP San Luis Reservoir end of September storage, 2005 LOD, Moderate Fishery Restrictions

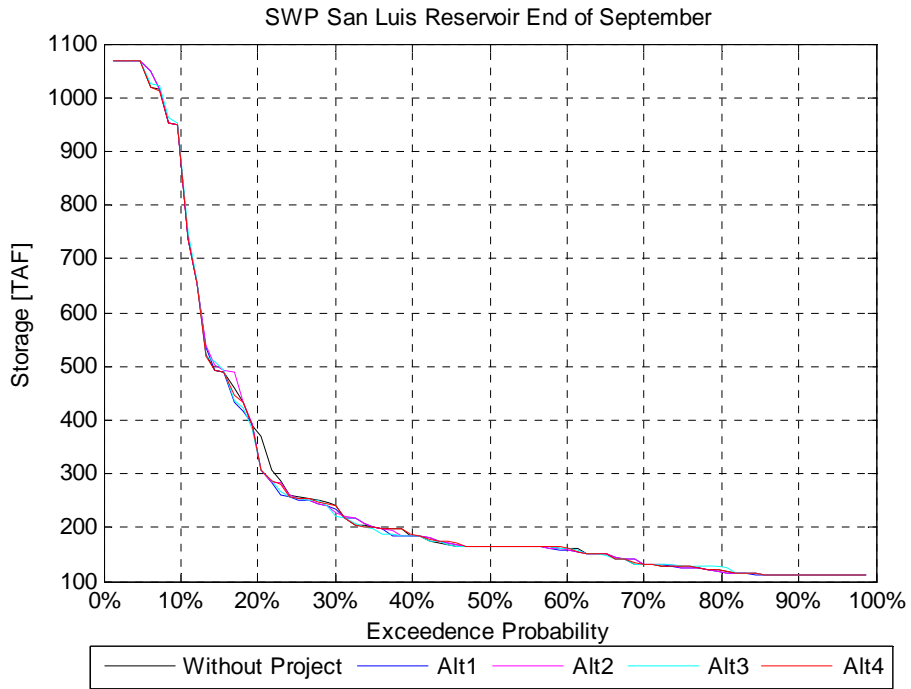


Figure C4-42: SWP San Luis Reservoir end of September storage, 2005 LOD, Moderate Fishery Restrictions

2030 Level of Development, Severe Fishery Restrictions

Model results for each project alternative are presented in **Table C4-11 (A-D)** as average values for full hydrologic study period (1921 to 2003) and a six-year dry period (1987 to 1992). These results include upstream and Delta flows and diversions (e.g. flow in Sacramento River and major tributaries, San Joaquin River flow, exports at Banks and Jones Pumping Plants, Net Delta Outflow, X2 position and QWEST), CVP and SWP south of Delta deliveries, CVP and SWP reservoir carry-over storages (at Folsom, Oroville, San Luis, Shasta and Trinity Reservoirs), and parameters specific to project alternative operations (CCWD and Los Vaqueros Reservoir (LV) diversions; additional south of Delta Environmental Water Supply deliveries; and Delta Supply Restoration deliveries to South Bay water agencies).

Table C4-12 and **Table C4-13** present the change in Delta channel flows and indices, upstream reservoir storages and local operation parameters for each project alternative as compared to the Future Without Project condition. Results are summarized in these tables as averages by water year type and by month, respectively.

Table C4-14 (A-D) presents the changes from the Future Without Project condition in monthly Banks and Jones export diversions for each project alternative, and **Table C4-15 (A-D)** presents changes from the Future Without Project condition in monthly CCWD and Los Vaqueros Reservoir (LV) diversions for each project alternative. These tables also indicate whether the Delta is in excess or balanced conditions.

Monthly and year type average changes in various Delta parameters (Sacramento River flow at Hood, San Joaquin River flow at Vernalis, Delta Outflow, combined Banks/Jones diversions, and combined CCWD and LV diversions) are presented in **Figure C4-43** through **Figure C4-47** and **Figure C4-53** through **Figure C4-57**, respectively. **Figure C4-48** shows the monthly average Los Vaqueros storage and **Figure C4-49** through **Figure C4-52** show time-series of storage for each alternative and the Future Without Project condition.

Figure C4-58 through **Figure C4-63** are exceedence plots of the end of September storage in upstream reservoirs (Trinity, Shasta, Oroville, and Folsom) and San Luis Reservoir (CVP and SWP).

**TABLE C4-11:
SUMMARY COMPARISON OF ANNUAL AVERAGE DIVERSIONS, DELIVERIES, RIVER FLOWS, AND
CARRYOVER STORAGE, 2030 LOD, SEVERE FISHERY RESTRICTIONS**

(A) ALTERNATIVE 1 COMPARED TO FUTURE WITHOUT PROJECT (NO ACTION)

	Future Without Project		Alternative 1		Difference (Alt – Fut. W.P.)		Percent Difference	
	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92
Diversion (TAF/yr)								
CCWD and LV Diversions	163	169	389	314	226	145	139%	85%
Banks Pumping Plant	2573	1507	2377	1370	-196	-137	-8%	-9%
Jones Pumping Plant	2158	1627	2161	1644	3	17	0%	1%
Total	4894	3304	4927	3328	33	25	1%	1%
Delta (cfs)								
Sacramento River at Hood	22,315	12,958	22,319	12,976	4	18	0%	0%
San Joaquin River at Vernalis	4,242	1,540	4,242	1,540	0	0	0%	0%
Delta Outflow	22,362	8,766	22,317	8,752	-44	-14	0%	0%
QWEST	3,226	312	3,180	286	-46	-27	-1%	-8%
X2 Position (km)	74.95	81.39	74.98	81.39	0.03	0.00	0%	0%
Upstream River Flows (cfs)								
Sacramento River at Keswick Dam	8,561	6,333	8,559	6,345	-1	12	0%	0%
American River below Nimbus Dam	3,289	1,504	3,289	1,515	0	11	0%	1%
Feather River below Thermalito	4,386	2,349	4,386	2,346	0	-3	0%	0%
Reservoir Carryover Storage (TAF)								
Trinity	1,397	810	1,394	817	-3	7	0%	1%
Shasta	2,732	1,671	2,726	1,621	-6	-50	0%	-3%
Oroville	2,206	1,203	2,203	1,209	-3	6	0%	0%
Folsom	513	331	511	319	-2	-13	0%	-4%
CVP San Luis (August)	175	106	174	100	0	-6	0%	-6%
SWP San Luis (August)	220	117	219	117	0	1	0%	0%
Deliveries (TAF/yr)								
CVP SOD Ag	880	353	883	366	2	13	0%	4%
CVP SOD M&I	115	95	116	96	0	1	0%	1%
SWP Table A + Article 56	2,436	1,459	2,434	1,467	-2	8	0%	1%
SWP Article 21	71	0	69	0	-2	0	-2%	NA
Delta Supply Restoration + Dry Year	0	0	32	27	32	27	NA	NA

(B) ALTERNATIVE 2 COMPARED TO FUTURE WITHOUT PROJECT (NO ACTION)

	Future Without Project		Alternative 2		Difference (Alt – Fut. W.P.)		Percent Difference	
	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92
Diversion (TAF/yr)								
CCWD and LV Diversions	163	169	405	327	242	158	149%	93%
Banks Pumping Plant	2573	1507	2383	1372	-190	-135	-7%	-9%
Jones Pumping Plant	2158	1627	2160	1642	2	15	0%	1%
Total	4894	3304	4948	3341	54	38	1%	1%
Delta (cfs)								
Sacramento River at Hood	22,315	12,958	22,316	12,979	2	21	0%	0%
San Joaquin River at Vernalis	4,242	1,540	4,242	1,540	0	0	0%	0%
Delta Outflow	22,362	8,766	22,285	8,735	-77	-31	0%	0%
QWEST	3,226	312	3,148	267	-78	-45	-2%	-15%
X2 Position (km)	75	81	75	81	0	0	0%	0%
Upstream River Flows (cfs)								
Sacramento River at Keswick Dam	8,561	6,333	8,558	6,347	-3	14	0%	0%
American River below Nimbus Dam	3,289	1,504	3,290	1,515	0	11	0%	1%
Feather River below Thermalito	4,386	2,349	4,386	2,344	0	-5	0%	0%
Reservoir Carryover Storage (TAF)								
Trinity	1,397	810	1,392	814	-4	4	0%	1%
Shasta	2,732	1,671	2,720	1,616	-12	-55	0%	-3%
Oroville	2,206	1,203	2,202	1,207	-4	4	0%	0%
Folsom	513	331	511	319	-2	-13	0%	-4%
CVP San Luis (August)	175	106	174	101	0	-6	0%	-5%
SWP San Luis (August)	220	117	220	117	0	0	0%	0%
Deliveries (TAF/yr)								
CVP SOD Ag	880	353	881	363	1	10	0%	3%
CVP SOD M&I	115	95	116	97	0	2	0%	2%
SWP Table A + Article 56	2,436	1,459	2,436	1,466	0	7	0%	0%
SWP Article 21	71	0	69	0	-1	0	-2%	NA
Additional SOD Env Water Supply	0	0	52	40	52	40	NA	NA

**TABLE C4-11:
SUMMARY COMPARISON OF ANNUAL AVERAGE DIVERSIONS, DELIVERIES, RIVER FLOWS, AND
CARRYOVER STORAGE, 2030 LOD, SEVERE FISHERY RESTRICTIONS**

(C) ALTERNATIVE 3 COMPARED TO FUTURE WITHOUT PROJECT (NO ACTION)

	Future Without Project		Alternative 3		Difference (Alt – Fut. W.P.)		Percent Difference	
	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92
Diversion (TAF/yr)								
CCWD and LV Diversions	163	169	166	141	3	-28	2%	-17%
Banks Pumping Plant	2573	1507	2596	1564	23	57	1%	4%
Jones Pumping Plant	2158	1627	2164	1661	6	35	0%	2%
Total	4894	3304	4926	3367	32	63	1%	2%
Delta (cfs)								
Sacramento River at Hood	22,315	12,958	22,307	12,935	-7	-23	0%	0%
San Joaquin River at Vernalis	4,242	1,540	4,242	1,540	0	0	0%	0%
Delta Outflow	22,362	8,766	22,312	8,654	-50	-112	0%	-1%
QWEST	3,226	312	3,183	219	-43	-93	-1%	-30%
X2 Position (km)	75	81	75	82	0	0	0%	0%
Upstream River Flows (cfs)								
Sacramento River at Keswick Dam	8,561	6,333	8,557	6,321	-4	-12	0%	0%
American River below Nimbus Dam	3,289	1,504	3,289	1,507	0	3	0%	0%
Feather River below Thermalito	4,386	2,349	4,386	2,352	0	3	0%	0%
Reservoir Carryover Storage (TAF)								
Trinity	1,397	810	1,398	830	1	20	0%	2%
Shasta	2,732	1,671	2,733	1,692	1	20	0%	1%
Oroville	2,206	1,203	2,212	1,211	6	8	0%	1%
Folsom	513	331	513	326	0	-6	0%	-2%
CVP San Luis (August)	175	106	174	105	-1	-1	-1%	-1%
SWP San Luis (August)	220	117	222	119	2	3	1%	2%
Deliveries (TAF/yr)								
CVP SOD Ag	880	353	880	366	0	13	0%	4%
CVP SOD M&I	115	95	116	97	0	1	0%	2%
SWP Table A + Article 56	2,436	1,459	2,451	1,520	15	61	1%	4%
SWP Article 21	71	0	76	0	6	0	8%	NA
Additional SOD Env Water Supply	0	0	8	21	8	21	NA	NA

(D) ALTERNATIVE 4 COMPARED TO FUTURE WITHOUT PROJECT (NO ACTION)

	Future Without Project		Alternative 4		Difference (Alt – Fut. W.P.)		Percent Difference	
	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92
Diversion (TAF/yr)								
CCWD and LV Diversions	163	169	163	160	0	-9	0%	-5%
Banks Pumping Plant	2573	1507	2571	1508	-2	1	0%	0%
Jones Pumping Plant	2158	1627	2158	1633	0	6	0%	0%
Total	4894	3304	4892	3301	-2	-2	0%	0%
Delta (cfs)								
Sacramento River at Hood	22,315	12,958	22,312	12,959	-2	1	0%	0%
San Joaquin River at Vernalis	4,242	1,540	4,242	1,540	0	0	0%	0%
Delta Outflow	22,362	8,766	22,363	8,770	1	4	0%	0%
QWEST	3,226	312	3,230	315	3	3	0%	1%
X2 Position (km)	75	81	75	81	0	0	0%	0%
Upstream River Flows (cfs)								
Sacramento River at Keswick Dam	8,561	6,333	8,559	6,334	-2	1	0%	0%
American River below Nimbus Dam	3,289	1,504	3,289	1,504	0	0	0%	0%
Feather River below Thermalito	4,386	2,349	4,386	2,349	0	0	0%	0%
Reservoir Carryover Storage (TAF)								
Trinity	1,397	810	1,398	813	1	3	0%	0%
Shasta	2,732	1,671	2,733	1,671	1	0	0%	0%
Oroville	2,206	1,203	2,203	1,203	-3	0	0%	0%
Folsom	513	331	512	330	-1	-1	0%	0%
CVP San Luis (August)	175	106	174	105	-1	-2	-1%	-1%
SWP San Luis (August)	220	117	219	117	-1	0	0%	0%
Deliveries (TAF/yr)								
CVP SOD Ag	880	353	880	360	-1	7	0%	2%
CVP SOD M&I	115	95	116	96	0	1	0%	1%
SWP Table A + Article 56	2,436	1,459	2,435	1,459	-1	0	0%	0%
SWP Article 21	71	0	70	0	-1	0	-1%	NA

**TABLE C4-12:
ANNUAL VALUES BY WATER YEAR TYPE, 2030 LOD, SEVERE FISHERY RESTRICTIONS**

Parameter	Long Term Average	Dry Period (87-92)	Wet	Above Normal	Below Normal	Dry	Critical
CCWD and LV Diversions (TAF/yr)							
Average Total Diversions Future Without Project	163	169	161	173	172	157	155
Changes under Alternative 1	226	145	277	235	223	208	135
Changes under Alternative 2	242	158	292	255	242	224	148
Changes under Alternative 3	3	-28	21	19	12	-6	-49
Changes under Alternative 4	0	-9	9	9	-1	-8	-13
CVP and SWP Improved Fish Screening							
Future Without Project	0	0	0	0	0	0	0
Changes under Alternative 1	177	138	214	173	170	161	136
Changes under Alternative 2	174	137	208	166	167	161	136
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
Delta (cfs)							
Sacramento River at Hood							
Future Without Project	22,315	12,958	33,040	25,208	18,396	15,409	11,111
Changes under Alternative 1	4	18	8	-6	8	12	-13
Changes under Alternative 2	2	21	6	-25	4	16	-5
Changes under Alternative 3	-7	-23	17	-31	-6	16	-71
Changes under Alternative 4	-2	1	10	-19	0	-5	-11
San Joaquin River at Vernalis							
Future Without Project	4,242	1,540	7,508	3,963	3,304	2,184	1,625
Changes under Alternative 1	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
Delta Outflow Future Without Project							
	22,362	8,766	40,357	24,361	15,075	10,918	7,042
Changes under Alternative 1	-44	-14	-71	-75	-12	-33	-11
Changes under Alternative 2	-77	-31	-96	-135	-74	-48	-20
Changes under Alternative 3	-50	-112	-40	-80	-82	-1	-76
Changes under Alternative 4	1	4	5	-31	4	11	3
Banks Pumping Plant Future Without Project							
	3,544	2,082	4,725	3,636	3,306	2,942	2,072
Changes under Alternative 1	-270	-190	-319	-269	-278	-243	-194
Changes under Alternative 2	-262	-186	-312	-255	-258	-242	-195
Changes under Alternative 3	32	78	38	18	45	13	49
Changes under Alternative 4	-3	1	-5	1	-1	-3	0
Jones Pumping Plant Future Without Project							
	2,973	2,247	3,471	3,126	2,932	2,746	2,128
Changes under Alternative 1	4	24	9	7	-8	3	7
Changes under Alternative 2	3	21	4	4	4	-2	6
Changes under Alternative 3	8	48	-1	-2	14	14	22
Changes under Alternative 4	-1	8	-3	-1	0	-2	4
Banks + Jones Exports Future Without Project							
	6,517	4,329	8,196	6,762	6,238	5,687	4,200
Changes under Alternative 1	-265	-166	-310	-262	-286	-240	-187
Changes under Alternative 2	-259	-165	-308	-251	-254	-243	-189
Changes under Alternative 3	40	126	37	16	59	27	70
Changes under Alternative 4	-3	9	-8	0	-1	-6	4
Banks + Jones + CCWD + LV Diversions							
Future Without Project	6,741	4,563	8,418	7,000	6,475	5,904	4,414
Changes under Alternative 1	45	32	71	61	21	46	-2
Changes under Alternative 2	74	52	94	100	79	65	14
Changes under Alternative 3	44	87	65	42	75	17	3
Changes under Alternative 4	-3	-3	4	12	-3	-16	-15
QWEST Future Without Project							
	3,226	312	7,392	3,276	1,759	325	215
Changes under Alternative 1	-46	-27	-87	-43	-18	-42	-1
Changes under Alternative 2	-78	-45	-109	-104	-77	-60	-16
Changes under Alternative 3	-43	-93	-63	-29	-76	-11	-21
Changes under Alternative 4	3	3	-1	-15	4	17	12
X2 Position (km) Future Without Project							
	74.95	81.39	68.73	73.17	76.35	79.01	82.48
Changes under Alternative 1	0.03	0.00	0.04	0.04	0.00	0.03	0.02
Changes under Alternative 2	0.05	0.02	0.05	0.10	0.05	0.04	0.03
Changes under Alternative 3	0.03	0.15	0.00	0.06	0.03	0.00	0.09
Changes under Alternative 4	0.00	-0.01	0.01	0.04	-0.01	-0.03	0.00
Upstream River Flows (cfs)							
Sacramento River at Keswick Dam							
Future Without Project	8,561	6,333	11,557	8,682	7,087	6,906	6,148
Changes under Alternative 1	-1	12	7	-5	-16	8	-12
Changes under Alternative 2	-3	14	-6	-15	3	8	-5
Changes under Alternative 3	-4	-12	6	-12	-2	11	-42
Changes under Alternative 4	-2	1	0	-4	1	-1	-9

**TABLE C4-12:
ANNUAL VALUES BY WATER YEAR TYPE, 2030 LOD, SEVERE FISHERY RESTRICTIONS**

Parameter	Long Term Average	Dry Period (87-92)	Wet	Above Normal	Below Normal	Dry	Critical
American River below Nimbus Dam							
Future Without Project	3,289	1,504	5,208	3,687	2,751	1,980	1,324
Changes under Alternative 1	0	11	-2	0	-5	8	0
Changes under Alternative 2	0	11	-2	2	-5	8	0
Changes under Alternative 3	0	3	2	2	0	1	-8
Changes under Alternative 4	0	0	0	1	0	1	-2
Feather River below Thermalito							
Future Without Project	4,386	2,349	6,871	4,392	3,367	2,948	2,341
Changes under Alternative 1	0	-3	-4	-8	19	-1	-3
Changes under Alternative 2	0	-5	6	-22	8	2	-4
Changes under Alternative 3	0	3	18	-29	-2	4	-13
Changes under Alternative 4	0	0	10	-17	0	-3	-1
Reservoir Carryover Storage (TAF)							
Trinity Future Without Project	1,397	810	1,854	1,624	1,271	1,129	726
Changes under Alternative 1	-3	7	-2	2	-4	-9	-2
Changes under Alternative 2	-4	4	-2	-4	-7	-7	-4
Changes under Alternative 3	1	20	-1	1	4	0	6
Changes under Alternative 4	1	3	0	2	0	1	2
Shasta Future Without Project	2,732	1,671	3,331	3,200	2,839	2,396	1,343
Changes under Alternative 1	-6	-50	-4	-6	13	-12	-23
Changes under Alternative 2	-12	-55	-4	-8	-12	-15	-30
Changes under Alternative 3	1	20	-4	-1	6	-8	24
Changes under Alternative 4	1	0	0	-1	2	2	3
Oroville Future Without Project	2,206	1,203	3,002	2,483	2,183	1,655	1,058
Changes under Alternative 1	-3	6	1	0	-16	-3	4
Changes under Alternative 2	-4	4	-7	-5	-3	-4	2
Changes under Alternative 3	6	8	5	2	12	-2	17
Changes under Alternative 4	-3	0	-9	-3	3	-1	1
Folsom Future Without Project	513	331	636	573	555	401	306
Changes under Alternative 1	-2	-13	0	-1	2	-7	-3
Changes under Alternative 2	-2	-13	0	-2	2	-7	-4
Changes under Alternative 3	0	-6	0	1	0	-1	3
Changes under Alternative 4	-1	-1	0	0	0	-2	1
CVP San Luis (August) Future Without Project	175	106	249	160	127	133	146
Changes under Alternative 1	0	-6	0	0	-1	-4	3
Changes under Alternative 2	0	-6	0	-1	0	-4	3
Changes under Alternative 3	-1	-1	0	0	-1	-2	-3
Changes under Alternative 4	-1	-2	0	-1	-2	-3	0
SWP San Luis (August) Future Without Project	220	117	384	166	151	138	121
Changes under Alternative 1	0	1	-2	0	0	0	0
Changes under Alternative 2	0	0	-1	-1	0	0	0
Changes under Alternative 3	2	3	7	0	0	0	-1
Changes under Alternative 4	-1	0	-2	-1	0	0	-1
CVP and SWP Deliveries (TAF/year)							
CVP SOD Ag Future Without Project	880	353	1,333	965	790	630	299
Changes under Alternative 1	2	13	5	9	-8	4	-2
Changes under Alternative 2	1	10	2	6	1	-1	-3
Changes under Alternative 3	0	13	-2	1	2	-6	6
Changes under Alternative 4	-1	7	-3	0	1	0	2
CVP SOD M&I Future Without Project	115	95	131	115	114	109	93
Changes under Alternative 1	0	1	1	0	0	0	0
Changes under Alternative 2	0	2	0	0	0	0	0
Changes under Alternative 3	0	1	0	0	0	0	1
Changes under Alternative 4	0	1	0	0	0	0	1
SWP Table A + Article 56 Future Without Project	2,436	1,459	3,122	2,494	2,360	2,126	1,445
Changes under Alternative 1	-2	8	3	-10	-7	-1	2
Changes under Alternative 2	0	7	4	-2	-5	-2	1
Changes under Alternative 3	15	61	12	5	22	8	32
Changes under Alternative 4	-1	0	0	-1	-1	-4	0
SWP Article 21 Future Without Project	71	0	144	72	63	1	24
Changes under Alternative 1	-2	0	-1	4	-9	-1	1
Changes under Alternative 2	-1	0	-4	0	0	0	0
Changes under Alternative 3	6	0	8	7	13	1	-1
Changes under Alternative 4	-1	0	-4	2	0	0	0
Improved Fish Screening for CVP South Bay							
Future Without Project	0	0	0	0	0	0	0
Changes under Alternative 1	74	75	74	71	76	76	72
Changes under Alternative 2	72	74	72	70	75	74	72
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
Improved Fish Screening for SWP South Bay							
Future Without Project	0	0	0	0	0	0	0
Changes under Alternative 1	117	71	157	116	106	98	74
Changes under Alternative 2	115	71	153	110	106	98	74
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0

**TABLE C4-12:
ANNUAL VALUES BY WATER YEAR TYPE, 2030 LOD, SEVERE FISHERY RESTRICTIONS**

Parameter	Long Term Average	Dry Period (87-92)	Wet	Above Normal	Below Normal	Dry	Critical
LV CVP Delta Supply Restoration							
Future Without Project	0	0	0	0	0	0	0
Changes under Alternative 1	7	7	5	6	5	9	10
Changes under Alternative 2	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
SWP South Bay Delta Supply Restoration							
Future Without Project	0	0	0	0	0	0	0
Changes under Alternative 1	25	19	16	19	21	39	34
Changes under Alternative 2	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
Additional CVP SOD Environmental Water from Dedicated Storage Future Without Project	0	0	0	0	0	0	0
Changes under Alternative 1	0	0	0	0	0	0	0
Changes under Alternative 2	52	40	42	47	49	70	58
Changes under Alternative 3	8	21	3	5	6	18	13
Changes under Alternative 4	0	0	0	0	0	0	0

**TABLE C4-13:
AVERAGE MONTHLY VALUES, 2030 LOD, SEVERE FISHERY RESTRICTIONS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
CCWD and LV Diversions (TAF)												
Average Total Diversions												
Future Without Project	10	9	7	9	11	9	3	15	28	26	21	14
Changes under Alternative 1	12	16	21	18	16	28	-2	33	19	21	22	22
Changes under Alternative 2	13	18	23	24	18	28	-2	34	20	21	22	22
Changes under Alternative 3	-2	-2	-1	0	1	2	-2	10	-6	4	1	-1
Changes under Alternative 4	0	-1	0	0	0	0	-1	0	-1	1	1	0
CVP and SWP Improved Fish												
Screening Future Without Project												
Changes under Alternative 1	11	15	17	17	13	22	0	9	13	17	20	22
Changes under Alternative 2	11	15	17	16	13	21	0	9	13	17	20	22
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Delta (cfs)												
Sacramento River at Hood												
Future Without Project	11,263	15,242	25,678	34,526	40,358	35,075	24,196	19,785	15,451	18,539	14,870	12,791
Changes under Alternative 1	-15	11	4	-17	-8	3	-51	28	90	50	-30	-16
Changes under Alternative 2	-9	-76	-21	-40	-9	13	-42	29	130	89	-22	-20
Changes under Alternative 3	11	-16	-26	-7	-23	23	-10	-24	-58	-16	-10	68
Changes under Alternative 4	-1	-37	-3	-22	-23	2	-6	-2	0	29	39	-2
San Joaquin River at Vernalis												
Future Without Project	2,533	2,703	3,447	4,824	6,506	6,339	5,990	6,040	4,619	3,236	2,097	2,569
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Delta Outflow												
Future Without Project	4,891	9,389	24,113	43,838	55,898	46,668	29,842	22,122	13,826	8,100	4,549	5,105
Changes under Alternative 1	-35	-20	-14	18	-91	-116	101	-342	-19	30	-24	-21
Changes under Alternative 2	-41	-144	-139	-49	-163	-121	106	-354	-2	35	-27	-20
Changes under Alternative 3	4	-14	-64	-23	-175	-160	-7	-171	44	-43	13	1
Changes under Alternative 4	1	-29	-4	97	-51	-13	6	5	7	-6	6	-9
Banks Pumping Plant												
Future Without Project	3,824	4,550	4,633	4,164	3,382	2,227	1,324	1,476	1,407	5,344	5,512	4,683
Changes under Alternative 1	-179	-242	-325	-316	-236	-352	-197	-151	-219	-289	-343	-387
Changes under Alternative 2	-176	-242	-285	-330	-226	-342	-198	-147	-212	-265	-329	-392
Changes under Alternative 3	43	12	42	59	99	148	36	1	0	-49	-37	32
Changes under Alternative 4	-1	-1	-3	-62	-1	-1	0	0	4	22	15	-2
Jones Pumping Plant												
Future Without Project	4,011	4,181	3,814	3,538	2,535	1,657	1,329	1,392	1,183	3,900	4,100	4,033
Changes under Alternative 1	8	4	-2	-32	15	21	77	-18	4	-26	-15	15
Changes under Alternative 2	3	11	9	-61	27	18	75	-15	2	-27	-20	13
Changes under Alternative 3	2	17	39	-37	34	4	0	-10	1	4	-7	49
Changes under Alternative 4	4	6	8	-59	19	11	1	0	-1	-5	-2	7
Banks + Jones Exports												
Future Without Project	7,835	8,731	8,448	7,702	5,917	3,884	2,653	2,867	2,590	9,243	9,612	8,716
Changes under Alternative 1	-171	-239	-327	-349	-221	-330	-120	-169	-215	-315	-358	-372
Changes under Alternative 2	-173	-230	-276	-391	-200	-323	-123	-162	-209	-292	-349	-379
Changes under Alternative 3	44	29	82	22	132	152	36	-9	2	-44	-44	80
Changes under Alternative 4	3	6	5	-121	18	10	1	0	3	17	13	5

**TABLE C4-13:
AVERAGE MONTHLY VALUES, 2030 LOD, SEVERE FISHERY RESTRICTIONS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Banks + Jones + CCWD + LV												
Diversions Future Without Project	8,003	8,886	8,565	7,847	6,105	4,035	2,708	3,120	3,056	9,663	9,957	8,949
Changes under Alternative 1	22	28	13	-50	56	126	-153	370	109	19	-6	5
Changes under Alternative 2	33	67	105	3	124	139	-149	383	132	54	4	0
Changes under Alternative 3	6	-1	69	14	148	181	-4	147	-102	27	-24	66
Changes under Alternative 4	-2	-6	1	-119	25	13	-11	-8	-7	35	32	7
QWEST Future Without Project	-724	-1,071	1,468	6,053	9,814	9,790	8,069	6,362	5,012	-1,555	-3,032	-1,474
Changes under Alternative 1	-26	-30	22	47	-58	-126	146	-367	-85	-69	-3	-10
Changes under Alternative 2	-34	-84	-109	-9	-126	-138	143	-379	-97	-92	-10	-6
Changes under Alternative 3	-2	-6	-43	-15	-151	-178	3	-150	86	-31	21	-46
Changes under Alternative 4	1	-4	-2	116	-28	-13	11	7	7	-27	-20	-8
X2 Position (km)												
Future Without Project	85.57	85.80	82.95	77.11	69.61	64.07	63.21	66.12	69.27	74.04	78.17	83.52
Changes under Alternative 1	0.04	0.05	0.06	-0.01	-0.03	0.00	0.03	-0.02	0.13	0.06	-0.01	0.03
Changes under Alternative 2	0.04	0.06	0.16	0.08	0.04	0.04	0.04	-0.02	0.14	0.05	-0.02	0.03
Changes under Alternative 3	-0.01	-0.01	0.02	0.09	0.06	0.05	0.04	0.01	0.07	-0.02	0.04	-0.01
Changes under Alternative 4	0.01	0.00	0.04	0.01	-0.04	0.00	0.00	0.00	0.00	-0.01	0.00	-0.01
E/I Ratio Future Without Project	0.56	0.52	0.41	0.27	0.13	0.08	0.08	0.10	0.10	0.42	0.55	0.57
Changes under Alternative 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Changes under Alternative 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Changes under Alternative 3	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Changes under Alternative 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Upstream River Flows (cfs)												
Sacramento River at Keswick Dam												
Future Without Project	6,073	5,609	7,192	8,668	10,785	8,712	6,903	7,841	10,266	13,292	10,903	6,482
Changes under Alternative 1	-28	-10	2	-7	-9	11	-18	16	36	42	-25	-26
Changes under Alternative 2	-21	-43	-16	-27	-4	11	-12	14	68	52	-36	-19
Changes under Alternative 3	-23	12	-15	-26	-35	14	-4	-27	-62	31	16	71
Changes under Alternative 4	3	-2	8	-20	-15	13	-2	-1	1	-1	2	-8
American River below Nimbus Dam												
Future Without Project	1,682	2,592	3,304	4,331	5,096	3,768	3,343	3,652	3,327	3,696	2,450	2,228
Changes under Alternative 1	16	5	0	-9	1	-15	-13	7	25	3	-1	-15
Changes under Alternative 2	15	5	0	-10	-1	-10	-15	5	28	10	-7	-14
Changes under Alternative 3	-7	-5	3	2	7	-3	2	0	7	22	5	-33
Changes under Alternative 4	4	-2	0	0	-2	-8	0	0	-1	0	7	1
Feather River below Thermalito												
Future Without Project	2,798	2,482	4,287	5,810	6,812	6,708	3,179	3,692	3,186	6,768	4,816	2,093
Changes under Alternative 1	-2	12	-17	-13	-26	12	-22	7	30	3	-6	24
Changes under Alternative 2	-2	-41	-5	-10	-33	17	-20	7	32	27	18	8
Changes under Alternative 3	46	-28	35	15	0	19	-8	4	-5	-74	-30	29
Changes under Alternative 4	-7	-31	-9	5	-9	-6	-4	-1	0	29	29	4
CVP and SWP Deliveries (TAF)												
CVP SOD Ag Future Without Project	28	21	29	51	60	42	59	92	145	178	132	43
Changes under Alternative 1	0	0	0	0	0	0	0	0	1	1	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	1	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
CVP SOD M&I												
Future Without Project	9	11	12	8	4	12	10	9	9	10	11	13
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0

**TABLE C4-13:
AVERAGE MONTHLY VALUES, 2030 LOD, SEVERE FISHERY RESTRICTIONS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
SWP Table A + Article 56												
Future Without Project	175	152	139	145	176	135	174	222	249	333	316	220
Changes under Alternative 1	0	0	0	-1	0	-1	0	0	1	0	0	0
Changes under Alternative 2	0	0	0	-1	0	1	1	0	0	0	0	0
Changes under Alternative 3	1	1	1	0	1	2	2	2	3	1	1	1
Changes under Alternative 4	0	0	0	0	0	1	1	0	0	0	0	0
SWP Article 21												
Future Without Project	6	6	13	12	10	11	3	2	1	1	1	3
Changes under Alternative 1	0	0	-1	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	-1	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	2	2	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	-1	0	0	0	0	0	0	0
Improved Fish Screening for CVP												
South Bay Future Without Project	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	7	10	9	6	2	7	3	3	4	6	8	9
Changes under Alternative 2	7	10	8	6	2	7	3	3	4	6	8	9
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Improved Fish Screening for SWP												
South Bay Future Without Project	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	4	5	8	12	11	15	11	7	9	11	12	13
Changes under Alternative 2	4	5	8	11	10	14	11	7	8	11	12	13
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
CVP South Bay Delta Supply												
Restoration Future Without Project	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	1	1	1	1	0	1	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
SWP South Bay Delta Supply												
Restoration Future Without Project	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	6	4	3	0	1	1	0	1	2	1	2	4
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Additional CVP SOD Environmental Water from Dedicated Storage												
Future Without Project	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	12	9	5	5	6	2	0	2	2	1	3	4
Changes under Alternative 3	1	0	0	0	0	0	0	0	0	1	2	5
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0

**TABLE C4-14:
CHANGES IN BANKS + JONES EXPORTS (CFS), 2030 LOD, SEVERE FISHERY RESTRICTIONS**

Water Year	(A) Alternative 1											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	-470	-395	-449	-233	-260	-426	-140	0	-297	-338	-369	-385
1923	-6	-205	-284	-445	-378	-425	-131	-198	-267	-362	-335	-352
1924	-117	-173	-260	-246	-205	-300	-105	-213	-222	-304	-310	-150
1925	106	-374	-141	-3132	-167	-300	0	0	179	724	61	157
1926	-141	-169	-171	-205	-181	-300	0	0	-1	-893	-621	-442
1927	-219	-160	0	0	-266	-470	-148	0	1	88	-441	-545
1928	-252	-313	-362	-260	-244	-392	-47	-220	-274	-265	-266	-360
1929	-141	-178	-263	-236	-207	-336	-100	-199	0	-617	-487	-385
1930	71	18	-166	-153	0	-405	-159	-215	0	-2	-334	-617
1931	-139	-128	-145	-203	-170	-300	0	-177	-198	-154	-153	-247
1932	-141	-93	-127	0	-113	-359	0	0	0	5	-458	-611
1933	-117	-153	-133	125	-120	-345	0	-171	0	-125	-265	-212
1934	42	-99	-16	-413	-110	-300	0	-194	0	-256	-373	-273
1935	9	199	-237	-117	-126	-348	0	0	-350	-423	-763	-173
1936	-176	-132	-221	-245	-215	0	-131	-661	0	-48	-310	-571
1937	-214	-789	-234	-252	865	64	-220	-13	-281	-438	-172	-401
1938	-171	-287	-268	-104	-305	-453	-278	-221	-470	-483	-571	-470
1939	-306	-418	-425	-470	-157	-350	-86	-275	-300	-418	-428	-408
1940	-177	-229	-212	-214	-183	-470	-140	0	-432	-422	0	-409
1941	-211	-305	-356	-148	0	362	-278	-248	-437	-379	-391	-470
1942	-318	-332	-382	-408	-339	-470	-149	-232	-424	-423	-450	-470
1943	-214	-317	-368	-465	-467	-510	-278	-645	-387	-490	-157	-447
1944	-209	-370	-401	-232	-268	-388	-115	0	-104	-284	-393	-321
1945	-136	-175	-212	-470	-383	-4	-131	0	-300	-453	-450	-388
1946	-179	-280	-332	-380	-327	-379	-131	-211	-241	-366	-370	-324
1947	-109	117	-206	-405	-357	-350	-115	0	0	-441	-484	-413
1948	-61	-73	-182	-244	-208	-300	-119	0	0	0	0	-374
1949	-234	-117	-220	-230	-199	-438	-215	-277	0	0	-386	-361
1950	-169	-158	-182	-240	0	-435	0	0	0	-178	-726	-199
1951	-157	-223	-180	-462	-799	-314	-70	-220	-300	-495	-574	-411
1952	-185	-285	-336	-386	0	-470	-278	-222	-404	-416	-430	-470
1953	-453	-470	-358	-234	-283	-470	0	-215	-348	-366	-376	-388
1954	-245	-239	-296	-382	-340	-404	-140	-15	-274	-253	-363	-361
1955	-116	-181	-261	0	-380	-337	-115	-272	-175	-398	-410	-491
1956	-136	-225	-286	-445	0	-352	-149	-225	-427	-424	-434	-470
1957	-209	-316	-229	-310	-284	-390	-280	-113	-187	-344	-335	-331
1958	-118	-175	-412	-240	-365	-447	-162	-284	-470	-482	-470	-470
1959	-293	-396	-435	-398	-307	-392	0	-157	-270	-108	-297	-310
1960	-115	-174	-271	-238	-204	-300	-115	-258	0	-343	-359	-570
1961	-132	-201	-109	-233	-200	-300	-96	-300	0	-417	-406	-631
1962	-131	-328	-166	-234	-167	-438	0	-282	-220	0	-419	-428
1963	-182	0	0	0	0	-444	-149	0	-253	-365	-183	-350
1964	-117	-170	-438	-462	-405	-300	-96	-247	-171	-362	-430	-426
1965	-140	-207	-12	0	-401	-436	-149	-216	-286	-336	-357	-373
1966	-212	-203	-270	-465	-430	-437	0	-248	-288	-317	-344	-789
1967	-127	-211	-271	-454	-435	0	-278	-26	-310	-355	-470	-479
1968	-407	-437	-411	-272	-408	-470	-262	-218	-300	-494	-371	-296
1969	-150	-217	-288	-405	0	-462	-278	-220	-470	-470	-481	-470
1970	-298	-471	-274	-471	-157	-470	-273	-216	-450	-426	-460	-430
1971	-261	-329	-372	-397	-335	-376	-103	-185	-46	-306	-281	-281
1972	-127	-161	-4632	-3334	-345	-414	-246	-220	-288	55	121	-348
1973	-126	-201	-59	-462	-208	-462	-140	-218	-414	-893	-901	-213
1974	-255	-296	-347	-462	-158	-77	-149	-222	-470	-470	-470	-470
1975	-288	-388	-423	-390	-304	-409	-149	-222	-292	-361	-354	-382
1976	-127	-208	-420	-470	-119	-300	-105	-297	-280	-526	-515	-374
1977	-155	-103	-203	129	-139	-300	0	-118	-98	-63	-196	-169
1978	50	-358	-123	-85	-68	-473	185	-3	0	-80	-29	-577
1979	-167	-428	-503	-226	0	0	-131	0	-247	-306	-220	-359
1980	24	-177	-470	-268	-369	-465	-140	-222	-470	-470	-470	-421
1981	-274	-334	-403	-360	-287	-381	-10	0	-136	-273	-473	-302
1982	-127	-170	0	-387	-463	-472	-278	-233	-470	-470	-484	-470
1983	-301	-399	-413	-448	-430	-446	-278	-239	-470	-470	-470	-470
1984	-470	-456	-424	-469	-424	-360	0	-217	-389	-391	-663	-390
1985	-162	-272	-325	-381	-327	-392	-115	-215	-282	-333	-431	-319
1986	-213	286	-343	-257	-422	2	-278	0	-246	-392	-383	-454
1987	-239	-337	-500	-391	-241	-380	-194	-205	0	-295	-300	-324
1988	-176	-186	-190	-184	-148	-300	-105	-202	0	-322	-331	-240
1989	73	-31	-346	950	-6	-345	0	-277	-174	-386	-367	87
1990	-169	-237	-310	-160	-133	-300	0	-176	-78	5	-34	-292
1991	-106	-214	-142	-25	-92	-337	0	-145	-78	-249	-170	-206
1992	-100	-150	-143	-80	-47	-245	0	-352	0	-113	-272	-205
1993	-98	-180	-146	-137	-294	-470	0	0	0	0	81	-501
1994	-164	-254	-350	-344	-261	-300	-56	-214	-136	-279	-281	-148
1995	7	-179	-192	-196	0	0	-280	0	0	0	0	-342
1996	-322	-420	-413	-400	-316	-464	-149	-228	-399	-468	-480	-470
1997	-249	-337	-385	-409	-237	-470	-149	-218	-436	-448	-443	-370
1998	-273	-317	-365	-1555	-338	482	-278	-237	-470	-470	-470	-470
1999	-315	-411	-413	-467	-470	-324	-149	-223	-422	-467	-480	-387
2000	-300	-308	-360	-330	-283	-412	-140	-220	-304	-389	-204	-377
2001	-166	-234	-304	-267	-228	-440	-115	0	0	-334	-426	-408
2002	-155	-342	-271	-231	160	-393	-106	-240	-146	-742	-322	79
2003	67	-220	-272	0	-99	-300	-108	0	-16	-199	-303	-328
Average	-171	-239	-327	-349	-221	-330	-120	-169	-215	-315	-358	-372

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-14:
CHANGES IN BANKS + JONES EXPORTS (CFS), 2030 LOD, SEVERE FISHERY RESTRICTIONS**

Water Year	(B) Alternative 2											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	-470	-395	-449	-233	-260	-426	-140	0	-297	-338	-369	-385
1923	-6	-205	-284	-225	-378	-425	-131	-128	-267	-362	-335	-352
1924	-117	-173	-258	-246	-205	-300	-105	-213	-222	-304	-310	-146
1925	110	-376	-136	-3132	-167	-300	0	0	179	715	48	131
1926	-141	-168	-170	-204	-180	-300	0	0	-1	-903	-627	-446
1927	-223	-160	0	0	-266	-470	-148	0	1	88	-300	-537
1928	-252	-313	-215	-251	-244	-393	-47	-220	-276	-236	-243	-341
1929	-110	-187	-254	-236	-208	-336	-105	-199	0	-622	-508	-408
1930	-163	24	-164	-151	0	-404	-159	-237	0	-12	-355	-603
1931	-133	-122	-160	-201	-168	-300	0	-177	-198	-168	-235	-247
1932	-121	-125	-127	0	-112	-359	0	0	0	1	-457	-612
1933	-118	-154	-130	135	-120	-345	0	-171	0	-103	-265	-212
1934	25	-141	-21	-353	-110	-300	0	-194	-1	-256	-364	-272
1935	7	200	-236	-117	-126	-347	0	0	-350	-480	-810	-139
1936	-177	-133	-220	-245	-215	0	-131	-429	0	-178	-353	-551
1937	-59	-207	-637	-253	7	-31	-258	-18	-187	-350	-333	-398
1938	-260	-280	-126	-377	-367	-453	-278	-221	-470	-481	-570	-470
1939	-303	-410	-424	-470	-157	-352	-87	-278	-300	-463	-462	-403
1940	-157	-232	-215	-210	-180	-470	-140	0	-431	-422	0	-409
1941	-213	-304	-355	-148	0	550	-278	0	-437	-379	-391	-470
1942	-319	-333	-382	-408	-339	-470	-149	-232	-424	-423	-451	-470
1943	-214	-317	-368	-436	-467	-510	-278	-645	-387	-490	-157	-447
1944	-209	-370	-402	-232	-268	-388	-115	0	0	-278	-387	-320
1945	-138	-175	-212	-470	-381	-8	-131	0	-300	-452	-449	-387
1946	-181	-280	-200	-1594	352	-378	-131	-208	-237	-451	-452	-320
1947	-107	138	-196	-403	-356	-350	-115	0	0	-484	-642	-413
1948	-41	-77	-185	-240	-203	-300	-116	0	0	0	0	-483
1949	-188	-134	-216	-230	-198	-438	-215	-277	0	0	-386	-351
1950	-168	-156	-181	-240	0	-435	0	0	0	-146	-693	-187
1951	-154	-217	0	0	-465	-304	-70	-220	-300	-504	-586	-406
1952	-189	-285	-336	-386	0	-470	-278	-222	-404	-416	-430	-470
1953	-453	-469	-358	-234	-283	-470	0	-215	-348	-366	-376	-388
1954	-245	-239	-296	-382	-340	-404	-140	0	-274	-328	-362	-342
1955	-116	-181	-261	0	-380	-337	-115	-272	-175	-390	-404	-495
1956	-139	-225	-286	-445	0	-16	-149	-225	-428	-426	-435	-470
1957	-209	-324	-226	-310	-284	-390	-280	-66	-187	-350	-335	-319
1958	-118	-175	-412	-240	-364	-447	-154	-284	-470	-482	-470	-470
1959	-292	-395	-435	-398	-307	-392	0	-154	-270	-106	-296	-306
1960	-120	-176	-276	-238	-204	-300	-115	-258	0	-370	-386	-615
1961	-138	-222	-417	-233	-200	-300	0	-300	0	-414	-405	-464
1962	-147	-426	-123	-244	-174	-440	0	-283	-220	0	-420	-403
1963	-182	0	0	0	0	-444	-149	0	-230	-373	-185	-350
1964	-117	-170	-471	-460	-405	-300	-115	-246	-171	-339	-424	-425
1965	-140	-206	-12	0	-199	-436	-149	-216	-286	-337	-358	-373
1966	-216	-203	-198	-465	-430	-437	0	-248	-288	-317	-344	-786
1967	-132	-215	-271	-454	-435	0	-278	0	-310	-355	-470	-478
1968	-406	-436	-412	-279	-409	-470	-262	-218	-300	-493	-371	-296
1969	-156	-216	-288	-405	0	-338	-278	-220	-470	-470	-481	-470
1970	-298	-471	-274	-438	-157	-470	-279	-216	-450	-426	-460	-427
1971	-265	-329	-224	-397	-335	-376	-124	-185	-46	-281	-294	-281
1972	-183	-162	-470	-451	-124	-368	-246	-219	-300	-428	-391	-373
1973	-158	-232	0	-460	-248	-462	-140	-218	-399	-402	-410	-348
1974	-181	-280	-288	-462	-146	-434	-149	-222	-470	-470	-470	-470
1975	-288	-388	-423	-391	-305	-410	-149	-222	-294	-334	-356	-384
1976	-127	-211	-420	-470	-119	-300	-105	-297	-280	-518	-507	-376
1977	-153	-108	-201	112	-138	-300	0	-118	-98	-139	-146	-169
1978	-85	-137	-123	-85	-66	-472	40	-18	0	-4	-6	-578
1979	-144	-418	-512	-222	0	0	-131	0	-247	-305	-221	-341
1980	77	-177	-470	-127	-384	-465	-140	-222	-470	-470	-470	-421
1981	-274	-335	-397	-360	-287	-381	-10	0	-137	-270	-469	-302
1982	-126	-169	0	-245	-463	-461	-278	-233	-470	-470	-484	-470
1983	-301	-399	-396	-421	-425	-409	-278	-239	-470	-470	-470	-470
1984	-470	-456	-400	-469	-424	-360	0	-217	-389	-391	-663	-390
1985	-162	-272	-261	-381	-327	-392	-115	-215	-282	-326	-425	-317
1986	-217	286	-349	-257	-419	2	-278	0	0	-392	-640	-454
1987	-239	-225	-354	-386	-231	-381	-194	-206	0	-280	-266	-308
1988	-139	-145	-195	-185	-149	-300	-105	-201	0	-388	-383	-259
1989	74	-36	-334	930	-117	-345	0	-276	-174	-386	-350	53
1990	-166	-235	-312	-160	-133	-300	0	-176	-78	-15	-48	-296
1991	-107	-207	-141	-33	-92	-337	0	-145	-78	-228	-185	-206
1992	-107	-138	-152	-73	-47	-244	0	-352	0	-125	-283	-205
1993	-93	-161	-145	-140	-294	-470	0	0	0	0	80	-499
1994	-162	-253	-349	-344	-261	-300	-69	-214	-136	-273	-277	-148
1995	-73	-181	-190	-196	0	0	-279	0	0	0	0	-342
1996	-322	-420	-402	-399	-316	-464	-149	-228	-398	-469	-480	-470
1997	-249	-336	-385	-409	-267	-470	-149	-218	-436	-449	-444	-370
1998	-272	-317	-365	-1555	-338	688	-278	-230	-470	-470	-470	-470
1999	-315	-411	-400	-6392	1526	-262	-149	-223	-404	1074	1132	-387
2000	-279	-422	-816	-322	-280	-416	-140	-220	-305	-429	-262	-380
2001	-170	-235	-306	-268	-229	-438	-115	0	0	-323	-419	-412
2002	-153	-333	-270	-231	-411	-393	-106	-239	-145	0	-404	-484
2003	70	-216	-271	0	-161	-300	-140	0	1	-248	-305	-318
Average	-173	-230	-276	-391	-200	-323	-123	-162	-209	-292	-349	-379

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-14:
CHANGES IN BANKS + JONES EXPORTS (CFS), 2030 LOD, SEVERE FISHERY RESTRICTIONS**

(C) Alternative 3

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	0	9	0	0	0	0	0	0	0	-1	-11	0
1923	175	0	0	1984	0	0	0	0	0	96	65	3
1924	84	62	-3	0	0	0	0	0	0	44	-114	162
1925	243	-340	519	0	0	0	0	0	0	-178	39	732
1926	199	202	103	0	0	0	0	0	0	-189	-75	646
1927	-70	0	0	0	0	0	0	0	0	88	0	517
1928	-21	0	0	0	0	0	0	0	0	-251	201	204
1929	71	-6	11	0	0	0	0	0	0	-173	-65	11
1930	-89	166	0	0	0	0	0	23	0	-93	-91	14
1931	-6	49	75	0	0	0	0	0	0	243	-404	253
1932	-239	492	0	0	0	0	0	0	0	-31	-620	146
1933	5	4	8	1849	1002	0	0	0	0	-959	-834	33
1934	319	-121	871	598	1098	0	0	0	0	-56	-632	-2
1935	287	94	388	0	0	0	0	0	0	359	312	346
1936	112	141	72	0	0	0	0	-661	0	196	-107	-157
1937	-34	-546	100	0	1180	3215	522	42	0	-1017	-731	35
1938	30	0	0	1443	36	0	702	0	0	-13	-101	0
1939	0	-8	1	0	0	0	0	0	0	1	1	13
1940	9	10	86	0	0	0	0	0	0	-35	0	0
1941	41	13	0	0	0	1612	216	0	0	-899	-533	0
1942	112	-6	0	0	463	0	0	0	0	8	-13	0
1943	-22	0	0	0	0	249	0	-158	72	9	162	32
1944	-91	137	-7	0	0	0	0	0	0	-34	-5	-13
1945	18	0	0	0	1021	515	0	0	0	-115	-116	-2
1946	33	0	0	0	-39	0	0	0	0	102	10	3
1947	94	-91	0	12	0	0	0	1	0	-12	-52	52
1948	41	165	112	0	0	0	0	0	0	0	0	-34
1949	6	97	78	0	0	0	0	0	0	0	0	318
1950	-15	75	112	0	0	0	0	0	0	-40	-229	158
1951	20	0	0	0	1243	172	0	0	0	-42	-126	-6
1952	6	0	0	0	0	0	81	0	0	0	0	0
1953	-18	1	0	0	0	0	0	0	0	0	0	0
1954	-12	0	28	0	0	0	0	0	0	-263	136	-64
1955	120	0	0	-2786	0	0	0	22	-2	448	411	479
1956	-77	78	1	0	7	-1	0	0	1	-30	-32	0
1957	0	-3	228	542	12	0	0	0	0	172	121	-56
1958	0	0	0	0	0	0	706	46	0	-12	0	0
1959	0	-3	0	0	0	0	0	-56	0	248	222	-32
1960	33	198	38	0	0	0	0	0	0	0	0	563
1961	237	4	517	0	0	0	0	0	0	0	0	-50
1962	-356	482	70	-28	0	0	0	0	0	0	0	-17
1963	0	0	0	0	0	0	0	0	0	-32	-2	0
1964	0	0	-76	0	0	0	0	6	0	10	6	13
1965	-7	0	0	0	0	0	0	0	0	40	182	36
1966	434	0	0	0	0	0	0	0	0	-91	-55	-5
1967	11	1	0	0	0	0	0	0	0	0	0	-56
1968	-40	-36	-9	466	73	0	0	0	0	42	67	-91
1969	166	23	0	0	0	-24	0	0	0	163	-12	0
1970	0	-1	0	4	1595	787	-367	-1	0	-597	-582	477
1971	-405	0	0	0	0	0	0	0	0	104	13	0
1972	-13	68	0	0	0	0	0	0	0	60	149	-61
1973	22	0	0	0	0	0	0	0	0	-1	-1	91
1974	-4	0	0	0	0	392	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	22	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	190
1977	-16	83	108	92	1	0	0	0	0	125	-13	0
1978	136	-226	0	0	0	-4	224	-3	0	-124	-74	-203
1979	109	-44	39	0	0	0	0	0	0	26	66	-65
1980	185	0	0	-11	7	0	0	0	0	0	6	0
1981	-6	-10	23	0	0	0	0	0	0	0	2	-2
1982	-4	0	0	0	0	41	0	0	0	1	-14	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	1581	720	0	0	0	79	54	-1
1985	101	0	0	0	0	0	0	0	0	5	4	-3
1986	39	28	0	0	-6	1	481	31	0	-237	323	0
1987	-6	-2	-431	2365	0	0	0	0	0	-467	140	662
1988	387	621	3737	1284	-220	0	0	0	1	-579	-368	563
1989	496	91	130	320	187	0	0	0	0	0	0	-150
1990	192	187	53	0	0	0	0	0	0	-68	-75	53
1991	0	13	-17	-19	0	0	0	0	0	-6	29	0
1992	16	-33	73	-142	0	0	0	0	0	166	-156	45
1993	-95	198	0	0	0	0	0	0	0	5	35	-83
1994	156	124	-113	0	0	0	0	0	0	-9	22	188
1995	205	285	-48	0	0	0	-1	0	0	0	0	0
1996	0	-2	0	0	0	2387	0	0	60	-1202	-1261	0
1997	-3	0	0	0	271	1596	0	0	0	-285	-290	3
1998	41	-2	0	0	0	593	398	0	0	0	0	0
1999	0	0	0	-6161	1832	208	0	0	0	1464	1534	0
2000	4	-139	-173	0	-1	-1	0	0	0	7	-48	16
2001	91	-29	-11	0	0	0	0	0	0	6	-14	389
2002	-10	-142	0	0	-411	0	0	0	-1	0	-32	298
2003	204	-15	0	0	-68	0	0	0	0	155	0	-4
Average	44	29	82	22	132	152	36	-9	2	-44	-44	80

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-14:
CHANGES IN BANKS + JONES EXPORTS (CFS), 2030 LOD, SEVERE FISHERY RESTRICTIONS**

Water Year	(D) Alternative 4											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	0	0	0	0	0	0	0	0	0	0	-4	0
1923	-14	0	0	0	0	0	0	0	0	-1	-4	0
1924	0	0	-3	0	0	0	0	0	0	2	5	159
1925	242	-315	212	-2945	0	0	0	0	179	684	357	592
1926	-1	-2	13	0	0	0	0	0	0	-229	-149	-64
1927	-87	0	0	0	0	0	0	0	0	0	0	8
1928	3	0	0	0	0	0	0	0	0	-153	20	16
1929	13	-4	2	0	0	0	0	0	0	-54	-45	-25
1930	-104	165	0	0	0	0	0	0	0	-18	-30	-12
1931	-16	41	80	0	0	0	0	0	0	20	-144	0
1932	-83	158	0	0	0	0	0	0	0	46	-10	0
1933	-12	-11	-7	-37	0	0	0	0	0	24	4	2
1934	3	0	9	-13	0	0	0	0	0	20	3	-7
1935	5	3	-5	0	0	0	0	0	0	18	15	-55
1936	-130	0	2	0	0	0	0	0	0	74	-67	-52
1937	39	42	-319	0	135	2	1	1	0	59	-12	2
1938	-52	0	0	71	1	0	0	0	0	-181	-177	0
1939	0	1	0	0	0	0	0	0	0	-1	-1	-18
1940	-15	-12	67	0	0	0	0	0	0	-8	0	0
1941	9	0	0	0	0	42	0	0	0	5	5	0
1942	-243	2	0	0	0	0	0	0	0	-2	-2	0
1943	2	0	0	0	0	-96	0	0	50	-25	-28	-17
1944	15	-25	8	0	0	0	0	0	0	3	-3	5
1945	-10	0	0	0	10	-3	0	0	0	0	0	0
1946	-3	0	0	0	4	0	0	0	0	0	0	1
1947	0	-15	0	12	0	0	0	0	0	1	-12	0
1948	-9	136	95	0	0	0	0	0	0	0	0	12
1949	7	86	47	0	0	0	0	0	0	0	0	43
1950	-34	40	0	0	0	0	0	0	0	0	-42	0
1951	-5	0	0	0	3	0	0	0	0	-170	169	5
1952	-5	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	-5	0	0	0	0	0	0	0	0	-75	-14	23
1955	0	0	0	0	0	0	0	0	0	-2	-1	-2
1956	5	0	0	0	0	0	0	0	0	2	2	0
1957	0	-1	40	0	0	0	0	0	0	7	-17	4
1958	0	0	0	0	0	0	19	0	0	-4	0	0
1959	0	-1	0	0	0	0	0	0	0	-15	-1	-1
1960	0	-2	-1	0	0	0	0	0	0	0	0	-7
1961	6	3	430	0	0	0	0	0	0	0	0	-63
1962	38	80	-24	22	0	0	0	0	0	0	0	-21
1963	0	0	0	0	0	0	0	0	0	-114	1	-1
1964	0	0	1	0	0	0	0	-6	0	8	10	0
1965	-15	0	0	0	0	0	0	0	0	1	1	6
1966	59	0	0	0	0	0	0	0	0	-14	-8	3
1967	-3	1	0	0	0	0	0	0	0	0	0	-9
1968	-7	-6	-2	0	0	0	0	0	0	-1	-1	0
1969	-6	0	0	0	0	6	0	0	0	0	-4	0
1970	0	0	0	0	0	0	0	0	0	-10	0	0
1971	-1	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	-14	0	5
1973	-2	0	0	0	0	0	0	0	0	0	0	-17
1974	1	0	0	0	0	-6	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	-1	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	2
1977	-2	93	97	36	-4	0	0	0	0	0	0	0
1978	-1	2	0	0	0	-1	27	1	0	-20	-20	0
1979	-30	-15	9	0	0	0	0	0	0	-3	-159	-11
1980	276	0	0	151	0	0	0	0	0	0	-126	0
1981	125	-1	-181	0	0	0	0	0	0	23	-18	1
1982	-10	0	0	0	0	9	0	0	0	0	-4	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0
1985	1	0	0	0	0	0	0	0	0	0	0	1
1986	-2	480	-48	0	2	-1	0	0	0	-10	-59	0
1987	-45	48	32	0	0	0	0	0	0	3	8	4
1988	8	9	0	0	0	0	0	0	0	-8	-6	-6
1989	219	49	10	65	-4	0	0	0	0	0	0	-14
1990	-3	0	4	0	0	0	0	0	0	162	130	6
1991	0	-43	2	60	0	0	0	0	0	-25	4	0
1992	0	2	-4	17	0	0	0	0	0	-8	-1	0
1993	1	-1	0	0	0	0	0	0	0	0	0	0
1994	-1	-1	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0	0	0	0
1996	0	-197	0	0	0	0	0	0	-4	-2	-2	0
1997	-2	0	0	0	-91	0	0	0	0	-11	-2	15
1998	-13	0	0	-1214	0	619	0	0	0	0	0	0
1999	0	0	0	-6161	1832	208	0	0	0	1479	1549	0
2000	1	-139	-182	0	-1	-1	0	0	0	-45	-49	9
2001	-14	-3	-4	0	0	0	0	0	0	-12	-10	-18
2002	-9	-141	0	0	-411	0	0	0	-1	0	-9	-123
2003	203	-16	0	0	0	0	0	0	0	11	0	16
Average	3	6	5	-121	18	10	1	0	3	17	13	5

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-15:
CHANGES IN CCWD + LV DIVERSIONS (CFS), 2030 LOD, SEVERE FISHERY RESTRICTIONS**

Water Year	(A) Alternative 1											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	470	395	470	270	275	370	0	670	393	208	369	423
1923	139	395	370	514	378	470	0	670	296	296	338	405
1924	119	174	259	247	271	301	0	214	56	124	168	150
1925	-64	-12	109	69	92	300	0	658	470	470	311	354
1926	141	165	185	107	195	300	-213	660	470	183	323	331
1927	-45	179	470	470	76	470	0	670	470	470	523	431
1928	235	333	577	266	253	470	0	670	100	320	287	361
1929	129	177	266	189	187	473	0	379	521	190	269	187
1930	-84	-18	81	-45	470	370	0	470	470	350	330	353
1931	139	128	138	108	48	334	-233	50	163	218	230	247
1932	109	144	145	470	-83	470	0	670	470	470	62	262
1933	117	153	135	38	8	354	-233	237	470	19	201	212
1934	-129	99	118	123	-81	470	184	194	470	468	253	273
1935	-81	-34	15	-44	129	470	0	470	204	470	270	473
1936	159	132	244	170	228	570	-62	654	470	470	441	420
1937	191	250	311	258	243	570	-56	653	470	243	308	387
1938	212	462	470	387	348	469	0	670	310	482	481	478
1939	474	405	470	472	182	472	0	275	300	263	365	405
1940	148	229	213	107	192	270	-167	470	286	470	511	412
1941	235	319	481	186	470	616	0	670	334	453	463	458
1942	376	393	436	409	349	472	0	670	318	440	451	478
1943	342	377	423	466	470	471	0	670	310	469	479	409
1944	246	351	395	264	288	470	0	670	470	112	307	341
1945	136	285	273	474	404	470	-184	479	280	228	294	387
1946	176	378	646	388	322	473	0	670	68	268	281	318
1947	106	163	400	365	277	467	0	670	470	218	366	388
1948	136	72	181	116	68	385	-184	470	470	470	350	370
1949	136	108	200	109	79	470	0	366	470	372	382	404
1950	157	159	190	115	470	470	-184	470	470	470	229	403
1951	157	257	598	468	470	473	0	670	297	409	420	415
1952	192	356	430	394	470	433	0	670	297	387	481	478
1953	475	470	437	239	296	470	0	670	305	378	386	385
1954	245	345	297	387	350	370	0	670	128	277	343	356
1955	115	456	388	470	290	470	0	470	470	250	370	393
1956	143	219	360	301	470	570	0	670	297	272	449	477
1957	345	315	391	360	307	388	0	670	298	298	317	333
1958	316	438	430	243	374	469	0	670	371	482	470	489
1959	430	395	470	403	318	392	0	670	97	221	338	469
1960	115	174	216	126	134	472	0	470	470	221	361	395
1961	72	169	171	100	87	470	-215	389	470	298	410	433
1962	-8	98	216	63	64	438	0	207	73	470	365	501
1963	214	470	470	646	684	472	0	670	495	317	188	421
1964	316	269	436	397	423	470	0	470	470	293	369	395
1965	140	278	72	470	470	376	0	670	297	158	354	382
1966	109	139	628	469	441	470	0	373	142	624	335	381
1967	127	336	278	462	250	570	0	670	295	367	481	478
1968	475	471	470	283	418	472	0	670	297	347	380	401
1969	147	230	421	212	470	535	0	670	310	482	481	478
1970	434	471	327	463	168	473	0	670	307	463	470	463
1971	237	439	470	391	337	472	0	670	78	247	269	363
1972	210	172	220	410	396	474	0	670	112	319	357	385
1973	127	379	470	243	218	471	0	670	241	422	433	410
1974	326	197	735	469	176	471	0	670	310	481	470	489
1975	424	450	468	399	307	469	0	670	312	344	364	478
1976	472	410	471	475	154	476	0	297	304	379	158	206
1977	-55	55	160	21	-53	312	-233	-98	-101	142	156	169
1978	90	130	127	85	71	470	0	470	470	470	470	373
1979	307	403	446	268	470	570	0	670	367	103	276	324
1980	129	347	311	636	383	472	0	670	297	481	481	409
1981	275	334	381	419	178	470	0	670	470	190	279	316
1982	127	280	470	470	423	467	0	670	320	482	481	476
1983	436	456	468	464	434	465	0	670	327	482	480	477
1984	474	466	465	471	430	401	0	670	308	403	410	391
1985	179	339	709	389	343	470	0	670	207	253	345	390
1986	135	211	278	285	270	570	-124	653	470	292	358	443
1987	239	337	374	349	265	470	0	294	470	180	295	347
1988	147	196	442	94	148	300	-233	384	470	215	248	89
1989	-73	-4	41	-7	-31	427	-215	277	19	296	406	534
1990	170	235	304	214	163	470	0	176	78	261	253	270
1991	107	138	147	125	108	470	0	145	78	174	187	206
1992	104	149	139	98	63	427	0	193	470	169	221	-2
1993	104	164	163	139	297	470	0	470	470	470	470	415
1994	197	270	273	353	214	487	0	214	136	241	85	146
1995	-7	177	197	205	470	470	-152	634	470	470	533	658
1996	459	420	464	401	319	472	0	670	315	463	474	458
1997	250	440	436	406	472	474	0	670	307	448	456	415
1998	242	370	433	357	155	570	0	670	297	455	481	478
1999	452	470	464	469	473	473	0	670	310	434	445	384
2000	300	412	344	342	293	536	0	670	296	354	211	414
2001	157	234	303	331	251	470	0	670	470	258	359	400
2002	155	67	297	239	470	470	-27	461	271	350	359	215
2003	-67	40	222	470	470	470	-167	637	470	-11	191	304
Average	193	267	340	299	277	456	-33	539	324	334	352	376

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-15:
CHANGES IN CCWD + LV DIVERSIONS (CFS), 2030 LOD, SEVERE FISHERY RESTRICTIONS**

Water Year	(B) Alternative 2											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	470	395	470	469	280	370	0	670	393	208	369	423
1923	139	442	471	514	378	470	0	670	296	296	338	405
1924	117	173	257	245	331	299	0	211	53	120	165	146
1925	-67	-15	106	418	167	300	0	658	470	470	310	353
1926	141	164	184	335	180	300	-213	660	470	183	322	325
1927	-49	386	470	470	198	470	0	670	470	470	587	431
1928	236	385	577	471	283	470	0	670	102	322	289	361
1929	127	180	264	189	244	472	0	378	519	188	267	183
1930	-86	-19	363	65	470	370	0	470	470	350	327	341
1931	133	122	133	307	16	332	-47	177	198	218	230	247
1932	109	144	467	470	-5	470	0	670	470	470	62	263
1933	118	154	135	240	-21	355	-233	237	470	19	201	212
1934	-105	141	121	352	-90	470	184	193	470	468	252	272
1935	-82	-35	15	298	126	470	0	470	204	470	270	474
1936	160	133	245	368	247	570	-62	654	470	470	441	420
1937	191	250	311	442	271	570	-56	653	470	467	307	387
1938	212	479	470	462	463	469	0	670	310	482	481	478
1939	474	402	470	472	292	472	0	278	300	265	367	408
1940	151	232	215	342	180	270	-167	470	286	470	511	412
1941	237	320	483	404	470	616	0	670	508	453	463	458
1942	465	469	478	483	470	472	0	670	318	440	451	478
1943	474	469	468	466	470	471	0	670	310	469	479	409
1944	249	353	397	474	293	470	0	670	470	119	307	343
1945	138	436	481	475	470	470	-184	479	470	228	294	387
1946	178	401	646	470	315	594	0	670	63	263	275	312
1947	105	162	468	363	369	466	0	670	470	220	367	388
1948	136	72	181	324	63	385	-184	470	470	470	350	370
1949	137	108	200	109	79	470	0	366	470	372	380	401
1950	155	157	189	328	470	470	-184	470	470	470	220	394
1951	155	336	598	678	672	473	0	670	297	409	420	415
1952	206	363	481	470	470	541	0	670	297	387	481	478
1953	475	470	464	469	308	470	0	670	305	378	386	385
1954	245	449	301	472	470	370	0	670	128	354	343	366
1955	124	467	476	470	420	470	0	470	470	250	379	404
1956	150	224	473	321	470	570	0	670	297	272	449	477
1957	474	316	391	470	428	388	0	670	298	298	317	339
1958	479	438	430	465	386	469	0	670	371	482	470	489
1959	475	394	470	471	439	392	0	670	97	221	338	475
1960	120	178	218	128	229	475	0	470	470	247	389	426
1961	93	317	189	332	95	470	-215	389	470	295	410	433
1962	-9	95	214	71	277	441	0	207	74	470	366	508
1963	298	470	470	646	684	472	0	670	495	317	187	421
1964	380	478	470	397	473	470	0	470	470	293	370	395
1965	140	482	438	470	470	376	0	670	297	158	354	382
1966	112	344	733	469	471	470	0	373	142	624	334	387
1967	132	340	402	470	270	570	0	670	470	367	481	478
1968	475	471	470	466	470	472	0	670	297	347	380	407
1969	154	235	478	270	470	664	0	670	310	482	481	478
1970	473	471	466	463	290	473	0	670	307	463	470	463
1971	241	475	470	459	337	472	0	670	310	247	270	411
1972	266	172	477	475	498	474	0	670	296	353	385	412
1973	155	480	470	271	376	471	0	670	226	407	417	410
1974	271	279	735	469	280	471	0	670	310	481	470	489
1975	474	472	468	474	429	469	0	670	312	346	367	478
1976	472	472	471	475	252	476	0	297	305	381	159	208
1977	-54	56	161	22	-52	313	-120	118	98	142	156	169
1978	90	130	469	155	66	470	0	470	470	470	470	373
1979	308	404	447	475	470	570	0	670	399	103	276	334
1980	129	473	311	636	466	472	0	670	297	481	481	409
1981	275	335	380	472	287	470	0	670	470	190	279	315
1982	126	481	470	470	423	467	0	670	320	482	481	476
1983	472	465	468	464	466	465	0	670	327	482	480	477
1984	474	466	465	471	471	429	0	670	308	403	410	391
1985	178	378	724	470	459	470	0	670	207	253	345	391
1986	136	212	279	480	270	570	-124	653	470	464	358	443
1987	239	337	375	477	347	470	0	295	470	183	298	352
1988	150	198	487	225	149	300	-233	470	470	214	246	88
1989	-74	-5	38	-8	81	470	0	277	19	296	418	534
1990	169	234	306	415	133	470	0	176	78	261	253	270
1991	107	138	147	125	224	470	0	145	78	174	187	206
1992	104	149	139	98	174	470	0	193	470	172	229	1
1993	92	163	348	346	294	470	0	470	470	470	470	415
1994	197	271	273	365	299	488	0	214	136	241	85	146
1995	73	177	197	452	470	470	-152	634	470	470	533	658
1996	475	420	464	465	435	472	0	670	315	462	473	458
1997	249	468	464	462	472	474	0	670	307	448	456	415
1998	243	370	482	480	276	570	0	670	297	455	481	478
1999	475	470	464	469	328	473	0	670	310	417	427	384
2000	285	469	328	477	394	580	0	670	296	356	210	416
2001	159	236	306	477	288	470	0	670	470	257	359	398
2002	153	65	378	451	470	470	-27	470	470	350	354	208
2003	-70	36	366	470	470	470	-167	637	470	378	193	324
Average	206	297	380	394	324	463	-27	545	341	345	353	378

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-15:
CHANGES IN CCWD + LV DIVERSIONS (CFS), 2030 LOD, SEVERE FISHERY RESTRICTIONS**

Water Year	(C) Alternative 3											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	0	0	0	-1	0	141	0	197	-173	-131	11	8
1923	-1	0	0	-5	0	0	0	221	-174	-12	11	47
1924	1	1	1	0	0	0	0	0	-302	-164	-131	-162
1925	-167	-141	-109	-133	-112	-147	-215	-273	370	370	173	-6
1926	-5	-25	-69	-130	0	-147	-213	-271	-506	243	-2	-9
1927	-166	-81	370	370	305	0	0	570	370	370	281	1
1928	1	45	-38	0	1	0	0	-204	-496	549	179	8
1929	8	6	5	-47	-95	3	0	0	-405	213	3	-92
1930	-194	-162	-102	204	370	291	0	0	370	54	1	8
1931	6	-49	-107	-149	-152	-137	-233	-127	-326	-261	-252	-253
1932	-226	-187	-158	370	158	0	0	570	370	370	250	-10
1933	-5	-4	-2	-126	-148	-127	-233	0	370	250	-32	-33
1934	-235	-198	-132	-171	182	0	-48	0	-526	368	0	2
1935	-203	-198	-132	-172	0	0	-184	-425	-146	370	231	-6
1936	-62	-142	-86	-121	0	470	-62	554	370	370	341	2
1937	11	8	6	-32	2	470	-56	553	-124	-170	-112	8
1938	-3	-2	11	-8	-7	-1	0	180	-160	12	11	8
1939	4	2	0	-3	-5	-4	0	0	-306	213	59	-18
1940	-13	-10	-83	-137	0	370	-167	370	-146	93	-133	-2
1941	-23	-16	-11	0	127	-65	0	154	-136	12	11	8
1942	4	1	-5	-4	0	2	0	169	-152	12	11	8
1943	4	-1	-2	-4	0	1	0	180	-160	12	11	8
1944	-25	-17	-10	-9	-14	0	0	570	-37	-170	-4	-25
1945	-18	-16	-15	-17	0	370	-184	183	-173	-170	-112	-1
1946	-36	0	43	0	-137	128	0	214	-173	-8	11	-36
1947	-29	-24	-15	-63	-112	-20	0	570	-506	202	-6	-42
1948	-26	-164	-112	-157	-167	-98	-184	370	370	370	145	-19
1949	-17	-96	-79	-126	-136	0	0	0	370	272	-19	-18
1950	-11	-75	-105	-148	370	0	-184	370	-39	-170	-128	-9
1951	-24	70	-75	-2	0	3	0	196	-173	9	11	-3
1952	-28	-22	-13	0	296	-101	0	180	-173	-83	11	8
1953	5	0	-6	-1	3	0	0	186	-165	12	11	0
1954	13	-21	-17	-9	0	95	0	-204	-146	333	11	-34
1955	-23	-19	-17	347	-197	0	0	0	-506	319	-35	-36
1956	-24	-17	-13	0	370	116	0	177	-173	-157	11	7
1957	4	2	1	-10	0	9	0	189	-172	12	11	-33
1958	-32	118	-40	-5	-6	-1	0	117	-99	12	0	19
1959	5	2	0	-9	0	-127	0	428	-173	-87	11	-49
1960	-33	-24	-78	-124	-111	-22	0	0	-506	134	-4	-32
1961	-97	-182	-118	-156	-149	0	-215	0	-506	135	-3	-82
1962	-244	-199	-128	-45	0	0	0	-75	-146	370	186	1
1963	-196	370	370	546	584	2	0	570	357	12	11	1
1964	2	2	76	-73	3	0	0	0	86	-42	8	9
1965	7	6	4	370	-95	-94	0	-206	221	-171	5	0
1966	-21	33	-3	-1	1	0	0	125	-146	59	11	-18
1967	-11	-8	-77	0	168	111	0	161	-175	-103	11	8
1968	5	1	0	-4	0	2	0	215	-173	-8	9	-25
1969	-19	-14	-12	185	-116	-12	0	181	-160	12	11	8
1970	3	1	-4	-7	1	3	0	185	-163	12	11	-33
1971	-25	-15	85	-11	-130	122	0	180	-160	12	11	8
1972	5	-19	-11	-12	44	4	0	214	-174	-8	11	-33
1973	-18	-22	294	-227	-3	1	0	198	-173	8	11	-3
1974	-34	46	-3	-1	2	1	0	180	-160	11	0	19
1975	4	2	-2	-19	18	-1	0	179	-158	12	10	8
1976	2	2	1	-13	-12	-24	0	-284	-57	-46	-278	-255
1977	-236	-197	-144	-176	-206	-173	-233	-260	-202	0	0	0
1978	0	0	-23	-2	0	0	0	370	370	370	370	53
1979	0	0	0	-1	370	470	0	570	210	-171	-17	-1
1980	-5	-3	71	-60	-4	2	0	194	-173	11	11	8
1981	-2	10	0	-1	-2	0	0	244	-173	-38	1	5
1982	4	4	302	-264	-47	-3	0	169	-150	12	11	6
1983	2	-5	-2	-6	-4	-5	0	162	-143	12	10	7
1984	4	-4	-5	1	1	3	0	184	-162	12	11	0
1985	-7	14	-1	0	1	0	0	248	-174	-39	-1	-2
1986	-1	-1	0	-5	54	429	-124	164	-173	-170	-112	7
1987	5	2	0	-2	-3	0	0	0	-506	207	-1	-6
1988	-3	-2	-2	-118	-167	-181	-233	0	-526	139	-62	-237
1989	-224	-189	-127	-172	-180	-62	-178	0	370	195	0	-81
1990	-223	-182	-69	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	11	0	0
1992	0	0	-11	0	0	0	0	0	50	29	-77	0
1993	0	0	0	0	0	0	0	370	370	370	370	1
1994	14	9	-45	-107	-95	13	0	0	-326	-55	-228	-191
1995	-205	-178	-59	0	370	370	-152	534	370	370	433	558
1996	86	2	-6	-5	-4	2	0	173	-155	12	11	8
1997	4	-2	-6	-8	2	4	0	184	-163	12	10	3
1998	25	17	11	9	90	-101	0	164	-173	-15	11	8
1999	5	0	-6	-1	3	3	0	179	-160	12	11	17
2000	-4	1	1	4	0	-6	0	196	-174	10	10	14
2001	18	9	10	5	0	0	0	570	-506	222	59	13
2002	10	-140	-96	0	-373	0	-27	0	0	250	7	-160
2003	-205	-165	-103	313	370	0	-167	537	-28	-171	-111	-27
Average	-38	-30	-13	-8	16	29	-40	155	-104	71	19	-14

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-15:
CHANGES IN CCWD + LV DIVERSIONS (CFS), 2030 LOD, SEVERE FISHERY RESTRICTIONS**

Water Year	(D) Alternative 4											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	0	0	0	0	0	0	0	0	0	14	4	3
1923	1	1	1	-5	0	0	0	0	0	15	4	0
1924	4	3	3	1	1	2	0	3	-164	-161	-128	-159
1925	-165	-140	-58	0	0	0	0	0	0	0	0	2
1926	1	-3	0	0	0	0	0	0	0	0	0	2
1927	-2	0	0	0	0	0	0	0	0	0	117	2
1928	3	0	160	0	189	101	0	0	0	179	184	8
1929	8	6	5	-47	-94	4	0	0	0	0	3	-89
1930	-193	-161	-101	0	0	0	0	0	0	0	3	26
1931	16	-41	-102	-141	-3	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	20
1933	12	11	7	-49	0	0	0	0	0	0	16	-2
1934	-10	0	-4	0	0	0	0	0	0	0	1	7
1935	-7	0	0	0	0	0	0	0	-146	0	0	4
1936	131	0	4	0	0	0	0	0	0	0	63	1
1937	2	1	1	-34	0	0	-35	0	0	0	62	2
1938	0	0	0	196	234	116	0	0	14	182	184	21
1939	1	1	0	3	4	3	0	0	0	0	2	18
1940	15	12	-67	-125	0	-100	-167	-200	0	0	41	1
1941	10	7	6	0	0	46	0	0	38	182	184	128
1942	1	0	-2	-2	0	1	0	0	8	4	4	3
1943	2	0	-1	-2	0	0	0	0	-110	120	4	3
1944	11	7	5	3	4	0	0	0	0	0	2	10
1945	10	8	7	3	0	-100	-184	-191	0	0	62	0
1946	4	0	176	197	1	1	0	0	0	14	4	3
1947	3	3	2	-49	-98	0	0	0	0	0	2	11
1948	9	-136	-95	-140	-134	0	0	-112	0	0	0	7
1949	7	-79	-66	-102	0	0	0	0	0	0	14	16
1950	12	-43	0	0	0	0	0	0	0	0	0	1
1951	5	0	128	208	202	98	0	0	0	180	184	3
1952	22	16	11	0	0	0	0	0	0	-34	4	3
1953	2	0	-2	0	1	0	0	0	10	5	4	0
1954	5	4	5	2	0	0	0	0	-146	133	14	16
1955	15	12	11	0	0	0	0	0	0	-33	10	19
1956	16	12	10	0	0	0	0	0	0	-47	4	3
1957	1	1	0	0	0	-1	0	0	2	11	4	2
1958	3	0	-1	-2	-2	0	0	0	8	4	0	7
1959	2	1	0	-1	0	0	0	0	0	15	4	-1
1960	0	0	-42	-112	-102	2	0	0	0	0	2	14
1961	-66	-157	-105	-140	-128	0	-143	0	0	0	3	-5
1962	0	0	0	0	0	0	0	-75	-146	0	0	166
1963	8	0	0	176	214	2	0	0	25	182	184	2
1964	16	11	0	136	110	0	0	0	0	15	17	19
1965	15	12	8	0	0	0	0	0	0	-42	-1	0
1966	-4	8	-1	0	0	0	0	0	-146	156	4	4
1967	3	3	-71	0	0	0	0	0	0	67	9	3
1968	2	0	0	-1	0	1	0	0	0	14	3	6
1969	6	5	4	0	-7	-14	0	0	10	4	4	3
1970	1	0	-1	-3	0	1	0	0	10	4	4	1
1971	1	0	0	-1	1	1	0	0	10	4	4	3
1972	2	1	1	0	-2	2	0	0	0	14	4	3
1973	2	2	0	-8	-1	0	0	0	0	14	4	-1
1974	-5	0	7	-1	1	0	0	0	0	9	4	0
1975	1	1	-1	-2	1	0	0	0	10	4	4	3
1976	1	1	0	-1	-1	-2	0	0	-4	-2	-236	-212
1977	-215	-181	-107	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0
1979	1	0	0	0	0	0	0	0	0	0	157	0
1980	2	1	0	166	244	108	0	0	0	182	142	3
1981	2	0	1	2	-4	0	0	0	0	14	2	13
1982	10	10	0	0	-34	-1	0	0	9	4	4	2
1983	1	-2	-1	-2	-2	-2	0	0	9	4	4	3
1984	2	-2	-2	0	0	1	0	0	10	4	4	0
1985	-3	6	0	0	0	0	0	0	0	15	0	1
1986	1	1	1	-2	0	0	-124	-17	0	0	62	48
1987	45	7	0	-2	-2	0	0	0	0	0	0	0
1988	0	0	0	-116	0	0	-233	0	0	0	-51	-228
1989	-219	-88	-12	0	0	0	0	0	-156	0	-2	154
1990	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	-5	5	0
1993	0	0	0	0	0	0	0	0	0	0	0	0
1994	0	0	1	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0	0	63	188
1996	193	197	209	136	-1	1	0	0	9	4	4	3
1997	1	-1	-2	-3	1	1	0	0	10	4	4	1
1998	9	6	4	3	0	0	0	0	0	-13	4	3
1999	2	0	-2	0	1	1	0	0	9	4	4	0
2000	5	0	0	1	0	-2	0	0	0	14	4	4
2001	5	3	3	1	0	0	0	0	0	0	2	11
2002	9	-142	-97	0	0	0	-27	0	0	0	11	-156
2003	-203	-164	-102	0	0	0	-74	-24	0	0	67	16
Average	-5	-12	-3	2	7	3	-12	-8	-10	18	19	2

NOTE: Values with a grey background indicate months of Delta excess conditions.

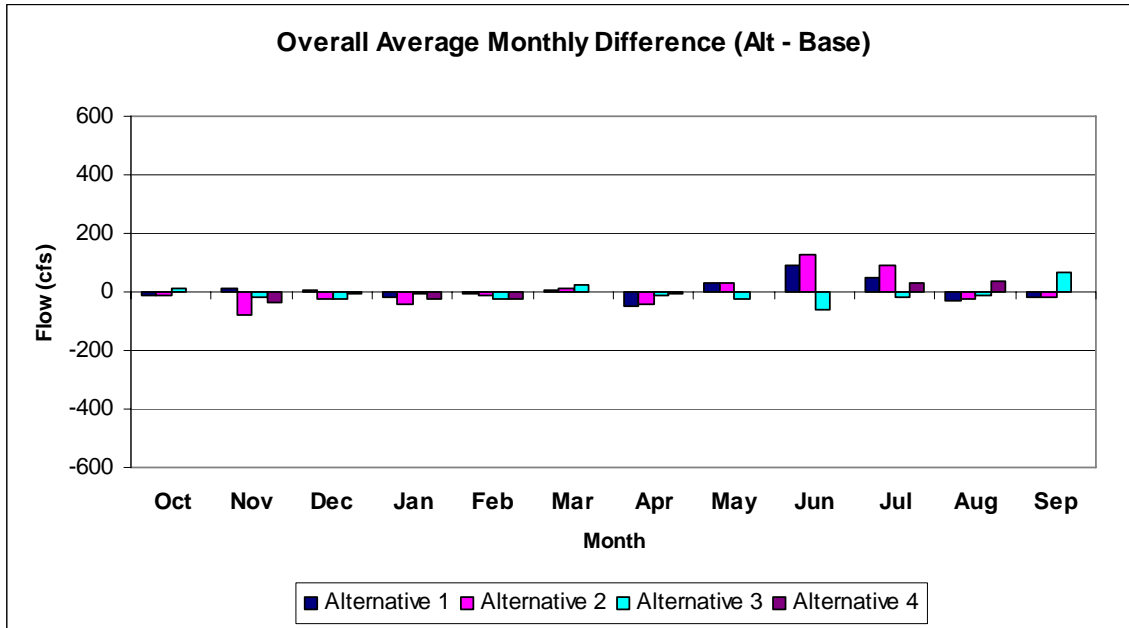


Figure C4-43: Changes in Average Monthly Sacramento River at Hood flow, 2030 LOD, Severe Fishery Restrictions

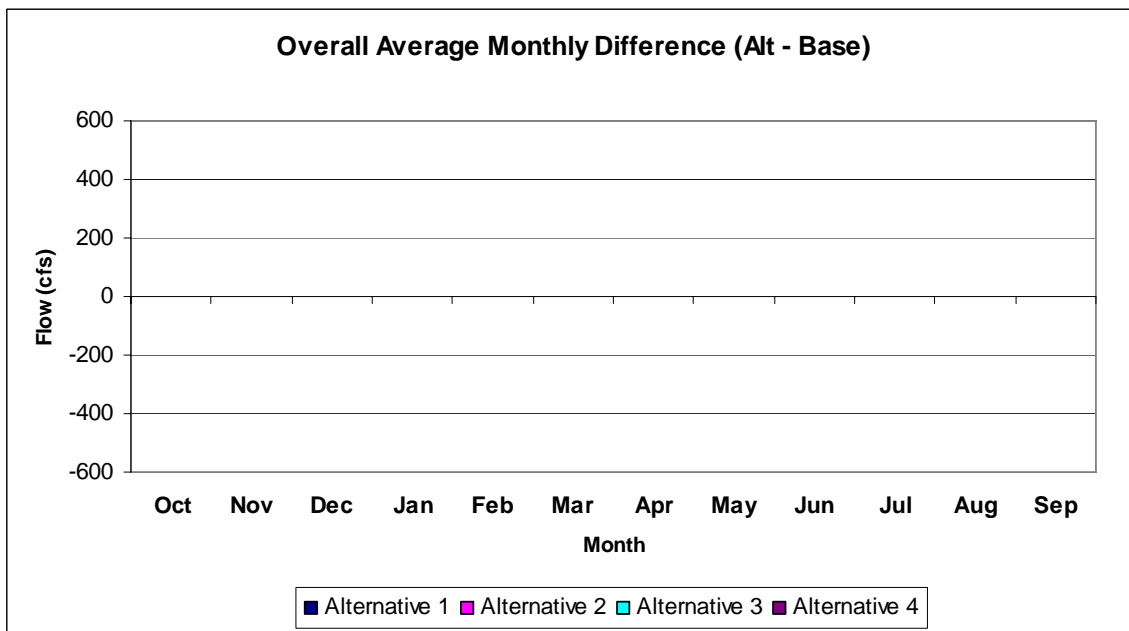


Figure C4-44: Changes in Average Monthly San Joaquin River at Vernalis Flow, 2030 LOD, Severe Fishery Restrictions

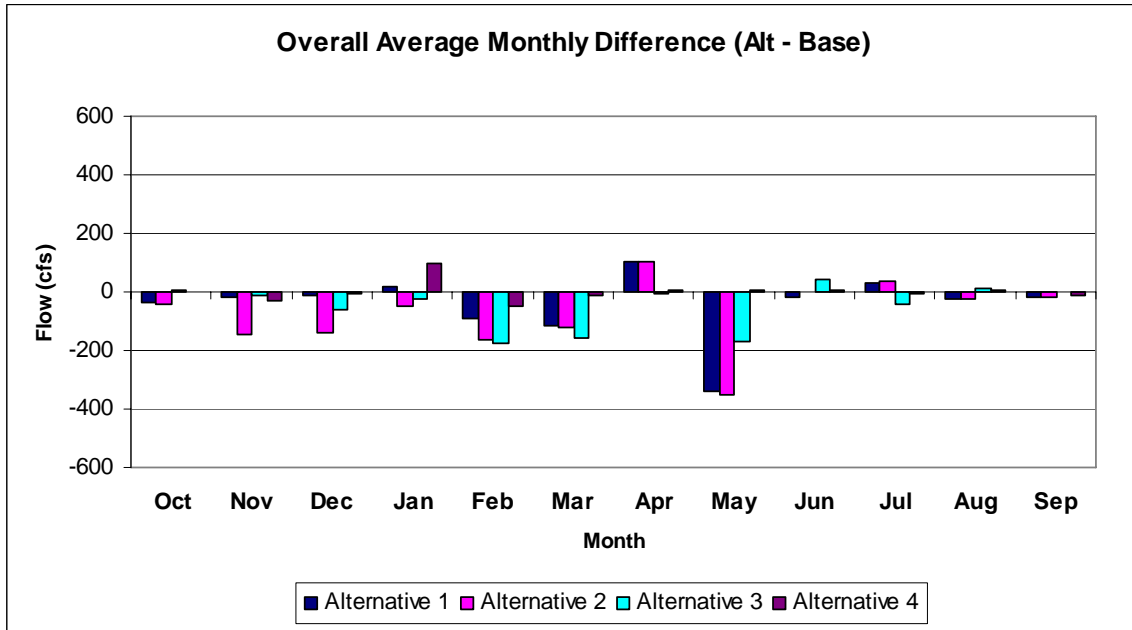


Figure C4-45: Changes in Average Monthly Delta Outflow, 2030 LOD, Severe Fishery Restrictions

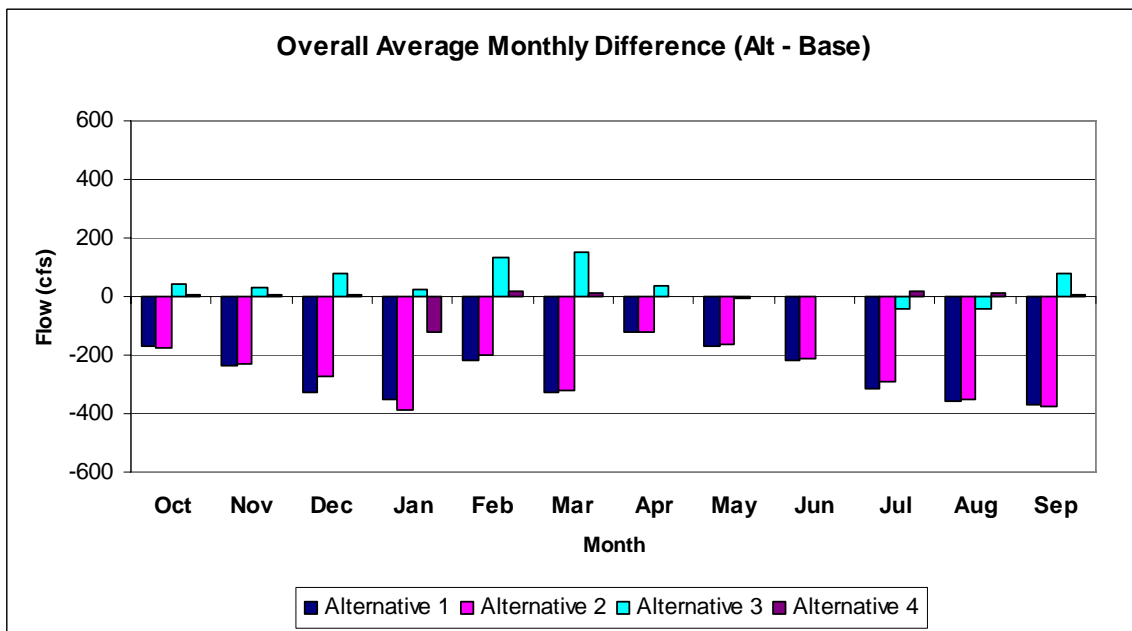


Figure C4-46: Changes in Average Monthly Banks + Jones Diversions, 2030 LOD, Severe Fishery Restrictions

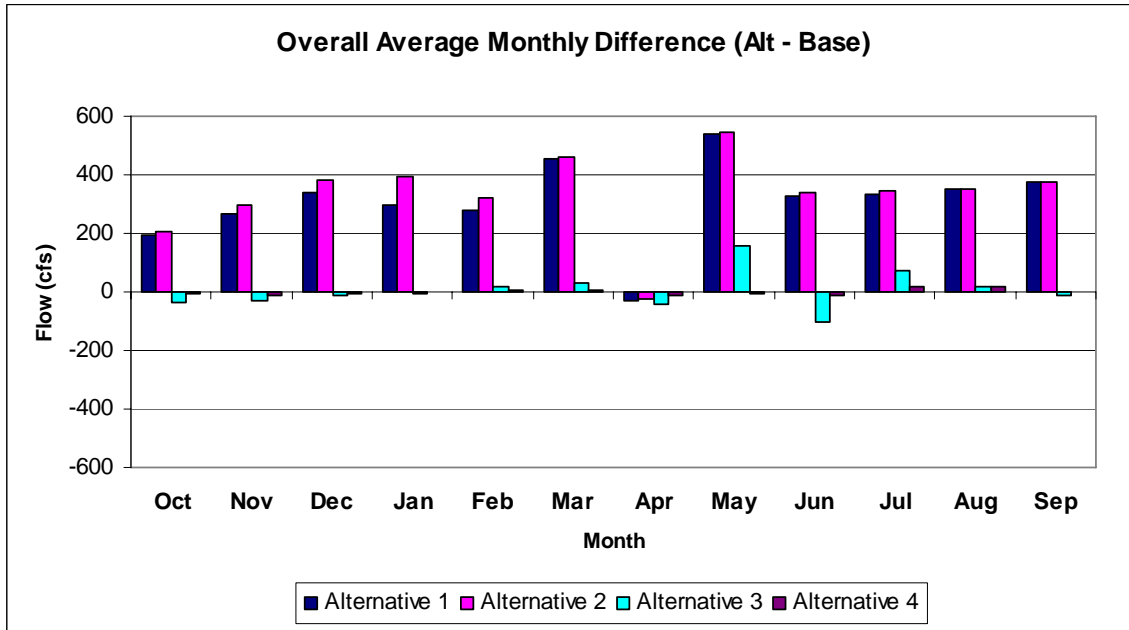


Figure C4-47: Changes in Average Monthly CCWD + LV Diversions, 2030 LOD, Severe Fishery Restrictions

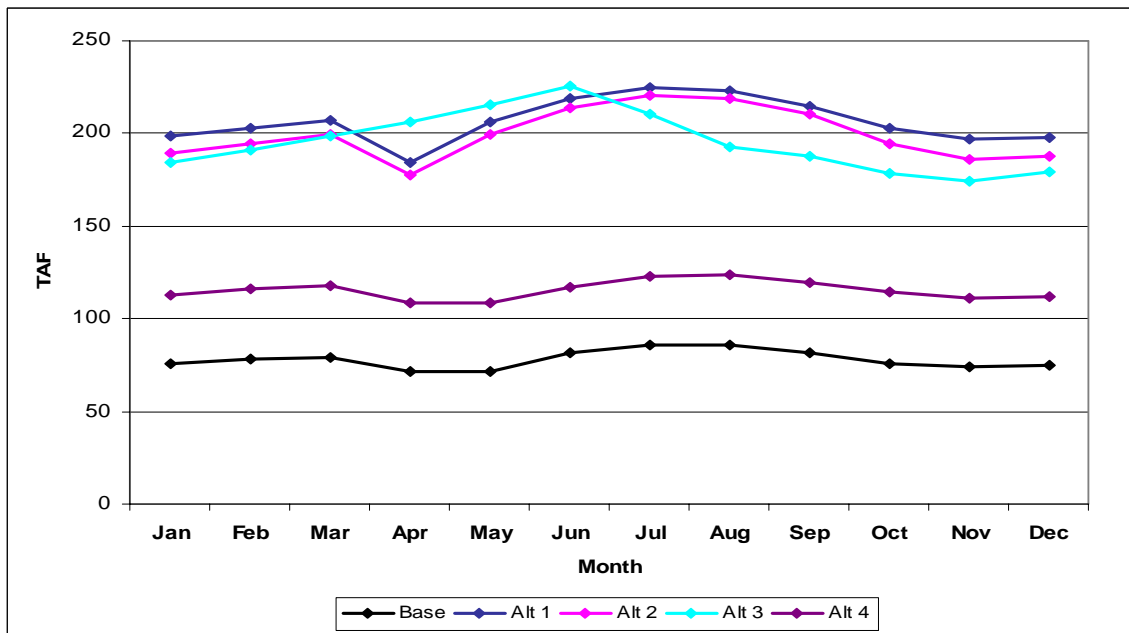


Figure C4-48: Monthly Average Los Vaqueros storage, 2030 LOD, Severe Fishery Restrictions

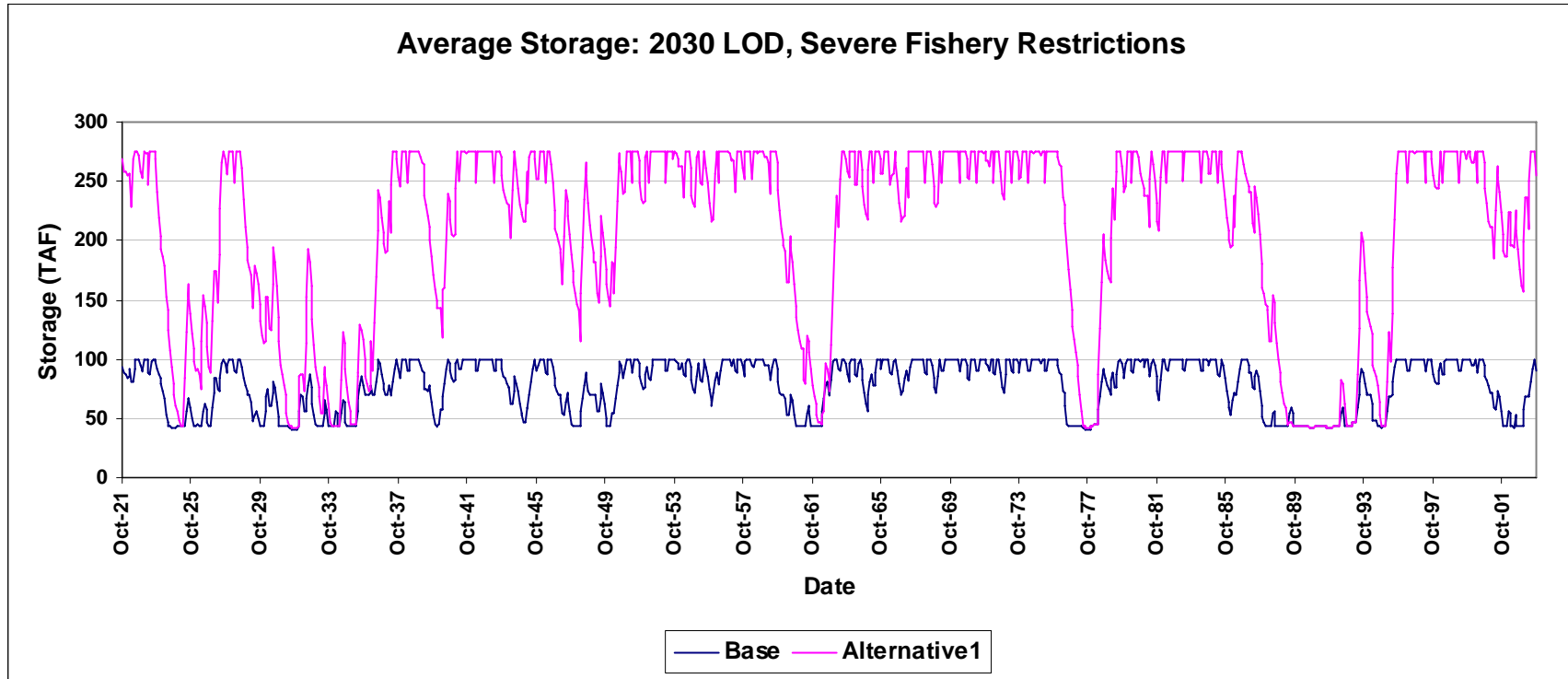


Figure C4-49: Timeseries of Alternative 1 and Base Los Vaqueros storage 2030 LOD, Severe Fishery Restrictions

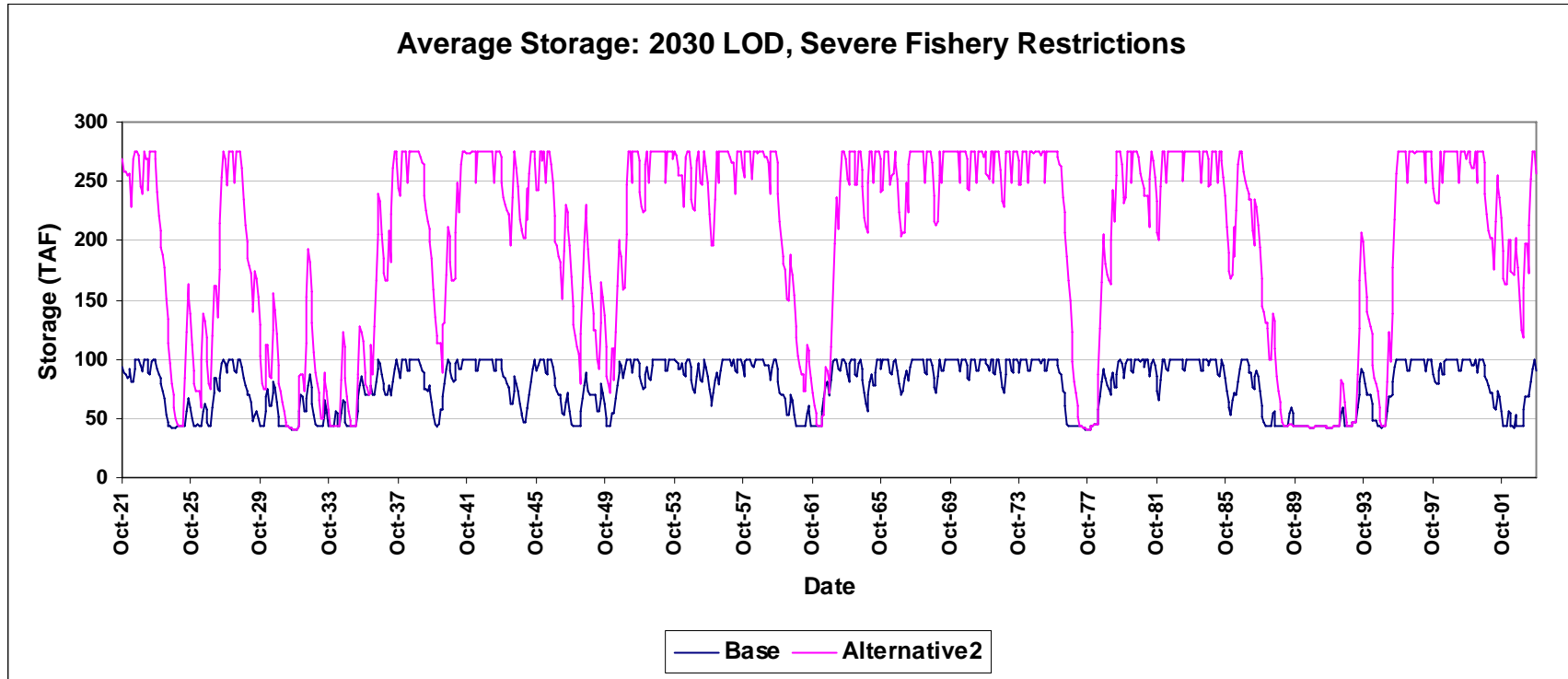


Figure C4-50: Timeseries of Alternative 2 and Base Los Vaqueros storage 2030 LOD, Severe Fishery Restrictions

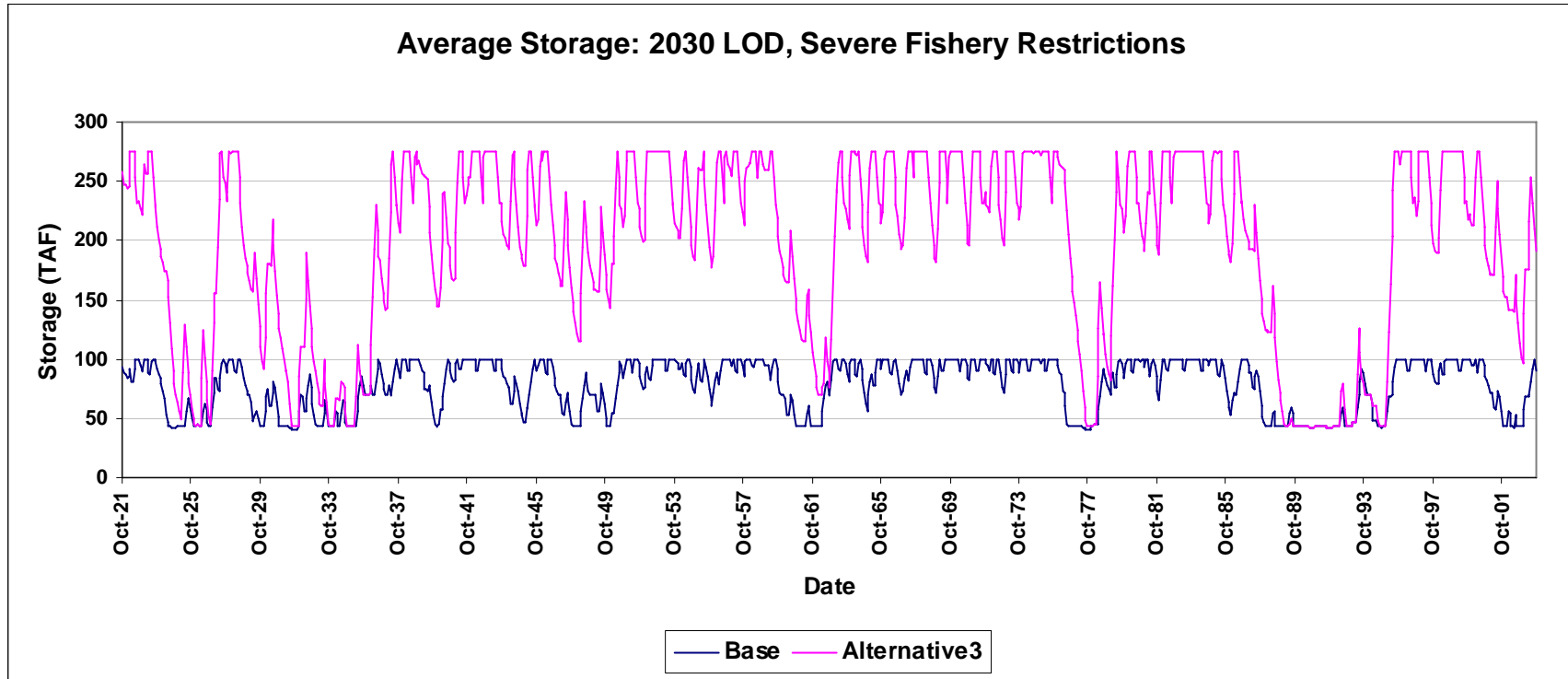


Figure C4-51: Timeseries of Alternative 3 and Base Los Vaqueros storage 2030 LOD, Severe Fishery Restrictions

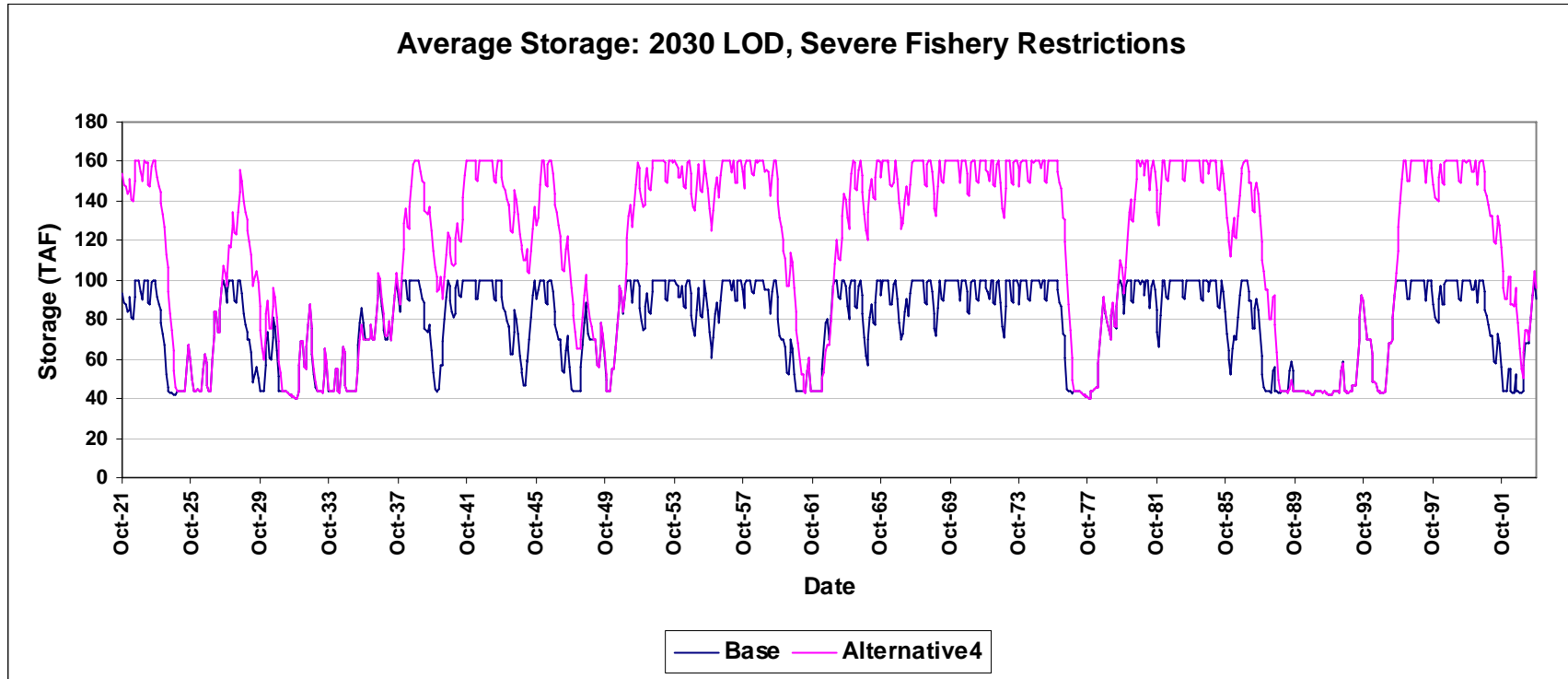


Figure C4-52: Timeseries of Alternative 4 and Base Los Vaqueros storage 2030 LOD, Severe Fishery Restrictions

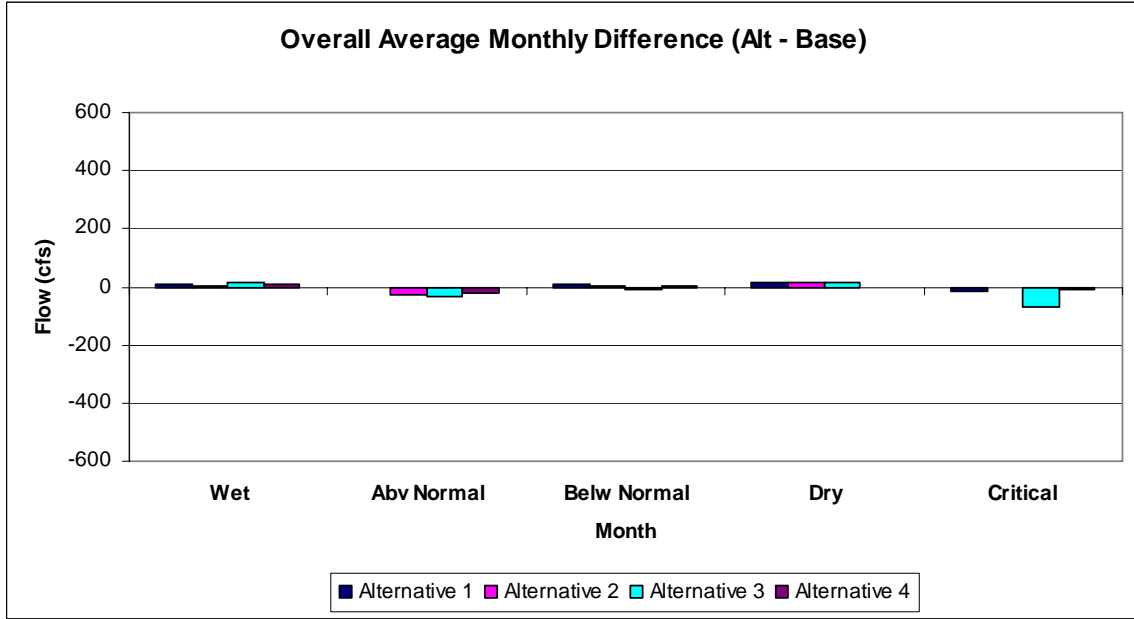


Figure C4-53: Changes in Sacramento River at Hood flow by water year type, 2030 LOD, Severe Fishery Restrictions

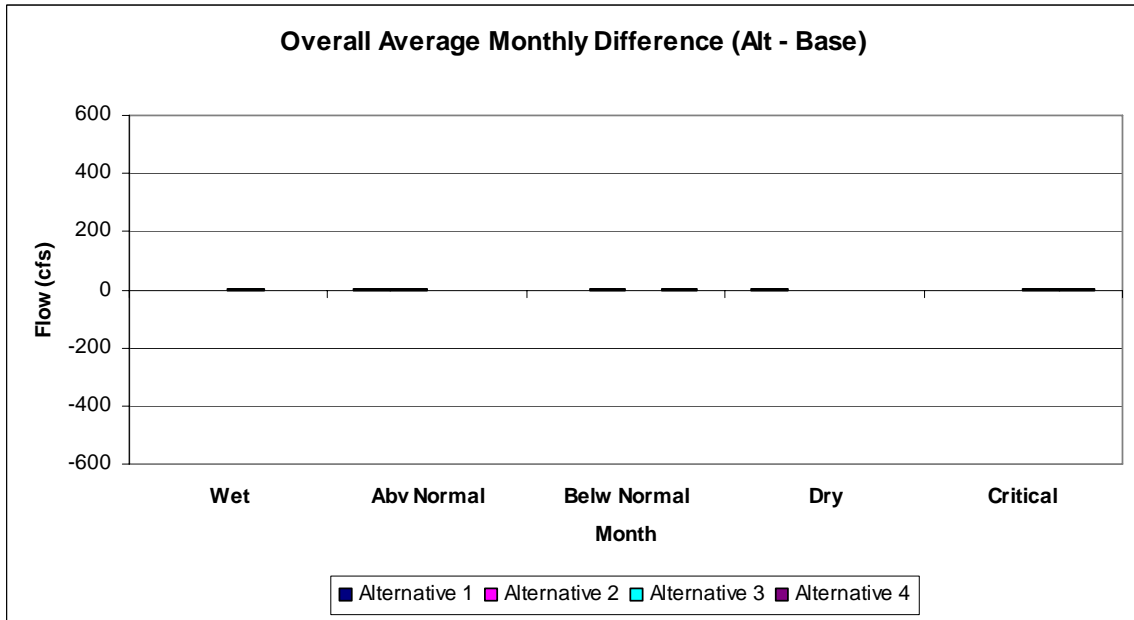


Figure C4-54: Changes in San Joaquin River at Vernalis flow by water year type, 2030 LOD, Severe Fishery Restrictions

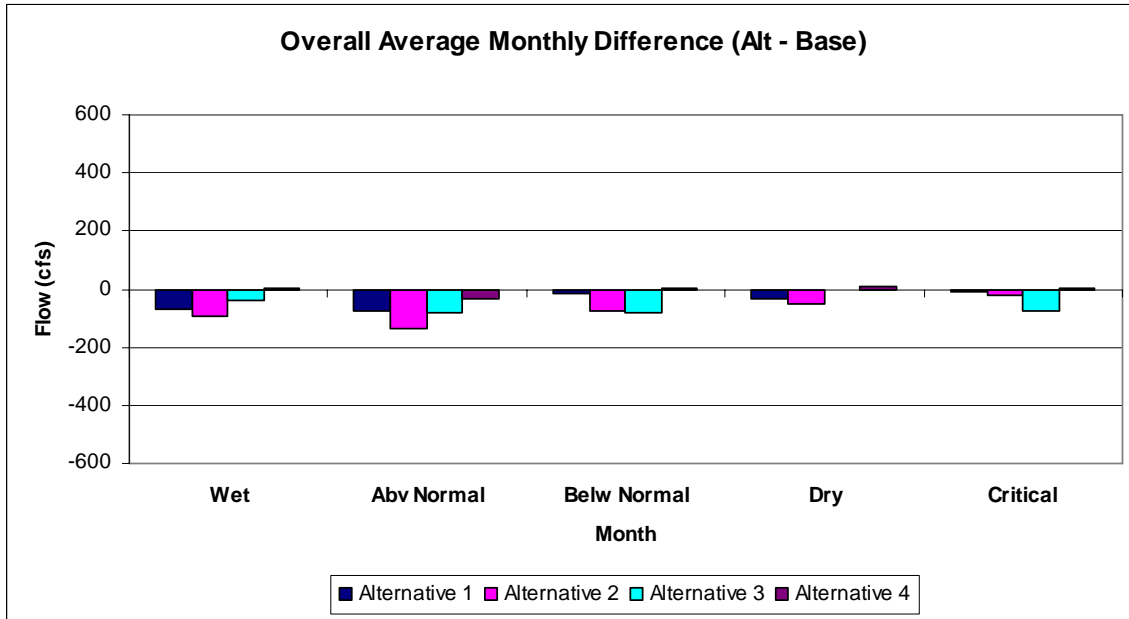


Figure C4-55: Changes in Delta Outflow by Year Type, 2030 LOD, Severe Fishery Restrictions

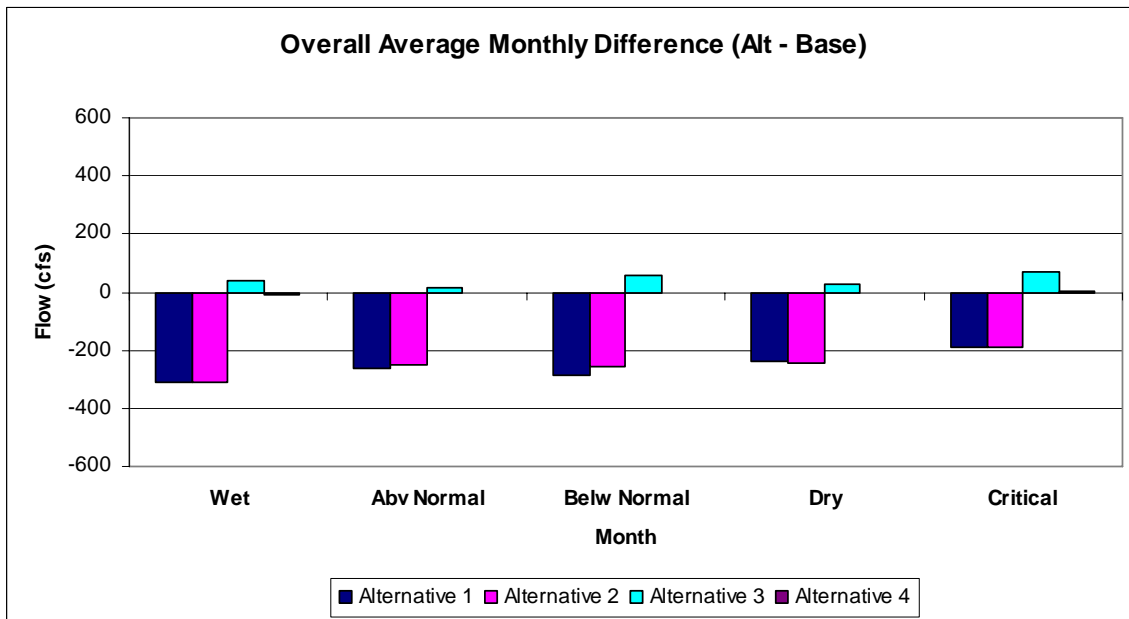


Figure C4-56: Changes in Banks + Jones Diversions by Year Type, 2030 LOD, Severe Fishery Restrictions

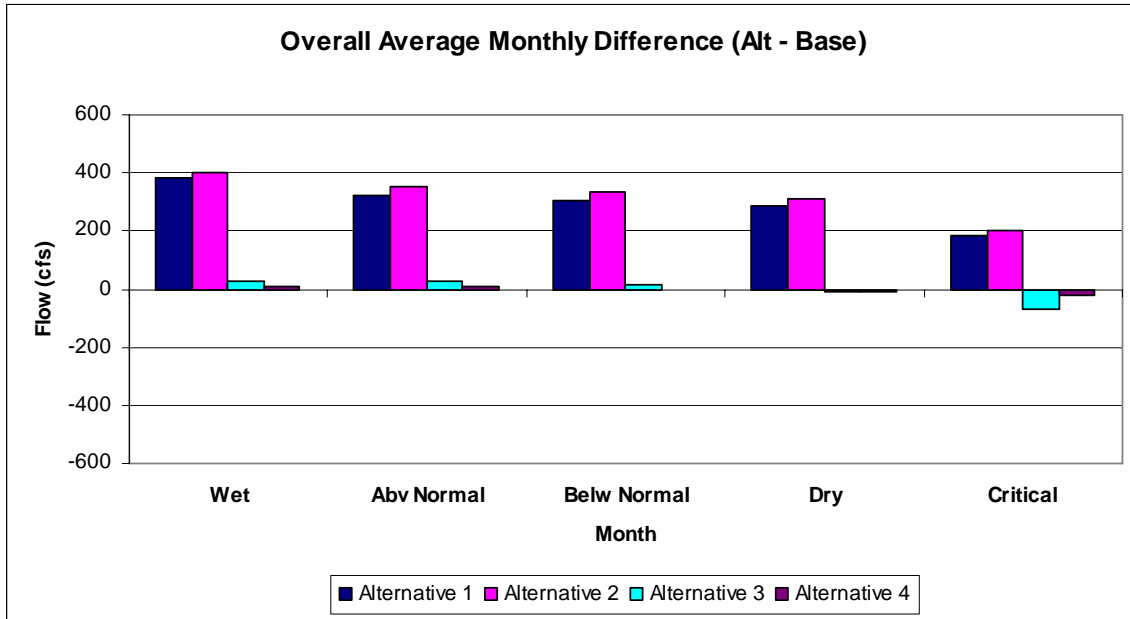


Figure C4-57: Changes in Project diversions by water year type, 2030 LOD, Severe Fishery Restrictions

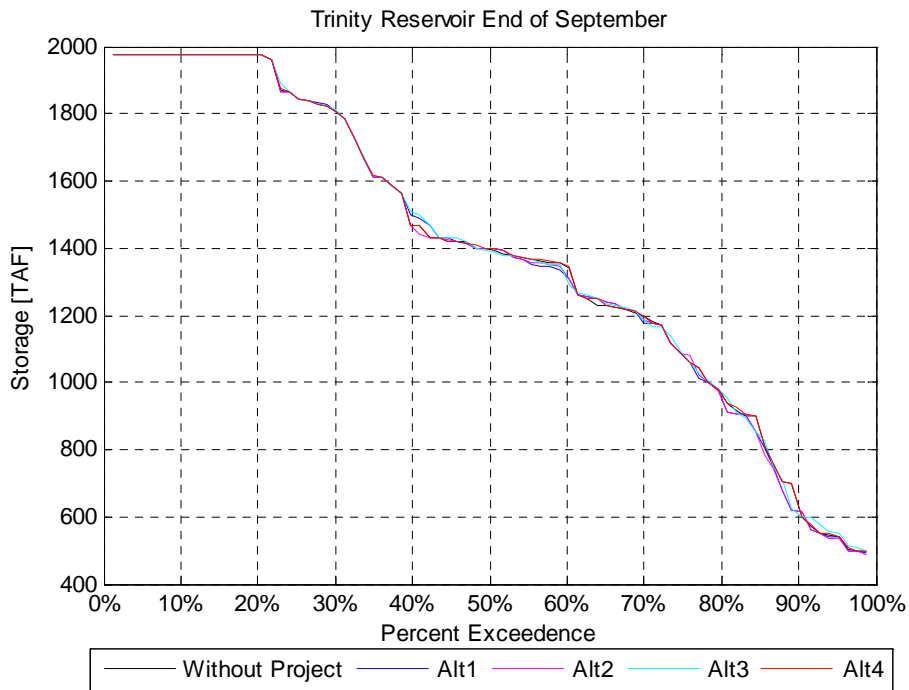


Figure C4-58: Trinity Reservoir end of September storage, 2030 LOD, Severe Fishery Restrictions

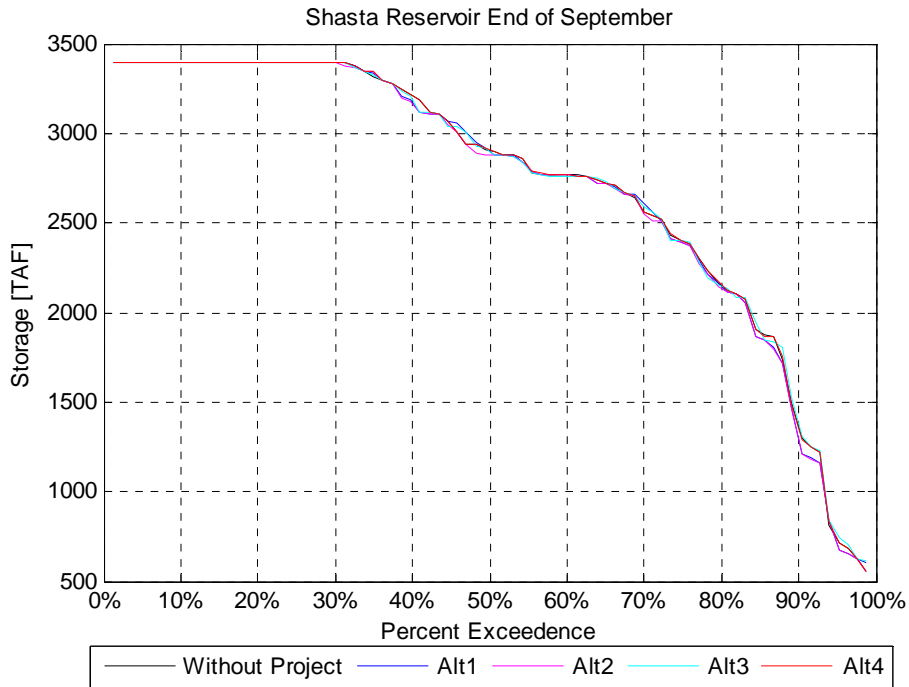


Figure C4-59: Shasta Reservoir end of September storage, 2030 LOD, Severe Fishery Restrictions

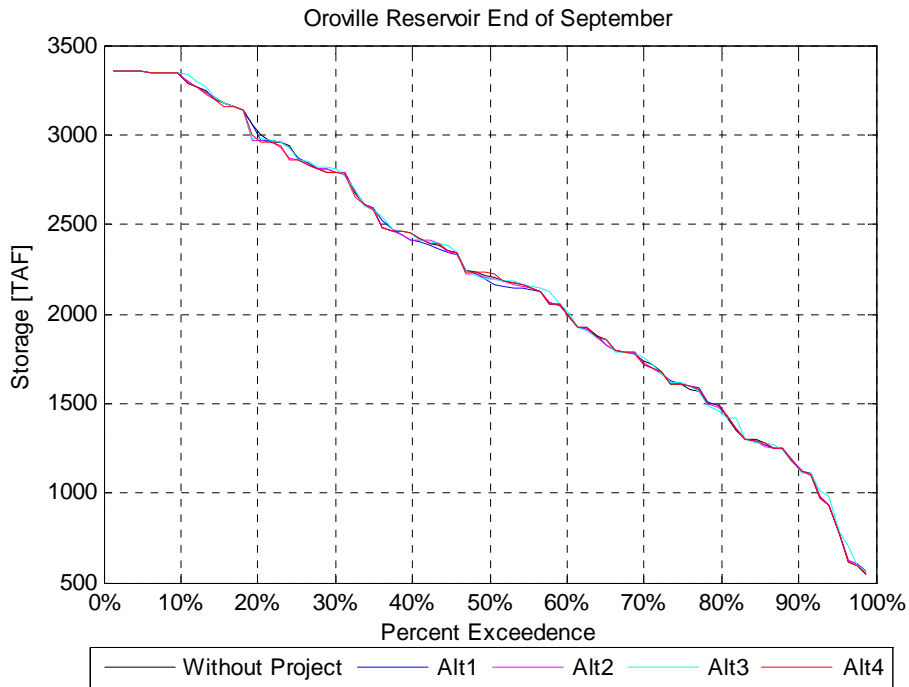


Figure C4-60: Oroville Reservoir end of September storage, 2030 LOD, Severe Fishery Restrictions

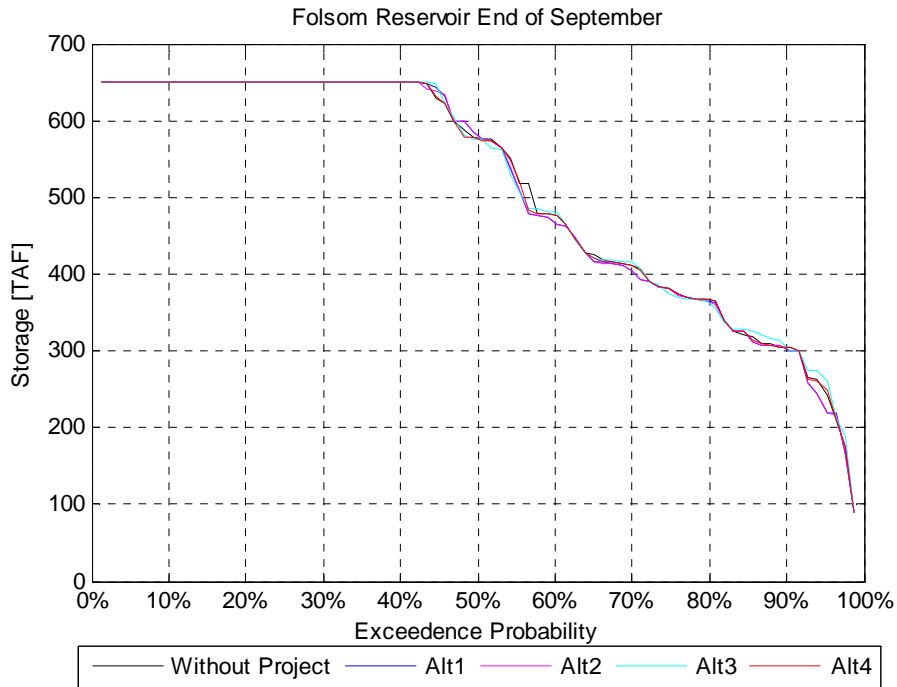


Figure C4-61: Folsom Reservoir end of September storage, 2030 LOD, Severe Fishery Restrictions

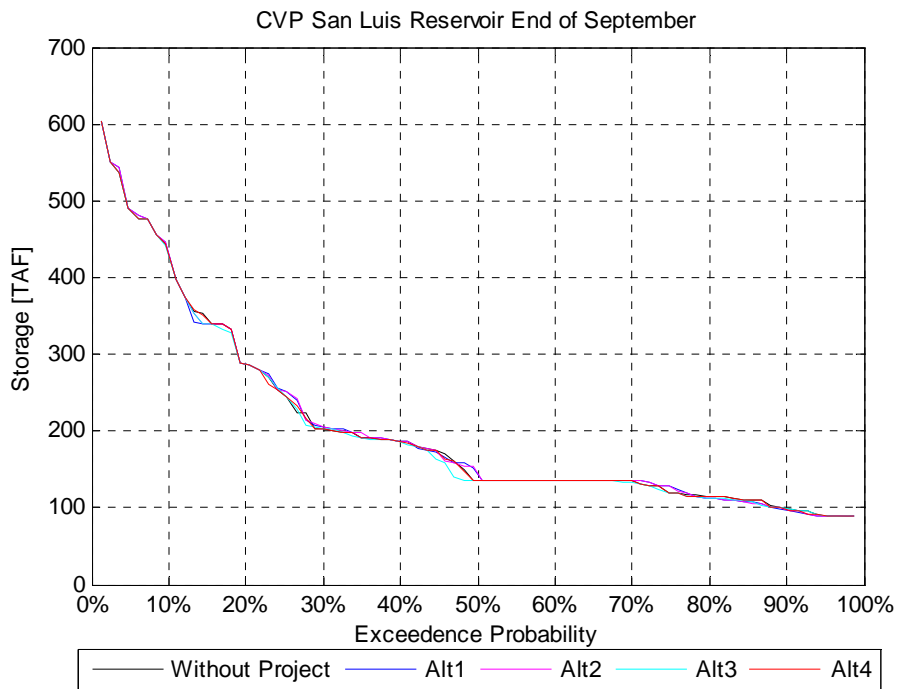


Figure C4-62: CVP San Luis Reservoir end of September storage, 2030 LOD, Severe Fishery Restrictions

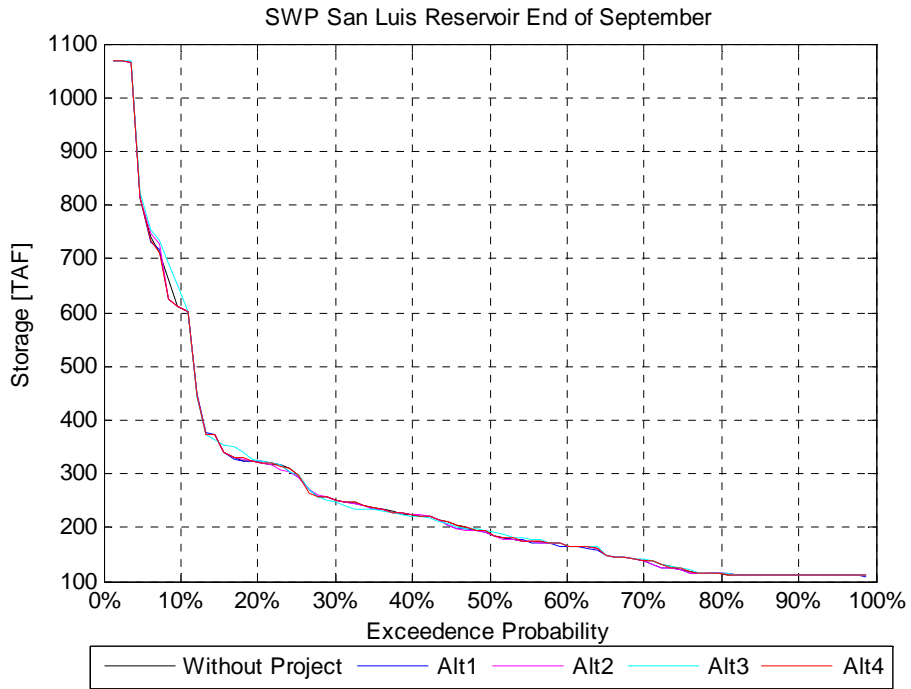


Figure C4-63: SWP San Luis Reservoir end of September storage, 2030 LOD, Severe Fishery Restrictions

2030 Level of Development, Moderate Fishery Restrictions

Model results for each project alternative are presented in **Table C4-16 (A-D)** as average values for full hydrologic study period (1921 to 2003) and a six-year dry period (1987 to 1992). These results include upstream and Delta flows and diversions (e.g. flow in Sacramento River and major tributaries, San Joaquin River flow, exports at Banks and Jones Pumping Plants, Net Delta Outflow, X2 position and QWEST), CVP and SWP south of Delta deliveries, CVP and SWP reservoir carry-over storages (at Folsom, Oroville, San Luis, Shasta and Trinity Reservoirs), and parameters specific to project alternative operations (CCWD and Los Vaqueros Reservoir (LV) diversions; additional south of Delta Environmental Water Supply deliveries; and Delta Supply Restoration deliveries to South Bay water agencies).

Table C4-17 and **Table C4-18** present the change in Delta channel flow and indices, upstream reservoir storages and local operation parameters for each project alternative as compared to the Future Without Project condition. Results are summarized by year type and monthly averages, respectively.

Table C4-19 (A-D) presents the changes from the Future Without Project condition in monthly Banks and Jones export diversions for each project alternative, and **Table C4-20 (A-D)** presents the changes from the Future Without Project condition in monthly CCWD and Los Vaqueros Reservoir (LV) diversions for each project alternative. These tables also indicate whether the Delta is in excess or balanced conditions.

Monthly and year type average changes in various Delta parameters (Sacramento River flow at Hood, San Joaquin River flow at Vernalis, Delta Outflow, combined Banks and Jones diversions, and combined CCWD and LV diversions) are presented in **Figure C4-64** through **Figure C4-68** and **Figure C4-74** through **Figure C4-78**, respectively. **Figure C4-69** shows the monthly average Los Vaqueros storage and **Figure C4-70** through **Figure C4-73** show time-series of storage for each alternative and the Future Without Project condition.

Figure C4-79 through **Figure C4-84** are exceedence plots of the end of September storage in upstream reservoirs (Trinity, Shasta, Oroville, and Folsom) and San Luis Reservoir (CVP and SWP).

**TABLE C4-16:
SUMMARY COMPARISON OF ANNUAL AVERAGE DIVERSIONS, DELIVERIES, RIVER FLOWS, AND
CARRYOVER STORAGE, 2030 LOD, MODERATE FISHERY RESTRICTIONS**

(A) ALTERNATIVE 1 COMPARED TO FUTURE WITHOUT PROJECT (NO ACTION)

	Future Without Project		Alternative 1		Difference (Alt – Fut. W.P.)		Percent Difference	
	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92
Diversion (TAF/yr)								
CCWD and LV Diversions	163	170	392	322	229	152	141%	90%
Banks Pumping Plant	2806	1654	2598	1527	-208	-127	-7%	-8%
Jones Pumping Plant	2295	1711	2296	1705	1	-6	0%	0%
Total	5264	3535	5286	3554	22	20	0%	1%
Delta (cfs)								
Sacramento River at Hood	22,370	12,935	22,372	12,951	2	16	0%	0%
San Joaquin River at Vernalis	4,243	1,540	4,243	1,540	0	0	0%	0%
Delta Outflow	21,838	8,420	21,811	8,410	-28	-10	0%	0%
QWEST	2,732	-37	2,703	-60	-29	-23	-1%	NA
X2 Position (km)	75.18	81.71	75.20	81.72	0.02	0.01	0%	0%
Upstream River Flows (cfs)								
Sacramento River at Keswick Dam	8,569	6,329	8,570	6,334	1	4	0%	0%
American River below Nimbus Dam	3,289	1,512	3,290	1,524	0	13	0%	1%
Feather River below Thermalito	4,388	2,327	4,387	2,326	-1	-1	0%	0%
Reservoir Carryover Storage (TAF)								
Trinity	1,366	750	1,364	741	-3	-8	0%	-1%
Shasta	2,674	1,508	2,667	1,469	-7	-39	0%	-3%
Oroville	2,088	1,182	2,092	1,188	4	7	0%	1%
Folsom	508	319	506	312	-2	-8	0%	-2%
CVP San Luis (August)	181	97	182	101	0	4	0%	4%
SWP San Luis (August)	209	116	206	118	-2	2	-1%	1%
Deliveries (TAF/yr)								
CVP SOD Ag	1,014	415	1,012	411	-1	-3	0%	-1%
CVP SOD M&I	120	99	120	98	0	0	0%	0%
SWP Table A + Article 56	2,692	1,612	2,689	1,624	-3	11	0%	1%
SWP Article 21	57	0	57	0	0	0	0%	NA
Delta Supply Restoration + Dry Year	0	0	22	28	22	28	NA	NA

(B) ALTERNATIVE 2 COMPARED TO FUTURE WITHOUT PROJECT (NO ACTION)

	Future Without Project		Alternative 2		Difference (Alt – Fut. W.P.)		Percent Difference	
	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92
Diversion (TAF/yr)								
CCWD and LV Diversions	163	170	412	345	249	176	152%	103%
Banks Pumping Plant	2806	1654	2604	1528	-202	-126	-7%	-8%
Jones Pumping Plant	2295	1711	2295	1705	-1	-6	0%	0%
Total	5264	3534	5508	3578	46	44	1%	1%
Delta (cfs)								
Sacramento River at Hood	22,370	12,935	22,373	12,965	3	30	0%	0%
San Joaquin River at Vernalis	4,243	1,540	4,243	1,540	0	0	0%	0%
Delta Outflow	21,838	8,420	21,776	8,391	-63	-29	0%	0%
QWEST	2,732	-37	2,670	-90	-62	-53	-2%	NA
X2 Position (km)	75	82	75	82	0	0	0%	0%
Upstream River Flows (cfs)								
Sacramento River at Keswick Dam	8,569	6,329	8,569	6,345	0	16	0%	0%
American River below Nimbus Dam	3,289	1,512	3,290	1,527	0	15	0%	1%
Feather River below Thermalito	4,388	2,327	4,387	2,322	-1	-4	0%	0%
Reservoir Carryover Storage (TAF)								
Trinity	1,366	750	1,361	729	-6	-20	0%	-3%
Shasta	2,674	1,508	2,664	1,456	-10	-53	0%	-3%
Oroville	2,088	1,182	2,091	1,188	3	6	0%	1%
Folsom	508	319	505	309	-3	-10	0%	-3%
CVP San Luis (August)	181	97	181	102	0	5	0%	5%
SWP San Luis (August)	209	116	206	118	-3	1	-1%	1%
Deliveries (TAF/yr)								
CVP SOD Ag	1,014	415	1,012	410	-2	-5	0%	-1%
CVP SOD M&I	120	99	120	98	0	0	0%	0%
SWP Table A + Article 56	2,692	1,612	2,689	1,624	-3	11	0%	1%
SWP Article 21	57	0	56	0	-1	0	-1%	NA
Additional SOD Env Water Supply	0	0	48	55	48	55	NA	NA

**TABLE C4-16:
SUMMARY COMPARISON OF ANNUAL AVERAGE DIVERSIONS, DELIVERIES, RIVER FLOWS, AND
CARRYOVER STORAGE, 2030 LOD, MODERATE FISHERY RESTRICTIONS**

(C) ALTERNATIVE 3 COMPARED TO FUTURE WITHOUT PROJECT (NO ACTION)

	Future Without Project		Alternative 3		Difference (Alt – Fut. W.P.)		Percent Difference	
	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92
Diversion (TAF/yr)								
CCWD and LV Diversions	163	170	166	155	3	-15	2%	-9%
Banks Pumping Plant	2806	1654	2835	1697	29	43	1%	3%
Jones Pumping Plant	2295	1711	2301	1729	5	18	0%	1%
Total	5264	3534	5302	3580	37	46	1%	1%
Delta (cfs)								
Sacramento River at Hood	22,370	12,935	22,366	12,965	-4	30	0%	0%
San Joaquin River at Vernalis	4,243	1,540	4,243	1,540	0	0	0%	0%
Delta Outflow	21,838	8,420	21,785	8,386	-53	-33	0%	0%
QWEST	2,732	-37	2,677	-90	-55	-53	-2%	NA
X2 Position (km)	75	82	75	82	0	0	0%	0%
Upstream River Flows (cfs)								
Sacramento River at Keswick Dam	8,569	6,329	8,569	6,340	0	11	0%	0%
American River below Nimbus Dam	3,289	1,512	3,289	1,523	0	12	0%	1%
Feather River below Thermalito	4,388	2,327	4,388	2,328	0	1	0%	0%
Reservoir Carryover Storage (TAF)								
Trinity	1,366	750	1,366	749	-1	0	0%	0%
Shasta	2,674	1,508	2,666	1,479	-9	-29	0%	-2%
Oroville	2,088	1,182	2,095	1,166	7	-16	0%	-1%
Folsom	508	319	507	310	-1	-9	0%	-3%
CVP San Luis (August)	181	97	181	99	0	2	0%	2%
SWP San Luis (August)	209	116	211	115	2	-1	1%	-1%
Deliveries (TAF/yr)								
CVP SOD Ag	1,014	415	1,009	409	-5	-6	0%	-1%
CVP SOD M&I	120	99	120	98	0	-1	0%	-1%
SWP Table A + Article 56	2,692	1,612	2,707	1,646	15	34	1%	2%
SWP Article 21	57	0	66	0	9	0	16%	NA
Additional SOD Env Water Supply	0	0	15	41	15	41	NA	NA

(D) ALTERNATIVE 4 COMPARED TO FUTURE WITHOUT PROJECT (NO ACTION)

	Future Without Project		Alternative 4		Difference (Alt – Fut. W.P.)		Percent Difference	
	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92	Avg	87 - 92
Diversion (TAF/yr)								
CCWD and LV Diversions	163	170	164	161	1	-9	0%	-6%
Banks Pumping Plant	2806	1654	2804	1654	-2	0	0%	0%
Jones Pumping Plant	2295	1711	2293	1715	-2	4	0%	0%
Total	5264	3534	5261	3530	-3	-5	0%	0%
Delta (cfs)								
Sacramento River at Hood	22,370	12,935	22,372	12,930	2	-5	0%	0%
San Joaquin River at Vernalis	4,243	1,540	4,243	1,540	0	0	0%	0%
Delta Outflow	21,838	8,420	21,845	8,421	6	2	0%	0%
QWEST	2,732	-37	2,737	-32	5	5	0%	NA
X2 Position (km)	75	82	75	82	0	0	0%	0%
Upstream River Flows (cfs)								
Sacramento River at Keswick Dam	8,569	6,329	8,569	6,327	0	-2	0%	0%
American River below Nimbus Dam	3,289	1,512	3,290	1,509	0	-2	0%	0%
Feather River below Thermalito	4,388	2,327	4,388	2,327	0	0	0%	0%
Reservoir Carryover Storage (TAF)								
Trinity	1,366	750	1,367	750	0	1	0%	0%
Shasta	2,674	1,508	2,675	1,516	1	8	0%	1%
Oroville	2,088	1,182	2,088	1,182	0	0	0%	0%
Folsom	508	319	507	323	0	3	0%	1%
CVP San Luis (August)	181	97	181	99	-1	2	0%	2%
SWP San Luis (August)	209	116	208	116	-1	0	0%	0%
Deliveries (TAF/yr)								
CVP SOD Ag	1,014	415	1,012	419	-2	4	0%	1%
CVP SOD M&I	120	99	120	99	0	0	0%	0%
SWP Table A + Article 56	2,692	1,612	2,690	1,612	-2	0	0%	0%
SWP Article 21	57	0	56	0	0	0	-1%	NA

**TABLE C4-17:
ANNUAL VALUES BY WATER YEAR TYPE, 2030 LOD, MODERATE FISHERY RESTRICTIONS**

Parameter	Long Term Average	Dry Period (87-92)	Wet	Above Normal	Below Normal	Dry	Critical
CCWD and LV Diversions (TAF/yr)							
Average Total Diversions Future Without Project	163	170	160	171	171	162	155
Changes under Alternative 1	229	152	276	240	233	213	136
Changes under Alternative 2	249	176	296	259	254	231	154
Changes under Alternative 3	3	-15	16	13	14	-4	-37
Changes under Alternative 4	1	-9	10	10	-2	-8	-10
CVP and SWP Improved Fish Screening							
Future Without Project	0	0	0	0	0	0	0
Changes under Alternative 1	190	125	231	191	189	167	138
Changes under Alternative 2	185	125	225	184	180	163	138
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
Delta (cfs)							
Sacramento River at Hood							
Future Without Project	22,370	12,935	33,039	25,285	18,484	15,503	11,173
Changes under Alternative 1	2	16	-1	13	-23	9	17
Changes under Alternative 2	3	30	-17	13	-16	20	32
Changes under Alternative 3	-4	30	-7	5	-16	16	-22
Changes under Alternative 4	2	-5	10	5	-17	3	3
San Joaquin River at Vernalis							
Future Without Project	4,243	1,540	7,508	3,964	3,305	2,186	1,625
Changes under Alternative 1	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
Delta Outflow Future Without Project							
	21,838	8,420	39,748	23,730	14,426	10,469	6,845
Changes under Alternative 1	-28	-10	-31	-20	-41	-38	3
Changes under Alternative 2	-63	-29	-89	-74	-72	-54	2
Changes under Alternative 3	-53	-33	-99	0	-41	-25	-65
Changes under Alternative 4	6	2	-3	3	20	3	20
Banks Pumping Plant Future Without Project							
	3,868	2,284	5,054	4,041	3,744	3,210	2,255
Changes under Alternative 1	-287	-175	-360	-287	-287	-250	-182
Changes under Alternative 2	-278	-173	-351	-272	-273	-242	-187
Changes under Alternative 3	41	60	53	30	17	25	76
Changes under Alternative 4	-3	1	-4	-7	-6	2	1
Jones Pumping Plant Future Without Project							
	3,170	2,363	3,630	3,334	3,216	3,007	2,202
Changes under Alternative 1	1	-8	4	0	-16	3	10
Changes under Alternative 2	-1	-8	7	3	-21	-3	4
Changes under Alternative 3	7	25	11	-7	-12	20	17
Changes under Alternative 4	-3	6	4	-8	-27	10	-3
Banks + Jones Exports Future Without Project							
	7,038	4,647	8,684	7,375	6,960	6,218	4,457
Changes under Alternative 1	-286	-183	-356	-287	-302	-247	-173
Changes under Alternative 2	-279	-182	-344	-269	-293	-244	-183
Changes under Alternative 3	49	85	65	24	6	46	93
Changes under Alternative 4	-6	7	0	-15	-34	12	-2
Banks + Jones + CCWD + LV Diversions							
Future Without Project	7,263	4,882	8,904	7,611	7,196	6,441	4,671
Changes under Alternative 1	29	26	24	42	18	46	14
Changes under Alternative 2	63	59	63	87	56	74	29
Changes under Alternative 3	52	63	86	40	24	40	42
Changes under Alternative 4	-4	-6	14	-2	-37	1	-16
QWEST Future Without Project							
	2,732	-37	6,908	2,726	1,083	-158	-50
Changes under Alternative 1	-29	-23	-25	-38	-24	-44	-12
Changes under Alternative 2	-62	-53	-67	-82	-60	-69	-23
Changes under Alternative 3	-55	-53	-88	-34	-27	-49	-48
Changes under Alternative 4	5	5	-12	4	33	1	15
X2 Position (km) Future Without Project							
	75.18	81.71	68.88	73.43	76.70	79.28	82.66
Changes under Alternative 1	0.02	0.01	0.02	0.00	0.03	0.02	0.03
Changes under Alternative 2	0.04	0.03	0.05	0.03	0.05	0.05	0.02
Changes under Alternative 3	0.02	0.02	0.03	-0.02	0.02	0.01	0.08
Changes under Alternative 4	-0.01	0.00	0.01	-0.01	-0.01	-0.01	-0.01
Upstream River Flows (cfs)							
Sacramento River at Keswick							
Future Without Project	8,569	6,329	11,525	8,648	7,094	6,981	6,189
Changes under Alternative 1	1	4	1	3	-17	21	-13
Changes under Alternative 2	0	16	-7	1	-17	26	-7
Changes under Alternative 3	0	11	4	-3	-10	17	-20
Changes under Alternative 4	0	-2	7	-1	-13	8	-11

**TABLE C4-17:
ANNUAL VALUES BY WATER YEAR TYPE, 2030 LOD, MODERATE FISHERY RESTRICTIONS**

Parameter	Long Term Average	Dry Period (87-92)	Wet	Above Normal	Below Normal	Dry	Critical
American River below Nimbus							
Future Without Project	3,289	1,512	5,195	3,687	2,751	2,000	1,326
Changes under Alternative 1	0	13	-1	-2	-7	1	13
Changes under Alternative 2	0	15	-2	-2	-8	4	13
Changes under Alternative 3	0	12	0	-2	0	4	-5
Changes under Alternative 4	0	-2	0	1	-1	-1	4
Feather River below Thermalito							
Future Without Project	4,388	2,327	6,808	4,427	3,436	2,966	2,349
Changes under Alternative 1	-1	-1	-6	20	-5	-14	15
Changes under Alternative 2	-1	-4	-9	12	2	-11	18
Changes under Alternative 3	0	1	-10	42	-10	-8	3
Changes under Alternative 4	0	0	3	2	-4	-2	2
Reservoir Carryover Storage (TAF)							
Trinity Future Without Project	1,366	750	1,841	1,606	1,235	1,078	685
Changes under Alternative 1	-3	-8	-2	-7	-3	-4	2
Changes under Alternative 2	-6	-20	-2	-12	-5	-9	-4
Changes under Alternative 3	-1	0	-3	-6	3	2	0
Changes under Alternative 4	0	1	0	0	-1	-1	5
Shasta Future Without Project	2,674	1,508	3,319	3,173	2,771	2,286	1,251
Changes under Alternative 1	-7	-39	0	-3	4	-18	-25
Changes under Alternative 2	-10	-53	0	-3	1	-21	-37
Changes under Alternative 3	-9	-29	1	-4	0	-19	-27
Changes under Alternative 4	1	8	0	-1	8	0	-3
Oroville Future Without Project	2,088	1,182	2,934	2,297	2,002	1,504	1,024
Changes under Alternative 1	4	7	6	-7	-7	15	7
Changes under Alternative 2	3	6	6	-9	-9	14	4
Changes under Alternative 3	7	-16	14	-5	5	7	5
Changes under Alternative 4	0	0	-2	-4	2	1	2
Folsom Future Without Project	508	319	635	566	554	388	298
Changes under Alternative 1	-2	-8	0	-3	-2	-1	-6
Changes under Alternative 2	-3	-10	0	-3	-2	-2	-8
Changes under Alternative 3	-1	-9	0	-2	-1	-4	2
Changes under Alternative 4	0	3	0	0	-1	1	-1
CVP San Luis (August) Future Without Project	181	97	264	139	128	140	168
Changes under Alternative 1	0	4	-2	3	-5	2	7
Changes under Alternative 2	0	5	-2	3	-5	3	7
Changes under Alternative 3	0	2	2	2	-6	-2	6
Changes under Alternative 4	-1	2	0	2	-8	2	1
SWP San Luis (August) Future Without Project	209	116	368	136	141	134	125
Changes under Alternative 1	-2	2	-9	0	-1	2	0
Changes under Alternative 2	-3	1	-9	0	-2	1	1
Changes under Alternative 3	2	-1	8	-2	-4	-2	5
Changes under Alternative 4	-1	0	-2	0	0	0	-1
CVP and SWP Deliveries (TAF/year)							
CVP SOD Ag Future Without Project	1,014	415	1,423	1,144	992	806	334
Changes under Alternative 1	-1	-3	3	-5	-7	1	-3
Changes under Alternative 2	-2	-5	4	-2	-9	-3	-5
Changes under Alternative 3	-5	-6	2	-11	-7	-6	-8
Changes under Alternative 4	-2	4	-1	-8	-6	4	-1
CVP SOD M&I Future Without Project	120	99	136	123	120	112	96
Changes under Alternative 1	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	-1	0	0
Changes under Alternative 3	0	-1	0	0	-1	0	0
Changes under Alternative 4	0	0	0	0	-1	0	0
SWP Table A + Article 56 Future Without Project	2,692	1,612	3,391	2,839	2,716	2,309	1,575
Changes under Alternative 1	-3	11	-19	-1	-3	6	15
Changes under Alternative 2	-3	11	-15	4	-3	4	9
Changes under Alternative 3	15	34	12	12	6	12	41
Changes under Alternative 4	-2	0	-2	-6	-6	2	3
SWP Article 21 Future Without Project	57	0	120	52	56	0	9
Changes under Alternative 1	0	0	1	-2	1	0	0
Changes under Alternative 2	-1	0	-1	-2	0	0	0
Changes under Alternative 3	9	0	20	9	0	2	7
Changes under Alternative 4	0	0	-1	1	0	0	0
Improved Fish Screening for CVP South Bay							
Future Without Project	0	0	0	0	0	0	0
Changes under Alternative 1	74	70	75	72	76	75	71
Changes under Alternative 2	72	69	72	70	73	74	70
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
Improved Fish Screening for SWP South Bay							
Future Without Project	0	0	0	0	0	0	0
Changes under Alternative 1	130	67	173	132	127	104	76
Changes under Alternative 2	126	67	169	127	120	101	75
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0

**TABLE C4-17:
ANNUAL VALUES BY WATER YEAR TYPE, 2030 LOD, MODERATE FISHERY RESTRICTIONS**

Parameter	Long Term Average	Dry Period (87-92)	Wet	Above Normal	Below Normal	Dry	Critical
CVP South Bay Delta Supply Restoration							
Future Without Project	0	0	0	0	0	0	0
Changes under Alternative 1	4	6	3	3	3	5	8
Changes under Alternative 2	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
SWP South Bay Delta Supply Restoration							
Future Without Project	0	0	0	0	0	0	0
Changes under Alternative 1	18	22	11	13	14	26	30
Changes under Alternative 2	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0
Additional CVP SOD Environmental Water from Dedicated Storage Future Without Project	0	0	0	0	0	0	0
Changes under Alternative 1	0	0	0	0	0	0	0
Changes under Alternative 2	48	55	37	43	42	61	62
Changes under Alternative 3	15	41	3	8	16	31	25
Changes under Alternative 4	0	0	0	0	0	0	0

**TABLE C4-18:
AVERAGE MONTHLY VALUES, 2030 LOD, MODERATE FISHERY RESTRICTIONS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
CCWD and LV Diversions (TAF)												
Average Total Diversions												
Future Without Project	10	9	7	9	11	11	3	15	28	26	21	14
Changes under Alternative 1	13	16	21	16	14	29	-2	36	18	22	23	23
Changes under Alternative 2	14	18	24	24	17	30	-1	36	19	22	23	23
Changes under Alternative 3	-2	-2	0	0	1	4	-2	9	-10	6	1	-1
Changes under Alternative 4	0	0	0	0	0	0	-1	0	0	1	1	0
CVP and SWP Improved Fish Screening												
Future Without Project	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	13	16	19	16	13	21	0	10	17	20	22	23
Changes under Alternative 2	13	16	18	15	12	20	0	10	16	19	22	23
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Delta (cfs)												
Sacramento River at Hood	11,533	14,982	25,486	34,318	40,232	34,988	24,241	19,857	16,644	18,406	14,680	13,073
Future Without Project												
Changes under Alternative 1	-2	20	6	4	20	21	-86	64	23	27	-51	-22
Changes under Alternative 2	-6	18	-26	0	5	28	-84	64	56	28	-37	-13
Changes under Alternative 3	48	23	14	11	-61	-5	-8	-44	-150	9	-32	146
Changes under Alternative 4	-3	10	9	-3	12	7	-16	-1	-14	24	15	-13
San Joaquin River at Vernalis	2,534	2,704	3,447	4,824	6,503	6,340	5,991	6,041	4,621	3,239	2,099	2,570
Future Without Project												
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Delta Outflow Future Without Project	4,862	8,956	23,572	43,380	54,586	44,657	29,250	21,550	13,153	8,514	4,436	5,146
Changes under Alternative 1	-14	-10	-26	137	-14	-125	82	-338	-6	3	-17	-9
Changes under Alternative 2	-28	-43	-150	2	-70	-148	62	-347	2	1	-23	-11
Changes under Alternative 3	16	-6	-49	-41	-155	-237	22	-199	4	-11	3	15
Changes under Alternative 4	-2	10	13	63	3	-13	0	8	-3	3	-1	-6
Banks Pumping Plant	4,068	4,641	4,768	4,214	3,933	3,357	1,537	1,831	2,436	5,199	5,606	4,824
Future Without Project												
Changes under Alternative 1	-193	-267	-318	-347	-244	-345	-207	-159	-282	-309	-370	-398
Changes under Alternative 2	-200	-264	-292	-350	-238	-329	-200	-149	-266	-303	-360	-387
Changes under Alternative 3	44	43	23	89	111	188	29	8	0	-62	-63	84
Changes under Alternative 4	1	-1	1	-42	-1	0	-7	-1	0	12	9	-3
Jones Pumping Plant	4,058	4,248	3,813	3,560	2,983	2,471	1,698	1,672	2,008	3,495	3,921	4,118
Future Without Project												
Changes under Alternative 1	-1	21	13	-55	8	22	74	-23	7	-19	-32	-6
Changes under Alternative 2	0	18	21	-47	-13	23	79	-23	-4	-34	-26	-5
Changes under Alternative 3	24	19	49	-48	-24	9	1	-4	5	-14	9	64
Changes under Alternative 4	-2	9	-1	-30	7	14	5	1	-8	-9	-14	-5
Banks + Jones Exports	8,126	8,889	8,580	7,773	6,916	5,829	3,235	3,503	4,444	8,694	9,527	8,942
Future Without Project												
Changes under Alternative 1	-194	-246	-306	-402	-236	-323	-133	-182	-276	-328	-403	-404
Changes under Alternative 2	-200	-246	-270	-396	-250	-307	-121	-172	-270	-337	-386	-393
Changes under Alternative 3	68	61	72	40	87	197	31	4	5	-76	-54	148
Changes under Alternative 4	0	8	0	-72	6	14	-2	0	-8	3	-6	-9

**TABLE C4-18:
AVERAGE MONTHLY VALUES, 2030 LOD, MODERATE FISHERY RESTRICTIONS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Banks + Jones + CCWD + LV Diversions												
Future Without Project	8,290	9,036	8,693	7,914	7,114	6,001	3,278	3,751	4,913	9,111	9,877	9,180
Changes under Alternative 1	10	30	44	-141	20	147	-168	402	29	23	-34	-14
Changes under Alternative 2	21	62	118	-13	57	178	-146	412	54	27	-15	-2
Changes under Alternative 3	30	32	64	35	97	258	-4	154	-155	20	-35	130
Changes under Alternative 4	-2	0	-3	-73	9	20	-16	-9	-11	21	16	-6
QWEST Future Without Project	-928	-1,218	1,357	5,978	8,785	7,813	7,506	5,742	3,480	-1,102	-3,005	-1,622
Changes under Alternative 1	-11	-25	-42	141	-17	-144	157	-393	-23	-15	19	7
Changes under Alternative 2	-23	-58	-120	13	-56	-174	135	-403	-39	-19	4	-2
Changes under Alternative 3	-15	-69	-62	-33	-105	-259	3	-160	114	-17	25	-87
Changes under Alternative 4	1	1	4	72	-8	-19	14	9	7	-14	-12	3
X2 Position (km) Future Without Project	85.54	85.78	83.26	77.10	69.72	64.32	63.93	66.55	69.69	74.59	78.01	83.66
Changes under Alternative 1	0.01	0.02	0.02	0.02	-0.06	-0.03	0.02	-0.01	0.15	0.08	0.01	0.02
Changes under Alternative 2	0.02	0.04	0.06	0.06	0.02	0.01	0.04	0.00	0.16	0.06	0.00	0.03
Changes under Alternative 3	-0.04	-0.03	0.00	0.04	0.02	0.05	0.08	0.02	0.10	0.06	0.01	-0.01
Changes under Alternative 4	0.01	0.00	0.00	-0.01	-0.05	-0.02	0.00	0.00	-0.01	0.00	0.00	0.00
E/I Ratio Future Without Project	0.57	0.54	0.41	0.27	0.16	0.15	0.11	0.14	0.21	0.39	0.54	0.58
Changes under Alternative 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Changes under Alternative 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Changes under Alternative 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Changes under Alternative 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Upstream River Flows (cfs)												
Sacramento River at Keswick Dam												
Future Without Project	6,081	5,475	7,043	8,597	10,801	8,783	6,956	7,878	10,636	13,236	10,775	6,567
Changes under Alternative 1	-18	34	32	-14	12	32	-20	31	2	-13	-49	-23
Changes under Alternative 2	-21	36	11	-18	7	37	-21	29	13	-15	-36	-26
Changes under Alternative 3	11	4	10	-20	-14	6	6	-43	-127	10	43	112
Changes under Alternative 4	-6	15	9	-1	18	9	-6	-1	-14	-8	-6	-10
American River below Nimbus Dam												
Future Without Project	1,689	2,583	3,302	4,288	5,098	3,808	3,337	3,667	3,495	3,666	2,335	2,205
Changes under Alternative 1	-7	-17	1	-9	5	-4	-16	16	31	15	-6	-6
Changes under Alternative 2	1	-23	-2	-11	2	-2	-17	17	40	18	-9	-11
Changes under Alternative 3	-17	-13	2	-2	-11	-4	8	0	-19	53	11	-10
Changes under Alternative 4	-1	-3	-1	0	-3	0	-6	0	1	11	-3	6
Feather River below Thermalito												
Future Without Project	3,051	2,340	4,036	5,518	6,483	6,566	3,128	3,723	3,868	6,766	4,873	2,305
Changes under Alternative 1	20	3	-10	19	-12	-7	-46	13	-8	16	3	2
Changes under Alternative 2	11	7	-15	16	-22	-9	-42	13	3	17	-6	18
Changes under Alternative 3	57	32	21	18	-32	26	4	-4	-9	-73	-85	43
Changes under Alternative 4	2	-1	-3	-12	-2	1	-4	0	-1	20	12	-9
CVP and SWP Deliveries (TAF/year)												
CVP SOD Ag Future Without Project	32	24	34	59	69	46	67	106	170	209	150	49
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	-1	-1	-1	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	-1	0

**TABLE C4-18:
AVERAGE MONTHLY VALUES, 2030 LOD, MODERATE FISHERY RESTRICTIONS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
CVP SOD M&I Future Without Project	9	12	12	8	4	12	10	9	9	11	11	13
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
SWP Table A + Article 56	200	177	169	138	163	165	208	255	289	347	339	242
Future Without Project												
Changes under Alternative 1	0	0	0	0	-1	-2	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	-1	0	0	0	0	0	0
Changes under Alternative 3	1	1	1	1	0	1	1	1	3	2	2	1
Changes under Alternative 4	0	0	0	0	-1	0	0	0	0	0	0	0
SWP Article 21 Future Without Project	5	6	9	8	11	8	2	2	1	1	0	1
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	-1	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	1	7	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Improved Fish Screening for CVP South Bay Future Without Project	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	7	11	10	6	2	6	1	2	5	7	8	8
Changes under Alternative 2	7	11	9	6	2	6	1	2	5	6	8	8
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Improved Fish Screening for SWP South Bay Future Without Project	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	6	6	10	9	10	15	12	8	11	13	14	15
Changes under Alternative 2	6	6	9	9	10	14	12	8	11	13	14	15
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
CVP South Bay Delta Supply Restoration Future Without Project	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	1	1	1	1	0	0	0	0	0	0	0	0
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
SWP South Bay Delta Supply Restoration Future Without Project	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	4	3	3	0	0	0	0	0	1	1	2	3
Changes under Alternative 2	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 3	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0
Additional CVP SOD Environmental Water from Dedicated Storage Future Without Project	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 1	0	0	0	0	0	0	0	0	0	0	0	0
Changes under Alternative 2	12	8	5	6	6	1	0	1	1	1	3	3
Changes under Alternative 3	3	1	0	0	0	0	0	0	0	1	3	8
Changes under Alternative 4	0	0	0	0	0	0	0	0	0	0	0	0

**TABLE C4-19:
CHANGES IN BANKS + JONES EXPORTS (CFS), 2030 LOD, MODERATE FISHERY RESTRICTIONS**

Water Year	(A) Alternative											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	-470	-395	-449	-2979	-207	20	-140	-218	-389	28	-18	-438
1923	-573	-288	-346	-1162	-396	-437	-131	-225	-282	-499	-512	-301
1924	-131	-194	-276	-260	-214	-300	-199	-199	-342	-307	-239	-136
1925	89	-33	-129	-3106	818	-300	0	0	0	1197	-219	-779
1926	-440	-373	-242	-220	-195	0	-115	0	-1	-444	-234	-388
1927	-58	-167	0	-72	-262	-470	-148	-222	-470	-454	-470	-421
1928	-292	-380	-424	-150	-117	-399	-140	-209	-353	-327	-421	-445
1929	-173	-257	-334	-266	-222	-391	0	-42	0	-205	-248	-213
1930	-62	36	-119	-91	0	0	365	-1	26	-1445	-983	-276
1931	-127	-165	-220	-212	-184	-361	-197	-191	413	257	66	-35
1932	111	23	-129	0	-123	-178	217	0	140	156	130	-47
1933	-130	-171	217	-51	-16	-352	0	-183	0	-231	-17	-126
1934	-17	243	-355	-462	-124	-331	0	-204	0	-13	-266	-300
1935	-52	-41	230	-148	-134	0	-17	-1	-288	-396	-376	-494
1936	-272	-354	-347	-117	-89	49	-245	-451	-425	-111	-480	-499
1937	-222	-321	-358	-126	-387	-9	-284	-251	-961	-492	-1235	-396
1938	-150	-320	-290	209	-382	-453	-278	-221	-470	-482	-481	-470
1939	-311	-410	-424	-412	-344	-470	-221	-363	-388	-271	-446	-486
1940	-184	-279	-329	-123	-95	0	-140	0	-449	-391	-359	-398
1941	-212	-318	-367	-124	-189	-428	-278	-248	-468	-468	-468	-470
1942	-231	-362	-408	-409	-340	-470	-201	-232	-470	-469	-469	-470
1943	-256	-358	-404	-367	-345	-435	-278	-424	-442	-571	-504	-397
1944	-262	-75	-412	-168	-140	-408	-115	-72	-185	-366	-383	-601
1945	-149	-223	-289	-257	-469	-151	-131	-175	-470	-592	-559	-514
1946	-634	-362	-408	-320	158	-403	-131	-219	-276	-377	-388	-367
1947	-175	138	-270	-305	-275	-470	-115	-65	0	-557	-501	-516
1948	-291	-252	-260	-122	-88	-332	-118	0	0	-59	-381	-493
1949	-164	-166	-252	-239	-212	-433	-229	-295	0	394	130	-339
1950	-10	-142	-380	-255	0	-69	-131	-218	-310	-615	-591	-159
1951	-131	-215	-281	-464	-715	-470	-140	-220	-465	-439	-470	-419
1952	-241	-347	-392	-404	-22	-469	0	-222	-431	-438	-450	-470
1953	-470	-470	-259	-282	-340	-470	-3	-223	-410	-638	-650	-382
1954	-282	-284	-334	-320	-285	-441	-140	-197	-324	-323	-221	-399
1955	-179	-228	-291	-82	-117	-442	0	-224	-300	-358	-762	-393
1956	-108	-231	-290	-451	-74	-470	-149	-225	-470	-469	-469	-470
1957	-269	-370	-433	-302	-273	-430	-285	-227	-219	-444	-358	-427
1958	-142	-231	-470	779	-138	-471	-734	-284	-470	-488	-470	-470
1959	-307	-411	-435	-251	-327	-473	-131	-217	-388	2	-362	-423
1960	-174	-269	-312	-58	-79	-383	-229	0	0	-373	-378	-437
1961	-78	-218	-58	-245	-217	-435	-17	-282	-36	-315	-315	-383
1962	-332	-230	-256	-264	-194	-458	-131	-405	0	-722	-448	40
1963	-237	0	0	0	-286	-403	-149	-236	-303	-329	-366	-241
1964	-137	-214	-439	-443	-409	-470	-115	-286	-271	-285	-393	-1133
1965	465	-226	-288	0	-399	-470	-149	-195	-410	-561	-559	-418
1966	-358	-287	-339	-396	-335	-453	-131	-255	-336	-394	-383	-430
1967	-60	-239	-301	-358	0	-470	-279	-240	-417	-427	-442	-470
1968	-450	-448	-407	-220	-268	-470	0	-218	-417	-381	-517	-430
1969	-289	-287	-354	-192	-49	-464	-278	-220	-470	-470	-480	-470
1970	-331	-426	-429	-466	-467	-374	-102	-216	-470	-380	-470	-516
1971	-259	-377	-394	-390	-340	-378	0	-205	-173	-432	-437	-325
1972	-140	-165	-211	-455	-248	-470	-220	-219	-390	-476	-460	-467
1973	-185	-281	-212	-297	-351	-462	-140	-218	-469	-479	-474	-435
1974	-201	-339	-385	-391	-333	-417	-149	-222	-470	-470	-470	-470
1975	-305	-355	-442	-373	-287	-408	-149	-222	-366	-380	-415	-446
1976	-177	-274	-420	-470	-126	-411	0	-373	-397	-486	-476	-431
1977	-184	-113	-337	36	-66	-295	-151	-113	421	260	-1033	-172
1978	-180	-31	-123	-85	-41	-470	0	0	-118	79	79	-469
1979	-387	-439	-470	-170	0	0	-131	0	-360	-411	-393	-412
1980	-194	-263	-326	-336	-477	-437	-263	-222	-470	-470	-469	-426
1981	-295	-326	-436	-345	-80	-387	0	-218	-186	-305	-482	-402
1982	-118	-171	0	-458	-406	-457	-278	-233	-470	-470	-482	-470
1983	-292	-392	-429	-443	-430	-455	-278	-239	-470	-470	-470	-470
1984	-470	-456	-438	-469	-424	-453	0	-217	-448	-497	-415	-234
1985	-249	-326	-374	-395	-326	-439	-115	-250	-329	-368	-371	-879
1986	356	-231	-332	-214	-641	-16	-292	0	-456	-341	-355	-458
1987	-254	-355	-402	-608	-253	-383	-232	0	-191	-354	-342	-592
1988	-136	-170	-253	-233	-193	7	-105	-332	0	25	-299	-278
1989	-120	2	-23	-132	53	-344	-214	0	0	-427	-386	-918
1990	-27	-146	-375	-143	-471	0	-197	-167	-133	-98	284	-92
1991	279	-310	577	87	-163	-335	0	-154	-169	-186	-984	-213
1992	-108	-54	-133	-241	-49	-279	0	0	0	-248	-252	-263
1993	14	130	-161	-128	-299	-470	0	0	0	7	-23	-495
1994	-141	-381	-395	-160	-137	-441	-105	-283	-325	-370	-391	-230
1995	-188	-178	-1535	-5982	-446	0	-85	372	0	0	0	-52
1996	-314	-413	-429	-357	-271	-56	-149	-228	-591	-549	-548	-470
1997	-364	-334	-383	-408	-1849	-470	-149	-218	-443	-567	-637	-395
1998	-235	-325	-373	-1563	-340	316	-278	-237	-470	-470	-470	-470
1999	-314	-411	-429	-261	-318	-470	-149	-223	-470	-470	-470	-394
2000	-317	-358	-426	-161	-273	-148	-140	-421	-392	-310	-299	-318
2001	-175	-275	-289	-243	-199	0	-115	-65	-296	-424	-438	-477
2002	-140	-184	-271	-229	0	-183	-115	-222	-208	-374	-386	-403
2003	-84	-260	-284	-214	-4	-263	-140	-232	-306	-48	-365	-349
Average	-194	-246	-306	-402	-236	-323	-133	-182	-276	-328	-403	-404

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-19:
CHANGES IN BANKS + JONES EXPORTS (CFS), 2030 LOD, MODERATE FISHERY RESTRICTIONS**

Water Year	(B) Alternative 2											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	-470	-395	-449	-2979	-207	20	-140	-218	-389	28	-18	-438
1923	-573	-288	-346	-987	-396	-437	-131	-225	-282	-508	-519	-296
1924	-131	-194	-274	-260	-214	-300	-201	-197	-342	-309	-242	-132
1925	93	-39	-131	-161	-237	-300	0	0	0	285	-195	-624
1926	-350	-228	-252	-226	-200	0	-115	0	-1	-535	-223	-426
1927	-116	-163	0	0	0	-469	-148	-222	-470	-454	-470	-422
1928	-293	-380	-424	-150	-117	-399	-140	-209	-353	-327	-421	-448
1929	-164	-254	-327	-266	-222	-391	0	-42	0	-205	-251	-202
1930	-55	42	-119	-91	0	0	365	-1	308	-1412	-920	-289
1931	-131	-169	-220	-213	-184	-365	-197	-192	406	249	61	-40
1932	59	-147	-129	0	-123	-214	217	0	149	146	169	-36
1933	-127	-167	-186	-93	-69	-353	0	-183	0	-231	-179	-122
1934	15	166	-401	-1620	-123	-373	0	-196	0	487	-493	-279
1935	0	-40	226	-134	-129	0	0	1	-312	-633	-593	-451
1936	-277	-356	-332	-117	-90	73	-245	-453	-424	-171	-443	-500
1937	-220	-318	-365	-125	-424	-11	-291	-154	-1071	-462	-1199	-397
1938	-201	-319	-149	262	-395	-453	-278	-221	-470	-482	-481	-470
1939	-310	-410	-424	-412	-344	-470	-221	-364	-388	-271	-446	-478
1940	-186	-281	-331	-123	-95	0	-140	0	-449	-391	0	-397
1941	-206	-318	-367	-124	0	-297	-278	-248	-463	-463	-463	-470
1942	-232	-363	-408	-409	-340	-470	-201	-232	-470	-468	-468	-470
1943	-257	-357	-403	-367	-345	-435	-278	-425	-442	-572	-504	-397
1944	-259	-73	-411	-168	-140	-409	-115	-72	-42	-366	-383	-584
1945	-147	-223	-289	-256	-469	-177	-131	0	-470	-605	-565	-512
1946	-635	-361	-407	-215	138	-403	-131	-219	-276	-373	-384	-366
1947	-176	138	-270	-304	-275	-470	-115	-63	0	-568	-510	-516
1948	-289	-254	-260	-122	-88	-332	-131	0	0	0	-381	-491
1949	-164	-168	-251	-239	-212	-433	-229	-295	0	373	112	-344
1950	-20	-146	-379	-255	0	0	-131	0	0	-264	-593	-119
1951	-137	-215	-201	-460	-904	-470	-140	-220	-465	-439	-470	-413
1952	-245	-348	-392	-404	0	-470	0	-222	-431	-438	-450	-470
1953	-470	-469	-259	-282	-340	-470	-3	-223	-410	-638	-650	-382
1954	-293	-284	-334	-320	-285	-400	-140	-197	-324	-323	-221	-396
1955	-180	-228	-291	-2786	-174	-438	0	-224	-301	16	-629	-530
1956	-287	-215	-282	-446	-297	-78	-149	-225	-470	-482	-483	-470
1957	-272	-299	-352	-301	-273	-430	-264	-227	-219	-451	-346	-416
1958	-142	-231	-470	-261	-378	-470	-203	-284	-470	-482	-470	-470
1959	-291	-394	-435	-232	-298	-480	-131	-217	-389	2	-349	-420
1960	-175	-257	-624	63	-79	-383	-229	0	0	-372	-378	-410
1961	-33	-228	-51	-244	-216	-435	-23	-282	-37	-237	-317	-381
1962	-328	-230	-258	-247	-194	-457	0	-425	0	-724	-448	44
1963	-237	0	2841	0	-256	-414	-148	-236	-311	-337	-378	-491
1964	-144	-228	-469	-455	-415	-470	-115	-284	-271	-288	-331	-377
1965	-220	-224	-287	0	-283	-470	-149	-195	-410	-588	-581	-418
1966	-339	-287	-267	-393	-333	-452	-131	-255	-335	-394	-383	-423
1967	-44	-240	-301	-358	0	-470	-279	-240	-417	-427	-442	-470
1968	-448	-445	-401	-221	-268	-470	0	-218	-417	-379	-515	-429
1969	-288	-288	-354	-192	0	-470	-278	-220	-470	-470	-480	-470
1970	-331	-426	-414	-437	-467	-371	-103	-216	-470	-380	-470	-486
1971	-256	-377	-270	-390	-340	-378	0	-205	-173	-433	-435	-325
1972	-173	-166	-211	-358	-248	-470	-235	-219	-389	-458	-441	-467
1973	-185	-281	-55	-297	-352	-462	-140	-218	-469	-481	-474	-435
1974	-202	-339	-270	-391	-333	-416	-149	-222	-470	-470	-470	-470
1975	-305	-354	-442	-373	-287	-408	-149	-222	-366	-381	-415	-446
1976	-177	-274	-420	-470	-126	-411	0	-373	-397	-474	-463	-434
1977	-182	-115	-335	34	-66	-296	0	-113	-131	-302	-108	-170
1978	-130	-122	-123	-85	-41	-470	0	0	-118	67	68	-466
1979	-365	-435	-470	-170	0	0	-131	0	-361	-413	-395	-411
1980	-193	-263	-326	-151	-428	-447	-263	-222	-470	-470	-469	-426
1981	-295	-327	-436	-345	-43	-387	0	-218	-186	-298	-476	-396
1982	-117	-171	0	-294	-406	-454	-278	-233	-470	-470	-481	-470
1983	-292	-392	-396	-421	-425	-409	-278	-239	-470	-470	-470	-470
1984	-470	-456	-400	-469	-424	-453	0	-217	-448	-497	-415	-235
1985	-249	-326	-319	-395	-326	-439	-115	-250	-329	-368	-371	-879
1986	355	-231	-332	-214	-640	-16	-292	0	1	-553	-356	-458
1987	-254	-355	-402	-399	-252	-383	-230	0	-191	-343	-334	-627
1988	-139	-171	-255	-233	-193	6	-105	-333	0	18	-314	-281
1989	-127	4	-21	-131	54	-344	-214	0	0	-427	-385	-933
1990	-31	-148	-363	-143	-471	0	-197	-166	-147	-108	219	-97
1991	248	-243	412	-78	-234	-335	0	-154	-170	-187	-595	-220
1992	-108	-112	-146	-151	-49	-280	0	0	0	-216	-261	-267
1993	11	134	-163	1086	-303	-470	0	0	0	16	-22	-491
1994	25	-396	-397	-157	-134	-439	-105	-283	-326	-371	-391	-92
1995	-185	-70	-1534	-5981	-444	0	126	372	0	0	0	-1
1996	-314	-413	-402	-357	-271	-178	-149	-228	-592	-545	-544	-470
1997	-364	-334	-384	-408	-1845	-470	-149	-218	-443	-567	-637	-395
1998	-236	-326	-373	-1563	-340	500	-278	-237	-470	-470	-470	-470
1999	-314	-411	-400	-232	-306	-470	-149	-223	-470	-470	-470	-394
2000	-303	-359	-421	-161	-273	73	-140	-422	-392	-310	-299	-316
2001	-175	-278	-287	-244	-199	0	-115	0	-296	-426	-441	-476
2002	-139	-186	-271	-229	0	0	-115	-54	-208	-376	-388	-405
2003	-26	-296	-284	-207	-29	0	-140	-172	-305	-51	-365	-322
Average	-200	-246	-270	-396	-250	-307	-121	-172	-270	-337	-386	-393

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-19:
CHANGES IN BANKS + JONES EXPORTS (CFS), 2030 LOD, MODERATE FISHERY RESTRICTIONS**

Water Year	(C) Alternative 3											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	0	9	0	-2786	0	375	1	2	0	445	414	-3
1923	-292	0	0	0	0	0	0	0	0	21	6	-27
1924	83	62	1	0	0	0	0	0	4	-40	-21	151
1925	175	139	107	0	962	0	0	0	0	-199	384	538
1926	61	260	12	0	0	0	0	0	-1	-445	67	573
1927	516	0	0	0	0	0	0	0	0	67	0	-8
1928	0	0	0	0	0	0	0	0	0	-305	0	564
1929	131	127	-142	0	0	5	0	274	0	0	-170	18
1930	90	29	0	0	0	0	0	0	308	-60	-113	23
1931	39	23	46	0	0	12	0	176	-269	22	32	226
1932	370	179	0	0	0	-200	217	0	253	0	37	368
1933	11	9	1123	3160	1526	0	0	0	0	0	-1362	168
1934	469	-256	956	1524	1680	6	0	0	0	-952	76	-6
1935	145	122	326	0	0	0	0	-29	-59	65	74	-237
1936	45	7	11	0	0	490	0	0	-1	-226	-170	394
1937	27	14	112	1	-883	833	482	261	-989	-490	-1214	25
1938	18	0	0	2289	-9	0	366	0	0	-12	-11	0
1939	0	-5	-1	0	0	0	0	-75	0	-1190	-1097	216
1940	32	25	18	0	0	0	0	0	0	-71	0	0
1941	-37	17	0	0	0	126	216	50	-137	-134	-135	0
1942	24	-2	0	0	612	545	0	0	0	-259	-263	0
1943	394	0	0	0	0	0	0	-180	28	29	102	44
1944	-15	103	1	0	0	0	0	-27	0	0	0	28
1945	58	0	0	0	0	-195	0	0	0	138	125	-8
1946	-94	0	0	0	-24	0	0	0	0	-29	16	-24
1947	45	387	0	0	0	0	0	22	0	-151	-115	617
1948	-55	91	128	0	0	0	0	0	0	0	0	-280
1949	-13	72	39	0	0	0	0	0	0	577	769	782
1950	268	150	-64	0	0	0	0	0	0	-405	-350	279
1951	28	0	0	-119	344	1254	0	0	0	14	0	-11
1952	11	75	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	3	3	0
1954	6	0	20	0	0	0	0	0	0	-294	0	308
1955	-6	0	0	-2786	87	0	0	0	0	428	-297	439
1956	-126	65	1	0	137	2558	0	0	0	-1276	-1284	0
1957	822	55	-469	230	480	0	-7	0	0	53	334	-63
1958	0	0	0	0	0	0	112	0	0	-12	0	0
1959	0	-3	0	0	0	0	0	21	0	-67	15	478
1960	-6	-262	476	-174	0	0	0	0	0	0	0	650
1961	-11	31	343	0	-582	0	0	0	105	-219	10	546
1962	342	106	169	120	0	1	33	-5	0	-557	0	600
1963	0	0	2841	0	0	0	0	0	1	14	0	-46
1964	1	0	-84	0	0	0	0	73	0	-18	-38	280
1965	-100	0	0	0	1	0	0	0	-7	-66	-51	0
1966	167	0	0	0	0	0	0	-20	0	21	0	-67
1967	121	-2	0	0	0	0	0	0	0	0	0	0
1968	4	4	1	144	566	0	0	0	0	-131	155	164
1969	108	31	0	0	0	0	0	0	0	164	-11	0
1970	0	-1	0	0	1464	1967	-84	0	0	-4	0	-97
1971	-36	0	0	0	0	0	0	0	0	22	-16	0
1972	-70	64	0	0	141	0	36	0	0	-286	112	-67
1973	180	0	0	0	0	0	0	0	0	-270	142	-9
1974	143	0	0	0	0	1719	0	0	0	0	0	0
1975	-162	255	0	0	0	764	0	0	0	-702	0	0
1976	0	0	0	0	0	0	0	0	0	-2	-2	670
1977	-21	192	-31	181	0	10	0	7	1233	403	-943	-3
1978	-83	66	0	0	0	0	0	79	-17	128	90	-65
1979	107	23	5	0	0	0	0	0	0	138	-78	1
1980	71	0	0	0	313	32	0	0	0	-10	8	0
1981	-27	-8	24	0	0	0	0	0	0	19	18	428
1982	11	0	0	0	0	27	0	0	0	1	-12	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	370	1758	0	0	0	-58	167	125
1985	78	0	0	0	0	0	0	-34	0	-24	-7	-38
1986	138	48	-39	0	-81	-16	420	46	5	461	-380	0
1987	-5	-2	-1	1528	181	799	0	0	0	107	59	498
1988	11	158	158	0	-2	8	0	-201	0	-179	45	288
1989	229	332	135	0	200	0	0	0	0	0	0	560
1990	440	322	16	0	-367	0	0	0	92	13	171	468
1991	184	268	0	-8	0	0	0	0	0	0	0	0
1992	0	0	-2	-4	0	0	0	0	0	-700	392	-9
1993	319	-8	418	0	0	0	0	0	0	7	-81	-62
1994	201	105	-35	0	0	0	0	0	0	0	0	974
1995	-82	1687	-302	0	1	0	-162	0	0	0	0	0
1996	0	-2	0	0	0	275	0	0	-149	-49	-50	0
1997	195	0	0	0	0	2363	0	0	0	-103	-130	-36
1998	-3	-1	0	0	0	32	872	0	0	0	0	0
1999	0	0	-159	0	0	214	0	0	0	0	0	0
2000	-257	33	-42	0	0	398	0	-89	0	128	0	-128
2001	-53	20	-128	0	0	0	0	1	0	131	120	412
2002	31	-14	0	0	0	0	0	0	0	-6	0	257
2003	154	-165	0	0	-14	0	0	0	0	163	0	266
Average	68	61	72	40	87	197	31	4	5	-76	-54	148

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-19:
CHANGES IN BANKS + JONES EXPORTS (CFS), 2030 LOD, MODERATE FISHERY RESTRICTIONS**

Water Year	(D) Alternative 4											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	0	0	0	-2786	0	375	1	2	0	447	417	-3
1923	-374	0	0	-671	0	0	0	0	0	-108	-111	8
1924	0	0	-1	0	0	0	0	-3	-179	-23	45	148
1925	158	158	-19	0	-13	0	0	0	0	238	94	-228
1926	-42	-56	25	0	0	0	0	0	0	457	-167	-15
1927	-35	0	0	0	0	0	0	0	0	0	0	-124
1928	1	0	0	0	0	0	0	0	0	-175	0	1
1929	-4	-1	-8	0	0	1	0	-2	0	0	-3	-14
1930	15	135	0	0	0	0	0	0	-28	-103	-98	-13
1931	-3	-7	27	0	0	11	0	-4	7	12	-11	0
1932	75	0	0	0	0	-1	217	0	75	13	625	243
1933	-5	-5	-456	32	39	0	0	0	0	0	59	8
1934	-11	18	-38	50	0	2	0	0	0	44	-4	-4
1935	2	-5	-6	0	0	0	0	0	0	-277	-301	-3
1936	-5	-3	74	0	0	29	0	0	0	-60	-51	41
1937	-98	-2	10	0	-6	-2	-12	-26	-533	40	-1034	-2
1938	-72	0	0	1483	-12	0	0	0	0	-182	-184	0
1939	0	0	0	0	0	0	0	0	0	-3	-2	-55
1940	-13	-11	-8	0	0	0	0	0	0	50	0	0
1941	-10	0	0	0	0	-15	0	0	0	0	0	0
1942	-258	2	0	0	0	0	0	0	0	-3	-2	0
1943	-1	0	0	0	0	0	0	0	-2	-14	-7	1
1944	36	20	19	0	0	0	0	0	0	0	0	26
1945	5	0	0	0	0	-32	0	0	0	25	24	0
1946	-1	0	0	0	-1	0	0	0	0	-1	-1	0
1947	-1	-2	0	0	0	0	0	-3	0	-7	-17	-1
1948	-3	53	89	0	0	0	0	0	0	0	0	-2
1949	0	69	49	0	0	0	0	0	0	219	355	62
1950	101	70	-49	0	0	0	0	0	0	-130	-120	-52
1951	-1	0	0	0	-38	0	0	0	0	-151	0	3
1952	-3	-2	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0
1954	-5	0	0	0	0	0	0	0	0	-80	0	-3
1955	-7	0	0	0	12	0	0	0	0	31	10	7
1956	3	0	0	0	5	0	0	0	0	0	0	0
1957	0	-1	-3	0	0	0	-1	0	0	-12	0	1
1958	0	0	0	0	0	0	10	0	0	-4	0	0
1959	0	-1	0	0	0	0	0	0	0	-14	0	0
1960	0	-2	1	66	0	0	0	0	0	0	0	-49
1961	20	21	220	0	0	0	0	0	-6	-30	28	20
1962	38	32	41	-87	0	-4	0	0	0	0	0	32
1963	0	0	0	0	0	0	0	0	0	-185	0	11
1964	0	0	-1	0	0	0	0	0	0	23	21	-671
1965	637	0	0	0	0	0	0	0	-5	-1	0	0
1966	24	0	0	0	0	0	0	0	0	-14	0	-1
1967	3	0	0	0	0	0	0	0	0	0	0	0
1968	0	-1	-1	-1	0	0	0	0	0	-15	-1	0
1969	0	0	0	0	0	0	0	0	0	0	-4	0
1970	0	0	0	0	0	0	0	0	0	-8	0	1
1971	-4	0	0	0	0	0	0	0	0	-2	-1	0
1972	0	0	0	-2933	141	0	-365	0	-1	527	600	-6
1973	-158	0	0	0	0	0	0	0	0	-137	-173	48
1974	-2	0	0	0	0	118	0	0	0	0	0	0
1975	0	-6	0	0	0	0	0	0	0	-25	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	160	-19	149	0	12	0	3	0	-175	-247	9
1978	-92	37	0	0	0	0	0	0	0	46	46	1
1979	0	0	0	0	0	0	0	0	0	19	-170	1
1980	0	0	0	0	202	0	0	0	0	1	-27	0
1981	28	-1	-8	0	0	0	0	0	0	1	1	1
1982	-4	0	0	0	0	4	0	0	0	0	-4	0
1983	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	-6	6	-30
1985	7	0	0	0	0	0	0	0	0	4	2	-4
1986	4	0	1	0	-4	0	0	0	0	1	-62	0
1987	-2	-1	0	-1	0	0	0	0	0	1	2	3
1988	-1	0	0	0	0	0	0	0	0	2	-1	0
1989	-1	173	123	0	184	0	0	0	0	0	0	-132
1990	90	-1	6	0	-1	0	0	0	8	25	1	23
1991	-8	14	-16	-1	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	-8	0	-1
1993	4	6	-9	0	0	0	0	0	0	0	1	-2
1994	4	0	-1	0	0	0	0	0	0	0	0	9
1995	1	6	-27	0	0	0	5	0	0	0	0	0
1996	0	-197	0	0	0	0	0	0	0	-4	-3	0
1997	-54	0	0	0	0	0	0	0	0	-13	-4	0
1998	5	-1	0	-1214	0	624	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0	0	0
2000	4	-1	-8	0	0	-4	0	0	0	-16	0	3
2001	-2	-6	0	0	0	0	0	0	0	0	0	0
2002	-2	-3	0	0	0	0	0	0	0	0	0	0
2003	1	-1	0	0	-1	0	0	0	0	-4	0	1
Average	0	8	0	-72	6	14	-2	0	-8	3	-6	-9

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-20:
CHANGES IN CCWD + LV DIVERSIONS (CFS), 2030 LOD, MODERATE FISHERY RESTRICTIONS**

(A) Alternative 1												
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	470	395	470	215	217	570	0	670	297	288	445	423
1923	197	409	405	522	396	486	0	670	296	320	357	402
1924	127	192	276	258	258	297	0	199	182	184	155	136
1925	-55	-1	69	39	52	300	-215	658	470	470	220	369
1926	143	186	272	165	6	570	0	670	470	350	327	336
1927	116	232	470	470	54	376	0	670	296	330	481	413
1928	318	423	366	151	368	470	0	670	180	411	431	429
1929	173	246	312	260	229	392	0	670	470	105	195	213
1930	56	-37	46	-107	470	570	0	670	220	153	335	335
1931	123	169	218	108	59	371	-233	10	-37	141	63	35
1932	-102	-23	104	470	-73	284	0	670	470	470	102	290
1933	130	172	151	184	74	470	-233	233	470	142	239	126
1934	-101	-41	7	27	-69	377	184	204	470	470	268	300
1935	-49	-19	31	-4	-64	470	-184	615	470	470	403	496
1936	273	354	337	25	-100	570	0	670	278	470	424	419
1937	235	321	368	131	113	570	-55	653	272	271	331	386
1938	238	439	470	360	328	469	0	670	310	482	481	478
1939	447	410	470	419	356	470	0	363	388	256	350	447
1940	184	279	329	47	102	470	-167	470	304	470	511	397
1941	230	317	462	130	470	469	0	670	334	482	481	478
1942	346	405	446	409	348	472	0	670	318	482	481	478
1943	256	426	443	367	353	471	0	670	310	482	481	386
1944	260	365	410	186	151	370	0	670	470	200	385	409
1945	162	299	331	263	470	533	-184	651	297	300	358	408
1946	260	464	311	652	314	473	0	670	103	308	322	361
1947	119	182	404	302	228	470	0	670	470	315	393	470
1948	221	253	264	3	-34	470	-184	470	470	470	239	434
1949	158	155	233	128	102	470	0	384	470	470	385	438
1950	182	252	315	161	470	470	-184	608	136	184	259	416
1951	127	141	686	468	470	473	0	670	297	474	481	416
1952	238	342	468	427	470	369	0	670	297	420	481	478
1953	475	470	310	285	350	473	0	670	310	423	426	381
1954	282	351	330	321	151	651	0	670	179	371	232	418
1955	134	403	373	470	46	474	0	670	127	334	349	381
1956	137	209	333	307	470	558	0	670	297	480	481	477
1957	360	371	456	346	295	475	0	670	277	366	389	396
1958	212	96	524	451	187	649	0	670	371	482	470	489
1959	399	406	470	253	334	471	0	670	215	379	269	460
1960	163	259	313	48	2	470	0	670	470	258	377	401
1961	155	137	196	129	110	370	-114	356	470	217	353	424
1962	129	92	211	101	101	452	-184	349	470	470	370	486
1963	237	470	470	646	344	471	0	670	155	357	376	405
1964	260	278	441	439	412	473	0	376	470	321	366	390
1965	140	292	322	470	349	376	0	670	270	369	421	407
1966	169	257	622	399	344	474	0	670	162	356	394	397
1967	141	348	341	364	470	393	0	670	295	367	452	478
1968	475	471	470	240	284	472	0	670	243	409	437	431
1969	183	292	435	-2	539	473	0	670	310	482	481	478
1970	422	471	466	463	471	467	0	670	307	482	481	428
1971	274	444	512	395	343	472	0	670	124	291	311	381
1972	182	162	249	506	398	474	0	670	216	388	419	432
1973	170	388	470	187	358	471	0	670	296	474	481	402
1974	228	302	735	396	346	471	0	670	310	481	481	478
1975	396	410	483	377	317	469	0	670	312	408	425	478
1976	432	409	471	470	149	470	0	373	398	399	367	233
1977	-11	122	203	-35	-111	161	-233	-87	-110	31	45	170
1978	90	130	110	84	43	470	0	470	470	470	470	387
1979	394	476	475	195	470	570	0	670	258	262	436	413
1980	188	376	221	657	466	472	0	670	297	481	481	414
1981	293	327	399	382	544	470	0	670	13	233	321	345
1982	118	242	470	391	413	467	0	670	320	482	481	476
1983	382	431	468	464	432	465	0	670	327	482	480	477
1984	474	466	465	471	428	473	0	670	286	461	468	394
1985	227	347	691	402	338	471	0	670	155	290	374	404
1986	150	234	294	229	270	570	-24	653	470	300	358	447
1987	254	355	391	342	258	370	0	670	254	185	329	370
1988	136	184	263	276	-8	570	0	670	470	132	258	288
1989	119	-1	37	-10	-45	470	-215	654	470	363	388	454
1990	46	150	257	53	470	570	0	167	189	52	-7	26
1991	-106	-43	-23	-77	-106	329	-233	149	151	13	117	219
1992	108	152	120	100	62	427	0	654	470	350	258	296
1993	-82	-25	31	-11	301	470	-167	470	470	470	470	411
1994	244	332	386	144	85	441	0	283	325	375	284	223
1995	-31	82	234	157	249	470	-152	634	470	470	533	658
1996	407	415	464	356	275	472	0	670	288	458	469	458
1997	246	402	419	404	472	474	0	670	307	456	464	397
1998	244	410	424	362	154	570	0	670	322	482	481	478
1999	407	455	464	264	329	473	0	670	310	482	481	396
2000	264	369	411	179	281	570	0	670	218	326	310	417
2001	213	304	362	281	215	570	0	670	123	223	354	377
2002	140	199	357	35	470	570	0	670	211	233	377	396
2003	145	219	300	18	470	570	-89	661	132	50	254	447
Average	204	276	349	261	256	470	-35	584	304	351	368	390

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-20:
CHANGES IN CCWD + LV DIVERSIONS (CFS), 2030 LOD, MODERATE FISHERY RESTRICTIONS**

Water Year	(B) Alternative 2											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	470	395	470	448	207	570	0	670	297	288	445	423
1923	197	469	469	522	396	543	0	670	296	320	357	402
1924	125	190	275	257	338	295	0	196	179	183	151	132
1925	-59	-3	66	283	80	300	0	658	470	470	230	379
1926	145	200	278	397	13	570	0	670	470	350	324	328
1927	111	462	470	470	470	570	0	670	296	330	481	413
1928	309	468	372	400	471	470	0	670	180	411	431	429
1929	164	240	307	256	308	390	0	670	470	105	182	201
1930	48	-42	359	-41	470	570	0	670	470	350	335	341
1931	127	172	221	327	39	371	-233	15	-31	143	70	40
1932	-3	147	412	470	8	278	0	670	470	470	97	286
1933	128	167	147	399	52	470	-233	233	470	142	235	122
1934	-103	-3	121	393	-77	374	184	196	470	470	256	279
1935	-58	-28	16	288	-71	470	-184	615	470	470	403	497
1936	275	356	338	260	-111	570	0	670	277	470	540	419
1937	233	318	366	364	102	570	-55	653	399	269	330	386
1938	239	475	470	463	448	469	0	670	310	482	481	478
1939	474	409	470	471	472	470	0	364	388	257	350	449
1940	186	281	330	291	95	470	-167	470	304	470	511	397
1941	233	319	471	379	470	625	0	670	334	482	481	478
1942	474	469	467	466	470	472	0	670	318	482	481	478
1943	256	469	468	466	470	471	0	670	310	482	481	386
1944	261	366	410	424	140	370	0	670	470	200	385	410
1945	164	468	476	473	470	533	-184	651	366	300	358	408
1946	261	466	311	652	311	594	0	670	103	308	322	362
1947	120	183	469	302	344	470	0	670	470	315	393	471
1948	222	254	264	246	-33	470	-184	470	470	470	239	434
1949	162	158	236	130	104	470	0	384	470	470	385	440
1950	184	254	316	365	470	470	-184	608	470	470	328	416
1951	142	282	736	468	470	473	0	670	297	474	481	416
1952	249	351	473	470	470	492	0	670	297	420	481	478
1953	475	470	464	469	365	473	0	670	310	423	426	381
1954	292	470	333	469	260	668	0	670	179	371	232	418
1955	141	467	467	470	172	474	0	670	127	321	350	375
1956	131	205	461	321	470	570	0	670	297	480	481	477
1957	474	374	457	468	419	485	0	670	284	366	389	402
1958	464	270	524	481	467	635	0	670	371	482	470	489
1959	475	393	470	469	318	469	0	670	215	379	269	465
1960	169	263	316	50	108	470	0	670	470	257	377	404
1961	157	139	197	337	135	370	-114	357	470	217	353	430
1962	134	96	214	105	226	452	0	349	470	470	370	491
1963	332	470	470	646	684	471	0	670	165	368	388	405
1964	426	466	470	460	462	473	0	373	470	319	364	388
1965	138	465	466	470	470	376	0	670	271	369	421	407
1966	170	370	733	469	465	474	0	670	162	356	394	401
1967	144	466	453	470	470	543	0	670	295	367	452	478
1968	475	471	470	465	296	472	0	670	243	409	437	431
1969	184	293	462	248	539	676	0	670	310	482	481	478
1970	473	471	466	463	471	473	0	670	307	482	481	428
1971	276	468	512	470	343	472	0	670	310	291	311	424
1972	215	161	467	616	471	474	0	670	215	388	419	432
1973	170	462	470	355	440	471	0	670	296	474	481	402
1974	229	311	735	469	466	471	0	670	310	481	481	478
1975	474	410	484	470	465	469	0	670	312	408	425	478
1976	472	472	471	471	254	470	0	373	399	401	370	235
1977	-10	124	204	-34	-110	162	-233	-46	131	143	45	170
1978	90	130	456	156	41	470	0	470	470	470	470	387
1979	375	476	476	428	470	570	0	670	277	262	436	413
1980	189	469	306	657	466	472	0	670	297	481	481	414
1981	292	327	399	471	544	470	0	670	13	233	321	344
1982	117	470	470	477	470	467	0	670	320	482	481	476
1983	472	465	468	464	466	465	0	670	327	482	480	477
1984	474	466	465	471	471	473	0	670	286	461	468	394
1985	227	386	724	470	458	471	0	670	155	290	374	405
1986	150	234	294	472	270	570	-24	653	470	364	358	447
1987	254	355	392	476	362	370	0	670	399	186	329	373
1988	139	186	265	476	-8	570	0	670	470	366	257	287
1989	119	-2	36	-11	-45	470	-215	654	470	363	388	460
1990	51	153	259	274	470	570	0	166	189	50	-10	24
1991	-108	-44	47	90	79	470	0	163	161	187	200	220
1992	108	152	140	100	176	470	0	654	470	350	257	295
1993	-83	-26	30	238	303	470	0	470	470	470	470	411
1994	254	347	393	328	51	439	0	283	326	376	287	225
1995	-30	83	374	438	270	470	-152	634	470	470	533	658
1996	475	414	464	465	395	472	0	670	288	458	469	458
1997	247	468	464	462	472	474	0	670	307	456	464	397
1998	245	486	480	479	277	570	0	670	322	482	481	478
1999	475	470	464	469	328	473	0	670	310	482	481	396
2000	265	369	412	423	273	570	0	670	218	326	309	417
2001	213	303	362	473	231	570	0	670	226	223	354	376
2002	139	198	472	249	470	570	0	670	296	233	376	389
2003	141	216	447	241	470	570	-89	661	132	49	254	443
Average	221	308	388	383	308	484	-25	584	324	364	371	390

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-20:
CHANGES IN CCWD + LV DIVERSIONS (CFS), 2030 LOD, MODERATE FISHERY RESTRICTIONS**

Water Year	(C) Alternative 3											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	0	0	0	-1	0	142	0	197	-173	-131	11	8
1923	-1	-1	-1	-4	0	6	0	207	-174	-4	11	44
1924	-2	-1	-1	-2	-1	-2	0	-2	-211	-75	-116	-151
1925	-162	-137	-107	-132	-95	-147	-215	-273	370	370	267	-6
1926	-5	-4	-3	-80	126	-247	0	-261	-506	250	65	-24
1927	-17	-14	370	370	370	470	0	430	-174	-140	11	-3
1928	-28	-3	42	-9	10	0	0	-204	-496	549	179	-15
1929	-19	-14	-11	-8	-45	0	0	-284	-526	256	-19	-18
1930	-44	-171	-104	195	370	470	0	89	370	-56	58	-22
1931	-14	-11	-41	-144	-147	0	-233	-179	-326	-90	-181	-226
1932	-214	-180	-153	370	265	247	0	570	370	361	-136	-19
1933	-10	-9	-6	-8	-91	0	-233	554	370	43	-19	-146
1934	-218	-188	-122	-169	135	0	-48	0	-526	370	0	5
1935	-178	-187	-126	-164	174	320	-184	-281	370	370	289	-8
1936	-5	-3	-64	-121	174	226	0	211	-175	-170	-3	-11
1937	-20	-14	-11	-32	-8	458	-55	196	-173	-170	-112	2
1938	-36	-23	70	-7	-7	-1	0	180	-160	12	11	8
1939	4	2	0	-11	-17	0	0	0	-306	206	10	-50
1940	-34	-28	-20	-109	0	370	-167	370	-146	140	-133	-4
1941	-41	-29	-22	0	105	-1	0	154	-136	12	11	8
1942	4	1	-5	-4	0	2	0	169	-152	12	11	8
1943	4	-1	-2	-4	0	1	0	180	-160	12	11	0
1944	-37	-25	-15	-13	-19	317	0	290	-174	-166	-10	-41
1945	-41	-35	-31	-30	0	433	-184	342	-173	-170	-112	-4
1946	-51	-39	63	36	-137	128	0	214	-173	-8	11	-52
1947	-44	-37	-27	-22	-81	0	0	89	-506	131	-9	-64
1948	-45	-93	-115	-154	-167	0	-184	370	370	370	239	-18
1949	-20	-86	-69	-120	-136	0	0	89	-506	370	55	-33
1950	-26	-21	-15	-122	370	370	-184	508	94	-170	-112	-5
1951	-32	46	-5	-2	0	3	0	196	-173	9	11	-6
1952	-29	-21	-13	0	264	-101	0	180	-173	-50	11	8
1953	5	0	-6	-1	3	3	0	179	-160	12	11	19
1954	-6	-15	-17	-10	46	1	0	-204	-146	380	11	-13
1955	-28	-21	-18	245	-175	4	0	239	-506	286	34	-43
1956	-34	-26	-21	37	184	-91	0	177	-173	10	11	7
1957	4	2	1	-12	0	12	0	189	-172	12	11	-37
1958	-41	94	-4	-5	-6	-1	0	117	-99	12	0	19
1959	5	2	0	-10	0	-203	0	125	-496	531	81	-40
1960	-32	-22	-18	-79	-106	0	0	89	-506	194	-6	-48
1961	-36	-116	-111	-151	-138	383	-114	74	-506	250	-3	-80
1962	-88	-186	-117	-176	-130	-127	-184	-75	370	370	211	-24
1963	-169	370	370	546	252	1	0	165	-148	12	11	-2
1964	-27	-17	74	-10	-8	3	0	89	-14	-37	-35	-33
1965	-27	-21	-16	370	-77	-94	0	-206	-123	303	10	8
1966	-28	31	-3	-1	1	4	0	215	-173	-9	11	-36
1967	-25	-19	-26	0	338	-52	0	161	-175	-103	11	8
1968	5	1	0	-16	13	2	0	215	-496	303	9	-31
1969	-32	-24	-21	195	-101	3	0	181	-160	12	11	8
1970	3	1	-4	-7	1	3	0	185	-163	12	11	-30
1971	-35	-19	86	0	-130	122	0	180	-160	12	11	8
1972	5	-23	-17	38	1	4	0	214	-496	303	11	-42
1973	-29	-28	208	-115	-3	1	0	198	-496	319	11	-3
1974	-30	42	-3	-1	2	1	0	180	-160	11	11	8
1975	4	2	-2	-13	12	-1	0	179	-158	12	10	8
1976	2	2	1	-11	-11	0	0	-284	-249	-36	-74	-238
1977	-217	-171	-152	-163	-206	-181	-233	-284	-275	-7	0	0
1978	0	0	-34	-2	0	0	0	370	370	370	370	28
1979	-2	-1	-1	-2	370	470	0	570	-496	394	127	-1
1980	-4	-3	50	-39	-4	2	0	194	-173	11	11	8
1981	-3	10	0	-1	-2	0	0	244	-506	220	65	-15
1982	-11	-10	298	-257	0	-3	0	169	-150	12	11	6
1983	2	-5	-2	-6	-4	-5	0	162	-143	12	10	7
1984	4	-4	-5	1	1	3	0	184	-162	12	11	34
1985	-14	-13	-1	0	1	1	0	245	-174	-38	-4	-21
1986	-16	-13	-10	-13	58	395	-24	164	-173	-170	-112	7
1987	5	2	0	-4	-7	72	0	-261	-506	214	-4	-24
1988	-16	-13	-9	-8	-367	-281	0	570	-526	266	-2	-14
1989	-21	-182	-122	-153	-184	0	-215	-277	370	194	-1	-40
1990	-191	-162	-105	-138	370	470	0	0	-326	-187	-253	-236
1991	-223	-188	-35	0	0	0	0	8	-8	0	0	0
1992	0	0	0	0	0	0	0	554	370	250	1	11
1993	-210	-192	-118	-147	0	0	-124	370	370	370	370	1
1994	7	5	4	-87	-85	-181	0	0	-326	4	-110	-196
1995	-192	-160	-98	-98	265	370	-152	534	370	370	433	431
1996	5	2	-6	-5	-4	2	0	173	-155	12	11	8
1997	4	-2	-6	-8	2	4	0	184	-163	12	10	38
1998	12	8	5	4	33	-101	0	164	-148	12	11	8
1999	5	0	-6	-1	3	3	0	179	-160	12	11	37
2000	1	3	2	1	0	81	0	196	-174	-99	10	-1
2001	-3	-2	-58	-2	0	384	0	243	-506	237	60	-19
2002	-14	-12	-7	120	-373	-247	0	570	93	-99	-4	-20
2003	-13	-10	-27	253	-373	295	-89	176	-174	-171	-111	-54
Average	-38	-30	-8	-5	11	61	-34	150	-160	95	19	-18

NOTE: Values with a grey background indicate months of Delta excess conditions.

**TABLE C4-20:
CHANGES IN CCWD + LV DIVERSIONS (CFS), 2030 LOD, MODERATE FISHERY RESTRICTIONS**

(D) Alternative 4

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1922	0	0	0	0	0	0	0	0	0	14	4	3
1923	1	0	0	-4	0	2	0	0	0	13	4	0
1924	2	1	1	0	0	1	0	1	-45	-74	-112	-148
1925	-159	-135	-105	-129	-59	0	0	0	0	0	0	3
1926	3	2	2	-10	0	0	0	0	0	0	0	2
1927	2	-1	0	0	0	0	0	0	0	31	184	0
1928	3	0	102	0	179	101	0	0	0	179	184	3
1929	4	3	2	1	-36	0	0	0	0	0	12	14
1930	-22	-154	-89	0	0	0	0	0	0	0	2	13
1931	10	8	-27	-130	-134	0	-233	-144	0	0	0	0
1932	0	0	-22	0	0	0	0	0	0	0	0	8
1933	6	5	3	2	-27	0	0	0	0	0	8	-8
1934	0	0	0	0	0	0	0	0	0	0	0	4
1935	-4	0	0	0	0	0	0	0	0	0	53	4
1936	3	2	-60	-2	0	0	0	0	-146	0	170	0
1937	3	2	2	-23	1	0	-16	0	0	0	62	2
1938	1	1	0	197	234	116	0	0	14	182	184	20
1939	1	1	0	3	4	0	0	0	0	0	0	17
1940	14	12	9	-88	0	-100	-167	-200	-146	0	41	0
1941	-4	-3	-2	0	0	110	0	0	38	182	184	134
1942	1	0	-2	-2	0	1	0	0	8	4	4	3
1943	2	0	-1	-2	0	0	0	0	10	4	4	0
1944	1	0	0	0	0	0	0	0	0	0	0	0
1945	1	1	1	-1	0	-37	-184	-19	0	0	62	0
1946	-1	0	0	182	36	1	0	0	0	14	4	1
1947	1	1	1	-1	-60	0	0	0	0	0	0	3
1948	3	-53	-93	-129	-120	0	-92	-187	0	0	0	1
1949	2	-69	-56	-109	0	0	0	0	0	0	1	5
1950	5	4	3	-17	0	0	0	0	0	0	62	0
1951	2	12	266	208	202	98	0	0	0	158	4	2
1952	11	8	5	0	0	0	0	0	0	-12	4	3
1953	2	0	-2	0	1	1	0	0	9	4	4	0
1954	5	1	2	1	-5	1	0	0	-146	154	4	1
1955	5	4	3	0	-12	1	0	0	0	13	0	5
1956	5	4	3	0	0	0	0	0	-2	2	4	3
1957	1	1	0	1	0	-1	0	0	2	11	4	1
1958	1	0	2	-2	-2	0	0	0	8	4	0	7
1959	2	1	0	0	0	0	0	0	0	14	4	0
1960	0	0	0	-68	-97	0	0	0	0	0	0	1
1961	1	-85	-93	-131	-112	0	-114	-15	0	0	0	7
1962	-38	-144	-81	0	0	0	0	-75	0	0	0	49
1963	27	0	0	176	214	102	0	0	25	182	184	1
1964	9	6	0	0	117	1	0	0	0	14	7	7
1965	7	6	5	0	0	0	0	0	0	-11	4	3
1966	-2	3	-1	0	0	2	0	0	0	14	4	-1
1967	0	0	-15	0	0	0	0	0	0	29	4	3
1968	2	0	0	0	-1	1	0	0	0	14	3	0
1969	0	0	0	0	0	1	0	0	10	4	4	3
1970	1	0	-1	-3	0	1	0	0	10	4	4	-1
1971	-2	-1	4	0	1	1	0	0	10	4	4	3
1972	2	-1	-1	1	1	2	0	0	0	14	4	-4
1973	-3	-2	0	7	-1	0	0	0	0	14	4	-1
1974	-5	1	7	-1	1	0	0	0	9	4	4	3
1975	1	1	-1	0	-1	0	0	0	10	4	4	3
1976	1	1	0	0	0	0	0	0	0	1	-35	-205
1977	-195	-149	-118	-148	-121	0	0	0	0	0	0	0
1978	0	0	0	-1	0	0	0	0	0	0	0	0
1979	3	2	2	1	0	0	0	0	0	24	184	0
1980	2	1	0	187	244	108	0	0	0	182	64	3
1981	1	1	0	1	-3	0	0	0	0	5	1	5
1982	4	4	0	-1	0	-1	0	0	9	4	4	2
1983	1	-2	-1	-2	-2	-2	0	0	9	4	4	3
1984	2	-2	-2	0	0	1	0	0	10	4	4	0
1985	-3	5	0	0	0	0	0	0	0	14	-1	-2
1986	-2	-1	-1	-3	0	0	-24	-17	0	0	62	12
1987	2	1	0	-1	-1	0	0	0	0	0	0	1
1988	1	1	1	-1	0	0	0	0	0	0	1	6
1989	-9	-172	-115	-141	-176	0	-215	-16	0	0	1	-27
1990	-86	0	-3	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	1	7
1993	-7	0	0	0	0	0	0	0	0	0	0	0
1994	2	1	1	-4	0	0	0	0	0	2	-2	0
1995	0	0	0	0	0	0	0	0	0	0	63	188
1996	193	197	219	126	-1	1	0	0	9	4	4	3
1997	1	-1	-2	-3	1	1	0	0	10	4	4	0
1998	4	3	2	1	0	-12	0	0	7	4	4	3
1999	2	0	-2	0	1	1	0	0	9	4	4	0
2000	1	1	1	0	0	0	0	0	0	16	4	0
2001	-1	-1	-1	-1	0	0	0	0	0	0	0	2
2002	2	2	1	0	0	0	0	0	0	0	1	7
2003	6	5	-19	0	0	0	-89	-9	0	0	67	-2
Average	-2	-8	-3	-1	3	6	-14	-8	-3	18	22	2

NOTE: Values with a grey background indicate months of Delta excess conditions.

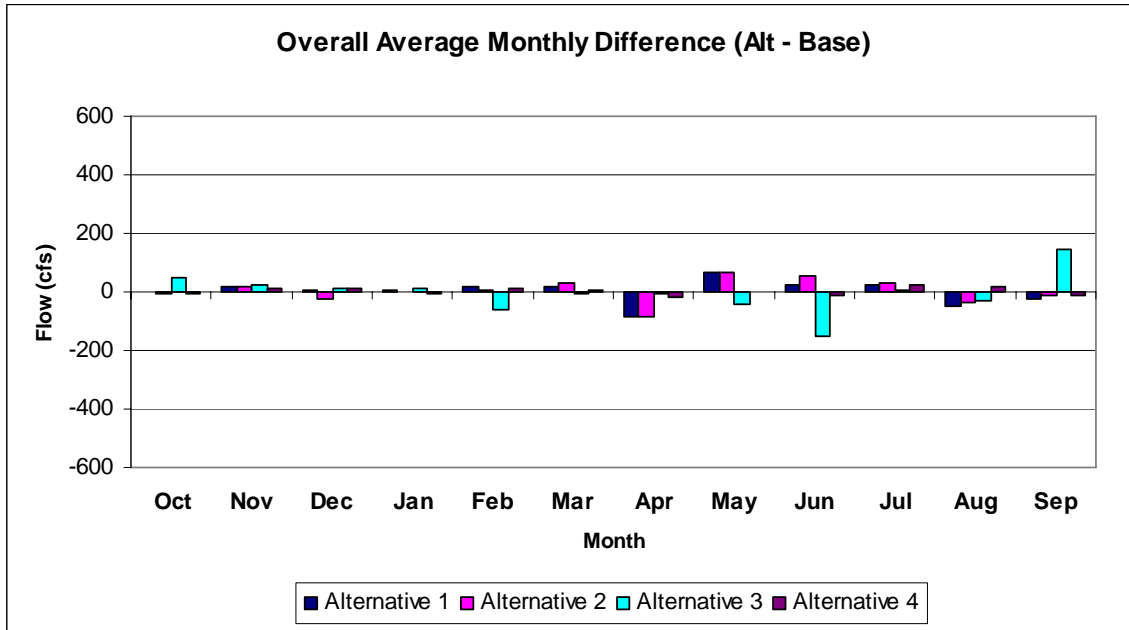


Figure C4-64: Changes in Average Monthly Sacramento River at Hood flow, 2030 LOD, Moderate Fishery Restrictions

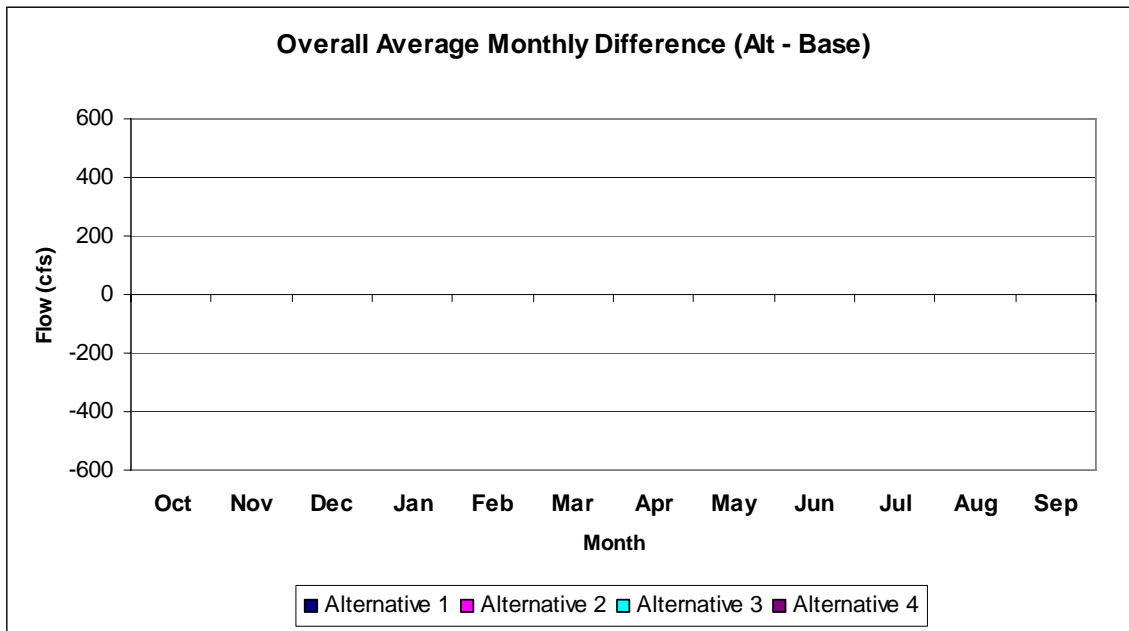


Figure C4-65: Changes in Average Monthly San Joaquin River at Vernalis Flow, 2030 LOD, Moderate Fishery Restrictions

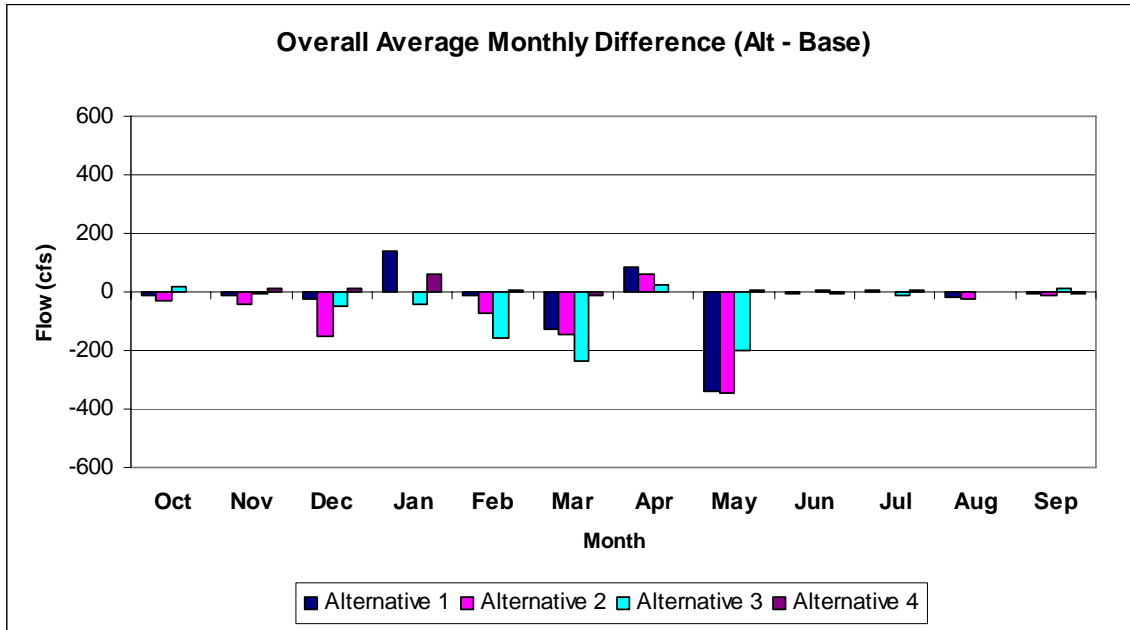


Figure C4-66: Changes in Average Monthly Delta Outflow, 2030 LOD, Moderate Fishery Restrictions

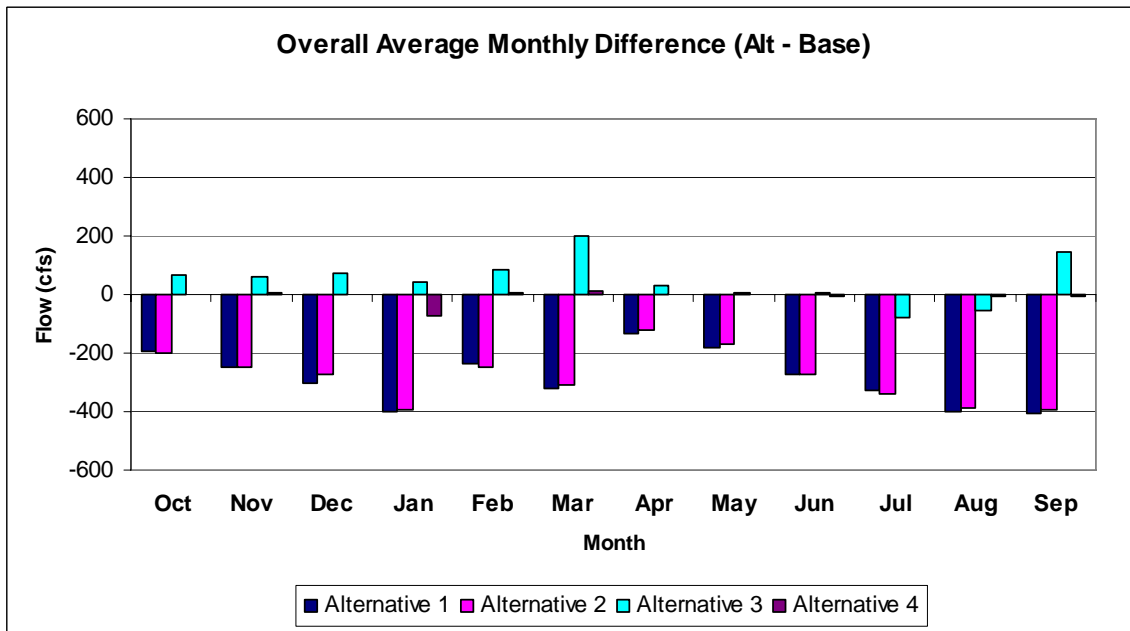


Figure C4-67: Changes in Average Monthly Banks + Jones Diversions, 2030 LOD, Moderate Fishery Restrictions

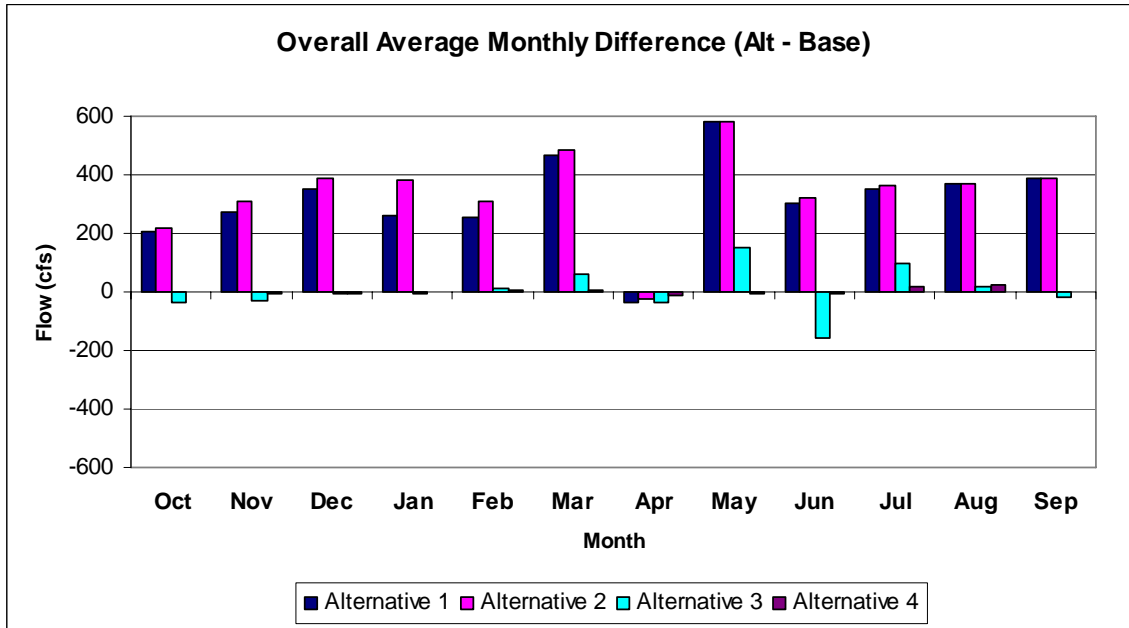


Figure C4-68: Changes in Average Monthly CCWD + LV Diversions, 2030 LOD, Moderate Fishery Restrictions

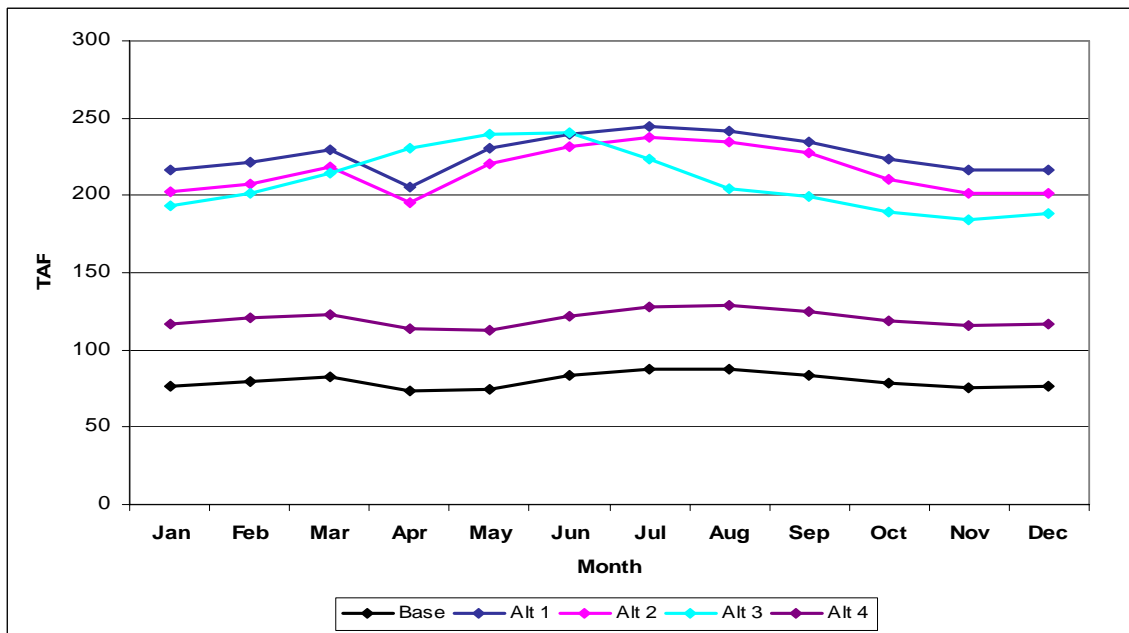


Figure C4-69: Monthly Average Los Vaqueros storage, 2030 LOD, Moderate Fishery Restrictions

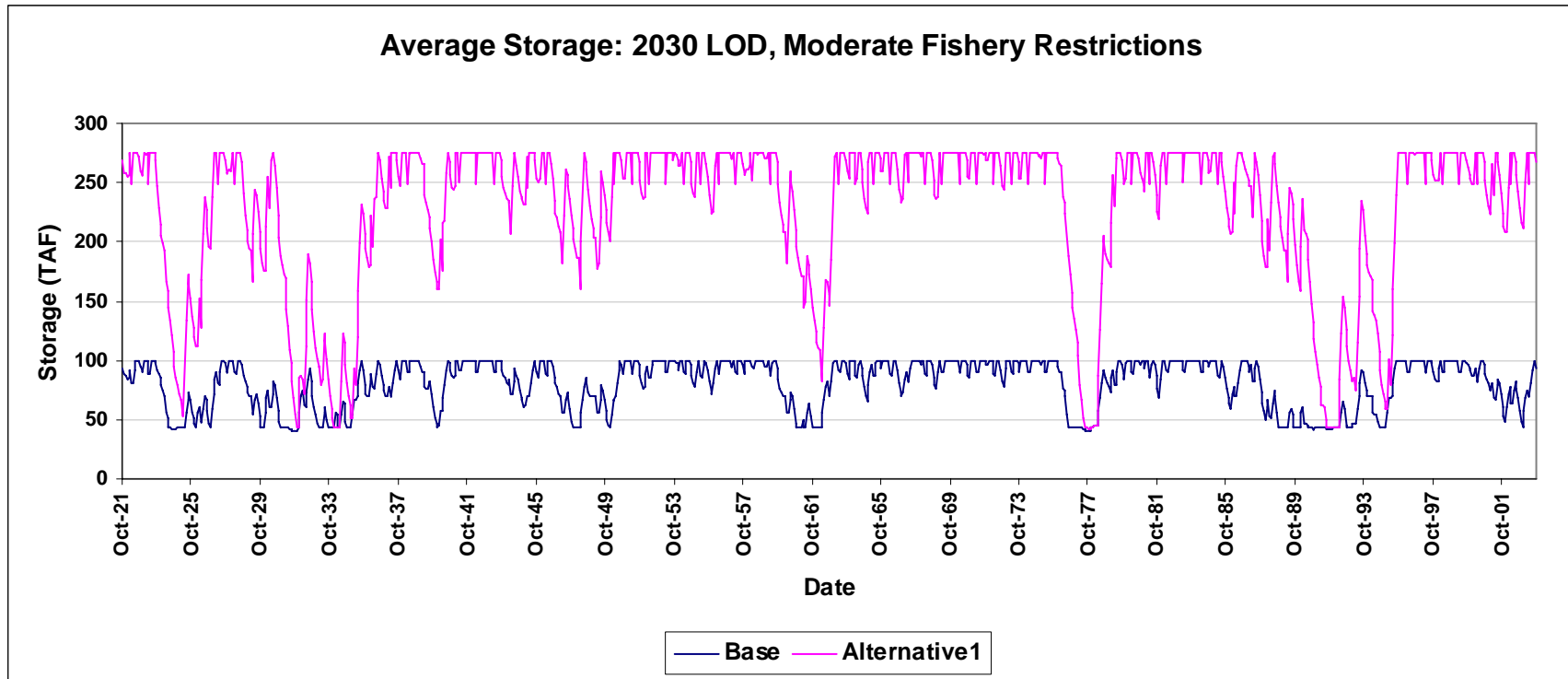


Figure C4-70: Timeseries of Alternative 1 and Base Los Vaqueros storage, 2030 LOD, Moderate Fisheries Restrictions

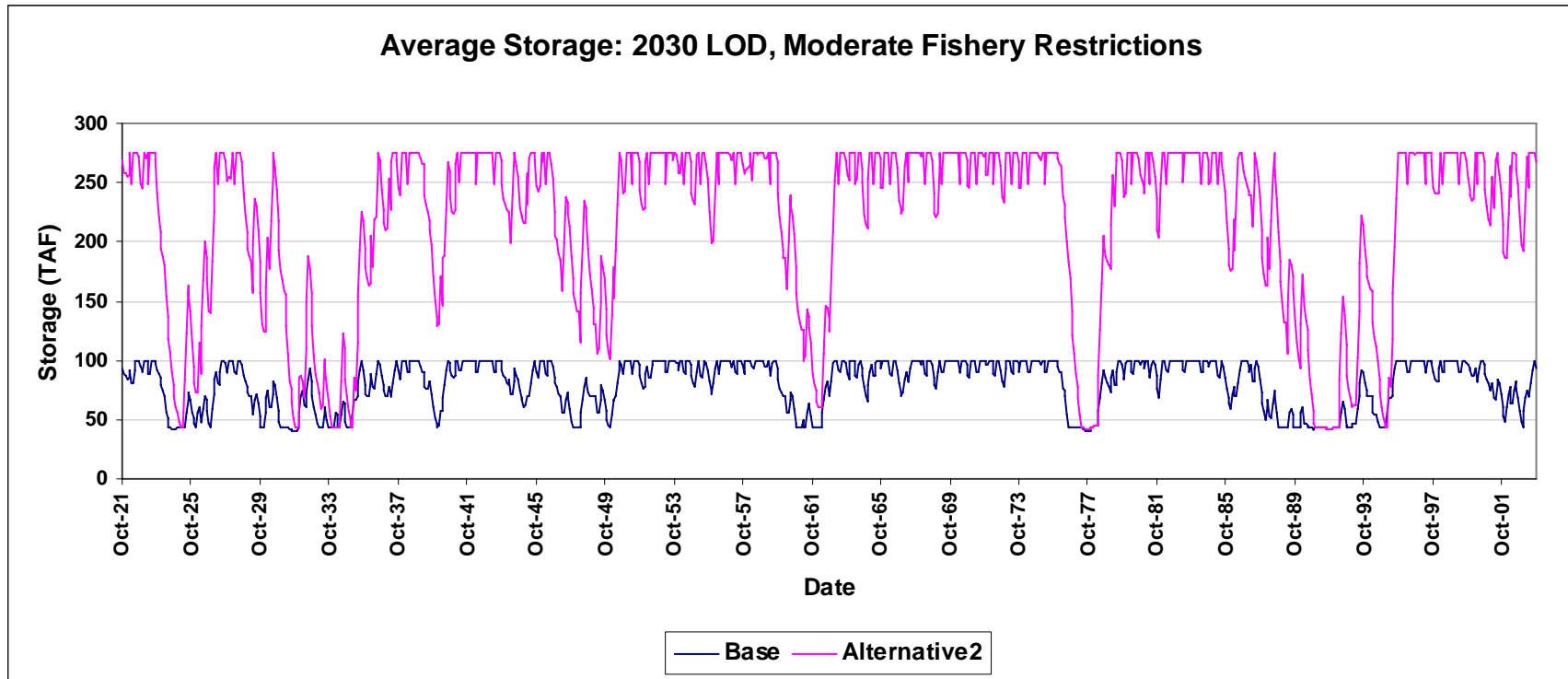


Figure C4-71: Timeseries of Alternative 2 and Base Los Vaqueros storage, 2030 LOD, Moderate Fisheries Restrictions

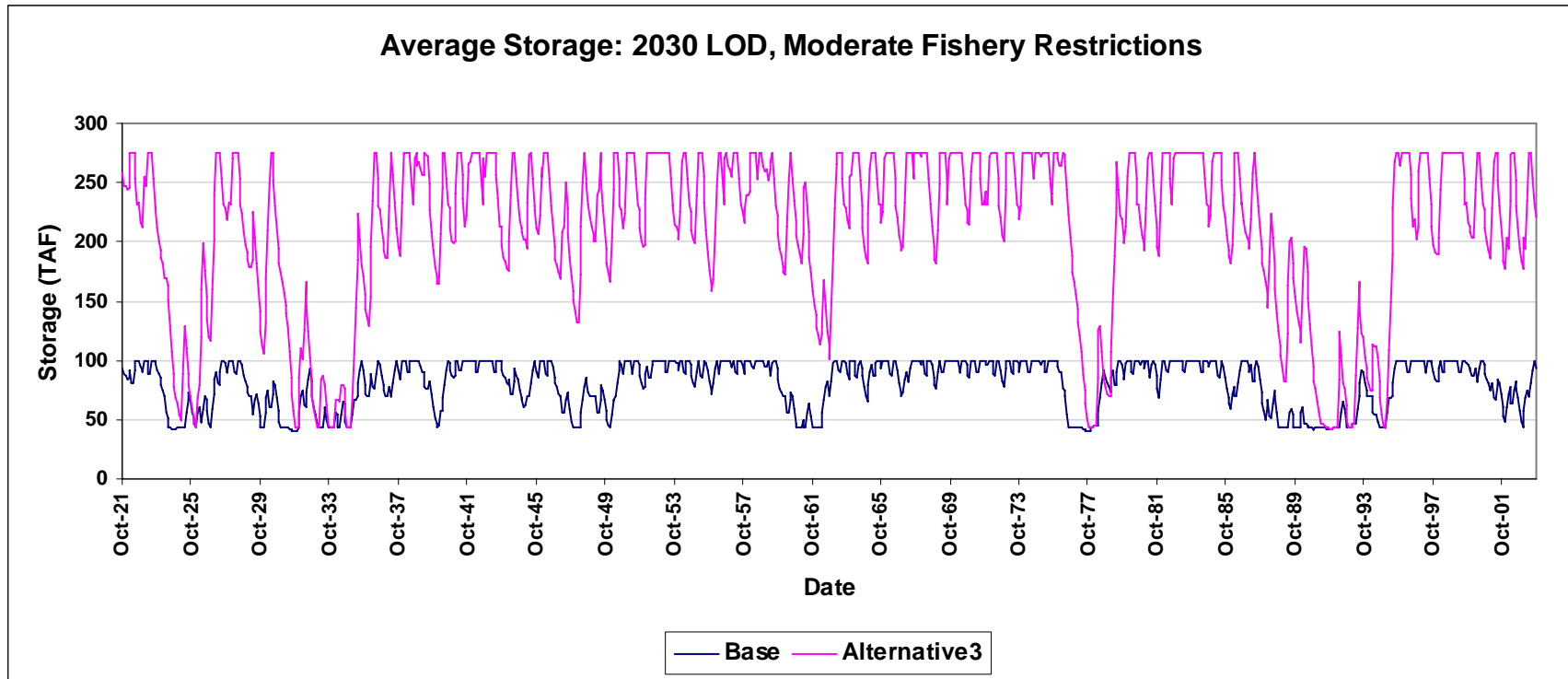


Figure C4-72: Timeseries of Alternative 3 and Base Los Vaqueros storage, 2030 LOD, Moderate Fisheries Restrictions

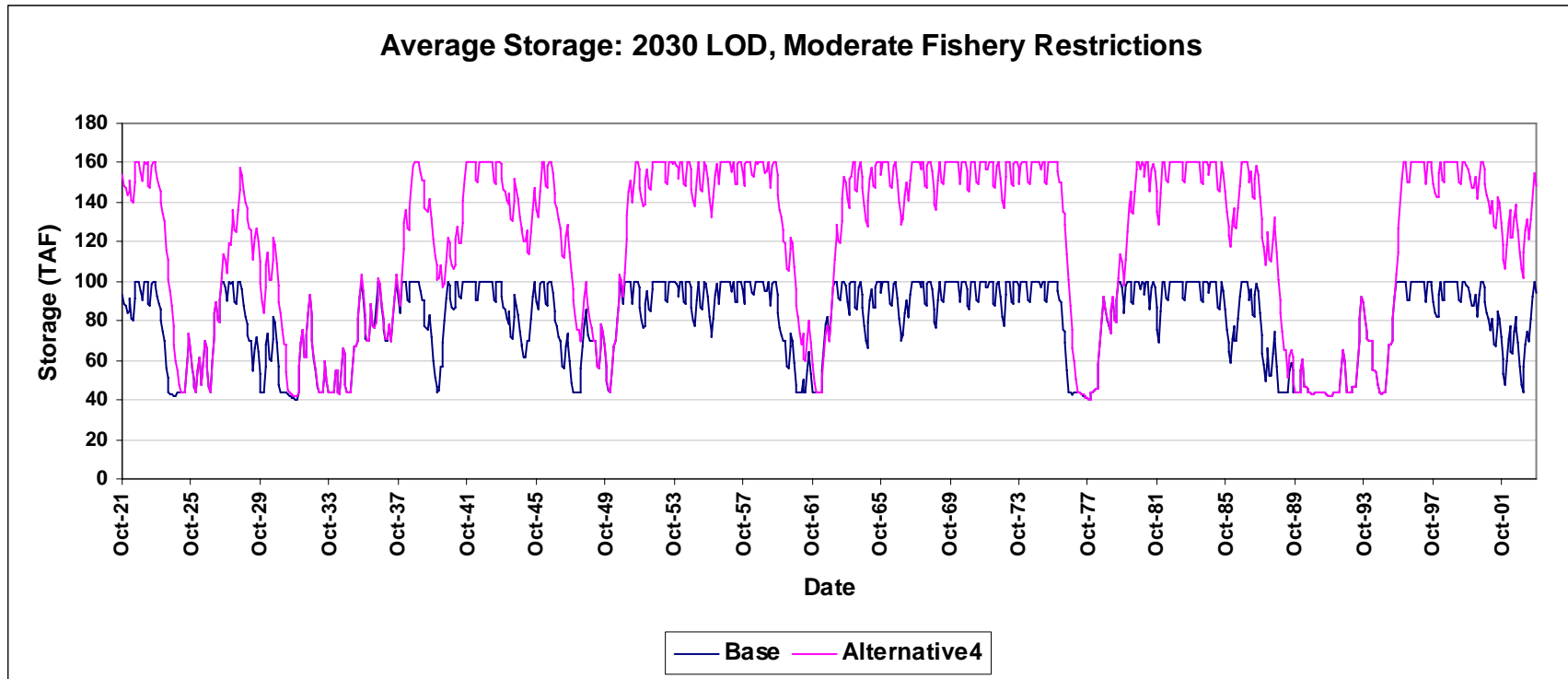


Figure C4-73: Timeseries of Alternative 4 and Base Los Vaqueros storage, 2030 LOD, Moderate Fisheries Restrictions

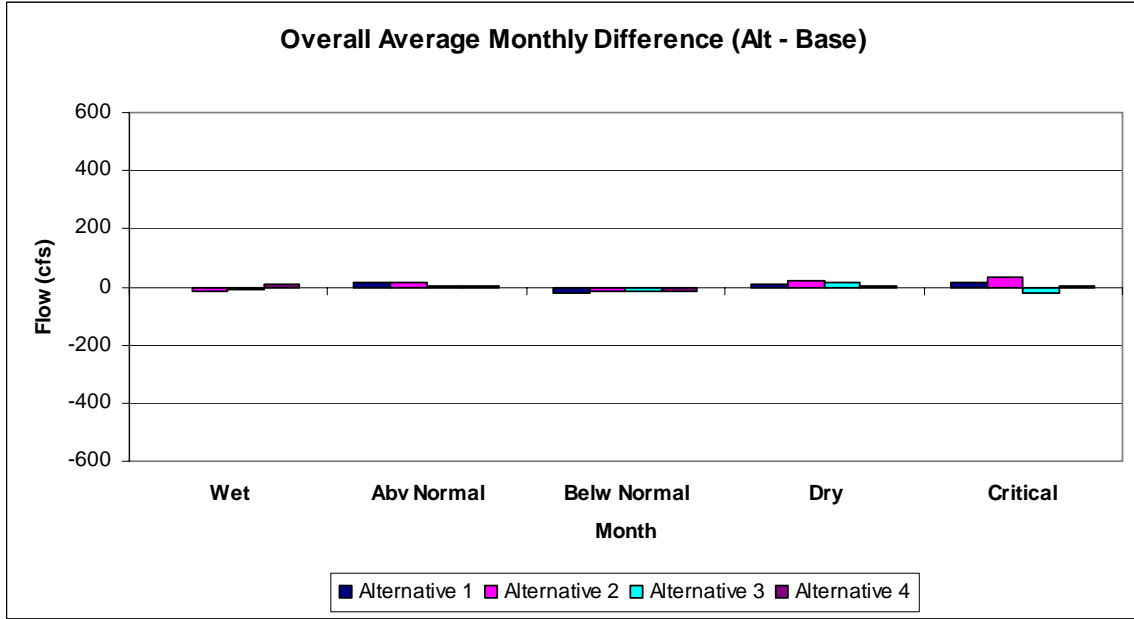


Figure C4-74: Changes in Sacramento River at Hood flow by water year type, 2030 LOD, Moderate Fishery Restrictions

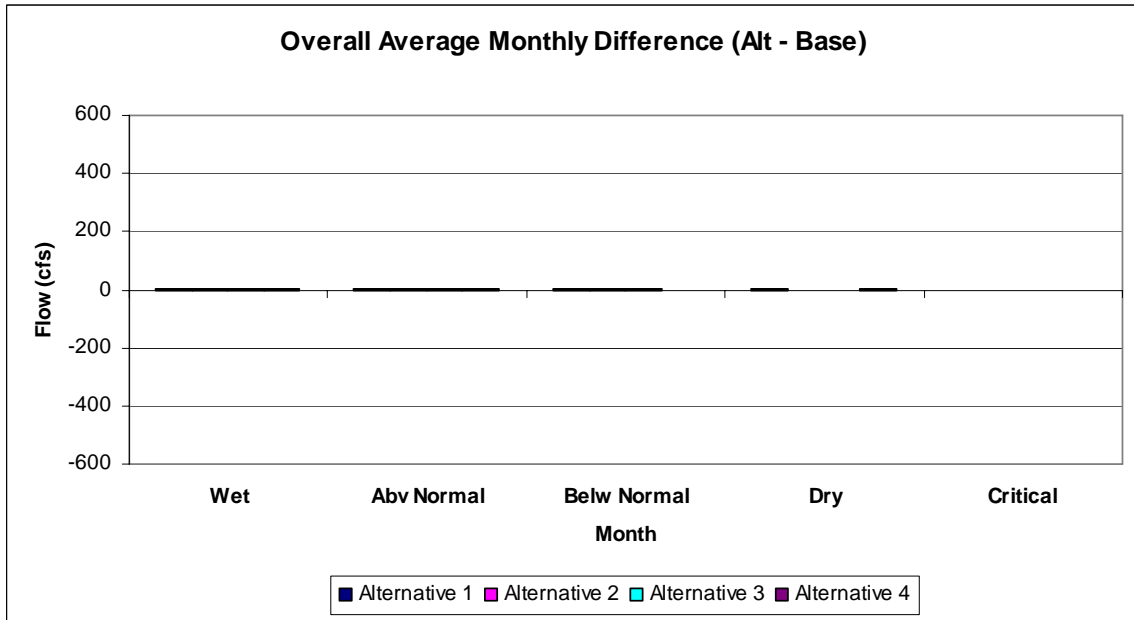


Figure C4-75: Changes in San Joaquin River at Vernalis flow by water year type, 2030 LOD, Moderate Fishery Restrictions

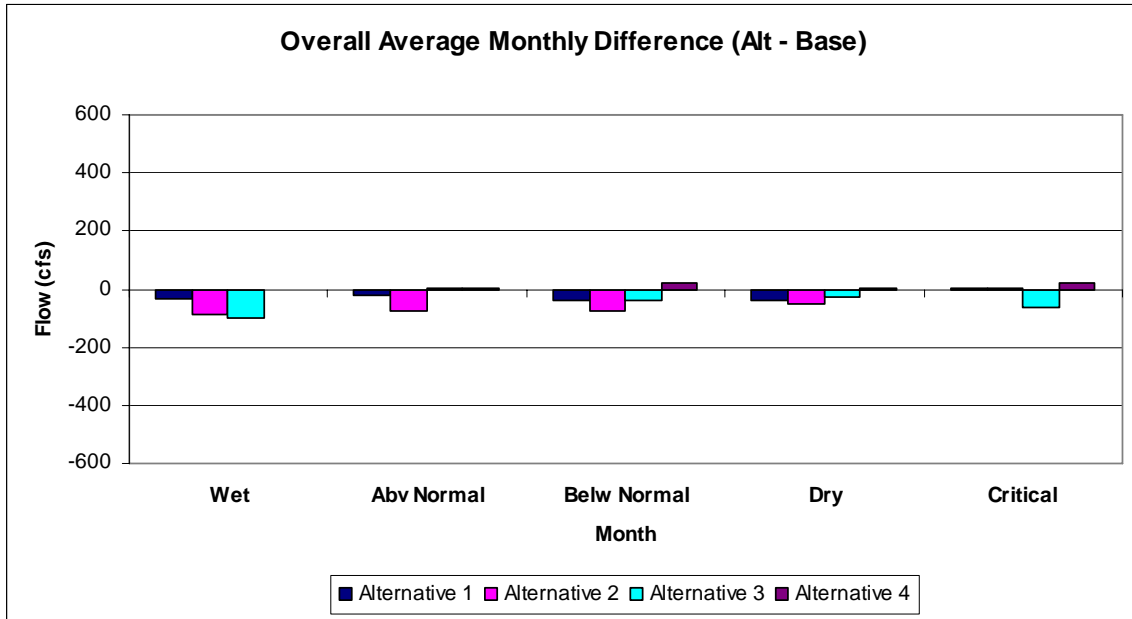


Figure C4-76: Changes in Delta Outflow by Year Type, 2030 LOD, Moderate Fishery Restrictions

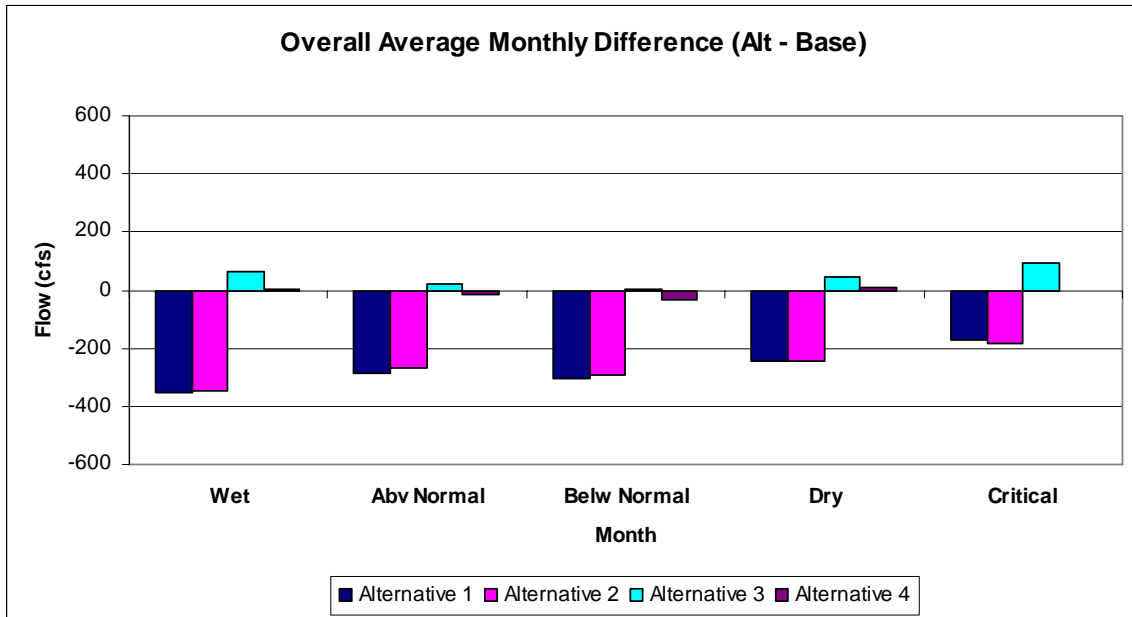


Figure C4-77: Changes in Banks + Jones Diversions by Year Type, 2030 LOD, Moderate Fishery Restrictions

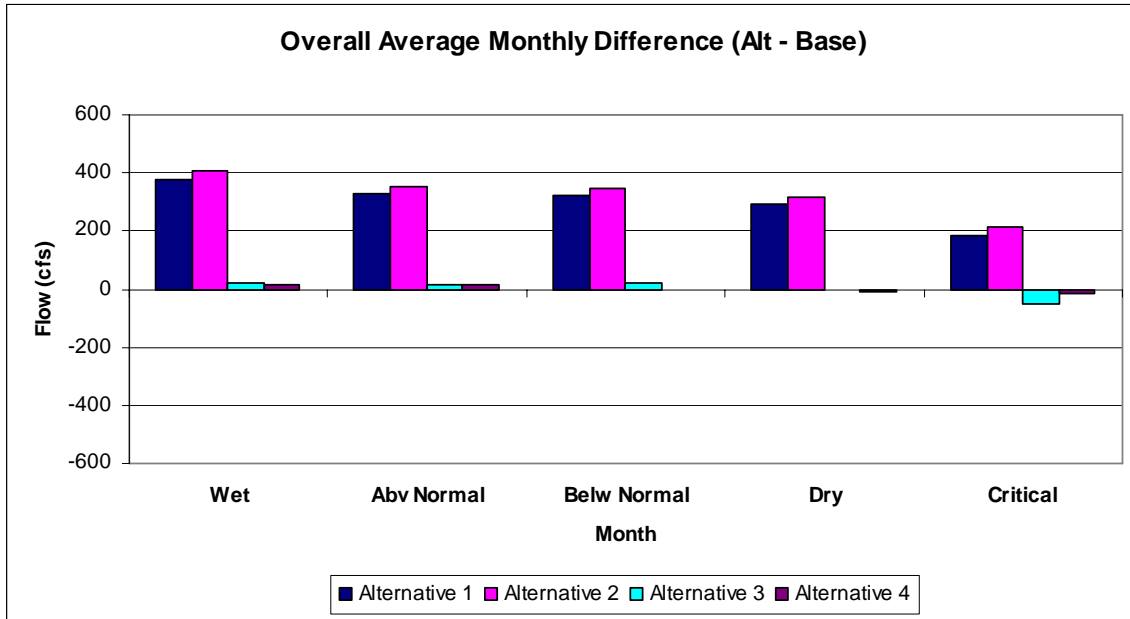


Figure C4-78: Changes in Project diversions by water year type, 2030 LOD, Moderate Fishery Restrictions

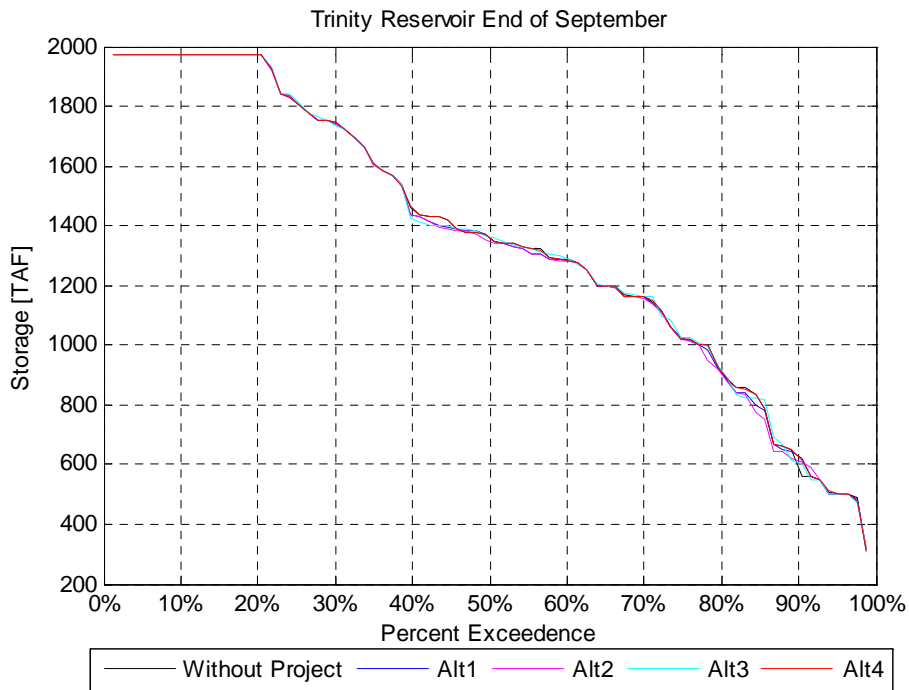


Figure C4-79: Trinity Reservoir end of September storage, 2030 LOD, Moderate Fishery Restrictions

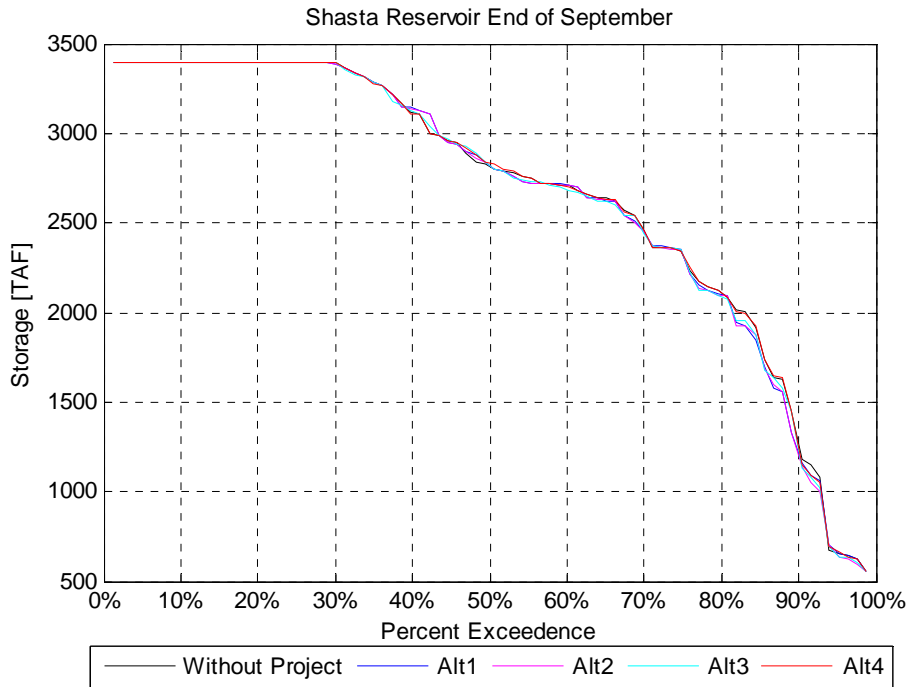


Figure C4-80: Shasta Reservoir end of September storage, 2030 LOD, Moderate Fishery Restrictions

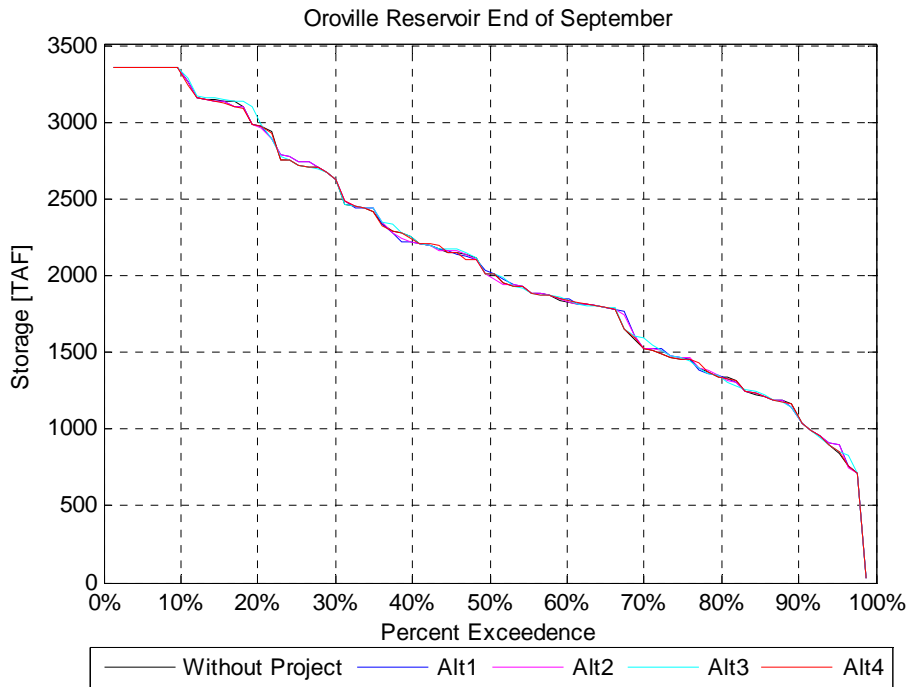


Figure C4-81: Oroville Reservoir end of September storage, 2030 LOD, Moderate Fishery Restrictions

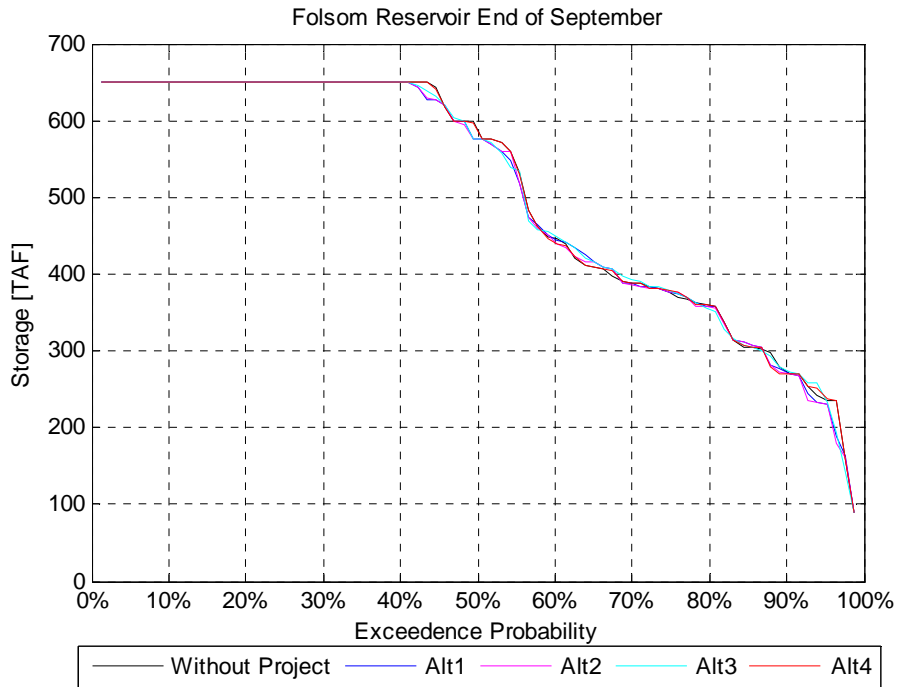


Figure C4-82: Folsom Reservoir end of September storage, 2030 LOD, Moderate Fishery Restrictions

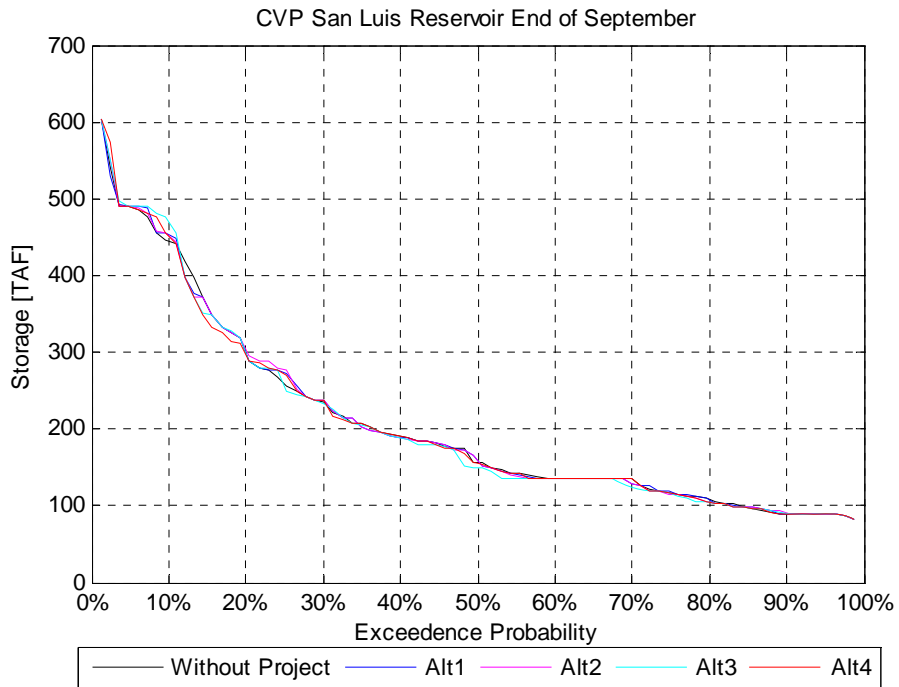


Figure C4-83: CVP San Luis Reservoir end of September storage, 2030 LOD, Moderate Fishery Restrictions

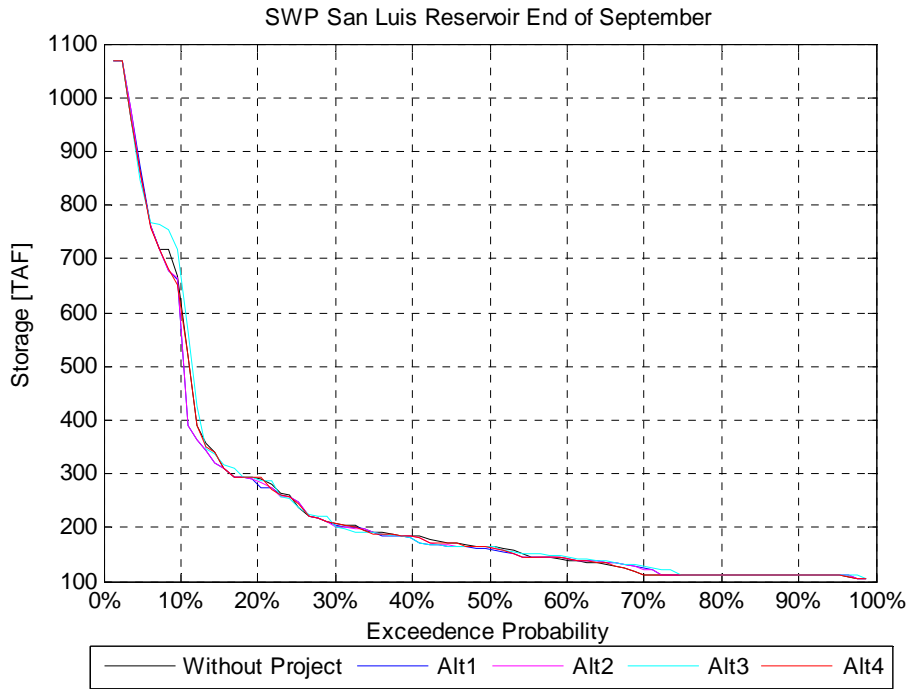


Figure C4-84: SWP San Luis Reservoir end of September storage, 2030 LOD, Moderate Fishery Restrictions