Appendix 8G

Chloride

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8G.1 Chloride Methodology

Chloride was modeled quantitatively for the Delta in two ways. First, a quantitative assessment utilizing a mass-balance approach (DSM2 fingerprinting data combined with historical source water quality data) was employed. Additionally, results of a second modeling approach utilizing DSM2-QUAL modeled EC and EC to chloride relationships were used to supplement the results of the mass-balance approach. Section 8.1.1.1, 8.3.1.3, and the chloride discussion under section 8.3.1.7 provide more detailed information regarding the assessment methodology for chloride and the details of the quantitative approaches. Figures and tables to support the assessment are provided below.

Understanding the uncertainties and limitations in the modeling and assessment approach is important for interpreting the results and effects analysis, including assessment of compliance with water quality objectives. Please refer to Section 8.3.1.1, *Models Used and Their Linkages*, and Section 8.3.1.3, *Plan Area*, for a description of these limitations. In light of these limitations, the assessment of compliance is conducted in terms of assessing the overall direction and degree to which Delta chloride would be affected relative to a baseline, and discussion of compliance does not imply that the alternative would literally cause Delta chloride to be out of compliance a certain period of time. In other words, the model results are used in a comparative mode, not a predictive mode.

Table Cl-1. Period average change in chloride concentrations (mg/L) for No Action LLT, relative to existing conditions. Calculation of chloride concentrations was based on a mass balance approach.

Chloride			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Annual Avg. Change
No Act. LLT	Location	Period [a]	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	-1	-1	0	0	0	-1	-1	0	0	0
			(-1%)	(1%)	(-2%)	(-5%)	(-4%)	(-2%)	(-2%)	(-3%)	(-6%)	(-5%)	(0%)	(0%)	(-3%)
		DROUGHT	0	0	0	-1	-1	-1	-1	-1	-1	0	0	0	0
			(-0%)	(1%)	(-2%)	(-4%)	(-4%)	(-6%)	(-6%)	(-6%)	(-4%)	(-1%)	(3%)	(-2%)	(-3%)
	SJR at Buckley Cove	ALL	-2	0	-6	-5	-4	-3	-5	-5	-10	-12	-13	-5	-6
			(-3%)	(-1%)	(-8%)	(-6%)	(-5%)	(-4%)	(-5%)	(-6%)	(-11%)	(-14%)	(-14%)	(-6%)	(-7%)
		DROUGHT	-3	-3	-9	-9	-5	-6	-9	-9	-19	-17	-22	-8	-10
			(-4%)	(-4%)	(-11%)	(-11%)	(-7%)	(-7%)	(-11%)	(-11%)	(-21%)	(-19%)	(-23%)	(-9%)	(-12%)
	Franks Tract	ALL	-67	-134	-45	3	6	3	3	5	7	-46	-47	-15	-27
			(-23%)	(-35%)	(-15%)	(2%)	(10%)	(8%)	(8%)	(10%)	(12%)	(-24%)	(-20%)	(-5%)	(-16%)
		DROUGHT	-39	-116	-40	-19	17	5	2	11	27	-68	-77	33	-22
			(-11%)	(-26%)	(-11%)	(-9%)	(27%)	(19%)	(11%)	(37%)	(52%)	(-22%)	(-24%)	(9%)	(-10%)
	Old R. at Rock Slough	ALL	-42	-110	-44	3	3	4	3	3	4	-33	-40	-11	-22
			(-17%)	(-35%)	(-17%)	(2%)	(5%)	(8%)	(6%)	(5%)	(8%)	(-22%)	(-21%)	(-5%)	(-14%)
		DROUGHT	-11	-96	-45	-18	8	6	3	6	19	-48	-67	16	-19
			(-4%)	(-27%)	(-14%)	(-9%)	(10%)	(16%)	(9%)	(20%)	(45%)	(-20%)	(-24%)	(6%)	(-10%)
Western Delta	Sac. R. at Emmaton	ALL	-204	-134	50	34	26	14	17	29	38	4	70	28	-2
			(-24%)	(-15%)	(11%)	(22%)	(38%)	(48%)	(43%)	(24%)	(17%)	(1%)	(15%)	(3%)	(-1%)
		DROUGHT	-239	-112	94	82	63	14	20	72	101	56	117	247	43
			(-21%)	(-9%)	(14%)	(36%)	(58%)	(32%)	(42%)	(41%)	(33%)	(12%)	(20%)	(22%)	(8%)
	SJR at Antioch	ALL	-659	-550	-65	39	52	38	42	54	68	-157	-7	-213	-113
			(-30%)	(-22%)	(-4%)	(6%)	(20%)	(34%)	(29%)	(15%)	(12%)	(-13%)	(-0%)	(-10%)	(-10%)
		DROUGHT	-699	-537	-110	123	140	39	50	105	135	-111	-5	207	-55
			(-26%)	(-17%)	(-5%)	(15%)	(34%)	(24%)	(25%)	(19%)	(16%)	(-6%)	(-0%)	(8%)	(-4%)
	Sac. R. at Mallard Island	ALL	-810	-623	-63	10	82	81	86	118	116	-232	2	-447	-140
			(-17%)	(-13%)	(-2%)	(1%)	(9%)	(18%)	(12%)	(9%)	(6%)	(-8%)	(0%)	(-11%)	(-5%)
		DROUGHT	-929	-757	-134	126	214	63	76	50	78	-190	-24	96	-111
			(-17%)	(-12%)	(-3%)	(5%)	(13%)	(9%)	(7%)	(2%)	(3%)	(-5%)	(-1%)	(2%)	(-3%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-1	-1	0	0	2	1	-1	0	-1	-2	-1	-1	0
			(-8%)	(-5%)	(0%)	(1%)	(12%)	(5%)	(-6%)	(-1%)	(-7%)	(-10%)	(-6%)	(-3%)	(-3%)
		DROUGHT	-2	-2	1	0	1	1	1	3	-1	-2	0	0	0
			(-10%)	(-10%)	(7%)	(4%)	(4%)	(6%)	(5%)	(18%)	(-5%)	(-7%)	(-0%)	(0%)	(0%)
	Contra Costa PP #1	ALL	-34	-63	-73	-20	17	4	3	2	5	-15	-47	-14	-20
			(-14%)	(-25%)	(-31%)	(-11%)	(22%)	(7%)	(5%)	(4%)	(9%)	(-12%)	(-23%)	(-7%)	(-13%)
		DROUGHT	-13	-29	-70	18	12	7	4	5	17	-13	-89	-30	-15
			(-4%)	(-10%)	(-23%)	(8%)	(14%)	(16%)	(10%)	(13%)	(40%)	(-7%)	(-28%)	(-12%)	(-9%)
	Banks PP	ALL	-17	-59	-35	-5	4	2	2	1	2	-21	-37	-17	-15
			(-10%)	(-29%)	(-18%)	(-3%)	(5%)	(3%)	(2%)	(2%)	(3%)	(-20%)	(-24%)	(-10%)	(-12%)
		DROUGHT	-5	-45	-34	-16	1	2	2	3	7	-24	-62	-16	-16
			(-3%)	(-20%)	(-15%)	(-9%)	(1%)	(3%)	(4%)	(4%)	(13%)	(-17%)	(-28%)	(-8%)	(-11%)
	Jones PP	ALL	-17	-54	-25	-5	2	2	1	1	3	-18	-31	-17	-13
			(-12%)	(-29%)	(-16%)	(-4%)	(2%)	(2%)	(1%)	(1%)	(5%)	(-16%)	(-22%)	(-11%)	(-11%)
		DROUGHT	-7	-48	-20	-13	0	1	1	1	10	-28	-53	-10	-14
			(-4%)	(-24%)	(-11%)	(-10%)	(-0%)	(1%)	(1%)	(2%)	(19%)	(-19%)	(-26%)	(-6%)	(-11%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987–1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-2. Period average change in chloride concentrations (mg/L) for No Action LLT relative to existing conditions. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Avg. Chang
No Act. LLT	Location	Period [a]	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	-1	-1	0	0	0	0	0	0	0	0
			(-0%)	(0%)	(-1%)	(-3%)	(-3%)	(-1%)	(-1%)	(-1%)	(-1%)	(-0%)	(1%)	(1%)	(-1%)
		DROUGHT	0	0	0	-1	-1	-1	-1	0	0	0	0	0	0
			(-0%)	(0%)	(-1%)	(-3%)	(-3%)	(-3%)	(-3%)	(-2%)	(-1%)	(-0%)	(1%)	(-1%)	(-1%)
	SJR at Buckley Cove	ALL	-5	-9	-27	-29	-17	-15	-8	-7	-4	-15	-20	-13	-14
			(-5%)	(-8%)	(-20%)	(-18%)	(-12%)	(-11%)	(-8%)	(-9%)	(-4%)	(-14%)	(-19%)	(-13%)	(-12%)
		DROUGHT	-9	-15	-33	-40	-25	-21	-13	-15	-33	-37	-50	-25	-26
			(-7%)	(-11%)	(-20%)	(-19%)	(-12%)	(-10%)	(-8%)	(-12%)	(-26%)	(-33%)	(-42%)	(-19%)	(-17%)
	Franks Tract	ALL	-39	-80	-37	-10	2	2	1	3	8	-27	-32	-10	-18
			(-21%)	(-35%)	(-18%)	(-8%)	(2%)	(6%)	(5%)	(8%)	(19%)	(-21%)	(-21%)	(-5%)	(-15%)
		DROUGHT	-19	-68	-34	-27	16	6	1	9	26	-39	-50	27	-13
			(-8%)	(-25%)	(-12%)	(-15%)	(22%)	(14%)	(4%)	(28%)	(61%)	(-18%)	(-22%)	(11%)	(-8%)
	Old R. at Rock Slough	ALL	-23	-65	-33	-9	-1	4	1	1	6	-18	-27	-8	-14
			(-15%)	(-34%)	(-18%)	(-7%)	(-1%)	(9%)	(2%)	(3%)	(15%)	(-18%)	(-21%)	(-5%)	(-13%)
		DROUGHT	-1	-55	-32	-26	4	7	3	7	18	-26	-43	14	-11
			(-1%)	(-26%)	(-14%)	(-15%)	(5%)	(11%)	(5%)	(16%)	(48%)	(-16%)	(-22%)	(8%)	(-8%)
Western Delta	Sac. R. at Emmaton	ALL	-137	-92	23	19	21	15	15	25	39	13	47	33	2
			(-24%)	(-17%)	(7%)	(15%)	(29%)	(43%)	(42%)	(28%)	(21%)	(6%)	(14%)	(6%)	(1%)
		DROUGHT	-150	-79	54	62	62	18	19	67	112	59	95	193	43
			(-19%)	(-10%)	(11%)	(32%)	(56%)	(40%)	(52%)	(57%)	(46%)	(18%)	(21%)	(24%)	(12%)
	SJR at Antioch	ALL	-447	-382	-93	6	39	44	44	55	79	-79	-19	-120	-73
			(-30%)	(-26%)	(-9%)	(1%)	(15%)	(37%)	(39%)	(22%)	(16%)	(-9%)	(-2%)	(-8%)	(-10%)
		DROUGHT	-454	-367	-129	80	134	55	54	123	183	-24	11	191	-12
			(-25%)	(-19%)	(-9%)	(11%)	(34%)	(34%)	(38%)	(33%)	(27%)	(-2%)	(1%)	(11%)	(-1%)
	Sac. R. at Mallard Island	ALL	-660	-552	-146	-12	69	118	130	157	187	-108	-6	-280	-92
			(-21%)	(-19%)	(-7%)	(-1%)	(8%)	(26%)	(25%)	(17%)	(13%)	(-5%)	(-0%)	(-9%)	(-5%)
		DROUGHT	-693	-624	-200	77	247	138	149	195	238	-36	5	169	-28
			(-19%)	(-16%)	(-6%)	(4%)	(18%)	(21%)	(20%)	(14%)	(11%)	(-1%)	(0%)	(5%)	(-1%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	0	0	0	0	1	1	-1	0	0	0	0	0	0
			(-2%)	(-2%)	(-0%)	(-0%)	(7%)	(3%)	(-2%)	(1%)	(-2%)	(-2%)	(-1%)	(-1%)	(-0%)
		DROUGHT	0	-1	0	0	0	1	1	2	0	0	0	0	0
			(-2%)	(-4%)	(1%)	(1%)	(2%)	(3%)	(5%)	(10%)	(-1%)	(-2%)	(-0%)	(-0%)	(1%)
	Contra Costa PP #1	ALL	-22	-37	-54	-28	13	-7	-3	0	4	-7	-32	-14	-16
			(-14%)	(-23%)	(-30%)	(-15%)	(12%)	(-8%)	(-3%)	(-1%)	(8%)	(-9%)	(-22%)	(-10%)	(-13%)
		DROUGHT	-6	-16	-56	3	5	9	5	5	14	-5	-58	-19	-10
			(-3%)	(-8%)	(-24%)	(2%)	(5%)	(11%)	(7%)	(9%)	(31%)	(-4%)	(-26%)	(-11%)	(-7%)
	Banks PP	ALL	-12	-34	-27	-15	-2	-1	-2	0	6	-6	-21	-11	-10
			(-10%)	(-26%)	(-18%)	(-11%)	(-2%)	(-2%)	(-2%)	(-0%)	(9%)	(-8%)	(-21%)	(-10%)	(-10%)
		DROUGHT	-4	-25	-26	-18	-6	-3	-2	0	11	-11	-39	-10	-11
			(-3%)	(-16%)	(-14%)	(-11%)	(-4%)	(-3%)	(-2%)	(-0%)	(16%)	(-11%)	(-25%)	(-7%)	(-8%)
	Jones PP	ALL	-7	-29	-23	-17	-1	-2	-1	-1	13	1	-15	-8	-7
			(-6%)	(-23%)	(-15%)	(-11%)	(-1%)	(-1%)	(-1%)	(-1%)	(21%)	(1%)	(-15%)	(-8%)	(-7%)
		DROUGHT	3	-23	-21	-23	-4	-2	1	-2	11	-9	-32	-5	-9
			(2%)	(-15%)	(-12%)	(-12%)	(-2%)	(-1%)	(1%)	(-1%)	(18%)	(-8%)	(-21%)	(-4%)	(-6%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-3. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions and No Action LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride No Act. LLT	Location	Period [a]	Period Average Concentration mg/L		Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act._LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	15.7	15.3	0	0
		DROUGHT	16.8	16.3	0	0
	SJR at Buckley Cove	ALL	82.9	77.2	0	0
		DROUGHT	86.5	76.5	0	0
	Franks Tract	ALL	173.8	146.4	34	22
		DROUGHT	212.8	190.9	47	35
	Old R. at Rock Slough	ALL	152.0	130.5	28	17
		DROUGHT	180.2	161.4	42	27
Western Delta	Sac. R. at Emmaton	ALL	368.9	366.5	44	44
		DROUGHT	516.4	559.3	55	60
	SJR at Antioch	ALL	108,7.3	974.2	66	73
		DROUGHT	140,0.6	134,5.6	82	87
	Sac. R. at Mallard Island	ALL	255,2.0	241,1.9	85	86
		DROUGHT	323,3.9	312,3.1	100	100
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	17.1	16.6	0	0
		DROUGHT	17.7	17.7	0	0
	Contra Costa PP #1	ALL	146.5	126.9	24	14
		DROUGHT	176.5	161.3	37	22
	Banks PP	ALL	123.4	108.5	4	2
		DROUGHT	143.7	128.0	7	2
	Jones PP	ALL	116.9	103.4	1	1
		DROUGHT	132.9	118.9	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-4. Period Average chloride concentrations and frequency of exceedance of objectives for existing condition and No Action LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride No Act. LLT	Location	Period [a]	Period Average Concentration (mg/L)		Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act._LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	18.5	18.3	0	0
		DROUGHT	19.3	19.0	0	0
	SJR at Buckley Cove	ALL	115.7	101.7	0	0
		DROUGHT	154.9	128.5	0	0
	Franks Tract	ALL	119.9	101.5	14	8
		DROUGHT	152.8	140.0	22	15
	Old R. at Rock Slough	ALL	107.9	93.7	4	3
		DROUGHT	135.9	125.2	7	5
Western Delta	Sac. R. at Emmaton	ALL	258.0	259.7	36	32
		DROUGHT	363.7	406.4	50	55
	SJR at Antioch	ALL	756.6	683.7	61	65
		DROUGHT	1,001.9	990.0	80	82
	Sac. R. at Mallard Island	ALL	1,766.4	1,674.5	77	83
		DROUGHT	2,345.9	2,317.9	98	98
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	18.8	18.8	0	0
		DROUGHT	18.7	18.9	0	0
	Contra Costa PP #1	ALL	120.4	104.7	5	3
		DROUGHT	142.8	133.1	8	7
	Banks PP	ALL	101.6	91.1	1	1
		DROUGHT	134.0	122.9	2	2
	Jones PP	ALL	108.8	101.4	0	0
		DROUGHT	144.7	136.0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-5. No Action LLT use of assimilative capacity available under existing conditions relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride No Act. LLT	Location	Period [a]	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Annual Avg. Change
			Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0
	SJR at Buckley Cove	ALL	1	0	4	3	2	2	3	3	6	8	8	3	3
		DROUGHT	2	2	5	6	3	4	6	6	12	11	14	5	6
	Franks Tract	ALL	-	-	-	-3	-3	-1	-1	-2	-3	80	-	-	36
		DROUGHT	-	-	-	41	-9	-2	-1	-5	-14	-	-	-	59
	Old R. at Rock Slough	ALL	-	-	-	-3	-2	-2	-2	-1	-2	34	67	-	22
		DROUGHT	-	-	-	30	-4	-3	-1	-3	-9	-	-	-	27
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-34	-14	-6	-8	-23	-100	-	-	-	-
		DROUGHT	-	-	-	-100	-45	-7	-10	-100	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-28	-39	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-44	-97	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	1	0	0	0	-1	0	0	0	1	1	1	0	0
		DROUGHT	1	1	0	0	0	0	0	-1	0	1	0	0	0
	Contra Costa PP #1	ALL	-	-	-	28	-10	-2	-1	-1	-3	12	-	43	19
		DROUGHT	-	-	-	-58	-7	-3	-2	-2	-8	20	-	-	21
	Banks PP	ALL	20	-	57	4	-2	-1	-1	-1	-1	14	37	20	12
		DROUGHT	10	-	-	20	-1	-1	-1	-1	-3	23	-	31	15
	Jones PP	ALL	18	84	26	4	-1	-1	0	0	-2	13	29	18	10
		DROUGHT	9	99	27	11	0	-1	0	-1	-5	29	-	14	12

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-6. No Action LLT use of assimilative capacity available under existing conditions relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride No Act. LLT	Location	Period [a]	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Annual Avg. Change
			Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0
	SJR at Buckley Cove	ALL	3	6	25	33	16	14	5	4	2	11	14	9	10
		DROUGHT	7	14	40	-	75	59	16	12	28	27	39	21	28
	Franks Tract	ALL	64	-	89	9	-1	-1	-1	-1	-4	22	33	17	14
		DROUGHT	97	-	-	39	-9	-3	0	-4	-12	-	-	-100	13
	Old R. at Rock Slough	ALL	24	-	47	8	0	-2	0	-1	-3	12	22	8	10
		DROUGHT	2	-	-	33	-3	-4	-2	-3	-9	30	73	-23	9
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-15	-12	-7	-7	-16	-60	-52	-	-	-
		DROUGHT	-	-	-	-100	-44	-9	-9	-51	-100	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-34	-32	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-63	-51	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	0	0	0	0	-1	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	-1	0	0	0	0	0
	Contra Costa PP #1	ALL	24	41	79	42	-9	5	1	0	-2	5	29	13	12
		DROUGHT	10	26	-	-8	-4	-5	-3	-3	-7	4	-	24	9
	Banks PP	ALL	8	29	25	13	2	1	1	0	-3	3	14	8	7
		DROUGHT	4	25	38	23	5	3	2	0	-6	7	41	9	10
	Jones PP	ALL	5	24	23	17	1	1	0	0	-7	-1	10	6	5
		DROUGHT	-2	23	31	39	6	4	-1	1	-6	6	31	4	8

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-7. Period average change in chloride concentrations (mg/L) for Alternative 1A LLT relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 1 LLT	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	2	3	3	3	1	2	1	2	1	2	3	3	2	2	2	2	5	6	6	7	6	6	5	5	3	4
			(20%)	(22%)	(26%)	(25%)	(11%)	(12%)	(7%)	(13%)	(7%)	(12%)	(16%)	(19%)	(14%)	(16%)	(10%)	(13%)	(29%)	(36%)	(34%)	(40%)	(47%)	(47%)	(41%)	(40%)	(21%)	(24%)
		DROUGHT	2	2	3	3	2	2	0	1	-1	0	2	3	1	2	2	2	7	8	10	10	7	6	4	5	3	4
			(16%)	(16%)	(22%)	(20%)	(12%)	(14%)	(1%)	(5%)	(-3%)	(1%)	(8%)	(14%)	(3%)	(9%)	(8%)	(15%)	(39%)	(45%)	(56%)	(57%)	(46%)	(41%)	(31%)	(34%)	(18%)	(22%)
	SJR at Buckley Cove	ALL	-3	0	-1	0	-2	4	-3	2	-3	1	-2	1	-4	1	-4	1	-7	2	-10	3	-7	6	-4	0	-4	2
			(-3%)	(-0%)	(-1%)	(-0%)	(-3%)	(5%)	(-3%)	(2%)	(-4%)	(1%)	(-3%)	(1%)	(-4%)	(1%)	(-5%)	(1%)	(-9%)	(3%)	(-11%)	(4%)	(-7%)	(8%)	(-5%)	(0%)	(-5%)	(2%)
		DROUGHT	-3	0	-2	1	-5	4	-6	3	-4	2	-4	2	-7	3	-7	2	-13	6	-12	6	-11	10	-7	1	-7	3
			(-4%)	(0%)	(-3%)	(1%)	(-6%)	(6%)	(-7%)	(4%)	(-5%)	(2%)	(-5%)	(3%)	(-8%)	(3%)	(-8%)	(3%)	(-15%)	(8%)	(-13%)	(8%)	(-12%)	(14%)	(-8%)	(2%)	(-8%)	(4%)
	Franks Tract	ALL	10	77	-91	43	-27	19	24	21	17	11	17	13	10	7	4	-1	12	5	-50	-4	-30	16	18	34	-7	20
			(3%)	(34%)	(-24%)	(17%)	(-9%)	(7%)	(15%)	(13%)	(28%)	(16%)	(43%)	(33%)	(27%)	(18%)	(8%)	(-1%)	(22%)	(8%)	(-26%)	(-2%)	(-13%)	(9%)	(6%)	(12%)	(-4%)	(14%)
		DROUGHT	-11	28	-104	12	-59	-19	-23	-4	12	-5	10	4	7	4	13	2	32	5	-99	-30	-44	33	12	-21	-21	1
			(-3%)	(9%)	(-24%)	(4%)	(-16%)	(-6%)	(-11%)	(-2%)	(19%)	(-6%)	(34%)	(12%)	(30%)	(17%)	(44%)	(5%)	(62%)	(7%)	(-32%)	(-13%)	(-14%)	(14%)	(3%)	(-5%)	(-10%)	(0%)
	Old R. at Rock Slough	ALL	23	65	-67	42	-20	24	19	16	16	13	13	9	2	-1	-5	-8	9	4	-34	-1	-27	13	17	28	-4	17
			(10%)	(33%)	(-22%)	(21%)	(-8%)	(11%)	(13%)	(11%)	(24%)	(18%)	(27%)	(18%)	(5%)	(-1%)	(-8%)	(-12%)	(16%)	(8%)	(-23%)	(-1%)	(-14%)	(8%)	(7%)	(12%)	(-3%)	(13%)
		DROUGHT	6	16	-80	16	-52	-7	-16	2	8	1	8	2	6	2	8	2	23	4	-74	-26	-43	24	22	6	-15	3
			(2%)	(6%)	(-23%)	(6%)	(-17%)	(-3%)	(-8%)	(1%)	(12%)	(1%)	(20%)	(3%)	(17%)	(6%)	(25%)	(4%)	(53%)	(6%)	(-31%)	(-13%)	(-16%)	(11%)	(8%)	(2%)	(-9%)	(2%)
Western Delta	Sac. R. at Emmaton	ALL	-177	27	-49	85	76	27	24	-10	11	-14	16	2	30	13	80	51	92	54	152	149	255	185	245	217	63	65
			(-21%)	(4%)	(-6%)	(11%)	(17%)	(5%)	(16%)	(-5%)	(17%)	(-15%)	(53%)	(4%)	(77%)	(23%)	(66%)	(34%)	(42%)	(21%)	(47%)	(45%)	(54%)	(34%)	(30%)	(26%)	(17%)	(18%)
		DROUGHT	-265	-26	-94	18	79	-15	31	-51	37	-26	22	8	41	20	158	86	188	87	339	283	268	151	6	-241	68	25
			(-23%)	(-3%)	(-8%)	(2%)	(11%)	(-2%)	(14%)	(-16%)	(35%)	(-15%)	(49%)	(13%)	(83%)	(29%)	(89%)	(34%)	(62%)	(21%)	(72%)	(54%)	(45%)	(21%)	(1%)	(-18%)	(13%)	(4%)
	SJR at Antioch	ALL	-505	154	-516	35	-46	19	-35	-73	8	-44	42	4	71	29	126	71	112	44	32	189	265	273	251	464	-16	97
			(-23%)	(10%)	(-21%)	(2%)	(-3%)	(1%)	(-6%)	(-11%)	(3%)	(-14%)	(37%)	(3%)	(50%)	(16%)	(35%)	(17%)	(19%)	(7%)	(3%)	(17%)	(18%)	(19%)	(12%)	(24%)	(-1%)	(10%)
		DROUGHT	-598	101	-668	-131	-216	-106	-106	-229	36	-104	42	3	79	28	175	70	204	69	139	250	294	299	-93	-300	-59	-4
			(-22%)	(5%)	(-22%)	(-5%)	(-10%)	(-5%)	(-13%)	(-24%)	(9%)	(-19%)	(26%)	(2%)	(40%)	(11%)	(31%)	(11%)	(24%)	(7%)	(8%)	(15%)	(17%)	(18%)	(-4%)	(-11%)	(-4%)	(-0%)
	Sac. R. at Mallard Island	ALL	-703	107	-423	200	-13	50	-3	-12	83	1	141	60	252	165	385	267	263	148	252	483	446	445	412	859	91	231
			(-15%)	(3%)	(-9%)	(5%)	(-0%)	(2%)	(-0%)	(-1%)	(9%)	(0%)	(31%)	(11%)	(34%)	(20%)	(28%)	(18%)	(14%)	(7%)	(8%)	(17%)	(13%)	(13%)	(10%)	(23%)	(4%)	(10%)
		DROUGHT	-835	94	-733	25	-240	-106	-103	-229	159	-55	184	121	237	161	240	190	238	161	268	458	396	420	-120	-216	-26	85
			(-16%)	(2%)	(-12%)	(0%)	(-5%)	(-2%)	(-4%)	(-9%)	(10%)	(-3%)	(26%)	(16%)	(22%)	(14%)	(11%)	(9%)	(10%)	(6%)	(7%)	(13%)	(11%)	(11%)	(-2%)	(-4%)	(-1%)	(3%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	15	16	20	21	20	20	10	10	2	0	-1	-2	-3	-2	-4	-3	-5	-4	-3	0	1	2	11	12	5	6
			(89%)	(106%)	(138%)	(150%)	(150%)	(149%)	(71%)	(70%)	(14%)	(3%)	(-9%)	(-13%)	(-17%)	(-12%)	(-21%)	(-21%)	(-26%)	(-20%)	(-12%)	(-2%)	(5%)	(13%)	(62%)	(67%)	(32%)	(36%)
		DROUGHT	21	23	32	33	36	36	25	25	12	12	4	3	2	1	0	-3	-1	0	6	8	11	11	21	21	14	14
			(99%)	(119%)	(196%)	(228%)	(292%)	(267%)	(202%)	(191%)	(86%)	(78%)	(26%)	(20%)	(11%)	(6%)	(-2%)	(-17%)	(-4%)	(2%)	(28%)	(39%)	(48%)	(49%)	(96%)	(95%)	(80%)	(80%)
	Contra Costa PP #1	ALL	38	72	-7	56	-35	38	-4	16	56	38	18	14	13	10	-5	-7	5	0	-18	-2	-46	1	-3	11	1	21
			(16%)	(35%)	(-3%)	(30%)	(-15%)	(23%)	(-2%)	(10%)	(71%)	(40%)	(33%)	(24%)	(24%)	(18%)	(-7%)	(-10%)	(9%)	(0%)	(-14%)	(-2%)	(-23%)	(1%)	(-2%)	(5%)	(1%)	(16%)
		DROUGHT	27	40	-35	-6	-74	-4	-29	-47	7	-5	7	0	6	2	4	0	18	0	-44	-31	-98	-9	13	43	-17	-1
			(9%)	(14%)	(-12%)	(-2%)	(-25%)	(-2%)	(-13%)	(-20%)	(8%)	(-5%)	(15%)	(-0%)	(14%)	(4%)	(12%)	(-1%)	(40%)	(0%)	(-24%)	(-18%)	(-31%)	(-4%)	(5%)	(19%)	(-9%)	(-1%)
	Banks PP	ALL	8	24	-70	-11	-64	-29	-69	-64	-34	-37	-48	-50	-35	-36	-20	-22	-26	-27	-37	-16	-61	-24	-35	-18	-41	-26
			(5%)	(16%)	(-34%)	(-7%)	(-34%)	(-19%)	(-50%)	(-48%)	(-41%)	(-44%)	(-71%)	(-72%)	(-49%)	(-50%)	(-28%)	(-29%)	(-38%)	(-40%)	(-35%)	(-19%)	(-40%)	(-21%)	(-21%)	(-12%)	(-33%)	(-24%)
		DROUGHT	7	12	-63	-17	-73	-38	-55	-39	-4	-5	-40	-42	-27	-29	-11	-13	4	-2	-64	-40	-81	-19	-20	-5	-36	-20
			(3%)	(6%)	(-28%)	(-10%)	(-32%)	(-20%)	(-33%)	(-26%)	(-4%)	(-6%)	(-60%)	(-61%)	(-41%)	(-43%)	(-18%)	(-21%)	(8%)	(-4%)	(-44%)	(-33%)	(-36%)	(-11%)	(-10%)	(-3%)	(-25%)	(-16%)
	Jones PP	ALL	-33	-15	-95	-41	-54	-29	-43	-38	-35	-36	-34	-36	-30	-30	-26	-27	-25	-28	-39	-20	-35	-4	-59	-42	-42	-29
			(-22%)	(-11%)	(-51%)	(-31%)	(-35%)	(-22%)	(-37%)	(-34%)	(-43%)	(-44%)	(-45%)	(-46%)	(-37%)	(-37%)	(-32%)	(-32%)	(-36%)	(-39%)	(-35%)	(-22%)	(-24%)	(-3%)	(-38%)	(-30%)	(-36%)	(-28%)
		DROUGHT	-48	-41	-111	-63	-45	-25	-38	-25	-26	-26	-9	-10	-26	-26	-29	-30	-8	-18	-53	-25	-61	-7	-27	-16	-40	-26
			(-27%)	(-24%)	(-55%)	(-41%)	(-25%)	(-16%)	(-29%)	(-21%)	(-31%)	(-31%)	(-12%)	(-13%)	(-33%)	(-34%)	(-37%)	(-38%)	(-15%)	(-29%)	(-35%)	(-20%)	(-30%)	(-5%)	(-15%)	(-10%)	(-30%)	(-22%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-8. Period average change in chloride concentrations (mg/L) for Alternative 1A LLT relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 1 LLT	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	1	1	1	1	1	1	1	2	1	2	2	2	1	2	1	1	2	2	2	2	2	2	1	1	1	2
			(5%)	(6%)	(8%)	(8%)	(3%)	(4%)	(4%)	(8%)	(5%)	(8%)	(8%)	(10%)	(8%)	(8%)	(6%)	(7%)	(12%)	(13%)	(10%)	(10%)	(11%)	(10%)	(9%)	(9%)	(7%)	(8%)
		DROUGHT	1	1	1	1	1	1	0	1	-1	0	1	2	0	1	1	1	3	3	2	2	2	2	1	1	1	1
			(4%)	(4%)	(6%)	(6%)	(4%)	(4%)	(-0%)	(2%)	(-3%)	(0%)	(4%)	(8%)	(2%)	(5%)	(6%)	(8%)	(17%)	(18%)	(14%)	(14%)	(10%)	(10%)	(8%)	(8%)	(5%)	(7%)
	SJR at Buckley Cove	ALL	-8	-3	-16	-7	-35	-7	-45	-16	-30	-14	-28	-13	-6	2	3	10	-2	1	-16	-1	-14	6	-10	3	-17	-3
			(-8%)	(-3%)	(-15%)	(-7%)	(-25%)	(-7%)	(-28%)	(-12%)	(-21%)	(-11%)	(-20%)	(-10%)	(-6%)	(2%)	(3%)	(13%)	(-2%)	(1%)	(-15%)	(-1%)	(-13%)	(7%)	(-10%)	(4%)	(-15%)	(-3%)
		DROUGHT	-11	-2	-20	-5	-39	-7	-60	-20	-49	-24	-40	-20	-11	2	6	21	-12	21	-19	18	-21	30	-15	10	-24	2
			(-9%)	(-2%)	(-15%)	(-4%)	(-23%)	(-5%)	(-28%)	(-11%)	(-23%)	(-12%)	(-19%)	(-10%)	(-7%)	(1%)	(4%)	(19%)	(-10%)	(21%)	(-17%)	(24%)	(-17%)	(42%)	(-11%)	(9%)	(-16%)	(2%)
	Franks Tract	ALL	2	42	-60	20	-31	6	12	22	15	13	13	11	5	4	2	-1	11	3	-29	-2	-17	15	14	24	-5	13
			(1%)	(28%)	(-26%)	(13%)	(-15%)	(4%)	(9%)	(18%)	(24%)	(21%)	(34%)	(27%)	(17%)	(12%)	(6%)	(-2%)	(27%)	(7%)	(-22%)	(-2%)	(-11%)	(13%)	(7%)	(13%)	(-4%)	(13%)
		DROUGHT	-8	11	-68	0	-50	-17	-24	4	13	-3	13	8	6	5	12	3	32	7	-57	-18	-21	28	14	-13	-11	1
			(-3%)	(5%)	(-25%)	(-0%)	(-19%)	(-7%)	(-13%)	(2%)	(17%)	(-4%)	(34%)	(17%)	(21%)	(17%)	(38%)	(8%)	(78%)	(10%)	(-27%)	(-10%)	(-10%)	(16%)	(6%)	(-5%)	(-7%)	(1%)
	Old R. at Rock Slough	ALL	11	34	-46	19	-22	11	13	22	13	14	6	1	-5	-6	-6	-8	9	3	-18	0	-15	12	13	21	-4	10
			(7%)	(26%)	(-24%)	(15%)	(-12%)	(7%)	(10%)	(18%)	(19%)	(19%)	(11%)	(2%)	(-10%)	(-11%)	(-14%)	(-16%)	(23%)	(7%)	(-18%)	(0%)	(-12%)	(12%)	(8%)	(14%)	(-4%)	(11%)
		DROUGHT	3	4	-51	4	-43	-12	-16	10	7	3	8	1	5	2	7	1	24	5	-40	-14	-23	20	20	6	-8	2
			(2%)	(2%)	(-24%)	(2%)	(-19%)	(-6%)	(-9%)	(7%)	(8%)	(3%)	(13%)	(2%)	(8%)	(3%)	(18%)	(1%)	(62%)	(9%)	(-25%)	(-10%)	(-12%)	(14%)	(11%)	(3%)	(-6%)	(2%)
Western Delta	Sac. R. at Emmaton	ALL	-123	13	-60	32	36	13	15	-3	5	-16	16	1	24	9	63	38	91	52	122	109	192	145	182	149	47	45
			(-22%)	(3%)	(-11%)	(7%)	(12%)	(4%)	(12%)	(-2%)	(7%)	(-17%)	(45%)	(2%)	(67%)	(17%)	(69%)	(33%)	(49%)	(23%)	(55%)	(46%)	(57%)	(38%)	(33%)	(25%)	(18%)	(17%)
		DROUGHT	-182	-32	-85	-6	40	-14	18	-44	27	-35	25	7	36	17	140	73	200	88	284	225	233	138	30	-163	64	21
			(-23%)	(-5%)	(-11%)	(-1%)	(8%)	(-3%)	(9%)	(-17%)	(25%)	(-20%)	(56%)	(11%)	(99%)	(30%)	(119%)	(39%)	(82%)	(25%)	(86%)	(58%)	(52%)	(26%)	(4%)	(-17%)	(18%)	(5%)
	SJR at Antioch	ALL	-333	114	-383	-2	-76	18	-38	-44	-4	-43	47	2	65	21	111	56	131	52	66	146	225	244	216	336	2	75
			(-22%)	(11%)	(-26%)	(-0%)	(-7%)	(2%)	(-8%)	(-9%)	(-2%)	(-15%)	(39%)	(1%)	(58%)	(14%)	(44%)	(18%)	(27%)	(9%)	(8%)	(19%)	(21%)	(24%)	(15%)	(25%)	(0%)	(11%)
		DROUGHT	-410	44	-472	-105	-188	-59	-111	-191	16	-118	60	5	81	27	195	72	261	78	196	219	293	282	-9	-200	-7	5
			(-22%)	(3%)	(-25%)	(-7%)	(-13%)	(-4%)	(-16%)	(-24%)	(4%)	(-22%)	(37%)	(2%)	(57%)	(14%)	(52%)	(14%)	(38%)	(9%)	(16%)	(18%)	(23%)	(22%)	(-0%)	(-10%)	(-1%)	(0%)
	Sac. R. at Mallard Island	ALL	-457	202	-452	101	-52	93	-12	0	50	-19	174	57	251	121	376	218	344	158	280	388	442	448	400	679	112	204
			(-15%)	(8%)	(-15%)	(4%)	(-2%)	(4%)	(-1%)	(0%)	(6%)	(-2%)	(39%)	(10%)	(49%)	(19%)	(41%)	(20%)	(23%)	(9%)	(14%)	(20%)	(18%)	(18%)	(13%)	(25%)	(6%)	(12%)
		DROUGHT	-605	88	-598	26	-221	-20	-166	-244	100	-146	243	105	284	135	383	188	417	179	401	437	457	451	8	-161	59	87
			(-16%)	(3%)	(-16%)	(1%)	(-7%)	(-1%)	(-9%)	(-12%)	(7%)	(-9%)	(37%)	(13%)	(39%)	(15%)	(27%)	(12%)	(20%)	(8%)	(15%)	(16%)	(16%)	(16%)	(0%)	(-4%)	(2%)	(4%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	5	5	6	6	7	7	4	4	0	-1	-1	-2	-2	-1	-1	-1	0	0	1	2	2	3	5	5	2	2
			(28%)	(31%)	(34%)	(37%)	(41%)	(42%)	(20%)	(20%)	(1%)	(-6%)	(-5%)	(-8%)	(-9%)	(-7%)	(-6%)	(-7%)	(-1%)	(1%)	(8%)	(11%)	(14%)	(16%)	(28%)	(29%)	(12%)	(12%)
		DROUGHT	7	8	10	11	15	15	13	12	7	6	3	2	1	0	0	-2	2	2	5	6	7	7	9	9	7	6
			(39%)	(42%)	(56%)	(62%)	(88%)	(85%)	(69%)	(67%)	(34%)	(32%)	(15%)	(11%)	(5%)	(0%)	(2%)	(-7%)	(11%)	(13%)	(29%)	(32%)	(38%)	(38%)	(53%)	(53%)	(36%)	(34%)
	Contra Costa PP #1	ALL	18	40	-11	26	-33	21	-9	19	62	49	4	12	0	3	-15	-15	4	0	-6	1	-29	3	-2	12	-1	14
			(11%)	(29%)	(-7%)	(21%)	(-18%)	(17%)	(-5%)	(12%)	(57%)	(40%)	(5%)	(14%)	(-0%)	(3%)	(-22%)	(-22%)	(9%)	(1%)	(-7%)	(1%)	(-20%)	(3%)	(-2%)	(9%)	(-1%)	(14%)
		DROUGHT	14	20	-27	-11	-63	-7	-36	-39	4	-1	6	-3	3	-2	0	-6	19	4	-21	-16	-60	-3	11	30	-13	-3
			(7%)	(11%)	(-14%)	(-7%)	(-27%)	(-4%)	(-17%)	(-18%)	(4%)	(-1%)	(8%)	(-4%)	(4%)	(-2%)	(-1%)	(-9%)	(41%)	(7%)	(-16%)	(-13%)	(-27%)	(-2%)	(6%)	(19%)	(-9%)	(-2%)
	Banks PP	ALL	4	15	-39	-5	-46	-19	-67	-52	-31	-29	-55	-53	-37	-35	-17	-17	-13	-19	-15	-9	-31	-10	-15	-4	-30	-20
			(3%)	(15%)	(-30%)	(-5%)	(-32%)	(-17%)	(-48%)	(-42%)	(-31%)	(-29%)	(-62%)	(-62%)	(-45%)	(-44%)	(-23%)	(-23%)	(-21%)	(-27%)	(-21%)	(-14%)	(-30%)	(-12%)	(-14%)	(-4%)	(-30%)	(-21%)
		DROUGHT	6	10	-36	-11	-58	-32	-56	-38	-4	2	-89	-86	-65	-62	-30	-30	7	-4	-25	-14	-43	-4	-9	1	-33	-22
			(4%)	(8%)	(-23%)	(-9%)	(-32%)	(-21%)	(-33%)	(-24%)	(-3%)	(1%)	(-67%)	(-66%)	(-50%)	(-49%)	(-28%)	(-28%)	(10%)	(-5%)	(-25%)	(-16%)	(-28%)	(-4%)	(-7%)	(1%)	(-25%)	(-18%)
	Jones PP	ALL	-7	0	-48	-18	-43	-20	-46	-29	-41	-40	-28	-26	-27	-26	-23	-23	-11	-24	-14	-15	-13	2	-23	-15	-27	-19
			(-7%)	(-0%)	(-37%)	(-18%)	(-29%)	(-16%)	(-30%)	(-22%)	(-32%)	(-31%)	(-23%)	(-22%)	(-30%)	(-30%)	(-30%)	(-29%)	(-17%)	(-31%)	(-17%)	(-18%)	(-13%)	(3%)	(-22%)	(-15%)	(-25%)	(-19%)
		DROUGHT	-16	-19	-52	-29	-33	-12	-34	-11	-66	-62	-40	-37	-47	-48	-46	-44	-7	-19	-19	-10	-25	7	-5	1	-32	-24
			(-12%)	(-14%)	(-35%)	(-23%)	(-18%)	(-7%)	(-18%)	(-7%)	(-35%)	(-33%)	(-21%)	(-20%)	(-35%)	(-36%)	(-41%)	(-40%)	(-12%)	(-25%)	(-18%)	(-11%)	(-17%)	(6%)	(-3%)	(0%)	(-22%)	(-17%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-9. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 1A LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 1 LLT			Period Average Concentration mg/L			Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)		
	Location	Period [a]	Ex. Cond.	No Act. LLT	Alt 1 LLT	Ex. Cond.	No Act._LLT	Alt 1 LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	15.7	15.3	19.0	0	0	0
		DROUGHT	16.8	16.3	19.8	0	0	0
	SJR at Buckley Cove	ALL	82.9	77.2	78.8	0	0	0
		DROUGHT	86.5	76.5	79.7	0	0	0
	Franks Tract	ALL	173.8	146.4	166.6	34	22	30
		DROUGHT	212.8	190.9	191.7	47	35	38
	Old R. at Rock Slough	ALL	152.0	130.5	147.6	28	17	21
		DROUGHT	180.2	161.4	164.9	42	27	32
Western Delta	Sac. R. at Emmaton	ALL	368.9	366.5	431.9	44	44	50
		DROUGHT	516.4	559.3	583.9	55	60	67
	SJR at Antioch	ALL	1,087.3	974.2	1,071.1	66	73	74
		DROUGHT	1,400.6	1,345.6	1,341.4	82	87	90
	Sac. R. at Mallard Island	ALL	2,552.0	2,411.9	2,643.1	85	86	87
		DROUGHT	3,233.9	3,123.1	3,208.3	100	100	100
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	17.1	16.6	22.5	0	0	0
		DROUGHT	17.7	17.7	31.8	0	0	0
	Contra Costa PP #1	ALL	146.5	126.9	147.5	24	14	21
		DROUGHT	176.5	161.3	159.9	37	22	28
	Banks PP	ALL	123.4	108.5	82.8	4	2	1
		DROUGHT	143.7	128.0	108.2	7	2	2
	Jones PP	ALL	116.9	103.4	74.6	1	1	0
		DROUGHT	132.9	118.9	92.9	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-10. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 1A LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 1 LLT			Period Average Concentration (mg/L)			Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)		
	Location	Period [a]	Ex. Cond.	No Act. LLT	Alt 1 LLT	Ex. Cond.	No Act._LLT	Alt 1 LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	18	18	20	0	0	0
		DROUGHT	19	19	20	0	0	0
	SJR at Buckley Cove	ALL	116	102	99	0	0	0
		DROUGHT	155	128	131	0	0	0
	Franks Tract	ALL	120	102	115	14	8	9
		DROUGHT	153	140	141	22	15	17
	Old R. at Rock Slough	ALL	108	94	104	4	3	2
		DROUGHT	136	125	128	7	5	0
Western Delta	Sac. R. at Emmaton	ALL	258	260	305	36	32	44
		DROUGHT	364	406	428	50	55	62
	SJR at Antioch	ALL	757	684	759	61	65	71
		DROUGHT	1,002	990	995	80	82	85
	Sac. R. at Mallard Island	ALL	1,766	1,674	1,878	77	83	84
		DROUGHT	2,346	2,318	2,404	98	98	98
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	19	19	21	0	0	0
		DROUGHT	19	19	25	0	0	0
	Contra Costa PP #1	ALL	120	105	119	5	3	4
		DROUGHT	143	133	130	8	7	2
	Banks PP	ALL	102	91	72	1	1	0
		DROUGHT	134	123	101	2	2	0
	Jones PP	ALL	109	101	82	0	0	0
		DROUGHT	145	136	112	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-11. Alternative 1A use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 1 LLT	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-3	-3	-3	-3	-3	-2	-2	-1	-2
		DROUGHT	-1	-1	-1	-1	-1	-1	0	0	0	0	-1	-1	0	-1	-1	-1	-3	-3	-4	-4	-3	-3	-2	-2	-1	-2
	SJR at Buckley Cove	ALL	2	0	0	0	1	-2	2	-1	2	0	1	-1	2	-1	2	0	5	-1	6	-2	4	-3	3	0	2	-1
		DROUGHT	2	0	1	0	3	-2	4	-2	2	-1	2	-1	4	-1	4	-1	8	-3	7	-3	7	-6	4	-1	4	-2
	Franks Tract	ALL	-	-100	-	-100	-	-	-25	-23	-9	-6	-8	-6	-5	-4	-2	0	-6	-3	86	3	-	-24	-	-	9	-19
		DROUGHT	-	-	-	-	-	-	49	6	-7	3	-4	-2	-3	-2	-6	-1	-16	-3	-	-	-	-100	-	-	57	-1
	Old R. at Rock Slough	ALL	-100	-100	-	-85	-	-65	-20	-17	-9	-7	-6	-5	-1	0	3	4	-4	-2	35	1	46	-13	-100	-100	5	-14
		DROUGHT	-	-	-	-	-	-	26	-3	-5	-1	-4	-1	-3	-1	-4	-1	-11	-2	-	43	-	-57	-	-	22	-4
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	-24	16	-6	9	-7	-1	-14	-7	-62	-51	-100	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-100	-	-26	33	-11	-4	-20	-11	-100	-	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-31	-4	-66	-44	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-48	-6	-100	-100	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-6	-7	-9	-9	-8	-8	-4	-4	-1	0	1	1	1	1	2	1	2	2	1	0	0	-1	-5	-5	-2	-3
		DROUGHT	-9	-10	-14	-14	-15	-15	-11	-10	-5	-5	-2	-1	-1	0	0	1	0	0	-3	-4	-5	-5	-9	-9	-6	-6
	Contra Costa PP #1	ALL	-100	-100	-	-88	-	-44	5	-18	-33	-25	-9	-7	-6	-5	2	4	-3	0	14	2	-	-1	11	-23	-1	-17
		DROUGHT	-	-	-	-	-	23	94	-	-4	3	-3	0	-3	-1	-2	0	-9	0	65	38	-	34	-	-100	23	2
	Banks PP	ALL	-9	-24	-	10	-	30	63	56	20	23	27	28	19	20	12	12	14	15	25	9	61	18	42	18	32	18
		DROUGHT	-13	-21	-	25	-	65	69	41	2	3	22	23	14	16	6	7	-2	1	61	31	-	22	41	8	33	16
	Jones PP	ALL	33	13	-	34	56	24	32	27	20	22	20	21	18	18	15	16	14	16	28	13	32	3	62	37	32	20
		DROUGHT	67	53	-	65	60	26	32	19	16	16	5	6	15	15	17	18	4	10	55	20	-	7	37	20	34	20

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-12. Alternative 1A use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 1 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	-1	-1	0	0	0	-1	-1	-1	-1	-1	-1	-1	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1
	SJR at Buckley Cove	ALL	5	2	11	5	31	5	51	14	29	11	25	10	4	-1	-1	-5	2	-1	11	1	10	-4	7	-2	13	2
		DROUGHT	9	2	18	4	48	6	-	25	-	41	-	36	13	-2	-4	-15	11	-14	14	-11	16	-16	13	-7	26	-2
	Franks Tract	ALL	-4	-41	-	-20	74	-8	-10	-18	-8	-7	-6	-5	-2	-2	-1	0	-5	-2	24	1	17	-12	-23	-34	4	-9
		DROUGHT	40	-29	-	1	-	-	34	-4	-7	2	-6	-4	-3	-2	-5	-2	-16	-4	-	23	86	-38	-85	-	12	-1
	Old R. at Rock Slough	ALL	-12	-29	73	-15	32	-10	-11	-18	-8	-8	-3	-1	2	3	3	4	-4	-2	12	0	12	-8	-13	-20	3	-7
		DROUGHT	-5	-7	-	-4	-	22	21	-9	-5	-2	-4	-1	-2	-1	-4	0	-11	-3	46	12	38	-20	-33	-12	7	-2
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	-13	3	-3	10	-7	0	-11	-4	-40	-28	-100	-100	-100	-100	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-32	-	-19	44	-12	-4	-17	-9	-100	-100	-100	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-36	-3	-47	-22	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-69	-15	-76	-52	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-2	-2	-3	-3	-3	-3	-2	-2	0	1	0	1	1	1	1	1	0	0	-1	-1	-1	-1	-2	-2	-1	-1
		DROUGHT	-3	-3	-4	-5	-6	-6	-5	-5	-3	-3	-1	-1	0	0	0	1	-1	-1	-2	-2	-3	-3	-4	-4	-3	-3
	Contra Costa PP #1	ALL	-20	-35	13	-20	48	-17	14	-20	-44	-38	-3	-7	0	-1	8	8	-2	0	4	-1	26	-2	2	-10	1	-10
		DROUGHT	-26	-33	45	15	-	9	89	-	-3	0	-4	2	-2	1	0	3	-9	-2	17	13	-	3	-14	-31	12	2
	Banks PP	ALL	-3	-10	33	3	43	15	59	41	21	19	34	32	22	21	10	10	7	10	9	5	21	6	11	2	20	12
		DROUGHT	-5	-9	36	9	84	34	71	39	4	-2	77	72	54	50	21	21	-4	2	17	9	46	3	8	-1	29	18
	Jones PP	ALL	5	0	39	12	43	16	47	25	33	32	21	20	16	16	13	13	6	14	8	9	9	-1	16	10	19	13
		DROUGHT	14	16	52	24	48	13	58	13	-	96	71	64	41	42	34	32	4	11	14	7	24	-5	4	0	31	21

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-13. Period average change in chloride concentrations (mg/L) for Alternative 2A LLT relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 2 LLT	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	3	4	3	3	2	2	2	3	2	3	3	4	3	3	3	3	6	7	6	7	6	6	4	4	4	4
			(29%)	(31%)	(28%)	(26%)	(12%)	(14%)	(9%)	(15%)	(10%)	(16%)	(19%)	(22%)	(20%)	(23%)	(16%)	(20%)	(32%)	(40%)	(31%)	(38%)	(46%)	(45%)	(34%)	(34%)	(23%)	(26%)
		DROUGHT	3	3	3	3	1	2	1	2	0	1	2	3	1	2	2	3	7	8	10	10	7	6	4	5	3	4
			(27%)	(27%)	(25%)	(24%)	(10%)	(12%)	(4%)	(8%)	(0%)	(5%)	(11%)	(18%)	(6%)	(13%)	(10%)	(17%)	(38%)	(44%)	(57%)	(58%)	(46%)	(41%)	(32%)	(34%)	(21%)	(24%)
	SJR at Buckley Cove	ALL	-2	1	0	1	-2	4	-2	3	-2	2	-1	2	-3	2	-3	2	-6	4	-8	4	-9	4	-4	1	-3	2
			(-2%)	(1%)	(0%)	(1%)	(-3%)	(5%)	(-2%)	(4%)	(-2%)	(3%)	(-2%)	(3%)	(-3%)	(2%)	(-4%)	(2%)	(-7%)	(5%)	(-9%)	(6%)	(-10%)	(5%)	(-5%)	(1%)	(-4%)	(3%)
		DROUGHT	-2	1	-2	1	-5	4	-6	4	-3	3	-3	3	-5	4	-6	4	-10	8	-10	7	-15	7	-6	2	-6	4
			(-2%)	(2%)	(-3%)	(1%)	(-6%)	(5%)	(-6%)	(5%)	(-3%)	(3%)	(-3%)	(4%)	(-6%)	(5%)	(-7%)	(5%)	(-12%)	(11%)	(-11%)	(10%)	(-15%)	(10%)	(-7%)	(2%)	(-7%)	(5%)
	Franks Tract	ALL	-90	-23	-194	-60	-103	-58	-27	-30	3	-3	13	10	12	9	10	5	18	12	-42	4	-21	26	-26	-10	-37	-10
			(-31%)	(-10%)	(-51%)	(-24%)	(-35%)	(-23%)	(-17%)	(-19%)	(5%)	(-5%)	(34%)	(24%)	(31%)	(21%)	(21%)	(10%)	(34%)	(19%)	(-22%)	(3%)	(-9%)	(14%)	(-9%)	(-4%)	(-21%)	(-7%)
		DROUGHT	-75	-37	-172	-56	-78	-38	-21	-2	4	-13	9	4	9	6	15	4	39	12	-89	-21	-43	34	17	-16	-32	-10
			(-21%)	(-12%)	(-39%)	(-17%)	(-21%)	(-11%)	(-10%)	(-1%)	(6%)	(-16%)	(33%)	(12%)	(39%)	(26%)	(50%)	(9%)	(76%)	(16%)	(-29%)	(-9%)	(-13%)	(14%)	(5%)	(-4%)	(-15%)	(-5%)
	Old R. at Rock Slough	ALL	-46	-5	-149	-39	-86	-42	-26	-29	4	0	10	6	5	2	3	0	15	11	-27	6	-17	22	-11	0	-27	-6
			(-19%)	(-2%)	(-48%)	(-20%)	(-33%)	(-20%)	(-17%)	(-18%)	(5%)	(0%)	(21%)	(13%)	(9%)	(3%)	(4%)	(-0%)	(28%)	(19%)	(-18%)	(5%)	(-9%)	(15%)	(-4%)	(0%)	(-18%)	(-4%)
		DROUGHT	-33	-23	-129	-33	-60	-14	-22	-4	0	-7	7	1	7	4	10	4	31	11	-63	-15	-39	28	29	13	-22	-3
			(-11%)	(-8%)	(-37%)	(-13%)	(-19%)	(-5%)	(-12%)	(-3%)	(0%)	(-9%)	(18%)	(2%)	(21%)	(11%)	(32%)	(10%)	(71%)	(18%)	(-26%)	(-8%)	(-14%)	(13%)	(10%)	(4%)	(-12%)	(-2%)
Western Delta	Sac. R. at Emmaton	ALL	-356	-152	-208	-74	-22	-72	-27	-60	10	-16	17	3	29	13	65	35	89	51	149	145	254	184	-65	-93	-5	-3
			(-42%)	(-24%)	(-23%)	(-10%)	(-5%)	(-15%)	(-17%)	(-32%)	(15%)	(-17%)	(58%)	(7%)	(76%)	(23%)	(54%)	(24%)	(40%)	(20%)	(45%)	(44%)	(54%)	(34%)	(-8%)	(-11%)	(-1%)	(-1%)
		DROUGHT	-375	-136	-270	-157	-37	-131	-24	-106	42	-22	23	9	41	20	156	84	186	85	350	294	277	160	12	-235	32	-11
			(-33%)	(-15%)	(-22%)	(-14%)	(-5%)	(-17%)	(-11%)	(-34%)	(38%)	(-13%)	(51%)	(15%)	(83%)	(29%)	(88%)	(34%)	(61%)	(21%)	(74%)	(56%)	(47%)	(22%)	(1%)	(-17%)	(6%)	(-2%)
	SJR at Antioch	ALL	-1049	-391	-948	-398	-310	-246	-180	-218	-28	-81	39	1	58	17	76	21	108	40	42	199	279	286	-376	-163	-191	-78
			(-48%)	(-25%)	(-39%)	(-21%)	(-21%)	(-18%)	(-30%)	(-34%)	(-11%)	(-25%)	(35%)	(1%)	(41%)	(9%)	(21%)	(5%)	(18%)	(6%)	(3%)	(18%)	(19%)	(19%)	(-18%)	(-9%)	(-18%)	(-8%)
		DROUGHT	-1026	-327	-1040	-504	-392	-283	-221	-344	0	-141	41	3	71	21	167	62	216	81	142	253	297	301	-81	-288	-152	-97
			(-38%)	(-17%)	(-34%)	(-20%)	(-19%)	(-14%)	(-26%)	(-36%)	(-0%)	(-26%)	(26%)	(1%)	(36%)	(8%)	(30%)	(9%)	(26%)	(8%)	(8%)	(16%)	(18%)	(18%)	(-3%)	(-10%)	(-11%)	(-7%)
	Sac. R. at Mallard Island	ALL	-1292	-481	-940	-316	-302	-239	-202	-212	40	-42	151	70	217	131	254	136	243	127	248	480	452	450	-492	-45	-135	5
			(-28%)	(-13%)	(-19%)	(-7%)	(-9%)	(-7%)	(-12%)	(-13%)	(4%)	(-4%)	(33%)	(13%)	(29%)	(16%)	(18%)	(9%)	(13%)	(6%)	(8%)	(17%)	(13%)	(13%)	(-12%)	(-1%)	(-5%)	(0%)
		DROUGHT	-1346	-417	-1234	-477	-460	-326	-266	-392	102	-113	183	120	221	145	225	175	245	168	272	462	400	424	-102	-199	-147	-36
			(-25%)	(-9%)	(-20%)	(-9%)	(-10%)	(-7%)	(-11%)	(-15%)	(6%)	(-6%)	(26%)	(16%)	(20%)	(12%)	(11%)	(8%)	(10%)	(7%)	(7%)	(13%)	(11%)	(11%)	(-2%)	(-4%)	(-5%)	(-1%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	8	10	14	14	15	15	7	7	1	-1	-2	-3	-3	-2	-4	-4	-5	-4	-3	-1	1	2	9	9	3	4
			(50%)	(63%)	(93%)	(102%)	(111%)	(110%)	(50%)	(49%)	(5%)	(-6%)	(-12%)	(-16%)	(-21%)	(-16%)	(-25%)	(-24%)	(-26%)	(-21%)	(-13%)	(-3%)	(3%)	(10%)	(46%)	(51%)	(18%)	(21%)
		DROUGHT	14	16	26	27	30	29	20	20	10	9	3	2	1	0	-1	-4	-1	0	5	7	10	10	19	19	11	11
			(65%)	(82%)	(158%)	(186%)	(239%)	(218%)	(164%)	(155%)	(71%)	(64%)	(22%)	(15%)	(4%)	(-1%)	(-8%)	(-22%)	(-6%)	(-1%)	(24%)	(34%)	(45%)	(46%)	(85%)	(85%)	(64%)	(63%)
	Contra Costa PP #1	ALL	-29	5	-91	-28	-96	-23	-45	-25	3	-14	12	8	9	6	0	-2	11	6	-11	4	-36	11	-6	8	-23	-4
			(-12%)	(3%)	(-36%)	(-15%)	(-41%)	(-14%)	(-25%)	(-16%)	(4%)	(-14%)	(22%)	(14%)	(17%)	(11%)	(1%)	(-3%)	(19%)	(9%)	(-9%)	(4%)	(-17%)	(7%)	(-3%)	(4%)	(-16%)	(-3%)
		DROUGHT	-21	-8	-74	-45	-107	-37	-52	-70	-1	-13	5	-2	6	1	6	1	23	5	-33	-20	-91	-1	17	47	-27	-12
			(-7%)	(-3%)	(-25%)	(-17%)	(-36%)	(-16%)	(-24%)	(-29%)	(-2%)	(-14%)	(10%)	(-5%)	(13%)	(3%)	(15%)	(2%)	(52%)	(8%)	(-18%)	(-12%)	(-29%)	(-1%)	(7%)	(21%)	(-15%)	(-7%)
	Banks PP	ALL	-39	-22	-118	-59	-105	-70	-85	-80	-43	-46	-41	-43	-43	-44	-20	-21	-24	-26	-40	-19	-58	-21	-62	-46	-56	-41
			(-23%)	(-15%)	(-59%)	(-41%)	(-55%)	(-45%)	(-61%)	(-59%)	(-52%)	(-54%)	(-61%)	(-62%)	(-60%)	(-61%)	(-27%)	(-29%)	(-36%)	(-38%)	(-38%)	(-23%)	(-38%)	(-19%)	(-37%)	(-30%)	(-45%)	(-37%)
		DROUGHT	-10	-5	-89	-44	-99	-65	-100	-84	-30	-31	-35	-37	-27	-30	-9	-11	-4	-11	-62	-38	-86	-24	-6	10	-42	-26
			(-5%)	(-2%)	(-40%)	(-25%)	(-44%)	(-34%)	(-59%)	(-55%)	(-32%)	(-33%)	(-53%)	(-54%)	(-42%)	(-44%)	(-14%)	(-18%)	(-8%)	(-18%)	(-43%)	(-31%)	(-38%)	(-15%)	(-3%)	(5%)	(-29%)	(-21%)
	Jones PP	ALL	-59	-41	-108	-53	-90	-65	-66	-61	-41	-43	-45	-47	-39	-39	-37	-38	-28	-31	-41	-23	-26	5	-62	-45	-53	-40
			(-39%)	(-31%)	(-58%)	(-41%)	(-58%)	(-50%)	(-57%)	(-55%)	(-51%)	(-52%)	(-59%)	(-60%)	(-48%)	(-48%)	(-45%)	(-46%)	(-42%)	(-44%)	(-37%)	(-24%)	(-18%)	(5%)	(-40%)	(-33%)	(-45%)	(-38%)
		DROUGHT	-50	-44	-91	-43	-89	-69	-78	-65	-12	-12	-29	-30	-24	-25	-36	-38	-2	-12	-77	-49	-50	3	-6	4	-44	-30
			(-28%)	(-25%)	(-45%)	(-28%)	(-51%)	(-44%)	(-59%)	(-54%)	(-14%)	(-14%)	(-37%)	(-38%)	(-31%)	(-32%)	(-47%)	(-48%)	(-3%)	(-19%)	(-51%)	(-39%)	(-25%)	(2%)	(-3%)	(2%)	(-33%)	(-25%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-14. Period average change in chloride concentrations (mg/L) for Alternative 2A LLT relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 2 LLT	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	1	1	1	1	1	1	1	2	2	2	2	3	2	2	1	2	2	2	1	2	2	2	1	1	2	2
			(8%)	(8%)	(9%)	(8%)	(4%)	(5%)	(5%)	(9%)	(7%)	(10%)	(11%)	(12%)	(11%)	(12%)	(8%)	(9%)	(13%)	(14%)	(9%)	(10%)	(11%)	(10%)	(8%)	(7%)	(8%)	(9%)
		DROUGHT	1	1	1	1	1	1	0	1	0	1	1	2	1	1	1	2	3	3	2	2	2	2	1	1	1	2
			(7%)	(8%)	(7%)	(7%)	(3%)	(4%)	(1%)	(4%)	(-1%)	(2%)	(6%)	(10%)	(4%)	(7%)	(7%)	(9%)	(16%)	(17%)	(14%)	(14%)	(10%)	(10%)	(8%)	(8%)	(6%)	(8%)
	SJR at Buckley Cove	ALL	-3	1	-11	-2	-31	-4	-36	-8	-20	-4	-18	-3	-6	2	1	8	3	6	-6	9	-4	16	-5	8	-11	3
			(-3%)	(1%)	(-10%)	(-2%)	(-23%)	(-3%)	(-22%)	(-6%)	(-14%)	(-3%)	(-13%)	(-3%)	(-6%)	(2%)	(2%)	(12%)	(3%)	(7%)	(-6%)	(10%)	(-3%)	(19%)	(-5%)	(9%)	(-10%)	(3%)
		DROUGHT	-5	4	-16	0	-38	-5	-50	-10	-33	-8	-26	-6	-13	1	3	18	-8	25	-4	33	-4	47	-7	18	-17	10
			(-4%)	(4%)	(-11%)	(-0%)	(-23%)	(-4%)	(-24%)	(-6%)	(-15%)	(-4%)	(-12%)	(-3%)	(-8%)	(1%)	(2%)	(16%)	(-6%)	(26%)	(-4%)	(44%)	(-3%)	(66%)	(-5%)	(17%)	(-11%)	(8%)
	Franks Tract	ALL	-56	-17	-118	-38	-80	-43	-31	-21	2	0	11	9	10	8	8	6	16	8	-24	3	-12	20	-13	-3	-24	-6
			(-30%)	(-11%)	(-51%)	(-25%)	(-38%)	(-25%)	(-23%)	(-17%)	(3%)	(0%)	(29%)	(22%)	(31%)	(25%)	(25%)	(16%)	(39%)	(17%)	(-19%)	(3%)	(-8%)	(17%)	(-7%)	(-2%)	(-20%)	(-6%)
		DROUGHT	-45	-25	-104	-36	-67	-33	-30	-2	3	-13	16	10	14	13	18	9	41	15	-50	-11	-22	28	18	-9	-17	-5
			(-19%)	(-12%)	(-39%)	(-18%)	(-25%)	(-14%)	(-17%)	(-2%)	(5%)	(-14%)	(40%)	(23%)	(48%)	(43%)	(57%)	(23%)	(97%)	(22%)	(-23%)	(-6%)	(-10%)	(16%)	(8%)	(-3%)	(-11%)	(-3%)
	Old R. at Rock Slough	ALL	-26	-2	-85	-21	-62	-30	-22	-13	4	4	7	2	3	2	3	1	14	9	-14	5	-10	17	-1	7	-16	-2
			(-17%)	(-2%)	(-45%)	(-17%)	(-35%)	(-20%)	(-17%)	(-10%)	(5%)	(6%)	(14%)	(4%)	(7%)	(5%)	(6%)	(3%)	(36%)	(19%)	(-13%)	(5%)	(-8%)	(17%)	(-1%)	(5%)	(-15%)	(-2%)
		DROUGHT	-15	-14	-73	-18	-50	-19	-27	-1	-1	-5	11	4	13	10	14	7	32	14	-33	-6	-21	22	25	10	-10	0
			(-8%)	(-7%)	(-34%)	(-11%)	(-22%)	(-9%)	(-16%)	(-1%)	(-1%)	(-5%)	(18%)	(6%)	(23%)	(17%)	(33%)	(15%)	(85%)	(25%)	(-20%)	(-5%)	(-11%)	(15%)	(13%)	(5%)	(-8%)	(0%)
Western Delta	Sac. R. at Emmaton	ALL	-253	-116	-165	-73	-41	-64	-33	-51	-1	-23	16	1	24	9	53	28	85	47	119	105	189	143	-27	-60	-3	-5
			(-44%)	(-27%)	(-30%)	(-16%)	(-13%)	(-19%)	(-25%)	(-35%)	(-2%)	(-24%)	(46%)	(2%)	(68%)	(18%)	(58%)	(24%)	(46%)	(21%)	(53%)	(44%)	(57%)	(37%)	(-5%)	(-10%)	(-1%)	(-2%)
		DROUGHT	-257	-107	-201	-122	-59	-113	-35	-97	26	-36	26	9	36	17	138	71	198	85	294	235	239	144	34	-159	36	-6
			(-33%)	(-17%)	(-26%)	(-17%)	(-12%)	(-21%)	(-18%)	(-38%)	(23%)	(-21%)	(59%)	(14%)	(98%)	(30%)	(117%)	(38%)	(81%)	(24%)	(89%)	(60%)	(54%)	(27%)	(4%)	(-16%)	(10%)	(-2%)
	SJR at Antioch	ALL	-732	-285	-666	-285	-293	-199	-178	-184	-57	-95	37	-7	55	11	76	21	122	43	67	146	228	247	-218	-97	-130	-57
			(-49%)	(-27%)	(-45%)	(-26%)	(-29%)	(-21%)	(-36%)	(-37%)	(-22%)	(-32%)	(31%)	(-4%)	(49%)	(7%)	(30%)	(7%)	(25%)	(8%)	(8%)	(19%)	(22%)	(24%)	(-15%)	(-7%)	(-17%)	(-8%)
		DROUGHT	-711	-257	-722	-355	-373	-244	-229	-309	-35	-169	57	2	75	20	186	63	271	88	196	220	293	281	-2	-193	-83	-71
			(-39%)	(-19%)	(-38%)	(-23%)	(-25%)	(-18%)	(-32%)	(-39%)	(-9%)	(-32%)	(35%)	(1%)	(52%)	(10%)	(49%)	(13%)	(40%)	(10%)	(16%)	(18%)	(23%)	(22%)	(-0%)	(-10%)	(-8%)	(-7%)
	Sac. R. at Mallard Island	ALL	-1096	-436	-887	-335	-393	-247	-261	-249	-56	-125	162	44	220	91	258	100	290	104	263	371	439	445	-302	-22	-114	-22
			(-36%)	(-18%)	(-30%)	(-14%)	(-18%)	(-12%)	(-21%)	(-20%)	(-7%)	(-14%)	(36%)	(8%)	(43%)	(14%)	(28%)	(9%)	(20%)	(6%)	(13%)	(19%)	(18%)	(18%)	(-10%)	(-1%)	(-6%)	(-1%)
		DROUGHT	-1097	-404	-1037	-413	-538	-338	-377	-455	4	-243	229	91	264	116	358	163	416	179	401	436	454	449	20	-149	-75	-47
			(-30%)	(-13%)	(-27%)	(-13%)	(-17%)	(-11%)	(-19%)	(-22%)	(0%)	(-15%)	(35%)	(11%)	(36%)	(13%)	(25%)	(10%)	(20%)	(8%)	(15%)	(16%)	(16%)	(15%)	(1%)	(-4%)	(-3%)	(-2%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	3	3	4	4	5	5	2	2	-1	-2	-2	-2	-2	-2	-2	-2	0	0	1	2	2	3	4	4	1	1
			(16%)	(19%)	(20%)	(23%)	(30%)	(31%)	(11%)	(12%)	(-3%)	(-9%)	(-7%)	(-10%)	(-12%)	(-9%)	(-8%)	(-8%)	(-1%)	(0%)	(7%)	(10%)	(14%)	(15%)	(23%)	(24%)	(7%)	(7%)
		DROUGHT	5	5	8	8	13	12	10	10	6	5	3	2	0	-1	0	-2	2	2	5	5	7	7	9	9	5	5
			(27%)	(29%)	(43%)	(48%)	(73%)	(71%)	(55%)	(53%)	(29%)	(27%)	(13%)	(9%)	(1%)	(-4%)	(-1%)	(-10%)	(9%)	(11%)	(26%)	(28%)	(37%)	(37%)	(48%)	(48%)	(29%)	(28%)
	Contra Costa PP #1	ALL	-15	7	-52	-15	-74	-20	-49	-21	11	-2	-2	5	1	3	-9	-8	9	5	-2	6	-23	8	-3	11	-17	-2
			(-10%)	(5%)	(-33%)	(-12%)	(-41%)	(-16%)	(-27%)	(-14%)	(10%)	(-1%)	(-2%)	(6%)	(1%)	(4%)	(-13%)	(-12%)	(18%)	(9%)	(-2%)	(7%)	(-16%)	(8%)	(-2%)	(9%)	(-14%)	(-2%)
		DROUGHT	-8	-2	-41	-26	-84	-28	-64	-67	-4	-9	5	-4	8	3	5	-1	24	10	-12	-7	-56	1	13	32	-18	-8
			(-4%)	(-1%)	(-22%)	(-15%)	(-37%)	(-16%)	(-30%)	(-31%)	(-4%)	(-8%)	(7%)	(-4%)	(11%)	(4%)	(8%)	(-1%)	(52%)	(16%)	(-10%)	(-6%)	(-25%)	(1%)	(8%)	(21%)	(-13%)	(-6%)
	Banks PP	ALL	-21	-9	-66	-32	-70	-44	-83	-69	-47	-44	-42	-41	-41	-39	-8	-8	-12	-18	-18	-12	-30	-9	-32	-21	-38	-28
			(-19%)	(-9%)	(-50%)	(-33%)	(-49%)	(-37%)	(-60%)	(-56%)	(-46%)	(-44%)	(-48%)	(-47%)	(-49%)	(-48%)	(-11%)	(-11%)	(-19%)	(-25%)	(-25%)	(-18%)	(-30%)	(-12%)	(-29%)	(-21%)	(-38%)	(-31%)
		DROUGHT	-3	2	-50	-25	-77	-51	-105	-87	-53	-47	-81	-78	-64	-61	-18	-18	-2	-14	-23	-12	-48	-9	2	12	-39	-28
			(-2%)	(1%)	(-33%)	(-20%)	(-42%)	(-33%)	(-61%)	(-57%)	(-39%)	(-36%)	(-61%)	(-60%)	(-49%)	(-48%)	(-17%)	(-17%)	(-3%)	(-17%)	(-22%)	(-13%)	(-31%)	(-8%)	(2%)	(10%)	(-29%)	(-23%)
	Jones PP	ALL	-34	-27	-59	-29	-67	-44	-82	-65	-58	-57	-63	-61	-28	-27	-28	-28	-15	-28	-16	-17	-10	5	-30	-22	-41	-33
			(-31%)	(-26%)	(-45%)	(-29%)	(-44%)	(-34%)	(-54%)	(-49%)	(-46%)	(-45%)	(-53%)	(-52%)	(-32%)	(-31%)	(-37%)	(-36%)	(-23%)	(-36%)	(-20%)	(-21%)	(-10%)	(5%)	(-28%)	(-22%)	(-37%)	(-33%)
		DROUGHT	-26	-29	-45	-22	-67	-46	-117	-94	-55	-51	-98	-95	-35	-36	-52	-50	0	-11	-41	-32	-22	9	7	12	-44	-35
			(-20%)	(-22%)	(-30%)	(-17%)	(-37%)	(-29%)	(-61%)	(-56%)	(-29%)	(-28%)	(-50%)	(-50%)	(-26%)	(-27%)	(-46%)	(-45%)	(1%)	(-15%)	(-38%)	(-32%)	(-15%)	(8%)	(5%)	(10%)	(-30%)	(-26%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-15. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 2A LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 2 LLT			Period Average Concentration mg/L			Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)		
	Location	Period [a]	Ex. Cond.	No Act. LLT	Alt 2 LLT	Ex. Cond.	No Act._LLT	Alt 2 LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	15.7	15.3	19.4	0	0	0
		DROUGHT	16.8	16.3	20.2	0	0	0
	SJR at Buckley Cove	ALL	82.9	77.2	79.5	0	0	0
		DROUGHT	86.5	76.5	80.5	0	0	0
	Franks Tract	ALL	173.8	146.4	136.6	34	22	19
		DROUGHT	212.8	190.9	180.8	47	35	35
	Old R. at Rock Slough	ALL	152.0	130.5	124.9	28	17	15
		DROUGHT	180.2	161.4	158.4	42	27	30
Western Delta	Sac. R. at Emmaton	ALL	368.9	366.5	363.6	44	44	44
		DROUGHT	516.4	559.3	548.2	55	60	63
	SJR at Antioch	ALL	1087.3	974.2	896.5	66	73	70
		DROUGHT	1400.6	1345.6	1248.4	82	87	85
	Sac. R. at Mallard Island	ALL	2552.0	2411.9	2416.8	85	86	88
		DROUGHT	3233.9	3123.1	3087.2	100	100	100
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	17.1	16.6	20.2	0	0	0
		DROUGHT	17.7	17.7	29.0	0	0	0
	Contra Costa PP #1	ALL	146.5	126.9	123.3	24	14	12
		DROUGHT	176.5	161.3	149.5	37	22	23
	Banks PP	ALL	123.4	108.5	67.9	4	2	1
		DROUGHT	143.7	128.0	101.7	7	2	2
	Jones PP	ALL	116.9	103.4	63.8	1	1	0
		DROUGHT	132.9	118.9	89.3	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-16. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 2A LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 2 LLT			Period Average Concentration (mg/L)			Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)		
	Location	Period [a]	Ex. Cond.	No Act. LLT	Alt 2 LLT	Ex. Cond.	No Act._LLT	Alt 2 LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	18	18	20	0	0	0
		DROUGHT	19	19	21	0	0	0
	SJR at Buckley Cove	ALL	116	102	104	0	0	0
		DROUGHT	155	128	138	0	0	0
	Franks Tract	ALL	120	102	96	14	8	8
		DROUGHT	153	140	135	22	15	17
	Old R. at Rock Slough	ALL	108	94	92	4	3	2
		DROUGHT	136	125	126	7	5	2
Western Delta	Sac. R. at Emmaton	ALL	258	260	255	36	32	36
		DROUGHT	364	406	400	50	55	57
	SJR at Antioch	ALL	757	684	627	61	65	64
		DROUGHT	1002	990	919	80	82	78
	Sac. R. at Mallard Island	ALL	1766	1674	1653	77	83	83
		DROUGHT	2346	2318	2271	98	98	98
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	19	19	20	0	0	0
		DROUGHT	19	19	24	0	0	0
	Contra Costa PP #1	ALL	120	105	103	5	3	3
		DROUGHT	143	133	125	8	7	3
	Banks PP	ALL	102	91	63	1	1	0
		DROUGHT	134	123	95	2	2	0
	Jones PP	ALL	109	101	68	0	0	0
		DROUGHT	145	136	101	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-17. Alternative 2A use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 2 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-1	-1	-1	-1	-3	-3	-2	-3	-3	-3	-2	-2	-2	-2
		DROUGHT	-1	-1	-1	-1	-1	-1	0	-1	0	0	-1	-1	0	-1	-1	-1	-3	-3	-4	-4	-3	-3	-2	-2	-1	-2
	SJR at Buckley Cove	ALL	1	0	0	0	1	-2	1	-2	1	-1	1	-1	2	-1	2	-1	4	-2	5	-2	5	-2	2	0	2	-1
		DROUGHT	1	-1	1	-1	3	-2	3	-2	2	-1	2	-2	3	-2	4	-2	7	-5	6	-4	9	-4	4	-1	4	-2
	Franks Tract	ALL	-	91	-	-	-	-	29	33	-1	2	-6	-5	-6	-4	-5	-3	-9	-6	73	-4	-	-39	-	-	49	10
		DROUGHT	-	-	-	-	-	-	45	3	-2	8	-4	-2	-4	-3	-7	-2	-20	-7	-	-	-	-100	-	-	86	17
	Old R. at Rock Slough	ALL	-	9	-	80	-	-	26	30	-2	0	-5	-3	-2	-1	-1	0	-8	-6	28	-5	29	-23	-	-2	28	5
		DROUGHT	-	-	-	-	-	-	37	6	0	4	-3	0	-3	-2	-5	-2	-15	-6	-	25	-	-67	-	-	31	3
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	27	94	-6	10	-8	-1	-14	-6	-50	-36	-100	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	98	-	-29	28	-11	-5	-20	-11	-100	-	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-29	-1	-54	-25	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-47	-5	-100	-100	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-4	-4	-6	-6	-6	-6	-3	-3	0	0	1	1	1	1	2	2	2	2	1	0	0	-1	-4	-4	-1	-2
		DROUGHT	-6	-7	-11	-12	-13	-12	-9	-8	-4	-4	-1	-1	0	0	1	2	1	0	-2	-3	-5	-5	-8	-8	-5	-5
	Contra Costa PP #1	ALL	-	-12	-	45	-	27	64	28	-2	9	-6	-4	-5	-3	0	1	-5	-3	9	-3	78	-12	19	-17	22	3
		DROUGHT	-	-	-	-	-	-	-	-	1	8	-2	1	-3	-1	-3	0	-11	-3	49	24	-	6	-	-100	37	13
	Banks PP	ALL	46	22	-	56	-	73	77	69	25	28	23	24	24	25	11	12	13	14	28	11	58	16	76	47	44	29
		DROUGHT	19	8	-	63	-	-	-	87	19	20	19	20	15	16	4	6	2	6	60	30	-	28	11	-15	39	22
	Jones PP	ALL	60	36	-	45	94	53	49	43	24	26	26	27	23	23	22	23	16	18	30	14	24	-4	66	40	40	27
		DROUGHT	71	57	-	44	-	73	66	49	7	7	17	18	14	15	21	22	1	6	80	39	-	-3	9	-5	37	23

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

– Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-18. Alternative 2A use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 2 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-1	-1	-1	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	-1
		DROUGHT	-1	-1	-1	-1	0	0	0	0	0	0	-1	-1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
	SJR at Buckley Cove	ALL	2	-1	8	1	28	3	41	6	19	3	17	3	4	-1	-1	-5	-2	-4	4	-6	2	-10	3	-5	9	-2
		DROUGHT	4	-3	14	0	47	5	-	13	100	14	75	10	15	-1	-2	-13	7	-16	3	-19	3	-26	6	-13	18	-8
	Franks Tract	ALL	91	17	-	38	-	55	27	17	-1	0	-5	-4	-4	-4	-4	-3	-8	-4	20	-2	12	-16	22	4	18	4
		DROUGHT	-	66	-	75	-	-	43	3	-2	8	-7	-5	-7	-6	-8	-4	-20	-8	-	14	88	-37	-100	-	18	4
	Old R. at Rock Slough	ALL	27	2	-	16	90	29	19	10	-2	-2	-3	-1	-2	-1	-1	-1	-7	-4	9	-3	8	-11	1	-7	11	1
		DROUGHT	24	21	-	20	-	35	35	1	0	3	-6	-2	-7	-5	-7	-4	-15	-7	37	5	35	-22	-40	-21	9	0
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	27	50	1	14	-8	-1	-11	-5	-33	-21	-100	-100	-100	-100	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	62	-	-18	45	-13	-5	-17	-9	-100	-100	-100	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-29	8	-40	-12	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-65	-5	-70	-39	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-1	-1	-2	-2	-2	-2	-1	-1	0	1	1	1	1	1	1	1	0	0	-1	-1	-1	-1	-2	-2	-1	-1
		DROUGHT	-2	-2	-3	-4	-5	-5	-4	-4	-3	-2	-1	-1	0	0	0	1	-1	-1	-2	-2	-3	-3	-4	-4	-2	-2
	Contra Costa PP #1	ALL	17	-6	57	12	-	16	74	23	-8	1	1	-3	0	-2	5	4	-4	-2	1	-3	21	-6	3	-9	13	1
		DROUGHT	14	4	68	34	-	37	-	-	3	7	-3	2	-5	-2	-2	0	-12	-5	10	6	-	-2	-17	-33	17	7
	Banks PP	ALL	15	6	56	21	66	33	74	54	32	30	26	25	24	23	5	5	6	10	10	7	20	5	22	13	26	18
		DROUGHT	2	-1	51	21	-	53	-	90	47	40	70	65	53	50	12	12	1	8	15	7	51	7	-2	-10	34	22
	Jones PP	ALL	24	18	48	19	67	36	84	57	47	46	48	46	17	17	16	16	8	16	10	10	7	-3	21	15	29	22
		DROUGHT	23	26	44	17	99	52	-	-	91	79	-	-	31	32	38	36	0	6	29	21	22	-7	-6	-10	42	31

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-19. Period average change in chloride concentrations (mg/L) for Alternative 3 LLT relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 3 LLT	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	2	2	3	3	1	1	1	2	1	2	2	3	2	2	1	2	5	6	6	7	7	6	5	5	3	3
			(19%)	(21%)	(22%)	(21%)	(8%)	(10%)	(4%)	(9%)	(4%)	(9%)	(13%)	(16%)	(10%)	(13%)	(9%)	(13%)	(29%)	(36%)	(33%)	(39%)	(47%)	(47%)	(39%)	(39%)	(19%)	(22%)
		DROUGHT	2	2	3	3	1	1	0	1	-1	0	2	3	1	2	1	2	7	8	9	9	6	6	4	4	3	3
			(15%)	(15%)	(26%)	(25%)	(10%)	(11%)	(-0%)	(4%)	(-3%)	(1%)	(7%)	(14%)	(3%)	(9%)	(7%)	(13%)	(38%)	(44%)	(55%)	(56%)	(45%)	(40%)	(29%)	(32%)	(18%)	(21%)
	SJR at Buckley Cove	ALL	-3	0	-1	0	-3	3	-3	1	-3	1	-2	1	-4	1	-4	1	-8	2	-10	3	-7	6	-4	0	-4	2
			(-3%)	(-0%)	(-1%)	(-0%)	(-4%)	(5%)	(-4%)	(2%)	(-4%)	(1%)	(-3%)	(1%)	(-4%)	(1%)	(-5%)	(1%)	(-9%)	(2%)	(-11%)	(4%)	(-8%)	(8%)	(-5%)	(0%)	(-5%)	(2%)
		DROUGHT	-3	0	-2	1	-5	4	-6	3	-4	2	-4	2	-7	2	-7	2	-15	4	-12	5	-11	11	-6	2	-7	3
			(-4%)	(0%)	(-3%)	(1%)	(-6%)	(6%)	(-7%)	(4%)	(-5%)	(2%)	(-5%)	(2%)	(-8%)	(3%)	(-9%)	(2%)	(-16%)	(6%)	(-14%)	(7%)	(-11%)	(14%)	(-7%)	(3%)	(-8%)	(4%)
	Franks Tract	ALL	17	84	-91	43	-35	11	19	16	9	3	12	9	8	5	4	-1	12	5	-47	-1	-30	17	21	36	-8	19
			(6%)	(37%)	(-24%)	(17%)	(-12%)	(4%)	(12%)	(10%)	(15%)	(4%)	(31%)	(22%)	(20%)	(12%)	(8%)	(-2%)	(21%)	(8%)	(-25%)	(-1%)	(-13%)	(9%)	(7%)	(13%)	(-5%)	(13%)
		DROUGHT	4	43	-105	11	-63	-23	3	22	10	-7	8	3	6	3	15	4	37	10	-97	-29	-43	35	7	-26	-18	4
			(1%)	(13%)	(-24%)	(3%)	(-17%)	(-7%)	(1%)	(12%)	(16%)	(-9%)	(30%)	(9%)	(25%)	(13%)	(50%)	(9%)	(71%)	(13%)	(-31%)	(-12%)	(-13%)	(14%)	(2%)	(-7%)	(-9%)	(2%)
	Old R. at Rock Slough	ALL	31	72	-64	45	-34	10	12	9	8	4	12	9	1	-3	-6	-8	8	4	-32	1	-26	14	20	32	-6	16
			(13%)	(37%)	(-21%)	(23%)	(-13%)	(5%)	(8%)	(6%)	(11%)	(6%)	(26%)	(17%)	(1%)	(-5%)	(-10%)	(-14%)	(15%)	(6%)	(-21%)	(1%)	(-14%)	(9%)	(8%)	(14%)	(-4%)	(12%)
		DROUGHT	20	31	-80	16	-60	-15	-5	13	9	2	7	1	1	-2	6	0	28	9	-71	-23	-42	25	17	1	-14	5
			(7%)	(11%)	(-23%)	(6%)	(-19%)	(-5%)	(-3%)	(8%)	(13%)	(2%)	(18%)	(2%)	(4%)	(-5%)	(19%)	(-1%)	(65%)	(14%)	(-30%)	(-12%)	(-15%)	(12%)	(6%)	(0%)	(-8%)	(3%)
Western Delta	Sac. R. at Emmaton	ALL	-194	10	-79	54	85	35	1	-33	7	-19	15	1	31	14	84	55	90	52	151	147	252	182	233	205	56	59
			(-23%)	(1%)	(-9%)	(7%)	(19%)	(7%)	(1%)	(-18%)	(10%)	(-20%)	(51%)	(2%)	(80%)	(26%)	(70%)	(37%)	(41%)	(20%)	(46%)	(45%)	(53%)	(33%)	(28%)	(24%)	(15%)	(16%)
		DROUGHT	-306	-67	-186	-73	141	47	-25	-107	16	-47	21	7	44	24	171	99	172	71	335	279	253	136	-24	-271	51	8
			(-27%)	(-7%)	(-15%)	(-6%)	(20%)	(6%)	(-11%)	(-35%)	(15%)	(-27%)	(46%)	(11%)	(90%)	(35%)	(96%)	(40%)	(57%)	(18%)	(71%)	(53%)	(43%)	(19%)	(-2%)	(-20%)	(10%)	(1%)
	SJR at Antioch	ALL	-536	122	-540	10	-24	41	-79	-118	-16	-68	34	-4	72	30	136	82	113	45	37	194	261	268	260	474	-23	90
			(-24%)	(8%)	(-22%)	(1%)	(-2%)	(3%)	(-13%)	(-18%)	(-6%)	(-22%)	(30%)	(-2%)	(51%)	(16%)	(38%)	(20%)	(19%)	(7%)	(3%)	(18%)	(18%)	(18%)	(12%)	(25%)	(-2%)	(9%)
		DROUGHT	-657	41	-843	-306	-98	12	-184	-307	-26	-166	35	-4	86	35	205	100	196	61	138	249	280	285	-116	-323	-82	-27
			(-25%)	(2%)	(-27%)	(-12%)	(-5%)	(1%)	(-22%)	(-32%)	(-6%)	(-30%)	(21%)	(-2%)	(43%)	(14%)	(36%)	(15%)	(23%)	(6%)	(8%)	(15%)	(17%)	(17%)	(-5%)	(-12%)	(-6%)	(-2%)
	Sac. R. at Mallard Island	ALL	-781	30	-457	166	15	78	-73	-82	62	-19	128	47	260	174	400	282	268	152	254	485	441	439	412	858	77	218
			(-17%)	(1%)	(-9%)	(4%)	(0%)	(2%)	(-4%)	(-5%)	(7%)	(-2%)	(28%)	(9%)	(35%)	(21%)	(29%)	(19%)	(14%)	(8%)	(8%)	(17%)	(13%)	(13%)	(10%)	(23%)	(3%)	(9%)
		DROUGHT	-996	-68	-917	-160	-147	-13	-251	-378	84	-130	161	98	253	177	265	215	227	149	263	453	380	404	-146	-243	-69	42
			(-19%)	(-2%)	(-15%)	(-3%)	(-3%)	(-0%)	(-10%)	(-15%)	(5%)	(-7%)	(23%)	(13%)	(23%)	(15%)	(13%)	(10%)	(9%)	(6%)	(7%)	(13%)	(10%)	(11%)	(-3%)	(-5%)	(-2%)	(1%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	15	16	19	20	17	17	9	9	2	0	-2	-3	-3	-2	-4	-4	-5	-4	-3	0	1	2	11	12	5	5
			(87%)	(103%)	(130%)	(141%)	(131%)	(131%)	(63%)	(62%)	(10%)	(-2%)	(-11%)	(-15%)	(-19%)	(-14%)	(-23%)	(-22%)	(-26%)	(-20%)	(-12%)	(-2%)	(4%)	(11%)	(60%)	(65%)	(28%)	(32%)
		DROUGHT	20	22	31	32	33	32	23	23	11	10	3	2	1	0	-1	-4	-1	0	5	7	10	10	19	19	13	13
			(95%)	(115%)	(188%)	(219%)	(263%)	(241%)	(189%)	(178%)	(78%)	(71%)	(22%)	(16%)	(7%)	(1%)	(-5%)	(-19%)	(-6%)	(-1%)	(22%)	(31%)	(41%)	(42%)	(88%)	(88%)	(72%)	(72%)
	Contra Costa PP #1	ALL	46	80	10	72	-55	18	-27	-7	25	7	12	8	10	8	-5	-8	5	0	-15	0	-43	4	-1	13	-3	16
			(19%)	(38%)	(4%)	(39%)	(-23%)	(11%)	(-15%)	(-4%)	(31%)	(8%)	(23%)	(15%)	(19%)	(13%)	(-8%)	(-12%)	(8%)	(-1%)	(-12%)	(0%)	(-21%)	(2%)	(-0%)	(7%)	(-2%)	(13%)
		DROUGHT	30	43	19	48	-78	-8	-34	-53	8	-3	7	-1	1	-3	2	-3	20	3	-43	-29	-95	-6	11	41	-13	3
			(10%)	(15%)	(6%)	(18%)	(-26%)	(-3%)	(-16%)	(-22%)	(10%)	(-3%)	(14%)	(-1%)	(3%)	(-6%)	(6%)	(-6%)	(47%)	(5%)	(-23%)	(-17%)	(-30%)	(-3%)	(4%)	(18%)	(-7%)	(2%)
	Banks PP	ALL	4	20	-60	-1	-53	-18	-46	-41	-18	-22	-32	-34	-29	-30	-16	-18	-15	-17	-42	-21	-59	-23	-40	-23	-34	-19
			(2%)	(14%)	(-30%)	(-1%)	(-28%)	(-12%)	(-33%)	(-30%)	(-22%)	(-25%)	(-47%)	(-48%)	(-41%)	(-42%)	(-22%)	(-24%)	(-23%)	(-25%)	(-40%)	(-25%)	(-40%)	(-20%)	(-24%)	(-15%)	(-27%)	(-17%)
		DROUGHT	10	15	-70	-25	-65	-31	-93	-77	4	3	-23	-25	-23	-25	-8	-11	6	-1	-85	-61	-80	-17	-11	5	-34	-19
			(5%)	(8%)	(-31%)	(-14%)	(-29%)	(-16%)	(-55%)	(-50%)	(4%)	(3%)	(-35%)	(-36%)	(-35%)	(-37%)	(-14%)	(-17%)	(11%)	(-2%)	(-59%)	(-50%)	(-35%)	(-11%)	(-5%)	(3%)	(-24%)	(-15%)
	Jones PP	ALL	-31	-13	-78	-23	-37	-12	-48	-42	-30	-32	-30	-31	-14	-14	-20	-21	-26	-29	-37	-19	-33	-2	-43	-26	-35	-22
			(-20%)	(-10%)	(-42%)	(-18%)	(-24%)	(-9%)	(-41%)	(-39%)	(-38%)	(-39%)	(-39%)	(-40%)	(-17%)	(-18%)	(-24%)	(-25%)	(-38%)	(-41%)	(-33%)	(-20%)	(-23%)	(-2%)	(-28%)	(-19%)	(-30%)	(-21%)
		DROUGHT	-38	-32	-94	-45	-45	-25	-78	-65	-30	-30	-26	-27	-11	-12	-23	-25	-10	-20	-50	-21	-58	-5	-36	-26	-40	-26
			(-21%)	(-18%)	(-47%)	(-30%)	(-26%)	(-16%)	(-59%)	(-54%)	(-36%)	(-35%)	(-33%)	(-34%)	(-15%)	(-15%)	(-30%)	(-31%)	(-19%)	(-32%)	(-32%)	(-17%)	(-28%)	(-3%)	(-20%)	(-16%)	(-30%)	(-22%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-20. Period average change in chloride concentrations (mg/L) for Alternative 3 LLT relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 3 LLT	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	1	1	1	1	0	1	1	1	1	1	1	2	1	1	1	1	2	2	2	2	2	2	1	1	1	1
			(5%)	(5%)	(7%)	(7%)	(3%)	(3%)	(2%)	(5%)	(3%)	(6%)	(7%)	(8%)	(6%)	(7%)	(6%)	(7%)	(12%)	(13%)	(10%)	(10%)	(11%)	(10%)	(9%)	(8%)	(6%)	(7%)
		DROUGHT	1	1	1	1	1	1	0	0	-1	0	1	2	0	1	1	1	3	3	2	2	2	1	1	1	1	1
			(4%)	(4%)	(8%)	(8%)	(3%)	(4%)	(-1%)	(2%)	(-3%)	(0%)	(4%)	(8%)	(2%)	(5%)	(5%)	(7%)	(16%)	(17%)	(14%)	(14%)	(10%)	(9%)	(7%)	(8%)	(5%)	(7%)
	SJR at Buckley Cove	ALL	-8	-3	-16	-7	-36	-9	-45	-16	-30	-13	-27	-12	-6	2	3	10	-3	0	-16	-1	-14	6	-10	3	-17	-3
			(-8%)	(-3%)	(-15%)	(-7%)	(-26%)	(-8%)	(-28%)	(-12%)	(-21%)	(-10%)	(-20%)	(-10%)	(-6%)	(3%)	(3%)	(13%)	(-3%)	(0%)	(-15%)	(-2%)	(-13%)	(7%)	(-10%)	(3%)	(-15%)	(-3%)
		DROUGHT	-12	-2	-20	-4	-41	-8	-60	-20	-49	-24	-40	-20	-11	2	6	21	-16	18	-21	16	-21	29	-16	9	-25	1
			(-9%)	(-2%)	(-14%)	(-4%)	(-24%)	(-6%)	(-28%)	(-12%)	(-22%)	(-12%)	(-19%)	(-10%)	(-7%)	(1%)	(5%)	(19%)	(-12%)	(18%)	(-19%)	(21%)	(-18%)	(41%)	(-12%)	(8%)	(-16%)	(1%)
	Franks Tract	ALL	8	47	-61	19	-37	0	8	18	5	4	10	8	5	4	3	0	12	4	-27	0	-17	16	15	25	-6	12
			(4%)	(32%)	(-26%)	(13%)	(-18%)	(-0%)	(6%)	(15%)	(8%)	(6%)	(28%)	(21%)	(17%)	(12%)	(8%)	(0%)	(29%)	(9%)	(-21%)	(0%)	(-11%)	(13%)	(8%)	(14%)	(-5%)	(12%)
		DROUGHT	2	21	-69	-1	-57	-24	-4	23	11	-5	12	6	5	4	12	3	36	10	-56	-17	-21	28	10	-16	-10	3
			(1%)	(10%)	(-26%)	(-1%)	(-21%)	(-10%)	(-2%)	(15%)	(15%)	(-6%)	(30%)	(14%)	(16%)	(12%)	(39%)	(9%)	(86%)	(15%)	(-27%)	(-10%)	(-9%)	(16%)	(4%)	(-6%)	(-7%)	(2%)
	Old R. at Rock Slough	ALL	17	40	-44	20	-35	-2	3	13	7	7	9	5	-5	-6	-7	-9	10	4	-16	2	-14	13	15	22	-5	9
			(11%)	(30%)	(-23%)	(17%)	(-19%)	(-1%)	(3%)	(10%)	(10%)	(10%)	(18%)	(9%)	(-10%)	(-11%)	(-16%)	(-18%)	(26%)	(10%)	(-16%)	(2%)	(-11%)	(13%)	(9%)	(15%)	(-5%)	(10%)
		DROUGHT	13	14	-51	4	-53	-21	-5	21	16	11	9	2	-4	-7	2	-5	27	9	-40	-13	-22	21	16	1	-8	3
			(7%)	(8%)	(-24%)	(3%)	(-23%)	(-11%)	(-3%)	(14%)	(18%)	(12%)	(14%)	(3%)	(-7%)	(-12%)	(4%)	(-11%)	(71%)	(15%)	(-25%)	(-10%)	(-12%)	(14%)	(8%)	(1%)	(-6%)	(2%)
Western Delta	Sac. R. at Emmaton	ALL	-134	3	-83	10	41	18	-3	-21	-2	-23	16	1	25	10	66	41	89	51	122	108	188	141	174	140	42	40
			(-23%)	(1%)	(-15%)	(2%)	(13%)	(6%)	(-2%)	(-14%)	(-2%)	(-25%)	(45%)	(1%)	(70%)	(20%)	(73%)	(35%)	(48%)	(23%)	(54%)	(46%)	(56%)	(37%)	(31%)	(24%)	(16%)	(15%)
		DROUGHT	-211	-61	-151	-72	74	20	-29	-91	-2	-64	22	4	38	19	149	81	184	72	281	222	220	125	7	-186	49	6
			(-27%)	(-10%)	(-19%)	(-10%)	(15%)	(4%)	(-15%)	(-36%)	(-2%)	(-37%)	(50%)	(7%)	(104%)	(34%)	(126%)	(44%)	(75%)	(20%)	(85%)	(57%)	(49%)	(23%)	(1%)	(-19%)	(13%)	(1%)
	SJR at Antioch	ALL	-352	95	-413	-31	-62	31	-72	-78	-35	-74	38	-6	65	22	118	64	132	53	69	149	218	237	221	342	-6	67
			(-24%)	(9%)	(-28%)	(-3%)	(-6%)	(3%)	(-14%)	(-16%)	(-14%)	(-25%)	(32%)	(-4%)	(58%)	(14%)	(47%)	(21%)	(27%)	(9%)	(8%)	(19%)	(21%)	(23%)	(15%)	(26%)	(-1%)	(10%)
		DROUGHT	-452	2	-604	-237	-128	1	-175	-256	-67	-201	47	-8	84	30	213	91	252	69	191	215	280	269	-29	-220	-32	-20
			(-25%)	(0%)	(-32%)	(-15%)	(-9%)	(0%)	(-25%)	(-32%)	(-17%)	(-38%)	(29%)	(-4%)	(59%)	(15%)	(57%)	(18%)	(37%)	(8%)	(15%)	(18%)	(22%)	(21%)	(-2%)	(-11%)	(-3%)	(-2%)
	Sac. R. at Mallard Island	ALL	-510	150	-495	57	-34	112	-69	-57	5	-64	156	38	253	123	386	229	350	164	280	388	434	440	401	680	96	188
			(-17%)	(6%)	(-17%)	(2%)	(-2%)	(5%)	(-5%)	(-5%)	(1%)	(-7%)	(35%)	(7%)	(49%)	(19%)	(42%)	(21%)	(24%)	(10%)	(14%)	(20%)	(18%)	(18%)	(13%)	(25%)	(5%)	(11%)
		DROUGHT	-732	-39	-785	-161	-188	13	-293	-371	-41	-287	204	66	288	139	402	207	402	164	390	426	441	435	-18	-187	6	34
			(-20%)	(-1%)	(-21%)	(-5%)	(-6%)	(0%)	(-15%)	(-18%)	(-3%)	(-17%)	(31%)	(8%)	(39%)	(16%)	(28%)	(13%)	(19%)	(7%)	(14%)	(16%)	(15%)	(15%)	(-1%)	(-5%)	(0%)	(1%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	5	5	5	6	6	6	3	3	-1	-2	-1	-2	-2	-2	-1	-1	0	0	1	2	2	3	5	5	2	2
			(27%)	(31%)	(31%)	(34%)	(34%)	(34%)	(14%)	(15%)	(-2%)	(-8%)	(-7%)	(-9%)	(-10%)	(-8%)	(-7%)	(-7%)	(-1%)	(1%)	(8%)	(10%)	(13%)	(15%)	(27%)	(28%)	(10%)	(10%)
		DROUGHT	7	7	10	10	13	12	11	10	5	5	2	2	1	0	0	-2	2	2	4	5	6	6	8	9	6	5
			(37%)	(40%)	(53%)	(59%)	(74%)	(71%)	(59%)	(56%)	(27%)	(24%)	(12%)	(8%)	(3%)	(-2%)	(1%)	(-9%)	(10%)	(11%)	(23%)	(26%)	(33%)	(33%)	(47%)	(48%)	(31%)	(29%)
	Contra Costa PP #1	ALL	23	45	-2	35	-47	7	-39	-11	25	13	2	9	0	3	-13	-13	5	1	-4	3	-27	5	-2	13	-7	9
			(15%)	(33%)	(-1%)	(29%)	(-26%)	(5%)	(-21%)	(-7%)	(23%)	(11%)	(2%)	(11%)	(0%)	(4%)	(-19%)	(-19%)	(10%)	(2%)	(-5%)	(4%)	(-19%)	(4%)	(-1%)	(10%)	(-5%)	(9%)
		DROUGHT	17	23	5	21	-63	-8	-44	-47	14	9	8	-2	-5	-10	-5	-11	18	4	-20	-15	-59	-1	9	28	-11	-1
			(9%)	(12%)	(3%)	(12%)	(-28%)	(-5%)	(-21%)	(-22%)	(13%)	(8%)	(10%)	(-2%)	(-7%)	(-13%)	(-9%)	(-17%)	(39%)	(6%)	(-16%)	(-13%)	(-27%)	(-1%)	(5%)	(18%)	(-7%)	(-1%)
	Banks PP	ALL	1	12	-39	-4	-43	-17	-48	-34	-16	-13	-38	-37	-35	-34	-15	-15	-9	-14	-21	-15	-30	-9	-19	-8	-26	-15
			(0%)	(12%)	(-29%)	(-5%)	(-30%)	(-14%)	(-35%)	(-27%)	(-15%)	(-13%)	(-44%)	(-43%)	(-43%)	(-41%)	(-20%)	(-20%)	(-14%)	(-21%)	(-28%)	(-22%)	(-30%)	(-11%)	(-18%)	(-8%)	(-26%)	(-17%)
		DROUGHT	7	11	-45	-20	-55	-29	-93	-75	4	10	-53	-50	-56	-54	-27	-27	7	-4	-49	-38	-43	-4	-2	8	-32	-21
			(5%)	(9%)	(-30%)	(-16%)	(-30%)	(-18%)	(-54%)	(-49%)	(3%)	(7%)	(-40%)	(-38%)	(-43%)	(-42%)	(-25%)	(-25%)	(10%)	(-5%)	(-48%)	(-42%)	(-28%)	(-4%)	(-2%)	(6%)	(-24%)	(-17%)
	Jones PP	ALL	-9	-2	-34	-5	-31	-8	-62	-45	-40	-39	-39	-37	-17	-16	-20	-20	-15	-28	-13	-14	-12	3	-18	-9	-26	-18
			(-8%)	(-2%)	(-26%)	(-5%)	(-21%)	(-7%)	(-41%)	(-33%)	(-32%)	(-31%)	(-33%)	(-32%)	(-19%)	(-18%)	(-27%)	(-26%)	(-24%)	(-37%)	(-15%)	(-17%)	(-12%)	(4%)	(-16%)	(-10%)	(-24%)	(-18%)
		DROUGHT	-12	-15	-28	-5	-46	-25	-106	-83	-82	-78	-80	-78	-20	-21	-39	-37	-14	-25	-17	-8	-24	8	-13	-8	-38	-29
			(-9%)	(-11%)	(-18%)	(-4%)	(-25%)	(-15%)	(-55%)	(-49%)	(-43%)	(-42%)	(-41%)	(-40%)	(-15%)	(-16%)	(-34%)	(-33%)	(-22%)	(-34%)	(-16%)	(-8%)	(-16%)	(6%)	(-10%)	(-6%)	(-26%)	(-21%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-21. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 3 LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 3 LLT			Period Average Concentration mg/L			Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)		
	Location	Period [a]	Ex. Cond.	No Act. LLT	Alt 3 LLT	Ex. Cond.	No Act._LLT	Alt 3 LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	15.7	15.3	18.7	0	0	0
		DROUGHT	16.8	16.3	19.7	0	0	0
	SJR at Buckley Cove	ALL	82.9	77.2	78.7	0	0	0
		DROUGHT	86.5	76.5	79.6	0	0	0
	Franks Tract	ALL	173.8	146.4	165.3	34	22	30
		DROUGHT	212.8	190.9	194.7	47	35	37
	Old R. at Rock Slough	ALL	152.0	130.5	146.2	28	17	24
		DROUGHT	180.2	161.4	166.1	42	27	33
Western Delta	Sac. R. at Emmaton	ALL	368.9	366.5	425.3	44	44	50
		DROUGHT	516.4	559.3	567.4	55	60	65
	SJR at Antioch	ALL	1,087.3	974.2	1,063.9	66	73	74
		DROUGHT	1,400.6	1,345.6	1,318.6	82	87	88
	Sac. R. at Mallard Island	ALL	2,552.0	2,411.9	2,629.4	85	86	87
		DROUGHT	3,233.9	3,123.1	3,165.1	100	100	100
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	17.1	16.6	21.9	0	0	0
		DROUGHT	17.7	17.7	30.5	0	0	0
	Contra Costa PP #1	ALL	146.5	126.9	143.3	24	14	20
		DROUGHT	176.5	161.3	163.9	37	22	30
	Banks PP	ALL	123.4	108.5	89.8	4	2	1
		DROUGHT	143.7	128.0	109.4	7	2	0
	Jones PP	ALL	116.9	103.4	81.6	1	1	0
		DROUGHT	132.9	118.9	93.1	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-22. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 3 LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 3 LLT			Period Average Concentration (mg/L)			Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)		
	Location	Period [a]	Ex. Cond.	No Act. LLT	Alt 3 LLT	Ex. Cond.	No Act._LLT	Alt 3 LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	18	18	20	0	0	0
		DROUGHT	19	19	20	0	0	0
	SJR at Buckley Cove	ALL	116	102	98	0	0	0
		DROUGHT	155	128	130	0	0	0
	Franks Tract	ALL	120	102	114	14	8	9
		DROUGHT	153	140	143	22	15	15
	Old R. at Rock Slough	ALL	108	94	103	4	3	3
		DROUGHT	136	125	128	7	5	2
Western Delta	Sac. R. at Emmaton	ALL	258	260	300	36	32	43
		DROUGHT	364	406	412	50	55	57
	SJR at Antioch	ALL	757	684	751	61	65	71
		DROUGHT	1,002	990	970	80	82	83
	Sac. R. at Mallard Island	ALL	1,766	1,674	1,863	77	83	84
		DROUGHT	2,346	2,318	2,352	98	98	98
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	19	19	21	0	0	0
		DROUGHT	19	19	24	0	0	0
	Contra Costa PP #1	ALL	120	105	114	5	3	2
		DROUGHT	143	133	132	8	7	2
	Banks PP	ALL	102	91	76	1	1	0
		DROUGHT	134	123	102	2	2	0
	Jones PP	ALL	109	101	83	0	0	0
		DROUGHT	145	136	107	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-23. Alternative 3 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 3 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-1	-1	-1	0	-1	0	-1	0	-1	-1	-1	-1	-1	-1	-1	-2	-3	-3	-3	-3	-3	-2	-2	-1	-1
		DROUGHT	-1	-1	-1	-1	-1	-1	0	0	0	0	-1	-1	0	-1	-1	-1	-3	-3	-4	-4	-3	-2	-2	-2	-1	-1
	SJR at Buckley Cove	ALL	2	0	0	0	2	-2	2	-1	2	0	1	-1	2	-1	2	0	5	-1	6	-2	4	-3	3	0	3	-1
		DROUGHT	2	0	1	0	3	-2	4	-2	2	-1	2	-1	4	-1	5	-1	9	-2	8	-3	7	-6	4	-1	4	-2
	Franks Tract	ALL	-	-100	-	-100	-	-	-21	-18	-5	-2	-6	-4	-4	-2	-2	0	-6	-3	81	1	-	-25	-	-	11	-18
		DROUGHT	-	-	-	-	-	-	-6	-33	-5	4	-4	-1	-2	-1	-7	-2	-19	-6	-	-	-	-100	-	-	49	-6
	Old R. at Rock Slough	ALL	-100	-100	-	-91	-	-27	-12	-9	-4	-2	-6	-4	0	1	3	4	-4	-2	33	-1	44	-14	-100	-100	6	-13
		DROUGHT	-	-	-	-	-	-	8	-17	-5	-1	-3	-1	-1	1	-3	0	-14	-5	-	40	-	-61	-	-	20	-5
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	-1	51	-4	12	-7	0	-15	-7	-65	-55	-100	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-11	60	-10	-3	-22	-13	-100	-	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-25	4	-67	-46	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-39	8	-100	-100	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-6	-7	-8	-8	-7	-7	-4	-4	-1	0	1	1	1	1	2	2	2	2	1	0	0	-1	-5	-5	-2	-2
		DROUGHT	-9	-10	-13	-14	-14	-14	-10	-10	-5	-4	-1	-1	0	0	0	2	1	0	-2	-3	-4	-4	-8	-8	-6	-6
	Contra Costa PP #1	ALL	-100	-100	-100	-100	-	-21	38	7	-14	-5	-6	-4	-5	-4	3	4	-2	0	12	0	94	-4	2	-29	3	-13
		DROUGHT	-	-	-	-	-	41	-	-	-5	2	-3	0	-1	1	-1	1	-10	-1	63	36	-	22	-	-100	17	-3
	Banks PP	ALL	-4	-20	-	1	86	19	41	35	11	13	17	19	16	17	9	10	8	9	29	13	59	17	49	24	27	13
		DROUGHT	-19	-26	-	35	-	53	-	79	-2	-2	13	14	12	14	4	6	-3	0	82	48	-	20	21	-8	32	15
	Jones PP	ALL	31	11	-	20	39	10	35	30	18	19	17	18	8	9	12	12	14	16	27	12	31	1	46	23	26	15
		DROUGHT	54	41	-	47	61	27	66	49	18	18	15	16	7	7	13	14	5	10	51	17	-	5	51	32	34	20

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-24. Alternative 3 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL.
Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 3 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	-1	0	0	0	0	-1	0	-1	-1	-1	0	-1	0	0	-1	-1	-1	-1	-1	-1	-1	-1	0	-1
		DROUGHT	0	0	-1	-1	0	0	0	0	0	0	0	-1	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1
	SJR at Buckley Cove	ALL	5	2	12	5	33	6	51	14	28	11	25	10	4	-2	-2	-5	2	0	12	1	10	-4	7	-2	13	2
		DROUGHT	9	2	18	3	50	7	-	25	-	40	-	36	13	-2	-4	-15	13	-12	15	-9	16	-16	14	-6	26	-1
	Franks Tract	ALL	-13	-47	-	-19	90	0	-7	-14	-3	-2	-5	-4	-2	-2	-1	0	-6	-2	22	0	17	-12	-25	-36	5	-8
		DROUGHT	-12	-55	-	2	-	-	6	-24	-6	3	-6	-3	-2	-2	-5	-2	-17	-6	-	22	86	-38	-62	-	10	-3
	Old R. at Rock Slough	ALL	-17	-33	71	-16	50	2	-3	-10	-4	-4	-4	-2	2	3	4	4	-5	-2	11	-1	11	-9	-15	-21	4	-6
		DROUGHT	-21	-22	-	-5	-	40	6	-20	-10	-7	-5	-1	2	4	-1	3	-13	-4	45	12	38	-20	-25	-3	7	-2
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	2	21	1	14	-7	0	-12	-5	-42	-31	-100	-100	-100	-100	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	52	-	2	80	-11	-2	-18	-10	-100	-100	-100	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-29	7	-47	-23	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-54	26	-79	-57	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-2	-2	-2	-3	-3	-3	-1	-1	0	1	1	1	1	1	1	1	0	0	-1	-1	-1	-1	-2	-2	-1	-1
		DROUGHT	-3	-3	-4	-4	-5	-5	-5	-4	-2	-2	-1	-1	0	0	0	1	-1	-1	-2	-2	-3	-3	-4	-4	-2	-2
	Contra Costa PP #1	ALL	-25	-40	2	-28	69	-6	59	12	-18	-10	-1	-5	0	-2	7	7	-2	-1	3	-2	25	-3	2	-10	5	-6
		DROUGHT	-30	-36	-9	-27	-	10	-	-	-10	-7	-4	1	3	6	3	6	-9	-2	17	12	-	1	-12	-29	10	1
	Banks PP	ALL	0	-8	33	3	41	13	43	27	11	9	24	23	21	20	9	8	5	8	12	8	20	5	14	5	17	10
		DROUGHT	-6	-10	46	16	79	30	-	78	-3	-8	45	41	46	43	19	18	-4	3	33	24	45	3	2	-6	27	16
	Jones PP	ALL	7	1	28	3	31	7	63	39	33	31	30	28	10	10	12	11	8	16	8	8	8	-2	12	6	18	12
		DROUGHT	10	13	27	4	67	28	-	-	-	-	-	-	17	19	28	27	7	14	12	5	23	-6	11	6	36	26

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-25A. Period average change in chloride concentrations (mg/L) for Alternative 4 LLT Scenario H1 relative to existing conditions and the No Action Alternative LLT.
Calculation of chloride concentrations was based on a mass balance approach.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 4 LLT Scenario H1	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	3	4	3	3	1	2	1	2	1	2	3	3	3	3	3	3	6	7	6	6	6	6	4	4	3	4
			(29%)	(30%)	(27%)	(25%)	(11%)	(13%)	(6%)	(11%)	(7%)	(12%)	(17%)	(20%)	(18%)	(21%)	(16%)	(20%)	(31%)	(39%)	(31%)	(37%)	(43%)	(42%)	(37%)	(37%)	(22%)	(25%)
		DROUGHT	3	3	3	3	1	2	0	1	0	1	2	3	1	2	2	3	7	8	10	10	6	6	4	4	3	4
			(24%)	(24%)	(26%)	(25%)	(11%)	(13%)	(2%)	(6%)	(-0%)	(4%)	(8%)	(15%)	(5%)	(12%)	(10%)	(16%)	(38%)	(44%)	(58%)	(59%)	(43%)	(39%)	(29%)	(31%)	(19%)	(23%)
	SJR at Buckley Cove	ALL	-2	1	0	1	-2	4	-2	3	-2	2	-1	2	-3	2	-3	2	-6	4	-8	4	-9	4	-4	1	-4	2
			(-2%)	(1%)	(0%)	(1%)	(-3%)	(5%)	(-2%)	(4%)	(-2%)	(3%)	(-2%)	(3%)	(-3%)	(2%)	(-4%)	(2%)	(-7%)	(5%)	(-9%)	(5%)	(-10%)	(5%)	(-5%)	(1%)	(-4%)	(3%)
		DROUGHT	-2	1	-2	1	-5	4	-6	4	-3	3	-3	3	-5	4	-6	4	-10	8	-10	7	-15	7	-6	2	-6	4
			(-2%)	(2%)	(-3%)	(1%)	(-6%)	(5%)	(-6%)	(5%)	(-3%)	(3%)	(-3%)	(4%)	(-6%)	(5%)	(-7%)	(5%)	(-12%)	(11%)	(-12%)	(10%)	(-16%)	(9%)	(-7%)	(2%)	(-7%)	(5%)
	Franks Tract	ALL	-4	63	-157	-23	-58	-13	-19	-22	2	-4	12	9	11	8	9	5	18	11	-41	6	-14	33	40	56	-17	11
			(-1%)	(28%)	(-41%)	(-9%)	(-19%)	(-5%)	(-12%)	(-14%)	(3%)	(-6%)	(31%)	(21%)	(30%)	(20%)	(20%)	(9%)	(33%)	(18%)	(-21%)	(4%)	(-6%)	(18%)	(13%)	(20%)	(-10%)	(7%)
		DROUGHT	-21	18	-146	-30	-46	-7	-34	-15	11	-7	10	4	7	5	13	2	37	10	-90	-22	-38	39	15	-18	-23	-2
			(-6%)	(6%)	(-33%)	(-9%)	(-12%)	(-2%)	(-16%)	(-8%)	(16%)	(-8%)	(34%)	(12%)	(32%)	(19%)	(44%)	(5%)	(71%)	(13%)	(-29%)	(-9%)	(-12%)	(16%)	(4%)	(-5%)	(-11%)	(-1%)
	Old R. at Rock Slough	ALL	21	62	-125	-15	-54	-10	-19	-22	-1	-4	10	6	4	1	2	-1	15	11	-26	7	-11	28	38	50	-12	9
			(9%)	(31%)	(-40%)	(-8%)	(-21%)	(-5%)	(-13%)	(-14%)	(-1%)	(-6%)	(21%)	(12%)	(8%)	(2%)	(4%)	(-1%)	(28%)	(19%)	(-17%)	(6%)	(-6%)	(19%)	(16%)	(21%)	(-8%)	(7%)
		DROUGHT	10	21	-115	-20	-44	2	-30	-12	2	-6	7	1	4	0	8	2	28	9	-65	-17	-34	33	28	12	-17	2
			(4%)	(7%)	(-33%)	(-8%)	(-14%)	(1%)	(-16%)	(-7%)	(3%)	(-7%)	(18%)	(2%)	(10%)	(1%)	(25%)	(4%)	(65%)	(14%)	(-27%)	(-9%)	(-12%)	(16%)	(10%)	(4%)	(-9%)	(1%)
Western Delta	Sac. R. at Emmaton	ALL	-173	31	-44	90	37	-13	-19	-53	12	-14	16	2	29	12	67	37	92	54	152	148	235	165	206	178	51	53
			(-20%)	(5%)	(-5%)	(12%)	(9%)	(-3%)	(-12%)	(-28%)	(17%)	(-15%)	(55%)	(5%)	(75%)	(22%)	(55%)	(25%)	(41%)	(21%)	(46%)	(45%)	(50%)	(30%)	(25%)	(21%)	(14%)	(15%)
		DROUGHT	-327	-88	-85	27	-9	-103	40	-42	61	-2	19	5	39	19	152	79	182	82	369	313	252	135	-31	-278	55	12
			(-28%)	(-10%)	(-7%)	(2%)	(-1%)	(-13%)	(18%)	(-14%)	(56%)	(-1%)	(42%)	(8%)	(80%)	(27%)	(85%)	(32%)	(60%)	(20%)	(78%)	(60%)	(42%)	(19%)	(-3%)	(-20%)	(11%)	(2%)
	SJR at Antioch	ALL	-614	44	-554	-3	-176	-111	-173	-212	-26	-79	35	-3	58	16	79	24	110	42	45	202	271	278	222	436	-60	53
			(-28%)	(3%)	(-23%)	(-0%)	(-12%)	(-8%)	(-28%)	(-33%)	(-10%)	(-25%)	(31%)	(-2%)	(41%)	(9%)	(22%)	(6%)	(19%)	(6%)	(4%)	(19%)	(18%)	(19%)	(10%)	(23%)	(-6%)	(5%)
		DROUGHT	-830	-132	-647	-110	-386	-276	-117	-240	55	-85	32	-7	70	19	158	53	208	73	163	274	285	289	-110	-317	-93	-38
			(-31%)	(-7%)	(-21%)	(-4%)	(-19%)	(-14%)	(-14%)	(-25%)	(13%)	(-15%)	(20%)	(-3%)	(35%)	(8%)	(28%)	(8%)	(25%)	(7%)	(9%)	(17%)	(17%)	(17%)	(-4%)	(-11%)	(-7%)	(-3%)
	Sac. R. at Mallard Island	ALL	-662	148	-412	211	-188	-125	-246	-256	29	-53	139	58	217	131	261	143	246	130	248	480	440	438	369	816	37	177
			(-14%)	(4%)	(-8%)	(5%)	(-6%)	(-4%)	(-15%)	(-15%)	(3%)	(-5%)	(30%)	(11%)	(29%)	(16%)	(19%)	(10%)	(13%)	(6%)	(8%)	(17%)	(13%)	(13%)	(9%)	(21%)	(1%)	(7%)
		DROUGHT	-1023	-94	-692	65	-480	-346	-89	-215	164	-51	160	97	229	153	215	165	238	160	292	482	381	404	-132	-228	-61	49
			(-19%)	(-2%)	(-11%)	(1%)	(-11%)	(-8%)	(-4%)	(-8%)	(10%)	(-3%)	(23%)	(13%)	(21%)	(13%)	(10%)	(8%)	(10%)	(6%)	(8%)	(14%)	(10%)	(11%)	(-3%)	(-5%)	(-2%)	(2%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	14	15	18	19	19	19	10	10	2	0	-1	-2	-3	-2	-4	-3	-6	-4	-3	-1	0	2	10	10	5	5
			(81%)	(97%)	(124%)	(135%)	(144%)	(143%)	(69%)	(68%)	(13%)	(2%)	(-9%)	(-13%)	(-17%)	(-12%)	(-21%)	(-21%)	(-29%)	(-24%)	(-16%)	(-6%)	(2%)	(8%)	(53%)	(58%)	(28%)	(31%)
		DROUGHT	18	20	29	31	36	36	25	25	13	12	4	4	2	1	0	-3	-1	0	5	7	11	11	19	19	13	13
			(87%)	#####	(179%)	(209%)	(292%)	(267%)	(201%)	(190%)	(90%)	(82%)	(30%)	(23%)	(14%)	(9%)	(0%)	(-15%)	(-7%)	(-2%)	(21%)	(31%)	(46%)	(46%)	(85%)	(84%)	(76%)	(76%)
	Contra Costa PP #1	ALL	52	86	-6	57	-81	-7	-46	-26	6	-11	11	7	9	6	0	-2	12	7	-12	3	-32	15	18	33	-6	14
			(21%)	(41%)	(-2%)	(30%)	(-34%)	(-4%)	(-26%)	(-16%)	(8%)	(-12%)	(20%)	(12%)	(16%)	(11%)	(0%)	(-3%)	(21%)	(11%)	(-10%)	(3%)	(-16%)	(10%)	(8%)	(16%)	(-4%)	(11%)
		DROUGHT	44	58	-35	-5	-94	-24	-56	-74	-2	-13	6	-1	1	-3	4	-1	24	7	-37	-24	-88	2	19	49	-18	-3
			(15%)	(20%)	(-12%)	(-2%)	(-31%)	(-10%)	(-25%)	(-31%)	(-2%)	(-14%)	(13%)	(-2%)	(3%)	(-6%)	(10%)	(-2%)	(56%)	(11%)	(-20%)	(-14%)	(-28%)	(1%)	(7%)	(22%)	(-10%)	(-2%)
	Banks PP	ALL	-23	-6	-90	-31	-80	-46	-63	-59	-37	-41	-42	-44	-40	-42	-20	-21	-24	-26	-41	-20	-57	-20	-26	-9	-45	-30
			(-14%)	(-4%)	(-44%)	(-21%)	(-42%)	(-30%)	(-45%)	(-44%)	(-45%)	(-47%)	(-62%)	(-63%)	(-57%)	(-58%)	(-27%)	(-28%)	(-36%)	(-38%)	(-39%)	(-24%)	(-38%)	(-18%)	(-15%)	(-6%)	(-37%)	(-28%)
		DROUGHT	-5	1	-66	-21	-72	-38	-79	-63	-32	-33	-34	-36	-26	-28	-10	-13	7	0	-68	-44	-87	-25	-3	13	-40	-24
			(-2%)	(0%)	(-29%)	(-12%)	(-32%)	(-20%)	(-47%)	(-41%)	(-35%)	(-35%)	(-51%)	(-53%)	(-40%)	(-42%)	(-17%)	(-20%)	(13%)	(-0%)	(-47%)	(-36%)	(-39%)	(-15%)	(-1%)	(7%)	(-28%)	(-19%)
	Jones PP	ALL	-42	-24	-87	-33	-56	-31	-38	-33	-29	-30	-33	-35	-34	-35	-35	-36	-33	-36	-39	-20	-25	6	-52	-35	-42	-28
			(-27%)	(-18%)	(-47%)	(-25%)	(-36%)	(-24%)	(-33%)	(-30%)	(-35%)	(-37%)	(-44%)	(-45%)	(-42%)	(-42%)	(-44%)	(-44%)	(-48%)	(-51%)	(-35%)	(-22%)	(-17%)	(6%)	(-34%)	(-25%)	(-36%)	(-28%)
		DROUGHT	-37	-30	-73	-24	-60	-40	-33	-19	-10	-10	-13	-14	-21	-22	-33	-34	-11	-21	-74	-45	-47	7	-1	9	-34	-20
			(-21%)	(-18%)	(-36%)	(-16%)	(-34%)	(-26%)	(-25%)	(-16%)	(-12%)	(-12%)	(-17%)	(-18%)	(-27%)	(-27%)	(-43%)	(-44%)	(-21%)	(-34%)	(-48%)	(-36%)	(-23%)	(4%)	(-1%)	(5%)	(-26%)	(-17%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-25B. Period average change in chloride concentrations (mg/L) for Alternative 4 LLT Scenario H2 relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 4 LLT Scenario H2	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	4	4	3	3	2	2	1	2	1	2	3	3	3	3	2	3	7	8	7	8	6	6	5	5	4	4
			(29%)	(31%)	(26%)	(25%)	(14%)	(15%)	(6%)	(12%)	(7%)	(12%)	(17%)	(20%)	(18%)	(20%)	(15%)	(19%)	(36%)	(43%)	(41%)	(48%)	(44%)	(43%)	(38%)	(38%)	(23%)	(27%)
		DROUGHT	3	3	3	3	2	2	1	1	0	1	2	3	1	2	2	3	8	8	9	10	6	6	4	4	3	4
			(22%)	(22%)	(27%)	(26%)	(17%)	(19%)	(2%)	(7%)	(-1%)	(4%)	(9%)	(16%)	(8%)	(15%)	(11%)	(18%)	(41%)	(47%)	(56%)	(57%)	(45%)	(40%)	(28%)	(30%)	(20%)	(24%)
	SJR at Buckley Cove	ALL	-2	1	0	1	-2	4	-2	3	-2	2	-1	2	-3	2	-3	2	-6	4	-8	4	-9	4	-4	1	-3	2
			(-2%)	(1%)	(0%)	(1%)	(-3%)	(5%)	(-2%)	(4%)	(-2%)	(3%)	(-2%)	(3%)	(-3%)	(2%)	(-4%)	(2%)	(-7%)	(5%)	(-10%)	(5%)	(-10%)	(5%)	(-5%)	(1%)	(-4%)	(3%)
		DROUGHT	-2	1	-2	1	-5	4	-6	4	-3	3	-3	3	-5	4	-6	4	-10	8	-11	6	-15	7	-6	2	-6	4
			(-2%)	(2%)	(-3%)	(1%)	(-6%)	(5%)	(-6%)	(5%)	(-3%)	(3%)	(-3%)	(4%)	(-6%)	(5%)	(-7%)	(5%)	(-11%)	(12%)	(-12%)	(9%)	(-15%)	(9%)	(-7%)	(2%)	(-7%)	(5%)
	Franks Tract	ALL	-7	61	-156	-22	-62	-16	-26	-29	2	-4	12	9	12	9	10	5	18	11	-53	-7	-31	16	27	42	-21	6
			(-2%)	(27%)	(-41%)	(-9%)	(-21%)	(-6%)	(-16%)	(-18%)	(4%)	(-6%)	(32%)	(22%)	(31%)	(21%)	(21%)	(11%)	(32%)	(18%)	(-27%)	(-5%)	(-13%)	(9%)	(9%)	(15%)	(-12%)	(4%)
		DROUGHT	-50	-11	-164	-48	-45	-5	-21	-2	8	-9	10	5	10	7	15	3	34	7	-86	-18	-23	54	10	-23	-25	-3
			(-14%)	(-4%)	(-37%)	(-15%)	(-12%)	(-1%)	(-10%)	(-1%)	(13%)	(-11%)	(36%)	(14%)	(44%)	(30%)	(48%)	(8%)	(65%)	(9%)	(-28%)	(-7%)	(-7%)	(22%)	(3%)	(-6%)	(-12%)	(-2%)
	Old R. at Rock Slough	ALL	20	61	-124	-14	-57	-13	-26	-29	1	-2	11	7	7	3	4	2	17	13	-36	-3	-27	13	27	39	-15	6
			(8%)	(31%)	(-40%)	(-7%)	(-22%)	(-6%)	(-17%)	(-19%)	(2%)	(-3%)	(22%)	(13%)	(13%)	(6%)	(7%)	(3%)	(31%)	(22%)	(-24%)	(-3%)	(-14%)	(9%)	(11%)	(17%)	(-10%)	(5%)
		DROUGHT	-13	-3	-130	-34	-46	-1	-19	-2	3	-5	8	2	11	8	12	5	27	8	-65	-17	-20	47	24	7	-17	1
			(-5%)	(-1%)	(-37%)	(-13%)	(-15%)	(-0%)	(-10%)	(-1%)	(4%)	(-6%)	(22%)	(5%)	(32%)	(21%)	(37%)	(14%)	(63%)	(12%)	(-27%)	(-9%)	(-7%)	(22%)	(8%)	(2%)	(-10%)	(1%)
Western Delta	Sac. R. at Emmaton	ALL	-185	18	-41	93	91	42	-27	-61	7	-18	14	0	25	9	57	28	95	58	191	188	249	179	224	196	58	61
			(-22%)	(3%)	(-5%)	(12%)	(21%)	(9%)	(-18%)	(-33%)	(11%)	(-20%)	(47%)	(-1%)	(65%)	(15%)	(47%)	(19%)	(43%)	(22%)	(58%)	(57%)	(52%)	(33%)	(27%)	(23%)	(16%)	(17%)
		DROUGHT	-450	-211	-141	-29	182	88	5	-77	49	-14	20	6	39	19	148	76	187	86	375	320	271	154	-49	-296	53	10
			(-39%)	(-23%)	(-11%)	(-3%)	(26%)	(11%)	(2%)	(-25%)	(45%)	(-8%)	(45%)	(10%)	(80%)	(27%)	(83%)	(30%)	(62%)	(21%)	(80%)	(61%)	(45%)	(22%)	(-4%)	(-22%)	(10%)	(2%)
	SJR at Antioch	ALL	-628	31	-553	-3	-129	-64	-178	-216	-37	-89	27	-11	45	3	56	1	98	29	65	223	290	297	235	448	-59	54
			(-28%)	(2%)	(-23%)	(-0%)	(-9%)	(-5%)	(-29%)	(-33%)	(-14%)	(-28%)	(24%)	(-7%)	(32%)	(2%)	(16%)	(0%)	(16%)	(4%)	(5%)	(20%)	(20%)	(20%)	(11%)	(23%)	(-5%)	(6%)
		DROUGHT	-1007	-308	-722	-185	-136	-26	-140	-263	26	-114	29	-10	57	6	145	40	196	61	189	300	300	305	-129	-337	-99	-44
			(-38%)	(-16%)	(-23%)	(-7%)	(-7%)	(-1%)	(-17%)	(-27%)	(6%)	(-21%)	(18%)	(-5%)	(29%)	(3%)	(26%)	(6%)	(23%)	(6%)	(11%)	(19%)	(18%)	(18%)	(-5%)	(-12%)	(-7%)	(-3%)
	Sac. R. at Mallard Island	ALL	-702	108	-430	193	-129	-66	-208	-217	21	-60	119	38	141	55	169	50	228	112	297	529	463	461	394	841	30	170
			(-15%)	(3%)	(-9%)	(5%)	(-4%)	(-2%)	(-12%)	(-13%)	(2%)	(-6%)	(26%)	(7%)	(19%)	(7%)	(12%)	(3%)	(12%)	(6%)	(10%)	(19%)	(13%)	(13%)	(9%)	(22%)	(1%)	(7%)
		DROUGHT	-1284	-356	-783	-26	-177	-43	-89	-216	145	-70	146	83	211	135	206	156	231	153	307	497	396	420	-165	-262	-72	39
			(-24%)	(-8%)	(-13%)	(-0%)	(-4%)	(-1%)	(-4%)	(-8%)	(9%)	(-4%)	(21%)	(11%)	(19%)	(12%)	(10%)	(7%)	(9%)	(6%)	(8%)	(14%)	(11%)	(11%)	(-3%)	(-5%)	(-2%)	(1%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	15	17	19	20	20	20	12	12	3	2	-1	-1	-2	-1	-3	-3	-5	-4	-2	0	2	3	11	11	6	6
			(91%)	#####	(129%)	(140%)	(149%)	(149%)	(82%)	(80%)	(21%)	(9%)	(-5%)	(-9%)	(-15%)	(-10%)	(-20%)	(-20%)	(-26%)	(-21%)	(-11%)	(-1%)	(8%)	(16%)	(57%)	(62%)	(33%)	(37%)
		DROUGHT	22	24	29	31	36	35	28	28	14	14	5	4	3	2	1	-3	-1	0	6	8	12	12	21	21	15	15
			(104%)	#####	(179%)	(209%)	(291%)	(266%)	(229%)	(217%)	(101%)	(93%)	(34%)	(27%)	(17%)	(11%)	(3%)	(-12%)	(-4%)	(2%)	(27%)	(37%)	(54%)	(54%)	(95%)	(94%)	(83%)	(83%)
	Contra Costa PP #1	ALL	43	77	-36	26	-78	-5	-43	-23	-2	-19	9	5	11	8	3	1	13	8	-19	-3	-49	-2	11	25	-11	8
			(18%)	(37%)	(-15%)	(14%)	(-33%)	(-3%)	(-24%)	(-15%)	(-2%)	(-20%)	(17%)	(9%)	(20%)	(14%)	(5%)	(1%)	(23%)	(13%)	(-15%)	(-3%)	(-24%)	(-1%)	(5%)	(12%)	(-8%)	(6%)
		DROUGHT	12	25	-39	-10	-106	-36	-52	-70	1	-11	7	0	9	5	9	4	19	2	-35	-22	-72	18	28	58	-18	-3
			(4%)	(9%)	(-13%)	(-4%)	(-35%)	(-15%)	(-24%)	(-30%)	(1%)	(-12%)	(15%)	(-0%)	(22%)	(11%)	(23%)	(10%)	(44%)	(3%)	(-19%)	(-13%)	(-23%)	(8%)	(11%)	(26%)	(-10%)	(-2%)
	Banks PP	ALL	-19	-2	-85	-26	-85	-50	-67	-62	-38	-42	-36	-38	-43	-44	-23	-24	-30	-32	-41	-21	-60	-23	-32	-15	-46	-31
			(-11%)	(-1%)	(-42%)	(-18%)	(-45%)	(-33%)	(-48%)	(-46%)	(-47%)	(-49%)	(-53%)	(-54%)	(-60%)	(-61%)	(-32%)	(-33%)	(-45%)	(-47%)	(-40%)	(-24%)	(-40%)	(-20%)	(-19%)	(-10%)	(-38%)	(-29%)
		DROUGHT	-19	-14	-75	-29	-98	-64	-59	-43	-29	-30	-25	-27	-38	-40	-28	-31	-8	-15	-67	-43	-70	-8	-22	-6	-45	-29
			(-10%)	(-7%)	(-33%)	(-16%)	(-44%)	(-34%)	(-35%)	(-28%)	(-32%)	(-33%)	(-38%)	(-40%)	(-58%)	(-60%)	(-48%)	(-50%)	(-15%)	(-25%)	(-46%)	(-35%)	(-31%)	(-5%)	(-11%)	(-3%)	(-31%)	(-23%)
	Jones PP	ALL	-47	-29	-97	-43	-70	-45	-45	-40	-36	-37	-43	-45	-41	-41	-34	-35	-22	-25	-45	-26	-39	-8	-54	-37	-48	-34
			(-31%)	(-22%)	(-52%)	(-33%)	(-46%)	(-35%)	(-39%)	(-36%)	(-44%)	(-45%)	(-57%)	(-58%)	(-50%)	(-51%)	(-42%)	(-42%)	(-33%)	(-36%)	(-40%)	(-28%)	(-28%)	(-7%)	(-35%)	(-27%)	(-41%)	(-33%)
		DROUGHT	-54	-48	-84	-35	-70	-50	-43	-30	-20	-19	-29	-30	-35	-35	-22	-24	-1	-11	-70	-42	-54	-1	-28	-18	-43	-29
			(-30%)	(-28%)	(-42%)	(-23%)	(-40%)	(-32%)	(-33%)	(-25%)	(-23%)	(-23%)	(-37%)	(-38%)	(-44%)	(-45%)	(-29%)	(-30%)	(-2%)	(-18%)	(-46%)	(-34%)	(-26%)	(-1%)	(-16%)	(-11%)	(-32%)	(-24%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-25C. Period average change in chloride concentrations (mg/L) for Alternative 4 LLT Scenario H3 relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 4 LLT Scenario H3	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	4	4	3	3	2	2	1	2	1	2	3	3	3	3	3	3	6	7	6	7	6	6	4	4	3	4
			(30%)	(32%)	(27%)	(26%)	(12%)	(14%)	(7%)	(12%)	(7%)	(12%)	(17%)	(20%)	(19%)	(22%)	(16%)	(19%)	(31%)	(39%)	(32%)	(39%)	(45%)	(44%)	(32%)	(32%)	(22%)	(25%)
		DROUGHT	3	3	3	3	1	1	0	1	0	1	2	3	1	2	2	3	7	8	10	10	7	6	4	4	3	4
			(25%)	(25%)	(24%)	(23%)	(9%)	(11%)	(2%)	(6%)	(-1%)	(4%)	(9%)	(16%)	(7%)	(13%)	(10%)	(16%)	(39%)	(45%)	(58%)	(59%)	(47%)	(42%)	(29%)	(32%)	(20%)	(23%)
	SJR at Buckley Cove	ALL	-1	1	0	1	-2	4	-2	3	-2	2	-1	2	-3	2	-3	2	-6	4	-8	4	-9	4	-4	1	-3	2
			(-2%)	(1%)	(0%)	(1%)	(-3%)	(5%)	(-2%)	(4%)	(-2%)	(3%)	(-2%)	(3%)	(-3%)	(2%)	(-4%)	(2%)	(-7%)	(5%)	(-9%)	(6%)	(-10%)	(5%)	(-5%)	(1%)	(-4%)	(3%)
		DROUGHT	-2	1	-2	1	-5	4	-6	4	-3	3	-3	3	-5	4	-6	4	-11	8	-10	7	-15	7	-6	2	-6	4
			(-2%)	(2%)	(-3%)	(1%)	(-6%)	(5%)	(-6%)	(5%)	(-3%)	(3%)	(-3%)	(4%)	(-6%)	(5%)	(-7%)	(5%)	(-12%)	(11%)	(-11%)	(10%)	(-16%)	(9%)	(-7%)	(2%)	(-7%)	(5%)
	Franks Tract	ALL	-92	-24	-194	-60	-110	-65	-46	-49	-4	-10	11	8	11	8	9	5	17	11	-41	5	-16	30	-24	-9	-40	-13
			(-31%)	(-11%)	(-51%)	(-24%)	(-37%)	(-26%)	(-30%)	(-31%)	(-6%)	(-15%)	(29%)	(19%)	(30%)	(20%)	(20%)	(10%)	(32%)	(18%)	(-22%)	(3%)	(-7%)	(17%)	(-8%)	(-3%)	(-23%)	(-9%)
		DROUGHT	-79	-41	-189	-73	-98	-58	-56	-37	-2	-19	8	2	7	5	14	3	38	11	-90	-22	-42	35	20	-13	-39	-17
			(-22%)	(-13%)	(-43%)	(-23%)	(-26%)	(-17%)	(-27%)	(-20%)	(-3%)	(-23%)	(28%)	(7%)	(33%)	(20%)	(46%)	(7%)	(73%)	(14%)	(-29%)	(-9%)	(-13%)	(14%)	(6%)	(-3%)	(-18%)	(-9%)
	Old R. at Rock Slough	ALL	-49	-8	-147	-38	-94	-50	-48	-51	-6	-9	9	5	5	1	2	0	14	10	-27	6	-13	27	-9	2	-30	-9
			(-21%)	(-4%)	(-47%)	(-19%)	(-36%)	(-23%)	(-32%)	(-33%)	(-8%)	(-13%)	(18%)	(9%)	(9%)	(2%)	(4%)	(-1%)	(27%)	(17%)	(-18%)	(5%)	(-7%)	(18%)	(-4%)	(1%)	(-20%)	(-7%)
		DROUGHT	-35	-24	-144	-48	-81	-36	-56	-38	-7	-15	5	-1	6	2	9	3	29	10	-64	-16	-38	29	31	15	-29	-10
			(-12%)	(-9%)	(-41%)	(-19%)	(-26%)	(-13%)	(-29%)	(-22%)	(-10%)	(-19%)	(13%)	(-2%)	(16%)	(6%)	(29%)	(7%)	(67%)	(15%)	(-27%)	(-8%)	(-14%)	(14%)	(11%)	(5%)	(-16%)	(-6%)
Western Delta	Sac. R. at Emmaton	ALL	-329	-125	-199	-65	-34	-84	-29	-63	13	-13	18	4	30	13	65	36	94	56	161	157	251	181	-93	-120	-4	-2
			(-39%)	(-19%)	(-22%)	(-9%)	(-8%)	(-17%)	(-19%)	(-34%)	(19%)	(-13%)	(62%)	(10%)	(78%)	(24%)	(54%)	(24%)	(42%)	(21%)	(49%)	(47%)	(53%)	(33%)	(-11%)	(-14%)	(-1%)	(-1%)
		DROUGHT	-457	-218	-255	-142	-74	-168	-19	-101	50	-14	21	7	42	22	156	84	192	91	363	308	276	159	-17	-264	23	-20
			(-40%)	(-24%)	(-20%)	(-12%)	(-11%)	(-21%)	(-8%)	(-33%)	(46%)	(-8%)	(47%)	(12%)	(86%)	(31%)	(88%)	(33%)	(63%)	(22%)	(77%)	(59%)	(46%)	(22%)	(-2%)	(-19%)	(4%)	(-4%)
	SJR at Antioch	ALL	-1004	-346	-920	-370	-361	-296	-196	-235	-22	-74	40	2	58	16	76	22	112	44	52	209	284	292	-401	-188	-190	-77
			(-45%)	(-22%)	(-38%)	(-20%)	(-25%)	(-21%)	(-32%)	(-36%)	(-8%)	(-23%)	(36%)	(1%)	(41%)	(9%)	(22%)	(5%)	(19%)	(7%)	(4%)	(19%)	(19%)	(20%)	(-19%)	(-10%)	(-17%)	(-8%)
		DROUGHT	-1137	-438	-998	-461	-514	-405	-223	-346	25	-115	36	-3	69	18	166	61	221	86	153	264	294	299	-81	-288	-166	-111
			(-42%)	(-22%)	(-32%)	(-18%)	(-25%)	(-21%)	(-27%)	(-36%)	(6%)	(-21%)	(22%)	(-1%)	(35%)	(7%)	(29%)	(9%)	(26%)	(9%)	(9%)	(16%)	(17%)	(18%)	(-3%)	(-10%)	(-12%)	(-8%)
	Sac. R. at Mallard Island	ALL	-1220	-410	-924	-301	-366	-303	-220	-229	45	-36	147	66	221	134	255	137	250	135	257	489	456	454	-522	-75	-135	5
			(-26%)	(-11%)	(-19%)	(-7%)	(-11%)	(-9%)	(-13%)	(-14%)	(5%)	(-4%)	(32%)	(12%)	(30%)	(16%)	(18%)	(9%)	(13%)	(7%)	(9%)	(18%)	(13%)	(13%)	(-12%)	(-2%)	(-5%)	(0%)
		DROUGHT	-1447	-518	-1184	-426	-604	-470	-190	-316	144	-70	165	103	229	153	225	175	254	177	284	474	398	422	-111	-207	-153	-42
			(-27%)	(-12%)	(-19%)	(-8%)	(-13%)	(-11%)	(-8%)	(-12%)	(9%)	(-4%)	(23%)	(13%)	(21%)	(13%)	(11%)	(8%)	(10%)	(7%)	(8%)	(13%)	(11%)	(11%)	(-2%)	(-4%)	(-5%)	(-1%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	8	10	13	14	14	14	7	7	1	-1	-2	-3	-3	-2	-4	-4	-6	-5	-4	-1	1	2	9	9	3	3
			(49%)	(62%)	(87%)	(96%)	(107%)	(106%)	(50%)	(48%)	(4%)	(-6%)	(-13%)	(-17%)	(-21%)	(-16%)	(-25%)	(-24%)	(-30%)	(-25%)	(-16%)	(-7%)	(4%)	(11%)	(47%)	(51%)	(16%)	(20%)
		DROUGHT	13	15	24	26	29	28	20	19	10	9	3	2	1	0	-1	-4	-2	-1	5	6	11	11	18	18	11	11
			(62%)	(79%)	(149%)	(175%)	(230%)	(210%)	(160%)	(150%)	(70%)	(63%)	(21%)	(15%)	(4%)	(-2%)	(-8%)	(-22%)	(-9%)	(-4%)	(21%)	(31%)	(46%)	(46%)	(83%)	(83%)	(61%)	(61%)
	Contra Costa PP #1	ALL	-32	2	-79	-16	-102	-28	-61	-41	-10	-28	8	4	8	5	0	-2	10	5	-10	5	-32	15	-1	14	-25	-5
			(-13%)	(1%)	(-31%)	(-9%)	(-43%)	(-17%)	(-34%)	(-26%)	(-13%)	(-29%)	(15%)	(7%)	(15%)	(9%)	(1%)	(-3%)	(17%)	(7%)	(-8%)	(5%)	(-16%)	(9%)	(-0%)	(7%)	(-17%)	(-4%)
		DROUGHT	-16	-3	-77	-48	-117	-47	-67	-85	-11	-23	3	-4	4	0	5	0	21	3	-35	-22	-90	0	17	47	-30	-15
			(-5%)	(-1%)	(-26%)	(-18%)	(-39%)	(-20%)	(-31%)	(-36%)	(-14%)	(-24%)	(7%)	(-8%)	(9%)	(-1%)	(13%)	(1%)	(47%)	(5%)	(-19%)	(-13%)	(-29%)	(-0%)	(7%)	(21%)	(-17%)	(-9%)
	Banks PP	ALL	-40	-24	-108	-49	-102	-67	-83	-78	-38	-42	-39	-41	-43	-45	-22	-23	-22	-24	-38	-17	-58	-22	-49	-32	-53	-38
			(-24%)	(-16%)	(-53%)	(-34%)	(-54%)	(-44%)	(-59%)	(-58%)	(-47%)	(-49%)	(-57%)	(-59%)	(-61%)	(-62%)	(-30%)	(-32%)	(-33%)	(-35%)	(-36%)	(-20%)	(-39%)	(-19%)	(-29%)	(-21%)	(-43%)	(-35%)
		DROUGHT	-14	-9	-93	-48	-115	-81	-104	-88	-32	-33	-37	-39	-35	-37	-9	-12	8	1	-62	-38	-102	-40	5	21	-47	-31
			(-7%)	(-4%)	(-41%)	(-27%)	(-51%)	(-42%)	(-61%)	(-57%)	(-35%)	(-36%)	(-56%)	(-57%)	(-53%)	(-55%)	(-15%)	(-19%)	(15%)	(2%)	(-43%)	(-31%)	(-45%)	(-24%)	(3%)	(11%)	(-33%)	(-24%)
	Jones PP	ALL	-60	-43	-105	-51	-73	-48	-47	-42	-34	-36	-42	-44	-35	-36	-34	-34	-32	-35	-40	-21	-23	8	-55	-37	-48	-35
			(-40%)	(-32%)	(-57%)	(-39%)	(-47%)	(-37%)	(-41%)	(-38%)	(-42%)	(-43%)	(-55%)	(-56%)	(-43%)	(-44%)	(-41%)	(-42%)	(-47%)	(-49%)	(-36%)	(-23%)	(-16%)	(7%)	(-35%)	(-27%)	(-41%)	(-34%)
		DROUGHT	-49	-43	-89	-40	-76	-56	-60	-47	-27	-27	-20	-21	-26	-26	-31	-33	-9	-19	-74	-46	-49	5	1	11	-41	-27
			(-27%)	(-25%)	(-44%)	(-26%)	(-43%)	(-36%)	(-45%)	(-39%)	(-32%)	(-32%)	(-26%)	(-27%)	(-33%)	(-33%)	(-41%)	(-42%)	(-17%)	(-31%)	(-49%)	(-37%)	(-24%)	(3%)	(0%)	(7%)	(-31%)	(-22%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-25D. Period average change in chloride concentrations (mg/L) for Alternative 4 LLT Scenario H4 relative to existing conditions and the No Action Alternative LLT.
Calculation of chloride concentrations was based on a mass balance approach.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 4 LLT Scenario H4	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	3	3	3	3	2	2	2	3	2	2	3	3	3	3	2	3	7	8	8	9	6	6	4	4	4	4
			(28%)	(29%)	(26%)	(24%)	(12%)	(14%)	(9%)	(14%)	(8%)	(13%)	(18%)	(20%)	(18%)	(21%)	(15%)	(19%)	(36%)	(44%)	(42%)	(49%)	(42%)	(41%)	(31%)	(31%)	(23%)	(26%)
		DROUGHT	3	3	3	3	2	2	1	2	0	1	2	3	1	2	2	3	8	8	10	10	6	6	4	4	3	4
			(23%)	(23%)	(25%)	(24%)	(13%)	(15%)	(4%)	(9%)	(-0%)	(4%)	(10%)	(16%)	(8%)	(15%)	(11%)	(18%)	(41%)	(47%)	(58%)	(59%)	(42%)	(37%)	(26%)	(29%)	(20%)	(24%)
	SJR at Buckley Cove	ALL	-1	1	0	1	-2	4	-2	3	-2	2	-1	2	-3	2	-3	2	-6	4	-8	4	-9	4	-4	1	-3	2
			(-2%)	(1%)	(0%)	(1%)	(-3%)	(5%)	(-2%)	(4%)	(-2%)	(3%)	(-2%)	(3%)	(-3%)	(2%)	(-4%)	(2%)	(-7%)	(5%)	(-9%)	(6%)	(-10%)	(5%)	(-5%)	(1%)	(-4%)	(3%)
		DROUGHT	-2	1	-2	1	-5	4	-6	4	-3	3	-3	3	-5	4	-6	4	-10	8	-9	8	-14	8	-6	2	-6	4
			(-2%)	(2%)	(-3%)	(1%)	(-6%)	(5%)	(-6%)	(5%)	(-3%)	(3%)	(-3%)	(4%)	(-6%)	(5%)	(-7%)	(5%)	(-11%)	(12%)	(-11%)	(11%)	(-15%)	(10%)	(-7%)	(2%)	(-7%)	(5%)
	Franks Tract	ALL	-87	-20	-204	-70	-118	-72	-32	-35	4	-2	13	10	12	9	10	5	18	11	-55	-9	-34	13	-25	-10	-41	-14
			(-30%)	(-9%)	(-53%)	(-28%)	(-40%)	(-29%)	(-20%)	(-22%)	(6%)	(-4%)	(35%)	(24%)	(32%)	(23%)	(22%)	(11%)	(33%)	(19%)	(-29%)	(-6%)	(-15%)	(7%)	(-8%)	(-3%)	(-24%)	(-10%)
		DROUGHT	-79	-41	-199	-83	-124	-84	-33	-15	9	-9	11	6	10	7	14	3	35	8	-94	-26	-37	40	16	-17	-39	-18
			(-22%)	(-13%)	(-45%)	(-26%)	(-33%)	(-25%)	(-16%)	(-8%)	(13%)	(-11%)	(39%)	(17%)	(43%)	(29%)	(47%)	(7%)	(67%)	(10%)	(-30%)	(-11%)	(-12%)	(16%)	(4%)	(-4%)	(-19%)	(-9%)
	Old R. at Rock Slough	ALL	-44	-3	-155	-45	-102	-58	-38	-41	3	-1	12	8	7	4	5	2	18	14	-37	-4	-30	9	-11	0	-31	-10
			(-19%)	(-1%)	(-50%)	(-23%)	(-40%)	(-27%)	(-25%)	(-26%)	(4%)	(-1%)	(24%)	(15%)	(14%)	(7%)	(8%)	(3%)	(33%)	(24%)	(-25%)	(-3%)	(-16%)	(6%)	(-5%)	(-0%)	(-21%)	(-7%)
		DROUGHT	-36	-25	-150	-54	-107	-62	-46	-28	2	-6	10	4	11	8	12	5	28	8	-69	-21	-35	33	29	13	-29	-11
			(-12%)	(-9%)	(-43%)	(-21%)	(-34%)	(-23%)	(-24%)	(-16%)	(3%)	(-7%)	(25%)	(8%)	(32%)	(21%)	(37%)	(14%)	(64%)	(13%)	(-29%)	(-11%)	(-13%)	(16%)	(10%)	(4%)	(-16%)	(-7%)
Western Delta	Sac. R. at Emmaton	ALL	-359	-155	-238	-104	5	-45	9	-25	17	-9	15	1	25	8	57	27	95	57	192	188	235	165	-95	-123	-4	-1
			(-42%)	(-24%)	(-27%)	(-14%)	(1%)	(-9%)	(6%)	(-13%)	(24%)	(-10%)	(50%)	(2%)	(65%)	(15%)	(47%)	(18%)	(43%)	(22%)	(59%)	(57%)	(49%)	(30%)	(-12%)	(-15%)	(-1%)	(-0%)
		DROUGHT	-454	-215	-341	-229	46	-48	46	-36	61	-2	21	6	38	17	148	76	188	87	373	317	243	126	-73	-320	25	-18
			(-40%)	(-24%)	(-27%)	(-20%)	(7%)	(-6%)	(21%)	(-12%)	(56%)	(-1%)	(46%)	(11%)	(77%)	(25%)	(83%)	(30%)	(62%)	(22%)	(79%)	(60%)	(41%)	(18%)	(-6%)	(-23%)	(5%)	(-3%)
	SJR at Antioch	ALL	-1041	-382	-1004	-453	-294	-229	-110	-149	-13	-65	30	-8	46	4	56	1	97	28	59	216	288	296	-392	-179	-190	-77
			(-47%)	(-25%)	(-41%)	(-24%)	(-20%)	(-16%)	(-18%)	(-23%)	(-5%)	(-21%)	(27%)	(-5%)	(32%)	(2%)	(16%)	(0%)	(16%)	(4%)	(5%)	(20%)	(19%)	(20%)	(-18%)	(-9%)	(-17%)	(-8%)
		DROUGHT	-1127	-429	-1175	-638	-344	-234	-82	-206	50	-90	30	-9	52	2	145	40	201	66	171	282	292	297	-149	-357	-161	-106
			(-42%)	(-22%)	(-38%)	(-25%)	(-17%)	(-12%)	(-10%)	(-21%)	(12%)	(-16%)	(18%)	(-4%)	(26%)	(1%)	(26%)	(6%)	(24%)	(7%)	(10%)	(17%)	(17%)	(18%)	(-6%)	(-13%)	(-12%)	(-8%)
	Sac. R. at Mallard Island	ALL	-1310	-499	-992	-369	-278	-215	-64	-74	60	-21	129	48	142	55	171	53	224	108	292	524	459	457	-514	-68	-140	0
			(-28%)	(-13%)	(-20%)	(-9%)	(-8%)	(-7%)	(-4%)	(-4%)	(6%)	(-2%)	(28%)	(9%)	(19%)	(7%)	(12%)	(4%)	(12%)	(5%)	(10%)	(19%)	(13%)	(13%)	(-12%)	(-2%)	(-5%)	(-0%)
		DROUGHT	-1507	-578	-1367	-609	-367	-233	-8	-134	175	-39	149	86	202	126	208	158	237	160	298	488	385	409	-182	-278	-148	-37
			(-28%)	(-13%)	(-22%)	(-11%)	(-8%)	(-5%)	(-0%)	(-5%)	(11%)	(-2%)	(21%)	(11%)	(19%)	(11%)	(10%)	(7%)	(10%)	(6%)	(8%)	(14%)	(10%)	(11%)	(-4%)	(-6%)	(-5%)	(-1%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	8	9	13	14	14	14	8	8	2	0	-1	-2	-3	-2	-4	-4	-5	-4	-3	-1	1	3	8	9	3	4
			(48%)	(61%)	(88%)	(97%)	(110%)	(109%)	(56%)	(55%)	(10%)	(-1%)	(-9%)	(-13%)	(-19%)	(-14%)	(-23%)	(-23%)	(-28%)	(-22%)	(-13%)	(-3%)	(7%)	(14%)	(45%)	(49%)	(19%)	(22%)
		DROUGHT	13	15	25	27	30	29	23	22	11	11	4	3	1	1	-1	-4	-2	0	5	7	11	11	18	18	12	12
			(63%)	(80%)	(155%)	(182%)	(243%)	(221%)	(183%)	(173%)	(81%)	(73%)	(26%)	(19%)	(9%)	(4%)	(-4%)	(-18%)	(-7%)	(-2%)	(23%)	(33%)	(47%)	(48%)	(81%)	(81%)	(66%)	(66%)
	Contra Costa PP #1	ALL	-26	7	-85	-23	-106	-33	-61	-41	3	-15	12	8	10	8	3	1	17	12	-18	-3	-53	-6	-8	7	-26	-7
			(-11%)	(4%)	(-34%)	(-12%)	(-45%)	(-20%)	(-34%)	(-26%)	(3%)	(-15%)	(22%)	(14%)	(19%)	(13%)	(5%)	(2%)	(30%)	(19%)	(-15%)	(-3%)	(-26%)	(-4%)	(-4%)	(3%)	(-18%)	(-5%)
		DROUGHT	-19	-6	-83	-54	-128	-58	-84	-102	1	-11	9	2	9	4	9	4	25	7	-39	-26	-87	2	19	49	-31	-16
			(-6%)	(-2%)	(-28%)	(-20%)	(-43%)	(-25%)	(-38%)	(-43%)	(1%)	(-11%)	(19%)	(3%)	(21%)	(10%)	(24%)	(10%)	(57%)	(12%)	(-22%)	(-15%)	(-28%)	(1%)	(7%)	(22%)	(-17%)	(-10%)
	Banks PP	ALL	-29	-13	-116	-57	-104	-69	-80	-75	-37	-40	-36	-38	-37	-39	-22	-23	-31	-33	-46	-25	-57	-21	-71	-55	-56	-41
			(-18%)	(-9%)	(-58%)	(-40%)	(-55%)	(-45%)	(-57%)	(-56%)	(-44%)	(-47%)	(-53%)	(-54%)	(-52%)	(-53%)	(-30%)	(-31%)	(-46%)	(-48%)	(-44%)	(-30%)	(-38%)	(-18%)	(-42%)	(-36%)	(-45%)	(-37%)
		DROUGHT	-12	-7	-92	-47	-123	-89	-101	-85	-25	-26	-30	-32	-32	-35	-30	-32	-7	-14	-69	-45	-77	-15	-15	0	-51	-35
			(-6%)	(-4%)	(-41%)	(-26%)	(-55%)	(-47%)	(-59%)	(-55%)	(-27%)	(-28%)	(-45%)	(-47%)	(-50%)	(-52%)	(-50%)	(-52%)	(-14%)	(-23%)	(-47%)	(-37%)	(-34%)	(-9%)	(-8%)	(0%)	(-36%)	(-28%)
	Jones PP	ALL	-61	-43	-102	-48	-74	-48	-60	-55	-38	-40	-43	-45	-41	-42	-33	-34	-26	-29	-41	-23	-37	-6	-51	-34	-50	-37
			(-40%)	(-32%)	(-55%)	(-36%)	(-48%)	(-37%)	(-52%)	(-50%)	(-47%)	(-48%)	(-56%)	(-57%)	(-51%)	(-51%)	(-41%)	(-42%)	(-38%)	(-40%)	(-37%)	(-25%)	(-26%)	(-5%)	(-33%)	(-25%)	(-43%)	(-36%)
		DROUGHT	-51	-45	-99	-51	-80	-60	-69	-56	-35	-35	-26	-27	-34	-34	-22	-23	-4	-14	-51	-22	-53	1	1	11	-42	-28
			(-29%)	(-26%)	(-49%)	(-33%)	(-46%)	(-39%)	(-52%)	(-47%)	(-41%)	(-41%)	(-33%)	(-34%)	(-43%)	(-44%)	(-28%)	(-30%)	(-8%)	(-23%)	(-33%)	(-18%)	(-26%)	(0%)	(0%)	(7%)	(-31%)	(-23%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-26A. Period average change in chloride concentrations (mg/L) for Alternative 4 LLT Scenario H1 relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 4 Scn H1	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	1	1	1	1	1	1	1	2	1	2	2	2	2	2	1	2	2	2	1	2	2	1	1	1	1	2
			(7%)	(8%)	(8%)	(8%)	(4%)	(5%)	(3%)	(7%)	(5%)	(8%)	(9%)	(11%)	(10%)	(11%)	(8%)	(9%)	(13%)	(14%)	(9%)	(9%)	(10%)	(9%)	(9%)	(8%)	(8%)	(9%)
		DROUGHT	1	1	1	1	1	1	0	1	0	1	1	2	1	1	1	2	3	3	2	2	2	1	1	1	1	1
			(7%)	(7%)	(7%)	(7%)	(3%)	(4%)	(1%)	(3%)	(-1%)	(2%)	(4%)	(8%)	(4%)	(6%)	(7%)	(8%)	(16%)	(17%)	(14%)	(14%)	(10%)	(9%)	(7%)	(8%)	(6%)	(8%)
	SJR at Buckley Cove	ALL	-3	1	-11	-2	-31	-4	-37	-8	-20	-4	-18	-3	-6	2	1	8	3	6	-6	9	-4	16	-5	9	-12	2
			(-3%)	(1%)	(-10%)	(-2%)	(-23%)	(-4%)	(-23%)	(-6%)	(-14%)	(-3%)	(-13%)	(-3%)	(-6%)	(2%)	(2%)	(12%)	(3%)	(7%)	(-6%)	(10%)	(-4%)	(19%)	(-5%)	(9%)	(-10%)	(2%)
		DROUGHT	-5	4	-16	-1	-37	-4	-50	-10	-33	-8	-26	-6	-12	1	3	18	-8	25	-4	33	-4	46	-7	18	-17	10
			(-4%)	(4%)	(-12%)	(-0%)	(-22%)	(-3%)	(-24%)	(-6%)	(-15%)	(-4%)	(-12%)	(-3%)	(-8%)	(1%)	(2%)	(16%)	(-6%)	(26%)	(-3%)	(44%)	(-4%)	(65%)	(-5%)	(17%)	(-11%)	(8%)
	Franks Tract	ALL	-7	33	-99	-19	-49	-12	-20	-10	0	-1	10	8	9	7	8	5	16	8	-23	3	-8	24	26	36	-11	7
			(-4%)	(22%)	(-43%)	(-13%)	(-23%)	(-7%)	(-15%)	(-8%)	(0%)	(-2%)	(27%)	(20%)	(29%)	(23%)	(23%)	(15%)	(38%)	(16%)	(-18%)	(3%)	(-5%)	(20%)	(14%)	(20%)	(-10%)	(7%)
		DROUGHT	-14	5	-92	-24	-43	-9	-32	-5	12	-4	17	11	11	10	15	7	38	13	-51	-12	-18	31	16	-10	-12	1
			(-6%)	(3%)	(-34%)	(-12%)	(-16%)	(-4%)	(-18%)	(-3%)	(17%)	(-4%)	(43%)	(25%)	(37%)	(33%)	(50%)	(17%)	(91%)	(19%)	(-24%)	(-7%)	(-8%)	(18%)	(7%)	(-4%)	(-8%)	(1%)
	Old R. at Rock Slough	ALL	10	33	-78	-13	-42	-10	-20	-10	-2	-1	8	3	2	1	2	0	14	9	-13	5	-6	21	25	33	-8	6
			(6%)	(25%)	(-41%)	(-11%)	(-24%)	(-7%)	(-15%)	(-8%)	(-3%)	(-2%)	(15%)	(6%)	(3%)	(1%)	(4%)	(1%)	(36%)	(19%)	(-13%)	(6%)	(-5%)	(21%)	(16%)	(23%)	(-8%)	(6%)
		DROUGHT	8	9	-71	-16	-34	-2	-28	-2	2	-3	11	4	6	3	10	4	30	12	-35	-8	-17	26	24	9	-8	3
			(4%)	(5%)	(-33%)	(-10%)	(-15%)	(-1%)	(-16%)	(-1%)	(2%)	(-3%)	(18%)	(6%)	(10%)	(5%)	(25%)	(7%)	(78%)	(20%)	(-21%)	(-6%)	(-9%)	(17%)	(13%)	(5%)	(-6%)	(2%)
Western Delta	Sac. R. at Emmaton	ALL	-122	14	-60	33	16	-7	-18	-37	3	-19	15	0	24	9	54	29	88	49	122	109	176	130	153	120	38	36
			(-21%)	(3%)	(-11%)	(7%)	(5%)	(-2%)	(-14%)	(-25%)	(3%)	(-20%)	(43%)	(0%)	(68%)	(18%)	(59%)	(25%)	(48%)	(22%)	(54%)	(46%)	(53%)	(34%)	(27%)	(20%)	(15%)	(14%)
		DROUGHT	-224	-73	-91	-13	-18	-72	26	-36	54	-7	22	5	35	16	134	66	193	80	309	250	221	126	3	-190	55	13
			(-29%)	(-12%)	(-12%)	(-2%)	(-4%)	(-13%)	(13%)	(-14%)	(50%)	(-4%)	(51%)	(8%)	(95%)	(28%)	(113%)	(36%)	(79%)	(22%)	(94%)	(64%)	(50%)	(23%)	(0%)	(-19%)	(15%)	(3%)
	SJR at Antioch	ALL	-413	35	-408	-26	-145	-52	-149	-156	-48	-87	32	-12	54	10	77	22	124	45	70	150	223	242	192	312	-33	40
			(-28%)	(3%)	(-27%)	(-2%)	(-14%)	(-6%)	(-30%)	(-31%)	(-19%)	(-30%)	(27%)	(-7%)	(48%)	(7%)	(31%)	(7%)	(26%)	(8%)	(8%)	(19%)	(21%)	(23%)	(13%)	(23%)	(-4%)	(6%)
		DROUGHT	-570	-116	-486	-118	-307	-178	-127	-207	48	-87	50	-5	73	19	177	54	259	76	212	235	286	274	-24	-216	-34	-22
			(-31%)	(-8%)	(-25%)	(-8%)	(-21%)	(-13%)	(-18%)	(-26%)	(12%)	(-16%)	(31%)	(-2%)	(51%)	(10%)	(47%)	(11%)	(38%)	(9%)	(17%)	(19%)	(22%)	(21%)	(-1%)	(-11%)	(-3%)	(-2%)
	Sac. R. at Mallard Island	ALL	-447	213	-429	123	-158	-12	-259	-247	-58	-127	148	31	217	87	263	106	295	108	265	373	426	433	361	641	52	144
			(-14%)	(9%)	(-15%)	(5%)	(-7%)	(-1%)	(-20%)	(-20%)	(-7%)	(-14%)	(33%)	(5%)	(42%)	(14%)	(29%)	(10%)	(20%)	(6%)	(13%)	(19%)	(17%)	(18%)	(12%)	(24%)	(3%)	(9%)
		DROUGHT	-760	-67	-628	-3	-409	-208	-196	-274	151	-96	215	77	267	119	346	151	400	162	417	453	443	438	-8	-178	20	48
			(-20%)	(-2%)	(-17%)	(-0%)	(-13%)	(-7%)	(-10%)	(-13%)	(11%)	(-6%)	(33%)	(10%)	(37%)	(13%)	(24%)	(9%)	(19%)	(7%)	(15%)	(17%)	(15%)	(15%)	(-0%)	(-5%)	(1%)	(2%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	4	5	5	5	7	7	4	4	0	-1	-1	-1	-2	-1	-1	-1	0	0	1	2	2	3	4	5	2	2
			(25%)	(29%)	(27%)	(30%)	(40%)	(41%)	(19%)	(20%)	(2%)	(-4%)	(-4%)	(-7%)	(-9%)	(-7%)	(-6%)	(-7%)	(-2%)	(-1%)	(6%)	(9%)	(13%)	(15%)	(25%)	(26%)	(11%)	(11%)
		DROUGHT	6	7	8	9	16	16	13	13	8	8	4	4	1	0	1	-1	2	2	5	5	7	7	9	9	7	6
			(35%)	(38%)	(46%)	(51%)	(92%)	(89%)	(72%)	(70%)	(42%)	(39%)	(21%)	(17%)	(7%)	(2%)	(4%)	(-6%)	(10%)	(12%)	(26%)	(28%)	(38%)	(38%)	(49%)	(49%)	(36%)	(34%)
	Contra Costa PP #1	ALL	26	48	-10	27	-65	-11	-52	-24	9	-4	0	8	0	3	-9	-9	9	6	-2	5	-21	10	9	24	-9	7
			(16%)	(35%)	(-6%)	(22%)	(-36%)	(-9%)	(-28%)	(-15%)	(8%)	(-3%)	(1%)	(9%)	(0%)	(4%)	(-14%)	(-13%)	(20%)	(11%)	(-3%)	(6%)	(-15%)	(10%)	(7%)	(19%)	(-7%)	(7%)
		DROUGHT	27	32	-24	-9	-75	-20	-58	-61	-4	-9	7	-2	0	-5	1	-4	24	10	-16	-11	-54	4	14	33	-13	-4
			(14%)	(17%)	(-13%)	(-5%)	(-33%)	(-11%)	(-28%)	(-29%)	(-4%)	(-8%)	(9%)	(-2%)	(-0%)	(-6%)	(2%)	(-6%)	(52%)	(16%)	(-12%)	(-9%)	(-24%)	(2%)	(8%)	(21%)	(-9%)	(-3%)
	Banks PP	ALL	-15	-3	-48	-14	-55	-29	-63	-49	-41	-39	-49	-48	-39	-38	-10	-10	-10	-16	-20	-14	-30	-9	-12	-1	-33	-22
			(-13%)	(-3%)	(-37%)	(-15%)	(-38%)	(-24%)	(-46%)	(-39%)	(-40%)	(-39%)	(-56%)	(-55%)	(-47%)	(-46%)	(-14%)	(-13%)	(-16%)	(-23%)	(-28%)	(-21%)	(-29%)	(-11%)	(-11%)	(-1%)	(-32%)	(-25%)
		DROUGHT	-2	2	-36	-11	-57	-31	-81	-63	-55	-49	-80	-77	-60	-58	-21	-21	14	3	-30	-19	-45	-7	5	14	-37	-26
			(-1%)	(2%)	(-24%)	(-9%)	(-32%)	(-20%)	(-47%)	(-41%)	(-40%)	(-37%)	(-60%)	(-59%)	(-46%)	(-45%)	(-20%)	(-20%)	(21%)	(4%)	(-29%)	(-21%)	(-29%)	(-6%)	(3%)	(12%)	(-28%)	(-21%)
	Jones PP	ALL	-25	-18	-48	-18	-36	-13	-52	-35	-41	-39	-45	-43	-26	-26	-26	-26	-22	-35	-14	-15	-11	4	-26	-18	-31	-24
			(-23%)	(-17%)	(-37%)	(-18%)	(-24%)	(-10%)	(-34%)	(-26%)	(-32%)	(-31%)	(-37%)	(-37%)	(-30%)	(-29%)	(-34%)	(-33%)	(-35%)	(-46%)	(-17%)	(-18%)	(-11%)	(4%)	(-24%)	(-18%)	(-28%)	(-23%)
		DROUGHT	-23	-26	-37	-14	-35	-14	-59	-36	-53	-50	-61	-59	-30	-32	-47	-45	-14	-25	-37	-28	-21	11	8	13	-34	-25
			(-17%)	(-19%)	(-25%)	(-11%)	(-19%)	(-9%)	(-31%)	(-21%)	(-28%)	(-27%)	(-31%)	(-31%)	(-23%)	(-23%)	(-41%)	(-40%)	(-22%)	(-34%)	(-34%)	(-28%)	(-14%)	(9%)	(6%)	(10%)	(-24%)	(-19%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-26B. Period average change in chloride concentrations (mg/L) for Alternative 4 LLT Scenario H2 relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 4 LLT Scn H2	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	1	1	1	1	1	1	1	2	1	2	2	2	2	2	1	2	2	2	2	2	2	1	1	1	1	2
			(7%)	(8%)	(8%)	(8%)	(5%)	(5%)	(3%)	(7%)	(5%)	(8%)	(9%)	(11%)	(10%)	(11%)	(8%)	(9%)	(14%)	(15%)	(11%)	(12%)	(10%)	(9%)	(9%)	(8%)	(8%)	(9%)
		DROUGHT	1	1	1	1	1	1	0	1	0	0	1	2	1	2	1	2	3	3	2	2	2	2	1	1	1	2
			(6%)	(6%)	(8%)	(8%)	(5%)	(6%)	(1%)	(3%)	(-1%)	(2%)	(5%)	(9%)	(5%)	(8%)	(8%)	(9%)	(17%)	(18%)	(14%)	(14%)	(10%)	(9%)	(7%)	(7%)	(6%)	(8%)
	SJR at Buckley Cove	ALL	-3	1	-11	-2	-30	-3	-37	-8	-21	-4	-18	-3	-6	2	1	8	3	7	-5	10	-3	17	-5	8	-11	3
			(-3%)	(1%)	(-10%)	(-2%)	(-22%)	(-3%)	(-23%)	(-6%)	(-14%)	(-3%)	(-13%)	(-3%)	(-6%)	(2%)	(2%)	(12%)	(3%)	(7%)	(-5%)	(11%)	(-3%)	(20%)	(-5%)	(9%)	(-10%)	(3%)
		DROUGHT	-5	4	-16	-1	-35	-2	-50	-10	-33	-8	-26	-5	-12	1	3	18	-8	26	-5	32	-3	47	-7	18	-16	10
			(-4%)	(4%)	(-11%)	(-0%)	(-21%)	(-2%)	(-23%)	(-6%)	(-15%)	(-4%)	(-12%)	(-3%)	(-8%)	(1%)	(2%)	(16%)	(-6%)	(26%)	(-5%)	(42%)	(-3%)	(67%)	(-5%)	(16%)	(-11%)	(8%)
	Franks Tract	ALL	-7	32	-98	-18	-51	-14	-25	-15	0	-1	11	9	11	10	10	7	16	9	-29	-2	-16	16	19	29	-13	5
			(-4%)	(21%)	(-42%)	(-12%)	(-24%)	(-8%)	(-19%)	(-12%)	(1%)	(-2%)	(29%)	(22%)	(36%)	(30%)	(30%)	(21%)	(40%)	(18%)	(-22%)	(-2%)	(-10%)	(14%)	(10%)	(16%)	(-11%)	(5%)
		DROUGHT	-32	-13	-104	-37	-46	-12	-24	3	9	-7	18	12	18	17	21	12	38	13	-48	-9	-9	41	12	-14	-12	1
			(-14%)	(-6%)	(-39%)	(-18%)	(-17%)	(-5%)	(-13%)	(2%)	(13%)	(-7%)	(45%)	(27%)	(59%)	(54%)	(68%)	(31%)	(91%)	(19%)	(-23%)	(-5%)	(-4%)	(23%)	(5%)	(-5%)	(-8%)	(0%)
	Old R. at Rock Slough	ALL	10	33	-76	-12	-45	-12	-25	-16	0	0	9	5	8	7	7	5	17	12	-17	1	-13	14	19	27	-9	5
			(7%)	(25%)	(-41%)	(-10%)	(-25%)	(-8%)	(-19%)	(-13%)	(-0%)	(0%)	(19%)	(9%)	(16%)	(14%)	(14%)	(11%)	(44%)	(26%)	(-17%)	(1%)	(-10%)	(14%)	(12%)	(19%)	(-8%)	(6%)
		DROUGHT	-7	-6	-81	-26	-42	-10	-21	4	3	-2	15	8	23	20	21	14	32	14	-35	-8	-8	35	20	6	-7	4
			(-4%)	(-3%)	(-38%)	(-16%)	(-18%)	(-5%)	(-12%)	(3%)	(3%)	(-2%)	(24%)	(11%)	(41%)	(34%)	(49%)	(28%)	(84%)	(24%)	(-21%)	(-6%)	(-4%)	(24%)	(11%)	(3%)	(-5%)	(3%)
Western Delta	Sac. R. at Emmaton	ALL	-130	7	-58	35	53	30	-25	-43	-1	-22	13	-2	22	7	49	23	89	51	147	134	186	139	166	132	43	41
			(-23%)	(2%)	(-11%)	(8%)	(17%)	(9%)	(-19%)	(-30%)	(-2%)	(-24%)	(37%)	(-4%)	(61%)	(13%)	(53%)	(20%)	(48%)	(23%)	(65%)	(56%)	(55%)	(36%)	(30%)	(22%)	(16%)	(16%)
		DROUGHT	-311	-161	-141	-62	106	52	-3	-65	39	-23	24	6	35	15	130	62	197	85	316	257	234	139	-13	-206	51	8
			(-40%)	(-26%)	(-18%)	(-9%)	(22%)	(10%)	(-1%)	(-25%)	(36%)	(-13%)	(54%)	(10%)	(94%)	(27%)	(109%)	(33%)	(80%)	(24%)	(96%)	(66%)	(53%)	(26%)	(-2%)	(-21%)	(14%)	(2%)
	SJR at Antioch	ALL	-418	29	-408	-26	-112	-18	-150	-156	-57	-96	25	-20	44	1	61	7	110	31	86	165	239	258	203	323	-31	42
			(-28%)	(3%)	(-27%)	(-2%)	(-11%)	(-2%)	(-30%)	(-31%)	(-22%)	(-33%)	(21%)	(-12%)	(39%)	(1%)	(24%)	(2%)	(23%)	(5%)	(10%)	(21%)	(23%)	(25%)	(14%)	(24%)	(-4%)	(6%)
		DROUGHT	-698	-244	-565	-198	-145	-16	-137	-217	11	-124	48	-8	62	7	164	41	248	66	231	255	298	287	-39	-230	-44	-32
			(-38%)	(-18%)	(-30%)	(-13%)	(-10%)	(-1%)	(-19%)	(-27%)	(3%)	(-23%)	(29%)	(-3%)	(43%)	(4%)	(44%)	(8%)	(36%)	(8%)	(19%)	(21%)	(23%)	(22%)	(-2%)	(-12%)	(-4%)	(-3%)
	Sac. R. at Mallard Island	ALL	-471	188	-448	104	-108	38	-210	-197	-54	-123	127	9	167	37	183	26	257	70	301	409	451	457	383	663	48	140
			(-15%)	(8%)	(-15%)	(4%)	(-5%)	(2%)	(-17%)	(-16%)	(-7%)	(-14%)	(28%)	(2%)	(33%)	(6%)	(20%)	(2%)	(17%)	(4%)	(15%)	(21%)	(18%)	(19%)	(13%)	(25%)	(3%)	(8%)
		DROUGHT	-977	-283	-768	-144	-182	18	-148	-226	116	-131	202	63	243	94	327	132	387	149	429	465	460	455	-35	-204	4	32
			(-26%)	(-9%)	(-20%)	(-5%)	(-6%)	(1%)	(-8%)	(-11%)	(8%)	(-8%)	(31%)	(8%)	(33%)	(11%)	(23%)	(8%)	(18%)	(6%)	(16%)	(17%)	(16%)	(16%)	(-1%)	(-5%)	(0%)	(1%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	5	5	5	5	7	7	5	5	1	-1	-1	-1	-2	-1	-1	-1	0	0	1	2	3	3	4	5	2	2
			(29%)	(32%)	(29%)	(32%)	(41%)	(41%)	(23%)	(23%)	(4%)	(-3%)	(-3%)	(-6%)	(-8%)	(-6%)	(-6%)	(-6%)	(-1%)	(1%)	(8%)	(11%)	(16%)	(18%)	(26%)	(27%)	(12%)	(13%)
		DROUGHT	8	8	8	9	15	15	14	14	8	8	4	3	2	1	1	-1	2	2	5	5	8	8	9	9	7	7
			(41%)	(44%)	(45%)	(51%)	(87%)	(85%)	(79%)	(77%)	(42%)	(39%)	(18%)	(15%)	(8%)	(3%)	(5%)	(-5%)	(12%)	(14%)	(28%)	(31%)	(44%)	(44%)	(50%)	(50%)	(37%)	(36%)
	Contra Costa PP #1	ALL	21	43	-27	10	-63	-9	-47	-19	0	-13	-4	3	7	9	-2	-2	13	9	-4	3	-29	3	6	20	-11	5
			(13%)	(32%)	(-17%)	(8%)	(-35%)	(-7%)	(-26%)	(-12%)	(-0%)	(-10%)	(-4%)	(4%)	(9%)	(12%)	(-3%)	(-2%)	(27%)	(18%)	(-5%)	(4%)	(-21%)	(2%)	(4%)	(16%)	(-9%)	(5%)
		DROUGHT	6	12	-26	-11	-85	-29	-59	-63	-2	-7	10	1	18	13	14	9	24	10	-15	-10	-45	13	19	38	-12	-2
			(3%)	(6%)	(-14%)	(-6%)	(-37%)	(-17%)	(-28%)	(-29%)	(-2%)	(-6%)	(13%)	(1%)	(24%)	(16%)	(24%)	(14%)	(53%)	(16%)	(-11%)	(-8%)	(-20%)	(8%)	(11%)	(25%)	(-8%)	(-1%)
	Banks PP	ALL	-11	1	-48	-14	-57	-31	-64	-49	-41	-39	-36	-35	-44	-42	-22	-21	-17	-23	-15	-9	-26	-5	-12	-1	-32	-22
			(-10%)	(1%)	(-36%)	(-14%)	(-40%)	(-26%)	(-46%)	(-40%)	(-40%)	(-38%)	(-42%)	(-41%)	(-53%)	(-52%)	(-29%)	(-28%)	(-27%)	(-33%)	(-20%)	(-13%)	(-26%)	(-7%)	(-11%)	(-1%)	(-32%)	(-24%)
		DROUGHT	-11	-7	-42	-17	-79	-53	-63	-45	-50	-44	-63	-60	-78	-75	-56	-56	-7	-18	-27	-16	-30	9	-8	2	-43	-32
			(-8%)	(-5%)	(-27%)	(-13%)	(-44%)	(-34%)	(-37%)	(-29%)	(-36%)	(-33%)	(-47%)	(-46%)	(-60%)	(-59%)	(-53%)	(-52%)	(-10%)	(-23%)	(-27%)	(-18%)	(-19%)	(7%)	(-6%)	(2%)	(-32%)	(-26%)
	Jones PP	ALL	-30	-23	-53	-23	-53	-30	-59	-42	-55	-54	-60	-58	-33	-32	-19	-18	-8	-21	-19	-20	-18	-3	-26	-17	-36	-29
			(-28%)	(-23%)	(-41%)	(-23%)	(-35%)	(-24%)	(-39%)	(-31%)	(-43%)	(-43%)	(-50%)	(-50%)	(-37%)	(-37%)	(-24%)	(-24%)	(-12%)	(-27%)	(-23%)	(-24%)	(-18%)	(-4%)	(-24%)	(-18%)	(-33%)	(-28%)
		DROUGHT	-38	-40	-47	-24	-45	-24	-74	-51	-78	-74	-97	-95	-56	-57	-29	-27	4	-8	-35	-26	-26	5	-11	-6	-44	-36
			(-28%)	(-30%)	(-32%)	(-19%)	(-25%)	(-15%)	(-39%)	(-30%)	(-41%)	(-40%)	(-50%)	(-49%)	(-41%)	(-42%)	(-25%)	(-24%)	(6%)	(-10%)	(-33%)	(-27%)	(-18%)	(4%)	(-9%)	(-5%)	(-31%)	(-26%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-26C. Period average change in chloride concentrations (mg/L) for Alternative 4 LLT Scenario H3 relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 4 Scn H3	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	1	1	1	1	1	1	1	2	1	2	2	2	2	2	1	2	2	2	2	2	2	2	1	1	1	2
			(8%)	(8%)	(8%)	(8%)	(4%)	(5%)	(4%)	(7%)	(4%)	(8%)	(9%)	(11%)	(10%)	(11%)	(8%)	(9%)	(12%)	(14%)	(9%)	(10%)	(10%)	(10%)	(8%)	(7%)	(8%)	(9%)
		DROUGHT	1	1	1	1	0	1	0	1	0	0	1	2	1	1	1	2	3	3	2	2	2	2	1	1	1	1
			(7%)	(7%)	(7%)	(7%)	(3%)	(4%)	(0%)	(3%)	(-1%)	(2%)	(5%)	(9%)	(4%)	(7%)	(7%)	(9%)	(17%)	(18%)	(14%)	(15%)	(10%)	(10%)	(7%)	(8%)	(6%)	(8%)
	SJR at Buckley Cove	ALL	-3	1	-11	-2	-31	-4	-37	-8	-20	-4	-19	-3	-6	2	1	8	3	6	-6	10	-3	17	-5	8	-11	3
			(-3%)	(1%)	(-10%)	(-2%)	(-23%)	(-3%)	(-23%)	(-6%)	(-14%)	(-3%)	(-13%)	(-3%)	(-6%)	(2%)	(2%)	(12%)	(3%)	(7%)	(-5%)	(10%)	(-3%)	(19%)	(-5%)	(9%)	(-10%)	(3%)
		DROUGHT	-5	4	-16	-1	-38	-5	-50	-10	-33	-8	-26	-6	-13	1	3	18	-8	25	-4	34	-4	47	-7	18	-17	10
			(-4%)	(4%)	(-12%)	(-0%)	(-23%)	(-4%)	(-24%)	(-6%)	(-15%)	(-4%)	(-12%)	(-3%)	(-8%)	(0%)	(2%)	(16%)	(-6%)	(26%)	(-3%)	(44%)	(-3%)	(66%)	(-5%)	(17%)	(-11%)	(8%)
	Franks Tract	ALL	-57	-18	-116	-36	-82	-45	-48	-38	-7	-9	8	6	9	8	8	5	16	8	-24	3	-9	23	-13	-3	-26	-8
			(-30%)	(-12%)	(-50%)	(-24%)	(-39%)	(-26%)	(-36%)	(-30%)	(-12%)	(-14%)	(23%)	(16%)	(29%)	(23%)	(24%)	(15%)	(37%)	(16%)	(-18%)	(3%)	(-6%)	(19%)	(-7%)	(-1%)	(-22%)	(-8%)
		DROUGHT	-46	-27	-115	-47	-80	-46	-59	-32	-3	-19	14	8	12	11	17	8	40	14	-50	-12	-21	29	20	-7	-23	-10
			(-20%)	(-13%)	(-43%)	(-23%)	(-30%)	(-20%)	(-33%)	(-21%)	(-5%)	(-22%)	(35%)	(18%)	(41%)	(36%)	(55%)	(21%)	(95%)	(21%)	(-24%)	(-7%)	(-9%)	(17%)	(9%)	(-3%)	(-15%)	(-7%)
	Old R. at Rock Slough	ALL	-27	-4	-83	-18	-68	-35	-47	-38	-8	-7	6	1	3	2	2	1	14	8	-14	4	-7	20	0	8	-19	-5
			(-18%)	(-3%)	(-44%)	(-15%)	(-38%)	(-24%)	(-35%)	(-30%)	(-11%)	(-10%)	(12%)	(3%)	(5%)	(4%)	(5%)	(2%)	(35%)	(18%)	(-14%)	(5%)	(-6%)	(20%)	(0%)	(6%)	(-18%)	(-5%)
		DROUGHT	-15	-14	-83	-28	-64	-32	-55	-29	-10	-14	8	1	11	8	13	6	31	13	-34	-7	-19	24	27	12	-16	-5
			(-8%)	(-8%)	(-38%)	(-17%)	(-28%)	(-16%)	(-32%)	(-20%)	(-11%)	(-15%)	(13%)	(1%)	(20%)	(14%)	(31%)	(13%)	(82%)	(23%)	(-21%)	(-5%)	(-10%)	(16%)	(14%)	(6%)	(-12%)	(-4%)
Western Delta	Sac. R. at Emmaton	ALL	-233	-97	-152	-60	-47	-69	-35	-53	2	-19	18	3	25	10	53	28	89	51	129	116	189	143	-46	-79	-1	-2
			(-41%)	(-22%)	(-28%)	(-13%)	(-15%)	(-21%)	(-27%)	(-36%)	(2%)	(-21%)	(51%)	(5%)	(70%)	(20%)	(58%)	(24%)	(48%)	(23%)	(58%)	(49%)	(57%)	(37%)	(-8%)	(-13%)	(-0%)	(-1%)
		DROUGHT	-313	-163	-196	-117	-83	-137	-33	-94	36	-26	25	7	37	18	137	70	202	90	305	246	240	145	14	-179	31	-12
			(-40%)	(-26%)	(-25%)	(-17%)	(-17%)	(-25%)	(-17%)	(-37%)	(33%)	(-15%)	(57%)	(12%)	(100%)	(31%)	(116%)	(38%)	(82%)	(25%)	(93%)	(63%)	(54%)	(27%)	(2%)	(-18%)	(9%)	(-3%)
	SJR at Antioch	ALL	-699	-252	-632	-250	-319	-226	-193	-199	-50	-89	38	-6	55	11	76	22	125	46	77	156	235	254	-235	-115	-127	-54
			(-47%)	(-24%)	(-42%)	(-22%)	(-31%)	(-24%)	(-39%)	(-40%)	(-20%)	(-30%)	(32%)	(-4%)	(49%)	(7%)	(30%)	(7%)	(26%)	(8%)	(9%)	(20%)	(22%)	(25%)	(-16%)	(-9%)	(-17%)	(-8%)
		DROUGHT	-786	-332	-705	-338	-456	-327	-240	-320	-4	-138	53	-2	72	18	184	61	274	91	207	230	294	282	0	-192	-92	-81
			(-43%)	(-24%)	(-37%)	(-22%)	(-31%)	(-24%)	(-34%)	(-40%)	(-1%)	(-26%)	(33%)	(-1%)	(50%)	(9%)	(49%)	(12%)	(40%)	(10%)	(17%)	(19%)	(23%)	(22%)	(-0%)	(-10%)	(-9%)	(-8%)
	Sac. R. at Mallard Island	ALL	-1037	-377	-843	-290	-430	-285	-284	-272	-43	-112	161	43	222	92	259	102	298	111	275	383	446	452	-325	-46	-108	-17
			(-34%)	(-16%)	(-29%)	(-12%)	(-19%)	(-14%)	(-22%)	(-22%)	(-5%)	(-13%)	(36%)	(8%)	(43%)	(14%)	(28%)	(9%)	(20%)	(7%)	(13%)	(20%)	(18%)	(18%)	(-11%)	(-2%)	(-6%)	(-1%)
		DROUGHT	-1173	-480	-1024	-399	-649	-448	-339	-417	84	-163	219	81	267	118	358	163	422	184	415	451	457	452	14	-155	-79	-51
			(-32%)	(-16%)	(-27%)	(-13%)	(-20%)	(-15%)	(-17%)	(-21%)	(6%)	(-10%)	(33%)	(10%)	(37%)	(13%)	(25%)	(10%)	(20%)	(8%)	(15%)	(17%)	(16%)	(16%)	(0%)	(-4%)	(-3%)	(-2%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	3	3	3	4	5	5	2	2	-1	-2	-2	-2	-2	-2	-1	-2	-1	0	1	1	2	3	4	4	1	1
			(15%)	(18%)	(18%)	(21%)	(29%)	(29%)	(11%)	(11%)	(-3%)	(-9%)	(-8%)	(-10%)	(-11%)	(-9%)	(-8%)	(-8%)	(-3%)	(-2%)	(6%)	(8%)	(13%)	(15%)	(22%)	(23%)	(6%)	(6%)
		DROUGHT	5	5	7	8	12	12	10	9	6	5	3	2	0	-1	0	-2	2	2	4	5	7	7	8	8	5	5
			(26%)	(28%)	(39%)	(44%)	(69%)	(67%)	(54%)	(52%)	(29%)	(26%)	(13%)	(9%)	(1%)	(-4%)	(-1%)	(-10%)	(8%)	(10%)	(25%)	(27%)	(37%)	(37%)	(45%)	(46%)	(28%)	(26%)
	Contra Costa PP #1	ALL	-17	5	-44	-7	-78	-24	-68	-40	-11	-24	-6	1	-1	1	-8	-8	8	4	-1	6	-21	10	0	14	-21	-5
			(-11%)	(4%)	(-28%)	(-6%)	(-43%)	(-19%)	(-37%)	(-26%)	(-10%)	(-19%)	(-7%)	(1%)	(-2%)	(1%)	(-13%)	(-12%)	(16%)	(8%)	(-2%)	(8%)	(-15%)	(10%)	(-0%)	(11%)	(-17%)	(-5%)
		DROUGHT	-4	2	-42	-26	-91	-36	-76	-79	-16	-21	3	-7	6	1	5	-1	22	8	-14	-9	-55	3	14	33	-21	-11
			(-2%)	(1%)	(-22%)	(-15%)	(-40%)	(-21%)	(-36%)	(-37%)	(-15%)	(-18%)	(3%)	(-8%)	(8%)	(1%)	(8%)	(-1%)	(48%)	(13%)	(-11%)	(-7%)	(-25%)	(2%)	(8%)	(21%)	(-15%)	(-8%)
	Banks PP	ALL	-23	-11	-60	-26	-69	-43	-81	-66	-42	-40	-43	-42	-45	-43	-13	-12	-9	-15	-16	-10	-31	-10	-21	-10	-37	-27
			(-20%)	(-11%)	(-46%)	(-27%)	(-48%)	(-36%)	(-59%)	(-54%)	(-41%)	(-40%)	(-49%)	(-49%)	(-54%)	(-53%)	(-17%)	(-16%)	(-14%)	(-21%)	(-22%)	(-15%)	(-31%)	(-12%)	(-20%)	(-10%)	(-36%)	(-29%)
		DROUGHT	-5	-1	-52	-28	-88	-62	-111	-93	-52	-46	-85	-82	-75	-72	-19	-19	17	6	-19	-8	-57	-19	11	21	-43	-31
			(-4%)	(-1%)	(-35%)	(-22%)	(-49%)	(-40%)	(-65%)	(-60%)	(-38%)	(-35%)	(-64%)	(-63%)	(-58%)	(-57%)	(-18%)	(-18%)	(24%)	(7%)	(-19%)	(-9%)	(-37%)	(-16%)	(8%)	(17%)	(-32%)	(-26%)
	Jones PP	ALL	-35	-28	-59	-29	-46	-23	-63	-46	-53	-51	-58	-56	-28	-28	-24	-24	-21	-34	-15	-16	-9	6	-24	-16	-36	-29
			(-32%)	(-28%)	(-45%)	(-29%)	(-30%)	(-18%)	(-41%)	(-34%)	(-42%)	(-41%)	(-48%)	(-47%)	(-32%)	(-32%)	(-32%)	(-31%)	(-33%)	(-45%)	(-19%)	(-20%)	(-9%)	(7%)	(-23%)	(-16%)	(-33%)	(-28%)
		DROUGHT	-27	-29	-47	-24	-42	-21	-100	-77	-83	-80	-76	-74	-39	-40	-44	-42	-11	-22	-39	-30	-21	10	9	14	-41	-33
			(-20%)	(-22%)	(-31%)	(-19%)	(-23%)	(-13%)	(-52%)	(-46%)	(-44%)	(-43%)	(-39%)	(-39%)	(-29%)	(-30%)	(-39%)	(-38%)	(-18%)	(-30%)	(-36%)	(-30%)	(-14%)	(9%)	(7%)	(11%)	(-29%)	(-24%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-26D. Period average change in chloride concentrations (mg/L) for Alternative 4 LLT Scenario H4 relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 4 Scn H4	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	1	1	1	1	1	1	1	2	1	2	2	2	2	2	1	2	2	2	2	2	2	1	1	1	1	2
			(7%)	(8%)	(8%)	(8%)	(4%)	(5%)	(5%)	(8%)	(5%)	(8%)	(9%)	(11%)	(10%)	(11%)	(8%)	(9%)	(14%)	(15%)	(12%)	(12%)	(10%)	(9%)	(7%)	(7%)	(8%)	(9%)
		DROUGHT	1	1	1	1	1	1	0	1	0	1	1	2	1	2	1	2	3	3	2	2	2	1	1	1	1	2
			(6%)	(6%)	(7%)	(7%)	(4%)	(5%)	(2%)	(4%)	(-1%)	(2%)	(5%)	(9%)	(5%)	(8%)	(8%)	(9%)	(17%)	(18%)	(15%)	(15%)	(10%)	(9%)	(7%)	(7%)	(6%)	(8%)
	SJR at Buckley Cove	ALL	-3	1	-11	-2	-31	-4	-38	-10	-21	-4	-18	-3	-6	2	1	8	3	7	-4	11	-3	17	-5	8	-12	2
			(-3%)	(1%)	(-10%)	(-2%)	(-23%)	(-3%)	(-24%)	(-7%)	(-15%)	(-4%)	(-13%)	(-3%)	(-6%)	(2%)	(1%)	(11%)	(3%)	(7%)	(-4%)	(12%)	(-3%)	(20%)	(-5%)	(9%)	(-10%)	(2%)
		DROUGHT	-5	4	-16	0	-37	-4	-50	-10	-33	-8	-26	-5	-13	1	3	18	-8	25	-3	35	-3	47	-7	18	-16	10
			(-4%)	(4%)	(-11%)	(-0%)	(-22%)	(-3%)	(-24%)	(-6%)	(-15%)	(-4%)	(-12%)	(-3%)	(-8%)	(0%)	(2%)	(16%)	(-6%)	(26%)	(-2%)	(46%)	(-3%)	(67%)	(-5%)	(17%)	(-11%)	(8%)
	Franks Tract	ALL	-54	-15	-122	-42	-88	-51	-35	-25	1	0	12	10	12	10	10	8	17	9	-30	-4	-18	14	-12	-2	-26	-7
			(-29%)	(-10%)	(-53%)	(-28%)	(-42%)	(-30%)	(-26%)	(-20%)	(2%)	(-1%)	(32%)	(25%)	(39%)	(32%)	(31%)	(22%)	(41%)	(19%)	(-23%)	(-3%)	(-12%)	(12%)	(-6%)	(-1%)	(-21%)	(-7%)
		DROUGHT	-47	-28	-121	-54	-100	-66	-41	-13	8	-8	19	14	18	17	21	12	39	13	-53	-14	-17	32	17	-10	-21	-9
			(-20%)	(-13%)	(-45%)	(-27%)	(-37%)	(-28%)	(-23%)	(-9%)	(11%)	(-8%)	(49%)	(30%)	(59%)	(53%)	(68%)	(31%)	(92%)	(19%)	(-25%)	(-8%)	(-8%)	(18%)	(7%)	(-4%)	(-14%)	(-6%)
	Old R. at Rock Slough	ALL	-24	-1	-87	-22	-75	-42	-37	-28	1	2	11	7	9	8	7	6	19	13	-17	1	-15	11	0	8	-17	-3
			(-15%)	(-0%)	(-46%)	(-18%)	(-41%)	(-28%)	(-28%)	(-22%)	(1%)	(2%)	(23%)	(13%)	(18%)	(16%)	(15%)	(12%)	(47%)	(28%)	(-17%)	(1%)	(-12%)	(12%)	(-0%)	(5%)	(-16%)	(-3%)
		DROUGHT	-16	-15	-86	-30	-83	-51	-47	-21	1	-4	16	9	23	20	21	14	33	15	-36	-10	-17	26	25	10	-14	-3
			(-9%)	(-8%)	(-40%)	(-19%)	(-36%)	(-26%)	(-27%)	(-14%)	(1%)	(-4%)	(26%)	(14%)	(41%)	(34%)	(50%)	(29%)	(86%)	(26%)	(-22%)	(-7%)	(-9%)	(18%)	(13%)	(5%)	(-10%)	(-3%)
Western Delta	Sac. R. at Emmaton	ALL	-253	-117	-181	-88	-24	-46	0	-19	11	-10	16	1	23	8	48	23	89	51	146	133	174	128	-50	-83	0	-2
			(-44%)	(-27%)	(-33%)	(-19%)	(-8%)	(-14%)	(-0%)	(-13%)	(16%)	(-10%)	(45%)	(2%)	(64%)	(15%)	(53%)	(20%)	(48%)	(23%)	(65%)	(56%)	(52%)	(33%)	(-9%)	(-14%)	(-0%)	(-1%)
		DROUGHT	-313	-163	-254	-175	-14	-69	27	-34	54	-7	26	8	33	14	128	61	197	84	309	250	209	114	-30	-223	31	-12
			(-40%)	(-26%)	(-33%)	(-25%)	(-3%)	(-13%)	(14%)	(-13%)	(50%)	(-4%)	(58%)	(13%)	(90%)	(25%)	(108%)	(33%)	(80%)	(24%)	(94%)	(64%)	(47%)	(21%)	(-4%)	(-23%)	(9%)	(-3%)
	SJR at Antioch	ALL	-724	-277	-696	-314	-280	-186	-114	-121	-25	-63	33	-11	48	4	61	6	110	31	80	159	237	256	-231	-111	-125	-52
			(-49%)	(-27%)	(-47%)	(-28%)	(-27%)	(-20%)	(-23%)	(-24%)	(-10%)	(-22%)	(27%)	(-7%)	(42%)	(3%)	(24%)	(2%)	(23%)	(5%)	(9%)	(21%)	(23%)	(25%)	(-16%)	(-8%)	(-17%)	(-8%)
		DROUGHT	-784	-330	-826	-459	-360	-231	-106	-186	40	-94	51	-4	58	4	161	39	251	69	215	239	288	277	-57	-248	-89	-77
			(-43%)	(-24%)	(-43%)	(-30%)	(-25%)	(-17%)	(-15%)	(-23%)	(10%)	(-18%)	(32%)	(-2%)	(41%)	(2%)	(43%)	(8%)	(37%)	(8%)	(17%)	(20%)	(22%)	(21%)	(-3%)	(-12%)	(-9%)	(-8%)
	Sac. R. at Mallard Island	ALL	-1102	-442	-923	-371	-376	-230	-118	-106	21	-48	150	32	174	44	184	27	255	68	294	402	448	454	-322	-42	-110	-18
			(-36%)	(-18%)	(-32%)	(-16%)	(-17%)	(-11%)	(-9%)	(-8%)	(3%)	(-5%)	(34%)	(6%)	(34%)	(7%)	(20%)	(3%)	(17%)	(4%)	(14%)	(21%)	(18%)	(18%)	(-11%)	(-2%)	(-6%)	(-1%)
		DROUGHT	-1226	-533	-1180	-556	-501	-301	-113	-191	167	-80	209	71	234	85	322	127	392	155	419	455	441	436	-54	-223	-74	-46
			(-33%)	(-18%)	(-31%)	(-18%)	(-16%)	(-10%)	(-6%)	(-9%)	(12%)	(-5%)	(32%)	(9%)	(32%)	(10%)	(23%)	(8%)	(19%)	(7%)	(15%)	(17%)	(15%)	(15%)	(-2%)	(-6%)	(-3%)	(-2%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	3	3	4	4	5	6	3	3	0	-2	-1	-2	-2	-2	-1	-1	0	0	1	2	2	3	4	4	1	1
			(15%)	(18%)	(20%)	(23%)	(31%)	(32%)	(14%)	(15%)	(-1%)	(-7%)	(-6%)	(-8%)	(-10%)	(-8%)	(-7%)	(-7%)	(-2%)	(-0%)	(7%)	(10%)	(14%)	(16%)	(20%)	(22%)	(7%)	(8%)
		DROUGHT	5	5	8	8	13	13	11	11	7	6	3	2	1	0	0	-2	2	2	5	5	6	6	7	8	6	5
			(26%)	(29%)	(42%)	(48%)	(75%)	(73%)	(63%)	(61%)	(33%)	(30%)	(15%)	(11%)	(4%)	(-1%)	(1%)	(-8%)	(10%)	(11%)	(25%)	(27%)	(36%)	(36%)	(42%)	(42%)	(30%)	(28%)
	Contra Costa PP #1	ALL	-13	9	-49	-12	-80	-26	-69	-41	6	-7	-1	6	6	8	-1	-1	16	13	-4	4	-32	0	-3	11	-19	-3
			(-8%)	(7%)	(-31%)	(-9%)	(-44%)	(-20%)	(-38%)	(-26%)	(5%)	(-6%)	(-1%)	(8%)	(7%)	(11%)	(-1%)	(-1%)	(34%)	(24%)	(-4%)	(5%)	(-22%)	(0%)	(-2%)	(9%)	(-15%)	(-3%)
		DROUGHT	-6	0	-47	-31	-98	-42	-89	-92	-1	-6	13	4	17	12	15	10	29	15	-17	-12	-54	4	14	33	-19	-9
			(-3%)	(-0%)	(-25%)	(-18%)	(-43%)	(-24%)	(-43%)	(-43%)	(-1%)	(-5%)	(17%)	(5%)	(22%)	(15%)	(25%)	(15%)	(63%)	(24%)	(-13%)	(-10%)	(-24%)	(2%)	(8%)	(22%)	(-13%)	(-7%)
	Banks PP	ALL	-14	-2	-67	-33	-72	-45	-78	-64	-39	-37	-36	-34	-35	-33	-19	-19	-18	-24	-18	-12	-25	-4	-38	-26	-38	-28
			(-12%)	(-2%)	(-51%)	(-34%)	(-50%)	(-38%)	(-57%)	(-52%)	(-38%)	(-37%)	(-41%)	(-40%)	(-42%)	(-41%)	(-26%)	(-25%)	(-29%)	(-35%)	(-25%)	(-18%)	(-25%)	(-5%)	(-35%)	(-27%)	(-38%)	(-30%)
		DROUGHT	-5	-1	-53	-28	-94	-67	-104	-85	-40	-35	-70	-67	-67	-64	-58	-58	-7	-18	-27	-17	-35	3	-5	5	-47	-36
			(-4%)	(-1%)	(-35%)	(-22%)	(-52%)	(-43%)	(-60%)	(-56%)	(-29%)	(-26%)	(-53%)	(-51%)	(-52%)	(-51%)	(-55%)	(-55%)	(-9%)	(-22%)	(-27%)	(-18%)	(-23%)	(3%)	(-4%)	(4%)	(-35%)	(-29%)
	Jones PP	ALL	-37	-30	-57	-28	-49	-26	-76	-59	-60	-59	-59	-57	-35	-34	-18	-17	-9	-23	-16	-17	-17	-2	-23	-15	-38	-30
			(-34%)	(-29%)	(-44%)	(-28%)	(-33%)	(-21%)	(-50%)	(-44%)	(-47%)	(-47%)	(-49%)	(-49%)	(-40%)	(-39%)	(-23%)	(-23%)	(-15%)	(-30%)	(-20%)	(-21%)	(-17%)	(-3%)	(-22%)	(-15%)	(-35%)	(-30%)
		DROUGHT	-31	-34	-51	-28	-56	-35	-114	-91	-102	-98	-88	-86	-55	-56	-27	-26	-2	-13	-19	-10	-26	6	9	14	-44	-36
			(-24%)	(-25%)	(-34%)	(-22%)	(-31%)	(-22%)	(-59%)	(-54%)	(-54%)	(-53%)	(-45%)	(-45%)	(-41%)	(-41%)	(-24%)	(-23%)	(-3%)	(-18%)	(-17%)	(-10%)	(-17%)	(5%)	(7%)	(11%)	(-31%)	(-26%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-27. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 4 LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 4 LLT Scenarios			Period Average Concentration mg/L						Lowest Applicable Human Health Criterion/Objective (250 mg/L) b Frequency of Criterion/Objective Exceedance (%)					
	Location	Period [a]	Ex. Cond.	No Act. LLT	H1	H2	H3	H4	Ex. Cond.	No Act. LLT	H1	H2	H3	H4
Delta Interior	Moke. R. (SF) at Staten Island	ALL	15.7	15.3	19.1	19.4	19.2	19.4	0	0	0	0	0	0
		DROUGHT	16.8	16.3	20.0	20.2	20.1	20.2	0	0	0	0	0	0
	SJR at Buckley Cove	ALL	82.9	77.2	79.4	79.5	79.5	79.5	0	0	0	0	0	0
		DROUGHT	86.5	76.5	80.4	80.4	80.4	80.6	0	0	0	0	0	0
	Franks Tract	ALL	173.8	146.4	157.0	152.7	133.9	132.3	34	22	26	25	19	19
		DROUGHT	212.8	190.9	189.3	187.6	173.8	173.4	47	35	35	38	30	33
	Old R. at Rock Slough	ALL	152.0	130.5	139.8	136.8	121.8	120.9	28	17	18	18	15	15
		DROUGHT	180.2	161.4	163.5	162.8	151.4	150.9	42	27	30	27	27	25
Western Delta	Sac. R. at Emmaton	ALL	368.9	366.5	419.8	427.4	364.7	365.4	44	44	50	53	44	47
		DROUGHT	516.4	559.3	571.5	569.4	539.5	541.0	55	60	67	70	63	65
	SJR at Antioch	ALL	1,087.3	974.2	1,027.1	1,028.3	897.2	897.4	66	73	70	68	69	68
		DROUGHT	1,400.6	1,345.6	1,307.3	1,301.4	1,234.8	1,239.3	82	87	85	83	85	85
	Sac. R. at Mallard Island	ALL	2,552.0	2,411.9	2,588.6	2,582.2	2,416.9	2,411.9	85	86	88	86	88	86
		DROUGHT	3,233.9	3,123.1	3,172.4	3,162.3	3,081.0	3,085.8	100	100	100	100	100	100
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	17.1	16.6	21.8	22.8	19.9	20.3	0	0	0	0	0	0
		DROUGHT	17.7	17.7	31.1	32.4	28.5	29.4	0	0	0	0	0	0
	Contra Costa PP #1	ALL	146.5	126.9	140.8	135.1	121.5	120.4	24	14	18	16	13	12
		DROUGHT	176.5	161.3	158.8	158.2	146.2	145.7	37	22	27	28	22	22
	Banks PP	ALL	123.4	108.5	78.2	77.1	70.5	67.8	4	2	1	0	1	1
		DROUGHT	143.7	128.0	104.1	98.8	96.7	92.6	7	2	2	0	2	2
	Jones PP	ALL	116.9	103.4	74.9	69.1	68.7	66.6	1	1	0	0	0	0
		DROUGHT	132.9	118.9	98.6	90.3	92.2	91.4	0	0	0	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-28. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 4 LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 4 LLT Scenarios	Location	Period [a]	Period Average Concentration mg/L						Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)					
			Ex. Cond.	No Act. LLT	H1	H2	H3	H4	Ex. Cond.	No Act. LLT	H1	H2	H3	H4
Delta Interior	Moke. R. (SF) at Staten Island	ALL	18.5	18.3	19.9	19.9	19.9	19.9	0	0	0	0	0	0
		DROUGHT	19.3	19.0	20.4	20.5	20.5	20.5	0	0	0	0	0	0
	SJR at Buckley Cove	ALL	115.7	101.7	104.2	104.4	104.2	104.2	0	0	0	0	0	0
		DROUGHT	154.9	128.5	138.2	138.4	138.2	138.5	0	0	0	0	0	0
	Franks Tract	ALL	119.9	101.5	108.5	106.7	93.6	94.3	14	8	8	6	7	7
		DROUGHT	152.8	140.0	141.1	140.6	130.1	131.3	22	15	18	13	15	13
	Old R. at Rock Slough	ALL	107.9	93.7	99.5	99.0	88.8	90.6	4	3	2	2	2	2
		DROUGHT	135.9	125.2	128.1	129.2	120.1	122.1	7	5	3	2	3	2
Western Delta	Sac. R. at Emmaton	ALL	258.0	259.7	295.6	300.6	257.4	258.0	36	32	45	43	36	36
		DROUGHT	363.7	406.4	418.9	414.7	394.6	394.7	50	55	62	60	57	58
	SJR at Antioch	ALL	756.6	683.7	723.9	725.2	629.8	631.5	61	65	67	66	65	63
		DROUGHT	1,001.9	990.0	967.8	958.3	909.5	913.0	80	82	83	83	82	82
	Sac. R. at Mallard Island	ALL	1,766.4	1,674.5	1,818.4	1,814.5	1,657.9	1,656.8	77	83	84	83	84	83
		DROUGHT	2,345.9	2,317.9	2,365.8	2,350.2	2,266.9	2,271.6	98	98	98	98	98	98
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	18.8	18.8	20.8	21.1	20.0	20.2	0	0	0	0	0	0
		DROUGHT	18.7	18.9	25.4	25.7	23.9	24.3	0	0	0	0	0	0
	Contra Costa PP #1	ALL	120.4	104.7	111.6	109.7	99.6	101.8	5	3	2	1	2	2
		DROUGHT	142.8	133.1	129.6	131.2	122.0	124.1	8	7	3	2	3	3
	Banks PP	ALL	101.6	91.1	68.7	69.1	64.5	63.4	1	1	0	0	0	0
		DROUGHT	134.0	122.9	96.6	91.2	91.5	86.9	2	2	0	0	0	0
	Jones PP	ALL	108.8	101.4	77.8	72.8	72.7	71.0	0	0	0	0	0	0
		DROUGHT	144.7	136.0	110.7	100.3	103.3	100.3	0	0	0	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-29A. Alternative 4 Scenario H1 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 4 LLT Scenario H1	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-2	-3	-3	-2	-2	-2	-1	-2
		DROUGHT	-1	-1	-1	-1	-1	-1	0	-1	0	0	-1	-1	0	-1	-1	-1	-3	-3	-4	-4	-3	-2	-2	-2	-1	-
	SJR at Buckley Cove	ALL	1	0	0	0	1	-2	1	-2	1	-1	1	-1	2	-1	2	-1	4	-2	5	-2	6	-2	2	0	2	-1
		DROUGHT	1	-1	1	-1	3	-2	3	-2	2	-1	2	-2	3	-2	4	-2	7	-5	6	-4	10	-4	4	-1	4	-
	Franks Tract	ALL	-	-100	-	-	-	-	21	25	-1	2	-6	-4	-5	-4	-5	-2	-9	-6	70	-5	69	-49	-	-	22	-10
		DROUGHT	-	-	-	-	-	-	73	23	-6	4	-4	-2	-3	-2	-6	-1	-19	-6	-	-	-	-100	-	-	63	-
	Old R. at Rock Slough	ALL	-100	-100	-	31	-	28	20	24	1	2	-5	-3	-2	0	-1	0	-8	-6	27	-5	19	-29	-100	-100	12	-8
		DROUGHT	-	-	-	-	-	-	49	15	-1	3	-3	0	-2	0	-4	-1	-14	-5	-	28	-	-79	-	-	24	-
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	19	82	-6	9	-7	-1	-14	-6	-52	-37	-100	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-100	-	-43	3	-9	-2	-20	-10	-100	-	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-26	3	-53	-24	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-36	14	-100	-100	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-6	-6	-8	-8	-8	-8	-4	-4	-1	0	1	1	1	1	2	1	2	2	1	1	0	-1	-4	-4	-2	-2
		DROUGHT	-8	-9	-12	-13	-15	-15	-11	-10	-5	-5	-2	-2	-1	-1	0	1	1	0	-2	-3	-5	-5	-8	-8	-6	-
	Contra Costa PP #1	ALL	-100	-100	-	-90	-	8	65	29	-4	7	-5	-4	-4	-3	0	1	-6	-4	9	-2	70	-16	-56	-70	6	-11
		DROUGHT	-	-	-	-	-	-	-	-	1	9	-3	1	-1	1	-2	0	-12	-4	55	29	-	-7	-	-100	24	-
	Banks PP	ALL	27	6	-	29	-	48	57	51	22	25	23	25	22	23	11	12	13	14	28	12	57	15	31	9	36	21
		DROUGHT	9	-1	-	30	-	64	98	65	20	21	19	20	14	15	5	7	-3	0	65	34	-	29	6	-19	37	-
	Jones PP	ALL	42	21	-	28	58	25	28	24	17	18	19	20	20	21	21	22	18	20	28	13	23	-5	55	31	31	19
		DROUGHT	52	39	-	25	80	42	28	15	6	6	8	8	12	13	19	20	5	11	76	36	-	-7	2	-11	29	-

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-29B. Alternative 4 Scenario H2 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 4 LLT Scenario H2	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-4	-3	-3	-2	-2	-2	-2
		DROUGHT	-1	-1	-1	-1	-1	-1	0	-1	0	0	-1	-1	-1	-1	-1	-1	-3	-4	-4	-4	-3	-3	-2	-2	-1	-
	SJR at Buckley Cove	ALL	1	0	0	0	1	-2	1	-2	1	-1	1	-1	2	-1	2	-1	4	-2	5	-2	6	-2	2	0	2	-1
		DROUGHT	1	-1	1	-1	3	-2	3	-2	2	-1	2	-2	3	-2	4	-2	6	-5	7	-3	10	-4	4	-1	4	-
	Franks Tract	ALL	-	-100	-	-	-	-	28	32	-1	2	-6	-4	-6	-4	-5	-3	-9	-6	91	6	-	-23	-	-	28	-6
		DROUGHT	-	-	-	-	-	-	45	3	-4	5	-5	-2	-4	-3	-7	-2	-17	-4	-	-	-	-100	-	-	68	-
	Old R. at Rock Slough	ALL	-100	-100	-	28	-	37	27	31	-1	1	-5	-3	-3	-2	-2	-1	-9	-7	37	2	45	-13	-100	-100	16	-5
		DROUGHT	-	-	-	-	-	-	32	2	-2	3	-4	-1	-5	-4	-5	-3	-13	-4	-	29	-	-100	-	-	25	-
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	27	94	-4	12	-6	0	-12	-4	-45	-28	-100	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-20	-	-35	18	-10	-3	-20	-11	-100	-	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-20	11	-42	-5	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-33	20	-100	-100	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-7	-7	-8	-8	-8	-8	-5	-5	-1	-1	0	1	1	1	1	1	2	2	1	0	-1	-1	-5	-5	-2	-3
		DROUGHT	-10	-10	-12	-13	-15	-15	-12	-12	-6	-6	-2	-2	-1	-1	0	1	0	0	-3	-3	-5	-5	-9	-9	-6	-
	Contra Costa PP #1	ALL	-100	-100	-	-42	-	5	61	26	1	12	-5	-3	-5	-4	-2	0	-7	-4	15	2	-	2	-32	-53	11	-7
		DROUGHT	-	-	-	-	-	-	-	-	0	7	-3	0	-4	-2	-4	-2	-9	-1	52	27	-	-69	-	-100	25	-
	Banks PP	ALL	22	2	-	25	-	53	60	54	23	26	20	21	24	25	13	14	16	18	29	12	60	17	39	15	37	22
		DROUGHT	37	24	-	42	-	-	73	44	18	19	14	15	20	22	15	16	4	8	64	33	-	9	44	9	42	-
	Jones PP	ALL	48	25	-	36	74	37	33	29	21	22	25	26	24	25	20	21	12	14	32	17	36	6	57	33	36	23
		DROUGHT	77	62	-	36	94	53	37	23	12	12	17	18	20	21	13	14	0	6	73	33	-	1	40	22	36	-

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-29C. Alternative 4 Scenario H3 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 4 LLT Scenario H3	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-2	-2	-1	-2
		DROUGHT	-1	-1	-1	-1	-1	-1	0	-1	0	0	-1	-1	0	-1	-1	-1	-3	-3	-4	-4	-3	-3	-2	-2	-1	-
	SJR at Buckley Cove	ALL	1	0	0	0	1	-2	1	-2	1	-1	1	-1	2	-1	2	-1	4	-2	5	-2	5	-2	2	0	2	-1
		DROUGHT	1	-1	1	-1	3	-2	3	-2	2	-1	2	-2	3	-2	4	-2	7	-5	6	-4	10	-4	4	-1	4	-
	Franks Tract	ALL	-	98	-	-	-	-	50	54	2	5	-5	-4	-5	-4	-5	-2	-9	-6	72	-5	79	-45	-	-	52	12
		DROUGHT	-	-	-	-	-	-	-	57	1	11	-4	-1	-3	-2	-6	-1	-19	-6	-	-	-	-100	-	-	-	-
	Old R. at Rock Slough	ALL	-	15	-	76	-	-	49	54	3	5	-4	-2	-2	-1	-1	0	-7	-5	28	-5	22	-27	-	-13	31	7
		DROUGHT	-	-	-	-	-	-	93	49	4	9	-2	1	-3	-1	-4	-1	-14	-5	-	27	-	-70	-	-	41	-
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	30	98	-7	8	-8	-2	-14	-7	-51	-36	-100	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	76	-	-35	17	-10	-4	-21	-12	-100	-	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-29	-2	-54	-24	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-41	5	-100	-100	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-4	-4	-5	-6	-6	-6	-3	-3	0	1	1	1	1	1	2	2	3	2	2	1	0	-1	-4	-4	-1	-1
		DROUGHT	-6	-7	-10	-11	-12	-12	-8	-8	-4	-4	-1	-1	0	0	1	2	1	0	-2	-3	-5	-5	-8	-8	-5	-
	Contra Costa PP #1	ALL	-	-4	-	25	-	33	87	46	6	18	-4	-2	-4	-3	0	1	-5	-2	8	-4	70	-16	2	-29	24	4
		DROUGHT	-	-	-	-	-	-	-	-	7	15	-1	2	-2	0	-2	0	-10	-2	52	27	-	1	-	-100	41	-
	Banks PP	ALL	48	23	-	46	-	71	75	67	23	26	21	23	24	25	12	13	12	13	26	10	58	16	59	32	42	27
		DROUGHT	26	15	-	69	-	-	-	91	20	21	20	22	19	20	5	6	-4	-1	59	29	-	46	-10	-32	44	-
	Jones PP	ALL	61	37	-	43	77	40	35	30	20	21	24	25	21	21	20	21	17	19	29	14	21	-6	58	33	36	24
		DROUGHT	69	55	-	42	-	59	51	36	16	16	12	12	15	15	18	19	5	10	77	37	-	-5	-1	-13	35	-

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-29D. Alternative 4 Scenario H4 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 4 LLT Scenario H4	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-4	-2	-2	-2	-2	-2	-2
		DROUGHT	-1	-1	-1	-1	-1	-1	0	-1	0	0	-1	-1	-1	-1	-1	-1	-3	-4	-4	-4	-3	-2	-2	-2	-1	-
	SJR at Buckley Cove	ALL	1	0	0	0	1	-2	1	-2	1	-1	1	-1	2	-1	2	-1	4	-2	5	-3	5	-2	2	0	2	-1
		DROUGHT	1	-1	1	-1	3	-2	3	-2	2	-1	2	-2	3	-2	4	-2	6	-5	6	-4	9	-4	4	-1	4	-
	Franks Tract	ALL	-	80	-	-	-	-	34	38	-2	1	-6	-5	-6	-4	-5	-3	-9	-6	96	9	-	-19	-	-	54	14
		DROUGHT	-	-	-	-	-	-	72	23	-5	5	-5	-3	-4	-3	-6	-1	-17	-5	-	-	-	-100	-	-	-	-
	Old R. at Rock Slough	ALL	-	5	-	92	-	-	39	43	-1	0	-6	-4	-4	-2	-2	-1	-9	-7	38	3	51	-10	-	1	32	8
		DROUGHT	-	-	-	-	-	-	77	36	-1	3	-5	-2	-5	-4	-5	-3	-13	-4	-	36	-	-78	-	-	42	-
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	-9	39	-9	6	-7	0	-12	-4	-44	-28	-100	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-100	-	-43	3	-10	-3	-19	-9	-100	-	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-22	8	-42	-6	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-34	18	-100	-100	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-3	-4	-6	-6	-6	-6	-3	-3	-1	0	1	1	1	1	2	2	2	2	1	0	-1	-1	-4	-4	-1	-2
		DROUGHT	-6	-7	-11	-11	-13	-12	-10	-9	-5	-5	-2	-1	-1	0	0	2	1	0	-2	-3	-5	-5	-8	-8	-5	-
	Contra Costa PP #1	ALL	-	-18	-	36	-	38	87	46	-2	9	-6	-4	-5	-4	-2	-1	-9	-6	15	2	-	6	23	-14	25	5
		DROUGHT	-	-	-	-	-	-	-	-	-1	7	-4	-1	-4	-2	-4	-2	-12	-4	58	32	-	-8	-	-100	42	-
	Banks PP	ALL	35	13	-	54	-	73	72	65	22	25	20	21	21	22	12	13	17	18	32	15	58	15	87	56	44	29
		DROUGHT	23	12	-	67	-	-	-	87	16	17	16	18	17	19	16	17	4	7	66	35	-	17	30	-1	48	-
	Jones PP	ALL	62	37	-	40	77	40	44	39	23	24	25	26	24	25	20	20	14	16	30	15	34	4	54	30	38	25
		DROUGHT	72	58	-	52	-	64	59	43	21	21	15	16	20	20	13	14	2	8	53	18	-	-1	-1	-14	35	-

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-30A. Alternative 4 Scenario H1 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 4 Scn H1	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-1	-1	-1	0	0	0	-1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
		DROUGHT	0	0	-1	-1	0	0	0	0	0	0	0	-1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	0	-1
	SJR at Buckley Cove	ALL	2	-1	8	2	28	3	42	7	19	3	17	3	4	-1	-1	-5	-2	-4	4	-6	3	-10	3	-5	9	-2
		DROUGHT	4	-3	14	0	45	4	-	13	100	14	75	10	15	-1	-2	-13	7	-16	3	-19	3	-26	6	-13	18	-8
	Franks Tract	ALL	11	-32	-	19	-	15	17	8	0	1	-5	-4	-4	-3	-4	-2	-8	-4	19	-2	8	-19	-44	-52	9	-5
		DROUGHT	69	-14	-	50	-	62	46	5	-7	2	-8	-5	-5	-5	-7	-3	-18	-7	-	16	74	-42	-99	-	12	-1
	Old R. at Rock Slough	ALL	-10	-27	-	10	61	10	17	8	1	1	-4	-2	-1	0	-1	0	-7	-4	9	-3	5	-14	-26	-31	6	-4
		DROUGHT	-12	-14	-	18	-	4	36	2	-1	2	-6	-2	-3	-1	-5	-2	-14	-6	39	7	29	-25	-38	-19	7	-2
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	15	36	-1	12	-7	0	-11	-4	-34	-21	-100	-100	-100	-100	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-46	-	-38	9	-11	-3	-16	-8	-100	-100	-100	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-25	14	-39	-11	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-58	16	-69	-37	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-2	-2	-2	-2	-3	-3	-2	-2	0	0	0	1	1	1	1	1	0	0	0	-1	-1	-1	-2	-2	-1	-1
		DROUGHT	-3	-3	-4	-4	-7	-7	-6	-6	-4	-3	-2	-2	-1	0	0	1	-1	-1	-2	-2	-3	-3	-4	-4	-3	-3
	Contra Costa PP #1	ALL	-28	-42	11	-21	95	9	78	25	-6	3	0	-5	0	-2	5	5	-5	-3	2	-3	19	-7	-9	-19	7	-5
		DROUGHT	-47	-52	40	11	-	26	-	-	3	7	-4	1	0	3	-1	2	-12	-5	13	9	-	-4	-18	-34	12	3
	Banks PP	ALL	11	2	41	9	52	22	56	38	28	26	30	29	24	22	6	6	6	9	12	8	20	5	8	1	22	14
		DROUGHT	2	-2	37	9	83	32	-	65	49	41	69	64	50	47	15	15	-8	-2	20	12	48	5	-4	-12	32	21
	Jones PP	ALL	18	12	39	12	36	10	53	31	33	32	34	32	16	16	15	15	12	20	8	9	8	-2	18	12	22	16
		DROUGHT	20	23	37	11	52	16	-	44	88	77	-	-	26	27	34	33	7	14	26	18	20	-8	-7	-11	32	22

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-30B. Alternative 4 Scenario H2 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 4 LLT Scn H2	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-1	-1	-1	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
		DROUGHT	0	0	-1	-1	0	0	0	0	0	0	-1	-1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	-1	-1
	SJR at Buckley Cove	ALL	2	-1	8	2	27	2	42	7	19	3	17	3	4	-1	-1	-5	-2	-4	4	-6	2	-10	3	-5	8	-2
		DROUGHT	4	-3	14	0	43	2	-	12	99	14	74	9	15	-1	-2	-13	7	-17	4	-18	3	-26	6	-13	17	-8
	Franks Tract	ALL	12	-32	-	18	-	17	22	12	0	1	-5	-4	-5	-4	-5	-3	-8	-4	24	1	16	-13	-32	-42	10	-3
		DROUGHT	-	33	-	75	-	82	34	-3	-5	4	-8	-6	-8	-8	-9	-6	-18	-7	-	12	35	-55	-75	-	13	0
	Old R. at Rock Slough	ALL	-11	-28	-	9	65	12	22	13	0	0	-5	-3	-4	-3	-3	-3	-8	-6	12	-1	11	-9	-20	-26	6	-3
		DROUGHT	11	9	-	29	-	19	27	-4	-2	1	-8	-4	-12	-10	-10	-7	-15	-7	39	7	14	-34	-32	-12	6	-3
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	20	42	1	14	-6	1	-10	-3	-31	-17	-100	-100	-100	-100	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	5	-	-28	29	-12	-3	-16	-8	-98	-97	-100	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-19	23	-32	-1	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-55	24	-58	-14	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-2	-2	-2	-2	-3	-3	-2	-2	0	0	0	1	1	1	0	1	0	0	-1	-1	-1	-1	-2	-2	-1	-1
		DROUGHT	-3	-3	-4	-4	-6	-6	-6	-6	-4	-3	-2	-1	-1	0	0	0	-1	-1	-2	-2	-3	-3	-4	-4	-3	-3
	Contra Costa PP #1	ALL	-23	-38	29	-8	92	8	71	20	0	10	2	-2	-4	-5	1	1	-6	-5	3	-2	27	-2	-6	-17	8	-3
		DROUGHT	-11	-20	43	14	-	38	-	-	2	5	-6	-1	-10	-8	-7	-5	-12	-5	12	8	-	-15	-25	-40	11	2
	Banks PP	ALL	8	-1	40	9	54	23	57	39	28	26	22	21	26	25	12	12	9	13	8	5	18	3	8	1	22	14
		DROUGHT	9	6	42	14	-	55	81	47	44	37	54	50	64	61	39	39	4	11	18	10	32	-6	7	-2	37	25
	Jones PP	ALL	21	16	44	16	53	24	60	37	45	43	46	44	20	20	11	10	4	12	11	12	12	2	18	12	26	19
		DROUGHT	32	35	47	20	67	27	-	62	-	-	-	-	48	49	21	19	-2	4	25	17	26	-4	10	5	42	31

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-30C. Alternative 4 Scenario H3 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL.
Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 4 Scn H3	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-1	-1	-1	0	0	0	-1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	-1
		DROUGHT	0	-1	-1	-1	0	0	0	0	0	0	-1	-1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
	SJR at Buckley Cove	ALL	2	-1	8	2	28	3	42	7	19	3	17	3	4	-1	-1	-5	-2	-4	4	-6	2	-10	3	-5	9	-2
		DROUGHT	4	-3	14	0	46	4	-	13	100	14	75	10	15	-1	-2	-13	7	-16	3	-19	3	-26	6	-13	18	-8
	Franks Tract	ALL	93	18	-	36	-	58	41	30	4	5	-4	-3	-4	-3	-4	-3	-7	-4	20	-2	10	-18	21	4	20	5
		DROUGHT	-	71	-	97	-	-	84	33	2	12	-6	-4	-6	-5	-8	-4	-19	-8	-	15	83	-39	-100	-	23	9
	Old R. at Rock Slough	ALL	28	3	-	15	98	35	41	30	4	4	-3	-1	-1	-1	-1	0	-7	-4	9	-3	6	-13	0	-8	13	3
		DROUGHT	25	22	-	31	-	60	71	28	6	9	-4	-1	-6	-4	-6	-3	-15	-7	38	6	32	-23	-43	-25	14	4
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	29	52	-1	12	-8	-1	-12	-5	-33	-21	-100	-100	-100	-100	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	58	-	-25	33	-12	-4	-17	-9	-100	-100	-100	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-29	7	-40	-12	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-61	6	-67	-34	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-1	-1	-1	-2	-2	-2	-1	-1	0	1	1	1	1	1	1	1	0	0	0	-1	-1	-1	-2	-2	0	-1
		DROUGHT	-2	-2	-3	-3	-5	-5	-4	-4	-2	-2	-1	-1	0	0	0	1	-1	-1	-2	-2	-3	-3	-3	-4	-2	-2
	Contra Costa PP #1	ALL	18	-5	49	6	-	20	-	42	8	18	4	0	1	-1	5	4	-4	-2	1	-4	19	-7	0	-11	16	4
		DROUGHT	8	-3	69	34	-	47	-	-	11	16	-1	4	-4	-1	-2	0	-11	-4	11	7	-	-3	-17	-34	19	9
	Banks PP	ALL	16	7	51	17	65	32	72	52	29	27	27	25	27	26	7	7	5	8	9	6	21	6	15	6	25	17
		DROUGHT	5	1	53	22	-	65	-	96	46	39	73	68	62	59	13	13	-10	-4	13	5	61	14	-9	-16	37	25
	Jones PP	ALL	25	19	49	19	46	19	64	40	43	41	44	42	18	17	14	14	11	20	9	10	6	-4	17	11	26	19
		DROUGHT	23	26	46	19	61	23	-	95	-	-	-	-	34	35	32	31	6	13	27	20	21	-8	-8	-11	39	29

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-30D. Alternative 4 Scenario H4 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL.
Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 4 Scn H4	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-1	-1	-1	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	-1	-1
		DROUGHT	0	0	-1	-1	0	0	0	0	0	0	-1	-1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	-1	-1
	SJR at Buckley Cove	ALL	2	-1	8	1	28	3	44	8	20	4	17	3	4	-1	-1	-5	-2	-4	3	-7	2	-10	3	-5	9	-2
		DROUGHT	4	-3	14	0	45	3	-	13	100	14	74	10	15	-1	-2	-12	7	-17	2	-20	2	-26	6	-13	17	-8
	Franks Tract	ALL	88	15	-	43	-	66	30	20	-1	0	-6	-5	-5	-5	-5	-4	-8	-5	25	2	18	-11	20	3	20	5
		DROUGHT	-	71	-	-	-	-	58	13	-5	5	-9	-7	-8	-8	-9	-6	-19	-7	-	18	70	-43	-100	-	22	8
	Old R. at Rock Slough	ALL	25	0	-	18	-	41	32	22	-1	-1	-6	-3	-4	-4	-4	-3	-9	-6	12	0	12	-8	0	-7	12	2
		DROUGHT	25	23	-	34	-	96	60	21	0	2	-9	-5	-12	-10	-10	-7	-16	-8	41	9	29	-25	-40	-21	12	3
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	0	19	-6	6	-7	0	-11	-4	-30	-17	-100	-100	-100	-100	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-48	-	-39	9	-12	-4	-15	-7	-97	-95	-100	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-25	13	-35	-4	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-59	13	-55	-8	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-1	-1	-2	-2	-2	-2	-1	-1	0	1	1	1	1	1	1	1	0	0	-1	-1	-1	-1	-2	-2	-1	-1
		DROUGHT	-2	-2	-3	-4	-6	-5	-5	-5	-3	-3	-1	-1	0	0	0	1	-1	-1	-2	-2	-3	-3	-3	-3	-2	-2
	Contra Costa PP #1	ALL	14	-8	53	9	-	21	-	43	-4	6	1	-4	-3	-5	1	0	-8	-6	2	-2	29	0	3	-9	14	2
		DROUGHT	11	1	76	40	-	55	-	-	1	4	-8	-3	-10	-7	-8	-5	-14	-8	14	10	-	-4	-18	-35	17	8
	Banks PP	ALL	10	1	57	22	67	34	70	50	27	25	22	21	21	20	11	11	10	13	10	7	17	2	26	17	26	17
		DROUGHT	4	1	54	23	-	71	-	88	36	29	60	55	55	52	41	40	4	11	18	10	38	-2	4	-4	41	28
	Jones PP	ALL	26	20	48	19	49	21	77	51	49	47	45	43	22	21	10	10	5	13	10	10	12	2	16	10	27	20
		DROUGHT	27	30	51	23	83	40	-	-	-	-	-	-	47	49	20	18	1	7	13	6	25	-5	-7	-11	42	31

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-31. Period average change in chloride concentrations (mg/L) for Alternative 5 LLT relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride / Alt 5 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	3	3	3	2	1	1	0	1	0	1	2	2	2	2	2	3	5	6	4	5	5	5	4	4	3	3
			(22%)	(24%)	(20%)	(19%)	(8%)	(9%)	(1%)	(6%)	(1%)	(6%)	(10%)	(13%)	(12%)	(14%)	(13%)	(17%)	(26%)	(33%)	(24%)	(30%)	(39%)	(38%)	(34%)	(33%)	(16%)	(19%)
		DROUGHT	3	3	3	3	1	1	0	1	-1	0	1	2	1	2	1	2	7	8	9	9	7	6	5	5	3	3
			(21%)	(21%)	(24%)	(22%)	(9%)	(11%)	(-1%)	(3%)	(-5%)	(-0%)	(5%)	(11%)	(4%)	(10%)	(8%)	(15%)	(37%)	(42%)	(52%)	(53%)	(48%)	(43%)	(34%)	(36%)	(18%)	(21%)
	SJR at Buckley Cove	ALL	-2	1	1	1	-3	3	-3	1	-3	1	-3	1	-4	1	-4	1	-7	3	-8	4	-8	5	-4	1	-4	2
			(-2%)	(1%)	(1%)	(1%)	(-3%)	(5%)	(-4%)	(2%)	(-4%)	(1%)	(-3%)	(1%)	(-4%)	(1%)	(-5%)	(1%)	(-8%)	(4%)	(-9%)	(5%)	(-9%)	(6%)	(-4%)	(1%)	(-5%)	(2%)
		DROUGHT	-2	1	-2	1	-5	4	-6	3	-4	1	-4	2	-7	2	-7	2	-12	6	-9	8	-11	10	-6	2	-6	4
			(-2%)	(2%)	(-2%)	(2%)	(-6%)	(5%)	(-7%)	(4%)	(-5%)	(2%)	(-5%)	(2%)	(-8%)	(3%)	(-8%)	(3%)	(-13%)	(9%)	(-10%)	(12%)	(-12%)	(14%)	(-7%)	(3%)	(-7%)	(5%)
	Franks Tract	ALL	-80	-13	-155	-21	-94	-49	16	13	12	6	9	6	8	5	7	2	12	5	-32	14	-5	42	-17	-2	-27	1
			(-27%)	(-6%)	(-41%)	(-8%)	(-32%)	(-19%)	(10%)	(8%)	(21%)	(10%)	(24%)	(15%)	(20%)	(11%)	(15%)	(4%)	(22%)	(8%)	(-17%)	(9%)	(-2%)	(23%)	(-6%)	(-1%)	(-15%)	(0%)
		DROUGHT	-64	-26	-185	-69	-96	-56	19	37	17	-1	9	4	5	3	9	-2	31	4	-80	-12	-38	39	16	-17	-30	-8
			(-18%)	(-8%)	(-42%)	(-21%)	(-26%)	(-17%)	(9%)	(20%)	(26%)	(-1%)	(32%)	(11%)	(23%)	(11%)	(30%)	(-5%)	(60%)	(5%)	(-26%)	(-5%)	(-12%)	(16%)	(4%)	(-4%)	(-14%)	(-4%)
	Old R. at Rock Slough	ALL	-49	-8	-112	-2	-84	-40	8	5	10	6	7	4	4	0	2	0	6	2	-21	12	-3	37	2	14	-19	2
			(-21%)	(-4%)	(-36%)	(-1%)	(-33%)	(-19%)	(5%)	(3%)	(14%)	(9%)	(15%)	(7%)	(7%)	(1%)	(4%)	(-1%)	(12%)	(4%)	(-14%)	(10%)	(-1%)	(24%)	(1%)	(6%)	(-13%)	(2%)
		DROUGHT	-32	-22	-132	-36	-88	-43	13	31	15	7	6	0	1	-2	4	-2	22	3	-57	-9	-36	31	27	11	-21	-3
			(-11%)	(-8%)	(-38%)	(-14%)	(-28%)	(-16%)	(7%)	(18%)	(20%)	(9%)	(16%)	(-0%)	(2%)	(-6%)	(13%)	(-6%)	(51%)	(5%)	(-24%)	(-5%)	(-13%)	(15%)	(10%)	(4%)	(-12%)	(-2%)
Western Delta	Sac. R. at Emmaton	ALL	-253	-50	-237	-103	31	-19	14	-20	16	-10	17	3	23	7	66	37	96	58	122	118	219	149	-56	-84	5	7
			(-30%)	(-8%)	(-27%)	(-14%)	(7%)	(-4%)	(9%)	(-11%)	(23%)	(-11%)	(59%)	(8%)	(61%)	(12%)	(55%)	(24%)	(43%)	(22%)	(37%)	(36%)	(46%)	(27%)	(-7%)	(-10%)	(1%)	(2%)
		DROUGHT	-388	-149	-340	-227	114	20	12	-70	31	-32	20	6	37	17	144	72	181	80	313	258	287	170	38	-209	37	-5
			(-34%)	(-16%)	(-27%)	(-20%)	(16%)	(2%)	(5%)	(-23%)	(29%)	(-19%)	(46%)	(11%)	(76%)	(24%)	(81%)	(29%)	(59%)	(20%)	(67%)	(49%)	(48%)	(24%)	(3%)	(-15%)	(7%)	(-1%)
	SJR at Antioch	ALL	-801	-142	-902	-352	-181	-117	-22	-61	12	-40	43	5	48	6	81	27	136	68	52	209	245	253	-367	-153	-138	-25
			(-36%)	(-9%)	(-37%)	(-19%)	(-12%)	(-8%)	(-4%)	(-9%)	(5%)	(-13%)	(38%)	(3%)	(34%)	(4%)	(23%)	(7%)	(23%)	(10%)	(4%)	(19%)	(17%)	(17%)	(-17%)	(-8%)	(-13%)	(-3%)
		DROUGHT	-955	-256	-1170	-633	-143	-33	-95	-218	11	-130	40	1	67	16	152	47	208	73	135	246	273	278	-58	-265	-128	-73
			(-36%)	(-13%)	(-38%)	(-25%)	(-7%)	(-2%)	(-11%)	(-23%)	(3%)	(-24%)	(25%)	(0%)	(34%)	(7%)	(27%)	(7%)	(25%)	(8%)	(8%)	(15%)	(16%)	(16%)	(-2%)	(-10%)	(-9%)	(-5%)
	Sac. R. at Mallard Island	ALL	-996	-185	-936	-312	-134	-71	-19	-29	87	5	147	66	192	106	283	165	285	169	238	470	406	404	-497	-51	-79	61
			(-21%)	(-5%)	(-19%)	(-7%)	(-4%)	(-2%)	(-1%)	(-2%)	(9%)	(0%)	(32%)	(12%)	(26%)	(13%)	(20%)	(11%)	(15%)	(8%)	(8%)	(17%)	(12%)	(12%)	(-12%)	(-1%)	(-3%)	(3%)
		DROUGHT	-1323	-394	-1342	-585	-154	-20	-118	-244	123	-92	149	86	223	147	224	173	241	163	253	442	374	398	-74	-170	-119	-8
			(-25%)	(-9%)	(-22%)	(-11%)	(-3%)	(-0%)	(-5%)	(-10%)	(8%)	(-5%)	(21%)	(11%)	(20%)	(13%)	(11%)	(8%)	(10%)	(6%)	(7%)	(13%)	(10%)	(11%)	(-1%)	(-3%)	(-4%)	(-0%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	10	12	16	17	14	14	7	7	1	-1	-2	-3	-3	-2	-4	-4	-6	-5	-4	-2	0	1	8	9	3	4
			(60%)	(74%)	(107%)	(117%)	(108%)	(107%)	(51%)	(50%)	(6%)	(-5%)	(-13%)	(-17%)	(-21%)	(-16%)	(-25%)	(-24%)	(-30%)	(-25%)	(-17%)	(-8%)	(-1%)	(5%)	(46%)	(50%)	(18%)	(22%)
		DROUGHT	19	21	30	32	31	30	23	22	11	10	4	3	1	0	-1	-4	-2	-1	4	6	9	10	21	21	13	13
			(92%)	(112%)	(186%)	(216%)	(248%)	(227%)	(183%)	(173%)	(79%)	(71%)	(23%)	(17%)	(7%)	(1%)	(-7%)	(-21%)	(-9%)	(-4%)	(19%)	(29%)	(41%)	(42%)	(98%)	(97%)	(71%)	(71%)
	Contra Costa PP #1	ALL	-38	-5	-63	0	-85	-12	-26	-6	17	0	9	5	4	1	1	-1	5	-1	-9	6	-21	26	12	26	-16	3
			(-16%)	(-2%)	(-25%)	(-0%)	(-36%)	(-7%)	(-14%)	(-4%)	(21%)	(-0%)	(16%)	(8%)	(7%)	(2%)	(1%)	(-2%)	(8%)	(-1%)	(-7%)	(6%)	(-10%)	(16%)	(5%)	(13%)	(-11%)	(3%)
		DROUGHT	-23	-10	-35	-6	-113	-43	-33	-51	22	10	6	-2	0	-4	1	-4	18	0	-23	-10	-81	8	16	46	-21	-5
			(-8%)	(-4%)	(-12%)	(-2%)	(-37%)	(-19%)	(-15%)	(-21%)	(26%)	(11%)	(12%)	(-3%)	(-0%)	(-9%)	(2%)	(-9%)	(41%)	(1%)	(-13%)	(-6%)	(-26%)	(4%)	(6%)	(21%)	(-12%)	(-3%)
	Banks PP	ALL	-39	-22	-85	-26	-70	-35	-35	-31	-9	-13	-13	-15	-23	-25	-10	-11	-11	-13	-46	-25	-57	-20	-37	-20	-36	-21
			(-23%)	(-15%)	(-42%)	(-18%)	(-37%)	(-23%)	(-25%)	(-23%)	(-11%)	(-15%)	(-19%)	(-21%)	(-33%)	(-34%)	(-14%)	(-15%)	(-17%)	(-19%)	(-44%)	(-29%)	(-38%)	(-18%)	(-22%)	(-13%)	(-29%)	(-19%)
		DROUGHT	-25	-20	-98	-53	-81	-47	-63	-47	3	2	-10	-12	-16	-18	-4	-7	5	-2	-75	-51	-104	-41	-17	-2	-38	-23
			(-13%)	(-10%)	(-44%)	(-29%)	(-36%)	(-25%)	(-37%)	(-31%)	(4%)	(2%)	(-15%)	(-17%)	(-25%)	(-27%)	(-7%)	(-11%)	(9%)	(-4%)	(-52%)	(-42%)	(-46%)	(-25%)	(-9%)	(-1%)	(-27%)	(-18%)
	Jones PP	ALL	-28	-11	-84	-30	-58	-33	-37	-32	-10	-12	-15	-17	-12	-13	-18	-19	-13	-17	-27	-8	-16	15	-42	-24	-30	-16
			(-19%)	(-8%)	(-45%)	(-23%)	(-38%)	(-25%)	(-32%)	(-29%)	(-12%)	(-14%)	(-20%)	(-22%)	(-15%)	(-16%)	(-22%)	(-23%)	(-20%)	(-23%)	(-24%)	(-9%)	(-11%)	(13%)	(-27%)	(-18%)	(-26%)	(-16%)
		DROUGHT	-26	-19	-84	-36	-58	-38	-80	-66	-10	-10	-16	-17	-7	-8	-19	-21	-2	-12	-41	-12	-46	8	-7	3	-31	-17
			(-14%)	(-11%)	(-42%)	(-24%)	(-33%)	(-24%)	(-60%)	(-56%)	(-12%)	(-12%)	(-20%)	(-21%)	(-9%)	(-10%)	(-25%)	(-27%)	(-4%)	(-20%)	(-27%)	(-10%)	(-22%)	(5%)	(-4%)	(2%)	(-23%)	(-14%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-32. Period average change in chloride concentrations (mg/L) for Alternative 5 LLT relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 5 LLT	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	1	1	1	1	0	1	0	1	0	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1
			(6%)	(6%)	(6%)	(6%)	(2%)	(3%)	(0%)	(3%)	(1%)	(4%)	(5%)	(7%)	(7%)	(7%)	(7%)	(8%)	(11%)	(12%)	(7%)	(8%)	(9%)	(8%)	(8%)	(7%)	(5%)	(7%)
		DROUGHT	1	1	1	1	0	1	0	0	-1	0	1	1	1	1	1	1	3	3	2	2	2	2	1	1	1	1
			(6%)	(6%)	(7%)	(7%)	(3%)	(4%)	(-1%)	(1%)	(-4%)	(-1%)	(3%)	(6%)	(3%)	(5%)	(6%)	(8%)	(16%)	(17%)	(13%)	(13%)	(11%)	(10%)	(8%)	(9%)	(5%)	(7%)
	SJR at Buckley Cove	ALL	-4	1	-11	-2	-35	-7	-44	-15	-30	-13	-27	-12	-6	2	2	10	0	3	-10	5	-6	14	-5	8	-15	-1
			(-4%)	(1%)	(-10%)	(-2%)	(-25%)	(-6%)	(-27%)	(-12%)	(-21%)	(-10%)	(-20%)	(-10%)	(-6%)	(2%)	(3%)	(13%)	(-0%)	(4%)	(-9%)	(5%)	(-6%)	(16%)	(-5%)	(9%)	(-13%)	(-1%)
		DROUGHT	-6	3	-16	0	-40	-7	-60	-20	-49	-24	-41	-20	-12	2	5	20	-10	24	-9	28	-6	44	-7	18	-21	6
			(-5%)	(2%)	(-11%)	(-0%)	(-24%)	(-5%)	(-28%)	(-12%)	(-23%)	(-13%)	(-19%)	(-10%)	(-7%)	(1%)	(4%)	(19%)	(-7%)	(24%)	(-8%)	(37%)	(-5%)	(62%)	(-5%)	(17%)	(-13%)	(4%)
	Franks Tract	ALL	-50	-11	-91	-11	-73	-36	-3	7	5	4	8	6	4	3	4	2	12	4	-18	8	-2	30	-10	0	-18	0
			(-27%)	(-7%)	(-40%)	(-7%)	(-35%)	(-21%)	(-2%)	(6%)	(9%)	(6%)	(21%)	(14%)	(14%)	(9%)	(14%)	(5%)	(28%)	(8%)	(-14%)	(8%)	(-1%)	(25%)	(-5%)	(-0%)	(-15%)	(0%)
		DROUGHT	-38	-19	-111	-44	-80	-47	1	28	15	-1	11	6	4	2	8	0	31	5	-46	-7	-19	30	16	-11	-17	-5
			(-16%)	(-9%)	(-41%)	(-22%)	(-30%)	(-20%)	(0%)	(18%)	(20%)	(-1%)	(29%)	(13%)	(12%)	(8%)	(27%)	(-0%)	(74%)	(8%)	(-22%)	(-4%)	(-9%)	(17%)	(7%)	(-4%)	(-11%)	(-3%)
	Old R. at Rock Slough	ALL	-29	-6	-60	4	-64	-31	-8	1	3	4	4	0	-2	-3	0	-2	8	2	-11	7	-1	26	3	11	-13	1
			(-19%)	(-5%)	(-32%)	(3%)	(-35%)	(-21%)	(-6%)	(1%)	(4%)	(5%)	(9%)	(-0%)	(-5%)	(-6%)	(-1%)	(-3%)	(20%)	(5%)	(-11%)	(9%)	(-1%)	(26%)	(2%)	(8%)	(-12%)	(1%)
		DROUGHT	-16	-14	-75	-20	-72	-40	2	27	12	7	4	-3	-6	-9	2	-5	22	4	-31	-4	-19	24	22	8	-13	-2
			(-8%)	(-8%)	(-35%)	(-12%)	(-32%)	(-21%)	(1%)	(19%)	(13%)	(8%)	(6%)	(-5%)	(-10%)	(-15%)	(5%)	(-9%)	(58%)	(7%)	(-19%)	(-3%)	(-10%)	(16%)	(12%)	(4%)	(-9%)	(-2%)
Western Delta	Sac. R. at Emmaton	ALL	-182	-45	-167	-74	-5	-28	1	-18	7	-14	18	3	19	4	52	26	92	53	99	86	167	120	-21	-54	7	5
			(-32%)	(-10%)	(-30%)	(-16%)	(-2%)	(-8%)	(1%)	(-12%)	(9%)	(-16%)	(51%)	(6%)	(55%)	(9%)	(57%)	(23%)	(50%)	(24%)	(44%)	(36%)	(50%)	(31%)	(-4%)	(-9%)	(3%)	(2%)
		DROUGHT	-262	-112	-241	-163	43	-11	-1	-63	18	-44	22	5	31	12	123	55	189	76	261	202	245	150	51	-142	40	-3
			(-34%)	(-18%)	(-31%)	(-23%)	(9%)	(-2%)	(-0%)	(-25%)	(16%)	(-26%)	(51%)	(8%)	(86%)	(22%)	(104%)	(30%)	(77%)	(21%)	(79%)	(52%)	(55%)	(28%)	(6%)	(-14%)	(11%)	(-1%)
	SJR at Antioch	ALL	-561	-114	-603	-222	-203	-110	-50	-56	-9	-48	48	3	47	3	74	20	143	64	73	152	203	222	-214	-94	-88	-15
			(-38%)	(-11%)	(-40%)	(-20%)	(-20%)	(-12%)	(-10%)	(-11%)	(-4%)	(-16%)	(40%)	(2%)	(42%)	(2%)	(30%)	(6%)	(30%)	(11%)	(9%)	(20%)	(19%)	(22%)	(-15%)	(-7%)	(-12%)	(-2%)
		DROUGHT	-653	-199	-800	-432	-203	-74	-110	-190	-20	-154	54	-1	66	12	163	41	255	72	182	206	269	258	12	-179	-65	-53
			(-36%)	(-14%)	(-42%)	(-28%)	(-14%)	(-6%)	(-15%)	(-24%)	(-5%)	(-29%)	(33%)	(-1%)	(46%)	(6%)	(43%)	(8%)	(37%)	(8%)	(15%)	(17%)	(21%)	(20%)	(1%)	(-9%)	(-7%)	(-5%)
	Sac. R. at Mallard Island	ALL	-859	-199	-806	-254	-255	-109	-54	-42	32	-37	177	59	195	65	267	110	339	152	259	367	401	407	-306	-26	-51	41
			(-28%)	(-8%)	(-28%)	(-11%)	(-11%)	(-5%)	(-4%)	(-3%)	(4%)	(-4%)	(40%)	(10%)	(38%)	(10%)	(29%)	(10%)	(23%)	(9%)	(13%)	(19%)	(16%)	(16%)	(-10%)	(-1%)	(-3%)	(2%)
		DROUGHT	-1056	-363	-1119	-495	-301	-101	-164	-241	48	-199	199	61	248	99	338	143	402	164	369	405	423	417	44	-125	-48	-20
			(-28%)	(-12%)	(-30%)	(-16%)	(-10%)	(-3%)	(-8%)	(-12%)	(3%)	(-12%)	(30%)	(8%)	(34%)	(11%)	(24%)	(9%)	(19%)	(7%)	(13%)	(15%)	(15%)	(14%)	(1%)	(-3%)	(-2%)	(-1%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	3	4	5	5	5	5	2	3	-1	-2	-2	-2	-2	-2	-2	-2	-1	0	1	1	2	2	4	4	1	1
			(20%)	(23%)	(27%)	(30%)	(30%)	(30%)	(12%)	(13%)	(-3%)	(-9%)	(-8%)	(-10%)	(-12%)	(-9%)	(-8%)	(-9%)	(-3%)	(-2%)	(4%)	(7%)	(11%)	(12%)	(22%)	(23%)	(7%)	(7%)
		DROUGHT	7	7	10	11	13	13	11	11	6	6	3	2	1	0	0	-2	1	2	4	4	6	6	9	9	6	6
			(39%)	(41%)	(57%)	(63%)	(76%)	(73%)	(63%)	(61%)	(31%)	(28%)	(13%)	(9%)	(3%)	(-2%)	(-0%)	(-9%)	(8%)	(9%)	(22%)	(24%)	(33%)	(33%)	(50%)	(50%)	(32%)	(30%)
	Contra Costa PP #1	ALL	-25	-3	-37	0	-66	-12	-42	-13	11	-2	-9	-1	-11	-8	-5	-5	4	0	-3	4	-14	18	5	19	-16	0
			(-16%)	(-2%)	(-23%)	(0%)	(-36%)	(-9%)	(-23%)	(-9%)	(10%)	(-1%)	(-10%)	(-2%)	(-14%)	(-11%)	(-7%)	(-7%)	(7%)	(-0%)	(-4%)	(5%)	(-10%)	(16%)	(3%)	(15%)	(-13%)	(-0%)
		DROUGHT	-12	-6	-19	-4	-87	-32	-50	-54	17	12	1	-8	-9	-14	-6	-11	15	1	-10	-5	-51	7	12	31	-17	-7
			(-6%)	(-3%)	(-10%)	(-2%)	(-38%)	(-18%)	(-24%)	(-25%)	(15%)	(10%)	(1%)	(-9%)	(-13%)	(-18%)	(-10%)	(-18%)	(33%)	(1%)	(-7%)	(-4%)	(-23%)	(4%)	(7%)	(20%)	(-12%)	(-5%)
	Banks PP	ALL	-22	-10	-50	-16	-52	-25	-45	-30	-14	-11	-18	-17	-32	-30	-11	-11	-6	-12	-28	-22	-33	-12	-18	-7	-27	-17
			(-20%)	(-10%)	(-38%)	(-16%)	(-36%)	(-21%)	(-32%)	(-24%)	(-13%)	(-11%)	(-21%)	(-19%)	(-39%)	(-37%)	(-15%)	(-15%)	(-9%)	(-17%)	(-38%)	(-32%)	(-32%)	(-14%)	(-17%)	(-7%)	(-27%)	(-18%)
		DROUGHT	-11	-7	-58	-34	-63	-37	-67	-49	1	7	-34	-31	-49	-46	-20	-19	7	-4	-44	-33	-62	-24	-6	4	-32	-20
			(-8%)	(-5%)	(-39%)	(-27%)	(-35%)	(-24%)	(-39%)	(-32%)	(1%)	(5%)	(-26%)	(-24%)	(-38%)	(-36%)	(-18%)	(-18%)	(10%)	(-5%)	(-43%)	(-36%)	(-40%)	(-20%)	(-4%)	(3%)	(-24%)	(-17%)
	Jones PP	ALL	-11	-4	-47	-18	-42	-19	-57	-40	-19	-18	-32	-30	-15	-14	-18	-17	-4	-17	-8	-9	-6	9	-21	-12	-23	-15
			(-10%)	(-4%)	(-36%)	(-18%)	(-28%)	(-15%)	(-38%)	(-30%)	(-15%)	(-14%)	(-26%)	(-25%)	(-16%)	(-16%)	(-23%)	(-23%)	(-6%)	(-22%)	(-9%)	(-11%)	(-6%)	(10%)	(-19%)	(-12%)	(-21%)	(-15%)
		DROUGHT	-5	-8	-42	-19	-51	-30	-120	-97	-36	-32	-54	-51	-14	-15	-33	-32	-2	-13	-14	-5	-22	10	0	5	-30	-22
			(-4%)	(-6%)	(-28%)	(-15%)	(-28%)	(-18%)	(-63%)	(-58%)	(-19%)	(-17%)	(-28%)	(-27%)	(-10%)	(-11%)	(-29%)	(-28%)	(-3%)	(-18%)	(-13%)	(-5%)	(-15%)	(9%)	(-0%)	(4%)	(-21%)	(-16%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index)..

Table Cl-33. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 5 LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 5 LLT			Period Average Concentration mg/L			Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)		
	Location	**Period [a]**	**Ex. Cond.**	**No Act. LLT**	**Alt 5 LLT**	**Ex. Cond.**	**No Act._LLT**	**Alt 5 LLT**
Delta Interior	Moke. R. (SF) at Staten Island	ALL	15.7	15.3	18.3	0	0	0
		DROUGHT	16.8	16.3	19.7	0	0	0
	SJR at Buckley Cove	ALL	82.9	77.2	79.0	0	0	0
		DROUGHT	86.5	76.5	80.2	0	0	0
	Franks Tract	ALL	173.8	146.4	147.1	34	22	23
		DROUGHT	212.8	190.9	182.9	47	35	35
	Old R. at Rock Slough	ALL	152.0	130.5	132.9	28	17	17
		DROUGHT	180.2	161.4	158.7	42	27	28
Western Delta	Sac. R. at Emmaton	ALL	368.9	366.5	373.8	44	44	46
		DROUGHT	516.4	559.3	553.8	55	60	63
	SJR at Antioch	ALL	1,087.3	974.2	949.4	66	73	72
		DROUGHT	1,400.6	1,345.6	1,272.7	82	87	85
	Sac. R. at Mallard Island	ALL	2,552.0	2,411.9	2,473.3	85	86	87
		DROUGHT	3,233.9	3,123.1	3,115.1	100	100	100
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	17.1	16.6	20.2	0	0	0
		DROUGHT	17.7	17.7	30.3	0	0	0
	Contra Costa PP #1	ALL	146.5	126.9	130.1	24	14	18
		DROUGHT	176.5	161.3	155.9	37	22	30
	Banks PP	ALL	123.4	108.5	87.5	4	2	1
		DROUGHT	143.7	128.0	105.5	7	2	2
	Jones PP	ALL	116.9	103.4	87.0	1	1	0
		DROUGHT	132.9	118.9	102.0	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-34. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 5 LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 5 LLT			Period Average Concentration (mg/L)			Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)		
	Location	Period [a]	Ex. Cond.	No Act. LLT	Alt 5 LLT	Ex. Cond.	No Act._LLT	Alt 5 LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	18	18	19	0	0	0
		DROUGHT	19	19	20	0	0	0
	SJR at Buckley Cove	ALL	116	102	101	0	0	0
		DROUGHT	155	128	134	0	0	0
	Franks Tract	ALL	120	102	102	14	8	8
		DROUGHT	153	140	135	22	15	17
	Old R. at Rock Slough	ALL	108	94	95	4	3	3
		DROUGHT	136	125	123	7	5	3
Western Delta	Sac. R. at Emmaton	ALL	258	260	265	36	32	37
		DROUGHT	364	406	404	50	55	53
	SJR at Antioch	ALL	757	684	669	61	65	66
		DROUGHT	1,002	990	937	80	82	78
	Sac. R. at Mallard Island	ALL	1,766	1,674	1,716	77	83	84
		DROUGHT	2,346	2,318	2,298	98	98	98
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	19	19	20	0	0	0
		DROUGHT	19	19	25	0	0	0
	Contra Costa PP #1	ALL	120	105	105	5	3	2
		DROUGHT	143	133	126	8	7	3
	Banks PP	ALL	102	91	74	1	1	0
		DROUGHT	134	123	102	2	2	0
	Jones PP	ALL	109	101	86	0	0	0
		DROUGHT	145	136	114	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-35. Alternative 5 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 5 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-1	-1	-1	0	-1	0	-1	0	0	-1	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2	-2	-2	-1	-1
		DROUGHT	-1	-1	-1	-1	-1	-1	0	0	0	0	0	-1	0	-1	-1	-1	-3	-3	-4	-4	-3	-3	-2	-2	-1	-1
	SJR at Buckley Cove	ALL	1	0	0	-1	2	-2	2	-1	2	0	1	0	2	-1	2	0	4	-2	5	-2	5	-3	2	-1	2	-1
		DROUGHT	1	-1	1	-1	3	-2	4	-2	2	-1	2	-1	4	-1	4	-1	8	-4	6	-5	7	-6	4	-1	4	-2
	Franks Tract	ALL	-	52	-	-	-	-	-17	-14	-6	-3	-4	-3	-4	-2	-3	-1	-6	-3	56	-13	22	-63	-	-	35	-1
		DROUGHT	-	-	-	-	-	-	-40	-58	-9	0	-4	-2	-2	-1	-4	1	-16	-2	-	-	-	-100	-	-	80	14
	Old R. at Rock Slough	ALL	-	15	-	4	-	-	-8	-5	-5	-3	-4	-2	-2	0	-1	0	-3	-1	22	-9	4	-38	-36	-76	20	-2
		DROUGHT	-	-	-	-	-	-	-22	-40	-8	-4	-3	0	0	1	-2	1	-11	-2	-	15	-	-74	-	-	31	3
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	-14	31	-9	6	-8	-2	-11	-3	-51	-37	-100	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-49	-	-22	41	-10	-3	-19	-9	-100	-	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-31	-5	-45	-10	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-45	-2	-100	-100	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-4	-5	-7	-7	-6	-6	-3	-3	0	0	1	1	1	1	2	2	3	2	2	1	0	0	-4	-4	-1	-2
		DROUGHT	-8	-9	-13	-14	-13	-13	-10	-9	-5	-4	-1	-1	0	0	0	2	1	0	-2	-3	-4	-4	-9	-9	-5	-5
	Contra Costa PP #1	ALL	-	11	-	1	-	14	36	6	-10	0	-4	-2	-2	-1	0	1	-2	0	7	-4	46	-28	-36	-56	16	-3
		DROUGHT	-	-	-	-	-	-	-	-	-13	-7	-3	1	0	2	0	2	-9	0	34	12	-	-32	-	-100	28	6
	Banks PP	ALL	46	22	-	24	-	37	32	27	5	8	7	8	13	14	6	6	6	7	31	15	57	15	45	20	28	15
		DROUGHT	48	34	-	75	-	80	78	49	-2	-1	5	6	9	10	2	4	-2	1	72	40	-	48	35	3	36	18
	Jones PP	ALL	29	9	-	25	61	27	27	23	6	7	9	10	7	8	11	11	7	9	19	5	15	-11	44	22	22	11
		DROUGHT	36	25	-	37	78	40	68	50	6	6	9	10	4	5	11	12	1	6	42	10	-	-8	9	-4	26	13

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-36. Alternative 5 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 5 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1
		DROUGHT	0	0	-1	-1	0	0	0	0	0	0	0	-1	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1
	SJR at Buckley Cove	ALL	3	0	8	1	31	5	50	13	28	11	25	10	4	-1	-1	-5	0	-2	7	-3	4	-9	4	-5	11	0
		DROUGHT	5	-2	14	0	49	6	-	25	-	41	-	36	14	-2	-4	-14	8	-16	7	-16	5	-24	6	-13	22	-5
	Franks Tract	ALL	81	11	-	11	-	46	3	-6	-3	-2	-4	-3	-2	-1	-2	-1	-6	-2	15	-6	2	-23	18	0	14	0
		DROUGHT	-	48	-	90	-	-	-1	-29	-8	1	-5	-3	-2	-1	-4	0	-15	-3	-	9	78	-41	-94	-	18	4
	Old R. at Rock Slough	ALL	30	5	97	-3	92	30	7	-1	-2	-2	-2	0	1	2	0	1	-4	-1	7	-4	1	-17	-3	-10	9	-1
		DROUGHT	25	22	-	22	-	75	-2	-27	-7	-5	-2	2	3	4	-1	2	-10	-2	35	4	32	-24	-36	-16	11	2
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	-1	18	-4	9	-8	-1	-9	-2	-32	-20	-100	-100	-100	-100	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	2	-	-12	56	-11	-3	-15	-6	-93	-86	-100	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-37	-4	-34	-3	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-62	4	-62	-23	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-2	-2	-2	-2	-2	-2	-1	-1	0	1	1	1	1	1	1	1	0	0	0	-1	-1	-1	-2	-2	-1	-1
		DROUGHT	-3	-3	-4	-5	-6	-6	-5	-5	-3	-2	-1	-1	0	0	0	1	-1	-1	-2	-2	-3	-3	-4	-4	-3	-2
	Contra Costa PP #1	ALL	27	3	40	0	96	10	63	14	-8	1	5	1	6	5	3	3	-2	0	2	-3	13	-13	-5	-16	12	0
		DROUGHT	21	10	32	5	-	41	-	-	-12	-9	-1	5	5	9	3	6	-7	0	8	4	-	-8	-15	-32	16	6
	Banks PP	ALL	16	7	42	10	49	19	40	24	9	8	11	10	19	18	6	6	3	6	16	12	22	7	13	4	18	10
		DROUGHT	10	6	59	27	91	39	86	50	-1	-6	29	26	40	38	14	14	-4	2	29	21	66	18	5	-3	27	16
	Jones PP	ALL	8	3	39	12	42	15	58	35	16	14	24	23	9	9	10	10	2	10	5	5	4	-5	14	8	16	10
		DROUGHT	5	7	42	16	75	33	-	-	59	50	96	88	12	13	24	23	1	8	10	3	21	-7	0	-4	29	19

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-37. Period average change in chloride concentrations (mg/L) for Alternative 6A LLT relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 6 LLT	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	5	5	5	5	3	3	3	4	3	4	4	4	4	4	3	4	8	9	13	14	11	11	7	7	6	6
			(44%)	(46%)	(42%)	(40%)	(24%)	(26%)	(14%)	(20%)	(14%)	(19%)	(23%)	(26%)	(23%)	(26%)	(20%)	(24%)	(42%)	(50%)	(74%)	(83%)	(81%)	(80%)	(56%)	(55%)	(37%)	(40%)
		DROUGHT	5	5	5	5	3	4	2	3	1	2	3	4	2	3	3	4	9	10	15	15	11	10	7	8	6	6
			(40%)	(41%)	(40%)	(38%)	(27%)	(29%)	(11%)	(15%)	(3%)	(8%)	(15%)	(22%)	(10%)	(17%)	(16%)	(23%)	(50%)	(56%)	(87%)	(88%)	(76%)	(70%)	(54%)	(57%)	(33%)	(37%)
	SJR at Buckley Cove	ALL	-2	0	0	0	-1	5	-2	2	-3	1	-2	1	-3	1	-4	1	-7	3	-8	5	-9	4	-4	1	-4	2
			(-2%)	(0%)	(-0%)	(0%)	(-1%)	(7%)	(-3%)	(3%)	(-3%)	(2%)	(-3%)	(2%)	(-4%)	(1%)	(-4%)	(1%)	(-8%)	(4%)	(-9%)	(6%)	(-10%)	(5%)	(-5%)	(1%)	(-4%)	(3%)
		DROUGHT	-2	1	-2	1	-4	5	-6	4	-3	2	-3	2	-6	3	-7	3	-11	8	-10	7	-16	6	-6	1	-6	4
			(-3%)	(1%)	(-3%)	(1%)	(-5%)	(7%)	(-7%)	(5%)	(-4%)	(3%)	(-4%)	(3%)	(-7%)	(4%)	(-8%)	(3%)	(-12%)	(11%)	(-11%)	(10%)	(-16%)	(8%)	(-7%)	(2%)	(-7%)	(5%)
	Franks Tract	ALL	-215	-148	-306	-172	-236	-191	-100	-103	0	-6	22	19	21	17	13	9	9	3	-92	-46	-109	-63	-194	-179	-99	-72
			(-74%)	(-66%)	(-80%)	(-69%)	(-79%)	(-76%)	(-64%)	(-65%)	(0%)	(-9%)	(57%)	(45%)	(54%)	(43%)	(29%)	(18%)	(17%)	(4%)	(-48%)	(-32%)	(-48%)	(-34%)	(-65%)	(-63%)	(-57%)	(-49%)
		DROUGHT	-263	-224	-354	-238	-305	-266	-148	-129	-14	-32	18	12	19	17	13	2	8	-19	-173	-104	-136	-58	-190	-223	-127	-105
			(-74%)	(-71%)	(-81%)	(-74%)	(-82%)	(-79%)	(-72%)	(-70%)	(-22%)	(-39%)	(62%)	(36%)	(86%)	(68%)	(43%)	(4%)	(15%)	(-25%)	(-56%)	(-43%)	(-42%)	(-24%)	(-54%)	(-58%)	(-60%)	(-55%)
	Old R. at Rock Slough	ALL	-149	-108	-223	-114	-175	-131	-68	-71	18	14	35	31	27	24	21	18	20	16	-64	-30	-84	-44	-138	-127	-65	-43
			(-62%)	(-54%)	(-72%)	(-57%)	(-68%)	(-61%)	(-45%)	(-46%)	(27%)	(20%)	(72%)	(60%)	(50%)	(42%)	(37%)	(31%)	(37%)	(27%)	(-42%)	(-26%)	(-44%)	(-29%)	(-57%)	(-55%)	(-43%)	(-33%)
		DROUGHT	-195	-184	-262	-166	-231	-186	-107	-89	12	4	43	37	42	38	38	32	17	-2	-143	-95	-135	-68	-156	-172	-90	-71
			(-67%)	(-66%)	(-75%)	(-65%)	(-74%)	(-69%)	(-56%)	(-52%)	(16%)	(5%)	(112%)	(84%)	(123%)	(104%)	(120%)	(83%)	(40%)	(-3%)	(-60%)	(-50%)	(-49%)	(-33%)	(-55%)	(-57%)	(-50%)	(-44%)
Western Delta	Sac. R. at Emmaton	ALL	-478	-274	-529	-396	-246	-295	-72	-106	-17	-43	8	-6	20	4	47	18	72	35	285	282	110	40	-336	-364	-95	-92
			(-56%)	(-43%)	(-59%)	(-52%)	(-56%)	(-61%)	(-48%)	(-57%)	(-25%)	(-46%)	(28%)	(-13%)	(53%)	(7%)	(39%)	(12%)	(33%)	(13%)	(87%)	(85%)	(23%)	(7%)	(-41%)	(-43%)	(-26%)	(-25%)
		DROUGHT	-629	-390	-701	-588	-310	-404	-67	-149	-13	-76	13	-1	28	7	102	30	142	41	474	419	258	141	-310	-558	-84	-127
			(-55%)	(-43%)	(-56%)	(-52%)	(-45%)	(-51%)	(-30%)	(-49%)	(-12%)	(-45%)	(30%)	(-2%)	(57%)	(11%)	(57%)	(12%)	(47%)	(10%)	(101%)	(80%)	(43%)	(20%)	(-28%)	(-41%)	(-16%)	(-23%)
	SJR at Antioch	ALL	-1413	-755	-1665	-1115	-1009	-945	-397	-436	-122	-175	-5	-43	23	-19	20	-35	33	-35	28	185	-217	-210	-1081	-867	-484	-371
			(-64%)	(-49%)	(-68%)	(-59%)	(-69%)	(-67%)	(-65%)	(-67%)	(-46%)	(-55%)	(-5%)	(-29%)	(16%)	(-10%)	(6%)	(-8%)	(6%)	(-5%)	(2%)	(17%)	(-15%)	(-14%)	(-51%)	(-45%)	(-45%)	(-38%)
		DROUGHT	-1608	-909	-1957	-1421	-1243	-1133	-464	-587	-165	-306	-13	-52	19	-32	36	-69	79	-56	123	234	59	64	-913	-1120	-504	-449
			(-60%)	(-46%)	(-64%)	(-56%)	(-60%)	(-58%)	(-55%)	(-61%)	(-40%)	(-56%)	(-8%)	(-26%)	(10%)	(-13%)	(6%)	(-10%)	(9%)	(-6%)	(7%)	(14%)	(4%)	(4%)	(-36%)	(-41%)	(-36%)	(-33%)
	Sac. R. at Mallard Island	ALL	-1574	-763	-1723	-1100	-1212	-1148	-527	-537	-203	-284	23	-58	124	38	181	63	179	63	298	530	9	7	-992	-546	-451	-311
			(-34%)	(-20%)	(-35%)	(-26%)	(-37%)	(-35%)	(-32%)	(-32%)	(-21%)	(-28%)	(5%)	(-11%)	(17%)	(5%)	(13%)	(4%)	(9%)	(3%)	(10%)	(19%)	(0%)	(0%)	(-23%)	(-14%)	(-18%)	(-13%)
		DROUGHT	-1779	-850	-2101	-1344	-1353	-1219	-599	-725	-295	-509	42	-21	111	35	108	58	152	74	329	519	270	294	-742	-838	-488	-377
			(-33%)	(-19%)	(-34%)	(-25%)	(-30%)	(-28%)	(-25%)	(-28%)	(-18%)	(-28%)	(6%)	(-3%)	(10%)	(3%)	(5%)	(3%)	(6%)	(3%)	(9%)	(15%)	(7%)	(8%)	(-15%)	(-17%)	(-15%)	(-12%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	9	11	12	13	11	11	4	4	-1	-3	-3	-4	-4	-3	-4	-4	-6	-5	-3	-1	4	6	11	11	3	3
			(55%)	(68%)	(83%)	(92%)	(84%)	(83%)	(31%)	(30%)	(-5%)	(-15%)	(-17%)	(-21%)	(-24%)	(-19%)	(-27%)	(-27%)	(-31%)	(-26%)	(-13%)	(-4%)	(21%)	(29%)	(58%)	(63%)	(15%)	(18%)
		DROUGHT	18	20	25	27	23	22	16	15	7	7	2	1	0	-1	-2	-5	-3	-2	4	6	16	16	26	25	11	11
			(87%)	(107%)	(154%)	(182%)	(186%)	(168%)	(125%)	(117%)	(51%)	(45%)	(11%)	(5%)	(-1%)	(-6%)	(-12%)	(-25%)	(-16%)	(-12%)	(18%)	(27%)	(70%)	(70%)	(116%)	(116%)	(62%)	(62%)
	Contra Costa PP #1	ALL	-148	-114	-158	-96	-149	-76	-89	-69	14	-4	37	33	34	31	23	21	23	17	-35	-20	-97	-50	-110	-96	-55	-35
			(-61%)	(-55%)	(-64%)	(-51%)	(-63%)	(-46%)	(-49%)	(-43%)	(17%)	(-4%)	(70%)	(59%)	(63%)	(55%)	(37%)	(32%)	(40%)	(28%)	(-28%)	(-18%)	(-48%)	(-32%)	(-51%)	(-47%)	(-37%)	(-28%)
		DROUGHT	-198	-185	-208	-179	-214	-144	-131	-149	5	-6	43	36	43	39	43	38	23	6	-92	-79	-181	-92	-129	-99	-83	-68
			(-67%)	(-66%)	(-69%)	(-66%)	(-71%)	(-62%)	(-60%)	(-63%)	(7%)	(-6%)	(95%)	(69%)	(105%)	(86%)	(112%)	(89%)	(53%)	(9%)	(-50%)	(-47%)	(-58%)	(-41%)	(-51%)	(-44%)	(-47%)	(-42%)
	Banks PP	ALL	-159	-142	-196	-137	-183	-148	-132	-128	-75	-79	-61	-64	-64	-66	-66	-68	-60	-62	-98	-77	-143	-107	-162	-145	-117	-102
			(-96%)	(-96%)	(-97%)	(-95%)	(-96%)	(-96%)	(-95%)	(-95%)	(-92%)	(-92%)	(-90%)	(-91%)	(-91%)	(-91%)	(-91%)	(-91%)	(-90%)	(-90%)	(-94%)	(-92%)	(-95%)	(-94%)	(-96%)	(-96%)	(-95%)	(-94%)
		DROUGHT	-191	-186	-219	-173	-219	-185	-162	-146	-85	-86	-60	-62	-58	-61	-53	-55	-45	-52	-139	-114	-220	-157	-193	-178	-137	-121
			(-97%)	(-97%)	(-97%)	(-96%)	(-97%)	(-97%)	(-96%)	(-95%)	(-93%)	(-93%)	(-90%)	(-90%)	(-90%)	(-90%)	(-89%)	(-89%)	(-87%)	(-88%)	(-95%)	(-94%)	(-97%)	(-96%)	(-97%)	(-96%)	(-95%)	(-95%)
	Jones PP	ALL	-145	-128	-179	-124	-148	-123	-108	-103	-74	-76	-70	-71	-74	-75	-75	-75	-61	-64	-105	-86	-135	-104	-148	-131	-110	-97
			(-96%)	(-95%)	(-96%)	(-95%)	(-96%)	(-95%)	(-94%)	(-94%)	(-92%)	(-92%)	(-91%)	(-91%)	(-92%)	(-92%)	(-92%)	(-92%)	(-90%)	(-90%)	(-94%)	(-93%)	(-95%)	(-94%)	(-96%)	(-95%)	(-94%)	(-93%)
		DROUGHT	-172	-166	-195	-146	-169	-149	-125	-112	-78	-78	-71	-72	-72	-72	-70	-72	-45	-55	-146	-118	-198	-145	-172	-161	-126	-112
			(-96%)	(-96%)	(-97%)	(-96%)	(-96%)	(-96%)	(-95%)	(-94%)	(-92%)	(-92%)	(-91%)	(-91%)	(-92%)	(-92%)	(-91%)	(-91%)	(-87%)	(-89%)	(-96%)	(-95%)	(-97%)	(-96%)	(-96%)	(-96%)	(-95%)	(-94%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-38. Period average change in chloride concentrations (mg/L) for Alternative 6A LLT relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 6 LLT	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	2	2	2	2	2	2	2	3	2	3	3	3	2	2	2	2	3	3	3	3	3	3	2	2	2	2
			(11%)	(12%)	(13%)	(13%)	(9%)	(10%)	(9%)	(12%)	(9%)	(13%)	(12%)	(14%)	(12%)	(13%)	(10%)	(11%)	(16%)	(17%)	(19%)	(19%)	(17%)	(16%)	(12%)	(12%)	(12%)	(13%)
		DROUGHT	2	2	2	2	2	2	1	2	0	1	2	3	1	2	2	2	3	4	3	3	3	2	2	2	2	2
			(11%)	(11%)	(12%)	(12%)	(10%)	(11%)	(6%)	(9%)	(2%)	(5%)	(8%)	(12%)	(6%)	(9%)	(10%)	(12%)	(20%)	(21%)	(21%)	(21%)	(16%)	(15%)	(13%)	(13%)	(10%)	(12%)
	SJR at Buckley Cove	ALL	-5	0	-12	-3	-22	5	-37	-9	-24	-8	-23	-8	-5	3	3	10	1	4	-1	14	-1	19	-5	8	-11	3
			(-5%)	(0%)	(-11%)	(-3%)	(-16%)	(5%)	(-23%)	(-6%)	(-17%)	(-6%)	(-17%)	(-6%)	(-5%)	(4%)	(4%)	(14%)	(1%)	(5%)	(-1%)	(15%)	(-1%)	(22%)	(-5%)	(9%)	(-10%)	(3%)
		DROUGHT	-6	3	-16	-1	-28	5	-51	-11	-41	-15	-34	-14	-10	3	6	21	-7	27	4	41	2	52	-6	18	-16	11
			(-5%)	(3%)	(-12%)	(-1%)	(-17%)	(4%)	(-24%)	(-6%)	(-19%)	(-8%)	(-16%)	(-7%)	(-6%)	(2%)	(5%)	(19%)	(-5%)	(27%)	(3%)	(54%)	(1%)	(74%)	(-5%)	(17%)	(-10%)	(8%)
	Franks Tract	ALL	-129	-90	-171	-91	-153	-116	-66	-56	16	14	33	31	31	29	22	19	14	6	-51	-25	-62	-30	-115	-105	-53	-34
			(-69%)	(-60%)	(-74%)	(-60%)	(-73%)	(-67%)	(-49%)	(-45%)	(26%)	(23%)	(88%)	(78%)	(101%)	(91%)	(65%)	(54%)	(33%)	(12%)	(-40%)	(-24%)	(-41%)	(-25%)	(-60%)	(-58%)	(-44%)	(-34%)
		DROUGHT	-161	-142	-201	-133	-202	-168	-107	-79	8	-8	46	40	45	44	35	26	25	0	-104	-65	-88	-38	-123	-150	-69	-56
			(-70%)	(-67%)	(-75%)	(-66%)	(-75%)	(-71%)	(-59%)	(-52%)	(10%)	(-9%)	(117%)	(90%)	(151%)	(142%)	(114%)	(68%)	(60%)	(-0%)	(-49%)	(-38%)	(-39%)	(-22%)	(-53%)	(-58%)	(-45%)	(-40%)
	Old R. at Rock Slough	ALL	-63	-40	-92	-28	-68	-36	9	19	64	65	77	73	55	54	36	35	38	32	-17	1	-32	-6	-59	-51	-4	10
			(-41%)	(-31%)	(-49%)	(-23%)	(-38%)	(-24%)	(7%)	(15%)	(89%)	(90%)	(157%)	(136%)	(112%)	(108%)	(77%)	(73%)	(96%)	(71%)	(-17%)	(1%)	(-26%)	(-6%)	(-39%)	(-35%)	(-4%)	(11%)
		DROUGHT	-86	-84	-104	-49	-102	-70	-9	17	94	90	130	123	106	103	79	73	45	27	-77	-50	-79	-36	-78	-92	-7	4
			(-46%)	(-45%)	(-48%)	(-30%)	(-45%)	(-36%)	(-5%)	(11%)	(106%)	(96%)	(208%)	(176%)	(191%)	(176%)	(190%)	(150%)	(118%)	(47%)	(-47%)	(-37%)	(-41%)	(-24%)	(-41%)	(-46%)	(-5%)	(3%)
Western Delta	Sac. R. at Emmaton	ALL	-345	-208	-353	-260	-192	-215	-65	-84	-20	-41	7	-8	18	3	37	12	64	25	215	202	92	46	-232	-265	-64	-66
			(-60%)	(-48%)	(-64%)	(-57%)	(-62%)	(-65%)	(-51%)	(-57%)	(-28%)	(-44%)	(21%)	(-16%)	(50%)	(5%)	(41%)	(10%)	(35%)	(11%)	(96%)	(85%)	(28%)	(12%)	(-41%)	(-45%)	(-25%)	(-25%)
		DROUGHT	-455	-305	-474	-395	-259	-313	-69	-131	-16	-77	13	-5	27	8	90	23	143	31	379	320	214	119	-220	-413	-52	-95
			(-58%)	(-48%)	(-61%)	(-56%)	(-52%)	(-57%)	(-36%)	(-51%)	(-15%)	(-45%)	(29%)	(-8%)	(74%)	(14%)	(76%)	(12%)	(58%)	(9%)	(115%)	(82%)	(48%)	(22%)	(-28%)	(-42%)	(-14%)	(-23%)
	SJR at Antioch	ALL	-1001	-554	-1080	-698	-751	-658	-342	-348	-124	-162	-10	-54	25	-19	27	-28	44	-35	64	143	-120	-102	-750	-629	-335	-262
			(-67%)	(-53%)	(-72%)	(-63%)	(-74%)	(-71%)	(-69%)	(-69%)	(-49%)	(-55%)	(-8%)	(-33%)	(22%)	(-12%)	(11%)	(-9%)	(9%)	(-6%)	(8%)	(19%)	(-11%)	(-10%)	(-51%)	(-47%)	(-44%)	(-38%)
		DROUGHT	-1161	-707	-1302	-935	-970	-841	-426	-506	-167	-301	-9	-64	36	-19	70	-52	118	-65	161	185	86	75	-656	-847	-352	-340
			(-63%)	(-51%)	(-68%)	(-61%)	(-66%)	(-63%)	(-60%)	(-64%)	(-42%)	(-57%)	(-5%)	(-29%)	(25%)	(-9%)	(19%)	(-10%)	(17%)	(-7%)	(13%)	(15%)	(7%)	(6%)	(-36%)	(-42%)	(-35%)	(-34%)
	Sac. R. at Mallard Island	ALL	-1382	-722	-1420	-868	-1145	-999	-604	-592	-274	-342	-17	-135	102	-28	162	4	199	13	301	409	41	47	-845	-566	-407	-315
			(-45%)	(-30%)	(-48%)	(-37%)	(-51%)	(-48%)	(-48%)	(-47%)	(-34%)	(-39%)	(-4%)	(-24%)	(20%)	(-4%)	(18%)	(0%)	(13%)	(1%)	(15%)	(21%)	(2%)	(2%)	(-28%)	(-21%)	(-23%)	(-19%)
		DROUGHT	-1584	-891	-1732	-1108	-1388	-1187	-771	-848	-396	-643	-1	-139	131	-18	185	-10	255	17	407	443	295	290	-626	-796	-435	-407
			(-43%)	(-30%)	(-46%)	(-35%)	(-44%)	(-40%)	(-39%)	(-42%)	(-28%)	(-39%)	(-0%)	(-17%)	(18%)	(-2%)	(13%)	(-1%)	(12%)	(1%)	(15%)	(16%)	(10%)	(10%)	(-18%)	(-21%)	(-19%)	(-18%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	3	4	3	3	3	3	0	1	-2	-3	-2	-3	-3	-2	-2	-2	-1	0	1	2	4	4	5	5	1	1
			(18%)	(21%)	(17%)	(20%)	(18%)	(18%)	(2%)	(3%)	(-9%)	(-14%)	(-11%)	(-14%)	(-13%)	(-11%)	(-9%)	(-9%)	(-3%)	(-2%)	(7%)	(10%)	(22%)	(24%)	(28%)	(29%)	(5%)	(5%)
		DROUGHT	7	7	7	8	8	8	7	6	4	3	1	0	0	-1	0	-2	1	1	4	5	9	9	11	11	5	5
			(37%)	(39%)	(40%)	(46%)	(47%)	(45%)	(36%)	(34%)	(18%)	(15%)	(4%)	(1%)	(-2%)	(-6%)	(-2%)	(-11%)	(6%)	(7%)	(23%)	(25%)	(52%)	(52%)	(62%)	(62%)	(26%)	(24%)
	Contra Costa PP #1	ALL	-56	-34	-50	-13	-60	-6	-16	12	74	61	75	82	70	73	41	42	40	36	5	12	-38	-7	-35	-21	4	20
			(-35%)	(-25%)	(-31%)	(-11%)	(-33%)	(-5%)	(-9%)	(8%)	(68%)	(51%)	(83%)	(99%)	(89%)	(95%)	(61%)	(62%)	(83%)	(70%)	(6%)	(16%)	(-27%)	(-6%)	(-25%)	(-16%)	(3%)	(19%)
		DROUGHT	-81	-75	-67	-52	-94	-38	-34	-37	90	85	135	126	124	119	91	86	52	37	-40	-35	-109	-52	-57	-38	1	11
			(-42%)	(-40%)	(-36%)	(-30%)	(-41%)	(-22%)	(-16%)	(-18%)	(82%)	(74%)	(169%)	(141%)	(164%)	(148%)	(155%)	(135%)	(112%)	(62%)	(-31%)	(-28%)	(-49%)	(-31%)	(-33%)	(-25%)	(1%)	(8%)
	Banks PP	ALL	-98	-86	-117	-83	-129	-103	-123	-109	-88	-86	-73	-72	-69	-67	-61	-60	-49	-54	-59	-53	-87	-66	-94	-82	-87	-77
			(-87%)	(-86%)	(-89%)	(-85%)	(-90%)	(-88%)	(-89%)	(-88%)	(-86%)	(-85%)	(-83%)	(-83%)	(-83%)	(-82%)	(-81%)	(-81%)	(-77%)	(-79%)	(-80%)	(-79%)	(-86%)	(-82%)	(-87%)	(-85%)	(-86%)	(-84%)
		DROUGHT	-124	-120	-137	-113	-167	-140	-157	-139	-126	-120	-119	-115	-121	-118	-98	-98	-65	-76	-87	-76	-141	-103	-120	-110	-120	-108
			(-92%)	(-91%)	(-91%)	(-89%)	(-92%)	(-91%)	(-91%)	(-90%)	(-92%)	(-91%)	(-89%)	(-89%)	(-93%)	(-93%)	(-92%)	(-92%)	(-92%)	(-93%)	(-86%)	(-84%)	(-91%)	(-88%)	(-89%)	(-88%)	(-89%)	(-88%)
	Jones PP	ALL	-95	-88	-115	-85	-136	-113	-137	-120	-113	-111	-105	-103	-74	-73	-62	-62	-49	-62	-68	-69	-87	-72	-93	-85	-94	-87
			(-87%)	(-86%)	(-89%)	(-86%)	(-90%)	(-89%)	(-90%)	(-89%)	(-89%)	(-88%)	(-88%)	(-88%)	(-84%)	(-84%)	(-81%)	(-81%)	(-77%)	(-81%)	(-83%)	(-83%)	(-86%)	(-83%)	(-87%)	(-86%)	(-87%)	(-86%)
		DROUGHT	-119	-121	-135	-112	-168	-147	-177	-154	-175	-171	-179	-177	-120	-121	-99	-97	-48	-59	-93	-84	-133	-102	-119	-114	-130	-122
			(-89%)	(-89%)	(-90%)	(-89%)	(-92%)	(-91%)	(-92%)	(-91%)	(-92%)	(-92%)	(-93%)	(-92%)	(-89%)	(-89%)	(-87%)	(-87%)	(-77%)	(-80%)	(-87%)	(-85%)	(-90%)	(-88%)	(-89%)	(-89%)	(-90%)	(-89%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-39. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 6A LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 6 LLT			Period Average Concentration mg/L			Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)		
	Location	Period [a]	Ex. Cond.	No Act. LLT	Alt 6 LLT	Ex. Cond.	No Act._LLT	Alt 6 LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	15.7	15.3	21.5	0	0	0
		DROUGHT	16.8	16.3	22.3	0	0	0
	SJR at Buckley Cove	ALL	82.9	77.2	79.2	0	0	0
		DROUGHT	86.5	76.5	80.1	0	0	0
	Franks Tract	ALL	173.8	146.4	74.9	34	22	1
		DROUGHT	212.8	190.9	85.7	47	35	2
	Old R. at Rock Slough	ALL	152.0	130.5	87.0	28	17	0
		DROUGHT	180.2	161.4	90.5	42	27	0
Western Delta	Sac. R. at Emmaton	ALL	368.9	366.5	274.4	44	44	38
		DROUGHT	516.4	559.3	431.9	55	60	58
	SJR at Antioch	ALL	1,087.3	974.2	603.4	66	73	57
		DROUGHT	1,400.6	1,345.6	896.7	82	87	73
	Sac. R. at Mallard Island	ALL	2,552.0	2,411.9	2,100.6	85	86	86
		DROUGHT	3,233.9	3,123.1	2,745.9	100	100	100
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	17.1	16.6	19.7	0	0	0
		DROUGHT	17.7	17.7	28.6	0	0	0
	Contra Costa PP #1	ALL	146.5	126.9	91.8	24	14	0
		DROUGHT	176.5	161.3	93.5	37	22	0
	Banks PP	ALL	123.4	108.5	6.8	4	2	0
		DROUGHT	143.7	128.0	6.8	7	2	0
	Jones PP	ALL	116.9	103.4	6.8	1	1	0
		DROUGHT	132.9	118.9	6.8	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-40. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 6A LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 6 LLT			Period Average Concentration (mg/L)			Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)		
	Location	Period [a]	Ex. Cond.	No Act. LLT	Alt 6 LLT	Ex. Cond.	No Act._LLT	Alt 6 LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	18	18	21	0	0	0
		DROUGHT	19	19	21	0	0	0
	SJR at Buckley Cove	ALL	116	102	105	0	0	0
		DROUGHT	155	128	139	0	0	0
	Franks Tract	ALL	120	102	67	14	8	0
		DROUGHT	153	140	84	22	15	0
	Old R. at Rock Slough	ALL	108	94	104	4	3	0
		DROUGHT	136	125	129	7	5	0
Western Delta	Sac. R. at Emmaton	ALL	258	260	194	36	32	27
		DROUGHT	364	406	311	50	55	50
	SJR at Antioch	ALL	757	684	422	61	65	51
		DROUGHT	1,002	990	650	80	82	68
	Sac. R. at Mallard Island	ALL	1,766	1,674	1,360	77	83	82
		DROUGHT	2,346	2,318	1,910	98	98	98
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	19	19	20	0	0	0
		DROUGHT	19	19	24	0	0	0
	Contra Costa PP #1	ALL	120	105	125	5	3	1
		DROUGHT	143	133	144	8	7	0
	Banks PP	ALL	102	91	14	1	1	0
		DROUGHT	134	123	14	2	2	0
	Jones PP	ALL	109	101	14	0	0	0
		DROUGHT	145	136	14	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-41. Alternative 6A use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 6 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-2	-2	-2	-2	-1	-1	-1	-2	-1	-2	-2	-2	-2	-2	-1	-2	-3	-4	-6	-6	-5	-5	-3	-3	-2	-3
		DROUGHT	-2	-2	-2	-2	-1	-2	-1	-1	0	-1	-1	-2	-1	-1	-1	-2	-4	-4	-6	-6	-5	-4	-3	-3	-2	-3
	SJR at Buckley Cove	ALL	1	0	0	0	1	-3	1	-1	2	-1	1	-1	2	-1	2	-1	4	-2	5	-3	6	-2	2	0	2	-1
		DROUGHT	1	-1	1	-1	2	-3	3	-2	2	-1	2	-1	4	-2	4	-2	7	-4	6	-4	10	-3	4	-1	4	-2
	Franks Tract	ALL	-	-	-	-	-	-	-	-	0	3	-10	-9	-10	-8	-7	-4	-5	-1	-	44	-	93	-	-	-	69
		DROUGHT	-	-	-	-	-	-	-	-	8	19	-8	-6	-8	-7	-6	-1	-4	11	-	-	-	-	-	-	-	-
	Old R. at Rock Slough	ALL	-	-	-	-	-	-	70	75	-10	-8	-17	-16	-14	-12	-11	-10	-10	-8	65	23	-	44	-	-	66	36
		DROUGHT	-	-	-	-	-	-	-	-	-7	-2	-21	-18	-19	-18	-18	-15	-8	1	-	-	-	-	-	-	-	80
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	74	-	9	28	-4	3	-10	-2	-36	-18	-100	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	9	98	-6	0	-14	-4	-100	-	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	4	44	-21	29	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	15	-	-37	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-4	-5	-5	-6	-5	-5	-2	-2	0	1	1	2	2	1	2	2	3	2	1	0	-2	-2	-5	-5	-1	-1
		DROUGHT	-8	-9	-11	-11	-10	-9	-7	-6	-3	-3	-1	0	0	0	1	2	1	1	-2	-3	-7	-7	-11	-11	-5	-5
	Contra Costa PP #1	ALL	-	-	-	-	-	88	-	76	-8	2	-19	-17	-17	-16	-12	-11	-12	-9	28	14	-	54	-	-	53	29
		DROUGHT	-	-	-	-	-	-	-	-	-3	4	-21	-18	-21	-19	-20	-18	-11	-3	-	97	-	-	-	-	-	76
	Banks PP	ALL	-	-	-	-	-	-	-	-	45	48	34	35	36	37	37	38	33	34	68	47	-	78	-	-	92	72
		DROUGHT	-	-	-	-	-	-	-	-	54	55	33	34	31	33	28	29	23	27	-	89	-	-	-	-	-	99
	Jones PP	ALL	-	-	-	-	-	-	80	73	44	45	40	41	44	45	44	45	34	36	76	55	-	75	-	-	83	66
		DROUGHT	-	-	-	-	-	-	-	85	47	47	41	42	42	42	41	42	23	29	-	94	-	-	-	-	-	86

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-42. Alternative 6A use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 6 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
		DROUGHT	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	-1	-1	-1	-1	-1	-1	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1
	SJR at Buckley Cove	ALL	3	0	9	2	20	-4	42	7	23	6	21	6	3	-2	-2	-6	0	-3	1	-9	1	-11	3	-5	8	-2
		DROUGHT	5	-2	15	1	34	-4	-	14	-	26	98	24	12	-3	-4	-15	6	-18	-3	-24	-1	-29	6	-13	17	-9
	Franks Tract	ALL	-	89	-	92	-	-	57	44	-8	-8	-15	-15	-14	-14	-10	-9	-7	-3	42	17	64	23	-	-	41	23
		DROUGHT	-	-	-	-	-	-	-	81	-4	5	-22	-20	-21	-20	-16	-13	-12	0	-	85	-	51	-	-	71	51
	Old R. at Rock Slough	ALL	66	34	-	22	99	35	-8	-15	-36	-36	-39	-37	-28	-27	-18	-17	-18	-16	12	-1	26	4	61	49	3	-6
		DROUGHT	-	-	-	54	-	-	12	-16	-58	-57	-69	-68	-55	-54	-38	-36	-21	-14	87	44	-	35	-	-	6	-3
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	54	82	11	26	-3	4	-8	-1	-23	-9	-98	-96	-100	-100	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	11	98	-6	3	-13	-4	-68	-35	-100	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	8	63	-18	20	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	10	-	-33	35	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-1	-2	-1	-1	-1	-1	0	0	1	1	1	1	1	1	1	1	0	0	-1	-1	-2	-2	-2	-2	0	0
		DROUGHT	-3	-3	-3	-3	-4	-3	-3	-3	-2	-1	0	0	0	1	0	1	0	-1	-2	-2	-4	-4	-5	-5	-2	-2
	Contra Costa PP #1	ALL	62	30	55	10	88	5	24	-13	-52	-48	-47	-49	-41	-42	-23	-23	-20	-18	-3	-7	35	5	33	17	-3	-14
		DROUGHT	-	-	-	67	-	50	85	-	-64	-63	-80	-78	-71	-70	-48	-46	-25	-20	33	28	-	60	74	39	-1	-9
	Banks PP	ALL	71	57	99	54	-	78	-	86	60	57	45	44	41	40	35	34	26	30	33	29	58	39	66	54	59	48
		DROUGHT	-	-	-	91	-	-	-	-	-	-	-	96	100	96	68	68	36	45	58	48	-	77	-	87	-	85
	Jones PP	ALL	68	60	95	57	-	92	-	-	92	90	80	78	46	45	36	36	26	36	40	41	58	44	65	56	67	58
		DROUGHT	-	-	-	91	-	-	-	-	-	-	-	-	-	-	72	70	26	34	65	55	-	76	-	93	-	-

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-43. Period average change in chloride concentrations (mg/L) for Alternative 7 LLT relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 7 LLT	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	5	5	5	5	3	3	3	3	2	3	3	4	3	3	3	3	7	8	4	5	4	4	4	4	4	4
			(41%)	(43%)	(39%)	(38%)	(23%)	(25%)	(12%)	(18%)	(11%)	(16%)	(20%)	(23%)	(20%)	(23%)	(19%)	(22%)	(35%)	(43%)	(23%)	(29%)	(31%)	(30%)	(31%)	(31%)	(24%)	(28%)
		DROUGHT	5	5	4	4	3	3	2	3	1	2	3	4	2	3	2	3	7	8	7	7	5	4	4	4	4	4
			(38%)	(38%)	(36%)	(35%)	(25%)	(27%)	(10%)	(14%)	(3%)	(7%)	(14%)	(20%)	(10%)	(16%)	(13%)	(20%)	(40%)	(46%)	(43%)	(43%)	(32%)	(28%)	(29%)	(32%)	(23%)	(26%)
	SJR at Buckley Cove	ALL	-2	1	0	1	-1	5	-2	2	-3	1	-2	1	-3	1	-4	1	-7	3	-11	1	-2	10	-3	2	-3	2
			(-2%)	(1%)	(0%)	(1%)	(-1%)	(7%)	(-3%)	(3%)	(-4%)	(2%)	(-3%)	(2%)	(-4%)	(1%)	(-4%)	(1%)	(-8%)	(4%)	(-13%)	(1%)	(-3%)	(13%)	(-3%)	(2%)	(-4%)	(3%)
		DROUGHT	-1	2	-1	2	-4	5	-5	4	-3	2	-4	2	-6	3	-7	3	-11	8	-12	5	12	33	0	7	-4	6
			(-1%)	(3%)	(-1%)	(3%)	(-4%)	(7%)	(-6%)	(5%)	(-4%)	(3%)	(-4%)	(3%)	(-7%)	(4%)	(-8%)	(3%)	(-12%)	(11%)	(-14%)	(7%)	(12%)	(45%)	(-1%)	(9%)	(-4%)	(8%)
	Franks Tract	ALL	-67	0	-252	-118	-223	-177	-99	-101	-3	-9	19	16	20	17	13	8	1	-6	-63	-17	20	67	-8	7	-53	-26
			(-23%)	(0%)	(-66%)	(-48%)	(-75%)	(-70%)	(-63%)	(-64%)	(-5%)	(-14%)	(51%)	(39%)	(53%)	(41%)	(28%)	(16%)	(1%)	(-10%)	(-33%)	(-11%)	(9%)	(36%)	(-3%)	(3%)	(-31%)	(-18%)
		DROUGHT	-68	-29	-275	-159	-280	-240	-140	-121	-12	-30	18	12	19	17	12	1	-7	-33	-126	-58	17	94	26	-7	-68	-46
			(-19%)	(-9%)	(-63%)	(-49%)	(-75%)	(-72%)	(-69%)	(-65%)	(-19%)	(-36%)	(63%)	(37%)	(86%)	(68%)	(39%)	(2%)	(-13%)	(-42%)	(-41%)	(-24%)	(5%)	(38%)	(7%)	(-2%)	(-32%)	(-24%)
	Old R. at Rock Slough	ALL	-63	-21	-195	-85	-166	-122	-67	-70	16	13	35	31	27	24	21	19	17	13	-48	-15	18	57	-1	10	-34	-12
			(-26%)	(-11%)	(-63%)	(-43%)	(-64%)	(-57%)	(-44%)	(-45%)	(24%)	(18%)	(72%)	(60%)	(51%)	(42%)	(37%)	(31%)	(32%)	(22%)	(-32%)	(-12%)	(9%)	(38%)	(-1%)	(4%)	(-22%)	(-9%)
		DROUGHT	-62	-52	-215	-119	-215	-170	-101	-83	13	6	44	38	42	39	40	34	13	-6	-96	-48	13	81	37	20	-41	-22
			(-21%)	(-19%)	(-62%)	(-47%)	(-68%)	(-63%)	(-53%)	(-48%)	(19%)	(7%)	(113%)	(84%)	(125%)	(106%)	(125%)	(88%)	(31%)	(-10%)	(-40%)	(-25%)	(5%)	(39%)	(13%)	(7%)	(-23%)	(-13%)
Western Delta	Sac. R. at Emmaton	ALL	-279	-75	-513	-379	-244	-293	-75	-108	-19	-44	5	-9	18	1	20	-10	-20	-58	124	120	156	86	-46	-74	-73	-70
			(-33%)	(-12%)	(-58%)	(-50%)	(-56%)	(-60%)	(-49%)	(-58%)	(-27%)	(-47%)	(19%)	(-20%)	(46%)	(2%)	(16%)	(-6%)	(-9%)	(-22%)	(38%)	(36%)	(33%)	(16%)	(-6%)	(-9%)	(-20%)	(-19%)
		DROUGHT	-358	-119	-646	-533	-295	-389	-75	-157	-16	-79	7	-7	22	1	56	-16	-14	-115	224	169	132	14	36	-212	-77	-120
			(-31%)	(-13%)	(-52%)	(-47%)	(-43%)	(-49%)	(-33%)	(-51%)	(-14%)	(-46%)	(16%)	(-12%)	(44%)	(2%)	(32%)	(-6%)	(-5%)	(-28%)	(48%)	(32%)	(22%)	(2%)	(3%)	(-15%)	(-15%)	(-21%)
	SJR at Antioch	ALL	-1029	-370	-1630	-1079	-1008	-944	-398	-437	-127	-179	-12	-50	16	-26	-19	-73	-115	-183	67	224	255	262	-328	-115	-361	-248
			(-47%)	(-24%)	(-67%)	(-57%)	(-69%)	(-67%)	(-65%)	(-68%)	(-48%)	(-56%)	(-10%)	(-33%)	(11%)	(-14%)	(-5%)	(-18%)	(-19%)	(-28%)	(5%)	(21%)	(17%)	(18%)	(-15%)	(-6%)	(-33%)	(-25%)
		DROUGHT	-1108	-409	-1870	-1333	-1222	-1112	-474	-597	-170	-310	-23	-62	6	-45	-29	-134	-168	-303	52	163	197	202	-43	-251	-404	-349
			(-41%)	(-21%)	(-61%)	(-52%)	(-59%)	(-57%)	(-56%)	(-62%)	(-41%)	(-56%)	(-14%)	(-31%)	(3%)	(-18%)	(-5%)	(-20%)	(-20%)	(-31%)	(3%)	(10%)	(12%)	(12%)	(-2%)	(-9%)	(-29%)	(-26%)
	Sac. R. at Mallard Island	ALL	-1241	-431	-1726	-1102	-1222	-1159	-524	-534	-205	-286	12	-70	109	23	128	10	-11	-127	285	517	381	379	-455	-9	-372	-232
			(-27%)	(-11%)	(-35%)	(-26%)	(-37%)	(-36%)	(-31%)	(-32%)	(-22%)	(-28%)	(3%)	(-13%)	(15%)	(3%)	(9%)	(1%)	(-1%)	(-6%)	(9%)	(19%)	(11%)	(11%)	(-11%)	(-0%)	(-15%)	(-10%)
		DROUGHT	-1358	-430	-2037	-1279	-1350	-1216	-627	-753	-307	-522	20	-42	87	11	23	-27	-138	-216	195	385	241	264	-60	-157	-443	-332
			(-25%)	(-10%)	(-33%)	(-24%)	(-30%)	(-28%)	(-26%)	(-29%)	(-19%)	(-28%)	(3%)	(-6%)	(8%)	(1%)	(1%)	(-1%)	(-6%)	(-8%)	(5%)	(11%)	(6%)	(7%)	(-1%)	(-3%)	(-14%)	(-11%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	3	5	10	11	10	10	4	4	-1	-3	-3	-4	-4	-3	-5	-4	-7	-6	-8	-6	-5	-4	0	0	-1	0
			(20%)	(30%)	(70%)	(78%)	(75%)	(75%)	(28%)	(27%)	(-6%)	(-15%)	(-18%)	(-22%)	(-25%)	(-20%)	(-28%)	(-27%)	(-37%)	(-33%)	(-37%)	(-31%)	(-26%)	(-21%)	(-1%)	(2%)	(-3%)	(-0%)
		DROUGHT	7	9	20	22	22	21	15	15	7	7	2	1	0	-1	-2	-5	-6	-5	-6	-4	-2	-2	3	3	5	5
			(34%)	(48%)	(125%)	(150%)	(174%)	(156%)	(121%)	(113%)	(51%)	(45%)	(12%)	(6%)	(-1%)	(-6%)	(-13%)	(-26%)	(-28%)	(-24%)	(-26%)	(-20%)	(-9%)	(-9%)	(13%)	(13%)	(28%)	(28%)
	Contra Costa PP #1	ALL	-19	15	-117	-54	-137	-63	-84	-64	14	-3	38	34	34	32	24	22	21	16	-31	-15	-2	45	21	35	-20	0
			(-8%)	(7%)	(-47%)	(-29%)	(-58%)	(-39%)	(-47%)	(-40%)	(17%)	(-4%)	(71%)	(60%)	(64%)	(56%)	(38%)	(33%)	(37%)	(26%)	(-25%)	(-14%)	(-1%)	(29%)	(10%)	(17%)	(-14%)	(-0%)
		DROUGHT	-19	-6	-152	-123	-194	-124	-123	-141	8	-4	44	37	44	40	44	39	21	4	-59	-46	-25	65	52	82	-30	-15
			(-7%)	(-2%)	(-51%)	(-45%)	(-64%)	(-54%)	(-56%)	(-59%)	(10%)	(-4%)	(97%)	(71%)	(106%)	(87%)	(117%)	(93%)	(49%)	(6%)	(-32%)	(-27%)	(-8%)	(29%)	(20%)	(36%)	(-17%)	(-9%)
	Banks PP	ALL	-159	-142	-196	-137	-181	-146	-110	-105	-65	-69	-47	-49	-64	-66	-66	-68	-57	-58	-39	-18	-19	17	-42	-25	-80	-65
			(-96%)	(-96%)	(-97%)	(-95%)	(-96%)	(-95%)	(-79%)	(-78%)	(-79%)	(-80%)	(-69%)	(-70%)	(-91%)	(-91%)	(-91%)	(-91%)	(-85%)	(-85%)	(-37%)	(-21%)	(-13%)	(15%)	(-25%)	(-17%)	(-65%)	(-60%)
		DROUGHT	-192	-187	-220	-175	-219	-185	-162	-146	-86	-88	-60	-62	-62	-65	-58	-61	-51	-57	-78	-53	-29	34	9	25	-84	-69
			(-97%)	(-97%)	(-98%)	(-97%)	(-97%)	(-97%)	(-96%)	(-95%)	(-94%)	(-94%)	(-90%)	(-91%)	(-96%)	(-96%)	(-98%)	(-98%)	(-97%)	(-98%)	(-53%)	(-44%)	(-13%)	(21%)	(5%)	(13%)	(-59%)	(-54%)
	Jones PP	ALL	-145	-128	-179	-124	-139	-114	-92	-87	-60	-62	-63	-65	-74	-75	-75	-76	-60	-64	-29	-11	-14	17	-56	-38	-82	-69
			(-96%)	(-95%)	(-96%)	(-95%)	(-90%)	(-88%)	(-80%)	(-79%)	(-74%)	(-75%)	(-83%)	(-84%)	(-92%)	(-92%)	(-92%)	(-92%)	(-89%)	(-89%)	(-26%)	(-12%)	(-10%)	(15%)	(-36%)	(-28%)	(-70%)	(-66%)
		DROUGHT	-172	-166	-195	-146	-169	-149	-125	-112	-78	-78	-71	-72	-72	-72	-70	-72	-45	-55	-63	-35	-30	23	-28	-17	-93	-79
			(-96%)	(-96%)	(-97%)	(-96%)	(-96%)	(-96%)	(-95%)	(-94%)	(-92%)	(-92%)	(-91%)	(-91%)	(-92%)	(-92%)	(-91%)	(-91%)	(-87%)	(-89%)	(-41%)	(-28%)	(-15%)	(15%)	(-15%)	(-10%)	(-70%)	(-67%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-44. Period average change in chloride concentrations (mg/L) for Alternative 7 LLT relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 7 LLT	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	2	2	2	2	1	2	2	2	2	2	2	3	2	2	2	2	2	2	1	1	1	1	1	1	2	2
			(11%)	(11%)	(12%)	(12%)	(8%)	(9%)	(7%)	(11%)	(7%)	(10%)	(11%)	(12%)	(11%)	(12%)	(9%)	(10%)	(13%)	(14%)	(7%)	(8%)	(8%)	(7%)	(8%)	(7%)	(9%)	(10%)
		DROUGHT	2	2	2	2	2	2	1	2	0	1	2	3	1	2	2	2	3	3	2	2	1	1	1	1	2	2
			(11%)	(11%)	(11%)	(11%)	(9%)	(10%)	(5%)	(8%)	(1%)	(4%)	(8%)	(12%)	(6%)	(9%)	(8%)	(10%)	(17%)	(18%)	(11%)	(11%)	(7%)	(7%)	(7%)	(8%)	(8%)	(10%)
	SJR at Buckley Cove	ALL	-6	-1	-13	-4	-23	5	-38	-9	-25	-8	-23	-8	-5	3	2	10	0	4	-17	-2	-16	4	-12	1	-15	-1
			(-6%)	(-1%)	(-12%)	(-4%)	(-16%)	(4%)	(-23%)	(-7%)	(-17%)	(-6%)	(-17%)	(-7%)	(-5%)	(3%)	(3%)	(13%)	(0%)	(4%)	(-16%)	(-2%)	(-15%)	(5%)	(-12%)	(1%)	(-13%)	(-1%)
		DROUGHT	-8	1	-17	-2	-29	4	-52	-12	-41	-16	-35	-14	-11	3	5	20	-7	26	-20	18	-20	30	-20	5	-21	5
			(-6%)	(1%)	(-13%)	(-2%)	(-17%)	(3%)	(-24%)	(-7%)	(-19%)	(-8%)	(-16%)	(-7%)	(-7%)	(2%)	(4%)	(18%)	(-6%)	(27%)	(-17%)	(23%)	(-17%)	(43%)	(-15%)	(4%)	(-14%)	(4%)
	Franks Tract	ALL	-43	-4	-146	-66	-146	-109	-68	-58	11	9	32	30	30	29	20	18	5	-3	-40	-13	11	43	-7	3	-28	-10
			(-23%)	(-2%)	(-63%)	(-43%)	(-70%)	(-63%)	(-51%)	(-47%)	(17%)	(14%)	(85%)	(75%)	(98%)	(89%)	(62%)	(50%)	(13%)	(-5%)	(-31%)	(-13%)	(7%)	(36%)	(-4%)	(2%)	(-24%)	(-10%)
		DROUGHT	-43	-24	-162	-94	-188	-155	-102	-75	9	-7	45	39	45	44	34	25	12	-13	-82	-43	10	60	16	-11	-34	-21
			(-19%)	(-12%)	(-60%)	(-47%)	(-70%)	(-66%)	(-57%)	(-49%)	(12%)	(-8%)	(115%)	(88%)	(148%)	(139%)	(110%)	(64%)	(30%)	(-19%)	(-39%)	(-25%)	(4%)	(34%)	(7%)	(-4%)	(-22%)	(-15%)
	Old R. at Rock Slough	ALL	-26	-3	-84	-20	-67	-34	4	14	66	66	78	74	54	54	35	33	35	30	-29	-11	10	36	2	10	7	21
			(-17%)	(-3%)	(-45%)	(-16%)	(-37%)	(-23%)	(3%)	(11%)	(91%)	(93%)	(159%)	(138%)	(110%)	(107%)	(74%)	(70%)	(89%)	(65%)	(-28%)	(-13%)	(8%)	(36%)	(1%)	(7%)	(6%)	(22%)
		DROUGHT	-28	-27	-89	-34	-97	-66	-9	17	92	88	128	120	105	102	78	71	42	23	-59	-33	8	51	22	8	16	27
			(-15%)	(-14%)	(-41%)	(-21%)	(-43%)	(-33%)	(-5%)	(12%)	(104%)	(94%)	(204%)	(173%)	(188%)	(174%)	(187%)	(147%)	(109%)	(41%)	(-37%)	(-24%)	(4%)	(34%)	(12%)	(4%)	(12%)	(21%)
Western Delta	Sac. R. at Emmaton	ALL	-196	-60	-335	-243	-188	-211	-67	-86	-21	-43	5	-10	15	0	12	-13	-24	-63	83	70	110	63	-21	-54	-52	-54
			(-34%)	(-14%)	(-61%)	(-53%)	(-61%)	(-64%)	(-52%)	(-58%)	(-30%)	(-46%)	(14%)	(-20%)	(43%)	(0%)	(13%)	(-11%)	(-13%)	(-28%)	(37%)	(29%)	(33%)	(16%)	(-4%)	(-9%)	(-20%)	(-21%)
		DROUGHT	-248	-98	-427	-348	-242	-296	-74	-136	-19	-80	7	-10	22	2	52	-15	-5	-118	165	107	109	14	34	-159	-52	-95
			(-32%)	(-15%)	(-55%)	(-50%)	(-49%)	(-54%)	(-38%)	(-53%)	(-17%)	(-47%)	(17%)	(-17%)	(59%)	(4%)	(44%)	(-8%)	(-2%)	(-33%)	(50%)	(27%)	(24%)	(3%)	(4%)	(-16%)	(-14%)	(-23%)
	SJR at Antioch	ALL	-707	-260	-1043	-661	-746	-653	-344	-351	-129	-168	-16	-60	18	-25	-10	-65	-102	-181	36	115	191	210	-201	-81	-254	-182
			(-48%)	(-25%)	(-70%)	(-59%)	(-73%)	(-70%)	(-69%)	(-70%)	(-51%)	(-57%)	(-13%)	(-37%)	(16%)	(-16%)	(-4%)	(-21%)	(-21%)	(-32%)	(4%)	(15%)	(18%)	(20%)	(-14%)	(-6%)	(-34%)	(-27%)
		DROUGHT	-770	-316	-1223	-855	-943	-814	-431	-512	-173	-307	-18	-74	23	-32	14	-109	-126	-308	36	60	175	164	-11	-202	-287	-275
			(-42%)	(-23%)	(-64%)	(-55%)	(-64%)	(-61%)	(-61%)	(-64%)	(-43%)	(-58%)	(-11%)	(-34%)	(16%)	(-16%)	(4%)	(-22%)	(-18%)	(-36%)	(3%)	(5%)	(14%)	(13%)	(-1%)	(-10%)	(-29%)	(-28%)
	Sac. R. at Mallard Island	ALL	-1024	-364	-1358	-806	-1141	-995	-604	-592	-283	-352	-33	-151	83	-47	99	-58	-34	-220	190	298	364	370	-299	-19	-337	-245
			(-33%)	(-15%)	(-46%)	(-34%)	(-51%)	(-48%)	(-48%)	(-47%)	(-35%)	(-40%)	(-7%)	(-27%)	(16%)	(-7%)	(11%)	(-5%)	(-2%)	(-13%)	(9%)	(15%)	(15%)	(15%)	(-10%)	(-1%)	(-19%)	(-15%)
		DROUGHT	-1105	-412	-1612	-988	-1351	-1151	-789	-866	-413	-660	-30	-168	97	-52	86	-109	-118	-356	156	192	260	255	-9	-178	-402	-374
			(-30%)	(-14%)	(-43%)	(-31%)	(-43%)	(-39%)	(-40%)	(-43%)	(-30%)	(-40%)	(-5%)	(-21%)	(13%)	(-6%)	(6%)	(-7%)	(-6%)	(-15%)	(6%)	(7%)	(9%)	(9%)	(-0%)	(-5%)	(-17%)	(-16%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	1	2	2	3	3	3	0	0	-2	-3	-2	-3	-3	-2	-2	-2	-1	-1	-1	0	0	0	1	1	0	0
			(7%)	(10%)	(14%)	(16%)	(16%)	(16%)	(2%)	(2%)	(-8%)	(-14%)	(-11%)	(-13%)	(-13%)	(-11%)	(-9%)	(-9%)	(-5%)	(-4%)	(-3%)	(-1%)	(1%)	(3%)	(5%)	(6%)	(-1%)	(-1%)
		DROUGHT	3	3	6	6	8	7	6	6	4	3	1	1	0	-1	0	-2	0	1	1	1	2	2	3	3	3	3
			(16%)	(18%)	(31%)	(36%)	(44%)	(42%)	(36%)	(34%)	(19%)	(17%)	(6%)	(3%)	(-1%)	(-6%)	(-1%)	(-11%)	(2%)	(3%)	(5%)	(7%)	(12%)	(12%)	(15%)	(15%)	(15%)	(13%)
	Contra Costa PP #1	ALL	-8	14	-40	-3	-57	-3	-16	12	74	61	81	88	72	75	42	42	39	35	-13	-6	-5	26	9	23	15	30
			(-5%)	(10%)	(-25%)	(-2%)	(-31%)	(-2%)	(-9%)	(8%)	(68%)	(50%)	(89%)	(106%)	(91%)	(98%)	(62%)	(62%)	(81%)	(68%)	(-15%)	(-7%)	(-4%)	(24%)	(6%)	(18%)	(12%)	(29%)
		DROUGHT	-10	-4	-52	-36	-89	-33	-33	-36	89	84	137	128	118	113	88	83	50	36	-32	-27	-21	37	27	46	23	33
			(-5%)	(-2%)	(-27%)	(-21%)	(-39%)	(-19%)	(-16%)	(-17%)	(81%)	(73%)	(171%)	(143%)	(157%)	(141%)	(150%)	(130%)	(108%)	(59%)	(-25%)	(-22%)	(-10%)	(22%)	(16%)	(30%)	(16%)	(24%)
	Banks PP	ALL	-98	-86	-117	-83	-129	-103	-103	-88	-79	-77	-61	-59	-69	-67	-61	-60	-48	-54	-15	-9	-9	12	-20	-9	-62	-52
			(-87%)	(-86%)	(-89%)	(-85%)	(-90%)	(-87%)	(-75%)	(-72%)	(-77%)	(-77%)	(-69%)	(-69%)	(-83%)	(-82%)	(-81%)	(-81%)	(-76%)	(-78%)	(-21%)	(-14%)	(-9%)	(15%)	(-19%)	(-10%)	(-61%)	(-57%)
		DROUGHT	-124	-120	-140	-115	-167	-140	-157	-139	-126	-120	-121	-117	-124	-121	-104	-103	-68	-79	-38	-27	-12	27	6	16	-84	-73
			(-92%)	(-91%)	(-92%)	(-91%)	(-92%)	(-91%)	(-91%)	(-90%)	(-92%)	(-91%)	(-91%)	(-90%)	(-96%)	(-95%)	(-97%)	(-97%)	(-96%)	(-96%)	(-38%)	(-30%)	(-8%)	(23%)	(5%)	(13%)	(-63%)	(-59%)
	Jones PP	ALL	-95	-88	-115	-85	-134	-112	-120	-103	-103	-101	-101	-99	-74	-73	-62	-62	-49	-62	-3	-4	-3	12	-23	-15	-74	-66
			(-87%)	(-86%)	(-89%)	(-86%)	(-90%)	(-88%)	(-79%)	(-77%)	(-81%)	(-81%)	(-84%)	(-84%)	(-84%)	(-84%)	(-81%)	(-81%)	(-77%)	(-81%)	(-4%)	(-5%)	(-3%)	(14%)	(-22%)	(-15%)	(-68%)	(-65%)
		DROUGHT	-119	-121	-135	-112	-168	-147	-177	-154	-175	-171	-179	-177	-120	-121	-99	-97	-48	-59	-23	-14	-12	20	-4	1	-105	-96
			(-89%)	(-89%)	(-90%)	(-89%)	(-92%)	(-91%)	(-92%)	(-91%)	(-92%)	(-92%)	(-92%)	(-92%)	(-89%)	(-89%)	(-87%)	(-87%)	(-77%)	(-80%)	(-22%)	(-14%)	(-8%)	(17%)	(-3%)	(1%)	(-72%)	(-71%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-45. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 7 LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 7 LLT			Period Average Concentration mg/L			Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)		
	Location	Period [a]	Ex. Cond.	No Act. LLT	Alt 7 LLT	Ex. Cond.	No Act._LLT	Alt 7 LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	15.7	15.3	19.6	0	0	0
		DROUGHT	16.8	16.3	20.5	0	0	0
	SJR at Buckley Cove	ALL	82.9	77.2	79.6	0	0	0
		DROUGHT	86.5	76.5	82.9	0	0	0
	Franks Tract	ALL	173.8	146.4	120.3	34	22	16
		DROUGHT	212.8	190.9	144.8	47	35	25
	Old R. at Rock Slough	ALL	152.0	130.5	118.3	28	17	11
		DROUGHT	180.2	161.4	139.6	42	27	18
Western Delta	Sac. R. at Emmaton	ALL	368.9	366.5	296.2	44	44	37
		DROUGHT	516.4	559.3	439.1	55	60	58
	SJR at Antioch	ALL	1,087.3	974.2	726.6	66	73	60
		DROUGHT	1,400.6	1,345.6	996.4	82	87	75
	Sac. R. at Mallard Island	ALL	2,552.0	2,411.9	2,179.5	85	86	86
		DROUGHT	3,233.9	3,123.1	2,791.2	100	100	100
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	17.1	16.6	16.6	0	0	0
		DROUGHT	17.7	17.7	22.7	0	0	0
	Contra Costa PP #1	ALL	146.5	126.9	126.7	24	14	12
		DROUGHT	176.5	161.3	146.6	37	22	18
	Banks PP	ALL	123.4	108.5	43.5	4	2	1
		DROUGHT	143.7	128.0	59.3	7	2	2
	Jones PP	ALL	116.9	103.4	34.7	1	1	1
		DROUGHT	132.9	118.9	39.7	0	0	2

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-46. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 7 LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 7 LLT			Period Average Concentration (mg/L)			Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)		
	Location	**Period [a]**	**Ex. Cond.**	**No Act. LLT**	**Alt 7 LLT**	**Ex. Cond.**	**No Act._LLT**	**Alt 7 LLT**
Delta Interior	Moke. R. (SF) at Staten Island	ALL	18	18	20	0	0	0
		DROUGHT	19	19	21	0	0	0
	SJR at Buckley Cove	ALL	116	102	101	0	0	0
		DROUGHT	155	128	134	0	0	0
	Franks Tract	ALL	120	102	92	14	8	4
		DROUGHT	153	140	119	22	15	8
	Old R. at Rock Slough	ALL	108	94	114	4	3	1
		DROUGHT	136	125	152	7	5	2
Western Delta	Sac. R. at Emmaton	ALL	258	260	206	36	32	31
		DROUGHT	364	406	312	50	55	50
	SJR at Antioch	ALL	757	684	502	61	65	52
		DROUGHT	1,002	990	715	80	82	67
	Sac. R. at Mallard Island	ALL	1,766	1,674	1,430	77	83	81
		DROUGHT	2,346	2,318	1,944	98	98	98
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	19	19	19	0	0	0
		DROUGHT	19	19	21	0	0	0
	Contra Costa PP #1	ALL	120	105	135	5	3	1
		DROUGHT	143	133	166	8	7	2
	Banks PP	ALL	102	91	39	1	1	0
		DROUGHT	134	123	50	2	2	0
	Jones PP	ALL	109	101	35	0	0	0
		DROUGHT	145	136	40	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-47. Alternative 7 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 7 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-2	-2	-2	-2	-1	-1	-1	-2	-1	-1	-1	-2	-1	-1	-1	-1	-3	-3	-2	-2	-2	-2	-2	-2	-2	-2
		DROUGHT	-2	-2	-2	-2	-1	-1	-1	-1	0	-1	-1	-2	-1	-1	-1	-1	-3	-4	-3	-3	-2	-2	-2	-2	-2	-2
	SJR at Buckley Cove	ALL	1	0	0	0	0	-3	1	-1	2	-1	1	-1	2	-1	2	-1	4	-2	7	-1	1	-6	2	-1	2	-1
		DROUGHT	1	-1	1	-1	2	-3	3	-2	2	-1	2	-1	4	-2	4	-2	7	-4	8	-3	-7	-19	0	-4	2	-4
	Franks Tract	ALL	-	-1	-	-	-	-	-	-	2	5	-9	-8	-9	-8	-6	-4	0	3	-	16	-98	-99	-	-	70	25
		DROUGHT	-	-	-	-	-	-	-	-	7	18	-8	-6	-8	-7	-5	0	3	20	-	-	-	-100	-	-	-	78
	Old R. at Rock Slough	ALL	-	40	-	-	-	-	69	74	-9	-7	-17	-16	-14	-12	-11	-10	-9	-7	49	11	-30	-58	22	-55	34	10
		DROUGHT	-	-	-	-	-	-	-	-	-8	-3	-21	-18	-20	-18	-18	-16	-6	3	-	82	-	-100	-	-	58	25
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	76	-	10	29	-2	4	-8	-1	-15	10	73	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	11	-	-3	4	-11	-1	-78	-	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	8	50	-15	39	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	26	-	-11	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-1	-2	-4	-5	-4	-4	-2	-2	0	1	1	2	2	1	2	2	3	3	4	3	2	2	0	0	0	0
		DROUGHT	-3	-4	-9	-9	-9	-9	-6	-6	-3	-3	-1	0	0	0	1	2	3	2	3	2	1	1	-1	-1	-2	-2
	Contra Costa PP #1	ALL	-	-35	-	86	-	73	-	71	-8	2	-19	-18	-17	-16	-13	-12	-11	-8	24	11	4	-49	-63	-74	19	0
		DROUGHT	-	-	-	-	-	-	-	-	-5	2	-22	-19	-21	-19	-21	-19	-10	-2	87	56	-	-100	-	-100	41	17
	Banks PP	ALL	-	-	-	-	-	-	100	91	39	42	26	27	36	37	37	39	31	32	27	11	19	-13	51	26	63	46
		DROUGHT	-	-	-	-	-	-	-	-	55	56	33	34	34	35	30	32	26	30	74	41	-	-39	-19	-38	79	56
	Jones PP	ALL	-	-	-	-	-	94	68	62	35	37	36	38	44	45	44	45	33	36	21	7	13	-12	59	34	62	47
		DROUGHT	-	-	-	-	-	-	-	85	47	47	41	42	42	42	41	42	23	29	65	28	67	-24	38	21	80	60

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-48. Alternative 7 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 7 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	0	-1	-1
		DROUGHT	-1	-1	-1	-1	-1	-1	-1	-1	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-1	-1	-1	-1
	SJR at Buckley Cove	ALL	4	1	9	3	20	-3	43	8	23	7	21	7	3	-2	-1	-5	0	-3	12	1	11	-2	9	-1	11	0
		DROUGHT	6	-1	15	2	35	-4	-	15	-	28	99	25	13	-3	-4	-14	6	-17	14	-10	16	-17	17	-3	22	-4
	Franks Tract	ALL	69	3	-	66	-	-	59	46	-6	-5	-15	-14	-14	-13	-9	-8	-2	1	33	9	-11	-33	12	-4	22	7
		DROUGHT	-	63	-	-	-	-	-	77	-5	5	-21	-19	-20	-20	-15	-12	-6	7	-	55	-40	-80	-97	-	35	19
	Old R. at Rock Slough	ALL	28	3	-	15	96	33	-4	-11	-37	-37	-39	-38	-27	-27	-17	-17	-17	-14	19	6	-8	-24	-2	-9	-5	-13
		DROUGHT	44	42	-	38	-	-	11	-17	-57	-56	-68	-67	-54	-53	-38	-35	-20	-12	68	29	-13	-50	-36	-17	-14	-21
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	55	83	12	27	-2	5	-7	0	-8	10	38	-	-100	-100	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	13	-	-4	5	-10	-1	-40	24	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	12	70	-13	27	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	21	-	-21	60	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-1	-1	-1	-1	-1	-1	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
		DROUGHT	-1	-1	-2	-3	-3	-3	-3	-3	-2	-1	-1	0	0	1	0	1	0	0	0	-1	-1	-1	-1	-1	-1	-1
	Contra Costa PP #1	ALL	9	-13	44	2	83	2	24	-13	-52	-48	-50	-53	-42	-43	-23	-23	-19	-18	8	3	5	-19	-8	-19	-11	-21
		DROUGHT	17	6	85	47	-	43	81	97	-63	-62	-81	-79	-68	-67	-46	-45	-25	-19	26	22	75	-43	-35	-48	-21	-28
	Banks PP	ALL	71	57	99	54	-	77	92	70	54	51	37	36	41	40	35	34	26	30	9	5	6	-7	14	6	42	33
		DROUGHT	-	-	-	94	-	-	-	-	-	-	-	98	-	98	72	72	38	47	26	17	13	-20	-5	-13	73	57
	Jones PP	ALL	68	60	95	57	-	91	-	90	84	82	77	75	46	45	36	36	26	36	2	2	2	-8	16	10	52	44
		DROUGHT	-	-	-	91	-	-	-	-	-	-	-	-	-	-	72	70	26	34	16	9	12	-15	3	-1	100	84

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-49. Period average change in chloride concentrations (mg/L) for Alternative 8 LLT relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride / Alt 8 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	5	5	4	4	3	3	2	3	2	3	3	3	3	3	2	3	7	8	8	9	6	6	4	4	4	4
			(43%)	(45%)	(35%)	(33%)	(22%)	(23%)	(10%)	(16%)	(9%)	(14%)	(16%)	(19%)	(16%)	(19%)	(15%)	(18%)	(36%)	(44%)	(45%)	(52%)	(41%)	(41%)	(36%)	(36%)	(26%)	(29%)
		DROUGHT	5	5	4	4	3	3	2	3	0	1	1	3	1	2	1	2	8	9	10	10	6	6	5	5	4	4
			(42%)	(42%)	(36%)	(35%)	(25%)	(27%)	(8%)	(13%)	(-0%)	(4%)	(7%)	(13%)	(4%)	(11%)	(8%)	(15%)	(42%)	(48%)	(57%)	(58%)	(42%)	(38%)	(37%)	(39%)	(23%)	(27%)
	SJR at Buckley Cove	ALL	-2	0	0	0	-1	5	-2	2	-3	1	-2	1	-3	1	-4	1	-7	3	-11	2	-12	1	-5	0	-4	1
			(-3%)	(0%)	(-0%)	(0%)	(-1%)	(7%)	(-3%)	(3%)	(-4%)	(1%)	(-3%)	(2%)	(-4%)	(1%)	(-4%)	(1%)	(-8%)	(4%)	(-12%)	(2%)	(-13%)	(1%)	(-6%)	(-0%)	(-5%)	(2%)
		DROUGHT	-3	1	-2	1	-4	5	-6	4	-4	2	-4	2	-6	3	-7	3	-11	8	-17	0	-23	-1	-8	-1	-8	2
			(-3%)	(1%)	(-3%)	(1%)	(-5%)	(6%)	(-7%)	(5%)	(-4%)	(2%)	(-4%)	(3%)	(-7%)	(4%)	(-8%)	(3%)	(-12%)	(11%)	(-19%)	(0%)	(-23%)	(-1%)	(-10%)	(-1%)	(-9%)	(3%)
	Franks Tract	ALL	-69	-2	-251	-117	-223	-177	-99	-102	-4	-10	19	15	19	16	10	6	-2	-9	-99	-53	-29	18	-17	-2	-62	-35
			(-24%)	(-1%)	(-66%)	(-47%)	(-75%)	(-70%)	(-63%)	(-64%)	(-6%)	(-15%)	(49%)	(37%)	(49%)	(38%)	(23%)	(12%)	(-3%)	(-14%)	(-52%)	(-36%)	(-12%)	(10%)	(-6%)	(-1%)	(-36%)	(-24%)
		DROUGHT	-64	-26	-265	-149	-277	-237	-139	-120	-13	-30	16	11	17	14	7	-4	-13	-40	-177	-109	-36	41	25	-8	-77	-55
			(-18%)	(-8%)	(-60%)	(-46%)	(-74%)	(-71%)	(-68%)	(-65%)	(-19%)	(-36%)	(58%)	(32%)	(74%)	(57%)	(23%)	(-10%)	(-26%)	(-51%)	(-57%)	(-45%)	(-11%)	(17%)	(7%)	(-2%)	(-36%)	(-29%)
	Old R. at Rock Slough	ALL	-66	-24	-198	-88	-167	-123	-67	-70	16	12	35	31	27	23	21	18	15	11	-75	-42	-29	11	-10	1	-42	-20
			(-27%)	(-12%)	(-64%)	(-44%)	(-65%)	(-58%)	(-44%)	(-45%)	(24%)	(18%)	(72%)	(60%)	(50%)	(42%)	(36%)	(30%)	(29%)	(20%)	(-50%)	(-36%)	(-15%)	(7%)	(-4%)	(0%)	(-27%)	(-15%)
		DROUGHT	-63	-52	-216	-121	-216	-171	-102	-84	13	5	43	37	41	38	38	32	9	-10	-145	-97	-40	27	32	16	-50	-32
			(-22%)	(-19%)	(-62%)	(-47%)	(-69%)	(-63%)	(-53%)	(-49%)	(18%)	(7%)	(112%)	(83%)	(122%)	(103%)	(120%)	(83%)	(21%)	(-16%)	(-61%)	(-51%)	(-15%)	(13%)	(11%)	(5%)	(-28%)	(-20%)
Western Delta	Sac. R. at Emmaton	ALL	-226	-23	-468	-334	-235	-285	-76	-110	-23	-49	-2	-16	3	-13	-18	-48	-29	-67	193	189	246	176	8	-20	-52	-50
			(-27%)	(-4%)	(-53%)	(-44%)	(-54%)	(-59%)	(-50%)	(-59%)	(-34%)	(-52%)	(-8%)	(-37%)	(9%)	(-24%)	(-15%)	(-32%)	(-13%)	(-26%)	(59%)	(57%)	(52%)	(32%)	(1%)	(-2%)	(-14%)	(-14%)
		DROUGHT	-269	-30	-575	-463	-282	-376	-75	-157	-27	-90	-14	-28	-6	-27	-29	-102	-45	-146	310	255	269	152	116	-132	-52	-95
			(-23%)	(-3%)	(-46%)	(-41%)	(-41%)	(-48%)	(-33%)	(-51%)	(-25%)	(-53%)	(-32%)	(-48%)	(-13%)	(-38%)	(-17%)	(-41%)	(-15%)	(-36%)	(66%)	(48%)	(45%)	(21%)	(10%)	(-10%)	(-10%)	(-17%)
	SJR at Antioch	ALL	-976	-317	-1574	-1023	-995	-931	-405	-444	-139	-191	-30	-68	-20	-62	-90	-144	-134	-202	31	189	352	359	-291	-78	-356	-243
			(-44%)	(-20%)	(-64%)	(-54%)	(-68%)	(-66%)	(-67%)	(-69%)	(-52%)	(-60%)	(-27%)	(-45%)	(-14%)	(-34%)	(-25%)	(-35%)	(-23%)	(-31%)	(3%)	(17%)	(24%)	(24%)	(-14%)	(-4%)	(-33%)	(-25%)
		DROUGHT	-1015	-316	-1788	-1252	-1206	-1096	-482	-605	-200	-340	-73	-111	-65	-115	-186	-290	-231	-366	65	176	356	361	8	-199	-401	-346
			(-38%)	(-16%)	(-58%)	(-49%)	(-58%)	(-56%)	(-57%)	(-63%)	(-49%)	(-62%)	(-45%)	(-56%)	(-33%)	(-46%)	(-33%)	(-43%)	(-28%)	(-38%)	(4%)	(11%)	(21%)	(21%)	(0%)	(-7%)	(-29%)	(-26%)
	Sac. R. at Mallard Island	ALL	-1162	-352	-1649	-1025	-1197	-1134	-579	-588	-268	-350	-67	-148	-33	-120	-51	-169	-49	-165	295	526	508	506	-414	33	-389	-249
			(-25%)	(-9%)	(-34%)	(-24%)	(-36%)	(-35%)	(-35%)	(-35%)	(-28%)	(-34%)	(-15%)	(-28%)	(-4%)	(-14%)	(-4%)	(-11%)	(-3%)	(-8%)	(10%)	(19%)	(15%)	(15%)	(-10%)	(1%)	(-15%)	(-10%)
		DROUGHT	-1236	-308	-1951	-1193	-1323	-1189	-696	-822	-436	-651	-158	-220	-120	-196	-267	-317	-234	-311	221	411	431	455	-1	-97	-481	-370
			(-23%)	(-7%)	(-32%)	(-22%)	(-29%)	(-27%)	(-29%)	(-32%)	(-27%)	(-36%)	(-22%)	(-29%)	(-11%)	(-17%)	(-13%)	(-15%)	(-9%)	(-12%)	(6%)	(12%)	(12%)	(12%)	(-0%)	(-2%)	(-15%)	(-12%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	5	6	12	13	12	12	6	6	0	-2	-2	-3	-3	-2	-4	-4	-7	-6	-8	-6	-5	-3	1	2	0	1
			(29%)	(40%)	(81%)	(90%)	(89%)	(89%)	(39%)	(38%)	(0%)	(-10%)	(-15%)	(-19%)	(-21%)	(-16%)	(-24%)	(-24%)	(-37%)	(-32%)	(-36%)	(-29%)	(-23%)	(-18%)	(6%)	(10%)	(3%)	(6%)
		DROUGHT	10	12	27	28	29	28	19	19	9	9	3	2	1	0	-1	-4	-5	-4	-5	-4	-2	-2	5	5	7	7
			(45%)	(60%)	(163%)	(192%)	(231%)	(210%)	(157%)	(147%)	(67%)	(60%)	(18%)	(11%)	(6%)	(0%)	(-6%)	(-20%)	(-26%)	(-22%)	(-24%)	(-18%)	(-8%)	(-8%)	(25%)	(25%)	(42%)	(42%)
	Contra Costa PP #1	ALL	-22	12	-118	-55	-139	-65	-86	-66	13	-4	38	34	34	32	23	21	20	14	-50	-35	-61	-14	-10	5	-30	-10
			(-9%)	(6%)	(-47%)	(-30%)	(-58%)	(-40%)	(-48%)	(-42%)	(17%)	(-4%)	(71%)	(59%)	(64%)	(56%)	(37%)	(32%)	(35%)	(24%)	(-40%)	(-32%)	(-30%)	(-9%)	(-4%)	(2%)	(-20%)	(-8%)
		DROUGHT	-20	-7	-155	-126	-196	-126	-124	-142	7	-4	44	37	43	39	42	38	18	0	-99	-85	-109	-20	20	50	-44	-29
			(-7%)	(-3%)	(-52%)	(-47%)	(-65%)	(-54%)	(-57%)	(-60%)	(9%)	(-4%)	(97%)	(70%)	(104%)	(86%)	(112%)	(88%)	(41%)	(1%)	(-54%)	(-50%)	(-35%)	(-9%)	(8%)	(22%)	(-25%)	(-18%)
	Banks PP	ALL	-159	-142	-196	-137	-178	-143	-119	-114	-63	-67	-50	-53	-64	-66	-66	-68	-57	-58	-26	-5	-52	-16	-71	-54	-88	-73
			(-96%)	(-96%)	(-97%)	(-95%)	(-94%)	(-93%)	(-85%)	(-85%)	(-77%)	(-78%)	(-74%)	(-75%)	(-91%)	(-91%)	(-91%)	(-91%)	(-85%)	(-85%)	(-25%)	(-6%)	(-35%)	(-14%)	(-42%)	(-36%)	(-71%)	(-67%)
		DROUGHT	-194	-188	-219	-173	-220	-186	-162	-146	-85	-86	-60	-62	-62	-65	-58	-61	-49	-56	-35	-11	-105	-42	-49	-33	-99	-83
			(-98%)	(-98%)	(-97%)	(-96%)	(-98%)	(-97%)	(-96%)	(-95%)	(-93%)	(-93%)	(-90%)	(-90%)	(-96%)	(-96%)	(-98%)	(-98%)	(-95%)	(-95%)	(-24%)	(-9%)	(-46%)	(-26%)	(-24%)	(-18%)	(-69%)	(-65%)
	Jones PP	ALL	-145	-127	-179	-124	-142	-116	-89	-84	-62	-64	-63	-64	-74	-75	-75	-76	-61	-64	-41	-22	-37	-6	-63	-46	-86	-72
			(-96%)	(-95%)	(-96%)	(-95%)	(-92%)	(-90%)	(-77%)	(-76%)	(-77%)	(-78%)	(-82%)	(-83%)	(-92%)	(-92%)	(-92%)	(-92%)	(-90%)	(-90%)	(-37%)	(-24%)	(-26%)	(-5%)	(-41%)	(-33%)	(-73%)	(-70%)
		DROUGHT	-172	-166	-195	-146	-169	-149	-125	-112	-78	-78	-70	-71	-72	-72	-70	-72	-45	-55	-85	-57	-67	-13	-40	-30	-99	-85
			(-96%)	(-96%)	(-97%)	(-96%)	(-96%)	(-96%)	(-95%)	(-94%)	(-92%)	(-92%)	(-90%)	(-90%)	(-92%)	(-92%)	(-91%)	(-91%)	(-87%)	(-89%)	(-56%)	(-45%)	(-32%)	(-9%)	(-23%)	(-18%)	(-75%)	(-72%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-50. Period average change in chloride concentrations (mg/L) for Alternative 8 LLT relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 8 LLT	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	2	2	2	2	1	2	1	2	1	2	2	2	2	2	1	1	2	2	2	2	2	1	1	1	2	2
			(11%)	(12%)	(11%)	(11%)	(8%)	(9%)	(6%)	(9%)	(6%)	(9%)	(9%)	(10%)	(9%)	(10%)	(8%)	(9%)	(14%)	(15%)	(12%)	(13%)	(10%)	(9%)	(9%)	(8%)	(9%)	(10%)
		DROUGHT	2	2	2	2	2	2	1	2	0	1	1	2	1	1	1	1	3	3	2	2	2	1	1	2	1	2
			(12%)	(12%)	(11%)	(11%)	(9%)	(10%)	(4%)	(7%)	(-1%)	(2%)	(4%)	(7%)	(3%)	(6%)	(6%)	(8%)	(18%)	(19%)	(14%)	(14%)	(10%)	(9%)	(9%)	(10%)	(7%)	(9%)
	SJR at Buckley Cove	ALL	-5	0	-13	-4	-22	5	-37	-9	-24	-8	-23	-8	-5	3	3	10	1	4	-10	5	-13	7	-9	4	-13	1
			(-5%)	(-0%)	(-11%)	(-4%)	(-16%)	(5%)	(-23%)	(-6%)	(-17%)	(-6%)	(-17%)	(-6%)	(-5%)	(3%)	(3%)	(14%)	(1%)	(5%)	(-9%)	(6%)	(-12%)	(8%)	(-9%)	(5%)	(-11%)	(1%)
		DROUGHT	-7	3	-17	-1	-28	5	-51	-11	-41	-16	-34	-14	-10	3	6	21	-7	27	-14	23	-26	25	-14	11	-20	6
			(-5%)	(2%)	(-12%)	(-1%)	(-17%)	(4%)	(-24%)	(-6%)	(-19%)	(-8%)	(-16%)	(-7%)	(-6%)	(2%)	(4%)	(19%)	(-5%)	(27%)	(-12%)	(31%)	(-21%)	(35%)	(-11%)	(10%)	(-13%)	(5%)
	Franks Tract	ALL	-42	-3	-144	-64	-145	-108	-68	-57	10	9	31	29	28	27	18	15	3	-5	-62	-35	-19	13	-11	-1	-33	-15
			(-22%)	(-2%)	(-62%)	(-42%)	(-69%)	(-63%)	(-51%)	(-46%)	(16%)	(14%)	(82%)	(72%)	(92%)	(83%)	(54%)	(43%)	(7%)	(-10%)	(-48%)	(-35%)	(-12%)	(11%)	(-6%)	(-0%)	(-28%)	(-15%)
		DROUGHT	-39	-20	-154	-87	-185	-151	-101	-74	8	-8	43	37	40	39	28	19	6	-20	-116	-78	-29	20	13	-13	-41	-28
			(-17%)	(-10%)	(-57%)	(-43%)	(-69%)	(-64%)	(-56%)	(-48%)	(11%)	(-9%)	(109%)	(83%)	(133%)	(125%)	(91%)	(50%)	(13%)	(-30%)	(-55%)	(-45%)	(-13%)	(12%)	(6%)	(-5%)	(-27%)	(-20%)
	Old R. at Rock Slough	ALL	-27	-4	-84	-20	-67	-34	5	14	65	66	78	74	54	53	34	32	34	28	-43	-25	-19	8	-2	6	2	17
			(-17%)	(-3%)	(-45%)	(-16%)	(-37%)	(-23%)	(4%)	(11%)	(90%)	(92%)	(159%)	(138%)	(109%)	(106%)	(73%)	(68%)	(85%)	(62%)	(-43%)	(-30%)	(-15%)	(8%)	(-1%)	(4%)	(2%)	(18%)
		DROUGHT	-27	-26	-89	-34	-97	-66	-9	17	92	88	128	120	104	101	76	69	37	19	-91	-65	-32	11	17	3	9	20
			(-14%)	(-14%)	(-41%)	(-21%)	(-43%)	(-33%)	(-5%)	(12%)	(104%)	(94%)	(204%)	(173%)	(186%)	(172%)	(181%)	(142%)	(97%)	(33%)	(-56%)	(-48%)	(-17%)	(8%)	(9%)	(1%)	(7%)	(16%)
Western Delta	Sac. R. at Emmaton	ALL	-156	-20	-304	-212	-181	-204	-66	-85	-24	-45	-1	-16	5	-10	-16	-42	-37	-76	124	110	175	128	23	-10	-38	-40
			(-27%)	(-5%)	(-55%)	(-46%)	(-59%)	(-61%)	(-52%)	(-58%)	(-33%)	(-49%)	(-3%)	(-32%)	(14%)	(-20%)	(-18%)	(-36%)	(-20%)	(-34%)	(55%)	(46%)	(52%)	(34%)	(4%)	(-2%)	(-15%)	(-15%)
		DROUGHT	-182	-32	-377	-298	-231	-285	-72	-134	-26	-87	-10	-28	-1	-21	-15	-83	-44	-156	210	151	206	111	97	-96	-37	-80
			(-23%)	(-5%)	(-48%)	(-43%)	(-47%)	(-52%)	(-37%)	(-52%)	(-24%)	(-51%)	(-24%)	(-46%)	(-4%)	(-37%)	(-13%)	(-45%)	(-18%)	(-44%)	(64%)	(39%)	(46%)	(21%)	(12%)	(-10%)	(-10%)	(-20%)
	SJR at Antioch	ALL	-662	-215	-1000	-618	-734	-640	-346	-352	-137	-176	-33	-77	-11	-54	-69	-123	-131	-210	9	88	265	284	-161	-41	-251	-178
			(-45%)	(-21%)	(-67%)	(-56%)	(-72%)	(-69%)	(-70%)	(-70%)	(-54%)	(-60%)	(-28%)	(-47%)	(-9%)	(-35%)	(-27%)	(-40%)	(-27%)	(-37%)	(1%)	(11%)	(25%)	(28%)	(-11%)	(-3%)	(-33%)	(-26%)
		DROUGHT	-698	-244	-1159	-791	-928	-798	-432	-512	-194	-328	-65	-120	-40	-94	-118	-240	-210	-393	17	41	283	272	40	-151	-292	-280
			(-38%)	(-18%)	(-61%)	(-51%)	(-63%)	(-60%)	(-61%)	(-65%)	(-49%)	(-62%)	(-40%)	(-55%)	(-28%)	(-48%)	(-31%)	(-48%)	(-31%)	(-45%)	(1%)	(3%)	(22%)	(21%)	(2%)	(-8%)	(-29%)	(-28%)
	Sac. R. at Mallard Island	ALL	-944	-284	-1285	-733	-1111	-965	-630	-618	-330	-399	-118	-236	-52	-182	-88	-246	-118	-304	190	299	472	478	-242	37	-355	-263
			(-31%)	(-12%)	(-44%)	(-31%)	(-50%)	(-46%)	(-50%)	(-49%)	(-41%)	(-45%)	(-26%)	(-42%)	(-10%)	(-28%)	(-10%)	(-23%)	(-8%)	(-18%)	(9%)	(15%)	(19%)	(19%)	(-8%)	(1%)	(-20%)	(-16%)
		DROUGHT	-995	-302	-1518	-894	-1319	-1119	-826	-903	-524	-771	-230	-368	-136	-285	-246	-441	-311	-548	135	171	410	405	71	-98	-457	-429
			(-27%)	(-10%)	(-40%)	(-28%)	(-42%)	(-38%)	(-42%)	(-44%)	(-37%)	(-47%)	(-35%)	(-46%)	(-19%)	(-32%)	(-17%)	(-27%)	(-15%)	(-24%)	(5%)	(6%)	(14%)	(14%)	(2%)	(-3%)	(-19%)	(-19%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	2	2	3	4	4	4	1	1	-1	-3	-2	-2	-2	-2	-1	-1	-1	-1	0	0	1	1	2	2	0	0
			(10%)	(13%)	(18%)	(21%)	(22%)	(23%)	(7%)	(7%)	(-5%)	(-11%)	(-9%)	(-11%)	(-12%)	(-9%)	(-7%)	(-8%)	(-5%)	(-3%)	(-2%)	(1%)	(3%)	(5%)	(9%)	(10%)	(2%)	(2%)
		DROUGHT	4	4	8	9	12	11	9	9	5	5	2	2	1	-1	0	-2	1	1	1	1	2	2	4	4	4	4
			(20%)	(23%)	(46%)	(52%)	(68%)	(66%)	(50%)	(48%)	(27%)	(25%)	(10%)	(7%)	(3%)	(-2%)	(2%)	(-8%)	(3%)	(5%)	(6%)	(8%)	(13%)	(13%)	(20%)	(20%)	(22%)	(20%)
	Contra Costa PP #1	ALL	-5	17	-40	-2	-57	-3	-15	13	74	62	80	87	72	75	41	41	38	34	-23	-16	-41	-9	-5	9	10	26
			(-3%)	(12%)	(-25%)	(-2%)	(-31%)	(-2%)	(-8%)	(8%)	(68%)	(51%)	(88%)	(105%)	(92%)	(98%)	(60%)	(61%)	(79%)	(66%)	(-27%)	(-20%)	(-29%)	(-9%)	(-4%)	(7%)	(8%)	(24%)
		DROUGHT	-9	-3	-53	-37	-89	-34	-33	-36	89	84	136	127	118	113	84	79	46	32	-58	-53	-78	-20	5	24	13	23
			(-5%)	(-2%)	(-28%)	(-21%)	(-39%)	(-19%)	(-16%)	(-17%)	(81%)	(73%)	(170%)	(143%)	(157%)	(141%)	(144%)	(124%)	(100%)	(53%)	(-45%)	(-43%)	(-35%)	(-12%)	(3%)	(16%)	(9%)	(17%)
	Banks PP	ALL	-98	-86	-117	-83	-129	-102	-110	-96	-80	-78	-64	-62	-69	-67	-61	-60	-48	-54	11	17	-16	5	-36	-25	-65	-54
			(-87%)	(-86%)	(-89%)	(-85%)	(-89%)	(-87%)	(-80%)	(-78%)	(-78%)	(-77%)	(-73%)	(-72%)	(-83%)	(-82%)	(-81%)	(-81%)	(-76%)	(-78%)	(15%)	(25%)	(-16%)	(6%)	(-33%)	(-26%)	(-64%)	(-60%)
		DROUGHT	-127	-123	-137	-113	-169	-143	-157	-139	-123	-117	-119	-116	-124	-121	-104	-103	-65	-76	28	39	-44	-6	-24	-14	-87	-76
			(-94%)	(-93%)	(-91%)	(-89%)	(-94%)	(-93%)	(-91%)	(-90%)	(-89%)	(-89%)	(-89%)	(-89%)	(-96%)	(-95%)	(-97%)	(-97%)	(-92%)	(-93%)	(28%)	(43%)	(-29%)	(-5%)	(-18%)	(-12%)	(-65%)	(-62%)
	Jones PP	ALL	-95	-88	-115	-85	-135	-112	-118	-101	-104	-102	-100	-98	-74	-73	-62	-62	-49	-62	-4	-5	-15	0	-30	-22	-75	-68
			(-87%)	(-86%)	(-89%)	(-86%)	(-90%)	(-88%)	(-78%)	(-75%)	(-81%)	(-81%)	(-84%)	(-84%)	(-84%)	(-84%)	(-81%)	(-81%)	(-77%)	(-81%)	(-5%)	(-7%)	(-15%)	(-0%)	(-28%)	(-22%)	(-69%)	(-67%)
		DROUGHT	-119	-121	-135	-112	-168	-147	-177	-154	-175	-171	-178	-175	-120	-121	-99	-97	-48	-59	-33	-24	-40	-8	-23	-18	-109	-101
			(-89%)	(-89%)	(-90%)	(-89%)	(-92%)	(-91%)	(-92%)	(-91%)	(-92%)	(-92%)	(-92%)	(-92%)	(-89%)	(-89%)	(-87%)	(-87%)	(-77%)	(-80%)	(-30%)	(-24%)	(-27%)	(-7%)	(-17%)	(-14%)	(-76%)	(-74%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-51. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 8 LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 8 LLT			Period Average Concentration mg/L			Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)		
	Location	Period [a]	Ex. Cond.	No Act. LLT	Alt 8 LLT	Ex. Cond.	No Act._LLT	Alt 8 LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	15.7	15.3	19.8	0	0	0
		DROUGHT	16.8	16.3	20.7	0	0	0
	SJR at Buckley Cove	ALL	82.9	77.2	78.6	0	0	0
		DROUGHT	86.5	76.5	78.7	0	0	0
	Franks Tract	ALL	173.8	146.4	111.7	34	22	14
		DROUGHT	212.8	190.9	136.2	47	35	22
	Old R. at Rock Slough	ALL	152.0	130.5	110.5	28	17	7
		DROUGHT	180.2	161.4	129.9	42	27	13
Western Delta	Sac. R. at Emmaton	ALL	368.9	366.5	316.7	44	44	35
		DROUGHT	516.4	559.3	464.0	55	60	50
	SJR at Antioch	ALL	1,087.3	974.2	731.4	66	73	58
		DROUGHT	1,400.6	1,345.6	999.3	82	87	68
	Sac. R. at Mallard Island	ALL	2,552.0	2,411.9	2,163.1	85	86	86
		DROUGHT	3,233.9	3,123.1	2,753.1	100	100	100
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	17.1	16.6	17.6	0	0	0
		DROUGHT	17.7	17.7	25.1	0	0	0
	Contra Costa PP #1	ALL	146.5	126.9	116.7	24	14	9
		DROUGHT	176.5	161.3	132.5	37	22	15
	Banks PP	ALL	123.4	108.5	35.4	4	2	0
		DROUGHT	143.7	128.0	45.2	7	2	0
	Jones PP	ALL	116.9	103.4	31.0	1	1	0
		DROUGHT	132.9	118.9	33.9	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-52. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 8 LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 8 LLT			Period Average Concentration (mg/L)			Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)		
	Location	**Period [a]**	**Ex. Cond.**	**No Act. LLT**	**Alt 8 LLT**	**Ex. Cond.**	**No Act._LLT**	**Alt 8 LLT**
Delta Interior	Moke. R. (SF) at Staten Island	ALL	18	18	20	0	0	0
		DROUGHT	19	19	21	0	0	0
	SJR at Buckley Cove	ALL	116	102	103	0	0	0
		DROUGHT	155	128	135	0	0	0
	Franks Tract	ALL	120	102	86	14	8	4
		DROUGHT	153	140	112	22	15	7
	Old R. at Rock Slough	ALL	108	94	110	4	3	0
		DROUGHT	136	125	145	7	5	0
Western Delta	Sac. R. at Emmaton	ALL	258	260	220	36	32	30
		DROUGHT	364	406	327	50	55	43
	SJR at Antioch	ALL	757	684	506	61	65	49
		DROUGHT	1,002	990	710	80	82	60
	Sac. R. at Mallard Island	ALL	1,766	1,674	1,412	77	83	78
		DROUGHT	2,346	2,318	1,889	98	98	92
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	19	19	19	0	0	0
		DROUGHT	19	19	23	0	0	0
	Contra Costa PP #1	ALL	120	105	130	5	3	1
		DROUGHT	143	133	156	8	7	0
	Banks PP	ALL	102	91	37	1	1	0
		DROUGHT	134	123	47	2	2	0
	Jones PP	ALL	109	101	34	0	0	0
		DROUGHT	145	136	35	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-53. Alternative 8 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 8 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-4	-4	-2	-2	-2	-2	-2	-2
		DROUGHT	-2	-2	-2	-2	-1	-1	-1	-1	0	0	-1	-1	0	-1	-1	-1	-3	-4	-4	-4	-3	-2	-2	-2	-2	-2
	SJR at Buckley Cove	ALL	1	0	0	0	1	-3	1	-1	2	-1	1	-1	2	-1	2	-1	4	-2	7	-1	8	0	3	0	3	-1
		DROUGHT	2	0	1	0	3	-3	4	-2	2	-1	2	-1	4	-2	4	-1	7	-4	10	0	15	0	5	0	5	-1
	Franks Tract	ALL	-	8	-	-	-	-	-	-	2	5	-9	-7	-9	-7	-5	-3	1	5	-	51	-	-27	-	-	81	33
		DROUGHT	-	-	-	-	-	-	-	-	7	18	-7	-5	-7	-6	-3	2	7	24	-	-	-	-100	-	-	-	93
	Old R. at Rock Slough	ALL	-	46	-	-	-	-	69	75	-9	-7	-17	-16	-14	-12	-11	-10	-8	-6	77	32	49	-11	-	-5	42	17
		DROUGHT	-	-	-	-	-	-	-	-	-7	-3	-20	-18	-19	-18	-18	-15	-4	5	-	-	-	-65	-	-	72	36
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	78	-	13	31	1	8	-2	7	14	48	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	19	-	7	15	3	15	41	-	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	22	69	18	93	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-2	-3	-5	-5	-5	-5	-2	-2	0	1	1	1	1	1	2	2	3	3	3	3	2	1	-1	-1	0	0
		DROUGHT	-4	-5	-11	-12	-12	-12	-8	-8	-4	-4	-1	-1	0	0	0	2	2	2	2	2	1	1	-2	-2	-3	-3
	Contra Costa PP #1	ALL	-	-29	-	88	-	76	-	73	-8	3	-19	-17	-17	-16	-12	-11	-10	-8	39	25	-	15	29	-10	29	8
		DROUGHT	-	-	-	-	-	-	-	-	-4	3	-22	-19	-21	-19	-20	-18	-9	0	-	-	-	77	-	-100	60	32
	Banks PP	ALL	-	-	-	-	-	-	-	99	38	41	28	29	36	37	38	39	31	32	18	3	52	11	87	55	69	52
		DROUGHT	-	-	-	-	-	-	-	-	54	55	33	34	34	35	31	32	25	29	33	8	-	49	97	50	93	68
	Jones PP	ALL	-	-	-	-	-	96	66	60	37	38	36	37	44	45	44	45	34	36	30	14	34	4	66	41	64	49
		DROUGHT	-	-	-	-	-	-	-	85	47	47	41	42	42	42	41	42	23	29	88	45	-	13	57	37	85	65

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-54. Alternative 8 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL.
Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 8 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
		DROUGHT	-1	-1	-1	-1	-1	-1	0	-1	0	0	0	-1	0	-1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
	SJR at Buckley Cove	ALL	3	0	9	2	20	-4	42	7	23	6	21	6	3	-2	-2	-5	0	-3	7	-3	9	-4	6	-3	10	-1
		DROUGHT	5	-2	15	1	34	-4	-	14	-	27	98	25	12	-3	-4	-15	6	-17	10	-13	20	-14	12	-8	21	-5
	Franks Tract	ALL	68	3	-	65	-	-	58	46	-5	-5	-14	-14	-13	-12	-8	-7	-1	2	51	24	20	-10	18	1	26	10
		DROUGHT	-	53	-	-	-	-	-	75	-5	5	-20	-18	-18	-18	-13	-9	-3	11	-	-	-	-27	-81	-	42	25
	Old R. at Rock Slough	ALL	28	3	-	16	96	33	-4	-11	-37	-37	-39	-38	-27	-27	-17	-16	-16	-14	29	15	15	-6	2	-6	-2	-11
		DROUGHT	43	40	-	38	-	-	11	-16	-57	-56	-68	-67	-53	-53	-36	-34	-18	-10	-	56	54	-11	-28	-6	-8	-16
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	55	83	13	29	1	8	-2	5	10	31	57	-	-100	-100	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	18	-	5	15	1	11	12	-	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	25	90	8	57	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	74	-	37	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-1	-1	-1	-2	-2	-2	-1	-1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	-1	-1	0	0
		DROUGHT	-2	-2	-4	-4	-5	-5	-4	-4	-2	-2	-1	-1	0	0	0	1	0	0	0	-1	-1	-1	-2	-2	-2	-2
	Contra Costa PP #1	ALL	6	-15	43	2	83	2	23	-14	-53	-48	-50	-52	-42	-43	-22	-22	-19	-17	14	9	37	7	5	-7	-8	-18
		DROUGHT	16	5	87	48	-	44	82	98	-63	-62	-80	-79	-67	-66	-44	-43	-23	-17	47	42	-	24	-7	-25	-12	-20
	Banks PP	ALL	71	57	99	54	-	77	99	76	54	52	39	38	41	40	35	34	26	30	-6	-9	11	-3	25	16	44	34
		DROUGHT	-	-	-	91	-	-	-	-	-	99	-	96	-	98	72	72	36	45	-19	-24	47	4	21	11	75	60
	Jones PP	ALL	68	60	95	57	-	91	-	88	85	82	77	74	46	45	36	36	26	36	3	3	10	0	21	15	53	46
		DROUGHT	-	-	-	91	-	-	-	-	-	-	-	-	-	-	72	70	26	34	23	16	39	6	19	15	-	88

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-55. Period average change in chloride concentrations (mg/L) for Alternative 9 LLT relative to existing conditions and the No Action Alternative LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride / Alt 9 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	1	1	1	1	0	1	-2	-1	-3	-2	-1	-1	-2	-1	-2	-1	0	1	0	1	1	1	1	1	0	0
			(8%)	(10%)	(7%)	(5%)	(2%)	(4%)	(-11%)	(-6%)	(-13%)	(-9%)	(-6%)	(-3%)	(-11%)	(-9%)	(-10%)	(-7%)	(-0%)	(5%)	(1%)	(6%)	(9%)	(9%)	(10%)	(10%)	(-2%)	(0%)
		DROUGHT	1	1	1	1	1	2	-3	-2	-6	-5	-4	-3	-3	-2	-2	-1	0	1	2	2	3	2	2	2	-1	0
			(11%)	(11%)	(9%)	(8%)	(11%)	(12%)	(-15%)	(-11%)	(-24%)	(-21%)	(-19%)	(-14%)	(-19%)	(-14%)	(-12%)	(-7%)	(3%)	(7%)	(11%)	(11%)	(19%)	(15%)	(14%)	(16%)	(-4%)	(-1%)
	SJR at Buckley Cove	ALL	19	21	50	51	40	46	8	13	-14	-11	-24	-20	-33	-29	-40	-35	-41	-31	-24	-11	-13	-1	5	9	-6	0
			(22%)	(26%)	(65%)	(66%)	(51%)	(64%)	(11%)	(17%)	(-18%)	(-14%)	(-30%)	(-27%)	(-40%)	(-37%)	(-47%)	(-44%)	(-47%)	(-40%)	(-27%)	(-15%)	(-15%)	(-1%)	(5%)	(12%)	(-7%)	(0%)
		DROUGHT	48	51	101	105	95	104	47	56	-4	1	-32	-26	-46	-37	-56	-47	-48	-29	-4	13	10	32	14	21	10	20
			(58%)	(64%)	(123%)	(132%)	(113%)	(139%)	(54%)	(73%)	(-5%)	(2%)	(-38%)	(-34%)	(-54%)	(-48%)	(-64%)	(-60%)	(-52%)	(-40%)	(-4%)	(19%)	(11%)	(43%)	(15%)	(27%)	(12%)	(27%)
	Franks Tract	ALL	-90	-23	-147	-13	-109	-64	-27	-30	29	23	34	31	33	30	31	26	35	29	-33	13	-48	-1	-99	-84	-33	-5
			(-31%)	(-10%)	(-38%)	(-5%)	(-37%)	(-25%)	(-17%)	(-19%)	(48%)	(35%)	(89%)	(75%)	(89%)	(75%)	(67%)	(52%)	(65%)	(47%)	(-17%)	(9%)	(-21%)	(-1%)	(-33%)	(-29%)	(-19%)	(-4%)
		DROUGHT	-65	-26	-80	36	-73	-33	-10	9	46	29	48	42	42	40	46	35	58	32	-53	16	-36	41	-56	-89	-11	11
			(-18%)	(-8%)	(-18%)	(11%)	(-19%)	(-10%)	(-5%)	(5%)	(71%)	(35%)	(169%)	(125%)	(190%)	(161%)	(154%)	(85%)	(113%)	(40%)	(-17%)	(6%)	(-11%)	(17%)	(-16%)	(-23%)	(-5%)	(6%)
	Old R. at Rock Slough	ALL	-152	-110	-219	-110	-167	-123	-64	-67	17	13	34	30	28	25	24	22	33	28	-30	3	-73	-34	-152	-141	-60	-39
			(-63%)	(-56%)	(-71%)	(-55%)	(-65%)	(-58%)	(-42%)	(-43%)	(25%)	(19%)	(70%)	(58%)	(53%)	(45%)	(43%)	(36%)	(61%)	(49%)	(-20%)	(3%)	(-38%)	(-22%)	(-62%)	(-61%)	(-40%)	(-30%)
		DROUGHT	-195	-185	-250	-155	-214	-169	-93	-75	14	7	43	37	48	45	50	44	45	25	-70	-22	-106	-39	-182	-198	-76	-57
			(-68%)	(-66%)	(-72%)	(-61%)	(-68%)	(-63%)	(-49%)	(-43%)	(20%)	(9%)	(112%)	(83%)	(143%)	(122%)	(158%)	(115%)	(103%)	(40%)	(-29%)	(-12%)	(-38%)	(-18%)	(-64%)	(-66%)	(-42%)	(-35%)
Western Delta	Sac. R. at Emmaton	ALL	23	227	73	207	176	126	106	73	52	26	22	8	31	15	49	20	44	6	188	184	154	84	-5	-33	76	79
			(3%)	(35%)	(8%)	(27%)	(40%)	(26%)	(70%)	(39%)	(75%)	(27%)	(74%)	(18%)	(81%)	(27%)	(41%)	(13%)	(20%)	(2%)	(57%)	(56%)	(33%)	(16%)	(-1%)	(-4%)	(21%)	(21%)
		DROUGHT	130	369	237	350	315	221	193	111	120	56	36	22	46	26	132	60	137	36	360	304	118	1	144	-103	164	121
			(11%)	(41%)	(19%)	(31%)	(45%)	(28%)	(85%)	(36%)	(110%)	(33%)	(80%)	(37%)	(95%)	(37%)	(74%)	(24%)	(45%)	(9%)	(77%)	(58%)	(20%)	(0%)	(13%)	(-8%)	(32%)	(22%)
	SJR at Antioch	ALL	-674	-15	-675	-125	-241	-177	-106	-145	-36	-88	0	-38	5	-36	-41	-96	-31	-99	-182	-25	-282	-275	-623	-410	-240	-127
			(-31%)	(-1%)	(-28%)	(-7%)	(-16%)	(-13%)	(-17%)	(-22%)	(-13%)	(-28%)	(-0%)	(-25%)	(4%)	(-20%)	(-12%)	(-23%)	(-5%)	(-15%)	(-15%)	(-2%)	(-19%)	(-19%)	(-29%)	(-21%)	(-22%)	(-13%)
		DROUGHT	-550	149	-527	9	-111	-1	-18	-141	17	-123	3	-36	2	-49	-13	-118	5	-130	-138	-27	-392	-387	-328	-535	-171	-116
			(-21%)	(8%)	(-17%)	(0%)	(-5%)	(-0%)	(-2%)	(-15%)	(4%)	(-22%)	(2%)	(-18%)	(1%)	(-20%)	(-2%)	(-18%)	(1%)	(-13%)	(-8%)	(-2%)	(-23%)	(-23%)	(-13%)	(-19%)	(-12%)	(-9%)
	Sac. R. at Mallard Island	ALL	-649	162	-556	67	1	64	57	47	53	-29	76	-5	147	60	154	36	144	29	235	467	194	192	-458	-12	-50	90
			(-14%)	(4%)	(-11%)	(2%)	(0%)	(2%)	(3%)	(3%)	(6%)	(-3%)	(17%)	(-1%)	(20%)	(7%)	(11%)	(2%)	(8%)	(1%)	(8%)	(17%)	(6%)	(6%)	(-11%)	(-0%)	(-2%)	(4%)
		DROUGHT	-615	314	-605	152	35	169	156	30	204	-11	103	40	144	69	76	26	121	43	257	447	34	58	-33	-130	-10	101
			(-11%)	(7%)	(-10%)	(3%)	(1%)	(4%)	(6%)	(1%)	(13%)	(-1%)	(15%)	(5%)	(13%)	(6%)	(4%)	(1%)	(5%)	(2%)	(7%)	(13%)	(1%)	(2%)	(-1%)	(-3%)	(-0%)	(3%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	3	5	13	14	18	18	11	11	3	1	-1	-1	-2	-1	-3	-3	-6	-4	-5	-3	-2	-1	2	2	3	3
			(19%)	(30%)	(89%)	(98%)	(135%)	(134%)	(74%)	(73%)	(20%)	(8%)	(-4%)	(-9%)	(-14%)	(-8%)	(-19%)	(-18%)	(-29%)	(-24%)	(-22%)	(-13%)	(-12%)	(-6%)	(10%)	(14%)	(15%)	(18%)
		DROUGHT	9	11	32	34	42	41	31	31	17	17	7	6	4	3	1	-2	-1	0	3	4	4	4	9	9	13	13
			(42%)	(56%)	(199%)	(232%)	(339%)	(312%)	(251%)	(239%)	(122%)	(112%)	(47%)	(39%)	(25%)	(19%)	(7%)	(-9%)	(-6%)	(-1%)	(11%)	(20%)	(18%)	(19%)	(41%)	(40%)	(75%)	(74%)
	Contra Costa PP #1	ALL	-152	-118	-158	-95	-145	-72	-87	-67	12	-5	35	32	34	31	24	22	31	26	-17	-1	-81	-34	-121	-107	-52	-32
			(-63%)	(-57%)	(-63%)	(-51%)	(-61%)	(-44%)	(-49%)	(-42%)	(16%)	(-5%)	(67%)	(56%)	(63%)	(55%)	(39%)	(34%)	(55%)	(42%)	(-13%)	(-1%)	(-40%)	(-22%)	(-56%)	(-53%)	(-35%)	(-26%)
		DROUGHT	-200	-187	-201	-172	-202	-132	-123	-141	11	-1	44	37	47	43	51	46	43	25	-57	-43	-144	-55	-147	-116	-73	-58
			(-68%)	(-66%)	(-67%)	(-64%)	(-67%)	(-57%)	(-56%)	(-59%)	(13%)	(-1%)	(96%)	(70%)	(114%)	(94%)	(134%)	(108%)	(98%)	(42%)	(-31%)	(-26%)	(-46%)	(-24%)	(-58%)	(-52%)	(-41%)	(-36%)
	Banks PP	ALL	-21	-5	-3	56	-21	13	-26	-21	-13	-17	-10	-12	-25	-26	-32	-33	-26	-28	-33	-12	-54	-17	-45	-28	-26	-11
			(-13%)	(-3%)	(-1%)	(39%)	(-11%)	(9%)	(-19%)	(-16%)	(-16%)	(-20%)	(-14%)	(-17%)	(-35%)	(-36%)	(-44%)	(-45%)	(-39%)	(-41%)	(-31%)	(-14%)	(-36%)	(-15%)	(-27%)	(-19%)	(-21%)	(-10%)
		DROUGHT	-1	4	67	112	44	78	1	17	-6	-8	-11	-13	-28	-31	-34	-37	-15	-22	-37	-13	-95	-32	-59	-43	-15	1
			(-1%)	(2%)	(30%)	(62%)	(19%)	(41%)	(1%)	(11%)	(-7%)	(-8%)	(-16%)	(-19%)	(-43%)	(-45%)	(-58%)	(-59%)	(-29%)	(-37%)	(-25%)	(-10%)	(-42%)	(-20%)	(-29%)	(-23%)	(-10%)	(1%)
	Jones PP	ALL	-7	11	16	70	14	39	-2	4	-9	-11	-16	-17	-34	-34	-40	-41	-28	-31	-44	-26	-46	-15	-31	-14	-19	-5
			(-4%)	(8%)	(9%)	(53%)	(9%)	(31%)	(-1%)	(3%)	(-11%)	(-13%)	(-21%)	(-22%)	(-42%)	(-42%)	(-49%)	(-50%)	(-40%)	(-43%)	(-39%)	(-27%)	(-32%)	(-13%)	(-20%)	(-10%)	(-16%)	(-5%)
		DROUGHT	17	24	91	139	93	113	38	51	1	1	-22	-23	-42	-42	-52	-53	-15	-25	-45	-16	-73	-20	-37	-27	-4	10
			(10%)	(14%)	(45%)	(91%)	(53%)	(73%)	(29%)	(43%)	(1%)	(1%)	(-29%)	(-30%)	(-53%)	(-53%)	(-67%)	(-68%)	(-28%)	(-40%)	(-29%)	(-13%)	(-36%)	(-13%)	(-21%)	(-16%)	(-3%)	(9%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-56. Period average change in chloride concentrations (mg/L) for Alternative 9 LLT relative to existing conditions and the No Action Alternative LLT.
Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 9 LLT	Location	Period [a]	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	-2	-1	-2	-1	-1	0	-1	-1	0	0	0	1	0	0	0	0	0	0	0	0
			(2%)	(2%)	(2%)	(1%)	(-0%)	(1%)	(-6%)	(-3%)	(-8%)	(-5%)	(-3%)	(-2%)	(-4%)	(-3%)	(-0%)	(0%)	(2%)	(3%)	(2%)	(2%)	(3%)	(2%)	(3%)	(2%)	(-1%)	(-0%)
		DROUGHT	0	0	0	0	0	1	-2	-2	-4	-3	-3	-2	-2	-1	-1	0	0	0	0	0	1	1	0	1	-1	0
			(3%)	(3%)	(2%)	(2%)	(2%)	(3%)	(-9%)	(-7%)	(-16%)	(-13%)	(-11%)	(-8%)	(-9%)	(-7%)	(-4%)	(-2%)	(2%)	(3%)	(3%)	(3%)	(4%)	(3%)	(3%)	(3%)	(-4%)	(-2%)
	SJR at Buckley Cove	ALL	-28	-24	-23	-14	-45	-18	-73	-44	-70	-54	-79	-64	-55	-47	-45	-38	-62	-58	-57	-42	-49	-29	-44	-30	-52	-38
			(-29%)	(-25%)	(-21%)	(-14%)	(-32%)	(-16%)	(-45%)	(-33%)	(-49%)	(-42%)	(-57%)	(-52%)	(-55%)	(-51%)	(-57%)	(-53%)	(-63%)	(-61%)	(-53%)	(-45%)	(-47%)	(-34%)	(-42%)	(-33%)	(-45%)	(-38%)
		DROUGHT	-29	-20	-11	5	-21	12	-71	-31	-105	-80	-128	-108	-105	-92	-87	-72	-88	-54	-46	-9	-43	7	-63	-38	-66	-40
			(-23%)	(-17%)	(-8%)	(4%)	(-13%)	(9%)	(-33%)	(-18%)	(-48%)	(-42%)	(-60%)	(-55%)	(-64%)	(-60%)	(-70%)	(-66%)	(-67%)	(-55%)	(-41%)	(-12%)	(-35%)	(11%)	(-47%)	(-35%)	(-43%)	(-31%)
	Franks Tract	ALL	-31	8	-54	26	-34	3	26	37	66	65	70	68	56	54	36	33	44	36	2	29	-10	22	-40	-29	11	29
			(-17%)	(5%)	(-23%)	(17%)	(-16%)	(2%)	(20%)	(30%)	(107%)	(102%)	(188%)	(172%)	(182%)	(169%)	(108%)	(93%)	(105%)	(73%)	(2%)	(28%)	(-7%)	(18%)	(-21%)	(-16%)	(9%)	(29%)
		DROUGHT	-7	13	-2	66	3	36	55	83	114	98	122	116	93	92	67	58	71	45	-17	22	-10	40	-13	-40	40	52
			(-3%)	(6%)	(-1%)	(33%)	(1%)	(15%)	(31%)	(55%)	(154%)	(109%)	(311%)	(260%)	(309%)	(294%)	(218%)	(149%)	(169%)	(67%)	(-8%)	(13%)	(-4%)	(23%)	(-6%)	(-15%)	(26%)	(37%)
	Old R. at Rock Slough	ALL	-60	-37	-85	-21	-45	-12	8	17	63	64	77	73	41	40	28	27	61	55	25	43	-6	21	-56	-48	4	19
			(-39%)	(-28%)	(-45%)	(-17%)	(-25%)	(-8%)	(6%)	(14%)	(88%)	(89%)	(157%)	(136%)	(83%)	(80%)	(61%)	(57%)	(154%)	(122%)	(25%)	(52%)	(-5%)	(21%)	(-37%)	(-33%)	(4%)	(20%)
		DROUGHT	-73	-72	-90	-35	-67	-36	11	36	107	102	134	127	89	86	72	65	73	55	-14	13	-31	12	-63	-77	12	23
			(-39%)	(-38%)	(-42%)	(-22%)	(-30%)	(-18%)	(6%)	(25%)	(120%)	(110%)	(215%)	(183%)	(161%)	(147%)	(173%)	(135%)	(191%)	(97%)	(-8%)	(9%)	(-16%)	(8%)	(-34%)	(-38%)	(9%)	(18%)
Western Delta	Sac. R. at Emmaton	ALL	29	165	67	159	133	110	99	80	62	41	30	15	29	14	35	10	38	-1	139	126	112	65	14	-19	65	64
			(5%)	(38%)	(12%)	(35%)	(43%)	(33%)	(77%)	(54%)	(87%)	(44%)	(86%)	(30%)	(82%)	(28%)	(39%)	(9%)	(20%)	(-0%)	(62%)	(53%)	(33%)	(17%)	(2%)	(-3%)	(25%)	(25%)
		DROUGHT	121	272	198	276	259	205	197	135	146	84	48	30	43	24	114	47	142	30	294	235	112	17	123	-70	150	107
			(16%)	(43%)	(25%)	(39%)	(52%)	(37%)	(101%)	(53%)	(133%)	(49%)	(109%)	(49%)	(118%)	(43%)	(97%)	(25%)	(58%)	(8%)	(89%)	(60%)	(25%)	(3%)	(16%)	(-7%)	(41%)	(26%)
	SJR at Antioch	ALL	-437	10	-376	5	-149	-55	-53	-59	-6	-45	17	-27	19	-25	-20	-75	-22	-101	-102	-23	-191	-172	-394	-274	-143	-70
			(-29%)	(1%)	(-25%)	(0%)	(-15%)	(-6%)	(-11%)	(-12%)	(-2%)	(-15%)	(14%)	(-17%)	(17%)	(-16%)	(-8%)	(-24%)	(-5%)	(-18%)	(-12%)	(-3%)	(-18%)	(-17%)	(-27%)	(-20%)	(-19%)	(-10%)
		DROUGHT	-326	128	-243	125	-11	119	60	-20	80	-54	46	-10	32	-22	45	-77	59	-124	-35	-11	-259	-270	-197	-388	-62	-50
			(-18%)	(9%)	(-13%)	(8%)	(-1%)	(9%)	(8%)	(-3%)	(20%)	(-10%)	(28%)	(-4%)	(22%)	(-11%)	(12%)	(-15%)	(9%)	(-14%)	(-3%)	(-1%)	(-20%)	(-21%)	(-11%)	(-19%)	(-6%)	(-5%)
	Sac. R. at Mallard Island	ALL	-514	146	-376	176	14	160	117	129	117	48	126	8	149	19	136	-21	147	-40	232	340	207	214	-298	-19	5	97
			(-17%)	(6%)	(-13%)	(7%)	(1%)	(8%)	(9%)	(10%)	(14%)	(5%)	(28%)	(1%)	(29%)	(3%)	(15%)	(-2%)	(10%)	(-2%)	(11%)	(17%)	(8%)	(9%)	(-10%)	(-1%)	(0%)	(6%)
		DROUGHT	-406	288	-290	334	137	337	293	216	351	104	201	63	184	35	187	-8	230	-7	362	398	128	123	44	-126	118	146
			(-11%)	(10%)	(-8%)	(11%)	(4%)	(11%)	(15%)	(11%)	(25%)	(6%)	(31%)	(8%)	(25%)	(4%)	(13%)	(-0%)	(11%)	(-0%)	(13%)	(15%)	(4%)	(4%)	(1%)	(-3%)	(5%)	(6%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	1	2	4	5	8	8	6	6	2	1	0	0	-1	-1	-1	-1	0	0	0	1	1	1	1	2	2	2
			(7%)	(9%)	(24%)	(27%)	(46%)	(46%)	(28%)	(29%)	(10%)	(3%)	(1%)	(-1%)	(-6%)	(-4%)	(-4%)	(-5%)	(-2%)	(-0%)	(3%)	(5%)	(6%)	(8%)	(9%)	(10%)	(10%)	(10%)
		DROUGHT	3	4	12	13	22	21	20	19	14	14	8	7	3	2	2	0	2	3	4	4	4	4	5	5	8	8
			(19%)	(21%)	(67%)	(73%)	(125%)	(122%)	(108%)	(105%)	(71%)	(68%)	(39%)	(35%)	(16%)	(10%)	(9%)	(-1%)	(12%)	(14%)	(20%)	(22%)	(23%)	(23%)	(25%)	(26%)	(44%)	(42%)
	Contra Costa PP #1	ALL	-56	-34	-55	-17	-65	-11	-33	-5	67	54	76	83	71	74	35	35	54	51	39	47	-3	28	-29	-14	9	24
			(-35%)	(-25%)	(-34%)	(-14%)	(-36%)	(-9%)	(-18%)	(-3%)	(62%)	(45%)	(84%)	(100%)	(90%)	(97%)	(52%)	(52%)	(113%)	(98%)	(45%)	(59%)	(-2%)	(26%)	(-20%)	(-11%)	(7%)	(23%)
		DROUGHT	-73	-68	-66	-50	-92	-37	-48	-51	82	77	132	123	137	132	96	90	76	62	6	11	-57	0	-37	-18	13	23
			(-38%)	(-36%)	(-35%)	(-29%)	(-40%)	(-21%)	(-23%)	(-24%)	(75%)	(67%)	(165%)	(137%)	(181%)	(164%)	(163%)	(141%)	(165%)	(102%)	(5%)	(9%)	(-26%)	(0%)	(-21%)	(-12%)	(9%)	(17%)
	Banks PP	ALL	-13	-1	-1	33	-15	11	-31	-16	-26	-24	-22	-20	-40	-38	-42	-42	-30	-35	-22	-16	-34	-13	-28	-17	-25	-14
			(-11%)	(-1%)	(-1%)	(34%)	(-10%)	(10%)	(-22%)	(-13%)	(-25%)	(-23%)	(-25%)	(-24%)	(-48%)	(-47%)	(-56%)	(-56%)	(-47%)	(-51%)	(-30%)	(-24%)	(-33%)	(-16%)	(-26%)	(-18%)	(-24%)	(-16%)
		DROUGHT	0	4	44	68	34	60	-1	17	-24	-18	-41	-37	-75	-72	-73	-73	-30	-41	-20	-10	-62	-23	-39	-30	-24	-13
			(0%)	(3%)	(29%)	(54%)	(19%)	(39%)	(-1%)	(11%)	(-18%)	(-14%)	(-30%)	(-29%)	(-58%)	(-57%)	(-69%)	(-69%)	(-43%)	(-50%)	(-20%)	(-11%)	(-40%)	(-20%)	(-29%)	(-24%)	(-18%)	(-10%)
	Jones PP	ALL	-84	-77	-106	-76	-126	-103	-126	-109	-100	-98	-89	-87	-63	-62	-52	-52	-38	-51	-53	-55	-74	-59	-80	-72	-83	-75
			(-77%)	(-76%)	(-82%)	(-77%)	(-84%)	(-81%)	(-83%)	(-81%)	(-78%)	(-78%)	(-74%)	(-74%)	(-71%)	(-71%)	(-68%)	(-68%)	(-60%)	(-67%)	(-65%)	(-66%)	(-73%)	(-69%)	(-75%)	(-73%)	(-76%)	(-74%)
		DROUGHT	-109	-111	-125	-102	-158	-137	-167	-144	-165	-161	-170	-167	-110	-111	-89	-87	-38	-49	-83	-74	-123	-91	-109	-104	-120	-112
			(-82%)	(-82%)	(-84%)	(-81%)	(-87%)	(-85%)	(-87%)	(-86%)	(-87%)	(-87%)	(-87%)	(-87%)	(-82%)	(-82%)	(-78%)	(-78%)	(-61%)	(-67%)	(-77%)	(-75%)	(-83%)	(-79%)	(-82%)	(-81%)	(-83%)	(-82%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-57. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 9 LLT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 9 LLT			Period Average Concentration mg/L			Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b] Frequency of Criterion/Objective Exceedance (%)		
	Location	**Period [a]**	**Ex. Cond.**	**No Act. LLT**	**Alt 9 LLT**	**Ex. Cond.**	**No Act._LLT**	**Alt 9 LLT**
Delta Interior	Moke. R. (SF) at Staten Island	ALL	15.7	15.3	15.4	0	0	0
		DROUGHT	16.8	16.3	16.2	0	0	0
	SJR at Buckley Cove	ALL	82.9	77.2	77.4	0	0	2
		DROUGHT	86.5	76.5	96.9	0	0	5
	Franks Tract	ALL	173.8	146.4	141.3	34	22	16
		DROUGHT	212.8	190.9	201.9	47	35	37
	Old R. at Rock Slough	ALL	152.0	130.5	91.8	28	17	0
		DROUGHT	180.2	161.4	104.5	42	27	0
Western Delta	Sac. R. at Emmaton	ALL	368.9	366.5	445.1	44	44	49
		DROUGHT	516.4	559.3	680.4	55	60	67
	SJR at Antioch	ALL	1,087.3	974.2	846.8	66	73	68
		DROUGHT	1,400.6	1,345.6	1,229.9	82	87	80
	Sac. R. at Mallard Island	ALL	2,552.0	2,411.9	2,501.7	85	86	86
		DROUGHT	3,233.9	3,123.1	3,223.7	100	100	100
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	17.1	16.6	19.7	0	0	0
		DROUGHT	17.7	17.7	30.9	0	0	0
	Contra Costa PP #1	ALL	146.5	126.9	94.5	24	14	0
		DROUGHT	176.5	161.3	103.3	37	22	0
	Banks PP	ALL	123.4	108.5	97.7	4	2	9
		DROUGHT	143.7	128.0	129.1	7	2	17
	Jones PP	ALL	116.9	103.4	98.1	1	1	9
		DROUGHT	132.9	118.9	129.1	0	0	17

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-58. Period Average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action LLT, and Alternative 9 LLT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 9 LLT						Lowest Applicable Human Health Criterion/Objective (250 mg/L) [b]		
			Period Average Concentration (mg/L)			Frequency of Criterion/Objective Exceedance (%)		
	Location	Period [a]	Ex. Cond.	No Act. LLT	Alt 9 LLT	Ex. Cond.	No Act._LLT	Alt 9 LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	18	18	18	0	0	0
		DROUGHT	19	19	19	0	0	0
	SJR at Buckley Cove	ALL	116	102	63	0	0	2
		DROUGHT	155	128	89	0	0	5
	Franks Tract	ALL	120	102	131	14	8	10
		DROUGHT	153	140	192	22	15	28
	Old R. at Rock Slough	ALL	108	94	112	4	3	0
		DROUGHT	136	125	148	7	5	0
Western Delta	Sac. R. at Emmaton	ALL	258	260	323	36	32	43
		DROUGHT	364	406	513	50	55	62
	SJR at Antioch	ALL	757	684	614	61	65	57
		DROUGHT	1,002	990	940	80	82	77
	Sac. R. at Mallard Island	ALL	1,766	1,674	1,771	77	83	83
		DROUGHT	2,346	2,318	2,464	98	98	100
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	19	19	21	0	0	0
		DROUGHT	19	19	27	0	0	0
	Contra Costa PP #1	ALL	120	105	129	5	3	0
		DROUGHT	143	133	156	8	7	0
	Banks PP	ALL	102	91	77	1	1	4
		DROUGHT	134	123	110	2	2	12
	Jones PP	ALL	109	101	26	0	0	0
		DROUGHT	145	136	24	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-59. Alternative 9 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 9 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	1	1	1	1	0	0	1	1	1	0	0	0	0	0	-1	-1	0	0	0	0
		DROUGHT	-1	-1	0	0	-1	-1	1	1	3	2	2	1	1	1	1	1	0	-1	-1	-1	-1	-1	-1	-1	0	0
	SJR at Buckley Cove	ALL	-11	-12	-29	-29	-23	-26	-5	-7	8	6	14	12	20	17	24	21	25	18	15	6	8	0	-3	-5	3	0
		DROUGHT	-29	-30	-61	-61	-57	-59	-28	-32	3	-1	19	15	28	21	34	27	30	16	2	-7	-7	-18	-8	-13	-6	-12
	Franks Tract	ALL	-	93	-	-	-	-	29	33	-15	-12	-16	-15	-16	-15	-15	-13	-18	-15	57	-13	-	2	-	-	43	5
		DROUGHT	-	-	-	-	-	-	22	-13	-25	-17	-22	-20	-19	-18	-21	-17	-30	-18	-	-100	-	-100	-	-	29	-19
	Old R. at Rock Slough	ALL	-	-	-	-	-	-	66	71	-9	-7	-17	-15	-14	-13	-13	-12	-17	-15	31	-2	-	34	-	-	61	32
		DROUGHT	-	-	-	-	-	-	-	96	-8	-4	-20	-18	-22	-21	-23	-21	-22	-13	-	38	-	92	-	-	-	64
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	-100	-100	-28	-17	-10	-4	-15	-8	-38	-20	-100	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-100	-	-85	-72	-17	-11	-23	-14	-100	-	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	0	39	-5	55	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-4	72	-3	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-1	-2	-6	-6	-7	-7	-5	-5	-1	-1	0	1	1	1	1	1	2	2	2	1	1	0	-1	-1	-1	-1
		DROUGHT	-4	-5	-14	-14	-18	-18	-13	-13	-7	-7	-3	-3	-2	-1	-1	1	1	0	-1	-2	-2	-2	-4	-4	-6	-6
	Contra Costa PP #1	ALL	-	-	-	-	-	84	-	75	-7	3	-18	-16	-17	-16	-13	-12	-16	-14	13	1	-	37	-	-	50	26
		DROUGHT	-	-	-	-	-	-	-	-	-6	1	-21	-19	-23	-21	-24	-22	-21	-13	84	53	-	-	-	-	99	65
	Banks PP	ALL	25	5	5	-53	35	-14	24	18	8	10	5	7	14	15	18	19	14	15	23	7	54	13	55	29	20	8
		DROUGHT	3	-7	-100	-100	-100	-100	-1	-18	4	5	6	7	15	17	18	20	8	11	35	10	-	38	-	66	14	-1
	Jones PP	ALL	7	-9	-25	-59	-15	-33	1	-3	5	6	9	10	20	20	24	24	15	17	32	16	42	11	33	12	14	4
		DROUGHT	-24	-30	-100	-100	-100	-100	-32	-39	0	-1	13	14	24	25	30	31	7	13	46	13	-	20	52	33	3	-8

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-60. Alternative 9 use of assimilative capacity available under existing conditions and No Action LLT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 9 LLT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	1	1	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	SJR at Buckley Cove	ALL	19	15	16	9	41	13	83	38	66	44	71	51	37	30	26	21	41	38	40	27	34	18	30	19	39	26
		DROUGHT	22	14	10	-4	26	-10	-	39	-	-	-	-	-	93	69	51	74	36	34	5	33	-4	54	27	70	33
	Franks Tract	ALL	51	-8	-	-27	81	-4	-23	-29	-35	-35	-33	-32	-26	-25	-16	-15	-21	-18	-2	-19	11	-17	67	42	-8	-20
		DROUGHT	33	-32	-	-100	-	-100	-79	-85	-64	-61	-58	-57	-42	-42	-30	-28	-34	-25	44	-29	40	-53	78	-	-41	-48
	Old R. at Rock Slough	ALL	62	31	-	16	64	12	-7	-14	-36	-36	-39	-37	-21	-20	-14	-13	-29	-27	-17	-26	5	-14	58	46	-3	-12
		DROUGHT	-	-	-	39	-	67	-14	-35	-66	-65	-72	-71	-46	-45	-35	-32	-35	-28	16	-11	52	-12	-	-	-11	-19
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	-81	-77	-35	-26	-14	-8	-14	-7	-22	-7	-58	4	-100	-100	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-100	-	-100	-100	-23	-16	-20	-12	-87	-73	-100	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-13	32	-14	26	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-52	30	-30	43	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-1	-1	-2	-2	-3	-4	-2	-2	-1	0	0	0	1	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1
		DROUGHT	-1	-2	-5	-5	-9	-9	-8	-8	-6	-6	-3	-3	-1	-1	-1	0	-1	-1	-2	-2	-2	-2	-2	-2	-4	-3
	Contra Costa PP #1	ALL	61	30	60	14	95	9	50	5	-47	-42	-48	-50	-42	-43	-19	-19	-27	-26	-24	-27	3	-20	27	12	-7	-17
		DROUGHT	-	-	-	65	-	48	-	-	-58	-57	-78	-76	-78	-78	-50	-49	-37	-33	-5	-8	-	-1	47	18	-12	-19
	Banks PP	ALL	9	1	1	-22	14	-9	28	13	18	16	13	12	24	22	24	24	16	19	12	9	23	7	20	11	17	9
		DROUGHT	0	-4	-44	-56	-49	-63	1	-18	22	16	35	31	62	59	51	51	17	25	14	6	65	17	34	23	21	10
	Jones PP	ALL	60	52	88	51	-	84	-	95	81	79	68	66	39	38	30	30	20	29	32	33	50	36	56	48	59	51
		DROUGHT	93	98	-	82	-	-	-	-	-	-	-	-	95	97	65	63	20	28	58	49	-	68	93	85	-	98

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-61. Monthly Martinez Chloride Concentrations (mg/L) Used in Assessment

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean (mg/L)	6,502	5,026	3,757	4,575	5,254	5,162	6,661	6,994	7,966	8,492	9,414	8,025
Minimum (mg/L)	8	27	11	8	8	188	938	3,810	3,000	2,200	4,990	219
Maximum (mg/L)	12,200	12,300	11,200	11,200	9,710	9,970	10,800	10,500	11,000	11,100	12,500	12,600
75th Percentile (mg/L)	9,855	8,520	6,375	6,900	7,868	7,915	8,505	8,635	9,670	9,975	11,000	10,900
99th Percentile (mg/L)	12,125	12,125	11,075	11,070	9,643	9,805	10,644	10,474	10,922	11,074	12,370	12,574
Data Source	BDAT	BDAT	BDAT	BDAT	BDAT	BDAT	BDAT	BDAT	BDAT	BDAT	BDAT	BDAT
Station(s)	Suisun Bay at Bulls Head near Martinez											
Date Range	1980 - 2007											
ND Replaced with RL	No											
Data Omitted	None											
No. of Data Points	26	26	26	27	26	26	27	27	27	27	27	27

Table Cl-62. Flow-Chloride Concentration Regression for San Joaquin River at Vernalis – Data Used in Assessment and Results

Baselines Flows (Average all Years)		
EC	NT	LLT
4237	4187	3987

$Cl^- = B_1(\text{annual flow}^{B_2})$	
B_1	3357.2
B_2	-0.473

Baselines Concentratoins (Average All Years)		
EC	NT	LLT
64.622	64.986	66.508

	Flow (cfs)	Concentration (mg/L)	% Change in Flow		Change in Concentration (mg/L)		% Change in Concentration	
Alternative	LLT	LLT	Alt - EC	Alt - LLT	Alt - EC	Alt - LLT	Alt - EC	Alt - LLT
NA	3987	67	-5.9%		1.9		2.9%	
1	3994	66	-5.7%	0.2%	1.8	-0.1	2.8%	-0.1%
2	3985	67	-5.9%	-0.1%	1.9	0.0	2.9%	0.0%
3	3993	66	-5.8%	0.2%	1.8	0.0	2.8%	-0.1%
4 H1	3988	66	-5.9%	0.0%	1.9	0.0	2.9%	0.0%
4 H2	3991	66	-5.8%	0.1%	1.9	0.0	2.9%	0.0%
4 H3	3987	67	-5.9%	0.0%	1.9	0.0	2.9%	0.0%
4 H4	3992	66	-5.8%	0.1%	1.8	0.0	2.9%	-0.1%
5	3990	66	-5.8%	0.1%	1.9	0.0	2.9%	0.0%
6	3989	66	-5.9%	0.1%	1.9	0.0	2.9%	0.0%
7	3987	67	-5.9%	0.0%	1.9	0.0	2.9%	0.0%
8	3989	66	-5.9%	0.1%	1.9	0.0	2.9%	0.0%
9	3992	66	-5.8%	0.1%	1.8	0.0	2.9%	-0.1%

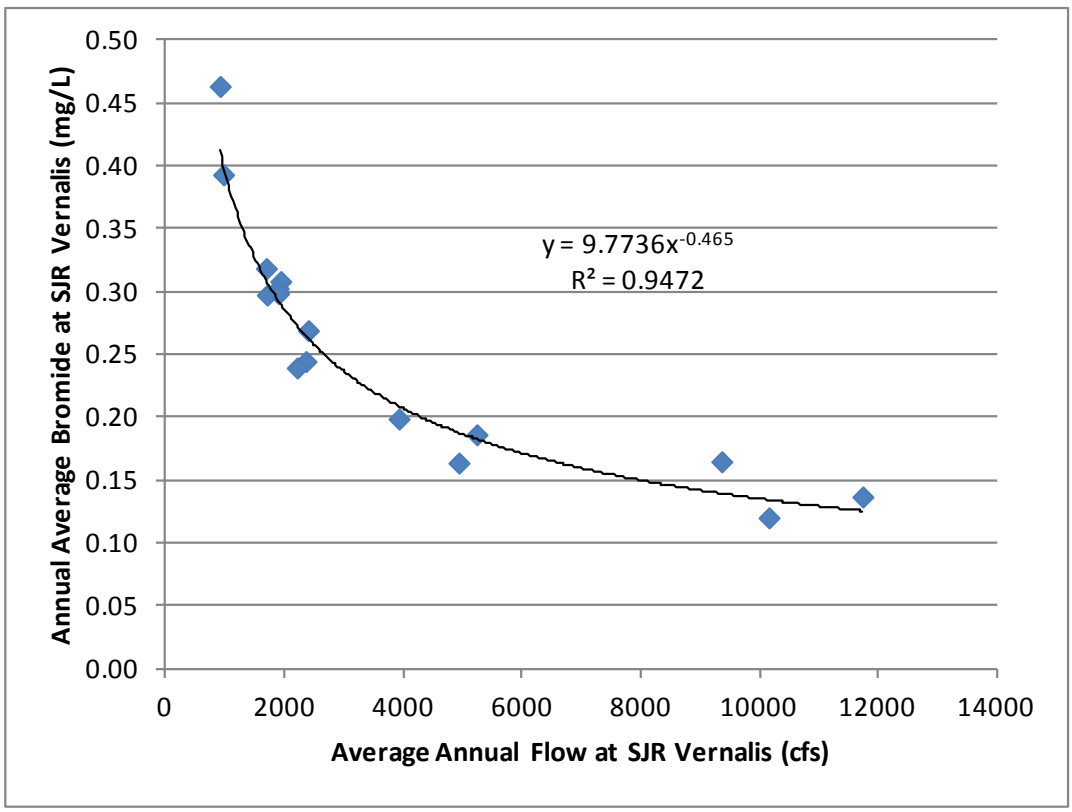


Table Cl-63. Number of days Bay-Delta Water Quality Control Plan 250 mg/L objective exceeded at Contra Costa Canal Pumping Plant #1.

Scenario	# of Days Standards are applicable	# of Days Violated	% of Days Violated
Ex. Cond.	5,842	369	6.32
No Act. LLT	5,842	268	4.59
Alt 1 LLT	5,842	194	3.32
Alt 2 LLT	5,842	190	3.25
Alt 3 LLT	5,842	225	3.85
Alt 4 LLT Scn H1	5,842	214	3.66
Alt 4 LLT Scn H2	5,842	172	2.94
Alt 4 LLT Scn H3	5,842	167	2.86
Alt 4 LLT Scn H4	5,842	151	2.58
Alt 5 LLT	5,842	171	2.93
Alt 6 LLT	5,842	0	0.00
Alt 7 LLT	5,842	53	0.91
Alt 8 LLT	5,842	40	0.68
Alt 9 LLT	5,842	18	0.31
No Act. ELT	5,842	475	8.13
Alt 4A ELT	5,842	229	3.92
Alt 2D ELT	5,842	120	2.05
Alt 5A ELT	5,842	311	5.32

Table Cl-64. Number of years Bay-Delta Water Quality Control Plan 150 mg/L objective exceeded Contra Costa Canal Pumping Plant #1.

Scenario	Total number of Years	# of Years when standards are violated	% of Years when standards are violated
Ex. Cond.	15	1	7
No Act. LLT	15	0	0
Alt 1 LLT	15	2	13
Alt 2 LLT	15	2	13
Alt 3 LLT	15	1	7
Alt 4 LLT Scn H1	15	1	7
Alt 4 LLT Scn H2	15	1	7
Alt 4 LLT Scn H3	15	1	7
Alt 4 LLT Scn H4	15	1	7
Alt 5 LLT	15	1	13
Alt 6 LLT	15	1	13
Alt 7 LLT	15	3	20
Alt 8 LLT	15	2	13
Alt 9 LLT	15	2	13
No. Act. ELT	15	0	0
Alt 4A ELT	15	0	0
Alt 2D ELT	15	0	0
Alt 5A ELT	15	0	0

Table Cl-65. Period average change in chloride concentrations (mg/L) for the No Action Alternative ELT relative to existing conditions. Calculation of chloride concentrations was based on a mass balance approach.

Chloride			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	l Avg. Chang
No Act. ELT	Location	Period [a]	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	0	1	0	0
			(2%)	(1%)	(-1%)	(1%)	(-1%)	(2%)	(1%)	(-1%)	(-1%)	(-2%)	(4%)	(1%)	(0%)
		DROUGHT	0	0	0	0	-1	0	0	0	0	0	2	0	0
			(1%)	(1%)	(-2%)	(1%)	(-2%)	(-2%)	(-2%)	(-2%)	(-2%)	(1%)	(13%)	(3%)	(0%)
	SJR at Buckley Cove	ALL	-2	-1	-6	-5	-3	-3	-4	-4	-9	-10	-11	-4	-5
			(-3%)	(-2%)	(-8%)	(-6%)	(-4%)	(-4%)	(-5%)	(-5%)	(-10%)	(-12%)	(-12%)	(-5%)	(-6%)
		DROUGHT	-3	-3	-9	-9	-6	-6	-9	-9	-16	-15	-20	-7	-9
			(-4%)	(-4%)	(-11%)	(-10%)	(-7%)	(-7%)	(-10%)	(-10%)	(-18%)	(-16%)	(-21%)	(-8%)	(-11%)
	Franks Tract	ALL	-39	-55	-33	10	1	2	1	1	2	-24	-17	-17	-14
			(-13%)	(-14%)	(-11%)	(6%)	(1%)	(5%)	(4%)	(2%)	(3%)	(-13%)	(-7%)	(-6%)	(-8%)
		DROUGHT	8	7	-4	25	6	4	1	4	10	-45	-47	15	-1
			(2%)	(2%)	(-1%)	(12%)	(10%)	(13%)	(6%)	(15%)	(20%)	(-14%)	(-14%)	(4%)	(-1%)
	Old R. at Rock Slough	ALL	-29	-40	-30	12	1	1	1	0	1	-18	-15	-11	-11
			(-12%)	(-13%)	(-12%)	(8%)	(2%)	(2%)	(2%)	(1%)	(1%)	(-12%)	(-8%)	(-4%)	(-7%)
		DROUGHT	6	15	-7	29	6	2	1	2	7	-34	-39	8	0
			(2%)	(4%)	(-2%)	(15%)	(8%)	(4%)	(3%)	(7%)	(16%)	(-14%)	(-14%)	(3%)	(-0%)
Western Delta	Sac. R. at Emmaton	ALL	-37	-83	10	6	4	8	6	2	19	25	73	-53	-2
			(-4%)	(-9%)	(2%)	(4%)	(6%)	(28%)	(16%)	(1%)	(8%)	(8%)	(15%)	(-6%)	(-0%)
		DROUGHT	-9	-42	68	31	20	14	8	32	39	45	165	171	45
			(-1%)	(-3%)	(10%)	(14%)	(18%)	(32%)	(17%)	(18%)	(13%)	(10%)	(28%)	(15%)	(9%)
	SJR at Antioch	ALL	-336	-378	-70	-1	15	26	18	4	44	-18	41	-272	-77
			(-15%)	(-15%)	(-5%)	(-0%)	(5%)	(23%)	(13%)	(1%)	(7%)	(-1%)	(3%)	(-13%)	(-7%)
		DROUGHT	-185	-338	11	46	67	43	23	48	63	-24	62	150	-3
			(-7%)	(-11%)	(1%)	(5%)	(16%)	(27%)	(12%)	(9%)	(7%)	(-1%)	(4%)	(6%)	(-0%)
	Sac. R. at Mallard Island	ALL	-468	-500	-88	-16	39	60	41	24	108	-18	90	-471	-100
			(-10%)	(-10%)	(-3%)	(-1%)	(4%)	(13%)	(6%)	(2%)	(6%)	(-1%)	(3%)	(-11%)	(-4%)
		DROUGHT	-428	-579	-35	20	133	67	44	32	46	-38	123	121	-41
			(-8%)	(-9%)	(-1%)	(1%)	(8%)	(10%)	(4%)	(2%)	(2%)	(-1%)	(3%)	(2%)	(-1%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-2	0	0	0	1	0	-1	0	-2	-3	-1	-1	-1
			(-14%)	(-2%)	(2%)	(2%)	(8%)	(-0%)	(-7%)	(-2%)	(-10%)	(-12%)	(-6%)	(-7%)	(-5%)
		DROUGHT	-4	0	1	0	0	1	1	1	-2	-1	0	-1	0
			(-18%)	(2%)	(5%)	(2%)	(3%)	(6%)	(3%)	(5%)	(-7%)	(-6%)	(-0%)	(-4%)	(-2%)
	Contra Costa PP #1	ALL	-38	-24	-28	-13	21	5	0	1	0	-5	-29	1	-9
			(-16%)	(-10%)	(-12%)	(-7%)	(27%)	(9%)	(1%)	(1%)	(1%)	(-4%)	(-14%)	(1%)	(-6%)
		DROUGHT	-33	25	5	23	25	8	0	2	6	-10	-61	-14	-2
			(-11%)	(8%)	(2%)	(11%)	(30%)	(17%)	(1%)	(6%)	(15%)	(-6%)	(-20%)	(-5%)	(-1%)
	Banks PP	ALL	-16	-21	-22	5	6	1	1	0	0	-12	-19	-5	-7
			(-10%)	(-10%)	(-12%)	(4%)	(8%)	(1%)	(1%)	(0%)	(1%)	(-12%)	(-12%)	(-3%)	(-6%)
		DROUGHT	-5	14	-13	22	14	0	-1	0	1	-17	-40	-5	-2
			(-3%)	(6%)	(-6%)	(13%)	(15%)	(-0%)	(-1%)	(0%)	(3%)	(-12%)	(-18%)	(-2%)	(-2%)
	Jones PP	ALL	-11	-15	-15	1	1	0	0	0	1	-12	-15	-8	-6
			(-7%)	(-8%)	(-10%)	(1%)	(1%)	(0%)	(0%)	(1%)	(2%)	(-11%)	(-10%)	(-5%)	(-5%)
		DROUGHT	5	18	-6	4	0	-1	0	1	3	-20	-33	-2	-3
			(3%)	(9%)	(-3%)	(3%)	(-0%)	(-2%)	(-0%)	(1%)	(5%)	(-13%)	(-16%)	(-1%)	(-2%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-66. Period average change in chloride concentrations (mg/L) for the No Action Alternative ELT relative to existing conditions. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Avg. Chang
No Act. ELT	Location	Period [a]	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0%)	(0%)	(-1%)	(0%)	(-0%)	(1%)	(0%)	(-0%)	(-0%)	(-0%)	(1%)	(1%)	(0%)
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0%)	(0%)	(-1%)	(0%)	(-1%)	(-1%)	(-1%)	(-1%)	(-1%)	(0%)	(3%)	(1%)	(-0%)
	SJR at Buckley Cove	ALL	-8	-11	-26	-25	-19	-15	-12	-11	-11	-14	-16	-11	-15
			(-8%)	(-10%)	(-18%)	(-15%)	(-13%)	(-11%)	(-12%)	(-13%)	(-11%)	(-13%)	(-16%)	(-11%)	(-13%)
		DROUGHT	-14	-18	-35	-39	-26	-21	-20	-18	-30	-26	-32	-16	-25
			(-11%)	(-13%)	(-21%)	(-18%)	(-12%)	(-10%)	(-12%)	(-14%)	(-23%)	(-23%)	(-27%)	(-12%)	(-16%)
	Franks Tract	ALL	-19	-28	-23	-2	-4	-1	0	-1	1	-17	-12	-9	-10
			(-10%)	(-12%)	(-11%)	(-1%)	(-6%)	(-3%)	(-1%)	(-3%)	(1%)	(-13%)	(-8%)	(-5%)	(-8%)
		DROUGHT	14	14	-1	14	5	2	0	2	9	-27	-31	13	1
			(6%)	(5%)	(-0%)	(8%)	(6%)	(5%)	(-1%)	(7%)	(21%)	(-13%)	(-14%)	(5%)	(1%)
	Old R. at Rock Slough	ALL	-13	-20	-20	0	-5	-3	-2	-3	0	-13	-10	-5	-8
			(-9%)	(-11%)	(-11%)	(0%)	(-7%)	(-5%)	(-5%)	(-6%)	(-1%)	(-13%)	(-8%)	(-4%)	(-7%)
		DROUGHT	10	17	-2	17	1	-2	-3	0	6	-20	-26	7	0
			(6%)	(8%)	(-1%)	(10%)	(1%)	(-4%)	(-5%)	(1%)	(15%)	(-13%)	(-13%)	(4%)	(0%)
Western Delta	Sac. R. at Emmaton	ALL	-20	-44	3	-2	-1	8	5	1	12	21	55	-24	1
			(-3%)	(-8%)	(1%)	(-1%)	(-2%)	(22%)	(15%)	(1%)	(6%)	(10%)	(16%)	(-4%)	(0%)
		DROUGHT	10	-7	48	24	13	16	8	29	42	39	128	131	40
			(1%)	(-1%)	(10%)	(13%)	(12%)	(37%)	(22%)	(24%)	(17%)	(12%)	(29%)	(17%)	(11%)
	SJR at Antioch	ALL	-226	-232	-84	-24	-3	26	19	5	32	-3	28	-166	-52
			(-15%)	(-16%)	(-8%)	(-5%)	(-1%)	(22%)	(17%)	(2%)	(7%)	(-0%)	(3%)	(-11%)	(-7%)
		DROUGHT	-94	-176	-22	27	43	53	26	54	77	8	54	131	15
			(-5%)	(-9%)	(-2%)	(4%)	(11%)	(32%)	(18%)	(14%)	(11%)	(1%)	(4%)	(7%)	(1%)
	Sac. R. at Mallard Island	ALL	-423	-394	-162	-41	7	76	60	35	103	20	68	-325	-81
			(-14%)	(-13%)	(-7%)	(-3%)	(1%)	(17%)	(12%)	(4%)	(7%)	(1%)	(3%)	(-11%)	(-5%)
		DROUGHT	-330	-396	-118	4	97	118	77	92	107	17	112	141	-7
			(-9%)	(-10%)	(-4%)	(0%)	(7%)	(18%)	(10%)	(6%)	(5%)	(1%)	(4%)	(4%)	(-0%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-1	0	0	0	1	0	-1	0	-1	-1	0	0	0
			(-4%)	(-2%)	(-0%)	(1%)	(4%)	(-0%)	(-4%)	(-1%)	(-3%)	(-4%)	(-1%)	(-1%)	(-1%)
		DROUGHT	-1	0	0	0	0	1	1	0	0	0	0	0	0
			(-6%)	(-1%)	(1%)	(1%)	(1%)	(3%)	(3%)	(2%)	(-3%)	(-2%)	(-0%)	(-0%)	(0%)
	Contra Costa PP #1	ALL	-23	-15	-20	-17	21	-10	-8	-2	-3	-4	-20	-1	-8
			(-14%)	(-9%)	(-11%)	(-9%)	(19%)	(-11%)	(-10%)	(-2%)	(-6%)	(-5%)	(-14%)	(-1%)	(-7%)
		DROUGHT	-17	19	4	12	24	8	-5	4	3	-6	-40	-8	0
			(-9%)	(10%)	(2%)	(6%)	(22%)	(10%)	(-6%)	(8%)	(7%)	(-5%)	(-18%)	(-5%)	(-0%)
	Banks PP	ALL	-9	-11	-16	-5	-2	-5	-5	-5	-2	-6	-12	-3	-7
			(-8%)	(-9%)	(-11%)	(-4%)	(-2%)	(-6%)	(-6%)	(-7%)	(-2%)	(-9%)	(-12%)	(-3%)	(-7%)
		DROUGHT	-1	12	-10	12	6	-11	-10	-6	-2	-9	-25	-2	-4
			(-1%)	(8%)	(-5%)	(7%)	(4%)	(-8%)	(-8%)	(-6%)	(-2%)	(-9%)	(-16%)	(-2%)	(-3%)
	Jones PP	ALL	-6	-9	-16	-12	-11	-6	-4	-4	4	-4	-9	-3	-7
			(-5%)	(-7%)	(-10%)	(-8%)	(-8%)	(-5%)	(-5%)	(-5%)	(6%)	(-4%)	(-9%)	(-3%)	(-6%)
		DROUGHT	5	13	-9	-10	-18	-10	-5	-4	1	-8	-19	-1	-5
			(3%)	(9%)	(-5%)	(-5%)	(-9%)	(-5%)	(-3%)	(-3%)	(2%)	(-8%)	(-13%)	(-1%)	(-4%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-67. No Action Alternative ELT use of assimilative capacity available under existing conditions relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Annual Avg. Change
No Act. ELT	Location	Period [a]	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	-1	0	0
	SJR at Buckley Cove	ALL	1	1	4	3	2	2	3	3	5	6	7	3	3
		DROUGHT	2	2	6	5	3	4	5	5	10	9	13	4	6
	Franks Tract	ALL	-	-	-	-11	0	-1	-1	-1	-1	42	81	-	18
		DROUGHT	-	-	-	-54	-3	-2	-1	-2	-5	-	-	-	3
	Old R. at Rock Slough	ALL	-	-	-	-12	-1	-1	-1	0	0	19	26	-	11
		DROUGHT	-	-	-	-48	-3	-1	0	-1	-3	-	-	-	1
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-6	-2	-4	-3	-1	-67	-	-	-	-
		DROUGHT	-	-	-	-100	-14	-7	-4	-45	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-19	-17	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-49	-44	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	1	0	0	0	-1	0	1	0	1	1	1	1	0
		DROUGHT	2	0	0	0	0	0	0	0	1	1	0	0	0
	Contra Costa PP #1	ALL	-	-	-	19	-13	-2	0	0	0	4	63	-4	9
		DROUGHT	-	-	-	-75	-15	-4	0	-1	-3	15	-	-	3
	Banks PP	ALL	19	45	37	-5	-4	-1	0	0	0	8	19	7	5
		DROUGHT	10	-58	52	-27	-9	0	0	0	-1	16	-	10	2
	Jones PP	ALL	11	23	16	0	0	0	0	0	-1	9	14	8	5
		DROUGHT	-7	-37	8	-3	0	1	0	-1	-1	21	74	3	2

Table Cl-68. No Action Alternative ELT use of assimilative capacity available under existing conditions relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Annual Avg. Change
No Act. ELT	Location	Period [a]	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0
	SJR at Buckley Cove	ALL	5	8	23	28	18	14	8	6	7	10	11	8	11
		DROUGHT	11	16	43	-	78	60	24	14	25	19	25	14	26
	Franks Tract	ALL	31	-	56	1	2	0	0	1	0	14	12	15	7
		DROUGHT	-70	-	-	-19	-3	-1	0	-1	-4	71	-	-77	-1
	Old R. at Rock Slough	ALL	14	32	29	0	3	1	1	1	0	9	9	6	6
		DROUGHT	-17	-49	11	-23	-1	1	2	0	-3	23	44	-12	0
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	1	1	-4	-2	0	-18	-83	-	-	-
		DROUGHT	-	-	-	-43	-9	-8	-4	-22	-100	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-20	-14	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-60	-24	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0
	Contra Costa PP #1	ALL	25	16	29	26	-15	6	5	1	1	3	18	1	7
		DROUGHT	31	-31	-21	-29	-17	-5	3	-2	-2	5	-	11	0
	Banks PP	ALL	7	10	16	4	1	3	3	3	1	4	8	2	5
		DROUGHT	1	-12	14	-15	-5	9	8	4	1	6	26	2	3
	Jones PP	ALL	4	7	16	12	9	5	3	2	-2	2	6	2	5
		DROUGHT	-4	-13	14	17	29	18	4	3	-1	6	19	1	5

Table Cl-69. Period average change in chloride concentrations (mg/L) for Alternative 4A ELT relative to existing conditions and the No Action Alternative ELT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 4A ELT	Location	Period [a]	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	1	1	1	1	0	0	2	1	1	1	1	1	1	1	0	0	1	1	2	3	2	1	1	1	1	1
			(12%)	(10%)	(9%)	(8%)	(3%)	(4%)	(7%)	(7%)	(5%)	(6%)	(9%)	(7%)	(6%)	(6%)	(2%)	(3%)	(4%)	(4%)	(12%)	(15%)	(11%)	(7%)	(5%)	(4%)	(7%)	(7%)
		DROUGHT	1	1	0	0	0	0	1	1	0	1	1	1	0	0	0	0	0	1	4	4	1	0	0	0	1	1
			(7%)	(6%)	(4%)	(3%)	(-1%)	(1%)	(4%)	(4%)	(2%)	(4%)	(3%)	(5%)	(-0%)	(2%)	(0%)	(2%)	(1%)	(3%)	(23%)	(21%)	(10%)	(-3%)	(3%)	(0%)	(4%)	(4%)
	SJR at Buckley Cove	ALL	-2	0	-2	-1	-5	1	-2	3	-2	1	-2	2	-3	1	-3	1	-7	1	-10	1	-10	1	-5	0	-4	1
			(-3%)	(0%)	(-2%)	(-1%)	(-7%)	(1%)	(-3%)	(3%)	(-3%)	(2%)	(-2%)	(2%)	(-4%)	(2%)	(-4%)	(2%)	(-8%)	(2%)	(-11%)	(1%)	(-11%)	(1%)	(-5%)	(-0%)	(-5%)	(1%)
		DROUGHT	-3	0	-3	0	-9	0	-6	2	-4	2	-3	3	-6	3	-6	3	-13	3	-14	0	-19	2	-7	0	-8	1
			(-3%)	(0%)	(-4%)	(-1%)	(-11%)	(0%)	(-7%)	(3%)	(-5%)	(2%)	(-4%)	(3%)	(-7%)	(4%)	(-7%)	(3%)	(-14%)	(5%)	(-16%)	(0%)	(-19%)	(2%)	(-8%)	(-0%)	(-9%)	(2%)
	Franks Tract	ALL	-103	-64	-212	-158	-93	-60	-31	-41	-7	-8	7	5	7	5	4	3	5	4	-75	-51	-69	-53	-56	-39	-52	-38
			(-35%)	(-25%)	(-56%)	(-48%)	(-31%)	(-23%)	(-20%)	(-25%)	(-12%)	(-14%)	(18%)	(12%)	(18%)	(13%)	(10%)	(7%)	(10%)	(7%)	(-39%)	(-30%)	(-30%)	(-25%)	(-19%)	(-14%)	(-30%)	(-24%)
		DROUGHT	-71	-79	-168	-175	-52	-48	-17	-42	-10	-16	2	-2	3	2	6	2	7	-3	-134	-89	-84	-37	34	19	-40	-39
			(-20%)	(-22%)	(-38%)	(-39%)	(-14%)	(-13%)	(-8%)	(-18%)	(-16%)	(-23%)	(7%)	(-5%)	(15%)	(8%)	(20%)	(4%)	(14%)	(-5%)	(-43%)	(-33%)	(-26%)	(-14%)	(10%)	(5%)	(-19%)	(-18%)
	Old R. at Rock Slough	ALL	-64	-35	-168	-128	-84	-54	-29	-41	-5	-6	7	6	3	2	1	1	8	7	-57	-39	-62	-47	-42	-32	-41	-30
			(-27%)	(-17%)	(-54%)	(-47%)	(-33%)	(-24%)	(-19%)	(-25%)	(-7%)	(-9%)	(15%)	(12%)	(5%)	(3%)	(2%)	(1%)	(15%)	(13%)	(-38%)	(-29%)	(-33%)	(-27%)	(-17%)	(-14%)	(-27%)	(-22%)
		DROUGHT	-34	-40	-136	-151	-49	-42	-13	-42	-10	-16	0	-1	2	1	6	3	7	0	-106	-72	-82	-43	20	12	-33	-33
			(-12%)	(-14%)	(-39%)	(-41%)	(-16%)	(-14%)	(-7%)	(-19%)	(-14%)	(-21%)	(1%)	(-3%)	(6%)	(3%)	(17%)	(10%)	(17%)	(0%)	(-45%)	(-35%)	(-30%)	(-18%)	(7%)	(4%)	(-18%)	(-18%)
Western Delta	Sac. R. at Emmaton	ALL	-218	-181	-213	-130	4	-6	-36	-42	-6	-10	9	1	9	2	1	-1	4	-15	153	127	189	116	50	103	-5	-3
			(-26%)	(-22%)	(-24%)	(-16%)	(1%)	(-1%)	(-24%)	(-26%)	(-9%)	(-14%)	(31%)	(3%)	(22%)	(5%)	(1%)	(-1%)	(2%)	(-6%)	(47%)	(36%)	(40%)	(21%)	(6%)	(13%)	(-1%)	(-1%)
		DROUGHT	-236	-227	-208	-166	63	-5	-51	-83	7	-13	15	1	13	5	27	-5	31	-8	275	230	252	87	262	90	37	-8
			(-21%)	(-20%)	(-17%)	(-14%)	(9%)	(-1%)	(-23%)	(-32%)	(6%)	(-10%)	(34%)	(2%)	(26%)	(8%)	(15%)	(-3%)	(10%)	(-2%)	(59%)	(45%)	(42%)	(11%)	(23%)	(7%)	(7%)	(-1%)
	SJR at Antioch	ALL	-813	-478	-789	-410	-131	-61	-147	-146	-39	-53	26	0	23	5	-3	-7	-12	-57	33	51	182	140	-239	33	-159	-82
			(-37%)	(-25%)	(-32%)	(-20%)	(-9%)	(-4%)	(-24%)	(-24%)	(-15%)	(-19%)	(23%)	(0%)	(16%)	(3%)	(-1%)	(-2%)	(-2%)	(-9%)	(3%)	(4%)	(12%)	(9%)	(-11%)	(2%)	(-15%)	(-8%)
		DROUGHT	-748	-563	-682	-344	-34	-45	-170	-215	-8	-74	43	-1	37	14	27	-21	17	-46	80	103	308	247	267	117	-72	-69
			(-28%)	(-23%)	(-22%)	(-13%)	(-2%)	(-2%)	(-20%)	(-24%)	(-2%)	(-16%)	(26%)	(-0%)	(19%)	(6%)	(5%)	(-3%)	(2%)	(-5%)	(5%)	(6%)	(18%)	(14%)	(10%)	(4%)	(-5%)	(-5%)
	Sac. R. at Mallard Island	ALL	-826	-358	-763	-264	-139	-51	-215	-199	-22	-60	77	16	52	12	8	-16	-5	-113	162	180	321	230	-363	108	-143	-43
			(-18%)	(-9%)	(-16%)	(-6%)	(-4%)	(-2%)	(-13%)	(-12%)	(-2%)	(-6%)	(17%)	(3%)	(7%)	(1%)	(1%)	(-1%)	(-0%)	(-6%)	(5%)	(6%)	(9%)	(7%)	(-9%)	(3%)	(-6%)	(-2%)
		DROUGHT	-833	-405	-807	-228	-79	-44	-310	-330	36	-96	104	36	79	35	1	-32	-1	-47	191	229	387	264	223	102	-84	-43
			(-16%)	(-8%)	(-13%)	(-4%)	(-2%)	(-1%)	(-13%)	(-13%)	(2%)	(-6%)	(15%)	(5%)	(7%)	(3%)	(0%)	(-1%)	(-0%)	(-2%)	(5%)	(6%)	(10%)	(7%)	(5%)	(2%)	(-3%)	(-1%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-2	1	1	1	1	0	0	0	1	0	0	0	-1	0	0	0	-2	0	-3	0	0	1	-1	1	0	0
			(-9%)	(6%)	(4%)	(6%)	(4%)	(3%)	(3%)	(1%)	(8%)	(0%)	(2%)	(2%)	(-5%)	(2%)	(-1%)	(1%)	(-10%)	(1%)	(-12%)	(0%)	(-2%)	(4%)	(-4%)	(4%)	(-2%)	(2%)
		DROUGHT	-2	1	1	1	2	1	0	0	1	0	1	0	1	0	1	0	-2	0	-1	0	1	1	0	1	0	1
			(-11%)	(8%)	(8%)	(6%)	(13%)	(7%)	(2%)	(1%)	(4%)	(1%)	(8%)	(2%)	(6%)	(3%)	(6%)	(1%)	(-8%)	(-0%)	(-6%)	(-0%)	(4%)	(5%)	(-1%)	(3%)	(1%)	(3%)
	Contra Costa PP #1	ALL	-50	-13	-104	-80	-104	-76	-39	-26	1	-21	8	3	7	7	1	0	8	8	-35	-30	-78	-49	-45	-46	-36	-27
			(-21%)	(-6%)	(-42%)	(-36%)	(-44%)	(-37%)	(-22%)	(-15%)	(1%)	(-20%)	(15%)	(5%)	(14%)	(13%)	(1%)	(0%)	(15%)	(14%)	(-29%)	(-25%)	(-38%)	(-28%)	(-21%)	(-21%)	(-25%)	(-20%)
		DROUGHT	-19	15	-92	-117	-97	-102	-8	-31	-4	-29	-1	-9	2	1	3	1	8	2	-69	-59	-127	-66	-13	1	-35	-33
			(-6%)	(6%)	(-31%)	(-36%)	(-32%)	(-33%)	(-4%)	(-13%)	(-5%)	(-27%)	(-3%)	(-17%)	(4%)	(3%)	(9%)	(2%)	(18%)	(3%)	(-38%)	(-34%)	(-40%)	(-26%)	(-5%)	(0%)	(-20%)	(-19%)
	Banks PP	ALL	-69	-54	-113	-91	-89	-67	-60	-65	-31	-37	-37	-38	-25	-26	-22	-22	-15	-15	-63	-51	-76	-58	-70	-64	-56	-49
			(-42%)	(-36%)	(-56%)	(-50%)	(-47%)	(-40%)	(-43%)	(-45%)	(-38%)	(-42%)	(-55%)	(-56%)	(-35%)	(-36%)	(-30%)	(-30%)	(-22%)	(-23%)	(-60%)	(-55%)	(-51%)	(-44%)	(-41%)	(-40%)	(-45%)	(-42%)
		DROUGHT	-45	-40	-94	-108	-64	-51	-33	-55	-18	-31	-32	-32	-13	-12	-2	-2	0	-1	-88	-71	-115	-75	-35	-31	-45	-42
			(-23%)	(-21%)	(-42%)	(-45%)	(-28%)	(-24%)	(-19%)	(-29%)	(-19%)	(-30%)	(-48%)	(-48%)	(-20%)	(-19%)	(-4%)	(-4%)	(1%)	(-2%)	(-60%)	(-55%)	(-51%)	(-40%)	(-18%)	(-16%)	(-31%)	(-30%)
	Jones PP	ALL	-63	-52	-105	-90	-56	-41	-45	-45	-38	-38	-45	-45	-31	-31	-33	-33	-33	-34	-49	-37	-59	-45	-47	-39	-50	-44
			(-42%)	(-37%)	(-57%)	(-53%)	(-36%)	(-29%)	(-39%)	(-39%)	(-47%)	(-47%)	(-59%)	(-59%)	(-38%)	(-38%)	(-40%)	(-41%)	(-48%)	(-49%)	(-44%)	(-37%)	(-42%)	(-35%)	(-30%)	(-27%)	(-43%)	(-40%)
		DROUGHT	-52	-57	-83	-101	-44	-38	-46	-50	-20	-20	-35	-33	-18	-18	-22	-23	-16	-18	-82	-62	-75	-42	-14	-12	-42	-40
			(-29%)	(-31%)	(-41%)	(-46%)	(-25%)	(-22%)	(-34%)	(-36%)	(-23%)	(-23%)	(-44%)	(-43%)	(-23%)	(-23%)	(-29%)	(-30%)	(-30%)	(-34%)	(-54%)	(-47%)	(-37%)	(-24%)	(-8%)	(-7%)	(-32%)	(-30%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-70. Period average change in chloride concentrations (mg/L) for Alternative 4A ELT relative to existing conditions and the No Action Alternative ELT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 4A ELT	Location	Period [a]	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3%)	(3%)	(3%)	(2%)	(1%)	(1%)	(5%)	(4%)	(4%)	(4%)	(5%)	(4%)	(3%)	(3%)	(0%)	(1%)	(0%)	(1%)	(3%)	(3%)	(2%)	(1%)	(1%)	(1%)	(3%)	(2%)
		DROUGHT	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0
			(2%)	(2%)	(1%)	(1%)	(-0%)	(1%)	(4%)	(3%)	(1%)	(3%)	(1%)	(3%)	(-0%)	(1%)	(0%)	(1%)	(0%)	(1%)	(5%)	(4%)	(2%)	(-1%)	(1%)	(0%)	(1%)	(2%)
	SJR at Buckley Cove	ALL	-8	0	-12	-1	-22	4	-21	3	-13	6	-10	5	-18	-6	-9	1	-6	4	-7	7	-11	6	-12	-1	-12	2
			(-8%)	(0%)	(-11%)	(-1%)	(-15%)	(4%)	(-13%)	(3%)	(-9%)	(5%)	(-7%)	(4%)	(-18%)	(-7%)	(-12%)	(2%)	(-6%)	(5%)	(-7%)	(7%)	(-10%)	(6%)	(-11%)	(-1%)	(-11%)	(2%)
		DROUGHT	-14	0	-18	-1	-33	2	-32	6	-14	12	-12	9	-32	-12	-14	3	-22	7	-11	15	-15	18	-17	0	-20	5
			(-11%)	(-0%)	(-13%)	(-1%)	(-20%)	(2%)	(-15%)	(4%)	(-6%)	(6%)	(-6%)	(5%)	(-19%)	(-8%)	(-12%)	(3%)	(-17%)	(7%)	(-9%)	(17%)	(-12%)	(20%)	(-12%)	(-0%)	(-13%)	(4%)
	Franks Tract	ALL	-60	-41	-125	-97	-67	-44	-32	-30	-10	-6	2	3	5	5	2	3	3	2	-49	-32	-44	-32	-29	-20	-34	-24
			(-32%)	(-24%)	(-54%)	(-48%)	(-32%)	(-24%)	(-24%)	(-23%)	(-16%)	(-10%)	(5%)	(8%)	(15%)	(16%)	(5%)	(9%)	(6%)	(5%)	(-38%)	(-28%)	(-29%)	(-23%)	(-15%)	(-11%)	(-28%)	(-22%)
		DROUGHT	-38	-52	-98	-112	-41	-40	-22	-35	-11	-15	2	1	5	6	7	5	9	0	-88	-61	-55	-24	31	18	-25	-26
			(-17%)	(-21%)	(-36%)	(-39%)	(-15%)	(-15%)	(-12%)	(-18%)	(-15%)	(-20%)	(6%)	(1%)	(18%)	(19%)	(22%)	(14%)	(22%)	(1%)	(-42%)	(-33%)	(-24%)	(-12%)	(13%)	(7%)	(-16%)	(-17%)
	Old R. at Rock Slough	ALL	-35	-22	-96	-76	-60	-40	-28	-29	-7	-2	4	7	2	4	-1	2	5	5	-36	-23	-39	-29	-22	-17	-26	-18
			(-23%)	(-16%)	(-51%)	(-45%)	(-33%)	(-25%)	(-21%)	(-21%)	(-10%)	(-4%)	(9%)	(15%)	(4%)	(9%)	(-2%)	(4%)	(12%)	(13%)	(-35%)	(-26%)	(-31%)	(-25%)	(-14%)	(-11%)	(-24%)	(-18%)
		DROUGHT	-15	-25	-75	-92	-37	-34	-16	-33	-12	-13	2	5	5	8	7	7	9	4	-69	-49	-54	-29	20	12	-19	-20
			(-8%)	(-13%)	(-35%)	(-40%)	(-16%)	(-15%)	(-9%)	(-18%)	(-13%)	(-14%)	(4%)	(8%)	(9%)	(16%)	(18%)	(17%)	(24%)	(8%)	(-43%)	(-35%)	(-28%)	(-17%)	(10%)	(6%)	(-14%)	(-15%)
Western Delta	Sac. R. at Emmaton	ALL	-145	-126	-144	-100	-9	-12	-36	-34	-12	-11	8	0	7	2	1	0	2	-10	110	88	140	85	58	82	-2	-3
			(-25%)	(-23%)	(-26%)	(-20%)	(-3%)	(-4%)	(-28%)	(-27%)	(-17%)	(-15%)	(21%)	(-1%)	(20%)	(4%)	(1%)	(0%)	(1%)	(-5%)	(49%)	(36%)	(42%)	(22%)	(10%)	(15%)	(-1%)	(-1%)
		DROUGHT	-146	-156	-134	-128	33	-14	-50	-74	-5	-18	16	0	13	5	27	-1	36	-6	211	171	204	76	215	84	35	-5
			(-19%)	(-20%)	(-17%)	(-17%)	(7%)	(-3%)	(-26%)	(-34%)	(-5%)	(-15%)	(36%)	(-1%)	(35%)	(11%)	(23%)	(-1%)	(15%)	(-2%)	(64%)	(46%)	(46%)	(13%)	(27%)	(9%)	(10%)	(-1%)
	SJR at Antioch	ALL	-547	-321	-524	-292	-142	-58	-140	-116	-63	-60	19	-7	22	3	1	-3	-7	-40	36	39	151	123	-111	55	-109	-56
			(-37%)	(-26%)	(-35%)	(-23%)	(-14%)	(-6%)	(-28%)	(-25%)	(-25%)	(-24%)	(16%)	(-5%)	(19%)	(2%)	(1%)	(-1%)	(-2%)	(-8%)	(4%)	(5%)	(14%)	(11%)	(-8%)	(4%)	(-14%)	(-8%)
		DROUGHT	-485	-390	-448	-272	-78	-56	-164	-191	-52	-94	47	-6	40	14	44	-10	37	-39	89	82	273	219	259	129	-36	-51
			(-26%)	(-22%)	(-23%)	(-16%)	(-5%)	(-4%)	(-23%)	(-26%)	(-13%)	(-21%)	(29%)	(-3%)	(28%)	(8%)	(12%)	(-2%)	(5%)	(-5%)	(7%)	(7%)	(21%)	(16%)	(14%)	(7%)	(-4%)	(-5%)
	Sac. R. at Mallard Island	ALL	-697	-273	-670	-276	-237	-75	-238	-196	-97	-104	78	2	73	14	28	-6	3	-100	136	116	294	226	-194	131	-127	-45
			(-23%)	(-10%)	(-23%)	(-11%)	(-11%)	(-4%)	(-19%)	(-16%)	(-12%)	(-13%)	(17%)	(0%)	(14%)	(2%)	(3%)	(-1%)	(0%)	(-6%)	(7%)	(6%)	(12%)	(9%)	(-7%)	(5%)	(-7%)	(-3%)
		DROUGHT	-640	-310	-666	-270	-194	-76	-343	-347	-86	-182	136	18	123	46	77	-15	46	-61	207	190	396	284	297	156	-54	-47
			(-17%)	(-9%)	(-18%)	(-8%)	(-6%)	(-3%)	(-18%)	(-18%)	(-6%)	(-12%)	(21%)	(2%)	(17%)	(6%)	(5%)	(-1%)	(2%)	(-3%)	(8%)	(7%)	(14%)	(9%)	(8%)	(4%)	(-2%)	(-2%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-1	0	0	0	0	0	0	0	1	0	0	0	-1	0	0	0	-1	0	-1	0	0	0	0	0	0	0
			(-3%)	(1%)	(-1%)	(1%)	(1%)	(1%)	(1%)	(1%)	(4%)	(-0%)	(1%)	(1%)	(-3%)	(1%)	(-0%)	(1%)	(-3%)	(0%)	(-3%)	(0%)	(-0%)	(1%)	(-1%)	(1%)	(-1%)	(1%)
		DROUGHT	-1	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	-1	0	0	0	0	0	0	0	0	0
			(-4%)	(1%)	(-1%)	(0%)	(3%)	(2%)	(1%)	(-0%)	(2%)	(0%)	(4%)	(1%)	(5%)	(2%)	(3%)	(1%)	(-3%)	(-0%)	(-2%)	(0%)	(1%)	(1%)	(0%)	(1%)	(1%)	(1%)
	Contra Costa PP #1	ALL	-28	-5	-59	-45	-78	-59	-43	-26	4	-17	-9	1	0	8	-6	-4	4	6	-21	-17	-52	-33	-27	-26	-26	-18
			(-17%)	(-4%)	(-37%)	(-31%)	(-43%)	(-36%)	(-24%)	(-16%)	(4%)	(-13%)	(-10%)	(2%)	(0%)	(12%)	(-9%)	(-7%)	(8%)	(14%)	(-24%)	(-20%)	(-37%)	(-27%)	(-19%)	(-19%)	(-22%)	(-16%)
		DROUGHT	-5	12	-49	-68	-71	-76	-15	-27	-4	-28	-2	-10	5	9	5	0	8	5	-44	-38	-86	-46	-6	2	-22	-22
			(-3%)	(7%)	(-26%)	(-33%)	(-31%)	(-32%)	(-7%)	(-12%)	(-4%)	(-21%)	(-3%)	(-12%)	(6%)	(13%)	(8%)	(0%)	(17%)	(10%)	(-35%)	(-31%)	(-39%)	(-25%)	(-4%)	(1%)	(-16%)	(-15%)
	Banks PP	ALL	-42	-33	-63	-51	-59	-42	-56	-52	-31	-29	-34	-30	-15	-10	-3	2	-9	-7	-33	-27	-47	-35	-38	-35	-36	-29
			(-38%)	(-32%)	(-48%)	(-43%)	(-41%)	(-33%)	(-41%)	(-39%)	(-30%)	(-29%)	(-39%)	(-36%)	(-18%)	(-13%)	(-4%)	(3%)	(-14%)	(-11%)	(-45%)	(-40%)	(-46%)	(-39%)	(-35%)	(-33%)	(-35%)	(-31%)
		DROUGHT	-27	-26	-52	-64	-50	-40	-37	-49	-31	-36	-70	-59	-26	-16	0	6	6	7	-46	-37	-74	-50	-21	-18	-36	-32
			(-20%)	(-19%)	(-35%)	(-39%)	(-28%)	(-24%)	(-22%)	(-27%)	(-22%)	(-25%)	(-52%)	(-48%)	(-20%)	(-14%)	(0%)	(6%)	(8%)	(11%)	(-45%)	(-40%)	(-48%)	(-38%)	(-15%)	(-14%)	(-27%)	(-25%)
	Jones PP	ALL	-38	-32	-59	-51	-41	-26	-60	-48	-57	-46	-62	-56	-21	-17	-21	-17	-26	-30	-28	-24	-34	-25	-24	-21	-39	-33
			(-35%)	(-31%)	(-46%)	(-42%)	(-27%)	(-19%)	(-40%)	(-35%)	(-44%)	(-39%)	(-52%)	(-50%)	(-24%)	(-20%)	(-28%)	(-24%)	(-41%)	(-44%)	(-34%)	(-31%)	(-33%)	(-27%)	(-23%)	(-20%)	(-36%)	(-32%)
		DROUGHT	-32	-36	-45	-58	-41	-32	-81	-72	-68	-51	-101	-91	-21	-17	-30	-26	-22	-23	-50	-42	-45	-26	-7	-5	-45	-40
			(-24%)	(-26%)	(-30%)	(-36%)	(-23%)	(-19%)	(-42%)	(-39%)	(-36%)	(-29%)	(-52%)	(-50%)	(-16%)	(-13%)	(-26%)	(-24%)	(-35%)	(-36%)	(-47%)	(-42%)	(-30%)	(-20%)	(-5%)	(-4%)	(-31%)	(-29%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-71. Alternative 4A ELT use of assimilative capacity available under existing conditions and No Action ELT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 4A ELT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-1	0	0	0	0	-1	-1	0	0	-1	-1	0	0	0	0	0	0	-1	-1	-1	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-2	-2	-1	0	0	0	0	0
	SJR at Buckley Cove	ALL	1	0	1	0	3	-1	1	-1	1	-1	1	-1	2	-1	2	-1	4	-1	6	0	6	0	3	0	3	-1
		DROUGHT	2	0	2	0	5	0	4	-1	2	-1	2	-1	4	-2	4	-2	8	-2	9	0	12	-1	4	0	5	-1
	Franks Tract	ALL	-	-	-	-	-	-	33	49	4	4	-3	-2	-3	-2	-2	-2	-3	-2	-	62	-	-	-	-	68	42
		DROUGHT	-	-	-	-	-	-	37	-	5	9	-1	1	-2	-1	-3	-1	-4	2	-	-	-	-	-	-	-	-
	Old R. at Rock Slough	ALL	-	91	-	-	-	-	30	47	3	3	-4	-3	-1	-1	-1	0	-4	-4	58	33	-	64	-	-	42	28
		DROUGHT	-	-	-	-	-	-	22	-	6	9	0	1	-1	-1	-3	-2	-4	0	-	-	-	-	-	-	47	46
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	37	45	3	6	-4	0	-4	-1	-1	1	-13	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-5	11	-7	0	-6	-2	-37	14	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-19	0	-21	-5	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-49	1	-71	-48	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	1	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
		DROUGHT	1	-1	-1	0	-1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
	Contra Costa PP #1	ALL	-	28	-	-	-	-	55	31	0	14	-4	-2	-4	-4	0	0	-4	-4	28	23	-	66	-	-	35	24
		DROUGHT	-	-	-	-	-	-	25	-	3	20	1	5	-1	-1	-2	0	-4	-1	-	76	-	-	-	-7	47	43
	Banks PP	ALL	82	53	-	-	-	80	54	62	18	23	21	21	14	14	12	12	8	8	43	32	76	49	85	74	44	37
		DROUGHT	86	69	-	-	-	-	40	93	11	22	17	17	7	7	1	1	0	0	84	58	-	-	71	56	42	39
	Jones PP	ALL	65	48	-	-	58	37	33	34	22	23	26	26	18	18	19	20	18	19	35	24	55	37	49	38	38	32
		DROUGHT	73	87	-	-	59	47	39	44	12	12	20	19	11	11	13	13	8	9	85	53	-	53	19	16	36	33

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-72. Alternative 4A ELT use of assimilative capacity available under existing conditions and No Action ELT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 4A ELT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SJR at Buckley Cove	ALL	5	0	8	0	19	-3	24	-3	12	-5	9	-4	12	4	5	-1	4	-3	5	-4	7	-4	8	0	9	-2
		DROUGHT	11	0	16	1	40	-2	85	-8	42	-21	35	-16	38	11	11	-2	19	-5	8	-9	11	-11	14	0	21	-4
	Franks Tract	ALL	97	51	-	-	-	68	28	26	5	3	-1	-1	-2	-2	-1	-1	-1	-1	40	23	45	29	49	29	26	17
		DROUGHT	-	-	-	-	-	-	31	62	6	9	-1	0	-2	-3	-3	-2	-4	0	-	93	-	43	-100	-100	25	27
	Old R. at Rock Slough	ALL	37	20	-	92	86	44	24	25	4	1	-2	-3	-1	-2	1	-1	-2	-2	24	14	32	22	23	16	18	12
		DROUGHT	24	48	-	-	-	-	20	55	7	8	-1	-2	-3	-4	-4	-3	-4	-2	79	45	92	34	-32	-23	17	18
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	29	27	7	6	-3	0	-3	-1	-1	0	-3	18	-100	-100	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	89	-	4	14	-8	0	-6	-2	-21	1	-100	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-15	7	-16	-2	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-54	17	-37	-17	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Contra Costa PP #1	ALL	30	4	65	42	-	66	65	31	-3	14	6	-1	0	-5	3	2	-2	-3	13	10	48	25	25	24	20	13
		DROUGHT	9	-17	81	-	-	-	37	93	3	24	1	6	-3	-5	-2	0	-4	-2	36	30	-	67	8	-2	21	21
	Banks PP	ALL	31	23	53	39	56	35	50	44	21	19	21	18	9	6	2	-1	5	4	19	15	31	22	27	24	24	19
		DROUGHT	24	22	53	74	72	51	48	74	27	34	60	46	22	13	0	-4	-3	-4	31	23	79	42	18	16	31	27
	Jones PP	ALL	27	22	49	39	41	22	61	44	46	35	48	41	13	10	12	10	14	16	16	14	23	16	17	15	28	22
		DROUGHT	27	32	45	66	61	41	-	-	-	65	-	-	18	14	22	18	12	12	35	28	44	21	6	5	43	36

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-73. Period average change in chloride concentrations (mg/L) for Alternative 2D ELT relative to existing conditions and the No Action Alternative ELT.
Calculation of chloride concentrations was based on a mass balance approach.

Chloride / Alt 2D ELT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	2	2	2	1	0	1	2	2	1	2	2	1	1	1	0	0	1	1	1	2	2	1	1	1	1	1
			(16%)	(14%)	(12%)	(11%)	(4%)	(5%)	(11%)	(10%)	(7%)	(8%)	(9%)	(8%)	(8%)	(7%)	(2%)	(3%)	(6%)	(7%)	(8%)	(11%)	(15%)	(10%)	(10%)	(9%)	(9%)	(8%)
		DROUGHT	1	1	1	0	0	0	1	1	0	1	1	1	0	0	0	0	1	1	4	4	2	0	1	0	1	1
			(8%)	(8%)	(5%)	(4%)	(0%)	(2%)	(6%)	(5%)	(2%)	(4%)	(3%)	(5%)	(0%)	(2%)	(0%)	(2%)	(3%)	(5%)	(23%)	(22%)	(16%)	(3%)	(6%)	(2%)	(6%)	(5%)
	SJR at Buckley Cove	ALL	-2	0	-2	-1	-5	1	-2	3	-2	1	-2	2	-3	1	-3	1	-7	2	-10	0	-10	1	-5	0	-4	1
			(-3%)	(0%)	(-2%)	(-1%)	(-7%)	(1%)	(-3%)	(3%)	(-3%)	(2%)	(-2%)	(2%)	(-4%)	(2%)	(-4%)	(2%)	(-8%)	(2%)	(-12%)	(-0%)	(-11%)	(1%)	(-5%)	(-0%)	(-5%)	(1%)
		DROUGHT	-3	0	-3	0	-9	0	-6	2	-4	2	-3	3	-6	3	-6	3	-13	3	-15	0	-18	2	-7	0	-8	1
			(-3%)	(0%)	(-4%)	(-1%)	(-11%)	(1%)	(-7%)	(3%)	(-5%)	(2%)	(-4%)	(3%)	(-7%)	(4%)	(-7%)	(3%)	(-14%)	(5%)	(-17%)	(-0%)	(-19%)	(3%)	(-8%)	(-0%)	(-9%)	(2%)
	Franks Tract	ALL	-116	-77	-224	-169	-107	-74	-35	-45	-5	-6	8	6	7	5	4	3	4	2	-59	-35	-55	-39	-77	-59	-55	-41
			(-40%)	(-30%)	(-59%)	(-52%)	(-36%)	(-28%)	(-22%)	(-27%)	(-9%)	(-10%)	(20%)	(14%)	(17%)	(13%)	(9%)	(6%)	(7%)	(4%)	(-31%)	(-21%)	(-24%)	(-18%)	(-26%)	(-21%)	(-31%)	(-25%)
		DROUGHT	-105	-113	-199	-205	-86	-82	-33	-58	-12	-18	1	-3	2	1	6	2	9	-1	-135	-90	-106	-60	-33	-49	-58	-56
			(-30%)	(-31%)	(-45%)	(-46%)	(-23%)	(-22%)	(-16%)	(-25%)	(-18%)	(-26%)	(2%)	(-10%)	(10%)	(3%)	(22%)	(6%)	(17%)	(-2%)	(-44%)	(-34%)	(-33%)	(-22%)	(-9%)	(-13%)	(-27%)	(-27%)
	Old R. at Rock Slough	ALL	-72	-43	-176	-136	-95	-65	-27	-38	-2	-3	7	6	2	1	0	-1	7	6	-44	-26	-45	-30	-55	-44	-42	-31
			(-30%)	(-21%)	(-57%)	(-50%)	(-37%)	(-29%)	(-17%)	(-23%)	(-2%)	(-5%)	(14%)	(11%)	(3%)	(1%)	(-0%)	(-1%)	(13%)	(11%)	(-29%)	(-19%)	(-24%)	(-17%)	(-23%)	(-19%)	(-28%)	(-22%)
		DROUGHT	-65	-71	-158	-173	-76	-69	-27	-56	-12	-18	-1	-3	-1	-2	4	2	9	2	-106	-72	-96	-56	-35	-43	-47	-47
			(-22%)	(-24%)	(-45%)	(-47%)	(-24%)	(-22%)	(-14%)	(-26%)	(-17%)	(-24%)	(-3%)	(-6%)	(-3%)	(-6%)	(13%)	(7%)	(21%)	(5%)	(-45%)	(-35%)	(-35%)	(-24%)	(-12%)	(-15%)	(-26%)	(-26%)
Western Delta	Sac. R. at Emmaton	ALL	-262	-225	-268	-185	-41	-51	-44	-50	-13	-17	5	-3	5	-1	-4	-6	-12	-31	59	34	115	42	-20	32	-40	-38
			(-31%)	(-28%)	(-30%)	(-23%)	(-9%)	(-11%)	(-29%)	(-32%)	(-20%)	(-24%)	(17%)	(-8%)	(14%)	(-1%)	(-3%)	(-5%)	(-6%)	(-13%)	(18%)	(10%)	(24%)	(8%)	(-2%)	(4%)	(-11%)	(-10%)
		DROUGHT	-303	-294	-303	-262	-21	-89	-60	-92	-5	-25	8	-6	8	0	28	-4	22	-17	211	166	197	33	138	-33	-7	-52
			(-26%)	(-26%)	(-24%)	(-22%)	(-3%)	(-12%)	(-27%)	(-36%)	(-4%)	(-19%)	(19%)	(-10%)	(16%)	(-0%)	(16%)	(-2%)	(7%)	(-5%)	(45%)	(32%)	(33%)	(4%)	(12%)	(-3%)	(-1%)	(-9%)
	SJR at Antioch	ALL	-878	-542	-873	-495	-206	-136	-170	-170	-48	-63	18	-8	15	-3	-17	-21	-48	-92	-70	-52	39	-2	-372	-99	-218	-140
			(-40%)	(-29%)	(-36%)	(-24%)	(-14%)	(-10%)	(-28%)	(-28%)	(-18%)	(-23%)	(16%)	(-6%)	(10%)	(-2%)	(-5%)	(-6%)	(-8%)	(-14%)	(-6%)	(-4%)	(3%)	(-0%)	(-17%)	(-5%)	(-20%)	(-14%)
		DROUGHT	-825	-640	-799	-461	-168	-178	-185	-230	-29	-96	26	-18	27	4	25	-23	-2	-64	6	30	162	100	86	-64	-140	-137
			(-31%)	(-26%)	(-26%)	(-17%)	(-8%)	(-9%)	(-22%)	(-26%)	(-7%)	(-20%)	(16%)	(-9%)	(14%)	(2%)	(4%)	(-4%)	(-0%)	(-7%)	(0%)	(2%)	(10%)	(6%)	(3%)	(-2%)	(-10%)	(-10%)
	Sac. R. at Mallard Island	ALL	-960	-492	-913	-414	-244	-156	-254	-238	-59	-98	46	-14	41	0	-35	-60	-75	-183	-42	-24	141	51	-506	-35	-238	-138
			(-21%)	(-12%)	(-19%)	(-9%)	(-7%)	(-5%)	(-15%)	(-14%)	(-6%)	(-10%)	(10%)	(-3%)	(6%)	(0%)	(-3%)	(-4%)	(-4%)	(-9%)	(-1%)	(-1%)	(4%)	(1%)	(-12%)	(-1%)	(-9%)	(-6%)
		DROUGHT	-932	-504	-946	-367	-234	-199	-312	-331	-23	-156	60	-7	66	21	-46	-78	-45	-90	93	131	255	132	71	-50	-166	-125
			(-17%)	(-10%)	(-15%)	(-7%)	(-5%)	(-4%)	(-13%)	(-14%)	(-1%)	(-9%)	(9%)	(-1%)	(6%)	(2%)	(-2%)	(-4%)	(-2%)	(-4%)	(2%)	(4%)	(7%)	(3%)	(1%)	(-1%)	(-5%)	(-4%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-2	1	1	1	1	1	0	0	2	1	1	1	-1	0	0	0	-2	0	-3	0	-1	0	-1	0	0	0
			(-10%)	(4%)	(6%)	(8%)	(7%)	(5%)	(3%)	(2%)	(11%)	(3%)	(3%)	(3%)	(-5%)	(3%)	(-2%)	(0%)	(-11%)	(-1%)	(-12%)	(0%)	(-5%)	(1%)	(-5%)	(2%)	(-2%)	(2%)
		DROUGHT	-3	0	1	1	1	1	0	0	1	0	1	0	1	0	1	0	-3	-1	-1	0	1	1	-2	-1	0	0
			(-15%)	(3%)	(6%)	(4%)	(10%)	(5%)	(0%)	(-1%)	(5%)	(2%)	(8%)	(2%)	(6%)	(3%)	(4%)	(-0%)	(-12%)	(-5%)	(-5%)	(1%)	(3%)	(3%)	(-8%)	(-4%)	(-1%)	(1%)
	Contra Costa PP #1	ALL	-59	-21	-105	-81	-112	-85	-41	-28	8	-13	9	4	7	7	-2	-3	7	7	-25	-19	-56	-27	-49	-51	-35	-26
			(-24%)	(-10%)	(-42%)	(-36%)	(-47%)	(-40%)	(-23%)	(-17%)	(10%)	(-13%)	(17%)	(7%)	(13%)	(12%)	(-3%)	(-4%)	(13%)	(12%)	(-20%)	(-16%)	(-27%)	(-15%)	(-23%)	(-23%)	(-24%)	(-19%)
		DROUGHT	-57	-23	-87	-111	-124	-128	-26	-49	-3	-28	-3	-11	-2	-2	1	-2	10	3	-66	-56	-136	-75	-55	-41	-46	-44
			(-19%)	(-9%)	(-29%)	(-34%)	(-41%)	(-42%)	(-12%)	(-20%)	(-4%)	(-26%)	(-7%)	(-20%)	(-4%)	(-5%)	(2%)	(-4%)	(22%)	(6%)	(-36%)	(-33%)	(-43%)	(-30%)	(-22%)	(-17%)	(-26%)	(-25%)
	Banks PP	ALL	-80	-64	-122	-100	-101	-79	-77	-82	-41	-47	-43	-44	-37	-38	-21	-21	-17	-17	-46	-34	-56	-38	-82	-76	-60	-53
			(-48%)	(-43%)	(-60%)	(-55%)	(-54%)	(-47%)	(-55%)	(-57%)	(-50%)	(-54%)	(-63%)	(-63%)	(-52%)	(-53%)	(-29%)	(-29%)	(-25%)	(-26%)	(-44%)	(-36%)	(-37%)	(-29%)	(-49%)	(-47%)	(-49%)	(-46%)
		DROUGHT	-74	-69	-108	-122	-84	-71	-52	-74	-15	-29	-33	-33	-23	-23	-15	-15	-1	-2	-101	-84	-110	-70	-58	-53	-56	-54
			(-37%)	(-36%)	(-48%)	(-51%)	(-37%)	(-33%)	(-31%)	(-39%)	(-17%)	(-28%)	(-50%)	(-49%)	(-36%)	(-35%)	(-25%)	(-26%)	(-2%)	(-5%)	(-70%)	(-66%)	(-48%)	(-37%)	(-29%)	(-27%)	(-39%)	(-38%)
	Jones PP	ALL	-67	-56	-114	-99	-65	-50	-56	-56	-42	-42	-48	-48	-40	-40	-44	-45	-33	-34	-37	-25	-43	-29	-75	-67	-55	-49
			(-44%)	(-40%)	(-61%)	(-58%)	(-42%)	(-36%)	(-48%)	(-49%)	(-52%)	(-52%)	(-62%)	(-63%)	(-49%)	(-49%)	(-55%)	(-55%)	(-49%)	(-49%)	(-33%)	(-25%)	(-30%)	(-22%)	(-48%)	(-46%)	(-47%)	(-44%)
		DROUGHT	-55	-60	-94	-112	-54	-48	-45	-49	-24	-24	-36	-34	-26	-26	-36	-37	-11	-14	-69	-49	-91	-58	-46	-44	-49	-46
			(-31%)	(-32%)	(-47%)	(-51%)	(-31%)	(-28%)	(-34%)	(-36%)	(-28%)	(-28%)	(-46%)	(-45%)	(-33%)	(-33%)	(-46%)	(-47%)	(-22%)	(-26%)	(-45%)	(-37%)	(-44%)	(-34%)	(-26%)	(-25%)	(-37%)	(-35%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-74. Period average change in chloride concentrations (mg/L) for Alternative 2D ELT relative to existing conditions and the No Action Alternative ELT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 2D ELT	Location	Period [a]	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	1	1	1	1	0	0	2	2	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1
			(4%)	(4%)	(4%)	(3%)	(1%)	(2%)	(7%)	(7%)	(5%)	(5%)	(5%)	(4%)	(4%)	(3%)	(0%)	(1%)	(1%)	(1%)	(2%)	(2%)	(3%)	(2%)	(2%)	(1%)	(3%)	(3%)
		DROUGHT	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0
			(2%)	(2%)	(1%)	(1%)	(-0%)	(1%)	(4%)	(4%)	(1%)	(3%)	(2%)	(3%)	(0%)	(1%)	(0%)	(1%)	(1%)	(1%)	(5%)	(4%)	(3%)	(1%)	(1%)	(1%)	(2%)	(2%)
	SJR at Buckley Cove	ALL	-8	0	-12	-1	-21	5	-21	4	-13	6	-10	5	-18	-6	-9	1	-6	4	-9	5	-11	5	-11	0	-12	2
			(-8%)	(0%)	(-11%)	(-1%)	(-15%)	(4%)	(-13%)	(3%)	(-9%)	(5%)	(-7%)	(4%)	(-18%)	(-7%)	(-12%)	(2%)	(-6%)	(5%)	(-9%)	(5%)	(-10%)	(6%)	(-11%)	(-0%)	(-11%)	(2%)
		DROUGHT	-14	0	-18	-1	-32	3	-32	6	-14	12	-12	9	-32	-12	-14	3	-22	8	-11	15	-14	19	-16	0	-19	5
			(-11%)	(-0%)	(-13%)	(-1%)	(-19%)	(2%)	(-15%)	(4%)	(-6%)	(6%)	(-6%)	(5%)	(-19%)	(-8%)	(-12%)	(3%)	(-17%)	(7%)	(-10%)	(17%)	(-11%)	(21%)	(-12%)	(0%)	(-13%)	(4%)
	Franks Tract	ALL	-73	-54	-135	-107	-79	-56	-35	-33	-7	-3	1	2	4	4	1	2	1	0	-41	-25	-40	-28	-48	-39	-38	-28
			(-39%)	(-32%)	(-58%)	(-53%)	(-38%)	(-30%)	(-26%)	(-25%)	(-11%)	(-6%)	(3%)	(5%)	(12%)	(13%)	(2%)	(6%)	(2%)	(0%)	(-32%)	(-22%)	(-26%)	(-20%)	(-25%)	(-22%)	(-31%)	(-25%)
		DROUGHT	-64	-78	-119	-134	-67	-66	-38	-51	-14	-18	1	-1	4	4	6	4	10	1	-92	-65	-74	-43	-19	-32	-39	-40
			(-28%)	(-32%)	(-44%)	(-47%)	(-25%)	(-25%)	(-21%)	(-27%)	(-19%)	(-23%)	(1%)	(-3%)	(12%)	(14%)	(19%)	(11%)	(24%)	(2%)	(-44%)	(-35%)	(-33%)	(-22%)	(-8%)	(-13%)	(-26%)	(-26%)
	Old R. at Rock Slough	ALL	-43	-30	-103	-83	-69	-48	-22	-22	-4	0	1	4	-1	2	-4	-1	3	4	-30	-17	-33	-22	-33	-27	-28	-20
			(-28%)	(-21%)	(-55%)	(-49%)	(-38%)	(-30%)	(-16%)	(-17%)	(-6%)	(1%)	(2%)	(8%)	(-1%)	(4%)	(-8%)	(-2%)	(9%)	(9%)	(-30%)	(-20%)	(-26%)	(-19%)	(-21%)	(-19%)	(-26%)	(-20%)
		DROUGHT	-37	-47	-91	-108	-58	-56	-31	-48	-16	-17	0	2	-1	2	3	3	10	4	-71	-51	-67	-41	-21	-29	-32	-32
			(-20%)	(-24%)	(-42%)	(-46%)	(-26%)	(-25%)	(-18%)	(-25%)	(-18%)	(-19%)	(-0%)	(4%)	(-2%)	(3%)	(7%)	(6%)	(26%)	(10%)	(-44%)	(-36%)	(-35%)	(-25%)	(-11%)	(-15%)	(-23%)	(-24%)
Western Delta	Sac. R. at Emmaton	ALL	-183	-163	-181	-137	-43	-45	-43	-41	-20	-18	3	-5	3	-2	-4	-5	-13	-25	43	22	77	23	-6	17	-31	-32
			(-32%)	(-29%)	(-33%)	(-27%)	(-14%)	(-15%)	(-34%)	(-33%)	(-27%)	(-26%)	(7%)	(-12%)	(9%)	(-5%)	(-4%)	(-5%)	(-7%)	(-13%)	(19%)	(9%)	(23%)	(6%)	(-1%)	(3%)	(-12%)	(-12%)
		DROUGHT	-202	-213	-201	-195	-32	-80	-60	-84	-15	-28	9	-7	8	0	28	-1	27	-15	162	123	153	25	110	-21	-1	-41
			(-26%)	(-27%)	(-26%)	(-25%)	(-7%)	(-15%)	(-31%)	(-39%)	(-14%)	(-23%)	(20%)	(-12%)	(21%)	(-0%)	(24%)	(-0%)	(11%)	(-5%)	(49%)	(33%)	(34%)	(4%)	(14%)	(-2%)	(-0%)	(-10%)
	SJR at Antioch	ALL	-603	-377	-582	-350	-202	-118	-163	-139	-74	-70	8	-18	10	-9	-10	-15	-44	-76	-51	-48	20	-8	-235	-69	-160	-108
			(-41%)	(-30%)	(-39%)	(-28%)	(-20%)	(-13%)	(-33%)	(-29%)	(-29%)	(-28%)	(7%)	(-13%)	(9%)	(-7%)	(-4%)	(-6%)	(-9%)	(-15%)	(-6%)	(-6%)	(2%)	(-1%)	(-16%)	(-5%)	(-21%)	(-15%)
		DROUGHT	-558	-464	-536	-360	-188	-166	-185	-212	-68	-110	28	-25	26	1	43	-11	17	-60	23	15	137	83	92	-38	-97	-112
			(-31%)	(-27%)	(-28%)	(-21%)	(-13%)	(-11%)	(-26%)	(-29%)	(-17%)	(-25%)	(17%)	(-12%)	(18%)	(0%)	(11%)	(-3%)	(2%)	(-8%)	(2%)	(1%)	(11%)	(6%)	(5%)	(-2%)	(-10%)	(-11%)
	Sac. R. at Mallard Island	ALL	-810	-387	-768	-374	-329	-167	-274	-232	-131	-137	42	-34	48	-11	-6	-40	-73	-176	-42	-62	95	27	-353	-28	-217	-135
			(-26%)	(-15%)	(-26%)	(-15%)	(-15%)	(-8%)	(-22%)	(-19%)	(-16%)	(-17%)	(9%)	(-6%)	(9%)	(-2%)	(-1%)	(-4%)	(-5%)	(-11%)	(-2%)	(-3%)	(4%)	(1%)	(-12%)	(-1%)	(-12%)	(-8%)
		DROUGHT	-746	-416	-778	-382	-346	-228	-358	-362	-119	-216	89	-29	92	16	50	-42	-7	-115	107	90	242	130	116	-25	-138	-132
			(-20%)	(-12%)	(-21%)	(-11%)	(-11%)	(-7%)	(-18%)	(-18%)	(-9%)	(-14%)	(14%)	(-4%)	(13%)	(2%)	(3%)	(-3%)	(-0%)	(-5%)	(4%)	(3%)	(8%)	(4%)	(3%)	(-1%)	(-6%)	(-6%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	-1	0	-1	0	0	0	0	0	0	0
			(-4%)	(0%)	(-1%)	(2%)	(1%)	(1%)	(1%)	(1%)	(6%)	(2%)	(2%)	(2%)	(-2%)	(1%)	(-1%)	(0%)	(-3%)	(0%)	(-3%)	(1%)	(-1%)	(1%)	(-1%)	(1%)	(-0%)	(1%)
		DROUGHT	-1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	-1	0	0	0	0	0	0	0	0	0
			(-5%)	(0%)	(-2%)	(-1%)	(2%)	(1%)	(-0%)	(-1%)	(2%)	(1%)	(4%)	(1%)	(5%)	(2%)	(2%)	(-0%)	(-4%)	(-1%)	(-1%)	(1%)	(1%)	(1%)	(-1%)	(-1%)	(0%)	(0%)
	Contra Costa PP #1	ALL	-34	-11	-60	-46	-85	-65	-43	-26	11	-10	-9	1	-1	7	-13	-11	2	4	-17	-13	-41	-21	-31	-30	-27	-18
			(-21%)	(-8%)	(-38%)	(-32%)	(-47%)	(-40%)	(-24%)	(-16%)	(10%)	(-8%)	(-10%)	(2%)	(-2%)	(10%)	(-19%)	(-17%)	(3%)	(9%)	(-19%)	(-15%)	(-29%)	(-18%)	(-22%)	(-21%)	(-22%)	(-16%)
		DROUGHT	-31	-14	-47	-66	-92	-96	-32	-44	-5	-29	-6	-14	-3	2	-2	-7	8	4	-44	-38	-94	-54	-36	-27	-32	-32
			(-16%)	(-8%)	(-25%)	(-32%)	(-40%)	(-41%)	(-15%)	(-20%)	(-5%)	(-22%)	(-7%)	(-15%)	(-3%)	(3%)	(-4%)	(-11%)	(17%)	(9%)	(-34%)	(-31%)	(-42%)	(-30%)	(-21%)	(-17%)	(-22%)	(-22%)
	Banks PP	ALL	-49	-40	-66	-54	-69	-52	-74	-69	-40	-38	-38	-33	-28	-23	-10	-5	-8	-7	-27	-21	-35	-24	-46	-43	-41	-34
			(-44%)	(-39%)	(-50%)	(-45%)	(-48%)	(-41%)	(-53%)	(-52%)	(-39%)	(-38%)	(-44%)	(-40%)	(-34%)	(-30%)	(-13%)	(-7%)	(-13%)	(-11%)	(-37%)	(-31%)	(-35%)	(-26%)	(-43%)	(-41%)	(-40%)	(-36%)
		DROUGHT	-47	-46	-62	-74	-66	-56	-59	-70	-28	-34	-71	-60	-49	-39	-26	-20	1	3	-65	-56	-70	-45	-37	-34	-48	-44
			(-35%)	(-34%)	(-41%)	(-45%)	(-36%)	(-33%)	(-34%)	(-38%)	(-21%)	(-24%)	(-53%)	(-49%)	(-38%)	(-33%)	(-25%)	(-20%)	(1%)	(4%)	(-64%)	(-60%)	(-45%)	(-34%)	(-27%)	(-26%)	(-36%)	(-34%)
	Jones PP	ALL	-38	-32	-62	-54	-46	-31	-65	-54	-55	-44	-64	-58	-30	-25	-33	-29	-26	-30	-18	-15	-24	-15	-41	-38	-42	-35
			(-35%)	(-31%)	(-48%)	(-44%)	(-31%)	(-23%)	(-43%)	(-38%)	(-43%)	(-38%)	(-54%)	(-52%)	(-34%)	(-30%)	(-43%)	(-40%)	(-42%)	(-45%)	(-23%)	(-19%)	(-24%)	(-17%)	(-38%)	(-37%)	(-39%)	(-35%)
		DROUGHT	-31	-36	-52	-65	-49	-40	-74	-64	-76	-58	-103	-94	-38	-33	-54	-50	-17	-18	-41	-32	-56	-37	-28	-27	-52	-46
			(-24%)	(-26%)	(-35%)	(-40%)	(-27%)	(-23%)	(-38%)	(-35%)	(-40%)	(-34%)	(-53%)	(-51%)	(-28%)	(-26%)	(-47%)	(-45%)	(-28%)	(-29%)	(-38%)	(-33%)	(-38%)	(-29%)	(-21%)	(-21%)	(-36%)	(-33%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-75. Alternative 2D ELT use of assimilative capacity available under existing conditions and No Action ELT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 2D ELT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	-1	-1	-1	-1	0	0	-1	-1	-1	-1	-1	-1	0	0	0	0	0	-1	-1	-1	-1	-1	0	0	-1	-1
		DROUGHT	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	-2	-2	-1	0	0	0	0	0
	SJR at Buckley Cove	ALL	1	0	1	0	3	-1	1	-1	1	-1	1	-1	2	-1	2	-1	4	-1	6	0	6	0	3	0	3	-1
		DROUGHT	2	0	2	0	5	0	4	-1	2	-1	2	-1	4	-2	4	-2	8	-2	9	0	12	-1	4	0	5	-1
	Franks Tract	ALL	-	-	-	-	-	-	37	54	3	3	-4	-3	-3	-2	-2	-1	-2	-1	-	43	-	-	-	-	72	45
		DROUGHT	-	-	-	-	-	-	72	-	6	10	0	1	-1	0	-3	-1	-5	1	-	-	-	-	-	-	-	-
	Old R. at Rock Slough	ALL	-	-	-	-	-	-	27	45	1	2	-3	-3	-1	0	0	0	-3	-3	45	22	77	41	-	-	43	29
		DROUGHT	-	-	-	-	-	-	46	-	7	11	0	1	0	1	-2	-1	-4	-1	-	-	-	-	-	-	67	66
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	45	54	7	10	-2	1	-3	0	3	5	45	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	3	20	-4	3	-4	0	-39	11	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-13	8	-14	4	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-29	40	-53	-15	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	1	0	0	-1	0	0	0	0	-1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
		DROUGHT	1	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0
	Contra Costa PP #1	ALL	-	46	-	-	-	-	58	33	-5	9	-5	-2	-4	-3	1	1	-4	-3	20	15	-	36	-	-	34	23
		DROUGHT	-	-	-	-	-	-	85	-	2	20	1	5	1	1	0	1	-5	-2	98	72	-	-	-	-	62	58
	Banks PP	ALL	95	64	-	-	-	95	70	78	24	29	24	24	21	21	12	12	9	9	32	21	56	32	-	88	48	40
		DROUGHT	-	-	-	-	-	-	65	-	10	20	18	18	13	12	8	8	1	1	97	70	-	-	-	98	53	49
	Jones PP	ALL	68	51	-	-	68	45	41	42	25	25	27	28	24	24	26	27	18	19	27	17	40	23	79	65	41	35
		DROUGHT	77	91	-	-	72	59	38	43	15	14	21	20	15	15	21	21	6	7	72	42	-	74	64	59	42	39

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-76. Alternative 2D ELT use of assimilative capacity available under existing conditions and No Action ELT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 2D ELT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SJR at Buckley Cove	ALL	5	0	9	1	19	-3	24	-4	12	-5	9	-4	12	4	5	-1	4	-3	7	-3	8	-3	8	0	9	-2
		DROUGHT	11	0	16	1	39	-2	85	-8	42	-20	35	-16	38	11	11	-2	19	-5	8	-9	10	-12	14	0	20	-4
	Franks Tract	ALL	-	67	-	-	-	86	30	28	4	2	0	-1	-2	-2	0	-1	0	0	34	18	41	26	81	57	29	20
		DROUGHT	-	-	-	-	-	-	54	91	8	11	0	1	-2	-2	-3	-2	-5	-1	-	99	-	78	-	-	40	42
	Old R. at Rock Slough	ALL	45	27	-	-	99	54	19	19	2	0	0	-2	0	-1	2	0	-2	-2	20	11	26	17	34	27	20	13
		DROUGHT	59	90	-	-	-	-	40	80	10	10	0	-1	1	-1	-1	-1	-5	-2	81	47	-	48	34	52	28	28
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	35	33	11	10	-1	3	-1	1	3	3	21	47	-100	-100	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	11	22	-4	4	-4	0	-21	1	-100	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-6	18	-7	7	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-32	72	-25	-1	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Contra Costa PP #1	ALL	37	9	66	43	-	74	66	31	-8	8	6	-1	1	-4	7	6	-1	-2	10	7	38	17	28	27	21	13
		DROUGHT	56	19	78	-	-	-	80	-	4	25	3	8	1	-1	1	4	-4	-2	36	30	-	79	46	32	30	30
	Banks PP	ALL	35	27	55	42	65	43	66	59	27	26	24	20	17	14	6	3	4	4	16	12	24	15	33	30	28	22
		DROUGHT	41	40	63	85	95	71	75	-	25	32	61	47	41	30	18	14	-1	-1	44	35	74	37	32	29	42	37
	Jones PP	ALL	27	22	52	42	46	26	67	49	45	33	49	43	18	15	19	16	14	16	11	9	16	10	29	26	30	24
		DROUGHT	27	32	52	75	72	51	-	94	-	74	-	-	33	28	39	35	9	10	28	21	55	30	24	23	49	42

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-77. Period average change in chloride concentrations (mg/L) for Alternative 5A ELT relative to existing conditions and the No Action Alternative ELT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride / Alt 5A ELT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	1	1	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1	2	1	1	1	1	0
			(6%)	(4%)	(6%)	(5%)	(0%)	(1%)	(2%)	(2%)	(0%)	(1%)	(4%)	(2%)	(2%)	(1%)	(-0%)	(1%)	(1%)	(1%)	(4%)	(7%)	(11%)	(6%)	(7%)	(6%)	(3%)	(3%)
		DROUGHT	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	3	3	1	1	0	1	1
			(4%)	(4%)	(4%)	(3%)	(-2%)	(0%)	(2%)	(2%)	(-2%)	(0%)	(-1%)	(2%)	(-2%)	(1%)	(-1%)	(1%)	(1%)	(3%)	(21%)	(19%)	(18%)	(5%)	(6%)	(3%)	(4%)	(3%)
	SJR at Buckley Cove	ALL	-2	0	-1	0	-6	0	-5	0	-3	0	-3	0	-4	0	-4	0	-8	0	-11	0	-10	1	-4	0	-5	0
			(-3%)	(0%)	(-2%)	(0%)	(-8%)	(0%)	(-6%)	(-0%)	(-4%)	(0%)	(-4%)	(0%)	(-5%)	(-0%)	(-5%)	(0%)	(-10%)	(0%)	(-12%)	(-1%)	(-11%)	(1%)	(-5%)	(0%)	(-6%)	(0%)
		DROUGHT	-3	0	-3	0	-9	0	-8	0	-6	0	-6	0	-9	0	-9	0	-16	0	-16	-1	-18	2	-7	0	-9	0
			(-4%)	(0%)	(-4%)	(0%)	(-11%)	(0%)	(-10%)	(0%)	(-7%)	(-0%)	(-7%)	(-0%)	(-10%)	(-0%)	(-10%)	(0%)	(-18%)	(1%)	(-18%)	(-2%)	(-19%)	(3%)	(-7%)	(1%)	(-11%)	(0%)
	Franks Tract	ALL	-69	-30	-74	-19	-53	-20	3	-7	2	1	4	2	3	1	1	0	-2	-4	-50	-26	-54	-37	-82	-65	-31	-17
			(-23%)	(-12%)	(-19%)	(-6%)	(-18%)	(-7%)	(2%)	(-4%)	(4%)	(2%)	(11%)	(5%)	(7%)	(4%)	(2%)	(-1%)	(-4%)	(-7%)	(-26%)	(-16%)	(-23%)	(-17%)	(-27%)	(-23%)	(-18%)	(-11%)
		DROUGHT	-29	-37	-45	-52	-40	-36	-4	-29	1	-5	2	-1	1	0	3	-2	3	-7	-108	-63	-91	-44	-37	-53	-29	-27
			(-8%)	(-10%)	(-10%)	(-12%)	(-11%)	(-10%)	(-2%)	(-13%)	(2%)	(-7%)	(9%)	(-4%)	(5%)	(-2%)	(9%)	(-5%)	(7%)	(-11%)	(-35%)	(-24%)	(-28%)	(-16%)	(-11%)	(-14%)	(-13%)	(-13%)
	Old R. at Rock Slough	ALL	-53	-25	-52	-12	-46	-16	5	-7	2	0	4	3	2	1	0	0	-2	-2	-39	-20	-44	-29	-62	-51	-24	-13
			(-22%)	(-12%)	(-17%)	(-4%)	(-18%)	(-7%)	(3%)	(-4%)	(3%)	(0%)	(8%)	(6%)	(3%)	(1%)	(0%)	(-1%)	(-3%)	(-4%)	(-26%)	(-15%)	(-23%)	(-16%)	(-25%)	(-22%)	(-16%)	(-9%)
		DROUGHT	-23	-29	-27	-42	-36	-29	7	-22	-1	-7	0	-2	-1	-2	1	-1	3	-4	-84	-50	-77	-38	-37	-45	-23	-23
			(-8%)	(-10%)	(-8%)	(-12%)	(-11%)	(-10%)	(4%)	(-10%)	(-1%)	(-9%)	(-0%)	(-4%)	(-4%)	(-7%)	(4%)	(-2%)	(8%)	(-7%)	(-35%)	(-24%)	(-28%)	(-16%)	(-13%)	(-15%)	(-13%)	(-13%)
Western Delta	Sac. R. at Emmaton	ALL	-30	7	-51	32	-14	-25	-2	-8	1	-3	6	-2	5	-1	-7	-8	0	-18	55	29	84	11	-38	14	1	2
			(-4%)	(1%)	(-6%)	(4%)	(-3%)	(-6%)	(-1%)	(-5%)	(2%)	(-4%)	(22%)	(-5%)	(12%)	(-3%)	(-5%)	(-7%)	(0%)	(-8%)	(17%)	(8%)	(18%)	(2%)	(-5%)	(2%)	(0%)	(1%)
		DROUGHT	-10	0	-30	12	13	-55	2	-29	7	-13	9	-5	8	0	17	-15	11	-28	183	138	189	24	130	-42	44	-1
			(-1%)	(-0%)	(-2%)	(1%)	(2%)	(-7%)	(1%)	(-11%)	(6%)	(-10%)	(20%)	(-9%)	(17%)	(0%)	(10%)	(-7%)	(4%)	(-8%)	(39%)	(27%)	(32%)	(3%)	(12%)	(-3%)	(9%)	(-0%)
	SJR at Antioch	ALL	-378	-43	-406	-27	-111	-41	-13	-12	9	-5	24	-2	15	-3	-16	-20	3	-42	-46	-28	-19	-60	-386	-113	-110	-33
			(-17%)	(-2%)	(-17%)	(-1%)	(-8%)	(-3%)	(-2%)	(-2%)	(4%)	(-2%)	(22%)	(-1%)	(11%)	(-2%)	(-4%)	(-5%)	(0%)	(-7%)	(-4%)	(-2%)	(-1%)	(-4%)	(-18%)	(-6%)	(-10%)	(-3%)
		DROUGHT	-234	-49	-352	-14	-87	-98	-47	-93	39	-28	34	-9	27	4	11	-37	-8	-70	-25	-1	84	22	61	-89	-41	-39
			(-9%)	(-2%)	(-11%)	(-1%)	(-4%)	(-5%)	(-6%)	(-10%)	(9%)	(-6%)	(21%)	(-5%)	(14%)	(2%)	(2%)	(-6%)	(-1%)	(-8%)	(-1%)	(-0%)	(5%)	(1%)	(2%)	(-3%)	(-3%)	(-3%)
	Sac. R. at Mallard Island	ALL	-534	-66	-531	-32	-130	-42	-55	-39	20	-19	55	-5	35	-6	-13	-37	52	-56	-29	-11	56	-35	-539	-68	-134	-35
			(-12%)	(-2%)	(-11%)	(-1%)	(-4%)	(-1%)	(-3%)	(-2%)	(2%)	(-2%)	(12%)	(-1%)	(5%)	(-1%)	(-1%)	(-3%)	(3%)	(-3%)	(-1%)	(-0%)	(2%)	(-1%)	(-13%)	(-2%)	(-5%)	(-1%)
		DROUGHT	-470	-41	-583	-5	-144	-109	-166	-186	62	-71	49	-19	52	8	-49	-81	-49	-94	42	80	169	46	52	-70	-86	-45
			(-9%)	(-1%)	(-10%)	(-0%)	(-3%)	(-2%)	(-7%)	(-8%)	(4%)	(-4%)	(7%)	(-2%)	(5%)	(1%)	(-2%)	(-4%)	(-2%)	(-4%)	(1%)	(2%)	(5%)	(1%)	(1%)	(-1%)	(-3%)	(-1%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-2	0	0	0	1	0	0	0	1	0	0	0	-1	0	-1	0	-2	0	-3	0	-1	1	-1	1	-1	0
			(-12%)	(3%)	(-0%)	(1%)	(5%)	(3%)	(2%)	(1%)	(7%)	(-0%)	(1%)	(1%)	(-7%)	(1%)	(-4%)	(-1%)	(-12%)	(-2%)	(-14%)	(-2%)	(-3%)	(3%)	(-3%)	(4%)	(-4%)	(1%)
		DROUGHT	-4	0	0	-1	1	0	0	0	1	0	1	0	1	0	1	0	-3	-1	-3	-1	1	1	-1	0	0	0
			(-18%)	(-0%)	(-3%)	(-4%)	(6%)	(1%)	(2%)	(0%)	(5%)	(2%)	(5%)	(-1%)	(6%)	(2%)	(5%)	(0%)	(-12%)	(-5%)	(-11%)	(-6%)	(6%)	(6%)	(-5%)	(-1%)	(-2%)	(-1%)
	Contra Costa PP #1	ALL	-72	-34	-41	-17	-38	-11	-19	-5	14	-8	5	0	4	3	1	0	-1	-2	-21	-15	-54	-25	-47	-48	-23	-14
			(-30%)	(-17%)	(-17%)	(-8%)	(-16%)	(-5%)	(-10%)	(-3%)	(17%)	(-8%)	(9%)	(-0%)	(7%)	(6%)	(1%)	(-0%)	(-2%)	(-3%)	(-17%)	(-13%)	(-26%)	(-14%)	(-21%)	(-22%)	(-15%)	(-10%)
		DROUGHT	-59	-26	-5	-30	-30	-34	1	-22	7	-17	0	-8	-1	-1	1	-1	4	-3	-48	-38	-110	-48	-53	-39	-24	-22
			(-20%)	(-10%)	(-2%)	(-9%)	(-10%)	(-11%)	(1%)	(-9%)	(9%)	(-16%)	(0%)	(-14%)	(-2%)	(-3%)	(3%)	(-3%)	(9%)	(-5%)	(-27%)	(-22%)	(-35%)	(-19%)	(-21%)	(-16%)	(-14%)	(-13%)
	Banks PP	ALL	-55	-39	-61	-39	-50	-27	-21	-26	-12	-18	-14	-15	-23	-24	-13	-13	-14	-15	-41	-29	-58	-39	-70	-64	-36	-29
			(-33%)	(-26%)	(-30%)	(-22%)	(-26%)	(-16%)	(-15%)	(-18%)	(-15%)	(-21%)	(-20%)	(-22%)	(-33%)	(-33%)	(-18%)	(-18%)	(-21%)	(-22%)	(-39%)	(-31%)	(-38%)	(-30%)	(-42%)	(-40%)	(-29%)	(-25%)
		DROUGHT	-50	-44	-29	-43	-54	-41	-18	-40	-2	-15	-16	-15	-17	-17	-6	-6	-6	-7	-72	-55	-93	-53	-48	-43	-34	-32
			(-25%)	(-23%)	(-13%)	(-18%)	(-24%)	(-19%)	(-11%)	(-21%)	(-2%)	(-14%)	(-23%)	(-23%)	(-27%)	(-26%)	(-10%)	(-10%)	(-11%)	(-14%)	(-49%)	(-43%)	(-41%)	(-28%)	(-24%)	(-22%)	(-24%)	(-22%)
	Jones PP	ALL	-33	-22	-54	-39	-28	-13	-27	-27	-9	-10	-24	-24	-14	-14	-20	-21	-13	-14	-28	-16	-42	-27	-57	-49	-29	-23
			(-22%)	(-16%)	(-29%)	(-23%)	(-18%)	(-9%)	(-23%)	(-24%)	(-11%)	(-12%)	(-32%)	(-32%)	(-17%)	(-17%)	(-25%)	(-25%)	(-20%)	(-21%)	(-25%)	(-16%)	(-29%)	(-21%)	(-37%)	(-34%)	(-25%)	(-21%)
		DROUGHT	-15	-20	-53	-71	-20	-14	-33	-37	-7	-7	-25	-24	-11	-11	-20	-21	-5	-7	-59	-39	-73	-40	-43	-41	-30	-28
			(-9%)	(-11%)	(-26%)	(-32%)	(-12%)	(-8%)	(-25%)	(-27%)	(-8%)	(-8%)	(-32%)	(-31%)	(-14%)	(-14%)	(-26%)	(-27%)	(-9%)	(-13%)	(-38%)	(-29%)	(-36%)	(-23%)	(-24%)	(-23%)	(-23%)	(-21%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-78. Period average change in chloride concentrations (mg/L) for Alternative 5A ELT relative to existing conditions and the No Action Alternative ELT. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 5A ELT	Location	Period [a]	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2%)	(1%)	(2%)	(2%)	(-0%)	(0%)	(2%)	(1%)	(0%)	(1%)	(2%)	(1%)	(1%)	(0%)	(-0%)	(0%)	(0%)	(0%)	(1%)	(1%)	(3%)	(1%)	(2%)	(1%)	(1%)	(1%)
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0
			(1%)	(1%)	(1%)	(1%)	(-1%)	(0%)	(2%)	(1%)	(-1%)	(0%)	(-0%)	(1%)	(-1%)	(0%)	(-0%)	(0%)	(0%)	(1%)	(4%)	(4%)	(4%)	(1%)	(1%)	(1%)	(1%)	(1%)
	SJR at Buckley Cove	ALL	-8	0	-11	0	-25	1	-25	0	-19	0	-15	0	-12	0	-10	0	-10	1	-11	3	-12	5	-11	1	-14	1
			(-8%)	(0%)	(-10%)	(0%)	(-18%)	(1%)	(-15%)	(-0%)	(-13%)	(-0%)	(-11%)	(-0%)	(-12%)	(-0%)	(-13%)	(0%)	(-10%)	(1%)	(-10%)	(3%)	(-11%)	(5%)	(-10%)	(1%)	(-12%)	(1%)
		DROUGHT	-14	0	-18	0	-34	1	-38	0	-26	0	-21	0	-20	0	-17	0	-28	2	-16	9	-17	15	-15	2	-22	2
			(-11%)	(0%)	(-13%)	(0%)	(-20%)	(1%)	(-18%)	(0%)	(-12%)	(-0%)	(-10%)	(-0%)	(-12%)	(0%)	(-14%)	(0%)	(-22%)	(1%)	(-14%)	(11%)	(-14%)	(18%)	(-11%)	(1%)	(-14%)	(2%)
	Franks Tract	ALL	-39	-20	-40	-12	-37	-14	-9	-7	-4	0	-1	0	0	1	-2	-1	-3	-3	-37	-20	-38	-26	-52	-42	-22	-12
			(-21%)	(-12%)	(-17%)	(-6%)	(-18%)	(-7%)	(-7%)	(-5%)	(-7%)	(-1%)	(-2%)	(0%)	(1%)	(2%)	(-5%)	(-2%)	(-6%)	(-8%)	(-29%)	(-18%)	(-25%)	(-19%)	(-27%)	(-23%)	(-18%)	(-11%)
		DROUGHT	-13	-26	-20	-34	-27	-26	-11	-25	-1	-6	0	-2	-1	0	1	-1	4	-5	-76	-49	-65	-35	-24	-36	-19	-20
			(-5%)	(-11%)	(-8%)	(-12%)	(-10%)	(-10%)	(-6%)	(-13%)	(-1%)	(-7%)	(0%)	(-5%)	(-3%)	(-1%)	(3%)	(-4%)	(10%)	(-9%)	(-36%)	(-27%)	(-29%)	(-18%)	(-10%)	(-15%)	(-13%)	(-13%)
	Old R. at Rock Slough	ALL	-30	-16	-25	-5	-32	-12	-6	-7	-7	-2	-1	2	-3	0	-3	0	-2	-2	-28	-15	-31	-20	-37	-32	-17	-9
			(-19%)	(-12%)	(-13%)	(-3%)	(-18%)	(-7%)	(-5%)	(-5%)	(-9%)	(-3%)	(-2%)	(3%)	(-5%)	(-0%)	(-7%)	(-1%)	(-5%)	(-5%)	(-27%)	(-17%)	(-24%)	(-18%)	(-24%)	(-21%)	(-16%)	(-9%)
		DROUGHT	-9	-20	-8	-25	-23	-21	1	-17	-7	-8	-5	-3	-7	-5	-1	-1	4	-2	-59	-38	-56	-30	-24	-31	-16	-17
			(-5%)	(-10%)	(-4%)	(-11%)	(-10%)	(-9%)	(0%)	(-9%)	(-8%)	(-9%)	(-8%)	(-5%)	(-13%)	(-9%)	(-2%)	(-2%)	(9%)	(-5%)	(-36%)	(-27%)	(-29%)	(-18%)	(-13%)	(-16%)	(-12%)	(-12%)
Western Delta	Sac. R. at Emmaton	ALL	-18	1	-25	18	-14	-17	-10	-8	-4	-3	6	-2	3	-2	-6	-7	-7	-19	41	20	58	3	-19	4	0	-1
			(-3%)	(0%)	(-5%)	(4%)	(-5%)	(-5%)	(-8%)	(-6%)	(-6%)	(-4%)	(16%)	(-5%)	(9%)	(-5%)	(-7%)	(-8%)	(-4%)	(-9%)	(18%)	(8%)	(17%)	(1%)	(-3%)	(1%)	(0%)	(-0%)
		DROUGHT	5	-5	-2	4	10	-38	-2	-27	-2	-15	11	-6	7	-1	17	-11	14	-28	143	103	146	18	100	-31	37	-3
			(1%)	(-1%)	(-0%)	(1%)	(2%)	(-7%)	(-1%)	(-12%)	(-2%)	(-12%)	(24%)	(-9%)	(18%)	(-3%)	(15%)	(-8%)	(6%)	(-10%)	(43%)	(28%)	(33%)	(3%)	(13%)	(-3%)	(10%)	(-1%)
	SJR at Antioch	ALL	-253	-27	-241	-9	-111	-27	-38	-14	-11	-7	22	-4	13	-5	-12	-17	-11	-43	-32	-29	-21	-49	-250	-84	-79	-26
			(-17%)	(-2%)	(-16%)	(-1%)	(-11%)	(-3%)	(-8%)	(-3%)	(-4%)	(-3%)	(19%)	(-3%)	(12%)	(-4%)	(-5%)	(-6%)	(-2%)	(-8%)	(-4%)	(-3%)	(-2%)	(-5%)	(-17%)	(-6%)	(-10%)	(-4%)
		DROUGHT	-134	-40	-186	-10	-88	-65	-59	-86	6	-36	41	-12	24	-2	25	-29	5	-72	-4	-11	75	21	66	-65	-19	-34
			(-7%)	(-2%)	(-10%)	(-1%)	(-6%)	(-5%)	(-8%)	(-12%)	(2%)	(-8%)	(25%)	(-5%)	(17%)	(-1%)	(7%)	(-7%)	(1%)	(-9%)	(-0%)	(-1%)	(6%)	(2%)	(4%)	(-3%)	(-2%)	(-3%)
	Sac. R. at Mallard Island	ALL	-468	-44	-401	-7	-192	-30	-82	-41	-17	-24	70	-7	49	-10	3	-32	31	-72	-6	-26	28	-40	-385	-60	-114	-33
			(-15%)	(-2%)	(-14%)	(-0%)	(-9%)	(-1%)	(-6%)	(-3%)	(-2%)	(-3%)	(16%)	(-1%)	(10%)	(-2%)	(0%)	(-3%)	(2%)	(-5%)	(-0%)	(-1%)	(1%)	(-2%)	(-13%)	(-2%)	(-6%)	(-2%)
		DROUGHT	-367	-37	-394	2	-198	-81	-185	-189	-11	-108	90	-28	75	-2	27	-65	-20	-127	59	42	163	51	86	-55	-56	-50
			(-10%)	(-1%)	(-10%)	(0%)	(-6%)	(-3%)	(-9%)	(-10%)	(-1%)	(-7%)	(14%)	(-4%)	(10%)	(-0%)	(2%)	(-4%)	(-1%)	(-6%)	(2%)	(2%)	(6%)	(2%)	(2%)	(-1%)	(-2%)	(-2%)
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	-1	0	0	0	0	0	0	0	1	0	0	0	-1	0	0	0	-1	0	-1	0	0	0	0	0	0	0
			(-4%)	(1%)	(-2%)	(0%)	(1%)	(1%)	(1%)	(0%)	(4%)	(-0%)	(0%)	(1%)	(-3%)	(0%)	(-1%)	(-1%)	(-4%)	(-0%)	(-4%)	(-0%)	(-1%)	(1%)	(-1%)	(1%)	(-1%)	(0%)
		DROUGHT	-1	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	-1	0	0	0	0	0	0	0	0	0
			(-5%)	(1%)	(-2%)	(-0%)	(1%)	(0%)	(1%)	(-0%)	(2%)	(1%)	(3%)	(-0%)	(4%)	(1%)	(3%)	(0%)	(-4%)	(-2%)	(-3%)	(-1%)	(2%)	(2%)	(-0%)	(0%)	(0%)	(0%)
	Contra Costa PP #1	ALL	-44	-21	-22	-8	-27	-7	-26	-9	10	-11	-15	-5	-5	3	-3	-1	-4	-1	-15	-11	-39	-19	-30	-30	-18	-10
			(-28%)	(-16%)	(-14%)	(-5%)	(-15%)	(-4%)	(-14%)	(-5%)	(9%)	(-9%)	(-17%)	(-6%)	(-7%)	(4%)	(-4%)	(-2%)	(-9%)	(-3%)	(-18%)	(-13%)	(-27%)	(-16%)	(-22%)	(-21%)	(-15%)	(-9%)
		DROUGHT	-34	-17	2	-17	-21	-25	-8	-20	1	-22	-6	-14	-7	-2	1	-3	2	-2	-34	-27	-78	-38	-36	-28	-18	-18
			(-18%)	(-10%)	(1%)	(-8%)	(-9%)	(-11%)	(-4%)	(-9%)	(1%)	(-17%)	(-8%)	(-16%)	(-9%)	(-3%)	(2%)	(-5%)	(4%)	(-3%)	(-26%)	(-22%)	(-35%)	(-21%)	(-21%)	(-17%)	(-13%)	(-13%)
	Banks PP	ALL	-34	-25	-35	-24	-36	-19	-31	-26	-18	-16	-20	-16	-29	-24	-12	-7	-12	-11	-25	-18	-37	-25	-42	-39	-28	-21
			(-31%)	(-25%)	(-27%)	(-20%)	(-25%)	(-15%)	(-22%)	(-20%)	(-17%)	(-16%)	(-23%)	(-19%)	(-35%)	(-31%)	(-16%)	(-10%)	(-19%)	(-17%)	(-34%)	(-27%)	(-37%)	(-28%)	(-39%)	(-37%)	(-27%)	(-22%)
		DROUGHT	-30	-29	-16	-28	-43	-33	-26	-38	-11	-17	-40	-30	-44	-34	-16	-10	-8	-6	-42	-33	-61	-36	-31	-28	-31	-27
			(-22%)	(-22%)	(-10%)	(-17%)	(-24%)	(-19%)	(-15%)	(-21%)	(-8%)	(-12%)	(-30%)	(-24%)	(-34%)	(-29%)	(-15%)	(-10%)	(-11%)	(-9%)	(-42%)	(-36%)	(-39%)	(-28%)	(-23%)	(-22%)	(-23%)	(-21%)
	Jones PP	ALL	-17	-11	-33	-25	-24	-8	-36	-25	-20	-10	-38	-31	-19	-14	-22	-18	-11	-15	-15	-12	-26	-17	-35	-32	-25	-18
			(-16%)	(-11%)	(-26%)	(-20%)	(-16%)	(-6%)	(-24%)	(-18%)	(-16%)	(-8%)	(-31%)	(-28%)	(-21%)	(-17%)	(-29%)	(-24%)	(-17%)	(-22%)	(-18%)	(-15%)	(-25%)	(-18%)	(-33%)	(-31%)	(-23%)	(-18%)
		DROUGHT	-7	-12	-36	-49	-23	-14	-49	-40	-29	-11	-73	-63	-23	-18	-35	-31	-7	-8	-37	-29	-47	-28	-28	-27	-33	-27
			(-6%)	(-9%)	(-24%)	(-30%)	(-13%)	(-8%)	(-26%)	(-22%)	(-15%)	(-6%)	(-38%)	(-34%)	(-17%)	(-14%)	(-31%)	(-29%)	(-12%)	(-13%)	(-35%)	(-29%)	(-32%)	(-22%)	(-21%)	(-20%)	(-23%)	(-20%)

[a] ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

Table Cl-79. Alternative 5A ELT use of assimilative capacity available under existing conditions and No Action ELT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on a mass balance approach.

Chloride Alt 5A ELT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-2	-1	-1	0	0	0	0	0
	SJR at Buckley Cove	ALL	1	0	1	0	4	0	3	0	2	0	2	0	3	0	3	0	5	0	7	0	6	0	3	0	3	0
		DROUGHT	2	0	2	0	6	0	5	0	3	0	4	0	5	0	5	0	10	0	10	1	12	-1	4	0	6	0
	Franks Tract	ALL	-	-	-	-	-	-	-3	8	-1	-1	-2	-1	-1	-1	0	0	1	2	87	32	-	100	-	-	41	19
		DROUGHT	-	-	-	-	-	-	9	-	-1	3	-1	1	0	0	-1	1	-2	4	-	-	-	-	-	-	77	71
	Old R. at Rock Slough	ALL	-	64	-	-	-	70	-5	8	-1	0	-2	-1	-1	0	0	0	1	1	39	17	74	39	-	-	24	12
		DROUGHT	-	-	-	-	-	-	-12	70	1	4	0	1	1	1	-1	0	-2	2	-	-	-	-	-	-	33	32
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	2	9	-1	2	-3	1	-2	1	5	7	-2	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-10	-	-5	11	-4	3	-4	0	-24	37	-	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-18	2	-14	3	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-39	21	-52	-14	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	1	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
		DROUGHT	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	-1	-1	0	0	0	0
	Contra Costa PP #1	ALL	-	75	-	71	-	26	26	7	-8	5	-2	0	-2	-2	0	0	1	1	16	12	-	34	-	-	22	12
		DROUGHT	-	-	-	-	-	-	-4	-	-4	12	0	4	0	1	-1	1	-2	1	71	49	-	-	-	-	33	30
	Banks PP	ALL	65	39	-	57	82	33	19	25	7	11	8	8	13	13	7	8	8	8	29	19	58	33	86	74	28	22
		DROUGHT	95	76	-	-	-	-	22	68	1	11	9	8	9	9	3	3	3	4	69	45	-	83	97	80	32	29
	Jones PP	ALL	34	20	84	49	29	11	20	20	5	6	14	14	8	8	12	12	7	8	20	11	39	22	60	48	22	17
		DROUGHT	21	31	-	-	27	18	28	32	4	4	15	14	6	6	12	12	2	4	61	33	-	51	61	56	26	23

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-80. Alternative 5A ELT use of assimilative capacity available under existing conditions and No Action ELT relative to the 250 mg/L secondary MCL. Calculation of chloride concentrations was based on EC-chloride relationship.

Chloride Alt 5A ELT	Location	Period [a]	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
			Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT	Ex. Cond.	No Act. ELT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SJR at Buckley Cove	ALL	5	0	8	0	22	-1	29	0	18	0	14	0	8	0	6	0	6	-1	8	-2	8	-3	7	0	10	-1
		DROUGHT	11	0	16	0	42	-1	100	0	79	0	60	0	23	0	14	0	24	-1	12	-6	13	-10	13	-1	23	-2
	Franks Tract	ALL	63	24	-	25	89	21	8	6	2	0	0	0	0	0	1	0	1	2	30	14	39	24	87	62	17	9
		DROUGHT	64	-	-	-	-	-	16	44	1	3	0	1	0	0	0	1	-2	2	-	75	-	62	-	-	20	21
	Old R. at Rock Slough	ALL	31	15	40	6	46	13	5	6	4	1	1	-1	1	0	2	0	1	1	19	9	25	15	38	31	12	6
		DROUGHT	15	38	24	-	-	85	-1	28	5	5	3	1	4	2	0	0	-2	1	66	35	94	35	38	57	14	15
Western Delta	Sac. R. at Emmaton	ALL	-	-	-	-	-	-	8	6	2	2	-3	1	-1	1	4	5	11	35	-100	-100	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	4	84	1	12	-5	3	-3	1	-13	11	-100	-	-	-	-	-	-	-	-	-
	SJR at Antioch	ALL	-	-	-	-	-	-	-	-	-	-	-17	4	-10	5	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-47	33	-23	2	-	-	-	-	-	-	-	-	-	-	-	-
	Sac. R. at Mallard Island	ALL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		DROUGHT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Contra Costa PP #1	ALL	48	19	25	7	39	8	39	10	-7	9	9	3	3	-2	1	1	2	1	9	7	35	15	28	27	14	7
		DROUGHT	61	23	-3	40	-	-	20	69	-1	19	4	9	4	1	-1	2	-1	1	27	21	-	56	46	32	17	17
	Banks PP	ALL	25	17	30	19	34	16	28	22	12	10	13	9	17	14	7	4	7	6	14	10	25	16	29	27	19	13
		DROUGHT	26	25	16	32	62	42	34	58	10	16	34	23	37	26	11	7	4	3	28	21	65	30	26	24	26	22
	Jones PP	ALL	12	8	27	19	24	7	37	22	17	7	29	23	11	8	13	10	6	8	9	7	17	10	25	22	17	12
		DROUGHT	6	11	36	56	34	18	84	58	47	14	-	96	20	15	26	22	4	4	26	19	46	23	24	23	31	25

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

NOTES:

-- Positive values indicate that implementation of the Alternative increases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality improves under the Alternative, relative to Existing Conditions or the No Action Alternative). Negative values indicate that implementation of the Alternative decreases assimilative capacity available under Existing Conditions or the No Action Alternative (i.e., water quality degradation occurs under the Alternative, relative to Existing Conditions or the No Action Alternative). Values of -100% represent instances where all available assimilative capacity is used under the Alternative, and therefore concentrations are at or above the criteria.

-- Regulatory objective is the state secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Table Cl-81. Period average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action ELT, and Alternatives 4A, 2D, and 5A ELT. Calculation of chloride concentrations was based on a mass balance approach.

Chloride	Location	Period [a]	Period Average Concentration mg/L					Lowest Applicable Human Health Criterion/Objective (250 mg/L) b Frequency of Criterion/Objective Exceedance (%)				
			Ex. Cond.	No Act. ELT	Alt 4A ELT	Alt 2D ELT	Alt 5A ELT	Ex. Cond.	No Act. ELT	Alt 4A ELT	Alt 2D ELT	Alt 5A ELT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	15.7	15.8	16.9	17.1	16.3	0	0	0	0	0
		DROUGHT	16.8	16.8	17.5	17.7	17.4	0	0	0	0	0
	SJR at Buckley Cove	ALL	82.9	77.6	78.5	78.5	77.7	0	0	0	0	0
		DROUGHT	86.5	77.2	78.7	78.7	77.3	0	0	0	0	0
	Franks Tract	ALL	173.8	159.8	121.8	119.0	142.8	34	25	17	14	22
		DROUGHT	212.8	211.6	172.5	155.2	184.2	47	42	32	25	35
	Old R. at Rock Slough	ALL	152.0	141.5	111.0	110.2	128.3	28	20	10	7	15
		DROUGHT	180.2	179.8	147.3	133.2	157.3	42	33	23	15	28
Western Delta	Sac. R. at Emmaton	ALL	368.9	367.3	364.3	328.9	369.6	44	41	40	38	40
		DROUGHT	516.4	561.7	553.8	509.7	560.6	55	60	58	53	57
	SJR at Antioch	ALL	1,087.3	101,0.1	928.3	869.8	977.2	66	70	67	65	70
		DROUGHT	1,400.6	1,397.8	1328.7	1,261.1	1,359.2	82	85	83	83	87
	Sac. R. at Mallard Island	ALL	2,552.0	2,452.1	2409.3	2,313.6	2,417.5	85	86	86	86	86
		DROUGHT	3,233.9	3,192.8	3149.8	3,067.9	3,147.5	100	100	100	100	100
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	17.1	16.3	16.7	16.7	16.4	0	0	0	0	0
		DROUGHT	17.7	17.4	17.9	17.5	17.3	0	0	0	0	0
	Contra Costa PP #1	ALL	146.5	137.5	110.6	111.8	123.9	24	17	11	8	14
		DROUGHT	176.5	174.5	141.8	130.9	152.1	37	28	25	13	25
	Banks PP	ALL	123.4	116.6	67.5	63.2	87.4	4	6	1	1	4
		DROUGHT	143.7	141.2	98.9	87.5	109.5	7	13	2	2	7
	Jones PP	ALL	116.9	110.9	66.7	61.6	87.7	1	3	0	0	1
		DROUGHT	132.9	130.2	90.7	84.1	102.6	0	5	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

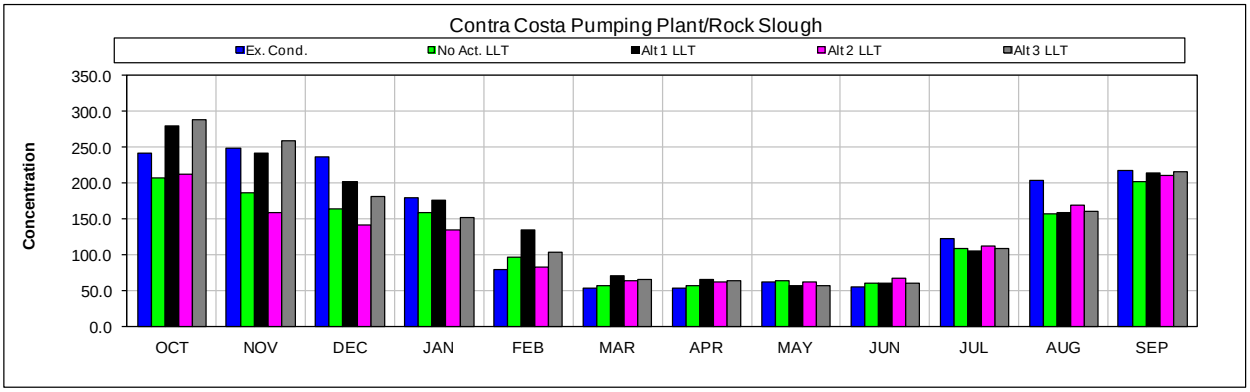
Table Cl-82. Period average chloride concentrations and frequency of exceedance of objectives for existing conditions, No Action ELT, and Alternatives 4A, 2D, and 5A ELT. Calculation of chloride concentrations was based on EC-chloride relationship.

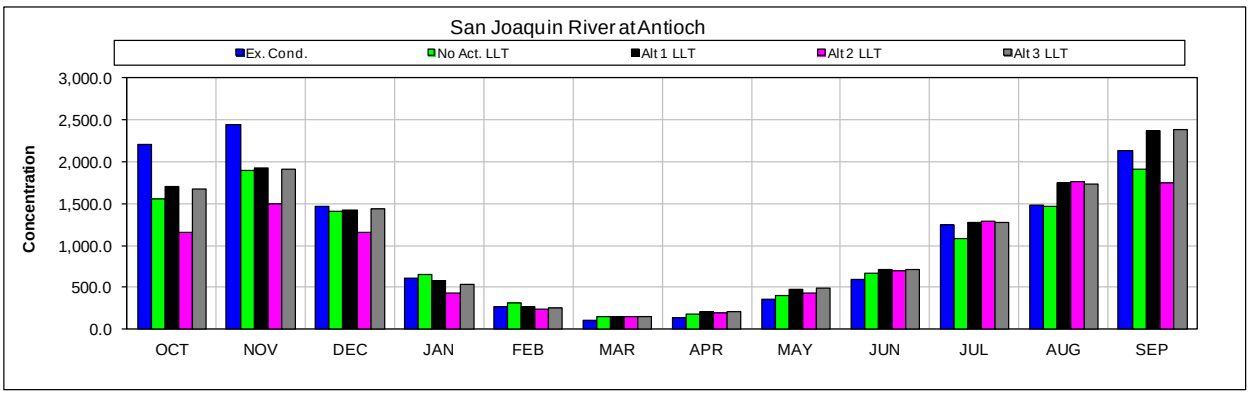
Chloride Alt 4A/2D/5A	Location	Period [a]	Period Average Concentration (mg/L)					Lowest Applicable Human Health Criterion/Objective (250 mg/L) b Frequency of Criterion/Objective Exceedance (%)				
			Ex. Cond.	No Act. ELT	Alt 4A ELT	Alt 2D ELT	Alt 5A ELT	Ex. Cond.	No Act. ELT	Alt 4A ELT	Alt 2D ELT	Alt 5A ELT
Delta Interior	Moke. R. (SF) at Staten Island	ALL	18.5	18.5	18.9	19.1	18.7	0	0	0	0	0
		DROUGHT	19.3	19.2	19.5	19.6	19.4	0	0	0	0	0
	SJR at Buckley Cove	ALL	115.7	100.9	103.3	103.3	101.7	0	0	0	0	0
		DROUGHT	154.9	130.4	135.4	135.6	132.9	0	0	0	0	0
	Franks Tract	ALL	119.9	110.2	86.1	82.1	98.2	14	16	6	4	9
		DROUGHT	152.8	153.8	128.0	113.8	133.4	22	28	15	7	15
	Old R. at Rock Slough	ALL	107.9	100.0	81.7	79.9	90.9	4	8	3	1	6
		DROUGHT	135.9	136.3	116.4	104.2	119.6	7	17	8	2	10
Western Delta	Sac. R. at Emmaton	ALL	258.0	259.2	256.2	227.5	258.3	36	32	33	30	28
		DROUGHT	363.7	403.8	398.7	362.4	400.8	50	53	50	50	47
	SJR at Antioch	ALL	756.6	704.2	647.8	596.1	678.0	61	63	59	57	60
		DROUGHT	1,001.9	1,016.8	965.5	904.6	983.0	80	78	77	73	77
	Sac. R. at Mallard Island	ALL	1,766.4	1,685.1	1639.8	1,549.9	1,652.3	77	80	80	81	81
		DROUGHT	2,345.9	2,339.2	2291.9	2,207.6	2,289.5	98	98	98	98	98
Major Diversions (Pumping Stations)	NBA at Barker Slough PP	ALL	18.8	18.6	18.7	18.8	18.6	0	0	0	0	0
		DROUGHT	18.7	18.7	18.8	18.7	18.7	0	0	0	0	0
	Contra Costa PP #1	ALL	120.4	112.0	94.1	93.6	102.0	5	8	2	3	5
		DROUGHT	142.8	142.6	120.6	110.7	124.6	8	17	7	3	8
	Banks PP	ALL	101.6	94.8	65.7	60.7	73.9	1	2	1	0	0
		DROUGHT	134.0	130.1	98.2	85.7	103.3	2	2	2	0	0
	Jones PP	ALL	108.8	102.3	69.6	66.8	84.2	0	0	0	0	1
		DROUGHT	144.7	139.3	99.4	93.1	111.8	0	0	0	0	0

[a] ALL: Water years 1975-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

[b] State secondary maximum contaminant level (MCL) incorporated by reference in the Region 2 and 5 Basin Plans.

Figure Cl-1. Long-term average estimated chloride concentrations at Contra Costa Pumping Plant, San Joaquin River at Antioch, and Sacramento River at Mallard Island for existing conditions, No Action LLT, and Alternatives 1–3 (mg/L).





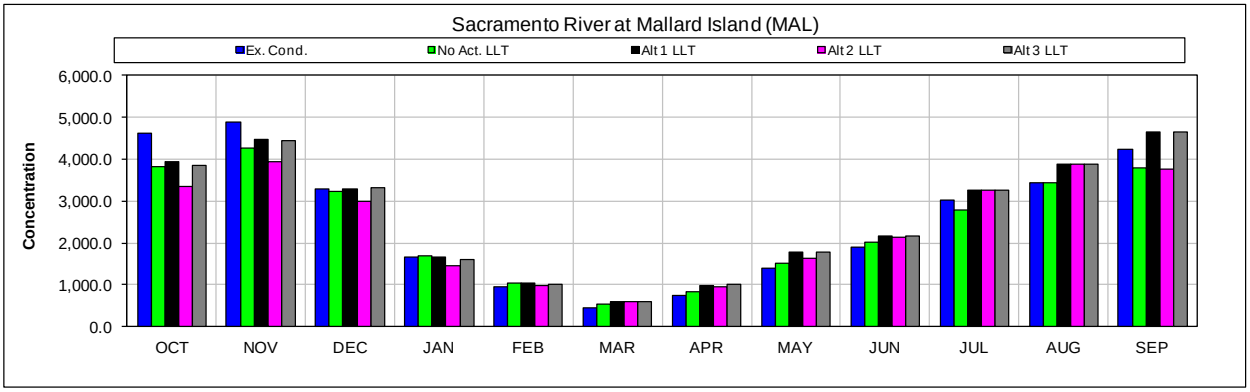


Figure Cl-2. Long-term average estimated chloride concentrations at Franks Tract, Old River at Rock Slough, Banks Pumping Plant, and Old River at Tracy Road for existing conditions and No Action LLT, and Alternatives 1–3 (mg/L).

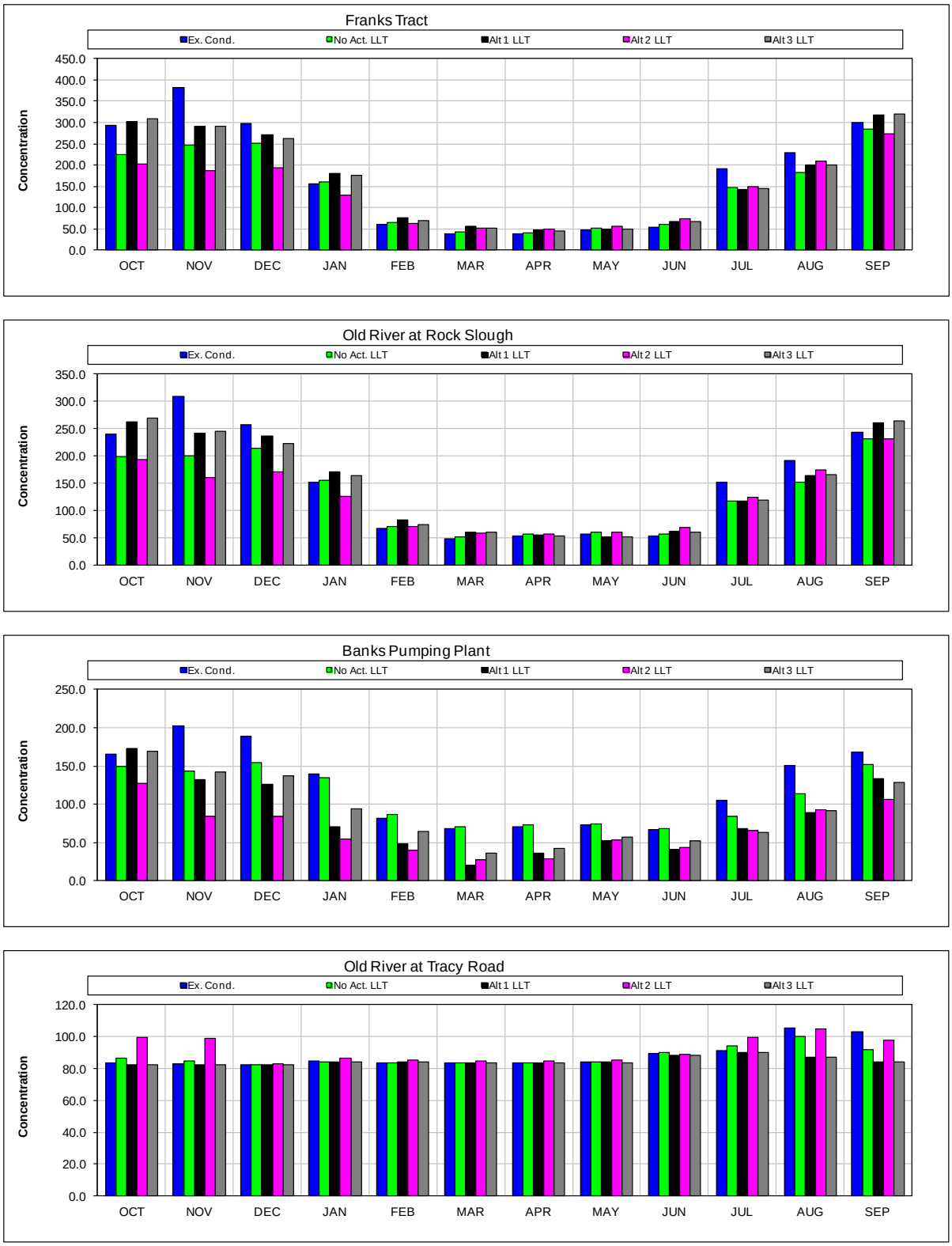
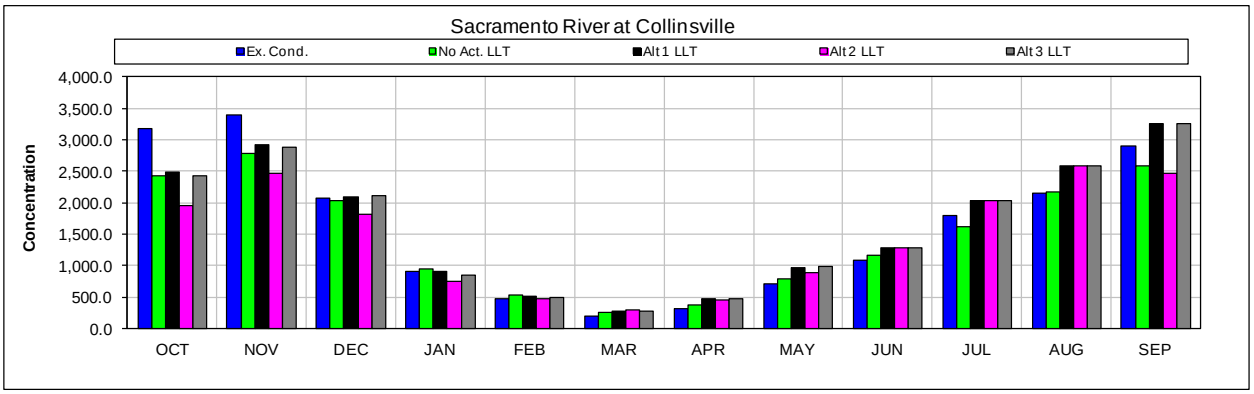
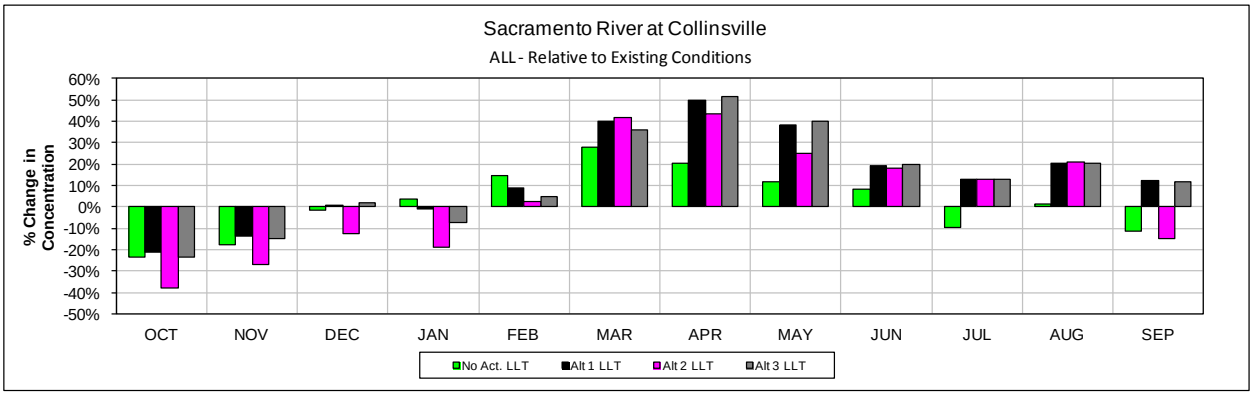


Figure Cl-3. Long-term average estimated chloride concentrations at Sacramento River at Collinsville, and change relative to existing conditions and No Action LLT, for Alternatives 1–3 (mg/L).





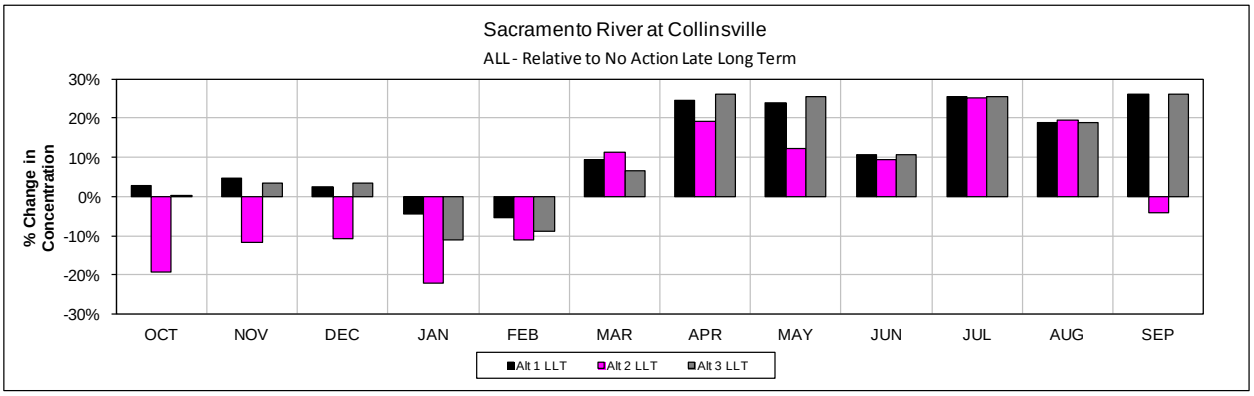
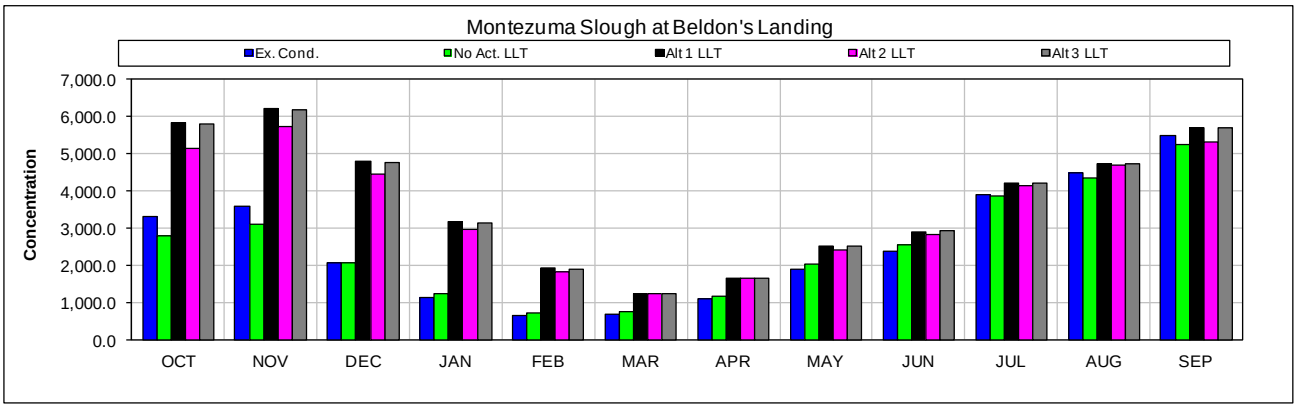
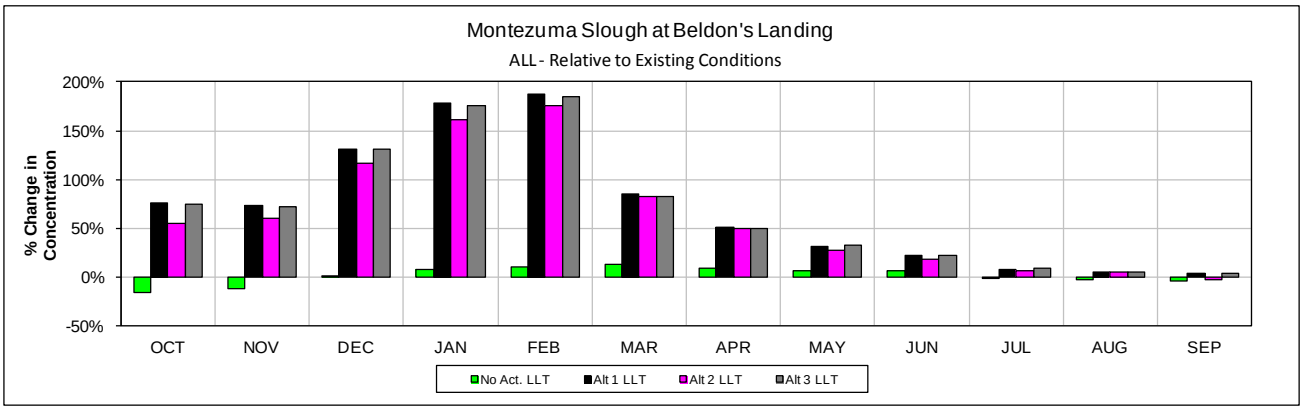


Figure Cl-4. Long-term average estimated chloride concentrations at Montezuma Slough at Beldon's Landing, and change relative to existing conditions and No Action LLT, for Alternatives 1–3 (mg/L).





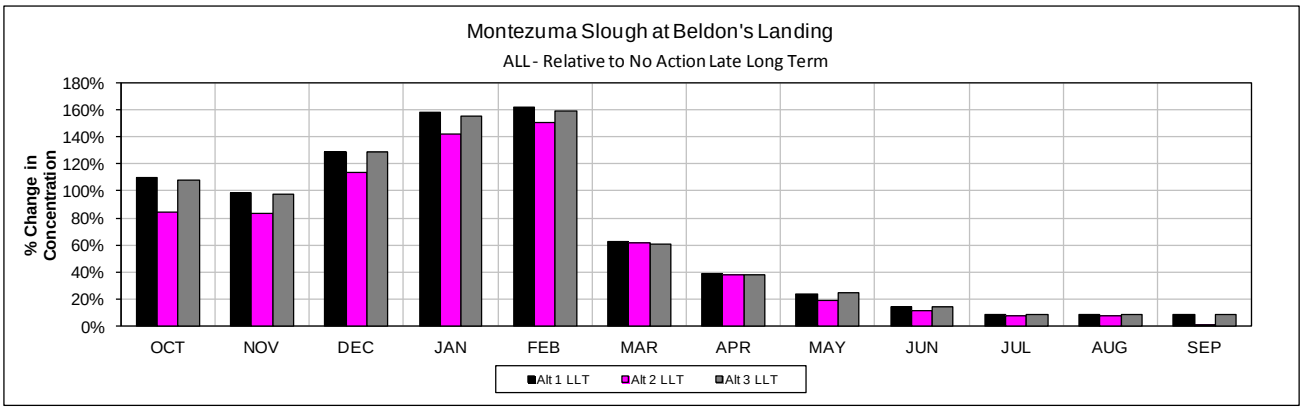
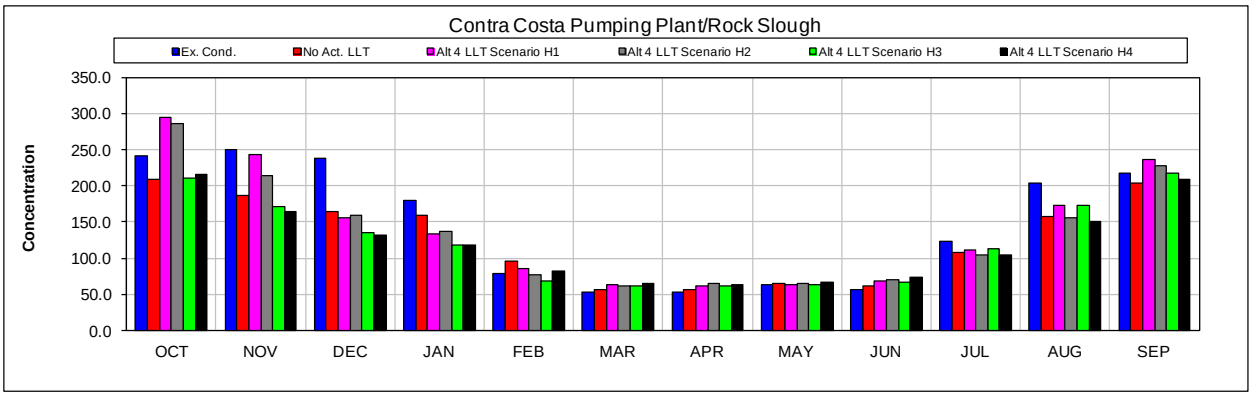
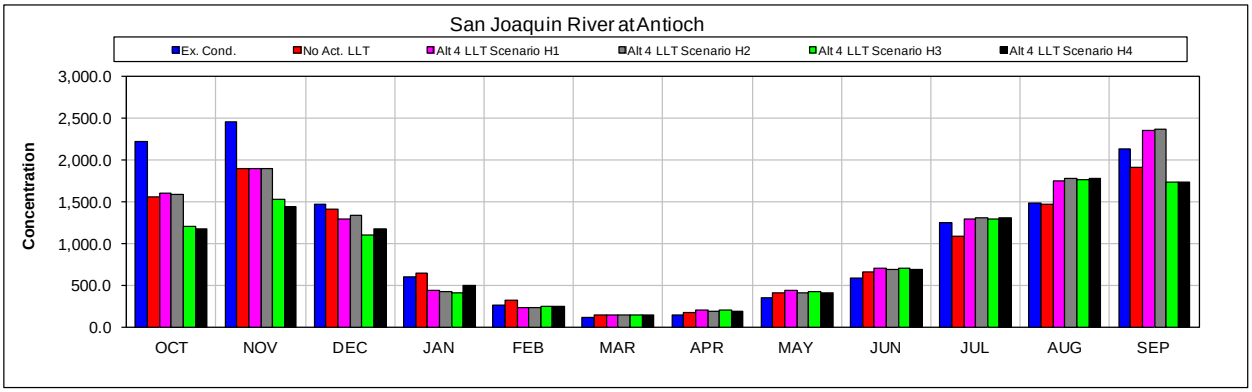


Figure Cl-5. Long-term average estimated chloride concentrations at Contra Costa Pumping Plant, San Joaquin River at Antioch, and Sacramento River at Mallard Island for existing conditions, No Action LLT, and Alternative 4 Scenarios H1–H4 (mg/L).





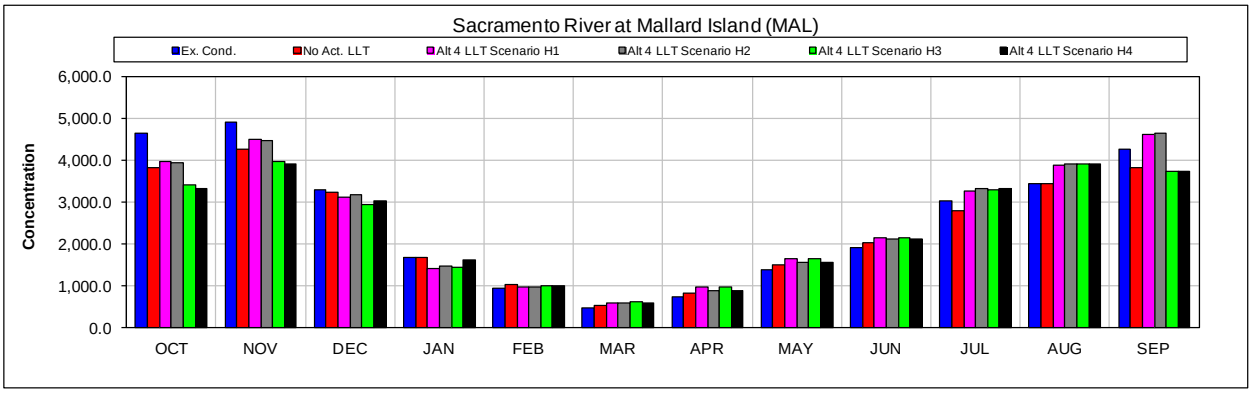


Figure Cl-6. Long-term average estimated chloride concentrations at Franks Tract, Old River at Rock Slough, Banks Pumping Plant, and Old River at Tracy Road for existing conditions, No Action LLT, and Alternative 4 Scenarios H1–H4 (mg/L).

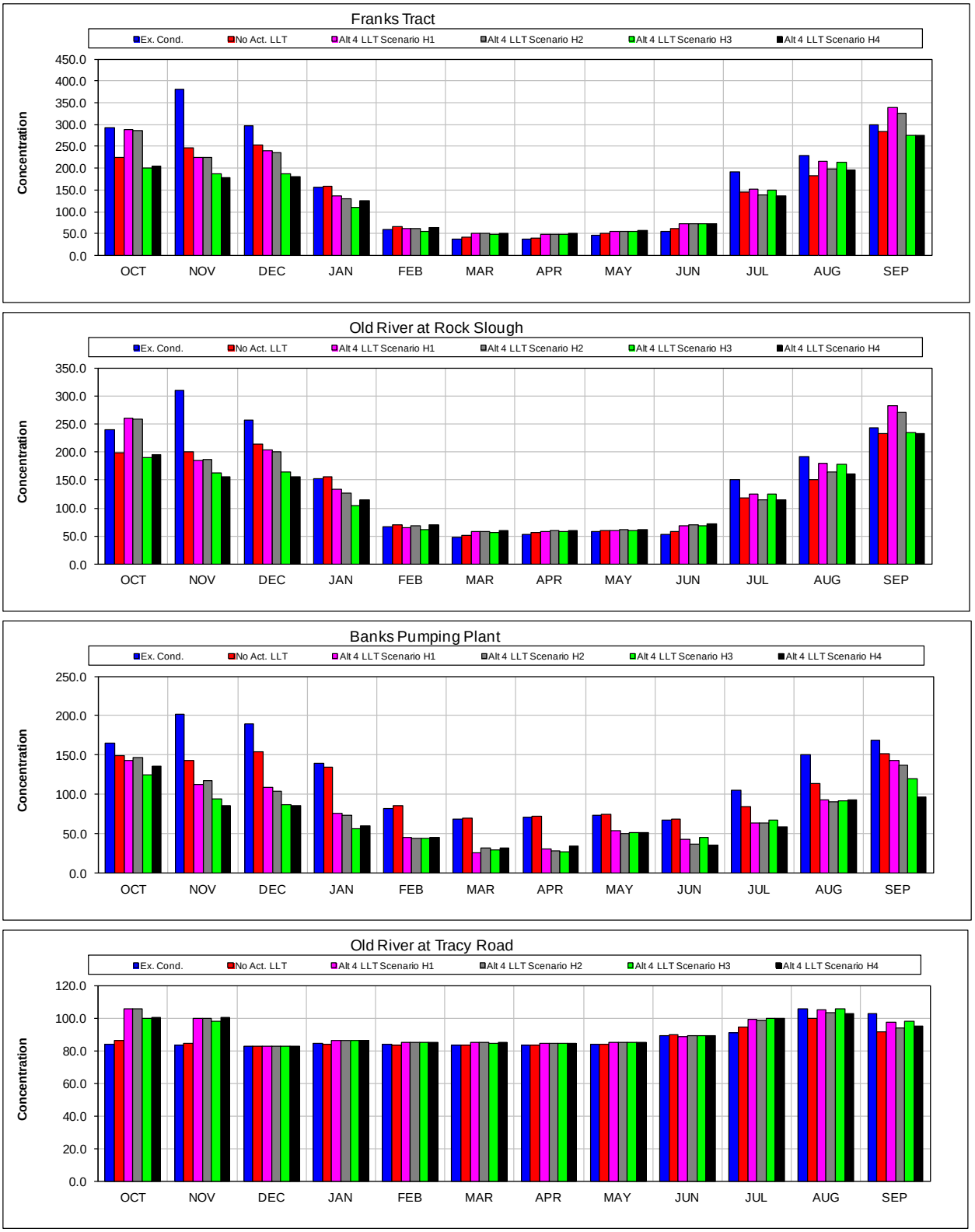
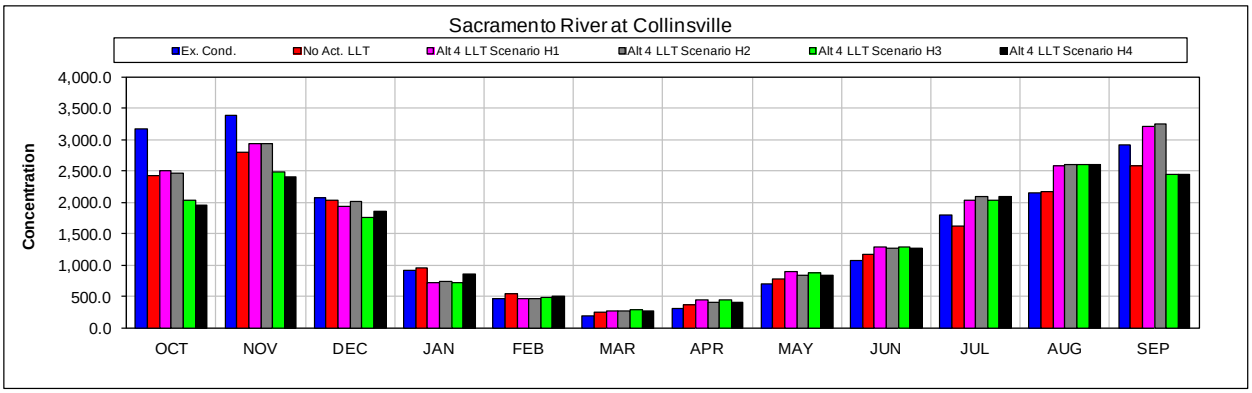
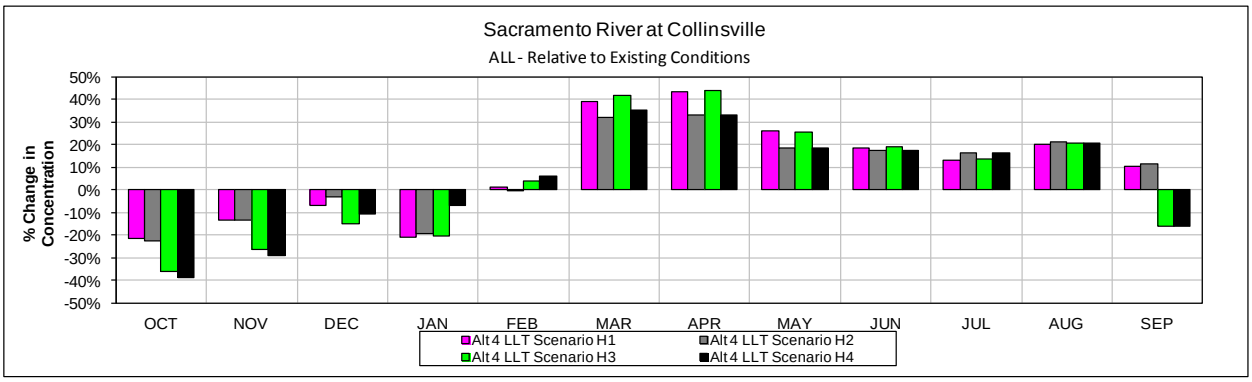


Figure Cl-7. Long-term average estimated chloride concentrations at Sacramento River at Collinsville, and change relative to existing conditions and No Action LLT, for Alternative 4 Scenarios H1–H4 (mg/L).





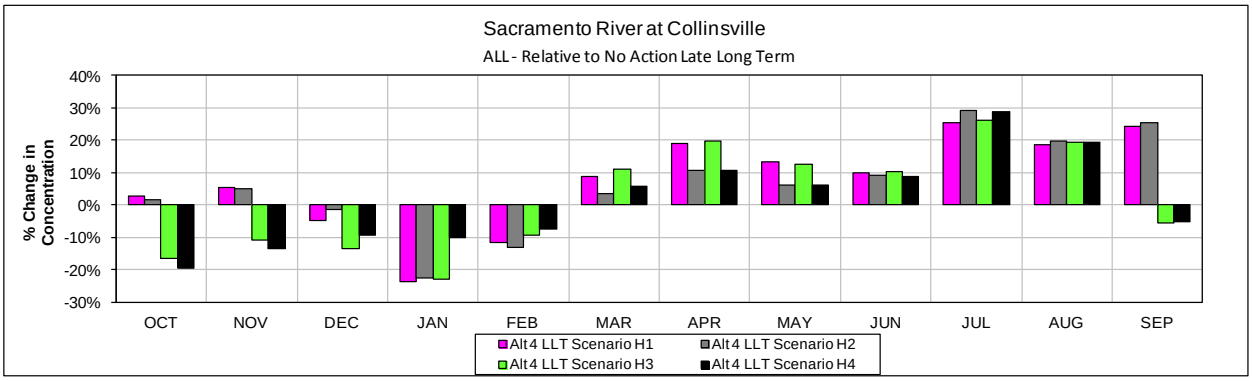
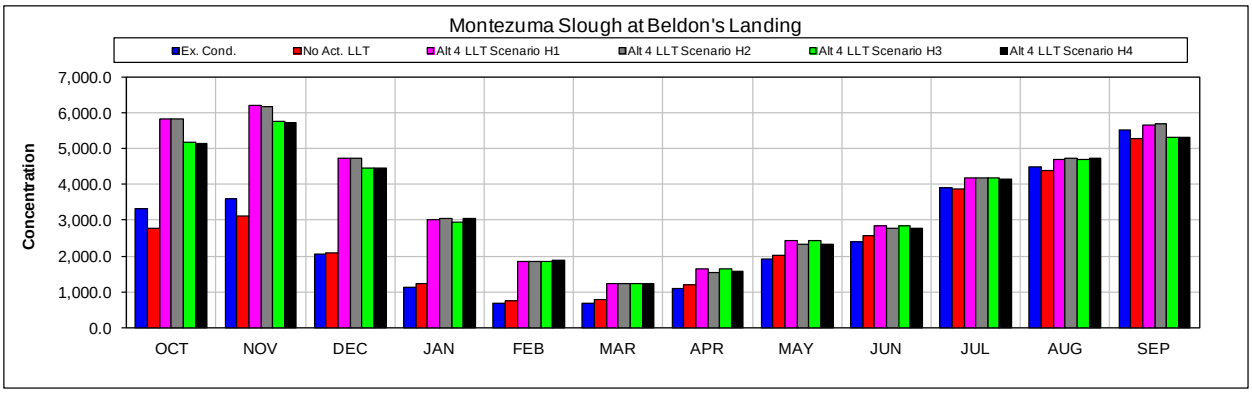
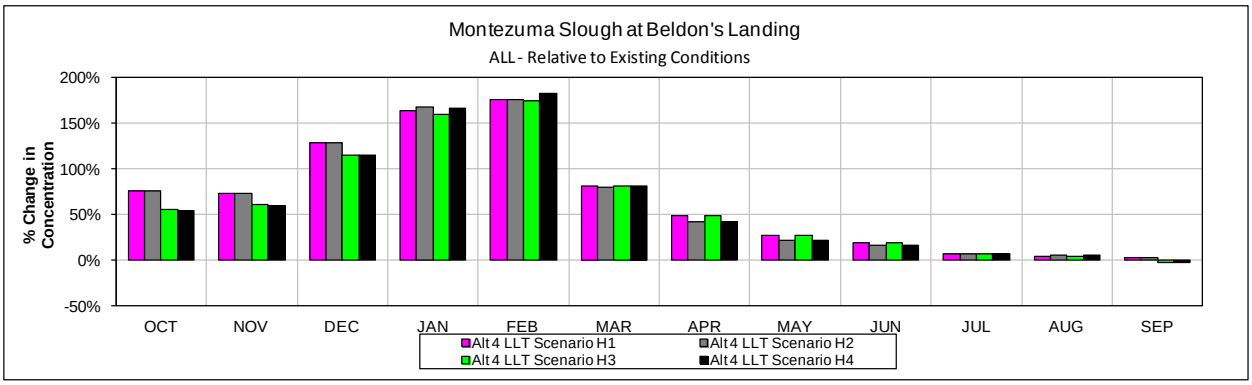


Figure Cl-8. Long-term average estimated chloride concentrations at Montezuma Slough at Beldon's Landing, and change relative to existing conditions and No Action LLT, for Alternative 4 Scenarios H1–H4 (mg/L).





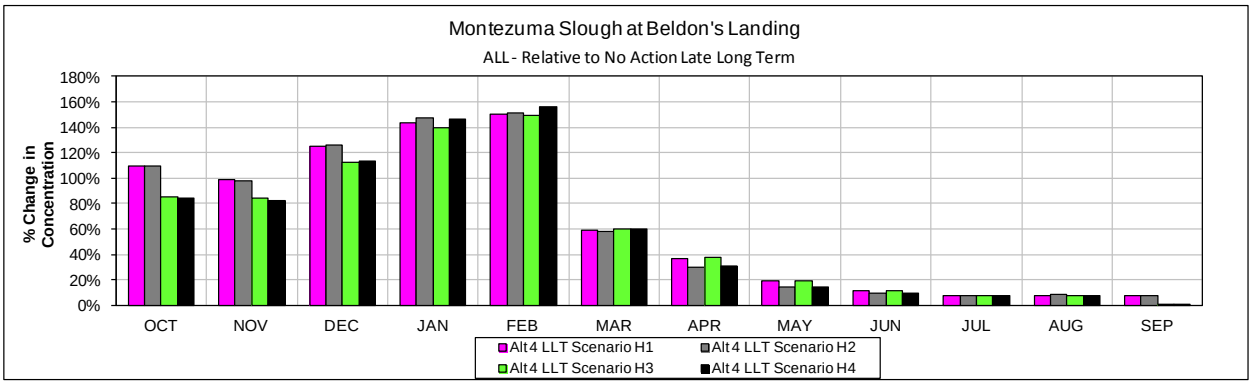
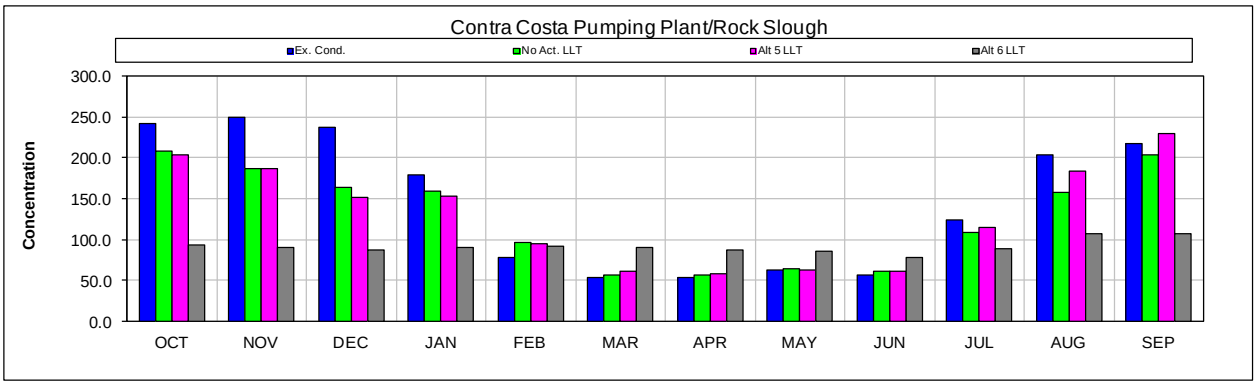
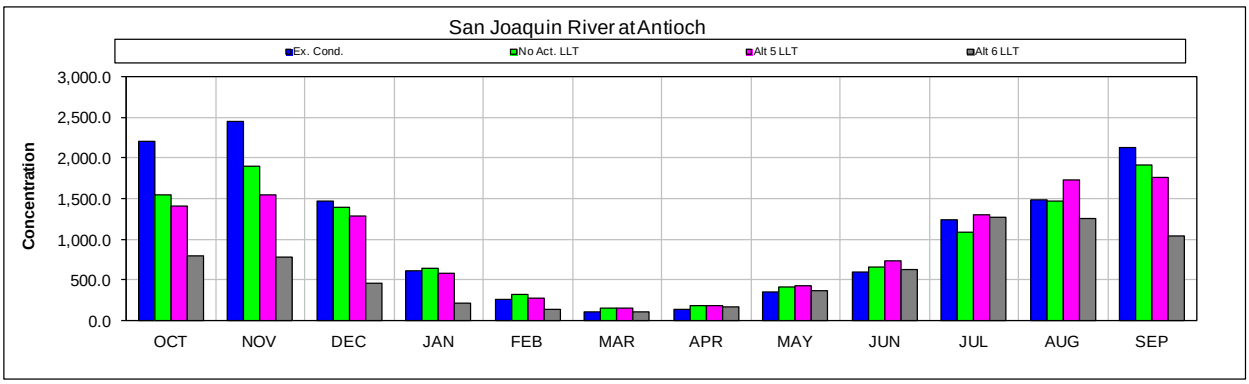


Figure Cl-9. Long-term average estimated chloride concentrations at Contra Costa Pumping Plant, San Joaquin River at Antioch, and Sacramento River at Mallard Island for existing conditions, No Action LLT, and Alternatives 5 and 6 (mg/L).





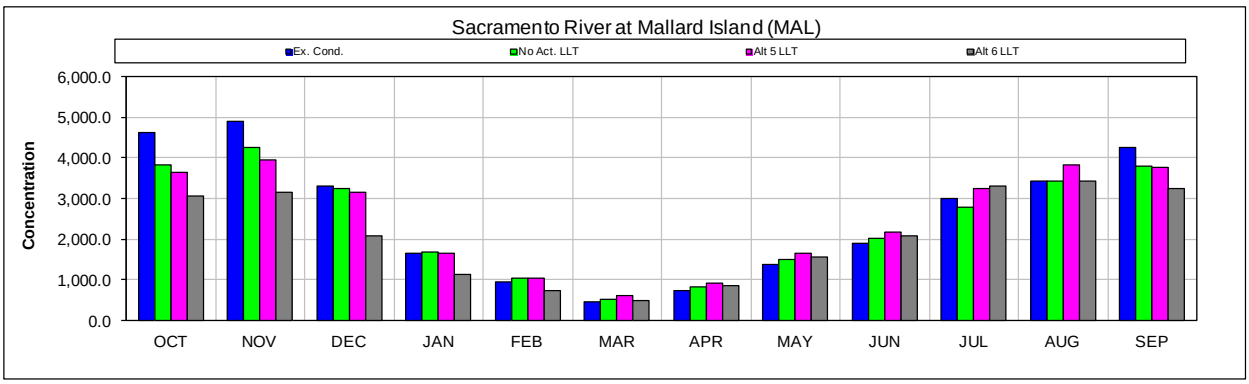


Figure Cl-10. Long-term average estimated chloride concentrations at Franks Tract, Old River at Rock Slough, Banks Pumping Plant, and Old River at Tracy Road for existing conditions, No Action LLT, and Alternatives 5 and 6 (mg/L).

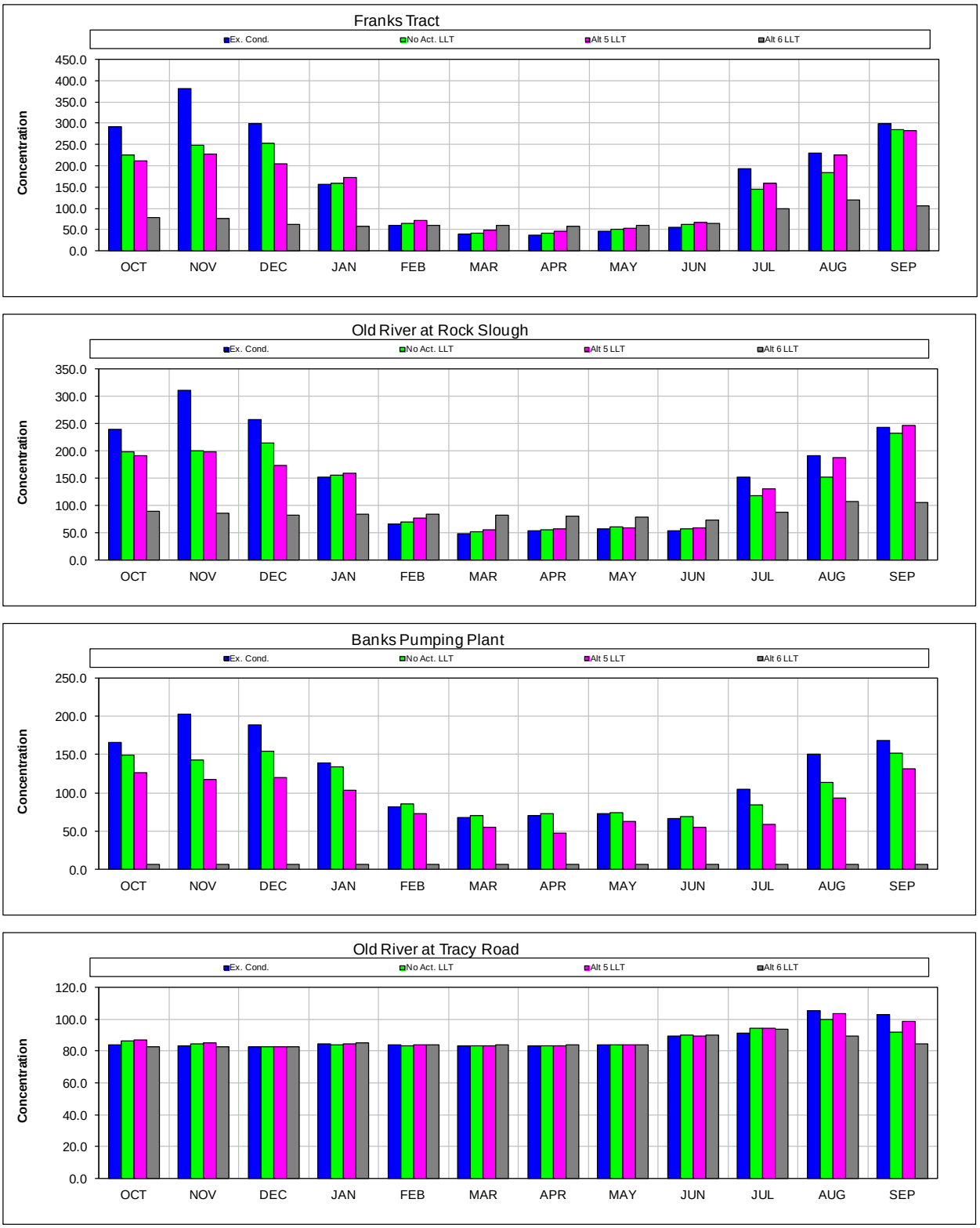
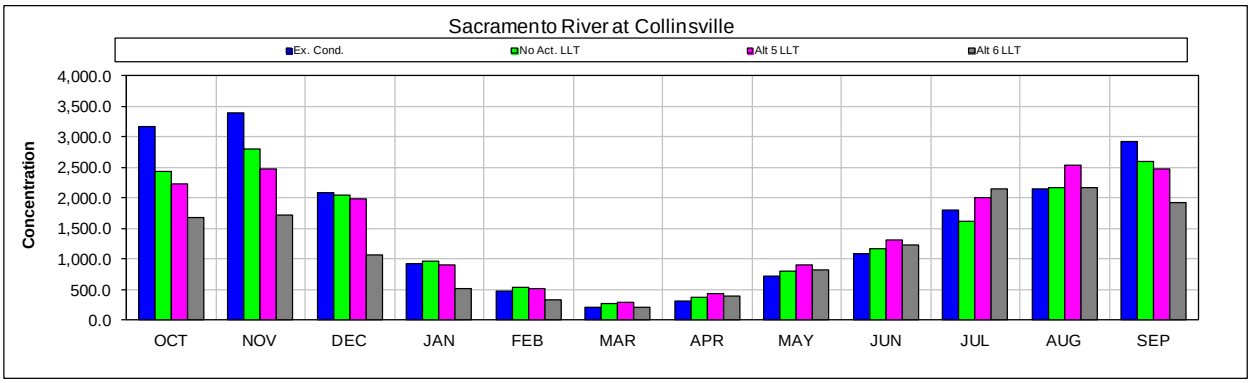
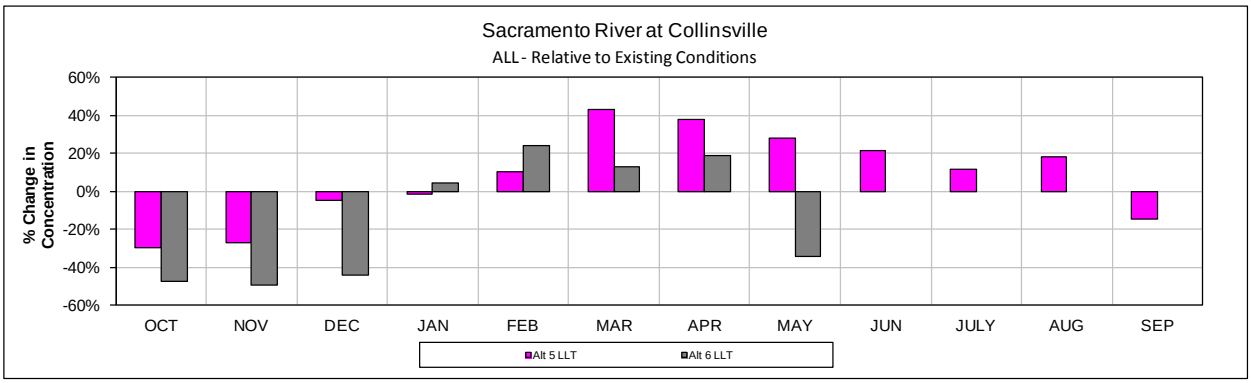


Figure Cl-11. Long-term average estimated chloride concentrations at Sacramento River at Collinsville, and change relative to existing conditions and No Action LLT, for Alternatives 5 and 6 (mg/L).





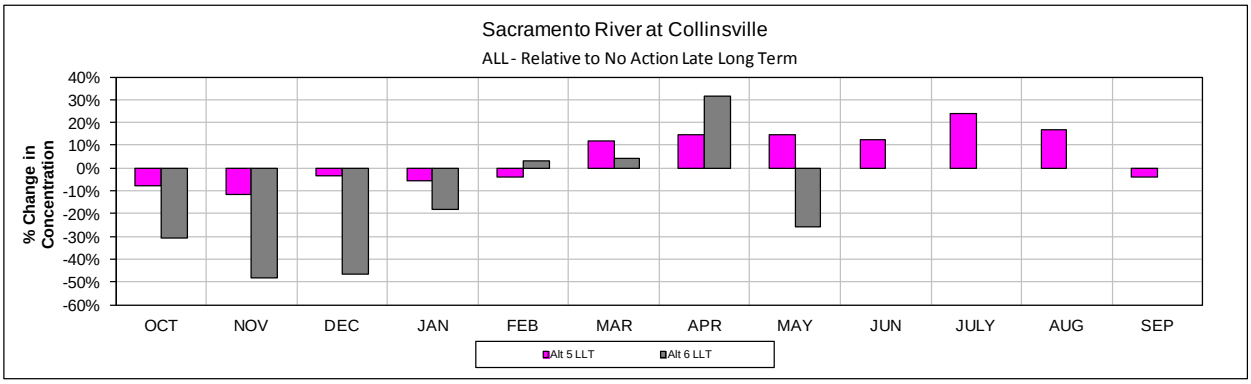
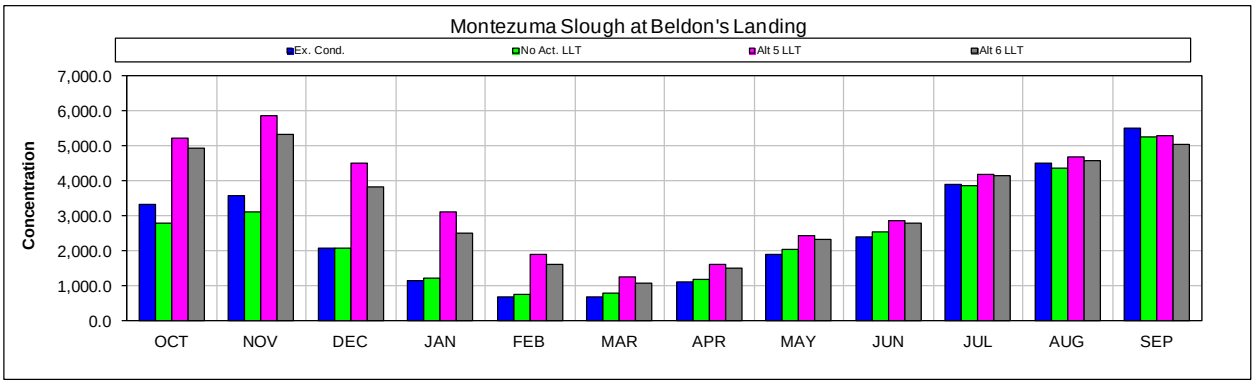
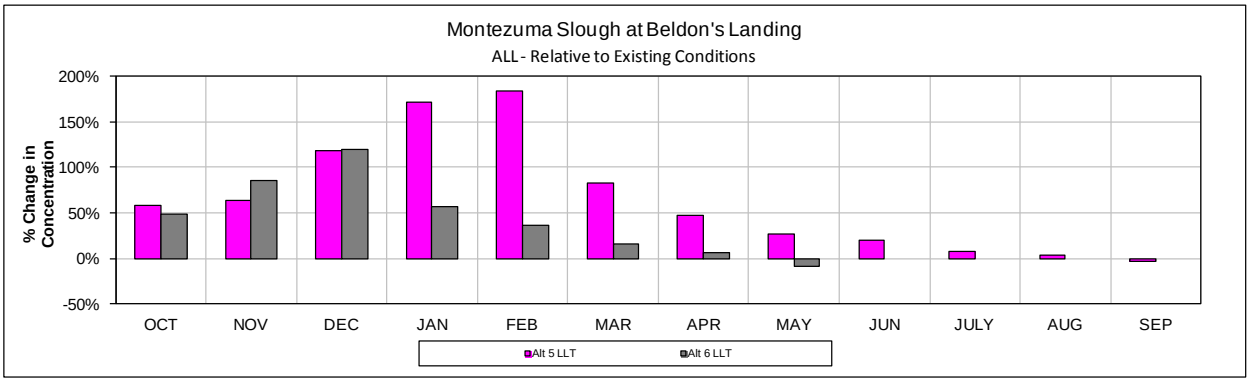


Figure Cl-12. Long-term average estimated chloride concentrations at Montezuma Slough at Beldon's Landing, and change relative to existing conditions and No Action LLT, for Alternatives 5 and 6 (mg/L).





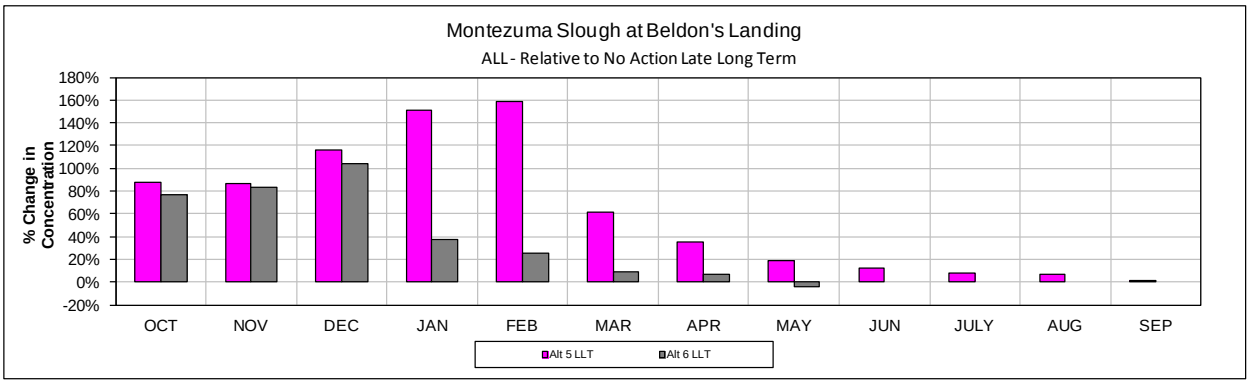
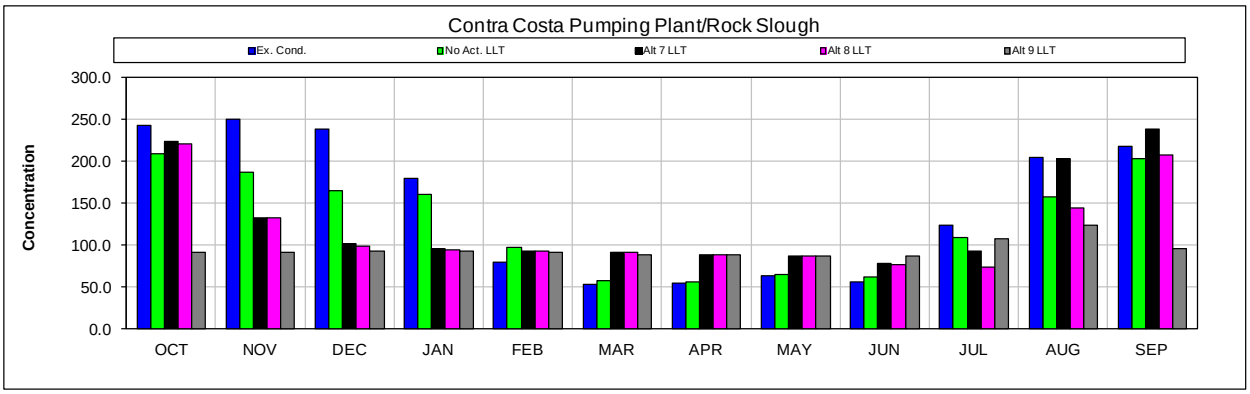
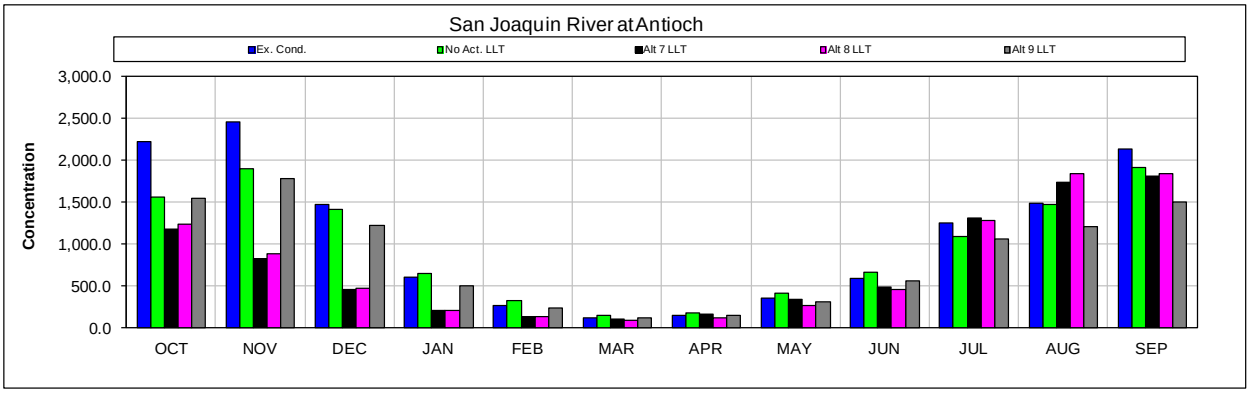


Figure Cl-13. Long-term average estimated chloride concentrations at Contra Costa Pumping Plant, San Joaquin River at Antioch, and Sacramento River at Mallard Island for existing conditions, No Action LLT, and Alternatives 7–9 (mg/L).





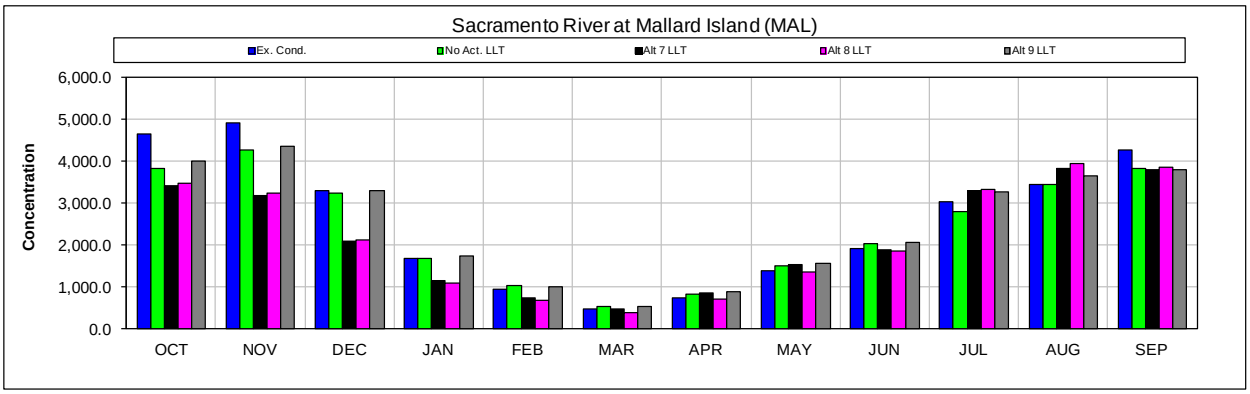
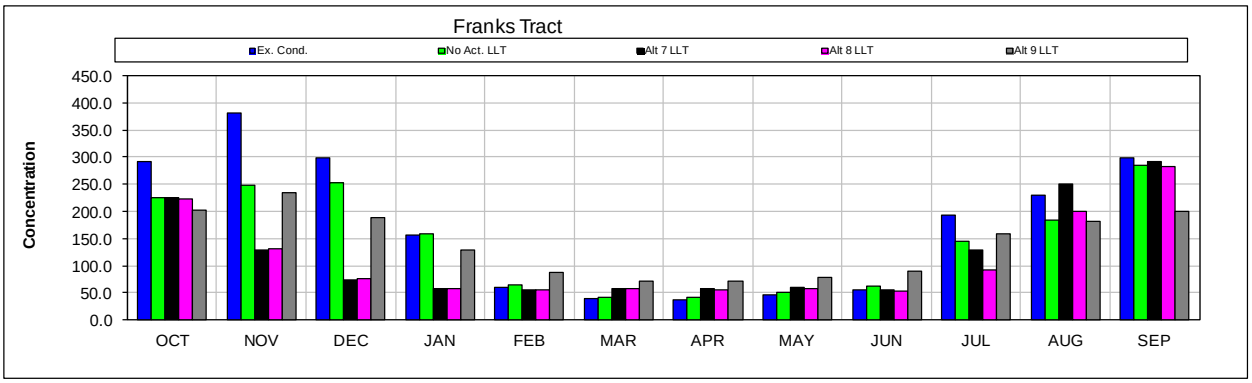
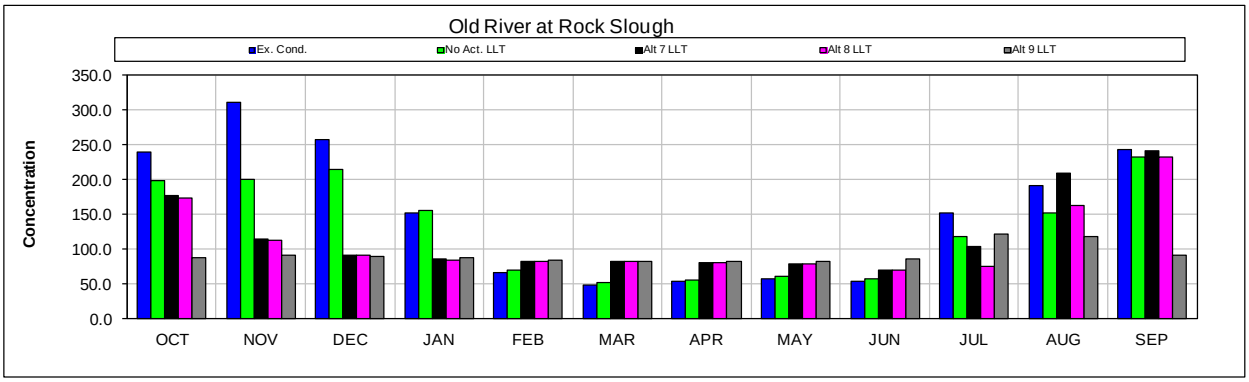
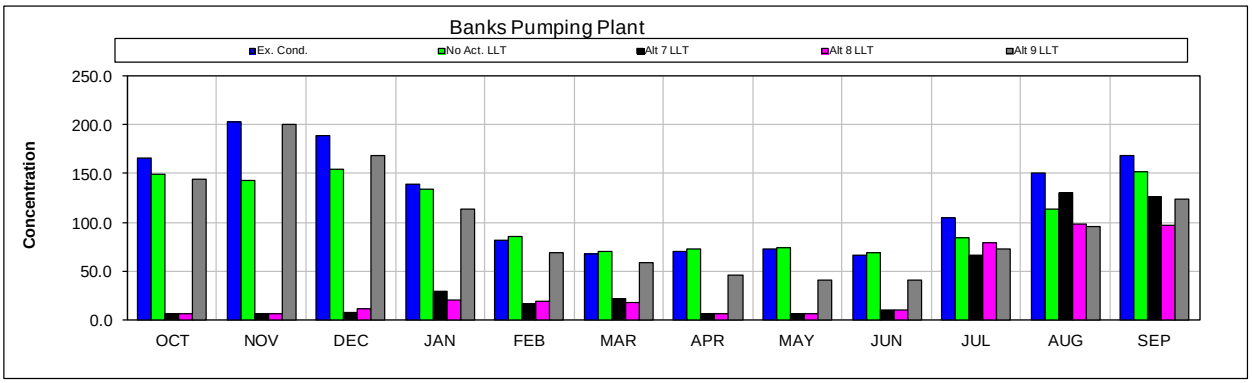


Figure Cl-14. Long-term average estimated chloride concentrations at Franks Tract, Old River at Rock Slough, Banks Pumping Plant, and Old River at Tracy Road for existing conditions, No Action LLT, and Alternatives 7–9 (mg/L).







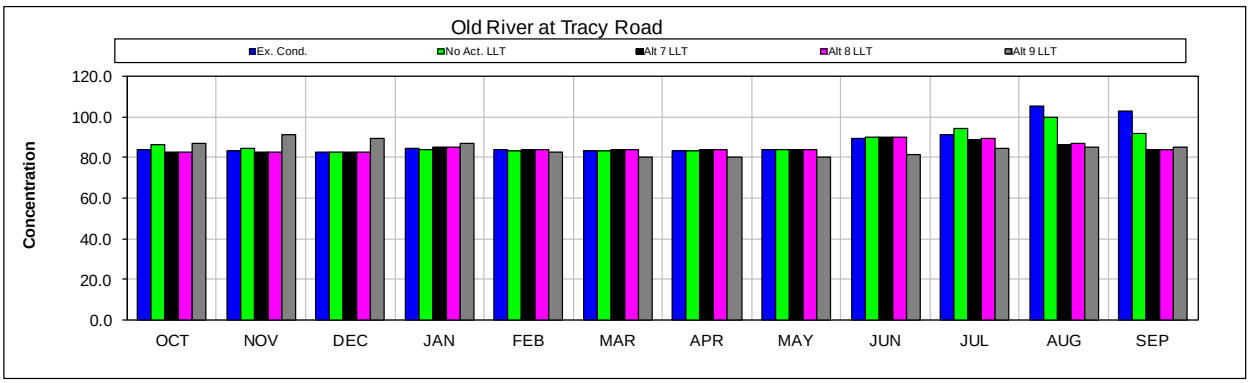
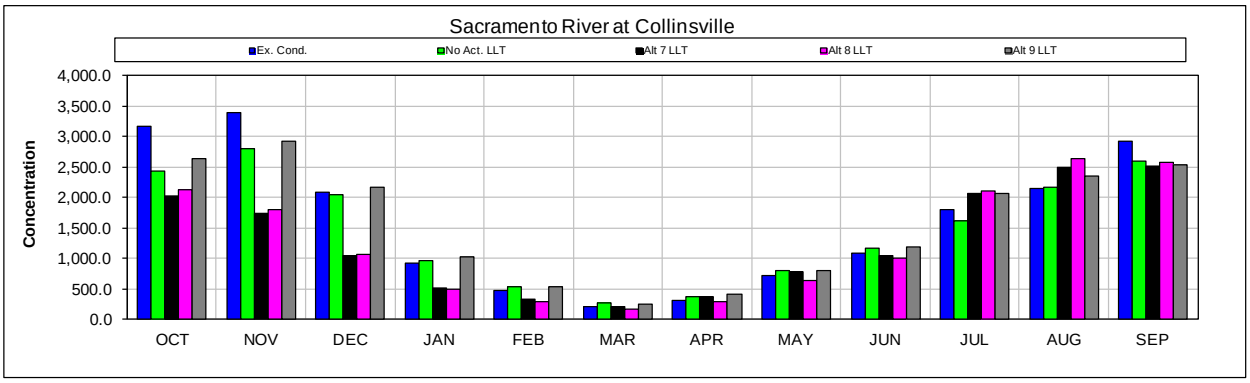
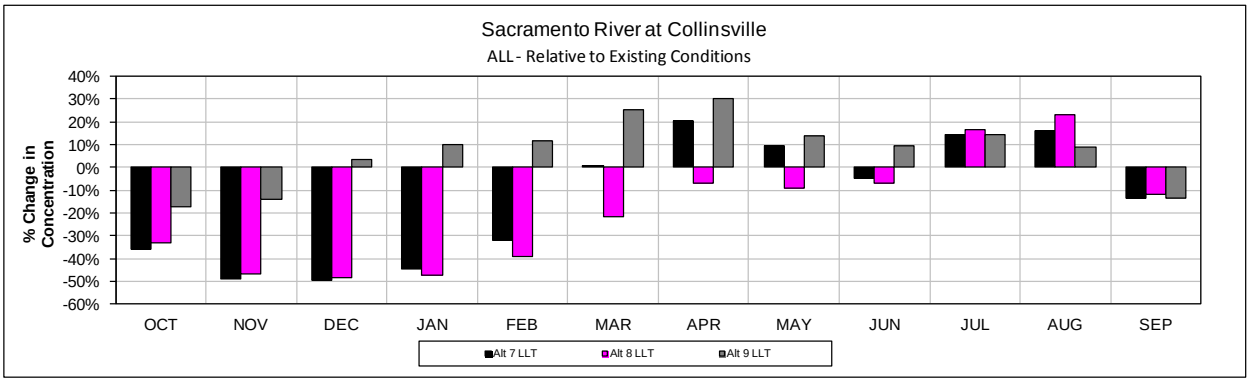


Figure Cl-15. Long-term average estimated chloride concentrations at Sacramento River at Collinsville, and change relative to existing conditions and No Action LLT, for Alternatives 7–9 (mg/L).





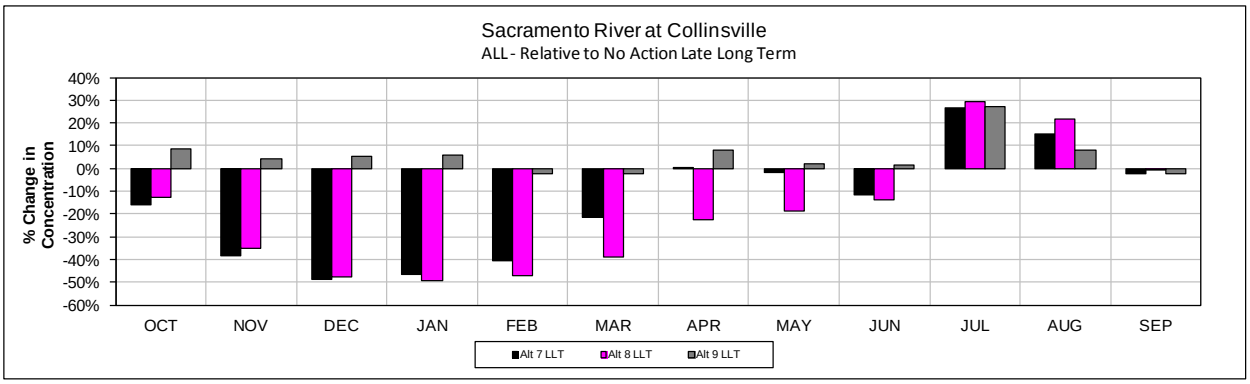
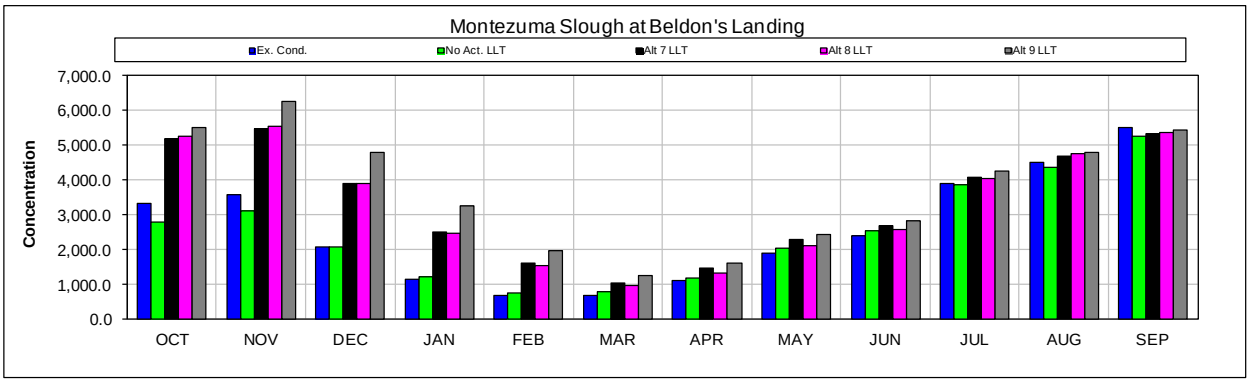
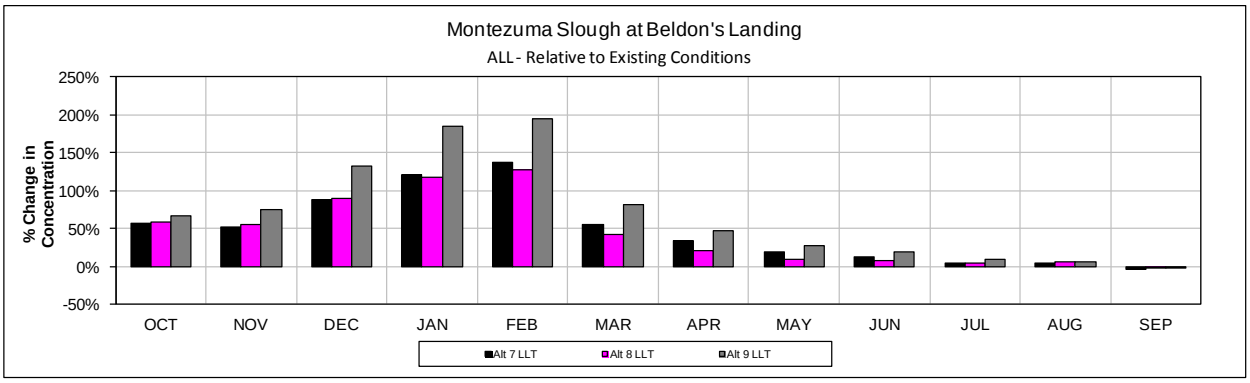


Figure Cl-16. Long-term average estimated chloride concentrations at Montezuma Slough at Beldon's Landing, and change relative to existing conditions and No Action LLT, for Alternatives 7–9 (mg/L).





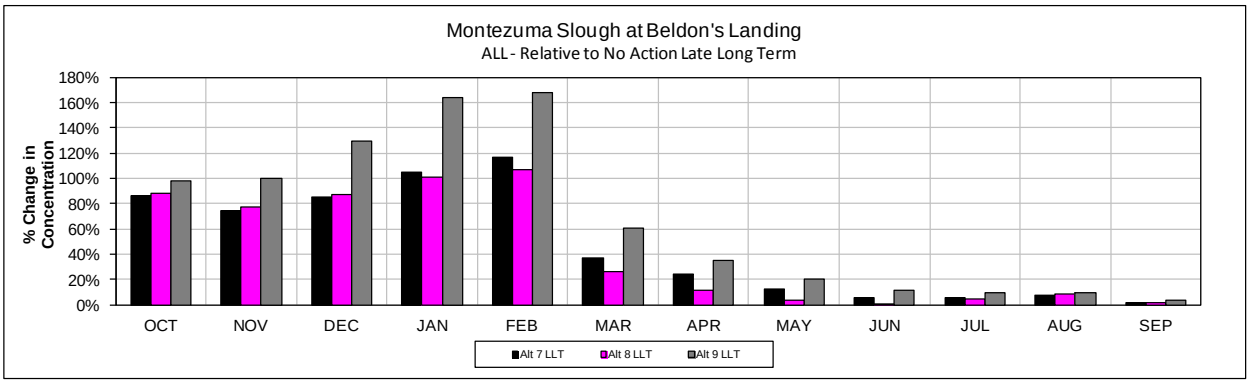
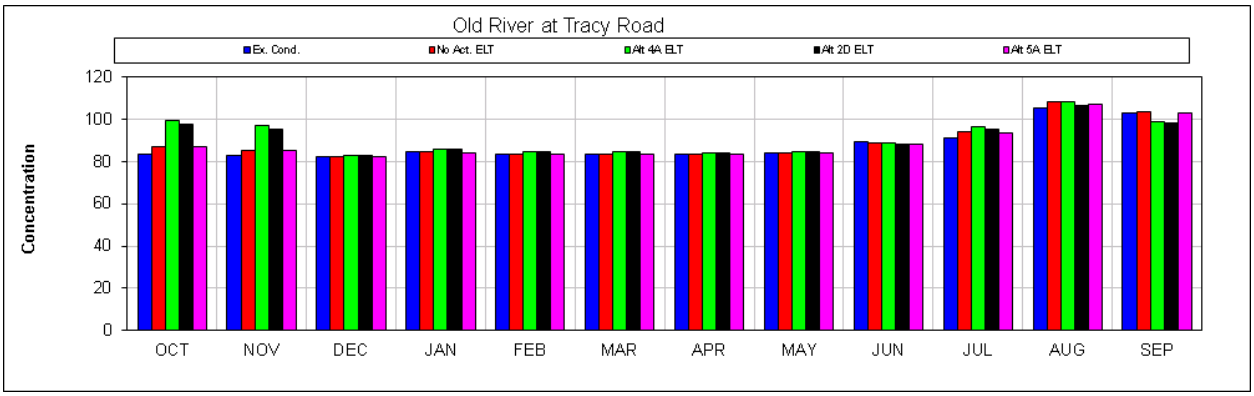
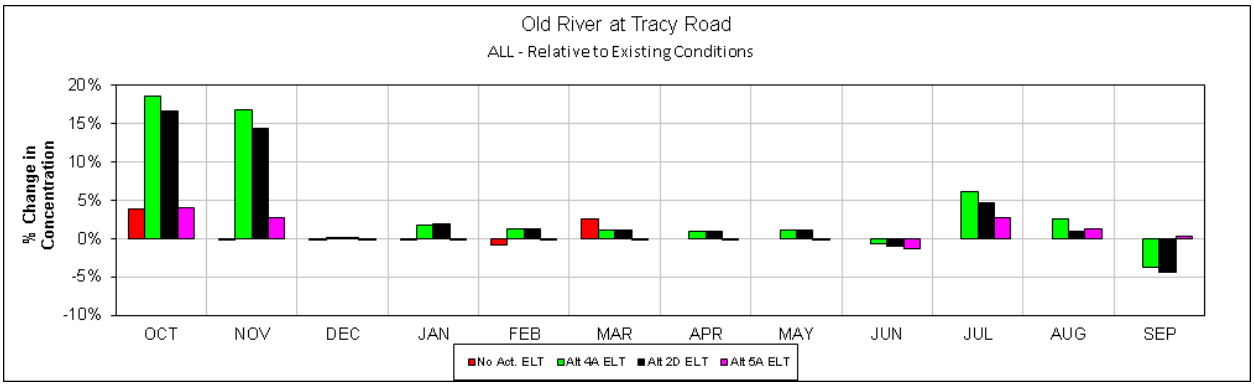


Figure Cl-17. Long-term average estimated chloride concentrations at Old River at Tracy Road, and change relative to existing conditions and the No Action Alternative ELT, for Alternatives 4A, 2D and 5A ELT (mg/L).





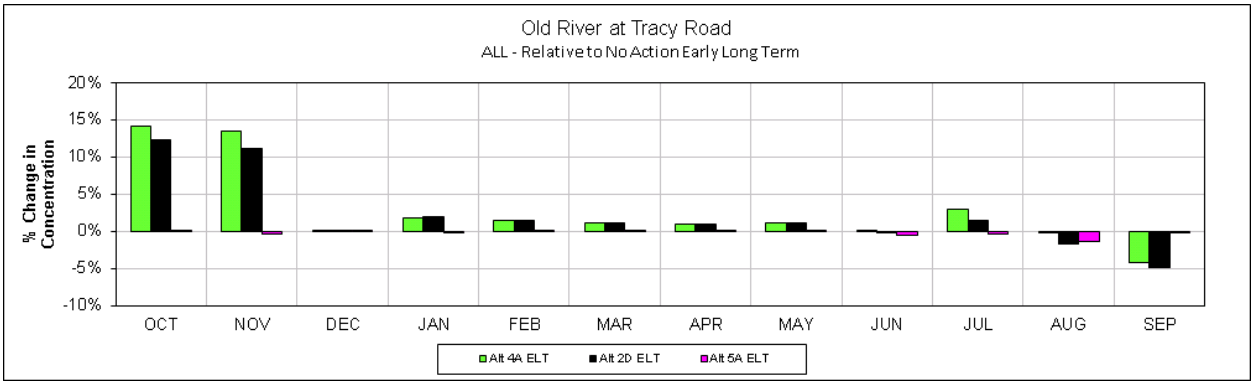
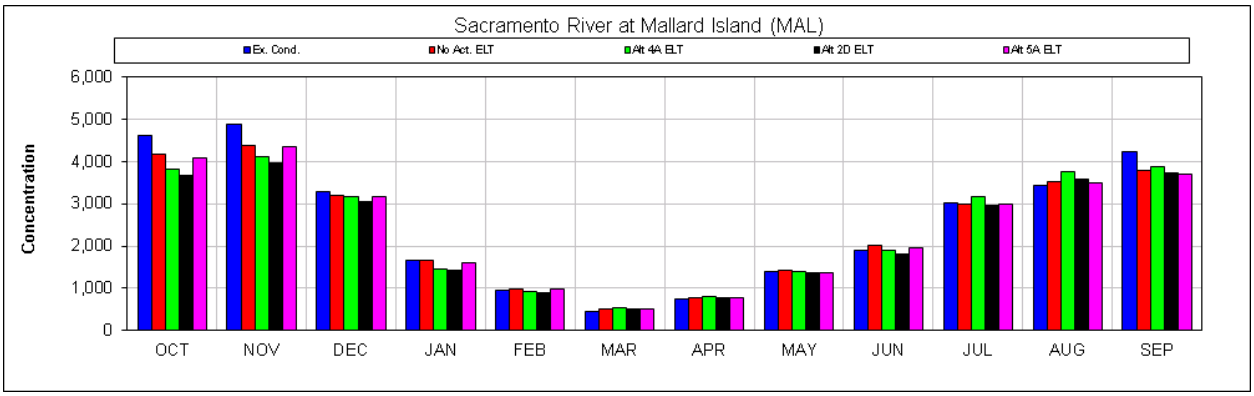
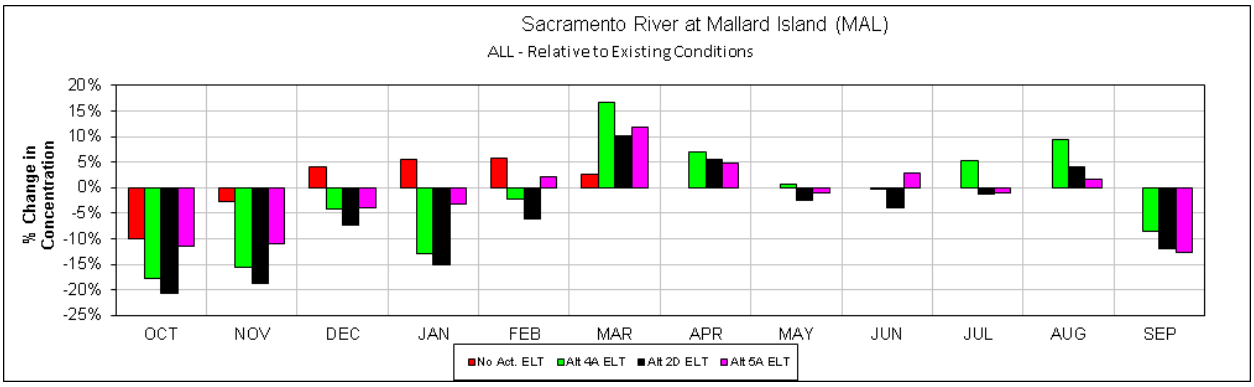


Figure Cl-18. Long-term average estimated chloride concentrations at Sacramento River at Mallard Island, and change relative to existing conditions and the No Action Alternative ELT, for Alternatives 4A, 2D and 5A ELT (mg/L).





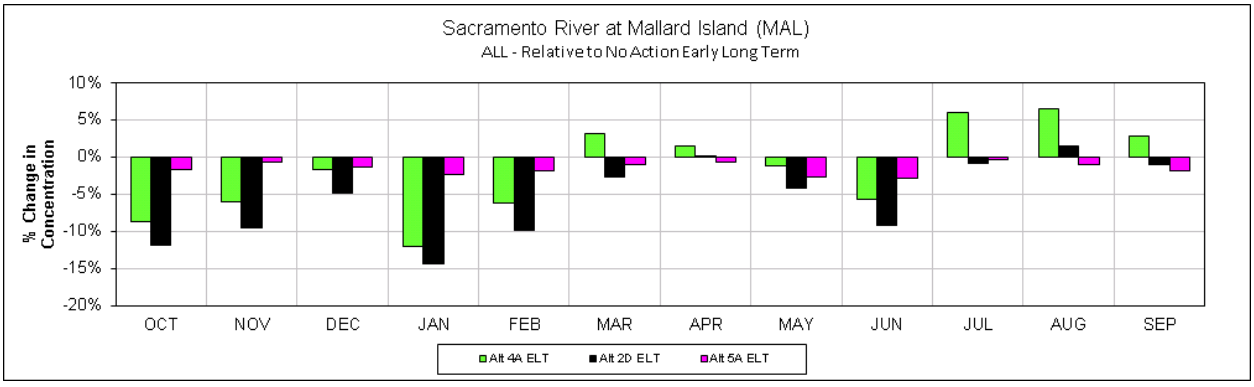
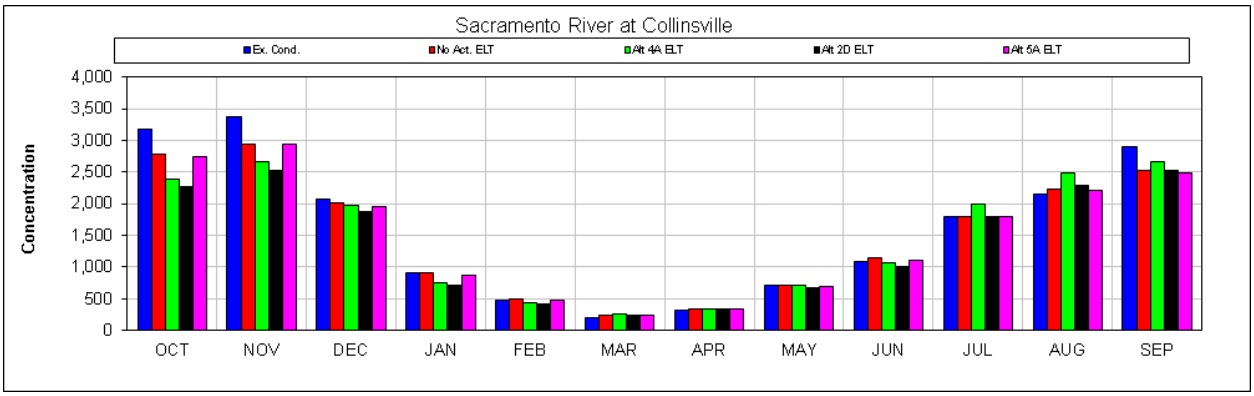
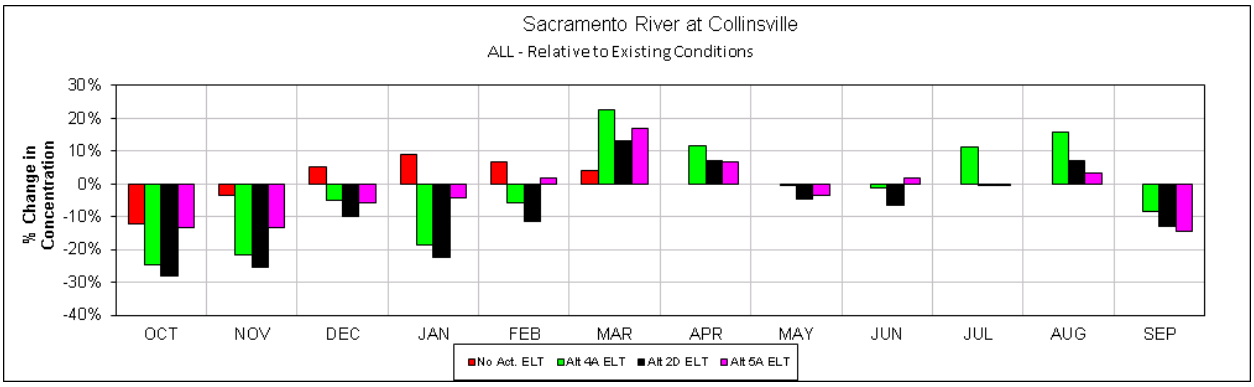


Figure Cl-19. Long-term average estimated chloride concentrations at Sacramento River at Collinsville, and change relative to existing conditions and the No Action Alternative ELT, for Alternatives 4A, 2D and 5A ELT (mg/L).





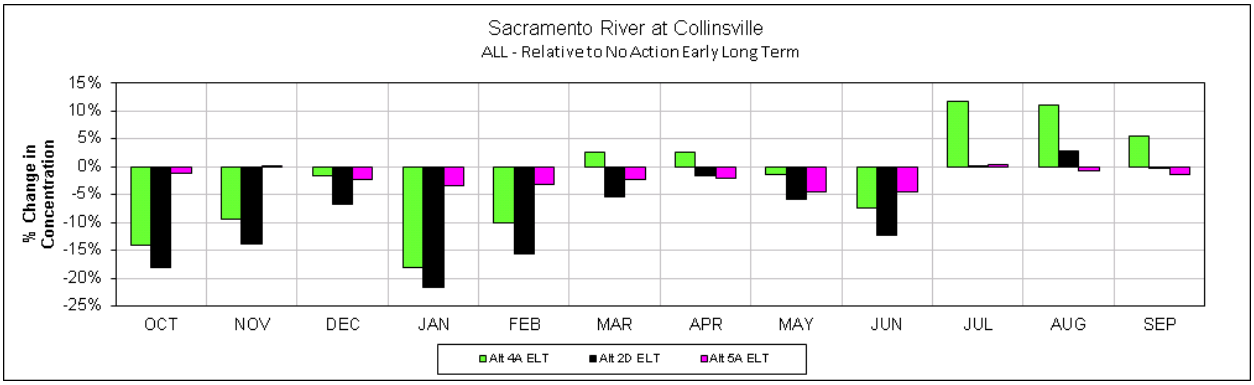


Figure Cl-20. Long-term average estimated chloride concentrations at Montezuma Slough at Beldon's Landing, and change relative to existing conditions and the No Action Alternative ELT, for Alternatives 2D and 5A ELT (mg/L).

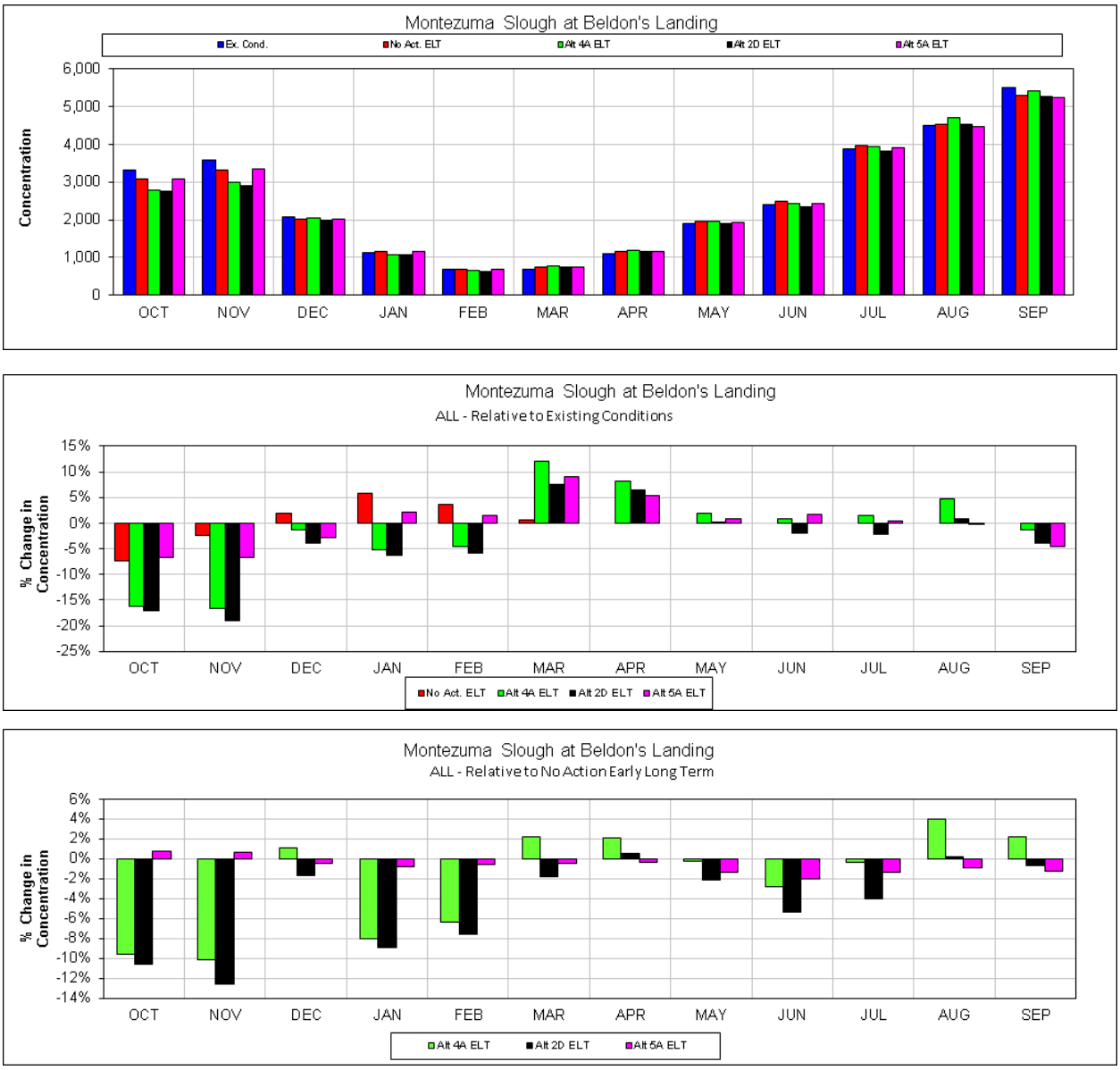


Figure Cl-21. Modeled chloride concentrations in the San Joaquin River at Antioch for April of drought years (1987-1991) using the mass balance approach.

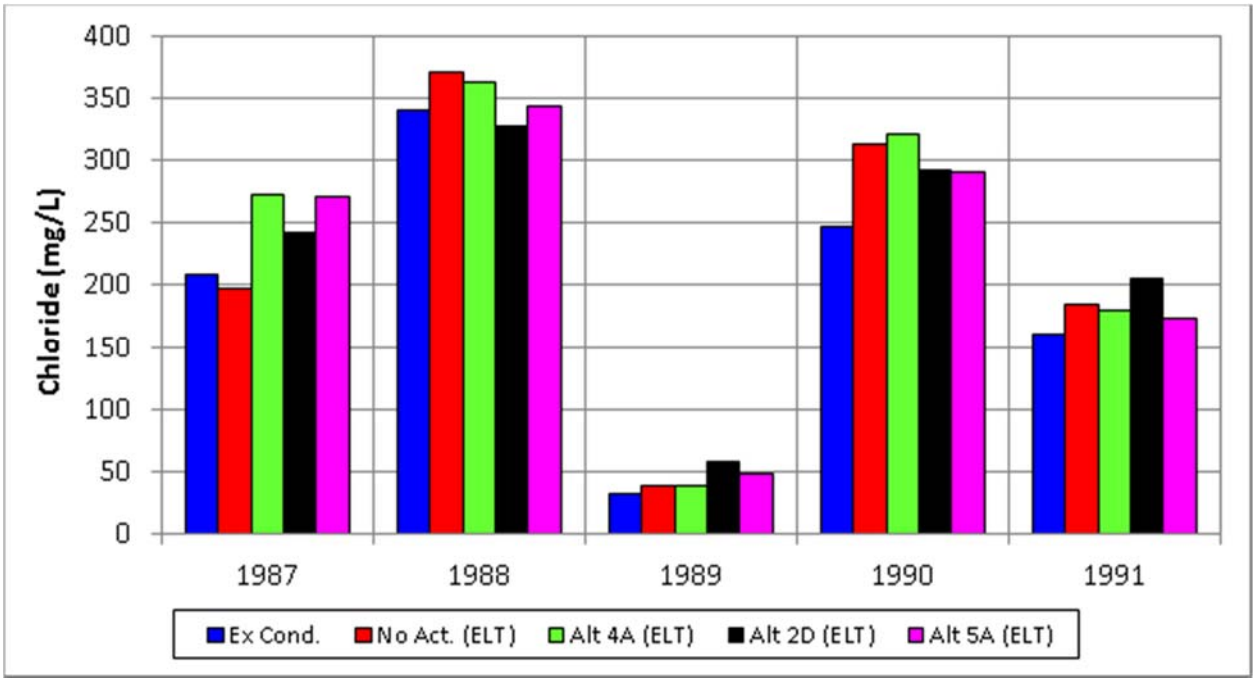


Figure Cl-22. Modeled chloride concentration box-and-whisker plot for the San Joaquin River at Antioch for April of dry and critical water years using the mass balance approach.

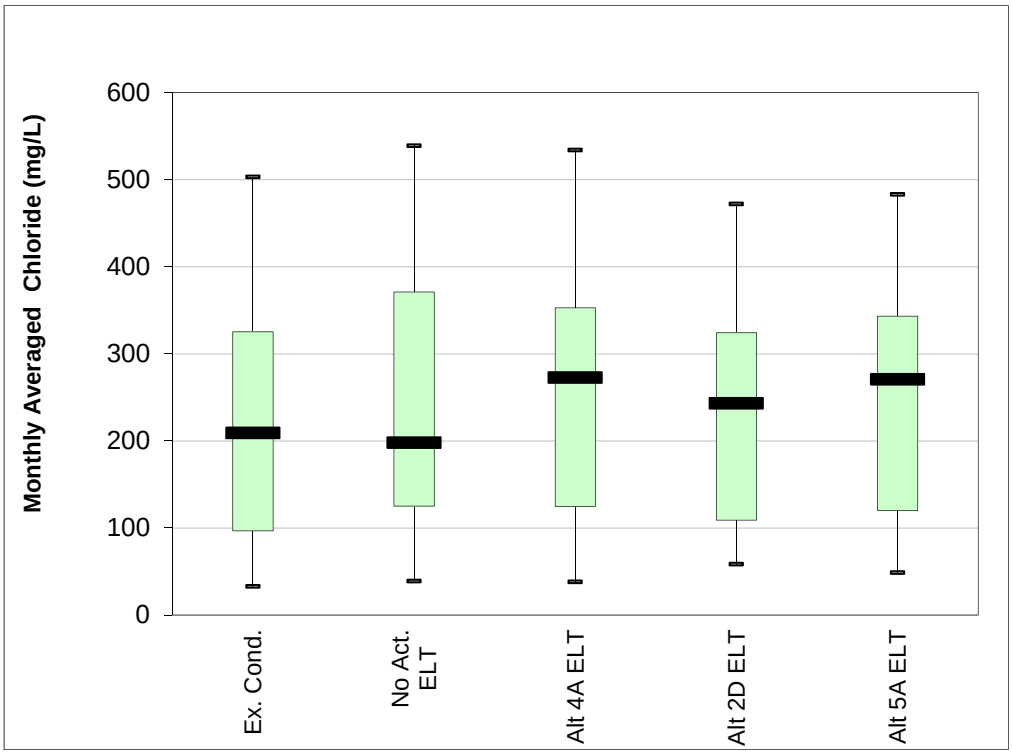
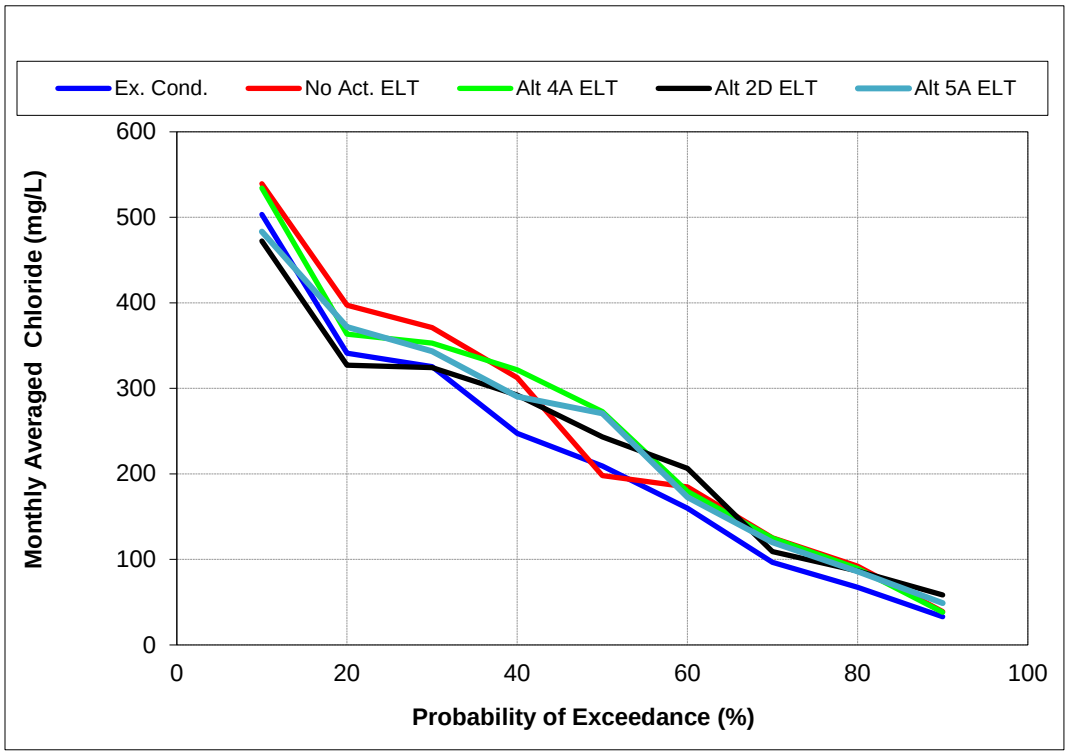



Figure Cl-23. Modeled chloride concentration exceedance plot for the San Joaquin River at Antioch for April of dry and critical water years using the mass balance approach.