

C.5 Discussion

C.5.1 Water Quality

C.5.1.1 EC

Water quality results from the three Alternatives – No Action Alternative, Alternative 2 and Alternative 3 – were analyzed at export locations and selected D-1641 locations in the Delta. EC changes due to the action alternatives were analyzed as Monthly Average percent change from No Action Alternative averaged over all WYs, and as averages over each water year type. Additional percent difference results for each month in the simulation are found in Chapter C.8.1, but are not discussed here.

Figure C-38 illustrates the SWP location EC and selected volumetric percentage calculations for the No Action Alternative, Alternative 2 and Alternative 3 scenarios for calendar years 1987 and 1998, respectively. The volumetric calculations illustrate a hypothetical constant volume calculation in DSM2-QUAL that quantify the inflow percent contributions to the flow at a given location, in this case at SWP. Note that 1987 was a Dry WY and 1988 was a Critical WY. The EC (top plot) for the two action alternatives was greater than No Action Alternative July to December 1987 and 1988, with Alternative 2 having the greatest EC in both time periods. On the other hand, from approximately January to July, 1988 the No Action Alternative EC was greater than either scenario by a small percentage.

The volumetric calculations give an indication of the likely causes for these EC increases and decreases. The EC increases in the Alternative 2 and Alternative 3 scenarios (Figure C-38 top plot) July to December appear to be related most strongly with an increase in the volume of Martinez in comparison with the No Action Alternative (3rd plot from top) and therefore the increase in EC likely arises from that source. Neither the Ag-Drain nor the Sacramento volumes were consistently related to EC changes in those periods. This figure demonstrates that changes in EC present a complicated picture as there are: changes to Sacramento River inflow which generally result in an EC decrease; changes in the influence of salinity intrusion from Martinez and consequent increase in EC; and, changes to agricultural diversions and return flows and thus also to salinity load from agricultural return flows. As a caution to the interpretation, note that the volumetric calculations are hypothetical “constant” volume calculations, so the changes in the actual volume of water from each of these sources at a location is not necessarily the same as the changes in the volumetric percentages.

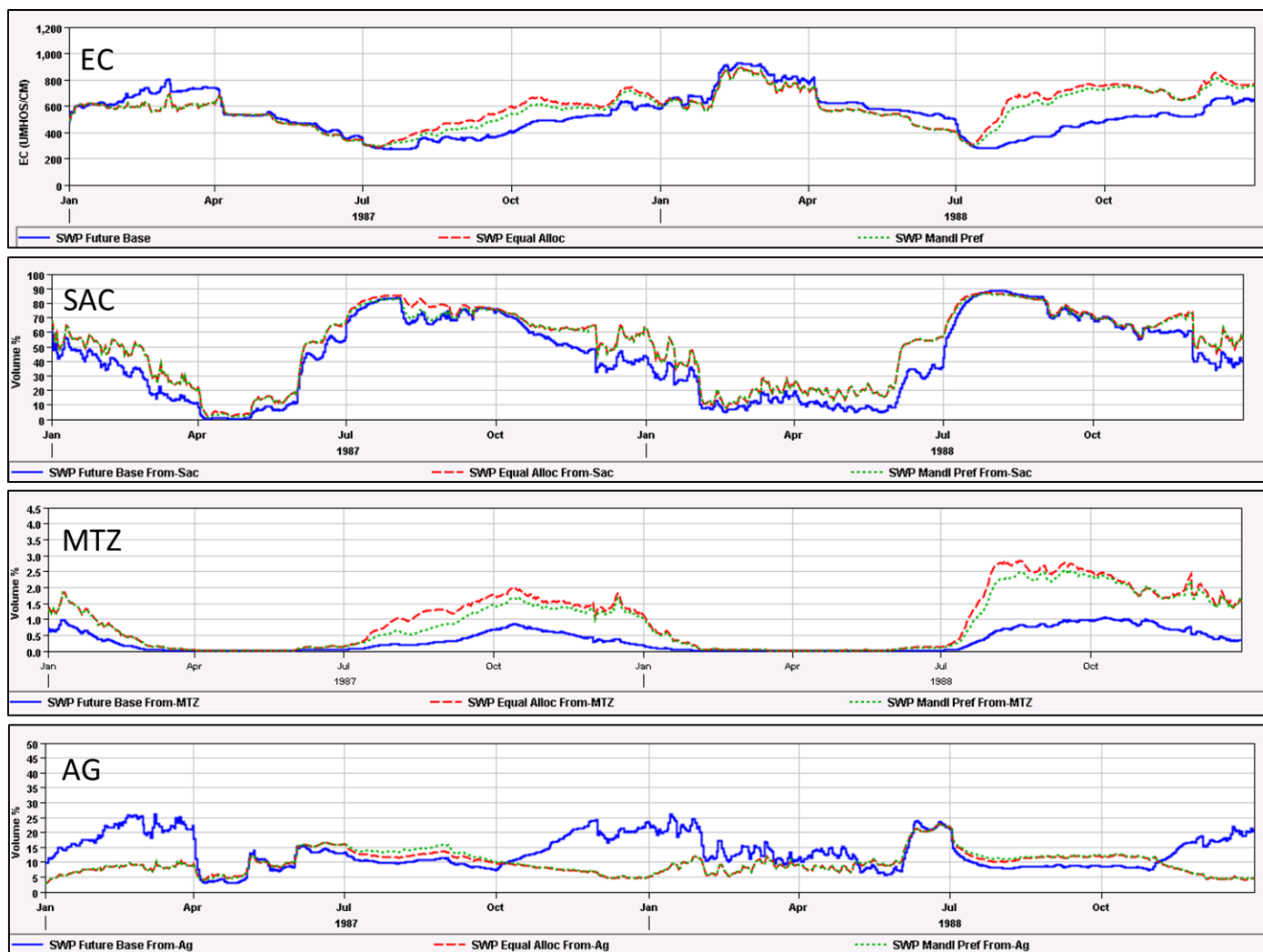


Figure C-38. EC and selected volumetric percent calculations (Sacramento, Martinez and Ag-Drain) at the SWP export location for the No Action Alternative, Alternative 2, and Alternative 3

Table C-21 through Table C-26 present the Monthly Average percent change from No Action Alternative for boundary flows for SWP (Table C-21) and CVP (Table C-22) exports, net DICU flows (Table C-23) and DICU-Drain (Table C-24) flows, and Sacramento (Table C-25) and San Joaquin (Table C-26) River inflows. These tables illustrate that the changes in water quality results, EC, X2 and bromide load, are likely a consequence of scenario differences in several factors, such as DICU flows in the spring and summer, and exports in the winter and late fall. Changes to the Sacramento River inflow likely also contributed to EC changes, but changes to San Joaquin River inflow were small and likely inconsequential. DICU diversion and return locations are interspersed throughout the Delta, so could contribute to localized changes in EC due to scenario changes in the pattern of agricultural use. The pattern of south Delta exports could work together to produce EC changes, or work in opposition to cancel changes that might produce EC patterns, as increases in SWP and CVP exports sometimes overlapped, for example November to December – December of Critical through Below Normal WYs for Alternative 2, while in other cases (June of Critical and Dry WYs), exports at the SWP decreased while at CVP they increased.

Table C-23, percent change from No Action Alternative in Net DICU flow (positive values are Delta inflows) and Table C-24 percent change from No Action Alternative in DICU Drain flow indicate that the scenarios both resulted in large differences in the treatment of DICU flow in comparison with the No Action Alternative. Although there are many changes in the fall, the largest percent changes occur in the spring and summer months during Critical and Dry WYs. As expected, the changes in DICU are most pronounced for Alternative 2 in comparison with the No Action Alternative.

At the SWP export location (Table C-4), both Alternatives 2 and 3 resulted in a deterioration of water quality (an increase in EC) predominantly in spring and early summer of Critical WYs but also for some months in Dry and Below Normal WYs. The percent increase in EC was more pronounced for the Alternative 2 than for Alternative 3. Decreases in EC at the SWP location also occurred for both action alternatives, but they were less frequent than increases, smaller in magnitude and generally scattered through all WYs and all months. Alternative 2 experienced an average increase in Sacramento River inflow volume calculated by WY (Table C-25 upper) in comparison with the No Action Alternative, while Alternative 3 experienced a decrease (Table C-25 lower). DICU Drain flow and Net flow (Table C-24 and Table C-23, respectively) show some their largest changes April to June in Critical and Dry WYs.

At the CVP export location (Table C-5), both Alternatives 2 and 3 resulted in a deterioration of water quality in Critical WYs. The percent increase in EC was more pronounced for Alternative 2. Decreases in EC at the CVP location also occurred for both action alternatives, but they were less frequent than increases, much smaller in magnitude and they were generally scattered through all WYs and all months. Volumetric changes (not shown) were similar in timing to the changes seen in Figure C-38 at SWP.

EC changes for the CCWD export locations depended on the location, but were generally similar to the SWP and CVP results in that Alternative 2 generally had more pronounced degradation of water quality than Alternative 3 and the increases occurred predominantly in Critical WYs.

At the CCWD Old River (OR) export location (Table C-6), both Alternatives 2 and 3 resulted in a deterioration of water quality in Critical WYs, although their timing varied. The percent increase in EC was more pronounced for Alternative 2. Decreases in EC at the OR location also occurred for both action alternatives, but they were smaller in magnitude than increases.

At the CCWD Rock Slough (RS) export location (Table C-7), both Alternatives 2 and 3 resulted in a deterioration of water quality in Critical WYs, although the timing varied. The percent increase in EC was more pronounced for Alternative 2. Decreases in EC at the RS location also occurred for both action alternatives, but they were smaller in magnitude than increases.

At the CCWD Victoria Canal (VC) export location (Table C-8), both Alternatives 2 and 3 resulted in a deterioration of water quality in Critical WYs, although the timing varied. The percent increase in EC was more pronounced for Alternative 2. Decreases in EC at the VC location also occurred for both action alternatives, but they were smaller in magnitude than increases.

EC changes were also analyzed at D-1641 compliance locations Rio Vista (Table C-9), Collinsville (Table C-10), Emmaton (Table C-11), Jersey Point (Table C-12), Antioch (Table C-13), Barker Slough (Table C-14) and Montezuma Slough (Table C-15). Table C-16 gives the results at Rock Slough for completeness, but they are not discussed here.

On the Sacramento River, the magnitude of EC increases and decreases for Alternative 2 increased downstream. At the upstream location at Rio Vista, on average there were EC increases led by increases in Critical WYs. At Emmaton and further downstream at Collinsville, EC decreased on average spring through summer, with the largest changes in Critical, Dry and Below Normal WYs. EC increases were led in late fall and early winter by increases in Below Normal and Dry WYs. Note that the results at Emmaton and Collinsville reflect the changes seen in X2 location. For Alternative 3, EC generally increased on average at all three locations led by increases in the spring and early summer of Critical and Dry WYs.

On the San Joaquin River, the EC changes and Jersey Point and Antioch were generally similar, although the magnitudes differed. For Alternative 2, winter increases in EC reflected increases in SWP+CVP export levels and the percentage changes were greater at Jersey Point, while late spring/early summer increases in EC were greater at Antioch. For Alternative 3, EC percent changes were more moderate and therefore difficult to pinpoint a single cause. EC changes at Montezuma Slough (Table C-15) were similar to the EC changes at Antioch.

At the Barker Slough location (Table C-14), percent changes were generally small for both scenarios - which was expected given the location - and most likely due to changes in DICU allocation locally.

C.5.1.2 Bromide

Bromide calculations were presented both as change in load (load calculated as the annual average of tons Bromide/year) from the No Action Alternative and as percent change in load averaged over all WYs and as averages and percent change over each WY type. The SWP and CVP bromide loads increased in Alternative 2 as an annual average, with increases dominated by increases in Critical WYs. For Alternative 3, the load decreased at both locations.

At the CCWD Old River location, the results generally followed the trend for the SWP annual average bromide load. However, at the Victoria Canal and Rock Slough locations, the annual average bromide loads decreased for both the action alternatives in comparison with the No Action Alternative, with the decreases coming in Critical, Dry or Above Normal WYs depending on the alternative and the location. These results may be somewhat misleading as the CCWD export locations have variable monthly timing (i.e., months when exports are disallowed or preferred at each location).

C.5.1.3 X2

The position of X2 in km from the Golden Gate is regulated for the compliance months February through June. Table C-19 presents X2 position as percent change from No Action Alternative for regulated months as an average and also split by WY type. Results show that the X2 percent change was generally negative for Alternative 2, and positive for Alternative 3. In absolute terms, Table C-1 documents that there are very few months when the change from No Action Alternative X2 position was greater than 1.0 km for either scenario. As noted in the discussion of EC at SWP and the volumetric percentages, the flow into and out of the Delta which regulates the position of X2 is influenced by several factors. However one factor, as seen in Table C-25, is that Alternative 2 saw an average percentage increase in Sacramento River inflow in comparison with the No Action Alternative and that X2 position general moved westward (negative numbers in Table C-19), while Alternative 3 saw the opposite – an average percent increase in the position of X2 and an average percent decrease in Sacramento River inflow.

C.5.2 Flow and Stage

C.5.2.1 South Delta Stage

Given changes in the demand for agricultural withdrawals and exports in the scenarios, the potential for reduced water levels in the south Delta that might affect agricultural water withdrawals was investigated at upstream and downstream locations of the south Delta barriers in Old River, Middle River and Grant Line Canal. A very conservative estimate was calculated in which the minimum stage value in any month for an alternative was compared to the

minimum stage for that month in the No Action Alternative. Using this metric, it was found that decreases in stage were less than -0.2 feet in the great majority of months.

C.5.2.2 OMR Flow

The BOs prescribing OMR flow values for the protection of delta smelt are complicated by the additional triggers used to specify the “adaptive” actions to restrict negative OMR flows, such as turbidity, water temperature, and the presence of delta smelt at certain locations or times. These complications make it difficult to assess the consequences of a change in OMR flow due to the alternatives. The Monthly Average percent change from No Action Alternative results indicate that both alternative scenarios tend to increase the magnitude of negative OMR flow, and that the range of effects are similar for the two scenarios.

Table C-21. Percent change in SWP export flows from the No Action Alternative exports

SWP Alternative 2												
WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Average	0.57	0.66	1.64	0.86	-0.75	-0.20	0.10	-0.20	-1.09	0.97	1.09	0.78
Critical	0.28	1.35	4.36	0.81	0.68	0.03	0.28	-1.07	-14.27	10.32	-3.18	3.10
Dry	0.59	2.85	0.02	0.11	-0.81	-0.46	0.40	-0.32	-3.43	0.74	7.27	2.66
BN	0.12	-0.19	5.03	5.18	-4.13	-0.66	0.08	-0.29	-0.94	-0.20	-0.04	0.48
AN	0.83	-0.29	0.02	-0.18	-0.01	-0.10	-0.01	-0.06	-0.01	-0.15	-0.01	-0.02
Wet	0.70	0.04	0.91	-0.07	-0.03	-0.03	0.00	0.00	-0.04	0.01	0.00	0.01
SWP Alternative 3												
WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Average	0.27	0.84	-1.33	0.09	-0.05	0.02	-0.21	-0.19	0.57	-0.43	0.02	-0.96
Critical	-0.18	-1.03	-2.75	2.04	0.88	-0.77	-1.93	0.28	0.44	-3.13	-8.95	-1.56
Dry	1.97	4.63	-3.79	-0.01	0.81	-0.36	-0.64	-1.14	2.93	-0.60	1.72	-3.96
BN	-0.62	-0.28	-0.81	-1.07	-1.92	0.61	0.53	-0.20	1.24	0.01	0.02	-0.56
AN	1.83	0.61	-0.01	0.05	0.02	0.00	0.00	0.02	0.00	-0.01	0.00	0.00
Wet	-0.42	-0.05	0.00	0.04	0.10	0.02	0.00	0.01	-0.01	-0.12	0.00	0.10

Table C-22. Percent change in CVP export flows from No Action Alternative exports

CVP Alternative 2												
WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Average	0.40	1.03	0.14	-0.88	0.75	-0.39	-0.15	0.14	1.12	1.17	3.77	0.45
Critical	0.40	1.66	1.39	0.09	-0.63	-1.58	0.02	0.64	19.64	4.05	16.07	1.38
Dry	-0.12	0.84	-0.04	0.10	2.38	0.66	-0.19	0.42	2.90	3.02	11.69	1.57
BN	0.89	2.03	1.47	-4.83	0.85	-0.09	-0.21	0.00	0.86	0.96	3.07	-0.53
AN	-1.63	-0.09	0.32	-0.97	0.29	0.12	0.00	0.00	0.00	0.30	0.00	-0.69
Wet	1.26	0.71	-1.04	0.01	-0.33	-0.99	-0.22	0.00	0.09	0.00	0.00	-0.05
CVP Alternative 3												
WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Average	-1.2	0.8	-0.1	0.7	0.8	-0.3	0.3	0.0	-1.4	-0.3	-1.2	-0.6
Critical	-2.8	0.3	3.1	-0.7	-2.1	-3.1	1.9	-0.2	-0.5	-4.3	8.6	-6.1
Dry	-2.4	1.6	-2.1	-0.1	-1.1	0.1	0.1	0.0	-2.8	-0.6	-8.6	-1.8
BN	-1.9	1.5	0.1	1.1	7.8	-1.0	-0.5	0.0	-6.2	0.8	-2.1	-0.1
AN	-0.5	0.0	-0.1	5.8	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Wet	0.5	0.6	0.0	-0.1	-0.2	0.1	0.4	0.0	0.0	-0.2	0.0	0.1

C-86 – November 2014 **Table C-23. Percent change from No Action Alternative for DICU-Net flow (positive represents inflow to the Delta)**

DICU NET Alternative 2												
WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Average	43.12	1.12	0.39	0.00	0.06	0.52	8.24	-5.34	-3.63	-3.23	-3.27	-3.70
Critical	93.04	7.32	2.63	0.00	0.31	3.46	-13.13	-14.23	-8.09	-7.23	-7.37	-8.11
Dry	-14.28	1.43	0.55	0.00	0.05	0.75	-163.99	-6.59	-5.25	-4.71	-4.91	-5.91
BN	-15.57	1.35	0.38	0.00	0.10	0.77	25.22	-6.94	-5.57	-5.50	-5.61	-6.98
AN	9.38	1.17	0.12	0.00	0.00	0.07	2.62	-2.21	-1.22	-1.07	-1.10	-1.24
Wet	5.28	0.36	0.12	0.00	0.00	0.05	0.28	-0.75	-0.48	-0.42	-0.41	-0.48
DICU NET Alternative 3												
WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Average	-23.24	-0.58	-0.23	0.00	-0.02	-0.26	-4.06	3.05	1.98	1.75	1.82	2.11
Critical	-58.65	-4.18	-1.76	0.00	-0.08	-1.03	6.00	7.74	3.87	3.31	3.83	3.77
Dry	6.29	-0.57	-0.16	0.00	-0.09	-0.74	119.84	5.76	4.34	4.18	4.10	5.39
BN	11.47	-1.01	-0.44	0.00	0.00	-0.34	-7.88	2.39	1.97	1.88	1.99	2.71
AN	-4.03	-0.47	0.00	0.00	0.00	0.00	-1.13	0.80	0.43	0.46	0.42	0.31
Wet	-2.23	-0.16	-0.06	0.00	0.00	0.00	-0.06	0.17	0.12	0.12	0.11	0.08

Table C-24. Percent change from No Action Alternative for DICU-Drain flow (inflow to the Delta channels)

DICU DRN Alternative 2												
WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Average	2.39	0.54	0.24	0.00	0.04	0.95	2.57	7.43	0.84	-2.49	-2.09	-0.73
Critical	1.34	1.57	1.05	0.00	0.19	6.40	26.15	31.78	20.45	-5.47	-4.00	-1.84
Dry	9.24	0.59	0.30	0.00	0.03	0.26	0.49	11.39	-4.16	-3.56	-3.56	-2.04
BN	1.09	0.59	0.22	0.00	0.07	0.09	0.95	-1.70	-4.41	-4.27	-2.79	-0.12
AN	1.09	0.56	0.08	0.00	0.00	0.05	0.46	-0.41	-0.97	-0.83	-0.81	-0.74
Wet	0.51	0.22	0.09	0.00	0.00	0.04	0.09	-0.18	-0.38	-0.33	-0.30	0.12
DICU DRN Alternative 3												
WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Average	-0.39	-0.28	-0.15	0.00	-0.02	-0.08	-0.20	-2.29	1.56	1.35	1.24	0.54
Critical	-0.55	-0.90	-0.70	0.00	-0.05	-0.09	0.65	1.02	2.93	2.50	2.17	1.26
Dry	-0.26	-0.24	-0.09	0.00	-0.06	-0.26	-0.59	1.93	3.45	3.16	2.96	1.84
BN	-0.80	-0.44	-0.26	0.00	0.00	-0.12	-0.64	-17.70	1.57	1.46	1.21	0.03
AN	-0.47	-0.22	0.00	0.00	0.00	0.00	-0.20	0.21	0.34	0.36	0.31	0.19
Wet	-0.18	-0.10	-0.04	0.00	0.00	0.00	-0.03	0.04	0.09	0.09	0.08	-0.07

Table C-25. Percent change from No Action Alternative for Sacramento River inflow for the two scenarios

Sacramento Inflow Alternative 2												
WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Average	0.25	-0.28	0.14	0.10	0.10	0.01	0.27	0.24	-0.43	0.13	0.84	0.11
Critical	0.36	-0.23	1.44	0.64	-0.29	-0.28	0.64	-0.73	-3.60	1.99	-0.65	-0.33
Dry	-0.16	-0.22	0.21	0.02	0.39	0.26	0.77	0.82	-0.48	0.05	5.25	1.10
BN	0.08	-0.04	0.14	-0.02	0.34	0.16	1.14	1.07	-0.30	-0.24	-0.41	-0.08
AN	-0.25	-0.18	0.19	0.26	0.09	-0.09	0.00	0.28	0.00	0.02	-0.07	0.07
Wet	0.70	-0.44	-0.08	0.03	0.01	-0.01	-0.03	-0.01	0.01	-0.10	-0.09	-0.07
Sacramento Inflow Alternative 3												
WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Average	-0.03	0.20	-0.03	0.02	-0.08	-0.07	-0.16	-0.20	0.05	0.24	-0.25	-0.39
Critical	-0.81	0.03	0.29	0.34	-0.54	-0.17	-0.44	-0.33	0.07	-0.32	0.30	-1.29
Dry	0.31	1.06	-0.19	-0.02	-0.14	-0.22	-0.39	-0.70	0.24	1.05	-1.62	-2.67
BN	-0.68	0.13	-0.20	0.24	-0.20	-0.11	-0.54	-0.53	0.22	0.31	0.08	-0.23
AN	0.60	0.49	-0.15	-0.07	0.04	-0.14	0.04	0.02	0.01	0.02	0.11	0.49
Wet	0.11	-0.21	0.05	-0.03	-0.03	0.02	-0.05	-0.04	-0.07	-0.04	0.01	0.04

Table C-26. Percent change from No Action Alternative for San Joaquin River inflow

Vernalis Inflow Alternative 2												
WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Average	0.01	0.00	0.00	0.00	-0.01	0.00	0.01	0.02	0.04	0.07	0.07	0.03
Critical	0.02	0.01	0.01	0.01	0.01	0.02	0.08	0.24	0.53	0.61	0.42	0.10
Dry	0.01	0.00	0.00	0.00	0.01	0.03	0.02	0.04	0.14	0.28	0.17	0.06
BN	0.01	0.00	0.00	0.00	-0.02	-0.01	0.01	0.01	0.04	0.09	0.06	0.02
AN	0.01	0.00	0.00	0.00	-0.01	-0.01	0.00	0.00	0.01	0.03	0.04	0.01
Wet	0.01	0.00	0.00	0.00	-0.01	-0.01	0.00	0.00	0.00	0.01	0.01	0.01
Vernalis Inflow Alternative 3												
WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Average	-0.01	0.00	0.00	0.00	0.01	0.00	0.00	-0.01	-0.02	-0.05	-0.04	-0.02
Critical	-0.01	0.00	0.00	0.00	-0.01	-0.02	-0.03	-0.18	-0.28	-0.66	-0.29	-0.05
Dry	-0.01	0.00	0.00	0.00	0.00	-0.01	-0.02	-0.04	-0.11	-0.21	-0.13	-0.05
BN	-0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	-0.04	-0.06	-0.04	-0.02
AN	-0.01	0.00	0.00	0.00	0.01	-0.01	-0.01	0.00	0.00	-0.01	-0.01	0.00
Wet	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00

C.6 Conclusion

Analysis of the two action alternatives to the No Action Alternative documented for EC and bromide at export locations and for EC at D-1641 locations indicate that Alternative 2 generally results in greater percent increases in EC on average than Alternative 3 in comparison with the No Action Alternative. Most of the changes in EC occurred in Critical WYs although Dry WYs also saw substantial changes. EC changes for the CCWD export locations depended on the location, but were generally similar in the pattern of seasonal EC increases. Alternative 2 generally had more pronounced degradation of water quality (assessed as percent change from No Action Alternative) than Alternative 3— for both scenarios, when it occurred, degradation was predominantly in Critical WYs.

Bromide loads at the SWP and CVP export locations increased as an annual average under Alternative 2, led by increases in Critical, Dry and Below Normal WYs. Bromide load decreased as an annual average and in Critical, Dry and Below Normal WYs for Alternative 3 in comparison with the No Action Alternative for the SWP location, and also decreased as an annual average at the CVP location for Critical and Dry WYs. At the CCWD export locations, the picture for bromide load was mixed – for Alternative 2; it decreased as an annual average at Rock Slough and at Victoria Canal and increased at Old River. Bromide load decreased as an annual average for Alternative 3 at all CCWD locations.

Changes in the location of X2 were small with the largest eastward changes potentially leading to increases in Delta EC occurred outside of the regulatory months February – June. Decreases in south Delta stage were generally small.

C.7 References

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C.8 Additional Tables

C.8.1 Average Monthly percent difference in EC for the export locations

Table C-27. SWP Monthly Export EC Percent Difference Alternative 2 Compared to No Action Alternative

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.00	0.00	0.00	0.00	0.00	0.10	-0.03	0.02	0.00	0.00	0.00	0.00
1923	-0.07	0.12	0.09	0.01	0.15	0.13	0.06	-0.07	-0.25	-0.78	-1.28	0.69
1924	0.13	-0.15	-0.21	-0.39	-0.20	-0.01	-0.01	0.43	0.90	-1.52	0.88	1.55
1925	0.91	0.41	0.49	0.60	0.23	0.32	0.18	0.14	1.00	0.47	0.24	-0.92
1926	0.23	0.65	-0.37	-0.44	-0.18	-0.27	-0.20	-0.57	1.35	-0.24	-0.04	1.58
1927	2.53	2.73	1.85	0.71	0.30	0.14	0.02	-0.02	-0.02	0.01	0.00	-0.01
1928	-0.01	0.14	0.08	0.04	0.02	0.05	0.21	-0.01	0.26	-0.31	-1.24	-0.58
1929	0.15	-0.65	-0.51	0.00	-0.02	-0.11	7.17	11.26	8.78	4.80	0.06	0.28
1930	0.01	-0.39	1.44	0.76	0.44	0.32	0.24	0.30	2.11	0.54	1.75	1.26
1931	-0.49	-1.26	-0.24	1.07	0.58	0.82	0.84	2.70	5.48	-5.37	-4.82	-2.19
1932	1.01	3.00	2.38	0.69	-0.32	-0.04	0.26	0.12	0.08	0.03	-0.88	-0.89
1933	-0.94	0.22	1.24	1.20	-0.02	-0.44	-0.26	-0.28	0.51	-3.02	-3.52	-2.21
1934	-2.15	-1.94	-1.22	-0.78	-0.31	4.29	6.01	5.36	6.45	1.66	-1.34	-0.75
1935	-0.48	-0.33	0.24	0.07	-0.94	-1.50	-0.08	-0.04	0.25	-0.24	0.01	1.22
1936	-0.58	0.97	1.05	1.91	0.02	0.05	0.29	0.55	0.51	-0.74	0.84	4.67
1937	0.91	1.60	2.19	0.08	-7.73	2.42	1.25	0.01	-0.83	0.00	0.51	5.02
1938	4.63	7.25	3.13	0.09	-0.01	-0.01	0.01	0.00	-0.01	0.00	0.05	0.18
1939	0.29	0.62	0.27	0.04	-1.28	-0.70	-1.15	-0.88	-0.61	-1.63	-3.39	-2.27
1940	-2.20	0.05	1.26	0.64	0.07	-0.04	-0.05	0.03	-0.02	-0.03	-0.16	-0.37
1941	-0.11	0.21	0.12	0.02	0.05	0.04	0.00	0.02	0.04	0.01	0.00	-0.03
1942	0.01	0.09	0.07	0.00	-0.02	-0.03	0.00	0.00	0.00	0.00	0.00	0.00
1943	0.01	0.11	0.09	0.01	0.00	0.02	-0.02	0.01	-0.04	-0.04	0.10	0.14
1944	-0.43	-0.31	0.22	-0.04	-0.01	0.10	0.20	0.10	0.03	0.25	1.08	2.37
1945	2.32	1.04	-1.60	10.63	4.04	-0.03	0.23	-0.18	-0.18	-0.61	-1.83	-0.39
1946	-0.57	-0.40	1.40	0.05	-0.04	-1.13	-0.44	-0.06	0.18	0.25	-0.43	-0.52
1947	0.69	0.59	0.12	0.04	0.02	0.10	-0.11	-0.33	0.18	0.02	1.67	-0.51
1948	-0.60	0.94	0.69	0.51	0.18	0.29	0.06	0.04	0.10	-0.13	0.23	1.04
1949	-0.09	-0.20	-0.18	-0.18	-0.07	-0.01	-0.06	-0.21	0.06	0.15	5.04	1.30
1950	-3.33	-0.86	0.32	0.29	0.06	0.10	0.45	0.13	-0.15	-1.33	-1.44	0.00
1951	-1.17	-4.59	-0.03	0.46	1.18	0.04	0.04	0.04	-0.05	-0.18	-0.44	-0.71
1952	0.09	-0.14	0.07	0.08	0.06	0.01	0.01	0.01	0.00	-0.01	-0.01	0.04
1953	0.02	-0.39	-0.28	0.00	-0.02	-0.01	0.01	-0.02	-0.01	0.01	0.01	0.05
1954	0.48	0.63	0.11	0.00	-0.02	-0.01	0.00	0.01	0.02	0.02	0.01	0.00
1955	0.00	0.13	-0.09	0.00	0.02	0.11	0.14	6.83	9.45	2.02	-2.39	1.33
1956	5.18	-1.87	-0.78	-0.03	-0.02	0.21	0.08	-0.02	0.00	0.00	0.00	-0.01
1957	0.07	0.37	0.12	-0.03	0.00	0.00	0.06	0.12	0.13	-0.18	-0.23	-0.24
1958	0.90	1.60	0.56	0.18	0.02	0.01	0.04	0.01	0.00	0.00	0.01	0.05
1959	0.03	-0.77	-0.36	0.04	0.04	0.25	0.09	-0.32	-0.01	-0.90	-1.25	0.57
1960	0.24	-0.07	-0.12	-0.13	-0.06	-0.01	0.07	0.21	0.37	-0.90	-0.79	-0.94
1961	-2.55	-0.50	-0.47	-2.84	-1.18	-0.10	0.11	0.21	0.28	-0.47	-1.45	-0.79
1962	0.19	0.04	-0.24	0.02	0.06	-0.01	-0.03	-0.06	-0.04	-0.57	-0.48	1.60
1963	0.35	-0.05	-0.22	-0.01	0.02	-0.01	0.00	0.03	0.04	0.01	-0.06	0.00

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WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1964	0.00	-0.12	-0.07	-0.07	-0.05	0.15	0.05	-0.08	0.06	-0.89	-0.31	-0.43
1965	-1.72	-0.37	0.12	-0.01	-0.04	0.12	0.19	0.07	-0.03	-0.17	-0.63	-0.88
1966	-0.25	0.02	0.07	0.05	0.01	0.00	0.00	0.01	0.01	0.26	-0.86	-0.48
1967	-0.14	0.05	0.04	0.01	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
1968	0.01	0.53	0.24	0.00	0.01	0.00	-0.12	-0.41	-0.28	-0.47	-1.90	-0.13
1969	-0.17	0.34	-1.31	-0.21	-0.04	0.00	0.00	0.00	0.00	-0.01	0.00	-0.04
1970	0.00	0.02	0.01	0.00	0.00	0.16	0.10	-0.05	-0.07	-0.16	-0.35	-0.22
1971	0.39	-0.15	-0.24	-0.10	0.02	0.01	0.01	0.02	0.01	0.02	0.04	-0.03
1972	-0.04	0.62	0.29	0.02	-0.01	0.10	0.30	-0.12	0.25	-0.92	-1.82	-0.45
1973	-0.20	-1.08	-2.03	-0.37	-0.02	0.00	0.00	0.01	0.00	-0.01	-0.01	-0.01
1974	0.14	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.07
1975	0.06	0.12	0.05	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00
1976	0.04	0.30	0.29	-0.01	0.01	0.09	0.21	0.15	0.09	2.60	7.25	3.63
1977	1.19	1.33	2.85	2.62	1.60	1.30	0.96	0.66	0.69	-2.88	-4.97	-1.59
1978	-0.69	-1.25	-0.36	0.04	0.36	0.22	0.06	0.01	0.00	0.01	0.01	-0.01
1979	0.37	-1.43	-1.17	0.29	0.05	0.06	0.16	0.01	-0.24	0.03	1.29	0.11
1980	-1.00	-0.79	1.75	0.57	0.16	-0.01	0.05	0.04	-0.05	-0.03	-0.12	0.30
1981	0.55	0.32	0.01	-0.04	0.12	0.13	0.06	-0.31	0.09	0.06	1.82	1.05
1982	-4.36	-2.78	-0.11	0.04	0.00	-1.62	-0.14	0.00	0.01	0.00	0.00	0.00
1983	0.01	0.00	0.00	0.05	0.01	-0.04	-0.01	0.00	0.00	0.00	0.00	0.00
1984	0.00	0.00	-0.01	0.02	0.00	0.00	0.01	0.01	0.00	-0.02	-0.01	-0.05
1985	-0.22	-0.12	-0.02	-0.04	-0.01	0.00	-0.11	-0.41	-0.02	-0.55	0.85	-1.10
1986	-1.14	-0.50	-1.09	-0.52	-0.02	0.04	0.32	0.07	-0.26	-0.15	0.28	0.80
1987	0.28	0.07	0.20	-0.15	-0.04	0.01	-0.33	-0.19	-0.79	-2.78	-0.34	2.28
1988	5.19	3.18	0.83	0.33	0.19	3.25	7.51	5.30	4.56	1.31	6.57	2.65
1989	3.21	1.30	1.91	0.06	-1.86	-1.15	-0.30	0.70	0.71	-0.42	2.04	1.00
1990	-1.95	0.45	4.25	6.39	1.00	0.00	0.64	0.82	0.96	-2.26	-7.86	2.74
1991	5.28	1.30	-1.03	1.00	4.53	1.27	3.22	8.06	23.96	11.96	-0.05	0.95
1992	-0.37	-0.65	1.87	2.84	1.40	0.87	0.49	0.94	5.07	3.53	1.41	1.72
1993	3.05	2.23	1.22	0.49	0.45	0.31	0.19	0.03	-0.03	0.00	0.01	0.01
1994	0.00	0.26	-0.02	0.32	0.21	0.41	0.26	0.23	0.18	-0.84	0.60	1.05
1995	0.72	-1.65	-0.93	-0.06	0.01	0.06	-0.02	0.02	0.02	0.03	0.02	0.01
1996	0.02	-0.69	-0.46	-0.02	0.00	0.03	0.01	0.00	0.00	0.01	0.00	0.00
1997	-0.02	0.55	0.15	0.00	0.01	-0.03	0.00	0.01	0.00	0.00	0.01	0.00
1998	-0.11	0.00	-0.02	0.01	0.02	0.03	0.00	-0.06	0.00	0.00	0.00	0.00
1999	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	-0.02	-0.02
2000	-0.22	-0.28	0.25	-0.01	-0.01	0.00	-0.01	0.00	0.00	0.03	0.02	0.01
2001	0.23	0.42	0.04	-0.03	0.00	0.10	0.20	-0.36	0.25	0.02	2.21	0.15
2002	1.77	2.00	4.69	0.83	-1.76	-1.18	-0.21	-0.05	0.00	0.06	0.35	-0.07
2003	-0.26	-0.45	-0.21	-0.07	-0.02	0.00	0.00	0.01	0.01	-0.01	0.00	-0.05
Average	0.19	0.14	0.30	0.36	0.02	0.12	0.36	0.50	0.87	-0.02	-0.12	0.29

**Table C-28. SWP Monthly Export EC Percent Difference Alternative 3
Compared to No Action Alternative**

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1923	0.00	0.00	0.00	0.00	0.00	0.02	0.01	-0.01	0.13	0.06	-0.05	0.05
1924	0.05	-0.05	-0.06	-0.04	0.00	-0.05	-0.06	-0.39	-0.41	1.88	0.84	0.61
1925	-0.53	0.05	-1.41	-0.05	0.38	-0.02	-0.06	-0.20	-0.76	0.17	-0.67	1.97
1926	2.83	1.04	0.75	0.36	0.06	-0.14	-0.18	0.42	-0.92	0.25	-0.87	-0.89
1927	-4.68	-1.28	-0.45	-0.29	-0.01	0.01	-0.01	-0.03	-0.01	-0.01	-0.01	0.02
1928	0.03	-0.61	-0.34	0.01	0.00	0.01	-0.15	-0.03	-0.07	0.40	0.65	-0.71
1929	-0.29	-0.08	0.31	0.15	0.16	0.28	0.12	0.05	0.04	-0.04	-0.10	-0.05
1930	-0.02	-0.01	-0.05	-0.09	-0.08	-0.43	-0.35	1.33	0.90	-0.16	-2.52	3.04
1931	3.61	1.73	0.67	0.63	0.25	-0.28	-0.33	-0.34	-0.53	5.58	4.19	2.67
1932	-0.07	-0.93	-1.27	-0.38	2.35	1.45	0.27	-0.08	-0.05	-0.06	-2.45	-11.52
1933	-7.01	-1.87	-1.99	0.35	0.24	0.28	2.62	1.50	0.09	10.31	10.28	3.44
1934	0.35	-0.90	-1.39	0.66	1.06	6.90	9.34	4.57	1.91	3.14	3.60	0.42
1935	-5.88	-7.11	-2.79	-0.61	-0.09	-0.09	-0.02	0.07	-0.37	-0.07	-1.31	-5.03
1936	-0.41	0.79	-1.90	-1.10	-2.53	-2.03	-0.29	-9.58	-13.02	-2.16	0.39	0.44
1937	0.93	2.52	2.75	0.49	0.76	-0.59	-0.92	-0.14	0.27	0.39	-0.40	-3.50
1938	-4.63	1.75	1.45	0.09	0.09	0.00	0.03	0.00	0.00	0.00	-0.02	-0.12
1939	-0.02	-0.49	-0.56	-0.02	-0.01	-0.01	0.51	0.35	0.19	0.40	0.59	-0.65
1940	-1.41	-0.15	1.22	0.14	0.03	0.01	-0.07	0.01	0.00	-0.02	-0.01	0.09
1941	0.09	-0.20	-0.12	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1942	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1943	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
1944	0.00	-0.01	-0.01	0.00	0.00	-0.18	-0.27	-0.07	-0.03	-0.65	-2.81	0.48
1945	1.36	0.60	0.35	0.12	0.02	-0.07	0.02	-0.01	-0.01	0.02	0.10	0.05
1946	0.10	0.15	0.70	0.02	0.05	-0.83	-0.45	-0.08	-0.20	-0.23	0.38	-0.17
1947	-0.17	0.04	-0.02	-0.04	-0.02	-0.01	0.14	0.30	0.08	0.23	-1.49	0.65
1948	1.58	0.50	0.11	-0.37	0.17	-0.35	-0.12	-0.04	-0.08	-0.09	-0.12	-0.12
1949	0.00	-0.20	0.10	-0.06	-0.07	-0.03	-0.01	-0.01	-0.01	0.00	-0.05	-0.08
1950	0.01	0.00	0.00	0.00	0.00	-0.15	-0.24	-0.08	6.42	2.49	0.51	-3.40
1951	1.22	6.25	0.12	-0.32	-1.76	-0.13	0.00	-0.03	-0.03	0.00	0.01	0.03
1952	-0.11	-0.08	-0.03	-0.01	-0.03	-0.01	0.01	0.00	0.00	0.00	0.00	0.00
1953	0.00	0.01	-0.03	-0.01	-0.02	-0.01	0.00	-0.04	-0.03	0.00	0.02	0.03
1954	-0.60	-0.74	-0.06	0.02	0.03	0.01	0.00	-0.01	-0.01	0.00	0.02	0.01
1955	0.01	-0.04	0.11	0.08	0.01	-0.25	-0.28	0.04	-0.12	-0.25	-0.76	1.36
1956	2.02	0.71	0.13	0.01	-0.11	0.06	0.01	-0.01	0.00	0.01	0.02	0.02
1957	0.01	0.01	0.02	0.01	0.00	0.00	0.00	-0.01	0.00	0.04	0.00	0.04
1958	0.03	-0.28	-0.12	0.03	-0.01	0.00	0.00	0.00	0.00	0.00	0.01	-0.01
1959	-0.02	0.07	0.07	0.02	0.00	-0.02	-0.02	0.00	0.15	0.03	-0.70	-0.30
1960	-0.08	-0.82	2.00	0.30	-0.17	-0.12	-0.16	-0.16	-0.22	1.70	2.55	-1.19
1961	0.65	-3.74	13.24	-13.22	-7.76	-1.39	-0.37	-0.47	-1.20	0.48	1.47	-1.72
1962	-1.89	2.83	3.57	1.41	0.09	0.01	0.01	0.00	0.00	0.00	0.00	-0.02
1963	0.00	0.00	-0.03	-0.01	0.00	0.00	0.00	-0.01	0.01	-0.02	-0.02	0.00
1964	-0.02	0.17	0.14	0.00	-0.25	-0.41	-0.15	0.09	-0.13	-0.40	-1.48	0.48
1965	1.73	0.33	-0.16	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.01	0.00

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WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1966	0.00	-0.02	-0.01	-0.04	-0.02	-0.01	-0.01	-0.02	-0.02	-0.01	-0.01	0.00
1967	-0.03	-0.07	-0.05	-0.01	0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.17
1968	0.03	-0.35	-0.20	-0.02	0.00	0.01	-0.01	-0.01	0.01	-0.17	0.51	0.53
1969	-0.04	-0.23	0.13	0.01	-0.08	-0.01	0.01	0.00	0.00	0.00	0.00	0.02
1970	-0.01	-0.01	-0.01	0.00	0.23	-0.15	-0.07	-0.01	0.05	0.86	-0.85	-0.21
1971	-0.17	-1.34	-0.89	-0.10	0.00	0.00	0.00	0.00	-0.34	-0.16	-0.05	0.01
1972	-0.07	-0.44	-0.40	0.13	-0.02	-0.07	-0.09	-0.03	-0.16	0.46	0.32	-1.31
1973	-0.41	-0.24	-0.29	-0.01	-0.01	0.00	0.00	-0.01	-0.01	-0.03	-0.02	-0.01
1974	-0.13	-0.08	-0.01	0.00	0.00	0.01	-0.01	0.00	0.00	0.00	-0.01	-0.05
1975	-0.04	0.02	0.02	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1976	-0.02	-0.15	-0.14	0.00	-0.03	-0.02	-0.08	-0.20	-0.25	-0.32	-0.23	-0.09
1977	0.61	1.40	-0.41	0.98	1.30	1.15	0.57	0.18	-0.04	2.36	3.95	1.47
1978	1.42	1.53	-1.44	-1.02	-0.10	-0.03	0.02	0.03	0.03	0.02	0.01	-0.01
1979	-0.02	-0.60	-0.48	0.04	0.00	-0.10	-0.23	-0.05	0.09	0.33	0.08	-1.68
1980	-0.58	0.10	0.61	0.18	0.04	-0.01	0.02	0.02	0.02	0.01	0.04	0.41
1981	0.41	0.21	0.06	0.01	-0.04	-0.01	-0.04	-0.04	-0.02	-0.01	-0.06	-0.03
1982	0.03	0.07	0.06	0.00	-0.09	-0.01	-0.08	-0.17	0.00	0.00	0.00	0.00
1983	0.00	0.00	0.00	-0.02	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1984	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00
1985	-0.02	-0.01	-0.01	-0.01	-0.01	0.00	0.00	-0.01	0.00	-0.64	-0.51	0.04
1986	0.11	0.03	0.00	-0.01	-0.01	-0.05	-0.01	0.01	0.13	0.34	0.90	0.59
1987	0.59	0.31	-0.21	-0.18	-0.09	-0.02	0.80	0.52	0.24	1.51	-0.12	0.90
1988	2.38	1.14	0.06	-0.17	0.08	-0.14	0.25	0.09	0.06	0.12	-0.35	-0.11
1989	-0.01	0.01	-0.08	-0.01	-0.07	-0.13	-0.06	-0.25	-0.31	0.74	0.19	0.09
1990	0.30	0.56	0.38	1.87	0.99	0.36	0.23	0.19	0.19	-0.13	0.77	4.45
1991	4.25	2.24	0.93	0.69	0.33	0.05	0.10	-0.26	-0.38	4.32	7.19	5.54
1992	0.00	-1.92	-1.08	-1.94	-1.17	-0.21	-0.28	-0.90	-0.95	-0.23	-0.20	1.26
1993	3.46	1.13	-0.96	-0.01	0.02	0.01	0.02	0.00	0.00	-0.01	0.00	0.01
1994	-0.02	0.51	-0.38	0.33	0.10	0.35	0.12	0.01	-0.07	0.63	1.12	0.96
1995	0.67	0.02	-0.11	0.01	0.02	0.01	-0.03	0.00	0.01	0.00	0.01	0.03
1996	0.04	-0.06	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1997	0.00	-0.03	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1998	-0.04	-0.01	0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.01	0.00	-0.01	-0.01	0.00	0.02
2000	-0.08	-0.05	-0.41	0.01	-0.01	0.01	0.02	0.02	0.02	-0.02	-0.01	-0.01
2001	-0.19	-0.36	-0.08	0.01	0.02	-0.03	-0.11	0.31	-0.08	-0.42	-2.97	0.47
2002	1.47	0.67	0.08	0.02	-1.55	-1.02	-0.19	-0.06	-0.04	-0.06	-0.05	-0.20
2003	0.09	-0.85	-0.12	-0.01	-0.06	-0.03	-0.01	-0.02	-0.02	-0.03	0.05	0.13
Average	0.03	0.04	0.12	-0.13	-0.09	0.02	0.11	-0.05	-0.12	0.40	0.24	0.00

**Table C-29. CVP Monthly Export EC Percent Difference Alternative 2
Compared to No Action Alternative**

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.00	0.00	0.00	0.00	0.00	-0.02	-0.01	0.00	0.00	0.00	0.00	0.00
1923	-0.05	0.12	0.04	0.01	0.11	0.13	0.12	-0.13	0.11	-0.26	-0.73	0.57
1924	0.07	-0.13	-0.06	-0.22	-0.07	0.04	-0.12	-0.04	0.44	-0.79	1.27	1.90
1925	0.26	0.19	0.06	0.23	0.04	0.19	0.17	0.20	0.40	0.47	0.14	-1.10
1926	0.57	0.44	-0.17	-0.26	-0.03	-0.08	0.09	-0.17	-0.35	-1.50	-2.28	1.36
1927	2.06	2.24	0.96	0.23	0.13	0.06	0.01	-0.15	0.01	0.02	0.01	0.00
1928	-0.01	0.35	0.04	0.01	-0.06	0.01	0.33	-0.18	0.73	0.01	-0.63	0.00
1929	1.64	-1.68	-0.26	0.01	0.01	-0.04	9.03	1.76	3.72	2.57	0.24	0.63
1930	-0.44	-0.29	0.96	0.31	0.19	0.08	0.17	0.12	-3.58	-3.11	-3.13	-0.01
1931	-0.62	-1.34	-0.25	0.60	1.02	0.48	0.12	4.76	5.60	-1.15	-0.76	0.96
1932	1.68	2.49	1.41	0.34	-2.15	-0.72	0.43	-0.09	0.54	-0.08	-0.82	-0.75
1933	-0.63	0.52	0.56	-0.35	-1.31	-0.52	0.12	0.35	0.87	3.19	-8.21	-1.64
1934	-2.10	-1.56	-0.93	-0.21	-0.08	4.80	0.51	0.68	2.92	2.45	-0.84	-2.01
1935	-0.82	-0.23	0.15	-0.13	-0.65	-2.29	0.29	-0.14	0.56	-0.11	-0.59	0.61
1936	-0.55	0.50	0.58	1.59	-0.05	0.13	0.37	0.63	0.49	-0.71	-1.73	3.41
1937	0.57	1.08	1.35	3.71	-0.23	-2.01	0.45	-0.26	-0.17	0.79	-0.45	4.03
1938	3.75	6.15	2.08	-0.01	-0.03	-0.01	-1.02	-0.09	0.00	0.00	0.07	0.12
1939	0.40	0.51	0.11	0.03	-1.60	-0.11	0.21	-0.10	0.41	0.11	-2.80	-1.88
1940	-1.15	1.08	0.48	0.22	0.03	-0.02	0.04	0.00	0.05	0.06	-0.10	-0.19
1941	-0.03	0.61	0.05	0.01	0.01	0.04	0.00	0.01	0.01	0.01	0.00	-0.02
1942	0.01	0.09	0.03	0.00	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
1943	0.01	0.12	0.04	0.00	0.00	0.01	0.00	0.02	-0.25	-0.01	0.08	0.11
1944	-0.49	-0.06	0.11	-0.02	0.00	0.06	0.26	0.19	0.15	-0.69	-0.60	1.93
1945	1.71	0.78	-2.67	5.59	1.01	0.10	-0.28	-0.25	0.19	-0.10	-1.16	-0.28
1946	-0.45	-0.20	0.64	0.03	-0.01	0.39	0.16	0.01	-0.43	0.15	-0.33	-0.30
1947	0.68	0.45	0.05	0.05	-0.01	0.04	-0.10	-0.06	0.42	0.26	-0.86	0.45
1948	-0.32	0.83	0.35	0.21	0.15	0.17	0.00	0.08	0.11	0.01	0.04	0.79
1949	-0.10	-0.18	-0.09	-0.10	-0.03	-0.01	0.12	0.02	0.31	0.36	4.62	1.04
1950	-1.60	-0.02	0.26	0.10	0.02	0.08	0.71	-0.08	0.84	-1.40	-1.50	-0.02
1951	-0.99	-3.37	0.01	1.17	-0.36	0.00	0.10	0.03	0.08	0.08	-0.25	-0.52
1952	0.36	0.12	0.34	0.04	0.02	0.03	0.00	0.00	0.00	0.00	0.01	0.02
1953	0.02	-0.79	-0.15	-0.01	-0.07	-0.01	0.12	0.03	0.01	0.02	0.01	0.04
1954	0.68	0.35	0.08	0.00	-0.01	0.00	0.00	0.01	0.02	0.07	0.02	0.01
1955	0.01	0.47	-0.05	0.00	0.04	0.05	0.11	6.59	3.58	1.28	-2.25	1.59
1956	3.14	-2.18	-0.29	0.00	0.01	0.19	0.00	-0.03	0.00	0.00	0.00	0.00
1957	0.05	0.25	0.04	-0.01	0.00	0.00	0.17	0.14	0.10	-0.20	-0.08	0.16
1958	0.73	1.28	0.28	0.07	0.01	-0.01	0.03	0.00	0.00	0.00	0.01	0.03
1959	0.04	-1.41	-0.15	0.02	0.02	0.19	0.00	-0.07	0.40	-0.41	-0.73	0.60
1960	0.19	-0.07	-0.09	-0.07	-0.02	0.00	0.18	0.06	0.75	-0.02	-1.75	-1.12
1961	-1.91	-0.36	-0.38	-1.60	-0.35	-0.01	0.09	0.05	0.61	-0.33	-1.01	-0.49
1962	0.22	0.05	-0.25	0.08	0.02	0.00	-0.05	-0.04	0.22	-0.34	-0.22	1.36
1963	0.22	-0.03	-0.10	-0.01	0.01	-0.01	0.01	0.00	-0.01	0.02	-0.03	0.00
1964	0.00	-0.09	-0.01	-0.03	-0.01	0.07	0.00	-0.02	0.37	-0.61	-1.30	-0.72
1965	-1.42	-0.14	0.05	-0.01	-0.02	0.10	0.16	-0.02	0.09	0.03	-0.33	-0.58

Appendix C
Delta Water Quality Model Documentation

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1966	-0.15	0.04	0.03	0.03	0.01	0.00	0.00	0.01	0.02	0.21	-0.70	-0.38
1967	-0.10	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1968	0.02	1.50	0.11	0.00	0.01	0.00	0.10	-0.05	0.16	-0.12	-1.34	0.11
1969	-0.23	0.36	-0.81	-0.04	0.82	0.03	0.01	0.00	0.00	0.00	0.00	0.01
1970	0.00	0.02	0.00	0.00	0.00	-0.10	-0.30	-0.02	0.03	-0.02	-0.19	-0.14
1971	0.39	-0.38	-0.11	-0.03	0.01	0.01	0.01	0.02	0.02	0.04	0.04	-0.02
1972	-0.03	1.14	0.14	0.01	0.00	0.19	0.39	-0.09	0.67	-0.36	-1.17	-0.30
1973	-0.02	-0.96	-1.01	-0.10	-0.01	0.00	0.00	0.01	0.02	0.01	0.00	-0.02
1974	0.34	0.04	0.00	0.00	0.00	0.00	-0.01	0.01	0.00	0.01	0.02	0.05
1975	0.07	0.09	0.02	0.00	0.01	0.00	-0.01	0.01	0.01	0.01	0.01	0.00
1976	0.04	0.57	0.14	-0.02	-0.02	0.06	0.11	0.04	0.22	-1.95	2.87	2.07
1977	0.49	1.93	2.10	0.53	1.48	0.48	-0.05	0.33	0.00	1.36	-0.11	-1.66
1978	-0.65	-1.38	-0.37	0.01	0.22	0.17	0.04	0.02	0.01	0.01	-0.02	-0.02
1979	0.71	-2.45	-0.38	0.13	0.03	0.03	0.20	-0.19	0.10	0.49	1.03	-0.01
1980	-0.84	-0.72	1.07	0.15	-2.20	-0.15	0.14	-0.01	-0.03	0.01	-0.06	-1.12
1981	0.20	0.41	0.01	-0.02	0.08	0.04	0.19	-0.10	0.57	0.36	1.63	0.09
1982	-4.04	-2.00	-0.05	0.01	0.01	2.20	0.02	-0.01	0.00	-0.01	-0.02	-0.01
1983	-0.01	0.00	0.00	0.29	-0.11	-0.13	-0.15	0.00	0.00	0.00	0.00	0.00
1984	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.01	0.00	0.00	0.00	-0.03
1985	-0.30	-0.07	-0.01	-0.02	0.00	0.00	0.06	-0.05	0.34	-0.16	0.75	-0.95
1986	-0.91	-0.37	-1.05	-0.17	0.02	-0.14	0.56	-0.12	-0.14	0.17	0.39	0.58
1987	0.18	-0.07	0.11	-0.08	-0.01	0.05	-0.02	-0.15	1.55	-2.58	-4.56	2.21
1988	3.99	0.97	0.42	0.11	0.03	1.38	1.70	0.81	3.13	1.02	4.92	0.48
1989	2.45	0.79	1.32	-0.13	-1.74	-0.06	-0.12	-0.11	1.20	-0.58	0.45	-1.35
1990	-1.98	0.44	2.31	3.60	-0.50	0.25	0.57	0.59	1.85	-2.49	-6.33	7.56
1991	3.17	-0.91	-1.21	4.75	1.91	0.09	6.67	8.50	13.37	13.40	-0.31	1.72
1992	1.44	0.18	1.48	0.55	0.21	0.33	0.28	0.45	-2.17	0.86	-0.20	1.50
1993	2.25	1.12	0.65	0.18	0.23	0.15	0.10	0.00	0.00	0.00	0.00	0.01
1994	0.01	0.93	0.25	0.09	0.33	0.19	0.12	0.08	0.35	-0.74	0.42	0.64
1995	0.81	-2.21	-0.37	-0.01	0.00	0.02	0.02	0.01	0.02	0.02	0.02	0.01
1996	0.07	-1.98	-0.19	-0.01	-0.01	0.04	0.00	0.00	0.00	0.01	0.01	0.00
1997	0.03	0.40	0.00	0.00	-0.20	0.19	0.02	0.01	0.01	0.10	0.01	0.00
1998	-0.14	0.24	-0.01	0.00	0.01	0.03	0.01	-0.02	0.00	0.00	0.00	0.00
1999	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.02	0.02	-0.01	0.00
2000	-0.28	-0.11	0.20	0.00	0.01	0.01	0.00	-0.01	0.02	0.11	0.02	0.01
2001	0.36	0.19	-0.01	-0.01	0.00	0.05	0.25	-0.12	0.92	0.79	-0.20	0.66
2002	2.10	1.44	2.53	0.28	-1.40	-0.41	0.02	0.03	0.06	0.09	0.37	-0.06
2003	-0.19	-0.51	-0.12	-0.02	0.00	0.00	0.00	0.03	0.02	0.01	0.01	0.17
Average	0.18	0.07	0.15	0.26	-0.06	0.08	0.29	0.29	0.52	0.12	-0.38	0.27

**Table C-30. CVP Monthly Export EC Percent Difference Alternative 3
Compared to No Action Alternative**

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1923	0.00	0.00	0.00	0.00	0.00	0.01	0.00	-0.08	-0.14	0.02	-0.12	0.05
1924	0.04	-0.06	-0.06	-0.05	-0.01	-0.12	-0.10	-0.30	-0.45	0.62	-0.26	-0.21
1925	-0.58	0.48	-1.52	0.06	0.11	-0.06	0.01	-0.27	0.07	-0.06	1.10	1.64
1926	2.13	0.79	0.45	0.16	0.02	-0.14	-0.09	0.01	0.05	0.98	1.34	-1.28
1927	-3.42	-0.85	-0.29	-0.10	-0.01	0.01	-0.04	-0.17	-0.01	-0.01	-0.01	0.01
1928	0.04	-1.07	-0.16	0.01	0.00	0.01	-0.33	0.07	-0.35	-0.17	0.23	-1.02
1929	0.16	0.00	0.21	0.09	0.10	0.19	0.01	0.01	0.00	-0.40	-0.14	-0.03
1930	-0.02	-0.01	-0.04	-0.05	-0.03	-0.40	-0.26	0.25	2.78	1.21	0.31	2.53
1931	2.67	1.00	0.23	0.33	0.04	-0.29	-0.04	-0.01	-0.82	0.49	1.02	0.48
1932	-0.96	-0.45	-0.83	-0.17	7.18	0.75	-0.49	0.09	-0.79	-0.02	6.80	-9.09
1933	-4.70	-1.06	-2.76	0.73	1.06	0.24	-1.94	-0.30	-0.57	2.27	1.55	0.29
1934	-0.10	-1.04	-0.79	1.05	1.99	6.31	0.59	0.21	-1.12	-1.68	-1.44	-2.25
1935	-3.81	-5.82	-1.54	-0.29	-0.02	-0.22	0.00	0.07	1.10	0.30	1.11	-3.14
1936	0.31	0.79	-1.31	-0.69	-4.91	-0.99	-0.25	-13.34	-7.38	-2.96	-1.09	0.27
1937	0.70	1.82	1.65	0.07	-0.09	0.63	-0.06	0.14	0.05	1.11	0.30	-2.98
1938	-3.39	1.73	0.56	0.36	0.13	0.00	-0.39	-0.04	-0.01	0.00	-0.08	-0.09
1939	-0.01	-0.62	-0.28	-0.01	0.00	0.00	-0.11	0.03	-0.18	-0.02	0.32	-0.57
1940	-0.86	0.36	0.87	0.03	0.02	0.01	-0.06	0.00	0.02	-0.02	-0.03	-0.08
1941	0.04	-0.61	-0.05	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1942	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1943	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
1944	-0.01	-0.02	0.00	0.00	0.00	-0.12	-0.26	-0.10	-0.35	0.20	-1.00	0.50
1945	0.98	0.45	0.18	0.06	-0.02	-0.03	-0.01	-0.08	-0.03	-0.02	0.06	0.03
1946	0.07	0.18	0.31	0.01	0.03	0.28	0.06	0.00	0.47	-0.14	0.29	-0.18
1947	-0.11	0.04	-0.01	0.01	-0.02	0.00	0.02	0.06	-0.22	-0.11	0.03	0.63
1948	1.53	0.25	0.09	-0.18	-0.11	-0.29	-0.02	-0.02	-0.06	-0.09	-0.10	-0.09
1949	-0.02	-0.21	0.09	-0.04	-0.03	-0.01	0.00	-0.01	-0.01	-0.01	-0.12	-0.06
1950	0.00	0.00	-0.01	0.00	0.00	-0.10	-0.33	0.01	10.98	-0.43	2.19	-2.59
1951	1.62	4.37	0.03	-4.95	-0.54	-0.06	0.11	-0.43	-0.02	-0.01	0.01	0.02
1952	-0.21	-0.16	-0.02	-0.01	-0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1953	0.00	-0.01	-0.03	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.01	0.01	0.02
1954	-0.70	-0.36	-0.02	0.01	0.01	0.00	0.00	-0.01	-0.01	-0.04	0.00	0.01
1955	0.01	-0.10	0.07	0.03	0.01	-0.14	-0.19	-0.07	-0.43	-0.48	1.49	1.30
1956	1.16	0.40	0.05	-0.01	-0.04	0.02	0.00	0.00	0.00	0.00	0.01	0.02
1957	0.00	0.01	0.01	0.01	0.00	0.00	0.00	-0.01	-0.01	0.03	-0.01	-0.09
1958	0.02	-0.24	-0.05	0.02	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1959	-0.03	0.14	0.03	0.01	0.00	-0.03	-0.02	-0.01	0.13	0.20	-0.55	-0.58
1960	0.60	-1.53	2.41	0.03	-0.06	-0.08	-0.10	-0.01	-0.54	-0.19	1.95	0.22
1961	1.61	-2.86	10.06	-7.91	-2.39	-0.51	-0.20	-0.11	-0.08	0.40	0.62	-1.79
1962	-1.35	2.81	2.22	0.56	0.02	0.01	0.00	0.00	0.00	-0.04	0.00	-0.02
1963	0.00	0.00	-0.01	0.00	0.00	0.00	-0.01	0.03	-0.04	-0.04	-0.03	-0.01
1964	-0.01	0.14	0.05	-0.01	-0.15	-0.26	0.01	0.04	-0.44	-0.66	-1.23	1.17
1965	1.13	0.03	-0.07	0.00	-0.01	-0.01	0.02	0.00	0.00	0.00	0.00	0.00

Appendix C
Delta Water Quality Model Documentation

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1966	-0.01	-0.01	-0.01	-0.03	-0.01	0.00	-0.01	-0.02	-0.02	-0.02	-0.01	0.00
1967	-0.03	-0.05	-0.02	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1968	0.01	-1.20	-0.10	0.00	0.00	0.00	-0.02	-0.01	-0.01	-0.15	0.39	0.19
1969	-0.10	-0.19	0.08	0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
1970	-0.01	-0.01	-0.01	0.00	0.10	-0.01	-0.01	-0.01	0.04	1.26	-0.68	-0.12
1971	-0.16	-2.73	-0.34	-0.03	0.00	0.00	0.00	0.00	-0.29	-0.10	-0.04	0.01
1972	-0.05	-1.46	-0.21	0.06	-0.01	-0.09	0.08	0.02	-0.35	0.17	0.08	-1.17
1973	-0.35	-0.19	-0.15	0.00	0.00	0.00	0.00	-0.01	-0.02	-0.03	-0.02	-0.13
1974	-0.29	-0.03	-0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.04
1975	-0.05	0.02	0.01	0.00	-0.01	0.00	0.00	-0.01	0.00	-0.01	0.00	0.00
1976	-0.02	-0.35	-0.06	0.01	0.00	-0.02	-0.23	-0.63	-0.57	-0.20	-0.32	-0.31
1977	2.00	0.44	-0.21	0.19	2.00	0.13	-0.21	-0.38	-0.28	-0.11	-0.30	2.48
1978	1.01	1.81	-1.46	-0.40	-0.06	-0.01	0.02	0.03	0.02	0.03	0.01	0.00
1979	-0.05	-1.04	-0.25	0.02	0.00	-0.07	-0.19	0.06	0.00	0.16	-0.06	-1.31
1980	-0.43	0.11	0.36	0.02	-0.99	-0.09	0.00	0.01	0.01	0.01	0.04	-0.93
1981	0.19	0.22	0.03	0.00	-0.02	0.00	-0.07	-0.02	-0.03	-0.02	-0.06	-0.03
1982	0.02	0.07	0.02	0.00	-0.17	0.02	-0.04	-0.01	0.00	0.00	0.00	0.00
1983	0.00	0.01	0.00	0.07	-0.06	-0.02	-0.02	0.00	0.00	0.00	0.00	0.00
1984	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	0.00
1985	-0.02	-0.01	-0.01	-0.01	0.00	0.00	-0.01	-0.02	-0.02	-0.55	-0.43	0.05
1986	0.09	0.02	0.00	0.00	-0.01	-0.36	0.12	0.07	0.06	0.07	0.57	0.18
1987	0.90	0.03	-0.16	-0.08	-0.04	-0.01	0.21	0.22	-0.25	0.95	0.84	0.78
1988	1.55	0.26	-0.02	-0.08	-0.13	0.11	0.02	0.01	0.03	0.09	-0.27	-0.03
1989	0.01	0.01	-0.05	0.00	-0.05	-0.02	0.10	-0.08	-0.67	0.49	1.13	-0.16
1990	0.16	1.04	0.17	1.16	0.35	0.04	0.04	0.02	0.18	0.85	-0.08	8.15
1991	2.95	0.99	0.47	0.24	0.07	0.00	0.12	-0.14	-0.92	4.86	5.66	3.43
1992	-1.08	-1.91	0.13	-2.33	-0.18	-0.06	-0.23	-0.55	-1.92	-1.31	-1.36	1.05
1993	3.27	-1.44	-0.28	0.01	0.01	0.01	0.01	0.00	0.00	-0.01	0.00	0.01
1994	-0.04	0.13	0.05	0.09	0.27	0.13	0.01	-0.04	-0.17	0.50	0.17	0.66
1995	0.39	-0.06	-0.10	0.01	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.02
1996	-0.01	-0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1997	-0.01	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
1998	-0.05	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
1999	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.02	0.00	0.00
2000	-0.31	-0.27	-0.26	0.00	0.02	0.01	-0.01	-0.02	0.00	-0.04	-0.02	-0.01
2001	-0.34	-0.20	-0.03	0.01	0.01	-0.02	-0.08	0.09	-0.51	-0.98	-1.52	0.61
2002	1.00	0.46	0.04	0.01	-1.23	-0.35	-0.02	-0.01	-0.04	-0.06	-0.07	-0.18
2003	0.35	-0.54	-0.01	0.00	-0.03	-0.01	-0.01	-0.02	-0.03	-0.04	0.03	-0.19
Average	0.06	-0.09	0.09	-0.15	0.02	0.05	-0.06	-0.19	-0.05	0.07	0.22	-0.05

Table C-31. CCWD Rock Slough (ROLD024) Monthly Export EC Percent Difference Alternative 2 Compared to No Action Alternative

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.01	0.00	0.00	0.00	0.00
1923	-0.01	0.08	0.05	0.01	0.14	0.12	0.15	-0.30	-0.13	-1.84	-1.43	0.94
1924	-0.12	-0.64	-0.90	-0.92	-0.30	0.17	0.66	0.60	-2.30	1.08	4.38	3.69
1925	1.65	2.07	1.84	1.37	1.16	0.65	0.24	0.17	0.64	0.12	0.56	-1.62
1926	-3.24	-2.35	-1.11	-0.93	-0.19	-0.60	-0.27	0.89	0.18	-0.22	1.34	3.02
1927	4.42	5.10	2.41	1.09	0.81	0.38	-0.03	-0.05	0.00	0.00	-0.01	-0.02
1928	-0.01	0.16	0.07	0.00	0.00	0.09	0.41	0.22	0.34	-1.50	-1.88	-0.70
1929	-0.59	-1.71	-0.37	-0.06	-0.08	-0.02	9.62	13.18	8.66	1.87	-0.72	-0.07
1930	-1.48	-0.15	2.47	1.96	1.60	0.68	0.34	0.13	-0.70	2.45	3.34	1.51
1931	-1.34	-0.22	2.58	2.06	0.51	0.60	1.30	4.85	8.13	-1.24	3.18	2.78
1932	2.99	5.95	3.53	1.01	0.45	0.43	0.51	0.05	0.35	-0.40	-1.33	-1.34
1933	-0.99	0.93	3.20	3.15	0.71	0.49	0.92	1.09	1.39	-1.17	-1.71	-3.59
1934	-3.81	-2.17	-0.85	-1.10	0.10	4.27	5.17	6.35	3.56	0.42	-2.16	-1.43
1935	-1.66	-0.33	0.50	0.11	0.40	0.27	0.29	-0.21	0.19	-1.16	1.01	1.15
1936	-1.52	0.16	1.29	1.75	-0.04	-0.03	0.40	0.81	0.33	-1.66	4.24	5.48
1937	1.54	3.86	3.46	-0.22	22.56	4.28	-1.49	-0.17	-0.21	-0.62	2.72	7.82
1938	7.70	13.02	4.07	0.06	-0.68	-0.09	-0.20	-0.12	-0.01	0.00	0.19	0.24
1939	0.36	1.06	0.40	0.01	-0.69	-0.63	-0.19	0.11	0.56	-4.91	-3.15	-2.90
1940	-1.47	2.73	2.66	1.07	0.03	-0.05	-0.16	-0.05	0.00	-0.14	-0.32	-0.57
1941	-0.28	0.30	0.08	0.19	0.19	0.06	-0.64	0.13	0.03	0.01	-0.01	-0.05
1942	0.00	0.13	0.06	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	-0.01
1943	0.00	0.18	0.11	0.01	0.00	-0.02	-0.01	0.01	-0.10	-0.04	0.18	0.17
1944	-0.43	0.04	0.09	-0.03	0.01	0.16	0.25	-0.02	-0.08	1.16	2.16	4.00
1945	3.69	1.53	14.97	36.45	6.48	2.69	0.90	-0.15	-0.05	-1.95	-2.49	-0.33
1946	-1.08	0.16	3.40	0.04	-0.06	-0.02	0.05	0.01	-0.06	0.30	-0.68	-0.52
1947	1.42	0.87	0.14	0.06	0.04	0.19	0.56	0.75	0.02	0.04	3.09	-1.48
1948	0.19	1.74	0.79	0.77	1.19	0.46	0.05	0.08	0.08	-0.43	0.82	0.93
1949	-0.30	-0.48	-0.39	-0.25	-0.05	0.02	0.10	0.13	0.06	0.36	9.31	-1.30
1950	-1.09	0.76	1.03	0.62	0.04	0.12	0.92	0.88	0.35	-2.31	-1.37	-0.40
1951	-3.48	-8.35	-0.01	3.88	1.74	-0.19	0.08	-0.03	-0.07	-0.42	-0.81	-0.92
1952	-0.13	-1.12	-0.12	0.28	0.19	0.01	0.01	-0.65	-0.06	-0.05	0.01	0.07
1953	0.03	-0.61	-0.16	0.03	0.00	0.01	0.00	-0.02	0.00	0.00	0.00	0.04
1954	0.50	0.33	0.05	-0.05	-0.05	-0.01	0.02	0.01	0.02	0.00	0.00	0.00
1955	-0.01	-0.50	-0.42	-0.02	0.00	0.14	0.28	2.05	8.27	-0.85	-2.98	4.47
1956	5.92	-5.86	-1.22	-0.26	0.01	0.38	0.10	-0.01	0.00	0.00	0.00	-0.01
1957	0.09	0.09	-0.11	-0.04	0.00	0.00	0.11	0.12	0.10	-0.39	-0.32	-0.48
1958	2.30	2.31	0.65	0.15	0.02	0.01	0.05	-0.01	0.00	0.00	0.04	0.07
1959	0.04	-0.67	0.03	0.16	0.12	0.31	0.57	0.55	0.03	-1.95	-1.21	0.84
1960	0.21	-0.31	-0.41	-0.28	-0.12	-0.04	0.33	0.56	0.03	-2.30	0.06	-1.87
1961	-2.78	-0.14	-1.45	-4.64	-0.99	-0.07	0.18	0.39	0.40	-1.29	-1.82	-0.40
1962	0.94	-0.32	-0.30	0.35	0.09	-0.05	-0.20	-0.18	0.02	-1.23	-0.11	1.93
1963	0.13	-0.24	-0.43	-0.01	0.02	-0.02	0.01	0.07	0.01	0.00	-0.02	0.00
1964	0.00	-0.08	-0.08	-0.07	0.00	0.08	0.26	0.19	-0.03	-1.86	0.77	-0.80
1965	-1.63	0.90	0.21	0.03	-0.03	0.16	0.20	0.03	-0.01	-0.51	-1.20	-1.03

Appendix C
Delta Water Quality Model Documentation

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1966	-0.19	-0.05	0.11	0.05	0.01	-0.05	-0.04	-0.02	0.11	0.32	-1.23	-0.46
1967	-0.10	0.14	0.08	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
1968	0.01	0.73	0.23	0.00	0.01	0.00	0.19	0.23	-0.29	-1.50	-2.75	-0.03
1969	0.25	0.02	-2.47	-0.17	-2.49	-0.34	0.00	0.00	0.01	-0.06	0.01	-0.13
1970	-0.03	0.03	0.02	0.00	0.00	0.00	-0.08	-0.07	-0.01	-0.37	-0.52	-0.19
1971	0.35	-0.36	-0.27	-0.10	-0.02	0.01	0.01	0.01	-0.01	-0.01	-0.03	-0.03
1972	-0.02	0.49	0.21	-0.01	-0.05	0.02	0.78	1.29	0.36	-2.27	-2.13	-0.54
1973	-0.33	-2.77	-3.39	-0.38	-0.02	0.00	0.00	0.00	-0.01	-0.04	-0.03	-0.01
1974	0.13	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.10
1975	0.05	0.07	0.01	0.01	0.02	0.00	0.00	0.00	0.01	0.00	0.00	-0.01
1976	0.03	0.48	0.17	0.03	0.10	0.17	0.31	0.02	-0.27	8.86	10.21	5.42
1977	1.32	4.84	4.08	4.36	-0.49	0.15	1.59	-0.07	0.89	-0.26	-2.93	-0.49
1978	-1.80	-2.52	0.76	1.35	1.30	0.38	-0.11	-0.10	-0.01	0.02	0.01	-0.02
1979	-0.03	-2.92	-0.17	0.22	0.06	0.04	0.32	-0.23	-0.19	0.27	1.88	-0.15
1980	-1.62	-0.28	3.92	0.70	6.61	2.23	0.38	0.06	-0.05	-0.05	-0.32	1.81
1981	2.13	0.42	-0.14	-0.13	0.13	0.12	0.30	0.79	0.17	0.29	2.20	0.62
1982	-8.66	-4.14	-0.02	0.03	-0.01	4.38	1.23	0.01	0.00	0.00	0.00	0.00
1983	0.01	0.01	0.00	-0.20	0.00	-0.02	0.00	0.00	0.00	0.00	0.00	0.00
1984	0.01	0.01	-0.02	0.00	-0.01	0.00	0.00	0.00	-0.03	-0.03	-0.03	-0.10
1985	-0.32	-0.13	-0.04	-0.08	-0.01	0.00	0.10	0.46	-0.05	-0.78	1.11	-1.68
1986	-1.52	-0.91	-0.85	0.53	-0.01	0.10	0.62	0.13	-0.22	-0.31	0.88	1.26
1987	0.22	-0.32	-0.17	-0.43	-0.04	0.00	-0.31	-0.01	-0.24	1.02	5.51	8.15
1988	7.78	2.77	2.02	0.42	-0.11	8.99	11.69	6.55	4.18	6.48	5.08	0.10
1989	-0.94	-0.62	2.76	-1.72	-2.22	-1.53	0.12	0.76	-0.28	-0.35	4.32	1.36
1990	-1.79	3.20	8.31	6.70	1.09	0.44	1.91	1.54	1.59	-7.32	-2.85	10.56
1991	1.24	-4.59	-0.46	7.67	3.09	0.70	3.00	13.04	23.87	3.78	1.73	5.46
1992	-0.28	-1.87	5.27	6.96	7.06	1.70	0.94	1.15	-0.29	-1.17	-2.25	2.91
1993	3.87	0.99	1.28	1.30	1.61	0.66	0.12	0.00	-0.09	0.00	0.02	0.01
1994	-0.03	0.73	1.08	-0.14	0.03	0.18	0.14	0.03	-0.43	-1.18	0.91	1.39
1995	0.50	-2.61	0.22	-0.19	0.03	-0.08	0.02	0.01	0.01	0.00	0.01	0.01
1996	0.05	-1.32	-0.50	0.00	-0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.00
1997	-0.02	0.61	0.19	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	-0.01
1998	-0.12	-0.04	0.01	-0.01	0.05	0.02	0.01	0.02	0.02	0.00	0.00	0.01
1999	0.02	0.04	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	-0.03	-0.03
2000	-0.25	-0.08	-0.02	-0.03	0.01	0.00	-0.01	0.00	0.00	0.00	0.01	0.00
2001	0.38	0.19	-0.04	-0.04	0.01	0.14	0.58	1.35	0.46	1.39	2.62	1.10
2002	4.25	10.71	14.22	1.13	-1.18	-0.73	-0.19	-0.08	-0.05	0.13	0.51	-0.18
2003	-0.26	-1.12	-0.52	-0.11	-0.01	0.00	0.00	0.00	0.00	-0.03	-0.10	-0.21
Average	0.13	0.22	0.95	0.92	0.61	0.40	0.55	0.72	0.72	-0.19	0.41	0.65

Table C-32. CCWD Rock Slough (ROLD024) Monthly Export EC Percent Difference Alternative 3 Compared to No Action Alternative

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1923	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.07	0.05	-0.03	0.07
1924	-0.03	-0.16	-0.07	-0.04	-0.01	-0.22	-0.57	0.86	3.31	2.47	-0.18	1.43
1925	-1.01	-0.73	-2.03	1.62	0.58	-0.09	-0.06	-0.17	-0.16	0.46	-1.10	3.20
1926	3.32	1.81	1.67	0.50	0.05	-0.80	-0.47	-1.00	-0.06	-0.11	-0.68	-2.55
1927	-6.94	-1.48	-0.32	-0.17	-0.01	0.01	-0.03	-0.04	-0.01	0.00	-0.01	0.03
1928	0.04	-0.73	-0.25	0.03	0.01	-0.01	-0.34	-0.25	-0.14	1.14	0.66	-1.04
1929	-0.50	-0.20	0.13	0.11	0.45	0.23	0.11	0.05	0.01	-0.16	-0.03	-0.09
1930	-0.04	-0.03	-0.09	-0.06	-0.03	-0.01	-0.43	1.79	1.57	-1.74	-3.52	5.05
1931	4.94	2.64	1.71	1.41	0.42	-0.08	-0.63	-0.91	-0.46	1.08	-1.05	2.21
1932	-2.00	-1.49	-2.46	-0.56	1.85	2.23	0.03	-0.02	-0.31	0.24	-10.43	-14.57
1933	-7.42	-0.48	1.63	0.90	0.19	0.06	-0.32	-0.31	-0.50	2.84	0.22	0.28
1934	-0.16	-2.54	-2.58	-0.78	-0.03	6.88	5.78	1.47	0.06	0.46	-3.10	-6.89
1935	-9.13	-12.82	-2.92	-0.55	-0.09	-0.02	0.00	0.17	0.10	-0.29	-5.74	-5.80
1936	-1.07	-2.94	-3.42	-0.32	-6.32	-2.00	-0.52	-16.63	-11.38	-0.53	1.51	0.39
1937	2.63	5.97	4.42	0.48	-2.53	-0.55	-0.08	0.15	0.14	0.12	-2.01	-6.37
1938	-5.79	5.06	2.32	0.03	-0.49	-0.03	0.01	0.00	0.00	-0.01	-0.10	-0.14
1939	-0.02	-1.24	-0.57	0.01	-0.04	-0.02	-0.05	-0.18	-0.21	1.10	0.48	-1.23
1940	-0.90	2.14	1.18	-0.29	0.05	-0.01	-0.16	0.01	0.00	0.00	0.00	0.27
1941	0.32	-0.27	-0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
1942	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1943	0.00	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
1944	0.00	-0.01	0.00	0.00	0.00	-0.30	-0.35	-0.02	-0.16	-2.18	-3.74	2.00
1945	2.38	1.28	0.66	0.21	0.05	0.02	0.04	-0.01	0.00	0.11	0.17	0.06
1946	0.07	0.68	1.51	0.01	0.07	0.06	-0.03	0.00	0.00	-0.25	0.49	-0.29
1947	-0.10	0.13	-0.05	-0.08	-0.04	-0.01	-0.28	-0.36	1.00	0.19	-2.46	1.39
1948	1.71	0.22	0.38	-0.87	-2.19	-0.91	-0.09	-0.03	-0.12	-0.10	-0.18	-0.11
1949	-0.15	-0.22	0.19	-0.19	-0.13	-0.04	-0.01	0.00	0.01	0.01	-0.12	-0.06
1950	-0.02	-0.01	0.01	0.00	-0.02	-0.18	-0.51	-0.48	6.80	0.84	-0.94	-3.81
1951	4.72	9.05	0.05	-6.54	-1.98	0.04	-0.05	-0.05	0.01	0.03	0.03	0.03
1952	-0.04	0.11	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00
1953	0.01	-0.01	0.03	0.01	0.02	0.01	0.00	-0.03	-0.01	0.02	0.04	0.04
1954	-0.58	-0.18	0.05	0.11	0.08	0.01	0.00	0.00	-0.01	0.03	0.03	0.02
1955	0.03	0.45	0.47	0.08	0.01	-0.27	-0.58	-0.86	-0.94	-0.30	-1.07	2.61
1956	2.39	0.62	0.30	-0.01	0.29	0.06	0.01	-0.02	0.00	0.02	0.04	0.03
1957	0.03	0.05	0.04	0.02	0.02	0.01	0.00	0.00	0.02	0.06	0.00	0.21
1958	-0.15	-0.56	-0.19	0.03	-0.03	0.01	0.00	0.00	0.00	0.01	0.02	-0.02
1959	-0.01	0.11	0.06	0.03	-0.01	0.00	0.02	0.21	0.57	-0.26	-0.87	-0.24
1960	-1.19	-0.67	4.17	-1.07	-0.34	-0.13	-0.21	-0.30	0.07	4.61	1.09	-0.57
1961	1.41	5.59	2.32	-31.92	-10.51	-1.15	-0.48	-0.59	-0.71	2.12	1.38	-3.27
1962	0.36	9.50	4.94	0.60	0.03	0.00	0.02	0.00	-0.01	0.03	-0.01	-0.02
1963	0.00	-0.01	-0.06	-0.01	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	0.00
1964	-0.02	0.13	0.08	0.02	-0.20	-0.29	-0.53	-0.64	-0.50	-0.78	-1.74	0.88
1965	2.07	-0.93	-0.21	-0.01	0.00	0.00	-0.03	-0.01	0.00	0.00	0.01	0.00

Appendix C
Delta Water Quality Model Documentation

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1966	0.00	-0.01	-0.02	-0.02	0.00	-0.01	0.00	-0.01	-0.02	0.00	0.00	0.00
1967	-0.09	-0.18	-0.08	-0.01	0.01	-0.01	0.00	0.00	0.00	0.00	0.01	0.31
1968	0.12	-0.41	-0.19	-0.02	0.00	0.01	0.00	0.03	-0.02	-0.19	0.85	0.67
1969	-0.42	-0.20	0.27	0.01	0.98	0.19	0.03	0.00	0.00	0.00	0.00	0.07
1970	0.02	-0.02	-0.01	0.01	0.48	-0.14	-0.03	0.01	0.29	0.15	-1.51	-0.04
1971	-0.04	-0.94	-0.70	-0.09	0.00	-0.01	-0.01	0.00	-0.23	-0.03	0.00	0.04
1972	-0.01	-0.73	-0.35	0.01	-0.02	-0.02	-0.46	-0.73	-0.20	1.15	-0.08	-1.50
1973	-0.41	-0.48	-0.43	0.01	-0.01	0.01	0.00	-0.01	-0.02	-0.04	-0.02	0.13
1974	-0.04	-0.06	0.00	0.00	0.00	0.01	-0.01	0.00	0.00	0.00	-0.03	-0.07
1975	-0.03	0.04	0.01	-0.01	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1976	-0.02	-0.23	-0.09	-0.02	-0.08	-0.06	-0.07	-0.09	-0.14	-0.42	-0.15	-0.17
1977	1.20	-2.15	0.32	2.52	-1.42	-0.65	-0.33	-0.37	-0.25	0.70	1.17	1.54
1978	2.40	1.58	-3.59	-0.80	-0.08	-0.07	0.01	0.03	0.02	0.01	-0.02	-0.02
1979	0.01	-0.88	-0.29	0.06	0.01	-0.10	-0.28	0.06	0.08	0.74	-0.34	-2.16
1980	-0.65	0.42	1.20	0.24	2.29	0.98	0.34	0.16	0.01	0.00	0.10	1.65
1981	1.62	0.26	0.04	0.00	-0.02	-0.01	0.00	-0.02	-0.02	-0.01	-0.10	0.01
1982	0.04	0.16	0.07	0.00	-0.02	-0.02	0.38	0.01	0.00	0.00	0.00	0.00
1983	-0.01	-0.01	0.00	-0.05	0.01	0.00	0.00	0.00	0.00	0.00	-0.01	0.00
1984	-0.01	-0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
1985	-0.02	-0.02	-0.02	-0.03	-0.03	0.01	0.02	0.00	-0.05	-1.09	-0.49	0.14
1986	0.14	0.04	0.00	-0.02	0.00	0.14	-0.08	0.09	0.11	0.50	1.53	1.02
1987	0.63	0.51	-0.22	-0.14	-0.08	0.02	1.40	0.75	0.57	-0.97	-3.21	3.36
1988	3.29	0.86	0.28	-0.16	-1.62	-0.24	0.12	0.04	0.07	-0.26	-0.33	0.00
1989	0.03	0.02	-0.07	0.08	-0.11	-0.13	-0.29	-0.42	0.23	0.98	-0.30	0.36
1990	0.53	0.32	1.12	2.77	1.04	0.30	0.28	0.33	0.23	-0.10	4.26	7.70
1991	2.98	1.68	1.04	0.87	0.56	0.08	-0.54	-0.95	2.56	7.94	7.25	1.61
1992	-4.56	-3.34	-0.80	-1.65	0.96	-0.04	-0.75	-1.21	0.70	0.54	-1.95	3.59
1993	-0.71	-5.14	-2.44	-0.38	0.03	0.03	0.02	0.00	0.00	-0.01	0.00	0.01
1994	0.17	0.82	1.00	-0.17	-0.17	0.19	0.11	-0.06	-0.09	1.07	0.92	1.03
1995	0.66	-0.21	0.03	0.10	0.07	0.00	0.01	0.00	0.02	0.00	0.01	-0.01
1996	-0.02	-0.04	-0.01	-0.01	0.00	-0.01	0.00	0.00	0.01	0.00	0.00	0.00
1997	-0.01	-0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1998	-0.05	0.01	0.01	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
1999	-0.01	-0.03	-0.01	0.00	-0.01	0.01	0.00	0.00	-0.01	0.00	0.02	0.05
2000	-0.08	-0.36	-0.12	0.03	0.01	-0.01	0.10	0.10	0.00	0.00	-0.01	0.00
2001	-0.31	-0.33	-0.01	-0.02	-0.04	-0.01	-0.16	-0.75	-0.21	-2.24	-3.74	2.14
2002	2.27	1.24	0.13	0.03	-1.02	-0.63	-0.17	-0.07	-0.06	-0.07	-0.12	-0.03
2003	0.70	-0.46	0.62	0.00	-0.04	-0.02	-0.01	0.00	-0.04	-0.01	0.08	0.38
Average	-0.02	0.12	0.12	-0.42	-0.23	0.03	-0.01	-0.26	0.02	0.24	-0.36	-0.06

**Table C-33. CCWD Old River Monthly Export EC Percent Difference
Alternative 2 Compared to No Action Alternative**

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00	0.00	0.00
1923	-0.04	0.14	0.07	0.01	0.17	0.08	0.15	-0.27	-0.19	-1.24	-1.39	0.82
1924	0.00	-0.37	-0.48	-0.62	-0.21	0.10	0.27	1.05	0.04	-0.37	2.34	2.69
1925	1.01	0.98	0.99	0.87	0.29	0.51	0.20	0.03	0.82	0.22	0.37	-1.24
1926	-1.22	-0.90	-0.69	-0.64	-0.18	-0.62	-0.24	-0.94	0.55	-0.29	0.71	2.33
1927	3.33	3.69	2.12	0.66	0.41	0.26	-0.08	-0.12	0.00	0.01	0.00	-0.02
1928	-0.01	0.19	0.08	0.03	0.01	0.08	0.22	-0.49	0.41	-0.87	-1.57	-0.65
1929	-0.08	-1.52	-0.42	-0.03	-0.05	-0.03	10.19	11.16	9.72	2.43	-0.41	0.08
1930	-0.98	-0.39	1.93	1.02	0.71	0.58	0.37	0.40	-0.19	1.39	2.80	1.49
1931	-0.91	-1.14	1.08	1.48	0.42	0.57	1.13	3.89	8.76	-3.74	-0.83	1.43
1932	2.16	4.13	2.92	0.75	-0.09	0.33	0.21	-0.20	0.30	-0.44	-1.13	-1.16
1933	-0.94	0.65	2.16	2.19	0.24	0.17	-0.25	0.42	1.84	-2.55	-2.91	-2.81
1934	-2.89	-1.92	-1.12	-1.07	-0.49	4.17	4.02	6.12	4.52	0.82	-0.89	-0.01
1935	-1.14	-0.31	0.35	0.09	0.13	0.20	0.36	-0.32	0.32	-0.69	0.55	1.19
1936	-1.02	0.56	1.12	1.34	-0.26	0.01	0.21	0.42	0.48	-1.15	2.55	5.12
1937	1.16	2.65	2.87	-0.03	-3.25	-0.19	-0.03	-0.07	-0.24	-0.30	1.61	6.37
1938	5.98	9.76	3.44	0.11	0.05	-0.06	-0.27	-0.15	-0.02	0.00	0.12	0.21
1939	0.40	1.45	0.34	0.04	-0.95	-0.55	-0.49	-0.98	0.56	-3.17	-3.27	-2.54
1940	-1.57	1.74	2.05	0.78	0.06	-0.03	-0.31	-0.11	-0.01	-0.08	-0.24	-0.46
1941	-0.15	0.36	0.11	0.05	0.11	0.05	-0.04	0.06	0.05	0.01	0.00	-0.04
1942	0.01	0.16	0.07	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	-0.01
1943	0.01	0.20	0.10	0.01	0.00	0.00	-0.01	0.01	-0.09	-0.04	0.13	0.15
1944	-0.56	0.12	0.17	-0.04	0.00	0.15	0.16	-0.18	0.03	0.66	1.63	3.19
1945	2.81	1.24	4.30	20.60	5.80	4.31	0.16	-0.15	-0.10	-1.19	-2.18	-0.35
1946	-0.79	-0.19	2.40	0.07	-0.06	0.01	0.18	0.01	-0.03	0.26	-0.55	-0.53
1947	1.07	0.70	0.12	0.04	0.03	0.17	-0.04	0.29	0.32	0.01	2.30	-1.04
1948	-0.19	1.31	0.71	0.60	1.09	0.44	0.03	0.00	0.11	-0.26	0.49	0.99
1949	-0.19	-0.32	-0.27	-0.22	-0.07	0.00	-0.31	-0.23	0.20	0.24	7.11	-0.13
1950	-1.58	0.29	0.63	0.38	0.05	0.14	0.40	-1.32	0.39	-1.78	-1.42	-0.19
1951	-2.16	-6.11	-0.05	5.26	1.37	0.00	0.06	-0.10	-0.06	-0.29	-0.62	-0.82
1952	0.12	-0.52	-0.13	0.14	0.13	0.02	0.01	-0.06	-0.01	-0.04	-0.01	0.05
1953	0.03	-0.71	-0.21	0.02	0.00	0.01	0.00	-0.07	0.00	0.01	0.00	0.04
1954	0.65	0.43	0.07	-0.01	-0.03	-0.01	0.00	0.01	0.02	0.01	0.01	0.00
1955	0.00	-0.06	-0.23	-0.01	0.00	0.14	0.16	6.59	7.87	0.55	-2.61	2.85
1956	5.28	-3.94	-1.00	-0.09	0.05	0.56	0.02	-0.02	0.00	0.00	0.00	-0.01
1957	0.12	0.34	0.02	-0.03	0.00	0.00	0.04	0.09	0.15	-0.27	-0.27	-0.36
1958	1.45	1.89	0.59	0.17	0.02	0.01	0.06	-0.02	0.00	0.00	0.02	0.06
1959	0.04	-1.01	-0.18	0.07	0.07	0.31	-0.04	-0.18	0.17	-1.38	-1.23	0.68
1960	0.20	-0.17	-0.24	-0.19	-0.08	-0.02	0.18	0.54	0.39	-1.59	-0.37	-1.39
1961	-2.55	-0.33	-0.90	-3.48	-1.06	-0.06	0.18	0.38	0.52	-0.86	-1.61	-0.55
1962	0.70	-0.10	-0.28	0.16	0.07	-0.03	-0.15	-0.12	0.04	-0.87	-0.31	1.78
1963	0.24	-0.11	-0.31	0.02	0.03	-0.02	0.06	0.07	0.02	0.00	-0.04	0.00
1964	0.00	-0.11	-0.06	-0.08	-0.02	0.08	0.07	0.12	0.31	-1.33	0.21	-0.56
1965	-1.69	0.25	0.16	0.02	-0.02	0.18	0.17	-0.10	-0.02	-0.33	-0.90	-0.96

Appendix C
Delta Water Quality Model Documentation

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1966	-0.22	0.04	0.09	0.03	0.00	-0.01	0.00	0.00	0.04	0.29	-1.05	-0.47
1967	-0.12	0.09	0.05	0.01	0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
1968	0.01	0.86	0.23	0.00	0.01	0.00	-0.26	-0.51	-0.15	-0.97	-2.28	-0.08
1969	0.02	0.28	-1.82	-0.21	-2.04	0.02	0.03	0.00	0.00	-0.03	0.00	-0.08
1970	-0.01	0.04	0.01	0.00	0.00	0.00	-0.06	-0.11	-0.03	-0.25	-0.43	-0.20
1971	0.47	-0.28	-0.27	-0.09	-0.01	0.01	0.03	0.02	0.00	0.01	0.00	-0.03
1972	-0.04	0.83	0.24	0.01	-0.03	0.05	0.49	0.35	0.62	-1.53	-1.99	-0.50
1973	-0.24	-1.74	-2.52	-0.35	-0.02	0.00	0.00	0.01	0.00	-0.02	-0.02	-0.01
1974	0.18	0.06	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.03	0.08
1975	0.06	0.12	0.04	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.00	-0.01
1976	0.04	0.57	0.25	0.01	0.04	0.15	0.31	0.29	0.11	5.92	8.87	4.62
1977	1.02	3.23	2.94	3.32	1.09	0.67	0.75	0.44	0.95	0.00	-1.61	-0.67
1978	-1.06	-1.85	0.10	0.37	0.63	0.30	-0.20	-0.10	-0.01	0.01	0.01	-0.02
1979	0.34	-2.76	-0.68	0.25	0.04	0.03	0.21	-0.09	-0.22	0.12	1.57	-0.02
1980	-1.28	-0.61	2.69	0.75	4.58	0.36	0.11	0.00	-0.06	-0.04	-0.21	1.01
1981	1.15	0.33	-0.05	-0.08	0.15	0.12	0.09	-0.15	0.43	0.14	2.02	0.92
1982	-6.44	-3.30	-0.07	0.02	-0.01	7.00	0.37	0.02	0.00	0.00	0.00	0.00
1983	0.01	0.01	0.00	-0.09	0.01	-0.03	0.00	0.00	0.00	0.00	0.00	0.00
1984	0.01	0.00	-0.02	0.00	-0.01	-0.03	0.00	0.01	-0.01	-0.03	-0.02	-0.07
1985	-0.32	-0.12	-0.03	-0.06	-0.01	0.00	-0.33	-0.28	0.16	-0.68	0.99	-1.41
1986	-1.30	-0.66	-1.02	-0.15	-0.02	0.03	0.44	0.22	-0.33	-0.25	0.53	1.06
1987	0.22	-0.33	0.06	-0.28	-0.04	0.00	0.32	0.25	0.11	-1.19	1.98	4.92
1988	5.98	1.84	1.24	0.33	-0.07	8.06	10.25	6.99	5.03	3.68	5.20	0.96
1989	2.01	0.16	2.40	-0.74	-2.12	-0.84	0.12	0.90	0.32	-0.43	3.04	1.28
1990	-1.88	1.59	6.57	6.42	0.70	0.36	1.44	1.21	2.07	-5.11	-4.33	6.99
1991	2.72	-2.27	-1.18	8.72	4.82	1.08	1.70	7.46	25.14	7.37	1.00	3.43
1992	0.88	-0.64	3.00	4.04	2.26	1.21	0.83	1.48	0.51	0.17	-1.00	2.18
1993	3.15	1.23	1.33	0.73	0.81	0.43	0.13	-0.01	-0.05	0.00	0.01	0.01
1994	-0.01	0.98	0.47	0.09	0.27	0.33	0.29	0.26	0.18	-1.02	0.77	1.23
1995	0.70	-2.55	-0.31	-0.09	0.01	0.01	0.02	0.00	0.01	0.01	0.02	0.01
1996	0.05	-1.41	-0.44	-0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00
1997	-0.02	0.74	0.21	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
1998	-0.16	-0.05	0.00	0.00	0.13	0.01	0.01	0.01	0.02	0.00	0.00	0.01
1999	0.01	0.02	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00	-0.02	-0.02
2000	-0.32	-0.10	0.05	-0.03	0.00	0.00	0.00	0.01	0.00	0.02	0.01	0.01
2001	0.48	0.25	-0.01	-0.03	0.00	0.14	0.30	0.13	0.80	0.77	2.12	0.44
2002	3.14	5.09	7.68	0.89	-1.90	-0.97	-0.21	-0.08	0.00	0.09	0.43	-0.13
2003	-0.21	-0.77	-0.31	-0.08	-0.02	0.00	0.00	0.01	0.01	-0.02	-0.05	-0.13
Average	0.18	0.15	0.55	0.66	0.17	0.37	0.42	0.54	0.90	-0.14	0.17	0.50

**Table C-34. CCWD Old River Monthly Export EC Percent Difference
Alternative 3 Compared to No Action Alternative**

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1923	0.00	0.00	0.00	0.00	0.00	0.02	0.00	-0.01	0.09	0.05	-0.04	0.06
1924	0.01	-0.11	-0.06	-0.03	0.00	-0.14	-0.32	-0.45	0.58	2.23	0.16	0.78
1925	-0.76	0.04	-1.81	0.65	0.45	-0.09	-0.01	-0.22	-0.32	0.38	-0.87	2.60
1926	2.98	1.29	1.18	0.41	0.06	-0.56	-0.29	0.52	-0.51	0.12	-1.13	-1.67
1927	-5.42	-1.32	-0.44	-0.25	-0.02	0.02	-0.05	-0.03	-0.01	0.00	-0.01	0.02
1928	0.05	-0.85	-0.31	0.02	0.00	0.00	-0.13	0.25	-0.14	0.73	0.67	-0.85
1929	-0.29	0.01	0.29	0.12	0.26	0.19	0.11	0.05	0.02	-0.36	-0.11	-0.07
1930	-0.04	-0.02	-0.07	-0.07	-0.04	-0.03	-0.41	1.99	1.27	-0.92	-3.29	4.06
1931	3.99	1.80	0.95	0.94	0.31	-0.09	-0.47	-0.71	-1.00	3.42	1.02	1.63
1932	-1.38	-0.88	-1.78	-0.49	2.05	2.04	-0.15	0.21	-0.34	0.52	-6.51	-13.01
1933	-6.81	-1.05	0.84	0.62	0.15	0.05	0.08	-0.26	-0.54	7.41	4.57	0.54
1934	-0.04	-1.68	-1.86	-0.57	-0.07	6.98	5.47	2.30	0.15	0.56	-0.73	-4.11
1935	-6.16	-9.49	-2.75	-0.57	-0.09	-0.02	0.00	0.17	0.00	-0.13	-4.09	-5.48
1936	-0.45	-0.90	-2.71	-0.46	-9.14	-2.71	-0.25	-12.36	-12.55	-1.37	1.07	0.43
1937	1.70	4.10	3.71	0.52	-2.80	-0.98	-0.29	0.07	0.15	0.27	-1.24	-4.87
1938	-5.19	3.20	1.88	0.04	-0.21	0.01	0.01	0.00	0.00	0.00	-0.05	-0.13
1939	-0.02	-1.60	-0.60	-0.01	-0.02	-0.01	-0.19	0.14	-0.25	0.73	0.52	-0.94
1940	-1.08	1.00	1.12	-0.04	0.04	0.00	-0.18	0.02	0.00	-0.01	-0.01	0.18
1941	0.18	-0.36	-0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1942	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1943	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
1944	-0.01	-0.01	-0.01	0.00	0.00	-0.28	-0.20	0.28	-0.14	-1.34	-3.29	1.32
1945	1.74	0.87	0.47	0.15	0.04	0.01	0.05	-0.02	-0.01	0.06	0.13	0.06
1946	0.07	0.37	1.11	0.03	0.09	0.07	0.02	0.00	0.00	-0.23	0.44	-0.23
1947	-0.13	0.09	-0.03	-0.06	-0.03	-0.01	0.09	-0.20	0.20	0.23	-1.97	1.02
1948	1.70	0.29	0.25	-0.58	-1.21	-0.70	-0.06	-0.02	-0.10	-0.09	-0.15	-0.11
1949	-0.07	-0.23	0.15	-0.11	-0.09	-0.03	-0.01	-0.01	0.00	0.01	-0.08	-0.07
1950	-0.01	-0.01	0.00	0.00	-0.01	-0.19	-0.21	0.58	10.28	1.62	-0.17	-3.61
1951	2.94	7.28	0.12	-10.38	-3.13	-0.16	-0.05	-0.13	-0.01	0.02	0.02	0.02
1952	-0.12	0.00	0.02	0.00	0.00	0.00	0.01	-0.01	0.00	0.00	0.01	0.00
1953	0.00	-0.02	0.01	0.01	0.01	0.01	-0.01	-0.09	-0.02	0.01	0.03	0.03
1954	-0.79	-0.39	0.01	0.05	0.05	0.01	0.00	-0.01	-0.01	0.01	0.02	0.02
1955	0.02	0.06	0.26	0.08	0.00	-0.32	-0.32	-0.12	-1.03	-0.27	-1.01	2.02
1956	2.10	0.57	0.21	0.00	0.54	0.12	0.00	-0.03	0.00	0.01	0.03	0.03
1957	0.01	0.02	0.03	0.01	0.01	0.00	0.00	-0.01	0.00	0.05	0.00	0.12
1958	-0.04	-0.40	-0.14	0.04	-0.02	0.00	0.00	0.00	0.00	0.00	0.01	-0.01
1959	-0.02	0.13	0.07	0.03	0.00	-0.01	0.00	0.03	0.30	-0.11	-0.79	-0.24
1960	-0.51	-0.88	3.19	-0.35	-0.21	-0.15	-0.20	-0.41	-0.22	3.13	1.87	-0.98
1961	1.61	0.08	9.03	-20.66	-8.16	-1.16	-0.51	-0.70	-0.78	1.36	1.35	-2.53
1962	-0.87	5.75	4.18	0.95	0.07	0.01	0.01	0.00	0.00	0.02	-0.01	-0.02
1963	0.00	0.00	-0.05	-0.01	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	0.00
1964	-0.02	0.17	0.10	0.00	-0.27	-0.33	-0.20	-0.27	-0.56	-0.57	-1.61	0.62
1965	1.78	-0.31	-0.17	-0.01	0.00	0.00	-0.05	0.00	0.00	0.00	0.01	0.00

Appendix C
Delta Water Quality Model Documentation

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1966	-0.01	-0.01	-0.01	-0.02	0.00	0.00	-0.02	-0.02	-0.02	-0.01	0.00	0.00
1967	-0.06	-0.12	-0.06	-0.01	0.01	-0.01	0.00	0.00	0.00	0.00	0.01	0.24
1968	0.06	-0.48	-0.19	-0.02	0.00	0.01	-0.01	0.00	0.00	-0.18	0.66	0.61
1969	-0.25	-0.22	0.19	0.01	0.98	0.06	0.01	0.00	0.00	0.00	0.00	0.04
1970	0.00	-0.03	-0.01	0.00	0.34	-0.13	-0.02	-0.01	0.13	0.51	-1.18	-0.13
1971	-0.14	-1.18	-0.77	-0.10	0.00	0.00	0.01	0.00	-0.36	-0.09	-0.03	0.03
1972	-0.05	-1.21	-0.38	0.07	-0.04	-0.06	-0.28	-0.26	-0.33	0.77	0.13	-1.39
1973	-0.39	-0.33	-0.34	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.03	-0.02	0.05
1974	-0.13	-0.07	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	-0.02	-0.06
1975	-0.04	0.04	0.02	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1976	-0.02	-0.27	-0.12	-0.01	-0.05	-0.04	-0.04	-0.09	-0.16	-0.39	-0.16	-0.12
1977	1.26	-0.47	-0.35	1.98	1.13	0.27	-0.02	-0.13	-0.39	0.52	0.77	1.15
1978	1.68	1.90	-2.56	-0.88	-0.09	-0.05	0.01	0.04	0.02	0.02	-0.01	-0.01
1979	-0.02	-1.06	-0.39	0.05	0.00	-0.14	-0.21	0.03	0.08	0.51	-0.11	-1.93
1980	-0.60	0.23	0.87	0.25	1.33	0.26	0.33	0.13	0.02	0.01	0.07	1.00
1981	0.89	0.19	0.05	-0.01	-0.03	-0.01	-0.01	-0.02	-0.02	-0.01	-0.08	-0.01
1982	0.03	0.10	0.06	0.00	-0.03	-0.02	0.12	-0.02	0.00	0.00	0.00	0.00
1983	0.00	0.00	0.00	-0.02	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1984	-0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
1985	-0.02	-0.02	-0.01	-0.02	-0.02	0.00	0.00	0.00	-0.02	-0.85	-0.48	0.09
1986	0.12	0.03	0.00	-0.01	0.00	-0.02	-0.03	0.04	0.16	0.42	1.20	0.81
1987	0.73	0.54	-0.22	-0.16	-0.08	-0.02	-1.19	0.11	0.21	0.52	-1.69	2.13
1988	2.47	0.55	0.11	-0.15	-1.45	-0.21	0.19	0.09	0.07	-0.07	-0.32	-0.03
1989	0.02	0.01	-0.08	0.03	-0.17	-0.14	-0.28	-0.59	-0.13	0.89	-0.09	0.21
1990	0.39	0.60	0.81	2.29	1.02	0.33	0.27	0.25	0.26	-0.04	2.93	5.70
1991	3.26	1.38	0.80	0.56	0.25	0.04	-0.42	-1.20	0.37	6.13	6.61	3.03
1992	-2.39	-2.71	-0.63	-2.40	-0.59	-0.15	-0.60	-1.63	-0.55	0.06	-1.41	2.51
1993	0.43	-2.73	-1.59	-0.13	0.02	0.02	0.01	0.00	0.00	-0.01	0.00	0.01
1994	0.03	0.33	0.20	0.09	0.13	0.30	0.11	-0.05	-0.15	0.86	0.92	0.95
1995	0.59	-0.11	-0.06	0.04	0.04	0.01	0.01	0.00	0.02	0.00	0.01	0.02
1996	-0.01	-0.04	-0.01	-0.01	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
1997	-0.01	-0.04	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1998	-0.06	0.02	0.01	-0.01	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	-0.01
1999	-0.01	-0.02	-0.01	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	0.01	0.03
2000	-0.13	-0.48	-0.24	0.02	0.00	0.00	0.18	0.12	0.01	-0.01	-0.01	0.00
2001	-0.41	-0.34	-0.04	0.00	-0.02	-0.01	-0.15	-0.01	-0.42	-1.37	-3.11	1.42
2002	1.61	0.87	0.09	0.02	-1.67	-0.85	-0.19	-0.08	-0.04	-0.06	-0.09	-0.07
2003	0.54	-0.61	0.19	0.00	-0.07	-0.02	-0.01	-0.01	-0.03	-0.02	0.07	0.25
Average	0.00	0.01	0.14	-0.35	-0.25	0.01	-0.01	-0.16	-0.08	0.31	-0.13	-0.08

**Table C-35. CCWD Victoria Canal Monthly Export EC Percent Difference
Alternative 2 Compared to No Action Alternative**

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.00	0.00	0.00	0.00	0.00	-0.01	0.05	0.00	0.00	0.00	0.00	-0.01
1923	-0.10	0.13	0.10	0.01	0.14	0.05	0.04	-0.18	-0.11	-0.15	-0.66	0.45
1924	0.14	0.08	0.14	-0.15	-0.09	0.14	0.29	0.58	0.04	-2.24	0.34	1.24
1925	-0.24	-0.37	-0.10	0.19	0.04	0.30	0.14	0.03	0.69	0.52	-0.29	-0.67
1926	3.16	2.55	0.08	-0.16	-0.08	-0.31	-0.15	-0.77	0.61	-0.15	-0.72	0.24
1927	0.88	1.13	1.36	0.51	0.28	0.09	0.00	-0.03	0.01	0.02	0.01	-0.01
1928	0.00	0.09	0.07	0.07	0.01	0.05	0.12	-0.64	0.56	0.37	-0.50	-0.25
1929	0.47	-0.36	-0.37	0.02	-0.01	0.06	8.04	11.37	8.23	2.43	0.26	0.74
1930	0.05	-0.17	1.00	0.41	0.29	0.43	0.24	0.27	0.12	-0.51	1.11	0.48
1931	-0.46	-1.46	-0.73	0.57	0.25	0.43	0.73	3.73	8.13	-4.15	-4.67	0.12
1932	1.36	1.54	1.61	0.59	-0.13	0.23	0.21	-0.12	0.23	0.18	-0.53	-0.70
1933	-0.42	0.50	0.70	1.17	0.01	-0.02	-0.26	0.46	0.96	-1.68	-2.40	-1.59
1934	-1.44	-1.41	-1.13	-0.88	-0.26	1.28	3.14	4.25	3.00	1.40	0.05	-0.57
1935	-0.87	-0.03	0.11	0.16	0.13	0.21	0.31	-0.19	0.62	0.47	0.05	0.80
1936	0.13	1.40	1.06	0.74	-0.18	0.04	0.17	0.37	0.46	-0.17	-0.47	2.72
1937	0.02	-0.33	1.05	0.41	-4.50	2.14	0.23	-0.08	-0.03	0.55	0.00	1.98
1938	0.73	3.28	1.74	0.04	-0.21	0.00	-0.01	0.00	0.00	0.00	-0.02	0.09
1939	0.26	0.68	0.01	0.10	-0.60	-0.50	-0.82	-1.31	0.25	0.04	-2.96	-1.31
1940	-0.75	0.70	0.87	0.34	0.03	-0.02	-0.19	0.01	0.01	0.03	-0.05	-0.17
1941	0.04	0.23	0.11	-0.04	0.03	0.01	-0.04	0.01	0.04	0.01	0.01	0.00
1942	0.02	0.09	0.06	0.01	0.01	-0.01	0.00	0.00	0.00	0.00	0.01	0.00
1943	0.01	0.06	0.06	0.00	0.00	0.01	-0.01	0.02	-0.03	-0.02	0.05	0.10
1944	-0.43	-0.06	0.27	-0.07	0.00	0.10	0.07	-0.29	0.13	-0.07	0.38	0.95
1945	0.84	0.41	-6.75	2.25	2.05	1.44	0.08	-0.12	-0.08	0.07	-0.90	-0.35
1946	-0.16	-0.35	0.05	0.00	0.01	0.06	0.20	0.01	0.02	0.14	-0.23	-0.26
1947	0.11	0.14	0.07	0.02	0.01	0.13	0.01	0.21	0.25	0.16	0.26	-0.02
1948	-0.41	0.41	0.46	0.35	0.88	0.39	0.02	-0.03	0.08	0.01	0.01	0.86
1949	0.01	-0.02	-0.03	-0.16	-0.09	0.00	-0.40	-0.22	0.17	0.21	1.46	2.17
1950	-1.98	-0.53	-0.04	0.10	0.01	0.13	0.01	-2.35	0.50	-0.57	-0.91	0.19
1951	0.00	-1.47	0.01	1.56	0.43	-0.04	0.05	-0.08	0.03	0.02	-0.18	-0.43
1952	0.30	0.17	0.07	0.04	0.04	0.02	0.01	-0.01	0.01	-0.02	-0.01	0.01
1953	0.01	-0.36	-0.28	0.01	0.00	0.00	0.01	-0.01	0.01	0.02	0.01	0.04
1954	0.38	0.43	0.08	0.00	-0.02	0.00	0.00	0.01	0.02	0.04	0.02	0.01
1955	0.01	0.30	0.07	0.03	-0.01	0.12	0.17	5.72	7.04	2.11	-1.24	-0.89
1956	1.91	-0.42	-0.36	0.00	0.04	0.14	-0.01	-0.03	0.00	0.01	0.01	0.00
1957	0.10	0.42	0.22	-0.02	0.00	0.00	-0.03	0.05	0.14	-0.03	-0.09	-0.03
1958	0.18	0.80	0.41	0.14	0.02	0.01	0.04	0.01	0.00	0.00	0.01	0.02
1959	0.02	-0.86	-0.49	0.03	0.03	0.24	0.02	-0.11	0.09	-0.27	-0.84	0.36
1960	0.14	0.00	-0.01	-0.06	-0.03	0.00	0.19	0.31	0.44	-0.07	-1.32	-0.50
1961	-1.28	-0.20	-0.28	-2.07	-0.89	0.05	0.16	0.26	0.29	-0.11	-0.95	-0.41
1962	0.28	0.09	-0.12	-0.04	0.02	-0.01	-0.22	-0.05	0.00	-0.16	-0.36	1.14
1963	0.26	0.02	-0.09	0.11	0.05	-0.03	0.01	0.02	0.02	0.00	-0.10	-0.01
1964	0.01	-0.13	-0.04	-0.09	-0.05	0.14	0.10	0.10	0.27	-0.34	-1.09	-0.29
1965	-1.50	-0.64	0.08	0.01	-0.02	0.20	0.13	-0.04	0.03	0.04	-0.21	-0.56

Appendix C
Delta Water Quality Model Documentation

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1966	-0.13	0.11	0.07	0.00	0.00	-0.02	0.00	0.00	0.02	0.16	-0.55	-0.38
1967	-0.11	0.03	0.01	0.01	0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
1968	0.01	0.36	0.14	0.00	0.01	0.00	-0.25	-0.47	-0.25	-0.16	-1.09	-0.12
1969	-0.46	0.11	-0.73	-0.09	-5.43	-0.28	0.01	0.00	0.00	0.00	0.00	0.01
1970	0.04	0.02	0.01	0.00	0.00	0.02	-0.05	-0.07	-0.04	-0.02	-0.15	-0.17
1971	0.38	-0.07	-0.07	-0.06	0.02	0.00	0.01	0.02	0.02	0.04	0.10	-0.03
1972	-0.06	0.33	0.23	0.02	-0.01	0.14	0.57	0.54	0.40	-0.18	-1.15	-0.31
1973	-0.01	-0.52	-1.34	-0.21	-0.01	0.00	0.00	0.01	0.01	0.01	0.00	-0.02
1974	0.15	0.12	0.00	0.00	0.00	0.00	-0.01	0.00	0.01	0.01	0.01	0.04
1975	0.05	0.12	0.07	0.00	0.00	0.00	-0.01	0.01	0.01	0.01	0.01	0.00
1976	0.06	0.29	0.31	0.00	-0.20	0.09	0.25	0.21	0.07	-0.05	4.95	1.91
1977	0.04	0.81	1.88	1.80	1.17	0.81	1.01	0.18	0.42	0.52	-0.78	-1.07
1978	-0.99	-0.44	-0.33	-0.06	0.22	0.14	0.03	0.00	0.00	0.01	0.01	0.00
1979	0.67	-1.39	-1.14	0.14	0.00	0.01	0.16	-0.08	-0.16	0.12	0.74	0.12
1980	-0.46	-0.61	0.82	0.31	14.58	1.40	0.09	0.00	-0.07	0.00	0.00	-0.58
1981	-0.37	0.07	0.03	0.00	0.14	0.10	0.12	-0.15	0.24	0.21	1.23	-0.52
1982	-1.92	-1.11	0.01	0.03	-0.05	2.03	-0.06	0.00	0.00	0.00	0.00	0.00
1983	0.00	0.00	0.00	-0.95	0.00	-0.03	-0.01	0.00	0.00	0.00	0.00	0.01
1984	0.00	0.00	-0.02	0.00	0.00	-0.02	0.00	0.01	0.01	0.02	0.00	-0.01
1985	-0.17	-0.08	-0.01	-0.02	0.00	0.00	-0.20	-0.22	0.09	-0.17	0.51	-0.65
1986	-0.59	-0.12	-1.09	-0.66	-0.03	-0.13	0.17	0.14	-0.27	0.08	0.10	0.55
1987	0.18	-0.07	0.29	-0.02	-0.02	0.01	-0.13	-0.09	0.14	-2.72	-1.43	-0.79
1988	1.98	0.17	0.09	0.13	-0.04	6.02	7.62	5.63	3.56	-0.69	3.99	1.24
1989	3.26	2.22	1.15	0.37	-1.61	-0.30	-0.05	0.44	0.77	-0.19	-0.36	-0.35
1990	-1.75	-0.33	1.70	5.28	0.75	0.13	0.96	1.00	1.14	-0.22	-6.94	2.90
1991	4.23	0.54	-1.23	9.50	4.14	0.65	2.64	10.37	24.74	13.44	-0.12	0.14
1992	1.62	1.52	1.21	1.25	0.72	0.24	0.50	0.94	0.88	0.93	0.22	0.43
1993	1.45	1.02	1.18	0.43	0.19	0.17	0.12	-0.01	-0.01	0.00	0.00	0.01
1994	0.03	0.63	-0.40	0.22	0.38	0.42	0.29	0.22	0.07	-0.54	0.57	0.59
1995	0.55	-1.67	-1.17	0.00	0.01	0.10	0.09	0.03	0.02	0.03	0.02	0.01
1996	0.02	-0.63	-0.25	-0.01	0.00	0.03	0.00	0.00	0.00	0.01	0.00	0.00
1997	-0.02	0.44	0.06	0.00	0.01	-0.03	0.02	0.01	0.00	0.02	0.01	0.00
1998	-0.10	-0.06	-0.01	0.00	0.07	0.03	0.01	0.05	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00
2000	-0.18	-0.14	0.16	0.04	-0.10	0.00	0.00	0.01	0.00	0.03	0.02	0.01
2001	0.22	0.18	0.03	-0.02	0.00	0.10	0.32	0.31	0.51	-0.24	1.13	-0.43
2002	1.18	-1.76	1.00	0.34	-1.46	-0.96	-0.16	-0.07	0.02	0.06	0.21	-0.03
2003	-0.25	-0.26	-0.07	-0.05	-0.02	0.00	0.00	0.01	0.02	0.00	0.10	0.06
Average	0.13	0.08	0.04	0.29	0.14	0.23	0.33	0.49	0.80	0.11	-0.20	0.10

**Table C-36. CCWD Victoria Canal Monthly Export EC Percent Difference
Alternative 3 Compared to No Action Alternative**

WY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1923	0.00	0.00	0.00	0.00	0.00	0.01	0.00	-0.02	0.03	0.03	-0.05	0.07
1924	0.10	0.03	-0.02	-0.17	0.00	-0.13	-0.31	-0.27	0.36	1.36	0.42	-0.39
1925	-0.56	0.28	-1.00	-0.44	0.16	-0.09	-0.08	-0.09	-0.34	-0.04	0.00	1.14
1926	1.62	0.10	0.15	0.17	-0.01	-0.57	-0.31	0.43	-0.53	0.16	-1.82	0.80
1927	-0.91	-0.60	-0.44	-0.26	-0.03	0.03	-0.03	-0.03	-0.01	-0.01	-0.01	0.01
1928	0.02	-0.48	-0.30	0.00	0.00	0.01	-0.02	0.42	-0.13	-0.06	0.32	-0.48
1929	-0.10	0.09	0.51	0.23	0.04	0.04	0.08	0.04	0.01	-0.23	-0.25	-0.03
1930	-0.02	0.00	-0.03	-0.07	-0.04	0.03	-0.28	0.72	0.82	-0.06	-1.67	1.63
1931	1.68	0.28	-0.03	0.23	0.14	-0.09	-0.28	-0.58	-0.59	3.28	3.35	0.50
1932	-0.70	-0.01	-0.57	-0.34	0.91	1.01	-0.03	0.14	-0.15	-0.23	0.16	-6.10
1933	-3.22	-0.81	-0.30	0.16	0.07	0.00	-0.05	-0.26	-0.41	5.07	6.83	0.53
1934	-0.22	-0.61	-0.72	-0.15	-0.01	1.89	3.54	2.52	0.45	-0.30	-0.71	-2.41
1935	-1.58	-2.58	-1.82	-0.49	-0.05	0.00	-0.01	0.12	-0.05	-0.08	-0.49	-3.04
1936	1.23	2.64	-0.67	-0.51	-5.13	-1.55	-0.14	-9.44	-11.52	-2.00	-0.35	0.27
1937	-0.39	-0.42	1.58	0.46	-0.12	-0.32	-0.19	0.03	0.01	0.28	0.06	-0.89
1938	-2.54	0.36	0.74	0.04	-0.95	-0.02	0.00	0.00	0.00	0.00	0.02	-0.09
1939	-0.02	-0.61	-0.40	-0.01	0.00	-0.01	-0.17	0.23	-0.11	0.00	0.44	-0.08
1940	-0.79	-0.23	0.74	0.16	0.05	-0.01	-0.21	0.01	-0.01	-0.03	-0.02	-0.04
1941	-0.05	-0.23	-0.11	0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1942	-0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1943	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
1944	0.00	-0.01	-0.01	0.00	0.00	-0.17	-0.12	0.46	-0.13	-0.11	-1.66	0.11
1945	0.39	0.07	0.15	0.07	0.00	0.18	0.05	-0.03	-0.02	-0.03	0.04	0.04
1946	0.08	-0.06	0.10	0.00	0.02	0.10	0.03	0.00	-0.01	-0.13	0.23	-0.11
1947	-0.12	-0.05	-0.01	-0.02	-0.01	0.00	0.08	-0.13	-0.03	-0.03	-0.60	0.34
1948	1.38	0.41	-0.05	-0.28	-1.16	-0.45	-0.05	-0.01	-0.10	-0.09	-0.08	-0.09
1949	0.07	-0.15	0.05	-0.02	-0.04	-0.01	0.00	0.00	-0.01	-0.01	0.00	-0.07
1950	0.00	0.00	-0.01	0.00	0.00	-0.16	-0.02	1.08	6.46	2.34	0.73	-2.43
1951	0.62	2.91	0.02	-4.49	-1.13	0.03	0.00	-0.06	-0.01	-0.01	0.00	0.01
1952	-0.14	-0.13	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1953	0.00	-0.01	-0.02	0.00	0.00	0.00	-0.01	-0.03	-0.01	-0.01	0.00	0.02
1954	-0.43	-0.46	-0.05	0.01	0.03	0.01	0.00	-0.01	-0.01	-0.01	0.01	0.01
1955	0.00	-0.29	-0.07	0.07	-0.02	-0.27	-0.32	-0.24	-0.62	-0.32	-0.59	0.82
1956	1.30	0.40	0.02	0.00	0.16	0.03	0.00	-0.02	0.00	0.00	0.01	0.01
1957	0.00	0.00	0.01	0.01	0.00	0.00	0.00	-0.01	0.00	0.03	-0.01	-0.07
1958	0.11	-0.11	-0.05	0.06	-0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1959	-0.03	0.07	0.08	0.01	0.00	-0.01	0.00	0.02	0.12	0.09	-0.48	-0.38
1960	0.75	-0.91	1.44	0.51	-0.08	-0.09	-0.16	-0.20	-0.25	0.09	3.03	0.17
1961	0.31	-5.93	13.57	-6.12	-4.90	-0.55	-0.27	-0.43	-0.36	0.00	0.74	-0.57
1962	-1.31	0.20	2.18	1.21	0.06	0.01	0.01	0.00	0.00	-0.01	0.00	-0.01
1963	0.00	0.00	-0.02	-0.01	0.00	0.00	0.00	-0.01	-0.02	-0.03	-0.03	-0.01
1964	-0.04	0.17	0.13	-0.06	-0.27	-0.30	-0.21	-0.20	-0.45	-0.40	-1.03	0.54
1965	1.19	0.46	-0.09	0.00	0.00	-0.01	-0.07	0.00	0.00	0.00	0.00	0.00