

**Model Output Index**

<b>Modeled Location and Data Type</b>	<b>Output Title/Definition</b>	<b>Page</b>
Sacramento River at Emmaton Salinity	Long-term Average Salinity and Average Salinity by Water Year Type Table	1
Sacramento River at Emmaton Salinity	Monthly Mean Salinity Tables	2-13
San Joaquin River at Jersey Point Salinity	Long-term Average Salinity and Average Salinity by Water Year Type Table	14
San Joaquin River at Jersey Point Salinity	Monthly Mean Salinity Tables	15-26
San Joaquin River at Airport Way Bridge (Vernalis) Salinity	Long-term Average Salinity and Average Salinity by Water Year Type Table	27
San Joaquin River at Airport Way Bridge (Vernalis) Salinity	Monthly Mean Salinity Tables	28-39
San Joaquin River at Brandt Bridge Salinity	Long-term Average Salinity and Average Salinity by Water Year Type Table	40
San Joaquin River at Brandt Bridge Salinity	Monthly Mean Salinity Tables	41-52
Middle River near Old River Salinity	Long-term Average Salinity and Average Salinity by Water Year Type Table	53
Middle River near Old River Salinity	Monthly Mean Salinity Tables	54-65
Old River at Tracy Road Bridge Salinity	Long-term Average Salinity and Average Salinity by Water Year Type Table	66
Old River at Tracy Road Bridge Salinity	Monthly Mean Salinity Tables	67-78
Old River at Hwy 4 (CCWD Los Vaqueros) Salinity	Long-term Average Salinity and Average Salinity by Water Year Type Table	79
Old River at Hwy 4 (CCWD Los Vaqueros) Salinity	Monthly Mean Salinity Tables	80-91
CCWD Pumping Plant #1 Salinity	Long-term Average Salinity and Average Salinity by Water Year Type Table	92
CCWD Pumping Plant #1 Salinity	Monthly Mean Salinity Tables	93-104
West Canal at the mouth of CCF (SWP Banks) Salinity	Long-term Average Salinity and Average Salinity by Water Year Type Table	105
West Canal at the mouth of CCF (SWP Banks) Salinity	Monthly Mean Salinity Tables	106-117
Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Salinity	Long-term Average Salinity and Average Salinity by Water Year Type Table	118
Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Salinity	Monthly Mean Salinity Tables	119-130
Middle River at Victoria Canal Salinity	Long-term Average Salinity and Average Salinity by Water Year Type Table	131
Middle River at Victoria Canal Salinity	Monthly Mean Salinity Tables	132-143
Stockton Intake Salinity	Long-term Average Salinity and Average Salinity by Water Year Type Table	144
Stockton Intake Salinity	Monthly Mean Salinity Tables	145-156
Old River at Hwy 4 (CCWD Los Vaqueros) Chlorides	Long-term Average Chlorides and Average Chlorides by Water Year Type Table	157
Old River at Hwy 4 (CCWD Los Vaqueros) Chlorides	Monthly Mean Chloride Tables	158-169
CCWD Pumping Plant #1 Chlorides	Long-term Average Chlorides and Average Chlorides by Water Year Type Table	170
CCWD Pumping Plant #1 Chlorides	Monthly Mean Chloride Tables	171-182
Old River at Rock Slough (CCWD Intake) Chlorides	Long-term Average Chlorides and Average Chlorides by Water Year Type Table	183
Old River at Rock Slough (CCWD Intake) Chlorides	Monthly Mean Chloride Tables	184-195
West Canal at the mouth of CCF (SWP Banks) Chlorides	Long-term Average Chlorides and Average Chlorides by Water Year Type Table	196
West Canal at the mouth of CCF (SWP Banks) Chlorides	Monthly Mean Chloride Tables	197-208
Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Chlorides	Long-term Average Chlorides and Average Chlorides by Water Year Type Table	209
Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Chlorides	Monthly Mean Chloride Tables	210-221
Middle River at Victoria Canal Chlorides	Long-term Average Chlorides and Average Chlorides by Water Year Type Table	222
Middle River at Victoria Canal Chlorides	Monthly Mean Chloride Tables	223-234
Stockton Intake Chlorides	Long-term Average Chlorides and Average Chlorides by Water Year Type Table	235
Stockton Intake Chlorides	Monthly Mean Chloride Tables	236-247
Old River at Hwy 4 (CCWD Los Vaqueros) Dissolved Organic Carbon	Long-term Average DOC and Average DOC by Water Year Type Table	248
Old River at Hwy 4 (CCWD Los Vaqueros) Dissolved Organic Carbon	Monthly Mean DOC Tables	249-260
Old River at Rock Slough (CCWD Intake) Dissolved Organic Carbon	Long-term Average DOC and Average DOC by Water Year Type Table	261
Old River at Rock Slough (CCWD Intake) Dissolved Organic Carbon	Monthly Mean DOC Tables	262-273
West Canal at the mouth of CCF (SWP Banks) Dissolved Organic Carbon	Long-term Average DOC and Average DOC by Water Year Type Table	274
West Canal at the mouth of CCF (SWP Banks) Dissolved Organic Carbon	Monthly Mean DOC Tables	275-286
Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Dissolved Organic Carbon	Long-term Average DOC and Average DOC by Water Year Type Table	287
Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Dissolved Organic Carbon	Monthly Mean DOC Tables	288-299
Old River at Bacon Island Flow	Long-term Average Flow and Average Flow by Water Year Type Table	300
Old River at Bacon Island Flow	Monthly Mean Flow Tables	301-312
Middle River at Middle River Flow	Long-term Average Flow and Average Flow by Water Year Type Table	313
Middle River at Middle River Flow	Monthly Mean Flow Tables	314-325
Middle River at Mowry Bridge Flow	Long-term Average Flow and Average Flow by Water Year Type Table	326
Middle River at Mowry Bridge Flow	Monthly Mean Flow Tables	327-338

Long-term and Water Year Type Average Salinity at the Sacramento River at Emmaton under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	EC (umhos/cm)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	2,330	1,795	1,309	849	564	334	352	486	847	1,018	1,498	2,158
NEPA Modified Flow Alternative	2,321	1,782	1,298	845	563	336	355	518	896	1,035	1,483	2,137
Difference	-9.8	-12.5	-11.1	-4.3	-1.1	2.3	2.7	31.6	49.6	17.7	-14.9	-20.6
Percent Difference <sup>3</sup>	-0.4	-0.7	-0.8	-0.5	-0.2	0.7	0.8	6.5	5.9	1.7	-1.0	-1.0
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	1,120	818	518	389	187	182	185	194	250	331	918	1,294
NEPA Modified Flow Alternative	1,122	820	518	397	188	182	185	194	250	325	879	1,283
Difference	2.1	1.9	0.0	7.4	0.6	0.0	0.0	0.0	0.2	-5.9	-39.6	-11.0
Percent Difference	0.2	0.2	0.0	1.9	0.3	0.0	0.0	0.0	0.1	-1.8	-4.3	-0.8
<b>Above Normal</b>												
NEPA No Action Alternative	2,740	1,908	1,016	206	189	185	189	194	260	397	894	1,829
NEPA Modified Flow Alternative	2,744	1,899	1,028	207	189	185	189	194	260	395	855	1,688
Difference	4.2	-8.7	11.2	0.2	-0.1	0.0	0.0	0.0	0.1	-2.1	-38.8	-141.4
Percent Difference	0.2	-0.5	1.1	0.1	0.0	0.0	0.0	0.0	0.0	-0.5	-4.3	-7.7
<b>Below Normal</b>												
NEPA No Action Alternative	2,951	2,380	1,763	457	209	189	199	206	247	578	1,137	2,340
NEPA Modified Flow Alternative	2,946	2,379	1,760	468	208	190	200	206	247	562	1,095	2,286
Difference	-4.9	-1.5	-2.6	11.5	-0.9	0.8	0.5	0.0	0.1	-15.8	-42.2	-53.7
Percent Difference	-0.2	-0.1	-0.1	2.5	-0.4	0.4	0.2	0.0	0.0	-2.7	-3.7	-2.3
<b>Dry</b>												
NEPA No Action Alternative	2,813	2,042	1,397	831	682	260	263	334	752	1,116	1,699	2,176
NEPA Modified Flow Alternative	2,708	1,970	1,335	815	685	259	264	364	793	1,161	1,685	2,171
Difference	-104.2	-71.7	-61.1	-15.8	3.1	-0.3	0.8	30.8	40.8	44.7	-14.1	-4.5
Percent Difference	-3.7	-3.5	-4.4	-1.9	0.5	-0.1	0.3	9.2	5.4	4.0	-0.8	-0.2
<b>Critical</b>												
NEPA No Action Alternative	2,867	2,411	2,056	1,660	1,067	634	687	1,072	1,874	1,962	2,230	3,103
NEPA Modified Flow Alternative	2,915	2,428	2,063	1,648	1,060	642	696	1,155	2,010	1,996	2,255	3,115
Difference	47.4	16.7	7.2	-11.6	-6.7	7.8	8.5	82.7	135.7	34.4	24.1	12.0
Percent Difference	1.7	0.7	0.3	-0.7	-0.6	1.2	1.2	7.7	7.2	1.8	1.1	0.4

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

### Sacramento River at Emmaton Salinity

October					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	497.0	497.0	0.0	0.0
1976	C	819.7	817.4	-2.3	-0.3
1977	C	4146.3	4393.9	247.7	6.0
1978	AN	2954.3	2978.8	24.5	0.8
1979	BN	2951.2	2946.3	-4.9	-0.2
1980	AN	2524.7	2508.7	-16.1	-0.6
1981	D	2704.5	2314.5	-390.0	-14.4
1982	W	2349.2	2360.8	11.6	0.5
1983	W	383.7	382.5	-1.2	-0.3
1984	W	189.3	189.3	0.0	0.0
1985	D	2126.8	2119.5	-7.3	-0.3
1986	W	2181.3	2181.4	0.1	0.0
1987	D	2484.2	2456.0	-28.2	-1.1
1988	C	3199.5	3221.9	22.5	0.7
1989	D	3934.8	3943.5	8.6	0.2
1990	C	2334.2	2316.3	-17.8	-0.8
1991	C	3836.7	3823.6	-13.1	-0.3
Mean:		2330.4	2320.7	-9.8	-0.6
Median:		2484.2	2360.8	-112.4	-4.5
Min:		189.3	189.3	0.0	0.0
Max:		4146.3	4393.9	247.7	6.0
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

### Sacramento River at Emmaton Salinity

November					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	1494.8	1494.6	-0.2	0.0
1976	C	1279.6	1290.9	11.3	0.9
1977	C	2945.8	3024.5	78.7	2.7
1978	AN	2392.4	2392.0	-0.4	0.0
1979	BN	2380.3	2378.8	-1.5	-0.1
1980	AN	1423.6	1406.6	-17.0	-1.2
1981	D	2622.1	2343.4	-278.6	-10.6
1982	W	371.0	380.4	9.5	2.6
1983	W	183.6	183.8	0.2	0.1
1984	W	177.2	177.2	0.0	0.0
1985	D	371.0	384.7	13.7	3.7
1986	W	1863.3	1863.2	-0.1	0.0
1987	D	2472.1	2446.8	-25.3	-1.0
1988	C	2574.5	2576.1	1.6	0.1
1989	D	2702.8	2706.0	3.3	0.1
1990	C	2131.5	2125.8	-5.7	-0.3
1991	C	3125.7	3123.2	-2.5	-0.1
Mean:		1794.8	1782.2	-12.5	-0.2
Median:		2131.5	2125.8	-0.1	0.0
Min:		177.2	177.2	-278.6	-10.6
Max:		3125.7	3123.2	78.7	3.7
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

### Sacramento River at Emmaton Salinity

December					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	1115.3	1114.2	-1.1	-0.1
1976	C	1338.7	1349.3	10.6	0.8
1977	C	3196.4	3207.1	10.8	0.3
1978	AN	1339.2	1341.5	2.3	0.2
1979	BN	1762.7	1760.0	-2.6	-0.1
1980	AN	693.6	713.6	20.1	2.9
1981	D	1307.4	1199.8	-107.7	-8.2
1982	W	180.4	180.6	0.2	0.1
1983	W	178.9	178.9	0.0	0.0
1984	W	178.1	178.1	0.0	0.0
1985	D	230.1	236.7	6.6	2.9
1986	W	936.9	937.9	1.1	0.1
1987	D	2002.5	1854.8	-147.6	-7.4
1988	C	1295.6	1291.8	-3.8	-0.3
1989	D	2046.4	2050.6	4.2	0.2
1990	C	1562.1	1581.1	19.0	1.2
1991	C	2888.6	2888.0	-0.6	0.0
Mean:		1309.0	1297.9	-11.1	-0.4
Median:		1307.4	1291.8	0.2	0.1
Min:		178.1	178.1	-147.6	-8.2
Max:		3196.4	3207.1	20.1	2.9
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Sacramento River at Emmaton Salinity

January					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	981.8	1030.0	48.2	4.9
1976	C	1296.1	1317.3	21.2	1.6
1977	C	2965.5	2968.7	3.2	0.1
1978	AN	219.9	219.5	-0.3	-0.1
1979	BN	456.9	468.4	11.5	2.5
1980	AN	193.1	193.8	0.7	0.4
1981	D	400.7	411.3	10.7	2.7
1982	W	191.8	191.8	0.0	0.0
1983	W	188.0	188.0	0.0	0.0
1984	W	179.4	179.4	0.0	0.0
1985	D	462.5	490.1	27.6	6.0
1986	W	406.1	394.7	-11.4	-2.8
1987	D	1103.4	999.8	-103.6	-9.4
1988	C	357.6	357.0	-0.7	-0.2
1989	D	1355.8	1358.1	2.3	0.2
1990	C	821.8	740.2	-81.5	-9.9
1991	C	2858.0	2857.9	-0.1	0.0
Mean:		849.3	845.1	-4.2	-0.2
Median:		456.9	468.4	0.0	0.0
Min:		179.4	179.4	-103.6	-9.9
Max:		2965.5	2968.7	48.2	6.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Sacramento River at Emmaton Salinity

February					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	210.9	213.7	2.8	1.3
1976	C	785.0	780.9	-4.1	-0.5
1977	C	1756.6	1757.3	0.7	0.0
1978	AN	192.1	192.0	-0.1	-0.1
1979	BN	209.1	208.2	-0.9	-0.4
1980	AN	185.5	185.5	0.0	0.0
1981	D	241.8	244.9	3.1	1.3
1982	W	179.7	179.7	0.0	0.0
1983	W	181.7	181.7	0.0	0.0
1984	W	181.4	181.4	0.0	0.0
1985	D	559.0	574.0	15.0	2.7
1986	W	182.8	182.8	0.0	0.0
1987	D	499.3	485.0	-14.3	-2.9
1988	C	268.1	268.1	-0.1	0.0
1989	D	1427.9	1436.4	8.5	0.6
1990	C	525.6	495.7	-29.9	-5.7
1991	C	2000.2	2000.2	0.0	0.0
Mean:		563.9	562.8	-1.1	-0.2
Median:		241.8	244.9	0.0	0.0
Min:		179.7	179.7	-29.9	-5.7
Max:		2000.2	2000.2	15.0	2.7
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Sacramento River at Emmaton Salinity

March					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	181.1	181.1	0.0	0.0
1976	C	368.2	367.3	-0.9	-0.2
1977	C	1438.2	1438.5	0.2	0.0
1978	AN	189.6	189.6	0.0	0.0
1979	BN	189.2	190.0	0.8	0.4
1980	AN	181.0	181.0	0.0	0.0
1981	D	198.9	198.7	-0.2	-0.1
1982	W	189.4	189.4	0.0	0.0
1983	W	179.9	179.9	0.0	0.0
1984	W	180.6	180.6	0.0	0.0
1985	D	389.9	391.9	2.0	0.5
1986	W	180.3	180.3	0.0	0.0
1987	D	237.4	236.7	-0.7	-0.3
1988	C	485.5	485.5	0.0	0.0
1989	D	212.5	210.1	-2.5	-1.2
1990	C	536.2	575.7	39.5	7.4
1991	C	341.7	341.7	0.0	0.0
Mean:		334.1	336.3	2.2	0.4
Median:		198.9	198.7	0.0	0.0
Min:		179.9	179.9	-2.5	-1.2
Max:		1438.2	1438.5	39.5	7.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



### Sacramento River at Emmaton Salinity

April					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	185.9	185.9	0.0	0.0
1976	C	640.7	650.0	9.3	1.5
1977	C	1178.7	1178.1	-0.6	-0.1
1978	AN	187.8	187.8	0.0	0.0
1979	BN	199.4	199.9	0.5	0.3
1980	AN	189.9	190.0	0.0	0.0
1981	D	211.0	212.5	1.5	0.7
1982	W	177.6	177.6	0.0	0.0
1983	W	180.1	180.1	0.0	0.0
1984	W	188.4	188.4	0.0	0.0
1985	D	401.4	403.5	2.1	0.5
1986	W	191.7	191.7	0.0	0.0
1987	D	250.7	250.5	-0.2	-0.1
1988	C	835.4	848.6	13.2	1.6
1989	D	190.0	189.8	-0.2	-0.1
1990	C	524.0	540.3	16.3	3.1
1991	C	257.6	262.1	4.5	1.7
Mean:		352.4	355.1	2.7	0.5
Median:		199.4	199.9	0.0	0.0
Min:		177.6	177.6	-0.6	-0.1
Max:		1178.7	1178.1	16.3	3.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Sacramento River at Emmaton Salinity

May					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	183.2	183.2	0.0	0.0
1976	C	1390.5	1465.9	75.5	5.4
1977	C	1798.3	1863.8	65.5	3.6
1978	AN	187.4	187.4	0.0	0.0
1979	BN	205.7	205.7	0.0	0.0
1980	AN	200.1	200.1	0.0	0.0
1981	D	299.9	340.9	41.0	13.7
1982	W	178.3	178.3	0.0	0.0
1983	W	176.4	176.4	0.0	0.0
1984	W	227.9	227.9	0.0	0.0
1985	D	288.8	289.2	0.4	0.1
1986	W	205.8	205.8	0.0	0.0
1987	D	503.3	585.0	81.7	16.2
1988	C	876.3	880.1	3.8	0.4
1989	D	242.4	242.4	0.0	0.0
1990	C	775.4	950.1	174.7	22.5
1991	C	521.1	615.1	94.0	18.0
Mean:		485.9	517.5	31.6	4.7
Median:		242.4	242.4	0.0	0.0
Min:		176.4	176.4	0.0	0.0
Max:		1798.3	1863.8	174.7	22.5
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					4

### Sacramento River at Emmaton Salinity

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	186.0	186.0	0.0	0.0
1976	C	2461.1	2519.5	58.4	2.4
1977	C	1870.6	1982.0	111.4	6.0
1978	AN	206.8	206.8	0.0	0.0
1979	BN	246.8	246.9	0.1	0.0
1980	AN	312.6	312.7	0.1	0.0
1981	D	797.1	853.7	56.6	7.1
1982	W	184.5	184.5	0.0	0.0
1983	W	174.4	174.4	0.0	0.0
1984	W	391.6	392.4	0.8	0.2
1985	D	740.8	740.8	0.0	0.0
1986	W	312.0	312.3	0.3	0.1
1987	D	797.3	904.1	106.7	13.4
1988	C	1384.7	1424.6	39.9	2.9
1989	D	673.9	673.9	-0.1	0.0
1990	C	2057.0	2360.7	303.7	14.8
1991	C	1599.2	1764.2	165.0	10.3
Mean:		846.8	896.4	49.6	3.4
Median:		673.9	673.9	0.3	0.1
Min:		174.4	174.4	-0.1	0.0
Max:		2461.1	2519.5	303.7	14.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					3

### Sacramento River at Emmaton Salinity

July					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	325.3	319.8	-5.5	-1.7
1976	C	1363.0	1499.4	136.4	10.0
1977	C	1665.2	1710.0	44.8	2.7
1978	AN	326.7	325.3	-1.4	-0.4
1979	BN	578.0	562.2	-15.8	-2.7
1980	AN	466.9	464.0	-2.9	-0.6
1981	D	1242.7	1386.7	144.0	11.6
1982	W	287.3	286.1	-1.3	-0.5
1983	W	179.2	179.2	0.0	0.0
1984	W	427.5	415.0	-12.5	-2.9
1985	D	991.5	991.8	0.3	0.0
1986	W	434.7	424.3	-10.4	-2.4
1987	D	1215.6	1248.3	32.7	2.7
1988	C	2013.6	2011.0	-2.6	-0.1
1989	D	1014.9	1016.6	1.7	0.2
1990	C	2308.1	2326.0	17.9	0.8
1991	C	2458.3	2433.8	-24.5	-1.0
Mean:		1017.6	1035.3	17.7	0.9
Median:		991.5	991.8	-1.3	-0.1
Min:		179.2	179.2	-24.5	-2.9
Max:		2458.3	2433.8	144.0	11.6
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					2

### Sacramento River at Emmaton Salinity

August					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	1112.6	1055.9	-56.7	-5.1
1976	C	1863.1	2012.2	149.0	8.0
1977	C	2282.9	2364.9	82.0	3.6
1978	AN	1002.2	934.1	-68.1	-6.8
1979	BN	1137.4	1095.3	-42.1	-3.7
1980	AN	785.3	775.9	-9.5	-1.2
1981	D	1130.5	1254.0	123.6	10.9
1982	W	963.8	898.8	-64.9	-6.7
1983	W	255.7	255.7	0.0	0.0
1984	W	983.5	966.1	-17.4	-1.8
1985	D	1360.1	1360.3	0.2	0.0
1986	W	1276.4	1217.5	-58.8	-4.6
1987	D	2060.9	2066.8	5.9	0.3
1988	C	2333.3	2329.0	-4.4	-0.2
1989	D	2246.5	2060.3	-186.2	-8.3
1990	C	2369.5	2331.1	-38.4	-1.6
1991	C	2303.3	2235.6	-67.8	-2.9
Mean:		1498.1	1483.1	-14.9	-1.2
Median:		1276.4	1254.0	-17.4	-1.6
Min:		255.7	255.7	-186.2	-8.3
Max:		2369.5	2364.9	149.0	10.9
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					1

### Sacramento River at Emmaton Salinity

#### September

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	1038.6	1024.3	-14.3	-1.4
1976	C	3179.9	3217.1	37.2	1.2
1977	C	3232.7	3312.1	79.3	2.5
1978	AN	1898.1	1872.0	-26.2	-1.4
1979	BN	2339.7	2286.0	-53.7	-2.3
1980	AN	1760.3	1503.7	-256.6	-14.6
1981	D	1191.0	1243.9	52.9	4.4
1982	W	1105.9	1090.0	-16.0	-1.4
1983	W	208.4	208.3	0.0	0.0
1984	W	2025.6	2019.2	-6.4	-0.3
1985	D	1867.3	1867.3	0.1	0.0
1986	W	2092.5	2074.2	-18.3	-0.9
1987	D	2847.8	2908.7	61.0	2.1
1988	C	2912.0	2930.2	18.2	0.6
1989	D	2796.3	2664.2	-132.1	-4.7
1990	C	3056.9	3020.2	-36.8	-1.2
1991	C	3132.1	3094.3	-37.9	-1.2
Mean:		2157.9	2137.4	-20.6	-1.1
Median:		2092.5	2074.2	-14.3	-0.9
Min:		208.4	208.3	-256.6	-14.6
Max:		3232.7	3312.1	79.3	4.4
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

Long-term and Water Year Type Average Salinity at the San Joaquin River at Jersey Point under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	EC (umhos/cm)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	2,065	1,640	1,565	1,102	701	405	306	376	639	1,057	1,443	2,196
NEPA Modified Flow Alternative	2,053	1,644	1,557	1,091	696	405	308	392	662	1,092	1,467	2,179
Difference	-12.2	4.5	-7.7	-11.3	-4.8	-0.7	1.5	15.9	23.9	34.8	24.0	-17.2
Percent Difference <sup>3</sup>	-0.6	0.3	-0.5	-1.0	-0.7	-0.2	0.5	4.2	3.7	3.3	1.7	-0.8
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	1,085	971	825	636	264	202	198	205	219	408	1,022	1,735
NEPA Modified Flow Alternative	1,088	976	825	645	268	202	198	205	219	417	1,032	1,724
Difference	3.7	5.7	0.6	8.4	4.2	0.1	0.0	0.0	0.1	9.7	10.0	-10.4
Percent Difference	0.3	0.6	0.1	1.3	1.6	0.0	0.0	0.0	0.1	2.4	1.0	-0.6
<b>Above Normal</b>												
NEPA No Action Alternative	2,232	1,558	1,702	425	220	212	214	213	222	525	1,085	2,295
NEPA Modified Flow Alternative	2,240	1,562	1,720	428	220	212	214	213	222	529	1,093	2,167
Difference	8.3	4.9	17.8	3.0	-0.1	0.0	0.0	0.0	0.0	3.6	8.7	-128.3
Percent Difference	0.4	0.3	1.0	0.7	0.0	0.0	0.0	0.0	0.0	0.7	0.8	-5.6
<b>Below Normal</b>												
NEPA No Action Alternative	2,566	2,490	2,051	674	268	222	215	220	236	634	1,287	2,305
NEPA Modified Flow Alternative	2,558	2,489	2,048	684	268	223	215	220	236	646	1,306	2,302
Difference	-7.8	-1.6	-2.4	10.1	0.0	0.4	0.4	0.0	0.1	11.9	18.3	-3.8
Percent Difference	-0.3	-0.1	-0.1	1.5	0.0	0.2	0.2	0.0	0.0	1.9	1.4	-0.2
<b>Dry</b>												
NEPA No Action Alternative	2,466	1,888	1,455	1,254	1,036	439	253	288	608	1,656	2,275	2,655
NEPA Modified Flow Alternative	2,416	1,893	1,426	1,234	1,037	437	253	302	633	1,702	2,306	2,633
Difference	-49.9	4.9	-28.9	-20.6	1.7	-2.3	0.1	14.0	25.0	45.8	30.3	-21.2
Percent Difference	-2.0	0.3	-2.0	-1.6	0.2	-0.5	0.1	4.9	4.1	2.8	1.3	-0.8
<b>Critical</b>												
NEPA No Action Alternative	2,559	1,972	2,241	1,804	1,148	696	513	715	1,331	1,526	1,371	2,228
NEPA Modified Flow Alternative	2,552	1,976	2,231	1,770	1,126	695	517	757	1,392	1,594	1,411	2,249
Difference	-7.0	4.0	-10.4	-33.7	-21.7	-0.6	4.8	42.7	61.0	68.1	40.2	21.0
Percent Difference	-0.3	0.2	-0.5	-1.9	-1.9	-0.1	0.9	6.0	4.6	4.5	2.9	0.9

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

### San Joaquin River at Jersey Point Salinity

October					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	465.1	465.2	0.1	0.0
1976	C	1291.1	1286.3	-4.8	-0.4
1977	C	3838.8	3848.5	9.7	0.3
1978	AN	1701.0	1728.3	27.3	1.6
1979	BN	2565.6	2557.8	-7.8	-0.3
1980	AN	2763.5	2752.6	-10.8	-0.4
1981	D	2238.3	2017.6	-220.6	-9.9
1982	W	2204.8	2224.5	19.8	0.9
1983	W	382.5	381.0	-1.4	-0.4
1984	W	201.3	201.3	0.0	0.0
1985	D	2706.2	2697.6	-8.7	-0.3
1986	W	2169.2	2169.3	0.1	0.0
1987	D	2245.3	2268.7	23.4	1.0
1988	C	2548.9	2564.0	15.1	0.6
1989	D	2674.1	2680.5	6.4	0.2
1990	C	2562.6	2517.9	-44.7	-1.7
1991	C	2554.5	2544.1	-10.4	-0.4
Mean:		2065.5	2053.2	-12.2	-0.5
Median:		2245.3	2268.7	0.0	0.0
Min:		201.3	201.3	-220.6	-9.9
Max:		3838.8	3848.5	27.3	1.6
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



### San Joaquin River at Jersey Point Salinity

November					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	1551.5	1551.5	0.1	0.0
1976	C	1702.1	1674.7	-27.4	-1.6
1977	C	2373.7	2429.3	55.6	2.3
1978	AN	1391.9	1396.0	4.0	0.3
1979	BN	2490.1	2488.5	-1.6	-0.1
1980	AN	1723.3	1729.0	5.7	0.3
1981	D	2054.9	2002.3	-52.6	-2.6
1982	W	1265.4	1293.9	28.5	2.3
1983	W	196.3	196.4	0.1	0.1
1984	W	185.3	185.3	0.0	0.0
1985	D	1333.4	1371.9	38.5	2.9
1986	W	1655.1	1655.1	0.0	0.0
1987	D	2056.6	2088.7	32.1	1.6
1988	C	1901.8	1905.8	4.0	0.2
1989	D	2105.7	2107.3	1.6	0.1
1990	C	1912.5	1903.2	-9.2	-0.5
1991	C	1972.1	1969.2	-2.9	-0.1
Mean:		1639.5	1644.0	4.5	0.3
Median:		1723.3	1729.0	0.1	0.1
Min:		185.3	185.3	-52.6	-2.6
Max:		2490.1	2488.5	55.6	2.9
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Jersey Point Salinity

December					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	1865.8	1864.4	-1.4	-0.1
1976	C	2393.5	2359.2	-34.3	-1.4
1977	C	2756.8	2771.1	14.3	0.5
1978	AN	1993.9	1995.5	1.5	0.1
1979	BN	2050.7	2048.3	-2.4	-0.1
1980	AN	1410.0	1444.1	34.1	2.4
1981	D	1699.8	1744.0	44.2	2.6
1982	W	225.6	228.1	2.5	1.1
1983	W	188.2	188.2	0.0	0.0
1984	W	179.6	179.6	0.0	0.0
1985	D	339.5	356.0	16.5	4.9
1986	W	1663.6	1665.4	1.8	0.1
1987	D	1940.4	1761.0	-179.4	-9.2
1988	C	2308.6	2302.3	-6.4	-0.3
1989	D	1841.3	1844.5	3.2	0.2
1990	C	1848.5	1823.4	-25.1	-1.4
1991	C	1898.2	1897.5	-0.7	0.0
Mean:		1564.9	1557.2	-7.7	0.0
Median:		1848.5	1823.4	0.0	0.0
Min:		179.6	179.6	-179.4	-9.2
Max:		2756.8	2771.1	44.2	4.9
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Jersey Point Salinity

January					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	1733.1	1795.7	62.6	3.6
1976	C	1982.9	1937.9	-45.0	-2.3
1977	C	2391.9	2396.0	4.1	0.2
1978	AN	517.1	516.0	-1.1	-0.2
1979	BN	673.8	683.9	10.1	1.5
1980	AN	333.9	341.0	7.1	2.1
1981	D	784.0	814.0	30.0	3.8
1982	W	227.5	227.6	0.0	0.0
1983	W	209.1	209.1	0.0	0.0
1984	W	180.2	180.2	0.0	0.0
1985	D	704.8	746.1	41.3	5.9
1986	W	831.1	810.5	-20.6	-2.5
1987	D	1475.1	1319.5	-155.6	-10.5
1988	C	1077.2	1073.7	-3.6	-0.3
1989	D	2052.8	2054.7	1.9	0.1
1990	C	1752.7	1628.9	-123.7	-7.1
1991	C	1814.7	1814.6	-0.1	0.0
Mean:		1102.5	1091.2	-11.3	-0.3
Median:		831.1	814.0	0.0	0.0
Min:		180.2	180.2	-155.6	-10.5
Max:		2391.9	2396.0	62.6	5.9
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

### San Joaquin River at Jersey Point Salinity

February					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	494.9	517.5	22.6	4.6
1976	C	1346.0	1327.4	-18.6	-1.4
1977	C	1484.7	1485.8	1.1	0.1
1978	AN	234.9	234.7	-0.2	-0.1
1979	BN	268.1	268.1	0.0	0.0
1980	AN	205.9	206.0	0.0	0.0
1981	D	434.4	439.4	5.0	1.2
1982	W	201.1	201.1	0.0	0.0
1983	W	185.5	185.6	0.1	0.1
1984	W	192.1	192.1	0.0	0.0
1985	D	1195.1	1237.2	42.0	3.5
1986	W	247.5	246.0	-1.5	-0.6
1987	D	1120.0	1075.3	-44.7	-4.0
1988	C	334.4	334.3	-0.2	-0.1
1989	D	1392.8	1397.1	4.3	0.3
1990	C	1087.8	997.0	-90.8	-8.3
1991	C	1485.4	1485.3	0.0	0.0
Mean:		700.6	695.9	-4.8	-0.3
Median:		434.4	439.4	0.0	0.0
Min:		185.5	185.6	-90.8	-8.3
Max:		1485.4	1485.8	42.0	4.6
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Jersey Point Salinity

March					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	206.6	206.9	0.3	0.1
1976	C	606.0	603.2	-2.8	-0.5
1977	C	995.4	995.7	0.3	0.0
1978	AN	228.7	228.6	0.0	0.0
1979	BN	222.3	222.6	0.4	0.2
1980	AN	194.4	194.4	0.0	0.0
1981	D	263.4	262.4	-0.9	-0.3
1982	W	216.5	216.5	0.0	0.0
1983	W	190.4	190.4	0.0	0.0
1984	W	194.6	194.6	0.0	0.0
1985	D	605.5	611.4	5.9	1.0
1986	W	202.9	202.9	0.0	0.0
1987	D	453.7	448.4	-5.3	-1.2
1988	C	342.9	342.8	-0.1	0.0
1989	D	432.9	424.0	-9.0	-2.1
1990	C	640.7	640.3	-0.4	-0.1
1991	C	894.4	894.4	0.0	0.0
Mean:		405.4	404.7	-0.7	-0.2
Median:		263.4	262.4	0.0	0.0
Min:		190.4	190.4	-9.0	-2.1
Max:		995.4	995.7	5.9	1.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Jersey Point Salinity

April					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	207.2	207.2	0.0	0.0
1976	C	461.4	464.9	3.5	0.8
1977	C	816.5	816.2	-0.3	0.0
1978	AN	223.9	223.9	0.0	0.0
1979	BN	214.5	215.0	0.4	0.2
1980	AN	204.6	204.7	0.1	0.0
1981	D	214.8	215.2	0.4	0.2
1982	W	185.9	185.9	0.0	0.0
1983	W	187.4	187.4	0.0	0.0
1984	W	198.9	198.9	0.0	0.0
1985	D	329.8	331.3	1.4	0.4
1986	W	211.9	211.9	0.0	0.0
1987	D	256.3	255.9	-0.4	-0.2
1988	C	597.5	604.2	6.7	1.1
1989	D	209.3	208.4	-1.0	-0.5
1990	C	423.4	436.1	12.7	3.0
1991	C	264.3	265.7	1.4	0.5
Mean:		306.3	307.8	1.5	0.3
Median:		214.8	215.2	0.0	0.0
Min:		185.9	185.9	-1.0	-0.5
Max:		816.5	816.2	12.7	3.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Jersey Point Salinity

May					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	208.4	208.4	0.0	0.0
1976	C	942.2	986.7	44.5	4.7
1977	C	1005.8	1036.1	30.3	3.0
1978	AN	206.2	206.2	0.0	0.0
1979	BN	219.8	219.9	0.0	0.0
1980	AN	219.0	219.0	0.0	0.0
1981	D	283.0	303.3	20.3	7.2
1982	W	181.1	181.1	0.0	0.0
1983	W	177.7	177.7	0.0	0.0
1984	W	242.6	242.6	0.0	0.0
1985	D	275.0	275.2	0.3	0.1
1986	W	216.8	216.8	0.0	0.0
1987	D	357.6	393.1	35.6	10.0
1988	C	729.1	732.7	3.7	0.5
1989	D	237.5	237.4	-0.1	0.0
1990	C	524.2	614.2	90.0	17.2
1991	C	372.1	417.1	45.1	12.1
Mean:		376.3	392.2	15.9	3.2
Median:		242.6	242.6	0.0	0.0
Min:		177.7	177.7	-0.1	0.0
Max:		1005.8	1036.1	90.0	17.2
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					3

### San Joaquin River at Jersey Point Salinity

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	194.6	194.6	0.0	0.0
1976	C	2273.4	2340.7	67.3	3.0
1977	C	1175.1	1222.7	47.6	4.1
1978	AN	205.2	205.2	0.0	0.0
1979	BN	235.6	235.7	0.1	0.0
1980	AN	237.8	237.9	0.1	0.0
1981	D	688.5	746.5	58.0	8.4
1982	W	190.1	190.1	0.0	0.0
1983	W	162.6	162.6	0.0	0.0
1984	W	304.5	305.0	0.5	0.2
1985	D	537.7	537.7	0.0	0.0
1986	W	242.3	242.4	0.1	0.0
1987	D	612.2	654.2	42.0	6.9
1988	C	943.0	931.4	-11.6	-1.2
1989	D	592.3	592.2	-0.1	0.0
1990	C	1302.9	1430.8	127.9	9.8
1991	C	958.5	1032.1	73.6	7.7
Mean:		638.6	662.5	23.9	2.3
Median:		537.7	537.7	0.1	0.0
Min:		162.6	162.6	-11.6	-1.2
Max:		2273.4	2340.7	127.9	9.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



### San Joaquin River at Jersey Point Salinity

July					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	417.2	424.3	7.1	1.7
1976	C	1964.2	2258.1	293.9	15.0
1977	C	1170.9	1186.1	15.3	1.3
1978	AN	454.2	457.5	3.4	0.7
1979	BN	634.0	645.9	11.9	1.9
1980	AN	596.8	600.6	3.8	0.6
1981	D	2212.8	2381.3	168.5	7.6
1982	W	313.0	315.1	2.0	0.6
1983	W	180.0	180.0	0.0	0.0
1984	W	628.0	654.4	26.4	4.2
1985	D	1693.9	1694.6	0.7	0.0
1986	W	499.7	512.5	12.8	2.6
1987	D	1395.7	1407.8	12.1	0.9
1988	C	1228.2	1220.6	-7.6	-0.6
1989	D	1321.4	1323.5	2.1	0.2
1990	C	1655.6	1680.5	24.9	1.5
1991	C	1610.0	1623.9	13.9	0.9
Mean:		1057.4	1092.2	34.8	2.3
Median:		1170.9	1186.1	11.9	0.9
Min:		180.0	180.0	-7.6	-0.6
Max:		2212.8	2381.3	293.9	15.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					1

### San Joaquin River at Jersey Point Salinity

August					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	1399.2	1416.1	16.9	1.2
1976	C	1415.8	1593.8	178.0	12.6
1977	C	1335.0	1385.7	50.7	3.8
1978	AN	978.6	1004.2	25.6	2.6
1979	BN	1287.5	1305.7	18.3	1.4
1980	AN	1190.7	1182.4	-8.3	-0.7
1981	D	1827.8	2087.0	259.2	14.2
1982	W	997.9	1024.4	26.5	2.7
1983	W	299.4	299.4	0.0	0.0
1984	W	1383.4	1381.0	-2.4	-0.2
1985	D	2203.5	2204.0	0.5	0.0
1986	W	1030.7	1039.8	9.1	0.9
1987	D	2048.5	2052.9	4.5	0.2
1988	C	1306.3	1303.1	-3.2	-0.2
1989	D	3021.1	2878.2	-142.9	-4.7
1990	C	1375.3	1368.6	-6.7	-0.5
1991	C	1423.3	1405.3	-17.9	-1.3
Mean:		1442.6	1466.6	24.0	1.9
Median:		1375.3	1381.0	4.5	0.2
Min:		299.4	299.4	-142.9	-4.7
Max:		3021.1	2878.2	259.2	14.2
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					2

### San Joaquin River at Jersey Point Salinity

#### September

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	1940.8	1919.2	-21.6	-1.1
1976	C	3148.6	3201.4	52.9	1.7
1977	C	2130.8	2207.4	76.7	3.6
1978	AN	2418.9	2397.5	-21.4	-0.9
1979	BN	2305.3	2301.5	-3.8	-0.2
1980	AN	2171.7	1936.4	-235.3	-10.8
1981	D	1723.4	1836.1	112.7	6.5
1982	W	1485.8	1476.1	-9.7	-0.7
1983	W	303.4	303.4	0.0	0.0
1984	W	2595.7	2588.2	-7.5	-0.3
1985	D	2638.4	2638.5	0.1	0.0
1986	W	2347.5	2334.2	-13.3	-0.6
1987	D	2798.3	2788.8	-9.5	-0.3
1988	C	1941.8	1942.7	1.0	0.1
1989	D	3458.3	3270.3	-187.9	-5.4
1990	C	1991.1	1977.9	-13.1	-0.7
1991	C	1930.0	1917.7	-12.3	-0.6
Mean:		2195.9	2178.7	-17.2	-0.6
Median:		2171.7	2207.4	-9.5	-0.3
Min:		303.4	303.4	-235.3	-10.8
Max:		3458.3	3270.3	112.7	6.5
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

Long-term and Water Year Type Average Salinity at the San Joaquin River at Airport Way Bridge (Vernalis) under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	EC (umhos/cm)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	601	649	559	497	512	541	425	425	530	642	771	957
NEPA Modified Flow Alternative	601	649	559	497	512	541	425	425	530	642	771	957
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference <sup>3</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	520	545	448	341	198	235	248	269	340	537	692	746
NEPA Modified Flow Alternative	520	545	448	341	198	235	248	269	340	537	692	746
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Above Normal</b>												
NEPA No Action Alternative	714	716	597	234	172	251	241	244	281	530	671	760
NEPA Modified Flow Alternative	714	716	597	234	172	251	241	244	281	530	671	760
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Below Normal</b>												
NEPA No Action Alternative	403	711	589	311	213	282	302	304	618	694	703	883
NEPA Modified Flow Alternative	403	711	589	311	213	282	302	304	618	694	703	883
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Dry</b>												
NEPA No Action Alternative	612	690	591	628	721	714	544	521	687	665	760	1,097
NEPA Modified Flow Alternative	612	690	591	628	721	714	544	521	687	665	760	1,097
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Critical</b>												
NEPA No Action Alternative	669	680	624	691	855	877	605	600	676	764	914	1,149
NEPA Modified Flow Alternative	669	680	624	691	855	877	605	600	676	764	914	1,149
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

### San Joaquin River at Airport Way Bridge (Vernalis) Salinity

October					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	610.7	610.7	0.0	0.0
1976	C	526.0	526.0	0.0	0.0
1977	C	496.7	496.7	0.0	0.0
1978	AN	763.2	763.2	0.0	0.0
1979	BN	402.7	402.7	0.0	0.0
1980	AN	665.4	665.4	0.0	0.0
1981	D	398.2	398.2	0.0	0.0
1982	W	795.0	795.0	0.0	0.0
1983	W	201.4	201.4	0.0	0.0
1984	W	204.7	204.7	0.0	0.0
1985	D	673.9	673.9	0.0	0.0
1986	W	788.4	788.4	0.0	0.0
1987	D	595.3	595.3	0.0	0.0
1988	C	774.6	774.6	0.0	0.0
1989	D	780.0	780.0	0.0	0.0
1990	C	784.8	784.8	0.0	0.0
1991	C	763.2	763.2	0.0	0.0
Mean:		601.4	601.4	0.0	0.0
Median:		665.4	665.4	0.0	0.0
Min:		201.4	201.4	0.0	0.0
Max:		795.0	795.0	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Airport Way Bridge (Vernalis) Salinity

November					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	690.6	690.6	0.0	0.0
1976	C	670.0	670.0	0.0	0.0
1977	C	556.5	556.5	0.0	0.0
1978	AN	781.5	781.5	0.0	0.0
1979	BN	711.4	711.4	0.0	0.0
1980	AN	651.1	651.1	0.0	0.0
1981	D	689.6	689.6	0.0	0.0
1982	W	806.6	806.6	0.0	0.0
1983	W	253.0	253.0	0.0	0.0
1984	W	167.1	167.1	0.0	0.0
1985	D	660.8	660.8	0.0	0.0
1986	W	808.5	808.5	0.0	0.0
1987	D	677.5	677.5	0.0	0.0
1988	C	761.0	761.0	0.0	0.0
1989	D	730.1	730.1	0.0	0.0
1990	C	719.4	719.4	0.0	0.0
1991	C	694.9	694.9	0.0	0.0
Mean:		648.8	648.8	0.0	0.0
Median:		690.6	690.6	0.0	0.0
Min:		167.1	167.1	0.0	0.0
Max:		808.5	808.5	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**San Joaquin River at Airport Way Bridge (Vernalis) Salinity**

<b>December</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	584.4	584.4	0.0	0.0
1976	C	575.2	575.2	0.0	0.0
1977	C	586.8	586.8	0.0	0.0
1978	AN	644.6	644.6	0.0	0.0
1979	BN	588.9	588.9	0.0	0.0
1980	AN	548.8	548.8	0.0	0.0
1981	D	585.9	585.9	0.0	0.0
1982	W	717.4	717.4	0.0	0.0
1983	W	118.5	118.5	0.0	0.0
1984	W	111.5	111.5	0.0	0.0
1985	D	582.4	582.4	0.0	0.0
1986	W	708.0	708.0	0.0	0.0
1987	D	596.7	596.7	0.0	0.0
1988	C	687.1	687.1	0.0	0.0
1989	D	598.7	598.7	0.0	0.0
1990	C	655.7	655.7	0.0	0.0
1991	C	613.1	613.1	0.0	0.0
	Mean:	559.0	559.0	0.0	0.0
	Median:	588.9	588.9	0.0	0.0
	Min:	111.5	111.5	0.0	0.0
	Max:	717.4	717.4	0.0	0.0
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**San Joaquin River at Airport Way Bridge (Vernalis) Salinity**

January					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	617.5	617.5	0.0	0.0
1976	C	636.1	636.1	0.0	0.0
1977	C	723.0	723.0	0.0	0.0
1978	AN	331.8	331.8	0.0	0.0
1979	BN	311.2	311.2	0.0	0.0
1980	AN	136.3	136.3	0.0	0.0
1981	D	555.1	555.1	0.0	0.0
1982	W	240.5	240.5	0.0	0.0
1983	W	103.4	103.4	0.0	0.0
1984	W	138.0	138.0	0.0	0.0
1985	D	636.3	636.3	0.0	0.0
1986	W	607.5	607.5	0.0	0.0
1987	D	641.0	641.0	0.0	0.0
1988	C	698.6	698.6	0.0	0.0
1989	D	679.8	679.8	0.0	0.0
1990	C	700.6	700.6	0.0	0.0
1991	C	697.7	697.7	0.0	0.0
Mean:		497.3	497.3	0.0	0.0
Median:		617.5	617.5	0.0	0.0
Min:		103.4	103.4	0.0	0.0
Max:		723.0	723.0	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



**San Joaquin River at Airport Way Bridge (Vernalis) Salinity**

February					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	326.0	326.0	0.0	0.0
1976	C	750.1	750.1	0.0	0.0
1977	C	908.4	908.4	0.0	0.0
1978	AN	232.7	232.7	0.0	0.0
1979	BN	212.5	212.5	0.0	0.0
1980	AN	111.8	111.8	0.0	0.0
1981	D	623.0	623.0	0.0	0.0
1982	W	173.9	173.9	0.0	0.0
1983	W	101.4	101.4	0.0	0.0
1984	W	230.1	230.1	0.0	0.0
1985	D	714.9	714.9	0.0	0.0
1986	W	159.4	159.4	0.0	0.0
1987	D	727.3	727.3	0.0	0.0
1988	C	886.1	886.1	0.0	0.0
1989	D	817.7	817.7	0.0	0.0
1990	C	853.6	853.6	0.0	0.0
1991	C	877.7	877.7	0.0	0.0
Mean:		512.2	512.2	0.0	0.0
Median:		623.0	623.0	0.0	0.0
Min:		101.4	101.4	0.0	0.0
Max:		908.4	908.4	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Airport Way Bridge (Vernalis) Salinity

March					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	284.5	284.5	0.0	0.0
1976	C	835.2	835.2	0.0	0.0
1977	C	1006.2	1006.2	0.0	0.0
1978	AN	284.5	284.5	0.0	0.0
1979	BN	281.8	281.8	0.0	0.0
1980	AN	216.9	216.9	0.0	0.0
1981	D	505.9	505.9	0.0	0.0
1982	W	218.5	218.5	0.0	0.0
1983	W	131.6	131.6	0.0	0.0
1984	W	376.5	376.5	0.0	0.0
1985	D	743.6	743.6	0.0	0.0
1986	W	163.4	163.4	0.0	0.0
1987	D	780.6	780.6	0.0	0.0
1988	C	1006.5	1006.5	0.0	0.0
1989	D	827.1	827.1	0.0	0.0
1990	C	934.4	934.4	0.0	0.0
1991	C	602.4	602.4	0.0	0.0
Mean:		541.1	541.1	0.0	0.0
Median:		505.9	505.9	0.0	0.0
Min:		131.6	131.6	0.0	0.0
Max:		1006.5	1006.5	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Airport Way Bridge (Vernalis) Salinity

April					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	302.7	302.7	0.0	0.0
1976	C	592.7	592.7	0.0	0.0
1977	C	686.9	686.9	0.0	0.0
1978	AN	212.7	212.7	0.0	0.0
1979	BN	301.9	301.9	0.0	0.0
1980	AN	269.8	269.8	0.0	0.0
1981	D	430.8	430.8	0.0	0.0
1982	W	152.9	152.9	0.0	0.0
1983	W	169.5	169.5	0.0	0.0
1984	W	389.6	389.6	0.0	0.0
1985	D	547.0	547.0	0.0	0.0
1986	W	223.2	223.2	0.0	0.0
1987	D	588.4	588.4	0.0	0.0
1988	C	651.4	651.4	0.0	0.0
1989	D	610.9	610.9	0.0	0.0
1990	C	616.6	616.6	0.0	0.0
1991	C	476.3	476.3	0.0	0.0
Mean:		424.9	424.9	0.0	0.0
Median:		430.8	430.8	0.0	0.0
Min:		152.9	152.9	0.0	0.0
Max:		686.9	686.9	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**San Joaquin River at Airport Way Bridge (Vernalis) Salinity**

<b>May</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	326.2	326.2	0.0	0.0
1976	C	567.0	567.0	0.0	0.0
1977	C	632.5	632.5	0.0	0.0
1978	AN	208.3	208.3	0.0	0.0
1979	BN	304.3	304.3	0.0	0.0
1980	AN	280.6	280.6	0.0	0.0
1981	D	454.7	454.7	0.0	0.0
1982	W	182.7	182.7	0.0	0.0
1983	W	162.1	162.1	0.0	0.0
1984	W	401.9	401.9	0.0	0.0
1985	D	431.9	431.9	0.0	0.0
1986	W	271.5	271.5	0.0	0.0
1987	D	569.2	569.2	0.0	0.0
1988	C	663.7	663.7	0.0	0.0
1989	D	626.3	626.3	0.0	0.0
1990	C	619.8	619.8	0.0	0.0
1991	C	515.9	515.9	0.0	0.0
Mean:		424.6	424.6	0.0	0.0
Median:		431.9	431.9	0.0	0.0
Min:		162.1	162.1	0.0	0.0
Max:		663.7	663.7	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Airport Way Bridge (Vernalis) Salinity

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	364.4	364.4	0.0	0.0
1976	C	681.5	681.5	0.0	0.0
1977	C	658.1	658.1	0.0	0.0
1978	AN	226.8	226.8	0.0	0.0
1979	BN	618.1	618.1	0.0	0.0
1980	AN	335.4	335.4	0.0	0.0
1981	D	695.9	695.9	0.0	0.0
1982	W	266.5	266.5	0.0	0.0
1983	W	125.3	125.3	0.0	0.0
1984	W	609.5	609.5	0.0	0.0
1985	D	697.2	697.2	0.0	0.0
1986	W	336.0	336.0	0.0	0.0
1987	D	681.5	681.5	0.0	0.0
1988	C	669.8	669.8	0.0	0.0
1989	D	674.8	674.8	0.0	0.0
1990	C	674.7	674.7	0.0	0.0
1991	C	696.7	696.7	0.0	0.0
Mean:		530.1	530.1	0.0	0.0
Median:		658.1	658.1	0.0	0.0
Min:		125.3	125.3	0.0	0.0
Max:		697.2	697.2	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**San Joaquin River at Airport Way Bridge (Vernalis) Salinity**

<b>July</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	629.2	629.2	0.0	0.0
1976	C	668.1	668.1	0.0	0.0
1977	C	945.7	945.7	0.0	0.0
1978	AN	615.4	615.4	0.0	0.0
1979	BN	693.7	693.7	0.0	0.0
1980	AN	444.9	444.9	0.0	0.0
1981	D	676.3	676.3	0.0	0.0
1982	W	514.4	514.4	0.0	0.0
1983	W	185.3	185.3	0.0	0.0
1984	W	704.1	704.1	0.0	0.0
1985	D	656.9	656.9	0.0	0.0
1986	W	653.8	653.8	0.0	0.0
1987	D	654.5	654.5	0.0	0.0
1988	C	800.3	800.3	0.0	0.0
1989	D	673.0	673.0	0.0	0.0
1990	C	717.7	717.7	0.0	0.0
1991	C	686.9	686.9	0.0	0.0
Mean:		642.4	642.4	0.0	0.0
Median:		668.1	668.1	0.0	0.0
Min:		185.3	185.3	0.0	0.0
Max:		945.7	945.7	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Airport Way Bridge (Vernalis) Salinity

August					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	671.2	671.2	0.0	0.0
1976	C	674.2	674.2	0.0	0.0
1977	C	1093.9	1093.9	0.0	0.0
1978	AN	704.4	704.4	0.0	0.0
1979	BN	702.6	702.6	0.0	0.0
1980	AN	637.3	637.3	0.0	0.0
1981	D	682.3	682.3	0.0	0.0
1982	W	703.2	703.2	0.0	0.0
1983	W	694.4	694.4	0.0	0.0
1984	W	701.6	701.6	0.0	0.0
1985	D	661.0	661.0	0.0	0.0
1986	W	689.2	689.2	0.0	0.0
1987	D	737.9	737.9	0.0	0.0
1988	C	1097.2	1097.2	0.0	0.0
1989	D	958.7	958.7	0.0	0.0
1990	C	947.1	947.1	0.0	0.0
1991	C	755.5	755.5	0.0	0.0
Mean:		771.3	771.3	0.0	0.0
Median:		702.6	702.6	0.0	0.0
Min:		637.3	637.3	0.0	0.0
Max:		1097.2	1097.2	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**San Joaquin River at Airport Way Bridge (Vernalis) Salinity**

<b>September</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	859.1	859.1	0.0	0.0
1976	C	1208.2	1208.2	0.0	0.0
1977	C	1189.7	1189.7	0.0	0.0
1978	AN	813.2	813.2	0.0	0.0
1979	BN	882.7	882.7	0.0	0.0
1980	AN	707.1	707.1	0.0	0.0
1981	D	1007.6	1007.6	0.0	0.0
1982	W	604.7	604.7	0.0	0.0
1983	W	422.0	422.0	0.0	0.0
1984	W	962.3	962.3	0.0	0.0
1985	D	1038.2	1038.2	0.0	0.0
1986	W	879.4	879.4	0.0	0.0
1987	D	1213.5	1213.5	0.0	0.0
1988	C	1215.4	1215.4	0.0	0.0
1989	D	1128.6	1128.6	0.0	0.0
1990	C	1120.7	1120.7	0.0	0.0
1991	C	1009.7	1009.7	0.0	0.0
Mean:		956.6	956.6	0.0	0.0
Median:		1007.6	1007.6	0.0	0.0
Min:		422.0	422.0	0.0	0.0
Max:		1215.4	1215.4	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



Long-term and Water Year Type Average Salinity at the San Joaquin River at Brandt Bridge under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	EC (umhos/cm)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	616	649	569	506	512	546	442	427	535	640	735	928
NEPA Modified Flow Alternative	616	649	569	506	512	546	442	427	535	640	735	928
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.4	0.0
Percent Difference <sup>3</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	523	546	456	351	207	238	250	272	344	535	689	740
NEPA Modified Flow Alternative	523	546	456	351	207	238	250	272	344	535	689	740
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Above Normal</b>												
NEPA No Action Alternative	733	717	610	255	178	254	244	248	287	531	665	756
NEPA Modified Flow Alternative	733	717	610	255	178	254	244	248	287	531	665	756
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Below Normal</b>												
NEPA No Action Alternative	419	702	599	330	218	283	305	309	617	692	703	869
NEPA Modified Flow Alternative	419	702	599	330	218	283	305	309	617	692	703	869
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Dry</b>												
NEPA No Action Alternative	628	689	601	631	718	720	569	523	689	675	664	1,039
NEPA Modified Flow Alternative	628	689	601	631	718	720	569	523	689	675	663	1,039
Difference	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.4	0.1
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0
<b>Critical</b>												
NEPA No Action Alternative	693	682	632	694	846	884	639	601	685	750	874	1,108
NEPA Modified Flow Alternative	693	682	632	695	846	884	639	601	685	750	874	1,108
Difference	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-0.1	0.3	-0.1	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

### San Joaquin River at Brandt Bridge Salinity

October					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	587.5	587.5	0.0	0.0
1976	C	539.8	539.8	0.0	0.0
1977	C	528.1	528.1	0.0	0.0
1978	AN	791.0	791.0	0.0	0.0
1979	BN	419.1	419.1	0.0	0.0
1980	AN	675.6	675.6	0.0	0.0
1981	D	410.6	410.6	0.0	0.0
1982	W	805.1	805.1	0.0	0.0
1983	W	212.5	212.5	0.0	0.0
1984	W	210.7	210.7	0.0	0.0
1985	D	686.5	686.5	0.0	0.0
1986	W	800.5	800.5	0.0	0.0
1987	D	609.0	609.0	0.0	0.0
1988	C	799.3	799.3	0.0	0.0
1989	D	807.3	807.3	0.0	0.0
1990	C	806.3	806.3	0.0	0.0
1991	C	791.2	791.2	0.0	0.0
Mean:		616.5	616.5	0.0	0.0
Median:		675.6	675.6	0.0	0.0
Min:		210.7	210.7	0.0	0.0
Max:		807.3	807.3	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Brandt Bridge Salinity

November					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	688.7	688.7	0.0	0.0
1976	C	665.2	665.2	0.0	0.0
1977	C	555.5	555.5	0.0	0.0
1978	AN	781.1	781.1	0.0	0.0
1979	BN	701.9	701.9	0.0	0.0
1980	AN	652.8	652.8	0.0	0.0
1981	D	680.1	680.1	0.0	0.0
1982	W	807.1	807.1	0.0	0.0
1983	W	256.2	256.2	0.0	0.0
1984	W	169.0	169.0	0.0	0.0
1985	D	664.6	664.6	0.0	0.0
1986	W	808.4	808.4	0.0	0.0
1987	D	675.5	675.5	0.0	0.0
1988	C	762.7	762.7	0.0	0.0
1989	D	733.9	733.9	0.0	0.0
1990	C	724.7	724.7	0.0	0.0
1991	C	702.1	702.1	0.0	0.0
Mean:		648.8	648.8	0.0	0.0
Median:		688.7	688.7	0.0	0.0
Min:		169.0	169.0	0.0	0.0
Max:		808.4	808.4	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Brandt Bridge Salinity

December					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	594.0	594.0	0.0	0.0
1976	C	583.0	583.0	0.0	0.0
1977	C	587.2	587.2	0.0	0.0
1978	AN	660.4	660.4	0.0	0.0
1979	BN	598.5	598.5	0.0	0.0
1980	AN	559.5	559.5	0.0	0.0
1981	D	595.9	596.2	0.3	0.1
1982	W	729.0	729.0	0.0	0.0
1983	W	123.1	123.1	0.0	0.0
1984	W	115.8	115.8	0.0	0.0
1985	D	593.2	593.2	0.0	0.0
1986	W	719.6	719.6	0.0	0.0
1987	D	603.8	603.7	-0.1	0.0
1988	C	705.5	705.4	0.0	0.0
1989	D	611.2	611.2	0.0	0.0
1990	C	663.7	663.6	-0.1	0.0
1991	C	621.8	621.8	0.0	0.0
Mean:		568.5	568.5	0.0	0.0
Median:		598.5	598.5	0.0	0.0
Min:		115.8	115.8	-0.1	0.0
Max:		729.0	729.0	0.3	0.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Brandt Bridge Salinity

January					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	619.0	619.0	0.0	0.0
1976	C	638.2	638.1	-0.1	0.0
1977	C	718.5	718.5	0.0	0.0
1978	AN	358.7	358.7	0.0	0.0
1979	BN	330.0	330.0	0.0	0.0
1980	AN	152.3	152.3	0.0	0.0
1981	D	564.6	564.6	0.0	0.0
1982	W	265.6	265.6	0.0	0.0
1983	W	113.6	113.6	0.0	0.0
1984	W	138.2	138.2	0.0	0.0
1985	D	637.2	637.2	0.0	0.0
1986	W	620.4	620.4	0.0	0.0
1987	D	642.8	642.8	0.0	0.0
1988	C	712.3	712.3	0.0	0.0
1989	D	679.1	679.1	0.0	0.0
1990	C	708.7	709.1	0.4	0.1
1991	C	694.7	694.7	0.0	0.0
Mean:		505.5	505.5	0.0	0.0
Median:		620.4	620.4	0.0	0.0
Min:		113.6	113.6	-0.1	0.0
Max:		718.5	718.5	0.4	0.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Brandt Bridge Salinity

February					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	340.5	340.5	0.0	0.0
1976	C	747.9	747.9	0.0	0.0
1977	C	896.9	896.9	0.0	0.0
1978	AN	240.4	240.4	0.0	0.0
1979	BN	218.1	218.1	0.0	0.0
1980	AN	116.0	116.0	0.0	0.0
1981	D	621.8	621.8	0.0	0.0
1982	W	176.9	176.9	0.0	0.0
1983	W	105.2	105.2	0.0	0.0
1984	W	229.4	229.4	0.0	0.0
1985	D	711.8	711.8	0.0	0.0
1986	W	181.8	181.8	0.0	0.0
1987	D	726.2	726.2	0.0	0.0
1988	C	874.5	874.5	0.0	0.0
1989	D	810.1	810.1	0.0	0.0
1990	C	844.0	844.1	0.0	0.0
1991	C	864.8	864.8	0.0	0.0
Mean:		512.1	512.1	0.0	0.0
Median:		621.8	621.8	0.0	0.0
Min:		105.2	105.2	0.0	0.0
Max:		896.9	896.9	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Brandt Bridge Salinity

March					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	286.7	286.7	0.0	0.0
1976	C	843.7	843.7	0.0	0.0
1977	C	1008.8	1008.8	0.0	0.0
1978	AN	292.3	292.3	0.0	0.0
1979	BN	282.6	282.6	0.0	0.0
1980	AN	215.8	215.8	0.0	0.0
1981	D	513.3	513.3	0.0	0.0
1982	W	223.6	223.6	0.0	0.0
1983	W	137.8	137.8	0.0	0.0
1984	W	375.6	375.6	0.0	0.0
1985	D	745.1	745.2	0.0	0.0
1986	W	167.0	167.0	0.0	0.0
1987	D	788.6	788.6	0.0	0.0
1988	C	1003.4	1003.4	0.0	0.0
1989	D	831.8	831.8	0.0	0.0
1990	C	936.6	936.6	0.0	0.0
1991	C	626.6	626.6	0.0	0.0
Mean:		545.9	545.9	0.0	0.0
Median:		513.3	513.3	0.0	0.0
Min:		137.8	137.8	0.0	0.0
Max:		1008.8	1008.8	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Brandt Bridge Salinity

April					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	305.4	305.4	0.0	0.0
1976	C	621.2	621.2	0.0	0.0
1977	C	727.0	727.0	0.0	0.0
1978	AN	216.1	216.1	0.0	0.0
1979	BN	305.0	305.0	0.0	0.0
1980	AN	272.3	272.3	0.0	0.0
1981	D	442.3	442.3	0.0	0.0
1982	W	154.8	154.8	0.0	0.0
1983	W	169.8	169.8	0.0	0.0
1984	W	396.8	396.8	0.0	0.0
1985	D	569.6	569.6	0.0	0.0
1986	W	223.5	223.5	0.0	0.0
1987	D	617.5	617.5	0.0	0.0
1988	C	691.6	691.6	0.0	0.0
1989	D	647.2	647.2	0.0	0.0
1990	C	660.0	660.0	0.0	0.0
1991	C	497.7	497.7	0.0	0.0
Mean:		442.2	442.2	0.0	0.0
Median:		442.3	442.3	0.0	0.0
Min:		154.8	154.8	0.0	0.0
Max:		727.0	727.0	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



### San Joaquin River at Brandt Bridge Salinity

May					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	331.1	331.1	0.0	0.0
1976	C	565.7	565.7	0.0	0.0
1977	C	636.0	636.0	0.0	0.0
1978	AN	211.3	211.3	0.0	0.0
1979	BN	309.3	309.3	0.0	0.0
1980	AN	284.8	284.8	0.0	0.0
1981	D	459.2	459.2	0.0	0.0
1982	W	184.8	184.8	0.0	0.0
1983	W	163.9	163.9	0.0	0.0
1984	W	406.2	406.2	0.0	0.0
1985	D	440.3	440.3	0.0	0.0
1986	W	274.2	274.2	0.0	0.0
1987	D	566.2	566.2	0.0	0.0
1988	C	665.9	665.9	0.0	0.0
1989	D	625.7	625.7	0.0	0.0
1990	C	614.2	614.2	0.0	0.0
1991	C	521.1	521.1	0.0	0.0
Mean:		427.1	427.1	0.0	0.0
Median:		440.3	440.3	0.0	0.0
Min:		163.9	163.9	0.0	0.0
Max:		665.9	665.9	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Brandt Bridge Salinity

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	372.1	372.1	0.0	0.0
1976	C	690.5	690.5	0.0	0.0
1977	C	671.3	671.2	-0.1	0.0
1978	AN	231.8	231.8	0.0	0.0
1979	BN	616.8	616.8	0.0	0.0
1980	AN	342.0	342.0	0.0	0.0
1981	D	689.8	689.8	0.0	0.0
1982	W	269.5	269.5	0.0	0.0
1983	W	128.1	128.1	0.0	0.0
1984	W	608.9	608.9	0.0	0.0
1985	D	688.3	688.3	0.0	0.0
1986	W	341.7	341.7	0.0	0.0
1987	D	690.4	690.3	-0.1	0.0
1988	C	681.2	681.2	-0.1	0.0
1989	D	688.5	688.5	0.0	0.0
1990	C	687.1	686.9	-0.3	0.0
1991	C	694.3	694.4	0.1	0.0
Mean:		534.9	534.8	0.0	0.0
Median:		671.3	671.2	0.0	0.0
Min:		128.1	128.1	-0.3	0.0
Max:		694.3	694.4	0.1	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Brandt Bridge Salinity

July					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	625.7	625.7	0.0	0.0
1976	C	676.8	677.4	0.6	0.1
1977	C	881.9	882.6	0.7	0.1
1978	AN	612.6	612.6	0.0	0.0
1979	BN	692.1	692.0	0.0	0.0
1980	AN	448.9	448.9	0.0	0.0
1981	D	684.4	684.3	-0.1	0.0
1982	W	514.8	514.8	0.0	0.0
1983	W	187.5	187.5	0.0	0.0
1984	W	700.1	700.0	-0.1	0.0
1985	D	667.2	667.2	0.0	0.0
1986	W	648.8	648.8	0.0	0.0
1987	D	664.1	664.0	-0.1	0.0
1988	C	780.5	780.5	0.0	0.0
1989	D	682.6	682.6	0.0	0.0
1990	C	716.1	716.1	0.0	0.0
1991	C	693.8	693.9	0.0	0.0
Mean:		639.9	639.9	0.1	0.0
Median:		676.8	677.4	0.6	0.1
Min:		187.5	187.5	0.0	0.0
Max:		881.9	882.6	0.7	0.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Brandt Bridge Salinity

August					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	670.6	670.6	0.0	0.0
1976	C	676.0	676.0	0.0	0.0
1977	C	1034.8	1034.8	0.0	0.0
1978	AN	699.8	699.7	-0.2	0.0
1979	BN	702.8	702.8	0.0	0.0
1980	AN	630.5	630.5	0.0	0.0
1981	D	684.1	684.2	0.0	0.0
1982	W	695.0	694.9	-0.1	0.0
1983	W	686.3	686.3	0.0	0.0
1984	W	702.5	702.5	0.0	0.0
1985	D	664.1	664.1	0.0	0.0
1986	W	688.6	688.6	0.0	0.0
1987	D	725.5	725.5	0.0	0.0
1988	C	1019.2	1019.2	0.0	0.0
1989	D	582.4	576.8	-5.7	-1.0
1990	C	896.1	895.9	-0.3	0.0
1991	C	744.0	743.9	-0.2	0.0
Mean:		735.4	735.1	-0.4	-0.1
Median:		695.0	694.9	0.0	0.0
Min:		582.4	576.8	-5.7	-1.0
Max:		1034.8	1034.8	0.0	0.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### San Joaquin River at Brandt Bridge Salinity

#### September

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	846.1	846.1	0.0	0.0
1976	C	1129.0	1129.0	0.0	0.0
1977	C	1164.3	1164.3	0.0	0.0
1978	AN	806.1	806.1	0.0	0.0
1979	BN	869.3	869.2	0.0	0.0
1980	AN	705.0	705.0	0.0	0.0
1981	D	971.8	971.8	0.0	0.0
1982	W	610.2	610.2	0.0	0.0
1983	W	435.0	435.0	0.0	0.0
1984	W	941.0	941.0	0.0	0.0
1985	D	995.4	995.4	0.0	0.0
1986	W	867.4	867.4	0.0	0.0
1987	D	1140.3	1141.4	1.2	0.1
1988	C	1182.7	1182.8	0.1	0.0
1989	D	1048.4	1047.5	-0.8	-0.1
1990	C	1087.1	1087.0	-0.1	0.0
1991	C	975.1	974.9	-0.2	0.0
Mean:		927.9	927.9	0.0	0.0
Median:		971.8	971.8	0.0	0.0
Min:		435.0	435.0	-0.8	-0.1
Max:		1182.7	1182.8	1.2	0.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

Long-term and Water Year Type Average Salinity at the Middle River near old River under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	EC (umhos/cm)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	467.2	482.5	461.4	476.8	430.8	428.2	385.8	404.8	475.1	492.9	396.8	472.3
NEPA Modified Flow Alternative	466.1	482.5	461.4	474.8	427.8	427.4	386.1	405.1	477.5	497.8	401.7	472.5
Difference	-1.1	0.1	0.0	-2.0	-3.0	-0.8	0.3	0.3	2.4	4.8	4.9	0.1
Percent Difference <sup>3</sup>	-0.2	0.0	0.0	-0.4	-0.7	-0.2	0.1	0.1	0.5	1.0	1.2	0.0
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	320.6	387.1	325.2	347.7	207.4	239.1	258.9	283.6	345.0	455.7	331.0	464.3
NEPA Modified Flow Alternative	322.2	388.1	325.8	347.9	207.4	239.1	258.9	283.6	345.0	457.1	329.7	464.6
Difference	1.5	1.0	0.7	0.2	0.0	0.0	0.0	0.0	0.0	1.4	-1.3	0.3
Percent Difference	0.5	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.3	-0.4	0.1
<b>Above Normal</b>												
NEPA No Action Alternative	544.1	554.2	486.7	254.1	179.3	255.1	252.9	260.9	287.7	531.2	347.5	548.4
NEPA Modified Flow Alternative	548.1	554.7	487.3	254.1	179.3	255.1	252.9	260.9	287.7	531.2	348.9	547.8
Difference	4.0	0.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	-0.6
Percent Difference	0.7	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	-0.1
<b>Below Normal</b>												
NEPA No Action Alternative	477.6	448.5	552.3	332.0	219.0	283.8	336.0	341.7	591.0	490.3	337.2	389.6
NEPA Modified Flow Alternative	476.4	448.2	552.1	332.0	219.0	283.8	336.1	341.7	591.1	492.1	340.0	390.2
Difference	-1.2	-0.3	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.8	0.6
Percent Difference	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.8	0.2
<b>Dry</b>												
NEPA No Action Alternative	518.5	521.4	503.4	532.6	608.1	546.1	445.4	476.5	561.4	439.3	454.7	511.2
NEPA Modified Flow Alternative	513.6	519.8	502.5	528.5	605.2	545.9	445.5	476.5	564.0	442.8	463.3	507.1
Difference	-4.9	-1.6	-0.9	-4.1	-2.8	-0.1	0.1	0.0	2.6	3.5	8.6	-4.1
Percent Difference	-1.0	-0.3	-0.2	-0.8	-0.5	0.0	0.0	0.0	0.5	0.8	1.9	-0.8
<b>Critical</b>												
NEPA No Action Alternative	539.8	524.8	535.9	679.3	655.3	621.1	528.3	538.8	587.9	558.3	448.0	435.3
NEPA Modified Flow Alternative	537.2	525.0	535.7	675.5	647.3	618.4	529.1	539.8	594.0	570.2	457.9	439.0
Difference	-2.5	0.2	-0.2	-3.8	-8.0	-2.6	0.8	1.0	6.1	11.9	9.9	3.7
Percent Difference	-0.5	0.0	0.0	-0.6	-1.2	-0.4	0.2	0.2	1.0	2.1	2.2	0.8

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

### Middle River near Old River Salinity

October					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	171.3	171.3	0.0	0.0
1976	C	399.5	398.8	-0.7	-0.2
1977	C	589.6	594.5	4.9	0.8
1978	AN	567.6	576.9	9.2	1.6
1979	BN	477.6	476.4	-1.2	-0.3
1980	AN	520.5	519.3	-1.2	-0.2
1981	D	463.4	444.0	-19.4	-4.2
1982	W	465.5	473.1	7.6	1.6
1983	W	211.6	211.6	0.0	0.0
1984	W	210.5	210.5	0.0	0.0
1985	D	533.5	533.0	-0.5	-0.1
1986	W	544.2	544.2	0.0	0.0
1987	D	510.6	509.2	-1.4	-0.3
1988	C	581.7	583.8	2.1	0.4
1989	D	566.5	568.1	1.6	0.3
1990	C	586.6	571.1	-15.5	-2.6
1991	C	541.4	537.9	-3.5	-0.6
Mean:		467.2	466.1	-1.1	-0.2
Median:		520.5	519.3	0.0	0.0
Min:		171.3	171.3	-19.4	-4.2
Max:		589.6	594.5	9.2	1.6
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Middle River near Old River Salinity

November					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	391.4	391.4	0.0	0.0
1976	C	386.4	386.7	0.3	0.1
1977	C	542.1	545.5	3.3	0.6
1978	AN	609.8	611.6	1.8	0.3
1979	BN	448.5	448.2	-0.3	-0.1
1980	AN	498.6	497.8	-0.8	-0.2
1981	D	437.4	426.5	-10.9	-2.5
1982	W	536.1	541.3	5.2	1.0
1983	W	303.2	303.2	0.0	0.0
1984	W	169.2	169.2	0.0	0.0
1985	D	546.5	551.8	5.2	1.0
1986	W	535.5	535.5	0.0	0.0
1987	D	495.7	494.3	-1.4	-0.3
1988	C	566.8	567.8	0.9	0.2
1989	D	606.1	606.8	0.8	0.1
1990	C	517.8	516.2	-1.5	-0.3
1991	C	610.6	608.7	-1.9	-0.3
Mean:		482.5	482.5	0.0	0.0
Median:		517.8	516.2	0.0	0.0
Min:		169.2	169.2	-10.9	-2.5
Max:		610.6	611.6	5.2	1.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



### Middle River near Old River Salinity

December					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	494.5	494.5	0.0	0.0
1976	C	532.5	526.7	-5.8	-1.1
1977	C	537.2	541.5	4.3	0.8
1978	AN	536.4	536.4	0.0	0.0
1979	BN	552.3	552.1	-0.2	0.0
1980	AN	437.0	438.1	1.2	0.3
1981	D	518.1	507.9	-10.2	-2.0
1982	W	377.4	380.7	3.2	0.8
1983	W	123.1	123.1	0.0	0.0
1984	W	115.9	115.9	0.0	0.0
1985	D	411.8	417.3	5.5	1.3
1986	W	514.8	514.9	0.0	0.0
1987	D	531.1	531.7	0.7	0.1
1988	C	528.4	528.3	-0.1	0.0
1989	D	552.5	553.0	0.5	0.1
1990	C	488.8	489.8	1.0	0.2
1991	C	592.7	592.2	-0.5	-0.1
Mean:		461.4	461.4	0.0	0.0
Median:		518.1	514.9	0.0	0.0
Min:		115.9	115.9	-10.2	-2.0
Max:		592.7	592.2	5.5	1.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Middle River near Old River Salinity

January					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	638.8	640.6	1.9	0.3
1976	C	690.0	680.0	-10.0	-1.4
1977	C	754.5	757.2	2.7	0.4
1978	AN	357.3	357.3	0.0	0.0
1979	BN	332.0	332.0	0.0	0.0
1980	AN	150.8	150.9	0.1	0.1
1981	D	514.0	515.9	2.0	0.4
1982	W	265.0	265.0	0.0	0.0
1983	W	114.5	114.5	0.0	0.0
1984	W	139.1	139.1	0.0	0.0
1985	D	420.8	423.3	2.5	0.6
1986	W	581.2	580.2	-1.0	-0.2
1987	D	597.7	576.3	-21.5	-3.6
1988	C	729.1	727.2	-1.9	-0.3
1989	D	597.9	598.5	0.6	0.1
1990	C	560.5	551.1	-9.4	-1.7
1991	C	662.3	662.1	-0.2	0.0
Mean:		476.8	474.8	-2.0	-0.3
Median:		560.5	551.1	0.0	0.0
Min:		114.5	114.5	-21.5	-3.6
Max:		754.5	757.2	2.7	0.6
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Middle River near Old River Salinity

February					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	340.9	341.0	0.0	0.0
1976	C	655.6	644.4	-11.2	-1.7
1977	C	762.7	763.7	1.0	0.1
1978	AN	241.7	241.7	0.0	0.0
1979	BN	219.0	219.0	0.0	0.0
1980	AN	116.9	116.9	0.0	0.0
1981	D	624.1	624.1	0.0	0.0
1982	W	177.7	177.7	0.0	0.0
1983	W	105.9	105.9	0.0	0.0
1984	W	230.5	230.5	0.0	0.0
1985	D	506.3	514.4	8.2	1.6
1986	W	182.0	182.0	0.0	0.0
1987	D	606.0	586.3	-19.8	-3.3
1988	C	490.6	490.2	-0.4	-0.1
1989	D	695.8	696.0	0.3	0.0
1990	C	664.3	634.8	-29.5	-4.4
1991	C	703.3	703.2	-0.1	0.0
Mean:		430.8	427.7	-3.0	-0.5
Median:		490.6	490.2	0.0	0.0
Min:		105.9	105.9	-29.5	-4.4
Max:		762.7	763.7	8.2	1.6
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Middle River near Old River Salinity

March					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	287.5	287.5	0.0	0.0
1976	C	593.3	589.2	-4.0	-0.7
1977	C	790.9	791.3	0.4	0.1
1978	AN	293.9	293.9	0.0	0.0
1979	BN	283.8	283.8	0.0	0.0
1980	AN	216.4	216.4	0.0	0.0
1981	D	514.4	514.4	0.0	0.0
1982	W	225.0	225.0	0.0	0.0
1983	W	138.3	138.3	0.0	0.0
1984	W	377.0	377.0	0.0	0.0
1985	D	557.8	563.8	6.0	1.1
1986	W	167.7	167.7	0.0	0.0
1987	D	566.9	561.7	-5.1	-0.9
1988	C	549.3	549.3	0.0	0.0
1989	D	545.2	543.9	-1.3	-0.2
1990	C	544.5	534.9	-9.6	-1.8
1991	C	627.4	627.4	0.0	0.0
Mean:		428.2	427.4	-0.8	-0.1
Median:		514.4	514.4	0.0	0.0
Min:		138.3	138.3	-9.6	-1.8
Max:		790.9	791.3	6.0	1.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Middle River near Old River Salinity

April					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	321.3	321.3	0.0	0.0
1976	C	476.8	476.1	-0.7	-0.1
1977	C	707.4	707.6	0.1	0.0
1978	AN	216.4	216.4	0.0	0.0
1979	BN	336.0	336.1	0.0	0.0
1980	AN	289.3	289.3	0.0	0.0
1981	D	467.0	467.2	0.2	0.0
1982	W	155.0	155.0	0.0	0.0
1983	W	170.2	170.2	0.0	0.0
1984	W	424.1	424.1	0.0	0.0
1985	D	520.7	521.8	1.1	0.2
1986	W	224.0	224.0	0.0	0.0
1987	D	447.3	447.2	-0.1	0.0
1988	C	509.1	509.2	0.1	0.0
1989	D	346.6	345.7	-1.0	-0.3
1990	C	484.3	488.9	4.6	0.9
1991	C	463.8	463.9	0.1	0.0
Mean:		385.8	386.1	0.3	0.0
Median:		424.1	424.1	0.0	0.0
Min:		155.0	155.0	-1.0	-0.3
Max:		707.4	707.6	4.6	0.9
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Middle River near Old River Salinity

May					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	350.7	350.7	0.0	0.0
1976	C	558.2	558.3	0.1	0.0
1977	C	639.7	639.8	0.1	0.0
1978	AN	211.7	211.7	0.0	0.0
1979	BN	341.7	341.7	0.0	0.0
1980	AN	310.1	310.1	0.0	0.0
1981	D	448.2	448.3	0.1	0.0
1982	W	185.1	185.1	0.0	0.0
1983	W	164.2	164.2	0.0	0.0
1984	W	428.6	428.6	0.0	0.0
1985	D	481.5	481.6	0.1	0.0
1986	W	289.5	289.5	0.0	0.0
1987	D	521.4	521.5	0.1	0.0
1988	C	543.2	543.5	0.4	0.1
1989	D	455.0	454.7	-0.2	0.0
1990	C	487.0	490.8	3.8	0.8
1991	C	466.1	466.4	0.3	0.1
Mean:		404.8	405.1	0.3	0.1
Median:		448.2	448.3	0.0	0.0
Min:		164.2	164.2	-0.2	0.0
Max:		639.7	639.8	3.8	0.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Middle River near Old River Salinity

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	373.0	373.0	0.0	0.0
1976	C	610.0	613.2	3.2	0.5
1977	C	632.0	636.1	4.1	0.6
1978	AN	232.5	232.5	0.0	0.0
1979	BN	591.0	591.1	0.0	0.0
1980	AN	342.9	342.9	0.0	0.0
1981	D	639.1	639.8	0.7	0.1
1982	W	270.2	270.2	0.0	0.0
1983	W	128.4	128.4	0.0	0.0
1984	W	611.0	611.0	0.0	0.0
1985	D	608.3	608.3	0.0	0.0
1986	W	342.6	342.6	0.0	0.0
1987	D	585.9	595.8	9.8	1.7
1988	C	590.6	592.5	1.9	0.3
1989	D	412.3	412.3	0.0	0.0
1990	C	582.0	592.9	10.9	1.9
1991	C	525.0	535.3	10.3	2.0
Mean:		475.1	477.5	2.4	0.4
Median:		582.0	591.1	0.0	0.0
Min:		128.4	128.4	0.0	0.0
Max:		639.1	639.8	10.9	2.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Middle River near Old River Salinity**

<b>July</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	584.6	590.4	5.8	1.0
1976	C	536.8	554.3	17.5	3.3
1977	C	571.8	585.7	13.9	2.4
1978	AN	613.0	613.0	0.0	0.0
1979	BN	490.3	492.1	1.8	0.4
1980	AN	449.5	449.5	0.0	0.0
1981	D	530.0	535.0	5.1	1.0
1982	W	515.5	515.5	0.0	0.0
1983	W	188.0	188.0	0.0	0.0
1984	W	453.2	455.1	2.0	0.4
1985	D	476.4	476.5	0.1	0.0
1986	W	537.3	536.4	-0.9	-0.2
1987	D	374.4	383.1	8.7	2.3
1988	C	606.6	611.2	4.6	0.8
1989	D	376.5	376.6	0.1	0.0
1990	C	555.0	571.5	16.5	3.0
1991	C	521.1	528.4	7.2	1.4
Mean:		492.9	497.8	4.8	0.9
Median:		521.1	528.4	2.0	0.4
Min:		188.0	188.0	-0.9	-0.2
Max:		613.0	613.0	17.5	3.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



### Middle River near Old River Salinity

August					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	360.7	368.1	7.4	2.1
1976	C	391.9	429.2	37.4	9.5
1977	C	399.1	405.3	6.2	1.6
1978	AN	345.4	347.5	2.0	0.6
1979	BN	337.2	340.0	2.8	0.8
1980	AN	349.6	350.3	0.8	0.2
1981	D	505.7	544.5	38.8	7.7
1982	W	339.5	340.8	1.2	0.4
1983	W	245.5	245.5	0.0	0.0
1984	W	340.3	344.0	3.7	1.1
1985	D	470.8	470.9	0.1	0.0
1986	W	369.2	350.1	-19.1	-5.2
1987	D	402.5	403.8	1.3	0.3
1988	C	488.4	489.6	1.3	0.3
1989	D	439.7	434.0	-5.7	-1.3
1990	C	490.9	497.0	6.1	1.2
1991	C	469.5	468.2	-1.3	-0.3
Mean:		396.8	401.7	4.9	1.1
Median:		391.9	403.8	1.3	0.4
Min:		245.5	245.5	-19.1	-5.2
Max:		505.7	544.5	38.8	9.5
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Middle River near Old River Salinity

#### September

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	461.5	464.2	2.7	0.6
1976	C	421.6	441.1	19.5	4.6
1977	C	415.5	422.3	6.8	1.6
1978	AN	392.7	391.4	-1.3	-0.3
1979	BN	389.6	390.2	0.6	0.2
1980	AN	704.2	704.2	0.0	0.0
1981	D	385.6	411.5	25.9	6.7
1982	W	605.7	605.6	0.0	0.0
1983	W	432.0	432.0	0.0	0.0
1984	W	439.3	440.2	0.9	0.2
1985	D	493.8	493.8	0.0	0.0
1986	W	383.3	381.0	-2.3	-0.6
1987	D	464.6	464.7	0.1	0.0
1988	C	458.6	459.7	1.1	0.2
1989	D	700.8	658.2	-42.6	-6.1
1990	C	444.0	441.9	-2.1	-0.5
1991	C	436.7	429.8	-6.9	-1.6
Mean:		472.3	472.5	0.1	0.3
Median:		439.3	441.1	0.0	0.0
Min:		383.3	381.0	-42.6	-6.1
Max:		704.2	704.2	25.9	6.7
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

Long-term and Water Year Type Average Salinity at the Old River at Tracy Road Bridge under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	EC (umhos/cm)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	616.6	590.0	543.5	549.2	461.4	493.1	442.5	424.5	440.0	512.3	522.3	606.4
NEPA Modified Flow Alternative	613.4	589.8	543.8	547.0	457.5	493.1	442.7	424.7	447.1	519.7	530.6	609.1
Difference	-3.2	-0.1	0.3	-2.1	-3.9	0.0	0.1	0.2	7.1	7.3	8.3	2.8
Percent Difference <sup>3</sup>	-0.5	0.0	0.0	-0.4	-0.8	0.0	0.0	0.0	1.6	1.4	1.6	0.5
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	368.3	447.0	386.3	392.4	234.9	255.9	268.8	300.5	323.9	427.7	419.4	540.5
NEPA Modified Flow Alternative	370.9	448.5	387.4	392.3	234.9	256.1	268.8	300.5	323.9	433.1	431.9	548.0
Difference	2.6	1.5	1.1	-0.1	0.0	0.1	0.0	0.0	0.0	5.4	12.4	7.4
Percent Difference	0.7	0.3	0.3	0.0	0.0	0.1	0.0	0.0	0.0	1.3	3.0	1.4
<b>Above Normal</b>												
NEPA No Action Alternative	715.6	642.5	569.4	489.8	217.4	276.5	265.2	277.2	296.2	499.4	467.9	526.9
NEPA Modified Flow Alternative	719.8	644.0	570.2	488.4	216.6	275.1	264.7	277.0	295.3	503.9	471.7	526.9
Difference	4.1	1.4	0.8	-1.4	-0.8	-1.4	-0.4	-0.3	-0.9	4.6	3.9	0.0
Percent Difference	0.6	0.2	0.1	-0.3	-0.4	-0.5	-0.2	-0.1	-0.3	0.9	0.8	0.0
<b>Below Normal</b>												
NEPA No Action Alternative	687.5	608.9	664.3	391.6	247.6	292.4	340.2	364.4	421.3	442.5	439.3	567.6
NEPA Modified Flow Alternative	685.1	608.0	663.9	386.7	245.4	292.1	340.1	363.6	421.0	451.8	439.7	568.4
Difference	-2.4	-0.9	-0.4	-4.9	-2.2	-0.3	-0.1	-0.8	-0.3	9.3	0.3	0.7
Percent Difference	-0.4	-0.1	-0.1	-1.2	-0.9	-0.1	0.0	-0.2	-0.1	2.1	0.1	0.1
<b>Dry</b>												
NEPA No Action Alternative	684.6	657.9	593.4	555.1	594.9	591.8	507.1	500.4	497.0	541.1	627.4	744.0
NEPA Modified Flow Alternative	670.8	652.5	592.4	553.1	592.6	592.7	507.1	500.4	506.1	544.8	636.8	740.1
Difference	-13.7	-5.4	-1.1	-2.1	-2.3	0.9	0.0	0.0	9.2	3.7	9.5	-3.8
Percent Difference	-2.0	-0.8	-0.2	-0.4	-0.4	0.2	0.0	0.0	1.8	0.7	1.5	-0.5
<b>Critical</b>												
NEPA No Action Alternative	756.6	653.7	626.3	756.4	721.5	778.2	656.1	558.7	571.7	593.1	579.5	601.6
NEPA Modified Flow Alternative	752.9	655.7	626.7	752.5	710.8	777.9	656.8	559.7	589.1	606.0	586.2	606.5
Difference	-3.7	2.0	0.4	-3.9	-10.7	-0.3	0.7	1.0	17.4	12.8	6.7	4.8
Percent Difference	-0.5	0.3	0.1	-0.5	-1.5	0.0	0.1	0.2	3.0	2.2	1.2	0.8

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

### Old River at Tracy Road Bridge Salinity

October					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	140.4	140.4	0.0	0.0
1976	C	564.5	563.2	-1.3	-0.2
1977	C	921.6	931.4	9.9	1.1
1978	AN	726.4	737.3	10.8	1.5
1979	BN	687.5	685.1	-2.4	-0.3
1980	AN	704.9	702.2	-2.6	-0.4
1981	D	630.5	575.6	-54.9	-8.7
1982	W	566.3	579.3	13.0	2.3
1983	W	218.9	219.0	0.0	0.0
1984	W	218.2	218.2	0.0	0.0
1985	D	720.5	719.2	-1.3	-0.2
1986	W	697.5	697.5	0.0	0.0
1987	D	675.9	675.0	-0.8	-0.1
1988	C	783.2	786.6	3.4	0.4
1989	D	711.4	713.5	2.2	0.3
1990	C	800.5	775.1	-25.4	-3.2
1991	C	713.3	708.2	-5.1	-0.7
Mean:		616.6	613.3	-3.2	-0.5
Median:		697.5	697.5	0.0	0.0
Min:		140.4	140.4	-54.9	-8.7
Max:		921.6	931.4	13.0	2.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Old River at Tracy Road Bridge Salinity

November					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	380.1	380.2	0.0	0.0
1976	C	439.4	438.0	-1.4	-0.3
1977	C	797.5	813.9	16.4	2.1
1978	AN	657.2	661.4	4.1	0.6
1979	BN	608.9	608.0	-0.9	-0.1
1980	AN	627.8	626.6	-1.3	-0.2
1981	D	550.8	519.9	-30.9	-5.6
1982	W	679.0	686.3	7.3	1.1
1983	W	387.3	387.6	0.3	0.1
1984	W	175.4	175.4	0.0	0.0
1985	D	716.1	722.2	6.1	0.9
1986	W	613.2	613.2	0.0	0.0
1987	D	604.0	605.9	1.9	0.3
1988	C	677.4	679.3	1.9	0.3
1989	D	760.8	762.0	1.2	0.2
1990	C	624.3	619.7	-4.7	-0.8
1991	C	729.9	727.6	-2.3	-0.3
Mean:		590.0	589.8	-0.1	-0.1
Median:		624.3	619.7	0.0	0.0
Min:		175.4	175.4	-30.9	-5.6
Max:		797.5	813.9	16.4	2.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Old River at Tracy Road Bridge Salinity

December					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	574.9	574.9	0.0	0.0
1976	C	582.6	579.2	-3.4	-0.6
1977	C	640.3	646.3	6.0	0.9
1978	AN	620.9	621.5	0.6	0.1
1979	BN	664.3	663.9	-0.4	-0.1
1980	AN	517.9	518.9	1.1	0.2
1981	D	631.9	620.3	-11.6	-1.8
1982	W	487.6	493.0	5.4	1.1
1983	W	133.9	133.9	0.0	0.0
1984	W	130.7	130.7	0.0	0.0
1985	D	482.7	491.8	9.1	1.9
1986	W	604.3	604.3	0.0	0.0
1987	D	616.5	614.2	-2.3	-0.4
1988	C	653.7	654.0	0.3	0.0
1989	D	642.5	643.0	0.5	0.1
1990	C	595.9	595.8	-0.1	0.0
1991	C	659.0	658.4	-0.7	-0.1
Mean:		543.5	543.8	0.3	0.1
Median:		604.3	604.3	0.0	0.0
Min:		130.7	130.7	-11.6	-1.8
Max:		664.3	663.9	9.1	1.9
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Tracy Road Bridge Salinity**

<b>January</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	654.3	655.0	0.8	0.1
1976	C	779.3	770.0	-9.2	-1.2
1977	C	843.3	846.1	2.7	0.3
1978	AN	789.1	788.9	-0.2	0.0
1979	BN	391.6	386.7	-4.9	-1.3
1980	AN	190.6	187.9	-2.7	-1.4
1981	D	562.3	566.9	4.6	0.8
1982	W	319.1	318.8	-0.2	-0.1
1983	W	182.1	182.0	0.0	0.0
1984	W	152.7	152.7	0.0	0.0
1985	D	369.6	373.3	3.7	1.0
1986	W	653.9	653.1	-0.8	-0.1
1987	D	643.6	626.1	-17.5	-2.7
1988	C	843.2	840.9	-2.3	-0.3
1989	D	644.9	645.9	1.0	0.2
1990	C	618.1	607.4	-10.7	-1.7
1991	C	698.1	698.0	-0.1	0.0
Mean:		549.2	547.0	-2.1	-0.4
Median:		643.6	626.1	-0.2	0.0
Min:		152.7	152.7	-17.5	-2.7
Max:		843.3	846.1	4.6	1.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Old River at Tracy Road Bridge Salinity

February					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	362.5	362.6	0.1	0.0
1976	C	763.4	751.1	-12.3	-1.6
1977	C	855.8	856.9	1.2	0.1
1978	AN	288.5	286.2	-2.3	-0.8
1979	BN	247.6	245.4	-2.2	-0.9
1980	AN	146.2	146.9	0.6	0.4
1981	D	473.6	473.9	0.3	0.1
1982	W	190.7	190.7	0.0	0.0
1983	W	126.5	126.5	0.0	0.0
1984	W	242.0	242.0	0.0	0.0
1985	D	471.0	481.6	10.6	2.3
1986	W	252.8	252.7	-0.1	0.0
1987	D	663.8	643.3	-20.5	-3.1
1988	C	461.7	461.2	-0.5	-0.1
1989	D	771.2	771.5	0.3	0.0
1990	C	726.7	684.9	-41.8	-5.8
1991	C	799.8	799.8	0.0	0.0
Mean:		461.4	457.5	-3.9	-0.6
Median:		461.7	461.2	0.0	0.0
Min:		126.5	126.5	-41.8	-5.8
Max:		855.8	856.9	10.6	2.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



### Old River at Tracy Road Bridge Salinity

March					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	298.0	298.0	0.0	0.0
1976	C	721.8	718.3	-3.5	-0.5
1977	C	957.6	957.8	0.2	0.0
1978	AN	327.5	323.9	-3.6	-1.1
1979	BN	292.4	292.1	-0.3	-0.1
1980	AN	225.5	226.3	0.9	0.4
1981	D	460.7	462.0	1.3	0.3
1982	W	246.4	247.1	0.7	0.3
1983	W	175.2	175.3	0.0	0.0
1984	W	382.2	382.2	0.0	0.0
1985	D	575.6	583.1	7.5	1.3
1986	W	177.7	177.7	0.0	0.0
1987	D	703.4	700.4	-3.0	-0.4
1988	C	803.3	803.3	0.0	0.0
1989	D	627.3	625.3	-2.0	-0.3
1990	C	653.7	655.6	1.8	0.3
1991	C	754.7	754.7	0.0	0.0
Mean:		493.1	493.1	0.0	0.0
Median:		460.7	462.0	0.0	0.0
Min:		175.2	175.3	-3.6	-1.1
Max:		957.6	957.8	7.5	1.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Tracy Road Bridge Salinity**

<b>April</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	334.0	334.1	0.1	0.0
1976	C	609.8	609.3	-0.5	-0.1
1977	C	810.2	810.3	0.1	0.0
1978	AN	223.1	222.1	-0.9	-0.4
1979	BN	340.2	340.1	-0.1	0.0
1980	AN	307.2	307.3	0.1	0.0
1981	D	468.5	468.5	0.0	0.0
1982	W	158.4	158.4	0.0	0.0
1983	W	180.5	180.5	0.0	0.0
1984	W	439.4	439.4	0.0	0.0
1985	D	592.4	593.4	1.0	0.2
1986	W	231.5	231.4	0.0	0.0
1987	D	540.9	541.0	0.1	0.0
1988	C	644.0	644.1	0.1	0.0
1989	D	426.7	425.5	-1.2	-0.3
1990	C	649.7	653.6	3.9	0.6
1991	C	566.4	566.5	0.0	0.0
Mean:		442.5	442.7	0.2	0.0
Median:		439.4	439.4	0.0	0.0
Min:		158.4	158.4	-1.2	-0.4
Max:		810.2	810.3	3.9	0.6
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Old River at Tracy Road Bridge Salinity

May					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	372.0	372.0	0.0	0.0
1976	C	544.0	544.6	0.6	0.1
1977	C	669.4	669.4	0.1	0.0
1978	AN	217.7	217.1	-0.6	-0.3
1979	BN	364.4	363.6	-0.8	-0.2
1980	AN	336.8	336.8	0.0	0.0
1981	D	466.9	466.9	0.0	0.0
1982	W	189.9	189.9	0.0	0.0
1983	W	167.2	167.2	0.0	0.0
1984	W	457.6	457.6	0.0	0.0
1985	D	513.3	513.6	0.2	0.0
1986	W	315.7	315.6	0.0	0.0
1987	D	533.2	533.1	-0.1	0.0
1988	C	548.3	548.9	0.6	0.1
1989	D	488.3	488.0	-0.3	-0.1
1990	C	522.1	525.6	3.5	0.7
1991	C	509.7	510.0	0.2	0.0
Mean:		424.5	424.7	0.2	0.0
Median:		466.9	466.9	0.0	0.0
Min:		167.2	167.2	-0.8	-0.3
Max:		669.4	669.4	3.5	0.7
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Old River at Tracy Road Bridge Salinity

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	381.3	381.3	0.0	0.0
1976	C	618.6	628.9	10.3	1.7
1977	C	660.5	667.8	7.3	1.1
1978	AN	242.4	240.7	-1.7	-0.7
1979	BN	421.3	421.0	-0.3	-0.1
1980	AN	350.0	350.0	0.0	0.0
1981	D	462.9	468.3	5.4	1.2
1982	W	276.4	276.5	0.0	0.0
1983	W	130.9	130.9	0.0	0.0
1984	W	480.1	480.1	0.0	0.0
1985	D	492.2	492.2	0.0	0.0
1986	W	350.9	350.9	0.0	0.0
1987	D	550.1	581.4	31.3	5.7
1988	C	550.6	564.0	13.4	2.4
1989	D	482.5	482.5	0.0	0.0
1990	C	533.8	567.9	34.0	6.4
1991	C	495.0	516.7	21.7	4.4
Mean:		440.0	447.1	7.1	1.3
Median:		480.1	480.1	0.0	0.0
Min:		130.9	130.9	-1.7	-0.7
Max:		660.5	667.8	34.0	6.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Old River at Tracy Road Bridge Salinity

July					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	608.1	614.7	6.6	1.1
1976	C	678.0	698.2	20.2	3.0
1977	C	549.6	563.2	13.7	2.5
1978	AN	525.1	534.5	9.4	1.8
1979	BN	442.5	451.8	9.3	2.1
1980	AN	473.6	473.4	-0.2	0.0
1981	D	634.3	635.0	0.7	0.1
1982	W	493.7	495.2	1.5	0.3
1983	W	192.9	192.9	0.0	0.0
1984	W	433.8	451.6	17.8	4.1
1985	D	550.2	550.2	0.0	0.0
1986	W	410.0	411.3	1.3	0.3
1987	D	509.4	523.4	14.1	2.8
1988	C	558.2	564.3	6.1	1.1
1989	D	470.4	470.5	0.1	0.0
1990	C	607.9	624.5	16.7	2.7
1991	C	572.1	579.7	7.6	1.3
Mean:		512.3	519.7	7.3	1.4
Median:		525.1	534.5	6.6	1.1
Min:		192.9	192.9	-0.2	0.0
Max:		678.0	698.2	20.2	4.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Old River at Tracy Road Bridge Salinity

August					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	482.1	525.8	43.7	9.1
1976	C	606.0	629.1	23.1	3.8
1977	C	491.1	499.7	8.6	1.8
1978	AN	429.2	435.8	6.6	1.5
1979	BN	439.3	439.7	0.4	0.1
1980	AN	506.5	507.7	1.2	0.2
1981	D	678.5	724.2	45.7	6.7
1982	W	419.3	426.4	7.1	1.7
1983	W	339.2	339.2	0.0	0.0
1984	W	446.8	455.6	8.8	2.0
1985	D	613.2	613.4	0.2	0.0
1986	W	409.8	412.4	2.6	0.6
1987	D	602.1	603.7	1.6	0.3
1988	C	596.5	597.3	0.8	0.1
1989	D	615.7	606.1	-9.6	-1.6
1990	C	624.6	627.2	2.5	0.4
1991	C	579.4	577.7	-1.7	-0.3
Mean:		522.3	530.6	8.3	1.6
Median:		506.5	525.8	2.5	0.4
Min:		339.2	339.2	-9.6	-1.6
Max:		678.5	724.2	45.7	9.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Tracy Road Bridge Salinity**

**September**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	649.4	684.5	35.2	5.4
1976	C	649.2	671.2	22.1	3.4
1977	C	585.7	598.1	12.4	2.1
1978	AN	516.6	518.6	2.0	0.4
1979	BN	567.6	568.4	0.7	0.1
1980	AN	537.2	535.2	-2.0	-0.4
1981	D	571.0	607.7	36.7	6.4
1982	W	468.8	471.6	2.8	0.6
1983	W	441.0	441.0	0.0	0.0
1984	W	624.6	624.9	0.3	0.0
1985	D	712.5	712.6	0.1	0.0
1986	W	518.9	517.9	-1.1	-0.2
1987	D	686.5	689.0	2.5	0.4
1988	C	584.0	585.2	1.1	0.2
1989	D	1005.9	951.2	-54.6	-5.4
1990	C	633.2	628.0	-5.2	-0.8
1991	C	556.1	549.8	-6.3	-1.1
Mean:		606.4	609.1	2.7	0.7
Median:		584.0	598.1	0.7	0.1
Min:		441.0	441.0	-54.6	-5.4
Max:		1005.9	951.2	36.7	6.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

Long-term and Water Year Type Average Salinity at the Old River at Hwy 4 (CCWD Los Vaqueros) under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	EC (umhos/cm)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	679.0	616.8	578.4	567.0	490.0	374.1	329.3	345.1	330.7	379.7	466.0	617.5
NEPA Modified Flow Alternative	674.7	617.2	577.1	563.0	486.4	373.3	329.6	345.8	338.5	390.3	476.2	615.8
Difference	-4.3	0.4	-1.3	-3.9	-3.6	-0.9	0.2	0.8	7.8	10.6	10.2	-1.8
Percent Difference <sup>3</sup>	-0.6	0.1	-0.2	-0.7	-0.7	-0.2	0.1	0.2	2.4	2.8	2.2	-0.3
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	407.3	430.4	382.5	392.6	318.6	263.9	243.8	258.4	236.9	236.9	317.3	506.6
NEPA Modified Flow Alternative	409.6	432.8	383.1	394.3	321.4	264.0	243.7	258.4	236.9	237.7	320.2	507.1
Difference	2.3	2.4	0.7	1.6	2.8	0.1	0.0	0.0	0.0	0.8	2.9	0.5
Percent Difference	0.6	0.6	0.2	0.4	0.9	0.0	0.0	0.0	0.0	0.4	0.9	0.1
<b>Above Normal</b>												
NEPA No Action Alternative	775.9	634.1	582.8	470.8	356.0	296.6	302.6	290.4	262.2	250.8	340.9	562.4
NEPA Modified Flow Alternative	783.7	635.4	586.8	474.0	356.1	296.6	302.6	290.4	262.3	251.3	341.9	542.3
Difference	7.8	1.3	4.0	3.2	0.1	0.0	0.0	0.0	0.1	0.5	1.0	-20.1
Percent Difference	1.0	0.2	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.2	0.3	-3.6
<b>Below Normal</b>												
NEPA No Action Alternative	784.6	697.9	747.6	538.8	327.3	278.7	282.4	285.1	250.1	259.7	372.4	586.1
NEPA Modified Flow Alternative	781.1	697.0	747.1	540.5	327.7	278.8	282.7	285.2	250.1	260.5	376.4	587.6
Difference	-3.5	-1.0	-0.6	1.7	0.3	0.1	0.3	0.0	0.0	0.7	4.0	1.4
Percent Difference	-0.4	-0.1	-0.1	0.3	0.1	0.0	0.1	0.0	0.0	0.3	1.1	0.2
<b>Dry</b>												
NEPA No Action Alternative	760.5	701.2	586.5	513.9	567.0	397.8	316.6	368.9	310.0	466.7	686.8	806.8
NEPA Modified Flow Alternative	738.9	695.6	581.7	504.7	565.6	397.6	316.5	369.1	317.9	477.7	701.8	798.4
Difference	-21.6	-5.5	-4.8	-9.2	-1.4	-0.1	-0.1	0.2	7.9	11.0	15.0	-8.4
Percent Difference	-2.8	-0.8	-0.8	-1.8	-0.2	0.0	0.0	0.0	2.5	2.3	2.2	-1.0
<b>Critical</b>												
NEPA No Action Alternative	825.7	712.5	732.3	827.9	685.9	515.6	445.2	446.5	484.6	528.5	506.8	605.4
NEPA Modified Flow Alternative	823.7	715.6	729.6	818.7	672.1	512.7	446.0	448.9	504.9	554.5	525.3	613.4
Difference	-2.0	3.0	-2.8	-9.2	-13.9	-2.9	0.8	2.4	20.2	26.0	18.6	8.0
Percent Difference	-0.2	0.4	-0.4	-1.1	-2.0	-0.6	0.2	0.5	4.2	4.9	3.7	1.3

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average



### Old River at Hwy 4 (CCWD Los Vaqueros) Salinity

October					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	122.2	122.2	0.0	0.0
1976	C	457.3	455.3	-1.9	-0.4
1977	C	1140.6	1158.4	17.8	1.6
1978	AN	743.7	762.6	19.0	2.6
1979	BN	784.6	781.1	-3.5	-0.4
1980	AN	808.2	804.8	-3.5	-0.4
1981	D	692.5	605.9	-86.5	-12.5
1982	W	615.6	627.8	12.2	2.0
1983	W	300.9	300.3	-0.6	-0.2
1984	W	267.9	267.9	0.0	0.0
1985	D	806.0	803.7	-2.3	-0.3
1986	W	730.1	730.1	0.0	0.0
1987	D	735.2	734.6	-0.6	-0.1
1988	C	874.5	879.2	4.6	0.5
1989	D	808.2	811.3	3.0	0.4
1990	C	845.1	820.5	-24.6	-2.9
1991	C	811.1	805.1	-6.0	-0.7
Mean:		679.0	674.7	-4.3	-0.6
Median:		743.7	762.6	-0.6	-0.1
Min:		122.2	122.2	-86.5	-12.5
Max:		1140.6	1158.4	19.0	2.6
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

### Old River at Hwy 4 (CCWD Los Vaqueros) Salinity

November					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	420.3	420.4	0.0	0.0
1976	C	468.4	464.0	-4.4	-0.9
1977	C	914.0	939.3	25.3	2.8
1978	AN	636.4	640.6	4.1	0.6
1979	BN	697.9	696.9	-1.0	-0.1
1980	AN	631.7	630.2	-1.5	-0.2
1981	D	626.3	585.7	-40.6	-6.5
1982	W	661.3	673.3	12.0	1.8
1983	W	235.5	235.5	0.0	0.0
1984	W	240.0	240.0	0.0	0.0
1985	D	705.4	719.5	14.1	2.0
1986	W	595.2	595.2	0.0	0.0
1987	D	648.0	651.1	3.1	0.5
1988	C	712.6	714.7	2.0	0.3
1989	D	825.0	826.3	1.3	0.2
1990	C	655.8	650.8	-4.9	-0.7
1991	C	811.7	809.0	-2.7	-0.3
Mean:		616.8	617.2	0.4	0.0
Median:		648.0	650.8	0.0	0.0
Min:		235.5	235.5	-40.6	-6.5
Max:		914.0	939.3	25.3	2.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Hwy 4 (CCWD Los Vaqueros) Salinity**

<b>December</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	652.7	652.5	-0.2	0.0
1976	C	787.4	768.9	-18.5	-2.3
1977	C	803.3	813.2	9.8	1.2
1978	AN	646.4	646.9	0.5	0.1
1979	BN	747.6	747.1	-0.6	-0.1
1980	AN	519.3	526.8	7.5	1.4
1981	D	661.2	650.0	-11.1	-1.7
1982	W	274.3	277.4	3.1	1.1
1983	W	258.2	258.3	0.1	0.0
1984	W	137.0	137.0	0.0	0.0
1985	D	305.8	312.9	7.1	2.3
1986	W	590.1	590.4	0.3	0.1
1987	D	694.5	678.6	-15.9	-2.3
1988	C	753.0	751.9	-1.0	-0.1
1989	D	684.4	685.3	0.8	0.1
1990	C	619.7	616.5	-3.2	-0.5
1991	C	698.3	697.4	-0.9	-0.1
Mean:		578.4	577.1	-1.3	0.0
Median:		652.7	650.0	0.0	0.0
Min:		137.0	137.0	-18.5	-2.3
Max:		803.3	813.2	9.8	2.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Hwy 4 (CCWD Los Vaqueros) Salinity**

January					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	722.1	733.8	11.7	1.6
1976	C	856.5	838.9	-17.6	-2.1
1977	C	1051.8	1056.2	4.4	0.4
1978	AN	544.3	543.9	-0.3	-0.1
1979	BN	538.8	540.5	1.7	0.3
1980	AN	397.2	404.0	6.8	1.7
1981	D	432.9	445.7	12.8	3.0
1982	W	348.7	348.8	0.1	0.0
1983	W	166.6	166.7	0.1	0.1
1984	W	192.2	192.2	0.0	0.0
1985	D	311.6	320.0	8.4	2.7
1986	W	533.6	529.7	-3.9	-0.7
1987	D	594.3	535.2	-59.1	-9.9
1988	C	787.4	784.7	-2.8	-0.4
1989	D	716.6	717.8	1.1	0.2
1990	C	701.1	671.4	-29.7	-4.2
1991	C	742.6	742.2	-0.3	0.0
Mean:		567.0	563.0	-3.9	-0.4
Median:		544.3	540.5	0.1	0.0
Min:		166.6	166.7	-59.1	-9.9
Max:		1051.8	1056.2	12.8	3.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Hwy 4 (CCWD Los Vaqueros) Salinity**

February					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	508.7	525.7	17.0	3.3
1976	C	737.3	717.7	-19.6	-2.7
1977	C	865.9	867.4	1.5	0.2
1978	AN	351.3	351.1	-0.2	-0.1
1979	BN	327.3	327.7	0.3	0.1
1980	AN	360.7	361.1	0.4	0.1
1981	D	336.1	342.2	6.1	1.8
1982	W	278.0	278.0	0.0	0.0
1983	W	125.6	125.6	0.0	0.0
1984	W	244.4	244.4	0.0	0.0
1985	D	510.3	529.7	19.4	3.8
1986	W	436.0	433.0	-3.0	-0.7
1987	D	605.2	573.6	-31.6	-5.2
1988	C	376.3	375.9	-0.4	-0.1
1989	D	816.3	816.7	0.5	0.1
1990	C	689.0	638.3	-50.7	-7.4
1991	C	761.2	761.1	-0.1	0.0
Mean:		490.0	486.4	-3.6	-0.4
Median:		436.0	433.0	0.0	0.0
Min:		125.6	125.6	-50.7	-7.4
Max:		865.9	867.4	19.4	3.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Hwy 4 (CCWD Los Vaqueros) Salinity**

<b>March</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	275.9	276.5	0.6	0.2
1976	C	452.6	448.6	-4.1	-0.9
1977	C	738.1	738.7	0.7	0.1
1978	AN	328.3	328.2	-0.1	0.0
1979	BN	278.7	278.8	0.0	0.0
1980	AN	265.0	265.0	0.0	0.0
1981	D	298.6	298.7	0.1	0.0
1982	W	291.8	291.8	0.0	0.0
1983	W	163.2	163.1	0.0	0.0
1984	W	242.3	242.3	0.0	0.0
1985	D	485.5	492.7	7.3	1.5
1986	W	346.4	346.1	-0.2	-0.1
1987	D	401.6	395.9	-5.7	-1.4
1988	C	381.9	381.9	0.0	0.0
1989	D	405.3	403.0	-2.3	-0.6
1990	C	460.3	449.3	-11.0	-2.4
1991	C	544.9	544.9	0.0	0.0
Mean:		374.1	373.3	-0.9	-0.2
Median:		346.4	346.1	0.0	0.0
Min:		163.2	163.1	-11.0	-2.4
Max:		738.1	738.7	7.3	1.5
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Old River at Hwy 4 (CCWD Los Vaqueros) Salinity

April					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	270.3	270.4	0.0	0.0
1976	C	376.5	375.9	-0.6	-0.2
1977	C	651.0	651.2	0.2	0.0
1978	AN	341.4	341.4	0.0	0.0
1979	BN	282.4	282.7	0.3	0.1
1980	AN	263.8	263.9	0.1	0.0
1981	D	300.8	300.7	-0.1	0.0
1982	W	174.0	174.0	0.0	0.0
1983	W	181.2	181.2	0.0	0.0
1984	W	272.1	272.1	0.0	0.0
1985	D	387.2	388.6	1.4	0.4
1986	W	321.1	321.0	-0.1	0.0
1987	D	318.1	317.6	-0.5	-0.2
1988	C	399.2	399.6	0.4	0.1
1989	D	260.1	258.9	-1.1	-0.4
1990	C	420.8	424.6	3.8	0.9
1991	C	378.4	378.5	0.1	0.0
Mean:		329.3	329.5	0.2	0.0
Median:		318.1	317.6	0.0	0.0
Min:		174.0	174.0	-1.1	-0.4
Max:		651.0	651.2	3.8	0.9
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Old River at Hwy 4 (CCWD Los Vaqueros) Salinity

May					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	280.1	280.1	0.0	0.0
1976	C	429.7	432.7	3.0	0.7
1977	C	593.6	594.2	0.6	0.1
1978	AN	286.3	286.3	0.0	0.0
1979	BN	285.1	285.1	0.0	0.0
1980	AN	294.5	294.5	0.0	0.0
1981	D	341.5	342.0	0.4	0.1
1982	W	215.1	215.1	0.0	0.0
1983	W	171.3	171.3	0.0	0.0
1984	W	339.3	339.3	0.0	0.0
1985	D	412.5	412.8	0.3	0.1
1986	W	286.3	286.3	0.0	0.0
1987	D	397.6	397.8	0.2	0.1
1988	C	440.2	441.4	1.2	0.3
1989	D	324.0	323.8	-0.2	-0.1
1990	C	408.9	414.8	5.9	1.4
1991	C	360.1	361.5	1.4	0.4
Mean:		345.1	345.8	0.8	0.2
Median:		339.3	339.3	0.0	0.0
Min:		171.3	171.3	-0.2	-0.1
Max:		593.6	594.2	5.9	1.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



### Old River at Hwy 4 (CCWD Los Vaqueros) Salinity

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	243.8	243.8	0.0	0.0
1976	C	620.2	642.3	22.1	3.6
1977	C	588.8	604.1	15.3	2.6
1978	AN	247.7	247.7	0.0	0.0
1979	BN	250.1	250.1	0.0	0.0
1980	AN	276.6	276.9	0.3	0.1
1981	D	301.5	312.9	11.4	3.8
1982	W	232.6	232.6	0.0	0.0
1983	W	135.9	135.9	0.0	0.0
1984	W	294.0	294.0	0.0	0.0
1985	D	322.4	322.4	0.0	0.0
1986	W	278.4	278.4	0.0	0.0
1987	D	342.6	362.7	20.1	5.9
1988	C	438.9	445.7	6.7	1.5
1989	D	273.5	273.4	0.0	0.0
1990	C	415.7	452.2	36.5	8.8
1991	C	359.5	380.1	20.6	5.7
Mean:		330.7	338.5	7.8	1.9
Median:		294.0	294.0	0.0	0.0
Min:		135.9	135.9	0.0	0.0
Max:		620.2	642.3	36.5	8.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Hwy 4 (CCWD Los Vaqueros) Salinity**

July					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	230.6	230.8	0.2	0.1
1976	C	713.8	771.5	57.7	8.1
1977	C	457.1	473.0	15.9	3.5
1978	AN	240.3	240.6	0.3	0.1
1979	BN	259.7	260.4	0.7	0.3
1980	AN	261.3	262.0	0.7	0.3
1981	D	601.6	637.5	35.8	6.0
1982	W	231.4	231.3	-0.2	-0.1
1983	W	194.5	194.5	0.0	0.0
1984	W	270.6	274.5	3.9	1.4
1985	D	480.1	480.3	0.2	0.0
1986	W	257.3	257.6	0.3	0.1
1987	D	395.5	403.0	7.5	1.9
1988	C	428.9	434.7	5.8	1.4
1989	D	389.5	389.8	0.3	0.1
1990	C	557.5	589.0	31.4	5.6
1991	C	485.4	504.6	19.2	4.0
Mean:		379.7	390.3	10.6	1.9
Median:		389.5	389.8	0.7	0.3
Min:		194.5	194.5	-0.2	-0.1
Max:		713.8	771.5	57.7	8.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Hwy 4 (CCWD Los Vaqueros) Salinity**

<b>August</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	370.4	375.8	5.4	1.5
1976	C	489.4	566.5	77.1	15.8
1977	C	451.3	460.0	8.7	1.9
1978	AN	324.4	326.6	2.3	0.7
1979	BN	372.4	376.4	4.0	1.1
1980	AN	357.5	357.2	-0.3	-0.1
1981	D	692.8	776.4	83.7	12.1
1982	W	297.9	300.8	2.9	1.0
1983	W	207.9	207.9	0.0	0.0
1984	W	385.9	390.9	4.9	1.3
1985	D	691.1	691.3	0.2	0.0
1986	W	324.3	325.7	1.4	0.4
1987	D	588.8	590.4	1.6	0.3
1988	C	486.6	486.8	0.2	0.0
1989	D	774.5	748.8	-25.7	-3.3
1990	C	542.2	549.2	6.9	1.3
1991	C	564.2	564.0	-0.2	0.0
Mean:		466.0	476.2	10.2	2.0
Median:		451.3	460.0	2.3	0.7
Min:		207.9	207.9	-25.7	-3.3
Max:		774.5	776.4	83.7	15.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					2

**Old River at Hwy 4 (CCWD Los Vaqueros) Salinity**

<b>September</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	572.9	575.6	2.7	0.5
1976	C	745.3	776.0	30.7	4.1
1977	C	577.1	598.7	21.6	3.7
1978	AN	576.2	574.8	-1.4	-0.2
1979	BN	586.1	587.6	1.4	0.2
1980	AN	548.6	509.8	-38.7	-7.1
1981	D	507.1	554.5	47.5	9.4
1982	W	434.0	436.9	3.0	0.7
1983	W	245.1	245.1	0.0	0.0
1984	W	711.4	711.0	-0.4	-0.1
1985	D	788.6	788.7	0.1	0.0
1986	W	569.6	566.8	-2.9	-0.5
1987	D	754.9	754.5	-0.4	-0.1
1988	C	569.7	569.3	-0.5	-0.1
1989	D	1176.5	1095.9	-80.6	-6.9
1990	C	581.1	577.3	-3.9	-0.7
1991	C	553.6	545.6	-8.0	-1.4
Mean:		617.5	615.8	-1.8	0.1
Median:		576.2	575.6	-0.4	-0.1
Min:		245.1	245.1	-80.6	-7.1
Max:		1176.5	1095.9	47.5	9.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

Long-term and Water Year Type Average Salinity at CCWD Pumping Plant #1 (Rock Slough) under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	EC (umhos/cm)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	782.2	702.5	660.3	711.2	592.0	439.6	395.7	331.8	334.4	417.2	532.4	693.9
NEPA Modified Flow Alternative	776.8	702.6	659.4	706.6	587.9	438.4	395.9	333.0	343.8	428.5	544.8	693.2
Difference	-5.5	0.1	-0.9	-4.6	-4.1	-1.1	0.2	1.2	9.4	11.2	12.4	-0.6
Percent Difference <sup>3</sup>	-0.7	0.0	-0.1	-0.6	-0.7	-0.3	0.1	0.4	2.8	2.7	2.3	-0.1
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	441.5	496.9	483.0	591.0	481.0	441.6	440.7	283.8	239.7	243.9	346.3	566.8
NEPA Modified Flow Alternative	445.0	499.5	483.8	592.5	485.2	441.6	440.7	283.8	239.7	245.7	350.4	567.6
Difference	3.6	2.5	0.7	1.5	4.2	0.0	0.0	0.0	0.0	1.7	4.2	0.7
Percent Difference	0.8	0.5	0.2	0.2	0.9	0.0	0.0	0.0	0.0	0.7	1.2	0.1
<b>Above Normal</b>												
NEPA No Action Alternative	911.1	685.8	637.9	706.1	511.3	339.1	319.5	291.9	252.8	257.3	377.6	619.8
NEPA Modified Flow Alternative	920.7	687.2	642.8	710.3	511.5	339.1	319.5	291.9	252.9	257.9	379.3	600.6
Difference	9.6	1.5	4.9	4.2	0.1	0.0	0.0	0.0	0.1	0.7	1.8	-19.2
Percent Difference	1.1	0.2	0.8	0.6	0.0	0.0	0.0	0.0	0.0	0.3	0.5	-3.1
<b>Below Normal</b>												
NEPA No Action Alternative	933.5	797.8	848.9	680.9	352.3	284.3	331.4	293.8	241.1	268.8	415.8	651.5
NEPA Modified Flow Alternative	928.6	796.5	848.3	682.8	352.7	284.3	332.1	293.9	241.1	270.4	421.1	653.6
Difference	-4.8	-1.3	-0.7	1.8	0.4	0.0	0.7	0.0	0.0	1.7	5.3	2.1
Percent Difference	-0.5	-0.2	-0.1	0.3	0.1	0.0	0.2	0.0	0.0	0.6	1.3	0.3
<b>Dry</b>												
NEPA No Action Alternative	885.6	809.7	650.9	560.7	630.2	418.9	341.7	330.6	297.0	525.3	794.8	929.5
NEPA Modified Flow Alternative	856.7	800.4	647.5	549.7	628.1	418.5	341.6	331.1	305.1	537.4	812.4	920.6
Difference	-28.9	-9.3	-3.3	-11.0	-2.1	-0.4	-0.2	0.5	8.2	12.1	17.5	-8.9
Percent Difference	-3.3	-1.1	-0.5	-2.0	-0.3	-0.1	-0.1	0.1	2.8	2.3	2.2	-1.0
<b>Critical</b>												
NEPA No Action Alternative	958.6	810.1	816.3	959.7	752.8	525.3	437.0	404.2	510.3	597.8	593.9	670.5
NEPA Modified Flow Alternative	956.6	815.0	813.3	949.5	736.1	521.8	437.8	408.0	535.7	624.0	615.9	682.0
Difference	-1.9	4.9	-3.0	-10.3	-16.7	-3.6	0.8	3.7	25.3	26.2	22.0	11.5
Percent Difference	-0.2	0.6	-0.4	-1.1	-2.2	-0.7	0.2	0.9	5.0	4.4	3.7	1.7

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

**CCWD Pumping Plant #1 (Rock Slough) Salinity**

<b>October</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	107.7	107.7	0.0	0.0
1976	C	498.4	495.8	-2.5	-0.5
1977	C	1350.6	1374.8	24.2	1.8
1978	AN	901.5	925.2	23.7	2.6
1979	BN	933.5	928.6	-4.8	-0.5
1980	AN	920.7	916.1	-4.5	-0.5
1981	D	827.1	711.8	-115.3	-13.9
1982	W	660.2	678.8	18.6	2.8
1983	W	330.4	329.5	-0.9	-0.3
1984	W	253.6	253.6	0.0	0.0
1985	D	927.6	924.9	-2.7	-0.3
1986	W	855.6	855.6	0.0	0.0
1987	D	855.3	854.0	-1.3	-0.2
1988	C	1020.5	1026.0	5.5	0.5
1989	D	932.2	936.1	3.9	0.4
1990	C	963.7	934.5	-29.2	-3.0
1991	C	959.6	952.1	-7.5	-0.8
Mean:		782.2	776.8	-5.5	-0.7
Median:		901.5	916.1	-0.9	-0.2
Min:		107.7	107.7	-115.3	-13.9
Max:		1350.6	1374.8	24.2	2.8
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

**CCWD Pumping Plant #1 (Rock Slough) Salinity**

<b>November</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	430.9	431.0	0.0	0.0
1976	C	494.6	489.6	-5.0	-1.0
1977	C	1098.3	1134.4	36.2	3.3
1978	AN	657.1	661.9	4.8	0.7
1979	BN	797.8	796.4	-1.3	-0.2
1980	AN	714.4	712.6	-1.9	-0.3
1981	D	710.3	654.4	-55.9	-7.9
1982	W	781.8	794.4	12.6	1.6
1983	W	309.7	309.8	0.0	0.0
1984	W	270.0	270.0	0.0	0.0
1985	D	854.4	867.5	13.1	1.5
1986	W	692.1	692.1	0.0	0.0
1987	D	726.9	730.9	4.0	0.6
1988	C	786.4	789.0	2.5	0.3
1989	D	947.2	948.8	1.7	0.2
1990	C	722.8	716.6	-6.2	-0.9
1991	C	948.4	945.5	-3.0	-0.3
Mean:		702.5	702.6	0.1	-0.1
Median:		722.8	716.6	0.0	0.0
Min:		270.0	270.0	-55.9	-7.9
Max:		1098.3	1134.4	36.2	3.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**CCWD Pumping Plant #1 (Rock Slough) Salinity**

<b>December</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	718.5	718.3	-0.2	0.0
1976	C	886.3	864.8	-21.5	-2.4
1977	C	911.0	923.2	12.1	1.3
1978	AN	702.5	703.1	0.6	0.1
1979	BN	848.9	848.3	-0.7	-0.1
1980	AN	573.4	582.4	9.0	1.6
1981	D	748.1	734.8	-13.3	-1.8
1982	W	272.6	276.1	3.5	1.3
1983	W	410.4	410.4	0.1	0.0
1984	W	366.2	366.2	0.0	0.0
1985	D	307.1	315.2	8.1	2.6
1986	W	647.4	647.8	0.3	0.0
1987	D	793.2	784.2	-9.0	-1.1
1988	C	836.9	835.9	-1.0	-0.1
1989	D	755.0	755.9	0.9	0.1
1990	C	685.5	681.7	-3.8	-0.6
1991	C	761.9	761.1	-0.8	-0.1
Mean:		660.3	659.4	-0.9	0.0
Median:		718.5	718.3	0.0	0.0
Min:		272.6	276.1	-21.5	-2.4
Max:		911.0	923.2	12.1	2.6
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



**CCWD Pumping Plant #1 (Rock Slough) Salinity**

January					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	818.1	829.9	11.8	1.4
1976	C	1004.9	984.6	-20.3	-2.0
1977	C	1285.4	1290.1	4.7	0.4
1978	AN	971.4	971.1	-0.2	0.0
1979	BN	680.9	682.8	1.8	0.3
1980	AN	440.9	449.5	8.6	2.0
1981	D	461.8	478.6	16.8	3.6
1982	W	476.6	476.6	0.1	0.0
1983	W	807.7	807.7	0.0	0.0
1984	W	266.3	266.3	0.0	0.0
1985	D	316.5	326.7	10.2	3.2
1986	W	586.4	581.8	-4.5	-0.8
1987	D	659.4	587.0	-72.4	-11.0
1988	C	874.0	870.9	-3.1	-0.4
1989	D	805.3	806.6	1.4	0.2
1990	C	786.4	754.0	-32.4	-4.1
1991	C	847.9	847.6	-0.3	0.0
Mean:		711.2	706.6	-4.6	-0.4
Median:		786.4	754.0	0.0	0.0
Min:		266.3	266.3	-72.4	-11.0
Max:		1285.4	1290.1	16.8	3.6
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

### CCWD Pumping Plant #1 (Rock Slough) Salinity

February					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	647.8	672.3	24.5	3.8
1976	C	864.9	840.7	-24.2	-2.8
1977	C	947.6	949.1	1.4	0.1
1978	AN	437.7	437.4	-0.2	0.0
1979	BN	352.3	352.7	0.4	0.1
1980	AN	584.9	585.5	0.5	0.1
1981	D	339.2	344.9	5.7	1.7
1982	W	315.9	315.9	0.0	0.0
1983	W	652.0	652.1	0.1	0.0
1984	W	267.1	267.1	0.0	0.0
1985	D	555.9	579.0	23.1	4.2
1986	W	522.0	518.4	-3.6	-0.7
1987	D	692.8	654.9	-37.9	-5.5
1988	C	341.6	341.2	-0.3	-0.1
1989	D	932.9	933.5	0.6	0.1
1990	C	764.9	704.9	-60.0	-7.8
1991	C	844.9	844.8	-0.1	0.0
Mean:		592.0	587.9	-4.1	-0.4
Median:		584.9	585.5	0.0	0.0
Min:		267.1	267.1	-60.0	-7.8
Max:		947.6	949.1	24.5	4.2
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**CCWD Pumping Plant #1 (Rock Slough) Salinity**

<b>March</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	327.2	328.0	0.8	0.2
1976	C	458.6	454.7	-3.9	-0.9
1977	C	723.7	724.2	0.5	0.1
1978	AN	369.5	369.4	-0.1	0.0
1979	BN	284.3	284.3	0.0	0.0
1980	AN	308.7	308.7	0.0	0.0
1981	D	278.6	277.6	-0.9	-0.3
1982	W	344.5	344.5	0.0	0.0
1983	W	750.4	750.4	-0.1	0.0
1984	W	256.0	256.0	0.0	0.0
1985	D	511.6	519.8	8.2	1.6
1986	W	529.7	529.2	-0.5	-0.1
1987	D	433.5	427.0	-6.5	-1.5
1988	C	318.6	318.6	0.0	0.0
1989	D	451.8	449.5	-2.3	-0.5
1990	C	479.8	465.4	-14.4	-3.0
1991	C	645.9	645.9	0.0	0.0
	Mean:	439.6	438.4	-1.1	-0.3
	Median:	433.5	427.0	0.0	0.0
	Min:	256.0	256.0	-14.4	-3.0
	Max:	750.4	750.4	8.2	1.6
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**CCWD Pumping Plant #1 (Rock Slough) Salinity**

<b>April</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	346.9	346.9	0.0	0.0
1976	C	428.1	427.3	-0.8	-0.2
1977	C	601.5	601.6	0.1	0.0
1978	AN	327.1	327.1	0.0	0.0
1979	BN	331.4	332.1	0.7	0.2
1980	AN	311.9	312.0	0.1	0.0
1981	D	330.9	330.7	-0.2	-0.1
1982	W	376.1	376.1	0.0	0.0
1983	W	753.8	753.7	0.0	0.0
1984	W	326.7	326.7	0.0	0.0
1985	D	395.8	397.3	1.5	0.4
1986	W	400.0	399.8	-0.2	0.0
1987	D	380.6	379.8	-0.8	-0.2
1988	C	400.8	401.0	0.1	0.0
1989	D	259.7	258.5	-1.2	-0.5
1990	C	392.5	396.9	4.4	1.1
1991	C	362.2	362.4	0.1	0.0
Mean:		395.6	395.9	0.2	0.0
Median:		376.1	376.1	0.0	0.0
Min:		259.7	258.5	-1.2	-0.5
Max:		753.8	753.7	4.4	1.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**CCWD Pumping Plant #1 (Rock Slough) Salinity**

<b>May</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	287.4	287.4	0.0	0.0
1976	C	412.3	417.4	5.0	1.2
1977	C	536.5	538.4	1.9	0.4
1978	AN	291.4	291.4	0.0	0.0
1979	BN	293.8	293.9	0.0	0.0
1980	AN	292.3	292.4	0.0	0.0
1981	D	325.2	325.8	0.6	0.2
1982	W	243.8	243.8	0.0	0.0
1983	W	264.0	264.0	0.0	0.0
1984	W	333.9	333.9	0.0	0.0
1985	D	373.4	373.6	0.2	0.1
1986	W	289.9	289.9	0.0	0.0
1987	D	345.5	346.7	1.2	0.3
1988	C	406.0	407.7	1.8	0.4
1989	D	278.2	278.1	-0.2	-0.1
1990	C	346.5	354.0	7.4	2.1
1991	C	319.8	322.3	2.5	0.8
Mean:		331.8	333.0	1.2	0.3
Median:		319.8	322.3	0.0	0.0
Min:		243.8	243.8	-0.2	-0.1
Max:		536.5	538.4	7.4	2.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### CCWD Pumping Plant #1 (Rock Slough) Salinity

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	232.2	232.2	0.0	0.0
1976	C	710.6	739.0	28.4	4.0
1977	C	606.6	627.0	20.3	3.3
1978	AN	247.9	247.9	0.0	0.0
1979	BN	241.1	241.1	0.0	0.0
1980	AN	257.7	257.8	0.1	0.0
1981	D	299.1	313.1	14.0	4.7
1982	W	229.6	229.6	0.0	0.0
1983	W	208.9	208.9	0.0	0.0
1984	W	265.8	265.9	0.1	0.0
1985	D	298.7	298.7	0.0	0.0
1986	W	261.8	261.8	0.0	0.0
1987	D	319.3	338.0	18.7	5.9
1988	C	442.0	445.1	3.1	0.7
1989	D	270.8	270.8	0.0	0.0
1990	C	436.6	485.8	49.2	11.3
1991	C	355.8	381.3	25.5	7.2
Mean:		334.4	343.8	9.4	2.2
Median:		270.8	270.8	0.1	0.0
Min:		208.9	208.9	0.0	0.0
Max:		710.6	739.0	49.2	11.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					1

**CCWD Pumping Plant #1 (Rock Slough) Salinity**

<b>July</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	238.5	239.3	0.8	0.3
1976	C	825.2	888.0	62.9	7.6
1977	C	484.5	499.9	15.5	3.2
1978	AN	248.4	249.0	0.6	0.2
1979	BN	268.8	270.4	1.7	0.6
1980	AN	266.1	266.8	0.7	0.3
1981	D	683.2	724.1	40.8	6.0
1982	W	227.1	227.1	0.1	0.0
1983	W	212.9	212.9	0.0	0.0
1984	W	284.0	290.0	6.1	2.1
1985	D	540.6	540.8	0.2	0.0
1986	W	257.2	258.8	1.6	0.6
1987	D	437.9	444.8	7.0	1.6
1988	C	459.4	461.3	1.9	0.4
1989	D	439.4	439.8	0.4	0.1
1990	C	653.6	685.8	32.2	4.9
1991	C	566.4	585.0	18.7	3.3
Mean:		417.2	428.5	11.2	1.8
Median:		437.9	439.8	1.7	0.6
Min:		212.9	212.9	0.0	0.0
Max:		825.2	888.0	62.9	7.6
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### CCWD Pumping Plant #1 (Rock Slough) Salinity

August					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	412.2	419.1	7.0	1.7
1976	C	574.3	673.8	99.5	17.3
1977	C	521.5	532.0	10.6	2.0
1978	AN	355.3	359.1	3.9	1.1
1979	BN	415.8	421.1	5.3	1.3
1980	AN	399.9	399.5	-0.4	-0.1
1981	D	833.7	930.3	96.7	11.6
1982	W	317.8	322.5	4.7	1.5
1983	W	225.2	225.2	0.0	0.0
1984	W	429.4	435.6	6.3	1.5
1985	D	787.2	787.5	0.3	0.0
1986	W	346.8	349.6	2.8	0.8
1987	D	677.9	679.8	1.8	0.3
1988	C	572.5	571.7	-0.8	-0.1
1989	D	880.4	851.8	-28.6	-3.2
1990	C	631.9	636.3	4.4	0.7
1991	C	669.4	665.9	-3.5	-0.5
Mean:		532.4	544.8	12.4	2.1
Median:		521.5	532.0	3.9	0.8
Min:		225.2	225.2	-28.6	-3.2
Max:		880.4	930.3	99.5	17.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					2



**CCWD Pumping Plant #1 (Rock Slough) Salinity**

**September**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	658.6	661.9	3.3	0.5
1976	C	702.4	747.9	45.5	6.5
1977	C	685.2	714.4	29.2	4.3
1978	AN	629.8	629.3	-0.5	-0.1
1979	BN	651.5	653.6	2.1	0.3
1980	AN	609.8	571.9	-37.9	-6.2
1981	D	588.0	649.1	61.1	10.4
1982	W	480.7	484.9	4.2	0.9
1983	W	241.7	241.7	0.0	0.0
1984	W	810.5	809.8	-0.6	-0.1
1985	D	900.0	900.1	0.1	0.0
1986	W	642.7	639.5	-3.2	-0.5
1987	D	850.1	850.1	0.0	0.0
1988	C	654.6	654.3	-0.3	0.0
1989	D	1379.9	1283.2	-96.7	-7.0
1990	C	669.9	663.6	-6.3	-0.9
1991	C	640.2	629.8	-10.4	-1.6
Mean:		693.9	693.2	-0.6	0.4
Median:		654.6	654.3	0.0	0.0
Min:		241.7	241.7	-96.7	-7.0
Max:		1379.9	1283.2	61.1	10.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					1

Long-term and Water Year Type Average Salinity at West Canal at the mouth of CCF (SWP Banks) under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	EC (umhos/cm)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	592.8	572.8	524.7	523.7	462.6	383.9	336.2	348.4	341.9	356.2	417.5	531.2
NEPA Modified Flow Alternative	589.3	573.0	523.8	520.6	459.3	383.0	336.3	348.7	346.0	365.1	428.0	530.9
Difference	-3.4	0.2	-0.9	-3.1	-3.2	-1.0	0.1	0.3	4.1	8.9	10.4	-0.3
Percent Difference <sup>3</sup>	-0.6	0.0	-0.2	-0.6	-0.7	-0.3	0.0	0.1	1.2	2.5	2.5	-0.1
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	374.5	403.9	339.1	363.4	290.4	238.6	230.0	254.5	257.4	243.3	291.5	451.1
NEPA Modified Flow Alternative	376.9	405.8	339.8	364.3	292.9	238.7	230.1	254.5	257.4	243.2	294.1	451.8
Difference	2.4	1.9	0.7	0.9	2.6	0.1	0.1	0.0	0.0	-0.1	2.6	0.6
Percent Difference	0.6	0.5	0.2	0.3	0.9	0.1	0.0	0.0	0.0	0.0	0.9	0.1
<b>Above Normal</b>												
NEPA No Action Alternative	657.1	621.4	529.5	451.8	265.1	293.1	263.1	263.4	274.7	256.2	311.7	478.9
NEPA Modified Flow Alternative	665.8	624.7	532.3	454.1	265.1	293.1	263.2	263.4	274.8	256.6	313.0	466.1
Difference	8.7	3.3	2.7	2.3	0.0	0.0	0.0	0.0	0.1	0.3	1.2	-12.7
Percent Difference	1.3	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.1	0.4	-2.7
<b>Below Normal</b>												
NEPA No Action Alternative	679.4	606.3	675.1	512.1	322.2	289.1	296.3	297.5	272.6	256.9	335.9	493.9
NEPA Modified Flow Alternative	676.4	605.4	674.7	513.1	322.6	289.0	296.6	297.5	272.6	256.8	338.9	495.9
Difference	-3.0	-0.9	-0.4	1.0	0.4	0.0	0.3	0.0	0.0	-0.1	3.0	2.0
Percent Difference	-0.4	-0.1	-0.1	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.9	0.4
<b>Dry</b>												
NEPA No Action Alternative	659.3	641.3	553.7	485.8	536.2	432.5	345.0	369.9	335.6	408.2	592.4	697.0
NEPA Modified Flow Alternative	642.2	635.9	550.3	478.8	534.7	433.0	345.0	369.9	341.6	417.1	606.0	690.3
Difference	-17.1	-5.3	-3.5	-7.0	-1.6	0.6	0.0	0.0	6.0	8.9	13.7	-6.8
Percent Difference	-2.6	-0.8	-0.6	-1.4	-0.3	0.1	0.0	0.0	1.8	2.2	2.3	-1.0
<b>Critical</b>												
NEPA No Action Alternative	714.7	660.9	655.0	745.6	682.9	545.8	472.5	469.1	472.1	487.4	462.4	507.0
NEPA Modified Flow Alternative	711.5	662.8	653.2	738.7	670.5	542.0	472.8	470.3	481.3	510.4	483.3	515.4
Difference	-3.2	1.9	-1.9	-6.9	-12.4	-3.8	0.3	1.2	9.3	23.0	20.9	8.4
Percent Difference	-0.5	0.3	-0.3	-0.9	-1.8	-0.7	0.1	0.3	2.0	4.7	4.5	1.7

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

**West Canal at the mouth of CCF (SWP Banks) Salinity**

<b>October</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	122.5	122.5	0.0	0.0
1976	C	435.4	433.8	-1.6	-0.4
1977	C	940.8	952.0	11.2	1.2
1978	AN	610.7	630.6	20.0	3.3
1979	BN	679.4	676.4	-3.0	-0.4
1980	AN	703.6	700.9	-2.6	-0.4
1981	D	607.0	539.9	-67.1	-11.1
1982	W	551.1	563.2	12.1	2.2
1983	W	285.6	285.2	-0.3	-0.1
1984	W	240.4	240.4	0.0	0.0
1985	D	712.4	710.7	-1.7	-0.2
1986	W	672.9	672.9	0.0	0.0
1987	D	657.1	655.8	-1.3	-0.2
1988	C	770.9	774.2	3.3	0.4
1989	D	660.6	662.2	1.6	0.2
1990	C	773.8	749.3	-24.5	-3.2
1991	C	652.8	648.2	-4.5	-0.7
Mean:		592.8	589.3	-3.4	-0.6
Median:		657.1	655.8	-0.3	-0.1
Min:		122.5	122.5	-67.1	-11.1
Max:		940.8	952.0	20.0	3.3
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Salinity**

<b>November</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	384.5	384.5	0.0	0.0
1976	C	425.9	423.2	-2.7	-0.6
1977	C	826.4	844.8	18.4	2.2
1978	AN	638.9	647.6	8.7	1.4
1979	BN	606.3	605.4	-0.9	-0.1
1980	AN	603.8	601.7	-2.1	-0.3
1981	D	552.6	518.8	-33.9	-6.1
1982	W	622.1	631.6	9.6	1.5
1983	W	243.7	243.7	0.0	0.0
1984	W	189.0	189.0	0.0	0.0
1985	D	655.1	665.6	10.5	1.6
1986	W	580.3	580.3	0.0	0.0
1987	D	596.7	597.2	0.5	0.1
1988	C	682.5	684.6	2.1	0.3
1989	D	760.6	762.0	1.5	0.2
1990	C	623.3	618.3	-5.0	-0.8
1991	C	746.3	742.9	-3.4	-0.5
Mean:		572.8	573.0	0.2	-0.1
Median:		606.3	605.4	0.0	0.0
Min:		189.0	189.0	-33.9	-6.1
Max:		826.4	844.8	18.4	2.2
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Salinity**

December					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	569.7	569.6	-0.1	0.0
1976	C	675.2	660.3	-15.0	-2.2
1977	C	686.8	695.5	8.8	1.3
1978	AN	585.0	585.5	0.6	0.1
1979	BN	675.1	674.7	-0.4	-0.1
1980	AN	474.1	479.0	4.9	1.0
1981	D	612.9	597.7	-15.2	-2.5
1982	W	303.2	306.6	3.4	1.1
1983	W	153.4	153.4	0.0	0.0
1984	W	130.9	130.9	0.0	0.0
1985	D	328.9	335.9	6.9	2.1
1986	W	538.2	538.4	0.2	0.0
1987	D	629.6	623.4	-6.2	-1.0
1988	C	656.1	655.6	-0.5	-0.1
1989	D	643.4	644.1	0.7	0.1
1990	C	569.5	568.3	-1.2	-0.2
1991	C	687.6	686.2	-1.3	-0.2
Mean:		524.7	523.8	-0.8	0.0
Median:		585.0	585.5	0.0	0.0
Min:		130.9	130.9	-15.2	-2.5
Max:		687.6	695.5	8.8	2.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Salinity**

January					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	651.8	659.0	7.3	1.1
1976	C	782.6	767.9	-14.8	-1.9
1977	C	896.4	901.2	4.8	0.5
1978	AN	558.5	558.3	-0.2	0.0
1979	BN	512.1	513.1	1.0	0.2
1980	AN	345.0	349.9	4.9	1.4
1981	D	435.3	444.0	8.7	2.0
1982	W	356.5	356.6	0.1	0.0
1983	W	137.7	137.5	-0.2	-0.1
1984	W	146.7	146.7	0.0	0.0
1985	D	306.5	312.5	6.0	2.0
1986	W	524.2	521.6	-2.6	-0.5
1987	D	565.4	521.6	-43.8	-7.7
1988	C	755.2	752.6	-2.6	-0.3
1989	D	635.9	636.9	1.0	0.2
1990	C	616.6	595.1	-21.5	-3.5
1991	C	677.0	676.4	-0.5	-0.1
Mean:		523.7	520.6	-3.1	-0.4
Median:		558.5	521.6	0.0	0.0
Min:		137.7	137.5	-43.8	-7.7
Max:		896.4	901.2	8.7	2.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Salinity**

February					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	517.1	531.9	14.8	2.9
1976	C	704.2	686.5	-17.7	-2.5
1977	C	865.8	868.2	2.3	0.3
1978	AN	368.0	367.8	-0.2	-0.1
1979	BN	322.2	322.6	0.4	0.1
1980	AN	162.3	162.4	0.2	0.1
1981	D	355.0	362.1	7.1	2.0
1982	W	259.8	259.8	0.0	0.0
1983	W	118.6	118.6	0.0	0.0
1984	W	234.4	234.4	0.0	0.0
1985	D	470.5	486.5	16.1	3.4
1986	W	321.9	320.1	-1.8	-0.6
1987	D	579.7	550.2	-29.5	-5.1
1988	C	438.3	437.7	-0.6	-0.1
1989	D	739.7	739.9	0.2	0.0
1990	C	687.8	641.8	-45.9	-6.7
1991	C	718.5	718.3	-0.2	0.0
Mean:		462.6	459.3	-3.2	-0.4
Median:		438.3	437.7	0.0	0.0
Min:		118.6	118.6	-45.9	-6.7
Max:		865.8	868.2	16.1	3.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Salinity**

<b>March</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	294.8	295.5	0.6	0.2
1976	C	493.9	488.7	-5.2	-1.1
1977	C	771.8	772.8	1.0	0.1
1978	AN	345.6	345.5	-0.1	0.0
1979	BN	289.1	289.0	0.0	0.0
1980	AN	240.6	240.6	0.0	0.0
1981	D	342.0	343.2	1.2	0.4
1982	W	281.5	281.5	0.0	0.0
1983	W	149.3	149.2	0.0	0.0
1984	W	269.2	269.2	0.0	0.0
1985	D	500.0	508.3	8.4	1.7
1986	W	198.1	198.1	0.0	0.0
1987	D	442.0	436.4	-5.5	-1.2
1988	C	413.9	413.7	-0.3	-0.1
1989	D	445.9	444.1	-1.8	-0.4
1990	C	492.1	477.3	-14.8	-3.0
1991	C	557.3	557.3	0.0	0.0
Mean:		383.9	383.0	-1.0	-0.2
Median:		345.6	345.5	0.0	0.0
Min:		149.3	149.2	-14.8	-3.0
Max:		771.8	772.8	8.4	1.7
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



**West Canal at the mouth of CCF (SWP Banks) Salinity**

April					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	285.1	285.2	0.0	0.0
1976	C	397.6	396.5	-1.1	-0.3
1977	C	707.1	707.6	0.5	0.1
1978	AN	264.2	264.2	0.0	0.0
1979	BN	296.3	296.6	0.3	0.1
1980	AN	262.0	262.1	0.0	0.0
1981	D	337.0	336.8	-0.2	-0.1
1982	W	169.7	169.7	0.0	0.0
1983	W	168.8	168.8	0.0	0.0
1984	W	295.3	295.3	0.0	0.0
1985	D	430.5	432.5	2.0	0.5
1986	W	231.2	231.5	0.3	0.1
1987	D	344.6	344.2	-0.5	-0.1
1988	C	428.8	428.9	0.1	0.0
1989	D	267.8	266.5	-1.3	-0.5
1990	C	423.3	425.1	1.8	0.4
1991	C	405.7	405.7	0.0	0.0
Mean:		336.2	336.3	0.1	0.0
Median:		296.3	296.6	0.0	0.0
Min:		168.8	168.8	-1.3	-0.5
Max:		707.1	707.6	2.0	0.5
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Salinity**

<b>May</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	297.8	297.8	0.0	0.0
1976	C	428.7	429.5	0.8	0.2
1977	C	647.2	647.5	0.3	0.0
1978	AN	236.0	236.0	0.0	0.0
1979	BN	297.5	297.5	0.0	0.0
1980	AN	290.7	290.7	0.0	0.0
1981	D	357.6	357.7	0.1	0.0
1982	W	190.4	190.4	0.0	0.0
1983	W	165.0	165.0	0.0	0.0
1984	W	343.8	343.8	0.0	0.0
1985	D	416.9	417.5	0.5	0.1
1986	W	275.5	275.5	0.0	0.0
1987	D	374.2	374.0	-0.2	-0.1
1988	C	451.7	452.4	0.7	0.2
1989	D	331.0	330.5	-0.5	-0.2
1990	C	428.6	432.3	3.8	0.9
1991	C	389.4	389.8	0.4	0.1
Mean:		348.4	348.7	0.3	0.1
Median:		343.8	343.8	0.0	0.0
Min:		165.0	165.0	-0.5	-0.2
Max:		647.2	647.5	3.8	0.9
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Salinity**

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	276.3	276.3	0.0	0.0
1976	C	532.7	548.1	15.4	2.9
1977	C	602.0	607.2	5.2	0.9
1978	AN	248.6	248.6	0.0	0.0
1979	BN	272.6	272.6	0.0	0.0
1980	AN	300.8	301.1	0.2	0.1
1981	D	316.9	324.9	8.0	2.5
1982	W	245.5	245.5	0.0	0.0
1983	W	132.2	132.2	0.0	0.0
1984	W	331.3	331.3	0.0	0.0
1985	D	361.5	361.6	0.1	0.0
1986	W	301.8	301.8	0.0	0.0
1987	D	370.4	386.3	15.9	4.3
1988	C	444.9	447.2	2.3	0.5
1989	D	293.7	293.7	0.0	0.0
1990	C	408.3	422.5	14.2	3.5
1991	C	372.4	381.5	9.1	2.4
Mean:		341.9	346.0	4.1	1.0
Median:		316.9	324.9	0.1	0.0
Min:		132.2	132.2	0.0	0.0
Max:		602.0	607.2	15.9	4.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Salinity**

<b>July</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	238.2	237.8	-0.5	-0.2
1976	C	646.6	686.6	40.0	6.2
1977	C	478.6	497.3	18.7	3.9
1978	AN	241.8	241.9	0.1	0.0
1979	BN	256.9	256.8	-0.1	0.0
1980	AN	270.6	271.3	0.6	0.2
1981	D	505.3	531.0	25.7	5.1
1982	W	246.6	246.3	-0.4	-0.2
1983	W	190.8	190.8	0.0	0.0
1984	W	272.7	273.9	1.2	0.4
1985	D	417.6	417.7	0.1	0.0
1986	W	268.3	267.4	-0.9	-0.3
1987	D	362.0	371.8	9.8	2.7
1988	C	418.0	425.8	7.8	1.9
1989	D	347.7	347.9	0.2	0.1
1990	C	479.6	508.8	29.2	6.1
1991	C	414.3	433.5	19.1	4.6
Mean:		356.2	365.1	8.9	1.8
Median:		347.7	347.9	0.6	0.2
Min:		190.8	190.8	-0.9	-0.3
Max:		646.6	686.6	40.0	6.2
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Salinity**

<b>August</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	329.3	333.8	4.6	1.4
1976	C	472.1	532.5	60.5	12.8
1977	C	409.1	420.8	11.7	2.9
1978	AN	299.1	301.4	2.3	0.8
1979	BN	335.9	338.9	3.0	0.9
1980	AN	324.3	324.5	0.2	0.1
1981	D	632.8	701.6	68.9	10.9
1982	W	281.0	282.7	1.7	0.6
1983	W	209.1	209.1	0.0	0.0
1984	W	339.5	344.0	4.5	1.3
1985	D	597.8	598.0	0.2	0.0
1986	W	298.7	300.8	2.1	0.7
1987	D	512.5	514.2	1.6	0.3
1988	C	426.6	430.4	3.8	0.9
1989	D	626.3	610.3	-16.0	-2.6
1990	C	514.4	530.9	16.5	3.2
1991	C	489.7	501.7	11.9	2.4
Mean:		417.5	428.0	10.4	2.2
Median:		409.1	420.8	3.0	0.9
Min:		209.1	209.1	-16.0	-2.6
Max:		632.8	701.6	68.9	12.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					2

**West Canal at the mouth of CCF (SWP Banks) Salinity**

**September**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	505.1	508.0	2.8	0.6
1976	C	599.6	628.6	29.1	4.9
1977	C	461.4	476.6	15.2	3.3
1978	AN	485.9	485.0	-0.9	-0.2
1979	BN	493.9	495.9	2.0	0.4
1980	AN	471.8	447.2	-24.6	-5.2
1981	D	455.9	498.2	42.3	9.3
1982	W	401.1	403.6	2.4	0.6
1983	W	267.4	267.4	0.0	0.0
1984	W	600.8	601.0	0.3	0.0
1985	D	680.9	680.9	0.1	0.0
1986	W	481.1	478.8	-2.3	-0.5
1987	D	633.1	632.3	-0.9	-0.1
1988	C	475.8	475.7	-0.1	0.0
1989	D	1018.3	949.6	-68.7	-6.7
1990	C	507.3	507.3	0.0	0.0
1991	C	490.7	488.6	-2.1	-0.4
Mean:		531.2	530.9	-0.3	0.4
Median:		490.7	495.9	0.0	0.0
Min:		267.4	267.4	-68.7	-6.7
Max:		1018.3	949.6	42.3	9.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

Long-term and Water Year Type Average Salinity at the Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	EC (umhos/cm)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	600.5	570.0	537.2	526.8	466.8	460.9	385.1	387.7	404.3	435.4	501.7	642.5
NEPA Modified Flow Alternative	597.5	570.1	536.6	524.8	464.4	460.7	385.3	388.0	411.0	441.9	507.6	642.0
Difference	-3.0	0.1	-0.6	-2.0	-2.4	-0.2	0.2	0.4	6.7	6.5	5.9	-0.4
Percent Difference <sup>3</sup>	-0.5	0.0	-0.1	-0.4	-0.5	0.0	0.1	0.1	1.6	1.5	1.2	-0.1
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	376.3	417.4	380.9	388.7	251.3	257.8	246.3	276.4	306.3	333.2	408.8	552.6
NEPA Modified Flow Alternative	378.3	419.2	381.3	389.5	252.4	257.9	246.4	276.3	306.3	333.6	410.7	552.9
Difference	2.0	1.8	0.5	0.8	1.0	0.1	0.0	0.0	0.0	0.4	2.0	0.3
Percent Difference	0.5	0.4	0.1	0.2	0.4	0.0	0.0	0.0	0.0	0.1	0.5	0.0
<b>Above Normal</b>												
NEPA No Action Alternative	704.1	619.3	554.2	346.8	232.3	277.4	252.6	269.8	291.0	333.0	406.6	570.5
NEPA Modified Flow Alternative	709.3	620.4	556.0	346.9	232.2	277.4	252.5	269.8	290.9	333.3	407.8	560.9
Difference	5.2	1.1	1.9	0.0	0.0	0.0	-0.1	0.0	-0.1	0.3	1.2	-9.6
Percent Difference	0.7	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	-1.7
<b>Below Normal</b>												
NEPA No Action Alternative	647.6	605.2	640.5	439.4	254.4	291.2	312.6	325.7	378.7	368.2	443.5	637.1
NEPA Modified Flow Alternative	645.0	604.5	640.1	438.6	254.2	291.2	312.7	325.6	378.8	364.6	442.6	636.4
Difference	-2.6	-0.7	-0.4	-0.8	-0.1	0.1	0.1	-0.2	0.1	-3.6	-0.9	-0.7
Percent Difference	-0.4	-0.1	-0.1	-0.2	0.0	0.0	0.0	0.0	0.0	-1.0	-0.2	-0.1
<b>Dry</b>												
NEPA No Action Alternative	666.5	635.4	565.0	551.1	603.6	565.0	424.7	442.0	436.6	489.9	630.1	789.3
NEPA Modified Flow Alternative	652.6	631.3	563.3	548.9	603.3	565.4	424.7	442.0	443.4	497.1	639.8	786.4
Difference	-14.0	-4.1	-1.8	-2.2	-0.2	0.5	0.0	0.0	6.8	7.3	9.7	-2.9
Percent Difference	-2.1	-0.7	-0.3	-0.4	0.0	0.1	0.0	0.0	1.6	1.5	1.5	-0.4
<b>Critical</b>												
NEPA No Action Alternative	721.2	643.4	643.8	734.8	709.2	688.1	559.7	515.2	526.9	548.4	541.6	644.7
NEPA Modified Flow Alternative	718.5	645.0	642.2	729.2	700.3	687.1	560.5	516.4	544.2	565.0	551.8	649.3
Difference	-2.6	1.6	-1.7	-5.5	-8.9	-1.0	0.7	1.3	17.2	16.6	10.2	4.6
Percent Difference	-0.4	0.3	-0.3	-0.8	-1.3	-0.2	0.1	0.2	3.3	3.0	1.9	0.7

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Salinity**

<b>October</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	165.2	165.2	0.0	0.0
1976	C	448.3	446.9	-1.3	-0.3
1977	C	901.0	910.8	9.8	1.1
1978	AN	705.9	718.9	13.0	1.8
1979	BN	647.6	645.0	-2.6	-0.4
1980	AN	702.2	699.7	-2.5	-0.4
1981	D	582.4	526.7	-55.7	-9.6
1982	W	587.2	597.1	9.9	1.7
1983	W	227.7	227.8	0.1	0.0
1984	W	221.7	221.7	0.0	0.0
1985	D	708.8	707.3	-1.5	-0.2
1986	W	679.7	679.7	0.0	0.0
1987	D	652.7	651.9	-0.8	-0.1
1988	C	776.8	779.9	3.2	0.4
1989	D	722.2	724.4	2.2	0.3
1990	C	766.2	746.0	-20.2	-2.6
1991	C	713.6	708.8	-4.8	-0.7
Mean:		600.5	597.5	-3.0	-0.5
Median:		679.7	679.7	0.0	0.0
Min:		165.2	165.2	-55.7	-9.6
Max:		901.0	910.8	13.0	1.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Salinity**

<b>November</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	417.3	417.3	0.0	0.0
1976	C	446.3	443.7	-2.6	-0.6
1977	C	757.2	772.3	15.1	2.0
1978	AN	648.4	651.9	3.5	0.5
1979	BN	605.2	604.5	-0.7	-0.1
1980	AN	590.3	588.9	-1.4	-0.2
1981	D	556.2	527.5	-28.7	-5.2
1982	W	626.9	635.6	8.8	1.4
1983	W	258.0	258.1	0.1	0.0
1984	W	180.7	180.7	0.0	0.0
1985	D	647.3	657.1	9.8	1.5
1986	W	604.1	604.1	0.0	0.0
1987	D	592.8	594.0	1.2	0.2
1988	C	669.8	671.4	1.6	0.2
1989	D	745.4	746.5	1.1	0.1
1990	C	613.5	609.8	-3.7	-0.6
1991	C	730.0	727.7	-2.3	-0.3
Mean:		570.0	570.1	0.1	-0.1
Median:		605.2	604.5	0.0	0.0
Min:		180.7	180.7	-28.7	-5.2
Max:		757.2	772.3	15.1	2.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Salinity**

<b>December</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	578.8	578.7	-0.1	0.0
1976	C	655.9	644.9	-11.0	-1.7
1977	C	644.3	649.1	4.7	0.7
1978	AN	605.9	606.3	0.3	0.0
1979	BN	640.5	640.1	-0.4	-0.1
1980	AN	502.4	505.8	3.4	0.7
1981	D	600.9	591.9	-9.0	-1.5
1982	W	435.2	437.4	2.3	0.5
1983	W	140.0	140.0	0.0	0.0
1984	W	161.5	161.5	0.0	0.0
1985	D	415.8	420.4	4.5	1.1
1986	W	588.8	589.0	0.2	0.0
1987	D	615.4	612.2	-3.2	-0.5
1988	C	667.1	666.6	-0.5	-0.1
1989	D	628.1	628.6	0.5	0.1
1990	C	600.1	599.1	-1.0	-0.2
1991	C	651.6	651.0	-0.6	-0.1
Mean:		537.2	536.6	-0.6	-0.1
Median:		600.9	599.1	0.0	0.0
Min:		140.0	140.0	-11.0	-1.7
Max:		667.1	666.6	4.7	1.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Salinity**

<b>January</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	647.4	653.2	5.8	0.9
1976	C	742.9	731.8	-11.1	-1.5
1977	C	848.9	851.5	2.6	0.3
1978	AN	486.6	486.5	-0.1	0.0
1979	BN	439.4	438.6	-0.8	-0.2
1980	AN	207.1	207.3	0.2	0.1
1981	D	513.7	517.7	4.1	0.8
1982	W	332.9	333.0	0.0	0.0
1983	W	247.5	247.5	0.0	0.0
1984	W	150.4	150.4	0.0	0.0
1985	D	414.9	419.2	4.4	1.1
1986	W	565.2	563.6	-1.7	-0.3
1987	D	624.5	606.4	-18.0	-2.9
1988	C	739.3	737.5	-1.9	-0.3
1989	D	651.5	652.3	0.8	0.1
1990	C	642.3	625.1	-17.2	-2.7
1991	C	700.5	700.3	-0.2	0.0
Mean:		526.8	524.8	-1.9	-0.3
Median:		565.2	563.6	0.0	0.0
Min:		150.4	150.4	-18.0	-2.9
Max:		848.9	851.5	5.8	1.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Salinity**

<b>February</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	417.5	423.1	5.5	1.3
1976	C	722.3	712.8	-9.5	-1.3
1977	C	843.1	844.1	1.0	0.1
1978	AN	307.6	307.2	-0.4	-0.1
1979	BN	254.4	254.2	-0.1	0.0
1980	AN	156.9	157.2	0.3	0.2
1981	D	443.4	447.7	4.3	1.0
1982	W	192.6	192.6	0.0	0.0
1983	W	154.0	154.0	0.0	0.0
1984	W	236.2	236.2	0.0	0.0
1985	D	550.7	561.7	11.0	2.0
1986	W	256.2	256.0	-0.3	-0.1
1987	D	646.6	630.0	-16.5	-2.6
1988	C	490.2	489.9	-0.3	-0.1
1989	D	773.6	773.9	0.3	0.0
1990	C	704.1	668.4	-35.7	-5.1
1991	C	786.1	786.0	0.0	0.0
Mean:		466.8	464.4	-2.4	-0.3
Median:		443.4	447.7	0.0	0.0
Min:		154.0	154.0	-35.7	-5.1
Max:		843.1	844.1	11.0	2.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Salinity

March					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	295.0	295.2	0.1	0.0
1976	C	625.3	622.6	-2.7	-0.4
1977	C	884.6	884.9	0.3	0.0
1978	AN	334.1	333.9	-0.3	-0.1
1979	BN	291.2	291.2	0.1	0.0
1980	AN	220.7	220.9	0.2	0.1
1981	D	454.4	454.8	0.4	0.1
1982	W	253.7	253.8	0.1	0.0
1983	W	207.4	207.4	0.0	0.0
1984	W	340.9	340.9	0.0	0.0
1985	D	587.1	591.7	4.6	0.8
1986	W	192.2	192.2	0.0	0.0
1987	D	647.1	644.8	-2.3	-0.4
1988	C	725.7	725.7	0.0	0.0
1989	D	571.3	570.3	-1.0	-0.2
1990	C	629.8	627.0	-2.8	-0.4
1991	C	575.1	575.1	0.0	0.0
Mean:		460.9	460.7	-0.2	0.0
Median:		454.4	454.8	0.0	0.0
Min:		192.2	192.2	-2.8	-0.4
Max:		884.6	884.9	4.6	0.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Salinity**

<b>April</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	301.4	301.4	0.0	0.0
1976	C	505.8	505.3	-0.5	-0.1
1977	C	725.5	725.7	0.2	0.0
1978	AN	228.1	227.9	-0.2	-0.1
1979	BN	312.6	312.7	0.1	0.0
1980	AN	277.0	277.1	0.1	0.0
1981	D	393.6	393.6	0.0	0.0
1982	W	162.6	162.6	0.0	0.0
1983	W	186.2	186.2	0.0	0.0
1984	W	350.5	350.6	0.0	0.0
1985	D	511.0	512.0	1.0	0.2
1986	W	230.9	231.1	0.2	0.1
1987	D	441.1	440.9	-0.3	-0.1
1988	C	534.8	535.0	0.2	0.0
1989	D	353.0	352.1	-0.9	-0.3
1990	C	558.1	561.9	3.8	0.7
1991	C	474.4	474.4	0.0	0.0
Mean:		385.1	385.3	0.2	0.0
Median:		353.0	352.1	0.0	0.0
Min:		162.6	162.6	-0.9	-0.3
Max:		725.5	725.7	3.8	0.7
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Salinity**

<b>May</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	329.1	329.1	0.0	0.0
1976	C	489.9	491.0	1.1	0.2
1977	C	642.6	642.7	0.1	0.0
1978	AN	223.6	223.5	-0.1	0.0
1979	BN	325.7	325.6	-0.2	-0.1
1980	AN	316.0	316.0	0.0	0.0
1981	D	407.8	407.8	0.1	0.0
1982	W	196.4	196.4	0.0	0.0
1983	W	173.3	173.3	0.0	0.0
1984	W	391.8	391.8	0.0	0.0
1985	D	459.8	460.0	0.2	0.0
1986	W	291.1	291.1	-0.1	0.0
1987	D	481.4	481.4	-0.1	0.0
1988	C	509.4	510.2	0.7	0.1
1989	D	418.9	418.6	-0.3	-0.1
1990	C	487.7	491.7	4.0	0.8
1991	C	446.2	446.5	0.4	0.1
Mean:		387.7	388.0	0.3	0.1
Median:		407.8	407.8	0.0	0.0
Min:		173.3	173.3	-0.3	-0.1
Max:		642.6	642.7	4.0	0.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Salinity**

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	343.0	343.0	0.0	0.0
1976	C	591.2	603.9	12.7	2.1
1977	C	621.9	633.4	11.6	1.9
1978	AN	247.7	247.4	-0.2	-0.1
1979	BN	378.7	378.8	0.1	0.0
1980	AN	334.2	334.3	0.1	0.0
1981	D	407.9	415.0	7.1	1.7
1982	W	274.5	274.5	0.0	0.0
1983	W	145.1	145.1	0.0	0.0
1984	W	430.8	430.9	0.0	0.0
1985	D	449.1	449.1	0.0	0.0
1986	W	337.8	337.8	0.0	0.0
1987	D	478.0	498.2	20.2	4.2
1988	C	504.4	514.5	10.1	2.0
1989	D	411.3	411.3	0.0	0.0
1990	C	476.7	510.4	33.6	7.0
1991	C	440.5	458.6	18.1	4.1
Mean:		404.3	411.0	6.7	1.3
Median:		411.3	415.0	0.1	0.0
Min:		145.1	145.1	-0.2	-0.1
Max:		621.9	633.4	33.6	7.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Salinity**

<b>July</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	339.0	338.8	-0.2	-0.1
1976	C	654.5	681.3	26.8	4.1
1977	C	510.1	524.6	14.5	2.8
1978	AN	333.3	333.5	0.2	0.1
1979	BN	368.2	364.6	-3.6	-1.0
1980	AN	332.8	333.2	0.4	0.1
1981	D	554.2	576.2	21.9	4.0
1982	W	337.3	336.9	-0.3	-0.1
1983	W	198.1	198.1	0.0	0.0
1984	W	389.5	391.9	2.4	0.6
1985	D	477.9	478.0	0.1	0.0
1986	W	402.1	402.3	0.2	0.0
1987	D	479.3	486.2	6.9	1.4
1988	C	499.0	506.2	7.2	1.4
1989	D	448.0	448.2	0.2	0.0
1990	C	564.1	586.2	22.1	3.9
1991	C	514.2	526.4	12.2	2.4
Mean:		435.4	441.9	6.5	1.2
Median:		448.0	448.2	0.4	0.1
Min:		198.1	198.1	-3.6	-1.0
Max:		654.5	681.3	26.8	4.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Salinity**

<b>August</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>EC (umhos/cm)</b>	<b>EC (umhos/cm)</b>		
1975	W	428.6	432.0	3.3	0.8
1976	C	540.8	579.1	38.3	7.1
1977	C	483.9	491.6	7.7	1.6
1978	AN	401.6	404.0	2.4	0.6
1979	BN	443.5	442.6	-0.9	-0.2
1980	AN	411.6	411.6	0.0	0.0
1981	D	634.2	687.7	53.5	8.4
1982	W	402.0	404.0	2.0	0.5
1983	W	353.6	353.6	0.0	0.0
1984	W	450.4	453.5	3.1	0.7
1985	D	614.4	614.6	0.2	0.0
1986	W	409.4	410.7	1.3	0.3
1987	D	586.7	587.8	1.1	0.2
1988	C	545.5	546.4	0.8	0.1
1989	D	685.0	669.0	-16.0	-2.3
1990	C	581.6	586.1	4.4	0.8
1991	C	556.3	555.9	-0.4	-0.1
Mean:		501.7	507.6	5.9	1.1
Median:		483.9	491.6	1.3	0.3
Min:		353.6	353.6	-16.0	-2.3
Max:		685.0	687.7	53.5	8.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Salinity**

**September**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	601.3	603.0	1.7	0.3
1976	C	752.0	771.4	19.4	2.6
1977	C	624.9	637.6	12.8	2.0
1978	AN	590.7	589.9	-0.8	-0.1
1979	BN	637.1	636.4	-0.7	-0.1
1980	AN	550.2	531.9	-18.3	-3.3
1981	D	586.7	616.5	29.8	5.1
1982	W	491.6	492.9	1.3	0.3
1983	W	362.4	362.4	0.0	0.0
1984	W	703.5	703.6	0.1	0.0
1985	D	787.5	787.6	0.0	0.0
1986	W	604.2	602.4	-1.8	-0.3
1987	D	760.3	763.4	3.1	0.4
1988	C	622.1	621.7	-0.3	0.0
1989	D	1022.8	978.1	-44.7	-4.4
1990	C	648.9	645.5	-3.5	-0.5
1991	C	575.6	570.0	-5.6	-1.0
Mean:		642.5	642.0	-0.4	0.1
Median:		622.1	621.7	0.0	0.0
Min:		362.4	362.4	-44.7	-4.4
Max:		1022.8	978.1	29.8	5.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

Long-term and Water Year Type Average Salinity at Victoria Canal under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	EC (umhos/cm)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	462.5	468.4	430.9	457.3	426.4	386.3	360.8	379.1	343.4	322.5	348.7	412.1
NEPA Modified Flow Alternative	461.4	468.4	430.5	455.2	424.1	385.7	361.0	379.4	349.3	328.9	353.4	411.5
Difference	-1.1	0.0	-0.4	-2.1	-2.3	-0.6	0.3	0.3	5.8	6.4	4.7	-0.6
Percent Difference <sup>3</sup>	-0.2	0.0	-0.1	-0.5	-0.5	-0.2	0.1	0.1	1.7	2.0	1.4	-0.2
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	337.3	375.3	301.4	343.4	283.5	259.4	249.8	270.2	276.4	253.4	269.4	366.1
NEPA Modified Flow Alternative	338.6	376.4	301.9	343.9	284.9	259.4	249.8	270.2	276.4	252.2	268.9	366.3
Difference	1.3	1.1	0.5	0.5	1.5	0.1	0.0	0.0	0.0	-1.2	-0.5	0.2
Percent Difference	0.4	0.3	0.2	0.1	0.5	0.0	0.0	0.0	0.0	-0.5	-0.2	0.1
<b>Above Normal</b>												
NEPA No Action Alternative	537.4	535.8	439.8	417.7	280.9	301.3	270.4	270.0	290.5	264.6	277.4	366.6
NEPA Modified Flow Alternative	541.5	536.0	440.9	418.8	280.9	301.2	270.4	270.0	290.7	264.9	276.1	360.7
Difference	4.1	0.2	1.1	1.2	0.0	0.0	0.0	0.0	0.2	0.3	-1.3	-5.9
Percent Difference	0.8	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.1	0.1	-0.5	-1.6
<b>Below Normal</b>												
NEPA No Action Alternative	453.9	439.9	525.5	459.4	325.5	298.0	314.3	307.0	291.7	259.4	290.5	377.9
NEPA Modified Flow Alternative	452.8	439.7	525.2	459.8	325.7	297.9	314.4	307.0	291.7	257.6	290.2	378.3
Difference	-1.1	-0.3	-0.3	0.4	0.2	0.0	0.1	0.0	0.0	-1.9	-0.3	0.4
Percent Difference	-0.2	-0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	-0.7	-0.1	0.1
<b>Dry</b>												
NEPA No Action Alternative	501.8	505.6	464.1	425.7	490.2	443.7	395.1	432.0	339.9	329.7	432.5	496.0
NEPA Modified Flow Alternative	496.5	503.9	462.4	421.1	489.4	444.2	395.1	432.0	345.3	335.8	441.2	491.4
Difference	-5.3	-1.7	-1.8	-4.6	-0.8	0.5	0.0	0.0	5.4	6.1	8.7	-4.6
Percent Difference	-1.1	-0.3	-0.4	-1.1	-0.2	0.1	0.0	0.0	1.6	1.8	2.0	-0.9
<b>Critical</b>												
NEPA No Action Alternative	528.1	510.4	511.4	611.9	596.8	518.9	489.8	503.8	444.7	421.6	401.1	416.2
NEPA Modified Flow Alternative	525.8	510.6	510.6	607.4	588.2	516.5	490.7	504.9	460.2	440.0	411.3	419.8
Difference	-2.3	0.2	-0.8	-4.5	-8.6	-2.5	0.9	1.1	15.4	18.5	10.2	3.6
Percent Difference	-0.4	0.0	-0.2	-0.7	-1.4	-0.5	0.2	0.2	3.5	4.4	2.5	0.9

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

### Victoria Canal Salinity

#### October

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	173.9	173.9	0.0	0.0
1976	C	381.6	381.0	-0.6	-0.2
1977	C	578.4	582.9	4.5	0.8
1978	AN	562.0	571.5	9.5	1.7
1979	BN	453.9	452.8	-1.1	-0.2
1980	AN	512.7	511.5	-1.3	-0.3
1981	D	419.6	399.1	-20.5	-4.9
1982	W	462.8	469.6	6.8	1.5
1983	W	263.8	263.7	-0.1	0.0
1984	W	251.6	251.6	0.0	0.0
1985	D	524.4	523.8	-0.6	-0.1
1986	W	534.5	534.5	0.0	0.0
1987	D	498.6	497.0	-1.6	-0.3
1988	C	575.9	578.1	2.3	0.4
1989	D	564.6	566.3	1.6	0.3
1990	C	568.2	554.3	-13.9	-2.4
1991	C	536.4	532.8	-3.6	-0.7
Mean:		462.5	461.4	-1.1	-0.3
Median:		512.7	511.5	-0.1	0.0
Min:		173.9	173.9	-20.5	-4.9
Max:		578.4	582.9	9.5	1.7
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Victoria Canal Salinity

November					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	378.6	378.6	0.0	0.0
1976	C	372.4	372.2	-0.2	-0.1
1977	C	525.5	529.0	3.4	0.6
1978	AN	595.7	597.1	1.4	0.2
1979	BN	439.9	439.7	-0.3	-0.1
1980	AN	475.8	474.8	-1.0	-0.2
1981	D	427.1	415.1	-12.1	-2.8
1982	W	520.8	526.5	5.7	1.1
1983	W	262.3	262.3	0.0	0.0
1984	W	194.8	194.8	0.0	0.0
1985	D	524.2	530.4	6.2	1.2
1986	W	519.9	519.9	0.0	0.0
1987	D	482.0	480.4	-1.5	-0.3
1988	C	552.1	553.0	0.9	0.2
1989	D	589.0	589.8	0.7	0.1
1990	C	500.6	499.3	-1.3	-0.3
1991	C	601.4	599.5	-1.8	-0.3
Mean:		468.4	468.4	0.0	0.0
Median:		500.6	499.3	0.0	0.0
Min:		194.8	194.8	-12.1	-2.8
Max:		601.4	599.5	6.2	1.2
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Victoria Canal Salinity

December					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	447.2	447.1	-0.1	0.0
1976	C	500.1	491.5	-8.6	-1.7
1977	C	519.7	524.0	4.3	0.8
1978	AN	486.5	486.6	0.1	0.0
1979	BN	525.5	525.2	-0.3	-0.1
1980	AN	393.1	395.2	2.2	0.6
1981	D	487.2	475.5	-11.7	-2.4
1982	W	319.4	321.9	2.5	0.8
1983	W	155.5	155.5	0.0	0.0
1984	W	132.8	132.8	0.0	0.0
1985	D	334.1	338.9	4.7	1.4
1986	W	452.3	452.4	0.1	0.0
1987	D	508.6	508.1	-0.5	-0.1
1988	C	501.2	500.9	-0.3	-0.1
1989	D	526.6	527.1	0.5	0.1
1990	C	463.7	464.7	1.0	0.2
1991	C	572.2	571.7	-0.5	-0.1
Mean:		430.9	430.5	-0.4	0.0
Median:		486.5	475.5	0.0	0.0
Min:		132.8	132.8	-11.7	-2.4
Max:		572.2	571.7	4.7	1.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Victoria Canal Salinity

#### January

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	520.6	524.4	3.8	0.7
1976	C	609.3	599.4	-9.9	-1.6
1977	C	710.0	712.9	2.9	0.4
1978	AN	521.3	521.1	-0.2	0.0
1979	BN	459.4	459.8	0.4	0.1
1980	AN	314.0	316.5	2.5	0.8
1981	D	399.9	403.8	3.8	1.0
1982	W	381.5	381.6	0.1	0.0
1983	W	170.6	170.6	0.0	0.0
1984	W	177.4	177.4	0.0	0.0
1985	D	313.2	316.3	3.1	1.0
1986	W	467.1	465.7	-1.4	-0.3
1987	D	481.5	455.4	-26.2	-5.4
1988	C	640.9	638.9	-2.0	-0.3
1989	D	508.2	508.9	0.7	0.1
1990	C	483.6	470.3	-13.3	-2.8
1991	C	615.5	615.3	-0.2	0.0
Mean:		457.3	455.2	-2.1	-0.4
Median:		481.5	465.7	0.0	0.0
Min:		170.6	170.6	-26.2	-5.4
Max:		710.0	712.9	3.8	1.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



### Victoria Canal Salinity

#### February

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	464.7	472.8	8.1	1.7
1976	C	596.3	584.4	-11.9	-2.0
1977	C	703.0	704.1	1.1	0.2
1978	AN	378.4	378.3	-0.1	0.0
1979	BN	325.5	325.7	0.2	0.1
1980	AN	183.5	183.5	0.0	0.0
1981	D	368.3	375.2	6.9	1.9
1982	W	256.7	256.7	0.0	0.0
1983	W	123.3	123.3	0.0	0.0
1984	W	248.4	248.4	0.0	0.0
1985	D	422.2	432.4	10.3	2.4
1986	W	324.3	323.4	-0.8	-0.2
1987	D	514.6	493.9	-20.7	-4.0
1988	C	428.2	427.8	-0.4	-0.1
1989	D	655.7	655.9	0.3	0.0
1990	C	601.2	569.3	-31.9	-5.3
1991	C	655.3	655.2	-0.1	0.0
Mean:		426.4	424.1	-2.3	-0.3
Median:		422.2	427.8	0.0	0.0
Min:		123.3	123.3	-31.9	-5.3
Max:		703.0	704.1	10.3	2.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Victoria Canal Salinity

March					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	309.9	310.1	0.3	0.1
1976	C	485.0	481.3	-3.8	-0.8
1977	C	683.1	683.5	0.4	0.1
1978	AN	370.3	370.3	0.0	0.0
1979	BN	298.0	297.9	0.0	0.0
1980	AN	232.2	232.2	0.0	0.0
1981	D	394.5	396.7	2.2	0.6
1982	W	304.6	304.6	0.0	0.0
1983	W	166.7	166.7	0.0	0.0
1984	W	301.9	301.9	0.0	0.0
1985	D	489.7	495.3	5.6	1.1
1986	W	213.7	213.7	0.0	0.0
1987	D	445.6	441.3	-4.3	-1.0
1988	C	423.2	423.2	0.0	0.0
1989	D	444.8	443.6	-1.2	-0.3
1990	C	479.5	470.6	-9.0	-1.9
1991	C	523.7	523.7	0.0	0.0
Mean:		386.3	385.7	-0.6	-0.1
Median:		394.5	396.7	0.0	0.0
Min:		166.7	166.7	-9.0	-1.9
Max:		683.1	683.5	5.6	1.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Victoria Canal Salinity

April					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	300.7	300.7	0.0	0.0
1976	C	433.0	432.4	-0.7	-0.2
1977	C	667.6	667.8	0.2	0.0
1978	AN	268.2	268.2	0.0	0.0
1979	BN	314.3	314.4	0.1	0.0
1980	AN	272.5	272.5	0.0	0.0
1981	D	404.8	404.7	-0.1	0.0
1982	W	176.3	176.3	0.0	0.0
1983	W	176.3	176.2	-0.1	-0.1
1984	W	352.7	352.7	0.0	0.0
1985	D	477.0	478.1	1.1	0.2
1986	W	242.8	242.8	0.0	0.0
1987	D	394.0	393.8	-0.1	0.0
1988	C	489.5	489.6	0.1	0.0
1989	D	304.6	303.7	-0.9	-0.3
1990	C	446.6	451.4	4.8	1.1
1991	C	412.2	412.2	0.0	0.0
Mean:		360.8	361.0	0.3	0.0
Median:		352.7	352.7	0.0	0.0
Min:		176.3	176.2	-0.9	-0.3
Max:		667.6	667.8	4.8	1.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Victoria Canal Salinity

May					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	315.4	315.4	0.0	0.0
1976	C	478.3	478.7	0.4	0.1
1977	C	625.6	625.7	0.1	0.0
1978	AN	239.0	239.0	0.0	0.0
1979	BN	307.0	307.0	0.0	0.0
1980	AN	301.0	301.1	0.0	0.0
1981	D	397.7	397.8	0.1	0.0
1982	W	198.4	198.4	0.0	0.0
1983	W	175.6	175.6	0.0	0.0
1984	W	379.6	379.6	0.0	0.0
1985	D	457.9	458.0	0.1	0.0
1986	W	282.3	282.3	0.0	0.0
1987	D	463.3	463.3	0.0	0.0
1988	C	518.9	519.4	0.4	0.1
1989	D	409.2	409.0	-0.2	0.0
1990	C	472.2	476.2	4.0	0.8
1991	C	424.0	424.3	0.3	0.1
Mean:		379.1	379.4	0.3	0.1
Median:		397.7	397.8	0.0	0.0
Min:		175.6	175.6	-0.2	0.0
Max:		625.6	625.7	4.0	0.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Victoria Canal Salinity

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	305.7	305.7	0.0	0.0
1976	C	448.6	458.1	9.4	2.1
1977	C	562.6	575.7	13.1	2.3
1978	AN	257.6	257.6	0.0	0.0
1979	BN	291.7	291.7	0.0	0.0
1980	AN	323.4	323.8	0.4	0.1
1981	D	322.4	328.5	6.1	1.9
1982	W	258.2	258.2	0.0	0.0
1983	W	135.1	135.1	0.0	0.0
1984	W	359.1	359.2	0.0	0.0
1985	D	364.3	364.3	0.0	0.0
1986	W	324.1	324.1	0.0	0.0
1987	D	378.9	394.6	15.7	4.1
1988	C	435.1	445.0	9.9	2.3
1989	D	293.9	293.8	0.0	0.0
1990	C	406.3	436.6	30.3	7.5
1991	C	371.1	385.4	14.3	3.9
Mean:		343.4	349.2	5.8	1.4
Median:		324.1	328.5	0.0	0.0
Min:		135.1	135.1	0.0	0.0
Max:		562.6	575.7	30.3	7.5
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Victoria Canal Salinity

#### July

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	250.7	249.6	-1.1	-0.4
1976	C	495.8	517.5	21.7	4.4
1977	C	405.6	421.5	15.9	3.9
1978	AN	245.1	244.8	-0.3	-0.1
1979	BN	259.4	257.6	-1.9	-0.7
1980	AN	284.1	284.9	0.8	0.3
1981	D	381.3	396.9	15.7	4.1
1982	W	270.0	269.4	-0.5	-0.2
1983	W	197.5	197.5	0.0	0.0
1984	W	270.5	268.8	-1.7	-0.6
1985	D	336.7	336.7	0.1	0.0
1986	W	278.2	275.6	-2.6	-0.9
1987	D	307.4	316.0	8.6	2.8
1988	C	392.2	402.3	10.0	2.5
1989	D	293.6	293.7	0.1	0.0
1990	C	427.6	457.6	30.0	7.0
1991	C	386.5	401.3	14.8	3.8
Mean:		322.5	328.9	6.4	1.5
Median:		293.6	293.7	0.1	0.0
Min:		197.5	197.5	-2.6	-0.9
Max:		495.8	517.5	30.0	7.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Victoria Canal Salinity

August					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	282.8	284.1	1.2	0.4
1976	C	367.2	406.0	38.7	10.5
1977	C	354.9	360.6	5.8	1.6
1978	AN	279.6	276.6	-3.0	-1.1
1979	BN	290.5	290.2	-0.3	-0.1
1980	AN	275.3	275.7	0.4	0.1
1981	D	466.2	508.4	42.1	9.0
1982	W	270.0	267.0	-3.0	-1.1
1983	W	211.7	211.7	0.0	0.0
1984	W	287.0	289.1	2.1	0.7
1985	D	436.1	436.2	0.1	0.0
1986	W	295.5	292.8	-2.7	-0.9
1987	D	384.6	385.8	1.2	0.3
1988	C	406.6	407.9	1.4	0.3
1989	D	443.0	434.4	-8.6	-1.9
1990	C	443.9	450.3	6.4	1.4
1991	C	433.2	431.8	-1.4	-0.3
Mean:		348.7	353.4	4.7	1.1
Median:		354.9	360.6	0.4	0.1
Min:		211.7	211.7	-8.6	-1.9
Max:		466.2	508.4	42.1	10.5
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					1

### Victoria Canal Salinity

#### September

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	378.9	380.6	1.8	0.5
1976	C	422.9	441.6	18.7	4.4
1977	C	401.7	409.5	7.8	1.9
1978	AN	370.9	369.6	-1.3	-0.4
1979	BN	377.9	378.3	0.4	0.1
1980	AN	362.3	351.7	-10.6	-2.9
1981	D	351.3	376.9	25.6	7.3
1982	W	345.6	346.1	0.5	0.1
1983	W	297.0	297.0	0.0	0.0
1984	W	433.7	434.4	0.8	0.2
1985	D	481.5	481.6	0.0	0.0
1986	W	375.3	373.2	-2.1	-0.6
1987	D	455.6	455.8	0.3	0.1
1988	C	423.8	424.5	0.7	0.2
1989	D	695.4	651.3	-44.2	-6.4
1990	C	422.6	420.5	-2.1	-0.5
1991	C	409.9	402.9	-7.0	-1.7
Mean:		412.1	411.5	-0.6	0.1
Median:		401.7	402.9	0.3	0.1
Min:		297.0	297.0	-44.2	-6.4
Max:		695.4	651.3	25.6	7.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



Long-term and Water Year Type Average Salinity at Stockton Intake under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	EC (umhos/cm)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	399.9	388.5	372.5	388.9	360.5	317.8	325.8	338.3	273.3	276.1	303.2	368.5
NEPA Modified Flow Alternative	398.7	388.7	371.7	386.5	358.3	317.4	326.1	339.0	278.6	281.6	307.5	367.5
Difference	-1.3	0.2	-0.8	-2.4	-2.1	-0.3	0.4	0.7	5.3	5.4	4.3	-1.0
Percent Difference <sup>3</sup>	-0.3	0.0	-0.2	-0.6	-0.6	-0.1	0.1	0.2	1.9	2.0	1.4	-0.3
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	290.5	318.1	266.9	295.5	246.2	232.3	233.8	249.8	235.8	210.7	234.9	322.3
NEPA Modified Flow Alternative	291.3	319.6	267.2	296.5	247.4	232.4	233.8	249.8	235.8	210.6	235.9	322.5
Difference	0.9	1.4	0.3	1.0	1.2	0.0	0.0	0.0	0.0	0.0	1.0	0.1
Percent Difference	0.3	0.5	0.1	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.4	0.0
<b>Above Normal</b>												
NEPA No Action Alternative	475.4	427.8	383.3	335.7	248.2	267.3	252.7	245.2	261.2	220.4	243.2	331.2
NEPA Modified Flow Alternative	476.5	427.3	385.4	336.1	248.0	267.2	252.7	245.3	261.7	221.0	243.7	322.3
Difference	1.1	-0.5	2.1	0.4	-0.2	-0.1	0.1	0.1	0.6	0.6	0.5	-8.9
Percent Difference	0.2	-0.1	0.5	0.1	-0.1	0.0	0.0	0.0	0.2	0.3	0.2	-2.7
<b>Below Normal</b>												
NEPA No Action Alternative	405.8	394.9	453.6	383.4	298.1	279.1	289.7	278.7	227.8	215.6	258.9	346.4
NEPA Modified Flow Alternative	405.1	394.6	453.3	384.2	298.0	279.3	289.7	278.7	227.8	215.7	260.8	347.4
Difference	-0.8	-0.3	-0.3	0.8	0.0	0.3	0.1	0.0	0.0	0.1	1.9	1.0
Percent Difference	-0.2	-0.1	-0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.7	0.3
<b>Dry</b>												
NEPA No Action Alternative	438.0	424.2	376.4	360.2	418.0	345.4	351.2	379.6	252.4	316.5	413.0	457.4
NEPA Modified Flow Alternative	433.5	423.1	374.0	355.7	418.0	345.5	351.2	380.2	257.1	322.7	419.3	452.5
Difference	-4.5	-1.1	-2.4	-4.5	0.0	0.0	-0.1	0.6	4.7	6.1	6.3	-4.9
Percent Difference	-1.0	-0.3	-0.6	-1.2	0.0	0.0	0.0	0.1	1.8	1.9	1.5	-1.1
<b>Critical</b>												
NEPA No Action Alternative	447.6	413.4	454.5	527.7	486.1	409.0	433.8	442.7	341.3	343.7	316.6	362.9
NEPA Modified Flow Alternative	445.7	413.8	452.6	521.8	477.8	407.8	435.1	444.7	355.4	357.1	324.5	366.8
Difference	-1.9	0.4	-1.9	-5.9	-8.4	-1.2	1.3	1.9	14.1	13.4	7.9	3.9
Percent Difference	-0.4	0.1	-0.4	-1.1	-1.7	-0.3	0.3	0.4	4.1	3.9	2.5	1.1

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

### Stockton Intake Salinity

October					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	150.8	150.8	0.0	0.0
1976	C	314.9	314.4	-0.6	-0.2
1977	C	529.2	531.0	1.8	0.3
1978	AN	504.6	508.1	3.5	0.7
1979	BN	405.8	405.0	-0.8	-0.2
1980	AN	446.3	445.0	-1.3	-0.3
1981	D	379.1	362.1	-17.0	-4.5
1982	W	390.3	394.8	4.4	1.1
1983	W	236.3	236.3	-0.1	0.0
1984	W	233.2	233.2	0.0	0.0
1985	D	451.9	451.0	-0.9	-0.2
1986	W	441.6	441.6	0.0	0.0
1987	D	433.8	432.4	-1.4	-0.3
1988	C	481.8	483.8	2.0	0.4
1989	D	487.1	488.4	1.4	0.3
1990	C	459.3	449.9	-9.5	-2.1
1991	C	452.7	449.5	-3.2	-0.7
Mean:		399.9	398.7	-1.3	-0.3
Median:		441.6	441.6	-0.1	0.0
Min:		150.8	150.8	-17.0	-4.5
Max:		529.2	531.0	4.4	1.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Stockton Intake Salinity

November					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	315.0	315.0	0.0	0.0
1976	C	314.0	313.2	-0.8	-0.3
1977	C	451.1	454.7	3.6	0.8
1978	AN	472.8	472.4	-0.4	-0.1
1979	BN	394.9	394.6	-0.3	-0.1
1980	AN	382.7	382.2	-0.5	-0.1
1981	D	375.8	362.4	-13.4	-3.6
1982	W	422.9	430.1	7.2	1.7
1983	W	255.3	255.3	0.0	0.0
1984	W	185.6	185.6	0.0	0.0
1985	D	448.2	457.1	8.9	2.0
1986	W	411.7	411.7	0.0	0.0
1987	D	403.0	402.5	-0.5	-0.1
1988	C	433.4	434.0	0.6	0.1
1989	D	469.9	470.4	0.5	0.1
1990	C	397.9	397.2	-0.6	-0.2
1991	C	470.7	469.8	-0.9	-0.2
Mean:		388.5	388.7	0.2	0.0
Median:		403.0	402.5	0.0	0.0
Min:		185.6	185.6	-13.4	-3.6
Max:		472.8	472.4	8.9	2.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Stockton Intake Salinity

December					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	406.6	406.5	-0.1	0.0
1976	C	484.3	473.3	-11.0	-2.3
1977	C	478.0	482.2	4.2	0.9
1978	AN	417.3	417.3	0.0	0.0
1979	BN	453.6	453.3	-0.3	-0.1
1980	AN	349.3	353.4	4.1	1.2
1981	D	402.6	397.6	-5.0	-1.2
1982	W	226.6	228.0	1.4	0.6
1983	W	161.9	161.9	0.0	0.0
1984	W	157.0	157.0	0.0	0.0
1985	D	249.3	252.8	3.6	1.4
1986	W	382.2	382.4	0.2	0.1
1987	D	425.5	416.5	-8.9	-2.1
1988	C	473.8	473.1	-0.8	-0.2
1989	D	428.2	428.9	0.6	0.1
1990	C	393.9	392.3	-1.6	-0.4
1991	C	442.3	442.0	-0.3	-0.1
Mean:		372.5	371.7	-0.8	-0.1
Median:		406.6	406.5	0.0	0.0
Min:		157.0	157.0	-11.0	-2.3
Max:		484.3	482.2	4.2	1.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Stockton Intake Salinity

#### January

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	475.0	482.4	7.4	1.6
1976	C	539.9	528.5	-11.4	-2.1
1977	C	596.1	598.0	1.9	0.3
1978	AN	417.4	417.0	-0.4	-0.1
1979	BN	383.4	384.2	0.8	0.2
1980	AN	254.0	255.2	1.2	0.5
1981	D	313.6	319.9	6.3	2.0
1982	W	315.5	315.5	0.0	0.0
1983	W	157.8	157.8	0.0	0.0
1984	W	156.6	156.6	0.0	0.0
1985	D	258.1	262.3	4.1	1.6
1986	W	372.4	370.0	-2.4	-0.6
1987	D	400.1	371.0	-29.2	-7.3
1988	C	557.5	555.7	-1.8	-0.3
1989	D	469.0	469.7	0.7	0.1
1990	C	465.4	447.5	-17.9	-3.8
1991	C	479.6	479.5	-0.1	0.0
Mean:		388.9	386.5	-2.4	-0.5
Median:		400.1	384.2	0.0	0.0
Min:		156.6	156.6	-29.2	-7.3
Max:		596.1	598.0	7.4	2.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Stockton Intake Salinity

#### February

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	393.6	399.8	6.2	1.6
1976	C	512.2	501.0	-11.2	-2.2
1977	C	569.1	569.8	0.6	0.1
1978	AN	327.6	327.5	-0.1	0.0
1979	BN	298.1	298.0	0.0	0.0
1980	AN	168.7	168.5	-0.2	-0.1
1981	D	287.1	293.1	6.0	2.1
1982	W	212.3	212.3	0.0	0.0
1983	W	141.8	141.8	0.0	0.0
1984	W	225.1	225.1	0.0	0.0
1985	D	379.7	391.5	11.8	3.1
1986	W	258.1	257.8	-0.3	-0.1
1987	D	439.8	421.6	-18.2	-4.1
1988	C	314.0	313.8	-0.2	-0.1
1989	D	565.3	565.7	0.4	0.1
1990	C	507.6	476.6	-31.0	-6.1
1991	C	527.7	527.6	0.0	0.0
Mean:		360.5	358.3	-2.1	-0.3
Median:		327.6	327.5	0.0	0.0
Min:		141.8	141.8	-31.0	-6.1
Max:		569.1	569.8	11.8	3.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Stockton Intake Salinity

March					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	277.8	277.9	0.1	0.0
1976	C	362.5	360.3	-2.3	-0.6
1977	C	556.8	557.0	0.2	0.0
1978	AN	325.7	325.7	-0.1	0.0
1979	BN	279.1	279.3	0.3	0.1
1980	AN	208.8	208.7	-0.1	0.0
1981	D	328.7	329.5	0.8	0.2
1982	W	256.6	256.6	0.0	0.0
1983	W	160.5	160.5	0.0	0.0
1984	W	270.1	270.1	0.0	0.0
1985	D	405.7	409.4	3.7	0.9
1986	W	196.7	196.7	0.0	0.0
1987	D	337.3	334.5	-2.8	-0.8
1988	C	356.8	356.9	0.1	0.0
1989	D	310.0	308.4	-1.6	-0.5
1990	C	361.6	357.8	-3.9	-1.1
1991	C	407.0	407.0	0.0	0.0
Mean:		317.8	317.4	-0.3	-0.1
Median:		325.7	325.7	0.0	0.0
Min:		160.5	160.5	-3.9	-1.1
Max:		556.8	557.0	3.7	0.9
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Stockton Intake Salinity

April					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	279.4	279.4	0.0	0.0
1976	C	394.1	393.8	-0.2	-0.1
1977	C	572.0	572.1	0.1	0.0
1978	AN	246.8	246.8	0.0	0.0
1979	BN	289.6	289.7	0.0	0.0
1980	AN	258.5	258.7	0.2	0.1
1981	D	356.0	356.1	0.1	0.0
1982	W	173.9	173.9	0.0	0.0
1983	W	174.9	174.9	0.0	0.0
1984	W	321.3	321.3	0.0	0.0
1985	D	412.1	412.6	0.5	0.1
1986	W	219.6	219.6	0.0	0.0
1987	D	358.3	358.1	-0.1	0.0
1988	C	426.9	427.2	0.3	0.1
1989	D	278.4	277.8	-0.6	-0.2
1990	C	394.2	400.4	6.2	1.6
1991	C	381.6	381.8	0.2	0.1
Mean:		325.7	326.1	0.4	0.1
Median:		321.3	321.3	0.0	0.0
Min:		173.9	173.9	-0.6	-0.2
Max:		572.0	572.1	6.2	1.6
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



### Stockton Intake Salinity

May					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	286.1	286.1	0.0	0.0
1976	C	427.3	429.0	1.6	0.4
1977	C	549.3	550.2	0.9	0.2
1978	AN	218.0	218.0	0.0	0.0
1979	BN	278.7	278.7	0.0	0.0
1980	AN	272.4	272.5	0.2	0.1
1981	D	359.4	360.5	1.1	0.3
1982	W	186.6	186.6	0.0	0.0
1983	W	172.4	172.4	0.0	0.0
1984	W	340.5	340.5	0.0	0.0
1985	D	392.9	392.8	0.0	0.0
1986	W	263.3	263.3	0.0	0.0
1987	D	420.9	422.2	1.3	0.3
1988	C	456.8	457.3	0.4	0.1
1989	D	345.2	345.1	-0.1	0.0
1990	C	414.4	419.6	5.2	1.3
1991	C	365.9	367.4	1.6	0.4
Mean:		338.2	339.0	0.7	0.2
Median:		345.2	345.1	0.0	0.0
Min:		172.4	172.4	-0.1	0.0
Max:		549.3	550.2	5.2	1.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Stockton Intake Salinity

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	252.1	252.1	0.0	0.0
1976	C	406.4	418.0	11.7	2.9
1977	C	400.0	410.7	10.7	2.7
1978	AN	240.5	240.5	0.0	0.0
1979	BN	227.8	227.8	0.0	0.0
1980	AN	281.8	282.9	1.1	0.4
1981	D	245.7	253.1	7.4	3.0
1982	W	240.4	240.4	0.0	0.0
1983	W	137.7	137.7	0.0	0.0
1984	W	260.8	260.9	0.0	0.0
1985	D	267.1	267.1	0.0	0.0
1986	W	288.0	288.0	0.0	0.0
1987	D	272.1	283.4	11.3	4.2
1988	C	315.1	321.5	6.3	2.0
1989	D	224.8	224.8	0.0	0.0
1990	C	306.9	335.3	28.4	9.3
1991	C	278.0	291.2	13.2	4.7
Mean:		273.3	278.6	5.3	1.7
Median:		267.1	267.1	0.0	0.0
Min:		137.7	137.7	0.0	0.0
Max:		406.4	418.0	28.4	9.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Stockton Intake Salinity

July					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	205.3	205.0	-0.2	-0.1
1976	C	428.3	458.3	30.0	7.0
1977	C	305.0	312.5	7.5	2.5
1978	AN	212.4	212.5	0.0	0.0
1979	BN	215.5	215.7	0.1	0.0
1980	AN	228.4	229.5	1.1	0.5
1981	D	386.8	407.5	20.6	5.3
1982	W	214.0	213.5	-0.5	-0.2
1983	W	192.2	192.2	0.0	0.0
1984	W	219.2	220.3	1.2	0.5
1985	D	323.3	323.4	0.1	0.0
1986	W	222.7	222.1	-0.6	-0.3
1987	D	278.3	281.9	3.7	1.3
1988	C	299.9	303.1	3.2	1.1
1989	D	277.8	277.9	0.2	0.1
1990	C	359.3	376.6	17.3	4.8
1991	C	325.9	334.9	9.0	2.8
Mean:		276.1	281.6	5.5	1.5
Median:		277.8	277.9	1.1	0.5
Min:		192.2	192.2	-0.6	-0.3
Max:		428.3	458.3	30.0	7.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Stockton Intake Salinity

August					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	253.9	256.4	2.6	1.0
1976	C	302.4	335.2	32.8	10.8
1977	C	291.6	295.8	4.2	1.4
1978	AN	238.8	239.5	0.8	0.3
1979	BN	258.9	260.8	1.9	0.7
1980	AN	247.6	247.9	0.2	0.1
1981	D	402.9	443.1	40.2	10.0
1982	W	224.8	225.4	0.6	0.3
1983	W	188.6	188.6	0.0	0.0
1984	W	265.0	267.3	2.4	0.9
1985	D	413.0	413.1	0.1	0.0
1986	W	242.1	241.5	-0.6	-0.2
1987	D	359.1	359.8	0.7	0.2
1988	C	315.3	315.4	0.1	0.0
1989	D	476.8	461.1	-15.7	-3.3
1990	C	335.3	338.8	3.5	1.0
1991	C	338.5	337.6	-0.9	-0.3
Mean:		303.2	307.5	4.3	1.3
Median:		291.6	295.8	0.7	0.3
Min:		188.6	188.6	-15.7	-3.3
Max:		476.8	461.1	40.2	10.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					2

### Stockton Intake Salinity

#### September

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		EC (umhos/cm)	EC (umhos/cm)		
1975	W	329.3	330.6	1.3	0.4
1976	C	430.5	444.9	14.4	3.3
1977	C	347.5	356.9	9.4	2.7
1978	AN	339.6	338.9	-0.7	-0.2
1979	BN	346.4	347.4	1.0	0.3
1980	AN	322.8	305.7	-17.1	-5.3
1981	D	313.1	334.1	21.0	6.7
1982	W	277.6	278.4	0.8	0.3
1983	W	261.2	261.2	0.0	0.0
1984	W	406.8	406.7	-0.1	0.0
1985	D	443.7	443.7	0.0	0.0
1986	W	336.7	335.3	-1.4	-0.4
1987	D	434.8	434.1	-0.7	-0.2
1988	C	352.2	352.4	0.2	0.1
1989	D	638.0	598.0	-40.0	-6.3
1990	C	348.4	347.4	-0.9	-0.3
1991	C	336.0	332.3	-3.7	-1.1
Mean:		368.5	367.5	-1.0	0.0
Median:		346.4	347.4	0.0	0.0
Min:		261.2	261.2	-40.0	-6.3
Max:		638.0	598.0	21.0	6.7
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

Long-term and Water Year Type Average Chlorides at the Old River at Hwy 4 (CCWD Los Vaqueros) under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	Chlorides (mg/L)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	143.4	125.8	116.1	109.5	80.4	49.8	40.3	42.2	45.3	58.3	82.8	123.9
NEPA Modified Flow Alternative	141.8	125.9	115.6	108.2	77.2	49.7	40.4	42.4	47.6	61.3	85.7	124.8
Difference	-1.5	0.1	-0.5	-1.3	-3.3	-0.1	0.0	0.1	2.2	3.0	2.9	0.8
Percent Difference <sup>3</sup>	-1.1	0.1	-0.4	-1.2	-4.0	-0.2	0.1	0.3	4.9	5.2	3.5	0.7
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	70.5	72.7	63.7	58.8	35.8	27.6	24.6	26.8	21.2	17.8	40.4	94.4
NEPA Modified Flow Alternative	71.2	73.4	63.8	59.4	36.2	27.6	24.6	26.8	21.2	18.1	41.3	94.5
Difference	0.7	0.7	0.1	0.6	0.4	0.0	0.0	0.0	0.0	0.2	0.8	0.1
Percent Difference	1.0	0.9	0.2	1.0	1.1	0.0	0.0	0.0	0.0	1.3	2.1	0.1
<b>Above Normal</b>												
NEPA No Action Alternative	171.1	130.7	116.1	76.4	41.4	32.5	33.4	31.6	24.7	21.5	47.2	110.3
NEPA Modified Flow Alternative	173.4	131.1	117.3	76.8	41.4	32.5	33.4	31.6	24.8	21.6	47.5	104.6
Difference	2.2	0.4	1.2	0.5	0.0	0.0	0.0	0.0	0.0	0.2	0.3	-5.7
Percent Difference	1.3	0.3	1.0	0.6	0.0	0.0	0.0	0.0	0.2	0.7	0.6	-5.2
<b>Below Normal</b>												
NEPA No Action Alternative	173.6	148.9	163.1	103.6	37.1	29.8	30.4	30.8	21.3	24.0	56.1	117.1
NEPA Modified Flow Alternative	172.6	148.6	162.9	104.1	37.2	29.8	30.4	30.8	21.3	24.2	57.3	117.5
Difference	-1.0	-0.3	-0.2	0.5	0.0	0.0	0.1	0.0	0.0	0.2	1.2	0.4
Percent Difference	-0.6	-0.2	-0.1	0.5	0.1	0.0	0.2	0.0	0.0	0.8	2.0	0.4
<b>Dry</b>												
NEPA No Action Alternative	166.7	149.8	116.3	95.4	102.0	47.7	35.5	43.3	38.4	83.0	145.7	171.1
NEPA Modified Flow Alternative	160.6	148.3	114.7	92.5	90.9	47.6	35.5	43.4	40.6	86.1	150.0	174.5
Difference	-6.2	-1.6	-1.6	-2.9	-11.1	0.0	0.0	0.0	2.2	3.1	4.3	3.4
Percent Difference	-3.7	-1.0	-1.4	-3.0	-10.9	0.0	0.0	0.0	5.8	3.8	2.9	2.0
<b>Critical</b>												
NEPA No Action Alternative	180.3	153.1	158.7	186.0	131.9	84.8	64.8	63.4	88.1	100.6	94.4	122.5
NEPA Modified Flow Alternative	178.7	153.9	157.9	183.1	129.4	84.4	64.9	63.8	93.9	108.1	99.7	124.8
Difference	-1.6	0.9	-0.8	-2.8	-2.6	-0.4	0.1	0.4	5.8	7.4	5.3	2.3
Percent Difference	-0.9	0.6	-0.5	-1.5	-1.9	-0.5	0.2	0.6	6.5	7.4	5.6	1.9

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

**Old River at Hwy 4 (CCWD Los Vaqueros) Chlorides**

<b>October</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	7.0	7.0	0.0	0.0
1976	C	80.3	79.8	-0.5	-0.6
1977	C	250.0	250.0	0.0	0.0
1978	AN	161.9	167.3	5.4	3.3
1979	BN	173.6	172.6	-1.0	-0.6
1980	AN	180.3	179.4	-1.0	-0.6
1981	D	147.4	122.7	-24.7	-16.8
1982	W	125.5	128.9	3.5	2.8
1983	W	35.7	35.6	-0.2	-0.6
1984	W	26.4	26.4	0.0	0.0
1985	D	179.7	179.0	-0.7	-0.4
1986	W	158.1	158.1	0.0	0.0
1987	D	159.5	159.4	-0.2	-0.1
1988	C	199.2	200.6	1.3	0.7
1989	D	180.3	181.2	0.9	0.5
1990	C	190.8	183.8	-7.0	-3.7
1991	C	181.2	179.4	-1.7	-0.9
Mean:		143.4	141.8	-1.5	-1.0
Median:		161.9	167.3	-0.2	-0.1
Min:		7.0	7.0	-24.7	-16.8
Max:		250.0	250.0	5.4	3.3
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

**Old River at Hwy 4 (CCWD Los Vaqueros) Chlorides**

<b>November</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	69.8	69.8	0.0	0.0
1976	C	83.5	82.2	-1.3	-1.6
1977	C	210.5	217.7	7.2	3.4
1978	AN	131.4	132.6	1.2	0.9
1979	BN	148.9	148.6	-0.3	-0.2
1980	AN	130.0	129.6	-0.4	-0.3
1981	D	128.5	116.9	-11.6	-9.0
1982	W	138.5	141.9	3.4	2.5
1983	W	17.1	17.1	0.0	0.0
1984	W	18.4	18.4	0.0	0.0
1985	D	151.0	155.0	4.0	2.6
1986	W	119.6	119.6	0.0	0.0
1987	D	134.7	135.6	0.9	0.7
1988	C	153.1	153.7	0.6	0.4
1989	D	185.1	185.5	0.4	0.2
1990	C	136.9	135.5	-1.4	-1.0
1991	C	181.3	180.6	-0.8	-0.4
Mean:		125.8	125.9	0.1	-0.1
Median:		134.7	135.5	0.0	0.0
Min:		17.1	17.1	-11.6	-9.0
Max:		210.5	217.7	7.2	3.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



**Old River at Hwy 4 (CCWD Los Vaqueros) Chlorides**

<b>December</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	136.0	136.0	-0.1	-0.1
1976	C	174.4	169.1	-5.3	-3.0
1977	C	178.9	181.7	2.8	1.6
1978	AN	134.2	134.4	0.1	0.1
1979	BN	163.1	162.9	-0.2	-0.1
1980	AN	98.0	100.1	2.1	2.1
1981	D	138.4	135.3	-3.2	-2.3
1982	W	29.1	29.6	0.5	1.7
1983	W	26.7	26.7	0.0	0.0
1984	W	8.6	8.6	0.0	0.0
1985	D	33.9	34.9	1.1	3.2
1986	W	118.2	118.3	0.1	0.1
1987	D	147.9	143.4	-4.5	-3.0
1988	C	164.6	164.3	-0.3	-0.2
1989	D	145.1	145.3	0.2	0.1
1990	C	126.6	125.7	-0.9	-0.7
1991	C	149.0	148.8	-0.2	-0.1
Mean:		116.0	115.6	-0.5	0.0
Median:		136.0	135.3	0.0	0.0
Min:		8.6	8.6	-5.3	-3.0
Max:		178.9	181.7	2.8	3.2
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Hwy 4 (CCWD Los Vaqueros) Chlorides**

<b>January</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	155.8	159.1	3.3	2.1
1976	C	194.1	189.1	-5.0	-2.6
1977	C	249.8	250.0	0.2	0.1
1978	AN	105.1	105.0	-0.1	-0.1
1979	BN	103.6	104.1	0.5	0.5
1980	AN	47.6	48.6	1.0	2.1
1981	D	73.4	77.0	3.7	5.0
1982	W	40.3	40.3	0.0	0.0
1983	W	13.0	13.0	0.0	0.0
1984	W	16.8	16.8	0.0	0.0
1985	D	34.7	36.0	1.3	3.7
1986	W	68.0	67.4	-0.6	-0.9
1987	D	119.4	102.5	-16.8	-14.1
1988	C	174.4	173.6	-0.8	-0.5
1989	D	154.2	154.6	0.3	0.2
1990	C	149.8	141.4	-8.5	-5.7
1991	C	161.6	161.5	-0.1	-0.1
Mean:		109.5	108.2	-1.3	-0.6
Median:		105.1	104.1	0.0	0.0
Min:		13.0	13.0	-16.8	-14.1
Max:		249.8	250.0	3.7	5.0
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

**Old River at Hwy 4 (CCWD Los Vaqueros) Chlorides**

<b>February</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	64.3	66.9	2.5	3.9
1976	C	160.1	154.5	-5.6	-3.5
1977	C	196.8	197.2	0.4	0.2
1978	AN	40.7	40.7	0.0	0.0
1979	BN	37.1	37.2	0.1	0.3
1980	AN	42.1	42.2	0.1	0.2
1981	D	38.4	39.3	0.9	2.3
1982	W	29.7	29.7	0.0	0.0
1983	W	7.0	7.0	0.0	0.0
1984	W	24.7	24.7	0.0	0.0
1985	D	64.6	67.5	2.9	4.5
1986	W	53.4	52.9	-0.5	-0.9
1987	D	122.5	74.0	-48.4	-39.5
1988	C	44.4	44.4	-0.1	-0.2
1989	D	182.6	182.8	0.1	0.1
1990	C	91.3	83.7	-7.6	-8.3
1991	C	166.9	166.9	0.0	0.0
Mean:		80.4	77.1	-3.2	-2.4
Median:		53.4	52.9	0.0	0.0
Min:		7.0	7.0	-48.4	-39.5
Max:		196.8	197.2	2.9	4.5
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

**Old River at Hwy 4 (CCWD Los Vaqueros) Chlorides**

<b>March</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	29.4	29.5	0.1	0.3
1976	C	55.9	55.3	-0.6	-1.1
1977	C	160.4	160.5	0.2	0.1
1978	AN	37.2	37.2	0.0	0.0
1979	BN	29.8	29.8	0.0	0.0
1980	AN	27.7	27.7	0.0	0.0
1981	D	32.8	32.8	0.0	0.0
1982	W	31.8	31.8	0.0	0.0
1983	W	12.5	12.5	0.0	0.0
1984	W	24.3	24.3	0.0	0.0
1985	D	60.8	61.9	1.1	1.8
1986	W	40.0	39.9	0.0	0.0
1987	D	48.2	47.4	-0.9	-1.9
1988	C	45.3	45.3	0.0	0.0
1989	D	48.8	48.5	-0.3	-0.6
1990	C	57.0	55.4	-1.6	-2.8
1991	C	105.3	105.3	0.0	0.0
Mean:		49.8	49.7	-0.1	-0.2
Median:		40.0	39.9	0.0	0.0
Min:		12.5	12.5	-1.6	-2.8
Max:		160.4	160.5	1.1	1.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Hwy 4 (CCWD Los Vaqueros) Chlorides**

April					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	28.6	28.6	0.0	0.0
1976	C	44.5	44.4	-0.1	-0.2
1977	C	135.5	135.6	0.1	0.1
1978	AN	39.2	39.2	0.0	0.0
1979	BN	30.4	30.4	0.0	0.0
1980	AN	27.6	27.6	0.0	0.0
1981	D	33.1	33.1	0.0	0.0
1982	W	14.1	14.1	0.0	0.0
1983	W	15.2	15.2	0.0	0.0
1984	W	28.8	28.8	0.0	0.0
1985	D	46.1	46.3	0.2	0.4
1986	W	36.2	36.1	0.0	0.0
1987	D	35.7	35.6	-0.1	-0.3
1988	C	47.9	47.9	0.1	0.2
1989	D	27.0	26.8	-0.2	-0.7
1990	C	51.1	51.7	0.6	1.2
1991	C	44.8	44.8	0.0	0.0
Mean:		40.3	40.4	0.0	0.0
Median:		35.7	35.6	0.0	0.0
Min:		14.1	14.1	-0.2	-0.7
Max:		135.5	135.6	0.6	1.2
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Hwy 4 (CCWD Los Vaqueros) Chlorides**

<b>May</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	30.0	30.0	0.0	0.0
1976	C	52.4	52.9	0.5	1.0
1977	C	119.2	119.4	0.2	0.2
1978	AN	30.9	30.9	0.0	0.0
1979	BN	30.8	30.8	0.0	0.0
1980	AN	32.2	32.2	0.0	0.0
1981	D	39.2	39.3	0.1	0.3
1982	W	20.3	20.3	0.0	0.0
1983	W	13.7	13.7	0.0	0.0
1984	W	38.9	38.9	0.0	0.0
1985	D	49.9	49.9	0.0	0.0
1986	W	30.9	30.9	0.0	0.0
1987	D	47.6	47.7	0.0	0.0
1988	C	54.0	54.2	0.2	0.4
1989	D	36.6	36.6	0.0	0.0
1990	C	49.3	50.2	0.9	1.8
1991	C	42.0	42.2	0.2	0.5
Mean:		42.2	42.4	0.1	0.2
Median:		38.9	38.9	0.0	0.0
Min:		13.7	13.7	0.0	0.0
Max:		119.2	119.4	0.9	1.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Old River at Hwy 4 (CCWD Los Vaqueros) Chlorides

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	19.5	19.5	0.0	0.0
1976	C	126.8	133.1	6.3	5.0
1977	C	117.8	122.2	4.4	3.7
1978	AN	20.6	20.6	0.0	0.0
1979	BN	21.3	21.3	0.0	0.0
1980	AN	28.8	28.9	0.1	0.3
1981	D	35.9	39.2	3.3	9.2
1982	W	16.3	16.3	0.0	0.0
1983	W	7.0	7.0	0.0	0.0
1984	W	33.8	33.8	0.0	0.0
1985	D	41.9	41.9	0.0	0.0
1986	W	29.3	29.3	0.0	0.0
1987	D	47.6	53.4	5.7	12.0
1988	C	75.1	77.0	1.9	2.5
1989	D	27.9	27.9	0.0	0.0
1990	C	68.5	78.9	10.4	15.2
1991	C	52.4	58.3	5.9	11.2
Mean:		45.3	47.6	2.2	3.5
Median:		33.8	33.8	0.0	0.0
Min:		7.0	7.0	0.0	0.0
Max:		126.8	133.1	10.4	15.2
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					3

**Old River at Hwy 4 (CCWD Los Vaqueros) Chlorides**

July					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	15.7	15.8	0.0	0.0
1976	C	153.4	169.9	16.4	10.7
1977	C	80.3	84.8	4.5	5.6
1978	AN	18.5	18.6	0.1	0.5
1979	BN	24.0	24.2	0.2	0.8
1980	AN	24.5	24.7	0.2	0.8
1981	D	121.5	131.7	10.2	8.4
1982	W	16.0	15.9	0.0	0.0
1983	W	7.0	7.0	0.0	0.0
1984	W	27.1	28.2	1.1	4.1
1985	D	86.8	86.9	0.0	0.0
1986	W	23.3	23.4	0.1	0.4
1987	D	62.7	64.9	2.1	3.3
1988	C	72.2	73.9	1.6	2.2
1989	D	61.0	61.1	0.1	0.2
1990	C	108.9	117.9	9.0	8.3
1991	C	88.4	93.8	5.5	6.2
Mean:		58.3	61.3	3.0	3.0
Median:		61.0	61.1	0.2	0.8
Min:		7.0	7.0	0.0	0.0
Max:		153.4	169.9	16.4	10.7
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					1



**Old River at Hwy 4 (CCWD Los Vaqueros) Chlorides**

<b>August</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	55.6	57.1	1.5	2.7
1976	C	89.5	111.4	22.0	24.6
1977	C	78.6	81.1	2.5	3.2
1978	AN	42.4	43.1	0.6	1.4
1979	BN	56.1	57.3	1.1	2.0
1980	AN	51.9	51.8	-0.1	-0.2
1981	D	147.4	171.3	23.8	16.1
1982	W	34.9	35.7	0.8	2.3
1983	W	9.3	9.3	0.0	0.0
1984	W	60.0	61.4	1.4	2.3
1985	D	147.0	147.0	0.1	0.1
1986	W	42.4	42.8	0.4	0.9
1987	D	117.8	118.3	0.5	0.4
1988	C	88.7	88.7	0.1	0.1
1989	D	170.7	163.4	-7.3	-4.3
1990	C	104.5	106.5	2.0	1.9
1991	C	110.8	110.8	0.0	0.0
Mean:		82.8	85.7	2.9	3.1
Median:		78.6	81.1	0.6	1.4
Min:		9.3	9.3	-7.3	-4.3
Max:		170.7	171.3	23.8	24.6
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					2

**Old River at Hwy 4 (CCWD Los Vaqueros) Chlorides**

<b>September</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	113.3	114.0	0.8	0.7
1976	C	162.4	171.2	8.7	5.4
1977	C	114.5	120.6	6.2	5.4
1978	AN	114.2	113.8	-0.4	-0.4
1979	BN	117.0	117.5	0.4	0.3
1980	AN	106.3	95.3	-11.0	-10.3
1981	D	94.5	108.0	13.5	14.3
1982	W	73.7	74.5	0.9	1.2
1983	W	19.9	19.9	0.0	0.0
1984	W	152.7	152.6	-0.1	-0.1
1985	D	174.8	174.8	0.0	0.0
1986	W	112.3	111.5	-0.8	-0.7
1987	D	165.1	165.0	-0.1	-0.1
1988	C	112.4	112.2	-0.1	-0.1
1989	D	250.0	250.0	0.0	0.0
1990	C	115.6	114.5	-1.1	-1.0
1991	C	107.8	105.5	-2.3	-2.1
Mean:		123.9	124.8	0.9	0.7
Median:		114.2	114.0	0.0	0.0
Min:		19.9	19.9	-11.0	-10.3
Max:		250.0	250.0	13.5	14.3
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					1

Long-term and Water Year Type Average Chlorides at CCWD Pumping Plant #1 (Rock Slough) under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	Chlorides (mg/L)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	169.5	149.6	134.0	127.6	98.6	66.9	58.5	45.0	47.8	70.9	102.2	142.6
NEPA Modified Flow Alternative	167.6	149.0	133.6	126.6	97.9	66.8	58.6	45.3	50.5	74.1	105.7	144.0
Difference	-2.0	-0.6	-0.4	-1.0	-0.7	-0.2	0.1	0.3	2.7	3.2	3.5	1.4
Percent Difference <sup>3</sup>	-1.2	-0.4	-0.3	-0.8	-0.7	-0.2	0.2	0.8	5.6	4.5	3.4	1.0
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	81.3	91.9	84.7	93.6	69.7	61.3	63.3	32.4	24.0	24.7	50.2	112.6
NEPA Modified Flow Alternative	82.3	92.7	84.8	94.0	70.5	61.4	63.3	32.4	24.0	25.1	51.4	112.8
Difference	1.0	0.7	0.1	0.4	0.8	0.0	0.0	0.0	0.0	0.4	1.2	0.2
Percent Difference	1.2	0.8	0.1	0.4	1.1	0.0	0.0	0.0	0.0	1.7	2.4	0.2
<b>Above Normal</b>												
NEPA No Action Alternative	209.7	145.4	129.7	115.0	75.1	45.9	41.1	33.2	25.9	26.6	57.6	126.7
NEPA Modified Flow Alternative	212.4	145.9	130.4	115.8	75.1	45.9	41.1	33.2	25.9	26.7	58.1	121.2
Difference	2.7	0.4	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.1	0.5	-5.5
Percent Difference	1.3	0.3	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.4	0.9	-4.3
<b>Below Normal</b>												
NEPA No Action Alternative	216.0	177.4	187.8	124.4	50.4	31.0	44.5	33.7	24.2	28.3	68.5	135.7
NEPA Modified Flow Alternative	214.7	177.0	187.3	124.7	50.5	31.0	44.7	33.8	24.2	28.6	70.0	136.3
Difference	-1.4	-0.4	-0.5	0.3	0.1	0.0	0.2	0.0	0.0	0.3	1.5	0.6
Percent Difference	-0.6	-0.2	-0.3	0.2	0.3	0.0	0.4	0.0	0.0	0.9	2.2	0.4
<b>Dry</b>												
NEPA No Action Alternative	202.4	180.8	134.8	106.8	105.6	63.1	46.8	44.2	35.0	99.7	176.5	191.6
NEPA Modified Flow Alternative	194.2	178.1	133.0	104.2	105.0	63.1	46.8	44.3	37.3	103.2	181.5	196.0
Difference	-8.2	-2.6	-1.8	-2.7	-0.5	0.0	0.0	0.1	2.3	3.4	5.0	4.4
Percent Difference	-4.1	-1.5	-1.3	-2.5	-0.5	0.0	0.0	0.3	6.7	3.5	2.8	2.3
<b>Critical</b>												
NEPA No Action Alternative	206.2	178.3	173.5	183.9	140.9	91.1	72.8	65.2	95.5	120.4	119.3	141.1
NEPA Modified Flow Alternative	204.3	177.6	173.3	181.9	138.2	90.6	73.1	66.3	102.7	127.9	125.5	144.4
Difference	-1.9	-0.7	-0.2	-2.0	-2.7	-0.5	0.3	1.1	7.2	7.5	6.3	3.3
Percent Difference	-0.9	-0.4	-0.1	-1.1	-1.9	-0.6	0.4	1.6	7.6	6.2	5.3	2.3

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

**CCWD Pumping Plant #1 (Rock Slough) Chlorides**

<b>October</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	4.2	4.2	0.0	0.0
1976	C	92.0	91.3	-0.7	-0.8
1977	C	250.0	250.0	0.0	0.0
1978	AN	206.9	213.7	6.7	3.2
1979	BN	216.0	214.7	-1.4	-0.6
1980	AN	212.4	211.1	-1.3	-0.6
1981	D	185.7	152.9	-32.9	-17.7
1982	W	138.1	143.5	5.3	3.8
1983	W	44.2	43.9	-0.2	-0.5
1984	W	26.0	26.0	0.0	0.0
1985	D	214.4	213.6	-0.8	-0.4
1986	W	193.8	193.8	0.0	0.0
1987	D	193.8	193.4	-0.4	-0.2
1988	C	240.8	242.4	1.6	0.7
1989	D	215.7	216.8	1.1	0.5
1990	C	224.7	216.3	-8.3	-3.7
1991	C	223.5	221.3	-2.2	-1.0
Mean:		169.5	167.6	-2.0	-1.0
Median:		206.9	211.1	-0.2	-0.2
Min:		4.2	4.2	-32.9	-17.7
Max:		250.0	250.0	6.7	3.8
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

**CCWD Pumping Plant #1 (Rock Slough) Chlorides**

<b>November</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	72.8	72.8	0.0	0.0
1976	C	91.0	89.5	-1.4	-1.5
1977	C	250.0	250.0	0.0	0.0
1978	AN	137.3	138.6	1.4	1.0
1979	BN	177.4	177.0	-0.4	-0.2
1980	AN	153.6	153.1	-0.5	-0.3
1981	D	152.4	136.5	-15.9	-10.4
1982	W	172.8	176.4	3.6	2.1
1983	W	38.3	38.3	0.0	0.0
1984	W	28.5	28.5	0.0	0.0
1985	D	193.5	197.2	3.7	1.9
1986	W	147.3	147.3	0.0	0.0
1987	D	157.2	158.3	1.1	0.7
1988	C	174.1	174.9	0.7	0.4
1989	D	219.9	220.4	0.5	0.2
1990	C	156.0	154.2	-1.8	-1.2
1991	C	220.3	219.5	-0.8	-0.4
Mean:		149.5	149.0	-0.6	-0.5
Median:		156.0	154.2	0.0	0.0
Min:		28.5	28.5	-15.9	-10.4
Max:		250.0	250.0	3.7	2.1
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

**CCWD Pumping Plant #1 (Rock Slough) Chlorides**

<b>December</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	147.6	147.5	-0.1	-0.1
1976	C	167.7	164.3	-3.4	-2.0
1977	C	209.6	213.1	3.5	1.7
1978	AN	147.3	147.5	0.2	0.1
1979	BN	187.8	187.3	-0.5	-0.3
1980	AN	112.0	113.3	1.3	1.2
1981	D	160.3	153.7	-6.6	-4.1
1982	W	28.9	29.4	0.5	1.7
1983	W	60.0	60.0	0.0	0.0
1984	W	53.4	53.4	0.0	0.0
1985	D	37.5	39.8	2.3	6.1
1986	W	133.8	133.9	0.0	0.0
1987	D	176.1	172.9	-3.1	-1.8
1988	C	177.7	177.9	0.2	0.1
1989	D	165.2	165.4	0.3	0.2
1990	C	145.4	144.3	-1.1	-0.8
1991	C	167.1	166.9	-0.2	-0.1
Mean:		134.0	133.6	-0.4	0.1
Median:		147.6	147.5	0.0	0.0
Min:		28.9	29.4	-6.6	-4.1
Max:		209.6	213.1	3.5	6.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**CCWD Pumping Plant #1 (Rock Slough) Chlorides**

January					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	151.3	154.0	2.6	1.7
1976	C	185.8	182.7	-3.1	-1.7
1977	C	250.0	250.0	0.0	0.0
1978	AN	159.7	159.7	0.0	0.0
1979	BN	124.4	124.7	0.3	0.2
1980	AN	70.3	71.8	1.6	2.3
1981	D	81.6	85.6	3.9	4.8
1982	W	69.9	69.9	0.0	0.0
1983	W	119.6	119.6	0.0	0.0
1984	W	27.9	27.9	0.0	0.0
1985	D	40.2	43.1	2.9	7.2
1986	W	99.4	98.6	-0.8	-0.8
1987	D	135.2	117.3	-17.9	-13.2
1988	C	148.0	147.5	-0.4	-0.3
1989	D	170.3	170.7	0.4	0.2
1990	C	144.4	137.9	-6.5	-4.5
1991	C	191.5	191.4	-0.1	-0.1
Mean:		127.6	126.6	-1.0	-0.2
Median:		135.2	124.7	0.0	0.0
Min:		27.9	27.9	-17.9	-13.2
Max:		250.0	250.0	3.9	7.2
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

**CCWD Pumping Plant #1 (Rock Slough) Chlorides**

February					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	106.5	110.9	4.4	4.1
1976	C	150.6	146.9	-3.7	-2.5
1977	C	205.3	206.4	1.1	0.5
1978	AN	64.1	64.0	0.0	0.0
1979	BN	50.4	50.5	0.1	0.2
1980	AN	86.2	86.2	0.1	0.1
1981	D	46.7	48.3	1.6	3.4
1982	W	40.0	40.0	0.0	0.0
1983	W	96.2	96.2	0.0	0.0
1984	W	28.1	28.1	0.0	0.0
1985	D	87.3	91.5	4.1	4.7
1986	W	77.6	77.0	-0.6	-0.8
1987	D	117.0	109.0	-8.0	-6.8
1988	C	47.3	47.2	-0.1	-0.2
1989	D	171.2	171.4	0.2	0.1
1990	C	124.9	114.1	-10.9	-8.7
1991	C	176.4	176.4	0.0	0.0
Mean:		98.6	97.9	-0.7	-0.3
Median:		87.3	91.5	0.0	0.0
Min:		28.1	28.1	-10.9	-8.7
Max:		205.3	206.4	4.4	4.7
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



### CCWD Pumping Plant #1 (Rock Slough) Chlorides

March					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	43.3	43.5	0.2	0.5
1976	C	75.1	74.5	-0.6	-0.8
1977	C	149.7	150.1	0.4	0.3
1978	AN	53.8	53.8	0.0	0.0
1979	BN	31.0	31.0	0.0	0.0
1980	AN	38.0	38.0	0.0	0.0
1981	D	29.8	29.6	-0.1	-0.3
1982	W	48.2	48.2	0.0	0.0
1983	W	111.0	111.0	0.0	0.0
1984	W	26.4	26.4	0.0	0.0
1985	D	80.1	81.7	1.6	2.0
1986	W	77.9	77.8	-0.1	-0.1
1987	D	65.7	64.5	-1.2	-1.8
1988	C	40.8	40.8	0.0	0.0
1989	D	76.9	76.5	-0.3	-0.4
1990	C	76.2	73.8	-2.4	-3.2
1991	C	113.9	113.9	0.0	0.0
Mean:		66.9	66.8	-0.1	-0.2
Median:		65.7	64.5	0.0	0.0
Min:		26.4	26.4	-2.4	-3.2
Max:		149.7	150.1	1.6	2.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**CCWD Pumping Plant #1 (Rock Slough) Chlorides**

<b>April</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	48.9	48.9	0.0	0.0
1976	C	66.6	66.5	-0.1	-0.2
1977	C	118.3	118.5	0.1	0.1
1978	AN	43.2	43.2	0.0	0.0
1979	BN	44.5	44.6	0.2	0.4
1980	AN	38.9	38.9	0.0	0.0
1981	D	44.3	44.2	-0.1	-0.2
1982	W	54.8	54.8	0.0	0.0
1983	W	111.5	111.5	0.0	0.0
1984	W	43.1	43.1	0.0	0.0
1985	D	60.1	60.3	0.3	0.5
1986	W	58.4	58.4	0.0	0.0
1987	D	55.7	55.6	-0.1	-0.2
1988	C	64.2	64.3	0.0	0.0
1989	D	27.0	26.8	-0.2	-0.7
1990	C	61.9	63.1	1.3	2.1
1991	C	53.0	53.0	0.0	0.0
Mean:		58.5	58.6	0.1	0.1
Median:		54.8	54.8	0.0	0.0
Min:		27.0	26.8	-0.2	-0.7
Max:		118.3	118.5	1.3	2.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**CCWD Pumping Plant #1 (Rock Slough) Chlorides**

<b>May</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	31.9	31.9	0.0	0.0
1976	C	67.5	69.0	1.4	2.1
1977	C	102.9	103.4	0.5	0.5
1978	AN	33.1	33.1	0.0	0.0
1979	BN	33.7	33.8	0.0	0.0
1980	AN	33.3	33.3	0.0	0.0
1981	D	42.7	42.9	0.2	0.5
1982	W	24.6	24.6	0.0	0.0
1983	W	27.6	27.6	0.0	0.0
1984	W	45.2	45.2	0.0	0.0
1985	D	55.9	56.0	0.1	0.2
1986	W	32.6	32.6	0.0	0.0
1987	D	48.5	48.8	0.3	0.6
1988	C	65.7	66.2	0.5	0.8
1989	D	29.7	29.7	0.0	0.0
1990	C	48.8	50.9	2.1	4.3
1991	C	41.1	41.8	0.7	1.7
Mean:		45.0	45.3	0.3	0.6
Median:		41.1	41.8	0.0	0.0
Min:		24.6	24.6	0.0	0.0
Max:		102.9	103.4	2.1	4.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### CCWD Pumping Plant #1 (Rock Slough) Chlorides

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	22.8	22.8	0.0	0.0
1976	C	152.5	160.6	8.1	5.3
1977	C	122.9	128.7	5.8	4.7
1978	AN	25.2	25.2	0.0	0.0
1979	BN	24.2	24.2	0.0	0.0
1980	AN	26.7	26.7	0.0	0.0
1981	D	35.2	39.2	4.0	11.4
1982	W	22.4	22.4	0.0	0.0
1983	W	19.3	19.3	0.0	0.0
1984	W	27.9	27.9	0.0	0.0
1985	D	35.1	35.1	0.0	0.0
1986	W	27.3	27.3	0.0	0.0
1987	D	41.0	46.3	5.3	12.9
1988	C	76.0	76.9	0.9	1.2
1989	D	28.6	28.6	0.0	0.0
1990	C	74.4	88.5	14.0	18.8
1991	C	51.4	58.7	7.3	14.2
Mean:		47.8	50.5	2.7	4.0
Median:		28.6	28.6	0.0	0.0
Min:		19.3	19.3	0.0	0.0
Max:		152.5	160.6	14.0	18.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					4

**CCWD Pumping Plant #1 (Rock Slough) Chlorides**

<b>July</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	23.8	23.9	0.1	0.4
1976	C	185.2	203.1	17.9	9.7
1977	C	88.1	92.5	4.4	5.0
1978	AN	25.3	25.4	0.1	0.4
1979	BN	28.3	28.6	0.2	0.7
1980	AN	27.9	28.0	0.1	0.4
1981	D	144.7	156.4	11.6	8.0
1982	W	22.1	22.1	0.0	0.0
1983	W	19.9	19.9	0.0	0.0
1984	W	30.9	32.7	1.7	5.5
1985	D	104.1	104.1	0.1	0.1
1986	W	26.6	26.8	0.2	0.8
1987	D	74.8	76.8	2.0	2.7
1988	C	80.9	81.5	0.5	0.6
1989	D	75.2	75.3	0.1	0.1
1990	C	136.3	145.4	9.2	6.8
1991	C	111.4	116.7	5.3	4.8
Mean:		70.9	74.1	3.1	2.7
Median:		74.8	75.3	0.2	0.7
Min:		19.9	19.9	0.0	0.0
Max:		185.2	203.1	17.9	9.7
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**CCWD Pumping Plant #1 (Rock Slough) Chlorides**

<b>August</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	67.5	69.5	2.0	3.0
1976	C	113.7	142.0	28.4	25.0
1977	C	98.6	101.6	3.0	3.0
1978	AN	51.2	52.3	1.1	2.1
1979	BN	68.5	70.0	1.5	2.2
1980	AN	64.0	63.9	-0.1	-0.2
1981	D	187.6	215.1	27.5	14.7
1982	W	40.6	41.9	1.3	3.2
1983	W	21.8	21.8	0.0	0.0
1984	W	72.4	74.2	1.8	2.5
1985	D	174.4	174.4	0.1	0.1
1986	W	48.8	49.6	0.8	1.6
1987	D	143.2	143.7	0.5	0.3
1988	C	113.2	112.9	-0.2	-0.2
1989	D	200.9	192.8	-8.2	-4.1
1990	C	130.1	131.3	1.3	1.0
1991	C	140.8	139.8	-1.0	-0.7
Mean:		102.2	105.7	3.5	3.1
Median:		98.6	101.6	1.1	1.6
Min:		21.8	21.8	-8.2	-4.1
Max:		200.9	215.1	28.4	25.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					2

**CCWD Pumping Plant #1 (Rock Slough) Chlorides**

<b>September</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	137.7	138.7	0.9	0.7
1976	C	150.2	163.2	13.0	8.7
1977	C	145.3	153.6	8.3	5.7
1978	AN	129.5	129.4	-0.1	-0.1
1979	BN	135.7	136.3	0.6	0.4
1980	AN	123.8	113.0	-10.8	-8.7
1981	D	117.6	135.0	17.4	14.8
1982	W	87.0	88.2	1.2	1.4
1983	W	24.3	24.3	0.0	0.0
1984	W	181.0	180.8	-0.2	-0.1
1985	D	206.5	206.5	0.0	0.0
1986	W	133.2	132.2	-0.9	-0.7
1987	D	192.3	192.3	0.0	0.0
1988	C	136.6	136.5	-0.1	-0.1
1989	D	250.0	250.0	0.0	0.0
1990	C	140.9	139.1	-1.8	-1.3
1991	C	132.5	129.5	-3.0	-2.3
Mean:		142.6	144.0	1.4	1.1
Median:		136.6	136.5	0.0	0.0
Min:		24.3	24.3	-10.8	-8.7
Max:		250.0	250.0	17.4	14.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					1

Long-term and Water Year Type Average Chlorides at the Old River at Rock Slough (CCWD Intake) under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	Chlorides (mg/L)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	164.9	140.1	133.6	116.1	80.3	43.0	32.4	34.2	40.4	65.9	98.8	149.5
NEPA Modified Flow Alternative	162.9	139.9	133.0	114.6	76.9	42.8	32.5	34.5	43.2	69.5	102.1	150.3
Difference	-1.9	-0.2	-0.7	-1.6	-3.5	-0.1	0.1	0.3	2.9	3.5	3.2	0.8
Percent Difference <sup>3</sup>	-1.2	-0.2	-0.5	-1.3	-4.3	-0.3	0.2	0.9	7.1	5.4	3.3	0.5
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	75.5	75.3	72.4	62.6	30.2	24.3	23.3	23.3	12.4	14.4	47.0	112.1
NEPA Modified Flow Alternative	76.2	76.1	72.5	63.4	30.7	24.4	23.3	23.3	12.4	15.0	48.3	112.2
Difference	0.7	0.8	0.1	0.8	0.5	0.0	0.0	0.0	0.0	0.6	1.2	0.1
Percent Difference	0.9	1.1	0.1	1.3	1.6	0.0	0.0	0.0	0.1	4.2	2.6	0.1
<b>Above Normal</b>												
NEPA No Action Alternative	206.5	135.9	133.6	66.8	34.2	25.6	27.6	26.0	15.5	18.4	55.2	137.4
NEPA Modified Flow Alternative	208.9	136.2	135.2	67.3	34.2	25.6	27.6	26.0	15.6	18.6	55.7	129.2
Difference	2.4	0.3	1.6	0.5	0.0	0.0	0.0	0.0	0.0	0.2	0.5	-8.2
Percent Difference	1.2	0.2	1.2	0.7	0.0	0.0	0.0	0.0	0.2	1.3	0.9	-6.0
<b>Below Normal</b>												
NEPA No Action Alternative	209.6	178.6	187.5	101.1	33.1	26.1	25.7	26.3	11.6	22.6	66.5	146.1
NEPA Modified Flow Alternative	208.4	178.3	187.3	101.8	33.1	26.2	25.7	26.3	11.6	23.1	68.0	146.3
Difference	-1.2	-0.3	-0.2	0.7	0.0	0.0	0.1	0.0	0.0	0.5	1.6	0.3
Percent Difference	-0.6	-0.2	-0.1	0.7	0.1	0.1	0.2	0.0	0.0	2.4	2.3	0.2
<b>Dry</b>												
NEPA No Action Alternative	197.8	170.1	128.9	102.9	108.9	41.1	26.3	32.4	29.0	102.1	177.4	193.6
NEPA Modified Flow Alternative	189.8	168.1	126.7	99.4	97.1	41.0	26.3	32.6	31.4	106.0	182.1	197.4
Difference	-7.9	-2.0	-2.2	-3.5	-11.7	-0.1	0.0	0.1	2.4	3.9	4.7	3.9
Percent Difference	-4.0	-1.2	-1.7	-3.4	-10.8	-0.2	-0.1	0.4	8.4	3.9	2.6	2.0
<b>Critical</b>												
NEPA No Action Alternative	202.4	175.0	187.8	202.9	135.5	73.5	49.8	51.3	93.1	116.3	111.7	157.2
NEPA Modified Flow Alternative	200.7	174.9	186.7	199.3	132.6	73.1	50.0	52.2	100.9	124.4	117.2	159.9
Difference	-1.7	-0.1	-1.1	-3.6	-2.9	-0.4	0.2	0.9	7.8	8.1	5.5	2.7
Percent Difference	-0.8	-0.1	-0.6	-1.8	-2.1	-0.5	0.4	1.7	8.4	6.9	4.9	1.7

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average



**Old River at Rock Slough (CCWD Intake) Chlorides**

<b>October</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	7.0	7.0	0.0	0.0
1976	C	85.9	85.3	-0.7	-0.8
1977	C	250.0	250.0	0.0	0.0
1978	AN	199.6	205.8	6.1	3.1
1979	BN	209.6	208.4	-1.2	-0.6
1980	AN	213.3	212.0	-1.3	-0.6
1981	D	175.8	143.9	-31.9	-18.1
1982	W	144.6	148.2	3.7	2.6
1983	W	33.6	33.4	-0.2	-0.6
1984	W	16.6	16.6	0.0	0.0
1985	D	209.4	208.5	-0.9	-0.4
1986	W	175.8	175.8	0.0	0.0
1987	D	184.2	184.1	0.0	0.0
1988	C	232.8	234.5	1.7	0.7
1989	D	221.6	222.8	1.1	0.5
1990	C	215.6	208.1	-7.4	-3.4
1991	C	227.6	225.5	-2.1	-0.9
Mean:		164.9	162.9	-1.9	-1.1
Median:		199.6	205.8	0.0	0.0
Min:		7.0	7.0	-31.9	-18.1
Max:		250.0	250.0	6.1	3.1
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

**Old River at Rock Slough (CCWD Intake) Chlorides**

<b>November</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	78.9	78.9	0.0	0.0
1976	C	97.0	95.1	-1.9	-2.0
1977	C	247.0	250.0	3.0	1.2
1978	AN	130.0	131.0	1.0	0.8
1979	BN	178.6	178.3	-0.3	-0.2
1980	AN	141.7	141.3	-0.4	-0.3
1981	D	152.6	137.7	-14.9	-9.8
1982	W	149.4	153.5	4.2	2.8
1983	W	10.9	10.9	0.0	0.0
1984	W	12.8	12.8	0.0	0.0
1985	D	164.4	169.6	5.2	3.2
1986	W	124.5	124.5	0.0	0.0
1987	D	153.5	154.8	1.4	0.9
1988	C	168.4	169.0	0.6	0.4
1989	D	209.9	210.3	0.4	0.2
1990	C	151.0	149.4	-1.6	-1.1
1991	C	211.6	210.8	-0.7	-0.3
Mean:		140.1	139.9	-0.2	-0.2
Median:		151.0	149.4	0.0	0.0
Min:		10.9	10.9	-14.9	-9.8
Max:		247.0	250.0	5.2	3.2
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Rock Slough (CCWD Intake) Chlorides**

<b>December</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	163.1	163.1	-0.1	-0.1
1976	C	210.6	204.1	-6.5	-3.1
1977	C	222.0	225.1	3.1	1.4
1978	AN	154.7	154.8	0.2	0.1
1979	BN	187.5	187.3	-0.2	-0.1
1980	AN	112.5	115.5	3.0	2.7
1981	D	154.6	152.2	-2.4	-1.6
1982	W	23.7	24.1	0.4	1.7
1983	W	29.2	29.2	0.0	0.0
1984	W	11.5	11.5	0.0	0.0
1985	D	29.3	30.4	1.1	3.8
1986	W	134.5	134.6	0.1	0.1
1987	D	169.6	161.8	-7.8	-4.6
1988	C	196.0	195.6	-0.5	-0.3
1989	D	162.0	162.3	0.3	0.2
1990	C	144.6	143.1	-1.5	-1.0
1991	C	165.5	165.3	-0.2	-0.1
Mean:		133.6	133.0	-0.6	-0.1
Median:		154.7	154.8	0.0	0.0
Min:		11.5	11.5	-7.8	-4.6
Max:		222.0	225.1	3.1	3.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Rock Slough (CCWD Intake) Chlorides**

<b>January</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	176.4	181.3	4.8	2.7
1976	C	217.5	211.6	-5.9	-2.7
1977	C	250.0	250.0	0.0	0.0
1978	AN	90.3	90.2	-0.1	-0.1
1979	BN	101.1	101.8	0.7	0.7
1980	AN	43.4	44.5	1.1	2.5
1981	D	70.9	75.7	4.8	6.8
1982	W	29.6	29.6	0.0	0.0
1983	W	19.6	19.6	0.0	0.0
1984	W	19.3	19.3	0.0	0.0
1985	D	34.1	35.7	1.7	5.0
1986	W	67.9	67.1	-0.8	-1.2
1987	D	128.8	107.9	-21.0	-16.3
1988	C	182.3	181.5	-0.8	-0.4
1989	D	177.8	178.1	0.4	0.2
1990	C	175.3	164.2	-11.1	-6.3
1991	C	189.4	189.4	-0.1	-0.1
Mean:		116.1	114.6	-1.5	-0.5
Median:		101.1	101.8	0.0	0.0
Min:		19.3	19.3	-21.0	-16.3
Max:		250.0	250.0	4.8	6.8
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

**Old River at Rock Slough (CCWD Intake) Chlorides**

<b>February</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	60.0	62.8	2.8	4.7
1976	C	167.0	160.8	-6.2	-3.7
1977	C	202.1	202.5	0.4	0.2
1978	AN	30.4	30.3	0.0	0.0
1979	BN	33.1	33.1	0.0	0.0
1980	AN	38.1	38.1	0.0	0.0
1981	D	34.4	35.2	0.7	2.0
1982	W	23.7	23.7	0.0	0.0
1983	W	9.2	9.2	0.0	0.0
1984	W	20.3	20.3	0.0	0.0
1985	D	70.0	73.5	3.5	5.0
1986	W	38.0	37.6	-0.4	-1.1
1987	D	127.9	76.5	-51.3	-40.1
1988	C	34.7	34.6	0.0	0.0
1989	D	203.1	203.4	0.3	0.1
1990	C	91.9	83.3	-8.5	-9.3
1991	C	181.5	181.5	0.0	0.0
Mean:		80.3	76.9	-3.5	-2.5
Median:		38.1	38.1	0.0	0.0
Min:		9.2	9.2	-51.3	-40.1
Max:		203.1	203.4	3.5	5.0
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

**Old River at Rock Slough (CCWD Intake) Chlorides**

<b>March</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	24.3	24.3	0.1	0.4
1976	C	48.4	47.8	-0.5	-1.0
1977	C	137.9	138.0	0.1	0.1
1978	AN	29.2	29.2	0.0	0.0
1979	BN	26.1	26.2	0.0	0.0
1980	AN	21.9	21.9	0.0	0.0
1981	D	25.4	25.3	-0.1	-0.4
1982	W	25.1	25.1	0.0	0.0
1983	W	14.4	14.4	0.0	0.0
1984	W	19.4	19.4	0.0	0.0
1985	D	55.9	56.9	1.0	1.8
1986	W	38.6	38.6	0.0	0.0
1987	D	41.6	40.8	-0.8	-1.9
1988	C	30.6	30.6	0.0	0.0
1989	D	41.3	40.9	-0.4	-1.0
1990	C	50.2	48.6	-1.6	-3.2
1991	C	100.5	100.5	0.0	0.0
Mean:		43.0	42.8	-0.1	-0.3
Median:		30.6	30.6	0.0	0.0
Min:		14.4	14.4	-1.6	-3.2
Max:		137.9	138.0	1.0	1.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Rock Slough (CCWD Intake) Chlorides**

<b>April</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	24.5	24.5	0.0	0.0
1976	C	34.1	34.0	0.0	0.0
1977	C	106.0	106.0	0.0	0.0
1978	AN	32.1	32.1	0.0	0.0
1979	BN	25.7	25.7	0.1	0.4
1980	AN	23.1	23.1	0.0	0.0
1981	D	24.2	24.2	0.0	0.0
1982	W	18.3	18.3	0.0	0.0
1983	W	17.8	17.8	0.0	0.0
1984	W	22.5	22.5	0.0	0.0
1985	D	34.0	34.1	0.2	0.6
1986	W	33.7	33.7	0.0	0.0
1987	D	26.1	26.1	-0.1	-0.4
1988	C	36.2	36.3	0.1	0.3
1989	D	20.8	20.6	-0.2	-1.0
1990	C	39.0	39.7	0.8	2.1
1991	C	33.7	33.7	0.0	0.0
Mean:		32.4	32.5	0.1	0.1
Median:		26.1	26.1	0.0	0.0
Min:		17.8	17.8	-0.2	-1.0
Max:		106.0	106.0	0.8	2.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Rock Slough (CCWD Intake) Chlorides**

<b>May</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	25.2	25.2	0.0	0.0
1976	C	46.9	48.0	1.0	2.1
1977	C	98.1	99.1	0.9	0.9
1978	AN	25.0	25.0	0.0	0.0
1979	BN	26.3	26.3	0.0	0.0
1980	AN	26.9	26.9	0.0	0.0
1981	D	31.6	31.8	0.2	0.6
1982	W	17.9	17.9	0.0	0.0
1983	W	15.8	15.8	0.0	0.0
1984	W	32.2	32.2	0.0	0.0
1985	D	38.6	38.6	0.0	0.0
1986	W	25.4	25.4	0.0	0.0
1987	D	34.8	35.1	0.3	0.9
1988	C	44.0	44.3	0.3	0.7
1989	D	24.7	24.6	0.0	0.0
1990	C	36.5	38.1	1.6	4.4
1991	C	30.8	31.4	0.6	2.0
Mean:		34.2	34.5	0.3	0.7
Median:		30.8	31.4	0.0	0.0
Min:		15.8	15.8	0.0	0.0
Max:		98.1	99.1	1.6	4.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



**Old River at Rock Slough (CCWD Intake) Chlorides**

<b>June</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	8.9	8.9	0.0	0.0
1976	C	155.6	163.9	8.3	5.3
1977	C	115.9	122.5	6.6	5.7
1978	AN	14.1	14.1	0.0	0.0
1979	BN	11.5	11.5	0.0	0.0
1980	AN	17.0	17.0	0.0	0.0
1981	D	29.8	34.0	4.2	14.1
1982	W	9.3	9.3	0.0	0.0
1983	W	7.0	7.0	0.0	0.0
1984	W	18.9	18.9	0.0	0.0
1985	D	28.7	28.7	0.0	0.0
1986	W	17.9	18.0	0.0	0.0
1987	D	35.0	40.6	5.5	15.7
1988	C	71.5	72.4	1.0	1.4
1989	D	22.3	22.3	0.0	0.0
1990	C	73.9	89.0	15.2	20.6
1991	C	48.5	56.3	7.8	16.1
Mean:		40.3	43.2	2.9	4.6
Median:		22.3	22.3	0.0	0.0
Min:		7.0	7.0	0.0	0.0
Max:		155.6	163.9	15.2	20.6
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					4

**Old River at Rock Slough (CCWD Intake) Chlorides**

<b>July</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	11.8	12.1	0.3	2.5
1976	C	176.0	198.1	22.1	12.6
1977	C	82.2	86.3	4.2	5.1
1978	AN	16.1	16.3	0.2	1.2
1979	BN	22.6	23.1	0.5	2.2
1980	AN	20.7	20.9	0.2	1.0
1981	D	153.7	167.4	13.7	8.9
1982	W	9.5	9.5	0.0	0.0
1983	W	7.0	7.0	0.0	0.0
1984	W	25.2	27.3	2.1	8.3
1985	D	107.0	107.0	0.1	0.1
1986	W	18.3	18.9	0.5	2.7
1987	D	74.6	76.5	1.9	2.5
1988	C	76.7	77.0	0.3	0.4
1989	D	72.9	73.0	0.1	0.1
1990	C	134.5	143.4	8.9	6.6
1991	C	112.2	117.1	4.9	4.4
Mean:		65.9	69.5	3.5	3.4
Median:		72.9	73.0	0.5	2.5
Min:		7.0	7.0	0.0	0.0
Max:		176.0	198.1	22.1	12.6
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					1

**Old River at Rock Slough (CCWD Intake) Chlorides**

<b>August</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	67.8	70.0	2.2	3.2
1976	C	101.8	127.8	26.0	25.5
1977	C	96.3	99.8	3.5	3.6
1978	AN	48.1	49.2	1.1	2.3
1979	BN	66.5	68.0	1.6	2.4
1980	AN	62.3	62.1	-0.2	-0.3
1981	D	168.0	196.7	28.7	17.1
1982	W	38.9	40.4	1.5	3.9
1983	W	7.1	7.1	0.0	0.0
1984	W	74.7	76.3	1.6	2.1
1985	D	177.5	177.6	0.1	0.1
1986	W	46.7	47.5	0.8	1.7
1987	D	144.5	145.0	0.5	0.3
1988	C	106.4	106.1	-0.3	-0.3
1989	D	219.7	209.0	-10.6	-4.8
1990	C	120.7	121.1	0.4	0.3
1991	C	133.2	131.2	-2.0	-1.5
Mean:		98.8	102.1	3.2	3.3
Median:		96.3	99.8	0.8	1.7
Min:		7.1	7.1	-10.6	-4.8
Max:		219.7	209.0	28.7	25.5
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					2

**Old River at Rock Slough (CCWD Intake) Chlorides**

<b>September</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	135.2	135.9	0.7	0.5
1976	C	209.9	219.4	9.5	4.5
1977	C	153.9	162.8	8.9	5.8
1978	AN	142.8	142.2	-0.6	-0.4
1979	BN	146.0	146.3	0.3	0.2
1980	AN	132.1	116.2	-15.9	-12.0
1981	D	110.6	125.9	15.3	13.8
1982	W	84.6	85.6	1.0	1.2
1983	W	12.8	12.8	0.0	0.0
1984	W	188.0	187.6	-0.3	-0.2
1985	D	209.5	209.5	0.0	0.0
1986	W	139.8	138.9	-1.0	-0.7
1987	D	204.0	204.2	0.2	0.1
1988	C	141.6	141.7	0.1	0.1
1989	D	250.0	250.0	0.0	0.0
1990	C	145.1	143.0	-2.1	-1.4
1991	C	135.4	132.4	-3.0	-2.2
Mean:		149.5	150.3	0.8	0.5
Median:		142.8	142.2	0.0	0.0
Min:		12.8	12.8	-15.9	-12.0
Max:		250.0	250.0	15.3	13.8
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					1

Long-term and Water Year Type Average Chlorides at West Canal at the mouth of CCF (SWP Banks) under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	Chlorides (mg/L)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	108.1	102.3	91.5	89.3	70.0	50.0	40.9	42.3	46.5	49.3	64.3	92.1
NEPA Modified Flow Alternative	107.3	102.4	91.3	88.5	67.7	49.8	40.9	42.4	47.5	51.5	66.9	92.1
Difference	-0.8	0.0	-0.3	-0.8	-2.3	-0.1	0.0	0.0	1.0	2.2	2.6	-0.1
Percent Difference <sup>3</sup>	-0.8	0.0	-0.3	-0.9	-3.3	-0.3	0.0	0.1	2.2	4.4	4.0	-0.1
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	56.8	61.0	49.5	49.7	31.8	23.8	22.5	26.2	27.6	21.6	33.4	72.5
NEPA Modified Flow Alternative	57.3	61.4	49.6	50.0	32.2	23.8	22.5	26.2	27.6	21.6	34.1	72.7
Difference	0.6	0.5	0.1	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.6	0.2
Percent Difference	1.0	0.8	0.2	0.6	1.2	0.1	0.0	0.0	0.0	-0.1	1.9	0.2
<b>Above Normal</b>												
NEPA No Action Alternative	123.0	114.2	91.7	69.3	27.8	32.0	27.5	27.5	29.3	24.8	38.4	79.3
NEPA Modified Flow Alternative	125.1	115.0	92.4	69.6	27.8	32.0	27.5	27.5	29.3	24.9	38.7	76.2
Difference	2.1	0.8	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.3	-3.1
Percent Difference	1.7	0.7	0.7	0.5	0.0	0.0	0.0	0.0	0.1	0.3	0.8	-3.9
<b>Below Normal</b>												
NEPA No Action Alternative	128.5	110.5	127.4	87.5	36.3	31.4	32.5	32.6	28.8	25.0	44.3	83.0
NEPA Modified Flow Alternative	127.7	110.3	127.3	87.7	36.4	31.4	32.5	32.6	28.8	24.9	45.0	83.5
Difference	-0.7	-0.2	-0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.7	0.5
Percent Difference	-0.6	-0.2	-0.1	0.3	0.2	0.0	0.1	0.0	0.0	-0.1	1.6	0.6
<b>Dry</b>												
NEPA No Action Alternative	123.5	119.1	96.4	80.2	86.8	52.9	39.8	43.5	44.2	62.0	107.1	132.8
NEPA Modified Flow Alternative	119.3	117.8	95.3	78.4	79.3	53.0	39.8	43.5	45.7	64.2	110.5	131.1
Difference	-4.2	-1.3	-1.0	-1.9	-7.5	0.1	0.0	0.0	1.5	2.2	3.4	-1.7
Percent Difference	-3.4	-1.1	-1.0	-2.3	-8.6	0.2	0.0	0.0	3.3	3.5	3.1	-1.3
<b>Critical</b>												
NEPA No Action Alternative	137.1	123.9	122.5	144.7	118.3	84.7	67.1	65.5	77.7	81.4	75.3	86.2
NEPA Modified Flow Alternative	136.3	124.4	122.0	143.0	116.2	84.2	67.2	65.7	79.9	87.1	80.4	88.3
Difference	-0.8	0.5	-0.5	-1.7	-2.2	-0.6	0.0	0.2	2.3	5.6	5.1	2.1
Percent Difference	-0.6	0.4	-0.4	-1.2	-1.8	-0.7	0.1	0.3	2.9	6.9	6.8	2.4

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

**West Canal at the mouth of CCF (SWP Banks) Chlorides**

<b>October</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	7.0	7.0	0.0	0.0
1976	C	68.7	68.3	-0.4	-0.6
1977	C	192.5	195.2	2.7	1.4
1978	AN	111.6	116.5	4.9	4.4
1979	BN	128.4	127.7	-0.7	-0.5
1980	AN	134.4	133.7	-0.6	-0.4
1981	D	110.7	94.3	-16.4	-14.8
1982	W	97.0	100.0	3.0	3.1
1983	W	32.0	31.9	-0.1	-0.3
1984	W	20.9	20.9	0.0	0.0
1985	D	136.5	136.1	-0.4	-0.3
1986	W	126.9	126.9	0.0	0.0
1987	D	123.0	122.7	-0.3	-0.2
1988	C	150.9	151.7	0.8	0.5
1989	D	123.9	124.2	0.4	0.3
1990	C	151.6	145.6	-6.0	-4.0
1991	C	121.9	120.8	-1.1	-0.9
Mean:		108.1	107.3	-0.8	-0.7
Median:		123.0	122.7	-0.1	-0.2
Min:		7.0	7.0	-16.4	-14.8
Max:		192.5	195.2	4.9	4.4
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Chlorides**

<b>November</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	56.2	56.2	0.0	0.0
1976	C	66.3	65.7	-0.7	-1.1
1977	C	164.5	169.0	4.5	2.7
1978	AN	118.5	120.7	2.1	1.8
1979	BN	110.5	110.3	-0.2	-0.2
1980	AN	109.9	109.4	-0.5	-0.5
1981	D	97.4	89.1	-8.3	-8.5
1982	W	114.4	116.8	2.3	2.0
1983	W	21.7	21.7	0.0	0.0
1984	W	8.3	8.3	0.0	0.0
1985	D	122.5	125.1	2.6	2.1
1986	W	104.2	104.2	0.0	0.0
1987	D	108.2	108.3	0.1	0.1
1988	C	129.2	129.7	0.5	0.4
1989	D	148.3	148.7	0.4	0.3
1990	C	114.7	113.5	-1.2	-1.0
1991	C	144.8	144.0	-0.8	-0.6
Mean:		102.3	102.4	0.0	-0.1
Median:		110.5	110.3	0.0	0.0
Min:		8.3	8.3	-8.3	-8.5
Max:		164.5	169.0	4.5	2.7
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Chlorides**

<b>December</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	101.6	101.5	0.0	0.0
1976	C	127.4	123.8	-3.7	-2.9
1977	C	130.3	132.4	2.1	1.6
1978	AN	105.3	105.5	0.1	0.1
1979	BN	127.4	127.3	-0.1	-0.1
1980	AN	78.1	79.3	1.2	1.5
1981	D	112.2	108.4	-3.7	-3.3
1982	W	33.5	34.0	0.5	1.5
1983	W	11.0	11.0	0.0	0.0
1984	W	7.6	7.6	0.0	0.0
1985	D	37.3	38.4	1.0	2.7
1986	W	93.9	93.9	0.0	0.0
1987	D	116.3	114.7	-1.5	-1.3
1988	C	122.7	122.6	-0.1	-0.1
1989	D	119.6	119.8	0.2	0.2
1990	C	101.5	101.2	-0.3	-0.3
1991	C	130.5	130.1	-0.3	-0.2
Mean:		91.5	91.3	-0.3	0.0
Median:		105.3	105.5	0.0	0.0
Min:		7.6	7.6	-3.7	-3.3
Max:		130.5	132.4	2.1	2.7
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



**West Canal at the mouth of CCF (SWP Banks) Chlorides**

<b>January</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	121.7	123.5	1.8	1.5
1976	C	153.7	150.1	-3.6	-2.3
1977	C	181.6	182.8	1.2	0.7
1978	AN	98.8	98.8	-0.1	-0.1
1979	BN	87.5	87.7	0.2	0.2
1980	AN	39.7	40.5	0.7	1.8
1981	D	68.6	70.8	2.1	3.1
1982	W	41.5	41.5	0.0	0.0
1983	W	8.6	8.6	0.0	0.0
1984	W	10.0	10.0	0.0	0.0
1985	D	34.0	34.9	0.9	2.6
1986	W	66.6	66.2	-0.4	-0.6
1987	D	100.5	89.8	-10.7	-10.6
1988	C	147.0	146.4	-0.6	-0.4
1989	D	117.8	118.1	0.3	0.3
1990	C	113.1	107.8	-5.3	-4.7
1991	C	127.9	127.7	-0.1	-0.1
Mean:		89.3	88.5	-0.8	-0.5
Median:		98.8	89.8	0.0	0.0
Min:		8.6	8.6	-10.7	-10.6
Max:		181.6	182.8	2.1	3.1
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Chlorides**

<b>February</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	65.6	67.8	2.2	3.4
1976	C	134.5	130.2	-4.3	-3.2
1977	C	174.1	174.7	0.6	0.3
1978	AN	43.2	43.2	0.0	0.0
1979	BN	36.3	36.4	0.1	0.3
1980	AN	12.3	12.4	0.0	0.0
1981	D	41.3	42.3	1.1	2.7
1982	W	27.0	27.0	0.0	0.0
1983	W	7.0	7.0	0.0	0.0
1984	W	23.2	23.2	0.0	0.0
1985	D	58.6	61.0	2.4	4.1
1986	W	36.3	36.0	-0.3	-0.8
1987	D	104.0	70.5	-33.5	-32.2
1988	C	53.7	53.7	-0.1	-0.2
1989	D	143.2	143.3	0.0	0.0
1990	C	91.2	84.3	-6.9	-7.6
1991	C	138.0	138.0	-0.1	-0.1
Mean:		70.0	67.7	-2.3	-2.0
Median:		53.7	53.7	0.0	0.0
Min:		7.0	7.0	-33.5	-32.2
Max:		174.1	174.7	2.4	4.1
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Chlorides**

<b>March</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	32.2	32.3	0.1	0.3
1976	C	62.1	61.3	-0.8	-1.3
1977	C	151.1	151.3	0.2	0.1
1978	AN	39.8	39.8	0.0	0.0
1979	BN	31.4	31.4	0.0	0.0
1980	AN	24.1	24.1	0.0	0.0
1981	D	39.3	39.5	0.2	0.5
1982	W	30.2	30.2	0.0	0.0
1983	W	10.4	10.4	0.0	0.0
1984	W	28.4	28.4	0.0	0.0
1985	D	63.0	64.3	1.3	2.1
1986	W	17.7	17.7	0.0	0.0
1987	D	54.3	53.5	-0.8	-1.5
1988	C	50.1	50.0	0.0	0.0
1989	D	54.9	54.6	-0.3	-0.5
1990	C	61.8	59.6	-2.2	-3.6
1991	C	98.5	98.5	0.0	0.0
Mean:		50.0	49.8	-0.1	-0.2
Median:		39.8	39.8	0.0	0.0
Min:		10.4	10.4	-2.2	-3.6
Max:		151.1	151.3	1.3	2.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Chlorides**

April					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	30.8	30.8	0.0	0.0
1976	C	47.6	47.5	-0.2	-0.4
1977	C	135.2	135.4	0.1	0.1
1978	AN	27.6	27.6	0.0	0.0
1979	BN	32.4	32.5	0.0	0.0
1980	AN	27.3	27.3	0.0	0.0
1981	D	38.6	38.5	0.0	0.0
1982	W	13.5	13.5	0.0	0.0
1983	W	13.3	13.3	0.0	0.0
1984	W	32.3	32.3	0.0	0.0
1985	D	52.6	52.9	0.3	0.6
1986	W	22.7	22.7	0.0	0.0
1987	D	39.7	39.6	-0.1	-0.3
1988	C	52.3	52.3	0.0	0.0
1989	D	28.2	28.0	-0.2	-0.7
1990	C	51.5	51.8	0.3	0.6
1991	C	48.9	48.9	0.0	0.0
Mean:		40.8	40.9	0.0	0.0
Median:		32.4	32.5	0.0	0.0
Min:		13.3	13.3	-0.2	-0.7
Max:		135.2	135.4	0.3	0.6
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Chlorides**

<b>May</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	32.7	32.7	0.0	0.0
1976	C	52.3	52.4	0.1	0.2
1977	C	120.6	120.6	0.1	0.1
1978	AN	23.4	23.4	0.0	0.0
1979	BN	32.6	32.6	0.0	0.0
1980	AN	31.6	31.6	0.0	0.0
1981	D	41.6	41.7	0.0	0.0
1982	W	16.6	16.6	0.0	0.0
1983	W	12.8	12.7	0.0	0.0
1984	W	39.6	39.6	0.0	0.0
1985	D	50.5	50.6	0.1	0.2
1986	W	29.3	29.3	0.0	0.0
1987	D	44.1	44.1	0.0	0.0
1988	C	55.8	55.9	0.1	0.2
1989	D	37.6	37.6	-0.1	-0.3
1990	C	52.3	52.9	0.6	1.1
1991	C	46.4	46.5	0.1	0.2
Mean:		42.3	42.4	0.1	0.1
Median:		39.6	39.6	0.0	0.0
Min:		12.8	12.7	-0.1	-0.3
Max:		120.6	120.6	0.6	1.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Chlorides**

<b>June</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	29.7	29.7	0.0	0.0
1976	C	92.5	96.3	3.8	4.1
1977	C	109.5	110.8	1.3	1.2
1978	AN	22.9	22.9	0.0	0.0
1979	BN	28.8	28.8	0.0	0.0
1980	AN	35.7	35.8	0.1	0.3
1981	D	39.6	41.6	2.0	5.0
1982	W	22.1	22.1	0.0	0.0
1983	W	7.0	7.0	0.0	0.0
1984	W	43.2	43.2	0.0	0.0
1985	D	50.6	50.6	0.0	0.0
1986	W	35.9	35.9	0.0	0.0
1987	D	52.7	56.6	3.9	7.4
1988	C	71.0	71.6	0.6	0.8
1989	D	34.0	33.9	0.0	0.0
1990	C	62.0	65.5	3.5	5.6
1991	C	53.2	55.5	2.2	4.1
Mean:		46.5	47.5	1.0	1.7
Median:		39.6	41.6	0.0	0.0
Min:		7.0	7.0	0.0	0.0
Max:		109.5	110.8	3.9	7.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Chlorides**

<b>July</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	20.4	20.2	-0.1	-0.5
1976	C	120.4	130.2	9.8	8.1
1977	C	79.3	83.8	4.6	5.8
1978	AN	21.3	21.3	0.0	0.0
1979	BN	25.0	24.9	0.0	0.0
1980	AN	28.3	28.5	0.2	0.7
1981	D	85.8	92.1	6.3	7.3
1982	W	22.4	22.3	-0.1	-0.4
1983	W	8.7	8.7	0.0	0.0
1984	W	28.8	29.1	0.3	1.0
1985	D	64.3	64.3	0.0	0.0
1986	W	27.7	27.5	-0.2	-0.7
1987	D	50.7	53.1	2.4	4.7
1988	C	64.4	66.3	1.9	2.9
1989	D	47.2	47.2	0.0	0.0
1990	C	79.5	86.7	7.2	9.1
1991	C	63.5	68.2	4.7	7.4
Mean:		49.3	51.4	2.2	2.7
Median:		47.2	47.2	0.2	0.7
Min:		8.7	8.7	-0.2	-0.7
Max:		120.4	130.2	9.8	9.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) Chlorides**

<b>August</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	42.7	43.8	1.1	2.6
1976	C	77.7	92.5	14.8	19.1
1977	C	62.2	65.1	2.9	4.7
1978	AN	35.3	35.8	0.6	1.7
1979	BN	44.3	45.0	0.7	1.6
1980	AN	41.5	41.5	0.0	0.0
1981	D	117.0	133.9	16.9	14.4
1982	W	30.8	31.3	0.4	1.3
1983	W	13.2	13.2	0.0	0.0
1984	W	45.2	46.3	1.1	2.4
1985	D	108.5	108.5	0.1	0.1
1986	W	35.2	35.7	0.5	1.4
1987	D	87.6	88.0	0.4	0.5
1988	C	66.5	67.5	0.9	1.4
1989	D	115.4	111.5	-3.9	-3.4
1990	C	88.0	92.1	4.0	4.5
1991	C	82.0	84.9	2.9	3.5
Mean:		64.3	66.9	2.6	3.3
Median:		62.2	65.1	0.7	1.6
Min:		13.2	13.2	-3.9	-3.4
Max:		117.0	133.9	16.9	19.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					2



**West Canal at the mouth of CCF (SWP Banks) Chlorides**

**September**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	85.8	86.5	0.7	0.8
1976	C	108.9	116.0	7.1	6.5
1977	C	75.0	78.8	3.7	4.9
1978	AN	81.1	80.8	-0.2	-0.2
1979	BN	83.0	83.5	0.5	0.6
1980	AN	77.6	71.6	-6.0	-7.7
1981	D	73.7	84.1	10.4	14.1
1982	W	60.3	60.9	0.6	1.0
1983	W	27.5	27.5	0.0	0.0
1984	W	109.2	109.2	0.1	0.1
1985	D	128.8	128.8	0.0	0.0
1986	W	79.9	79.3	-0.6	-0.8
1987	D	117.1	116.9	-0.2	-0.2
1988	C	78.6	78.6	0.0	0.0
1989	D	211.5	194.6	-16.8	-7.9
1990	C	86.3	86.3	0.0	0.0
1991	C	82.2	81.7	-0.5	-0.6
Mean:		92.1	92.1	-0.1	0.6
Median:		82.2	83.5	0.0	0.0
Min:		27.5	27.5	-16.8	-7.9
Max:		211.5	194.6	10.4	14.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					1

Long-term and Water Year Type Average Chlorides at the Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	Chlorides (mg/L)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	109.4	101.7	93.3	89.5	71.5	62.2	48.3	48.2	61.6	68.7	84.9	119.4
NEPA Modified Flow Alternative	108.7	101.7	93.1	89.0	69.0	62.2	48.3	48.3	63.2	70.3	86.4	119.3
Difference	-0.7	0.0	-0.2	-0.5	-2.5	0.0	0.0	0.1	1.6	1.6	1.5	-0.1
Percent Difference <sup>3</sup>	-0.7	0.0	-0.2	-0.5	-3.5	0.0	0.1	0.1	2.6	2.3	1.7	-0.1
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	55.1	64.4	56.9	53.4	25.7	26.7	25.0	29.5	38.9	43.6	62.2	97.4
NEPA Modified Flow Alternative	55.6	64.8	57.0	53.6	25.9	26.7	25.0	29.5	38.9	43.7	62.6	97.5
Difference	0.5	0.4	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.5	0.1
Percent Difference	0.9	0.7	0.1	0.4	0.6	0.0	0.0	0.0	0.0	0.2	0.8	0.1
<b>Above Normal</b>												
NEPA No Action Alternative	134.5	113.7	97.8	50.1	22.8	29.6	25.9	28.5	33.3	43.6	61.6	101.8
NEPA Modified Flow Alternative	135.8	114.0	98.2	50.1	22.8	29.6	25.9	28.5	33.3	43.7	61.9	99.4
Difference	1.3	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	-2.3
Percent Difference	1.0	0.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	-2.3
<b>Below Normal</b>												
NEPA No Action Alternative	120.7	110.3	118.9	69.7	26.2	31.7	34.9	36.9	54.8	52.2	70.7	118.1
NEPA Modified Flow Alternative	120.0	110.1	118.8	69.5	26.1	31.7	34.9	36.8	54.8	51.3	70.4	117.9
Difference	-0.6	-0.2	-0.1	-0.2	0.0	0.0	0.0	0.0	0.0	-0.9	-0.2	-0.2
Percent Difference	-0.5	-0.2	-0.1	-0.3	-0.1	0.0	0.1	-0.1	0.0	-1.7	-0.3	-0.1
<b>Dry</b>												
NEPA No Action Alternative	125.3	117.7	97.1	93.7	99.3	72.7	51.7	54.3	69.0	82.0	116.4	155.4
NEPA Modified Flow Alternative	121.9	116.7	96.5	93.0	90.4	72.8	51.7	54.3	70.6	83.8	118.8	154.7
Difference	-3.4	-1.0	-0.5	-0.7	-8.9	0.1	0.0	0.0	1.7	1.8	2.4	-0.7
Percent Difference	-2.7	-0.9	-0.6	-0.7	-8.9	0.1	0.0	0.0	2.4	2.2	2.0	-0.5
<b>Critical</b>												
NEPA No Action Alternative	138.7	119.6	119.7	142.0	123.5	108.6	80.5	72.3	91.1	96.4	94.7	120.0
NEPA Modified Flow Alternative	138.0	120.0	119.3	140.7	122.0	108.4	80.7	72.5	95.3	100.4	97.2	121.1
Difference	-0.7	0.4	-0.4	-1.4	-1.5	-0.1	0.1	0.2	4.2	4.1	2.5	1.1
Percent Difference	-0.5	0.3	-0.3	-1.0	-1.2	-0.1	0.1	0.3	4.6	4.2	2.6	0.9

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

### Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Chlorides

October					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	7.0	7.0	0.0	0.0
1976	C	71.8	71.5	-0.3	-0.4
1977	C	182.7	185.1	2.4	1.3
1978	AN	135.0	138.1	3.2	2.4
1979	BN	120.7	120.0	-0.6	-0.5
1980	AN	134.0	133.4	-0.6	-0.4
1981	D	104.7	91.0	-13.6	-13.0
1982	W	105.9	108.3	2.4	2.3
1983	W	17.8	17.8	0.0	0.0
1984	W	16.3	16.3	0.0	0.0
1985	D	135.7	135.3	-0.4	-0.3
1986	W	128.5	128.5	0.0	0.0
1987	D	121.9	121.7	-0.2	-0.2
1988	C	152.3	153.1	0.8	0.5
1989	D	138.9	139.5	0.5	0.4
1990	C	149.7	144.8	-4.9	-3.3
1991	C	136.8	135.7	-1.2	-0.9
Mean:		109.4	108.7	-0.7	-0.7
Median:		128.5	128.5	0.0	0.0
Min:		7.0	7.0	-13.6	-13.0
Max:		182.7	185.1	3.2	2.4
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Chlorides**

<b>November</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	64.2	64.2	0.0	0.0
1976	C	71.3	70.7	-0.6	-0.8
1977	C	147.5	151.2	3.7	2.5
1978	AN	120.8	121.7	0.9	0.7
1979	BN	110.3	110.1	-0.2	-0.2
1980	AN	106.6	106.3	-0.3	-0.3
1981	D	98.3	91.2	-7.0	-7.1
1982	W	115.6	117.7	2.1	1.8
1983	W	25.2	25.2	0.0	0.0
1984	W	7.0	7.0	0.0	0.0
1985	D	120.6	123.0	2.4	2.0
1986	W	110.0	110.0	0.0	0.0
1987	D	107.2	107.5	0.3	0.3
1988	C	126.1	126.5	0.4	0.3
1989	D	144.6	144.9	0.3	0.2
1990	C	112.3	111.4	-0.9	-0.8
1991	C	140.9	140.3	-0.6	-0.4
Mean:		101.7	101.7	0.0	-0.1
Median:		110.3	110.1	0.0	0.0
Min:		7.0	7.0	-7.0	-7.1
Max:		147.5	151.2	3.7	2.5
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Chlorides**

<b>December</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	103.8	103.8	0.0	0.0
1976	C	122.7	120.0	-2.7	-2.2
1977	C	119.9	121.0	1.2	1.0
1978	AN	110.5	110.5	0.1	0.1
1979	BN	118.9	118.8	-0.1	-0.1
1980	AN	85.1	85.9	0.8	0.9
1981	D	109.2	107.0	-2.2	-2.0
1982	W	53.3	53.6	0.3	0.6
1983	W	9.0	9.0	0.0	0.0
1984	W	12.2	12.2	0.0	0.0
1985	D	50.4	51.1	0.7	1.4
1986	W	106.3	106.3	0.0	0.0
1987	D	112.8	112.0	-0.8	-0.7
1988	C	125.4	125.3	-0.1	-0.1
1989	D	115.9	116.0	0.1	0.1
1990	C	109.0	108.8	-0.2	-0.2
1991	C	121.7	121.5	-0.1	-0.1
Mean:		93.3	93.1	-0.2	-0.1
Median:		109.2	108.8	0.0	0.0
Min:		9.0	9.0	-2.7	-2.2
Max:		125.4	125.3	1.2	1.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Chlorides**

<b>January</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	120.6	122.0	1.4	1.2
1976	C	144.0	141.3	-2.7	-1.9
1977	C	170.0	170.6	0.6	0.4
1978	AN	81.2	81.2	0.0	0.0
1979	BN	69.6	69.5	-0.2	-0.3
1980	AN	19.1	19.1	0.0	0.0
1981	D	87.8	88.8	1.0	1.1
1982	W	37.9	37.9	0.0	0.0
1983	W	25.1	25.1	0.0	0.0
1984	W	10.6	10.6	0.0	0.0
1985	D	50.2	50.9	0.7	1.4
1986	W	72.8	72.5	-0.3	-0.4
1987	D	115.0	110.6	-4.4	-3.8
1988	C	143.1	142.7	-0.5	-0.3
1989	D	121.6	121.8	0.2	0.2
1990	C	119.4	115.1	-4.2	-3.5
1991	C	133.6	133.6	0.0	0.0
Mean:		89.5	89.0	-0.5	-0.3
Median:		87.8	88.8	0.0	0.0
Min:		10.6	10.6	-4.4	-3.8
Max:		170.0	170.6	1.4	1.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Chlorides**

<b>February</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	50.6	51.5	0.8	1.6
1976	C	139.0	136.6	-2.3	-1.7
1977	C	168.6	168.8	0.3	0.2
1978	AN	34.1	34.1	-0.1	-0.3
1979	BN	26.2	26.1	0.0	0.0
1980	AN	11.5	11.6	0.0	0.0
1981	D	54.5	55.2	0.6	1.1
1982	W	16.9	16.9	0.0	0.0
1983	W	11.1	11.1	0.0	0.0
1984	W	23.4	23.4	0.0	0.0
1985	D	70.6	72.2	1.6	2.3
1986	W	26.4	26.4	0.0	0.0
1987	D	120.4	82.5	-37.9	-31.5
1988	C	61.5	61.5	0.0	0.0
1989	D	151.5	151.6	0.1	0.1
1990	C	93.6	88.3	-5.4	-5.8
1991	C	154.6	154.6	0.0	0.0
Mean:		71.4	69.0	-2.5	-2.0
Median:		54.5	55.2	0.0	0.0
Min:		11.1	11.1	-37.9	-31.5
Max:		168.6	168.8	1.6	2.3
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Chlorides**

<b>March</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	32.3	32.3	0.0	0.0
1976	C	81.8	81.4	-0.4	-0.5
1977	C	178.7	178.8	0.1	0.1
1978	AN	38.1	38.1	0.0	0.0
1979	BN	31.7	31.7	0.0	0.0
1980	AN	21.1	21.1	0.0	0.0
1981	D	56.2	56.2	0.1	0.2
1982	W	26.1	26.1	0.0	0.0
1983	W	19.1	19.1	0.0	0.0
1984	W	39.1	39.1	0.0	0.0
1985	D	76.1	76.8	0.7	0.9
1986	W	16.8	16.8	0.0	0.0
1987	D	85.1	84.7	-0.3	-0.4
1988	C	96.8	96.9	0.0	0.0
1989	D	73.7	73.5	-0.2	-0.3
1990	C	82.5	82.0	-0.4	-0.5
1991	C	102.9	102.9	0.0	0.0
Mean:		62.2	62.2	0.0	0.0
Median:		56.2	56.2	0.0	0.0
Min:		16.8	16.8	-0.4	-0.5
Max:		178.7	178.8	0.7	0.9
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Chlorides**

<b>April</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	33.2	33.2	0.0	0.0
1976	C	63.9	63.8	-0.1	-0.2
1977	C	139.8	139.8	0.0	0.0
1978	AN	22.2	22.2	0.0	0.0
1979	BN	34.9	34.9	0.0	0.0
1980	AN	29.6	29.6	0.0	0.0
1981	D	47.0	47.0	0.0	0.0
1982	W	12.4	12.4	0.0	0.0
1983	W	15.9	15.9	0.0	0.0
1984	W	40.6	40.6	0.0	0.0
1985	D	64.7	64.8	0.1	0.2
1986	W	22.6	22.7	0.0	0.0
1987	D	54.2	54.1	0.0	0.0
1988	C	68.2	68.2	0.0	0.0
1989	D	41.0	40.8	-0.1	-0.2
1990	C	71.7	72.3	0.6	0.8
1991	C	59.2	59.2	0.0	0.0
Mean:		48.3	48.3	0.0	0.0
Median:		41.0	40.8	0.0	0.0
Min:		12.4	12.4	-0.1	-0.2
Max:		139.8	139.8	0.6	0.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Chlorides**

<b>May</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	37.4	37.4	0.0	0.0
1976	C	61.5	61.6	0.2	0.3
1977	C	119.4	119.5	0.0	0.0
1978	AN	21.5	21.5	0.0	0.0
1979	BN	36.9	36.8	0.0	0.0
1980	AN	35.4	35.4	0.0	0.0
1981	D	49.2	49.2	0.0	0.0
1982	W	17.5	17.5	0.0	0.0
1983	W	14.0	14.0	0.0	0.0
1984	W	46.8	46.8	0.0	0.0
1985	D	57.0	57.0	0.0	0.0
1986	W	31.7	31.7	0.0	0.0
1987	D	60.2	60.2	0.0	0.0
1988	C	64.4	64.5	0.1	0.2
1989	D	50.8	50.8	0.0	0.0
1990	C	61.2	61.8	0.6	1.0
1991	C	54.9	55.0	0.1	0.2
Mean:		48.2	48.3	0.1	0.1
Median:		49.2	49.2	0.0	0.0
Min:		14.0	14.0	0.0	0.0
Max:		119.4	119.5	0.6	1.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Chlorides**

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	46.0	46.0	0.0	0.0
1976	C	106.8	110.0	3.1	2.9
1977	C	114.4	117.2	2.8	2.4
1978	AN	22.7	22.6	-0.1	-0.4
1979	BN	54.8	54.8	0.0	0.0
1980	AN	43.9	43.9	0.0	0.0
1981	D	61.9	63.7	1.7	2.7
1982	W	29.3	29.3	0.0	0.0
1983	W	7.0	7.0	0.0	0.0
1984	W	67.6	67.6	0.0	0.0
1985	D	72.0	72.0	0.0	0.0
1986	W	44.8	44.8	0.0	0.0
1987	D	79.1	84.1	5.0	6.3
1988	C	85.6	88.1	2.5	2.9
1989	D	62.8	62.8	0.0	0.0
1990	C	78.8	87.0	8.2	10.4
1991	C	69.9	74.4	4.4	6.3
Mean:		61.6	63.2	1.6	2.0
Median:		62.8	63.7	0.0	0.0
Min:		7.0	7.0	-0.1	-0.4
Max:		114.4	117.2	8.2	10.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					1

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Chlorides**

<b>July</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	45.1	45.0	-0.1	-0.2
1976	C	122.3	128.9	6.6	5.4
1977	C	87.0	90.5	3.6	4.1
1978	AN	43.7	43.7	0.0	0.0
1979	BN	52.2	51.3	-0.9	-1.7
1980	AN	43.5	43.6	0.1	0.2
1981	D	97.8	103.2	5.4	5.5
1982	W	44.6	44.6	-0.1	-0.2
1983	W	10.5	10.5	0.0	0.0
1984	W	57.4	58.0	0.6	1.0
1985	D	79.1	79.1	0.0	0.0
1986	W	60.5	60.6	0.1	0.2
1987	D	79.4	81.1	1.7	2.1
1988	C	84.3	86.0	1.8	2.1
1989	D	71.8	71.8	0.0	0.0
1990	C	100.2	105.6	5.4	5.4
1991	C	88.0	91.0	3.0	3.4
Mean:		68.7	70.3	1.6	1.6
Median:		71.8	71.8	0.1	0.2
Min:		10.5	10.5	-0.9	-1.7
Max:		122.3	128.9	6.6	5.5
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Chlorides**

<b>August</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	67.0	67.8	0.8	1.2
1976	C	94.5	103.9	9.4	9.9
1977	C	80.6	82.5	1.9	2.4
1978	AN	60.4	61.0	0.6	1.0
1979	BN	70.7	70.4	-0.2	-0.3
1980	AN	62.8	62.8	0.0	0.0
1981	D	117.4	130.5	13.1	11.2
1982	W	60.5	61.0	0.5	0.8
1983	W	48.6	48.6	0.0	0.0
1984	W	72.3	73.1	0.8	1.1
1985	D	112.5	112.6	0.0	0.0
1986	W	62.3	62.6	0.3	0.5
1987	D	105.7	106.0	0.3	0.3
1988	C	95.7	95.9	0.2	0.2
1989	D	129.8	125.9	-3.9	-3.0
1990	C	104.5	105.6	1.1	1.1
1991	C	98.3	98.2	-0.1	-0.1
Mean:		84.9	86.4	1.5	1.5
Median:		80.6	82.5	0.3	0.5
Min:		48.6	48.6	-3.9	-3.0
Max:		129.8	130.5	13.1	11.2
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					1

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) Chlorides**

<b>September</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Chlorides (mg/L)</b>	<b>Chlorides (mg/L)</b>		
1975	W	109.3	109.7	0.4	0.4
1976	C	146.2	151.0	4.8	3.3
1977	C	115.1	118.2	3.1	2.7
1978	AN	106.7	106.5	-0.2	-0.2
1979	BN	118.1	117.9	-0.2	-0.2
1980	AN	96.8	92.3	-4.5	-4.6
1981	D	105.7	113.0	7.3	6.9
1982	W	82.5	82.8	0.3	0.4
1983	W	50.8	50.8	0.0	0.0
1984	W	134.4	134.4	0.0	0.0
1985	D	154.9	155.0	0.0	0.0
1986	W	110.0	109.6	-0.4	-0.4
1987	D	148.3	149.0	0.8	0.5
1988	C	114.4	114.3	-0.1	-0.1
1989	D	212.6	201.6	-10.9	-5.1
1990	C	121.0	120.1	-0.8	-0.7
1991	C	103.0	101.7	-1.4	-1.4
Mean:		119.4	119.3	-0.1	0.1
Median:		114.4	114.3	0.0	0.0
Min:		50.8	50.8	-10.9	-5.1
Max:		212.6	201.6	7.3	6.9
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

Long-term and Water Year Type Average Chlorides at Victoria Canal under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	Chlorides (mg/L)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	75.0	76.3	68.1	72.7	61.6	49.6	44.3	46.8	46.5	40.7	47.1	62.6
NEPA Modified Flow Alternative	74.7	76.3	67.9	72.1	59.9	49.5	44.3	46.9	47.9	42.3	48.2	62.4
Difference	-0.3	0.0	-0.1	-0.5	-1.7	-0.1	0.0	0.1	1.4	1.6	1.2	-0.2
Percent Difference <sup>3</sup>	-0.4	0.0	-0.2	-0.7	-2.8	-0.2	0.1	0.1	3.1	3.9	2.5	-0.2
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	44.8	53.6	39.7	44.1	30.6	26.9	25.5	28.5	31.9	23.8	27.7	51.3
NEPA Modified Flow Alternative	45.1	53.8	39.8	44.3	30.8	26.9	25.5	28.5	31.9	23.5	27.6	51.4
Difference	0.3	0.3	0.1	0.1	0.2	0.0	0.0	0.0	0.0	-0.3	-0.1	0.0
Percent Difference	0.7	0.5	0.2	0.3	0.7	0.0	0.0	0.0	0.0	-1.2	-0.4	0.1
<b>Above Normal</b>												
NEPA No Action Alternative	93.1	92.7	69.3	62.2	30.1	33.2	28.6	28.5	32.9	26.6	29.7	51.5
NEPA Modified Flow Alternative	94.1	92.8	69.6	62.3	30.1	33.2	28.6	28.5	32.9	26.6	29.4	50.0
Difference	1.0	0.1	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.1	-0.3	-1.5
Percent Difference	1.1	0.1	0.4	0.3	0.0	0.0	0.0	0.0	0.2	0.3	-1.1	-2.8
<b>Below Normal</b>												
NEPA No Action Alternative	72.8	69.3	90.2	74.1	36.8	32.7	35.1	34.0	33.2	25.3	32.9	54.2
NEPA Modified Flow Alternative	72.5	69.3	90.2	74.2	36.9	32.7	35.2	34.0	33.2	24.9	32.8	54.3
Difference	-0.3	-0.1	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	-0.4	-0.1	0.1
Percent Difference	-0.4	-0.1	-0.1	0.1	0.1	0.0	0.0	0.0	0.0	-1.8	-0.2	0.2
<b>Dry</b>												
NEPA No Action Alternative	84.4	85.4	73.9	65.0	76.0	54.6	47.3	52.8	44.9	42.5	67.5	83.0
NEPA Modified Flow Alternative	83.2	85.0	73.4	63.8	70.3	54.6	47.3	52.8	46.3	43.9	69.7	81.9
Difference	-1.3	-0.4	-0.5	-1.2	-5.7	0.1	0.0	0.0	1.3	1.5	2.1	-1.1
Percent Difference	-1.5	-0.5	-0.7	-1.8	-7.5	0.1	0.0	0.0	2.9	3.5	3.2	-1.3
<b>Critical</b>												
NEPA No Action Alternative	90.9	86.5	86.8	111.3	98.7	78.1	68.8	70.1	70.5	64.9	59.9	63.6
NEPA Modified Flow Alternative	90.3	86.6	86.6	110.2	97.2	77.8	69.0	70.3	74.3	69.4	62.4	64.4
Difference	-0.5	0.0	-0.2	-1.1	-1.5	-0.4	0.1	0.2	3.8	4.5	2.5	0.9
Percent Difference	-0.6	0.0	-0.2	-1.0	-1.5	-0.5	0.2	0.2	5.3	7.0	4.1	1.4

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

### Victoria Canal Chlorides

#### October

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	7.0	7.0	0.0	0.0
1976	C	55.1	55.0	-0.2	-0.4
1977	C	103.1	104.2	1.1	1.1
1978	AN	99.1	101.5	2.3	2.3
1979	BN	72.7	72.5	-0.3	-0.4
1980	AN	87.1	86.8	-0.3	-0.3
1981	D	64.4	59.4	-5.0	-7.8
1982	W	74.9	76.6	1.7	2.3
1983	W	26.4	26.3	0.0	0.0
1984	W	23.4	23.4	0.0	0.0
1985	D	90.0	89.8	-0.2	-0.2
1986	W	92.4	92.4	0.0	0.0
1987	D	83.7	83.3	-0.4	-0.5
1988	C	102.5	103.1	0.6	0.6
1989	D	99.8	100.2	0.4	0.4
1990	C	100.6	97.2	-3.4	-3.4
1991	C	92.9	92.0	-0.9	-1.0
Mean:		75.0	74.7	-0.3	-0.4
Median:		87.1	86.8	0.0	0.0
Min:		7.0	7.0	-5.0	-7.8
Max:		103.1	104.2	2.3	2.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



### Victoria Canal Chlorides

#### November

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	54.4	54.4	0.0	0.0
1976	C	52.9	52.8	0.0	0.0
1977	C	90.2	91.1	0.8	0.9
1978	AN	107.4	107.7	0.3	0.3
1979	BN	69.3	69.3	-0.1	-0.1
1980	AN	78.1	77.9	-0.2	-0.3
1981	D	66.2	63.3	-2.9	-4.4
1982	W	89.1	90.5	1.4	1.6
1983	W	26.0	26.0	0.0	0.0
1984	W	9.5	9.5	0.0	0.0
1985	D	89.9	91.4	1.5	1.7
1986	W	88.8	88.8	0.0	0.0
1987	D	79.6	79.2	-0.4	-0.5
1988	C	96.7	96.9	0.2	0.2
1989	D	105.7	105.9	0.2	0.2
1990	C	84.1	83.8	-0.3	-0.4
1991	C	108.7	108.3	-0.4	-0.4
Mean:		76.3	76.3	0.0	-0.1
Median:		84.1	83.8	0.0	0.0
Min:		9.5	9.5	-2.9	-4.4
Max:		108.7	108.3	1.5	1.7
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Victoria Canal Chlorides

December					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	71.1	71.1	0.0	0.0
1976	C	84.0	81.9	-2.1	-2.5
1977	C	88.8	89.9	1.1	1.2
1978	AN	80.7	80.7	0.0	0.0
1979	BN	90.2	90.2	-0.1	-0.1
1980	AN	57.9	58.4	0.5	0.9
1981	D	80.9	78.0	-2.9	-3.6
1982	W	35.9	36.3	0.4	1.1
1983	W	11.3	11.3	0.0	0.0
1984	W	7.9	7.9	0.0	0.0
1985	D	38.1	38.8	0.7	1.8
1986	W	72.4	72.4	0.0	0.0
1987	D	86.1	86.0	-0.1	-0.1
1988	C	84.3	84.2	-0.1	-0.1
1989	D	90.5	90.6	0.1	0.1
1990	C	75.1	75.4	0.2	0.3
1991	C	101.6	101.5	-0.1	-0.1
Mean:		68.1	67.9	-0.1	-0.1
Median:		80.7	78.0	0.0	0.0
Min:		7.9	7.9	-2.9	-3.6
Max:		101.6	101.5	1.1	1.8
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Victoria Canal Chlorides

#### January

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	89.0	90.0	0.9	1.0
1976	C	110.7	108.3	-2.4	-2.2
1977	C	135.2	135.9	0.7	0.5
1978	AN	89.2	89.2	0.0	0.0
1979	BN	74.1	74.2	0.1	0.1
1980	AN	35.1	35.5	0.4	1.1
1981	D	59.6	60.5	0.9	1.5
1982	W	45.2	45.2	0.0	0.0
1983	W	13.6	13.6	0.0	0.0
1984	W	14.6	14.6	0.0	0.0
1985	D	35.0	35.4	0.5	1.4
1986	W	58.1	57.9	-0.2	-0.3
1987	D	79.5	73.1	-6.4	-8.1
1988	C	118.4	117.9	-0.5	-0.4
1989	D	86.0	86.2	0.2	0.2
1990	C	80.0	76.7	-3.3	-4.1
1991	C	112.2	112.1	0.0	0.0
Mean:		72.7	72.1	-0.5	-0.5
Median:		79.5	74.2	0.0	0.0
Min:		13.6	13.6	-6.4	-8.1
Max:		135.2	135.9	0.9	1.5
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Victoria Canal Chlorides

#### February

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	57.7	58.9	1.2	2.1
1976	C	107.5	104.6	-2.9	-2.7
1977	C	133.5	133.8	0.3	0.2
1978	AN	44.8	44.7	0.0	0.0
1979	BN	36.8	36.9	0.0	0.0
1980	AN	15.5	15.5	0.0	0.0
1981	D	43.2	44.3	1.0	2.3
1982	W	26.5	26.5	0.0	0.0
1983	W	7.0	7.0	0.0	0.0
1984	W	25.3	25.3	0.0	0.0
1985	D	51.3	52.9	1.5	2.9
1986	W	36.6	36.5	-0.1	-0.3
1987	D	87.6	62.1	-25.5	-29.1
1988	C	52.2	52.2	-0.1	-0.2
1989	D	122.0	122.1	0.1	0.1
1990	C	78.2	73.4	-4.8	-6.1
1991	C	121.9	121.9	0.0	0.0
Mean:		61.6	59.9	-1.7	-1.8
Median:		51.3	52.2	0.0	0.0
Min:		7.0	7.0	-25.5	-29.1
Max:		133.5	133.8	1.5	2.9
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

### Victoria Canal Chlorides

March					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	34.5	34.5	0.0	0.0
1976	C	60.8	60.2	-0.6	-1.0
1977	C	128.7	128.8	0.1	0.1
1978	AN	43.5	43.5	0.0	0.0
1979	BN	32.7	32.7	0.0	0.0
1980	AN	22.8	22.8	0.0	0.0
1981	D	47.2	47.5	0.3	0.6
1982	W	33.7	33.7	0.0	0.0
1983	W	13.0	13.0	0.0	0.0
1984	W	33.3	33.3	0.0	0.0
1985	D	61.5	62.3	0.8	1.3
1986	W	20.1	20.0	0.0	0.0
1987	D	54.8	54.2	-0.6	-1.1
1988	C	51.5	51.5	0.0	0.0
1989	D	54.7	54.5	-0.2	-0.4
1990	C	59.9	58.6	-1.3	-2.2
1991	C	89.8	89.8	0.0	0.0
Mean:		49.6	49.5	-0.1	-0.2
Median:		47.2	47.5	0.0	0.0
Min:		13.0	13.0	-1.3	-2.2
Max:		128.7	128.8	0.8	1.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Victoria Canal Chlorides

April					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	33.1	33.1	0.0	0.0
1976	C	53.0	52.9	-0.1	-0.2
1977	C	124.9	124.9	0.0	0.0
1978	AN	28.2	28.2	0.0	0.0
1979	BN	35.1	35.2	0.0	0.0
1980	AN	28.9	28.9	0.0	0.0
1981	D	48.7	48.7	0.0	0.0
1982	W	14.4	14.4	0.0	0.0
1983	W	14.4	14.4	0.0	0.0
1984	W	40.9	40.9	0.0	0.0
1985	D	59.6	59.7	0.2	0.3
1986	W	24.4	24.4	0.0	0.0
1987	D	47.1	47.1	0.0	0.0
1988	C	61.4	61.4	0.0	0.0
1989	D	33.7	33.6	-0.1	-0.3
1990	C	55.0	55.7	0.7	1.3
1991	C	49.8	49.8	0.0	0.0
Mean:		44.3	44.3	0.0	0.1
Median:		40.9	40.9	0.0	0.0
Min:		14.4	14.4	-0.1	-0.3
Max:		124.9	124.9	0.7	1.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Victoria Canal Chlorides

May					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	35.3	35.3	0.0	0.0
1976	C	59.7	59.8	0.1	0.2
1977	C	114.6	114.7	0.0	0.0
1978	AN	23.8	23.9	0.0	0.0
1979	BN	34.0	34.0	0.0	0.0
1980	AN	33.2	33.2	0.0	0.0
1981	D	47.7	47.7	0.0	0.0
1982	W	17.8	17.8	0.0	0.0
1983	W	14.3	14.3	0.0	0.0
1984	W	44.9	44.9	0.0	0.0
1985	D	56.7	56.7	0.0	0.0
1986	W	30.3	30.3	0.0	0.0
1987	D	57.5	57.5	0.0	0.0
1988	C	65.8	65.9	0.1	0.2
1989	D	49.4	49.3	0.0	0.0
1990	C	58.8	59.4	0.6	1.0
1991	C	51.6	51.6	0.1	0.2
Mean:		46.8	46.8	0.1	0.1
Median:		47.7	47.7	0.0	0.0
Min:		14.3	14.3	0.0	0.0
Max:		114.6	114.7	0.6	1.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Victoria Canal Chlorides

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	36.6	36.6	0.0	0.0
1976	C	71.5	73.8	2.3	3.2
1977	C	99.3	102.5	3.2	3.2
1978	AN	24.9	24.9	0.0	0.0
1979	BN	33.2	33.2	0.0	0.0
1980	AN	40.9	41.0	0.1	0.2
1981	D	40.7	42.2	1.5	3.7
1982	W	25.0	25.0	0.0	0.0
1983	W	7.0	7.0	0.0	0.0
1984	W	49.6	49.6	0.0	0.0
1985	D	50.9	50.9	0.0	0.0
1986	W	41.1	41.1	0.0	0.0
1987	D	54.5	58.3	3.8	7.0
1988	C	68.2	70.6	2.4	3.5
1989	D	33.7	33.7	0.0	0.0
1990	C	61.1	68.5	7.4	12.1
1991	C	52.5	56.0	3.5	6.7
Mean:		46.5	47.9	1.4	2.3
Median:		41.1	42.2	0.0	0.0
Min:		7.0	7.0	0.0	0.0
Max:		99.3	102.5	7.4	12.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					1



### Victoria Canal Chlorides

July					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	23.2	22.9	-0.3	-1.3
1976	C	83.0	88.3	5.3	6.4
1977	C	61.0	64.8	3.9	6.4
1978	AN	21.8	21.7	-0.1	-0.5
1979	BN	25.3	24.8	-0.5	-2.0
1980	AN	31.3	31.5	0.2	0.6
1981	D	55.0	58.9	3.8	6.9
1982	W	27.9	27.7	-0.1	-0.4
1983	W	10.2	10.2	0.0	0.0
1984	W	28.0	27.6	-0.4	-1.4
1985	D	44.1	44.2	0.0	0.0
1986	W	29.9	29.2	-0.6	-2.0
1987	D	37.0	39.1	2.1	5.7
1988	C	57.7	60.2	2.4	4.2
1989	D	33.6	33.7	0.0	0.0
1990	C	66.3	73.7	7.3	11.0
1991	C	56.3	59.9	3.6	6.4
Mean:		40.7	42.3	1.6	2.4
Median:		33.6	33.7	0.0	0.0
Min:		10.2	10.2	-0.6	-2.0
Max:		83.0	88.3	7.3	11.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					1

### Victoria Canal Chlorides

August					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	31.0	31.3	0.3	1.0
1976	C	51.6	61.1	9.5	18.4
1977	C	48.6	50.0	1.4	2.9
1978	AN	30.2	29.5	-0.7	-2.3
1979	BN	32.9	32.8	-0.1	-0.3
1980	AN	29.2	29.3	0.1	0.3
1981	D	75.8	86.0	10.3	13.6
1982	W	27.9	27.2	-0.7	-2.5
1983	W	13.7	13.7	0.0	0.0
1984	W	32.0	32.5	0.5	1.6
1985	D	68.4	68.4	0.0	0.0
1986	W	34.1	33.4	-0.7	-2.1
1987	D	55.8	56.1	0.3	0.5
1988	C	61.2	61.5	0.3	0.5
1989	D	70.1	68.0	-2.1	-3.0
1990	C	70.3	71.9	1.6	2.3
1991	C	67.7	67.4	-0.3	-0.4
Mean:		47.1	48.2	1.2	1.8
Median:		48.6	50.0	0.1	0.3
Min:		13.7	13.7	-2.1	-3.0
Max:		75.8	86.0	10.3	18.4
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					2

**Victoria Canal Chlorides**

**September**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	54.4	54.9	0.4	0.7
1976	C	65.2	69.8	4.6	7.1
1977	C	60.0	61.9	1.9	3.2
1978	AN	52.5	52.2	-0.3	-0.6
1979	BN	54.2	54.3	0.1	0.2
1980	AN	50.4	47.8	-2.6	-5.2
1981	D	47.7	54.0	6.2	13.0
1982	W	46.3	46.5	0.1	0.2
1983	W	34.5	34.5	0.0	0.0
1984	W	67.8	68.0	0.2	0.3
1985	D	79.5	79.5	0.0	0.0
1986	W	53.6	53.1	-0.5	-0.9
1987	D	73.2	73.2	0.1	0.1
1988	C	65.4	65.6	0.2	0.3
1989	D	131.7	120.9	-10.8	-8.2
1990	C	65.1	64.6	-0.5	-0.8
1991	C	62.0	60.3	-1.7	-2.7
Mean:		62.6	62.4	-0.2	0.4
Median:		60.0	60.3	0.1	0.1
Min:		34.5	34.5	-10.8	-8.2
Max:		131.7	120.9	6.2	13.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					1

Long-term and Water Year Type Average Chlorides at Stockton Intake under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	Chlorides (mg/L)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	60.1	56.8	54.6	57.7	48.9	37.9	38.5	40.2	29.4	29.4	36.0	51.9
NEPA Modified Flow Alternative	59.8	56.9	54.4	57.1	47.6	37.9	38.6	40.4	30.6	30.7	37.0	51.7
Difference	-0.3	0.1	-0.2	-0.6	-1.3	0.0	0.0	0.1	1.3	1.3	1.1	-0.2
Percent Difference <sup>3</sup>	-0.5	0.1	-0.4	-1.0	-2.6	-0.1	0.1	0.3	4.4	4.5	2.9	-0.5
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	34.5	39.6	32.5	36.1	24.9	22.9	23.1	25.5	21.8	13.4	19.3	40.7
NEPA Modified Flow Alternative	34.7	40.0	32.5	36.3	25.1	22.9	23.1	25.5	21.8	13.4	19.6	40.7
Difference	0.2	0.4	0.0	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Percent Difference	0.6	0.9	0.1	0.8	0.7	0.0	0.0	0.0	0.0	0.0	1.2	0.1
<b>Above Normal</b>												
NEPA No Action Alternative	78.0	66.4	55.5	45.0	25.2	28.1	25.9	24.8	25.7	15.8	21.3	42.8
NEPA Modified Flow Alternative	78.3	66.3	56.0	45.0	25.2	28.1	25.9	24.8	25.9	15.9	21.5	40.6
Difference	0.3	-0.1	0.5	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	-2.2
Percent Difference	0.3	-0.2	0.9	0.1	-0.1	0.0	0.0	0.0	0.5	0.9	0.6	-5.1
<b>Below Normal</b>												
NEPA No Action Alternative	61.0	58.4	72.7	55.6	32.7	29.9	31.5	29.8	17.6	14.6	25.2	46.5
NEPA Modified Flow Alternative	60.8	58.3	72.6	55.8	32.7	29.9	31.5	29.8	17.6	14.6	25.6	46.8
Difference	-0.2	-0.1	-0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.2
Percent Difference	-0.3	-0.1	-0.1	0.3	0.0	0.1	0.0	0.0	0.0	0.2	1.8	0.5
<b>Dry</b>												
NEPA No Action Alternative	68.9	65.5	54.5	50.3	61.3	39.8	40.7	44.9	23.6	39.2	62.8	73.6
NEPA Modified Flow Alternative	67.8	65.2	53.8	49.1	57.5	39.8	40.7	45.0	24.7	40.7	64.3	72.4
Difference	-1.1	-0.3	-0.7	-1.2	-3.8	0.0	0.0	0.1	1.1	1.5	1.5	-1.2
Percent Difference	-1.6	-0.4	-1.2	-2.4	-6.2	0.0	0.0	0.2	4.8	3.8	2.5	-1.6
<b>Critical</b>												
NEPA No Action Alternative	71.2	62.9	72.9	90.8	75.6	57.1	58.6	59.5	45.3	45.9	39.3	50.6
NEPA Modified Flow Alternative	70.8	63.0	72.4	89.3	74.1	56.9	58.8	59.9	48.7	49.1	41.2	51.5
Difference	-0.5	0.1	-0.5	-1.4	-1.4	-0.2	0.2	0.3	3.4	3.3	1.9	1.0
Percent Difference	-0.6	0.1	-0.6	-1.6	-1.9	-0.3	0.3	0.5	7.6	7.1	4.9	1.9

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

### Stockton Intake Chlorides

October					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	7.0	7.0	0.0	0.0
1976	C	38.8	38.7	-0.1	-0.3
1977	C	91.1	91.6	0.4	0.4
1978	AN	85.1	86.0	0.9	1.1
1979	BN	61.0	60.8	-0.2	-0.3
1980	AN	70.9	70.6	-0.3	-0.4
1981	D	54.5	50.3	-4.2	-7.7
1982	W	57.2	58.3	1.1	1.9
1983	W	19.7	19.6	0.0	0.0
1984	W	18.9	18.9	0.0	0.0
1985	D	72.3	72.0	-0.2	-0.3
1986	W	69.8	69.8	0.0	0.0
1987	D	67.8	67.5	-0.3	-0.4
1988	C	79.6	80.0	0.5	0.6
1989	D	80.8	81.2	0.3	0.4
1990	C	74.1	71.8	-2.3	-3.1
1991	C	72.5	71.7	-0.8	-1.1
Mean:		60.1	59.8	-0.3	-0.5
Median:		69.8	69.8	0.0	0.0
Min:		7.0	7.0	-4.2	-7.7
Max:		91.1	91.6	1.1	1.9
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Stockton Intake Chlorides

November					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	38.9	38.9	0.0	0.0
1976	C	38.6	38.4	-0.2	-0.5
1977	C	72.1	72.9	0.9	1.2
1978	AN	77.4	77.3	-0.1	-0.1
1979	BN	58.4	58.3	-0.1	-0.2
1980	AN	55.4	55.3	-0.1	-0.2
1981	D	53.7	50.4	-3.3	-6.1
1982	W	65.2	66.9	1.8	2.8
1983	W	24.3	24.3	0.0	0.0
1984	W	7.3	7.3	0.0	0.0
1985	D	71.4	73.5	2.2	3.1
1986	W	62.5	62.5	0.0	0.0
1987	D	60.3	60.2	-0.1	-0.2
1988	C	67.8	67.9	0.1	0.1
1989	D	76.7	76.8	0.1	0.1
1990	C	59.1	58.9	-0.2	-0.3
1991	C	76.9	76.6	-0.2	-0.3
Mean:		56.8	56.8	0.0	0.0
Median:		60.3	60.2	0.0	0.0
Min:		7.3	7.3	-3.3	-6.1
Max:		77.4	77.3	2.2	3.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Stockton Intake Chlorides

December					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	61.2	61.2	0.0	0.0
1976	C	80.2	77.5	-2.7	-3.4
1977	C	78.6	79.7	1.0	1.3
1978	AN	63.8	63.8	0.0	0.0
1979	BN	72.7	72.6	-0.1	-0.1
1980	AN	47.2	48.2	1.0	2.1
1981	D	60.2	59.0	-1.2	-2.0
1982	W	22.0	22.2	0.2	0.9
1983	W	12.3	12.3	0.0	0.0
1984	W	11.6	11.6	0.0	0.0
1985	D	25.4	25.9	0.5	2.0
1986	W	55.3	55.3	0.0	0.0
1987	D	65.8	63.6	-2.2	-3.3
1988	C	77.6	77.4	-0.2	-0.3
1989	D	66.5	66.6	0.2	0.3
1990	C	58.1	57.7	-0.4	-0.7
1991	C	69.9	69.9	-0.1	-0.1
Mean:		54.6	54.4	-0.2	-0.2
Median:		61.2	61.2	0.0	0.0
Min:		11.6	11.6	-2.7	-3.4
Max:		80.2	79.7	1.0	2.1
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Stockton Intake Chlorides

January					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	77.9	79.7	1.8	2.3
1976	C	93.7	91.0	-2.8	-3.0
1977	C	107.4	107.9	0.5	0.5
1978	AN	63.8	63.8	-0.1	-0.2
1979	BN	55.6	55.7	0.2	0.4
1980	AN	26.1	26.3	0.2	0.8
1981	D	38.5	40.0	1.5	3.9
1982	W	35.3	35.3	0.0	0.0
1983	W	11.7	11.7	0.0	0.0
1984	W	11.5	11.5	0.0	0.0
1985	D	26.7	27.3	0.6	2.2
1986	W	43.9	43.5	-0.4	-0.9
1987	D	59.6	52.5	-7.1	-11.9
1988	C	98.0	97.6	-0.4	-0.4
1989	D	76.4	76.6	0.2	0.3
1990	C	75.6	71.2	-4.4	-5.8
1991	C	79.0	79.0	0.0	0.0
Mean:		57.7	57.1	-0.6	-0.7
Median:		59.6	55.7	0.0	0.0
Min:		11.5	11.5	-7.1	-11.9
Max:		107.4	107.9	1.8	3.9
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0



### Stockton Intake Chlorides

February					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	47.0	48.0	0.9	1.9
1976	C	87.0	84.3	-2.7	-3.1
1977	C	100.9	101.0	0.1	0.1
1978	AN	37.1	37.1	0.0	0.0
1979	BN	32.7	32.7	0.0	0.0
1980	AN	13.3	13.3	0.0	0.0
1981	D	31.1	32.0	0.9	2.9
1982	W	19.8	19.8	0.0	0.0
1983	W	9.3	9.3	0.0	0.0
1984	W	21.8	21.8	0.0	0.0
1985	D	45.0	46.7	1.8	4.0
1986	W	26.7	26.7	0.0	0.0
1987	D	69.3	51.2	-18.1	-26.1
1988	C	35.1	35.1	0.0	0.0
1989	D	99.9	100.0	0.1	0.1
1990	C	64.1	59.5	-4.6	-7.2
1991	C	90.7	90.7	0.0	0.0
Mean:		48.9	47.6	-1.3	-1.6
Median:		37.1	37.1	0.0	0.0
Min:		9.3	9.3	-18.1	-26.1
Max:		100.9	101.0	1.8	4.0
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					0

### Stockton Intake Chlorides

March					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	29.7	29.7	0.0	0.0
1976	C	42.4	42.0	-0.3	-0.7
1977	C	97.9	97.9	0.1	0.1
1978	AN	36.9	36.9	0.0	0.0
1979	BN	29.9	29.9	0.0	0.0
1980	AN	19.3	19.3	0.0	0.0
1981	D	37.3	37.4	0.1	0.3
1982	W	26.5	26.5	0.0	0.0
1983	W	12.1	12.1	0.0	0.0
1984	W	28.5	28.5	0.0	0.0
1985	D	48.9	49.4	0.6	1.2
1986	W	17.5	17.5	0.0	0.0
1987	D	38.6	38.2	-0.4	-1.0
1988	C	41.5	41.5	0.0	0.0
1989	D	34.5	34.3	-0.2	-0.6
1990	C	42.2	41.7	-0.6	-1.4
1991	C	61.3	61.3	0.0	0.0
Mean:		37.9	37.9	0.0	-0.1
Median:		36.9	36.9	0.0	0.0
Min:		12.1	12.1	-0.6	-1.4
Max:		97.9	97.9	0.6	1.2
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Stockton Intake Chlorides

April					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	29.9	29.9	0.0	0.0
1976	C	47.1	47.1	0.0	0.0
1977	C	101.6	101.6	0.0	0.0
1978	AN	25.0	25.0	0.0	0.0
1979	BN	31.4	31.5	0.0	0.0
1980	AN	26.8	26.8	0.0	0.0
1981	D	41.4	41.4	0.0	0.0
1982	W	14.1	14.1	0.0	0.0
1983	W	14.2	14.2	0.0	0.0
1984	W	36.2	36.2	0.0	0.0
1985	D	49.8	49.9	0.1	0.2
1986	W	20.9	20.9	0.0	0.0
1987	D	41.7	41.7	0.0	0.0
1988	C	52.0	52.1	0.0	0.0
1989	D	29.8	29.7	-0.1	-0.3
1990	C	47.1	48.1	0.9	1.9
1991	C	45.2	45.3	0.0	0.0
Mean:		38.5	38.6	0.1	0.1
Median:		36.2	36.2	0.0	0.0
Min:		14.1	14.1	-0.1	-0.3
Max:		101.6	101.6	0.9	1.9
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Stockton Intake Chlorides

May					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	30.9	30.9	0.0	0.0
1976	C	52.1	52.3	0.2	0.4
1977	C	96.0	96.2	0.2	0.2
1978	AN	20.7	20.7	0.0	0.0
1979	BN	29.8	29.8	0.0	0.0
1980	AN	28.9	28.9	0.0	0.0
1981	D	41.9	42.1	0.2	0.5
1982	W	16.0	16.0	0.0	0.0
1983	W	13.9	13.9	0.0	0.0
1984	W	39.1	39.1	0.0	0.0
1985	D	46.9	46.9	0.0	0.0
1986	W	27.5	27.5	0.0	0.0
1987	D	51.1	51.3	0.2	0.4
1988	C	56.5	56.6	0.1	0.2
1989	D	39.8	39.8	0.0	0.0
1990	C	50.2	50.9	0.8	1.6
1991	C	42.9	43.1	0.2	0.5
Mean:		40.2	40.4	0.1	0.2
Median:		39.8	39.8	0.0	0.0
Min:		13.9	13.9	0.0	0.0
Max:		96.0	96.2	0.8	1.6
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Stockton Intake Chlorides

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	23.5	23.5	0.0	0.0
1976	C	61.2	64.0	2.8	4.6
1977	C	59.6	62.2	2.6	4.4
1978	AN	20.7	20.7	0.0	0.0
1979	BN	17.6	17.6	0.0	0.0
1980	AN	30.8	31.0	0.3	1.0
1981	D	22.0	23.8	1.8	8.2
1982	W	20.7	20.7	0.0	0.0
1983	W	7.0	7.0	0.0	0.0
1984	W	25.6	25.6	0.0	0.0
1985	D	27.2	27.2	0.0	0.0
1986	W	32.3	32.3	0.0	0.0
1987	D	28.4	31.1	2.8	9.9
1988	C	38.9	40.4	1.5	3.9
1989	D	16.9	16.8	0.0	0.0
1990	C	36.9	43.8	6.9	18.7
1991	C	29.8	33.1	3.2	10.7
Mean:		29.3	30.6	1.3	3.6
Median:		27.2	27.2	0.0	0.0
Min:		7.0	7.0	0.0	0.0
Max:		61.2	64.0	6.9	18.7
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					2

### Stockton Intake Chlorides

July					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	12.1	12.0	-0.1	-0.8
1976	C	66.5	73.8	7.3	11.0
1977	C	36.4	38.3	1.8	4.9
1978	AN	13.8	13.8	0.0	0.0
1979	BN	14.6	14.6	0.0	0.0
1980	AN	17.7	18.0	0.3	1.7
1981	D	56.4	61.4	5.0	8.9
1982	W	14.2	14.1	-0.1	-0.7
1983	W	8.9	8.9	0.0	0.0
1984	W	15.5	15.8	0.3	1.9
1985	D	40.9	40.9	0.0	0.0
1986	W	16.3	16.2	-0.2	-1.2
1987	D	29.9	30.8	0.9	3.0
1988	C	35.2	35.9	0.8	2.3
1989	D	29.8	29.8	0.0	0.0
1990	C	49.7	53.9	4.2	8.5
1991	C	41.5	43.7	2.2	5.3
Mean:		29.4	30.7	1.3	2.6
Median:		29.8	29.8	0.3	1.7
Min:		8.9	8.9	-0.2	-1.2
Max:		66.5	73.8	7.3	11.0
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					1

### Stockton Intake Chlorides

August					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	23.9	24.6	0.6	2.5
1976	C	35.8	43.8	8.0	22.3
1977	C	33.1	34.2	1.0	3.0
1978	AN	20.3	20.4	0.2	1.0
1979	BN	25.2	25.6	0.5	2.0
1980	AN	22.4	22.5	0.1	0.4
1981	D	60.3	70.1	9.8	16.3
1982	W	16.9	17.0	0.1	0.6
1983	W	8.0	8.0	0.0	0.0
1984	W	26.7	27.2	0.6	2.3
1985	D	62.8	62.8	0.0	0.0
1986	W	21.1	20.9	-0.1	-0.5
1987	D	49.6	49.8	0.2	0.4
1988	C	38.9	39.0	0.0	0.0
1989	D	78.3	74.5	-3.8	-4.9
1990	C	43.8	44.7	0.8	1.8
1991	C	44.6	44.4	-0.2	-0.4
Mean:		36.0	37.0	1.0	2.8
Median:		33.1	34.2	0.2	0.6
Min:		8.0	8.0	-3.8	-4.9
Max:		78.3	74.5	9.8	22.3
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					2

### Stockton Intake Chlorides

#### September

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Chlorides (mg/L)	Chlorides (mg/L)		
1975	W	42.3	42.7	0.3	0.7
1976	C	67.0	70.6	3.5	5.2
1977	C	46.8	49.1	2.3	4.9
1978	AN	44.9	44.7	-0.2	-0.4
1979	BN	46.5	46.8	0.2	0.4
1980	AN	40.8	36.6	-4.2	-10.3
1981	D	38.4	43.5	5.1	13.3
1982	W	29.7	29.9	0.2	0.7
1983	W	25.7	25.7	0.0	0.0
1984	W	61.3	61.2	0.0	0.0
1985	D	70.3	70.3	0.0	0.0
1986	W	44.2	43.8	-0.3	-0.7
1987	D	68.1	67.9	-0.2	-0.3
1988	C	47.9	48.0	0.0	0.0
1989	D	117.7	107.9	-9.8	-8.3
1990	C	47.0	46.8	-0.2	-0.4
1991	C	44.0	43.1	-0.9	-2.0
Mean:		51.9	51.7	-0.2	0.2
Median:		46.5	46.8	0.0	0.0
Min:		25.7	25.7	-9.8	-10.3
Max:		117.7	107.9	5.1	13.3
# Years Rel Diff <= -10%					1
# Years Rel Diff >= 10%					1



Long-term and Water Year Type Average DOC at the Old River at Hwy 4 (CCWD Los Vaqueros) under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	Dissolved Organic Carbon (mg/L)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	0.7	0.7	0.8	1.5	2.1	1.8	1.5	1.3	1.3	1.2	1.1	0.9
NEPA Modified Flow Alternative	0.7	0.7	0.8	1.5	2.1	1.8	1.5	1.3	1.3	1.3	1.1	0.9
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference <sup>3</sup>	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	3.1	0.8	-0.9	0.0
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	0.5	0.6	0.7	1.2	1.9	1.4	0.7	0.8	0.8	0.9	0.8	0.6
NEPA Modified Flow Alternative	0.5	0.6	0.7	1.2	1.9	1.4	0.7	0.8	0.8	0.9	0.8	0.6
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-2.5	-1.6
<b>Above Normal</b>												
NEPA No Action Alternative	1.0	0.9	0.9	2.4	3.1	2.3	1.6	1.2	1.1	0.9	0.8	0.6
NEPA Modified Flow Alternative	1.0	0.9	0.9	2.4	3.1	2.3	1.6	1.2	1.1	0.9	0.8	0.6
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	-1.0	-1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.5	-1.6
<b>Below Normal</b>												
NEPA No Action Alternative	0.6	0.6	0.7	1.9	2.8	2.0	1.3	0.9	1.1	1.1	0.9	0.8
NEPA Modified Flow Alternative	0.6	0.6	0.7	1.9	2.8	2.0	1.3	0.9	1.1	1.0	0.9	0.7
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	-0.4	0.0	0.8	0.0	0.0	-1.9	-2.2	-1.3
<b>Dry</b>												
NEPA No Action Alternative	0.8	0.7	0.8	1.2	1.6	1.6	1.6	1.5	1.4	1.1	0.9	0.7
NEPA Modified Flow Alternative	0.7	0.7	0.8	1.2	1.6	1.6	1.6	1.5	1.5	1.1	0.9	0.7
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	-1.3	-1.4	-1.2	0.0	0.6	0.0	0.0	0.0	2.8	1.8	0.0	0.0
<b>Critical</b>												
NEPA No Action Alternative	0.7	0.7	0.8	1.5	2.1	2.2	2.2	1.9	1.8	1.8	1.8	1.4
NEPA Modified Flow Alternative	0.7	0.7	0.8	1.5	2.1	2.2	2.2	1.9	1.9	1.9	1.8	1.4
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.7	0.0	0.5	0.5	0.5	6.6	2.7	-0.5	-0.7

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

**Old River at Hwy 4 (CCWD Los Vaqueros) DOC**

<b>October</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.2	0.2	0.0	0.0
1976	C	0.4	0.4	0.0	0.0
1977	C	0.7	0.7	0.0	0.0
1978	AN	1.5	1.5	0.0	0.0
1979	BN	0.6	0.6	0.0	0.0
1980	AN	0.6	0.6	0.0	0.0
1981	D	0.6	0.6	0.0	0.0
1982	W	0.5	0.5	0.0	0.0
1983	W	0.4	0.4	0.0	0.0
1984	W	0.7	0.7	0.0	0.0
1985	D	0.5	0.5	0.0	0.0
1986	W	0.6	0.6	0.0	0.0
1987	D	0.6	0.6	0.0	0.0
1988	C	0.8	0.8	0.0	0.0
1989	D	1.2	1.2	0.0	0.0
1990	C	0.6	0.6	0.0	0.0
1991	C	1.2	1.2	0.0	0.0
	Mean:	0.7	0.7	0.0	0.0
	Median:	0.6	0.6	0.0	0.0
	Min:	0.2	0.2	0.0	0.0
	Max:	1.5	1.5	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**Old River at Hwy 4 (CCWD Los Vaqueros) DOC**

<b>November</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.5	0.5	0.0	0.0
1976	C	0.4	0.4	0.0	0.0
1977	C	0.7	0.7	0.0	0.0
1978	AN	1.2	1.2	0.0	0.0
1979	BN	0.6	0.6	0.0	0.0
1980	AN	0.5	0.5	0.0	0.0
1981	D	0.7	0.6	0.0	0.0
1982	W	0.4	0.4	0.0	0.0
1983	W	0.7	0.7	0.0	0.0
1984	W	0.7	0.7	0.0	0.0
1985	D	0.6	0.6	0.0	0.0
1986	W	0.6	0.6	0.0	0.0
1987	D	0.7	0.6	0.0	0.0
1988	C	0.8	0.8	0.0	0.0
1989	D	0.9	0.9	0.0	0.0
1990	C	0.6	0.6	0.0	0.0
1991	C	1.2	1.2	0.0	0.0
	Mean:	0.7	0.7	0.0	0.0
	Median:	0.7	0.6	0.0	0.0
	Min:	0.4	0.4	0.0	0.0
	Max:	1.2	1.2	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**Old River at Hwy 4 (CCWD Los Vaqueros) DOC**

<b>December</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.5	0.5	0.0	0.0
1976	C	0.5	0.5	0.0	0.0
1977	C	0.8	0.8	0.0	0.0
1978	AN	1.1	1.1	0.0	0.0
1979	BN	0.7	0.7	0.0	0.0
1980	AN	0.7	0.6	0.0	0.0
1981	D	0.7	0.7	0.0	0.0
1982	W	0.8	0.8	0.0	0.0
1983	W	1.3	1.3	0.0	0.0
1984	W	0.1	0.1	0.0	0.0
1985	D	1.0	1.0	0.0	0.0
1986	W	0.9	0.9	0.0	0.0
1987	D	0.7	0.8	0.0	0.0
1988	C	0.7	0.7	0.0	0.0
1989	D	0.9	0.9	0.0	0.0
1990	C	0.7	0.8	0.0	0.0
1991	C	1.2	1.2	0.0	0.0
	Mean:	0.8	0.8	0.0	0.0
	Median:	0.7	0.8	0.0	0.0
	Min:	0.1	0.1	0.0	0.0
	Max:	1.3	1.3	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**Old River at Hwy 4 (CCWD Los Vaqueros) DOC**

<b>January</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	1.0	1.0	0.0	0.0
1976	C	1.0	1.0	0.0	0.0
1977	C	1.8	1.8	0.0	0.0
1978	AN	2.9	2.9	0.0	0.0
1979	BN	1.8	1.9	0.0	0.0
1980	AN	1.8	1.8	0.0	0.0
1981	D	1.1	1.1	0.0	0.0
1982	W	3.0	3.0	0.0	0.0
1983	W	0.3	0.3	0.0	0.0
1984	W	0.4	0.4	0.0	0.0
1985	D	1.3	1.3	0.0	0.0
1986	W	1.5	1.5	0.0	0.0
1987	D	1.3	1.3	0.0	0.0
1988	C	1.3	1.3	0.0	0.0
1989	D	1.2	1.2	0.0	0.0
1990	C	1.0	1.0	0.0	0.0
1991	C	2.2	2.2	0.0	0.0
	Mean:	1.5	1.5	0.0	0.0
	Median:	1.3	1.3	0.0	0.0
	Min:	0.3	0.3	0.0	0.0
	Max:	3.0	3.0	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**Old River at Hwy 4 (CCWD Los Vaqueros) DOC**

February					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	1.5	1.6	0.0	0.0
1976	C	1.4	1.4	0.0	0.0
1977	C	2.7	2.7	0.0	0.0
1978	AN	3.3	3.3	0.0	0.0
1979	BN	2.8	2.8	0.0	0.0
1980	AN	2.9	2.9	0.0	0.0
1981	D	1.3	1.4	0.0	0.0
1982	W	2.0	2.0	0.0	0.0
1983	W	0.1	0.1	0.0	0.0
1984	W	1.4	1.4	0.0	0.0
1985	D	1.3	1.3	0.0	0.0
1986	W	4.2	4.1	0.0	0.0
1987	D	1.7	1.7	0.0	0.0
1988	C	1.8	1.8	0.0	0.0
1989	D	2.1	2.1	0.0	0.0
1990	C	1.5	1.5	0.0	0.0
1991	C	3.0	3.0	0.0	0.0
Mean:		2.1	2.1	0.0	0.0
Median:		1.8	1.8	0.0	0.0
Min:		0.1	0.1	0.0	0.0
Max:		4.2	4.1	0.0	0.0
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Hwy 4 (CCWD Los Vaqueros) DOC**

<b>March</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	1.5	1.5	0.0	0.0
1976	C	1.4	1.4	0.0	0.0
1977	C	3.1	3.1	0.0	0.0
1978	AN	2.7	2.7	0.0	0.0
1979	BN	2.0	2.0	0.0	0.0
1980	AN	1.8	1.8	0.0	0.0
1981	D	1.5	1.5	0.0	0.0
1982	W	2.3	2.3	0.0	0.0
1983	W	0.2	0.2	0.0	0.0
1984	W	0.9	0.9	0.0	0.0
1985	D	1.7	1.7	0.0	0.0
1986	W	2.2	2.2	0.0	0.0
1987	D	1.8	1.8	0.0	0.0
1988	C	2.5	2.5	0.0	0.0
1989	D	1.5	1.5	0.0	0.0
1990	C	1.9	1.9	0.0	0.0
1991	C	1.9	1.9	0.0	0.0
Mean:		1.8	1.8	0.0	0.0
Median:		1.8	1.8	0.0	0.0
Min:		0.2	0.2	0.0	0.0
Max:		3.1	3.1	0.0	0.0
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Hwy 4 (CCWD Los Vaqueros) DOC**

<b>April</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	1.1	1.1	0.0	0.0
1976	C	1.6	1.6	0.0	0.0
1977	C	3.0	3.0	0.0	0.0
1978	AN	2.3	2.3	0.0	0.0
1979	BN	1.3	1.3	0.0	0.0
1980	AN	0.9	0.9	0.0	0.0
1981	D	1.5	1.5	0.0	0.0
1982	W	0.2	0.2	0.0	0.0
1983	W	0.1	0.1	0.0	0.0
1984	W	0.9	0.9	0.0	0.0
1985	D	2.0	2.0	0.0	0.0
1986	W	1.4	1.4	0.0	0.0
1987	D	1.7	1.7	0.0	0.0
1988	C	2.2	2.2	0.0	0.0
1989	D	1.2	1.2	0.0	0.0
1990	C	2.2	2.3	0.1	4.6
1991	C	1.9	1.9	0.0	0.0
Mean:		1.5	1.5	0.0	0.3
Median:		1.5	1.5	0.0	0.0
Min:		0.1	0.1	0.0	0.0
Max:		3.0	3.0	0.1	4.6
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



**Old River at Hwy 4 (CCWD Los Vaqueros) DOC**

<b>May</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.8	0.8	0.0	0.0
1976	C	1.6	1.6	0.0	0.0
1977	C	2.4	2.4	0.0	0.0
1978	AN	1.5	1.5	0.0	0.0
1979	BN	0.9	0.9	0.0	0.0
1980	AN	0.9	0.9	0.0	0.0
1981	D	1.1	1.1	0.0	0.0
1982	W	0.8	0.8	0.0	0.0
1983	W	0.1	0.1	0.0	0.0
1984	W	1.0	1.0	0.0	0.0
1985	D	1.7	1.7	0.0	0.0
1986	W	1.1	1.1	0.0	0.0
1987	D	1.8	1.8	0.0	0.0
1988	C	1.8	1.8	0.0	0.0
1989	D	1.5	1.5	0.0	0.0
1990	C	1.8	1.9	0.0	0.0
1991	C	1.7	1.7	0.0	0.0
	Mean:	1.3	1.3	0.0	0.0
	Median:	1.5	1.5	0.0	0.0
	Min:	0.1	0.1	0.0	0.0
	Max:	2.4	2.4	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**Old River at Hwy 4 (CCWD Los Vaqueros) DOC**

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	0.9	0.9	0.0	0.0
1976	C	1.6	1.6	0.0	0.0
1977	C	2.3	2.4	0.1	4.3
1978	AN	1.0	1.0	0.0	0.0
1979	BN	1.1	1.1	0.0	0.0
1980	AN	1.1	1.1	0.0	0.0
1981	D	1.3	1.3	0.0	0.0
1982	W	0.8	0.8	0.0	0.0
1983	W	0.1	0.1	0.0	0.0
1984	W	1.3	1.3	0.0	0.0
1985	D	1.5	1.5	0.0	0.0
1986	W	1.1	1.1	0.0	0.0
1987	D	1.6	1.7	0.1	6.1
1988	C	1.8	1.9	0.1	5.7
1989	D	1.2	1.2	0.0	0.0
1990	C	1.7	1.9	0.2	11.7
1991	C	1.7	1.8	0.1	6.0
Mean:		1.3	1.3	0.0	2.0
Median:		1.3	1.3	0.0	0.0
Min:		0.1	0.1	0.0	0.0
Max:		2.3	2.4	0.2	11.7
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					1

**Old River at Hwy 4 (CCWD Los Vaqueros) DOC**

July					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	0.8	0.8	0.0	0.0
1976	C	1.2	1.2	0.0	0.0
1977	C	1.9	2.0	0.1	5.3
1978	AN	0.9	0.9	0.0	0.0
1979	BN	1.0	1.0	0.0	0.0
1980	AN	0.9	0.9	0.0	0.0
1981	D	1.0	1.0	0.0	0.0
1982	W	0.9	0.9	0.0	0.0
1983	W	0.7	0.7	0.0	0.0
1984	W	1.0	1.0	0.0	0.0
1985	D	1.1	1.1	0.0	0.0
1986	W	1.1	1.1	0.0	0.0
1987	D	1.2	1.2	0.0	0.0
1988	C	2.2	2.2	0.1	4.6
1989	D	1.1	1.1	0.0	0.0
1990	C	2.0	2.1	0.1	5.1
1991	C	1.9	1.9	0.0	0.0
Mean:		1.2	1.3	0.0	0.9
Median:		1.1	1.1	0.0	0.0
Min:		0.7	0.7	0.0	0.0
Max:		2.2	2.2	0.1	5.3
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Hwy 4 (CCWD Los Vaqueros) DOC**

<b>August</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.8	0.7	0.0	0.0
1976	C	1.0	1.0	0.0	0.0
1977	C	1.7	1.7	0.0	0.0
1978	AN	0.9	0.8	0.0	0.0
1979	BN	0.9	0.9	0.0	0.0
1980	AN	0.7	0.7	0.0	0.0
1981	D	0.8	0.8	0.0	0.0
1982	W	0.8	0.8	0.0	0.0
1983	W	0.7	0.7	0.0	0.0
1984	W	0.8	0.8	0.0	0.0
1985	D	0.8	0.8	0.0	0.0
1986	W	1.0	1.0	0.0	0.0
1987	D	1.0	1.0	0.0	0.0
1988	C	2.3	2.3	0.0	0.0
1989	D	0.8	0.8	0.0	0.0
1990	C	2.1	2.1	0.0	0.0
1991	C	1.9	1.9	-0.1	-5.2
Mean:		1.1	1.1	0.0	-0.3
Median:		0.9	0.8	0.0	0.0
Min:		0.7	0.7	-0.1	-5.2
Max:		2.3	2.3	0.0	0.0
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Hwy 4 (CCWD Los Vaqueros) DOC**

**September**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	0.6	0.6	0.0	0.0
1976	C	0.7	0.7	0.0	0.0
1977	C	1.4	1.4	0.0	0.0
1978	AN	0.7	0.7	0.0	0.0
1979	BN	0.8	0.7	0.0	0.0
1980	AN	0.6	0.6	0.0	0.0
1981	D	0.6	0.6	0.0	0.0
1982	W	0.6	0.5	0.0	0.0
1983	W	0.5	0.5	0.0	0.0
1984	W	0.6	0.6	0.0	0.0
1985	D	0.6	0.6	0.0	0.0
1986	W	0.7	0.7	0.0	0.0
1987	D	0.8	0.9	0.0	0.0
1988	C	1.6	1.7	0.0	0.0
1989	D	0.7	0.6	0.0	0.0
1990	C	1.6	1.5	0.0	0.0
1991	C	1.5	1.4	0.0	0.0
	Mean:	0.9	0.8	0.0	0.0
	Median:	0.7	0.7	0.0	0.0
	Min:	0.5	0.5	0.0	0.0
	Max:	1.6	1.7	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

Long-term and Water Year Type Average DOC at the Old River at Rock Slough (CCWD Intake) under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	Dissolved Organic Carbon (mg/L)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	0.5	0.6	0.7	1.2	1.7	1.5	1.2	1.1	1.0	0.9	0.8	0.6
NEPA Modified Flow Alternative	0.5	0.5	0.7	1.2	1.7	1.5	1.2	1.1	1.0	0.9	0.8	0.6
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference <sup>3</sup>	0.0	-1.8	-1.5	0.0	0.0	0.0	0.8	0.0	3.2	1.1	-1.3	-1.6
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	0.4	0.5	0.8	1.2	1.4	1.5	1.0	0.7	0.7	0.7	0.6	0.5
NEPA Modified Flow Alternative	0.4	0.5	0.8	1.2	1.4	1.5	1.0	0.7	0.7	0.7	0.6	0.5
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.4	-3.2	-2.1
<b>Above Normal</b>												
NEPA No Action Alternative	0.8	0.6	0.7	1.9	3.5	1.8	1.4	1.0	0.9	0.7	0.6	0.5
NEPA Modified Flow Alternative	0.8	0.6	0.7	1.9	3.5	1.8	1.4	1.0	0.9	0.7	0.6	0.5
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	-1.7	-4.2
<b>Below Normal</b>												
NEPA No Action Alternative	0.5	0.5	0.5	1.5	2.7	1.9	1.2	0.8	0.8	0.7	0.6	0.6
NEPA Modified Flow Alternative	0.5	0.5	0.5	1.5	2.7	1.9	1.2	0.8	0.8	0.7	0.6	0.6
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	-0.4	0.5	0.9	0.0	0.0	-1.4	-1.6	-1.8
<b>Dry</b>												
NEPA No Action Alternative	0.6	0.6	0.6	0.9	1.1	1.1	1.1	1.2	1.0	0.8	0.6	0.5
NEPA Modified Flow Alternative	0.6	0.6	0.6	0.9	1.1	1.1	1.1	1.2	1.0	0.8	0.7	0.5
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	-1.8	-1.6	-1.1	0.0	0.9	0.9	0.0	2.0	1.2	1.6	0.0
<b>Critical</b>												
NEPA No Action Alternative	0.6	0.6	0.6	1.0	1.4	1.5	1.5	1.4	1.3	1.2	1.2	0.9
NEPA Modified Flow Alternative	0.6	0.6	0.6	1.0	1.4	1.5	1.5	1.4	1.3	1.3	1.2	0.9
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.7	0.7	1.4	5.6	2.5	-0.8	-1.1

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

**Old River at Rock Slough (CCWD Intake) DOC**

<b>October</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.2	0.2	0.0	0.0
1976	C	0.3	0.3	0.0	0.0
1977	C	0.5	0.6	0.0	0.0
1978	AN	1.1	1.1	0.0	0.0
1979	BN	0.5	0.5	0.0	0.0
1980	AN	0.5	0.5	0.0	0.0
1981	D	0.5	0.5	0.0	0.0
1982	W	0.4	0.4	0.0	0.0
1983	W	0.4	0.4	0.0	0.0
1984	W	0.6	0.6	0.0	0.0
1985	D	0.4	0.4	0.0	0.0
1986	W	0.4	0.4	0.0	0.0
1987	D	0.5	0.5	0.0	0.0
1988	C	0.6	0.6	0.0	0.0
1989	D	0.9	0.9	0.0	0.0
1990	C	0.4	0.4	0.0	0.0
1991	C	0.9	0.9	0.0	0.0
	Mean:	0.5	0.5	0.0	0.0
	Median:	0.5	0.5	0.0	0.0
	Min:	0.2	0.2	0.0	0.0
	Max:	1.1	1.1	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**Old River at Rock Slough (CCWD Intake) DOC**

<b>November</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.3	0.3	0.0	0.0
1976	C	0.3	0.3	0.0	0.0
1977	C	0.5	0.6	0.0	0.0
1978	AN	0.9	0.9	0.0	0.0
1979	BN	0.5	0.5	0.0	0.0
1980	AN	0.4	0.4	0.0	0.0
1981	D	0.5	0.5	0.0	0.0
1982	W	0.4	0.4	0.0	0.0
1983	W	0.7	0.7	0.0	0.0
1984	W	0.6	0.6	0.0	0.0
1985	D	0.5	0.5	0.0	0.0
1986	W	0.5	0.5	0.0	0.0
1987	D	0.5	0.5	0.0	0.0
1988	C	0.6	0.6	0.0	0.0
1989	D	0.7	0.7	0.0	0.0
1990	C	0.5	0.5	0.0	0.0
1991	C	0.8	0.8	0.0	0.0
	Mean:	0.5	0.5	0.0	0.0
	Median:	0.5	0.5	0.0	0.0
	Min:	0.3	0.3	0.0	0.0
	Max:	0.9	0.9	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0



**Old River at Rock Slough (CCWD Intake) DOC**

<b>December</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.4	0.4	0.0	0.0
1976	C	0.4	0.4	0.0	0.0
1977	C	0.6	0.6	0.0	0.0
1978	AN	0.8	0.8	0.0	0.0
1979	BN	0.5	0.5	0.0	0.0
1980	AN	0.5	0.5	0.0	0.0
1981	D	0.5	0.5	0.0	0.0
1982	W	0.6	0.6	0.0	0.0
1983	W	2.1	2.1	0.0	0.0
1984	W	0.4	0.4	0.0	0.0
1985	D	0.7	0.7	0.0	0.0
1986	W	0.7	0.7	0.0	0.0
1987	D	0.6	0.6	0.0	0.0
1988	C	0.6	0.6	0.0	0.0
1989	D	0.7	0.7	0.0	0.0
1990	C	0.5	0.5	0.0	0.0
1991	C	0.9	0.9	0.0	0.0
	Mean:	0.7	0.7	0.0	0.0
	Median:	0.6	0.6	0.0	0.0
	Min:	0.4	0.4	0.0	0.0
	Max:	2.1	2.1	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**Old River at Rock Slough (CCWD Intake) DOC**

**January**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	0.7	0.7	0.0	0.0
1976	C	0.7	0.7	0.0	0.0
1977	C	1.3	1.3	0.0	0.0
1978	AN	2.2	2.2	0.0	0.0
1979	BN	1.5	1.5	0.0	0.0
1980	AN	1.5	1.5	0.0	0.0
1981	D	0.7	0.7	0.0	0.0
1982	W	2.3	2.3	0.0	0.0
1983	W	0.9	0.9	0.0	0.0
1984	W	1.2	1.2	0.0	0.0
1985	D	0.9	0.9	0.0	0.0
1986	W	1.1	1.1	0.0	0.0
1987	D	0.9	0.9	0.0	0.0
1988	C	0.9	0.9	0.0	0.0
1989	D	0.9	0.9	0.0	0.0
1990	C	0.7	0.7	0.0	0.0
1991	C	1.6	1.6	0.0	0.0
Mean:		1.2	1.2	0.0	0.0
Median:		0.9	0.9	0.0	0.0
Min:		0.7	0.7	0.0	0.0
Max:		2.3	2.3	0.0	0.0
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Rock Slough (CCWD Intake) DOC**

**February**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	1.2	1.2	0.0	0.0
1976	C	0.9	0.9	0.0	0.0
1977	C	1.8	1.8	0.0	0.0
1978	AN	2.5	2.5	0.0	0.0
1979	BN	2.7	2.7	0.0	0.0
1980	AN	4.4	4.4	0.0	0.0
1981	D	0.9	0.9	0.0	0.0
1982	W	1.5	1.5	0.0	0.0
1983	W	0.3	0.3	0.0	0.0
1984	W	1.1	1.1	0.0	0.0
1985	D	0.9	0.9	0.0	0.0
1986	W	2.8	2.8	0.0	0.0
1987	D	1.2	1.2	0.0	0.0
1988	C	1.1	1.1	0.0	0.0
1989	D	1.4	1.4	0.0	0.0
1990	C	1.0	0.9	0.0	0.0
1991	C	2.2	2.2	0.0	0.0
Mean:		1.7	1.7	0.0	0.0
Median:		1.2	1.2	0.0	0.0
Min:		0.3	0.3	0.0	0.0
Max:		4.4	4.4	0.0	0.0
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Rock Slough (CCWD Intake) DOC**

<b>March</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	1.3	1.3	0.0	0.0
1976	C	1.0	1.0	0.0	0.0
1977	C	2.2	2.2	0.0	0.0
1978	AN	2.2	2.2	0.0	0.0
1979	BN	1.9	1.9	0.0	0.0
1980	AN	1.5	1.5	0.0	0.0
1981	D	0.9	0.9	0.0	0.0
1982	W	1.6	1.6	0.0	0.0
1983	W	0.4	0.4	0.0	0.0
1984	W	0.7	0.7	0.0	0.0
1985	D	1.2	1.2	0.0	0.0
1986	W	3.6	3.6	0.0	0.0
1987	D	1.2	1.2	0.0	0.0
1988	C	1.7	1.7	0.0	0.0
1989	D	0.9	0.9	0.0	0.0
1990	C	1.2	1.2	0.0	0.0
1991	C	1.3	1.3	0.0	0.0
	Mean:	1.5	1.5	0.0	0.0
	Median:	1.3	1.3	0.0	0.0
	Min:	0.4	0.4	0.0	0.0
	Max:	3.6	3.6	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**Old River at Rock Slough (CCWD Intake) DOC**

<b>April</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	1.0	1.0	0.0	0.0
1976	C	1.1	1.1	0.0	0.0
1977	C	2.0	2.0	0.0	0.0
1978	AN	2.0	2.0	0.0	0.0
1979	BN	1.1	1.2	0.0	0.0
1980	AN	0.8	0.8	0.0	0.0
1981	D	1.1	1.1	0.0	0.0
1982	W	0.6	0.6	0.0	0.0
1983	W	0.3	0.3	0.0	0.0
1984	W	0.7	0.7	0.0	0.0
1985	D	1.5	1.5	0.0	0.0
1986	W	2.3	2.3	0.0	0.0
1987	D	1.1	1.1	0.0	0.0
1988	C	1.5	1.5	0.0	0.0
1989	D	0.8	0.8	0.0	0.0
1990	C	1.5	1.5	0.0	0.0
1991	C	1.3	1.3	0.0	0.0
Mean:		1.2	1.2	0.0	0.0
Median:		1.1	1.1	0.0	0.0
Min:		0.3	0.3	0.0	0.0
Max:		2.3	2.3	0.0	0.0
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Rock Slough (CCWD Intake) DOC**

<b>May</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.6	0.6	0.0	0.0
1976	C	1.3	1.3	0.0	0.0
1977	C	1.7	1.7	0.0	0.0
1978	AN	1.1	1.1	0.0	0.0
1979	BN	0.8	0.8	0.0	0.0
1980	AN	0.8	0.8	0.0	0.0
1981	D	1.0	1.0	0.0	0.0
1982	W	0.8	0.8	0.0	0.0
1983	W	0.3	0.3	0.0	0.0
1984	W	0.9	0.9	0.0	0.0
1985	D	1.4	1.4	0.0	0.0
1986	W	0.9	0.9	0.0	0.0
1987	D	1.4	1.4	0.0	0.0
1988	C	1.3	1.4	0.0	0.0
1989	D	1.0	1.0	0.0	0.0
1990	C	1.3	1.3	0.0	0.0
1991	C	1.3	1.3	0.0	0.0
	Mean:	1.0	1.1	0.0	0.0
	Median:	1.0	1.0	0.0	0.0
	Min:	0.3	0.3	0.0	0.0
	Max:	1.7	1.7	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**Old River at Rock Slough (CCWD Intake) DOC**

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	0.6	0.6	0.0	0.0
1976	C	1.2	1.2	0.0	0.0
1977	C	1.6	1.7	0.1	6.3
1978	AN	0.9	0.9	0.0	0.0
1979	BN	0.8	0.8	0.0	0.0
1980	AN	0.9	0.9	0.0	0.0
1981	D	0.9	0.9	0.0	0.0
1982	W	0.7	0.7	0.0	0.0
1983	W	0.2	0.2	0.0	0.0
1984	W	1.0	1.0	0.0	0.0
1985	D	1.1	1.1	0.0	0.0
1986	W	0.9	0.9	0.0	0.0
1987	D	1.1	1.2	0.1	8.8
1988	C	1.2	1.3	0.1	8.2
1989	D	0.8	0.8	0.0	0.0
1990	C	1.2	1.4	0.1	8.3
1991	C	1.1	1.2	0.1	9.1
Mean:		0.9	1.0	0.0	2.4
Median:		0.9	0.9	0.0	0.0
Min:		0.2	0.2	0.0	0.0
Max:		1.6	1.7	0.1	9.1
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Old River at Rock Slough (CCWD Intake) DOC**

July					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	0.6	0.6	0.0	0.0
1976	C	0.9	0.9	0.0	0.0
1977	C	1.2	1.3	0.0	0.0
1978	AN	0.7	0.7	0.0	0.0
1979	BN	0.7	0.7	0.0	0.0
1980	AN	0.7	0.7	0.0	0.0
1981	D	0.8	0.8	0.0	0.0
1982	W	0.7	0.7	0.0	0.0
1983	W	0.6	0.6	0.0	0.0
1984	W	0.7	0.7	0.0	0.0
1985	D	0.8	0.8	0.0	0.0
1986	W	0.8	0.8	0.0	0.0
1987	D	0.8	0.9	0.0	0.0
1988	C	1.4	1.5	0.0	0.0
1989	D	0.8	0.8	0.0	0.0
1990	C	1.3	1.4	0.1	7.4
1991	C	1.2	1.2	0.0	0.0
Mean:		0.9	0.9	0.0	0.4
Median:		0.8	0.8	0.0	0.0
Min:		0.6	0.6	0.0	0.0
Max:		1.4	1.5	0.1	7.4
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



**Old River at Rock Slough (CCWD Intake) DOC**

<b>August</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.6	0.6	0.0	0.0
1976	C	0.7	0.7	0.0	0.0
1977	C	1.1	1.1	0.0	0.0
1978	AN	0.6	0.6	0.0	0.0
1979	BN	0.6	0.6	0.0	0.0
1980	AN	0.5	0.5	0.0	0.0
1981	D	0.6	0.6	0.0	0.0
1982	W	0.6	0.6	0.0	0.0
1983	W	0.5	0.5	0.0	0.0
1984	W	0.6	0.6	0.0	0.0
1985	D	0.6	0.6	0.0	0.0
1986	W	0.8	0.7	0.0	0.0
1987	D	0.7	0.7	0.0	0.0
1988	C	1.6	1.6	0.0	0.0
1989	D	0.7	0.6	0.0	0.0
1990	C	1.4	1.4	0.0	0.0
1991	C	1.3	1.2	0.0	0.0
	Mean:	0.8	0.8	0.0	0.0
	Median:	0.6	0.6	0.0	0.0
	Min:	0.5	0.5	0.0	0.0
	Max:	1.6	1.6	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**Old River at Rock Slough (CCWD Intake) DOC**

**September**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	0.4	0.4	0.0	0.0
1976	C	0.6	0.6	0.0	0.0
1977	C	0.9	0.9	0.0	0.0
1978	AN	0.5	0.5	0.0	0.0
1979	BN	0.6	0.5	0.0	0.0
1980	AN	0.4	0.4	0.0	0.0
1981	D	0.4	0.4	0.0	0.0
1982	W	0.4	0.4	0.0	0.0
1983	W	0.4	0.4	0.0	0.0
1984	W	0.5	0.5	0.0	0.0
1985	D	0.4	0.4	0.0	0.0
1986	W	0.6	0.6	0.0	0.0
1987	D	0.6	0.6	0.0	0.0
1988	C	1.1	1.1	0.0	0.0
1989	D	0.5	0.5	0.0	0.0
1990	C	1.1	1.1	0.0	0.0
1991	C	1.0	1.0	0.0	0.0
	Mean:	0.6	0.6	0.0	0.0
	Median:	0.5	0.5	0.0	0.0
	Min:	0.4	0.4	0.0	0.0
	Max:	1.1	1.1	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

Long-term and Water Year Type Average DOC at West Canal at the mouth of CCF (SWP Banks) under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	Dissolved Organic Carbon (mg/L)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	0.7	0.7	0.8	1.4	1.7	1.7	1.4	1.2	1.3	1.3	1.2	1.0
NEPA Modified Flow Alternative	0.7	0.7	0.8	1.4	1.7	1.7	1.4	1.2	1.3	1.4	1.2	1.0
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference <sup>3</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.8	1.5	0.0	-1.0
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	0.4	0.5	0.6	1.2	1.2	0.9	0.5	0.5	0.8	0.9	0.9	0.7
NEPA Modified Flow Alternative	0.4	0.5	0.6	1.2	1.2	0.9	0.5	0.5	0.8	0.9	0.9	0.7
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	-1.1	-3.3	-1.4
<b>Above Normal</b>												
NEPA No Action Alternative	1.1	1.0	0.9	2.2	1.8	1.7	0.7	0.6	0.8	1.0	0.9	0.7
NEPA Modified Flow Alternative	1.1	1.0	0.9	2.2	1.8	1.7	0.7	0.6	0.8	1.0	0.9	0.7
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	-2.2	-1.4
<b>Below Normal</b>												
NEPA No Action Alternative	0.7	0.6	0.7	1.7	2.2	1.5	1.1	0.8	1.1	1.2	1.0	0.9
NEPA Modified Flow Alternative	0.6	0.6	0.7	1.7	2.2	1.5	1.1	0.8	1.1	1.2	1.0	0.9
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	-1.5	0.0	0.0	0.6	0.0	-0.7	0.0	0.0	0.0	-0.8	-1.9	-2.3
<b>Dry</b>												
NEPA No Action Alternative	0.8	0.8	0.9	1.4	1.7	1.9	1.9	1.5	1.5	1.3	1.0	0.8
NEPA Modified Flow Alternative	0.8	0.8	0.9	1.4	1.7	1.9	1.9	1.5	1.6	1.3	1.0	0.8
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	-1.3	-1.1	0.0	0.0	0.0	0.0	0.0	1.9	1.6	0.0	0.0
<b>Critical</b>												
NEPA No Action Alternative	0.8	0.8	0.9	1.4	2.1	2.3	2.3	2.1	1.9	1.9	1.9	1.7
NEPA Modified Flow Alternative	0.8	0.8	0.9	1.4	2.1	2.3	2.3	2.1	1.9	2.0	2.0	1.7
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Percent Difference	1.2	0.0	0.0	0.0	0.0	0.0	0.4	0.5	1.1	2.6	1.6	0.0

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

**West Canal at the mouth of CCF (SWP Banks) DOC**

<b>October</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.3	0.3	0.0	0.0
1976	C	0.5	0.5	0.0	0.0
1977	C	0.7	0.7	0.0	0.0
1978	AN	1.5	1.5	0.0	0.0
1979	BN	0.6	0.6	0.0	0.0
1980	AN	0.7	0.7	0.0	0.0
1981	D	0.6	0.6	0.0	0.0
1982	W	0.6	0.6	0.0	0.0
1983	W	0.3	0.3	0.0	0.0
1984	W	0.3	0.3	0.0	0.0
1985	D	0.6	0.6	0.0	0.0
1986	W	0.6	0.6	0.0	0.0
1987	D	0.7	0.7	0.0	0.0
1988	C	0.9	0.9	0.0	0.0
1989	D	1.5	1.5	0.0	0.0
1990	C	0.7	0.7	0.0	0.0
1991	C	1.4	1.4	0.0	0.0
Mean:		0.7	0.7	0.0	0.0
Median:		0.6	0.6	0.0	0.0
Min:		0.3	0.3	0.0	0.0
Max:		1.5	1.5	0.0	0.0
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) DOC**

<b>November</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.5	0.5	0.0	0.0
1976	C	0.4	0.4	0.0	0.0
1977	C	0.7	0.7	0.0	0.0
1978	AN	1.4	1.4	0.0	0.0
1979	BN	0.6	0.6	0.0	0.0
1980	AN	0.6	0.6	0.0	0.0
1981	D	0.7	0.6	0.0	0.0
1982	W	0.5	0.5	0.0	0.0
1983	W	0.7	0.7	0.0	0.0
1984	W	0.2	0.2	0.0	0.0
1985	D	0.7	0.7	0.0	0.0
1986	W	0.7	0.7	0.0	0.0
1987	D	0.7	0.7	0.0	0.0
1988	C	0.9	0.9	0.0	0.0
1989	D	1.1	1.1	0.0	0.0
1990	C	0.7	0.7	0.0	0.0
1991	C	1.2	1.2	0.0	0.0
	Mean:	0.7	0.7	0.0	0.0
	Median:	0.7	0.7	0.0	0.0
	Min:	0.2	0.2	0.0	0.0
	Max:	1.4	1.4	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**West Canal at the mouth of CCF (SWP Banks) DOC**

<b>December</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.6	0.6	0.0	0.0
1976	C	0.6	0.6	0.0	0.0
1977	C	0.8	0.8	0.0	0.0
1978	AN	1.2	1.2	0.0	0.0
1979	BN	0.7	0.7	0.0	0.0
1980	AN	0.7	0.7	0.0	0.0
1981	D	0.8	0.7	0.0	0.0
1982	W	0.9	0.9	0.0	0.0
1983	W	0.2	0.2	0.0	0.0
1984	W	0.1	0.1	0.0	0.0
1985	D	1.1	1.1	0.0	0.0
1986	W	0.9	0.9	0.0	0.0
1987	D	0.8	0.8	0.0	0.0
1988	C	0.8	0.8	0.0	0.0
1989	D	1.0	1.0	0.0	0.0
1990	C	0.8	0.8	0.0	0.0
1991	C	1.3	1.3	0.0	0.0
Mean:		0.8	0.8	0.0	0.0
Median:		0.8	0.8	0.0	0.0
Min:		0.1	0.1	0.0	0.0
Max:		1.3	1.3	0.0	0.0
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) DOC**

January					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	1.1	1.1	0.0	0.0
1976	C	1.0	1.1	0.0	0.0
1977	C	1.5	1.5	0.0	0.0
1978	AN	3.0	3.0	0.0	0.0
1979	BN	1.7	1.7	0.0	0.0
1980	AN	1.3	1.3	0.0	0.0
1981	D	1.2	1.2	0.0	0.0
1982	W	2.7	2.7	0.0	0.0
1983	W	0.2	0.2	0.0	0.0
1984	W	0.1	0.1	0.0	0.0
1985	D	1.5	1.5	0.0	0.0
1986	W	1.7	1.7	0.0	0.0
1987	D	1.4	1.4	0.0	0.0
1988	C	1.5	1.5	0.0	0.0
1989	D	1.3	1.3	0.0	0.0
1990	C	1.1	1.1	0.0	0.0
1991	C	1.7	1.7	0.0	0.0
Mean:		1.4	1.4	0.0	0.0
Median:		1.4	1.4	0.0	0.0
Min:		0.1	0.1	0.0	0.0
Max:		3.0	3.0	0.0	0.0
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) DOC**

<b>February</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	1.6	1.6	0.0	0.0
1976	C	1.6	1.6	0.0	0.0
1977	C	2.5	2.5	0.0	0.0
1978	AN	3.2	3.2	0.0	0.0
1979	BN	2.2	2.2	0.0	0.0
1980	AN	0.4	0.4	0.0	0.0
1981	D	1.6	1.6	0.0	0.0
1982	W	1.5	1.5	0.0	0.0
1983	W	0.1	0.1	0.0	0.0
1984	W	0.7	0.7	0.0	0.0
1985	D	1.5	1.5	0.0	0.0
1986	W	2.0	2.0	0.0	0.0
1987	D	2.0	2.0	0.0	0.0
1988	C	2.1	2.1	0.0	0.0
1989	D	1.8	1.8	0.0	0.0
1990	C	1.7	1.7	0.0	0.0
1991	C	2.6	2.6	0.0	0.0
Mean:		1.7	1.7	0.0	0.0
Median:		1.7	1.7	0.0	0.0
Min:		0.1	0.1	0.0	0.0
Max:		3.2	3.2	0.0	0.0
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



**West Canal at the mouth of CCF (SWP Banks) DOC**

<b>March</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	1.4	1.4	0.0	0.0
1976	C	1.7	1.7	0.0	0.0
1977	C	2.9	2.9	0.0	0.0
1978	AN	2.3	2.3	0.0	0.0
1979	BN	1.5	1.5	0.0	0.0
1980	AN	1.0	1.0	0.0	0.0
1981	D	1.7	1.7	0.0	0.0
1982	W	1.5	1.5	0.0	0.0
1983	W	0.1	0.1	0.0	0.0
1984	W	0.9	0.9	0.0	0.0
1985	D	1.8	1.8	0.0	0.0
1986	W	0.4	0.4	0.0	0.0
1987	D	2.2	2.2	0.0	0.0
1988	C	2.3	2.3	0.0	0.0
1989	D	2.0	2.0	0.0	0.0
1990	C	2.2	2.2	0.0	0.0
1991	C	2.4	2.4	0.0	0.0
Mean:		1.7	1.7	0.0	0.0
Median:		1.7	1.7	0.0	0.0
Min:		0.1	0.1	0.0	0.0
Max:		2.9	2.9	0.0	0.0
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) DOC**

<b>April</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.9	0.9	0.0	0.0
1976	C	1.7	1.7	0.0	0.0
1977	C	3.1	3.1	0.0	0.0
1978	AN	0.8	0.8	0.0	0.0
1979	BN	1.1	1.1	0.0	0.0
1980	AN	0.6	0.6	0.0	0.0
1981	D	1.7	1.7	0.0	0.0
1982	W	0.2	0.2	0.0	0.0
1983	W	0.0	0.0	0.0	0.0
1984	W	0.9	0.9	0.0	0.0
1985	D	2.3	2.3	0.0	0.0
1986	W	0.2	0.2	0.0	0.0
1987	D	2.1	2.1	0.0	0.0
1988	C	2.4	2.4	0.0	0.0
1989	D	1.5	1.5	0.0	0.0
1990	C	2.2	2.2	0.1	4.6
1991	C	1.9	1.9	0.0	0.0
	Mean:	1.4	1.4	0.0	0.3
	Median:	1.5	1.5	0.0	0.0
	Min:	0.0	0.0	0.0	0.0
	Max:	3.1	3.1	0.1	4.6
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**West Canal at the mouth of CCF (SWP Banks) DOC**

<b>May</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.6	0.6	0.0	0.0
1976	C	1.6	1.6	0.0	0.0
1977	C	2.8	2.8	0.0	0.0
1978	AN	0.5	0.5	0.0	0.0
1979	BN	0.8	0.8	0.0	0.0
1980	AN	0.6	0.6	0.0	0.0
1981	D	1.1	1.1	0.0	0.0
1982	W	0.2	0.2	0.0	0.0
1983	W	0.0	0.0	0.0	0.0
1984	W	0.9	0.9	0.0	0.0
1985	D	1.7	1.7	0.0	0.0
1986	W	0.7	0.7	0.0	0.0
1987	D	1.8	1.8	0.0	0.0
1988	C	2.0	2.0	0.0	0.0
1989	D	1.5	1.5	0.0	0.0
1990	C	2.1	2.1	0.1	4.9
1991	C	1.8	1.8	0.0	0.0
Mean:		1.2	1.2	0.0	0.3
Median:		1.1	1.1	0.0	0.0
Min:		0.0	0.0	0.0	0.0
Max:		2.8	2.8	0.1	4.9
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) DOC**

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	0.9	0.9	0.0	0.0
1976	C	1.8	1.8	0.0	0.0
1977	C	2.5	2.5	0.0	0.0
1978	AN	0.7	0.7	0.0	0.0
1979	BN	1.1	1.1	0.0	0.0
1980	AN	0.9	1.0	0.0	0.0
1981	D	1.4	1.4	0.0	0.0
1982	W	0.6	0.6	0.0	0.0
1983	W	0.0	0.0	0.0	0.0
1984	W	1.3	1.3	0.0	0.0
1985	D	1.6	1.6	0.0	0.0
1986	W	0.9	0.9	0.0	0.0
1987	D	1.8	1.8	0.1	5.6
1988	C	1.7	1.7	0.0	0.0
1989	D	1.4	1.4	0.0	0.0
1990	C	1.7	1.8	0.0	0.0
1991	C	1.6	1.6	0.0	0.0
Mean:		1.3	1.3	0.0	0.3
Median:		1.4	1.4	0.0	0.0
Min:		0.0	0.0	0.0	0.0
Max:		2.5	2.5	0.1	5.6
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) DOC**

July					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	1.0	1.0	0.0	0.0
1976	C	1.4	1.4	0.0	0.0
1977	C	2.2	2.3	0.1	4.5
1978	AN	1.0	1.0	0.0	0.0
1979	BN	1.2	1.2	0.0	0.0
1980	AN	1.0	1.1	0.0	0.0
1981	D	1.2	1.2	0.0	0.0
1982	W	0.9	0.9	0.0	0.0
1983	W	0.4	0.4	0.0	0.0
1984	W	1.2	1.2	0.0	0.0
1985	D	1.3	1.3	0.0	0.0
1986	W	1.2	1.2	0.0	0.0
1987	D	1.4	1.5	0.1	7.2
1988	C	2.0	2.0	0.0	0.0
1989	D	1.3	1.3	0.0	0.0
1990	C	2.0	2.1	0.1	5.0
1991	C	1.9	2.0	0.1	5.2
Mean:		1.3	1.3	0.0	1.3
Median:		1.2	1.2	0.0	0.0
Min:		0.4	0.4	0.0	0.0
Max:		2.2	2.3	0.1	7.2
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**West Canal at the mouth of CCF (SWP Banks) DOC**

<b>August</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.9	0.9	0.0	0.0
1976	C	1.1	1.1	0.0	0.0
1977	C	1.9	2.0	0.1	5.2
1978	AN	1.0	1.0	0.0	0.0
1979	BN	1.0	1.0	0.0	0.0
1980	AN	0.8	0.8	0.0	0.0
1981	D	1.0	1.0	0.0	0.0
1982	W	0.9	0.9	0.0	0.0
1983	W	0.7	0.7	0.0	0.0
1984	W	0.9	0.9	0.0	0.0
1985	D	0.9	0.9	0.0	0.0
1986	W	1.2	1.1	0.0	0.0
1987	D	1.2	1.2	0.0	0.0
1988	C	2.3	2.3	0.0	0.0
1989	D	1.0	1.0	0.0	0.0
1990	C	2.2	2.3	0.1	4.6
1991	C	2.1	2.1	0.0	0.0
	Mean:	1.2	1.2	0.0	0.6
	Median:	1.0	1.0	0.0	0.0
	Min:	0.7	0.7	0.0	0.0
	Max:	2.3	2.3	0.1	5.2
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**West Canal at the mouth of CCF (SWP Banks) DOC**

**September**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	0.7	0.7	0.0	0.0
1976	C	0.9	0.9	0.0	0.0
1977	C	1.7	1.7	0.0	0.0
1978	AN	0.8	0.8	0.0	0.0
1979	BN	0.9	0.8	0.0	0.0
1980	AN	0.7	0.7	0.0	0.0
1981	D	0.7	0.7	0.0	0.0
1982	W	0.6	0.6	0.0	0.0
1983	W	0.6	0.6	0.0	0.0
1984	W	0.7	0.7	0.0	0.0
1985	D	0.7	0.7	0.0	0.0
1986	W	0.9	0.9	0.0	0.0
1987	D	1.0	1.0	0.0	0.0
1988	C	2.0	2.1	0.0	0.0
1989	D	0.8	0.8	0.0	0.0
1990	C	1.9	1.9	0.0	0.0
1991	C	1.9	1.8	-0.1	-5.4
	Mean:	1.0	1.0	0.0	-0.3
	Median:	0.8	0.8	0.0	0.0
	Min:	0.6	0.6	-0.1	-5.4
	Max:	2.0	2.1	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

Long-term and Water Year Type Average DOC at the Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	Dissolved Organic Carbon (mg/L)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	0.6	0.7	0.6	0.9	1.0	0.9	1.0	1.0	1.0	1.1	1.1	0.8
NEPA Modified Flow Alternative	0.6	0.7	0.6	0.9	1.0	0.9	1.0	1.0	1.0	1.1	1.1	0.8
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference <sup>3</sup>	0.0	-1.5	0.0	0.0	0.0	1.2	0.0	1.0	1.0	0.9	0.0	0.0
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	0.3	0.4	0.4	0.8	0.3	0.3	0.3	0.4	0.5	0.7	0.7	0.5
NEPA Modified Flow Alternative	0.3	0.5	0.4	0.8	0.3	0.3	0.3	0.4	0.5	0.7	0.7	0.5
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	2.3	0.0	0.0	0.0	3.6	3.7	0.0	0.0	-2.9	-2.7	-2.0
<b>Above Normal</b>												
NEPA No Action Alternative	1.0	0.9	0.7	1.0	0.7	0.5	0.3	0.3	0.4	0.8	0.8	0.6
NEPA Modified Flow Alternative	1.0	0.9	0.7	1.0	0.7	0.5	0.3	0.3	0.4	0.8	0.8	0.5
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.6	-1.8
<b>Below Normal</b>												
NEPA No Action Alternative	0.6	0.6	0.5	0.8	0.5	0.3	0.7	0.6	0.9	1.0	0.9	0.6
NEPA Modified Flow Alternative	0.6	0.6	0.5	0.8	0.5	0.3	0.7	0.6	0.9	1.0	0.8	0.6
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	-2.3	-3.1
<b>Dry</b>												
NEPA No Action Alternative	0.8	0.7	0.7	0.9	1.2	1.1	1.5	1.3	1.3	1.1	0.9	0.6
NEPA Modified Flow Alternative	0.8	0.7	0.7	0.9	1.2	1.1	1.5	1.3	1.3	1.1	0.9	0.6
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent Difference	0.0	-1.4	-1.5	0.0	0.0	0.0	0.0	0.0	0.8	1.8	0.0	0.0
<b>Critical</b>												
NEPA No Action Alternative	0.8	0.7	0.6	1.1	1.6	1.5	1.8	1.8	1.6	1.8	1.8	1.4
NEPA Modified Flow Alternative	0.8	0.7	0.6	1.1	1.6	1.5	1.8	1.8	1.7	1.8	1.8	1.3
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Percent Difference	0.0	0.0	1.6	0.9	0.0	0.0	0.6	0.6	1.8	2.9	0.6	-0.7

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average



**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) DOC**

<b>October</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.3	0.3	0.0	0.0
1976	C	0.4	0.4	0.0	0.0
1977	C	0.7	0.7	0.0	0.0
1978	AN	1.3	1.3	0.0	0.0
1979	BN	0.6	0.6	0.0	0.0
1980	AN	0.6	0.6	0.0	0.0
1981	D	0.6	0.5	0.0	0.0
1982	W	0.6	0.6	0.0	0.0
1983	W	0.1	0.1	0.0	0.0
1984	W	0.0	0.0	0.0	0.0
1985	D	0.6	0.6	0.0	0.0
1986	W	0.6	0.6	0.0	0.0
1987	D	0.6	0.6	0.0	0.0
1988	C	0.8	0.8	0.0	0.0
1989	D	1.3	1.3	0.0	0.0
1990	C	0.6	0.7	0.0	0.0
1991	C	1.3	1.3	0.0	0.0
	Mean:	0.6	0.6	0.0	0.0
	Median:	0.6	0.6	0.0	0.0
	Min:	0.0	0.0	0.0	0.0
	Max:	1.3	1.3	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) DOC**

<b>November</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.5	0.5	0.0	0.0
1976	C	0.4	0.4	0.0	0.0
1977	C	0.7	0.7	0.0	0.0
1978	AN	1.2	1.2	0.0	0.0
1979	BN	0.6	0.6	0.0	0.0
1980	AN	0.5	0.5	0.0	0.0
1981	D	0.7	0.6	0.0	0.0
1982	W	0.5	0.5	0.0	0.0
1983	W	0.6	0.6	0.0	0.0
1984	W	0.0	0.0	0.0	0.0
1985	D	0.7	0.7	0.0	0.0
1986	W	0.6	0.6	0.0	0.0
1987	D	0.7	0.7	0.0	0.0
1988	C	0.8	0.8	0.0	0.0
1989	D	1.0	1.0	0.0	0.0
1990	C	0.7	0.7	0.0	0.0
1991	C	1.1	1.1	0.0	0.0
	Mean:	0.7	0.7	0.0	0.0
	Median:	0.7	0.6	0.0	0.0
	Min:	0.0	0.0	0.0	0.0
	Max:	1.2	1.2	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) DOC**

<b>December</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.5	0.5	0.0	0.0
1976	C	0.4	0.5	0.0	0.0
1977	C	0.5	0.5	0.0	0.0
1978	AN	0.9	0.9	0.0	0.0
1979	BN	0.5	0.5	0.0	0.0
1980	AN	0.5	0.5	0.0	0.0
1981	D	0.6	0.6	0.0	0.0
1982	W	0.7	0.7	0.0	0.0
1983	W	0.1	0.1	0.0	0.0
1984	W	0.2	0.2	0.0	0.0
1985	D	0.8	0.8	0.0	0.0
1986	W	0.7	0.7	0.0	0.0
1987	D	0.5	0.5	0.0	0.0
1988	C	0.7	0.7	0.0	0.0
1989	D	0.8	0.8	0.0	0.0
1990	C	0.5	0.6	0.0	0.0
1991	C	1.0	1.0	0.0	0.0
	Mean:	0.6	0.6	0.0	0.0
	Median:	0.5	0.6	0.0	0.0
	Min:	0.1	0.1	0.0	0.0
	Max:	1.0	1.0	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) DOC**

**January**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	0.9	0.9	0.0	0.0
1976	C	0.9	0.9	0.0	0.0
1977	C	1.3	1.3	0.0	0.0
1978	AN	1.7	1.7	0.0	0.0
1979	BN	0.8	0.8	0.0	0.0
1980	AN	0.3	0.3	0.0	0.0
1981	D	0.7	0.7	0.0	0.0
1982	W	1.0	1.0	0.0	0.0
1983	W	0.7	0.7	0.0	0.0
1984	W	0.1	0.1	0.0	0.0
1985	D	1.1	1.1	0.0	0.0
1986	W	1.2	1.2	0.0	0.0
1987	D	0.7	0.7	0.0	0.0
1988	C	1.2	1.2	0.0	0.0
1989	D	1.2	1.2	0.0	0.0
1990	C	0.9	0.9	0.0	0.0
1991	C	1.3	1.3	0.0	0.0
Mean:		0.9	0.9	0.0	0.0
Median:		0.9	0.9	0.0	0.0
Min:		0.1	0.1	0.0	0.0
Max:		1.7	1.7	0.0	0.0
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) DOC**

<b>February</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.7	0.7	0.0	0.0
1976	C	1.0	1.0	0.0	0.0
1977	C	2.0	2.0	0.0	0.0
1978	AN	1.2	1.2	0.0	0.0
1979	BN	0.5	0.5	0.0	0.0
1980	AN	0.2	0.2	0.0	0.0
1981	D	1.1	1.1	0.0	0.0
1982	W	0.1	0.1	0.0	0.0
1983	W	0.2	0.2	0.0	0.0
1984	W	0.1	0.1	0.0	0.0
1985	D	1.1	1.1	0.0	0.0
1986	W	0.4	0.4	0.0	0.0
1987	D	1.3	1.3	0.0	0.0
1988	C	1.9	1.9	0.0	0.0
1989	D	1.4	1.4	0.0	0.0
1990	C	1.5	1.5	0.0	0.0
1991	C	1.7	1.7	0.0	0.0
	Mean:	1.0	1.0	0.0	0.0
	Median:	1.1	1.1	0.0	0.0
	Min:	0.1	0.1	0.0	0.0
	Max:	2.0	2.0	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

### Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) DOC

March					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	0.4	0.4	0.0	0.0
1976	C	1.2	1.2	0.0	0.0
1977	C	1.7	1.7	0.0	0.0
1978	AN	0.8	0.8	0.0	0.0
1979	BN	0.3	0.3	0.0	0.0
1980	AN	0.1	0.1	0.0	0.0
1981	D	0.7	0.7	0.0	0.0
1982	W	0.2	0.2	0.0	0.0
1983	W	0.4	0.4	0.0	0.0
1984	W	0.3	0.3	0.0	0.0
1985	D	1.3	1.3	0.0	0.0
1986	W	0.1	0.1	0.0	0.0
1987	D	1.1	1.1	0.0	0.0
1988	C	1.4	1.4	0.0	0.0
1989	D	1.4	1.4	0.0	0.0
1990	C	1.6	1.6	0.0	0.0
1991	C	1.7	1.7	0.0	0.0
Mean:		0.9	0.9	0.0	0.0
Median:		0.8	0.8	0.0	0.0
Min:		0.1	0.1	0.0	0.0
Max:		1.7	1.7	0.0	0.0
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) DOC**

<b>April</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.5	0.5	0.0	0.0
1976	C	1.4	1.4	0.0	0.0
1977	C	2.4	2.4	0.0	0.0
1978	AN	0.1	0.1	0.0	0.0
1979	BN	0.7	0.7	0.0	0.0
1980	AN	0.4	0.4	0.0	0.0
1981	D	1.2	1.2	0.0	0.0
1982	W	0.0	0.0	0.0	0.0
1983	W	0.1	0.1	0.0	0.0
1984	W	0.7	0.7	0.0	0.0
1985	D	1.7	1.7	0.0	0.0
1986	W	0.0	0.0	0.0	0.0
1987	D	1.7	1.7	0.0	0.0
1988	C	1.9	1.9	0.0	0.0
1989	D	1.3	1.3	0.0	0.0
1990	C	1.8	1.9	0.0	0.0
1991	C	1.4	1.4	0.0	0.0
Mean:		1.0	1.0	0.0	0.0
Median:		1.2	1.2	0.0	0.0
Min:		0.0	0.0	0.0	0.0
Max:		2.4	2.4	0.0	0.0
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) DOC**

<b>May</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.5	0.5	0.0	0.0
1976	C	1.5	1.5	0.0	0.0
1977	C	2.2	2.2	0.0	0.0
1978	AN	0.1	0.1	0.0	0.0
1979	BN	0.6	0.6	0.0	0.0
1980	AN	0.5	0.5	0.0	0.0
1981	D	0.9	0.9	0.0	0.0
1982	W	0.1	0.1	0.0	0.0
1983	W	0.0	0.0	0.0	0.0
1984	W	0.7	0.7	0.0	0.0
1985	D	1.2	1.3	0.0	0.0
1986	W	0.6	0.6	0.0	0.0
1987	D	1.5	1.5	0.0	0.0
1988	C	1.8	1.8	0.0	0.0
1989	D	1.5	1.5	0.0	0.0
1990	C	1.8	1.9	0.0	0.0
1991	C	1.6	1.6	0.0	0.0
Mean:		1.0	1.0	0.0	0.0
Median:		0.9	0.9	0.0	0.0
Min:		0.0	0.0	0.0	0.0
Max:		2.2	2.2	0.0	0.0
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0



**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) DOC**

June					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	0.5	0.5	0.0	0.0
1976	C	1.5	1.5	0.0	0.0
1977	C	1.9	1.9	0.0	0.0
1978	AN	0.2	0.2	0.0	0.0
1979	BN	0.9	0.9	0.0	0.0
1980	AN	0.5	0.5	0.0	0.0
1981	D	1.2	1.2	0.0	0.0
1982	W	0.2	0.2	0.0	0.0
1983	W	0.1	0.1	0.0	0.0
1984	W	1.0	1.0	0.0	0.0
1985	D	1.3	1.3	0.0	0.0
1986	W	0.5	0.5	0.0	0.0
1987	D	1.4	1.5	0.0	0.0
1988	C	1.6	1.6	0.0	0.0
1989	D	1.2	1.2	0.0	0.0
1990	C	1.6	1.7	0.1	6.2
1991	C	1.6	1.6	0.1	6.4
Mean:		1.0	1.0	0.0	0.7
Median:		1.2	1.2	0.0	0.0
Min:		0.1	0.1	0.0	0.0
Max:		1.9	1.9	0.1	6.4
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) DOC**

<b>July</b>					
<b>Water Year</b>	<b>Water Year Type</b>	<b>NEPA No Action Alternative</b>	<b>NEPA Modified Flow Alternative</b>	<b>Absolute Difference</b>	<b>Relative Difference (%)</b>
		<b>Dissolved Organic Carbon (mg/L)</b>	<b>Dissolved Organic Carbon (mg/L)</b>		
1975	W	0.8	0.8	0.0	0.0
1976	C	1.2	1.1	0.0	0.0
1977	C	2.0	2.0	0.1	5.1
1978	AN	0.8	0.8	0.0	0.0
1979	BN	1.0	1.0	0.0	0.0
1980	AN	0.7	0.8	0.0	0.0
1981	D	1.0	1.1	0.0	0.0
1982	W	0.7	0.7	0.0	0.0
1983	W	0.1	0.1	0.0	0.0
1984	W	1.0	1.0	0.0	0.0
1985	D	1.1	1.1	0.0	0.0
1986	W	0.9	0.9	0.0	0.0
1987	D	1.1	1.1	0.0	0.0
1988	C	2.0	2.1	0.1	5.0
1989	D	1.1	1.1	0.0	0.0
1990	C	1.8	2.0	0.1	5.5
1991	C	1.8	1.8	0.1	5.7
Mean:		1.1	1.1	0.0	1.3
Median:		1.0	1.1	0.0	0.0
Min:		0.1	0.1	0.0	0.0
Max:		2.0	2.1	0.1	5.7
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

### Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) DOC

August					
Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	0.7	0.7	0.0	0.0
1976	C	0.9	0.9	0.0	0.0
1977	C	1.8	1.8	0.0	0.0
1978	AN	0.9	0.8	0.0	0.0
1979	BN	0.9	0.8	0.0	0.0
1980	AN	0.7	0.7	0.0	0.0
1981	D	0.8	0.8	0.0	0.0
1982	W	0.8	0.7	0.0	0.0
1983	W	0.6	0.6	0.0	0.0
1984	W	0.7	0.7	0.0	0.0
1985	D	0.8	0.8	0.0	0.0
1986	W	1.0	0.9	0.0	0.0
1987	D	1.0	1.0	0.0	0.0
1988	C	2.2	2.3	0.0	0.0
1989	D	1.0	1.0	0.0	0.0
1990	C	2.0	2.1	0.0	0.0
1991	C	1.9	1.9	0.0	0.0
Mean:		1.1	1.1	0.0	0.0
Median:		0.9	0.8	0.0	0.0
Min:		0.6	0.6	0.0	0.0
Max:		2.2	2.3	0.0	0.0
# Years Abs Diff < -0.4				0	
# Years Abs Diff > 0.4				0	
# Years Rel Diff <= -10%					0
# Years Rel Diff >= 10%					0

**Delta-Mendota Canal at Tracy Pumping Plant (CVP Tracy) DOC**

**September**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Dissolved Organic Carbon (mg/L)	Dissolved Organic Carbon (mg/L)		
1975	W	0.5	0.5	0.0	0.0
1976	C	0.7	0.7	0.0	0.0
1977	C	1.4	1.4	0.0	0.0
1978	AN	0.6	0.6	0.0	0.0
1979	BN	0.6	0.6	0.0	0.0
1980	AN	0.5	0.5	0.0	0.0
1981	D	0.6	0.6	0.0	0.0
1982	W	0.4	0.4	0.0	0.0
1983	W	0.3	0.3	0.0	0.0
1984	W	0.6	0.6	0.0	0.0
1985	D	0.5	0.5	0.0	0.0
1986	W	0.6	0.6	0.0	0.0
1987	D	0.8	0.8	0.0	0.0
1988	C	1.7	1.7	0.0	0.0
1989	D	0.6	0.6	0.0	0.0
1990	C	1.5	1.5	0.0	0.0
1991	C	1.5	1.5	0.0	0.0
	Mean:	0.8	0.8	0.0	0.0
	Median:	0.6	0.6	0.0	0.0
	Min:	0.3	0.3	0.0	0.0
	Max:	1.7	1.7	0.0	0.0
	# Years Abs Diff < -0.4			0	
	# Years Abs Diff > 0.4			0	
	# Years Rel Diff <= -10%				0
	# Years Rel Diff >= 10%				0

Long-term and Water Year Type Average Flow at the Old River at Bacon Island under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	-3,055	-2,781	-2,704	-2,544	-1,585	-1,806	-691	-714	-1,520	-3,340	-3,148	-3,360
NEPA Modified Flow Alternative	-3,064	-2,803	-2,701	-2,541	-1,575	-1,798	-691	-714	-1,446	-3,411	-3,245	-3,365
Difference	-8.9	-22.1	2.6	3.2	10.2	7.8	0.1	-0.1	73.3	-70.9	-97.1	-5.0
Percent Difference <sup>3</sup>	0.3	0.8	-0.1	-0.1	-0.6	-0.4	0.0	0.0	-4.8	2.1	3.1	0.1
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	-2,933	-3,274	-1,905	-1,301	-265	-383	154	-405	-1,020	-3,847	-4,086	-4,274
NEPA Modified Flow Alternative	-2,934	-3,275	-1,905	-1,301	-265	-383	154	-405	-1,020	-3,985	-4,243	-4,276
Difference	-0.1	-0.4	-0.3	0.0	-0.1	0.0	0.0	0.0	0.0	-138.0	-156.2	-2.1
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.8	0.0
<b>Above Normal</b>												
NEPA No Action Alternative	-2,183	-2,216	-4,171	-3,129	-1,012	-2,189	-675	-623	-1,962	-4,832	-4,026	-4,466
NEPA Modified Flow Alternative	-2,191	-2,247	-4,169	-3,129	-1,012	-2,189	-675	-623	-1,962	-4,884	-4,187	-4,487
Difference	-8.3	-30.8	1.5	0.0	0.0	0.0	0.0	0.0	0.0	-52.2	-161.1	-21.2
Percent Difference	0.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	4.0	0.5
<b>Below Normal</b>												
NEPA No Action Alternative	-3,600	-3,289	-2,565	-3,120	-2,932	-2,542	-1,618	-1,343	-2,650	-3,475	-3,513	-3,229
NEPA Modified Flow Alternative	-3,600	-3,290	-2,566	-3,120	-2,932	-2,543	-1,618	-1,343	-2,650	-3,631	-3,671	-3,298
Difference	-0.6	-0.6	-0.6	-0.5	0.6	-0.6	-0.3	0.0	0.0	-155.9	-158.3	-69.0
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	4.5	2.1
<b>Dry</b>												
NEPA No Action Alternative	-3,258	-3,013	-2,823	-3,422	-3,010	-3,200	-1,522	-874	-2,088	-4,187	-4,067	-3,715
NEPA Modified Flow Alternative	-3,359	-3,114	-2,858	-3,422	-2,970	-3,194	-1,522	-874	-2,017	-4,159	-4,124	-3,692
Difference	-100.7	-100.8	-35.7	-0.2	40.0	6.7	0.1	-0.3	71.0	27.9	-57.0	22.9
Percent Difference	3.1	3.3	1.3	0.0	-1.3	-0.2	0.0	0.0	-3.4	-0.7	1.4	-0.6
<b>Critical</b>												
NEPA No Action Alternative	-3,253	-2,227	-2,847	-2,736	-1,725	-1,813	-693	-807	-1,162	-1,532	-1,050	-1,745
NEPA Modified Flow Alternative	-3,199	-2,209	-2,810	-2,724	-1,722	-1,792	-693	-808	-970	-1,606	-1,082	-1,756
Difference	53.9	18.2	37.2	11.1	2.7	21.4	0.3	-0.2	192.3	-73.4	-32.0	-11.0
Percent Difference	-1.7	-0.8	-1.3	-0.4	-0.2	-1.2	0.0	0.0	-16.5	4.8	3.1	0.6

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

### Old River at Bacon Island Flow

#### October

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-4480.4	-4480.9	-0.6	0.0
1976	C	-5358.3	-5358.3	0.0	0.0
1977	C	-3546.2	-3293.4	252.7	-7.1
1978	AN	-452.0	-462.2	-10.2	2.3
1979	BN	-3599.6	-3600.3	-0.6	0.0
1980	AN	-3914.0	-3920.5	-6.4	0.2
1981	D	-3698.9	-4014.3	-315.4	8.5
1982	W	-3500.2	-3500.2	0.1	0.0
1983	W	-2735.6	-2735.6	0.1	0.0
1984	W	-577.9	-577.9	0.0	0.0
1985	D	-4308.8	-4308.7	0.1	0.0
1986	W	-3373.1	-3373.1	0.0	0.0
1987	D	-3239.4	-3327.1	-87.7	2.7
1988	C	-2363.4	-2362.5	0.9	0.0
1989	D	-1785.7	-1785.3	0.4	0.0
1990	C	-3472.0	-3455.8	16.2	-0.5
1991	C	-1523.2	-1523.5	-0.4	0.0
	Mean:	-3054.6	-3063.5	-8.9	0.4
	Median:	-3472.0	-3373.1	0.0	0.0
	Min:	-5358.3	-5358.3	-315.4	-7.1
	Max:	-452.0	-462.2	252.7	8.5

### Old River at Bacon Island Flow

#### November

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-3483.7	-3484.3	-0.6	0.0
1976	C	-4358.3	-4266.9	91.4	-2.1
1977	C	-1991.8	-1988.5	3.3	-0.2
1978	AN	-1010.2	-1019.6	-9.4	0.9
1979	BN	-3289.4	-3290.0	-0.6	0.0
1980	AN	-3421.2	-3473.4	-52.2	1.5
1981	D	-2395.4	-2712.1	-316.7	13.2
1982	W	-5354.9	-5355.6	-0.7	0.0
1983	W	-4876.4	-4876.9	-0.5	0.0
1984	W	-27.7	-27.7	0.0	0.0
1985	D	-5274.0	-5274.9	-1.0	0.0
1986	W	-2628.4	-2628.4	0.0	0.0
1987	D	-2568.9	-2657.6	-88.7	3.5
1988	C	-1685.4	-1689.3	-3.9	0.2
1989	D	-1814.7	-1811.6	3.1	-0.2
1990	C	-2366.8	-2366.6	0.2	0.0
1991	C	-732.9	-732.9	0.0	0.0
	Mean:	-2781.2	-2803.3	-22.1	1.0
	Median:	-2568.9	-2657.6	-0.6	0.0
	Min:	-5354.9	-5355.6	-316.7	-2.1
	Max:	-27.7	-27.7	91.4	13.2

### Old River at Bacon Island Flow

#### December

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-4247.4	-4248.0	-0.6	0.0
1976	C	-4399.5	-4307.7	91.9	-2.1
1977	C	-1958.2	-1958.2	0.0	0.0
1978	AN	-3747.6	-3743.3	4.3	-0.1
1979	BN	-2565.1	-2565.7	-0.6	0.0
1980	AN	-4594.2	-4595.4	-1.3	0.0
1981	D	-2720.9	-3027.6	-306.7	11.3
1982	W	-4590.8	-4591.4	-0.6	0.0
1983	W	307.8	307.7	-0.1	0.0
1984	W	3401.7	3401.7	0.0	0.0
1985	D	-4516.2	-4516.9	-0.7	0.0
1986	W	-4397.1	-4397.1	0.0	0.0
1987	D	-2226.4	-2061.6	164.7	-7.4
1988	C	-4398.7	-4395.0	3.7	-0.1
1989	D	-1827.6	-1827.6	0.0	0.0
1990	C	-2628.4	-2537.8	90.6	-3.4
1991	C	-851.5	-851.6	0.0	0.0
	Mean:	-2703.5	-2700.9	2.6	-0.1
	Median:	-2720.9	-3027.6	0.0	0.0
	Min:	-4594.2	-4595.4	-306.7	-7.4
	Max:	3401.7	3401.7	164.7	11.3



### Old River at Bacon Island Flow

#### January

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-4124.9	-4125.3	-0.5	0.0
1976	C	-3288.6	-3144.9	143.6	-4.4
1977	C	-867.2	-867.2	0.0	0.0
1978	AN	-3943.2	-3942.9	0.3	0.0
1979	BN	-3119.6	-3120.1	-0.5	0.0
1980	AN	-2314.4	-2314.7	-0.3	0.0
1981	D	-3688.3	-3694.3	-6.0	0.2
1982	W	-3146.9	-3147.0	-0.1	0.0
1983	W	4472.1	4472.1	0.0	0.0
1984	W	727.9	727.9	0.0	0.0
1985	D	-3727.4	-3727.9	-0.5	0.0
1986	W	-4431.1	-4430.6	0.5	0.0
1987	D	-3040.7	-3038.1	2.6	-0.1
1988	C	-4640.4	-4640.3	0.1	0.0
1989	D	-3230.0	-3226.9	3.1	-0.1
1990	C	-4510.5	-4598.7	-88.1	2.0
1991	C	-371.1	-371.1	0.0	0.0
	Mean:	-2543.8	-2540.6	3.2	-0.1
	Median:	-3230.0	-3147.0	0.0	0.0
	Min:	-4640.4	-4640.3	-88.1	-4.4
	Max:	4472.1	4472.1	143.6	2.0

### Old River at Bacon Island Flow

#### February

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-3654.5	-3655.2	-0.6	0.0
1976	C	-2218.8	-2216.6	2.2	-0.1
1977	C	-925.1	-925.1	0.0	0.0
1978	AN	-2356.4	-2356.2	0.2	0.0
1979	BN	-2932.4	-2931.7	0.6	0.0
1980	AN	332.5	332.4	-0.2	-0.1
1981	D	-4073.0	-3910.5	162.6	-4.0
1982	W	-1912.0	-1912.0	0.0	0.0
1983	W	6375.6	6375.9	0.3	0.0
1984	W	-1129.1	-1129.1	0.0	0.0
1985	D	-4002.3	-4004.0	-1.7	0.0
1986	W	-1006.5	-1006.4	0.1	0.0
1987	D	-3327.4	-3330.5	-3.2	0.1
1988	C	-1893.7	-1893.6	0.1	0.0
1989	D	-637.6	-635.1	2.5	-0.4
1990	C	-3108.3	-3097.4	11.0	-0.4
1991	C	-476.6	-476.6	0.0	0.0
	Mean:	-1585.0	-1574.8	10.2	-0.3
	Median:	-1912.0	-1912.0	0.1	0.0
	Min:	-4073.0	-4004.0	-3.2	-4.0
	Max:	6375.6	6375.9	162.6	0.1

### Old River at Bacon Island Flow

#### March

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-3343.4	-3343.6	-0.2	0.0
1976	C	-2074.2	-2074.2	0.0	0.0
1977	C	-307.0	-307.0	0.0	0.0
1978	AN	-2537.4	-2537.3	0.0	0.0
1979	BN	-2541.9	-2542.5	-0.6	0.0
1980	AN	-1840.4	-1840.4	0.0	0.0
1981	D	-2931.9	-2929.5	2.4	-0.1
1982	W	-1881.1	-1881.1	0.0	0.0
1983	W	6364.7	6364.6	-0.1	0.0
1984	W	-3513.6	-3513.6	0.0	0.0
1985	D	-1954.3	-1953.4	0.8	0.0
1986	W	457.3	457.3	0.0	0.0
1987	D	-3485.7	-3463.9	21.8	-0.6
1988	C	-282.9	-281.7	1.2	-0.4
1989	D	-4429.3	-4427.7	1.6	0.0
1990	C	-1749.0	-1643.0	106.0	-6.1
1991	C	-4652.4	-4652.4	0.0	0.0
	Mean:	-1806.0	-1798.2	7.8	-0.4
	Median:	-2074.2	-2074.2	0.0	0.0
	Min:	-4652.4	-4652.4	-0.6	-6.1
	Max:	6364.7	6364.6	106.0	0.0

### Old River at Bacon Island Flow

#### April

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-1890.3	-1890.3	0.0	0.0
1976	C	-1040.7	-1040.7	0.0	0.0
1977	C	-434.4	-434.3	0.0	0.0
1978	AN	-161.6	-161.6	0.0	0.0
1979	BN	-1618.0	-1618.3	-0.3	0.0
1980	AN	-1187.4	-1187.4	0.0	0.0
1981	D	-1594.3	-1594.4	-0.1	0.0
1982	W	1890.5	1890.5	0.0	0.0
1983	W	2484.1	2484.1	0.0	0.0
1984	W	-1983.0	-1983.0	0.0	0.0
1985	D	-1184.0	-1184.0	0.0	0.0
1986	W	268.8	268.8	0.0	0.0
1987	D	-1446.8	-1446.6	0.3	0.0
1988	C	-929.9	-929.9	0.0	0.0
1989	D	-1861.6	-1861.4	0.3	0.0
1990	C	-373.3	-371.8	1.5	-0.4
1991	C	-687.0	-687.1	-0.1	0.0
Mean:		-691.1	-691.0	0.1	0.0
Median:		-1040.7	-1040.7	0.0	0.0
Min:		-1983.0	-1983.0	-0.3	-0.4
Max:		2484.1	2484.1	1.5	0.0

### Old River at Bacon Island Flow

#### May

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-1835.6	-1835.6	0.0	0.0
1976	C	-1081.5	-1081.6	-0.1	0.0
1977	C	-310.3	-310.4	-0.1	0.0
1978	AN	-555.9	-555.9	0.0	0.0
1979	BN	-1342.9	-1342.9	0.0	0.0
1980	AN	-690.3	-690.3	0.0	0.0
1981	D	-1430.7	-1431.4	-0.7	0.0
1982	W	-20.3	-20.3	0.0	0.0
1983	W	1932.1	1932.1	0.0	0.0
1984	W	-1019.0	-1019.0	0.0	0.0
1985	D	-486.3	-486.3	0.0	0.0
1986	W	-1081.0	-1081.0	0.0	0.0
1987	D	-504.3	-504.6	-0.3	0.1
1988	C	-1125.2	-1125.2	0.0	0.0
1989	D	-1073.1	-1073.1	0.0	0.0
1990	C	-728.3	-728.6	-0.3	0.0
1991	C	-791.6	-792.0	-0.3	0.0
	Mean:	-714.4	-714.5	-0.1	0.0
	Median:	-791.6	-792.0	0.0	0.0
	Min:	-1835.6	-1835.6	-0.7	0.0
	Max:	1932.1	1932.1	0.0	0.1

### Old River at Bacon Island Flow

#### June

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-3563.1	-3563.1	0.0	0.0
1976	C	-2231.3	-2231.3	0.0	0.0
1977	C	-634.1	-495.9	138.2	-21.8
1978	AN	-2059.8	-2059.8	0.0	0.0
1979	BN	-2649.7	-2649.7	0.0	0.0
1980	AN	-1863.3	-1863.3	0.0	0.0
1981	D	-2366.8	-2355.6	11.3	-0.5
1982	W	-2452.8	-2452.8	0.0	0.0
1983	W	4816.7	4816.7	0.0	0.0
1984	W	-1898.2	-1898.3	0.0	0.0
1985	D	-1806.4	-1806.4	0.0	0.0
1986	W	-2002.3	-2002.3	0.0	0.0
1987	D	-1702.3	-1429.4	272.9	-16.0
1988	C	-922.8	-714.3	208.5	-22.6
1989	D	-2474.9	-2474.9	0.0	0.0
1990	C	-1069.5	-685.7	383.8	-35.9
1991	C	-954.0	-722.9	231.2	-24.2
Mean:		-1519.7	-1446.4	73.3	-7.1
Median:		-1898.2	-1898.3	0.0	0.0
Min:		-3563.1	-3563.1	0.0	-35.9
Max:		4816.7	4816.7	383.8	0.0

### Old River at Bacon Island Flow

#### July

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-4890.6	-5046.7	-156.1	3.2
1976	C	-3252.5	-3565.4	-312.9	9.6
1977	C	-1529.7	-1463.5	66.2	-4.3
1978	AN	-4946.4	-5004.8	-58.4	1.2
1979	BN	-3475.2	-3631.2	-155.9	4.5
1980	AN	-4718.0	-4764.1	-46.0	1.0
1981	D	-5156.5	-5102.0	54.6	-1.1
1982	W	-4692.1	-4750.3	-58.2	1.2
1983	W	-1555.5	-1555.5	0.0	0.0
1984	W	-4306.6	-4600.8	-294.2	6.8
1985	D	-4752.4	-4753.2	-0.8	0.0
1986	W	-3790.9	-3972.2	-181.3	4.8
1987	D	-3273.3	-3215.5	57.8	-1.8
1988	C	-759.9	-752.5	7.4	-1.0
1989	D	-3565.7	-3565.8	-0.1	0.0
1990	C	-1095.2	-1139.6	-44.3	4.0
1991	C	-1025.0	-1108.3	-83.3	8.1
Mean:		-3340.3	-3411.3	-70.9	2.1
Median:		-3565.7	-3631.2	-46.0	1.2
Min:		-5156.5	-5102.0	-312.9	-4.3
Max:		-759.9	-752.5	66.2	9.6

### Old River at Bacon Island Flow

#### August

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-4354.7	-4571.5	-216.7	5.0
1976	C	-2239.4	-2244.2	-4.9	0.2
1977	C	-939.6	-944.3	-4.6	0.5
1978	AN	-3130.7	-3443.7	-313.0	10.0
1979	BN	-3512.9	-3671.2	-158.3	4.5
1980	AN	-4922.0	-4931.2	-9.2	0.2
1981	D	-4150.7	-4295.3	-144.6	3.5
1982	W	-3701.2	-4013.5	-312.3	8.4
1983	W	-4925.1	-4925.1	0.0	0.0
1984	W	-4862.4	-4930.5	-68.1	1.4
1985	D	-4844.4	-4844.4	0.0	0.0
1986	W	-2588.6	-2772.7	-184.1	7.1
1987	D	-2930.7	-2928.7	2.0	-0.1
1988	C	-605.7	-606.0	-0.3	0.0
1989	D	-4342.4	-4427.7	-85.3	2.0
1990	C	-579.4	-637.4	-58.0	10.0
1991	C	-885.4	-977.9	-92.4	10.4
Mean:		-3148.0	-3245.0	-97.0	3.7
Median:		-3512.9	-3671.2	-68.1	2.0
Min:		-4925.1	-4931.2	-313.0	-0.1
Max:		-579.4	-606.0	2.0	10.4



### Old River at Bacon Island Flow

#### September

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-5041.0	-5043.9	-3.0	0.1
1976	C	-3288.1	-3288.0	0.1	0.0
1977	C	-1280.5	-1291.8	-11.3	0.9
1978	AN	-4355.9	-4360.6	-4.7	0.1
1979	BN	-3229.2	-3298.2	-69.0	2.1
1980	AN	-4576.2	-4614.0	-37.7	0.8
1981	D	-4346.7	-4348.7	-1.9	0.0
1982	W	-4521.2	-4524.0	-2.9	0.1
1983	W	-3803.2	-3803.2	0.0	0.0
1984	W	-4177.2	-4178.0	-0.8	0.0
1985	D	-4196.0	-4196.0	0.0	0.0
1986	W	-3826.2	-3830.0	-3.9	0.1
1987	D	-2994.0	-2900.4	93.6	-3.1
1988	C	-1416.9	-1388.2	28.7	-2.0
1989	D	-3322.4	-3322.6	-0.1	0.0
1990	C	-1473.1	-1504.7	-31.6	2.1
1991	C	-1266.1	-1306.9	-40.8	3.2
	Mean:	-3359.6	-3364.7	-5.0	0.3
	Median:	-3803.2	-3803.2	-2.9	0.1
	Min:	-5041.0	-5043.9	-69.0	-3.1
	Max:	-1266.1	-1291.8	93.6	3.2

Long-term and Water Year Type Average Flow at the Middle River at Middle River under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	-3,042	-2,896	-2,838	-2,747	-2,122	-2,232	-1,469	-1,519	-2,085	-3,323	-3,179	-3,293
NEPA Modified Flow Alternative	-3,048	-2,909	-2,836	-2,746	-2,116	-2,227	-1,469	-1,519	-2,038	-3,371	-3,242	-3,297
Difference	-6.0	-13.4	2.2	1.6	6.4	5.0	0.1	0.3	48.0	-48.0	-63.6	-3.4
Percent Difference <sup>3</sup>	0.2	0.5	-0.1	-0.1	-0.3	-0.2	0.0	0.0	-2.3	1.4	2.0	0.1
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	-2,990	-3,321	-2,382	-1,974	-1,325	-1,366	-961	-1,360	-1,797	-3,698	-3,853	-3,976
NEPA Modified Flow Alternative	-2,990	-3,320	-2,382	-1,974	-1,325	-1,366	-961	-1,360	-1,797	-3,795	-3,957	-3,977
Difference	-0.1	0.4	0.0	0.0	0.2	0.0	0.0	0.0	0.0	-97.3	-104.0	-1.4
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.7	0.0
<b>Above Normal</b>												
NEPA No Action Alternative	-2,447	-2,457	-3,766	-3,272	-1,946	-2,565	-1,509	-1,477	-2,334	-4,256	-3,748	-3,930
NEPA Modified Flow Alternative	-2,453	-2,476	-3,765	-3,272	-1,946	-2,565	-1,509	-1,477	-2,334	-4,292	-3,850	-3,945
Difference	-5.5	-19.5	1.3	0.2	-0.2	0.0	0.0	0.0	0.0	-36.1	-101.9	-15.6
Percent Difference	0.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.7	0.4
<b>Below Normal</b>												
NEPA No Action Alternative	-3,378	-3,151	-2,657	-3,154	-2,996	-2,741	-2,081	-1,918	-2,774	-3,315	-3,329	-3,129
NEPA Modified Flow Alternative	-3,379	-3,151	-2,658	-3,153	-2,997	-2,738	-2,081	-1,918	-2,774	-3,412	-3,429	-3,172
Difference	-0.4	-0.4	-0.4	0.5	-1.4	2.1	0.0	0.0	0.0	-97.3	-99.3	-43.3
Percent Difference	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	2.9	3.0	1.4
<b>Dry</b>												
NEPA No Action Alternative	-3,165	-3,011	-2,907	-3,262	-2,966	-3,110	-1,980	-1,621	-2,468	-3,889	-3,764	-3,491
NEPA Modified Flow Alternative	-3,231	-3,073	-2,929	-3,261	-2,941	-3,107	-1,980	-1,620	-2,423	-3,870	-3,802	-3,476
Difference	-65.4	-62.5	-21.8	0.2	25.4	3.6	0.2	0.7	45.5	19.5	-37.7	15.1
Percent Difference	2.1	2.1	0.8	0.0	-0.9	-0.1	0.0	0.0	-1.8	-0.5	1.0	-0.4
<b>Critical</b>												
NEPA No Action Alternative	-3,166	-2,503	-2,906	-2,818	-2,140	-2,160	-1,428	-1,533	-1,830	-2,124	-1,778	-2,231
NEPA Modified Flow Alternative	-3,132	-2,491	-2,881	-2,813	-2,138	-2,147	-1,428	-1,533	-1,703	-2,172	-1,799	-2,238
Difference	34.4	11.9	24.4	5.2	1.7	13.7	0.3	0.6	126.7	-47.6	-21.3	-7.3
Percent Difference	-1.1	-0.5	-0.8	-0.2	-0.1	-0.6	0.0	0.0	-6.9	2.2	1.2	0.3

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

**Middle River at Middle River Flow**

**October**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-3935.2	-3935.6	-0.4	0.0
1976	C	-4472.3	-4472.3	0.0	0.0
1977	C	-3370.3	-3209.2	161.1	-4.8
1978	AN	-1332.7	-1339.5	-6.9	0.5
1979	BN	-3378.2	-3378.6	-0.4	0.0
1980	AN	-3561.7	-3565.9	-4.1	0.1
1981	D	-3414.6	-3618.8	-204.2	6.0
1982	W	-3282.1	-3282.1	0.0	0.0
1983	W	-2910.1	-2910.1	0.0	0.0
1984	W	-1611.2	-1611.2	0.0	0.0
1985	D	-3857.0	-3857.0	0.0	0.0
1986	W	-3208.9	-3208.9	0.0	0.0
1987	D	-3184.1	-3241.9	-57.8	1.8
1988	C	-2613.0	-2612.5	0.5	0.0
1989	D	-2205.5	-2205.3	0.2	0.0
1990	C	-3311.4	-3300.7	10.7	-0.3
1991	C	-2064.3	-2064.5	-0.3	0.0
	Mean:	-3041.9	-3047.9	-6.0	0.2
	Median:	-3282.1	-3241.9	0.0	0.0
	Min:	-4472.3	-4472.3	-204.2	-4.8
	Max:	-1332.7	-1339.5	161.1	6.0

**Middle River at Middle River Flow**

**November**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-3276.1	-3276.5	-0.4	0.0
1976	C	-3797.3	-3737.3	59.9	-1.6
1977	C	-2374.6	-2372.6	2.0	-0.1
1978	AN	-1662.3	-1668.5	-6.1	0.4
1979	BN	-3150.7	-3151.1	-0.4	0.0
1980	AN	-3251.4	-3284.2	-32.8	1.0
1981	D	-2527.7	-2725.0	-197.2	7.8
1982	W	-4618.9	-4617.7	1.1	0.0
1983	W	-4687.2	-4686.1	1.1	0.0
1984	W	-1283.3	-1283.3	0.0	0.0
1985	D	-4624.4	-4622.8	1.7	0.0
1986	W	-2738.1	-2738.1	0.0	0.0
1987	D	-2729.8	-2786.3	-56.5	2.1
1988	C	-2205.2	-2207.8	-2.5	0.1
1989	D	-2161.9	-2160.0	2.0	-0.1
1990	C	-2605.4	-2605.3	0.1	0.0
1991	C	-1531.0	-1531.0	0.0	0.0
	Mean:	-2895.6	-2909.0	-13.4	0.6
	Median:	-2729.8	-2738.1	0.0	0.0
	Min:	-4687.2	-4686.1	-197.2	-1.6
	Max:	-1283.3	-1283.3	59.9	7.8

**Middle River at Middle River Flow**

**December**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-3748.6	-3749.0	-0.4	0.0
1976	C	-3767.7	-3707.1	60.7	-1.6
1977	C	-2361.3	-2361.3	0.0	0.0
1978	AN	-3448.5	-3445.8	2.8	-0.1
1979	BN	-2657.4	-2657.8	-0.4	0.0
1980	AN	-4083.7	-4083.8	-0.1	0.0
1981	D	-2810.2	-3001.9	-191.7	6.8
1982	W	-4189.6	-4189.2	0.5	0.0
1983	W	-1074.8	-1074.9	0.0	0.0
1984	W	1019.9	1019.9	0.0	0.0
1985	D	-4078.6	-4078.0	0.6	0.0
1986	W	-3915.3	-3915.3	0.0	0.0
1987	D	-2580.0	-2476.2	103.8	-4.0
1988	C	-3989.6	-3987.1	2.5	-0.1
1989	D	-2159.4	-2159.4	0.0	0.0
1990	C	-2804.3	-2745.3	58.9	-2.1
1991	C	-1605.1	-1605.1	0.0	0.0
	Mean:	-2838.5	-2836.3	2.2	-0.1
	Median:	-2810.2	-3001.9	0.0	0.0
	Min:	-4189.6	-4189.2	-191.7	-4.0
	Max:	1019.9	1019.9	103.8	6.8

**Middle River at Middle River Flow**

**January**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-3596.4	-3595.9	0.5	0.0
1976	C	-3074.4	-2985.9	88.5	-2.9
1977	C	-1611.2	-1611.2	0.0	0.0
1978	AN	-3775.2	-3775.5	-0.3	0.0
1979	BN	-3153.6	-3153.1	0.5	0.0
1980	AN	-2768.9	-2768.2	0.7	0.0
1981	D	-3537.7	-3540.8	-3.0	0.1
1982	W	-3190.5	-3190.6	0.0	0.0
1983	W	1660.6	1660.6	0.0	0.0
1984	W	-712.1	-712.1	0.0	0.0
1985	D	-3495.7	-3495.2	0.5	0.0
1986	W	-4030.0	-4030.7	-0.7	0.0
1987	D	-3029.9	-3028.5	1.4	0.0
1988	C	-4124.8	-4124.8	0.1	0.0
1989	D	-2982.6	-2980.7	1.9	-0.1
1990	C	-4000.9	-4063.4	-62.5	1.6
1991	C	-1279.9	-1279.9	0.0	0.0
	Mean:	-2747.3	-2745.6	1.6	-0.1
	Median:	-3153.6	-3153.1	0.0	0.0
	Min:	-4124.8	-4124.8	-62.5	-2.9
	Max:	1660.6	1660.6	88.5	1.6

**Middle River at Middle River Flow**

**February**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-3437.5	-3436.6	0.9	0.0
1976	C	-2450.6	-2449.2	1.4	-0.1
1977	C	-1557.5	-1557.5	0.0	0.0
1978	AN	-2853.9	-2854.1	-0.3	0.0
1979	BN	-2995.6	-2997.0	-1.4	0.0
1980	AN	-1037.3	-1037.4	-0.1	0.0
1981	D	-3646.5	-3543.4	103.0	-2.8
1982	W	-2407.8	-2407.8	0.0	0.0
1983	W	2982.5	2982.5	0.0	0.0
1984	W	-1830.2	-1830.2	0.0	0.0
1985	D	-3586.4	-3587.6	-1.1	0.0
1986	W	-1931.4	-1931.3	0.0	0.0
1987	D	-3242.4	-3244.5	-2.1	0.1
1988	C	-2313.6	-2313.5	0.1	0.0
1989	D	-1389.0	-1387.3	1.7	-0.1
1990	C	-3012.8	-3005.6	7.2	-0.2
1991	C	-1365.2	-1365.2	0.0	0.0
	Mean:	-2122.1	-2115.6	6.4	-0.2
	Median:	-2407.8	-2407.8	0.0	0.0
	Min:	-3646.5	-3587.6	-2.1	-2.8
	Max:	2982.5	2982.5	103.0	0.1

### Middle River at Middle River Flow

#### March

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-3256.3	-3256.4	-0.1	0.0
1976	C	-2287.4	-2287.4	0.0	0.0
1977	C	-1091.6	-1091.6	0.0	0.0
1978	AN	-2856.8	-2856.8	0.0	0.0
1979	BN	-2740.6	-2738.5	2.1	-0.1
1980	AN	-2274.0	-2274.0	0.0	0.0
1981	D	-2961.9	-2960.0	1.9	-0.1
1982	W	-2431.9	-2431.9	0.0	0.0
1983	W	3035.6	3035.5	0.0	0.0
1984	W	-3316.8	-3316.8	0.0	0.0
1985	D	-2230.6	-2230.1	0.5	0.0
1986	W	-862.6	-862.6	0.0	0.0
1987	D	-3302.5	-3288.4	14.1	-0.4
1988	C	-1201.9	-1201.1	0.8	-0.1
1989	D	-3945.8	-3947.7	-1.9	0.0
1990	C	-2114.0	-2046.5	67.5	-3.2
1991	C	-4107.3	-4107.3	0.0	0.0
	Mean:	-2232.2	-2227.2	5.0	-0.2
	Median:	-2431.9	-2431.9	0.0	0.0
	Min:	-4107.3	-4107.3	-1.9	-3.2
	Max:	3035.6	3035.5	67.5	0.0



**Middle River at Middle River Flow**

**April**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-2264.5	-2264.5	0.0	0.0
1976	C	-1642.5	-1642.4	0.1	0.0
1977	C	-1195.1	-1195.1	0.0	0.0
1978	AN	-1224.3	-1224.3	0.0	0.0
1979	BN	-2081.1	-2081.1	0.0	0.0
1980	AN	-1794.2	-1794.2	0.0	0.0
1981	D	-2041.6	-2041.3	0.3	0.0
1982	W	121.9	121.9	0.0	0.0
1983	W	473.9	473.9	0.0	0.0
1984	W	-2253.6	-2253.6	0.0	0.0
1985	D	-1758.3	-1758.3	0.0	0.0
1986	W	-881.9	-881.9	0.0	0.0
1987	D	-1898.2	-1898.0	0.2	0.0
1988	C	-1613.0	-1612.9	0.1	0.0
1989	D	-2223.8	-2223.6	0.1	0.0
1990	C	-1283.3	-1282.4	0.9	-0.1
1991	C	-1406.9	-1406.6	0.3	0.0
	Mean:	-1468.6	-1468.5	0.1	0.0
	Median:	-1642.5	-1642.4	0.0	0.0
	Min:	-2264.5	-2264.5	0.0	-0.1
	Max:	473.9	473.9	0.9	0.0

**Middle River at Middle River Flow**

**May**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-2227.9	-2227.9	0.0	0.0
1976	C	-1720.4	-1720.1	0.3	0.0
1977	C	-1174.7	-1174.5	0.2	0.0
1978	AN	-1405.5	-1405.5	0.0	0.0
1979	BN	-1917.6	-1917.6	0.0	0.0
1980	AN	-1549.0	-1549.0	0.0	0.0
1981	D	-1979.8	-1978.4	1.4	-0.1
1982	W	-1159.1	-1159.1	0.0	0.0
1983	W	100.6	100.6	0.0	0.0
1984	W	-1710.4	-1710.4	0.0	0.0
1985	D	-1333.2	-1333.2	0.0	0.0
1986	W	-1802.6	-1802.6	0.0	0.0
1987	D	-1430.5	-1429.2	1.2	-0.1
1988	C	-1734.4	-1734.3	0.0	0.0
1989	D	-1739.1	-1739.1	0.0	0.0
1990	C	-1537.3	-1535.8	1.5	-0.1
1991	C	-1500.3	-1499.2	1.1	-0.1
	Mean:	-1518.9	-1518.5	0.3	0.0
	Median:	-1549.0	-1549.0	0.0	0.0
	Min:	-2227.9	-2227.9	0.0	-0.1
	Max:	100.6	100.6	1.5	0.0

### Middle River at Middle River Flow

#### June

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-3380.9	-3380.9	0.0	0.0
1976	C	-2510.8	-2510.8	0.0	0.0
1977	C	-1469.3	-1378.2	91.1	-6.2
1978	AN	-2342.1	-2342.1	0.0	0.0
1979	BN	-2773.9	-2773.9	0.0	0.0
1980	AN	-2326.8	-2326.8	0.0	0.0
1981	D	-2604.1	-2597.1	7.0	-0.3
1982	W	-2772.7	-2772.8	0.0	0.0
1983	W	1966.6	1966.6	0.0	0.0
1984	W	-2389.0	-2389.0	0.0	0.0
1985	D	-2305.4	-2305.4	0.0	0.0
1986	W	-2409.5	-2409.5	0.0	0.0
1987	D	-2227.0	-2052.0	175.0	-7.9
1988	C	-1650.2	-1514.7	135.5	-8.2
1989	D	-2737.4	-2737.4	0.0	0.0
1990	C	-1795.2	-1541.3	253.8	-14.1
1991	C	-1725.6	-1572.4	153.3	-8.9
Mean:		-2085.5	-2037.5	48.0	-2.7
Median:		-2342.1	-2342.1	0.0	0.0
Min:		-3380.9	-3380.9	0.0	-14.1
Max:		1966.6	1966.6	253.8	0.0

**Middle River at Middle River Flow**

**July**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-4229.9	-4337.6	-107.7	2.5
1976	C	-3279.5	-3480.5	-201.0	6.1
1977	C	-2088.8	-2045.6	43.1	-2.1
1978	AN	-4358.1	-4398.6	-40.5	0.9
1979	BN	-3315.0	-3412.3	-97.3	2.9
1980	AN	-4154.0	-4185.7	-31.7	0.8
1981	D	-4518.6	-4478.1	40.5	-0.9
1982	W	-4234.1	-4274.6	-40.6	1.0
1983	W	-2280.1	-2280.1	0.0	0.0
1984	W	-4087.8	-4300.2	-212.3	5.2
1985	D	-4275.2	-4275.8	-0.6	0.0
1986	W	-3658.4	-3784.2	-125.8	3.4
1987	D	-3307.6	-3269.6	38.0	-1.1
1988	C	-1588.9	-1583.9	5.0	-0.3
1989	D	-3455.4	-3455.4	0.0	0.0
1990	C	-1865.9	-1895.4	-29.5	1.6
1991	C	-1798.4	-1854.1	-55.7	3.1
	Mean:	-3323.3	-3371.3	-48.0	1.4
	Median:	-3455.4	-3480.5	-31.7	0.9
	Min:	-4518.6	-4478.1	-212.3	-2.1
	Max:	-1588.9	-1583.9	43.1	6.1

**Middle River at Middle River Flow**

**August**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-3871.7	-4016.1	-144.5	3.7
1976	C	-2584.2	-2587.0	-2.8	0.1
1977	C	-1697.4	-1700.1	-2.8	0.2
1978	AN	-3138.2	-3335.3	-197.1	6.3
1979	BN	-3329.3	-3428.6	-99.3	3.0
1980	AN	-4358.6	-4365.1	-6.6	0.2
1981	D	-3734.6	-3828.2	-93.5	2.5
1982	W	-3565.6	-3776.0	-210.4	5.9
1983	W	-4572.7	-4572.7	0.0	0.0
1984	W	-4416.8	-4464.0	-47.2	1.1
1985	D	-4245.6	-4245.6	0.0	0.0
1986	W	-2837.4	-2955.2	-117.9	4.2
1987	D	-3065.6	-3064.5	1.2	0.0
1988	C	-1438.4	-1438.6	-0.2	0.0
1989	D	-4010.9	-4069.6	-58.6	1.5
1990	C	-1488.0	-1527.1	-39.1	2.6
1991	C	-1679.7	-1741.3	-61.6	3.7
	Mean:	-3178.5	-3242.1	-63.6	2.1
	Median:	-3329.3	-3428.6	-47.2	1.5
	Min:	-4572.7	-4572.7	-210.4	0.0
	Max:	-1438.4	-1438.6	1.2	6.3

**Middle River at Middle River Flow**

**September**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-4323.2	-4325.1	-1.9	0.0
1976	C	-3225.0	-3225.0	0.0	0.0
1977	C	-1913.3	-1920.7	-7.4	0.4
1978	AN	-3833.9	-3837.0	-3.1	0.1
1979	BN	-3128.9	-3172.3	-43.3	1.4
1980	AN	-4025.7	-4053.7	-28.0	0.7
1981	D	-3804.4	-3805.3	-0.9	0.0
1982	W	-4161.2	-4163.3	-2.1	0.1
1983	W	-3840.2	-3840.2	0.0	0.0
1984	W	-3937.5	-3938.0	-0.5	0.0
1985	D	-3824.5	-3824.5	0.0	0.0
1986	W	-3616.7	-3619.4	-2.7	0.1
1987	D	-3036.0	-2974.7	61.3	-2.0
1988	C	-1986.4	-1967.4	19.0	-1.0
1989	D	-3300.7	-3300.8	-0.1	0.0
1990	C	-2078.7	-2099.5	-20.9	1.0
1991	C	-1949.4	-1976.7	-27.3	1.4
	Mean:	-3293.3	-3296.7	-3.4	0.1
	Median:	-3616.7	-3619.4	-1.9	0.0
	Min:	-4323.2	-4325.1	-43.3	-2.0
	Max:	-1913.3	-1920.7	61.3	1.4

Long-term and Water Year Type Average Flow at the Middle River at Mowry Bridge under NEPA No Action Alternative and NEPA Modified Flow Alternative Conditions

Analysis Period	Flow (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Long-term</b>												
<b>Full Simulation Period<sup>2</sup></b>												
NEPA No Action Alternative	-36	-108	93	219	519	582	318	237	355	89	-114	-62
NEPA Modified Flow Alternative	-35	-108	93	219	519	582	318	237	354	89	-113	-62
Difference	0.1	0.0	0.1	-0.1	0.0	0.0	0.0	0.1	-0.7	0.3	0.9	0.0
Percent Difference <sup>3</sup>	-0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.2	0.4	-0.8	-0.1
<b>Water Year Types<sup>1</sup></b>												
<b>Wet</b>												
NEPA No Action Alternative	287	53	614	732	1,326	1,635	1,048	744	1,052	353	-90	64
NEPA Modified Flow Alternative	287	53	614	732	1,326	1,635	1,048	744	1,052	354	-89	64
Difference	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.2	0.0
Percent Difference	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	-1.3	0.0
<b>Above Normal</b>												
NEPA No Action Alternative	-171	-171	-117	578	1,222	876	619	574	667	248	-84	48
NEPA Modified Flow Alternative	-171	-171	-117	578	1,222	876	619	574	667	248	-82	47
Difference	0.1	0.2	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	2.2	-0.1
Percent Difference	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-2.6	-0.2
<b>Below Normal</b>												
NEPA No Action Alternative	-152	-179	-96	267	682	652	106	135	-1	-31	-84	-105
NEPA Modified Flow Alternative	-152	-179	-96	267	682	652	106	135	-1	-30	-82	-104
Difference	0.0	0.0	0.0	0.0	0.1	-0.1	0.0	0.0	0.0	1.3	1.1	0.4
Percent Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.2	-1.3	-0.4
<b>Dry</b>												
NEPA No Action Alternative	-170	-177	-128	-142	-54	-30	-108	-72	-54	-65	-118	-141
NEPA Modified Flow Alternative	-170	-177	-127	-142	-54	-30	-108	-72	-54	-66	-117	-142
Difference	0.2	-0.2	0.9	0.1	0.0	-0.2	0.0	0.2	0.0	-0.1	0.3	-0.1
Percent Difference	-0.1	0.1	-0.7	0.0	-0.1	0.6	0.0	-0.2	0.1	0.1	-0.3	0.0
<b>Critical</b>												
NEPA No Action Alternative	-173	-176	-129	-156	-143	-113	-148	-136	-69	-91	-151	-162
NEPA Modified Flow Alternative	-173	-176	-130	-157	-143	-113	-148	-136	-72	-91	-151	-161
Difference	0.0	-0.1	-0.4	-0.3	0.0	0.0	0.0	0.2	-2.5	0.3	0.5	0.2
Percent Difference	0.0	0.1	0.3	0.2	0.0	0.0	0.0	-0.1	3.6	-0.3	-0.3	-0.1

1 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB 1995)

2 Based on the 17-year simulation period

3 Relative difference of the monthly average

### Middle River at Mowry Bridge Flow

#### October

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-166.7	-166.7	0.0	0.0
1976	C	-144.6	-144.6	0.0	0.0
1977	C	-171.5	-171.4	0.2	-0.1
1978	AN	-164.7	-164.5	0.2	-0.1
1979	BN	-152.3	-152.3	0.0	0.0
1980	AN	-176.8	-176.8	0.0	0.0
1981	D	-148.0	-146.9	1.2	-0.8
1982	W	-174.2	-174.2	0.0	0.0
1983	W	961.7	961.7	0.0	0.0
1984	W	992.5	992.5	0.0	0.0
1985	D	-185.4	-185.4	0.0	0.0
1986	W	-177.6	-177.6	0.0	0.0
1987	D	-179.6	-179.9	-0.3	0.2
1988	C	-188.5	-188.5	0.0	0.0
1989	D	-167.2	-167.3	0.0	0.0
1990	C	-182.6	-182.6	0.1	-0.1
1991	C	-178.2	-178.2	0.0	0.0
	Mean:	-35.5	-35.4	0.1	-0.1
	Median:	-171.5	-171.4	0.0	0.0
	Min:	-188.5	-188.5	-0.3	-0.8
	Max:	992.5	992.5	1.2	0.2



### Middle River at Mowry Bridge Flow

#### November

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-170.7	-170.7	0.0	0.0
1976	C	-157.3	-157.8	-0.5	0.3
1977	C	-174.8	-174.8	0.0	0.0
1978	AN	-168.2	-168.1	0.1	-0.1
1979	BN	-178.8	-178.8	0.0	0.0
1980	AN	-173.5	-173.3	0.2	-0.1
1981	D	-155.0	-156.0	-1.0	0.6
1982	W	-201.1	-200.9	0.3	-0.1
1983	W	-226.4	-226.2	0.2	-0.1
1984	W	1047.3	1047.3	0.0	0.0
1985	D	-207.6	-207.2	0.4	-0.2
1986	W	-183.2	-183.2	0.0	0.0
1987	D	-183.5	-183.8	-0.3	0.2
1988	C	-190.3	-190.3	0.0	0.0
1989	D	-161.4	-161.4	0.0	0.0
1990	C	-184.6	-184.6	0.0	0.0
1991	C	-174.5	-174.5	0.0	0.0
Mean:		-108.4	-108.5	0.0	0.0
Median:		-174.8	-174.8	0.0	0.0
Min:		-226.4	-226.2	-1.0	-0.2
Max:		1047.3	1047.3	0.4	0.6

### Middle River at Mowry Bridge Flow

#### December

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-84.2	-84.2	0.0	0.0
1976	C	-61.4	-62.8	-1.4	2.3
1977	C	-132.8	-132.8	0.0	0.0
1978	AN	-126.1	-126.1	0.0	0.0
1979	BN	-95.8	-95.8	0.0	0.0
1980	AN	-107.4	-107.2	0.2	-0.2
1981	D	-118.7	-114.1	4.6	-3.9
1982	W	-141.1	-141.0	0.2	-0.1
1983	W	1567.3	1567.3	0.0	0.0
1984	W	1845.5	1845.5	0.0	0.0
1985	D	-117.6	-117.4	0.2	-0.2
1986	W	-116.5	-116.5	0.0	0.0
1987	D	-143.3	-144.6	-1.3	0.9
1988	C	-145.8	-145.9	0.0	0.0
1989	D	-130.5	-130.5	0.0	0.0
1990	C	-152.5	-153.0	-0.4	0.3
1991	C	-154.5	-154.5	0.0	0.0
Mean:		93.2	93.3	0.1	-0.1
Median:		-118.7	-117.4	0.0	0.0
Min:		-154.5	-154.5	-1.4	-3.9
Max:		1845.5	1845.5	4.6	2.3

### Middle River at Mowry Bridge Flow

#### January

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-94.5	-94.3	0.2	-0.2
1976	C	-116.7	-119.0	-2.3	2.0
1977	C	-167.0	-167.0	0.0	0.0
1978	AN	243.4	243.4	0.0	0.0
1979	BN	266.7	266.7	0.0	0.0
1980	AN	912.0	911.8	-0.1	0.0
1981	D	-146.4	-146.2	0.2	-0.1
1982	W	517.0	517.0	0.0	0.0
1983	W	2141.8	2141.8	0.0	0.0
1984	W	1237.0	1237.0	0.0	0.0
1985	D	-150.2	-150.1	0.1	-0.1
1986	W	-140.7	-140.8	-0.1	0.1
1987	D	-136.2	-136.3	-0.1	0.1
1988	C	-164.7	-164.7	0.0	0.0
1989	D	-137.0	-137.0	0.0	0.0
1990	C	-159.1	-158.5	0.6	-0.4
1991	C	-174.4	-174.4	0.0	0.0
	Mean:	219.5	219.4	-0.1	0.1
	Median:	-136.2	-136.3	0.0	0.0
	Min:	-174.4	-174.4	-2.3	-0.4
	Max:	2141.8	2141.8	0.6	2.0

### Middle River at Mowry Bridge Flow

#### February

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	421.4	421.5	0.1	0.0
1976	C	-114.2	-114.2	-0.1	0.1
1977	C	-129.0	-129.0	0.0	0.0
1978	AN	591.7	591.7	0.0	0.0
1979	BN	682.2	682.3	0.1	0.0
1980	AN	1853.1	1853.1	0.0	0.0
1981	D	180.3	180.4	0.2	0.1
1982	W	1121.1	1121.1	0.0	0.0
1983	W	2982.6	2982.5	-0.1	0.0
1984	W	762.3	762.3	0.0	0.0
1985	D	-95.9	-95.9	0.0	0.0
1986	W	1344.4	1344.4	0.0	0.0
1987	D	-141.6	-141.6	0.0	0.0
1988	C	-166.0	-166.0	0.0	0.0
1989	D	-157.3	-157.4	0.0	0.0
1990	C	-144.9	-145.0	-0.1	0.1
1991	C	-161.9	-161.9	0.0	0.0
Mean:		519.3	519.3	0.0	0.0
Median:		180.3	180.4	0.0	0.0
Min:		-166.0	-166.0	-0.1	0.0
Max:		2982.6	2982.5	0.2	0.1

### Middle River at Mowry Bridge Flow

#### March

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	664.9	664.9	0.0	0.0
1976	C	-72.7	-72.7	0.0	0.0
1977	C	-97.6	-97.6	0.0	0.0
1978	AN	662.8	662.8	0.0	0.0
1979	BN	652.4	652.3	-0.1	0.0
1980	AN	1088.8	1088.8	0.0	0.0
1981	D	259.0	259.0	0.0	0.0
1982	W	1238.4	1238.4	0.0	0.0
1983	W	3740.1	3740.1	0.0	0.0
1984	W	460.3	460.3	0.0	0.0
1985	D	-115.2	-115.2	0.0	0.0
1986	W	2069.6	2069.6	0.0	0.0
1987	D	-122.7	-122.8	-0.1	0.1
1988	C	-133.5	-133.6	0.0	0.0
1989	D	-141.1	-141.7	-0.6	0.4
1990	C	-127.4	-127.3	0.2	-0.2
1991	C	-133.4	-133.4	0.0	0.0
Mean:		581.9	581.9	0.0	0.0
Median:		259.0	259.0	0.0	0.0
Min:		-141.1	-141.7	-0.6	-0.2
Max:		3740.1	3740.1	0.2	0.4

### Middle River at Mowry Bridge Flow

#### April

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	131.9	131.9	0.0	0.0
1976	C	-143.0	-143.0	0.0	0.0
1977	C	-104.3	-104.3	0.0	0.0
1978	AN	1043.6	1043.6	0.0	0.0
1979	BN	105.7	105.7	0.0	0.0
1980	AN	193.5	193.5	0.0	0.0
1981	D	6.8	6.8	0.0	0.0
1982	W	2213.1	2213.1	0.0	0.0
1983	W	1823.6	1823.6	0.0	0.0
1984	W	61.3	61.3	0.0	0.0
1985	D	-146.4	-146.4	0.0	0.0
1986	W	1011.8	1011.8	0.0	0.0
1987	D	-132.6	-132.6	0.0	0.0
1988	C	-183.3	-183.2	0.0	0.0
1989	D	-159.5	-159.5	0.0	0.0
1990	C	-179.0	-179.0	0.0	0.0
1991	C	-132.1	-132.0	0.1	-0.1
Mean:		318.3	318.3	0.0	0.0
Median:		6.8	6.8	0.0	0.0
Min:		-183.3	-183.2	0.0	-0.1
Max:		2213.1	2213.1	0.1	0.0

### Middle River at Mowry Bridge Flow

#### May

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	135.1	135.1	0.0	0.0
1976	C	-87.6	-87.5	0.1	-0.1
1977	C	-154.2	-154.1	0.1	-0.1
1978	AN	979.6	979.6	0.0	0.0
1979	BN	134.9	134.9	0.0	0.0
1980	AN	169.1	169.1	0.0	0.0
1981	D	-106.9	-106.5	0.4	-0.4
1982	W	1420.1	1420.1	0.0	0.0
1983	W	1811.7	1811.7	0.0	0.0
1984	W	104.9	104.9	0.0	0.0
1985	D	79.8	79.8	0.0	0.0
1986	W	245.7	245.7	0.0	0.0
1987	D	-136.7	-136.4	0.3	-0.2
1988	C	-140.4	-140.4	0.0	0.0
1989	D	-125.2	-125.2	0.0	0.0
1990	C	-182.9	-182.6	0.4	-0.2
1991	C	-117.0	-116.6	0.3	-0.3
	Mean:	237.1	237.2	0.1	-0.1
	Median:	79.8	79.8	0.0	0.0
	Min:	-182.9	-182.6	0.0	-0.4
	Max:	1811.7	1811.7	0.4	0.0

### Middle River at Mowry Bridge Flow

#### June

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	406.1	406.1	0.0	0.0
1976	C	-44.2	-44.2	0.0	0.0
1977	C	-72.0	-74.0	-2.0	2.8
1978	AN	889.6	889.6	0.0	0.0
1979	BN	-0.7	-0.6	0.0	0.0
1980	AN	444.6	444.6	0.0	0.0
1981	D	-23.4	-23.4	0.0	0.0
1982	W	777.2	777.2	0.0	0.0
1983	W	3297.1	3297.1	0.0	0.0
1984	W	256.2	256.2	0.0	0.0
1985	D	-48.2	-48.2	0.0	0.0
1986	W	521.3	521.3	0.0	0.0
1987	D	-60.6	-60.8	-0.1	0.2
1988	C	-69.8	-72.8	-3.0	4.3
1989	D	-82.4	-82.4	0.0	0.0
1990	C	-67.5	-72.0	-4.5	6.7
1991	C	-92.8	-95.7	-2.9	3.1
	Mean:	354.7	354.0	-0.7	1.0
	Median:	-23.4	-23.4	0.0	0.0
	Min:	-92.8	-95.7	-4.5	0.0
	Max:	3297.1	3297.1	0.0	6.7



### Middle River at Mowry Bridge Flow

#### July

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	1.3	3.2	1.9	143.4
1976	C	-85.2	-83.6	1.6	-1.9
1977	C	-90.7	-91.3	-0.5	0.6
1978	AN	206.1	205.8	-0.2	-0.1
1979	BN	-31.4	-30.1	1.3	-4.1
1980	AN	289.3	289.2	0.0	0.0
1981	D	-44.3	-44.5	-0.2	0.5
1982	W	284.0	283.8	-0.2	-0.1
1983	W	1566.6	1566.6	0.0	0.0
1984	W	-57.1	-56.1	1.0	-1.8
1985	D	-55.9	-55.9	0.0	0.0
1986	W	-29.2	-28.4	0.8	-2.7
1987	D	-84.0	-84.2	-0.2	0.2
1988	C	-86.0	-86.2	-0.2	0.2
1989	D	-77.4	-77.4	0.0	0.0
1990	C	-98.1	-98.1	0.1	-0.1
1991	C	-93.8	-93.5	0.4	-0.4
	Mean:	89.1	89.4	0.3	7.9
	Median:	-55.9	-55.9	0.0	0.0
	Min:	-98.1	-98.1	-0.5	-4.1
	Max:	1566.6	1566.6	1.9	143.4

### Middle River at Mowry Bridge Flow

#### August

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-71.8	-69.2	2.6	-3.6
1976	C	-144.9	-144.8	0.1	-0.1
1977	C	-153.2	-152.3	0.9	-0.6
1978	AN	-87.6	-83.3	4.3	-4.9
1979	BN	-83.6	-82.5	1.1	-1.3
1980	AN	-80.5	-80.4	0.0	0.0
1981	D	-87.3	-85.8	1.5	-1.7
1982	W	-83.5	-81.4	2.1	-2.5
1983	W	-111.0	-111.0	0.0	0.0
1984	W	-92.0	-91.5	0.5	-0.5
1985	D	-93.4	-93.4	0.0	0.0
1986	W	-94.0	-93.2	0.7	-0.7
1987	D	-138.8	-138.8	0.0	0.0
1988	C	-142.3	-142.3	0.0	0.0
1989	D	-150.9	-151.2	-0.2	0.1
1990	C	-161.6	-161.1	0.5	-0.3
1991	C	-153.9	-153.0	0.9	-0.6
	Mean:	-113.5	-112.7	0.9	-1.0
	Median:	-94.0	-93.4	0.5	-0.5
	Min:	-161.6	-161.1	-0.2	-4.9
	Max:	-71.8	-69.2	4.3	0.1

**Middle River at Mowry Bridge Flow  
September**

Water Year	Water Year Type	NEPA No Action Alternative	NEPA Modified Flow Alternative	Absolute Difference	Relative Difference (%)
		Flow (cfs)	Flow (cfs)		
1975	W	-74.8	-74.8	0.1	-0.1
1976	C	-163.2	-163.2	0.0	0.0
1977	C	-162.0	-161.9	0.1	-0.1
1978	AN	-79.0	-78.9	0.2	-0.3
1979	BN	-104.8	-104.4	0.4	-0.4
1980	AN	174.2	173.8	-0.4	-0.2
1981	D	-104.7	-104.6	0.1	-0.1
1982	W	245.6	245.5	-0.1	0.0
1983	W	401.9	401.9	0.0	0.0
1984	W	-133.3	-133.3	0.0	0.0
1985	D	-134.8	-134.8	0.0	0.0
1986	W	-117.7	-117.6	0.1	-0.1
1987	D	-155.8	-156.1	-0.3	0.2
1988	C	-153.2	-153.3	-0.1	0.1
1989	D	-170.5	-170.5	0.0	0.0
1990	C	-161.9	-161.9	0.0	0.0
1991	C	-167.3	-166.6	0.6	-0.4
	Mean:	-62.4	-62.4	0.0	-0.1
	Median:	-133.3	-133.3	0.0	0.0
	Min:	-170.5	-170.5	-0.4	-0.4
	Max:	401.9	401.9	0.6	0.2