

Increases in Salinity in Old River at Bacon Island due to the Boundary 1 Alternative

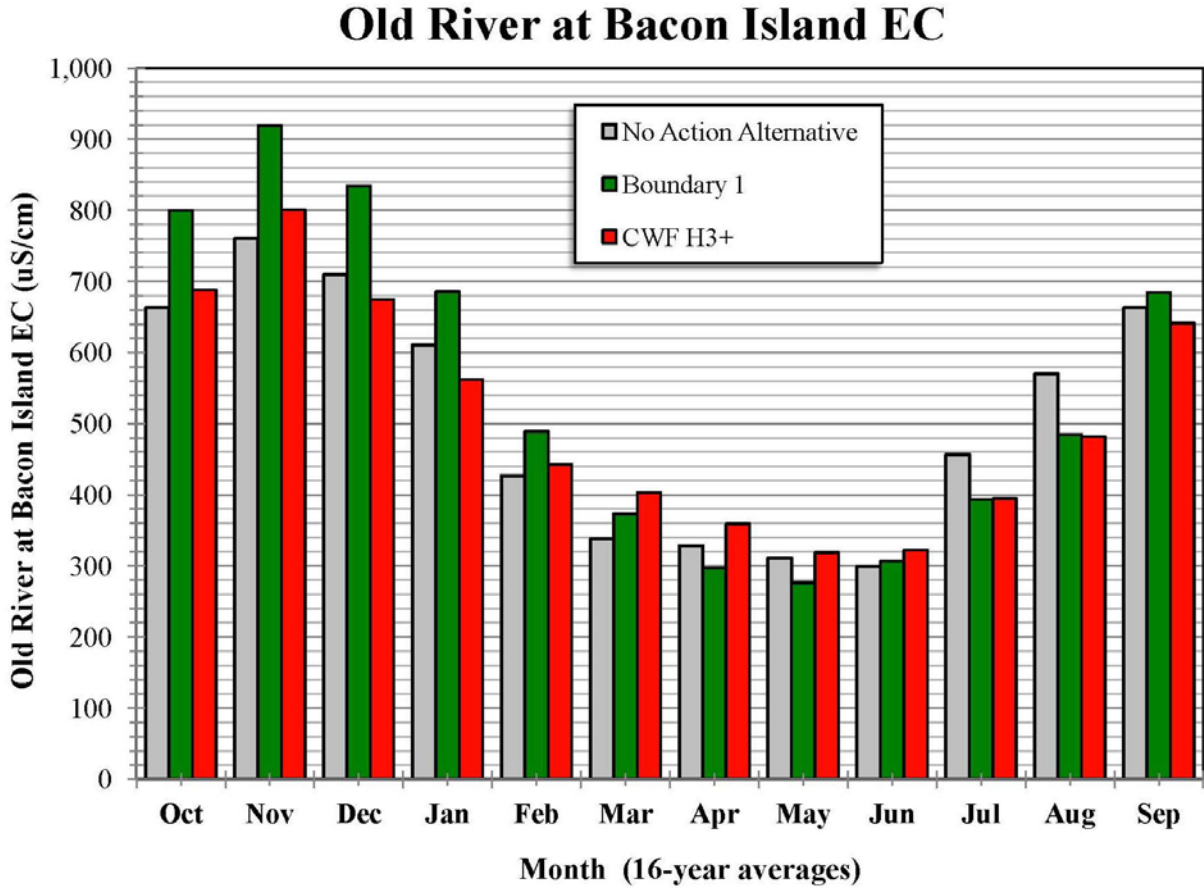


Figure 1: Increase in 16-year averaged salinity (EC) in Old River at Bacon Island relative to the No Action Alternative (NAA) due to Water Fix Boundary 1 alternative. Boundary 1 is one limit of the adaptive management range for the Waterfix project. The increases due to the proposed WaterFix project for Part 2, CWF H3+, are also shown for comparison. The 16-year averaging is for the period from October 1, 1975 through September 30, 1991. The Boundary 1 alternative would significantly degrade Delta water quality, even more than the current proposed project CWF H3+.

Comparing Boundary 1 Delta Outflow with NAA

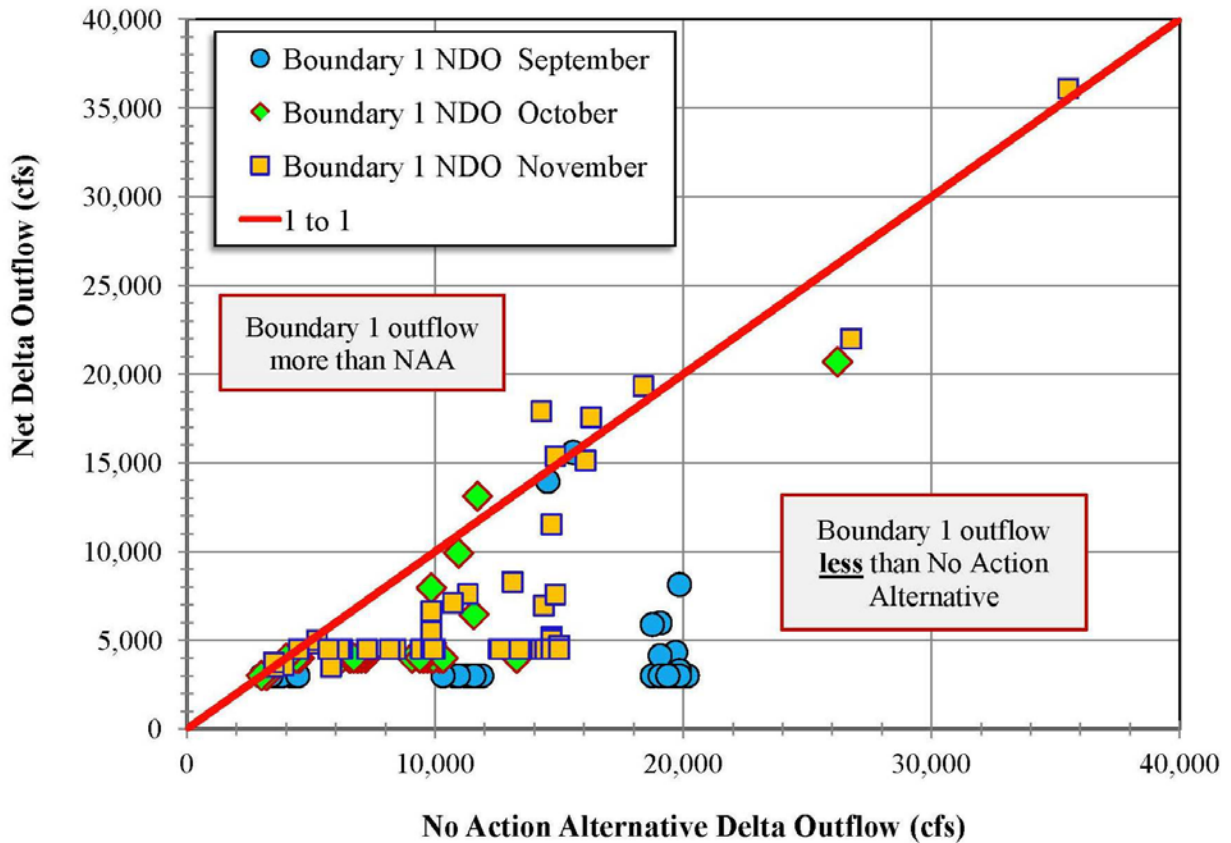


Figure 2: Comparison between monthly-averaged Fall Delta outflows for the WaterFix Boundary 1 alternative and the No Action Alternative (NAA). The data plotted are for the 82-year period October 1, 1921 through September 30, 2003. The Boundary 1 operating criteria do not include Fall X2 so outflows of 20,000 cfs in September in the NAA are reduced in Boundary 1 to the D-1641 bare minimum of 3,000 cfs.

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Table 1: 16-year average salinity (EC) by month in Old River at Bacon Island for the WaterFix Boundary 1 alternative and the No Action Alternative (NAA). The averaging period is October 1, 1975 through September 30, 1991. All the alternatives are for early long term (ELT), i.e., 2025 climate change conditions and 2030 level of development.

The Boundary 1 alternative would degrade the 16-year average Delta water quality in October and November by 21% increase. This is significant and adverse and needs to be fully mitigated. This degradation could be avoided by maintain higher Delta outflows in the Fall.

	Boundary 1	NAA		
Month	Old River at Bacon EC (µS/cm)	Old River at Bacon EC (µS/cm)	Increase in EC (µS/cm)	Percentage Increase (%)
Oct	800	663	137	21
Nov	919	760	159	21
Dec	834	709	125	18
Jan	686	610	75	12
Feb	489	427	62	15
Mar	373	338	36	11
Apr	297	329	-32	-10
May	276	311	-35	-11
Jun	307	300	7	2
Jul	393	457	-64	-14
Aug	485	570	-85	-15
Sep	684	663	21	3