

Table: Comparison of Long-Term Operations (LTO) alternatives to the No Action Alternative (NAA) as presented in the Federal FINAL EIS.

Percentage change from the NAA for each variable as presented in the U.S. Bureau of Reclamation's Final Environmental Impact Statement for Long-Term Operation of the Central Valley Project and State Water Project (referenced in the "Located" column). Alternative 2 (all variants) represent the federal Proposed Project; "Alt2-TUCP+AIIVA" is full implementation of the VAs without the possibility of temporary urgency changes. Green highlighting represents the superior environmental outcome among alternatives within each analysis. Uncolored cells reflect results that are better than NAA, though the difference may be marginal. Yellow represents no improvement from NAA. Red represents environmental outcomes worse than the NAA. Inclusion of results in this table does not reflect an endorsement of the models or methods used to generate those results.

Variable	Alternative Performance Relative to NAA									Analysis Located
	Year Type	NAA	Alt1	Alt2+TUCP -VA	Alt2-TUCP -VA	Alt2-TUCP +DeltaVA	Alt2-TUCP +AIIVA	Alt 3	Alt 4	
Winter-run Temperature Dependent Egg Mortality (TDM) -- Martin model	Critical	0%	8.3%	-33.9%	-18.7%	-20.0%	-13.0%	-43.6%	-15.2%	Table L.2-2
	All	0%	15.5%	-46.5%	-34.2%	-33.7%	-31.6%	-52.4%	-21.4%	
Winter-run temperatures at Hamilton City during adult migration* (May)	All	0%	0.00%	1.00%	1.00%	1.00%	1.00%	-1.00%	1.00%	Table L.1-8
Winter-run temperatures at Red Bluff associated with disease in adults* (May)	All	0%	-41.4%	-17.2%	-19.2%	-20.2%	-19.2%	-31.3%	-10.1%	Table L.1-12
Winter-run temperatures at Keswick during adult holding (May)	All	0%	-30.30%	-27.30%	-29.30%	-27.30%	-27.30%	-30.30%	-12.10%	Table L.1-16
Winter-run Juvenile Production Index	Above Normal	0%	N/A	-2.45%	-2.45%	-2.08%	-5.74%	N/A	N/A	Table L.3-5
	Below Normal	0%	N/A	-3.83%	-3.82%	-3.04%	-4.86%	N/A	N/A	
	Critical	0%	N/A	-23.25%	-11.47%	-14.01%	-17.69%	N/A	N/A	
	Dry	0%	N/A	-8.02%	-7.99%	-6.05%	-11.94%	N/A	N/A	
	Critical	0%	N/A	-0.33%	-0.33%	-0.32%	-0.34%	N/A	N/A	
Winter-run IOS model, female escapement	Wet	0%	-15.04%	7.12%	2.64%	-0.36%	-0.35%	22.38%	2.21%	Table F.5-12
	Above Normal	0%	-13.33%	6.30%	5.26%	0.46%	-0.20%	20.63%	2.33%	
	Below Normal	0%	-11.84%	10.84%	5.00%	1.85%	1.44%	27.28%	5.62%	
	Dry	0%	-15.05%	9.47%	5.41%	0.12%	1.79%	21.15%	3.30%	
	Critical	0%	-14.48%	7.87%	2.06%	-2.65%	-0.69%	16.87%	3.52%	
Winter-run through-Delta survival (STARS)	All	0%	-1.70%	0.40%	0.00%	0.20%	0.60%	1.70%	0.02%	Table I.5-4
Winter-run through Delta survival to Chipps Island (DPM)	Above Normal	0%	-2.63%	-0.31%	-0.48%	-0.10%	0.99%	7.73%	0.14%	Table I.6-6
	Below Normal	0%	-2.68%	-0.29%	-0.48%	-0.12%	1.52%	7.02%	0.46%	
	Critical	0%	-1.67%	0.18%	2.17%	1.45%	2.77%	4.04%	0.17%	
	Dry	0%	-3.62%	0.35%	0.35%	0.43%	1.55%	5.54%	-0.03%	
	Wet	0%	-1.62%	-0.19%	-0.20%	-0.16%	-0.04%	6.62%	0.03%	
Fall-run through Delta survival to Chipps Island (DPM)	Above Normal	0%	-0.68%	-0.81%	-1.14%	-0.33%	2.07%	8.34%	-0.75%	Table F.4-7
	Below Normal	0%	0.42%	-0.98%	-1.09%	-0.79%	2.75%	4.33%	-0.46%	
	Critical	0%	5.85%	0.50%	5.82%	6.09%	7.39%	6.24%	0.24%	
	Dry	0%	-0.57%	-0.51%	-0.52%	-0.48%	2.13%	3.21%	-0.29%	
	Wet	0%	-0.16%	-0.56%	-0.60%	-0.26%	-0.16%	8.81%	-0.55%	
Delta Smelt Life Cycle Model - Mean population growth rates	All	0%	-24%	-2%	-3%	1%	1%	23%	-5%	Table F.4-7
	Drier	0%	-18%	1%	0%	3%	3%	20%	-2%	
	Wetter	0%	-32%	-7%	-7%	-5%	-4%	25%	-10%	
Delta Smelt Model - Maunder and Deriso Revised	Above Normal	0%	-37%	0%	0%	0%	0%	11%	-1%	Table F.1-7
	Below Normal	0%	-26%	-1%	-1%	-1%	-2%	40%	-1%	
	Critical	0%	-11%	2%	2%	1%	2%	37%	3%	
	Dry	0%	-22%	0%	0%	0%	1%	21%	-1%	
	Wet	0%	-18%	-2%	-2%	-2%	-2%	31%	0%	
Longfin Smelt Abundance - Delta Outflow Model	Wet	0%	-8%	-2%	-2%	-1%	0%	40%	0%	Table J.1-3
	Above Normal	0%	-10%	-2%	-3%	0%	3%	32%	-1%	
	Below Normal	0%	-8%	-2%	-2%	0%	4%	23%	0%	
	Dry	0%	-8%	-1%	-1%	1%	4%	22%	-1%	
	Critical	0%	-5%	-1%	1%	2%	4%	19%	-1%	
Longfin Smelt salvage-OMR relationship (entrainment)	Wet	0%	197%	173%	173%	103%	98%	-92%	158%	Table I.4-2
	Above Normal	0%	295%	181%	181%	37%	33%	-80%	185%	
	Below Normal	0%	134%	75%	75%	31%	22%	-73%	86%	
	Dry	0%	63%	43%	43%	8%	-4%	-69%	45%	
	Critical	0%	35%	29%	29%	29%	24%	-47%	23%	
White Sturgeon - Year Class Strength with Delta Outflow	Wet	0%	-0.8%	-2.0%	-2.0%	-1.2%	-1.2%	35.9%	-2.0%	Table J.2-5
	Above Normal	0%	-11.9%	-6.0%	-7.5%	-1.5%	1.5%	24.2%	-4.5%	

Worse than NAA
 Best alternative
 Identical outcome to NAA