

Joint Reservoir Committee Authority Board Meeting

Agenda Item 3-3, Confirm Operations Analysis for
Revised Draft EIR/Supplemental Draft EIS

February 19, 2021



Background

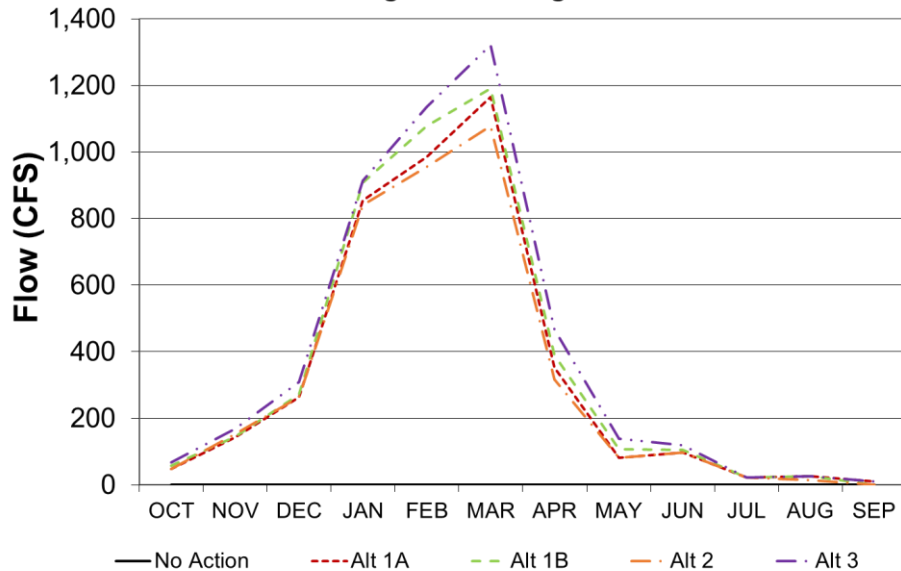
1. Last presented results in December
2. Change since last update:
 - a. CalSim 2020 Benchmark Baseline
 - i. Created by Reclamation in coordination with DWR and CDFW
 - ii. Includes latest model assumptions for ROC on LTO and SWP ITP
3. Results will be used in analysis for EIR/EIS, biological assessment

Background: Alternatives

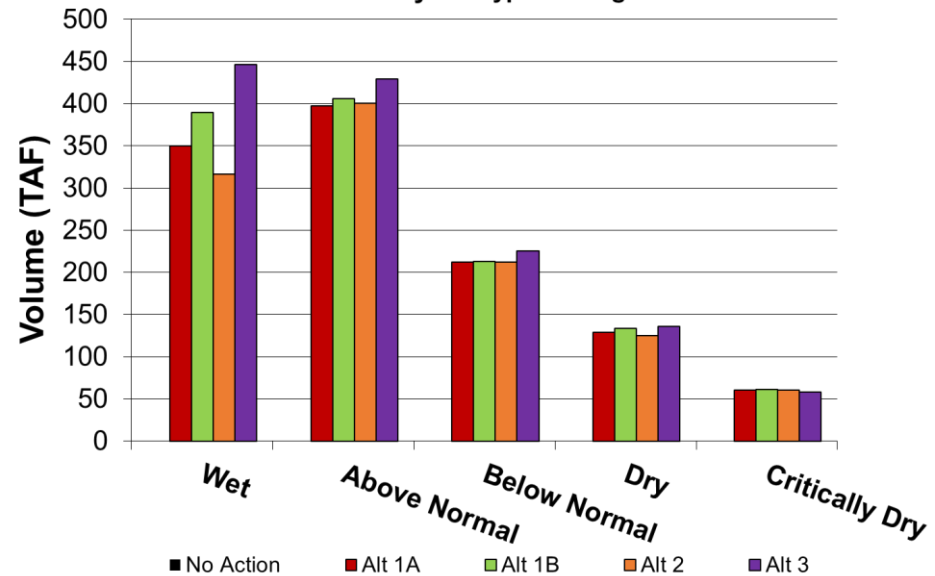
Facilities / Operations	Alternative 1A	Alternative 1B	Alternative 2	Alternative 3
Reservoir Size	1.5 MAF	Same as Alt 1A	1.3 MAF	1.5 MAF
Conveyance Release / Dunnigan Release	1,000 cfs to Colusa Basin Drain	Same as Alt 1A	1,000 cfs to Sacramento River. Partial release to CBD.	Same as Alt 1A
Reclamation Involvement	<ul style="list-style-type: none"> Operational exchanges only No funding 	<ul style="list-style-type: none"> Funding Partner up to 7% Cost-Share Also includes operational exchanges 	<ul style="list-style-type: none"> Operational exchanges only No funding 	Same as Alt 1B, but up to 25% investment
DWR Involvement	Operational Exchanges with Oroville and use of SWP facilities South-of-Delta	Same as Alt 1A	Same as Alt 1A	Same as Alt 1A

Results: Diversions

Total Sites Diversion to Fill
Long-term Averages



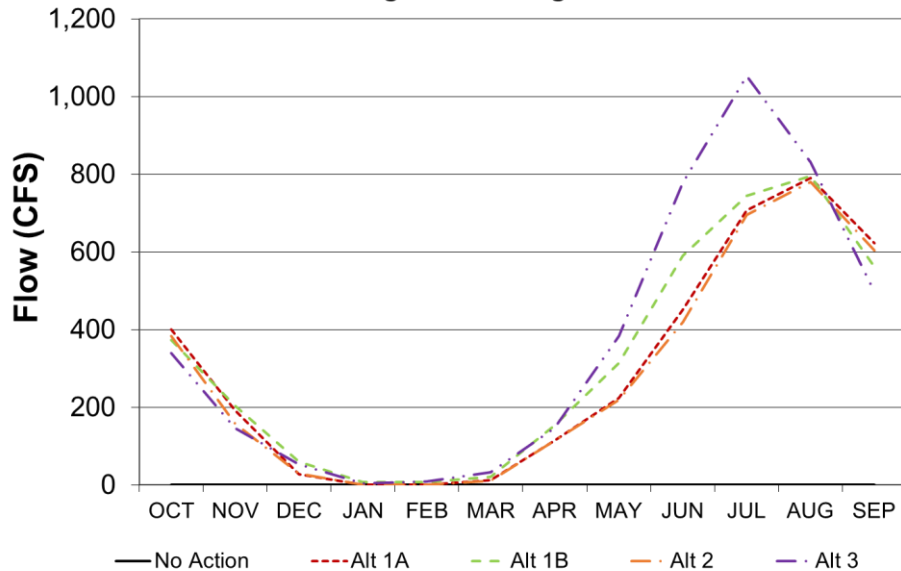
Total Sites Diversion to Fill
Water-year Type Averages



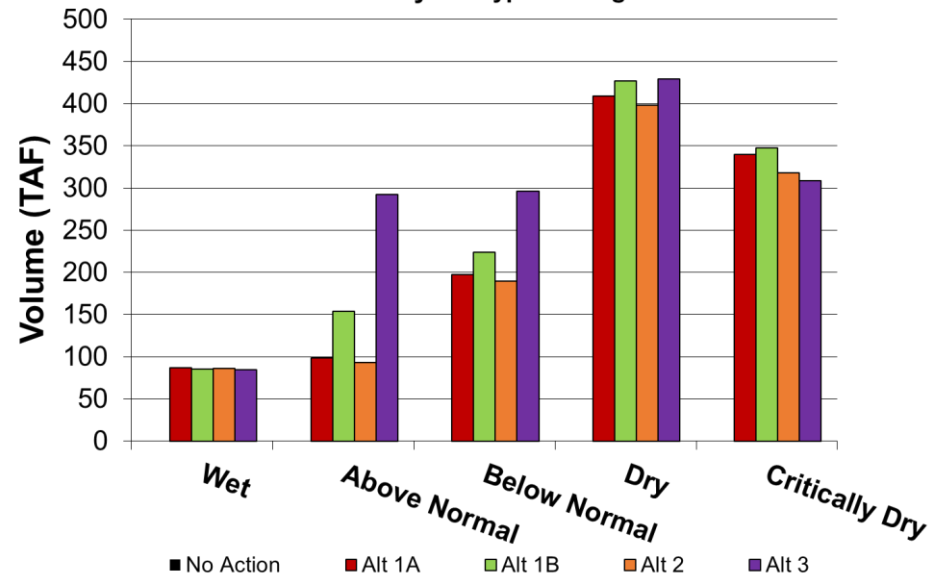
Total Sites Diversion to Fill	Alt 1A	Alt 1B	Alt 2	Alt 3
Long-term Average (TAF)	240	255	229	279
Dry and Critical Average (TAF)	101	104	99	105

Results: Releases

**Total Sites Release
Long-term Averages**



**Total Sites Release
Water-year Type Averages**

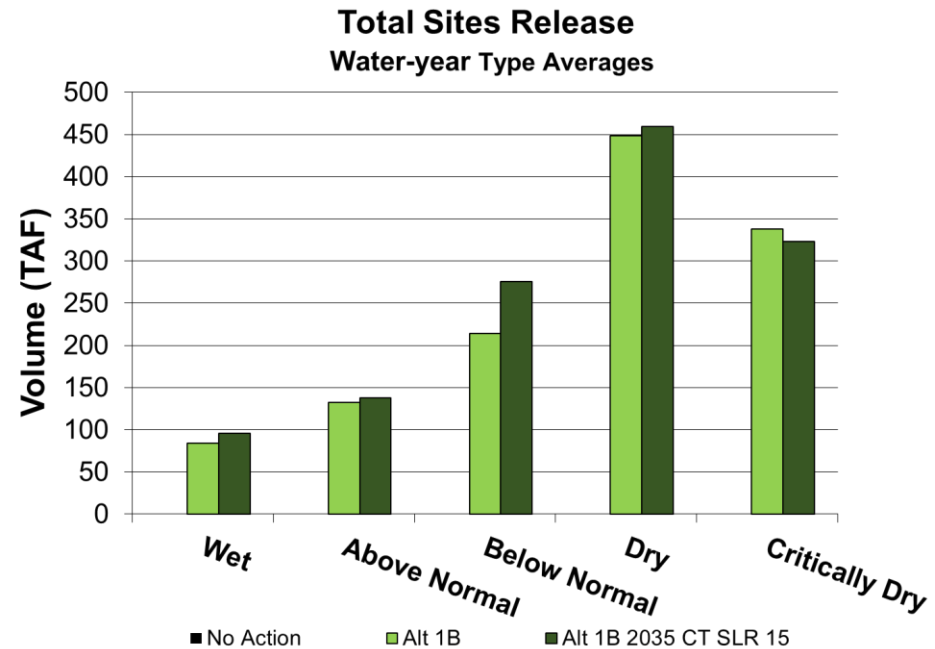
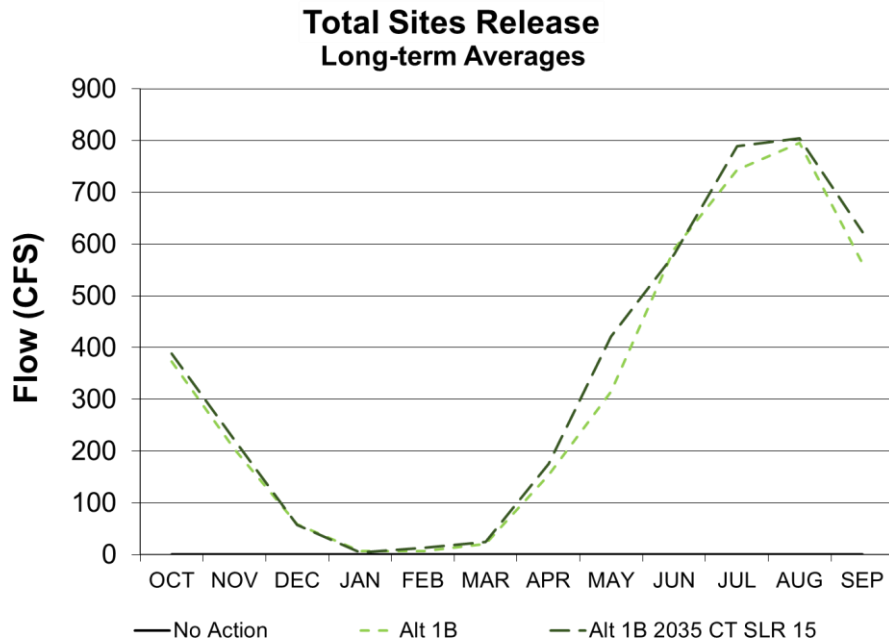


Total Sites Release	Alt 1A	Alt 1B	Alt 2	Alt 3
Long-term Average (TAF)	217	234	209	260
Dry and Critical Average (TAF)	402	404	374	383

Reservoir Releases – Summary Table

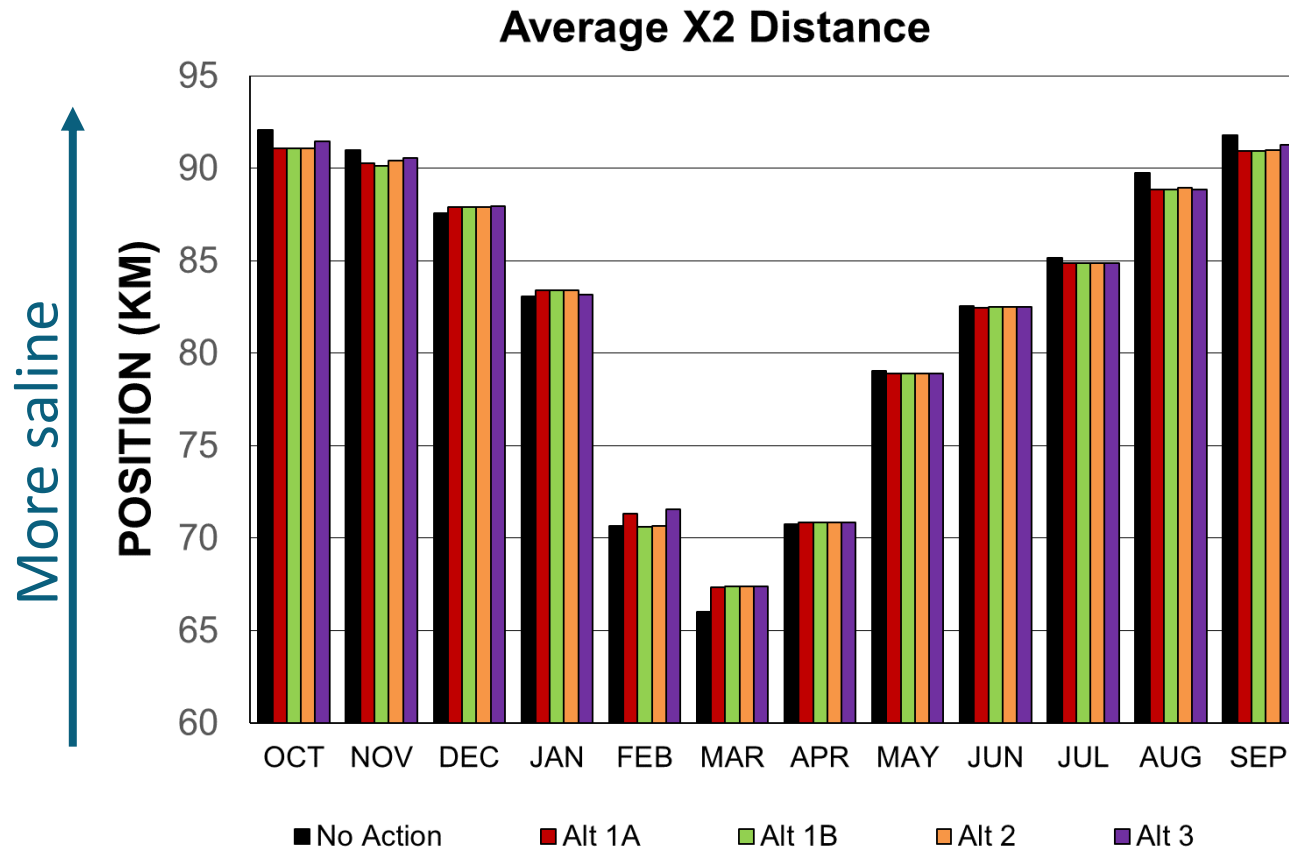
	Alternative 1A	Alternative 1B	Alternative 2	Alternative 3	Value Planning (VP7)
Reservoir Size	1.5 MAF	1.5 MAF	1.3 MAF	1.5 MAF	1.5 MAF
Federal Cost-Share	0%	6.6%	0%	25%	0%
Releases by Year Type (TAF)					
Wet	87	86	86	85	85-115
Above Normal	98	154	93	292	255-285
Below Normal	197	224	190	296	245-275
Dry	409	427	398	429	355-385
Critically Dry	340	348	318	308	205-235
Long-Term Annual Average	217	234	209	260	213-243

Results: Releases Under Climate Change



Total Sites Release	Alt 1B	Alt 1B 2035CT SLR15
Long-term Average (TAF)	234	250
Dry and Critical Average (TAF)	404	405

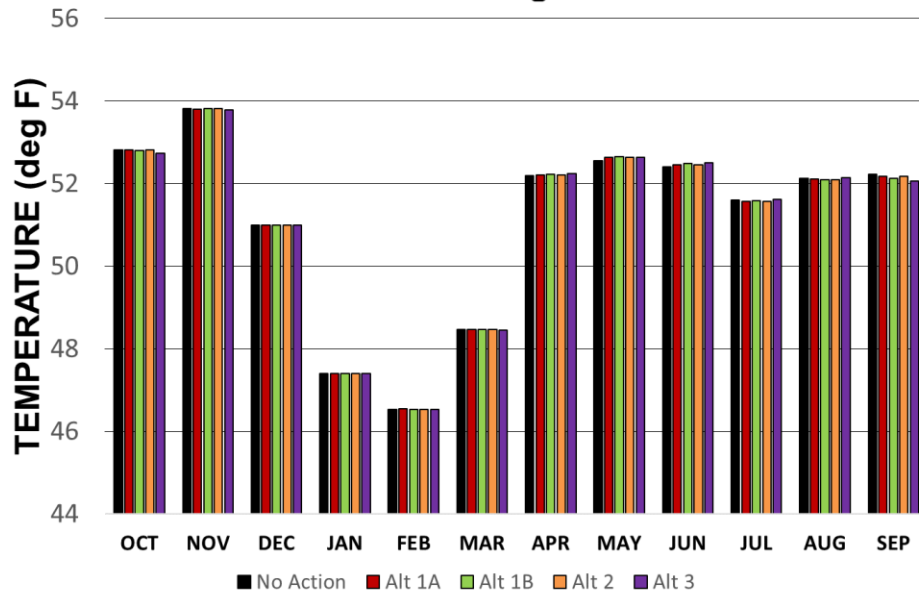
Results - Delta Water Quality X2



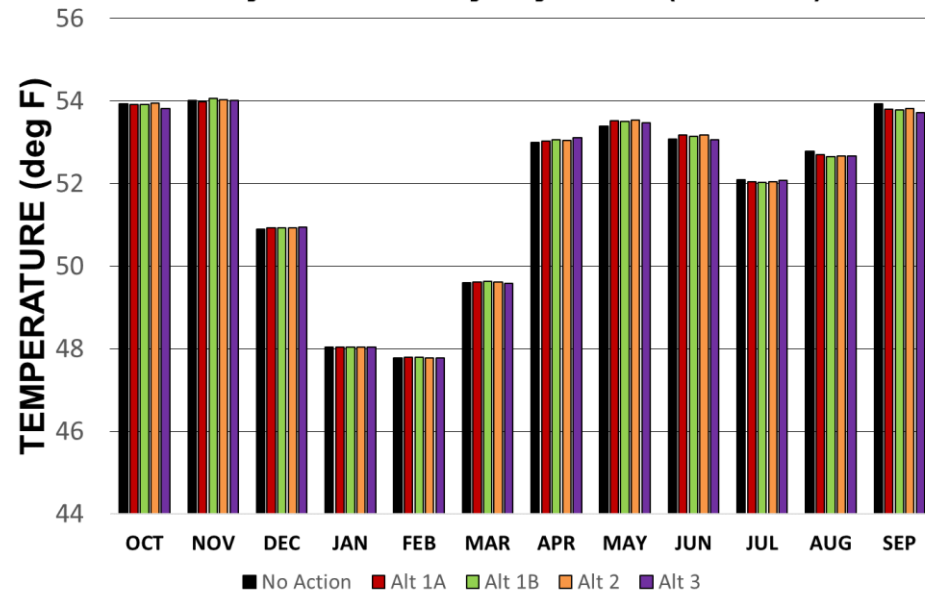
Improving salt conditions when salt content is at its highest

Results – Sacramento River Temperature

Sacramento River Below Clear Creek Temperature Averages



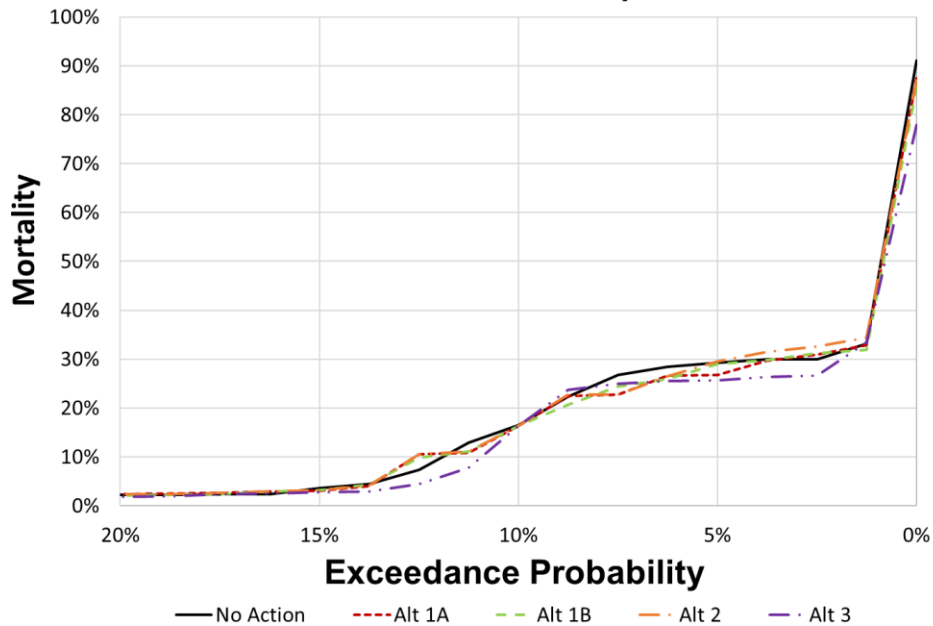
Sacramento River Below Clear Creek Temperature Dry and Critically Dry Years (40-30-30)



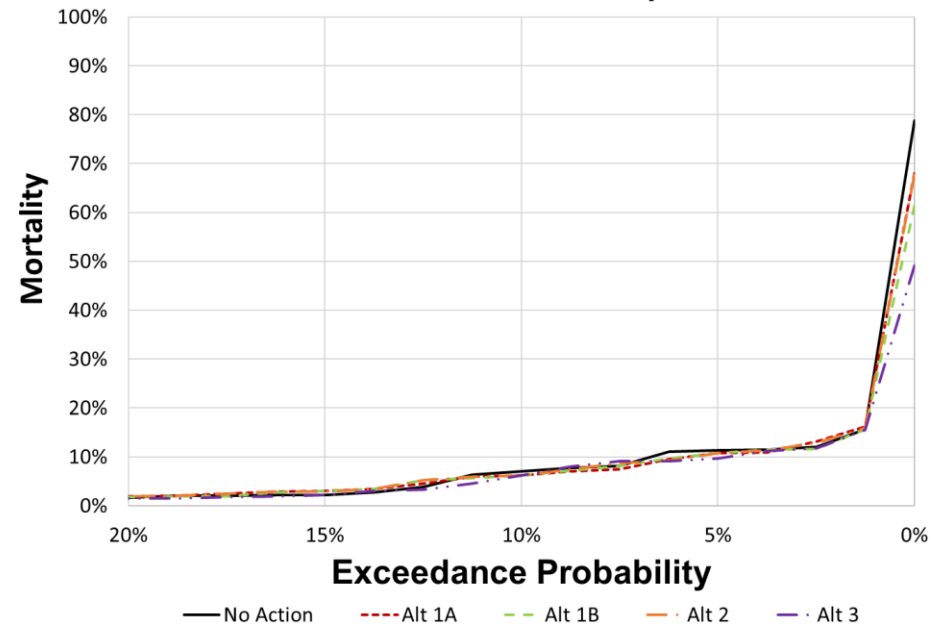
Minimal changes to River temperature due to pumping

Results – Fisheries - Mortality

Martin Model Mortality



Anderson Model Mortality



Improvements above the No Action Alternative in high mortality conditions

Next Steps

- Other models:
 - Power
 - Reservoir temperature
 - Further updates with Alt 3
- Deliveries by participant by year type
 - Work with participants on operating assumptions
- Run analysis under 2030 and 2070 WSIP hydrology for CWC Feasibility
- Use updated cost estimate and operating options to develop a range of costs per acre-foot
- Work with permitting agencies to discuss possible areas of concern

Questions?

