

# Authority Board Meeting

Agenda Item 3.1: Biological Assessment and  
State Operations ITP Modeling Update

April 27, 2022



# Background – Changes from RDEIR/SDEIS Model

- Incorporated climate change baseline
- Deadpool reduced to 60 TAF
- Shifted focus to Alternative 3
  - Proportionally reduced storage allocation to local PWAs to make room for Reclamation
- Incorporated revised diversion criteria
- Expanded operations to improve Shasta cold water pool, fall flow stability, and spring pulse actions
  - Requested by Reclamation
- Other minor modifications, updates and model improvements

# Takeaways from Updated Modeling

1. More federal investment results in less cost for local PWAs and more efficient reservoir operations (greater overall releases)
2. Benefits for local PWAs do not substantially change with model updates and increased federal investment
3. Changes in modeling and federal storage result in greater overall anadromous fish benefits

# Reclamation Investment Improves Overall Project Performance

## Project Releases

	Alternative 1B Historic	Alternative 3A 2035 CT	Alternative 3B 2035 CT
Wet	82	103	108
Above Normal	132	390	318
Below Normal	222	354	322
Dry	449	443	451
Critical	338	288	290
Average	234	284	274

More federal investment results in less cost for local PWAs due to lower storage allocation and more efficient reservoir operations (greater overall releases).

# Local PWAs Supplies do not Substantially Change with Reclamation Investment

## Project Releases

	Alternative 1B Historic	Alternative 3A 2035 CT	Alternative 3B 2035 CT
North of Delta	29	26	27
South of Delta	111	109	127
State	65	61	63
Reclamation	28	88	58
Total	234	284	274

Benefits for local PWAs do not substantially change with model updates and increased federal investment.

SOD increases under Alt 3B due to increased storage and movement of water in Wet and Above Normal years. NOD more static due to less active use of storage.

# Changes in Modeling and Federal Storage Result in Greater Anadromous Fish benefits

## SALMOD – Decrease in Long-Term Average Salmon Mortality

Alternative (relative to baseline)	Fall Run	Late-Fall Run	Spring Run	Winter Run
Alternative 3 (historic, RDEIR/SDEIS)	3%	0%	3%	8%
Alternative 3A 2035 CT	9%	0%	39%	12%
Alternative 3B 2035 CT	7%	1%	29%	11%

Important for federal funding, meeting project objectives

# Next Steps

- Agree on changes to storage allocation among Local PWAs to "make room" for Reclamation @ Alt 3 level
  - Rebalance to final participation levels before Phase 3
- Provide input on storage space for offer letter to Reclamation
- Complete other models required for Biological Assessment/Operations ITP application
- Complete modeling for Final EIR/EIS

Questions?



