

Environmental Planning and Permitting Workgroup

April 20, 2022



Agenda

- Initial Modeling Results
 - Biological Assessment and ITP Operations Application
- Amendment 3 Schedule Development
- Environmental Permitting and Planning Manager Report
 - Key Planning Activities Report
 - Geotechnical Report
- Upcoming Meetings

Initial Modeling Results – Biological Assessment / Operations ITP

Erin Heydinger

Background – Changes from RDEIR/SDEIS Model

- Climate condition: 2035 Central Tendency, 15 cm sea level rise
- Deadpool reduced to 60 TAF
- Revised diversion criteria:
 - Bend bridge pulse flow protection
 - 10,700 cfs at Wilkins Slough Oct-June
 - No Fremont Weir Notch criteria
 - Diversions permitted Sept. 1 – June 15
- Releases to SOD participants in all year types
- Refined release operations through Dunnigan Pipeline to account for restrictions at Knights Landing
- Expanded operations to improve Shasta cold water pool, fall flow stability, and spring pulse actions
 - Requested by Reclamation

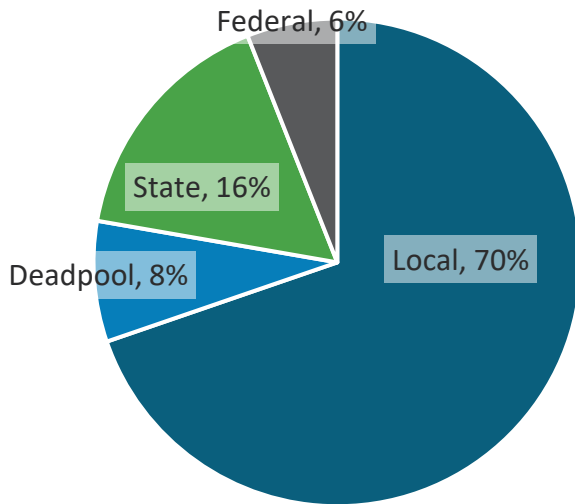
Takeaways from Updated Modeling

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

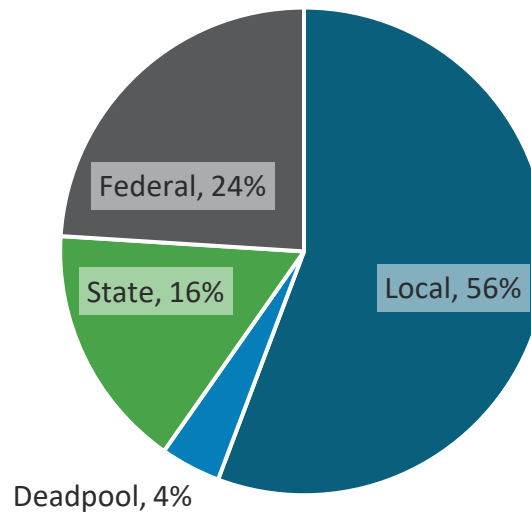
Alt 3 Reclamation Reallocates Storage Space from Local PWAs, but Reduces PWA Cost too

- Scenarios Modeled: Alternatives 3A and 3B

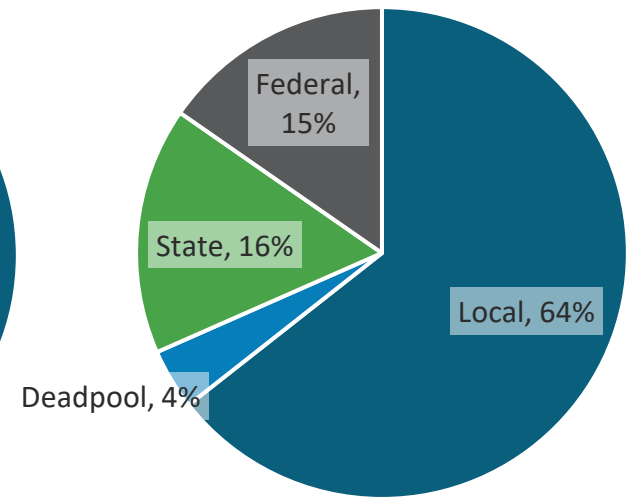
Alternative 1B
RDEIR/SDEIS



Alternative 3A



Alternative 3B



Storage allocation for each alternative developed based on Principles of Storage (April 2021), Amendment 2 participation

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

- EPP Work Group Focus –
 - Complete other models required for Biological Assessment/Operations ITP application
 - Complete modeling for Final EIR/EIS
- Overall Project Perspective –
 - Agree on changes to storage allocation among Local PWAs to "make room" for Reclamation @ Alt 3 level
 - Voluntary reductions or adjust participation to storage ratio (1:6.234)
 - Rebalance to final participation levels before Phase 3
 - Provide input on storage space for offer letter to Reclamation

Amendment 3 Project Schedule Update

Ali Forsythe

Background

- Focus
 - Amendment 3 Work Plan – 1/1/2022 to 12/31/2024
- Goals
 - Develop a detailed planning level schedule to help guide decision making
 - Establish a “Baseline” schedule to track progress and manage changes

Schedule Takeaways – Focused on EPP Work Group Efforts

1. Critical path for Investor Commitment goes through Updated Project Cost Estimate and Geotech Work Packages 3 & 4
 - *Geotech Planning and Permitting activities key to achieving these efforts*
2. Other key activities narrowly off the critical path are:
 - WIFIA Negotiations with approximately 4 months of float
 - *Water Right Permit with approximately 7 months of float*
3. Contract Strategy will drive the development of the schedule through Project completion

3 Paths to Investor Commitment

Construction



Investor Commitment – July 2024



What do we get?

- Water Right Permit
- Participant Specific Model
- ESA Permits

December 2023

What does it cost?

- Updated Project Cost Estimate
- Geo Work Packages 3 & 4
- Mitigation Cost Estimate
- Land Cost Established

July 2024

How do we pay for it?

- WIFIA Negotiations
- Finalize WIFIA Application
- Indicative Rating Assessment

March 2024

Key Changes for Planning/Permitting

- Final EIR/EIS
 - Moved to January 2023
 - Critical to stay on revised schedule for water right permit issuance
- Pushed back a few items that happen AFTER the EIR/EIS
 - Issuance of Construction and Operations ITPs
 - Moved to March 2023
 - Critical to stay on revised schedule for water right permit issuance
 - 404/401 Permit Issuance
 - Moved to October 2023
 - Not a critical path item

Next Steps

- Track Amendment 3 activities against baseline
 - Ongoing
- Master Schedule through Project Construction
 - Target completion date: October 2022

Environmental Planning and Permitting Manager Report

Ali Forsythe

Dashboard Update

Deliverable	Start	Finish	Status	Notes, New or Potential Issues
Negotiate and Execute Benefits Contracts with DWR & CDFW	Jun-22	Jun-23	N/S	
Water Right Application				
• Submit to State Board	Sep-20	May-22	●	Anticipated submittal on/around May 10
• Complete Protest Resolution Period	May-22	Dec-22	N/S	
• Receive Water Right Permit	Jan-23	Dec-23	N/S	
Federal ESA				
• Submit BAs to Reclamation	Oct-20	Jun-22	●	
• Receive BiOps	Jun-22	Dec-22	N/S	
State ITPs				
• Receive Construction ITP	Sep-20	Mar-23	●	Application submitted Jan-22
• Submit Operations ITP Application to CDFW	Sep-20	Jun-22	●	
• Receive Operations ITP	Jun-22	Mar-23	N/S	

N/S = Not Started; = On track; = Area of Potential Concern; = Delayed; = Completed

Dashboard Update

Deliverable	Start	Finish	Status	Notes, New or Potential Issues
Section 106 – Cultural Resources				
• Final Programmatic Agreement	Sep-20	Jan-23	●	
• Programmatic Historic Properties Management Plan	Dec-21	Sept-22	●	
Clean Water Act 404/401				
• Submit Final Permit Applications	Sep-20	Feb-23	●	Timed just post release of the Final EIR/EIS
• Receive 404 and 401 Permits	Oct-22	Oct-23	●	Will come after Final EIR/EIS
Streambed Alteration Agreement				
• Prepare and Submit Application	Jan-22	Dec-22	●	
• Receive Master Agreement	Jan-23	May-23	●	Will come shortly after Final EIR/EIS
Eagle Permit				
• Short-Term and Nest Take Permits Issued	Oct-20	Mar-23	●	April and July 2022 surveys completed
• Long-Term Permit Issued	Oct-20	Mar-24	●	

N/S = Not Started; Green = On track; Yellow = Area of Potential Concern; Red = Delayed; Blue = Completed

Dashboard Update

Deliverable	Start	Finish	Status	Notes, New or Potential Issues
Final EIR/EIS				
• Complete Final EIR/EIS	Dec-21	Jan-23	●	
• Certify Final EIR/EIS and approve preferred project and MMRP	Oct-22	Jan-23	●	

N/S = Not Started; **Green** = On track; **Yellow** = Area of Potential Concern; **Red** = Delayed; **Blue** = Completed

Geotech Early Evaluations Update

- TRR Early Evaluation Investigations Completed March 2022
 - No environmental issues encountered (tribal, biological, cultural)
 - Avoided impacts to all sensitive resources (e.g., nesting birds, potentially regulated wetlands, etc.)
- Priority 1 Geotechnical Investigations (2022 to 2024)
 - Environmental document (EA/IS) – public review early May
 - Permit applications – submit to agencies with public release of EA/IS
 - AB 52 on-going
 - Section 7 Consultation & SHPO Consultation underway (Reclamation lead)
 - Field effort anticipated to begin early September

Next Work Group Meeting

- Next Meeting – May 12, 2022; 1-2:30pm
- Anticipated Topics –
 - Permitting
 - Biological Assessment and Operations ITP Application
 - Aquatic species effects
 - Financial assurances
 - Delegate authority to release once completed

Upcoming Meetings

Reservoir Committee

Friday, April 22, 2022 (9:00 am – 12:00 pm)

Authority Board

Wednesday, April 27, 2022 (1:30 – 4:00 pm)

Environmental Planning and Permitting Workgroup

Thursday, May 12, 2022 (1:00 – 2:30 pm)

Thank you!

