



MEMORANDUM

TO: SLDMWA Water Resources Committee Members and Alternates

FROM: Scott Petersen, Water Policy Director

DATE: October 2, 2023

RE: Update on Water Policy/Resources Activities

Background

This memorandum is provided to briefly summarize the current status of various agency processes regarding water policy activities, including but not limited to the (1) Reinitiation of Consultation on Long-Term Operations of the Central Valley Project and State Water Project, including environmental compliance; (2) State Water Resources Control Board action; (3) San Joaquin River Restoration Program; (4) Delta conveyance; (5) Reclamation action; (6) Delta Stewardship Council action; (7) San Joaquin Valley Water Blueprint and San Joaquin Valley Water Collaborative Action Plan.

Policy Items

Reinitiation of Consultation on Long-Term Operations of the Central Valley Project and State Water Project

In August 2016, the Bureau of Reclamation and California Department of Water Resources (DWR) requested reinitiation of consultation with NOAA Fisheries, also known as National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS) due to multiple years of drought, low populations of listed species, and new information developed as a result of ongoing collaborative science efforts over the last 10 years.

On Jan. 31, 2019, Reclamation transmitted its Biological Assessment to the Services. The purpose of this action is to continue the coordinated long-term operation of the CVP and SWP to optimize water supply delivery and power generation consistent with applicable laws, contractual obligations, and agreements; and to increase operational flexibility by focusing on nonoperational measures to avoid significant adverse effects to species.

The biological opinions carefully evaluated the impact of the proposed CVP and SWP water operations on imperiled species such as salmon, steelhead and Delta smelt. FWS and NMFS documented impacts and worked closely with Reclamation to modify its proposed operations to minimize and offset those impacts, with the goals of providing water supply for project users and protecting the environment.

Both FWS and NMFS concluded that Reclamation's proposed operations will not jeopardize threatened or endangered species or adversely modify their critical habitat. These conclusions were reached for

several reasons – most notably because of significant investments by many partners in science, habitat restoration, conservation facilities including hatcheries, as well as protective measures built into Reclamation's and DWR's proposed operations.

On Oct. 21, 2019, FWS and NMFS released their biological opinions on Reclamation's and DWR's new proposed coordinated operations of the CVP and SWP.

On Dec. 19, 2019, Reclamation released the final Environmental Impact Statement analyzing potential effects associated with long-term water operations for the CVP and SWP.

On Feb. 18, 2020, Reclamation approved a Record of Decision that completes its environmental review for the long-term water operations for the CVP and SWP, which incorporates new science to optimize water deliveries and power production while protecting endangered species and their critical habitats.

On January 20, 2021, President Biden signed an Executive Order: “Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis”, with a fact sheet¹ attached that included a non-exclusive list of agency actions that heads of the relevant agencies will review in accordance with the Executive Order. Importantly, the NOAA Fisheries and U.S. Fish and Wildlife Service Biological Opinions on the Long-Term Operation of the Central Valley Project and State Water Project were both included in the list of agency actions for review.

On September 30, 2021, Reclamation Regional Director Ernest Conant sent a letter to U.S. FWS Regional Director Paul Souza and NMFS Regional Administrator Barry Thom requesting reinitiation of consultation on the Long-Term Operation of the CVP and SWP. Pursuant to 50 CFR § 402.16, Reclamation indicated that reinitiation is warranted based on anticipated modifications to the Proposed Action that may cause effects to listed species or designated critical habitats not analyzed in the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) Biological Opinions, dated October 21, 2019. To address the review of agency actions required by Executive Order 13990 and to voluntarily reconcile CVP operating criteria with operational requirements of the SWP under the California Endangered Species Act, Reclamation and DWR indicated that they anticipate a modified Proposed Action and associated biological effects analysis that would result in new Biological Opinions for the CVP and SWP.

Following this action, on October 20, 2021, the SLDMWA sent a letter to Reclamation Regional Director Ernest Conant requesting participation in the reinitiation of consultation pursuant to Section 4004 of the WIIN Act and in the NEPA process as either a Cooperating Agency or Participating Agency.

On February 26, 2022, the Department of the Interior released a Notice of Intent To Prepare an Environmental Impact Statement (EIS) and Hold Public Scoping Meetings on the 2021 Endangered Species Act Reinitiation of Section 7 Consultation on the Long-Term Operation of the Central Valley Project and State Water Project². In response to this, on March 30, 2022, the SLDMWA submitted a comment letter highlighting actions for Reclamation to consider during preparation of the EIS.

¹ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/fact-sheet-list-of-agency-actions-for-review/>

² <https://www.govinfo.gov/content/pkg/FR-2022-02-28/pdf/2022-04160.pdf>

During May 2022, Reclamation issued draft copies of the Knowledge Base Papers for the following management topics and requested supplementary material review and comments, to which the Authority submitted comment letters in June:

1. Spring-run Juvenile Production Estimate- Spring-run Survival Knowledge Base Document, May 2022
2. Steelhead Juvenile Production Estimate-Steelhead Survival Knowledge Base Document, April 2022
3. Old and Middle River Reverse Flow Management – Smelt, Chinook Salmon, and Steelhead Migration and Survival Knowledge Base Document, May 2022
4. Central Valley Tributary Habitat Restoration Effects on Salmonid Growth and Survival Knowledge Based Paper, March 2022
5. Delta Spring Outflow Management Smelt Growth and Survival Knowledge Base Document, May 2022
6. Pulse Flow Effects on Salmonid Survival Knowledge Base Document, May 2022
7. Summer and Fall Habitat Management Actions – Smelt Growth and Survival Knowledge Base Document, May 2022
8. Shasta Cold Water Pool Management – End of September Storage Knowledge Base Document, May 2022

Subsequent to the Knowledge Base Paper review, a Scoping Meeting was held, to which Water Authority staff provided comments, resulting in the release of a Scoping Report³ by Reclamation in June 2022.

On October 14, 2022, Reclamation released an Initial Alternatives Report (IAR).

On May 16, 2023, Reclamation provided an administrative draft copy of the Proposed Action, titled “State and Federal Cooperating Agency Draft LTO Alternative” to agencies that have executed an MOU with Reclamation on engagement. Authority staff is reviewing the document and provided feedback to Reclamation, in coordination with member agencies and other CVP contractors.

On June 30, 2023, Reclamation released a draft Qualitative Biological Assessment for review by agencies that have executed an MOU with Reclamation on engagement, though Reclamation is not accepting formal comments. Note that this release does not initiate formal ESA consultation and is being provided to assist the fishery agencies in setting up their documents and resources for the formal consultation, which we expect to begin in late September/early October.

On July 21, 2023, Reclamation released an Administrative Draft Terrestrial Biological Assessment for review by agencies that have an MOU with Reclamation on engagement, though Reclamation is not accepting formal comments. Note that this release does not initiate formal ESA consultation and is being provided to assist the fishery agencies in setting up their documents and resources for the formal consultation, which we expect to begin in late September/early October.

On September 12, Reclamation held a Quarterly Public meeting to provide an update on the LTO⁴.

³ <https://www.usbr.gov/mp/bdo/docs/lto-scoping-report-2022.pdf>

⁴ Request from Authority staff

Current Milestones

- Q4 2023 – Public Draft EIS/Quantitative Biological Assessment
 - The public draft EIS will be the avenue for comments to Reclamation
 - Cooperating agencies will receive an administrative draft of the EIS
- Summer 2024 – Record of Decision

Exploratory Modeling

Concurrent with the development of the EIS and BA, Reclamation is conducting Exploratory Modeling to assist in the development of the Proposed Action and Quantitative Biological Assessment. As a part of this work, the Benchmark model has been updated, with further updates to come. Importantly, the CalSim modeling is transitioning from CalSim2 to CalSim3, which may have some implications that need to be analyzed for potential water supply impacts.

State Water Resources Control Board (State Water Board) Activity

Bay Delta Water Quality Control Plan Update

Background

The State Water Board is currently considering updates to its 2006 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (“Bay Delta Plan”) in two phases (Plan amendments). The first Plan amendment is focused on San Joaquin River flows and southern Delta salinity (“Phase I” or “San Joaquin River Flows and Southern Delta Salinity Plan Amendment”). The second Plan amendment is focused on the Sacramento River and its tributaries, Delta eastside tributaries (including the Calaveras, Cosumnes, and Mokelumne rivers), Delta outflows, and interior Delta flows (“Phase II” or “Sacramento/Delta Plan Amendment”).

During the December 12, 2018 Water Board Meeting, the Department of Water Resources (“DWR”) and Department of Fish and Wildlife presented proposed “Voluntary Settlement Agreements” (“VSAs”) on behalf of Reclamation, DWR, and the public water agencies they serve to resolve conflicts over proposed amendments to the Bay-Delta Plan update.⁵ The State Water Board did not adopt the proposed VSAs in lieu of the proposed Phase 1 amendments, but as explained below, directed staff to consider the proposals as part of a future Delta-wide proposal.

Phase 1 Status: The State Water Board adopted a resolution⁶ to adopt amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary and adopt the Final Substitute Environmental Document during its December 12, 2018 public meeting.

⁵ Available at <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Blogs/Voluntary-Settlement-Agreement-Meeting-Materials-Dec-12-2018-DWR-CDFW-CNRA.pdf>.

⁶ Available at https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/rs2018_0059.pdf.

Most recently, on July 18, 2022, the State Water Resources Control Board issued a Notice of Preparation (NOP)⁷ and California Environmental Quality Act (CEQA) Scoping Meeting for the Proposed Regulation to Implement Lower San Joaquin River Flows (LSJR) and Southern Delta Salinity Objectives in the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta (Bay-Delta Plan).

The purpose of the NOP is: (1) to advise responsible and trustee agencies, Tribes, and interested organizations and persons, that the State Water Board or Board will be the lead agency and will prepare a draft EIR for a proposed regulation implementing the LSJR flow and southern Delta salinity components of the 2018 Bay-Delta Plan, and (2) to seek input on significant environmental issues, reasonable alternatives, and mitigation measures that should be addressed in the EIR. For responsible and trustee agencies, the State Water Board requests the views of your agency as to the scope and content of the environmental information related to your agency's area of statutory responsibility that must be included in the draft EIR.

In response to the release of the NOP, the Water Authority and member agencies provided scoping comments⁸.

Phase 2 Status: In the State Water Board's resolution adopting the Phase 1 amendments, the Water Board directed staff to assist the Natural Resources Agency in completing a Delta watershed-wide agreement, including potential flow and non-flow measures for the Tuolumne River, and associated analyses no later than March 1, 2019. Staff were directed to incorporate the Delta watershed-wide agreement as an alternative for a future, comprehensive Bay-Delta Plan update that addresses the reasonable protection of beneficial uses across the Delta watershed, with the goal that comprehensive amendments may be presented to the State Water Board for consideration as early as possible after December 1, 2019.

On March 1, 2019, the California Department of Water Resources and the Department of Fish and Wildlife submitted documents⁹ to the State Water Board that reflect progress since December to flesh-out the previously submitted framework to improve conditions for fish through targeted river flows and a suite of habitat-enhancing projects including floodplain inundation and physical improvement of spawning and rearing areas.

Since the March 1 submittal, work has taken place to develop the package into a form that is able to be analyzed by State Water Board staff for legal and technical adequacy. On June 30, 2019, a status update with additional details was submitted to the Board for review. Additionally, on February 4, 2020, the State team released a framework for the Voluntary Agreements to reach "adequacy", as defined by the State team.

⁷ Available at https://www.waterboards.ca.gov/public_notices/notices/20220715-implementation-nop-and-scoping-dwr-baydelta.pdf

⁸ Request from Authority staff

⁹ Available at http://resources.ca.gov/docs/voluntary-agreements/2019/Complete_March_1_VA_Submission_to_SWRCB.pdf

Further work and analysis is needed to determine whether the agreements can meet environmental objectives required by law and identified in the State Water Board's update to the Bay-Delta Water Quality Control Plan.

On September 28, The State Water Resources Control Board released a draft Staff Report in support of possible updates to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan) that are focused on the Sacramento River watershed, Delta, and Delta eastside tributaries (Sacramento/Delta).

The draft Staff Report includes scientific information and environmental and economic evaluations to support possible Sacramento/Delta updates to the Bay-Delta Plan. The report assesses a range of alternatives for updating the Sacramento/Delta portions of the Bay-Delta Plan, including: an alternative based on a 2018 Framework document identifying a 55% of unimpaired flow level (within an adaptive range from 45-65%) from Sacramento/Delta tributaries and associated Delta outflows; and a proposed voluntary agreements alternative that includes voluntary water contributions and physical habitat restoration on major tributaries to the Delta and in the Delta. In addition, based on input from California Native American tribes, the draft Staff Report identifies the proposed addition of tribal and subsistence fishing beneficial uses to the Bay-Delta Plan.

The draft Staff Report is available for review on the [Board's website](#). Written comments on the report are due by **December 15, 2023**. During the public comment period, staff will hold two public workshops to explain the report where attendees can also ask questions. The workshops will be followed by a public hearing before the State Water Board to receive oral comments on the draft Staff Report.

A Frequently Asked Questions (FAQ) document providing information on the report and the Bay-Delta Plan generally are available on the [Bay-Delta webpage](#).

Upcoming opportunities for engagement on the draft Staff Report are highlighted below:

- October 19 (9:30 am): Overview of Draft Staff Report Workshop and Q&A Session
- November 2 (9:30 am): Modeling Workshop and Q&A Session
- November 17 (9:30 am), December 1 (9:30 am), and December 11 (4:00 pm): Public hearing
- December 15: Written comments due

In addition to the public workshops, Board staff will hold a separate workshop for tribal representatives only to explain the draft Staff Report and answer questions. A separate notice inviting tribal representatives to participate in the workshop will be sent directly to tribal representatives.

Please see the [notice](#) for additional information on how to submit comments and participate in the workshops and hearing.

Schedule

LSJR Flow/SD Salinity Implementation Next Steps Assuming Regulation Path (Phase 1)

- Summer 2023: Executive Director act on draft COP, compliance methods, and procedures for adaptive implementation
- Fall 2023
 - Scientific Basis Report for Tuolumne River VAs submitted for peer review

- Draft Staff Report for Bay-Delta Plan amendment for Tuolumne River VA
- Draft Regulation and Draft EIR in support of a regulation implementing Lower SJR flows and South Delta Salinity
- Winter/Spring 2024
 - Final draft Staff Report for Tuolumne River VA
 - Board workshop and consideration of Tuolumne River VA
 - Final draft EIR and regulation implementing Lower SJR flows and South Delta Salinity
 - Board consideration of regulation implementing Lower SJR flows and South Delta Salinity

Sac/Delta Update: Key Milestones

- Winter 2023: Public workshop on Draft Staff Report
- Spring/Summer 2024: Response to comments and development of proposed final changes to the Bay-Delta Plan
- Summer/Fall 2024: Board consideration of adoption

Voluntary Agreements

On March 29, 2022, members of the Newsom Administration joined federal and local water leaders in announcing the signing of a memorandum of understanding¹⁰ that advances integrated efforts to improve ecosystem and fisheries health within the Sacramento-San Joaquin Bay-Delta. State and federal agencies also announced an agreement¹¹ specifically with the Sacramento River Settlement Contractors on an approach for 2022 water operations on the Sacramento River.

Both announcements represent a potential revival of progress toward what has been known as “Voluntary Agreements,” an approach the Authority believes is superior to a regulatory approach to update the Bay-Delta Water Quality Control Plan.

The broader MOU outlines terms for an eight-year program that would provide substantial new flows for the environment to help recover salmon and other native fish. The terms also support the creation of new and restored habitat for fish and wildlife, and provide significant funding for environmental improvements and water purchases, according to a joint news release from the California Natural Resources Agency and the California Environmental Protection Agency (CalEPA). Local water agency managers signing the MOU have committed to bringing the terms of the MOU to their boards of directors for their endorsement and to work to settle litigation over engaged species protections in the Delta.

On June 16, the SLDMWA, Friant Water Authority and Tehama Colusa Canal Authority signed onto the VA MOU. Additionally, since that time, in September and November, four more agencies – Contra Costa Water District, San Francisco Public Utilities Commission (SFPUC), Turlock Irrigation District (TID) and Modesto Irrigation District (MID) – have signed onto the VA MOU.

¹⁰ Available at <https://resources.ca.gov/-/media/CNRA-Website/Files/NewsRoom/Voluntary-Agreement-Package-March-29-2022.pdf>

¹¹ Available at <https://calepa.ca.gov/2022/03/29/informational-statement-state-federal-agencies-and-sacramento-river-settlement-contractors-agree-on-approach-for-2022-water-operations-on-the-sacramento-river/>

Work continues to develop the working documents associated with execution and implementation of the VA's and workgroups for participating agencies have been formed, with the formation of a VA Science Workgroup to develop the framework of the VA's proposed Science program, as well as the recent formation of Scheduling and Funding workgroups to ensure that the program remains coordinated.

Tuolumne River Voluntary Agreement

Background

On December 12, 2018, the State Water Board adopted Bay-Delta Plan amendments and a Final SED establishing updated flow objectives on the Lower San Joaquin River, including its three eastside tributaries the Stanislaus, Tuolumne, and Merced Rivers (collectively "LSJR"), revised salinity objectives for the southern Delta, and programs of implementation to achieve the revised objectives.

In November, 2022, the State Water Board received a memorandum of understanding¹² for a proposed Tuolumne River Voluntary Agreement. To consider the proposed voluntary agreement, the State Water Board will need to also consider modifications to the Bay-Delta Plan and prepare a staff report to support those possible changes because the Tuolumne River Voluntary Agreement does not fully conform to the current provisions of the Bay-Delta Plan.

The State Water Board has not yet determined whether to approve changes to the Bay-Delta Plan to incorporate the proposed Tuolumne River Voluntary Agreement, but is commencing preparation of the staff report to inform its consideration. In developing its environmental documentation in the staff report, the State Water Board will tier, as appropriate, from the adopted December 12, 2018, Final SED for the LSJR and southern Delta update to the Bay-Delta Plan.

U.S. Bureau of Reclamation

Reclamation Manual

Documents out for Comment

Draft Policy

- There are currently no Draft Policies out for review.

Draft Directives and Standards

- There are currently no Draft Directives and Standards out for review.

Draft Facilities Instructions, Standards, and Techniques (FIST)

- There are currently no Facilities Instructions, Standards, and Techniques out for review.

Draft Reclamation Safety and Health Standards (RSHS)

- There are currently no Safety and Health Standards out for review.

¹² Available at

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/2023/revised-va-mou-swrcb-copy.pdf

Draft Reclamation Design Standards

- There are currently no Design Standards out for review.

San Joaquin Valley Water Blueprint

The Water Blueprint for the San Joaquin Valley (Blueprint) is a non-profit group of stakeholders, working to better understand our shared goals for water solutions that support environmental stewardship with the needs of communities and industries throughout the San Joaquin Valley.

Blueprint's strategic priorities for 2022-2025: Advocacy, Groundwater Quality and Disadvantaged Communities, Land Use Changes & Environmental Planning, Outreach & Communications, SGMA Implementation, Water Supply Goals, Governance, Operations & Finance.

Mission Statement: *"Unifying the San Joaquin Valley's voice to advance an accessible, reliable solution for a balanced water future for all."*

Committees

Executive/Budget/Personnel

The Blueprint Board approved additional amendments to the Hallmark and Stantec agreements specifically to include work aligned with the California Water Institute/Reclamation Valley Water Plan. The Blueprint sent its annual invoicing, including newly established categories for GSA's coinciding with irrigable acres last month, along with a summary of accomplishments and future goals. Board has approved the evaluation criteria for specific priorities/efforts to help bridge the water deficit in the San Joaquin Valley. The projects/efforts selected will be identified for valley wide support and to date include the Patterson ID conveyance project and Delta Operations.

Advocacy/Communications

With a finalized criteria and selection of projects/efforts the Blueprint will meet again with policy makers, legislators, and Advisor Villaraigosa to highlight alignment with the Governor's water resiliency plan and priority for a potential Water Bond. The Board has provided direction to coordinate efforts with the Collaborative Action Plan where alignment exists. The Blueprint will be looking to meet, discuss and provide comments to PPIC on their "The Future of Agriculture in the San Joaquin Valley" especially with the scheduled conference at Fresno State September 20th.

Activities

SJV/Delta Water Leaders' Summit

Blueprint coordinated and invited a select group of agricultural and water leaders from the San Joaquin Valley and the Delta region to meet and tour the Delta and SJ Valley. Due to the high flood risk in the Delta, the Planning Committee rescheduled the Summit meetings tentatively for November 2-3 to ensure that full attention is given to protecting life and property, and after harvest.

Drinking Water Feasibility Study - CSU Fresno State, FWA, Self-Help, Sustainable Conservation

Fresno State is finalizing the scope of work and budget for subcontractors. They expect to have a project timeline ready by July. As a reminder the partners for the feasibility study have initially identified potential Fresno County districts/areas generally for recharge projects. Initial modeling for Fresno State/California Water Institute has preliminarily identified FID, Consolidated ID, Raisin City WD and North Fork Kings GSA

for strong multi benefit recharge potential. The group is focused on multi-benefits for recharge with a focus on drinking water with measurable results.

Unified Water Plan for the San Joaquin Valley

The Blueprint and California Water Institute have kicked off the joint development of a Unified Water Plan for the San Joaquin Valley as called for in the recently awarded Bureau of Reclamation grant. Both Stantec and The Hallmark Group will be engaged on the development of the plan. The final water plan will include measures to address San Joaquin Valley needs and potential portfolios to address needs and objectives, this report will ultimately be transmitted to Congress by Reclamation in 2025. A copy of that scope is available upon request.¹³

San Joaquin Valley Water Collaborative Action Program (SJVW CAP)

Background

The CAP Plenary Group met on February 28 and approved the formation of work groups to advance the revised Term Sheet¹⁴, adopted on November 22, 2022. Phase II, Work Groups are beginning to meet and discuss priorities and drafting for their respective areas: Safe Drinking Water; Sustainable Water Supplies; Ecosystem Health; Land Use, Demand Reduction and Land Repurposing; Implementation.

Steering Committee members continue to meet to discuss the proposed budget and work with Reclamation regarding the requested funding.

The August Plenary Group meeting was cancelled while the Steering Committee continues to advance the proposed work plan, scope and budget.

¹³ Request from Authority staff

¹⁴ Request from Authority staff



— BUREAU OF —
RECLAMATION

WIIN Act Quarterly Meeting

2021 Long-Term Operation of the CVP and SWP

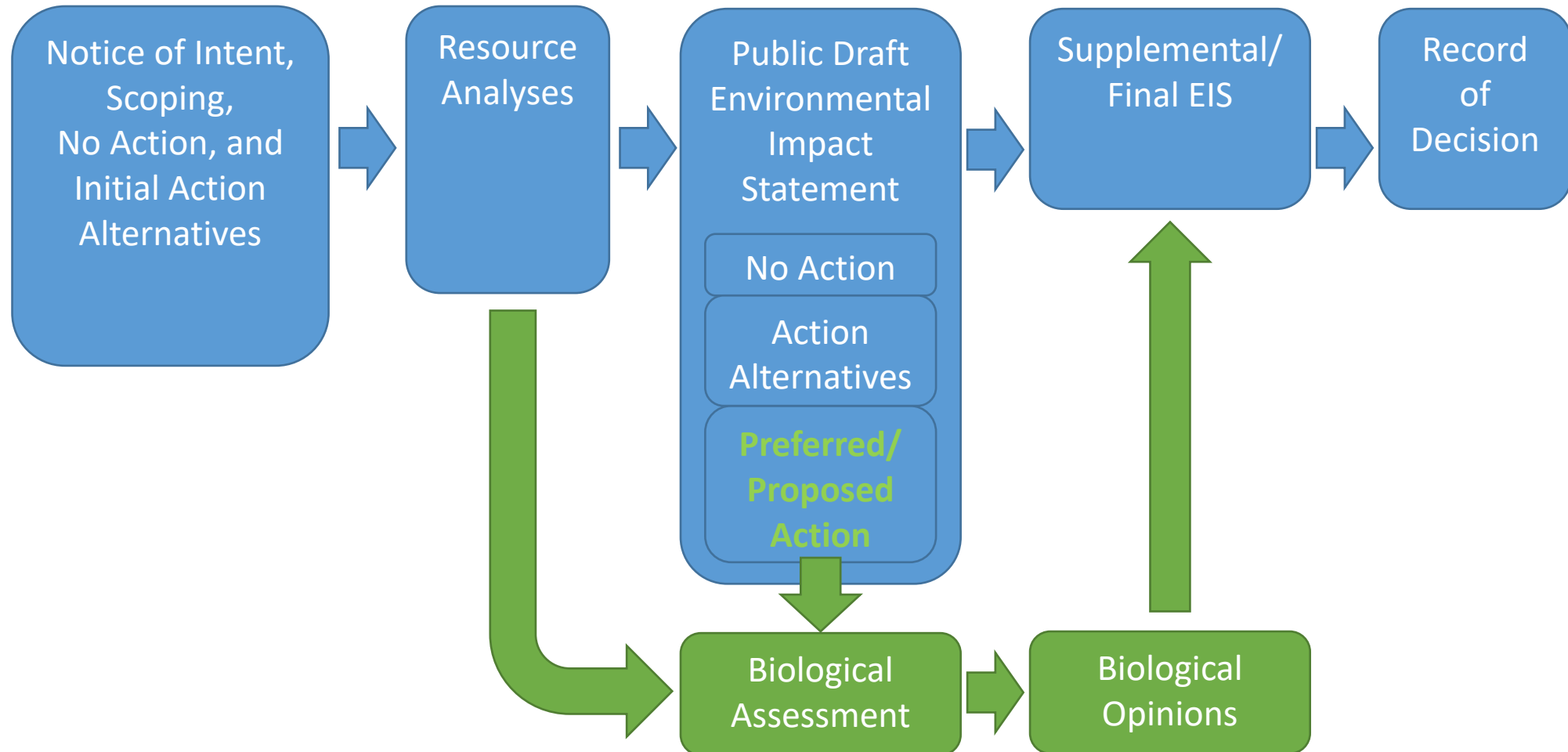
September 12, 2023

Agenda

- Modeling Update
- Cooperating Agency Draft Environmental Impact Statement
- Draft Biological Assessment Comments
- Trinity Consultation Update
- Anticipated Next Steps



NEPA and ESA Process



NEPA and ESA Process Diagram



Prior WIIN Act Quarterly Meetings

- March 2022 – Various scoping meetings following the NOI
- June 2022 – Scoping Comments and Initial Action Alternative Introduction
- September 2022 – Seasonal Operation Deconstruction and Initial Alternative Development
- December 2022 – Lines of Evidence
- March 2023 – Environmental Impact Statement (Affected Environment)
- June 2023 – Environmental Impact Statement (Alternative Components)





— BUREAU OF —
RECLAMATION

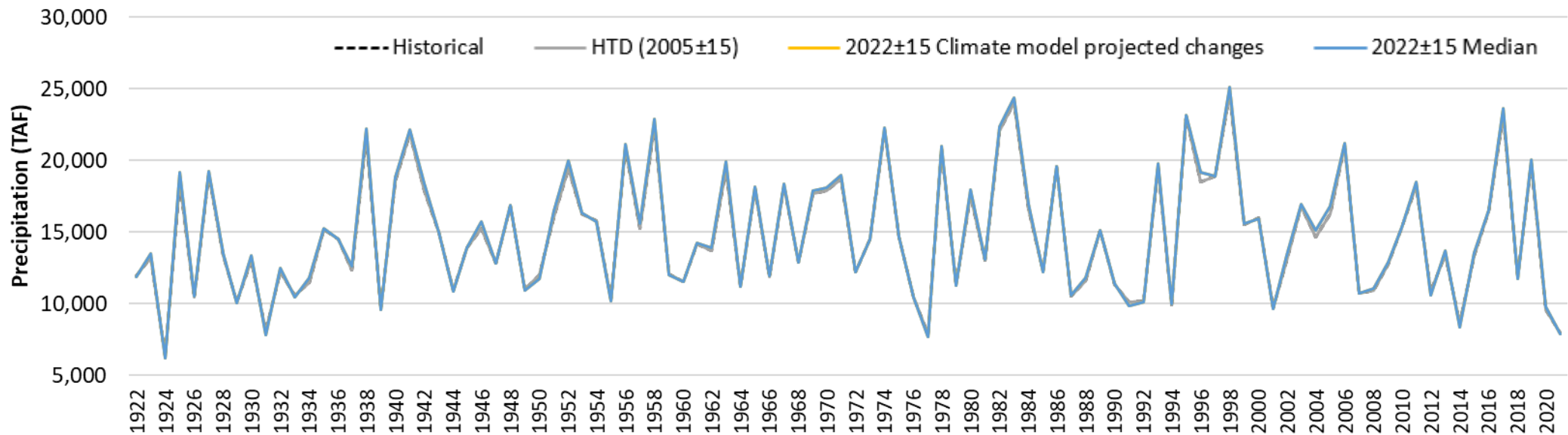
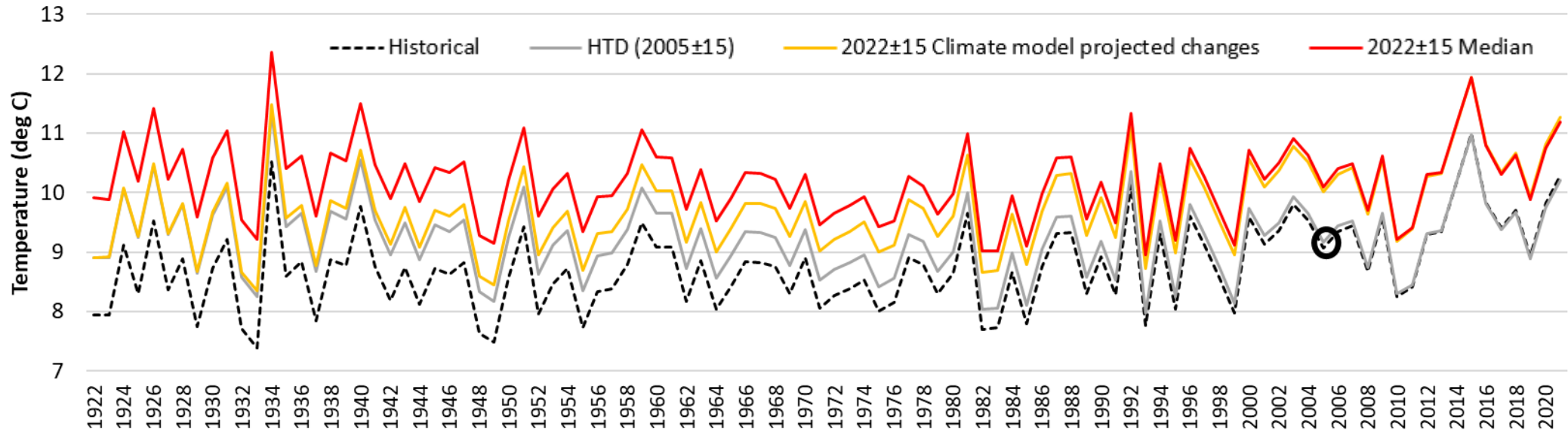
Modeling Key Assumptions and High- Level Results

Conditions for All Alternatives

- 2022±15 Median Climate Condition
- Sea Level Rise
- Land Use
- Urban Demands
- 100 year Period of Simulation
- Sisk Dam Raise and Reservoir Expansion
 - in all alternatives (not the NAA)



2022±15 Median Climate Condition: Sacramento River at Shasta example



No Action Alternative

- Operate CVP and SWP to 2020 ROD and 2020 SWP ITP
- Includes representation of TUCP actions



Shasta Dam and Reservoir



Alt. 1 - Water Quality Control Plan Model Assumptions

- Sacramento River: No spring pulse at Keswick
- Clear Creek: Instream Flow Preservation Agreement (2000) only
- American River: D-893 flow requirements only, implemented at Nimbus and H Street
- Stanislaus River: 1987 USBR-CDFW Agreement only (No Stepped Release Plan)
- Delta operations to D-1641
- No TUCPs



Alt. 2 Multi-Agency Consensus Assumptions

- Sacramento River
 - Fall and Winter Baseflows for Shasta Refill and Redd Maintenance
 - Water Temperature and Storage Management Framework
- Clear Creek and American River
 - Minimum Instream Flows
 - Pulse Flows
- Delta
 - OMR
 - Delta Smelt Summer Fall Habitat – SMSCG
- Stanislaus
 - Minimum Instream Flows
 - Winter Instability Flows
- TUCP Strategically modeled (a “w TUCP” sensitivity study will be provided)
- Voluntary Agreements, including measures for Spring Delta Outflow



Alt. 3 Modified Natural Hydrograph Assumptions

- Includes a modified priority order for meeting downstream demands
 - Meet D-1641
 - Meet minimum reservoir release and instream flow requirements
 - Make water diversions for Health & Safety
 - Meet storage criteria defined by NGOs
 - Meet unimpaired inflow and Delta outflow requirements defined by NGOs
 - Meet Delta operational requirements (e.g., OMR, 2:1 San Joaquin I:E)
 - Make water diversions for wildlife refuges
 - Make water diversions for settlement and exchange contractors
 - Make water diversions for CVP and SWP water service contractors
- Includes additional unimpaired flow and Delta outflow and measures to increase drought protection through carryover storage.



Alt. 4 Risk Informed Operation Assumptions

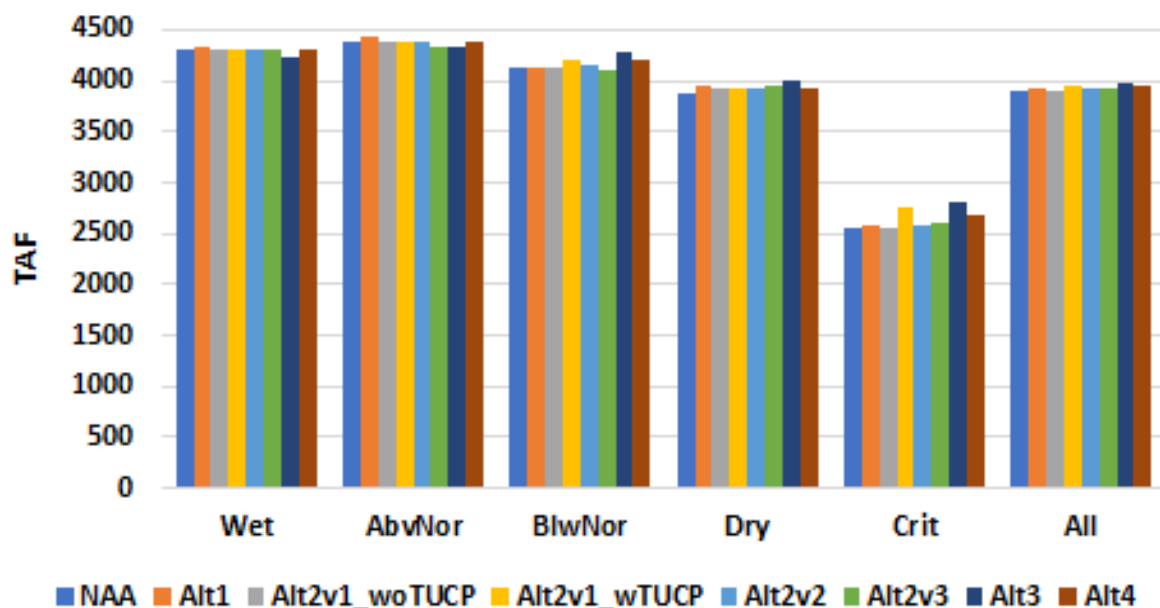
- **Shasta Action**
 - Target 2.0 MAF end of season Shasta storage
 - SRSC cuts down to 60% allocation
- **SMSCG**
 - Only Above Normal and Below Normal year action (currently modeled same as Alt2, model will be revised)
- **OMR**
 - Population dynamics
 - Real-time monitoring



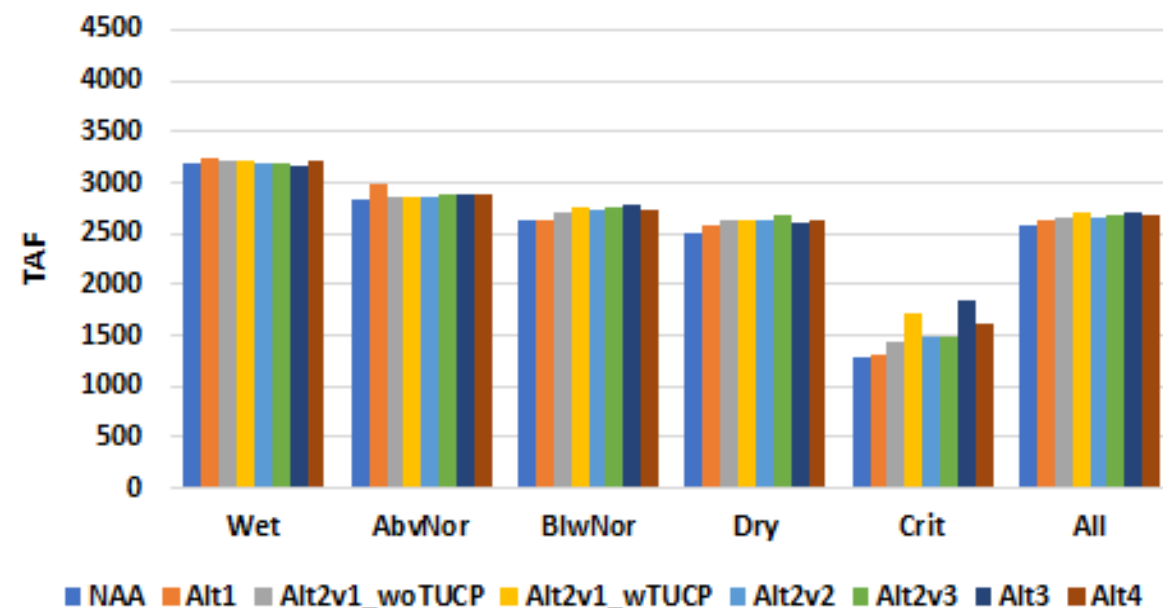
Modeling Results

- Shasta Storage (April and September)

End of April Shasta Storage - Avg by WYT

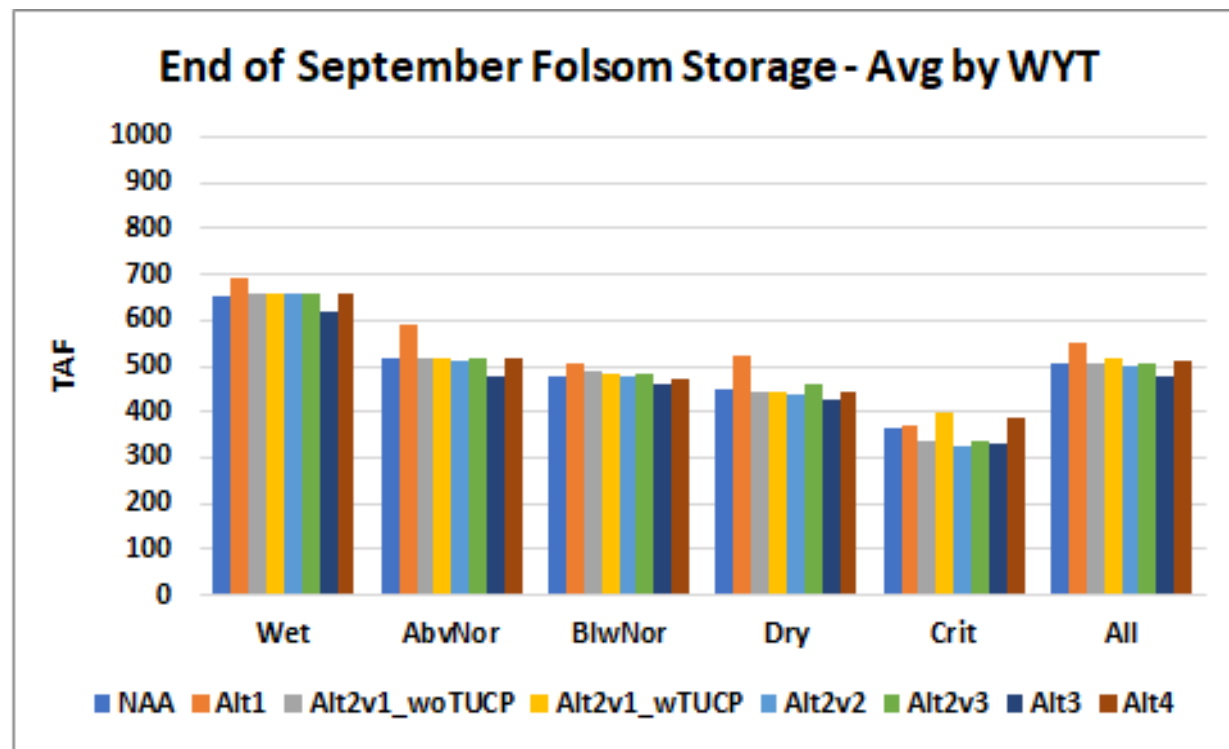
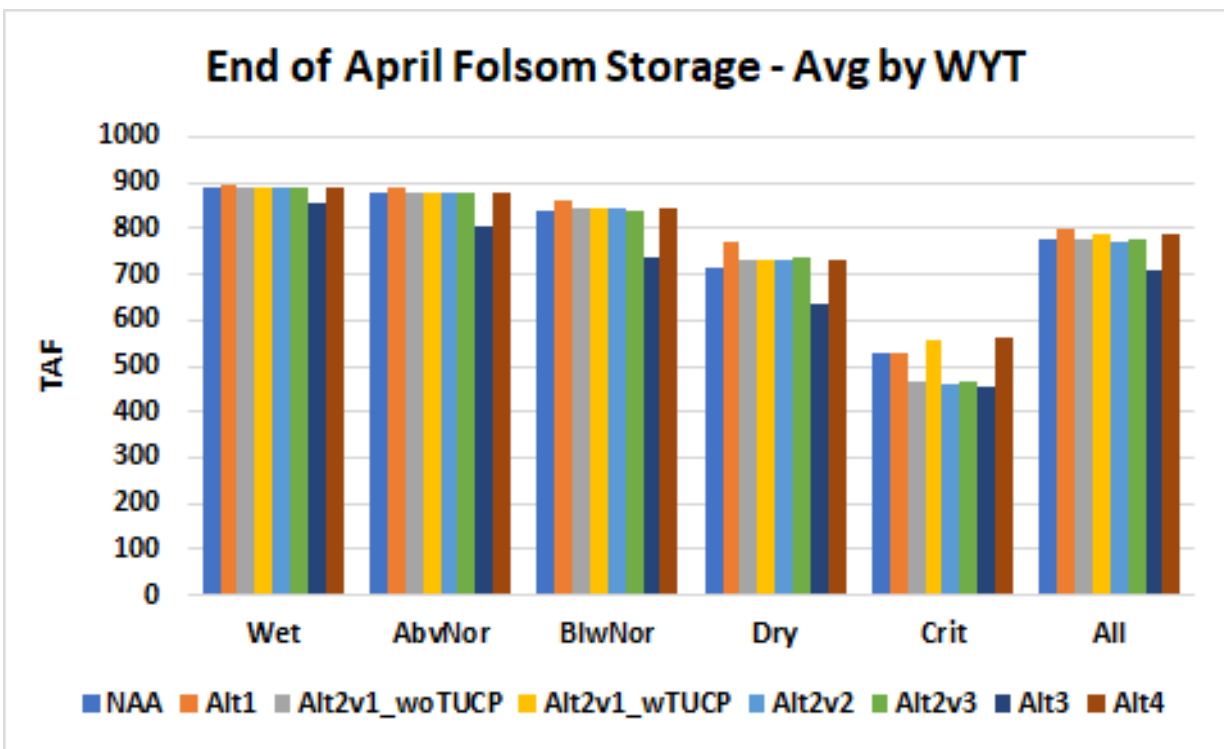


End of September Shasta Storage - Avg by WYT



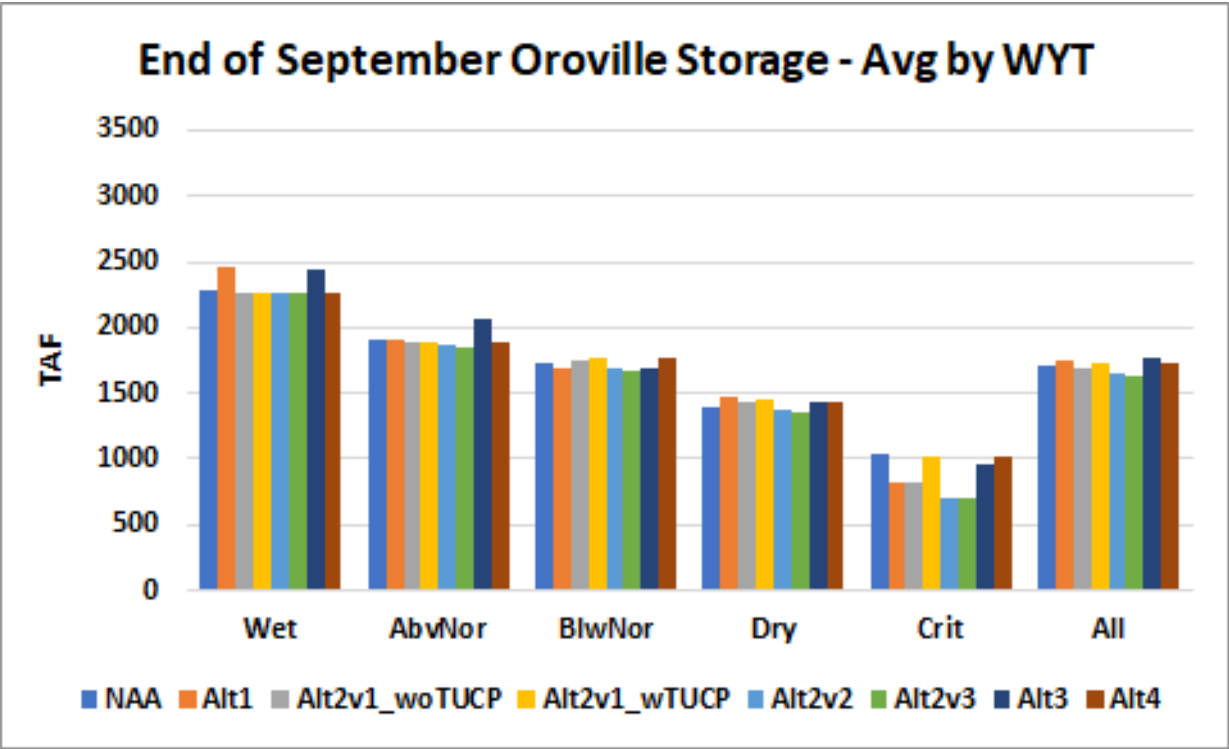
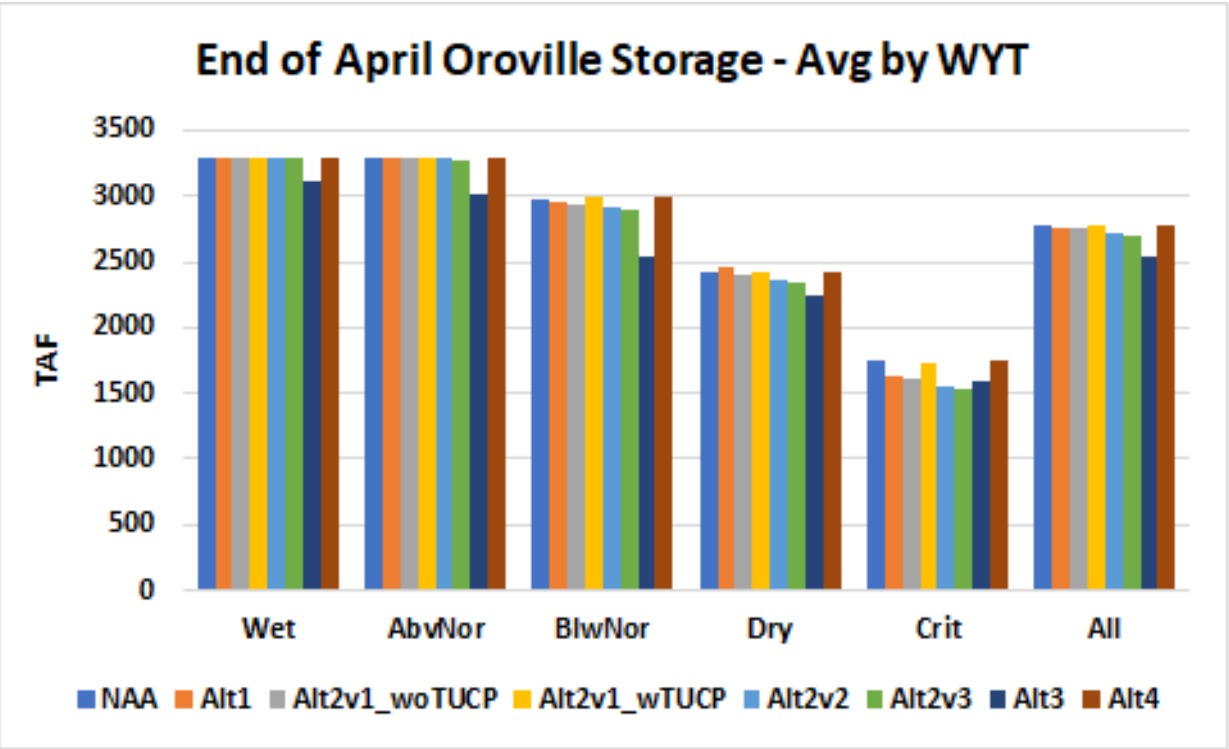
Modeling Results

- Folsom Storage (April and September/December)



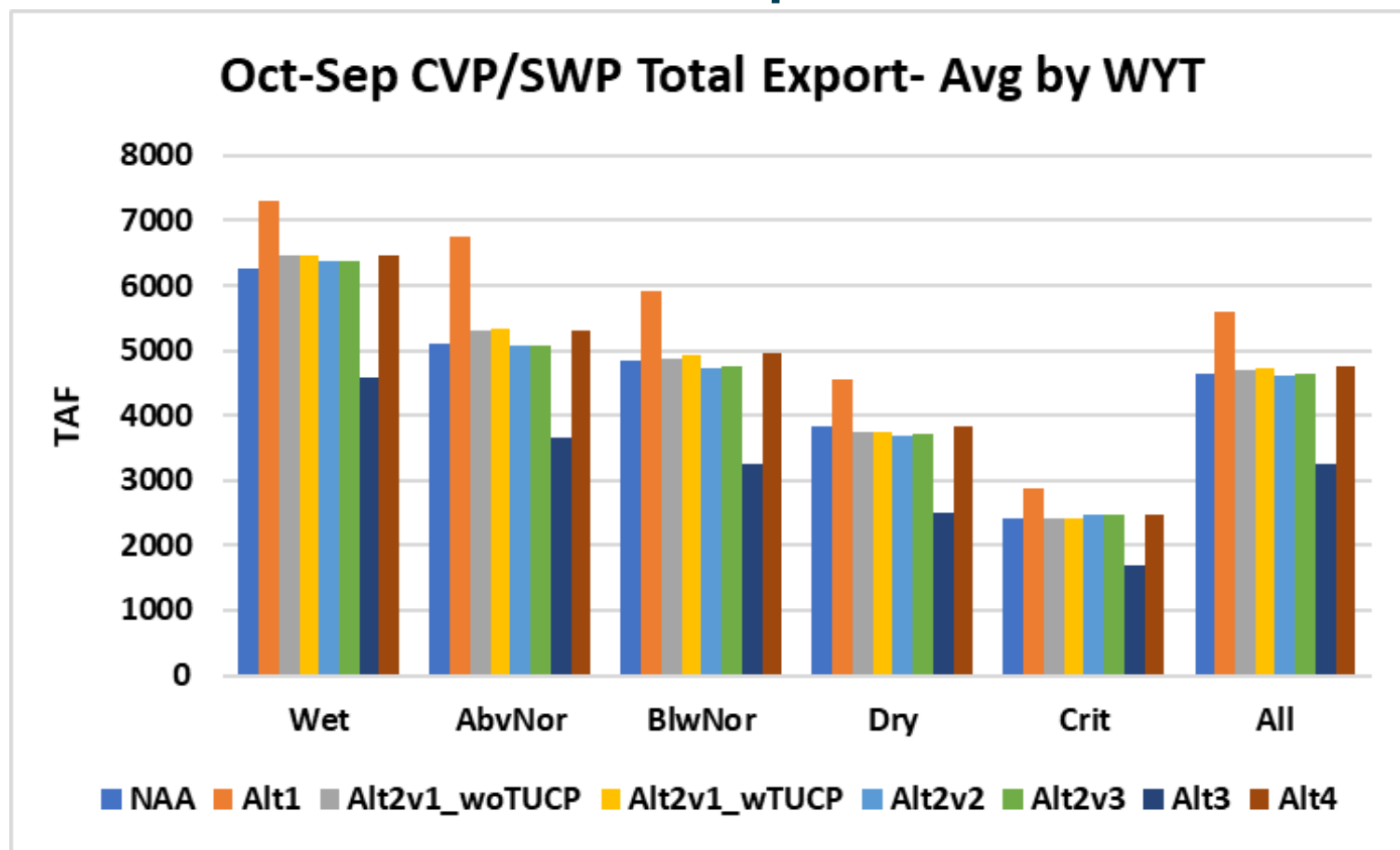
Modeling Results

- Oroville Storage (April and September)



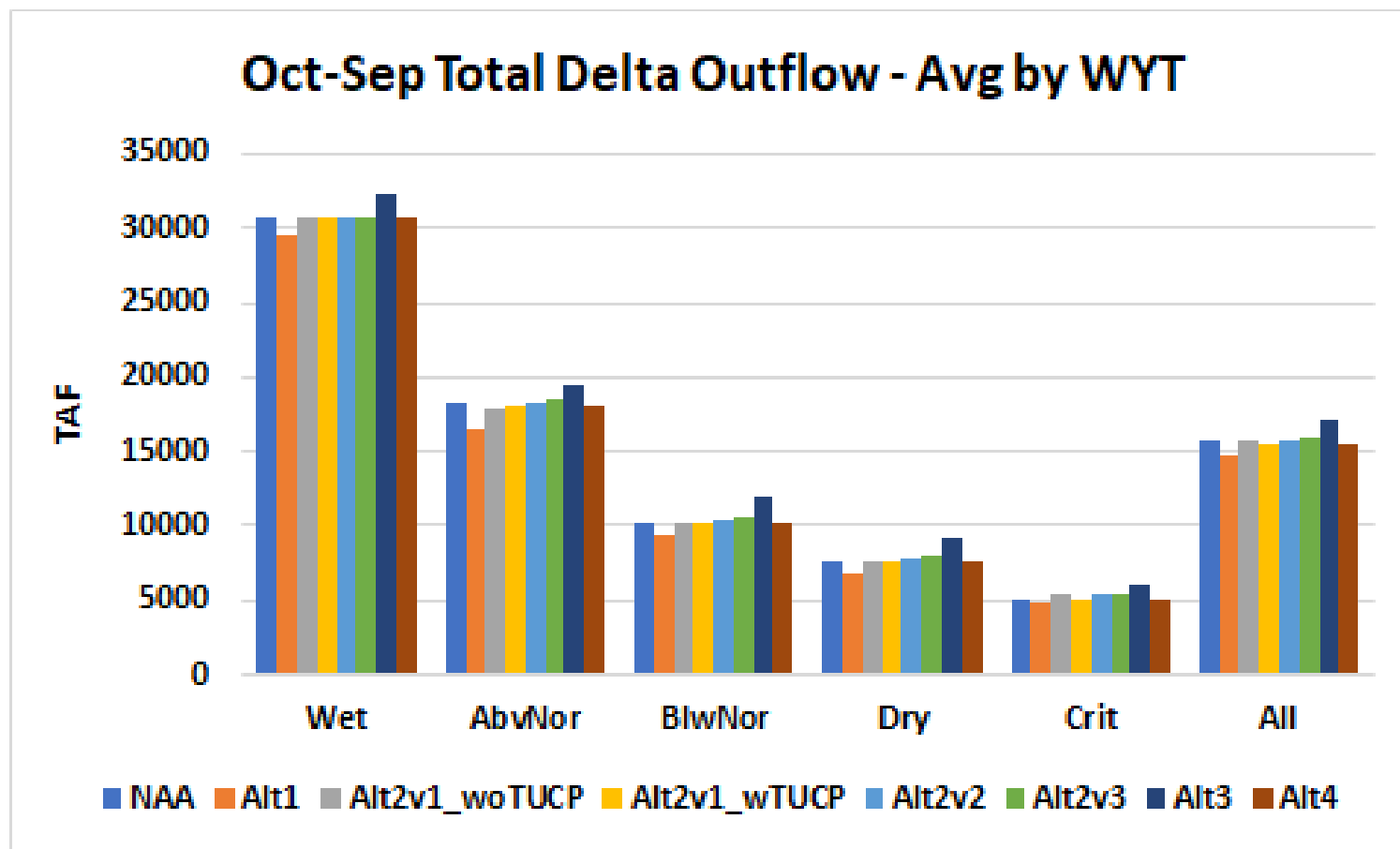
Modeling Results

- Total Annual CVP/SWP exports



Modeling Results

- Total Delta Outflow



Modeling Results

- Total Delta Outflow

| | NAA | Alt1 | Alt2v1_woTUCP | Alt2v1_wTUCP | Alt2v2 | Alt2v3 | Alt3 | Alt4 |
|--------|-------|--|---------------|--------------|--------|--------|-------|-------|
| Wet | 30816 | 29621 | 30677 | 30693 | 30701 | 30743 | 32355 | 30685 |
| AbvNor | 18239 | 16501 | 17965 | 18046 | 18213 | 18463 | 19478 | 18022 |
| BlwNor | 10257 | 9405 | 10161 | 10192 | 10309 | 10560 | 11933 | 10187 |
| Dry | 7659 | 6898 | 7683 | 7682 | 7786 | 7959 | 9118 | 7609 |
| Crit | 5005 | 4830 | 5379 | 5083 | 5350 | 5414 | 5964 | 5029 |
| All | 15667 | 14725 | 15638 | 15612 | 15726 | 15870 | 17077 | 15579 |
| | | Change from No Action Alternative (Alt - NAA) | | | | | | |
| Wet | | -1194 | -139 | -122 | -114 | -72 | 1540 | -131 |
| AbvNor | | -1738 | -274 | -193 | -26 | 224 | 1239 | -217 |
| BlwNor | | -852 | -97 | -66 | 51 | 302 | 1676 | -71 |
| Dry | | -761 | 24 | 23 | 127 | 300 | 1459 | -50 |
| Crit | | -176 | 373 | 78 | 344 | 408 | 959 | 24 |
| All | | -942 | -29 | -55 | 59 | 203 | 1410 | -88 |



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Cooperating Agency Draft Environmental Impact Statement

Groundwater

- Groundwater as a Water Supply Resources
- Methods and Tools



Groundwater Pumping Station



USGS California Groundwater Map



Water Quality

- **Constituents of Concern** includes Salinity, Mercury, Selenium, Nutrients, Dissolved Oxygen, and Pesticide, etc.
- **Methods and Tools**
- **Bay-Delta Region Specific** includes DSM2-QUAL, CalSim II and Calsim 3



Water quality sampling from the river



River water quality monitoring and sampling



Water Supply

- Sources (Precipitation and Imports) of Water in California
- Methods and Tools includes CalSim 3
- Analysis of Changes in Water Supply Deliveries



Shasta Reservoir



Keswick Dam and Power Plant



Terrestrial

- **Methods:**

- Land Cover estimated using USGS, State of California and University geospatial databases
- Federally listed species and critical habitat – USFWS, NMFS
- Special status species – USFWS, CDFW

- **Resources**

- Water (rivers, lakes, wetlands, open water)
- Vegetation, wildlife
- Emphasis on special status species within the affected resource area



California Clapper Rail



Power

- CVP power facilities include 11 hydroelectric powerplants and have a total maximum generating capacity of 2,103 MW
- Methods include using CalSim and LTGen and SWP Power tools
- Analysis of changes in operations that may affect power generation



Powerplant at Shasta Dam



Recreation

- Opportunities at over 18 CVP and SWP Service Areas
- Methods include CalSIM 3, IMPLAN
- Analysis of changes in Recreational opportunities



NEPA Milestones

- Cooperating Agency Draft Environmental Impact Statement
- Release of Public Draft Environmental Impact Statement
- Comment period and public meetings (3 virtual; 3 In-person: Sac, Los Banos, Redding)
- Final Environmental Impact Statement and Record of Decision



People working together



Richard Nixon – National Environment Policy Act



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Draft Biological Assessment Comments

Comment Themes of Agencies

- Effects on Stressors vs Individuals
- Proposed Action Scope
 - Inclusion of Voluntary Agreements
 - Inclusion of Sties Reservoir and Delta Conveyance Projects Programmatic Framework
- Environmental Baseline Approach



NOAA
FISHERIES



Comment Themes of Interested Party

- Analyses Relating to Proposed Action
 - Minimum flows, inflows, water temperatures, and export ratio
 - Water quality requirements under D-1641 for tributaries
- Temporary Urgency Change Petitions included in the Environmental Baseline
- PA Modeling
 - Water operations and modeling tools
 - Shasta operations relating to flood control, response downstream and power production
 - Alt 2 with VA modeling efforts



New Melones Reservoir



San Luis Power Plant





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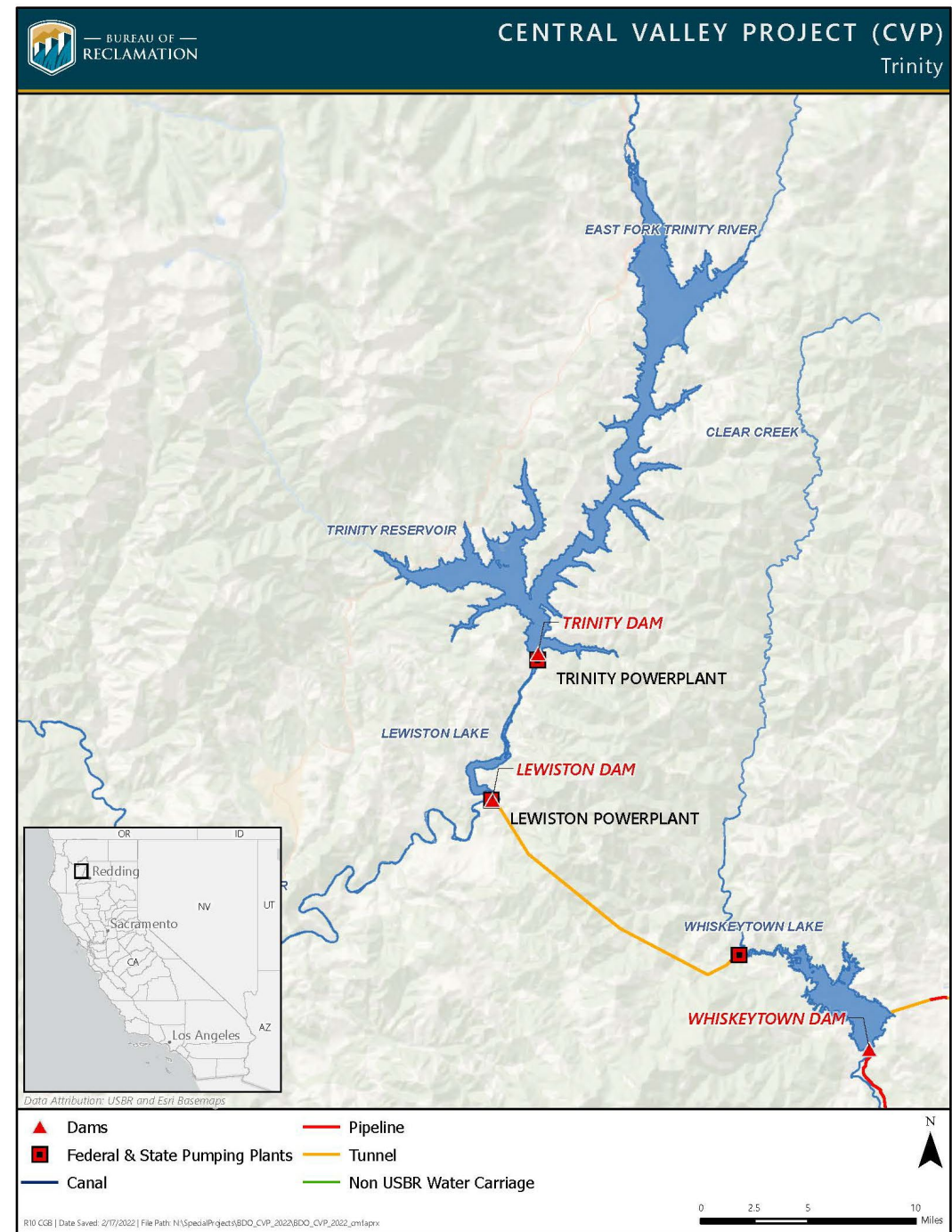
Trinity River Division Update

Trinity River Division

- Key Facilities

- Trinity Dam
- Lewiston Dam
- Clear Creek Tunnel
- Whiskeytown Dam

- Tribal Joint Lead Status



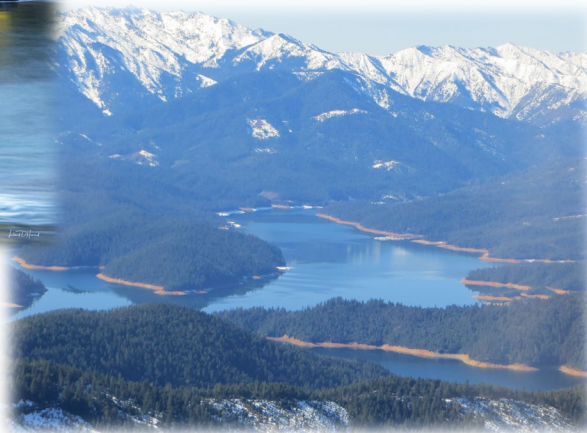
Trinity River Alternatives Development



Lewiston Dam



Trinity River



Trinity Reservoir

- Interested Party Meetings
- Components
 - Storage
 - Flow Management
 - Temperature Management
- Draft Preliminary Alternatives



Trinity River Division Upcoming Tasks

- Reviewing purpose and need
- Modeling preliminary alternatives
- Applying screening criteria
- Preparing public draft EIS alternatives
- Preparing Biological Assessment



Coho salmon (NOAA Fisheries).



Anticipated Next Steps

- Biological Assessment
 - Public Draft EIS
 - Final EIS
 - Record of Decision
-
- Next WIIN Act Quarterly Meeting – December 12, 2023



National Academies Committee

- Nominations for experts to serve on committee to review LTO alternatives and investments
 - Continue our additive approach to promote broad collaboration
- Longer timeframe than current consultation
- Seeking expertise in (examples):
 - fisheries science
 - freshwater and stream ecology
 - habitat restoration
 - water resources management
- Nominations due September 22, 2023
- [Review of the Long-Term Operations of the Central Valley Project | National Academies](#)



Questions

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Additional information:

<https://www.usbr.gov/mp/bdo/lto/index.html>



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