

June Quarterly Meeting Notes

TRINITY MANAGEMENT COUNCIL

June 5th–6th, 2024
9 a.m. – 3:45 p.m. PST
Yurok Tribe Office, 23001 CA-96
Weitchpec, CA 95546
MS Teams Video Conference

Trinity Management Council (TMC) Members in Attendance (06/05/2024 and 06/06/2024)

Name	Representative Seat
Justin Ly	National Marine Fisheries Service (NMFS) Core and Vice Chair
James Lee	Trinity River Restoration Program (TRRP) Implementation Branch Chief ¹
Liam Gogan	Trinity County (TC) Core
Tim Hayden	Yurok Tribe (YTFD) Core ²
Elizabeth Hadley	U.S. Bureau of Reclamation (USBR) Alternate ³
Mike Orcutt	Hoopa Valley Tribe (HVTFD) Core ⁴
Radley Ott	California Natural Resources Agency Department of Water Resources (CNRA-DWR) Core
Keli McElroy	U.S. Forest Service (USFS) Core
Bill Pinnix	U.S. Fish and Wildlife Service (USFWS) Core

Others in Attendance (in-person):

Eric Peterson (TRRP-USBR), Shane Quinn (YTFD), Ken Lindke (CNRA-DFW), Tyler Wallin (USFWS), Vicky Ryan (USFWS), Chris Laskodi (YTFD), Brad Nissen (USFWS), Brett Kormos (CNRA-DFW), Adam Long (USFW).

Others in Attendance (Microsoft Teams):

Justin Alvarez (HVTFD), Kiana Abel (TRRP-USBR), Lauren Alvarez (TRRP-USBR), Cassandra Holman (HVTFD), Emmanuel Cyr (YTFD), Heidi Carpenter-Harris (TC), Morgan Knechtle (CNRA-DFW), Patrick Flynn (TC), Roman Pittman (NMFS), Elliot Sarnacki (TRRP-USBR), Veronica Yates (HVTFD), Zac Reinstein (YTFD), Deanna Jackson (TRRP-USBR).

Notes: Aspen Howard (Chloeta)

¹ James Lee performs the duties of Executive Director in place of Mike Dixon for purposes of this meeting.

² Kyle De Juilio serves as an alternate for Tim Hayden when unavailable.

³ Elizabeth Hadley represents USBR in place of Don Bader for majority of the meeting.

⁴ Justin Alvarez serves as an alternate for Mike Orcutt when unavailable.

Wednesday, June 5th, 2024
(Scheduled from 9 a.m. – 3:45 p.m. PST)

Introductions (Justin Ly, Vice Chair)

Welcome and Introductions

Attendees on one or both days are listed above. Any omission of attendees outside of the TMC is accidental and regretful.

Approval of Agenda

Mike Orcutt inquired about the Winter Flow Variability agenda item, and asked if there was any flexibility on when that topic could be discussed because it is scheduled late in the day. James Lee represented that it was moved to this time slot to give both Don Bader and Elizabeth Hadley the availability to be present via Microsoft Teams for the discussion.

Motion: Radley Ott motions to approve the June agenda.

Second: Elizabeth Hadley seconds this motion.

Outcome: The motion passes unanimously with no opposition.

USBR: Yes

USFWS: Yes

USFS: Yes

CNRA-DWR: Yes

TC: Yes

YTFD: Yes

HVTFD: Yes

NMFS: Yes

Approval of March Meeting Minutes

Motion: Bill Pinnix motions to approve the March meeting minutes.

Second: Radley Ott seconds this motion.

Outcome: The motion passes unanimously with no opposition.

Comments on Non-Agenda Items (Justin Ly, Vice Chair)

Public Comments

No reports or comments were given by the public.

Reports and comments of TRRP entities

No reports or comments were given from TRRP entities.

TMC Discussion and Comments

Meeting Minutes

Mike Orcutt inquired about the TMC monthly teleconference meeting minutes and if there is a deadline for review and comments. Kyle De Juilio responds by saying they are not formally approved.

Orcutt said that even though they are not formally approved, the monthly meeting notes are still records that will be utilized for reporting. He is unsure of how well the meeting minutes captured his thoughts about having an executive session, saying that the issue was downplayed. He believes executive sessions can be a useful tool to discuss sensitive matters needing to be discussed in a closed forum. He recalled that in past meetings, he has expressed the desire to have an executive session and was not allowed to by the TMC Chair. He further stated that there is a lack of protocol and standards related to calling an executive session in the bylaws. In his viewpoint, a TMC member should be able to bring an issue to other representatives and evaluate it for further consideration of an executive session.

Justin Ly stated that there is a time slot in the agenda to potentially change the bylaws and provide more clarity on his concerns the following day.

Program Updates (James Lee)

Recognition of Staff and Partners

No comments were given.

Director's Report

James Lee presents the TMC Director's Report Memorandum, prepared by Mike Dixon and available on the TRRP website: <https://www.trrp.net/calendar/event/?id=11802>

Major TRRP activities between December 2023 and March 2024 include:

Work continues to prepare for implementation of a restoration project at Upper Conner Creek this summer. The first in-person Science Symposium since 2016 was held in Weaverville. The house that we purchased in the floodplain in Junction City was removed.

Organizational Updates

- The solicitation for the Secretary position closed on April 29. A selection has been made and a tentative offer was accepted.
- The TRRP Data Steward remains vacant. Initial recruitment paperwork has been submitted and it is in queue for soliciting. It will be hired as a GS 7/9/11/12 Natural Resource Specialist.
- Veronica Yates, the riparian ecologist who works for the program office as a Hoopa Valley Tribe employee, is moving on. A meeting will occur with the tribe in the coming weeks to determine the best path forward for that position.

- The lease extension for the current TRRP office in Weaverville ends on September 1, 2025. GSA, who manages the lease on behalf of Reclamation, failed to initiate the solicitation for a new space in accordance with the required timeline, so there may be an extension again in the current location. Dixon is hopeful am hopeful there may yet be a possibility to get a lease on more favorable terms for the public's money.

Budget Updates/Adjustments

The initial FY24 budget that was approved in June and July of 2023 included a speculative amount of funding that would be available for channel rehabilitation activities, using that activity as a balancer because the Upper Conner Creek project had been planned to occur over the course of two years. However, the location of the project adjacent to Junction City Elementary School and at the site of a heavily used public river access raise the prudence of constructing the project in a single season to minimize disruption to the neighborhood. There has been confirmation that the BIL funding for the project will all be available this fiscal year (with the exception of a portion of the revegetation funding, which will carry over into the next year anyway). The Regional Director's office has committed to seeking additional funding for the project, and in the interim, The TMC is being advanced with funds from the Central Valley Project Restoration Fund.

The FY25 budget proposal will be presented to the TMC for their recommendation on June 6.

Implementation Updates

Sky Ranch Channel Rehabilitation Site: Little change since last quarter. The design is at 60% and the VE study was completed; and a right-of-entry with the private landowner was established. The land transfer between USFS and BLM is expected to be completed this summer, after which TRRP can initiate NEPA. Depending on the availability of funding and the land transfer, the project may be constructed in 2025 or 2026. This project is the priority after Upper Conner Creek, although the land exchange must be completed before TRRP can move forward with planning.

Evans Bar Channel Rehabilitation Site: No change since last quarter. The design remains at the existing conditions report stage.

Sawmill Gravel Processing Site: A 60% design was prepared by the Yurok Tribe and State design group and submitted to the TRRP design team for review in November. The EA for the project will be completed by June 2024, so this project will be ready for implementation if Sky Ranch and Evans Bar NEPA is delayed.

Upper Conner Creek Channel Rehabilitation Site: This project is scheduled for implementation in Summer 2024, and revegetation work will likely extend into FY 2025.

EA Development

- Upper Conner Creek and Sawmill Environmental Assessment (EA)

The public comment period for the EA concluded May 31. The State Historic Preservation Office is reviewing potential effects to cultural resources, and after a 30-day review period, if no concerns are raised the EA will be ready for a FONSI.

- Gravel and Wood Augmentation EA

The State Historic Preservation Office is reviewing potential effects to cultural resources, and after a 30-day review period, if no concerns are raised the EA will be ready for a FONSI.

- Watershed Programmatic EA

A draft of the first three chapters is complete. The fisheries, terrestrial wildlife, and botany reports are in review. The public comment period could occur this summer depending on partner agency review of the draft documents.

River Acres House (Elliot Sarnacki)

Elliot Sarnacki shared photos of the demolition process handled primarily by Cal Inc., a demolition and asbestos remediator in Sacramento. The contract was for approximately \$75,000 and took around 4 to 5 days for the contractor to finish excavating the house. Watson Well performed the well and septic tank abatements, filling it with concrete, gravel, etc. This was observed by the county in relation to the demolition permits. After demolition, the site was cleaned up. Around 5 quarts of stockpile firewood was donated to the Golden Age Senior Center in Weaverville. The project was finished by laying seed and straw to help in grass growing. The neighbors expressed positive feedback at the outcome of the demolition.

James Lee expressed that this was the last structure in the restoration reach that was inundated by the maximum fisheries flow, which poses a liability to the Program. He explained that different avenues were explored, such as making the house a flowthrough, but they were unsuccessful.

Public Outreach Update (Kiana Abel)

Publications and Education Materials:

Reach: These materials are sent to 200 individual email addresses, as well as posted on social media platforms.

[River Riffle – March](#)

- Reading, Listening, Watching
- Current Conditions: Inundation and Drift
- Implementation Branch: Join us at our March 19 Open House
- [Featured Article: The River's Liver – the hyporheic zone](#)
- [Trinity River Watershed Animal Spotlight: Benthic macroinvertebrates](#)

- Upcoming Meetings and Events

[River Riffle – April](#)

- Reading, Listening, Watching
- Current Conditions: Snowmelt Hydrograph, Peak and Recession
- Program Update: [River Acres Demolition Complete](#)
- Implementation Branch: Thank you for attending our Open House!
- Featured Article: [The Trinity Watershed Basin's Water Year Forecast & Local Snow Surveys](#)
- Upcoming Meetings and Events

[River Riffle – May](#)

- Current Conditions
- Reading, Listening & Watching
- 2024 Science Symposium
- Implementation Branch: Public Comment Period Open!
- Upcoming Meetings and Events

The [TRRP Facebook Page](#) is up 94 followers since our last meeting. The page surpassed 1,000 followers just after the Science Symposium and is currently at 1,019 followers at the time of the meeting.



- Top post in the last 60 days was a post about the 2024 water year B120 designation by CDWR. Photo credit to Aaron Martin (Yurok Tribe).
- Impressions: 4669 | Reach: 2880 | Engagement: 430
- Interactions: 85 | Comments: 0 | Shares: 13

Public Events and Environmental Education:

March 27: Science on Tap (60 people in attendance)

- Seth Naman, National Marine Fisheries Service, “*The Importance of Natural Flows on Trinity River Salmon and Steelhead Populations*”

April 24: Science on Tap (132 people in attendance)

- Ken DeCamp, photographer, author and naturalist, “*Klamath Mountain Wildflowers*”

May 22: Science on Tap (60 people in attendance)

- Sarah Gomes, the Western Science Coordinator for Monarch Joint Venture, “*Monarch Monitoring: How you can make a difference.*”

April 6: Invasive Plant Pull Volunteer Event (20 people in attendance)

April 13: Adopt-a-Plot (9 people attended & 3 plots adopted) 7 plots are still available

April 20: 15th Annual Trinity County Plant and Seed Exchange

April 30-May 3: [2024 Trinity River Restoration Program Science Symposium](#)

Presentation style event featuring local, regional, and international experts in the physical and biological science of rivers. Day one will focus on fish populations, day two's focus will be habitat, flow and temperature, and day three focus is on the physical channel form. Nineteen speakers from three countries representing 4 Federal Agencies, 1 State Agency, 3 Tribes, 5 Academic Institutions, 3 Private Organizations.

- Tuesday Fish Populations: 107 people in attendance
- Wednesday Habitat, Flow & Temperature: 113 people in attendance
- Thursday Physical Channel Form: 76 people in attendance
- Friday Field Trip: 25 people in attendance

April 10 - May 10: Annual Wildflower Scavenger Hunt

May 18: Big Flat Jamboree

Educational Outreach:

April 11: STEAM Career Expo at Weaverville Elementary

- 100 students participated
- Grade levels: 4-8

April 22: Earth Day 2024 at Burnt Ranch School

- Conducted six lessons with 15 students per lesson
- Total students taught: 90
- Grade levels: K-8

May 9: Annual Day at the Wetlands – 52 kids this year

- Lewiston Elementary School, Creekside Charter Arts and Education School, Weaverville Elementary School
- Trinity County Resource Conservation District, Watershed Stewards Program, Yurok

May 15: Afterschool Ecology Lessons at Douglas City Elementary School

- Number of students: 45
- Grade levels: K-8

Landowner and Stakeholder Notifications

2024 WY Hydrograph & Spring Release Notifications

Public Comment Period (May 1 -May 31) for two proposed restoration projects the Sawmill_Gravel Processing Site and the Upper Conner Creek Restoration Project.

Presentations

March 27: Salmonid Restoration Federation (Eric Peterson)

- “Timing of periphyton scour and recovery for food web dynamics in a Mediterranean system.” Authors also included Chris Laskodi, Ben King, and Ken Lindke.

April 16: National Conference on Ecosystem Restoration (James Lee)

- “Science and flows in an adaptively managed, regulated river”. In the session titled: "A_Laboratory for Learning: Large-Scale Ecosystem Restoration and the Legacy of Secretary_Babbitt"

May 8: International Symposium on Ecohydraulics and Fish Passage (Todd Buxton)

- “Research on Thermal Stratification in two Trinity River pools”

May 30: California Land Surveyors Association Cascade Chapter (Eric Peterson)

- “TRRP Surveying”

Upcoming

June (Spring Run Chinook/Riparian)

- June 7: Hoopa Fish Fair
- June 10: Douglas City Elementary School: Oregon Gulch Site Tour
- June 24: Ascend Wilderness Hatchery Tour
- Weaverville Farmers Market
- River Days with Coffee Creek and Trinity Center
- BIL Funding Announcement (Press Release) in collaboration with BLM, Reclamation,_Hoopa & Yurok

July (Temperature)

- July 9, 11, 16, 19: Weaverville Summer Day Camp Ecology Lessons
- July 24: Science on the River at Lewiston Hotel: Derek Rupert, USBR “Clear Creek_Restoration Project”
- Upper Conner Creek Groundbreaking Ceremony
- 2023 Annual Report
- 4th of July Parade

August (Fish and Fire Ecology)

- Aug 28: Science on the River at Lewiston Hotel: Todd Buxton, TRRP “Diurnal Pool_Stratification”
- August 9: Hoopa Sovereign Day

TRRP Survey: Compilation for TMC and broader public

- Combine three years of data from the survey into four sections; demographics, impacts,_mitigations and TRRP grade. Present to TMC at the mid-summer call-in

meeting to review and illicit feedback for a potential presentation for the September TMC meeting.

Science Update (Eric Peterson)

- **Limiting Factors Analysis (LFA).** Phase 1 (study plan development) concluded at the last TMC meeting with the TMC moving to proceed with study plan option 3. NFWF drafted, and TRRP's IDT edited, a Request for Qualifications (RFQ). The RFQ was released May 15 with applications due June 14. If multiple applications are received, then the IDT is expected to review them in July. Award is targeted for August. The project will include quarterly meetings with the IDT (at a minimum). Total project timeline is 2 years with final deliverables due August 2026.
- **FY25 Science Priorities.** The IDT put forward 4 topics over the last year. We received proposals covering 3 of these: Benthic macroinvertebrate (BMI) production in relation to inundation and scour, a start toward foodscape modeling for DSS, and riparian response to stage zero wetted width. These will be presented to the TMC in draft form with a request for funding that is contingent upon revisions
- **Review of monitoring and DSS.** The IDT requested that workgroups review current Objectives and Targets as a basis for conducting this review. All workgroups have discussed these and the foundation is ready for IDT to move forward. This will be a major topic of an all day meeting at the end of June or in early July (in person preferred).
- **Cohort Reconstruction:** Code updates are expected to be complete by the end of August. CDFW (Ken Lindke) is anticipating to start the analysis in September with results available for the Limiting Factors Analysis in early FY25.

In Review or Final Edits

- Adult Salmonid Spawning

Final Publications and Reports

- Cramer Fish Sciences. 2024. [Final Study Plan - Phase 1 \[Limiting Factors Analysis\]](#). Memorandum to Trinity River Restoration Program.

Synthesis Reports – See Appendix II.⁵

Incomplete:

- Adult Salmonid Spawning – in final edits
- Cohort Reconstruction – coding nearly complete, analysis pending

⁵ Appendix II is located on page 14.
Page **10** of **63**

- Large Wood Management – rebooted, annotated outline out for review
- Flow Synthesis – regaining momentum
- Channel Complexity

Design Reports- See Design Workgroup Report below ⁶

Environmental Reports and Findings

- U.S. bureau of Reclamation Trinity River Restoration Program (USBR-TRRP), North Coast Regional Water Quality Control Board, and U. S. Bureau of Land Management (USBLM). 2024. [Trinity River Channel Rehabilitation Sites: Upper Conner Creek Site \(River Mile 77.1 to 78.5\) and Sawmill Gravel Processing Site \(River Mile 108.9 to 109.75\) Environmental Assessment / Initial Study](#). April, 2024. DOI-BLM-CA-N060- 2024-0008-EA and CGB-EA-2024-004. USBR-TRRP, Weaverville, California.

Post-Implementation Reports

- Yurok Tribe Fisheries Department (YTFD). 2024. Oregon Gulch as-built survey technical report. Report for the Trinity River Restoration Program (TRRP) (Agreement number R22AV00011). YTFD, Arcata, California. Available: <https://www.trrp.net/library/document?id=2634>.

Final Data Packages

- Yurok Tribe Fisheries Department (YTFD). 2024. [Oregon Gulch As-Built Orthophotography and Terrain Model](#). Data Package for the Trinity River Restoration Program (TRRP) (Agreement number R22AV00011). YTFD, Arcata, California.

Appendix I: Technical Workgroup Briefings
June 2024

Updates have been prepared for the Trinity Management Council by the Trinity River Restoration Program Technical Workgroup (WG) Coordinators.

Workgroup: Fish

Coordinator: Kyle De Juilio

Kyle De Juilio presented that the Fish Workgroup met May 15th for reviewing Science Proposals, review of the Synthesis Report Recommendation Action Tracker that Kyle has developed, and to identify a future coordinator as De Juilio steps away. Chris Laskodi will be stepping back in as the coordinator for the group.

Workgroup: Design

Coordinator: Oliver Rogers

⁶ The Design Workgroup Report is located on page 11.

Eric Peterson presented that the Design Team met on May 16th, for a quarterly meeting and received updates from the State of California-Yurok Tribe Design Team, Hoopa Valley Tribe Design Group, and the Federal Design Team. Topics covered included an update on the Sawmill Gravel Processing Site Rehabilitation project, which is progressing to a Draft 90% design, and a presentation on the 100% design for the Upper Conner Creek Rehabilitation Site. The Design Team WG also continued discussing the remaining Incomplete Channel Rehabilitation sites and determined which Design Groups will scope existing conditions reports for each of the remaining sites, including sites deemed not likely to move forward in the Phase II Review. The scoping of existing conditions reporting for sites deemed not likely to move forward would serve as the decision document for selection of a no action alternative. Sites that are likely to move forward as determined by the existing conditions reporting scoping, may proceed with existing conditions analysis and project design as funding allows.

Workgroup: Flow

Coordinator: Ken Lindke

Ken Lindke presented that the Flow workgroup met once since the March TMC meeting. The group reviewed an FY2025 proposal for preliminary development of a foodscape model that would serve as a food ration input to the Stream Salmonid Simulator juvenile Chinook salmon production model and could be used in flow management decision making. Consolidated comments from the workgroup were provided to the Science Coordinator. The group also elected Patrick Flynn to coordinate the Flow workgroup for the next year.

Workgroup: Watershed

Coordinator: Justin Alvarez

Justin Alvarez presented that the TMC allocated 1M for watershed work in this latest solicitation. NFWF flew the grant in January and preproposals were due on February 20th. There were 2 submittals, one for Floodplain restoration in Salt Creek (South Fork Tributary) and the other is a planning project in Upper Hayfork Creek (also a Southfork Tributary). The total budget request from the two proposals was about \$650k so less than the total made available by TMC. The Watershed Workgroup met on March 18th to go over their reviews of the pre-proposals and recommended both be advanced to full proposals. The workgroup met again on May 22nd and will likely advance them both for funding. Below is the timeline of milestones.

2/20/2024 Pre-proposals Due

3/18/2024 Trinity River Restoration Program pre-proposal review meeting

3/20/2024 Invitations/declines to submit full proposals sent to applicants

4/23/2024 Full proposals due

5/22/2024 Trinity River Restoration Program full proposal review meeting

Workgroup: Physical

Coordinator: Smokey Pittman

Eric Peterson presented that the Trinity River Physical Workgroup met on May 13, 2024, to discuss: (1) Q1 Proposal Review, and (2) Physical Targets and Objectives Review. The Q1 Proposal Review was led by Eric Peterson and the review form was completed. Targets and Objectives were reviewed and action items were identified, including: develop sub-groups for (1) developing active bar area targets, (2) fine sediment monitoring and DSS development, (3) flow-discussion workgroup to discuss piggybacking versus the current spring flow release plan, and (4) assessing the ramifications of reducing the grain size of injected gravel augmentations.

Workgroup: Riparian and Aquatic Ecology

Coordinator: Veronica Yates

Eric Peterson presented that the Riparian and Aquatic Workgroup met on May 14, 2024, to discuss the 3 proposals that were submitted to the Science Planning team. Each proposal was discussed for approximately 45 minutes and evaluated using a rubric provided by the Science Coordinator. The RAEWG determined that all 3 proposals should be recommended to the TMC and suggested minor revisions to each of the proposals. These revisions and the responses to the rubric were supplied to the Science Coordinator.

Next, a discussion was led by James Lee regarding a recommendation in the Riparian Encroachment Synthesis (Section 10.7, page 92, HVTFD & McBain 2021) to evaluate variable summer baseflows and conduct flow experiment. Lee suggested that there was no known policy requiring the current summer baseflow regime, and it was based on a recommendation to maintain 60oF at Douglas City by maintaining 450 cfs flow. The group discussed the potential benefits of variable summer base flows, including pool stratification, reduction of narrow leaf willow establishment, improvement of temperature conditions for other aquatic species (foothill yellow-legged frogs and Western pond turtles), and a more resilient root depth for riparian vegetation species. A modeling exercise was proposed using TARGETS, FYFAM, and RBM10 to evaluate potential impacts and submit with the FY26 Science Proposals. Group members were requested to review the Encroachment Synthesis report prior to the next quarterly RAEWG meeting.

Workgroup: Interdisciplinary Team (IDT)

Coordinator: Ty Wallin / Eric Peterson

Eric Peterson presented that the IDT met twice during this quarter. First in April to discuss moving forward with Phase II of the Limiting Factors Analysis through NFWF and clarify the level of involvement needed by the IDT. The second meeting May 29th to was primarily to work on the FY25 Science Proposal to the TMC that Peterson will present during this TMC meeting. Also at this meeting, the Flow Workgroup made a request to the IDT with the intention of it being forwarded up to the TMC. However, the IDT did not have consensus on how to make it a formal request. Thus, there is no agenda item for this. However, there was consensus that it be noted in the workgroup reports that the Flow Workgroup is concerned that there will be a repeat of last year's flow scheduling challenges.

Appendix II: Synthesis Reports Tracking and Estimated Completion Dates

Synthesis Reports				
Project No.	Brief Title	Involved Entities	Proposed Due	Status
TRRP-2018-002	Tributary Delta	<i>Program Office (POC: Todd Buxton, TRRP)</i>	Mar-19	Published in Ecohydrology 2022;e2463
TRRP-2018-003	Fish Habitat	<i>HVT, USFWS, YT, USBR TSC (POC: Damon Goodman, USFWS)</i>	2 nd Q 2019	USFWS portion Posted; YT portion Posted
TRRP-2018-007	Juvenile Chinook Production	<i>USFWS, YT, HVT (POC: Bill Pinnix, USFWS)</i>	Jul-17	FINAL POSTED
TRRP-2018-009	Cohort Reconstruction	<i>HVT, USFWS, CDFW (POC: Ken Lindke, CDFW)</i>	2 nd Q 2019 Cur.ETA mid2024	In progress
TRRP-2018-011	Adult Salmon Spawning	<i>USFWS, HVT, YT, CDFW (POC: Steve Gough, USFWS)</i>	2 nd Q 2019 Possibly before the TMC meeting.	In final edits
TRRP-2018-018	Bed Mobility and Scour	<i>HVT, USFWS (POC: Geoff Hales & Scott McBain, McBain Associates)</i>	2 nd Q 2018	FINAL POSTED
TRRP-2018-019	Cottonwood Seed Dispersal	<i>HVT (POC: John Bair, McBain Associates)</i>	3 rd Q 2018	FINAL POSTED
TRRP-2018-021	Riparian Encroachment	<i>HVT (POC: John Bair, McBain Associates)</i>	4 th Q 2018	FINAL POSTED
TRRP-2018-022	Sediment Storage	<i>HVT, USFWS (POC: Geoff Hales & Scott McBain, McBain Associates)</i>	4 th Q 2018	FINAL POSTED
TRRP-2018-025	Channel Complexity	<i>HVT, USFWS (POC: Smokey Pittman & Scott McBain, McBain Associates)</i>	August 2019 Cur ETA ?	Delayed- uncertain timeline
TRRP-2018-027	Fine Sediment	<i>Program Office, NMFS, HVT (POC: Todd Buxton, TRRP)</i>	Jul-20	FINAL POSTED
TRRP-2018-032	Water Temperature	<i>YT, USFWS, HVT, USBR, NMFS (POC: Eli Asarian, Riverbend Sciences)</i>	May-19	FINAL POSTED
TRRP-2018-033	Large Wood Management	<i>NMFS, YT, HVT (POC: Scott McBain)</i>	April 2018 Cur.ETA 2024	In Progress
NA	Flow Synthesis	<i>HVT et. Al. (POC: Justin Alvarez)</i>	Mid FY 22 Cur.ETA: July 2024	In Progress

Completed reports are available at <https://www.trrp.net/restoration/adaptive-management/synthesis-reports/>.

Public Comments

No reports or comments were given by the public.

TMC Discussion

Site Revisits

Orcutt inquired about the remaining rehabilitation and processing sites discussed during the implementation update, requesting that documentation be provided regarding the status of the remaining sites, as well as identifying the need to revisit previous sites.

Lee stated that this was a key topic of the last Design Team meeting. Oliver Rogers will be presenting on this topic during this current TMC meeting. Based on feedback from the discussion, the Design Team will then be fully prepared to move forward with providing documentation for the TMC. Lee discussed that there are challenges when trying to prioritize work with new ROD sites and ensuring previously visited sites are performing to the potential that they're capable of. There are preliminary assigned leads to all the remaining ROD sites through the Design Team. Lee stated the Phase II Review by Inter-Fluve, Inc. recommended revisiting some of the earlier TRRP projects. <https://www.trrp.net/library/document/?id=2623>

Public Outreach

Peterson reached out to an American Rivers representative to speak to the IDT, with a positive response. The representative won't be available until Mid-July, so this presentation might occur in the August to September time frame.

Riparian and Aquatic Ecology Workgroup Coordinator

Brad Nissen will be taking over the coordinator position as Veronica Yates moves on to new employment. Mike Orcutt thanks Yates for her hard work and wishes her well in her new endeavors.

Synthesis Reports

As certain projects start to gain and regain momentum, Orcutt is concerned about the language used to describe some of the work accomplished for the synthesis reports, saying it may mischaracterize the work accomplished. He emphasized that how the TRRP reports the status of projects is very important.

Kyle De Juilio stated that the primary authors of the synthesis reports had an initial meeting to discuss how to assess duties since the initial proposal was built because there is less time for this activity. They discussed bringing on additional contractors to help finish projects and will update when more accurate timelines are available. Currently, there is little new analysis needed for most of the reports. The work mainly consists of taking information from reports for compilation.

Closed Sessions Regarding Flow Scheduling

Orcutt recommended that the disagreements and concerns among the IDT may be a good topic to have an executive session over for this body to discuss. He noted that it has been a repeated contentious issue incorporated in different meeting minutes, and that it affects decision making in regard to flow schedules and other action items. To address concerns in a meaningful way,

Orcutt suggested possible executive sessions or bringing in a third-party mediator to help add structure on a case-by-case basis.

Pinnix added there will be a discussion on the flow scheduling process during the meeting. He questions whether the topic would warrant a special meeting of the TMC soon to solely focus on flow scheduling. Radley agreed and said that the TMC can discuss this further when the flow schedule discussion is taken up. One of the goals for the upcoming conversation is discussing the process and giving the Flow Workgroup and IDT enough time to review all flow schedule proposals. Radley states further that he thinks Orcutt is talking about other things beyond just this that would require a special session.

Forest Service Implementation Involvement

McElroy said there should be more interaction with the Forest Service when implementing projects such as Upper Conner Creek Channel Rehabilitation, regarding vegetation and wildlife. The Forest Service would like to give input on the design of that project. Lee said this would be a good topic for the Forest Service to discuss at an upcoming meeting.

Watershed Workgroup

Orcutt expressed ongoing concerns regarding the funding allocated to the South Fork McKenzie River Watershed. He highlighted historical barriers to the effective use of these funds and stressed the need for a broader discussion about productivity. He mentioned the importance of considering the spring run and its impact on NOAA fisheries. Additionally, Orcutt suggested integrating ideas into monitoring efforts, to be addressed as the program progresses.

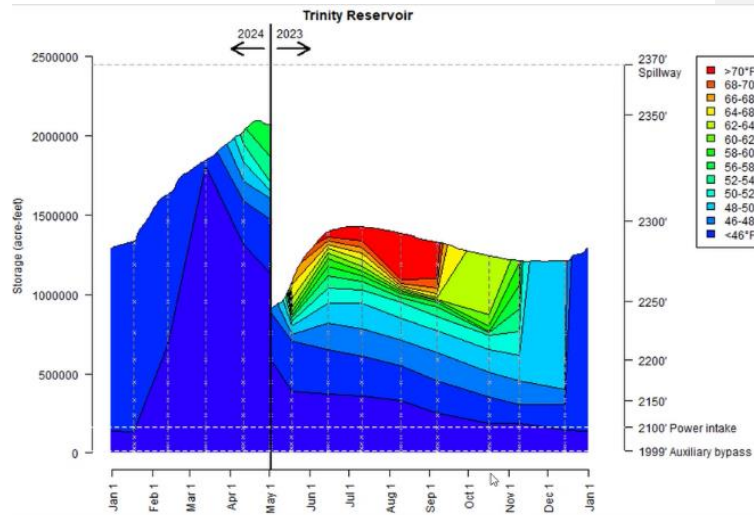
Orcutt also voiced concerns about the involvement of geomorphologists and other experts, as well as the roles of the Fish Workgroup and the National Fish and Wildlife Foundation (NFWF). He emphasized the need for clear policies, particularly when implementation is managed by different entities.

Central Valley Project (CVP) Operations Update (Elizabeth Hadley)

Temperature Profiles:

Current temperature profiles are favorable. The next profile will be conducted tomorrow and shared with the group for updates.

Hadley showcased a visual of the current temperature profile, which is rendered each month for Trinity Reservoir.



Projected End-of-Month Storage: The reservoir has peaked in storage elevation and is expected to bottom out at 1.6 million acre-feet at the end of November.

Estimated CVP Operations 90% Exceedance

Storages

Federal End of the Month Storage/Elevation (TAF/Feet)

Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Trinity	2073	2117	2020	1885	1762	1633	1610	1606	1627	1639	1675	1739	1813
Elevation	2349	2342	2333	2324	2314	2312	2312	2312	2313	2314	2317	2322	2328
Whiskeytown	237	238	238	238	238	238	206	206	206	206	206	206	238
Elevation	1209	1209	1209	1209	1209	1209	1199	1199	1199	1199	1199	1199	1209
Shasta	4364	4325	4009	3411	2999	2757	2663	2672	2744	2814	2969	3239	3442
Elevation	1059	1059	1048	1025	1008	997	992	993	996	999	1006	1018	1026
Folsom	849	966	904	648	452	417	365	333	319	305	332	431	563
Elevation	465	459	434	410	405	398	393	390	388	388	393	407	424
New Melones	2056	2068	2044	1985	1929	1885	1821	1827	1835	1839	1842	1862	1748
Elevation	1058	1058	1056	1051	1046	1042	1036	1036	1037	1037	1038	1040	1029
Federal San Luis	821	677	391	262	186	238	198	240	404	579	537	559	507
Elevation													
Total	10400	10391	9606	8430	7566	7168	6863	6884	7135	7383	7561	8066	8311

State End of the Month Reservoir Storage (TAF/Feet)

Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Oroville	3461	3519	3408	2837	2330	1829	1628	1540	1513	1551	1638	1809	1879
Elevation	899	892	852	812	766	766	745	735	732	736	746	764	771
State San Luis	539	428	289	453	625	869	959	1092	1245	1276	1284	1282	1238
Elevation													
Total San Luis (TAF)	1360	1105	680	715	811	1107	1157	1332	1649	1854	1822	1872	1745
Elevation	463	419	423	433	463	463	468	484	512	529	526	531	520

Monthly River Releases (TAF/cfs)

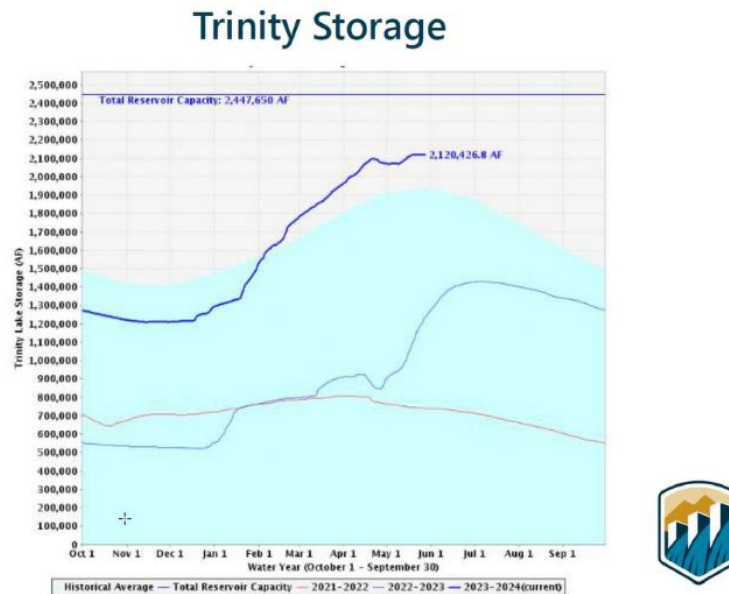
Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Trinity	215	107	45	53	52	23	18	18	18	18	17	18	32
cfs	3,500	1,800	735	857	870	373	300	300	300	300	300	300	540
Clear Creek	18	13	9	9	9	12	12	12	12	12	11	22	12
cfs	296	224	150	150	150	200	200	200	200	200	200	363	200
Sacramento	504	625	851	645	476	338	238	246	246	246	222	246	238
cfs	8200	10500	13850	10500	8000	5500	4000	4000	4000	4000	4000	4000	4000
American	246	208	345	283	113	93	75	77	77	77	76	74	74
cfs	4000	3500	5616	4599	1893	1506	1263	1250	1250	1377	1201	1201	1250
Stanislaus	76	89	15	15	15	48	12	12	14	12	12	12	91
cfs	1242	1500	250	250	250	774	200	200	226	221	200	200	1537
Feather	215	107	479	452	556	215	104	108	77	111	108	108	143

Flow Releases:

ROD flow releases will continue through the summer, with placeholders for August and September for augmentation flows if needed. Traditional ROD flow volumes are projected to resume in April.

Maintenance:

Maintenance work in the Clear Creek tunnel is scheduled to begin in November, resulting in nearly zero diversions during the winter.



Public Questions and Comments

No public questions or comments were given.

Questions and Comments of TRRP Entities

No questions or comments were given.

TMC Discussion and Comments

Regarding the diversions, Orcutt pointed out that the diversion rates are averaged over some period time, whereas the ROD flows are calculated annually.

Policy Regarding Whiskeytown Filling (Elizabeth Hadley, Josh Hoines, & Laura Ostmann)

Elizabeth Hadley, Deputy Area Manager for the Northern California Area Office (NCAO); Josh Hoines, Whiskeytown National Recreation Area Superintendent; and Laura Ostmann, from the National Park Service presented on this topic regarding the history of Whiskeytown filling and related policy.

Timeline Overview

- In 1949, Reclamation released preliminary plans to develop the Trinity River as part of the Central Valley Project.
- In 1955, The Trinity River Division (TRD) was authorized by an act of Congress (P.L. 84-386). Section 1 of the act provided for the construction, operation, and maintenance of the TRD.

- In 1963, Whiskeytown Dam was completed and the reservoir was allowed to begin filling.
- In 1965, a Whiskeytown act established the Whiskeytown recreational area, which provided that the lands around Whiskeytown Reservoir will be administered in a manner that's coordinated with the Central Valley Project.

Policy Discussion

BOR and the Park Service work closely to ensure that Whiskeytown Reservoir is managed in a way to fulfill these obligations. Very lengthy coordination agreements are in place that outline roles and responsibilities of each agency to ensure that BOR maintains its facilities and the Park Service can provide recreational opportunities.

Whiskeytown Reservoir is a regulated reservoir, which means it's designed to be kept at almost full capacity year-round. This benefits the releases into Clear Creek in the Sacramento River to meet Reclamation's contractual obligations, as well as provide flow regimes for power for Spring Creek Powerplants. There is a standard operating procedure that outlines operational levels at Whiskeytown Reservoir.

The graphic below is an excerpt from BOR's Standard Operating Procedure binder, with a general timeline for flood management and fill timing:

The following table summarizes the normal operational levels of Whiskeytown Lake

Lake Elevation	Time of Year
1198 + 0.5 to 1209.5 + 0.5 (fill cycle)	April 1 – April 30
1209.5 + 0.5	May 1 – Labor Day Weekend
1209.5 + 0.5 to 1208.5 + 0.5	Labor Day Weekend - October 14
1208 + 0.5 to 1198.5 + 0.5 (drawdown cycle)	October 15 – November 15
1198.5 + 0.5	November 16 – March 31

Notable Points

- There are approximately 35,000 acre feet in the winter to provide space for flood management.
- The Reservoir is kept full from mid to late April until November.
- The exact timing of the flow schedule is coordinated with the NPS to ensure actions don't negatively impact their facilities.
- Whenever possible, BOR refills the Reservoir with natural flows from Clear Creek, as done in the past two years.

- These operational levels and schedules will be included in the new Biological Opinion (BiOp).
- To help keep water flowing through Whiskeytown Reservoir at a cool temperature to assist in meeting temperature obligations on the Sacramento, BOR has two temperature curtains within the Reservoir: one past the powerhouse and the other at the intake into Spring Creek Tunnel.

Public Questions and Comments

No public comments were given, and the discussion was closed.

Questions and Comments of TRRP Entities

No comments were given, and the discussion was closed.

TMC Discussion and Comments

Q. By Liam Gogan: Is there an actual policy and/or an agreement about keeping Whiskeytown full at certain times of the year?

A. By Elizabeth Hadley: It's in the current BiOp for temperature management of the Sacramento and to assist in meeting recreational obligations.

Q. By Liam Gogan: Does 100% of Whiskeytown's filling need to be the BOR's obligation?

A. By Elizabeth Hadley: Yes, as the BOR is obligated to provide recreational opportunities, which the Park Service manages.

Q. By Liam Gogan: Would 85% fulfill this recreational opportunity?

A. By Josh Hoines: There have been 59 years that the agencies have been operating under this scenario. We do not have any data or insights on what that would mean for Recreation, or if it would impact the facilities or other measures in place. If anything, the answer would be speculative at best. It might not be impossible, but ramifications are unknown.

Gogan said his concerns don't stem from this year, where Clear Creek did most of the filling. He is mainly concerned about dry and critically dry years where water comes from Trinity River. He is unsure of the specific acre feet needed to supply Whiskeytown to get it at 100% full, but if they can get the recreational use out of Whiskeytown from 85% full, it would seem practical to not use Trinity River water during dry and critically dry years and save water at Trinity.

Kyle De Juilio expressed the same concerns about Trinity River water being used. He stated there are legal protections for Trinity River water, and that it cannot be used for benefits of Sacramento at the expense of the fish and wildlife at Trinity River. Diverting water in April provides no benefit to Trinity River fish and wildlife and could be against those protections. What TRRP has suggested in the past during recent years when storage was low is to wait to fill Whiskeytown Reservoir until July 1st, when diversions are required to meet the temperature requirements within the Trinity River.

Kyle de Juilio stated that the TRRP would like BOR and the Parks Service to consider is that when storage in Trinity Reservoir is below 1.2 million acre feet, which has been shown to be the

beginning of when temperature control can be lost due to the limited release points from Trinity Reservoir, that the filling of Whiskeytown be delayed until July 1st, to provide benefits to both systems. This is consistent with the legal protections with Trinity River water. Kyle de Juilio represents that he would like them to consider this during the reconsultation process.

Hadley responds by saying the appropriate place to make these recommendations is in the reconsultation process. She encourages him to express this during the reconsultation stage.

De Juilio states that it was unclear how to interact with the long-term operations of the Central Valley Project because this is being included in reference to the 2000 ROD and BiOp despite reconsultations. These concerns have been brought up by parallel processes for the TR Division, but seems disjointed to him.

Ly, regarding the Trinity River Division Act referenced by Kyle de Juilio, wanted to confirm that the act gives precedence to Trinity River's fish and wildlife. In his view, the Central Valley's needs for diversion are lower priority than what is needed to maintain and propagate fish and wildlife in Trinity. Hadley said as it pertains to the schedule, she did not have an answer on how that's incorporated. Ly clarified that he asked his question in a broad statement, whereupon Hadley replied by saying she's unsure if she's capable of answering that right now, as it's a legal question. Ly said he thinks it's common statement that he has read from Interior's solicitors. Assuming that is correct from solicitors' reports, Ly discussed the benefits of waiting until July 1st during drought years because the fish and wildlife needs in Trinity River are not meeting temperature needs otherwise. Hadley said this is the policy for a very long time, as well as implemented in the 2019 BiOp. She, again, encourages comments like these during the reconsultation process.

Kyle stated that in addition to the 1955 Trinity River Act, there are also protections in the State Water Rights Order 90-5, that say Trinity River water can't be used for temperature benefits in Sacramento at the expense of fish in Trinity River. He clarified that the reason he suggests July 1st in drought years over not filling Whiskeytown with Trinity River waters is the atmospheric warming that occurs in Lewiston Reservoir requires us to move more water through Lewiston that is being released to the river. Even in drought years from July until October, there are diversions that could be used for that purpose curated to the benefit of Trinity River. There is almost no scenario where there wouldn't be diversions occurring between July and October regardless of storage, according to de Juilio, so it's a multi-benefit use of the water from all agency perspectives if delayed releases occur.

Orcutt discussed that there is a legal opinion since the ROD was implemented in 2000, that exculpates the discussion surrounding the use of Trinity River by the BOR. One of the concerns he has is secondary discretion in the context of potential mismanagement of diversions, and discussed whether there's a long-term way to address the Clear Creek obligation issue during the reconsultation process. Orcutt expressed an interest in investigating the feasibility of using technical analysis to control temperatures in Lewiston.

Kyle de Juilio's understanding is flows to Clear Creek are managed independent to diversions. The volume release down to Clear Creek over the course of the year is within the range of runoff

from Clear Creek. He asked the National Parks Services what the possibly impacts would look like if there are refill delays in drought years in Trinity, from mid to late April to the beginning of July.

Hoines responds by saying the Parks Service can certainly look into it, but the outcome will be speculative in nature. Both marinas would probably be affected and the types and quantities of boats that could use them. The infrastructure would need to be figured out and moved, as well as contractual relationships that would be impacted.

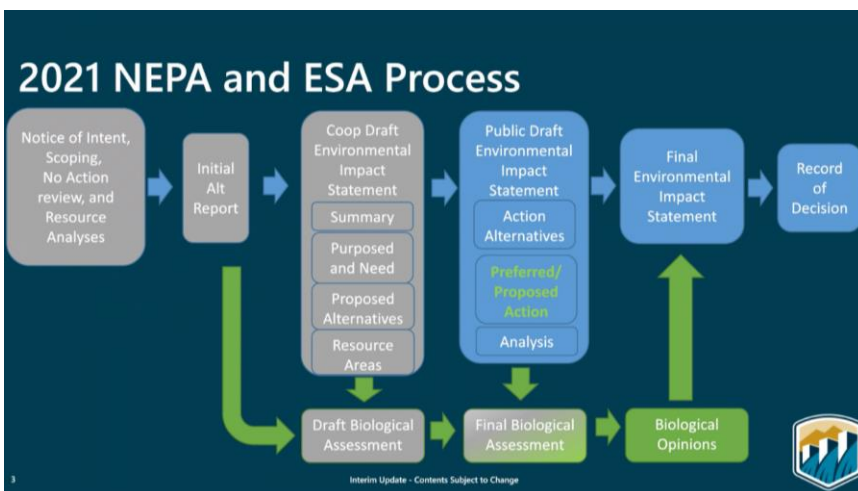
Ly asked Hadley how many acre feet are diverted to fill Whiskeytown. Hadley said she could reach out to CVP Operations for a specific answer. Kyle de Julilio said it's 35,000 acre feet.

Break

Trinity River Division (TRD) Reconsultation (Kristen Hiatt)

Kristen Hiatt's presentation on the Trinity River Division Reconsultation outlines the procedural steps and timelines involved in the National Environmental Policy Act (NEPA) and Endangered Species Act (ESA) processes for the reinitiation of consultation on the long-term operations of the CVP and the State Water Project (SWP). The purpose of the action is to continue operations of the Trinity River Division to meet federal and state legal requirements, satisfy contractual obligations, and support fish and wildlife conservation efforts. Key points include the status in the Coop Draft Environmental Impact Statement (EIS) stage, the upcoming milestones and public comment period, and a detailed review of comments from cooperating agencies. The presentation emphasizes the revised purpose and need for the project, criteria for screening and selecting alternatives, and the importance of coordination and public involvement. The schedule highlights critical dates leading up to the final Record of Decision by December 2024, with ongoing consultation and planning activities extending into 2025.

Reinitiation of Consultation of the Long-Term Operations of the CVP and SWP



Hiatt showcases a flowchart of the procedural steps and timelines involved in the NEPA and ESA Processes, indicating that the TRD is currently in the COOP Draft EIS stage, nearing the public comment period.

COOP EIS Commentor List: Agencies that provided feedback include the Western Area Power Administration, Friant Water Authority, San Luis & Delta-Mendota Authority, Regional Water Authority, Sacramento River Settlement Contractors, USFWS Bay Delta Office, Trinity County, East Bay Municipal Utility District, Hoopa Valley Tribe, Oakdale Irrigation District/South San Joaquin Irrigation District, Contra Costa Water District, Metropolitan Water District, and Grassland Water District.

Cooperating Agency Comment Themes

General Comments:

- Agencies suggested separating the Trinity River Division EIS and highlighted the need for accuracy in the description of the proposed action.

Chapter 1 – Introduction

- Need for additional language and consistent terminology regarding the coordinated relationship between the CVP and SWP.

Chapter 2 – Purpose and Need

- Scope inclusion of Trinity River Division and Klamath River language, and relevance of CESA to CVP.

Chapter 3 – Alternatives

- Suggestions for operational safeguards and clarifications.

Chapter 4 – Water Quality

- Clarification on Trinity's inclusion and analysis of flow impacts related to methylmercury and selenium.

Chapter 5 – Water Supply

- Inclusion of Trinity-specific allocations and flows, clarification on water delivery reductions, and impacts based on water-year type.

Chapter 6 – Groundwater

- Consideration of existing Groundwater Sustainability Plans (GSP) and Sustainable Groundwater Management Act (SGMA) impacts.

Chapter 9 and 10 – Air Quality and Greenhouse Gases

- Methodology for emission factors and groundwater pumping and determining significance thresholds.

Chapter 12 – Fish and Aquatic Resources

- Updating species information and improving analysis.

Chapter 13 – Terrestrial Resources

- Impacts on giant garter snake and western pond turtle in wildlife refuges.

Chapter 14 – Economics

- Inclusion of Trinity River in economic analysis, changes in water costs, and influence of SGMA.

Chapter 15 – Land Use and Agricultural Resources

- Mitigation for the reduction in irrigated acres.

Upcoming NEPA Milestones

Include the release of the Public Draft EIS, public comment periods, and meetings (virtual and in-person), followed by the Final EIS and Record of Decision with a 30-day waiting period.

2021 LTO Schedule	Milestone
Tasks	Date
Cooperating Agency DEIS	4/5/2024
Cooperating Agency Review Comments Due	4/19/2024
Sort/Review Comments on Cooperating Agency DEIS	5/3/2024
Revise CADEIS	5/17/2024
BDO Review of Revised CADEIS	5/24/2024
Edit and Finalize Public DEIS	6/12/2024
Publish Public DEIS	7/12/2024
Publish Final EIS	11/13/2024
Record of Decision (30-Day Legal Requirement)	12/13/2024

Trinity River Division Joint Lead Monthly Meetings

1. August 2023: Proposed Action Perspectives, Purpose and Need, Initial Alternatives
2. October 2023: EIS Framework, BA Framework, Screening Criteria, Knowledge Base Papers
3. November 2023: Seasonal Operations, Initial Alternatives
4. December 2023: Consensus Alternative
5. January 2024: Biological Assessment Foundation, Knowledge Base Paper, Screening Criteria

6. February 2024: Knowledge Base Papers, Species Deconstruction, Interested Party Planning, Environmental Baseline
7. March 2024: NEPA affected environment, Interested Party Meeting Planning, Species Deconstruction, Environmental Baseline
8. April 2024: Interested Party Meeting Planning, Species Deconstruction, Initial Alternatives
9. May 2024: Draft Alternatives and CalSim Update, ESA Update

Revised Purpose and Need

The Purpose of the action considered is to continue the operation of the CVP and the SWP, for authorized purposes, in a manner that:

- Meets requirements under federal Reclamation law; other federal laws and regulations; and State of California water rights, permits, and licenses pursuant to Section 8 of the Reclamation Act;
- Satisfies Reclamation contractual obligations and agreements; and
- Implements authorized CVP fish and wildlife project purposes and meets federal trust responsibilities to tribes, including those in the Central Valley Project Improvement Act (CVPIA)

Operation of the CVP and SWP is needed to meet multiple authorized purposes, including: flood control and navigation; water supply; fish and wildlife mitigation, protection, and restoration and enhancement; and power generation. Operation of the CVP and SWP also provides recreation and water quality benefits.

The purpose of the proposed action is to continue operations of the Trinity River Division (TRD) of the CVP in order to meet requirements identified in authorizing legislation (e.g. 1955 Act, P.L. 84-386) and subsequent federal law (e.g. Central Valley Project Improvement Act, P.L. 102-575).

Authorized purposes of the TRD include storage and delivery of water to both downstream and out-of-basin users, power generation, and restoration of salmon and other native fishes below Lewiston Dam on Trinity River.

Screening Criteria/Preferred Alternative Selection Criteria

Prior to eliminating alternatives, BOR should collaborate using the following criteria for consideration:

- Purpose and Need
- Completeness
- Technically and Economically Feasible
- Value Added

Knowledge Based Papers

The purpose of these reports is to compile datasets, literature, and models for analyzing the range of potential effects of key topics.

1. Trinity River Division Temperature Management – Chinook and Coho Salmon Migration and Survival
2. Trinity River Harvest Management – Chinook and Coho Salmon Migration and Survival
3. Trinity River Habitat Restoration Effects on Salmonid Growth and Survival

Trinity Consultation Schedule



Coordination

WIIN Quarterly Update Meeting – June 11, 2024

- Visit <https://www.usbr.gov/mp/bdo/ito/index.html> for updates including meeting link

Input opportunity

- Attend a public meeting for the Public Draft EIS
- Comment on the Public Draft EIS

Public Questions and Comments

Jerilyn Smith expressed interest in receiving the Powerpoint presentation.

Questions and Comments of TRRP Entities

No reports or comments were given by TRRP Entities.

TMC Discussion and Comments

Q. By Mike Orcutt: When will the BOR implement the proposed action on the long-term operations (LTO) side, as this may trigger litigation?

A. By Kristen Hiatt: The dates we're focused on are getting to our Record of Decision, which is in December. As far as the ESA schedule is concerned, it is still in the works as this is focused on NEPA only. We can't implement the action until the ROD and BiOp are complete. There is no specific date on when we will implement the proposed action.

Mike Orcutt raised concerns about whether the list of multiple authorized purposes discussed in the presentation is comprehensive. He emphasized that the Hoopa Valley Tribe believes the law and statutes mandate concurrence and is troubled by how this requirement might be excluded or overlooked in the Record of Decision (ROD). He emphasized the importance of ensuring that all legal and statutory obligations are fully addressed and incorporated into the final decision-making process.

Ly requested the Powerpoint be sent for later review.

Lunch

Fish Workgroup Review of Synthesis Report Recommendations (Kyle de Juilio)

Throughout his time serving as a workgroup coordinator for the Fish Workgroup, Kyle de Juilio recognized the need for a tool for direct guidance on annual planning for the Fish Workgroup. During the refinements process, the previous meeting culture of the Fish Workgroup has been seen as unfavorable for certain task delegation efficiency. This discussion focused on the creation of the Fish Workgroup Action Tracker.

Purpose of Action Tracker:

1. Elevate awareness
2. Prioritization and distillation
3. Identify action and track progress

Limitations:

The Action Tracker receives input from various sources within the Program.

Focuses exclusively on synthesis reports, which compile over 20 years of information.

Only considers recommendations relevant to the Fish Workgroup.

Limited by the responsibilities and capacity of specific workgroup members.

Synthesis Reports Overview

- Cooper-Hertel, E., D. Gaeuman, K. De Juilio, A. Martin, J. Boyce, D. H. Goodman, N. Som, and J. Alvarez. 2022. [Trinity River Juvenile Salmonid Habitat Synthesis: Physical Habitat Capacity at the Restoration Site and Reach Scale](#). Report for the Trinity River Restoration Program (TRRP). Klamath, California.

- Thomas Gast & Associates. 2021. [Analysis and model evaluation of long-term data collected at the Willow Creek outmigrant trap](#). Report 20190910YTFP for the Trinity River Restoration Program (TRRP). Thomas Gast & Associates Environmental Consultants, Arcata, California.
- Boyce, J., D. H Goodman, N. A Som, J. Alvarez, K. Hopkins, and A. Martin. 2020. [Streamflow and Juvenile Salmonid Habitat Availability at Six Rehabilitation Sites on the Trinity River, California 2008-2017](#). Arcata Fisheries Technical Report Number TR 2020-39 for the Trinity River Restoration Program (TRRP). U.S. Fish and Wildlife Service, Arcata, California.
- Pinnix, W. D., S. P. Boyle, T. Wallin, T. Daley, and N. A. Som. 2022. [Long-Term Analyses of Estimates of Abundance of Juvenile Chinook Salmon on the Trinity River, 1989-2018](#). Arcata Fisheries Technical Series Report TS 2022-40, report for the Trinity River Restoration Program (TRRP). U.S. Fish and Wildlife Service, Arcata, California.
- Gaeuman, D., K. De Juilio, and T. Buxton. 2023. [Stream bed disturbance and risk of salmonid redds scour in the Trinity River, CA](#). Report for the Trinity River Restoration Program (TRRP). Yurok Tribe Fisheries Department, Weaverville, California.
- Asarian, J. E., K. De Juilio, S. Naman, D. Gaeuman, and T. Buxton. 2023. [Synthesizing 87 years of scientific inquiry into Trinity River water temperatures](#). Report for the Trinity River Restoration Program (TRRP). Riverbend Sciences, Eureka, California.

Objectives and Targets Summary:

One of the main jobs of the Workgroup is to set objectives and targets, approved by the TMC. In the objective and target summary, the Fish Workgroup came up with a set of 14 objectives to boost fish populations in the Trinity River by setting specific targets for each fish.

Effectiveness and Monitoring

Effectiveness Monitoring

Effectiveness Monitoring & Other			
TRRP-2018-035: Channel rehab habitat effectiveness monitor(40 mile model support) YT, HVT, TRRP TSC,	\$ 70,348.81	\$ -	\$ -
TRRP Reclamation TSC	\$ -	\$ -	\$ -
Yurok Tribe	\$ 70,348.81	\$ -	\$ -
Hoopa Valley Tribe	\$ -	\$ -	\$ -
TRRP-2022-5: Improvements to RBM10	\$ -	\$ 96,000.00	\$ -
TRRP-2023-1: Chinook egg survival	\$ 172,292.00	\$ -	\$ -
TRRP-2023-2: Hyporheic flow and macroinverts YT	222,778.00	\$ -	\$ -
TRRP-2023-3: Lewiston Reservoir Temp Study YT	\$ 87,287.00	\$ -	\$ -
TRRP-2023-4: Evolution of Stream Morphology YT	\$ 45,200.00	\$ -	\$ -
TRRP-2023-X: Cohort reconstruction model support	\$ 40,000.00	\$ -	\$ -
TRRP-2023-X: Bed surface grain map	\$ 138,339.00	\$ -	\$ -
TRRP-2024-X: Limiting Factors Analysis	\$ 40,000.00	\$ -	\$ -
TRRP-2025-1: Restoration vegetation diversity	\$ -	\$ -	\$ 231,663.00
TRRP-2025-2: Benthic macroinvertebrates	\$ -	\$ -	\$ 385,992.00
TRRP-2025-3: Initial steps to a foodscape model	\$ -	\$ -	\$ -
TSC Sediment transport modeling	\$ 10,000.00	\$ 20,000.00	\$ -
Sub-total	\$ 896,593.62	\$ 116,000.00	\$ 617,655.00

The Fish Workgroup has provided objectives, the IDT has solicited proposals, and the TMC has funded all of these projects that strive towards the recommendations received from different reviews and reports.

Action Tracker Tool

This tool is an excel spreadsheet, with columns captured recommendation reports, with the Identifications of actions that are currently underway. This is then filtered based on response to only show actionable items for the Fish Workgroup. If it's actionable by another group, it is then prioritized.

Recommendation	Synthesis Report	Action underway	Actionable by Fish Workgroup	Actionable by other Workgroup	Priority	Proposed Fish Workgroup Action in FY 2025	Comments
Prioritization Key -	0 - Action being taken, no further action until current action complete	0.5 - Action being taken, workgroup needs to follow through on current action	1 - Priority for action within next Calendar year	2 - should be taken up as soon as higher priority items are addressed	3 - Broad topics that may be captured by other rankings	4 - Information not currently available to address	5 - Low priority, no action recommended
Achieve adult temperature objectives	Escapement	Updated Adult Temperature Targets Memo sent and accepted by IDT	Yes	Flow		Use in any DSS assessments of flow actions	Need to be formalized in EIT or NCBWQCB Basin Plan
Continued use of the abundance estimator developed in the report	Outmigration abundance analysis	Ongoing trapping	Yes			0 None	USFWS reporting for outmigrant trapping
Use bioenergetics to test assumptions of physical habitat models in low velocity habitat	Habitat Capacity	FY 2023 Bioenergetics HSC proposal	Yes	NA		Conduct approved FY 23 proposal - 0 USBR / USFWS / Yurok	In progress - Bioenergetics HSC/Capacity
Focus on regularly sustained flows of <99.1 cms when designing restoration sites	Habitat Capacity	Propose changes to Systemic habitat target	Yes	Design Team		Use recommended flow range when conducting approved FY 23 proposal - 0.5 Yurok	
Use flow management to provide more habitat during the critical rearing period when fish are present and apply thresholds of flow duration to assess the benefits of different flow management scenarios	Habitat Capacity	Propose changes to Systemic habitat target	Yes	Flow		0.5 Submit Systemic Habitat Target to IDT	
Internal and external review to identify efficiencies in the adult monitoring and redd and carcass survey design	Escapement	Core Monitoring Review 2023 RMI graduate study	Yes	IDT		1 Core monitoring review	

Fish Workgroup Action Tracker

Prioritization Key:

- 0 – Action being taken, no further action until current action complete
- 0.5 – Action being taken, workgroup needs to follow through on current action
- 1 – Priority for action within next Calendar year
- 2 – Should be taken up as soon as higher priority items are addressed
- 3 – Broad topics that may be captured by other rankings
- 4 – Information not currently available to address
- 5 – Low priority, no action recommended

Public Questions and Comments

No reports or comments were given by the public

Questions and Comments of TRRP Entities

No reports or comments were given by TRRP Entities.

TMC Discussion and Comments

Radley Ott questioned the effectiveness of the Action Tracker. Kyle de Juilio responded affirmatively, noting the high number of ongoing actions and the clarity it provided for prioritizing future tasks.

Keli McElroy raised concerns about the active participation and capacity of group members. De Juilio acknowledged varying levels of funding and participation but emphasized that smaller, focused meetings were more productive.

Mike Orcutt discussed the need for standardized protocols across workgroups and how the Action Tracker could be adapted for broader use. He highlighted the importance of integrating science plans and refining objectives and targets.

Liam Gogan inquired about prioritization within the Action Tracker. De Juilio explained the use of a prioritization key to categorize actions based on urgency and feasibility.

Eric Peterson emphasized the need to incorporate uncertainties and suggested using the Action Tracker for developing research topics for future fiscal years.

Bill Pinnix asked about the adoption of the Action Tracker by the IDT. De Juilio noted there was interest but no formal adoption yet.

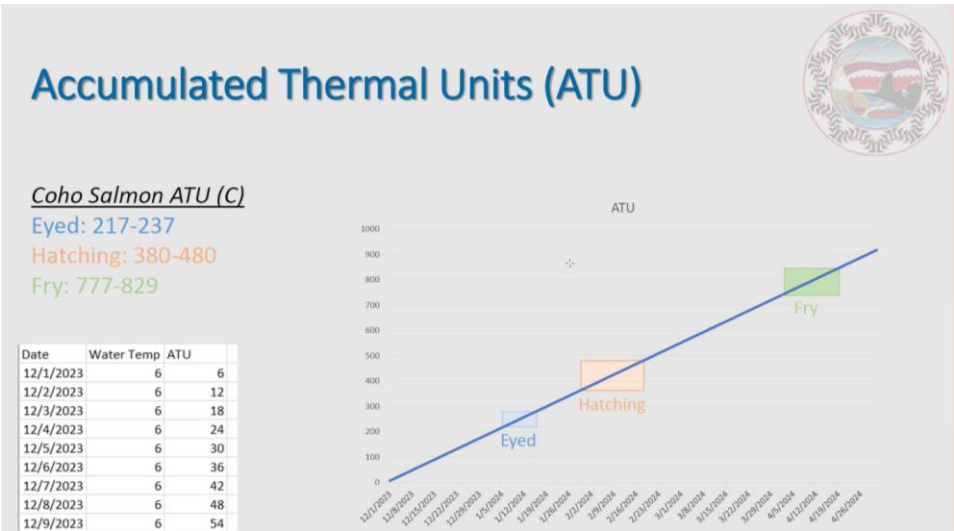
Orcutt discussed whether too many resources are dedicated to spring Chinook salmon, potentially at the expense of other species like steelhead or fall Chinook. He suggested evaluating resource allocation to ensure balanced efforts across species.

Remote Site Incubators (Zac Reinstein)

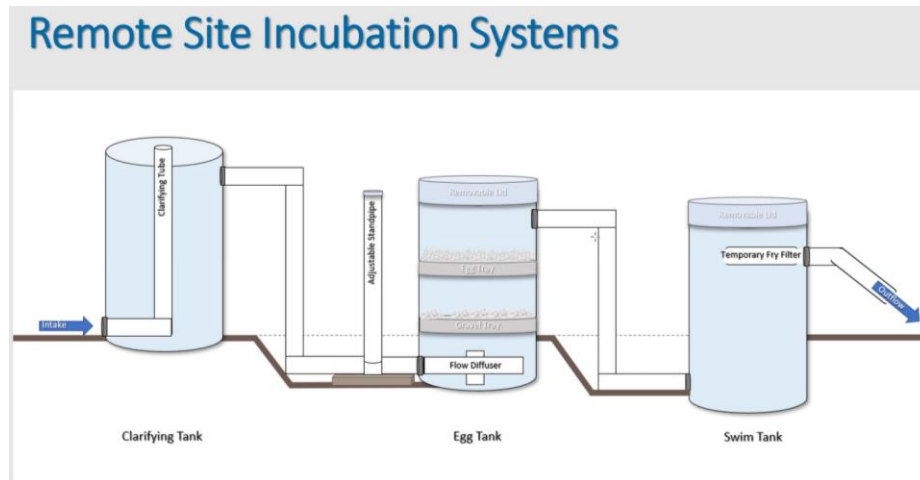
Zac Reinstein, a fisheries biologist with the Yurok Tribe, presented an overview of the Remote Site Incubators (RSI) project. The presentation detailed the significance and operational methodology of RSIs, which are gravity-fed systems designed for the optimal incubation and hatching of fish eggs, particularly Coho Salmon. RSIs utilize accumulated thermal units (ATUs) to manage and predict developmental milestones by tracking cumulative temperature exposure.

Coho Salmon Development and RSIs

In the juvenile stages of Coho Salmon, particularly the Young of the Year (YOY) and Alevin stages, the process from fertilization to free-swimming fry within gravel is heavily influenced by temperature. Different thermal gauges are used to measure and manage this process. The concept of accumulated thermal units (ATUs) is crucial, as it tracks the cumulative exposure of the developing eggs and larvae to temperature, providing a predictive measure for developmental milestones. Managing these thermal conditions ensures the healthy progression of Coho Salmon through their early life stages, optimizing their survival and growth.



A Remote Site Incubator (RSI) is a gravity-fed system designed to cycle water under head pressure, ensuring optimal conditions for fish egg incubation and hatching. The system begins with a clarifying tank that allows sediment and heavy materials to settle, enabling cleaner water to flow into the egg tank. An adjustable stand plate controls the water level and flow, making cleaning easier and regulating the system’s water flow. Water rises through a gravel bed to dissipate evenly, preventing backflow into the clarifying tank. Typically, the system uses one egg tray, but can accommodate up to six. A lid is necessary to block sunlight, which can negatively affect fish development. After hatching, the fish move to the swim tank where they absorb their yolk sac and begin to seek food. The swim tank serves as a temporary holding area, confirming the fish's readiness for creek release. Regular cleaning of the temporary fry filter is essential to remove eggshells. The design is scalable, ranging from small setups using water bottles to larger systems with 150-250 gallon tanks.

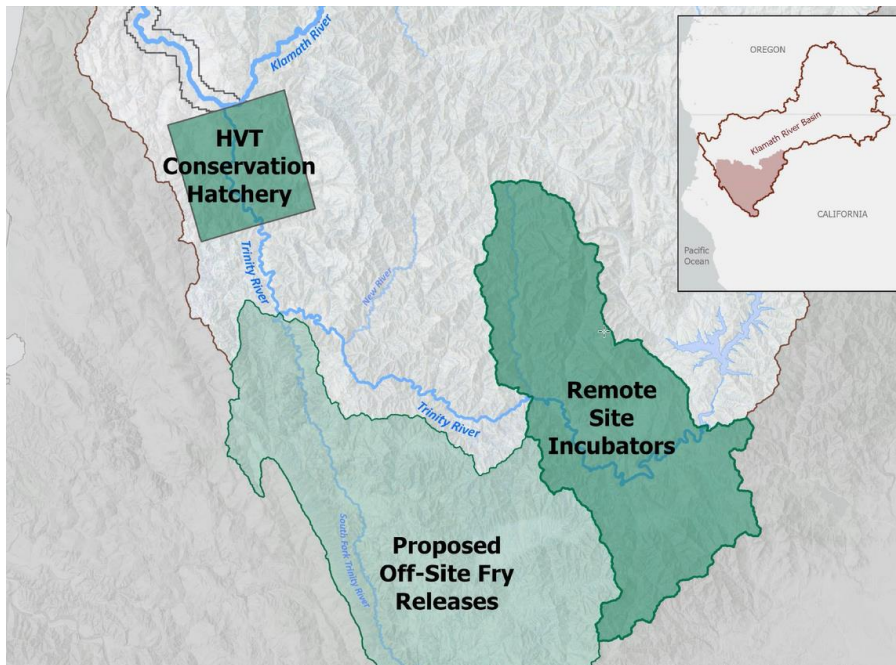


Pros of the Design: Use of excess eggs and limiting domestication by avoiding added food, allowing natural environmental fluctuations, and maintaining low stray rates. It eliminates the risk of redd scour, saves space at hatcheries, and is suitable for specific locations based on water, temperature, and habitat suitability. The design is also low-tech, cost-effective, and easy to install and remove with minimal personnel.

Downsides of the Design: Monitoring challenges, high crew and travel time requirements, site-specific constraints like variable water flows and weather, and issues related to hatchery genetics for species management.

RSI Utilization in Trinity River

The 2020 National Marine Fisheries Service (NMFS) Biological Opinion mandates that any excess Coho Salmon eggs, fry, juveniles, or adults not needed for smolt production at the Trinity River Hatchery (TRH) should be provided to an approved entity for supplementation in tributaries of the Trinity River to support population conservation efforts.



2023/2024 Season Overview

Grass Valley Creek

The Grass Valley Creek project is a collaborative effort involving BOR, CNRA-FWS, NOAA Fisheries, and YTFD, funded by the BOR. The site operates a Coho Salmon Remote Site Incubator (RSI) year-round with a 6 CFS flow rate in a relatively flat area. In December, 10,078 Coho Salmon eggs from Trinity River Hatchery were transported, wrapped in moist cheesecloth, and placed into coolers. During transit and initial days, a few mortalities occurred. Data collection included monitoring intake status, temperature, dissolved oxygen levels, flow rate, and recording mortalities and deformities.

Data Collection

RSI Data:

- Intake status
- Temperature and dissolved oxygen
 - Intake
 - Clarifying tank
 - Incubation tank

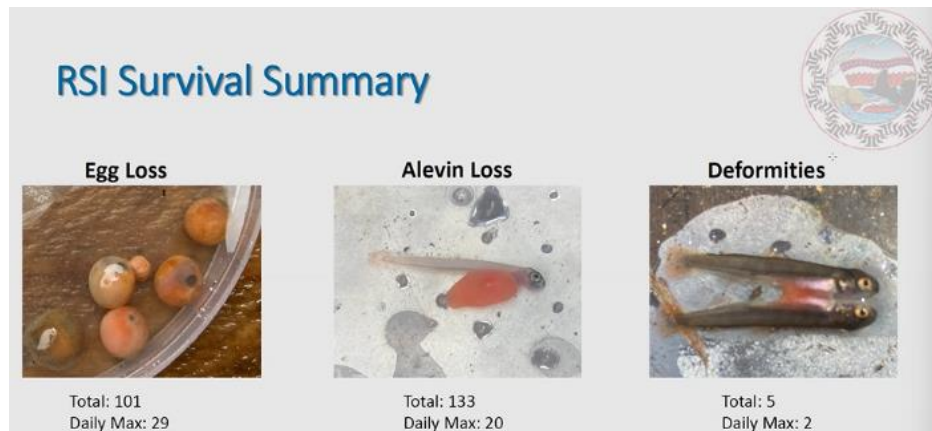
- Swim tank
- Creek
- Flow rate (gallons per minute)
- Mortalities and deformities

Site Data:

- Road conditions
- Spillway conditions
- Ford crossing conditions
- Air temperature
- Time in, time out

Temperature and Life Stage: Development takes a little longer than if the water was warmer than colder. Still above threshold for coho salmon, 5.6 C average for hatching, development, and emergence.

Flow Rate: 10.1 average GPM flow rate from January 18th, 2024, to April 25th, 2024



Out of the initial 10,078 eggs, 9,977 alevins developed into 9,844 fry, achieving a 97.7% fry survival rate.

The budget for the project was around \$900 for materials, with 43 site visits involving two people, totaling 112 crew hours on site and 129 hours for transit. Further evaluation of spatial distribution is planned for the end of the month.

2024-2025 RSI Planning

Future sites:

1. Grass Valley Creek
2. Little Browns Creek

Capacity

Maximum of 50,000 eggs

5,000-25,000 per site.

Future RSI Site Selection Tools

Future RSI site selection will utilize several tools and criteria. These include the NOAA Intrinsic Potential Model, the CDFW Passage Assessment Database, landowner access, stream reports, restoration actions, proximity to Junction City Weir, distance to roads and winter access, professional judgment, and summer rearing habitat assessments.

Field reconnaissance will also play a key role. The ranking metrics for site selection prioritize:

5. Fish Passage
4. Total Stream length with IP value
3. Proximity to Junction City Weir
2. Coho Salmon current usage
1. Restoration Actions

Future RSI Site Selection

Ranking	Watershed	Streams	Removal
1	Grass Valley Creek	Grass Valley Creek	
2	Indian Creek	Indian Creek	Need Private
3	Deadwood Creek	Deadwood Creek	High Stray
4	Reading Creek	Reading Creek	Need Private
5	Rush Creek	Rush Creek	High Stray
6	Weaver Creek	Little Browns Creek East Weaver Creek Middle Weaver Creek Sidney Gulch	
7	North Fork Trinity River	Rich Gulch East Fork North Fork Trinity River North Fork Trinity River Brock Gulch	

Commented [LK1]: @Aspen Howard should one of these be ranked #1?

Commented [AH2R1]: Yes, fixed it!

8	Canyon Creek	Canyon Creek Clear Gulch	
9	Maxwell Creek	Maxwell Creek	
10	Browns Creek	Browns Creek	
11	Soldier Creek	Soldier Creek	Lacks rearing, no floodplain
12	Conner Creek	Conner Creek	Deep incision, bedrock
13	Oregon Gulch	Oregon Gulch	Passage barrier

Once you find a site, the higher the IP, likely the lower the gradient that is. Probably looking at a lower P zone that surrounded upstream and downstream high IP areas. Wanted to make sure we're putting intake and intake line

Once a site is identified, a higher Intrinsic Potential (IP) typically indicates a lower gradient. This means the site is likely in a lower gradient zone surrounded by upstream and downstream areas with high IP values. It is important to ensure that the intake and intake line are properly placed in these optimal zones to maximize the effectiveness of the RSI system.

Public Questions and Comments

No public comments were given.

Questions and Comments of TRRP Entities

Ken Lindke raised the issue of variability in population monitoring and questioned if the benefits of RSIs would persist over six years. He asked about measuring success, to which Reinstein responded that while there are good monitoring methods, they are costly, and the project has not reached that point yet. Long-term strategies would involve stock assessments and tracking.

Chris Laskodi discussed the potential supplementation of nutrients to enhance RSI effectiveness. While he couldn't confirm its effectiveness, he suggested that theoretically, if more macroinvertebrates are produced, it should help. He mentioned 5,000 lbs. of supplementation for Grass Valley Creek for the season and the possibility of expanding.

TMC Discussion and Decision:

James Lee inquired about the high fry survival rate observed in RSIs compared to hatcheries. Zac Reinstein confirmed consistency in RSIs, highlighting their cost-effectiveness due to lower manpower needs. The critical period for monitoring during hatching, which lasts 2-3 weeks, was emphasized.

There was a discussion on how to determine when a stream no longer requires RSIs. Zac recommended a monitoring period of 4 to 6 years to assess rearing capacity and fish population

sustainability. Kyle De Juilio suggested rotating RSI sites every 6 years and following NOAA recovery plans that specify adult Coho numbers per IP kilometer.

Liam Gogan and James Lee discussed using the NOAA Intrinsic Potential model to select creeks based on factors like gradient and temperature. Shane Quinn explained Coho salmon rearing behaviors, including some moving to estuaries and others staying in specific river areas.

Reinstein noted the removal of a dam on East Weaver Creek, improving its intrinsic potential for Coho salmon.

Kyle De Juilio addressed genetic considerations and the need for stream-specific natural production attributes. Chris Laskodi discussed the potential supplementation of nutrients to improve RSI effectiveness, though concrete results are yet to be seen.

Mike Orcutt mentioned the regulatory implications and the possibility of NOAA Fisheries requiring consultations or BiOps (Biological Opinions) for RSIs. Justin Ly clarified that a BiOp specifically for RSIs is not anticipated, as it is already factored into the HGMP analysis.

Overall, the discussion highlighted the RSI's potential, operational challenges, site selection criteria, and long-term monitoring and regulatory considerations.

Break

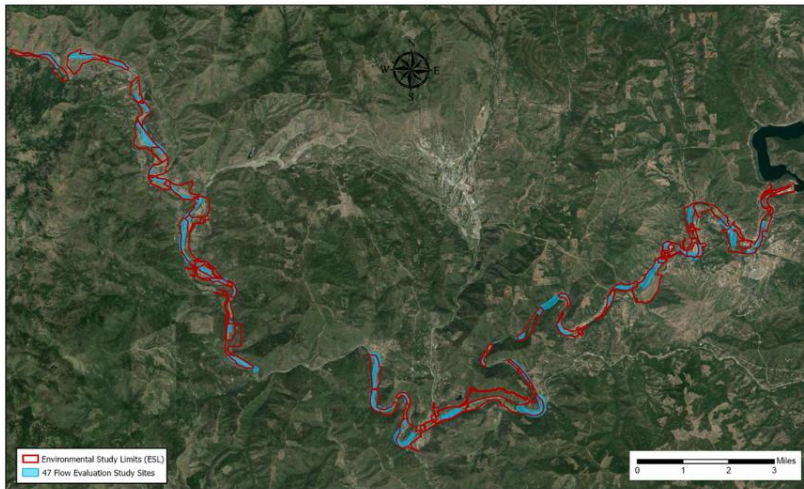
Channel Rehabilitation Site Status and Schedule (Oliver Rogers)

Oliver Rogers presented an update on the status and schedule of channel rehabilitation sites within the TRRP (Trinity River Restoration Program). The presentation provided an overview of the remaining ROD (Record of Decision) sites, focusing on 47 flow evaluation study sites and the overlap with Environmental Study Limits (ESL) developed by design teams. These boundaries can be expanded to access necessary materials like large wood. The update included completed channel rehabilitation and gravel augmentation sites as of May 2024 and outlined future tasks and designated design groups.

Key points discussed:

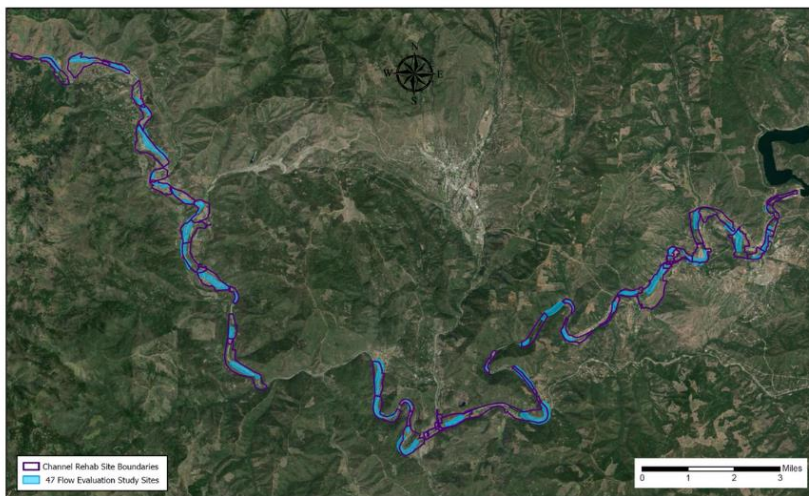
- Sky Ranch requires adaptation due to legislative land transfer constraints.
- Outstanding sites, their status, and designated design groups were highlighted. Sites like Steel Bridge and Poker Bar have been either deemed adequate under existing conditions or restricted by private development, respectively.
- Project scopes are due by the next Design Team meeting on August 15th, with specific design groups assigned to various sites.
- Reclamation's priority sites include Evans Bar, Sky Ranch, and Upper Conner Creek, among others, with varying design statuses.
- Recommendations for improving channel rehabilitation design emphasized clearer linkages between geomorphic settings and project objectives, as well as increased use of large woody material in projects.

TRRP Remaining Channel Rehabilitation Sites



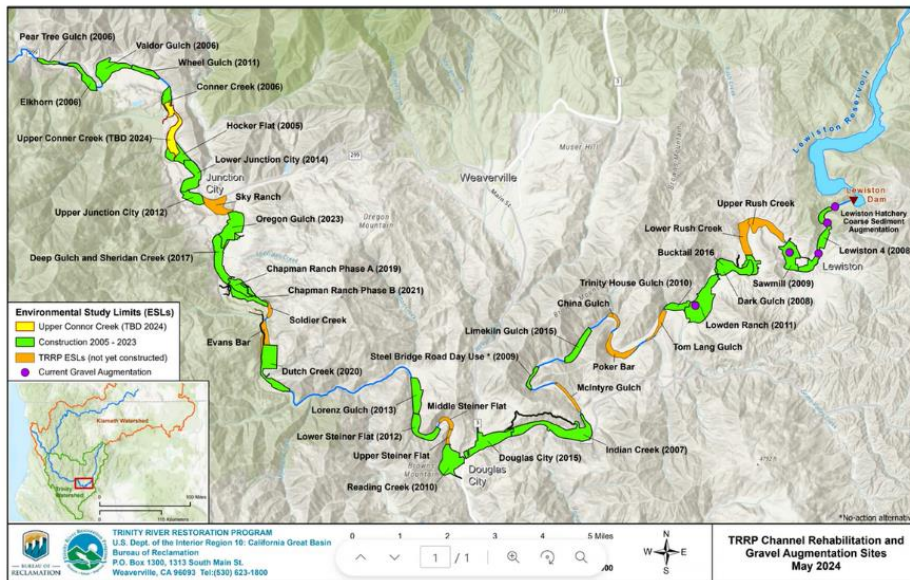
Environmental Study Limits overlap with Flow Study Sites

There are 47 flow evaluation study sites, which are the boundaries analyzed in NEPA SCWA documents. Notably, there is some overlap between these sites. The Environmental Study Limits (ESL) are developed by design teams, who have the discretion to expand these boundaries as needed to access large wood. It's important to note that some areas may overlap and fall outside the ESL.



Channel Rehab Sites overlap with Flow Study Sites

Showcasing the overlap between Channel Rehabilitation Sites and flow study sites, this helps to narrow down the areas for restoration by excluding all access sites. This approach provides a more accurate and relevant selection of locations for restoration efforts.



The above map illustrates the completed work to date. Sky Ranch involves a one-year legislative land transfer (year 6 or 7) and will need to adapt accordingly. Projects were prioritized on public land due to better access and fewer constraints.

Remaining ROD Sites

Status and which design group is designated to move forward. It was acknowledged that several sites have been considered by the Program as either good enough under existing conditions (Steel Bridge) or restricted by private development (Poker Bar), but TRRP needs to do its due diligence and the rationale and decision to be documented in the existing conditions report.

The project scopes are due by next Design Team meeting Aug 15th

- Yurok/State design team – Lower and Upper Rush Creek
- The Hoopa Valley Tribe design group – Upper and Middle Steiner Flat/Soldier Creek. (They are particularly interested in how changes at Chapman Ranch will affect Soldier Creek.
- Federal Team – McIntyre Gulch, Tom Lang Gulch, Poker Bar, and China Gulch
- Yurok/State design team will also finalize a recommendation for Steel Bridge

- The Yurok team will take on the Hatchery scoping.

Remaining ROD Sites

Project Name	RMs	No. of ROD Sites	Design Status
Evans Bar	84.3 – 85.2	1	In Design
Sky Ranch	80.2 – 81.0	2	In Design
Upper Conner Creek	77.4 – 78.2	1	In Design
Sawmill (Gravel Aug. Site)	108.9 – 109.75	0	Potential for future work, but not in active design
Upper Rush Creek	107.8 – 108.8	1**	Potential for future work, but not in active design
Upper Steiner Flat	91.9 – 92.2	0	Potential for future work, but not in active design
Lower Rush Creek	107.1 – 107.8	1	Potential for future work, but not in active design
McIntyre Gulch	97.2 – 98.0	1	Potential for future work, but not in active design
Middle Steiner Flat	91.3 – 91.9	1	Potential for future work, but not in active design
Poker Bar	101.8 – 102.8	1	Not likely to move forward
China Gulch	101.0 – 101.6	1	Not likely to move forward
Soldier Creek	83.7 – 84.2	1	Not likely to move forward
Tom Lang Gulch	103.0 – 103.9	1	Not likely to move forward
		*Not a ROD site	
		** Single Overlapping ROD site	

Recommendations to Improve Channel Rehabilitation Design

1. Making clear linkages between geomorphic trajectory/setting and project objectives and design criteria
2. More clearly linking fish use, hydrologic timing, and geomorphic trajectory to inform designs (As originally recommended by Buffington et al. 2014)
 - Increase the use of large woody material (LWM) in projects.

Public Questions and Comments

No public comments were given.

Questions and Comments of TRRP Entities

No comments were given by TRRP Entities.

TMC Discussion and Decision:

Mike Orcutt discussed addressing the 47 sites identified in the ROD, noting the overlap between some sites and questioning the logic of revisiting them for salmon recovery. He emphasized the importance of TMC input and pondered whether a separate analysis was needed. Orcutt also raised concerns about funding and the status of restoring pre-dam levels.

Oliver Rogers explained that the BOR requested an update to the outdated channel guide from 2011, emphasizing the necessity of revisits. He highlighted access issues, such as the decommissioned road to China Gulch, and discussed the constraints and design philosophies. Rogers mentioned that the Phase 2 review demonstrated the strength of using state-of-the-science design processes.

Radley Ott questioned the priority of revisiting all sites before taking new actions and discussed the original logic behind site selection. He emphasized the need for adaptive management and reevaluating past projects. James Lee also discussed the importance of adaptive management, stressing the need to complete initial goals before reviewing other sites.

Eric Peterson noted that understanding the historical context of the 47 sites in the EIS is important for review and understanding the priorities of channel rehabilitation efforts. He recommended pausing to review and understand the success of channel rehabilitation efforts. Kyle De Juilio emphasized adaptive management and the importance of accurately communicating project successes. He cited the Cooper-Hertel et al. report on habitat capacity (<https://www.trrp.net/library/document/?id=2533>) which indicated that pre-2009 sites did not significantly change habitat relationships with flow.

Additional points were made by Mike Orcutt, who speculated on program directives and emphasized the need for non-negotiable revisits and proper quantification. Oliver Rogers mentioned the accelerated pace of the program and the evolution of design features. Radley Ott advocated for incorporating revisits into evaluations due to improved understanding of habitat and implementation, while Liam Gogan questioned the priority of new projects versus revisiting previous ones, suggesting a cost-benefit analysis.

Bill Pinnix inquired about sites not likely to move forward due to landowner participation and flood impact concerns. Rogers stressed the importance of scoping to determine feasibility and constraints, with existing conditions documents guiding decisions.

The discussion concluded with advocates for a programmatic review and an updated channel design guide. References were made to the need for a living document that incorporates findings from Buffington and interflood reviews, emphasizing the importance of effective monitoring and continuous improvement in channel rehabilitation strategies.

Adjourn

Thursday, June 6th, 2024

(Scheduled from 9 a.m. – 3 p.m. PST)

Welcome, Comments on Non-Agenda Items (Don Bader, Chair)

Attendees on one or both days have been listed previously. Any omission of attendees outside of the TMC is accidental and regretful.

Public Comments

No public comments were given.

Reports and Comments of TRRP entities

Kiana Abel showed meeting attendees how to view detailed information regarding the Science Symposium on the TRRP website, including a detailed overview, biographies of the presenters, as well as video recordings of the event. <https://www.trrp.net/2024-science-symposium/>

TMC Discussion and comments, as appropriate

No comments from the TMC were given.

FY25 Science Proposals Recommendations (Eric Peterson)

Eric Peterson, Science Coordinator, presents the FY 2025 Science Planning slideshow to prepare for the budget. The IDT requested approval for three project proposals:

- BMI Scour and Inundation, pilot long term monitoring (\$316,991)
- Toward Foodscape Modeling (\$0 – TRRP staff time only)
- Riparian Response to Stage Zero (\$231,664)

These proposals are subject to revisions with IDT concurrence.

Science Plan

Step #	Description	Whom	When
1	Confirm Key Uncertainties and determine focus for upcoming funding cycle	IDT	July (of previous fiscal year)

2	Develop specific research questions	IDT with input from SAB	Sept – Oct
3	Develop RFP	EDO supported by IDT + workgroups as needed	Nov – Dec
4	Post RFP	EDO	Jan 1 – Feb 28
5	Evaluation of individual project proposals	Workgroups + SAB	March – April
6	Develop science proposal (i.e., portfolio of projects to fund)	IDT	May
7	Presentation of science proposal	IDT	May
8	Funding decision	TMC	June
9	Contracting	EDO	Oct

BMI Scour Inundation, pilot long term monitoring

- Drafted by Lindke, Laskodi, Som, Naman, and O'Dowd.
- Focuses on colonization and community response to hydrology inundation and scour.
- Two years of sampling intended for long-term monitoring, costing \$316,991 with a completion target of December 2026.
- SAB rated it as the top priority, requiring moderate revision.

Toward Foodscape Modeling

- Developed by Peterson, McSloy, and Buxton.
- Establishes modeling infrastructure for future parameterization with BMI data.
- Will provide outputs on cumulative hectare days of inundation and channel since scour.
- Demonstrated with various hydrographs and targeted for completion by early 2025.
- Rated second among the proposals by SAB, needing moderate revision.

Riparian Response to Stage Zero

- Drafted by Yates, Alvares, and Bair.
- Compares vegetation response at Oregon Gulch with Chapman Ranch and Upper Conner Creek.
- Utilizes hydraulic and TARGETS modeling.
- Costs \$231,664 with a completion target of June 2026.

- Requires major revision, as recommended by SAB and the Physical Workgroup.

IDT's Request of the TMC

The IDT requested that the TMC approve funding of \$548,655, contingent upon the proposals' revision and consensus within the IDT, with budgets adjusted for possible cost savings without significant increases.

Public Questions and Comments

No comments were given by the public.

Questions and Comments of TRRP Entities

No comments were given by TRRP Entities.

TMC Comments

De Julio expressed concerns about the protocol for recused members during proposal approvals. He emphasized the importance of maintaining this practice to ensure consensus within the IDT, especially when presenting proposals for TMC approval.

Lee noted that TRRP office members might not fully grasp the key drivers behind the research questions, urging Eric Peterson to explain the significance of scour inundation, foodscape modeling, and vegetation relevance. Eric clarified that the Benthic Macroinvertebrates proposal addresses critical food availability for young fish, while the modeling proposal aims to forecast food production based on hydrology. He also emphasized the ecological importance of understanding riparian vegetation's interaction with flow regimes.

Orcutt inquired about TMC members attending IDT meetings, expressing concerns about the roles and decision-making processes of the IDT and TMC. Eric explained that IDT comprises representatives from each agency, with coordinators serving as adjunct members. TMC members are welcome to attend meetings, and their participation is essential for addressing significant issues.

SAB reviewed the top three proposals, with Pinnix sharing a link to the TRRP Work Group Manual: <https://www.trrp.net/library/document/?id=2408>. The SAB's role in reviewing and updating the science plan was discussed, with Peterson noting the SAB's engagement in the process. Orcutt highlighted the need for additional focus on construction, limiting factors, and the integration of hatchery and natural populations.

Eric provided a timeline for proposal revisions, indicating that the IDT would review revisions within two weeks, and emphasized the importance of adhering to budget constraints before finalizing funding decisions. The meeting concluded with a consensus on the need for clear communication, thorough review processes, and collaboration among all stakeholders to ensure successful implementation of the FY25 science proposals.

TMC Decision

Motion: Mike Orcutt made a motion to follow the IDT's recommendation to fund the additional three proposed projects up to \$610,000 subject to IDT team review and contingent on their concurrence. The projects proposed include the Restoration Vegetation Diversity (TRRP-2025-1), Benthic Macroinvertebrates (TRRP-2025-2) and Initial Steps to Foodscape Model (TRRP-2025-3).

Second: Radley Ott seconded this motion.

Outcome: The motion passed unanimously with 8 affirmative votes.

USBR: Yes

USFS: Yes

USFWS: Yes

HVTFD: Yes

CNRA-DWR: Yes

TC: Yes

NMFS: Yes

YTFD: Yes

Post-Klamath Dam Removal Chinook Management (Mike Orcutt)

Mike Orcutt discussed the various factors affecting fish populations in the Klamath Basin. Since the late 70s and 80s, Hoopa has been involved in managing ocean fisheries. The PFMC has a fishery management plan for the Klamath, amended in 2016 to incorporate NOAA's harvest control rules. However, only fall Chinook are actively managed, while spring Chinook are not. Data from Klamath and Trinity indicate a combined MS5 value of 47,500 spawners, with TRRP and pre-dam levels targeting 62,000 spawners.

Klamath Dam Removal Recap

The removal of four dams is significant, opening up approximately 400 miles of habitat for Chinook, steelhead, and lamprey, and 70 miles for listed coho. This aims to restore riverine function, though short-term impacts are expected. Challenges include recolonization and the construction of the Fall Creek Hatchery to offset the loss of the Iron Gate Hatchery.



Fall Creek Hatchery Release 2024

- KRFC Production Goal – 3.25 million; 4.1 million actual
- Approx. 830k untagged fry released in late February (high mortality-presumed gas bubble disease)
- Approx. 420k untagged fry to be released March/April
- Approx 1.75 million Chinook smolts, 25% Ad-CWT, release window May 1 – June 15
- Approx. 250,000 Chinook yearlings, 100% Ad-CWT, release window Oct 15 – Nov 20
- Approx 75,000 coho yearlings, 100% Ad-CWT, release window Mar 15 – May 1



2024 Harvest Control Rule Adjustment

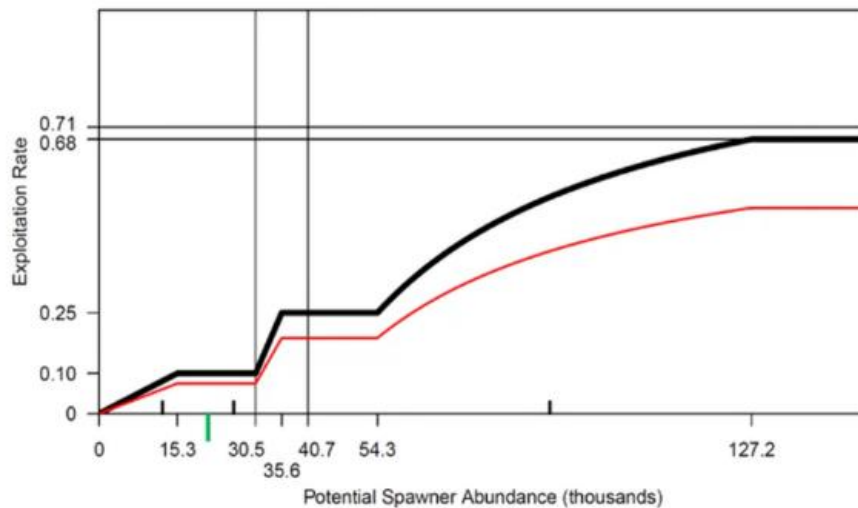


Figure 1. Proposed alternative method for deriving a maximum allowable exploitation rate: The black line is the existing HCR. The red and green line is the proposed alternative method. The alternative method for deriving a maximum allowable exploitation rate equates to a 20% reduction/buffer with 0% exploitation and the removal of de minimis fishery provisions (green line) at 15,300 potential spawners. (The sloping red line between 15.3 and 0 on the horizontal axis would be eliminated.)

Concern: The Pacific Fishery Management Council often lacks adequate fish projections in the ocean, leading to decisions that reduce harvest levels to ensure sustainability. The council recommended reducing ocean exploitation of fall Chinook by 25% to increase their numbers. The main concern was the declining population of upper Sacramento fall Chinook, which prompted efforts to repopulate the Klamath River. This decision aims to put more fish into the river system to support population recovery and ecological balance.

Basin/Management	2024 de minimis KRFC Control Rule	2024 PFMC Adopted 20% Buffer	CFGF Adopted Regulations
Entire Klamath Basin	6,220	4,999	0
Trinity sub-Basin	2,168	1,649	0

The concern about the fish allocations stems from the 1993 solicitor's opinion, which established specific harvest numbers for tribal and non-tribal fisheries in the Klamath Basin. This opinion affirmed that the Hoopa Valley and Yurok Tribes are entitled to harvest quantities of fish necessary to support a moderate standard of living, or 50% of the harvestable share of the Klamath-Trinity basin fishery, whichever is less. Due to the depleted condition of the fishery, this 50% allocation has been insufficient to meet the tribes' needs.

Specifically, the 1993 opinion set allocations of 8,000 fish for non-tribal fisheries and 8,000 for tribal fisheries, with an additional reduction of 6,300 fish. The Trinity Basin, in isolation, cannot produce sufficient fish to meet these numbers, which justifies these allocations. Recent management actions reflect these recommendations, aiming to ensure sustainable fish populations and improve overall fishery health. The State of California has recommended changes to fishery management practices, influenced by these allocations and the ongoing challenges in fish population recovery

Recommendations:

- Data sharing between Limiting Factors and PFMC Dam Removal Workgroup
 - a. MSY vs Habitat Approach
 - b. BOR Involvement in both processes (trinity may have different statutes. Knowledge based papers on fish populations. Getting traction there in ROC. Perhaps we need to separate it out to Trinity.)
- Cohort Reconstruction
- Survival/Mortality by Life stage
- Collaborate on overlapping functions with available personnel

We have 1 year to prepare for the rule adjustment.

Public Questions and Comments

No public comments were given.

Questions and Comments of TRRP Entities

No questions or comments were given by TRRP entities.

TMC Discussion:

During the discussion, Pinnix inquired about the difference between the maximum approach and the other approach. Rictor explained that the stock recruitment model, from which the MS5 value is derived, had findings up to 2005, and the MSY extended it to 2017, resulting in a 3,000 reduction. He mentioned a need to shift towards a more habitat-oriented approach using professional judgment, which the Trinity Basin is already implementing. Pinnix questioned if the habitat could support at least 62,000 fish returning after ocean harvest, to which Rictor confirmed, noting the importance of this in other workgroup meetings.

Lee asked if there would be separate escapements for the Trinity and Mainstem Klamath, with Rictor suggesting that the Trinity Basin might need separate goals, requiring support from California and Oregon. He emphasized today's discussion as a step towards workgroup participation and possible amendments to the fishery management plan.

Pinnix highlighted the need for management table involvement to meet BiOp obligations and ensure fish return to benefit the created habitats. Kormos added clarity on the habitat-based approach for escapement objectives, noting the workgroup's struggle to account for new habitat. He suggested an interim period of 12-15 years to understand new habitat potential and emphasized a tiered approach for fish repopulation.

Orcutt stressed the need for cohort reconstruction for the Trinity, urging cautious progression to determine the benefits of separate management for the Trinity. He also highlighted frustrations related to the sacredness of the Klamath and Trinity Rivers for reservations and people, noting significant concerns about the Keno reservoir's fall Chinook salmon and fish passage issues.

Orcutt discussed the reintroduction of fall Chinook in the Trinity River as a surrogate for experiments, emphasizing the need for a similar approach with RSI projects and highlighting the importance of the ad hoc workgroup led by Mathew Strickler for consultation efforts.

Lee asked about the subcommittee members, with Steve Gough mentioning nonvoting members and the necessity of sending knowledgeable reclamation people to prevent information isolation. This will be addressed in the next June work-group meeting.

Ryan inquired about NOAA representation for NFFC, noting their significant role and office in Portland. She emphasized NOAA's involvement and the need to tap into their expertise, with Michael Wilferrel as the chairperson.

FY25 Budget Proposal (James Lee)

James Lee presents the proposed FY25 Budget. A copy of the FY25 Executive Director's Budget Narrative was provided online and in person. This document was prepared by Mike Dixon in collaboration with auditors.

Annual Costs Summary by TRRP Program Activity	2023	2024 Working	2025 Proposed
Program Administration	\$ 3,676,752.34	\$ 2,470,817.75	\$ 3,091,180.90
Rehabilitation Implementation	\$ 5,107,455.23	\$ 9,522,208.24	\$ 5,710,362.20
Science Program <i>-includes FWS tribal funds transferred to TRRP/USBR</i>	\$ 4,864,326.24	\$ 4,940,492.04	\$ 5,193,232.09
TOTAL <i>(doesn't include FWS salary/ops funds retained at FWS)</i>	\$ 13,648,533.81	\$ 16,933,518.03	\$ 13,994,775.19

TMC TRRP Annual Funding <i>(doesn't include FWS salaries/operations funds retained at FWS):</i>	2023	2024 Working	2025 Proposed
USBR (Water & Related A30 funds) <i>Any recovered funds are included here</i>	\$ 11,207,000.00	\$ 11,295,883.49	\$ 12,265,000.00
USBR (CVPIA H37 funds)	\$ 1,500,000.00	\$ 3,475,000.00	\$ 1,500,000.00
USBR (BIL ecosystem restoration)	\$ 454,000.00	\$ 1,768,150.00	\$ -
FWS* <i>- annual transfer to TRRP/USBR for specific tribal projects</i>	\$ 505,119.00	\$ 525,000.00	\$ 350,000.00
TOTAL	\$ 13,666,119.00	\$ 17,064,033.49	\$ 14,115,000.00

* FWS annual funds transferred to TRRP/USBR for Tribal monitoring/survey projects.

FY25 Budget Priorities

The appropriated portion of the TRRP operating budget has been proposed for a modest increase from FY24; the TRRP anticipates approximately \$12.3 million of Water and Related Resources funding. FWS funding for tribal outmigrant monitoring tasks is projected to be somewhat lower this year, though the final amount they contribute will not be known until September. On the balance, the TRRP's planned budget is about \$800k higher than FY24, though much of this is consumed by year-on-year cost increases.

The following is a narrative to accompany the FY25 TRRP budget recommendation spreadsheet. It has been developed following extensive discussions with partners, internal program staff deliberations, midterm projections in implementation priorities, and has incorporated previous discussions of program priorities from recent fiscal years.

It should be noted that the three categories within the budget (Administration, Implementation, and Science and Monitoring) are arbitrary and are included solely for familiarity because of how past budgets have been prepared. They do not reflect any strict lines of overhead vs. restoration activities vs. science. For example, much of the "Technical Assistance" funding on the Admin page reflects science support and workgroup participation (including Design Team) by agency staff; and the costs included in both the Implementation and Science pages include significant overhead costs associated with positions and projects which would logically be considered Admin. Further, costs have frequently been moved between these subjective categories, so the reader is strongly cautioned against trying to compare the relative amount of the budget going to Admin, Implementation, and Science and Monitoring within or between years.

The budget, as proposed, identifies largely status-quo funding for Administration, status quo funding for Implementation tasks (except as described below), and status quo funding for Science tasks except for the additional projects proposed under the FY25 Science Request for Proposals. The proposed budget includes assumptions about costs of key tasks based on year-

adjusted prior year costs; actual funding amounts may vary based on staff salary adjustments, indirect and fringe rate changes, and other cost changes. As such, the proposal before the TMC is to approve these items as priorities in principle, with the acknowledgment that final numbers may differ from what is listed in the initial budget. Any savings from lower-than-anticipated operating costs would be redirected to the Implementation activities such as gravel processing or repairing the breach in the Sawmill side channel; alternatively, if the land exchange happens and NEPA is completed, a phased implementation of the Sky Ranch channel rehabilitation project could be initiated.

PROGRAM ADMINISTRATION		2023 Approved	2024 Working	2025 Proposed
TRRP Administration Personnel				
TRRP Program Office Personnel ED, Secretary, Grants and Agreements Specialist		\$ 581,399.00	\$ 610,469.00	\$ 670,113.00
	Subtotal	\$ 581,399.00	\$ 610,469.00	\$ 670,113.00
TRRP Administration				
TRRP Program Office Operations (TRRP office rent, vehicles, utilities, supplies, RO contracting, NCAO)		\$ 317,232.00	\$ 333,094.00	\$ 346,417.76
TMC Notetaker - TRRP contract		\$ 18,307.20	\$ 23,558.52	\$ 25,236.54
Public Education and Outreach/Website - TCRCO Work expands community knowledge of Program and educates schoolchildren, promoting environmental stewardship with a goal of improving support/success of restoration efforts.		\$ 107,359.26	\$ 109,836.23	\$ 110,340.38
Headwaters Refinements Contract - Extension		\$ 22,160.00	\$ -	\$ -
	Subtotal	\$ 465,058.46	\$ 466,488.75	\$ 481,994.68
Technical Assistance				
Hoopa Valley Tribe -AFA		\$ 499,927.09	\$ 649,288.00	\$ 540,721.14
Yurok Tribe-AFA		\$ 557,703.17	\$ 744,572.00	\$ 603,211.75
CA Dept of Water Resources - FA		\$ 300,000.00	\$ -	\$ 150,000.00
CA Dept of Fish & Wildlife - FA		\$ 536,954.50	\$ -	\$ 290,149.97
NOAA Fisheries - IA		\$ 310,545.12	\$ -	\$ 162,686.36
Forest Service - IA		\$ 89,290.00	\$ -	\$ 46,000.00
Trinity County Technical Assistance (TRRP grant, floodplain development permit, FEMA)		\$ 335,875.00	\$ -	\$ 146,304.00
	Subtotal	\$ 2,630,294.88	\$ 1,393,860.00	\$ 1,939,073.22
TOTAL PROGRAM ADMINISTRATION		\$ 3,676,752.34	\$ 2,470,817.75	\$ 3,091,180.90

2-year funding, FY23 and 24

Yellow Highlight are Changes from last TMC meeting

Administrative Budget

TRRP Program Office Personnel

The funding level proposed assumes that the Executive Director, Secretary, and Grants and Agreements Technician positions are encumbered for the full year.

TRRP Administration

TRRP Office Operations

Proposed based on multi-year averages and projection of costs for lease, utilities, fleet, and other nonstaff overhead costs.

TMC Notetaker

Having an objective, professional notetaker is invaluable for adequately documenting our deliberations and maintaining transparency. A contract for a new notetaker should be awarded very soon, if not by the June TMC meeting. This estimate assumes four in-person TMC meetings and eight monthly meetings.

TCRCD Outreach Grant

This long-running grant promotes the program's image in the community, provides valuable environmental education, and significantly streamlines our communications (e.g. NEPA mailings, newspaper ads). Since the start of the new 5-year grant and following turnover at the RCD, the RCD staff have stepped up their game substantially, and recent outreach events have been overwhelming successes. Mike Dixon proposes to fund this fifth and final year of the grant. The TMC will discuss a successor grant during development of the FY26 budget.

Technical Assistance

This line funds the participation in program activities by staff from across the TMC agencies. The proposed budget for these lines is flat with the FY24 costs (which were forward funded in FY23) plus year-on-year increase. Some of the costs noted are actual amounts from multiyear agreements, while the two tribes are scaled costs based on FY24 because new multiyear agreements for those entities still need to be negotiated.

Commented [LK3]: @Aspen Howard is this still James Lee talking? I think it would be good to clarify who "I" is

Commented [AH4R3]: It was the excerpt that Mike Dixon wrote about the budget - I changed it to match that.

IMPLEMENTATION BUDGET		2023 Approved	2024 Working	2025 Proposed
Implementation Personnel				
TRRP Program Office Personnel (Implementation Branch Chief, Public Affairs Specialist, Civil Engineer, CE Tech (1), Natural Resource Specialist)		\$ 462,266.00	\$ 1,095,318.00	\$ 1,158,677.00
	Subtotal	\$ 462,266.00	\$ 1,095,318.00	\$ 1,158,677.00
Miscellaneous				
FEMA/Flood Compliance Updates - Denver TSC		\$ 45,000.00	\$ 45,000.00	\$ 45,000.00
River Acres House Purchase & Removal		\$ 530,000.00	\$ 75,918.00	\$ -
Realty Acquisitions (Easements, material storage)		\$ -	\$ 17,671.80	\$ 20,000.00
	Subtotal	\$ 575,000.00	\$ 138,589.80	\$ 65,000.00
Planning				
NEPA/CEQA Compliance/Permits/ (TRRP contract: wetland delineation, bird surveys, native seed, cultural res surveys)		\$ 210,058.00	\$ 218,460.32	\$ 227,198.73
Revegetation Supply TRRP contract: native seed, native grass hay, plants		\$ 121,479.00	\$ 125,124.00	\$ 130,128.96
BLM Technical Assistance - IA (NEPA, permits)		\$ 176,340.45	\$ -	\$ 90,824.31
Geo-Phys Support Services (Aerial photography, boundary surveys, bathymetry and lidar, topography)		\$ 42,422.81	\$ 129,579.00	\$ 134,762.16
	Subtotal	\$ 550,300.26	\$ 473,163.32	\$ 582,914.16
Design and Support Services				
Hoopa Valley Tribe Support Services		\$ 150,903.00	\$ 9,080.00	\$ -
Yurok Tribe Support Services		\$ 250,000.00	\$ -	\$ -
TSC Modeling Support		\$ 53,136.00	\$ 40,000.00	\$ 40,000.00
	Subtotal	\$ 454,039.00	\$ 49,080.00	\$ 40,000.00
Construction				
Construction Projects		\$ 2,027,566.00	\$ 6,111,202.12	\$ 3,150,000.00
Construction Large Wood Supply YT		\$ 250,000.00	\$ 250,000.00	\$ 250,000.00
Construction Inspector		\$ -	\$ -	\$ -
Value Engineering Study - Reclamation requirement		\$ 7,360.00	\$ -	\$ -
Sediment Augmentation YT		\$ -	\$ 143,554.00	\$ 149,296.16
Coarse Sediment Processing/Placement YT		\$ 177,000.00	\$ -	\$ 200,000.00
Revegetation Maintenance/Irrigation-HVT		\$ 103,923.97	\$ 110,072.00	\$ 114,474.88
Systemic Riparian Mapping Project HVT (Funded Every 5 Years)		\$ -	\$ 151,229.00	\$ -
	Subtotal	\$ 2,565,849.97	\$ 6,766,057.12	\$ 3,863,771.04
Watershed Implementation				
Watershed Grants		\$ 500,000.00	\$ 1,000,000.00	\$ -
	Subtotal	\$ 500,000.00	\$ 1,000,000.00	\$ -
TOTAL IMPLEMENTATION BUDGET		\$ 5,107,455.23	\$ 9,522,208.24	\$ 5,710,362.20

2-year funding, FY23 and 24

Yellow Highlight are Changes from last TMC meeting

Budget balancer

Implementation Budget

TRRP Program Office Staff

This funding level assumes the positions of Implementation Branch Chief, Public Affairs Specialist (Outreach Coordinator), Civil Engineer, Civil Engineering Technician, and Senior Natural Resource Specialist (Compliance) are encumbered, and assumes we continue to hold vacant the second CE Tech.

Miscellaneous

FEMA/Flood Compliance Updates

This flood mapping is performed by the Denver Technical Service Center to prepare for submission of pre- and post-project compliance documentation to FEMA and the county floodplain administrator.

Realty

Temporary access agreements will only be required if we commence work at the Sky Ranch site. The figure shown is a placeholder.

Planning

NEPA/CEQA Compliance/Permits

This funds a contractor to perform biological and cultural field surveys and develop permitting packages for future projects. The existing contract will expire just before the end of FY24, so the cost proposed is an estimate for a new contract.

Revegetation Supply

This optional task associated with the environmental support services contract described above allows for advance ordering of container stock, native grass seed, straw, and other revegetation materials in advance of channel rehabilitation revegetation work.

BLM Technical Assistance

This task funds participation by BLM technical specialists in program activities, primarily compliance for restoration work on BLM-administered public lands. The BLM has used our funds judiciously and is a key partner in our work.

Geophysical Support Services

This broad category funds annual aerial photography, boundary surveys, post-construction as-built surveys, and large-area remote sensing data collection. The estimate shown here is to fund annual 40-mile aerial photography and as-built surveys for channel rehabilitation.

Design and Support Services

The need for design support services in the coming year is uncertain. \$40k is proposed to be added to our general Technical Service Center modeling support agreement. This task allows us

to lean on technical specialists in that office in support of a suite of research and modeling program activities.

Construction

Construction Projects

Once again, we propose to use the Construction Project task as the balancer for the budget due to its scalability. Accordingly, we propose the following ranked priorities for funding in FY25:

1. In the event that NEPA has been completed for the Sky Ranch Channel Rehabilitation Project, a first phase of implementation of that project would be pursued.
2. If the Sky Ranch project cannot be implemented, repair of the side channel breach and bulk excavation and processing of sediment at Sawmill.
3. Subject to funding and permitting, we would also pursue implementation of one or more process-based restoration projects in key tributaries, likely in the Weaver Creek or Deadwood Creek basins.

Large Wood Supply

The purpose of this task is to procure large wood for habitat installation in the following fiscal year. We will require large wood per the design of the upcoming Sky Ranch project.

Construction Inspector

TRRP office implementation staff should be able to cover the on-site government inspector role in the coming fiscal year, so paying for an inspector from the Willows Construction Office or Northern California Area Office should not be necessary.

VE Study

The next projects in queue for implementation (Upper Connor Creek, Sky Ranch, Sawmill Close-Out) have all had VE studies, so we do not anticipate needing a VE study this FY.

High Flow Gravel Augmentation

Funding for placement of gravel is required this FY.

Coarse Sediment Processing/Placement

The supply of processed gravel is largely depleted, so we will need to process gravel this FY. Funding proposed herein would begin replenishing that supply.

Revegetation Maintenance/Irrigation

We conduct three years of post-project irrigation and maintenance of plantings at channel rehabilitation sites. In FY25 we will irrigate this year's Upper Connor Creek site.

Systemic Riparian Mapping

This required monitoring project recurs at five-year intervals; it was funded in FY24.

Watershed Implementation

Our NFWF watershed grant is fully funded and subawards are awarded or in process for several projects. As described above in Construction Projects, we may pursue direct funding of beaver dam analogs in key tributaries. If we can get design and NEPA for one or more sites completed, those projects would be added to this category and funded out of the construction project balancer.

Lunch

SCIENCE AND MONITORING BUDGET	2023 Approved	2024 Working	2025 Proposed
Science Program Support			
TRRP Program Office Personnel (BOR) (Science Coordinator, Data Steward, Physical Scientist, NRS)	\$ 940,652.00	\$ 987,685.00	\$ 1,056,965.00
TRRP Program Office Personnel (HVT) - Riparian Ecologist	\$ 157,948.45	\$ 201,871.00	\$ 170,837.04
TRRP Program Office Personnel (YT) - Fish Biologist	\$ 124,714.64	\$ 184,133.00	\$ 134,891.35
External Peer Review Contract (DOI BPA)	\$ -	\$ -	\$ -
SAB Participation (currently 5 SAB members)	\$ -	\$ 135,015.00	\$ 131,282.00
TRRP-2018-036: Stream Gaging BOR Region Contract	\$ 235,900.00	\$ 237,720.00	\$ 237,720.00
Sub-total	\$ 1,459,215.09	\$ 1,746,424.00	\$ 1,731,695.39
Status and Trend Monitoring <i>doesn't include FWS** salaries</i>			
TRRP-2018-001: Chinook Run-Size Est.(CDFW, HVT)	\$ 514,229.22	\$ 475,966.00	\$ 490,962.14
California Department of Fish and Wildlife	\$ 443,059.92	\$ 404,250.00	\$ 416,377.50
Hoopa Valley Tribe	\$ 71,169.30	\$ 71,716.00	\$ 74,584.64
TRRP-2018-034: Chinook CWT-Fall Chinook (HVT)	\$ 303,804.85	\$ 315,957.04	\$ 328,595.33
TRRP-2018-004: Fall Run Scale Age (HVT, YT)	\$ 170,283.59	\$ 346,544.00	\$ 267,859.64
Hoopa Valley Tribe	\$ 116,091.29	\$ 178,116.00	\$ 127,727.54
Yurok Tribe	\$ 52,192.30	\$ 168,428.00	\$ 140,132.10
TRRP-2018-012: Outmigrant Monitor HVT, YT, FWS**	\$ 795,259.00	\$ 849,052.00	\$ 883,014.08
Hoopa Valley Tribe	\$ 429,087.05	\$ 449,873.00	\$ 467,867.92
Yurok Tribe	\$ 366,171.95	\$ 399,179.00	\$ 415,146.16
TRRP-2018-026: YT Harvest (Lower Klamath) (YT)	\$ 188,710.99	\$ 337,179.00	\$ 204,109.81
TRRP-2018-006: HVT Harvest (Lower Trinity) (HVT)	\$ 115,072.30	\$ 142,747.00	\$ 124,462.20
TRRP-2018-014: Monitor redd distribution, abundance and densities CDFW, YT, HVT, FS, FWS**	\$ 222,727.92	\$ 343,575.00	\$ 286,010.97
California Department of Fish and Wildlife	\$ 47,693.10	\$ 93,877.00	\$ 96,693.31
Yurok Tribe	\$ 79,293.51	\$ 160,183.00	\$ 85,763.86
Hoopa Valley Tribe	\$ 95,741.31	\$ 89,515.00	\$ 103,553.80
Forest Service (covered under technical assistance)	\$ -	\$ -	\$ -
TRRP-2018-010: Lower Klamath Creel Survey CDFW	\$ 100,000.00	\$ 147,967.00	\$ 152,406.01
TRRP-2018-005: Sport Harvest/Trinity Creel HVT	\$ 98,429.66	\$ 119,081.00	\$ 106,461.52
Sub-total	\$ 2,508,517.53	\$ 3,078,068.04	\$ 2,843,881.70
Effectiveness Monitoring & Other			
TRRP-2018-035: Channel rehab habitat effectiveness monitor(40 mile model support) YT, HVT, TRRP TSC,	\$ 70,348.81	\$ -	\$ -
TRRP Reclamation TSC	\$ -	\$ -	\$ -
Yurok Tribe	\$ 70,348.81	\$ -	\$ -
Hoopa Valley Tribe	\$ -	\$ -	\$ -
TRRP-2022-5: Improvements to RBM10	\$ -	\$ 96,000.00	\$ -
TRRP-2023-1: Chinook egg survival	\$ 172,292.00	\$ -	\$ -
TRRP-2023-2: Hyporheic flow and macroinverts YT	\$ 222,778.00	\$ -	\$ -
TRRP-2023-3: Lewiston Reservoir Temp Study YT	\$ 87,287.00	\$ -	\$ -
TRRP-2023-4: Evolution of Stream Morphology YT	\$ 45,200.00	\$ -	\$ -
TRRP-2023-X: Cohort reconstruction model support	\$ 40,000.00	\$ -	\$ -
TRRP-2023-X: Bed surface grain map	\$ 138,339.00	\$ -	\$ -
TRRP-2024-X: Limiting Factors Analysis	\$ 40,000.00	\$ -	\$ -
TRRP-2025-1: Restoration vegetation diversity	\$ -	\$ -	\$ 231,663.00
TRRP-2025-2: Benthic macroinvertebrates	\$ -	\$ -	\$ 385,992.00
TRRP-2025-3: Initial steps to a foodscape model	\$ -	\$ -	\$ -
TSC Sediment transport modeling	\$ 10,000.00	\$ 20,000.00	\$ -
Sub-total	\$ 896,593.62	\$ 116,000.00	\$ 617,655.00
Total Science Budget	\$ 4,864,326.24	\$ 4,940,492.04	\$ 5,193,232.09
Yellow Highlight are Changes from last TMC meeting			

Typo on 316,991.00 figure for TRRP-2025-2 benthic macroinvertebrates. Difference hasn't been assigned, but it would go to a balancer and different other projects.

Science and Monitoring Budget

Science Program Support

Program Office Personnel (BOR)

The number assumes that the Science Coordinator, Data Steward, Physical Scientist, and a Natural Resource Specialist (GIS support) are fully encumbered. The Data Steward position is currently vacant; it is uncertain if it will be encumbered at the beginning of the fiscal year. It will be solicited as a ladder position, so the actual cost of that position would also be dependent on the performance level at which the selectee is hired.

Program Office Personnel (HVT)

We will continue to require riparian ecology expertise for science & monitoring, revegetation design, and compliance support in the coming year.

Program Office Personnel (YT)

We will continue to require fish biology expertise for science & monitoring, flow management, channel rehab design, and compliance support in the coming year.

SAB

This is the cost of funding our SAB agreements for this year.

Stream Gaging

This is an intra-agency agreement Reclamation holds with USGS to fund gaging in the Trinity River watershed. The gage network underwent an internal review by the workgroups in 2018.

Status and Trend Monitoring

These projects are proposed for funding at FY24 levels adjusted for year-on-year cost increases. No changes to these existing projects are proposed at this time.

Effectiveness Monitoring & Other

These two projects (which will be presented on June 6) were solicited through the FY25 Science Request for Proposals. They were reviewed by the technical workgroups and reviewed and ranked by SAB. Subject to the principal investigators adequately responding to comments, I propose funding both projects. A third project is also recommended for implementation but will be completed solely with in-kind labor and thus will not require additional funds.

Public Questions and Comments

No comments were given.

Questions and Comments of TRRP Entities

No comments were given.

TMC Discussion and Comments

Orcutt raised concerns about the addition of new positions or the lack of filling vacant positions, noting inconsistencies in the selection process over the years. Lee confirmed no new positions

Commented [LK5]: @Aspen Howard what does this word mean?

Commented [AH6R5]: Gage means an instrument or device used to measure the level, flow, or discharge of water in rivers. I've seen it spelled gauge as well, but they had it spelled as gage in the meeting... Unsure of which is correct.

have been added, aligning with the Science plan for roles like a hydrogeologist and data steward. Hadley mentioned numerous vacancies in 2023 without adding new Full-Time Equivalents (FTEs), attributing budget increases to inflation. The Forest Service noted constraints on their ability to fill positions.

Orcutt also expressed concerns about the spring Chinook and fall releases, noting no recent action on this newer concern. Lee suggested discussing the issue offline with Elizabeth Hadley, acknowledging it as an artifact of identification and processing of fish.

Morgan Knechtle from CDFW mentioned coordinating with their fish health lab for in-season fish health assessments for adult spring Chinook monitoring. Gogan highlighted the issue of large-scale sediment displacement in rivers and the potential harm to fish from emergency flow management. He suggested technical workgroups explore solutions, emphasizing the importance of being prepared for events like the North Fork incident.

De Juilio supported active flow management in sync with environmental conditions but cautioned against overemphasizing adult fish flows. He stressed the importance of managing flows throughout all life stages of salmon, noting that eggs and juveniles are particularly vulnerable. He advocated for real-time flow management and monitoring to support a holistic approach to river health.

De Juilio also stressed the need for high turbidity monitoring stations to capture events and assess impacts on fish, pointing out the lack of such stations since funding cuts in 2018. Gogan agreed, emphasizing the need to understand and mitigate turbidity impacts on fish. Pinnix confirmed that the TMC had cut funding for turbidity monitoring in 2018 for budgetary reasons and mentioned the need for a contract with USGS to restart it.

TMC Motion

Motion: Mike Orcutt made a motion to approve proposed FY 25 budget except for the 3 IDT-recommended science proposals (TRRP 2025-1, 2, and 3)

Second: Radley Ott seconds this motion.

Outcome: The motion passes unanimously with 8 affirmative votes.

USBR: Yes

USFS: Yes

USFWS: Yes

HVTFD: Yes

CNRA-DWR: Yes

TC: Yes

NMFS: Yes

YTFD: Yes

TMC Bylaws Regarding Executive Sessions (Don Bader)

Don Bader led the meeting, referencing Section 600(d) of the TMC bylaws. The agenda item aimed to clarify the purpose of executive sessions and the process for calling one.

Public questions and Comments

No public comments were given.

Questions and Comments of TRRP Entities

No questions or comments were given by TRRP Entities.

TMC Discussion & Motion

Motion: Kyle De Juilio made the motion to replace Section 600(d) of the TMC bylaws with: “All regularly scheduled and special meetings of the TMC shall be open to the public except executive sessions. Executive sessions shall be comprised of one representative per TMC entity and invitees of the chair. Executive sessions shall be limited to issues related to contracts, personnel, legal matters, or other sensitive matters as determined by the TMC. The request for a specific executive session will be clearly proposed via a motion and voted to proceed by the TMC in accordance with Sections 603, 604, and 605.”

Second: Justin Ly seconds this motion.

Friendly Amendment: Mike Orcutt recommended “All regularly scheduled and special meetings of the TMC shall be open to the public except executive sessions. Executive sessions shall be comprised of one representative per TMC entity and invitees. Executive sessions shall be limited to issues related to contracts, personnel, legal matters, or other sensitive matters as determined by the TMC. The request for a specific executive session (including invitees) will be clearly proposed via a motion and voted to proceed by the TMC in accordance with Sections 603, 604, and 605.”

Friendly Amendment Acceptance: Kyle de Juilio and Justin Ly accept the friendly amendment.

Outcome: The motion passes unanimously with 8 affirmative votes.

USBR: Yes

USFS: Yes

USFWS: Yes

HVTFD: Yes

CNRA-DWR: Yes

TC: Yes

NMFS: Yes

YTFD: Yes

Orcutt emphasized that he's never had the full capability to have an executive session on a specific issue at hand, despite his view of calling an executive session to be simple. He noted that there was a planned executive session that was pulled from the agenda in the past.

De Julio emphasized the underutilization of executive sessions, advocating for transparency and appropriateness in their use.

Gogan requested that decision/action items be given well in advance to give representatives enough time to prepare and review.

A complete version of the TMC Bylaws can be found by following the link below:
<https://www.trrp.net/library/document/?id=2616>

Break

Winter Flow Variability Planning (Radley Ott)

The final topic of the quarterly meeting was a discussion titled, Winter Flow Variability Planning and was brought by TMC member Radley Ott, who serves in the seat for California Natural Resources Agency. The discussion centered around the desire from technical groups and the public, who have expressed the need for advanced planning regarding water management. These groups were looking to the TMC for guidance on how Water Year '25 would be managed with the knowledge that the management council was not able to pass a flow recommendation to the Department of the Interior in Water Year '24. The council decided on creating a timeline for proposals that would include both limitations as well as implementation.

Public Questions and Comments

No public comments were received.

Questions and Comments of TRRP Entities

Patrick Flynn suggested that the FWG should be able to make decisions by mid-July, allowing time for thorough evaluation and meaningful recommendations.

Ken Lindke differentiated between hydrographs and recommendations or conditions, noting that recommendations require more time for evaluation.

TMC Discussion and Decision

Don Bader noted that the Flow Workgroup (FWG) proposed the hydrograph in September. Ken Lindke suggested mid-July as a suitable timeframe for accepting hydrographs and making recommendations, with guidelines ready by December. Eric Peterson explained that the FWG typically identifies primary concerns for the year's hydrograph in September and questioned the feasibility of having proposed hydrographs ready by July. He supported the idea of the FWG providing winter flow hydrographs, with the TMC deciding on adoption in September.

Patrick Flynn recommended a cutoff of July 19 for alternative hydrographs, allowing the FWG 45 days to review and make recommendations. He emphasized the need for adequate time to mobilize resources and make informed decisions.

Mike Orcutt expressed concerns about moving the timeline up by six months, emphasizing the need for thorough planning and decision-making. He highlighted legal and administrative changes and advocated for additional discussions on influencing management strategies and ensuring compliance with the law. He also pointed out the potential risks and benefits of implementing winter flows.

Kyle De Juilio stressed the importance of understanding water management for the entire year and informing the public accordingly. Vicky Ryan supported vetting the hydrographs by September to ensure a common understanding and clear management direction.

De Juilio agreed that developing hydrographs should be a priority and emphasized the importance of having a clear flow schedule by the beginning of the water year.

Bader reiterated the importance of implementing winter flows and mentioned the benefits observed in past years.

Motion: Radley Ott made the motion: Any alternate hydrographs for WY 2025 winter flow variability to be submitted to the Flow Workgroup by 19 July and any other specific recommendations or conditions on flow be submitted to the Flow Workgroup by 16 August.

Second: Keli McElroy seconded the motion.

Friendly Amendment: Kyle De Juilio made the amendment: Any recommendations or conditions for WY 2025 flows between 01 Oct and 15 April be submitted to the Flow Workgroup by 19 July and any specific hydrographs are to be submitted to the Flow Workgroup by 9 August.

Friendly Amendment Acceptance: Radley Ott and Keli McElroy concurred.

Outcome: The motion passes with 7 affirmative votes and 1 negative vote.

USBR: Yes

USFS: Yes

USFWS: Yes

HVTFD: No*

CNRA-DWR: Yes

TC: Yes

NMFS: Yes

YTFD: Yes

*Orcutt voted no because concurrence issue is still outstanding.

Topics for Next Quarterly TMC Meeting

- Kyle De Juilio suggested a placeholder for presenters who discussed the effects of the Winter Flow release in 2023 to redo their presentation and show this year's flow release effects for comparison. This is based on availability of presenters.
- Kiana Abel proposed that Forest Service and tribal representatives present on the interconnection between fish and fire ecology.
- The quarterly TMC meeting in September will be hosted by the Fish and Wildlife Service. The meeting location will presumably be the Arcata office, located at 1655 Heindon Road, Arcata, CA 95521. The address is subject to change before the meeting,

Adjourn