



Trinity River Restoration Program

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NC-152

MEMORANDUM

To: Trinity Management Council

From: Mike Dixon, Executive Director
Trinity River Restoration Program

Subject: Director's Report

Date: March 15, 2024

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. A study plan was completed for the Limiting Factors Analysis. The rotary screw traps are monitoring our outmigrants. A contract to remove the River Acres house was awarded and demolition is imminent. Contracts with new SAB members are finally in place.

Organizational Updates

- The Public Affairs Specialist (GS 7/9/11) was advertised in February and a selection was made. We are happy to announce that Kiana Abel, the TRRP Secretary, has accepted a promotion into this position starting March 24. Kiana has already been carrying out many of these duties during and since her developmental detail in this position.
- The Science Coordinator position opened in January. Virtual interviews were held and in-person interviews will be conducted shortly.
- Elliot "Slippery Otter" Sarnacki has completed training and is now a DOI licensed uncrewed aerial system pilot. The program office is purchasing a mid-tier UAS that will be used for photogrammetry and aerial photography sometime this spring; these resources will be available to program partners for restoration-related purposes.

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 planned project for 2024 will be constructed over two-plus years and is thus scalable. We're getting closer to clarity on how much channel rehabilitation work will be funded now that the River Acres demolition is complete. The remaining budget unknowns for this year (which will drive the scale of channel rehabilitation work this year) are:

- The cost of the adult Chinook limiting factors analysis (which will be driven by the TMC's decision on that topic in the March meeting).
- The amount of Bipartisan Infrastructure Law funding that is ultimately awarded for channel rehabilitation in FY24 vs FY25.
- The possibility of Inflation Reduction Act funding for channel rehabilitation work.

A copy of the working budget is attached to this report.

Implementation Updates

Sky Ranch Channel Rehabilitation Site: The design is at 60% and the VE study was completed; and a right-of-entry with the private landowner was established. The timeline for the land transfer between USFS and BLM was extended and is now 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 2026 or 2027. 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. Designers and TRRP staff met with residents located in the ESL in October to discuss their concerns with a project.

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 May 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. Current TRRP funding allows for a two-year implementation schedule; however, other funding sources are being sought and the Yurok Tribe Construction Corporation is agreeable to a one-year implementation schedule if sufficient funding is acquired. Regardless of funding secured in FY 2024, substantial revegetation work would be conducted in FY 2025. A landowner did not grant permission to implement a portion of a feature (R-4) on their property in the downstream portion of the project, so this feature was modified to build the portion on BLM land. This project involves moving a heavily used river access from its current location on private property 150 m upstream to BLM land, and build a parking area and access road. The construction sequence was designed to minimize disruption to boaters who use this area for launching and retrieving boats. A meeting was held with river guides in early February to solicit their input on the river access improvement. BIL funds are available for constructing a vault toilet at the river access site and BLM has agreed to maintain the facility.

EA Development

- Upper Conner Creek and Sawmill Environmental Assessment (EA)

The cultural resources report for the EA remains to be completed and is necessary for BLM to complete their review. An open house is scheduled for March 19 with the intention of simultaneously opening the public comment period. The public comment period will be open for one month, and a FONSI should be ready by late April.

- Gravel and Wood Augmentation EA

Public comments were addressed and the EA will be completed after tribal consultation and State Historic Preservation Office (SHPO) review is complete. This EA is expected to be ready well before any WY 2025 gravel and wood augmentation projects are planned.

- Watershed Programmatic EA

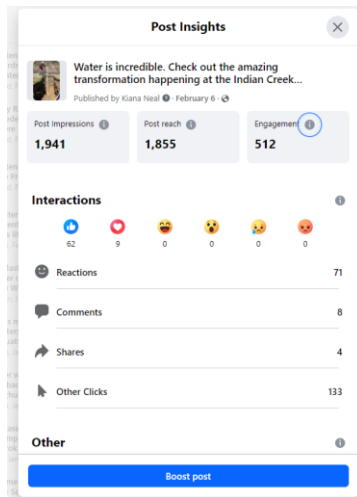
A draft of the first three chapters is complete. The fisheries, terrestrial wildlife, and botany reports are in review. The public comment period could potentially be as early as late April or early May depending on partner agency review of the draft documents.

Public Outreach Update

Publications and Education Materials:

River Riffle

- January
 - **Program & Implementation Branch Update**
 - **Article:** [Algae, Food-Webs, and Flows](#)
 - **Trinity River Watershed Plant Spotlight:** [Water Fern](#)
 - [Upcoming Events](#)
- February
 - **Trinity River:** Current Conditions
 - **Implementation Branch:** Proposed Restoration Activities
 - **Featured Article:** [Sediment, the Building Blocks of the Trinity River](#)
 - **Trinity River Watershed Animal Spotlight:** [Freshwater Mussels in the Trinity River](#)
 - [Upcoming Events](#)
- March
- The Trinity River Survey finished up on February 1. We had 147 responses, 80 repeat respondents. Results are being analyzed!
- The 2023 Annual Report
- The TRRP Facebook page is up 60 followers from the beginning of March topping out at, 925 followers.
 - Top post in the last 60 days was a post about the Indian Creek Restoration Project which showed a comparison from pre to post restoration at the site. TRRP was the primary funder for this watershed restoration project which was carried out by the Yurok Tribe.



Public Events and Environmental Education:

- SCIENCE ON TAP, at Trinity County Brewing Company
 - January: Max Ramos (restoration engineer with the Yurok Tribal Fisheries Department) presented “Modeling the Reestablishment of Coho Salmon in Klamath River Tributaries after Dam Removal” (over 70ppl attended)
 - February: Aaron Martin, fisheries biologist from the Yurok Tribal Fisheries Program presented “Oregon Gulch – Freeing the River and Embracing Change” (over 85ppl attended)
- OTHER EVENTS
 - Annual Birding Days Event in February as cancelled due to inclement weather
 - March 19 – TRRP Open House

Educational Outreach:

- February: Fish of the Trinity River education in each Junction City Elementary Classroom. We talked about each species, lifecycle and did a chinook dissection. At the end of our lesson we had kids create fish art which we showcased at the March 19 Open House event.
- Several classroom visits to Lewiston in February and March where kids got to play games and learn about Trinity River Salmonids.

Landowner and Stakeholder Notifications:

- Scoping Period (December 4 – 17) for two proposed restoration projects the Sawmill Gravel Processing Site and the Upper Conner Creek Restoration Project.
- Public Comment Period (TBD) for two proposed restoration projects the Sawmill Gravel Processing Site and the Upper Conner Creek Restoration Project.

Upcoming

Science on Tap

- March: Seth Naman, NOAA Fisheries “The importance of Natural Flows to Trinity River Salmon and Steelhead Populations”
- April: Ken DeCamp: (Photographer/Author) “Klamath Mountain Wildflowers”

- Science on the River will occupy the summer months in 2024
 - June: Kyle De Juilio (Senior Fisheries Biologist Yurok Tribe) “Indian Creek Watershed Restoration”
 - July: Corral Gulch Meadow/Salt Creek or “Clear Creek Restoration Project”
 - August: Todd Buxton (Hydrologist/Geomorphologist, TRRP): “Diurnal Pool Stratification”
- [2024 Science Symposium – April 30-May 2](#) - *Pushing river restoration boundaries toward a better future in our changing world*
 - Three and 1/2 day event featuring presentations on Fish Populations, Habitat Flow and Temperature and Physical Channel Forms with a field trip at the end.
 - All our SAB members will be attending and presenting or moderating.
- General Outreach Programing: January - May
 - Invasive Plant Pull (April 6)
 - Plant and Seed Exchange (April 20)
 - Day at the Wetland (May 9)

Science Update

- **SAB recruitment.** Contracts have been awarded for Dr. John Hayes for the Aquatic Ecology position, Dr. Kurt Fausch for the Riparian and Watershed position, and Dr. Daniele Tonina for the Hydrology position. They, as well as John Buffington and possibly Andy Paul, will be traveling to attend our science symposium later this spring.
- **Limiting Factors Analysis (LFA).** A detailed study plan was submitted by our contractor Cramer Fish Sciences. They proposed three levels of effort, each building on the other, from more of a literature review to the development of a model with a graphical user interface. Which of these tiers to pursue is a topic of the March TMC meeting.
- **FY25 Science priorities.** The FY25 request for proposals has lagged somewhat in the absence of a Science Coordinator, but fortunately Ty Wallin from USFWS was willing to pick up some of the slack there. An RFP was sent out to TRRP entities to solicit proposals that answer research questions that will address key uncertainties from the Science Plan, specifically related to nutrient flux, wetted area, and temperature. Proposals will be reviewed by the SAB in preparation for the June meeting of the TMC.
- **Review of monitoring and DSS.** The Science Plan approved last year calls for a review of our monitoring activities. The Flow Workgroup has also requested a review of the DSS components. The IDT has recognized these can be done together and should be in the context of Objectives and Targets. Most workgroups that have previously established Objectives have met to ensure Objectives and Targets remain pertinent and to start aligning our monitoring and DSS efforts to them.
- **Large Wood Management Plan.** This effort has successfully rebooted, now led by HVT and Applied River Sciences (previously McBain Associates). An annotated outline has gone out for review and has received feedback from the Riparian and Aquatic Ecology Workgroup.

- **2024 Science Symposium.** A team of program scientists have been working with Kiana Abel and the TCRCD's Duncan McIntosh to develop an agenda for the multiday science symposium that we will be holding at the Trinity Alps Performing Arts Center. We will have speakers from within and outside of the program, and each day will conclude with a panel discussion. An agenda is forthcoming. TMC members are encouraged to attend.

In Review or Final Edits

- Adult Salmonid Spawning

Final Publications and Reports

- Buxton, T. H. 2024. Trinity River water allocation, temperatures, and model results for implemented flows and proposed hydrographs for water year 2023. Report TRRP-2024-1 for the Trinity River Restoration Program (TRRP). U.S. Bureau of Reclamation, TRRP, Weaverville, California. Available: <https://www.trrp.net/library/document?id=2629>.

Synthesis Reports – See Appendix II.

Incomplete:

- Adult Salmonid Spawning – in final edits
- Cohort Reconstruction – a road-block on modeling is actively being remedied
- Large Wood Management – rebooted, annotated outline out for review
- Flow Synthesis – regaining momentum
- Channel Complexity

Design Reports- See Design Workgroup Report below

Environmental Reports and Findings

Post-Implementation Reports

Final Data Packages

- The 2022 Terrain Model that was delivered last year is now visible in our website mapping app. Please note the drop-down arrows next to each layer if you would like more information.
 - [Link for Elevation Data.](#)
 - [Link for Difference Data Between 2016 and 2022.](#)

Appendix I: Technical Workgroup Briefings March 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

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Workgroup: Design**Coordinator:** Oliver Rogers

The Design Team met on February 15th, 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 Draft 60% design and a presentation of the comments received on the Draft 90% design for the Upper Conner Creek Rehabilitation Site. The Design Team WG also discussed the Incomplete Channel Rehabilitation Projects - Design Status/Recommendations and responses received. The Design Team WG will be determining what analyses are needed to support a document that accurately identifies sites that may proceed with existing conditions analysis and project design, and that would inform project prioritization.

Workgroup: Flow**Coordinator:** Ken Lindke

The Flow Workgroup met three times since the December TMC meeting (12/20, 2/23, 3/7), and largely focused on water year 2024 flow planning. A compromised winter variable flow proposal was developed in late December at the direction of TMC that was ultimately rejected by TMC at their January special meeting. Details can be found in TMC meeting notes and a memo from the Flow Workgroup to TMC. Two subsequent meetings did not result in a consensus recommendation for water year 2024 flow management, but options for each water year type were selected for TMC consideration. The group achieved a consensus recommendation to implement diurnal flow variability that mimics snow melt in spring and early summer, pending infrastructure constraints. Diurnal variability was recommended to occur from April 8th through May 31st with the magnitude depending on daily average flow.

Workgroup: Watershed**Coordinator:** Justin Alvarez

The Watershed Work Group has not met in the last quarter.

Workgroup: Physical
Conor Shea; incoming – Smokey Pittman

Coordinator: outgoing -

The Physical Workgroup (PWG) met on January 11, 2024.

TRRP staff briefed PWG on the status of permit applications to conduct gravel augmentation at several new sites. The Environmental Assessment will not be completed in time to place gravel prior to the spring 2024 peak flow release.

The PWG reviewed status of gravel augmentations at currently permitted sites. The group consensus was that conditions at all the permitted sites were unsuitable for gravel placement in spring 2024 primarily because flow actions had not completely processed prior augmentations. The group consensus was that no gravel augmentations take place in spring 2024.

The PWG discussed conditions in the river reach directly downstream of the hatchery. Gravel movement in the left bank side channel is hindered by the remnant weir attached to the left bank. The PWG discussed the potential for removing the weir to facilitate habitat development in the side channel, noting the importance of rearing and spawning habitat near the dam. Several PWG members agreed to evaluate the feasibility of weir removal and to determine if there would be objections to this action.

TMC Executive Director's Report March 15, 2024

Smokey Pittman (Hoopa Valley Tribe consultant/McBain and Associates) will be the 2024 PWG coordinator.

Workgroup: Riparian and Aquatic Ecology
Yates

Coordinator: Veronica

At the end of January 2024, there was a request for members of the RAEWG to suggest appropriate citations to include in the bibliography for the Watershed Programmatic EA. No suggestions were offered to the work group coordinator's knowledge. The RAEWG had a quarterly meeting on March 4th, 2024. Topics of discussion included the RAEWG-related Objectives and Targets included in the Science Plan, as well as a review of the Large Wood Management Synthesis (LWMS). The RAEWG has 4 specific Objectives listed in the Science Plan, which the group agreed were appropriate and relevant, and don't require changes at this time. For each of the Objectives, the Targets and how they are monitored and/or modeled was discussed at length. Models such as FYFAM require scientific interpretation to be useful for the DSS and flow managers; the group discussed the need for that interpretation to be conducted by the modeler rather than those using the DSS during the decision-making process. The need for foothill yellow-legged frog monitoring or intensive study was identified by the group. The metrics for defining abundance, richness, and diversity (part of Objective 3) are simple for vegetation, but less clear for other native species populations (such as invertebrates, birds, and periphyton), and requires more definition. There is not currently sufficient monitoring to understand if this target is being achieved. Additionally, the group discussed the value of continuing to focus on the encroachment and removal of narrowleaf willow. Finally, the group discussed the annotated outline for the LWMS and offered comments.

Workgroup: Interdisciplinary Team

Coordinator: James Lee / Ty
Wallin / Eric Peterson

The IDT met after the TMC meeting in December, primarily for the FY2025 Science Priorities and RFP. It met again on March 11 to review the Flow Workgroup hydrograph recommendation, monitoring and modeling review, FY25 Science Priorities RFP, and other topics.

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</i> (POC: Todd Buxton, TRRP)	March 2019	Published in Ecohydrology 2022;e2463
TRRP-2018-003	Fish Habitat	<i>HVT, USFWS, YT, USBR TSC</i> (POC: Damon Goodman, USFWS)	2 nd Q 2019	USFWS portion Posted; YT portion Posted
TRRP-2018-007	Juvenile Chinook Production	<i>USFWS, YT, HVT</i> (POC: Bill Pinnix, USFWS)	July 2017	FINAL POSTED
TRRP-2018-009	Cohort Reconstruction	<i>HVT, USFWS, CDFW</i> (POC: Ken Lindke, CDFW)	2 nd Q 2019 Cur.ETA mid-2024	In progress
TRRP-2018-011	Adult Salmon Spawning	<i>USFWS, HVT, YT, CDFW</i> (POC: Steve Gough, USFWS)	2 nd Q 2019 Possibly before the TMC meeting.	In final edits
TRRP-2018-018	Bed Mobility and Scour	<i>HVT, USFWS</i> (POC: Geoff Hales & Scott McBain, McBain Associates)	2 nd Q 2018	<u>FINAL POSTED</u>
TRRP-2018-019	Cottonwood Seed Dispersal	<i>HVT</i> (POC: John Bair, McBain Associates)	3 rd Q 2018	FINAL POSTED
TRRP-2018-021	Riparian Encroachment	<i>HVT</i> (POC: John Bair, McBain Associates)	4 th Q 2018	FINAL POSTED
TRRP-2018-022	Sediment Storage	<i>HVT, USFWS</i> (POC: Geoff Hales & Scott McBain, McBain Associates)	4 th Q 2018	FINAL Posted
TRRP-2018-025	Channel Complexity	<i>HVT, USFWS</i> (POC: Smokey Pittman & Scott McBain, McBain Associates)	August 2019 Cur ETA ?	Delayed- uncertain timeline
TRRP-2018-027	Fine Sediment	<i>Program Office, NMFS, HVT</i> (POC: Todd Buxton, TRRP)	July 2020	FINAL POSTED

TRRP-2018-032	Water Temperature	<i>YT, USFWS, HVT, USBR, NMFS</i> (POC: <i>Eli Asarian, Riverbend Sciences</i>)	May 2019	<u>FINAL POSTED</u>
TRRP-2018-033	Large Wood Management	<i>NMFS, YT, HVT</i> (POC: <i>Scott McBain</i>)	April 2018 Cur.ETA 2024	In progress
NA	Flow Synthesis	<i>HVT et al.</i> (POC: <i>Justin Alvarez</i>)	Mid FY 22 Cur.ETA: July 2024	In Progress

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