



Trinity River Restoration Program

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NC-150

MEMORANDUM

To: Trinity Management Council

From: Mike Dixon, Executive Director
Trinity River Restoration Program

Subject: Director's Report

Date: September 8, 2023

Major TRRP activities between June 2023 and September 2023 include:

Construction at the Oregon Gulch project is in the home stretch. An administrative draft of an EA regarding gravel processing and augmentation is in review. Contracting packages are in the works for two new Science Advisory Board members. A major TRRP-funded watershed restoration project, the removal of East Weaver Dam, is underway.

Organizational Updates

- Lauren Alvares started in July as a natural resource specialist, primarily coordinating the program's environmental compliance. She comes from a fish biology role at the BLM.
- The Public Affairs Specialist (GS 7/9/11) should be advertised anytime. Kiana Abel has been performing this role in a developmental detail assignment for 120 days.
- Eric Peterson will continue to serve in a 120-day temporary promotion to the Science Coordinator position until October.
- The USFWS is reviewing applications for the biologist position which is intended to be coordinate the Trinity Stakeholder Advisory Committee and serve as the liaison between TRRP and the Arcata Fish & Wildlife Office.

Budget Updates/Adjustments:

Based upon a vote of the TMC in the July virtual meeting, FY23 funds were used to fund FY24 work by DWR, CDFW, USFS, BLM, NMFS, and Trinity County, and additional money was added to the Yurok AFA in Mod 1 to cover gravel processing for next year. This forward funding allows for more money to be available for the Limiting Factors Analysis and channel rehabilitation activities.

The current working budget for FY24 is included as an attachment.

Watershed Restoration Grant

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There has been no noteworthy activity associated with this task other than routine work by recent grantees to carry out the funded projects.

Related, however, the East Weaver Dam Removal project is underway. The TRRP funded a substantial portion of both the design and implementation of this project. The new water intake for the Weaverville Community Services District was installed last year and functioned effectively across a range of winter and summer flows. The 12' high dam is currently being removed. Approximately 2 miles of additional habitat for steelhead and SONCC coho salmon will be available this winter.

River Acres Road House

Escrow closed in late August on the property at 391 River Acres Road in Junction City. This was the last major infrastructure constraint that was identified based on the 2007 DWR maximum fisheries flow model (this model has subsequently been updated with higher resolution topography and two dimensional hydraulic modeling). The house begins to flood at more than 4,000 cfs below the maximum fisheries flow, so acquiring this property gives us a substantial safety margin for 11,000 cfs restoration releases that occur during storms with high tributary accretion. Avenues to dispose of the house and associated infrastructure are being explored through Reclamation and GSA.

Phase II Implementation Review Contract

The Phase II review report has been completed and is posted to the TRRP's data port.

Implementation Update

Sky Ranch Channel Rehabilitation Site:

The design is at 60% and the VE study was completed. The land transfer from TPUD to USFS to BLM is anticipated to be completed in February, and then TRRP can initiate NEPA. A right-of-entry was established with the largest private landowner on the project. TRRP is communicating with landowners on the changing project timeline. Depending on the availability of funding and the land transfer, the project may be constructed in 2025 or 2026.

Oregon Gulch Channel Rehabilitation Site:

The pilot channel (IC-1) through the newly-excavated floodplain was largely completed prior to the boat dance flows in late August. The main-channel plug (U-2) was built to an elevation sufficient to divert the entire flow of the Trinity River through the new channel during the boat dance flows. Work continues on building U-2 to design specifications (gradation and height). Major features remaining include this plug and downstream taper through the old channel, wood placement, and final grading of the site. As of September 5, 358,000 cu yd of spoils have been off-hauled to Eagle Rock Quarry. The Yurok Tribe Construction Company anticipates completion by mid-October. Revegetation activities scheduled to commence the week of September 11.

Evans Bar Channel Rehabilitation Site:

The existing conditions report was shared with landowners near Evans Bar. There are several lots near the site that require a boat crossing for access, and the access route is in a high-priority area for restoration. Landowners expressed concern that a project there would interfere with their access. TRRP staff and the Yurok/State Design Team are working through options to maintain access for landowners while meeting objectives for channel rehabilitation at this site.

Sawmill Gravel Processing Site:

The Yurok-State Design team continues to work on the 60% design for this site.

Upper Conner Creek Channel Rehabilitation Site:

A key landowner at this site recently signaled their intent to cooperate with TRRP, and the 90% design is expected to be completed by the end of September. Implementation of this project is scheduled for 2024 and perhaps into 2025 depending on the final cost estimate and TRRP budget.

EA Development

- Upper Conner Creek and Sawmill Environmental Assessment (EA)- these two sites will both be covered under the same EA, and our environmental services contractor intends to begin this EA in September as updated designs become available. The timeline for this EA is 5-6 months (February or March 2024)
- Gravel Augmentation EA – TRRP staff met with BLM to discuss their concerns and questions about the EA and no ‘red flags’ were raised. It is currently under review by BLM, Caltrans, Water Board, and Trinity County. This review period will close on Sept. 22. Depending on the nature of the comments and time required to respond, it will likely be distributed for public comment in early October. Again, depending on the nature of comments, we anticipate a FONSI in late 2023 or early 2024.
- Watershed Programmatic EA- Early phase work on the Watershed PEA continues. A draft analysis was shared with TRRP by the environmental services contractor. This product still needs input from cooperating agencies.

Public Outreach Update

Publications and Education Materials:

- [River Riffle](#): a monthly newsletter distributed via trrp.net, email and Facebook. Please send any comments/critiques/suggestions for the newsletter to Kiana at: jabel@usbr.gov or info@trrp.net
 - Some preliminary analytics (top ranking page since May 15: Home Page, 3,144 pageviews)
 - May: Ranking 41st, 59 page views
 - June: Ranking 40th, 60 page views
 - July: Ranking 14th, 203 page views
 - August: 24th, 92 page views
- The TRRP Facebook page is up 69 followers from the end of March topping out at, 818 followers.

- Top post in the last 60 days was the TRRP/combined partner update regarding heightened gill infections that may have been caused by sediment loads from a fire scar that dumped sediment into the North Fork Trinity River in June. Reach 2,216 with 122 reactions including 46 comments. Photo was provided by Charlie Holthaus.



- 2022 Annual Report
 - Completed and posted mid-July
 - PDF Version: <https://www.trrp.net/library/document/?id=2612>
 - Story Map Version: [Trinity River Restoration Program 2022 Annual Report \(arcgis.com\)](#)
- SUBMITTED ARTICLES
 - Summer Conservation Almanac – Thermal Ecology of the Trinity River
 - Article a month in the River Riffle – check them out!
 - June: [Trinity River Hatchery Modernization Project](#)
 - July: [Sediment and Summer Thunderstorms](#)
 - August: [Thermal Ecology of the Trinity River](#)
 - September: Flow Variability on the Trinity River (TBD)
- EARNED MEDIA/TRRP FEATURE
 - August 31, 2023. [New Challenges in the Struggle to Save Pacific Salmon \(arcgis.com\)](#). US Fish and Wildlife Service
 - August 30, 2023. *Trinity River Cleanup*. September 9
 - August 21, 2023. The salmon festival in Klamath California is not serving salmon this year, with the hope of restoring a food central to area tribes. CNN ([article](#) and [video clip](#))

- August 16, 2023. *Reclamation set to increase Trinity River flows this weekend.* Trinity Journal
- August 16, 2023. *Salmon gill-health still trending OK.* Trinity Journal
- July 19, 2023. *Earlier onset, increased fish disease feared.* Trinity Journal
- June 28, 2023. *Science on Tap looks at rare plants tonight.* Trinity Journal
- June 28, 2023. *Reconsultation seen as pathway forward for more water.* Trinity Journal

Public Events and Environmental Education:

- ADDRESSING PUBLIC CONCERN
 - This quarter we focused on direct messaging by identifying stakeholders within agencies and communities. We worked closely with partners in determining action items due to public concern and communicated through various medium.
 - Gill Infections in the TR
 - Concern from community stakeholders and began research on current situation and path forward. Worked with CDFW, Yurok, NOAA Fisheries, Trinity County & Reclamation representatives.
 - Temperature
 - Lots of consternation about river temperatures among the community. July is the warmest time of year for the Trinity watershed and temps peak at the end of the month. However, scientists were puzzled at the concern because temps were looking far better than 2022. James Lee wrote an article for our August newsletter describing thermal ecology of the Trinity River.
 - Oregon Gulch
 - Several topics of communication coming out of this project this quarter: in river work, turbidity, river navigation changes. Worked with nearby river front property owners, the RCD, Yurok Construction Corp and the Yurok Tribe.
- SCIENCE ON TAP, at Trinity County Brewing Company
 - June – Aaron Simms, Director of Rare Plants for the California Native Plant Society – 85 ppl
 - July – Brook Thompson, Traditional Ecological Knowledge – 75 ppl
- Science on the River, various locations
 - August 23 – John Bair, Riparian Ecology – 63 ppl. Important to note that this was our first “Science on the River” event. We held this at the Lewiston Hotel Dance Hall.
 - September 6 – Ken Lindke (CDFW), Winter Variable Flow – 75 ppl.. Held at the Indian Creek Lodge in Douglas City.
- OTHER EVENTS
 - Public Float June 24

- 4th of July Parade
- EDUCATIONAL OUTREACH
 - Weaverville Summer Day Camp - July
 - Weaverville Farmers Market – July & August
 - Hoopa Sovereigns Days – August
 - Bar 717 6th Grade Environmental Camp
 -

Landowner and Stakeholder Notifications:

Working diligently with landowners at two proposed sites in Junction City, Upper Conner Creek and Evans Bar neighborhoods.

Upcoming

- SEPTEMBER - Theme: Fall Chinook migration, Spring Chinook Redds
 - September 27 - Science on Tap – Lenya Quinn-Davidson Director, UCANR Fire Network Area Fire Advisor, University of California Cooperative Extension, Program Director, Women-in-Fire Training Exchanges (WTREX). *Rebuilding a culture of fire in CA: People, policy, and practice.*
 - Article: *Flow Variability on the Trinity River*
- OCTOBER - Theme: Fall Surveys on the TR, Redds
 - October 7 - Annual Salmon & Harvest Festival
 - October 21 – Volunteer Planting Day at Bucktail
 - October 25 - Science on Tap – Chris West ,Condor Restoration Program Manager, *Yurok Condor Program*
 - Article: *2023 Redd Counts*
- NOVEMBER - Theme: Carcasses, Spawning
 - Article: Important spawning areas in the TR
 - Science on the River

Science Update

The last quarter has seen a great deal of activity in three particular areas, driven in large part by the Flow Workgroup and the IDT.

- **Water Year 2023 variable flow implementation review.** Although a winter storm synchronization flow did not occur, elevated baseflows were scheduled for the period from February 14 through April 15. The elevated baseflows were partially constrained by dam infrastructure limiting the release to 2000 cfs prior to April 1. Preliminary results assembled by the Flow Workgroup include bed mobility, inundation, benthic macroinvertebrates, and outmigrant fish data, which will be presented during this TMC meeting.
- **SAB Recruitment.** Recruitment was sought for 3 positions on the SAB. The IDT provided recommendations for recruitment on two of these but were unable to reach a

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final decision for the Hydrology position. Subsequently during TMC monthly calls, the two recommended candidates were approved but the TMC is similarly split on the Hydrology position. This topic will be taken up again by the TMC at this meeting.

The two positions that have been approved are: Dr. John Hayes for the Aquatic Ecology position and Dr. Kurt Fausch for the Riparian and Watershed position. Drs. Hayes and Fausch have verbally accepted the positions and preparations have begun for formalizing contracts early in FY2024.

- **Limiting Factors Analysis (LFA).** The IDT developed a strategy to have an LFA conducted over the next couple years in two phases: (1) development of a study plan by a combined team of scientists from within the program and outside scientists with relevant expertise to set the analysis on an appropriate trajectory; (2) form a team of external experts to implement the study plan. The program engaged NFWF as an entity that could provide the flexibility needed to fund these two phases on the timeline identified by the Science Plan and meetings of the IDT.

A Request for Qualifications (RFQ) was released in early August with a deadline of August 18th. NFWF received one bid from Cramer Fish Sciences that named 6 highly qualified scientists for participation in the effort. While the IDT wished there had been more bids to choose from, the Cramer bid was deemed sufficient to move forward. A kick-off meeting with the IDT is expected to be scheduled in the near future.

In Review or Final Edits

- Synthesis Report:
- Topography Model for 2022

Final Publications and Reports

- 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. Available: <https://www.trrp.net/library/document?id=2615>.
- Bair, J. H. 2023. **Field guide to the common riparian trees and shrubs of the lower Trinity River.** Report. Applied River Sciences, Arcata, California. Available: <https://www.trrp.net/library/document?id=2622>.
- Hoopa Valley Tribal Fisheries Department (HVTFD) and McBain Associates. 2023. **Coarse sediment storage on the Trinity River: recommendations and correlations to juvenile Chinook Salmon rearing habitat.** Report for the Trinity River Restoration Program (TRRP). HVTFD, Hoopa, California. Available: <https://www.trrp.net/library/document?id=2614>.
- Peterson, E. B. 2023. **Retrospective analysis of the relevance of Trinity River flows to Trinity Lake (reservoir) levels, water years 1965-2021.** Report. Trinity River Restoration Program, Weaverville, California. Available: <https://www.trrp.net/library/document?id=2617>.

- Trinity River Restoration Program (TRRP). 2023. **2022 Annual Report. Report for the TRRP.** Weaverville, California.
Available: <https://www.trrp.net/library/document?id=2612>.

Synthesis Reports – See Appendix II.

Incomplete:

- Adult Salmon Spawning – in final edits
- Cohort Reconstruction – a road-block on modeling is actively being remedied
- Large Wood Management – actively progressing on a new timeline
- Flow Synthesis – regaining momentum
- Channel Complexity

Design Reports- See Design Workgroup Report below

Environmental Reports and Findings- N/A

Post-Implementation Reports

Final Data Packages

Appendix I: Technical Workgroup Briefings September 2023

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

Workgroup: Fish

Coordinator: Kyle De Julio

No meetings over the last quarter.

Workgroup: Design

Coordinator: Oliver Rogers

The Design Team met on August 11th, for a quarterly meeting and received updates from the Federal Design Team, Hoopa Design Team, and Yurok-State of California Design Team. Topics covered included: a timeline update on the Sky Ranch project (Land-for-Land Transfer), a presentation of the current design plan set for the Upper Conner Creek Rehabilitation Site, and an update on the Sawmill Gravel Processing Site Rehabilitation design and Evans Bar project. A presentation on the Oregon Gulch project (currently under construction) was given and the Design Team was queried on the proposition of an FY24 Chapman Ranch Post-Construction Review. Additionally, Patrick Flynn from the Trinity County Planning Dept. updated the Design Team on his work with DOI’s Appraisal Team on BLM acquisition of “Trinity River Parcel” (aka Smith Pit).

Further details provided in a separate memo posted to the TMC meeting materials.

Workgroup: Flow

Coordinator: Ken Lindke

The Flow workgroup has met 3 times over the last quarter in order to review the winter flow variability enacted in water year 2023 and to advance a recommendation for water year 2024. The result of these efforts will be presented at this TMC meeting.

Workgroup: Watershed

Coordinator: Justin Alvarez

No meetings over the last quarter.

Workgroup: Physical

Coordinator: Conor Shea

No meetings over the last quarter.

Workgroup: Riparian and Aquatic Ecology

Coordinator: Chris Laskodi

No meetings over the last quarter.

Workgroup: Interdisciplinary Team

Coordinator: Eric Peterson /
James Lee

The IDT has met 3 times over the last quarter to address a variety of topics.

- SAB recruitment
- Developing the Limiting Factors Analysis
- FY25 Science Activity Planning per the Science Plan
- Review of the Flow Workgroup's recommendation for Water Year 2024
- Planning a Science Symposium

Many of these are ongoing topics and the IDT is expected to meet twice before the next TMC. Additional topics to be covered will include review of Core Monitoring per the Science Plan and review of the flow DSS table per request of the Flow Workgroup.

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>	March 2019	Published in <i>Ecohydrology</i> 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>	July 2017	YT Portion Posted USFWS portion in final edits
TRRP-2018-009	Cohort Reconstruction	<i>HVT, USFWS, CDFW (POC: Ken Lindke, CDFW)</i>	2 nd Q 2019 Cur.ETA mid-2024	In progress
TRRP-2018-011	Adult Salmon Spawning	<i>USFWS, HVT, YT, CDFW (POC: Steve Gough, USFWS)</i>	2 nd Q 2019 Cur.ETA fall 2023	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	<u>FINAL POSTED</u>
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>	July 2020	FINAL POSTED
TRRP-2018-032	Water Temperature	<i>YT, USFWS, HVT, USBR, NMFS (POC: Eli Asarian, Riverbend Sciences)</i>	May 2019	<u>FINAL POSTED</u>
TRRP-2018-033	Large Wood Management	<i>NMFS, YT, HVT (POC: Scott McBain)</i>	April 2018 Cur.ETA 2024	Recently reorganized team, in progress,
NA	Flow Synthesis	<i>HVT et al. (POC: Justin Alvarez)</i>	Mid FY 22 Cur.ETA: July 2024	In Progress

* = due date for TRRP Peer Review process according to status assessment in December 2018. TRRP staff have created a web page for linking synthesis reports as they are completed. It incorporates additional reports that have had a synthesis intent but were not specifically funded by the FY2018 effort. The page is live at <https://www.trrp.net/restoration/adaptive-management/synthesis-reports/>.

Annual Costs Summary by TRRP Program Activity	2022	2023	2024 Proposed
Program Administration	\$ 2,433,379.48	\$ 3,676,752.34	\$ 2,176,893.22
Rehabilitation Implementation	\$ 4,972,558.70	\$ 5,107,455.23	\$ 6,318,017.86
Science Program- <i>includes FWS tribal funds transferred to TRRP/USBR</i>	\$ 4,050,210.26	\$ 4,864,326.24	\$ 4,334,943.70
TOTAL <i>(doesn't include FWS salary/ops funds retained at FWS)</i>	\$ 11,456,148.44	\$ 13,648,533.81	\$ 12,829,854.78

TMC TRRP Annual Funding <i>(doesn't include FWS salaries/operations funds retained at FWS):</i>	2022	2023	2024 Proposed
USBR (Water & Related A30 funds) <i>Any recovered funds are included here</i>	\$ 9,991,000.00	\$ 11,207,000.00	\$ 10,830,000.00
USBR (CVPIA H37 funds)	\$ 1,500,000.00	\$ 1,500,000.00	\$ 1,500,000.00
USBR (BIL ecosystem restoration)	\$ -	\$ 454,000.00	\$ -
FWS* - annual transfer to TRRP/USBR for specific tribal projects	\$ 535,000.00	\$ 505,119.00	\$ 500,000.00
TOTAL	\$ 12,026,000.00	\$ 13,666,119.00	\$ 12,830,000.00

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

PROGRAM ADMINISTRATION		2022 Approved	2023 Approved	2024 Approved
TRRP Administration Personnel				
TRRP Program Office Personnel <i>ED, Secretary, Grants and Agreements Specialist</i>		\$ 474,980.00	\$ 581,399.00	\$ 610,469.00
	Subtotal	\$ 474,980.00	\$ 581,399.00	\$ 610,469.00
TRRP Administration				
TRRP Program Office Operations (<i>TRRP office rent, vehicles, utilities, supplies, RO contracting, NCAO</i>)		\$ 231,725.00	\$ 317,232.00	\$ 333,094.00
TMC Notetaker - <i>TRRP contract</i>		\$ 29,380.00	\$ 18,307.20	\$ 23,558.52
Public Education and Outreach/Website - <i>TCRCD Work expands community knowledge of Program and educates schoolchildren, promoting environmental stewardship with a goal of improving support/success of restoration efforts.</i>		\$ 104,666.28	\$ 107,359.26	\$ 109,836.23
Headwaters Refinements Contract - Extension		\$ -	\$ 22,160.00	\$ -
	Subtotal	\$ 365,771.28	\$ 465,058.46	\$ 466,488.75
Technical Assistance				
Hoopa Valley Tribe -AFA		\$ 485,316.76	\$ 499,927.09	\$ 519,924.17
Yurok Tribe-AFA		\$ 518,447.26	\$ 557,703.17	\$ 580,011.30
CA Dept of Water Resources - FA		\$ 54,827.31	\$ 300,000.00	\$ -
CA Dept of Fish & Wildlife - FA		\$ 247,820.87	\$ 536,954.50	\$ -
NOAA Fisheries - IA		\$ 148,223.00	\$ 310,545.12	\$ -
Forest Service - IA		\$ 43,000.00	\$ 89,290.00	\$ -
Trinity County Technical Assistance (<i>TRRP grant, floodplain development permit, FEMA</i>)		\$ 94,993.00	\$ 335,875.00	\$ -
	Subtotal	\$ 1,592,628.20	\$ 2,630,294.88	\$ 1,099,935.47
TOTAL PROGRAM ADMINISTRATION		\$ 2,433,379.48	\$ 3,676,752.34	\$ 2,176,893.22

2-year funding, FY23 and 24

Yellow Highlight are Changes from last TMC meeting

IMPLEMENTATION BUDGET		2022 Approved	2023 Approved	2024 Approved
Implementation Personnel				
TRRP Program Office Personnel (Implementation Branch Chief, Public Affairs Specialist, Civil Engineer, CE Tech (1), Senior Natural Resource Specialist)		\$ 778,178.00	\$ 462,266.00	\$ 1,095,318.00
Subtotal		\$ 778,178.00	\$ 462,266.00	\$ 1,095,318.00
Miscellaneous				
FEMA/Flood Compliance Updates - Denver TSC		\$ 58,000.00	\$ 45,000.00	\$ 45,000.00
River Acres House Purchase.		\$ -	\$ 530,000.00	\$ -
Realty Acquisitions (Easements, material storage)		\$ -	\$ -	\$ 30,000.00
Subtotal		\$ 58,000.00	\$ 575,000.00	\$ 75,000.00
Planning				
NEPA/CEQA Compliance/Permits/ (TRRP contract: wetland delineation, bird surveys, native seed, cultural res surveys)		\$ 203,940.00	\$ 210,058.00	\$ 218,460.32
Revegetation Supply TRRP contract: native seed, native grass hay, plants		\$ -	\$ 121,479.00	\$ 126,338.16
BLM Technical Assistance - IA (NEPA, permits)		\$ 85,585.78	\$ 176,340.45	\$ -
Geo-Phys Support Services (Aerial photography, boundary surveys, bathymetry and lidar, topography)		\$ 31,410.00	\$ 42,422.81	\$ 112,000.00
Subtotal		\$ 320,935.78	\$ 550,300.26	\$ 456,798.48
Design and Support Services				
Hoopa Valley Tribe Support Services		\$ -	\$ 150,903.00	\$ 150,903.00
Yurok Tribe Support Services		\$ -	\$ 250,000.00	\$ 250,000.00
TSC Modeling Support		\$ -	\$ 53,136.00	\$ 40,000.00
Channel Rehab Review		\$ 245,946.68	\$ -	\$ -
Subtotal		\$ 245,946.68	\$ 454,039.00	\$ 440,903.00
Construction				
Construction Projects		\$ 2,605,300.00	\$ 2,027,566.00	\$ 3,100,500.00
Construction Large Wood Supply YT		\$ -	\$ 250,000.00	\$ 250,000.00
Construction Inspector		\$ -	\$ -	\$ -
Value Engineering Study - Reclamation requirement		\$ -	\$ 7,360.00	\$ -
Sediment Augmentation YT		\$ 130,748.38	\$ -	\$ 141,417.45
Coarse Sediment Processing/Placement YT		\$ 253,892.90	\$ 177,000.00	\$ -
Revegetation Maintenance/Irrigation-HVT		\$ 79,556.96	\$ 103,923.97	\$ 108,080.93
Systemic Riparian Mapping Project HVT (Funded Every 5 Years)		\$ -	\$ -	\$ 150,000.00
Subtotal		\$ 3,069,498.24	\$ 2,565,849.97	\$ 3,749,998.38
Watershed Implementation				
Watershed Grants		\$ 500,000.00	\$ 500,000.00	\$ 500,000.00
Subtotal		\$ 500,000.00	\$ 500,000.00	\$ 500,000.00
TOTAL IMPLEMENTATION BUDGET		\$ 4,972,558.70	\$ 5,107,455.23	\$ 6,318,017.86

Placeholder; will be soliciting new contract

Placeholder; will be soliciting new contract

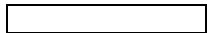
Balancer

2-year funding, FY23 and 24

Yellow Highlight are Changes from last TMC meeting

SCIENCE AND MONITORING BUDGET	2022 Approved	2023 Approved	2024 Approved
Science Program Support			
TRRP Program Office Personnel (BOR) (Science Coordinator, Data Steward, Physical Scientist,NRS)	\$ 915,470.00	\$ 940,652.00	\$ 987,685.00
TRRP Program Office Personnel (HVT) - Riparian Ecologist	\$ 166,511.25	\$ 157,948.45	\$ 164,266.39
TRRP Program Office Personnel (YT) - Fish Biologist	\$ 117,874.37	\$ 124,714.64	\$ 129,703.23
External Peer Review Contract (DOI BPA)	\$ 23,950.00	\$ -	\$ 40,000.00
SAB Participation (currently 2 SAB members)	\$ -	\$ -	\$ 125,000.00
TRRP-2018-036: Stream Gaging BOR Region Contract	\$ 239,750.00	\$ 235,900.00	\$ 237,720.00
Sub-total	\$ 1,463,555.62	\$ 1,459,215.09	\$ 1,684,374.61
Status and Trend Monitoring <i>doesn't include FWS** salaries</i>			
TRRP-2018-001: Chinook Run-Size Est.(CDFW, HVT)	\$ 499,251.67	\$ 514,229.22	\$ 478,266.07
California Department of Fish and Wildlife	\$ 430,155.26	\$ 443,059.92	\$ 404,250.00
Hoopa Valley Tribe	\$ 69,096.41	\$ 71,169.30	\$ 74,016.07
TRRP-2018-034: Chinook CWT-Fall Chinook (HVT)	\$ 327,348.07	\$ 303,804.85	\$ 315,957.04
TRRP-2018-004: Fall Run Scale Age (HVT, YT)	\$ 160,712.87	\$ 170,283.59	\$ 177,094.93
Hoopa Valley Tribe	\$ 114,651.74	\$ 118,091.29	\$ 122,814.94
Yurok Tribe	\$ 46,061.13	\$ 52,192.30	\$ 54,279.99
TRRP-2018-012:Outmigrant Monitor HVT, YT, FWS**	\$ 747,208.67	\$ 795,259.00	\$ 827,069.36
Hoopa Valley Tribe	\$ 416,495.18	\$ 429,087.05	\$ 446,250.53
Yurok Tribe	\$ 330,713.49	\$ 366,171.95	\$ 380,818.83
TRRP-2018-026: YT Harvest (Lower Klamath) (YT)	\$ 171,845.20	\$ 188,710.99	\$ 196,259.43
TRRP-2018-006: HVT Harvest (Lower Trinity) (HVT)	\$ 108,624.40	\$ 115,072.30	\$ 119,675.19
TRRP-2018-014: Monitor redd distribution, abundance and densities CDFW, YT, HVT, FS, FWS**	\$ 209,918.96	\$ 222,727.92	\$ 275,913.21
California Department of Fish and Wildlife	\$ 46,303.98	\$ 47,693.10	\$ 93,877.00
Yurok Tribe	\$ 70,662.25	\$ 79,293.51	\$ 82,465.25
Hoopa Valley Tribe	\$ 92,952.73	\$ 95,741.31	\$ 99,570.96
Forest Service (covered under technical assistance)	\$ -	\$ -	\$ -
TRRP-2018-010: Lower Klamath Creel Survey CDFW	\$ -	\$ 100,000.00	\$ 147,967.00
TRRP-2018-005: Sport Harvest/Trinity Creel HVT	\$ -	\$ 98,429.66	\$ 102,366.85
Sub-total	\$ 2,224,909.84	\$ 2,508,517.53	\$ 2,640,569.09
Effectiveness Monitoring & Other			
TRRP-2018-035: Channel rehab habitat effectiveness monitor(40 mile model support) YT, HVT, TRRP TSC,	\$ 5,305.80	\$ 70,348.81	\$ -
TRRP Reclamation TSC	\$ -	\$ -	\$ -
Yurok Tribe	\$ 3,819.80	\$ 70,348.81	\$ -
Hoopa Valley Tribe	\$ 1,486.00	\$ -	\$ -
FY22 RFP for research or modeling needs	\$ 312,839.00	\$ -	\$ -
TRRP-2022-6: Comparing physical and bioenergetic metrics of juvenile habitat	\$ 27,405.00	\$ -	\$ -
TRRP-2022-5: Improvements to RBM10	\$ 106,860.00	\$ -	\$ -
TRRP-2022-4: Effects of scour and inundation on aquatic communities	\$ 152,228.00	\$ -	\$ -
TRRP-2022-7: Site-specific SRH-2D	\$ 26,346.00	\$ -	\$ -
Supplement to complete large wood strategy HVT	\$ 33,600.00	\$ -	\$ -
FY23 RFP for research or modeling needs	\$ -	\$ -	\$ -
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	\$ -
TSC Sediment transport modeling	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00
Sub-total	\$ 361,744.80	\$ 896,593.62	\$ 10,000.00
Total Science Budget	\$ 4,050,210.26	\$ 4,864,326.24	\$ 4,334,943.70

FY24 cost TBD



Yellow Highlight are Changes from last TMC meeting