



Trinity River Restoration Program

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MEMORANDUM

To: TMC

From: Mike Dixon, Executive Director
Trinity River Restoration Program

Subject: Director's Report

Date: March 18, 2020

Major TRRP activities between December 2019 and March 2020 include:

The USFS signed decision documents for the Dutch Creek Channel Rehabilitation Project, clearing the way for that project to be implemented. Several flow-related science projects have been reviewed and are in the process of being funded.

Organizational Updates

- James Lee started as Science Coordinator on January 21.
- The Implementation Branch Chief (GS-13) and Fish Biologist (GS-11/12) positions are in review because of additional scrutiny of vacancies in certain job series.
- Recruitment paperwork for the Civil Engineer (GS-11/12) has been approved and the announcement has been finalized; it should open for application any time.

Science Update

Synthesis Reports (Appendix II: Synthesis Reports Tracking and Estimated Completion Dates)

Two reports (Cottonwood Seed Dispersal and Bed and Bar Scour) were finalized and are now available. Program staff and consultants are working on the reports with three report authors responding to peer review comments and five reports in progress (See Appendix II).

TRRP staff have created a web page for linking synthesis reports as they are completed. This web page will be made available to the public soon.

Program Science Metrics Objectives and Targets

Workgroups are continuing to make progress on our objectives and associated targets. It has shifted to a routine business item along with other agenda topics. A status check on this topic was scheduled for the March TMC meeting but has been deferred to a later date.

Flow-related science and modeling

As decided by TMC in December, the suite of pre-proposals reviewed by the IDT as well as a flow synthesis pre-proposal have advanced to full proposals and been through external peer review. Each of these projects is being funded and some will be implemented as soon as this spring. The exception is the acoustic bedload study. Due to both the water year and potential contractual constraints, the gathering of calibration data will be deferred to a later year to be

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approved by TMC. Required equipment will be purchased this year and an analysis by USGS of pilot data from previous years will be funded.

Implementation Update

Junction City House: There has been extensive conversation by our staff with the DOI Solicitor's Office and Reclamation's financial assistance, contracting, and realty staffs. This resulted in a likely path to fund the improvements to the house. In February the owner, after several months of trying, was able to secure bids from four construction companies. Unfortunately, the mean of the bids was \$458,385 which is almost twice what the house and parcel were purchased for in 2018. The program now needs to decide how to proceed with this objective.

Dutch Creek Channel Rehabilitation Site: The FONSI for this project was signed by Reclamation and BLM in December, and the USFS FONSI/Decision Record were signed in January. The project is scheduled for construction starting in July year. Some initial site road maintenance and clearing work on the access route was conducted in early January but the majority of the work will occur during our in-channel work window.

Chapman Ranch Phase B Channel Rehabilitation Site: As built data from Phase A have been received. The HVT design team is working on minor design revisions and will be re-running hydraulic models with these data in order to confirm that the project will perform as initially designed. The initial project schedule has the NEPA and permits for the project being largely complete by the end of this FY; it is slated for construction in FY21.

Sky Ranch Channel Rehabilitation Site: There has been some positive progress on a three-way land exchange (not involving the Program) which is required to build the project, and the design will advance pending selection of a new engineer. Historical surveys and outreach to interested parties are under way.

Oregon Gulch Channel Rehabilitation Site: The design for this project continues to advance and a 90% report is expected later this year. Importantly, a disposal location for all of the non-BLM sourced material has been identified within two miles of the project site, which makes the project substantially more feasible. NEPA for this project will begin this year.

Evans Bar Channel Rehabilitation Site: This project is slated for design development this year but there is no progress to report.

Upper Conner Creek Channel Rehabilitation Site: This project is slated for design development this year and a 30% design report is anticipated in September.

Other Compliance (ESA)

USFWS (wildlife) and NMFS (aquatic) Biological Assessments (BA) updates to start ESA Section 7 consultation: We have reinitiated consultation with NOAA Fisheries and will shortly reinitiate consultation with USFWS. Current BAs remain in force until they are updated with new Biological Opinions (BOs). The Action Area for restoration is the full watershed of the Trinity River from Lewiston Dam to the Klamath River including the S. Fork Trinity River. The USFS, BLM, USACE, and USFWS have submitted requests to be participating agencies in the NOAA Fisheries consultation, which will allow TRRP-related projects carried out or permitted by those agencies to receive programmatic ESA coverage from our BO.

Public Outreach Update

Publications and Education Materials

- April 2020: submission on TRRP river restoration efforts will appear in Fishing the California Alps yearly newsletter.
- Article published in Trinity County's *Conservation Almanac* Winter newsletter on the revegetation design and implementation at channel rehabilitation sites; an overview of TRRP activities in 2019 will appear in the Spring 2020 newsletter.
- TRRP 2019 Annual Report is in progress and draft content expected mid-April 15.
- Provided contacts and resources for a regular monthly informational and science column on the Trinity River to the *Trinity Journal*.

Public Events and Environmental Education

- Feb. 15: TRRP sponsored an educational birding event at a restored wetlands site in Weaverville.
- March 7: Participated in the Weaverville Art Cruise with a collaborative booth to discuss river restoration monitoring and channel rehabilitation design development

Landowner and Stakeholder Meetings

- Design team members continue working with landowners and residents near Dutch Creek and upcoming Junction City sites to develop temporary access and monitoring agreements.
- Continue to regularly answer questions and provide guidance to river-front property owners who feel they have been affected by river restoration activities.

Upcoming Events

- March 19: TRRP will host public informational meeting on the 2019 TMC flow and gravel recommendations
- April 18: TRRP will sponsor and host educational hike focused on watershed health and historic impacts
- April 24: TRRP will participate in Earth Day event with local schools with activities on fisheries and river restoration
- Early May: Staff will provide environmental education activities at Day at the Wetlands event for 4th graders from Weaverville Elementary School

FY20 Budget Update Adjustments since December TMC Meeting:

Funds are available in the amount of **\$12,178,000.00**.

<u>TRRP Program Activity</u>	<u>TMC Approved Amount</u>	<u>New Amount</u>	<u>Change +/-</u>
Program Administration	\$441, 660	\$670,351	+ \$228,691.00
TRRP Office Operations	\$750,903	\$650,000	- \$100,903.00.00
NOAA Fisheries	\$0	\$77,000	+ \$77,000.00
Refinements Facilitator	\$0	\$278,000	+ \$278,000.00
Program Implementation	\$489,982	\$812,715	+ \$322,733.00
Junction City House	\$200,000	\$0	- \$200,000.00
Realty Acquisitions	\$50,000	\$30,000	- \$20,000.00
Construction Inspector	\$0	\$100,610	+ \$100,610.00
Program Science	\$451, 114	\$545,814	+ \$94,700.00
Riparian Ecologist Support	\$187,389	\$61,679	- \$125,710.00
Gravel Implementation Monitoring	\$110,658	\$0	- \$110,658.00
Channel Rehab Effectiveness	\$140,000	\$77,013	-\$62,987.00
Outmigrant Monitoring	\$865,958.19	\$776,153.72	-\$89,804.47
Juvenile Outmigration Timing	\$0	\$18,310.12	+\$18,310.12
Flow Synthesis	\$0	\$108,617	+\$108,617.00
Pool Stratification	\$0	\$79,541.12	+\$79,541.12
Juvenile Off Channel	\$0	\$74,692.96	+\$74,692.96
S3 Consumption	\$0	\$37,080.51	+\$37,080.51
Hydrophones for Sediment	\$0	\$76,380	+\$76,380.00
Total			\$785,093.24

In Peer Review or Final Edits

- Bair, J., S. Loya, and J. Lee. **Vegetation encroachment synthesis for the Trinity River**. Facilitator: Eric Peterson
- Gast, T. **Analysis and Model Evaluation of Long Term Data Collected at the Willow Creek Outmigrant Trap synthesis**. Facilitator: Eric Peterson
- Lee, J. and J. Bair. **Riparian vegetation monitoring (FY2017)**. *Review complete, awaiting finalization.*
- Boyce, J. **Streamflow and Juvenile Salmonid Habitat Availability at Six Rehabilitation Sites on the Trinity River, California 2008-2017**. *Review complete, awaiting finalization.*

Final Publications and Reports

- Buxton, T.H. 2020. **Trinity River water allocation, temperatures, and model results for implemented flows and proposed hydrographs for water year 2019**. Report TR-TRRP-2020-2 for the Trinity River Restoration Program (TRRP). TRRP, Weaverville, California. Available: <http://www.trrp.net/library/document?id=2459>.
- Gaeuman, D. **WY2016-2017 Trinity River gravel augmentation monitoring**. Report for the Trinity River Restoration Program (TRRP). Yurok Tribal Fisheries Program, Klamath, California. Available: <http://www.trrp.net/library/document?id=2464>.
- Loya, S., A. Hamilton, J. Bair, and J. Lee. **Cottonwood Seed Dispersal on the Trinity River synthesis**. Report for the Trinity River Restoration Program (TRRP). McBain Associates, Arcata, California. Available: <http://www.trrp.net/library/document?id=2460>.
- Hales, G. and S. McBain. **Statistical evaluation of Trinity River point bar bed mobility and bed scour during annual spring ROD release for WY 2009-2013 synthesis**. Available: <http://www.trrp.net/library/document?id=2463>.

Final Data Packages

- GMA (GMA Hydrology, Inc.) and QSI (Quantum Spatial). 2020. **Orthophotography for a portion of the South Fork Trinity River, Trinity River Watershed, November 2019**. Data Package for the Trinity River Restoration Program (TRRP) under U.S. Bureau of Reclamation contract R14PC00122. QSI, Corvallis, Oregon. Available: <https://www.trrp.net/library/data?id=129>.
- GMA (GMA Hydrology, Inc.) and QSI (Quantum Spatial). 2020. **Orthophotography for Indian Valley, Trinity River Watershed, November 2019**. Data Package for the Trinity River Restoration Program (TRRP) under U.S. Bureau of Reclamation contract R14PC00122. QSI, Corvallis, Oregon. Available: <https://www.trrp.net/library/data?id=127>.
- GMA (GMA Hydrology, Inc.) and QSI (Quantum Spatial). 2020. **Orthophotography for portions of Hayfork Creek, Trinity River Watershed, November 2019**. Data Package for the Trinity River Restoration Program (TRRP) under U.S. Bureau of Reclamation contract R14PC00122. QSI, Corvallis, Oregon. Available: <https://www.trrp.net/library/data?id=128>.
- GMA (GMA Hydrology, Inc.) and QSI (Quantum Spatial). 2020. **South Fork Trinity River 2019 LiDAR Index**. Data Package for the Trinity River Restoration Program (TRRP) under U.S. Bureau of Reclamation contract R14PC00122. QSI, Corvallis, Oregon.

- GMA (GMA Hydrology, Inc.), QSI (Quantum Spatial), and TRRP (Trinity River Restoration Program). 2020. **Indian Valley DEM at 3ft Resolution from LIDAR collected November 2019.** Data Package for the Trinity River Restoration Program (TRRP) Trinity River Restoration Program, Weaverville, California. Available: <https://www.trrp.net/library/data?id=131>.
- GMA (GMA Hydrology, Inc.), QSI (Quantum Spatial), and TRRP (Trinity River Restoration Program). 2020. **Hayfork DEM at 3ft Resolution from LIDAR collected November 2019.** Data Package for the Trinity River Restoration Program (TRRP) TRRP, Weaverville, California. Available: <https://www.trrp.net/library/data?id=133>.
- GMA (GMA Hydrology, Inc.), QSI (Quantum Spatial), and TRRP (Trinity River Restoration Program). 2020. **South Fork Trinity River DEM at 3ft Resolution from LIDAR collected November 2019.** Data Package for the Trinity River Restoration Program (TRRP) TRRP, Weaverville, California. Available: <https://www.trrp.net/library/data?id=134>.
- GMA (GMA Hydrology, Inc.). 2020. **2019 Chapman Ranch as-built survey report.** Data Package for the Trinity River Restoration Program (TRRP) under U.S. Bureau of Reclamation contract R14PC00122. GMA Hydrology, Inc., Arcata, California.
- TRRP (Trinity River Restoration Program). 2020. **TRRP Environmental Study Limit (ESL) Boundaries, Version 2020-01-15.** Data Package for the Trinity River Restoration Program (TRRP) TRRP, Weaverville, California. Available: <https://www.trrp.net/library/data?id=24>

Appendix I: Technical Workgroup Briefings September 2019

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

Workgroup: Fish

Coordinator: Ken Lindke

The Fish work group met once this quarter, on 14 January. Half the meeting was dedicated to objectives/targets refinement. Two new targets were finalized: the juvenile food target and the juvenile rearing temperature target. In addition, the adult fall Chinook harvest target had been finalized at a previous meeting. Subgroups actively working on three new targets presented proposed targets and received feedback for modifications to bring to the next meeting: juvenile flow-to-habitat target, adult spring Chinook harvest, and brown trout predation and competition on/with juvenile salmonids. We received a presentation from Kyle Hopkins (YTFP) on temperature and fish monitoring of off-channel features in the restoration reach in summer 2019, which was a continuation of a pilot effort leading to a juvenile Chinook growth study to be implemented this summer. The group also reviewed flow management pre-proposals and fish-centric synthesis reports that had been submitted to date. The next meeting has not been scheduled, but it will likely occur in April. Work group members continue to work on targets refinement and synthesis reports.

Workgroup: Design

Coordinator: Justin Alvarez

The design team has been working through how to address the uncertainty associated with more dynamic designs when they are reporting within the program and to the public. A document is being developed outlining the proposed process. The process will be followed but won't be formalized until we have an implementation branch chief. The state design team is preparing for implementation of the Dutch Creek rehabilitation site. The Hoopa design team presented the Upper Connor Creek existing conditions report at the February meeting and is working toward a 30% design, they are also prepping for Chapman Phase B with the recently acquired as built topography from Chapman Phase A. The Yurok design team is working toward an 80% design for the Oregon gulch project but has made some significant changes to the design to address concerns about potential backwatering upstream of the site and impacting Sheridan hole and the lower portion of the riffle that pours into it.

In March the design team plans to float through some of the latest rehab sites to get an on the ground evaluation of how they are performing.

Workgroup: Flow

Coordinator: Todd Buxton

The Flow Workgroup met in person on December 17, January 9, and March 5 and in a conference call on February 7 to propose, refine, and evaluate hydrographs for flow scheduling. Additional tasks included reviewing the proposal for a flow synthesis report and considering decision support tools and turn-taking options for potential use in developing future flow schedules. Otherwise, Todd Buxton is continues tracking Trinity River flows and temperatures to verify implementation of scheduled flows and monitor progress meeting temperature targets on the river.

Workgroup: Watershed

Coordinator: Eric Wiseman

The Watershed WG met on March 16 to review FY20 watershed proposals. A presentation of their consensus recommendation will be given at the March TMC meeting.

Workgroup: Physical

Coordinator: Conor Shea

The Physical Workgroup met on March 2. The focus of the meeting was on development of gravel augmentation recommendations for the 2020 flow release and on planning for gravel augmentation in future years. Permits for placing gravel expire in spring 2020. The Physical Workgroup reviewed status

of currently permitted sites potential new sites, and objectives and means for placing gravel. Workgroup members are at work now on developing concept plans for newly identified sites with the goal of having new sites permitted in 2021.

Workgroup: Riparian and Aquatic Ecology

Coordinator: Chris Laskodi

Since the December TMC meeting, the RAE WG has met twice. Once on December 13 and again on January 27. The main objectives of these meetings have been refining Riparian and Aquatic Ecology objectives, metrics, and targets, and to begin to develop plans for a Science Symposium in 2021. Chris Laskodi was selected as the new RAEWG coordinator due to James Lee becoming the new Science Coordinator for the TRRP. We expect to have another meeting in late March/early April to finalize the objectives, metrics, and targets developed by the RAEWG.

Appendix II: Synthesis Reports Tracking and Estimated Completion Dates

Synthesis Reports											
Project No.	Brief Title	Involved Entities	Proposed Due	FY19 q2	FY19 q3	FY19 q4	FY20 q1	FY20 q2	FY20 q3	FY20 q4	notes
TRRP-2018-002	Tributary Delta	<i>Program Office</i> (POC: Todd Buxton, TRRP)	March 2019				*				Revisit timeline in May
TRRP-2018-003	Fish Habitat	<i>HVT, USFWS, YT, USBR TSC</i> (POC: Damon Goodman, USFWS)	2 nd Q 2019		*			PR done			PR complete
TRRP-2018-007	Juvenile Chinook Production	<i>USFWS, YT, HVT</i> (POC: Bill Pinnix, USFWS)	July 2017	*		YT		PR done			
TRRP-2018-009	Cohort Reconstruction	<i>HVT, USFWS, CDFW</i> (POC: Ken Lindke, CDFW)	2 nd Q 2019							*	
TRRP-2018-011	Adult Salmon Spawning	<i>USFWS, HVT, YT, CDFW</i> (POC: Steve Gough, USFWS)	2 nd Q 2019		*						"PR draft to be ready in April"
TRRP-2018-018	Bed Mobility and Scour	<i>HVT, USFWS</i> (POC: Geoff Hales & Scott McBain, McBain Associates)	2 nd Q 2018		*			Posted			FINAL POSTED!
TRRP-2018-019	Cottonwood Seed Dispersal	<i>HVT</i> (POC: John Bair, McBain Associates)	3 rd Q 2018		*			Posted			FINAL POSTED!
TRRP-2018-021	Riparian Encroachment	<i>HVT</i> (POC: John Bair, McBain Associates)	4 th Q 2018		*			PR done			
TRRP-2018-022	Sediment Storage	<i>HVT, USFWS</i> (POC: Geoff Hales & Scott McBain, McBain Associates)	4 th Q 2018		*						"submitted to Program March"
TRRP-2018-025	Channel Complexity	<i>HVT, USFWS</i> (POC: Smokey Pittman & Scott McBain, McBain Associates)	August 2019			*					Delayed- uncertain timeline
TRRP-2018-027	Fine Sediment	<i>Program Office, NMFS, HVT</i> (POC: Todd Buxton, TRRP)	July 2020							*	
TRRP-2018-032	Water Temperature	<i>YT, USFWS, HVT, USBR, NMFS</i> (POC: Eli Asarian, Riverbend Sciences)	May 2019					*			Expected final completion date: 9/2/20
TRRP-2018-033	Large Wood Management	<i>NMFS, YT, HVT</i> (POC: Scott McBain)	April 2018			*					Internal review

* = due date for TRRP Peer Review process according to status assessment in December 2018.