

Annual Charter Report

General:

Title	Description
Trinity River Restoration Program CVPIA Section 3406(b)(1)/(b)(23)	Trinity River Restoration

Authority:

Provision	Percentage	Comments
B1, B23	100	

Location ID(s):

Latitude	Longitude
40.721403	-122.92719

Watershed(s):

Watershed Name
Trinity River

Schedule:

Funding Begins	Benefits Begin	Funding Complete
10/1/2014	4/1/2014	9/30/2016

Benefit(s):

Metric	Value	Units	Comment
b1(other): Channel Rehabilitation	0	number of improvements	
b1(other): Coarse Sediment Placement (annual) (CU. YDS.)	0	cubic yards	
b1(other): Fine sediment reduction (annual) (CU. YDS.)	0	cubic yards	
b1(other): Fine Sediment annual mass (volume) balance (CU. YDS.)	0	cubic yards	
b1(other): Riparian Corridor Improvements	0	acres	
b23: # Fall-run Chinook Hatchery Escapement	0	percentage of fish	
b23: # Fall-run Chinook Natural Escapement	0	percentage of fish	
b23: # Spring-run Chinook Hatchery Escapement	0	percentage of fish	
b23: # Spring-run Chinook Natural Escapement	0	percentage of fish	
b23: # Coho Salmon Hatchery Escapement	0	percentage of fish	
b23: # Coho Salmon Natural Escapement	0	percentage of fish	
b23: # Steelhead Hatchery Escapement	0	percentage of fish	
b23: # Steelhead Natural Escapement	0	percentage of fish	
b23: ROD (369 TAF - 815 TAF) and Minimum Annual Flow	0	cfs	

Deliverable(s):	
Date	Title
5/27/2014	Annual Report
5/27/2014	Annual Work Plan
5/27/2014	Monitoring Reports
5/27/2014	Implement Flows
5/27/2014	Implement Coarse Sediment Management
5/27/2014	Implement Watershed Restoration Projects

Program Priority:	
Rank	Comment
	Program Priority Comments: Administration, Implementation, Monitoring

Estimated Cost(s):		
Fiscal Year	Fund	Total
2015	CVPRF	\$2,000,000
2015	FWSA	\$1,653,373
2015	WRR	\$11,121,386
2016	CVPRF	\$1,500,000
2016	FWSA	\$1,653,373
2016	WRR	\$11,121,386

Final Total
\$29,049,518

Partners:
Partner Name
Yurok Tribe
Trinity County
CDFW
CDWR
NMFS
USFS
TCRCD
Hoopa Tribe

No Related Programs Listed

Narrative:

Narrative Description

The Trinity River Restoration Program (TRRP) was founded in 2000 based on three comprehensive foundational documents: the Trinity River Flow Evaluation Final Report (TRFEFR; U.S. Fish and Wildlife Service and Hoopa Valley Tribe 1999); the Trinity River Environmental Impact Statement (TREIS/EIR; USFWS et al. 2000); and the Record of Decision (ROD; U.S. Department of the Interior 2000). These documents established a comprehensive science-based adaptive management program to restore the Trinity River's fishery resources.

Program Goals and Objectives for FY 2015

The TRRP is designed to restore the attributes of a healthy, alluvial river system by implementing variable annual instream flows, physical channel rehabilitation, sediment management, and watershed restoration. The Program's overarching goal is to restore and sustain natural production of adult anadromous fish populations downstream of Lewiston Dam to pre-dam levels, to facilitate dependent tribal, commercial and sport fisheries full participation in the benefits of restoration via enhanced harvest opportunities. The TRRP strategy for accomplishing this goal restores and perpetually maintains fish and wildlife resources (including T&E species) by restoring the processes that produce a healthy alluvial river system.

Fiscal Year 2015 (FY 2015) restoration activities include the continued implementation of the TRRP's restoration strategy. The Program will plan and implement restoration flow releases, construct up to three channel rehabilitation projects, augment coarse sediment, execute watershed restoration activities to manage fine sediment, and continue to implement a Decision Support System to integrate monitoring and evaluation results to inform future restoration efforts. Annual restoration flow releases will be based on water year type. Channel rehabilitation projects will include a combination of habitat improvement projects that will focus on side channel construction, floodplain lowering, woody debris placement, spawning gravel processing and augmentation, and juvenile fish habitat enhancements. Annual coarse sediment augmentations will be based on water year type, results of past augmentations, and 2-dimensional modeling runs. Watershed restoration projects will seek to reduce fine sediment contributions to the Trinity River. In addition to the various restoration actions, 18 activities from the TRRP's Integrated Assessment Plan are proposed under six CVPIA Annual Work Plan categories: Environmental Compliance, Pre-Project Monitoring, Post-Project Monitoring, Monitoring (Programmatic), Research (Evaluations, Studies, Investigations), and Modeling. These activities are generally intended to (1) evaluate long-term progress toward achieving Program goals and objectives; and (2) provide short-term feedback to improve Program management actions by testing key hypotheses, and reducing management uncertainties. The activities relate to the influence of restoration actions on fish, wildlife, vegetation and the physical environment.

To achieve these goals, the program does

- Mechanical Channel Rehabilitation
- Flow Management
- Sediment Management

Risk Management:

Risk Description	Likelihood	Risk Impact
Program Funding Constraints	2	2
Permitting Constraints	2	2
Access Constraints	2	2
Environmental Constraints	2	2

Data Management:

Description

TRRP has a Data Management and Utility Plan (<http://odp.trrp.net/Data/Documents/Details.aspx?document=1510>) that outlines the role of data in the program, partner agency responsibilities, data sharing, and final deposition of data. In brief:

- The multiple partner agencies are held responsible for proper management and documentation of draft data they collect or process.
- All data funded by the Department of Interior must be provided to DOI in final, documented form upon completion of funded projects.
- USFWS takes the lead on data review for fisheries data while USBR takes the lead on all other data.
- All final data, fisheries included, are to be stored in a repository at the TRRP office for management by the TRRP Data Steward.
- To promote data access for TRRP Partners and stakeholders, a subset of the repository with final, reviewed, public data is provided at <http://odp.trrp.net>

Year	Activity			Activity Description	
2015	Administration			Management	
Resource	Agency	Resource Type	FTE	Total Fund	Description
Reclamation Personnel	BOR	Staff Position		WRR	Program Manager, USBR co-lead: Management of TRRP program budget, activities, Reclamation staff. Secretary: Carries out all office administrative duties for TRRP. Acquisition Support Specialist: Processes all acquisitions, agreements, contracts for TRRP and monitors TRRP budget. (A30)
Other USBR Offices	BOR	Staff Position		WRR	Regional charges to process purchase requests: assessment is based on number of purchase requests, contracts, grants and agreements processed.
Data Management and Maintenance	BOR	Staff Position		WRR	Serves as data manager for TRRP ensuring QA/QC and metadata for all data. GIS applications of data.
Trinity Adaptive Management Working Group	BOR	Contracts and Agreements Cooperative Agreement		FWSA	(FWS-Arcata Fund) The Trinity Adaptive Management Working Group (TAMWG) is a group of stakeholders providing an opportunity for stakeholders to give policy and management advice about restoration activities to the TMC.
Trinity Management Council	BOR	Contracts and Agreements Cooperative Agreement		WRR	Members and alternates of the eight TRRP partner Federal, State, Tribe and local agencies (Reclamation, Service, NOAA, Forest Service, Hoopa Valley Tribe, Yurok Tribe, California Resources Agencies (DWR, CDFG) and Trinity County participate in four quarterly meetings and monthly teleconferences.
Technical Assistance to Tribes	BOR	Contracts and Agreements Cooperative Agreement		WRR	Development and maintenance of Tribal capacity to fully and meaningfully participate in the TRRP technical and Adaptive Environmental Assessment and Management (AEAM) activities and the restoration of Trinity River Tribal Trust resources. Funds Tribals participation in TRRP implementation.
Service Personnel	FWS	Staff Position		FWSA	(FWS-Arcata Fund) Participation of Arcata Fish and Wildlife Office Fisheries and Conservation Partnership Program staff in the Trinity Management Council, in support of the Trinity River Adaptive Management Working Group, and in science program administration. (A1R)
Public Education and Outreach/Website	BOR	Contracts and Agreements Contract		WRR	Public meetings and informational materials for information transfer about rehabilitation projects, environmental assessment and compliance, monitoring and evaluation, and partnership activities.

Year	Activity			Activity Description		
2015	Implementation			RIG		
Resource	Agency	Resource Type	FTE	Total	Fund	Description
2015 Channel Rehab Construction	BOR	Contracts and Agreements Contract			CVPRF	Implementation of large scale channel rehabilitation projects along the mainstem. Final selection of projects is dependent on cultural resources, environmental compliance, landowner access agreements, and other factors.
Trinity County Technical Assistance	BOR	Contracts and Agreements Cooperative Agreement			WRR	TC DOT works with TRRP staff in project planning and design development including baseline infrastructure inventories, cultural resource evaluations, geological/mining input Management Indicator Species evaluations, ESA and Sensitive Species report writing, recreation management, impact analyses.
NEPA/CEQA Compliance/Permits/Cultural	BOR	Contracts and Agreements Contract			WRR	Develop Environmental Assessments (NEPA/CEQA) to support rehabilitation implementation projects
BLM Technical Assistance	BOR	Contracts and Agreements Contract			WRR	
BLM Wood Harvesting Agreement	BOR	Contracts and Agreements Cooperative Agreement			WRR	BLM coordinates with TRRP rehabilitation projects to identify trees for removal for large wood structures for rehabilitation projects, coordinates NEPA and permitting for tree harvest
USFS Technical Assistance	BOR	Contracts and Agreements Cooperative Agreement			WRR	USFS collaborates with TRRP on watershed projects on USFS land in Trinity River restoration corridor, develops environmental documents for permitting of projects, conducts surveys of cultural resources and indicator species, conducts wild and scenic river consultations and impact analyses.
Realty Acquisitions (Contracts, Easements)	BOR	Staff Position			WRR	Completes all right of access and realty actions necessary to implement rehabilitation projects, prepares and presents project realty/mitigation updates at public meetings, assist TRRP Environmental Specialist with meeting all permit application submission requirements.
Remote Sensing Data (LiDAR, Aerial Photos, etc.)	BOR	Contracts and Agreements Contract			WRR	Digital orthorectified aerial photography on the Trinity River; aircraft-based LiDAR terrestrial topography data and true-color aerial photography for the full 42 mile project area; site specific aircraft-based LiDAR; and ground or sonar based terrestrial and bathymetric topographic surveys.
Hoopa Valley Tribe Support Services	BOR	Contracts and Agreements Cooperative Agreement			WRR	Funds full participation of Hoopa Valley Tribe consultants participation in technical work group meetings and project design activities.

Yurok Tribe Support Services	BOR	Contracts and Agreements Cooperative Agreement	WRR	Support the Yurok Tribe and their consultant team to participate in the Design Team and other implementation tasks.
Dept of Water Resources Design/Survey Support	BOR	Contracts and Agreements Cooperative Agreement	WRR	DWR will participate in design meeting and site visit, prepare detailed civil engineering designs for rehabilitation projects, survey sites in preparation for project designs and implementation, participate in value engineering studies for planned projects, and develop HEC-RAS models for flows.
VE Study - Technical Service Center	BOR	Staff Position	WRR	
TSC Design Support Services	BOR	Staff Position	WRR	
TSC Construction Management	BOR	Staff Position	WRR	Inspectors
Construction Supplies/Equipment	BOR	Supplies/Services Estimate	WRR	
Large Woody Debris Supply	BOR	Supplies/Services Estimate	WRR	
Course Sediment Augmentation/Injection	BOR	Contracts and Agreements Cooperative Agreement	WRR	On-site gravel augmentation along the Trinity River to promote geomorphic processes and habitat development. Gravel augmentation takes place during high flow events.
Course Sediment Processing/Placement	BOR	Contracts and Agreements Cooperative Agreement	WRR	Material processing of floodplain terraces to produce appropriate size class of gravels. This product will support gravel augmentation along the Trinity River mainstem during high flow releases in May-April timeframe
Support Services/Equipment/Software	BOR	Supplies/Services Estimate	WRR	Support Services/Equipment/Software
Revegetation Maintenance/Irrigation	BOR	Contracts and Agreements Cooperative Agreement	WRR	Implementation of revegetation materials at channel rehabilitation projects along the mainstem Trinity River. Final selection of projects is dependent on cultural resources, environmental compliance, landowner access.
Watershed Implementation	BOR	Contracts and Agreements Contract	WRR	Construction of Watershed Restoration Project Sites
2015 Channel Rehab Construction	BOR	Contracts and Agreements Contract	WRR	Implementation of large scale channel rehabilitation projects along the mainstem Final selection of projects is dependent on cultural resources, environmental compliance, landowner access agreements, and other factors.

Riparian Mapping System Wide	BOR	Contracts and Agreements Cooperative Agreement	WRR	Map and quantify changes in riparian floodplain vegetation (e.g., species, age-class, initiation success, structural attributes) at channel rehabilitation sites and system-wide. The TRRP is required to replace riparian vegetation that is removed during channel rehabilitation project implementation.
Riparian Bird Monitoring	BOR	Contracts and Agreements Contract	WRR	Restoration-associated changes in fish abundance and riparian habitat complexity are expected to affect riparian and riverine bird communities on the Trinity River. This project includes a multi-scale, multiple methodology monitoring program designed to meet and assess compliance requirements.
USFS Native Seed Supply	BOR	Contracts and Agreements Cooperative Agreement	WRR	Harvest and supply of native grass seeds to support restoration projects for mitigation of disturbance or removal of riparian vegetation as required by permitting agencies.
Personnel	BOR	Staff Position	WRR	
Supplementary Personnel	BOR	Staff Position	WRR	
FEMA/Trinity County Flood Compliance Updates	BOR	Staff Position	WRR	

Year	Activity				Activity Description		
2015	Monitoring				Science		
Resource	Agency	Resource Type	FTE	Total	Fund	Description	
Mainstem Chinook salmon spawning survey	FWS	Contracts and Agreements Cooperative Agreement			WRR	Monitor spring and fall Chinook salmon spawning in the mainstem Trinity River	
Temperature modeling	BOR	Staff Position			FWSA	(FWS-Arcata Fund) Annual Trinity River Division (TRD) operations are reviewed in the context of providing suitable water temperatures in the Trinity River throughout the year. Reservoir and river temperature models use forecast TRD operations, river flow, and meteorology.	
Personnel	BOR	Staff Position			WRR	Physical Scientist: Provides physical science support to TRRP: Conducts sediment and geomorphic sampling, analysis and modeling. Hydraulic Engineer: Provides hydraulic engineering expertise to TRRP: Participates in planning and implementation. Fishery Biologist	

Scientific Advisory Board	BOR	Contracts and Agreements Cooperative Agreement	WRR	Five scientists, recognized as experts in the disciplines of fisheries biology, fluvial geomorphology, hydraulic engineering, hydrology, riparian ecology, wildlife biology, or aquatic ecology, form a Scientific Advisory Board (SAB). They are currently evaluating channel rehabilitation actions.
Reviews	BOR	Contracts and Agreements Contract	WRR	External peer review of investigation plans or reports.
Adult Escapement Monitoring Program	BOR	Contracts and Agreements Cooperative Agreement	WRR	Monitor adult escapement of hatchery and naturally produced spring and fall Chinook, coho and fall steelhead. Spring and fall Chinook and coho salmon and fall-run steelhead run-size estimation using mark-recapture methods. Includes Trinity River Hatchery Chinook Coded Wire Tagging.
Monitor harvest of naturally produced fall Chinook	BOR	Contracts and Agreements Cooperative Agreement	WRR	Includes the following fall Chinook harvest monitoring projects: Yurok Tribal Harvest, Hoopa Tribal Harvest, Lower Trinity River Sport Harvest Survey, Lower Klamath River Creel Census.
Gravel implementation monitoring	BOR	Contracts and Agreements Contract	WRR	Monitoring activities needed to support a comprehensive evaluation of gravel augmentation activities.
Map and quantify riparian vegetation	BOR	Contracts and Agreements Cooperative Agreement	WRR	Map and quantify changes in riparian floodplain vegetation (e.g., species, age-class, initiation success, structural attributes) system-wide.
Sediment monitoring	BOR	Contracts and Agreements Contract	WRR	Sediment transport monitoring to develop total sediment load estimates (for gravel and sand) associated with the annual high flow releases.
Mainstem Chinook Spawning Survey	BOR	Contracts and Agreements Cooperative Agreement	WRR	Monitor spring and fall Chinook salmon spawning in the mainstem Trinity River
Fish Population Dynamics Model	FWS	Contracts and Agreements Cooperative Agreement	FWSA	(FWS-Arcata Fund) Assessing effects of restoration on Chinook Salmon and Coho Salmon rearing and spawning habitat. Model the effects of restoration on Chinook Salmon and Coho Salmon habitat at future channel rehabilitation sites to help guide project design.
Rearing Habitat Assessment	FWS	Contracts and Agreements Cooperative Agreement	FWSA	(FWS-Arcata Fund) Assessing effects of restoration on Chinook Salmon and Coho Salmon rearing and spawning habitat. Evaluate the effects of restoration on Chinook Salmon and Coho Salmon habitat at multiple spatial and temporal scales.

Trinity River Juvenile salmonid outmigrant monitoring program	FWS	Contracts and Agreements Cooperative Agreement	FWSA	(FWS-Arcata Fund) Quantitative assessment of juvenile salmonid production in the Trinity River
Stream gaging	BOR	Contracts and Agreements Cooperative Agreement	WRR	Stream Gaging network to provide real-time and final, quality controlled data for the Trinity River and tributaries

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