

Work Plan for Fiscal Year 2003

I. Program Title Trinity River Restoration 3406 (b)(23)

II. Responsible Entities

	Agency	Staff Name	Role
Lead	USBR	Doug Schleusner Ed Solbos	Executive Director Implementation Branch Chief

III. Program Objectives for FY 2003.

The Trinity River Restoration Program was established in 1984 under Public Law 98-541 to restore and maintain the fish and wildlife stocks of the Trinity River Basin to those levels that existed just prior to the construction of the Central Valley Project Trinity River Division (TRD). The Trinity River Basin Fish and Wildlife Management Reauthorization Act of 1996 (P.L. 104-143) reauthorized the program through September 30, 1998. The Central Valley Project Improvement Act of 1992 (P.L. 102-575) acknowledged the federal government's trust responsibility to the Hoopa Valley Tribe, increased instream flows to 340,000 acre feet per year, and directed the Secretary of the Interior to develop procedures for restoring and maintaining the Trinity River fishery.

The Trinity River Mainstem Fishery Restoration Draft Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) was completed on January 20, 2000. That document analyzed recommendations of the Trinity River Flow Evaluation Study (June 1999) along with five other alternatives. Biological Assessments and Opinions have since been prepared for the Trinity and Sacramento River systems. The Record of Decision (ROD) for the Final EIS was signed on December 19, 2000.

Components of that decision continue to determine the primary goals and objectives of the Trinity River Restoration Program, which include:

- a. Increased annual instream flows for the Trinity River from the TRD based on forecasted hydrology for the Trinity River Basin as of April 1st of each year, ranging from 369,000 acre-feet (af) in critically dry years to 815,000 af in extremely wet years;
- b. Physical channel rehabilitation, including the removal of riparian berms and the establishment of side channel habitat;
- c. Sediment management, including the supplementation of spawning gravels below the Lewiston Dam and reduction in fine sediments which degrade fish habitats;

- d. Watershed restoration efforts, addressing negative impacts which have resulted from land use practices in the Basin; and
- e. Flood plain infrastructure improvements or modifications, including rebuilding or fortifying bridges and addressing other structures affected by the peak instream flows provided by the ROD.

The following goals and objectives were identified by the Program's budget sub-committee, presented to the Trinity Management Council (TMC) as the basic foundation for FY03's activities, and approved on September 25, 2002. They are not all inclusive, and will be refined and expanded by the Adaptive Environmental Assessment and Management (AEAM) staff.

Program Administration

- The SEIS will be completed and comply with all legal/judicial requirements by the 2004 water year (*specific objectives established by the four co-leads*).
- The TMC will actively guide and support program goals through participation of its members and commitment of individual agency/tribal resources.
- The Adaptive Environmental Assessment and Management (AEAM) Team (Weaverville Office) will be fully staffed, operational, and actively participating in all aspects of the program by November 2002.
- Membership of the Trinity Adaptive Management Working Group (TAMWG) will be announced, and the group will begin meeting and functioning in its advisory capacity by November 2002.
- Members of the Science Advisory Board will be selected, and the group will begin meeting and functioning by March 2003.
- Design and implement an active education and outreach program to improve public awareness, understanding, and acceptance of restoration efforts.
 - ✓ *Sponsor and participate in the annual Salmon Festival in October 2002.*
 - ✓ *Design and develop a website for the Trinity River Restoration Program.*

Rehabilitation and Restoration

- All bridges and floodplain structures will be able to pass "extremely wet year" ROD flows (11,000 cubic feet per second) by May 2004.
 - ✓ *Complete NEPA analyses, permit compliance, and engineering designs for all four bridges, and construction contracts for four bridges.*
 - ✓ *Inventory and analyze all floodplain structures at risk from ROD flows.*
- The first group of channel restoration projects will be ready for implementation as soon as other controlling factors have been resolved.
 - ✓ *Continue NEPA analyses for the first group of 25 potential sites.*
 - ✓ *Complete designs for the first group of 16 channel restoration sites.*

- ✓ *Complete NEPA analyses, permits, designs, and construction contracts for pilot sites and the Rush Creek delta project.*
- Simplify administration and implementation of routine maintenance of the Grass Valley Creek - Hamilton Pond catchment basins.
 - ✓ *Complete the RCD/NRCS/BLM study of pond capacity and efficiency.*
 - ✓ *Continue annual maintenance dredging in the interim.*
 - ✓ *Develop and implement a multi-agency agreement for long-term or multi-year permits for routine pond maintenance.*

Monitoring and Analysis

- A comprehensive gravel management plan will be available to guide proposed introductions, including but not limited to source and destination locations, methods, timing, and quantities.
 - ✓ *The Phase 1 Plan will be distributed for review and comment by October 2002, with the objective of obtaining sufficient information to guide possible high flow gravel introductions in May 2003.*
 - ✓ *A technical workshop will be convened to solicit recommendations on the scope of work, level of detail, and timing of the Phase 2 effort.*
 - ✓ *The Phase 2 Plan will be completed by June 2003.*
- Improved analysis and reporting capabilities for anadromous fish and river-related resources will be available for budget and program planning purposes by FY 2004.
 - ✓ *Continue current monitoring activities in the interim.*
 - ✓ *Compile, analyze, and prepare status reports for each major resource area for the period December 2000 - September 2003.*
 - ✓ *Develop a comprehensive and integrated monitoring structure and process to guide monitoring activities in future years.*
- Complete a comprehensive review of past watershed restoration activities.
 - ✓ *Issue and award a RFP(s) for an independent study sufficient to guide the scope and location of future activities in time for FY04 budget and program planning, including but not limited to: lists/GIS layers of all watershed restoration sites by agency, assessment of results and effectiveness, current conditions of tributary watersheds, future work needed, and possible development issues that could potentially impact the watershed.*

IV. Status of the Program.

On September 25, 2002, the Trinity Management Council approved a FY03 budget of \$12.1 million, based on the following projected funding sources: Reclamation \$7 million (Water and Related appropriations); Fish and Wildlife Service, \$2.3 million (appropriated funds); California Department of Fish and Game, \$431,000 (Coastal Salmon Recovery Program), and including this request for \$2.4 million in CVPIA Restoration funds.

In fiscal year 2001, \$1,500,000 was allocated to the Trinity River Restoration Program from the CVPIA Restoration Fund. Those funds, plus an additional \$350,000 of appropriated Water and Related funds, were used in FY 2002 to continue environmental analyses, hydrologic studies, and engineering designs for the four bridges. Approximately \$175,000 remains unobligated from CVPIA Restoration Funds as of September 5, 2002.

Additional funding is needed to fully implement the construction contracts for the four bridges described above under Rehabilitation and Restoration (refer to Table F). This aspect of the Program is necessary to implement key provisions of the ROD. At the same time it would provide maximum flexibility for operating the Trinity River Division of the Central Valley Project in ways that would achieve the fisheries restoration goals of the program.

This project will also ensure safe and reasonable year-round access to parcels of land and homes served by the existing Salt Flat, Bucktail, Poker Bar, and Treadwell bridges across the Trinity River between river miles 97 and 107 (Lewiston Dam is located at river mile 112).

In summary, these actions are needed for the following reasons:

- To implement the Secretary of the Interior's December 19, 2000 Record of Decision to institute a new flow schedule (with dam releases reaching 11,000 cfs in extremely wet water years) in order to restore salmon and steelhead fisheries in the Trinity River by increasing quantity and quality of spawning and rearing habitat, and improving temperature conditions.
- To mitigate the associated higher likelihood of flooding of the four bridges and/or their access roads with potential loss of property and lives when increased releases are combined with peak tributary flows (e.g., the 1997 storms).
- To reexamine current limitations on Trinity Dam imposed by Safety of Dams water releases that are set at 6,000 cfs during periods of high inflows, while actual release capability is 13,750 cfs.

V. FY 2002 Accomplishments.

Over the years, this program has improved anadromous fisheries habitat in the Trinity River, enhanced tributaries throughout the Basin, and it continues to develop valuable scientific knowledge to improve the success of this and other river restoration efforts.

While flow issues are the subject of ongoing litigation, other activities identified in the December 2000 ROD have been allowed to proceed by the court. This includes site-specific environmental studies and engineering designs for bridge modifications, planning for channel restoration sites, gravel management activities, and establishment of the Restoration Program's organization structure. Monitoring activities for hydrologic, fishery, and riparian resources have also been allowed to continue and expand. The upper sediment

pond at the mouth of Grass Valley Creek was dredged for the first time in four years, and plans to improve its efficiency are underway.

The eight-member Trinity Management Council was established as the decision-making body for the program in FY01, and the charter for a federal advisory committee (Trinity Adaptive Management Working Group) was signed in March 2002 to allow for formal stakeholder participation. The Adaptive Environmental Assessment and Management (AEAM) Team has been established to provide technical and scientific support for the program. The Executive Director was hired October 7, 2001, the Weaverville field office opened September 1, 2002, and the majority of technical and scientific staff was in place by September 30, 2002.

Accomplishments specifically related to the bridge replacement/reconstruction projects on the Trinity River in FY 2002 with CVPIA Restoration Funds include:

- Conceptual designs for all four bridges, including a Value Engineering study.
- Hydraulic modeling for all bridge locations.
- Load testing on the Treadwell Bridge.
- Public scoping session and other public information meetings on potential alternatives.
- Development of a “proposed action” at each site and viable alternatives for environmental analysis.

Other past program accomplishments not involving CVPIA Restoration Funds include construction of the Buckhorn Debris Dam in 1991, sediment dredging in Grass Valley Creek and the Trinity River, placement of spawning gravel in the upper reaches of the Trinity River, development of a wildlife program, acquisition of 17,000 acres of extremely erodible land in the Grass Valley Creek drainage area, and modernization of the Trinity River Fish Hatchery. .

VI. Tasks, Costs, Schedules and Deliverables

A. Narrative Explanation of Tasks.

1. Program Administration. The USBR (Reclamation) Program Manager (Executive Director) is responsible for managing this program. This includes developing and implementing the overall program, outreach, coordinating with stakeholders, identifying partnering funds, and developing all necessary grants and cooperative agreements. The Implementation and Monitoring and Analysis Branch Chiefs provide day-to-day management of specific tasks and projects. Reclamation’s Northern California Area Office, Mid-Pacific Regional Office, and Denver Technical Service Center provide technical and contracting support, as needed.
2. Rehabilitation and Restoration. Primary emphasis in FY03 is on modification of bridges and other flood plain structures, site-specific NEPA/CEQA analyses

for channel restoration activities, and possible gravel introductions. Specific tasks include analyzing alternatives, evaluating environmental effects (physical, biological, economic, and social), completing draft environmental documents, conducting necessary public reviews, finalizing the documents, obtaining permits, and awarding contracts.

3. **Monitoring and Analysis.** Primary emphasis in FY03 is on development and implementation of an overall monitoring strategy, managing on-going monitoring activities, coordination and standardization of data collection efforts, development of a geographic information system, and completion of a gravel management plan.

B. Supplemental Narrative Explanation of Bridge Construction Tasks

1. **Environmental Analysis/Compliance and Permit Acquisition.** The replacement or reconstruction of the four bridges involves substantial environmental documentation, requiring an Environmental Assessment (EA) under the National Environmental Policy Act (NEPA) and an Environmental Impact Report (EIR) under the California Environmental Quality Act (CEQA). Reclamation is the Federal Lead Agency for the NEPA document, has obtained a contractor, and funded both the NEPA and CEQA documents. Specific tasks completed in FY 2002 included development of a Purpose and Need statement, performing wildlife species and habitat surveys, and conducting public scoping sessions. The environmental documents will provide the basis for site-specific permit applications to address flood plain modification, impacts to threatened and endangered species, cultural resource and historic preservation issues. Tasks in FY03 will include analysis of alternatives, evaluation of environmental effects (physical, biological, economic, and social), completion of the draft environmental documents, conducting a public review process, finalizing the documents, and obtaining permits.
2. **Hydrologic Studies, Engineering Design, and Cost Estimates.** A flood frequency analysis was prepared in FY02 to identify 100 and 50-year peak flows entering Trinity Reservoir. Safety of Dams (SOD) constraints and peak tributary flows were considered in order to obtain design flows. Flow data has been entered into hydraulic models for each bridge site to prepare conceptual designs and cost estimates. In concert with public scoping meetings, alternatives were developed that address stakeholder concerns and meet technical requirements. Outside consultants participated in the review of alternatives, and helped develop a proposed action for each bridge site. Designs based on the proposed action for each bridge will be finalized in conjunction with the environmental compliance process by the end of the second quarter in FY03.
3. **Construction and Contract Administration.** Final designs will be prepared, leading to a construction contract(s) in mid-FY03. The Restoration Program office in Weaverville along with the USBR construction office in Willows will administer the contracts.

C. Schedule and Deliverables.

#	Task	Dates		Deliverable
		Start	Complete	
1	Program Administration	10/01/02	09/30/03	Planning, management, and oversight of the total restoration program, including public outreach, interagency coordination, budget development, and accomplishment reporting.
2	Rehabilitation and Restoration	10/01/02	09/30/03	Planning, design, and implementation of restoration-related activities, including environmental studies, public reviews, permit compliance with regulatory agencies, and contracting for bridge construction, channel rehab sites, gravel introductions, and fine sediment management.
3	Monitoring and Analysis	10/01/02	09/30/03	Planning, design, and implementation of monitoring, modeling, and analysis activities, including interagency coordination, information management, scientific studies, evaluations, and management recommendations.

D. Summary of Program Costs and Funding Sources.

#	Task	Total Cost	W&RR
1	Program Administration	\$2,568,600	\$2,568,6000
2	Rehabilitation and Restoration	\$3,009,000	\$3,009,0000
3	Monitoring and Analysis	\$1,422,400	\$1,422,4000
		\$0	\$0
		\$0	\$0
		\$0	\$0
Total Program Budget		\$7,000,000	\$7,000,000

Explanatory Notes: Other available funds include \$431,000 from the CDF&G Coastal Salmon Recovery Program for Salt Flat bridge reconstruction, and an estimated \$2,290,700 in appropriated funds from the U.S. Fish and Wildlife Service. Refer by the Trinity Management Council on September 25, 2002.

E. CVPI A Program Budget.

#	Task	FTE	Direct Salary and Benefits Costs	Contracts Costs	Miscellaneous Costs	Administrative Costs	Total Costs
1	Program Administration	3.0	\$ 340,000	\$ 0	\$ 625,000	\$ 957,000	\$ 1,922,000
2	Rehabilitation and Restoration	3.0	\$ 340,000	\$ 3,009,000	\$ 0	\$ 0	\$ 3,349,000
3	Monitoring and Analysis	2.0	\$ 230,000	\$ 1,499,000	\$ 0	\$ 0	\$ 1,729,000
		0.0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
		0.0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	Total by Category	8.0	\$ 910,000	\$ 4,508,000	\$ 625,000	\$ 957,000	\$ 7,000,000

Explanatory Notes: This only includes Water and Related Resources funding from Reclamation appropriations, and does not include program funding that will be available from the Fish and Wildlife Service, or other agencies.

F. Additional Funds Needed

#	Task	Total Cost	Funding Sources					
			RF					
1	Program Administration	\$0	\$0					
2	Rehabilitation and Restoration	\$2,400,000	\$2,400,000					
3	Monitoring and Analysis	\$0	\$0					
Total Program Budget		\$2,400,000	\$2,400,000	\$				

Explanatory Notes: A total of \$4.4 million is needed in FY 2003 to modify or replace the four bridges that are presently a physical constraint to full implementation of the ROD. The TMC approved budget includes a cost-sharing approach to this need: \$1,569,000 (Water and Related Resources), \$431,000 (CDF&G Coastal Salmon Recovery Program), and the requested \$2,400,000 (CVPIA Restoration Fund). This package would ensure that all bridges will be able to pass “extremely wet year” ROD flows (11,000 cfs) by May 2004, and include completion of NEPA analyses and engineering designs, obtaining required permits, and construction contracts for all four bridges. Current funding (Water and Related Resources) allows for modification of one bridge (Salt Flat), which would still limit releases to “normal year” flows of 6,000 cubic feet per second (cfs). A minimum of \$500,000 in Restoration Funds would be necessary to modify two bridges (Salt Flat and Treadwell), and thus allow “wet year” releases of 8,500 cfs by May 2004.

VII. Future Years Commitments/Actions.

As determined by the Trinity Management Council¹, at this time the projected annual need for the total program is in the range of \$12 to \$17 million. Reclamation believes that its responsibility for activities on the mainstem of the Trinity can be met with an annual appropriation of \$7 million (Water and Related Resources). The difference between the \$7 million and \$12 to \$17 million represent additional aspects of the program related to watershed improvement and fish and wildlife monitoring. The projected annual need for CVPIA funds could range from \$3 million to \$10 million, depending on other agencies' contributions to the program. A more clearly defined statement of need will be described by October of each fiscal year.

¹ The Trinity Management Council, which makes annual budget recommendations for the overall Trinity River Restoration Program, consists of four federal agencies (Bureau of Reclamation, Fish and Wildlife Service, National Marine Fisheries Service, Forest Service), the State of California Resources Agency, Trinity County, and the Hoopa Valley and Yurok Tribes.

Trinity River Restoration Program
FY 2003 Budget (all funding sources)
 (Approved by TMC 9/25/02)

PROGRAM ADMINISTRATION	Amount
AEAM Team - Weaverville Office	
Personnel (salary, relocations)	\$1,063,474
Office Operations (rent, utilities, supplies)	\$137,400
Public Information (workshops, brochures)	\$40,000
Subtotal	\$1,240,874
Trinity Management Council	
Administration	
Bureau of Reclamation	\$25,000
Fish & Wildlife Service	\$150,000
Forest Service	\$0
National Marine Fisheries Service	\$0
Hoopa Valley Tribe	\$150,000
Yurok Tribe	\$150,000
CA Dept of Fish & Game	\$150,000
CA Dept of Water Resources	\$150,000
Trinity County	\$50,000
Bureau of Land Management	\$75,000
Subtotal	\$900,000
Trinity Adaptive Management Working Group	
Administration	
Support Functions	\$25,000
Reimbursable Travel	\$30,000
Subtotal	\$55,000
Independent Review Committees	
Science Advisory Board	
Support Functions	\$10,000
Reimbursable Travel	\$20,000
Subtotal	\$30,000
Information Management	
Spatial/GIS	\$175,000
Remote Sensing/Aerial Photography	\$50,000
Subtotal	\$225,000
Supplemental EIS - temporary	
Contracts/Amendments	\$100,000
Agency Participation (co-leads)	\$300,000
Subtotal	\$400,000
Total Program Administration	\$2,850,900

REHABILITATION AND RESTORATION	Amount
Bridges and Structures	
Environmental Compliance and Permits	
NSR NEPA Contract Admin	\$50,000
Implementation	
Construction Contract 4 Bridges	\$4,350,000
Floodplain Structures Relocation	\$100,000
Subtotal	\$4,500,000
Channel Restoration	
Environmental Compliance and Permits	\$0
Implementation	
Rush Creek Delta Removal Contract	\$200,000
Mechanical Site Rehab	\$500,000
Contract 2 Pilots	
Bank Rehab Data	\$50,000
Collection for Design	
Subtotal	\$750,000
Gravel Introductions	
Environmental Compliance and Permits	
NEPA Gravel Projects	\$40,000
Implementation	
Long Term Gravel Introductions	\$200,000
Subtotal	\$240,000
Sediment Management	
Environmental Compliance and Permits	\$0
Implementation	
Hamilton Ponds Dredging	\$150,000
Subtotal	\$150,000
Tributaries	
Environmental Compliance and Permits	\$0
Implementation	
Trinity County Watershed Grants	\$200,000
Subtotal	\$200,000
Total Rehabilitation and Restoration	\$5,840,000

MONITORING AND ANALYSIS	Amount
Hydrology/Geomorphology	
Streamflow Gaging	
Main stem	\$75,000
Tributaries	\$75,000
Sediment Monitoring	
Deadwood, Rush, Indian Creeks	\$184,000
Grass Valley Creek	\$45,000
Sediment Management	
Refine/Calibrate Transport Model	\$65,000
Gravel Management Plan Phase 2	\$40,000
Rush/Indian Creek	\$0
Sediment Pond Feasibility	
Bank Rehab Sites	\$40,000
Geomorphic Baseline Monitoring	
Review/Evaluate Watershed Activities	\$20,000
Subtotal	\$544,000
Fish Physiology	
Temperature Monitoring	
Water Temperature Monitoring	\$25,000
Smolt Health	
Lab Studies, Smolt Response to Thermal Conditions	\$25,000
Timing of Fry Emergence, Smolt Production	\$154,700
Hatchery Practices, Fingerling vs. Yearling Releases	\$75,000
Adult Health	
Thermal History/Tolerance, egg viability study	\$90,000
Quick Response, Spring Run Mortality Monitoring	\$25,000
Radio Tracking, Spring Chinook/Refugia	\$50,000
Subtotal	\$444,700
Fish Habitat/Management	
Spawning Surveys	
Carcass Surveys	\$140,000
Fall Run Scale Analysis, Age Composition	\$70,000
Spring Run Scale Analysis, Age Composition	\$26,400
Redd Scour Data Collection	\$30,000

MONITORING AND ANALYSIS (continued)	Amount
Fish Habitat/Management (continued)	
Emigration Surveys	
Emigration Estimates, Lower Trinity	\$180,000
Emigration Estimates, North Fork	\$180,000
Marking and Tagging	
CWT Marking at Hatchery	\$360,000
Chinook Tag Decoding at Hatchery	\$16,000
Mark Hatchery Steelhead	\$72,000
Mark Hatchery Coho	\$26,000
Run Size/Angler Harvest	
Run Size/Harvest Estimates, incl. Reward Tags	\$382,000
Angler Harvest, Estuary to Coon Creek	\$65,000
Angler Harvest, Weitchpec to Hawkins Bar	\$72,000
Angler Harvest, Spring Chinook	\$50,000
Tribal Harvest Survey, Lower Klamath	\$150,000
Baseline Monitoring	
Fish Habitat/Physiology	\$40,000
Monitoring Workshop	
Bank Rehab Sites, Biological Baseline Data Collection	\$250,000
ESA, Coho Recovery Plan Coordination	\$20,000
Green Sturgeon Habitat Use, Trinity/Lower Klamath	\$50,000
Subtotal	\$2,179,400
Riparian/Wildlife	
Habitat Mapping	
Key Riparian Species	\$50,000
Baseline Monitoring	
Riparian/Wildlife Monitoring Workshop	\$40,000
Monitor Riparian Vegetation Transects	\$110,000
Amphibian/Reptile Baseline Monitoring	\$70,000
Avian Baseline Monitoring	\$70,000
Subtotal	\$340,000
Total Monitoring and Analysis	\$3,508,100
Grand Total	12,199,000