

# Draft CVPIA Fiscal Year 2009 Annual Work Plan December 1, 2008

## ***Program Title***

Trinity River Restoration Program (TRRP)- CVPIA Section 3406(b)(1) other/ (b)(23)

## ***Responsible Entities***

<b>Staff Name</b>	<b>Agency</b>	<b>Role</b>
Doug Schleusner	USBR	Executive Director
Jennifer Faler	USBR	Implementation Branch Chief

## ***Program Goals and Objectives for FY 2009***

The Trinity River Mainstem Fishery Restoration Final Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) completed in October 2000, and the Record of Decision (ROD), signed on December 19, 2000, established a comprehensive science-based adaptive management program to restore the Trinity River's fishery. The program is based upon restoring the attributes of a healthy, alluvial river system by implementing variable annual instream flows, physical channel rehabilitation, sediment management, and floodplain infrastructure improvements.

Activities in Fiscal Year (FY) 2009 will focus on in-river construction activities that support the program objective of increasing juvenile rearing habitat for salmonids. Specifically, CVPIA Restoration Funds will contribute to implementation of the following task in FY 2009:

Task 1.11.1. - Construct 3 channel rehabilitation projects (**high priority**) during the 2009/10 construction season and perform annual coarse sediment augmentation (**lower priority**). The channel rehabilitation projects (Sawmill, Upper Rush Creek and Upper Reading Creek) 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 other juvenile rearing habitat enhancements. Annual coarse sediment augmentations will be based on water year type. In 2009 it is anticipated that 4,300 cubic yards of coarse sediment will be placed through direct injection during high flows and an additional 10,500 cubic yards will be placed in conjunction with the construction of the Sawmill, Upper Rush Creek and Upper Reading Creek channel rehabilitation sites.

## ***Status of the Program***

The TRRP has a fully staffed office dedicated to planning and implementing restoration activities, monitoring and program administration. Over the years, this Program has implemented many

projects to improve anadromous fisheries habitat in the Trinity River Basin. The TRRP continues to develop valuable scientific knowledge and restoration techniques to improve the success of this program and restoration projects on other rivers.

In fiscal years 2001-2008, the CVPIA Restoration Fund has allocated \$11,500,000 to the TRRP. Those funds, plus additional Federal appropriated funds and State funds, have been used to support the planning, environmental compliance, design, and construction activities at four bridge replacement sites, construction of sixteen channel rehabilitation projects, and placement of 21,000 cubic yards of spawning gravel below Lewiston Dam. One house has been relocated, a number of structures modified, and sixty (67) domestic water or sewer systems have been upgraded.

The program has made significant progress toward meeting goals of the program, although substantial additional effort is required to fully achieve performance goals. For example, the floodplain structures modification aspect of the program has achieved 100 percent capability of releasing maximum ROD flows for all water year types (critically dry, dry, normal, wet, extremely wet). Since the ROD was signed, nearly 1.8 million acre-feet more water has been released into the Trinity River than if it had not been signed. However, there have not been enough instances of each water year to adequately address the adaptive management requirements of the program. In addition to the flow accomplishments, the program has completed approximately 35% of the channel rehabilitation projects (16 out of 47 sites). Watershed and sediment management (gravel augmentation and fine sediment control) activities are ongoing annual requirements employed to achieve long term equilibrium of gravel movement through the system.

While positive upward trends were observed in 2008 program performance of naturally produced adult spawner escapement for fall-run and spring-run Chinook salmon and steelhead populations are still well behind identified goals. While there has been a general increase in coho escapement, their threatened status under the ESA allows no direct harvest which greatly influences spawner escapement.

### ***FY 2008 Restoration Fund (RF) Accomplishments***

In fiscal year 2008, the CVPIA Restoration Fund allocated \$4,000,000 to support the Trinity River Restoration Program. The program was able to obligate \$1,700,000. The remaining \$2,300,000 will be spent in 2009 and 2010. The \$1.7 million that was obligated helped accomplish the following activities:

- Contract award and construction of eight channel rehabilitation projects associated with the Lewiston Dark Gulch Site Rehabilitation Project. Construction on the project will be 50% complete by the end of the fiscal year and 100% complete by December 2008. Over 57,000 cubic yards of material is being excavated and 10,700 cubic yards of coarse sediment is being placed along a 3-mile section of the Trinity River in Lewiston, California. This will provide increased geomorphic and hydraulic complexity to this high priority area of the river and provide greater diversity of fish habitats supporting a

wide range of life history stages.

- The development of a Master Environmental Assessment (EA)/Environmental Impact Report (EIR) was also initiated for the remaining construction activities (i.e. channel rehabilitation, gravel augmentation and other sediment management activities). A Master EA/EIR will reduce overall program costs and potentially accelerate the construction program implementation for the remaining 31 sites.
- Placement of 2,300 cubic yards of spawning gravel at Sawmill and Diversion Pool sites during the Spring 2008 high flow event.
- Award of grant agreement for the purpose of implementing ten watershed restoration projects developed and selected through the collaborative activities of the Trinity River Watershed Council and the TRRP Watershed Work Group. The restoration projects include mitigation projects in areas of high sediment production, preventative maintenance to reduce the likelihood that high rates of sediment projection will develop in the future, sediment detention, enhancing fish passage at road crossings or other obstructions, and assessments for identifying and prioritizing the watershed activities that will most effectively improve aquatic habitat conditions.

Research indicates that a three to four-fold increase in rearing habitat is required to observe statistically significant increases in juvenile fish production. Completed work in 2008 significantly increases spawning gravel availability for adults and rearing habitat available for juvenile salmonids in the Lewiston area. The high flow injection of gravel and the site rehabilitation gravel placement in 2008 resulted in the largest gravel placement in the history of the program (13,000 cubic yards).

### **FY 2008 Water & Related Resources (W&RR) Fund Accomplishments:**

In FY 2008, the TRRP obligated \$7.01 M in W&RR funds. These funds helped accomplish the following activities:

- Program Administration of the TRRP, including Weaverville field office, Trinity Management Council (TMC) member agencies and tribes, and the federal advisory committee Trinity Adaptive Management Working Group (TAMWG).
- Flow schedule planning for WY2008.
- Completion of the final review draft of the Integrated Assessment Plan (science framework for monitoring activities) – to be reviewed and approved by the TMC in December 2008.

- Planning/design/National Environmental Policy Act (NEPA)-California Environmental Quality Act (CEQA) compliance/permitting for 8 sites (Lewiston-Dark Gulch project) to be built in FY2008/9
- Construction of 8 channel rehabilitation sites covering a project area of 3 miles in length and costing approximately \$2.0 M (Lewiston-Dark Gulch project). This task was also partially funded with CVPIA Restoration Funds.
- Development of a Master EIR/EA that will be site specific for the remaining Phase 1 sites (8 sites) and programmatic for Phase 2 sites (23 sites). This task was also partially funded with CVPIA Restoration Funds.
- Gravel augmentation involved 2,300 cubic yards placed in-river (below Lewiston Hatchery) and 10,700 cubic yards placed during site rehabilitation construction. This task was also partially funded with CVPIA Restoration Funds.
- Standard monitoring/assessment tasks – approximately \$2 million to conduct stream gaging, sediment transport, juvenile outmigrant surveys, adult run size (weirs), sport and tribal harvest, pre-construction habitat assessment, juvenile/adult fish health, riparian vegetation and wildlife, etc.

The information in the following tables illustrates the progress of the site rehabilitation and gravel augmentation activities. Table 1 is a summary of the coarse sediment augmentation locations and quantities that were completed in FY 2003, 2005, 2006, 2007 and 2008. Table 2 provides a summary of the entire site rehabilitation aspect of the program.

**Table A - Coarse Sediment Augmentation Summary Per Calendar Year (CY)**

Fiscal Year	Gravel Augmentation Location	Gravel (CY)	Total per Year
2003	Cableway	2,000	2,000
2004	--	0	0
2005	--	0	0
2006	Hatchery	1,621	1,621
2007	Hatchery	4,300	4,300
2008	High Flow Injections	2,300	13,000
	Lewiston-Dark Gulch	10,700	

**Table B - Rehabilitation Site Construction Summary**

Fiscal Year	Rehabilitation Site	# Sites	Dirtwork (CY)	Gravel (CY)
2005 / 6	Hocker Flat (complete)	1	83,000	0
2006 / 7	Canyon Creek Sites (complete)	4	91,000	0
2007 / 8	Indian Creek Sites (complete)	3	77,800	0

**Table B - Rehabilitation Site Construction Summary**

Fiscal Year	Rehabilitation Site	# Sites	Dirtwork (CY)	Gravel (CY)
<b>2008 / 9</b>	<b>Lewiston and Dark Gulch Sites ( 50% complete)</b>	<b>8</b>	<b>56,900</b>	<b>10,700</b>
2009 / 10	Sawmill, Upper Rush Creek, Upper Reading Creek Sites	3	180,000	10,500
2010 / 11	Lowden, Trinity House Gulch, Steel Bridge, Lower Reading Creek Sites	5	180,000	18,500
2011 / 12	Phase 2 (To Be Determined)	11	TBD	TBD
2012 / 13	Phase 2 (To Be Determined)	12	TBD	TBD

Construction is complete at the Hocker Flat, Canyon Creek, and Indian Creek sites. Funds have been obligated and construction 50% complete at the Lewiston and Dark Gulch sites as of 9/30/08; remainder to be completed by December 2008.

**Table 1. FY 2009 Tasks, Costs, Schedules and Deliverables**

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source Restoration Fund	Funding Source Water & Related Resources
<b>1.1</b>	<b>Program Management</b>						
1.1.1		4	DOI Co-designee for program implementation - USBR. NCAO Executive Director - USBR Trinity River Restoration Program (TRRP) Responsibilities include implementation of the Record of Decision (ROD) for the Trinity River Mainstem Fishery Restoration Final EIS/EIR signed December 2000. Program activities are performed under the authority of CVPIA Section 3406(b)(23) for provisions of the ROD associated with implementation of annual instream flows. Other activities not specifically identified in Section 3406(b)(23) are performed under the authority of 3406(b)(1)(other). Budget components for FY09 include personnel costs, office and vehicle lease charges, and Reclamation indirect charges	Ongoing	\$1,005,000	\$0	\$1,005,000
	<u>Subtotal Costs</u>				\$1,005,000	\$0	\$1,005,000
<b>1.2</b>	<b>Program Support</b>	<b>See 1.1.1</b>					
1.2.1			DOI Co-designee for program implementation - USFWS Arcata Field Office, with appropriated USFWS funds.	Ongoing	\$0	\$0	\$0
	<u>Subtotal Costs</u>						
<b>1.3</b>	<b>Technical Support</b>						
1.3.1			Trinity Management Council (TMC) - Group of agencies and tribes established by Trinity ROD to advise the Secretary on management of the program. Provides broad direction on funding prioritization and program emphasis. Includes labor, travel and per diem costs for 8 principle TMC members and technical representatives and other direct and indirect costs.	Ongoing	\$730,000	\$0	\$730,000
1.3.2			Trinity Adaptive Management Working Group (TAMWG) - A chartered FACA group of involved agencies and stakeholders. Includes travel and per diem costs for 15-20 members and administrative support costs. Funded through the USFWS.	Ongoing	\$0	\$0	\$0

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source Restoration Fund	Funding Source Water & Related Resources
1.3.3			Independent Review Committees - Includes objective peer review by a Science Advisory Board and independent review panels to review draft Scopes of Work and RFP's.	Ongoing	\$150,000	\$0	\$150,000
	<u>Subtotal Costs</u>				\$880,000	\$0	\$880,000
<b>1.4</b>	<b>Restoration Actions</b>						
1.4.1			Restoration actions to be implemented in FY09 are identified in other tasks listed herein.		\$0	\$0	\$0
	<u>Subtotal Costs</u>						
<b>1.5</b>	<b>Evaluations Studies Investigations Research</b>						
1.5.1			Adult fish health study. The USFWS directly funds and is responsible for reporting on other adult fish health and emigration studies that contribute to the Program.	Ongoing	\$ 20,000	\$0	\$20,000
	<u>Subtotal Costs</u>				\$ 20,000	\$0	\$20,000
<b>1.6</b>	<b>Land - Water - and - Conveyance - Acquisitions</b>						
1.6.1		1.0	Realty agreements with private landowners to indemnify the Government from any liabilities associated with implementation of the ROD fishery flows. Includes signed "Agreement, Accord and Satisfaction" documents that are recorded against the property. Also supports the "Well and Septic Assistance Program" administered through a grant to Trinity County. Includes 1 FTE: Diana Clifton, Realty Specialist.	Ongoing	\$616,500	\$0	\$616,500
	<u>Subtotal Costs</u>				\$616,500	\$0	\$616,500
<b>1.7</b>	<b>Outreach and Public Involvement</b>						
1.7.1			Program structure (TMC, TAMWG) and environmental compliance processes provide significant outreach and public involvement opportunities. Includes publications, program brochures and exhibits.	Ongoing	\$40,000	\$0	\$40,000
	<u>Subtotal Costs</u>				\$40,000	\$0	\$40,000

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source Restoration Fund	Funding Source Water & Related Resources
<b>1.8</b>	<b>Planning</b>						
1.8.1		.5	Continued development of an Integrated Assessment Plan (IAP) and Integrated Information Management System (IIMS) to guide the adaptive management component of the program. Includes monitoring protocols and performance measure analysis and development. Includes .5 FTE: Andreas Krause, Physical Scientist.	9/30/2009	\$224,500	\$0	\$224,500
	<u>Subtotal Costs</u>				\$224,500	\$0	\$224,500
<b>1.9</b>	<b>Environmental Compliance</b>						
1.9.1		1.0	Environmental and cultural resource compliance as necessary to implement the channel rehabilitation and gravel augmentation components of the program. Includes a stand-alone EA/EIR for the construction of 8 channel rehabilitation sites and a Master EA/EIR for the construction of 23 channel rehabilitation sites through 2012 with long-term gravel augmentation of 10,000 - 15,000 tons per year at multiple sites. Also includes permitting and CEQA lead support costs. Includes 1.0 FTE: Brandt Gutermuth, Environmental Specialist.	9/30/2009	\$349,000	\$0	\$349,000
	<u>Subtotal Costs</u>				\$349,000	\$0	\$349,000
<b>1.10</b>	<b>Design</b>						
1.10.1		1.0	Preparation of new IDIQ construction contract to implement the channel rehabilitation and gravel augmentation components of the program. Includes planning and conceptual designs for 23 phase 2 channel rehabilitation sites to be constructed from 2010-2013 (see table 2, pg. 5), with associated gravel processing and augmentation. An IDIQ Task Order for the 2009 construction activities will be prepared by program partners and TRRP personnel. The TRRP assembles the design packages and coordinates with MP-200 and MP-3800 for reviews, document preparation, and contract solicitation and award. Includes a Value Engineering study, surveying and HEC-RAS support. Includes 1.0 FTE: David Bandrowski, Civil Engineer.	9/30/2009	\$595,900	\$0	\$595,900
	<u>Subtotal Costs</u>				\$595,900	\$0	\$595,900
<b>1.11</b>	<b>Construction</b>						



Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source Restoration Fund	Funding Source Water & Related Resources
1.11.1		2.5	Construction of channel rehabilitation sites ( <b>high priority</b> ) and gravel augmentation ( <b>lower priority</b> ) projects as identified in the ROD. Includes contract award of three sites in FY09 (Sawmill, Upper Rush Creek, and Upper Reading Creek) and provides 14,800 tons of gravel to the river. Also includes mitigation requirements and dredging of the Hamilton sediment ponds. Projects have a direct affect on CPAR performance goals for 3406(b)(23) Trinity River Flow and (b)(1)(other) Fishery Restoration by increasing juvenile rearing and adult spawning habitat. Includes 2.5 FTEs: Jennifer Faler, RIG Branch Chief (.5), GIS Specialist, vacancy, Civil Technician, vacancy.	9/30/2009	\$3,143,600	\$2,550,000	\$ 593,600
1.11.2			Portion of Dark Gulch, Lewiston 4 channel rehabilitation sites funded through the California Department of Fish and Game (CDFG).	9/30/2009	\$450,000	\$0	\$0
1.11.3			* <b>Identified Carryover:</b> Construction of five additional channel rehabilitation sites in FY2010 to more closely attain the schedule originally identified in the ROD. This will allow completion of the first phase of rehabilitation sites (a total of 24 sites) to accelerate accomplishment of critical output goals identified in CPAR for habitat enhancement.	9/30/2009	\$0	\$ 0	\$0
<u>Subtotal Costs</u>					\$3,593,600	\$2,550,000	\$593,600
<b>1.12</b>	<b>Monitoring</b>						
1.12.1		4.5	Physical and biological monitoring activities to support the performance and adaptive management components of ROD implementation. Includes stream flow gauging and monitoring associated with water temperature, mainstem sediment transport, geomorphology, implementation, riparian vegetation, wildlife, habitat assessment, hatchery practices, and run size/angler harvest. Other fisheries monitoring activities are funded directly and reported on by the USUSFWS. Includes 4.5 FTEs: Rod Wittler, TMAG Branch Chief (.5), David Gaeuman, Geomorphologist (.5), Andreas Krause, Physical Scientist (.5), Nina Hemphill, Fisheries Biologist, Restoration Ecologist, vacancy, Database Steward, vacancy.	Ongoing	\$2,228,200	\$0	\$2,228,200
<u>Subtotal Costs</u>					\$2,228,200	\$0	\$2,228,200
<b>1.13</b>	<b>Modeling</b>						
1.13.1			Refinement of existing SALMOD model for Trinity applications.	Ongoing	\$15,000	\$0	\$15,000
<u>Subtotal Costs</u>					\$15,000	\$0	\$15,000

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source Restoration Fund	Funding Source Water & Related Resources
<b>1.14</b>	<b>Other</b>						
1.14.1	Watersheds	.5	Watershed planning and implementation includes coordination with the local Watershed Council and implementation of restoration projects that reduce fine sediment input to the Trinity River. Nine projects were obligated in 2007 for implementation in 2008 and 11 projects are funded and ready for implementation in 2009. Since the ROD was signed in 2000, the program has been committed to funding and implementing watershed restoration projects on the Trinity River. Dependent on funding and the availability of approved projects by the Watershed Council, the program is committed to funding restoration projects annually. The watershed program is an ongoing annual requirement and includes .5 FTE: David Gaeuman, Geomorphologist	Ongoing	\$572,300	\$0	\$572,300
	<u>Subtotal Costs</u>				\$572,300	\$0	\$572,300
	<b>Total Costs</b>				<b>\$10,140,000</b>	<b>\$2,550,000</b>	<b>\$7,140,000</b>
	Reclamation funding				\$ 9,690,000	\$0	\$0
	CADFG funding				\$ 450,000	\$0	\$0
	Identified Carryover *1.11.3 FY2010 Identified Carry-over \$750,000.				\$ 1,550,000	\$1,550,000	\$0

**Table 2. Budget Breakout**

Task	Agency	FTE	LABOR			CONTRACTS			Total Costs
			Direct Salary and Benefits Costs	Overhead Costs on Salary & Benefits	USFWS Overhead Assess: 22% of Direct Salary and Benefits Costs	Contract, Grant, and Agreement Costs	USFWS Overhead Assess: 6% Contract Costs	Misc. Costs	
1.1 Program Management	USFWS		0	0	0	0	0	0	0
	USBR	4.0	365,000	219,000	0	0	0	421,000	1,005,000
1.3 Technical Support	USFWS		0	0	0	0	0	0	0
	USBR		0	0	0	880,000	0	0	880,000
1.5 Evaluations, Studies, Investigations, Research	USFWS		0	0	0	0	0	0	0
	USBR		0	0	0	20,000	0	0	20,000
1.6 Land, Water and Conveyance Acquisitions	USFWS		0	0	0	0	0	0	0
	USBR	1.0	104,100	62,400	0	450,000	0	0	616,500
1.7 Outreach and Public Involvement	USFWS		0	0	0	0	0	0	0
	USBR		0	0	0	40,000	0	0	40,000
1.8 Planning	USFWS		0	0	0	0	0	0	0
	USBR	.5	46,600	27,900	0	150,000	0	0	224,500
1.9 Environmental Compliance	USFWS		0	0	0	0	0	0	0
	USBR	1.0	93,150	55,850	0	200,000	0	0	349,000
1.1 Design	USFWS		0	0	0	0	0	0	0
	USBR	1.0	84,900	51,000	0	460,000	0	0	595,900
1.11 Construction	USFWS		0	0	0	0	0	0	0
	USBR	2.5	212,850	130,750	0	2,800,000	0	0	3,143,600
1.12 Monitoring	USFWS		0	0	0	0	0	0	0
	USBR	4.5	413,200	250,000	0	1,565,000	0	0	2,228,200
1.13 Modeling	USFWS		0	0	0	0	0	0	0
	USBR	0	0	0	0	15,000	0	0	15,000
1.14 Other	USFWS		0	0	0	0	0	0	0
	Other		0	0	0	0	0	0	0
	Other		0	0	0	0	0	0	0
	USBR	.5	45,200	27,100	0	500,000	0	0	572,300
	Other		0	0	0	0	0	0	0
	Other		0	0	0	0	0	0	0
<b>USFWS Total Costs</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<b>USBR Total Costs</b>	15.0	1,365,000	824,000	0	7,080,000	0	421,000	9,690,000
<b>TOTAL ALL</b>	15.0	1,365,000	824,000	0	7,080,000	0	421,000	9,690,000

**Table 3. Three-Year Budget Plan FY 2010 – 2012**

<b>Year</b>	<b>Description of Activities (RF Funding)</b>	<b>Requested RF Funding</b>	<b>Requested W&amp;RR Funding</b>
<b>2010</b>	Restoration funds will contribute to implementation of up to 4 channel rehabilitation sites. The cost estimate for the 30% conceptual designs completed for these 5 sites located in four places on the river (Lowden, Trinity House Gulch, Steel Bridge, and Lower Reading Creek) is \$4.5 million. The ability to complete all 5 of these sites will depend on total funding availability.	\$1,750,000 *	\$ 7,140,000
<b>2011</b>	Restoration funds will contribute to implementation of channel rehabilitation projects for the remaining Phase 1 sites, if any (see 2010 description above). If all Phase 1 sites are completed in 2010, then restoration funds will be used to fund up to 11 Phase 2 sites. Cost estimates have not yet been developed for Phase 2 sites.	\$1,000,000	\$ 9,823,000
<b>2012</b>	Restoration funds will contribute to implementation channel rehabilitation projects for the remaining Phase 2 sites.	\$1,000,000	\$10,160,000

**Includes 750,000 of approved carryover.**

Note: The FY 2010 – 2012 Budget Plan provides estimates of capability only. The amounts are displayed are those that might be reasonably appropriated each year. These figures do not reflect the future Congressional Appropriations process. All of these estimates will be adjusted annually as RF collections are realized.