Draft CVPIA Fiscal Year 2011 Annual Work Plan
January 31, 2011

Program Title

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

Responsible Entities

Staff Name	Agency	Role
Jennifer Faler	USBR	Acting Executive Director
Andreas Krause	USBR	Acting Implementation Branch Chief

Program Goals and Objectives for FY 2010

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, watershed restoration and floodplain infrastructure improvements.

Activities in Fiscal Year (FY) 2011 will focus on in-river construction activities and associated monitoring 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 2011:

Task 1.11.1. - Construct up to 3 channel rehabilitation projects **(high priority)**, depending on cost estimates from the final designs during the 2011/12 construction season and perform annual coarse sediment augmentation and watershed restoration **(lower priority).** The 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 other juvenile rearing habitat enhancements. Annual coarse sediment augmentations are based on water year type. In 2011 it is anticipated that 3,500 - 5,000 cubic yards of coarse sediment will be placed through direct injection during high flows and an additional 5,000 – 10,000 cubic yards will be placed in conjunction with the construction of up to 3 channel rehabilitation sites.

Status of the Program

The TRRP has a fully staffed office dedicated to planning and implementing restoration activities, science and 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 collect valuable scientific information and implementing restoration techniques to improve the success of this program and restoration projects on other rivers.

In fiscal years 2001-2010, the CVPIA Restoration Fund has allocated $13,500,000 to the TRRP. Those funds, plus additional Federally 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 twenty three channel rehabilitation projects, and placement of 61,800 cubic yards of spawning gravel below Lewiston Dam. Table A - Coarse Sediment Augmentation Summary Per Fiscal Year provides a complete accounting of TRRP's coarse sediment augmentation program. In addition, extensive efforts have been made to develop an Integrated Assessment Plan that will guide future monitoring and evaluation activities in a more cost efficient and effective manner. Interrelationships between and among geomorphic, riparian, and biological resources have been more thoroughly identified than ever before, and relative priorities are being established to ensure that key components are adequately addressed even in the event of constrained budgets. The success of this program element has a direct bearing on the ability of the TRRP to measure longer-term progress towards fishery restoration goals.

Implementation of the ROD-defined flow schedules is a cornerstone of the TRRP's outcome based fishery restoration goals. The volumes of water (acre-feet) and peak releases (cubic feet per second) are based on five water year types (Critically Dry, Dry, Normal, Wet, and Extremely Wet), and collectively are designed to create inter-annual variability that mimics the pre-dam snowmelt driven hydrograph and contributes to the desired healthy river attributes identified in the flow study. The program has made progress toward meeting goals of the program, although substantial additional effort is required to fully achieve performance goals. One of the major objectives of the ROD flows is to flush sand out of the substrate to improve habitat conditions. Sediment monitoring in 2010 has shown significant reductions in the sand content of the channel bed throughout the upper 40 miles of the Trinity River since 2001. This reduction in sand content indicates that ROD flows along with watershed restoration are meeting this objective. Since the ROD was signed, nearly 2.23 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 49% of the channel rehabilitation projects (23 out of 47 sites). The ROD envisioned that it would take up to seven years to complete the 47 channel rehabilitation sites. Construction of the first site occurred in 2005 and it took six years to complete 23 sites. For this reason, an unfunded need of $2 million per year is being reported starting in 2011 to accelerate the completion of the channel rehabilitation aspect of the ROD. If this funding is provided, it is anticipated that all sites will be completed by FY2014. Refer to Table B - Rehabilitation Site Construction Summary below for a summary of the mechanical channel rehabilitation site activities. Lastly, 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.

Monitoring data for fish populations indicate variable results. The California Department of Fish and Game responded to increases in 2006 and 2007 record fish runs in steelhead numbers by instituting a larger take limit for hatchery steelhead for recreational anglers in the Trinity River during the 2008 fishing season. While much of the increased population consists of hatchery-produced fish, this suggests a response to system-wide improvements in temperatures and reduced fine sediment that likely is beneficial to all species and runs. The variable nature of these populations was demonstrated in preliminary 2008 weir counts, which suggests a smaller steelhead run than the past two years, but with a somewhat higher percentage of wild fish. Adult fish are spawning in areas not previously utilized, including within the channel rehabilitation sites.

FY 2010 Restoration Fund (RF) Accomplishments

In fiscal year 2010, the CVPIA Restoration Fund allocated $1,000,000 to support the Trinity River Restoration Program. These funds were allocated to the following activities:

- Contract award and implementation of extensive environmental mitigation such as riparian re-establishment, wetland enhancement, and associated reporting to regulatory agencies.

- Placement of 3,000 cubic yards of spawning gravel at the Diversion Pool and Grass Valley Creek delta sites during the spring 2010 high flow event.

- Award of grant agreement for the purpose of implementing five 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.

- Contract award to supply 166-32 foot logs suitable for use as habitat structures or engineered log jams and 2,500 cubic yards of coarse sediment for future rehabilitation and coarse sediment augmentation projects.

FY 2010 Water & Related Resources (W&RR) Fund Accomplishments:

In FY 2010, the TRRP obligated $6.75M in W&RR funds and $5.08M in American Reinvestment and Recovery Act 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).

- Contract award and construction of an extensive channel rehabilitation project in Lewiston and Douglas City. Construction on the Lowden Ranch Area and Reading Creek Rehabilitation Sites is 95% complete and will be 100% complete once the weather allows for site completion and demobilization. Over 200,000 cubic yards of material is being excavated and 28,400 cubic yards of coarse sediment is being placed along 2.4 miles of the Trinity River. In addition, large woody debris (trees), boulders, willow clumps, etc. will be placed in the mainstem and constructed side channels for aquatic and geomorphic purposes. The project will improve approximately 5.2 miles of edge habitat and 36 acres of floodplain surfaces.

- Flow schedule planning and implementation complete for WY2010.

- Planning and engineering designs are 60% complete for the next four channel rehabilitation sites.

- Ongoing monitoring/assessment tasks – approximately $4.0M obligated to conduct stream gaging, sediment transport, juvenile outmigrant and fry utilization surveys, adult run size (weirs), sport and tribal harvest, pre-construction habitat assessment, juvenile/adult fish health, riparian vegetation and wildlife, etc.

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 2010 will significantly increase spawning gravel availability for adults and rearing habitat available for juvenile salmonids in the

Lewiston and Douglas City area. An assessment to predict actual habitat gains is underway.

Table A - Coarse Sediment Augmentation Summary Per Fiscal Year

Fiscal Year	Gravel Augmentation Location	Gravel (CY)	Total per Year
2003	Cableway	2,000	2,000
2006	Hatchery	1,600	1,600
2007	Hatchery	4,300	4,300
2008	High Flow Injections	2,300	14,400
	Lewiston-Dark Gulch	12,100	
2009	High Flow Injections	2,300	8,000
	Sawmill	5,700	
2010	High Flow Injections	3,100	31,500
	Lowden Ranch Area and Reading Creek	28,400	
		Total =	**61,800**

Table B - Rehabilitation Site Construction Summary

Fiscal Year	Rehabilitation Site	Sites	Earth-work (CY)	Large Wood	River Miles	Acres Treated
2005	Hocker Flat (complete)	1	83,000	0	1.0	26
2006	Canyon Creek Sites (complete)	4	91,000	100	1.7	40
2007	Indian Creek Sites (complete)	3	77,800	200	2.8	31
2008	Lewiston and Dark Gulch Sites (complete)	8	56,900	200	3.7	42
2009	Sawmill and Steel Bridge Day Use (complete)	2	87,750	260	0.8	25
2010	Lowden, Trinity House Gulch, Reading Creek	5	202,600	300	2.4	36
	Total =	**23**	**599,050**	**1,060**	**12.4**	**200**

Table 1. FY 2011 Activities and Costs

AWP Activity Number	Type of Activity	# of FTE's	Activity Name & Description	NMFS OCAP RPA#	Performance Metric	Performance Target	Complete this FY? Y/N	Total Project Cost	FY2011 Anticipated Funding			
									Restoration Fund	Water and Related Resources	State or Other Sources*	Total All Sources
1.1	**Program Management**											
1.1.1		3.5	DOI Co-designee for program implementation - USBR. NCAO Executive Director - USBR Trinity River Restoration Program (TRRP)				N	$1,110,000	$0	$1,110,000	$0	$1,110,000
			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 FY2011 include personnel costs, office and vehicle lease charges, and Reclamation indirect charges.		Adult escapement	Restoration and maintenance of Trinity River anadromous fishery resources to pre-dam levels							
	Total FTEs	3.5				***Subtotal Funding***		$1,110,000	$0	$1,110,000	$0	$1,110,000
						Reclamation		$1,110,000	$0	$1,110,000	$0	$1,110,000
						Service		$0	$0	$0	$0	$0
						Other		$0	$0	$0	$0	$0
1.2	**Program Support**											
1.2.1		See 1.1.1	DOI Co-designee for program implementation - USFWS Arcata Field Office, with appropriated USFWS funds.		Adult escapement	Restoration and maintenance of Trinity River anadromous fishery resources to pre-dam levels	N	$0	$0	$0	$0	$0
						Subtotal Funding		$0	$0	$0	$0	$0
						Reclamation		$0	$0	$0	$0	$0
						Service		$0	$0	$0	$0	$0
						Other		$0	$0	$0	$0	$0

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									Restoration Fund	Water and Related Resources	State or Other Sources*	Total All Sources
1.3	**Technical Support**											
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.		Adult escapement	Restoration and maintenance of Trinity River anadromous fishery resources to pre-dam levels	N	$526,000	$0	$526,000	$0	$526,000
1.3.2			Non-project specific funding in addition to that associated with TMC activities. This support allows the Hoopa Valley Tribe and the Yurok Tribe to fully administer and support on-going technical assessment activities related to the Trinity River Restoration Program's Adaptive Management (AEAM) of the program. This scope of work reflects the emphasis in overall planning and implementation of the Trinity Adaptive Environmental Management and Assessment Program (AEAMP), as well as policy deliberations, technical analysis, and coordination within Tribal government.		Adult escapement	Restoration and maintenance of Trinity River anadromous fishery resources to pre-dam levels	N	$564,000	$0	$564,000	$0	$564,000
1.3.3			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.		Adult escapement	Restoration and maintenance of Trinity River anadromous fishery resources to pre-dam levels	N	$0	$0	$0	$0	$0
1.3.4			Independent Review Committees - Includes objective peer reviews by a Science Advisory Board, expert review panels, and sub-program review panels.		Adult escapement	Restoration and maintenance of Trinity River anadromous fishery resources to pre-dam levels	N	$100,000	$0	$100,000	$0	$100,000
1.3.5			Responsibilities include implementation of the Record of Decision (ROD) for the Trinity River Mainstem Fishery Restoration Final EIS/EIR signed December 2000. Budget components for FY2011 include personnel costs, office and vehicle lease charges, and USFWS indirect charges. FTE's are identified as follows: USFWS funds 7.35 FTE's with their appropriated funds.		Adult escapement	Restoration and maintenance of Trinity River anadromous fishery resources to pre-dam levels	N	$774,000	$0	$0	$774,000	$774,000
						Subtotal Funding		$1,964,000	$0	$1,190,000	$774,000	$1,964,000
						Reclamation		$1,190,000	$0	$1,190,000	$0	$1,190,000
						Service		$774,000	$0	$0	$774,000	$774,000
						Other		$0	$0	$0	$0	$0

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									Restoration Fund	Water and Related Resources	State or Other Sources*	Total All Sources
1.4	**Restoration Actions**											
1.4.1			Restoration actions include watershed projects to reduce fine sediment to the mainstem and coarse sediment augmentation projects. 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. Seven projects are being implemented in 2010 and new projects are in the review stage for 2011. 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.		Sediment trasport rates	Reduce the average grain size to increase mobility of coarse sediment in mainstem and stabilize fine sediment in Trinity River watershed	N	$922,000	$0	$922,000	$0	$922,000
						Subtotal Funding		$922,000	$0	$922,000	$0	$922,000
						Reclamation		$922,000	$0	$922,000	$0	$922,000
						Service		$0	$0	$0	$0	$0
						Other		$0	$0	$0	$0	$0
1.5	**Evaluations Studies Investigations Research**											
1.5.1			Adult fish health study. The USFWS funds these projects and is responsible for reporting on other adult fish health and emigration studies that contribute to the Program.		Adult escapement	Restoration and maintenance of Trinity River anadroumous fishery resources to pre-dam levels	N	$1,889,300	$0	$1,889,300	$0	$1,889,300
						Subtotal Funding		$1,889,300	$0	$1,889,300	$0	$1,889,300
						Reclamation		$1,889,300	$0	$1,889,300	$0	$1,889,300
						Service		$0	$0	$0	$0	$0
						Other		$0	$0	$0	$0	$0
1.6	**Land - Water - and - Conveyance - Acquisitions**											
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 planning for FEMA flood compliance and floodplain structure relocation actions. Includes 1 FTE: Realty Specialist.		As needed in support of implementation and monitoring projects	Restoration and maintenance of Trinity River anadromous fishery resources to pre-dam levels	N	$413,000	$0	$413,000	$0	$413,000
	Total FTEs	1.0				***Subtotal Funding***		$413,000	$0	$413,000	$0	$413,000
						Reclamation		$413,000	$0	$413,000	$0	$413,000
						Service		$0	$0	$0	$0	$0
						Other		$0	$0	$0	$0	$0

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									Restoration Fund	Water and Related Resources	State or Other Sources*	Total All Sources
1.7	**Outreach and Public Involvement**											
1.7.1			Program structure (TMC, TAMWG) and environmental compliance processes provide significant outreach and public involvement opportunities. Includes publications, program brochures, website maintenance, and exhibits		Adult escapement	Restoration and maintenance of Trinity River anadroumous fishery resources to pre-dam levels	N	$85,000	$0	$85,000	$0	$85,000
						Subtotal Funding		$85,000	$0	$85,000	$0	$85,000
						Reclamation		$85,000	$0	$85,000	$0	$85,000
						Service		$0	$0	$0	$0	$0
						Other		$0	$0	$0	$0	$0
1.8	**Planning**											
1.8.1		1.0	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, performance measure analysis, development and bi-annual science symposium. Includes: 1.0 FTE Data Specialist(contract employee)		Adult escapement	Restoration and maintenance of Trinity River anadromous fishery resources to pre-dam levels	N	$405,000	$0	$405,000	$0	$405,000
	Total FTEs	1.0				***Subtotal Funding***		$405,000	$0	$405,000	$0	$405,000
						Reclamation		$405,000	$0	$405,000	$0	$405,000
						Service		$0	$0	$0	$0	$0
						Other		$0	$0	$0	$0	$0
1.9	**Environmental Compliance**											
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 preparation of CEQA/NEPA environmental reviews, environmental permitting, and mitigation planning for phase 2 channel rehab sites through 2014 with long-term gravel augmentation of 10,000 - 15,000 tons per year at multiple sites. Includes: .5 FTE, Brandt Gutermuth, Environmental Specialist; .5 FTE, GIS Technician.		Adult escapement	Restoration and maintenance of Trinity River anadromous fishery resources to pre-dam levels	N	$517,500	$0	$517,500	$0	$517,500
	Total FTEs	1.0				***Subtotal Funding***		$517,500	$0	$517,500	$0	$517,500
						Reclamation		$517,500	$0	$517,500	$0	$517,500
						Service		$0	$0	$0	$0	$0
						Other		$0	$0	$0	$0	$0

AWP Activity Number	Type of Activity	# of FTE's	Activity Name & Description	NMFS OCAP RPA#	Performance Metric	Performance Target	Complete this FY? Y/N	Total Project Cost	FY2011 Anticipated Funding			
									Restoration Fund	Water and Related Resources	State or Other Sources*	Total All Sources
1.10	**Design**											
1.10.1		2.0	Preparation of site designs and contract documents to implement up to 3 channel rehabilitation and gravel augmentation components of the program. Includes planning and conceptual designs for up to 6 phase 2 channel rehabilitation sites to be constructed from 2011-2014 (see table 2, pg. 5), with associated gravel processing and augmentation. The TRRP assembles the design packages and coordinates with MPCO and MP-3800 for reviews, document preparation, and contract solicitation and award. Includes a Value Engineering study, surveying, geologic and hydrologic investigations, and HEC RAS support. Includes: 1.0 FTE, Civil Engineer; .5 FTE, Civil Technician; .5 FTE, Environmental Specialist.		Construct up to 47 mechanical channel rehabilitation sites	Restore attributes that produce a healthy, functioning alluvial river system.	N	$956,000	$0	$956,000	$0	$956,000
	Total FTEs	2.0				***Subtotal Funding***		$956,000	$0	$956,000	$0	$956,000
						Reclamation		$956,000	$0	$956,000	$0	$956,000
						Service		$0	$0	$0	$0	$0
						Other		$0	$0	$0	$0	$0
1.11	**Construction**											
1.11.1		2.5	Construction of channel rehabilitation sites (high priority) and gravel augmentation (lower priority) projects as identified in the ROD. Includes funding for up to 3 channel rehabilitation sites. Also includes environmental requirements. 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: .5 FTE, RIG Branch Chief; .5 FTE, GIS Technician; .5 FTE, Civil Technician; 1.0 FTE, Contracting Officer's Representative		Construct up to 47 mechanical channel rehabilitation sites	Restore attributes that produce a healthy, functioning alluvial river system	N	$3,552,000	$1,000,000	$2,552,000	$0	$3,552,000
1.11.2			Continued completion of ARRA FUNDED channel rehabilitation sites (high priority) and gravel augmentation (lower priority) projects as identified in the ROD; Reading Creek and Lowden Ranch Area.		Construct five mechanical channel rehabilitation sites	Restore attributes that produce a healthy, functioning alluvial river system	Y	$0	$0	$0	$0	$0
	Total FTEs	2.5				***Subtotal Funding***		$3,552,000	$1,000,000	$2,552,000	$0	$3,552,000
						Reclamation		$3,552,000	$1,000,000	$2,552,000	$0	$3,552,000
						Service		$0	$0	$0	$0	$0
						Other		$0	$0	$0	$0	$0

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									Restoration Fund	Water and Related Resources	State or Other Sources*	Total All Sources
1.12	**Monitoring**											
1.12.1		4.0	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 USFWS. Includes: .5 FTE, Special Projects; .5 FTE, DGeomorphologist; 1.0 FTE Physical Scientist; 1 FTE, Fisheries Biologist; 1.0 FTE, Riparian Ecologist.		Adult escapement	Restoration and maintenance of Trinity River anadromous fishery resources to pre-dam levels	N	$3,177,400	$0	$1,771,400	$1,406,000	$3,177,400
	Total FTEs	4.0				***Subtotal Funding***		$3,177,400	$0	$1,771,400	$1,406,000	$3,177,400
						Reclamation		$1,771,400	$0	$1,771,400	$0	$1,771,400
						Service		$1,406,000	$0	$0	$1,406,000	$1,406,000
						Other		$0	$0	$0	$0	$0
1.13	**Modeling**											
1.13.1			Physical and biological modeling activities to support the performance and adaptive management components of ROD implementation. Funding pays for calibration monitoring for the water temperature model run by FWS staff.		Adult escapement	Restoration and maintenance of Trinity River anadromous fishery resources to pre-dam levels	N	$8,800	$0	$8,800	$0	$8,800
						Subtotal Funding		$8,800	$0	$8,800	$0	$8,800
						Reclamation		$8,800	$0	$8,800	$0	$8,800
						Service		$0	$0	$0	$0	$0
						Other		$0	$0	$0	$0	$0
	TOTAL FUNDING							**$15,000,000**	**$1,000,000**	**$11,820,000**	**$2,180,000**	**$15,000,000**
	Total Funding Breakdown by Agency:											
	Reclamation funding							$12,820,000	$1,000,000	$11,820,000	$0	$12,820,000
	USFWS							$2,180,000	$0	$0	$2,180,000	$2,180,000
	Other							$0	$0	$0	$0	$0
	Unfunded Needs											
	Construction		The Program needs approximately $2,000,000 per year in additional funds to complete the channel rehabilitation aspect of the ROD by 2014.						$2,000,000	$0	$0	$2,000,000
	Total Unfunded Needs								$2,000,000	$0	$0	$2,000,000
	* Other anticipated FY 2011 funding is from Service appropriations to the Arcata Field Office.											

Table 2. FY 2011 Budget Breakout

Task	Agency	FTE	LABOR		CONTRACTS		USBR Only Misc. Costs	Total Costs
			Direct Salary and Benefits Costs [1/]	FWS Only Overhead Assess: 22% of Direct Salary and Benefits Costs [2/]	Contract, Grant, and Agreement Costs	FWS Only Overhead Assess: 6% Contract Costs [2/]		
1.1 Program Management	FWS			$0	$0	$0		$0
	USBR	3.5	$560,000		$0		$550,000	$1,110,000
1.2 Program Support	FWS		$0	$0	$0	$0		$0
	USBR		$0		$0		$0	$0
1.3 Technical Support	FWS		$774,000		$0	$0		$774,000
	USBR		$0		$1,190,000		$0	$1,190,000
1.4 Restoration Actions	FWS		$0	$0	$0	$0		$0
	USBR	0.5	$77,000		$845,000		$0	$922,000
1.5 Evaluations, Studies,	FWS		$0	$0	$0			$0
	USBR		$0		$1,889,300		$0	$1,889,300
1.6 Land, Water and Conveyance	FWS		$0	$0	$0	$0		$0
	USBR	1	$173,000		$240,000		$0	$413,000
1.7 Outreach and Public Involvement	FWS		$0	$0	$0	$0		$0
	USBR		$0		$85,000		$0	$85,000
1.8 Planning	FWS		$0	$0	$0	$0		$0
	USBR	1	$168,000		$237,000		$0	$405,000
1.9 Environmental Compliance	FWS		$0	$0	$0	$0		$0
	USBR	1	$154,500		$363,000		$0	$517,500
1.10 Design	FWS		$0	$0	$0	$0		$0
	USBR	2	$286,000		$670,000		$0	$956,000
1.11 Construction	FWS		$0	$0	$0	$0		$0
	USBR	2.5	$352,000		$3,200,000		$0	$3,552,000
1.12 Monitoring	FWS		$0	$0	$1,406,000	$0		$1,406,000
	USBR	3.5	$509,000		$1,262,400		$0	$1,771,400
1.13 Modeling	FWS		$0	$0	$0	$0		$0
	USBR		$0		$0		$0	$0
	FWS		$0	$0	$0	$0		$0
	Other		$0		$0	$0		$0
	Other		$0		$0	$0		$0
	USBR		$0		$8,800		$0	$8,800
	Other		$0		$0		$0	$0
	Other		$0		$0		$0	$0
Administrative Total - FWS			$774,000	$0		$0		$774,000
Contracts, Grants and Agreements Total - FWS					$1,406,000			$1,406,000
FWS Total Costs		0	$774,000	$0	$1,406,000	$0		$2,180,000
Administrative Total - USBR			$2,279,500				$550,000	$2,829,500
Contracts, Grants and Agreements Total - USBR					$9,990,500			$9,990,500
USBR Total Costs		15	$2,279,500		$9,990,500		$550,000	$12,820,000
TOTAL ALL		**15**	**$3,053,500**	**$0**	**$11,396,500**	**$0**	**$550,000**	**$15,000,000**

1/ For FWS only: The FWS develops a bio-rate which is the combination of both the salary/benefit and related administrative costs. The FWS simple definition reads, "It is an average $$ rate that is developed and used for estimating project costs. It incorporates a biologists' salary and benefits, supervisory, clerical and biologist support costs and all other office operating costs related to completing project tasks.

2/ FWS assesses an O/H Burden charge of 6% on all contracts/agreements related to budget object codes starting with 25, 41, and 32, and a charge of 22% on costs under all other budget object codes.

Table 3. CVPIA Three-Year Budget Plan FY 2012 – 2014

($ Thousands)

Year	Description of Activities	Requested RF Funding	Requested W&RR Funding	Anticipated Other Funding (footnote source)
2012	On-going implementation (channel rehabilitation, gravel augmentation, watershed restoration, and environmental mitigation), monitoring and analysis (adaptive management) and program administration for the Trinity River Restoration Program. At this funding level, 26 through 30 of the 47 total sites could be completed. If an additional $2M per year (2011 through 2014) of unfunded needs are met, the Program could complete all 47 sites in 2014.	$1,000	$11,823	$2,180
2013	On-going implementation (channel rehabilitation, gravel augmentation, watershed restoration, and environmental mitigation), monitoring and analysis (adaptive management) and program administration for the Trinity River Restoration Program. At this funding level, 31 through 35 of the 47 total sites could be completed. If an additional $2M per year (2011 through 2014) of unfunded needs are met, the Program could complete all 47 sites in 2014.	$2,000	$12,220	$2,180
2014	On-going implementation (channel rehabilitation, gravel augmentation, watershed restoration, and environmental mitigation), monitoring and analysis (adaptive management) and program administration for the Trinity River Restoration Program. At this funding level, 36 through 40 of the 47 total sites could be completed. If an additional $2M per year (2011 through 2014) of unfunded needs are met, the Program could complete all 47 sites in 2014.	$2,000	$12,220	$2,180

Note: The FY 2012 – 2014 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.

Other funding from USFWS, Arcata Field Office.

Table 4. FY 2011 CVPIA Monitoring Projects

Project Description:	Stream Gaging network to provide real-time and final, quality controlled data for the Trinity River and tributaries.
FY 2009 Project Complete?	Ongoing
CVPIA annual work plan subtask number:	1.12.1
Scope of the monitoring effort:	Trinity River – 10 locations.
Product/deliverable:	Provisional real-time and final quality controlled data are available via the USGS website. Final flow data typically becomes available in February for the preceding water year. For select gages, the USGS provides final flow data on Sept. 1 to facilitate sediment transport records computations and reporting.
Cost:	224,000
Questions posed:	N/A
Objectives:	Determine stream flow at various locations on the Trinity River mainstem and tributaries
Results – expected or actual:	Provisional real-time and quality controlled stream flow data every 15-minutes.
Data collection methods:	Standard methods as prescribed by the U.S. Geological Survey.
Data management:	All data reported, archived, and available through the National Water Information System maintained by the U.S. Geological Survey (www.usgs.gov)
Assessment:	Data is used for a variety of purposes throughout the Trinity River Restoration Program (hydrology and hydraulic modeling, site design, sediment transport computations, habitat mapping, smolt outmigration, etc.).
Use of information in future decision making:	Data is used for a variety of purposes throughout the Trinity River Restoration Program (hydrology and hydraulic modeling, site design, sediment transport computations, habitat mapping, smolt outmigration, etc.).
NMFS OCAP BO RPA	No

Project Description:	Adults Run Size
FY 2009 Project Complete?	Field work ongoing for 2009 run
CVPIA annual work plan subtask number:	1.12.1
Scope of the monitoring effort:	Whole Trinity River System
Product/deliverable:	Annual final Reports from HVT, and CDFG, USFWS documenting the results of the monitoring activity
Cost:	1,863,400
Questions posed:	Has the in-river run size shifted with ROD flows? Has escapement changed with rehabilitation or ROD flows? Has abundance and distribution of redds changed in response to ROD flows or rehabilitation efforts? Has tribal or in river sport harvest increased in response to rehabilitation actions or ROD flows?
Objectives:	To monitor success of rehabilitation efforts on harvest and escapement.
Results – expected or actual:	As conditions in river improve we predict that in river run size, escapement and harvest will increase. Trend analyses over a 10 year period may be used to answer the above questions.
Data collection methods:	Weirs, carcass/redd surveys, sport and tribal harvest surveys, coded wire tagging (CWT) of 25% of hatchery Chinook, 100% marking of hatchery steelhead and Coho. Scales collected and analyzed..
Data management:	Database maintained by CDFG, HVT and YT, data used for fall Chinook in harvest management of Klamath stocks, PFMC uses data
Assessment:	In river run size, escapement and harvest numbers for Chinook, Coho, and steelhead. Proportion of hatchery spawners in wild, separation of fall and spring Chinook, separation of different aged Chinook using scales and CWT
Use of information in future decision making:	Long term assessment , cannot be used for short term decision making
NMFS OCAP BO RPA	Yes for coho

Project Description:	Sediment transport monitoring to develop total sediment load estimates (for gravel and sand) associated with the annual high flow releases.
FY 2009 Project Complete?	Final report due in December.
CVPIA annual work plan subtask number:	1.12.1
Scope of the monitoring effort:	Trinity River – 4 locations.
Product/deliverable:	Digital database with quality controlled monitoring data, and a final report that provides an analysis of the data.
Cost:	269,000 (assuming normal water year)
Questions posed:	Have we met our sediment management objectives? Are we adding enough gravel? Are we reducing the total sand storage in the river?
Objectives:	Quantify total load and sediment budget for coarse and fine sediment. Use results to improve our ability to predict sediment transport associated with future high flow releases.
Results – expected or actual:	See deliverables. Data also feeds additional analyses conducted by the restoration program.
Data collection methods:	Synoptic sampling at 4 locations following USGS protocols. Samples collected from a boat mounted crane at temporary cableways.
Data management:	Quality controlled data delivered in an Access database developed to interface with the central database for the program for easy upload. Final report is archived in the digital document library. All data / reports are available to the public via the restoration program website.
Assessment:	Sediment transport rates are changing in response to implementation of restoration actions.
Use of information in future decision making:	Information used to plan gravel augmentation projects, improve our ability to predict sediment transport in response to management actions (e.g. high flow releases) and link management actions to program goals.
NMFS OCAP BO RPA	No

Project Description:	Outmigration
FY 2009 Project Complete?	Field work just completed, analyses started
CVPIA annual work plan subtask number:	1.12.1
Scope of the monitoring effort:	Whole Trinity River System, North Fork ,Willow Creek
Product/deliverable:	An annual final Report from HVT, and one from YT & USFWS documenting the results of the monitoring activity
Cost:	726,000
Questions posed:	Has timing of outmigration and / or peak period of outmigration shifted with ROD flows? Has abundance changed in response to ROD flows or rehabilitation efforts? How has the smolt to adult ratio shifted in response to rehabilitation actions?
Objectives:	To monitor success of rehabilitation efforts on smolt production
Results – expected or actual:	As conditions in river improve we predict that outmigration numbers will increase. Trend analyses over a 10 year period may be used to answer the above questions.
Data collection methods:	Rotary screw traps
Data management:	Database maintained by HVT and USFWS
Assessment:	Timing of outmigration, peak period of outmigration, estimate of abundance during peak period
Use of information in future decision making:	Long term assessment , cannot be used for short term decision making
NMFS OCAP BO RPA	no

Project Description:	Gravel augmentation monitoring
FY 2009 Project Complete?	Yes
CVPIA annual work plan subtask number:	1.12.1
Scope of the monitoring effort:	Determine fate of gravel introduced during high flow events
Product/deliverable:	Bathymetric data in the vicinity of gravel augmentations
Cost:	$95,000
Questions posed:	Where does gravel introduced at specific locations during high flow events get deposited? Does the gravel clear from the pools where it is introduced?
Objectives:	Guide implementation of the gravel augmentation component of the Program
Results – expected or actual:	Maps and aerial photography showing regions of deposition and erosion of the bed
Data collection methods:	Sonar with integrated GPS and aerial photography
Data management:	yes
Assessment:	Where does gravel introduced at specific locations during high flow events get deposited? Does the gravel clear from the pools where it is introduced?
Use of information in future decision making:	Guide implementation of the gravel augmentation component of the Program
NMFS OCAP BO RPA	