

CVPIA Fiscal Year 2008 Annual Work Plan

November 2, 2007

Program Title: *Anadromous Fish Restoration Program 3406(b)(1)*

Responsible Entities

Staff Name	Agency	Role
Kim Webb	USFWS	Lead
Ken Lentz	USBR	Co-Lead

Program Goals and Objectives for FY 2008

The goal of the AFRP, as stated in Section 3406(b)(1) of the CVPIA, is to "develop within three years of enactment and implement a program which makes all reasonable efforts to ensure that, by the year 2002, natural production of anadromous fish in Central Valley rivers and streams will be sustainable, on a long-term basis, at levels not less than twice the average levels attained during the period of 1967-1991". Section 3406(b)(1) also states that "this goal shall not apply to the San Joaquin River between Friant Dam and the Mendota Pool".

The objectives for the Anadromous Fish Restoration Program (AFRP) can be found in the Final Restoration Plan for the Anadromous Fish Restoration Program (Restoration Plan)¹.

1. Improve habitat for all life stages of anadromous fish through provision of flows of suitable quality, quantity, and timing, and improved physical habitat.
2. Improve survival rates by reducing or eliminating entrainment of juveniles at diversions.
3. Improve the opportunity for adult fish to reach their spawning habitats in a timely manner.
4. Collect fish population, health, and habitat data to facilitate evaluation of restoration actions.
5. Integrate habitat restoration efforts with harvest and hatchery management.
6. Involve partners in the implementation and evaluation of restoration actions.

The Restoration Plan was completed in 2001 to guide the long-term development of the AFRP. The Restoration Plan provides a programmatic-level description of the AFRP and, is used to guide the implementation of all of the provisions of the CVPIA that contribute to the goal of making all reasonable efforts to at least double natural production of anadromous fish (AFRP doubling-goal). The following provisions contribute to accomplishing the goal of the AFRP (b)(1) program: b2, b3...etc. The Restoration Plan presents a list of reasonable actions and evaluations and a process by which actions and evaluations were determined to be reasonable. The Restoration Plan identifies the need for partners, local involvement, public support, adaptive management, and flexibility as key attributes of the AFRP approach.

¹ Final Restoration Plan for the Anadromous Fish Restoration Program, A Plan to Increase Natural Production of Anadromous Fish in the Central Valley of California. Released as a Revised Draft on May 30, 1997 and adopted as final on January 9, 2001. CVPIA, AFRP, Stockton, CA. [http://www.delta.dfg.ca.gov/afrp/restplan_final.asp].

To implement this plan, in 1995 the USFWS established federal Habitat Restoration Coordinator (HRC) positions assigned to specific geographic areas from the upper Sacramento River and its major tributaries south to the San Joaquin River and its major tributaries. In 1998, the AFRP added three more HRCs from the California Department of Fish and Game (DFG) to this effort. These state HRCs provide assistance to the USFWS and ensure close coordination with the DFG the state agency with trust authority for managing anadromous fish populations in California. In their assigned areas, HRCs represent the AFRP, develop and nurture partnerships, develop projects with partners that contribute to the AFRP doubling-goal, and oversee all aspects of implementation of projects in which the AFRP invests funds. Together, the USFWS and DFG HRCs form an interagency team to coordinate, develop and implement restoration projects consistent with the goal, objectives, strategies, processes and priorities described in the Restoration Plan.

The AFRP is one of five Central Valley Project Improvement Act (CVPIA) programs that has been integrated with the California Bay-Delta Authority (CBDA) Ecosystem Restoration Program (ERP) (Record of Decision, 2000)². To facilitate this integration, the above objectives are included in the CBDA ERP Draft Stage 1 Implementation Plan.³ These objectives are also complementary to other goals and objectives listed in the Draft Stage 1 Implementation Plan and would help address the objectives of the CBDA's Multi-Species Conservation Strategy⁴ and the Biological Opinion for the CVPIA⁵. The AFRP shares CBDA's vision of the Single Blueprint concept which provides a unified and cooperative approach to restoration. The AFRP is committed to integrating its activities with the Ecosystem Restoration Program's actions and evaluations and using a scientifically-based adaptive management approach to achieve AFRP objectives.

Status of the Program

The Restoration Plan presents the goal, objectives, and strategies of the AFRP, as well as a list of reasonable actions and evaluations. The Restoration Plan identifies the need for partners, local involvement, public support, adaptive management, and flexibility as key attributes of the AFRP approach to making all reasonable efforts to at least double natural production of anadromous fish.

AFRP projects implemented from actions and evaluations in the Restoration Plan since 1995 have addressed environmental limiting factor categories that were derived from Central Valley watershed limiting factors listed in the AFRP Working Paper (Working Paper)⁶.

Central Valley Chinook salmon production (all races) remains slightly above the baseline (1967-1991) production. Average Chinook salmon production for the period or 1992-2006 has exceeded the doubling goal target on Clear, Butte, and Battle Creeks and the Mokelumne River. Substantial gains in fish populations have occurred where investment in flow and passage has occurred (Butte & Clear Creeks). Clear creek has also had a substantial investment in habitat. Winter-run production numbers are still trending upward since 1996. Spring-run numbers have trended upwards since 1991, but production was

² Programmatic Record of Decision, CALFED Bay-Delta Program, August 28, 2000. Sacramento, CA

³ Draft Stage 1 Implementation Plan, August 2001. Ecosystem Restoration Program, CALFED Bay- Delta Program. Sacramento, CA

⁴ CALFED Bay-Delta Program Multi-Species Conservation Strategy. August 28, 2000. California Bay-Delta Program. Sacramento, CA

⁵ Programmatic Biological Opinion for the CVPIA. January 27, 2000. USBR. Sacramento, CA

⁶ USFWS, 1995. Working paper on restoration needs, habitat restoration actions to double natural production of anadromous fish in the Central Valley of California, Volume 3, AFRP. [<http://www.delta.dfg.ca.gov/afrp/workingpaper.asp>].

much reduced in 2006. Fall-run production is up since the baseline by 20%, but has declined in recent years. Late fall-run production has increased greatly since the low period (1993-1997). Data on Chinook salmon doubling can be found in the Chinookprod file on the AFRP Web site: [\[http://www.delta.dfg.ca.gov/afrp/index.asp\]](http://www.delta.dfg.ca.gov/afrp/index.asp).

Table A is a compilation of information related to the progress made towards addressing these environmental limiting factor categories identified in the Working Paper and implementation of the restoration actions and evaluations in the Restoration Plan (that are based on the Working Paper's limiting factor categories). About 40% of the watershed specific environmental limiting factors (200) in the Working Paper have been addressed and 46% of all Restoration Plan actions (289) and evaluations have been implemented in the 1995 to 2007 time period.

The following sections refer specifically to actions and evaluations that fall either fully or partially under the activities of the AFRP. Actions in which another entity or CVPIA program bears responsibility are not included. Reporting on the Programmatic Assessment and Rating Tool (PART), since 1995, of the 51 high and medium priority structural actions and evaluations in the Restoration Plan, 8 (16%) have been completed. Reporting on the CVPIA Performance & Accountability Report (CPAR), of the 84 Restoration Plan actions with endpoints, 20 (24%) have been completed. Of the 46 structural actions with endpoints, 8 (17%) have been completed. A total of 11 (41%) of the 27 non-structural actions with endpoints have been completed. Actions requiring annual or in perpetuity projects such as gravel augmentation (replacing gravel lost behind dams) and flow augmentation are not considered to have endpoints. Table A provides a breakdown of progress at addressing Limiting Factors (Working Paper) and Actions and Evaluations (Final Restoration Plan). Note that addressed is not synonymous with completed, it means that one or more projects or activities have been initiated that are tied to the Limiting Factor or Action or Evaluation.

In the early program years, the AFRP emphasized planning and environmental inventories. These were followed by implementation of habitat restoration projects. Restoration projects were implemented throughout the Central Valley watersheds in accordance with AFRP restoration priority criteria.

Progress toward addressing Limiting Factors, Actions and Evaluations

Watershed	Working Paper			Final Restoration Plan		
	Limiting Factors Addressed	Total Limiting Factors	Percentage of Limiting Factors Addressed	Actions & Evaluations Addressed	Total Actions & Evaluations	Percentage Actions & Evaluations Addressed
American River	2	7	29%	2	13	15%
Antelope Creek	1	2	50%	0	2	0%
Battle Creek	4	5	80%	11	12	92%
Bear Creek	0	2	0%	0	2	0%
Bear River	3	5	60%	0	8	0%
Big Chico Creek	3	5	60%	6	10	60%
Butte Creek	23	27	85%	35	39	90%
Calaveras River	2	5	40%	2	6	33%
Central-Valley Wide	0	0	100%	11	15	73%
Clear Creek	6	6	100%	7	7	100%
Colusa Basin Drain	0	0	0%	1	2	50%
Cosumnes River	2	4	50%	5	9	56%
Cottonwood Creek	0	3	0%	4	5	80%

Watershed	Working Paper			Final Restoration Plan		
	Limiting Factors Addressed	Total Limiting Factors	Percentage of Limiting Factors Addressed	Actions & Evaluations Addressed	Total Actions & Evaluations	Percentage Actions & Evaluations Addressed
Cow Creek	0	6	0%	2	4	50%
Deer Creek	1	5	20%	4	5	80%
Elder Creek	0	2	0%	0	2	0%
Feather River	3	9	33%	0	12	0%
Merced River	5	12	42%	3	8	38%
Mill Creek	3	4	75%	4	5	80%
Miscellaneous Stream Tributaries	0	6	0%	1	1	100%
Mokelumne River	3	12	25%	5	13	38%
Ocean	0	0	0%	0	3	0%
Paynes Creek	0	2	0%	0	2	0%
Upper Mainstem Sacramento River	4	6	67%	17	22	77%
Sacramento-San Joaquin Delta	1	14	7%	3	29	10%
Mainstem San Joaquin River	1	10	10%	2	13	15%
Stanislaus River	4	10	40%	3	9	33%
Stoney Creek	0	8	0%	0	1	0%

Watershed	Working Paper			Final Restoration Plan		
	Limiting Factors Addressed	Total Limiting Factors	Percentage of Limiting Factors Addressed	Actions & Evaluations Addressed	Total Actions & Evaluations	Percentage Actions & Evaluations Addressed
Thomes Creek	0	4	0%	0	6	0%
Tuolumne River	6	11	55%	4	10	40%
Yuba River	3	8	38%	1	14	7%
All Watersheds	80	200	40%	133	289	46%

Table A. Working Paper limiting factors and Final Restoration Plan Actions and Evaluations addressed since 1995.

FY 2007 Accomplishments

Accomplishments for FY 2007 in the Sacramento Basin

The AFRP continued to accomplish its operating goals of developing restoration projects with partners, overseeing implementation of AFRP funded projects, working with local landowners, sharing restoration and anadromous fish expertise, and representing program goals at public and technical meetings.

On Battle Creek, Action 4 was completed by replacing the fish bypass pipe at the Orwick Diversion site. The project increases survival of outmigrating juvenile salmonids resulting in increased production.

On Big Chico Creek funds were provided to complete the permitting and environmental documentation required to begin construction of the Iron Canyon Fish Ladder (Action 2). Funds were also provided to identify, apply for, and acquire the funds to complete the construction of the ladder including final engineering design and cost estimates. Construction of new passage facilities at Iron Canyon will provide more consistent access to quality spring-run Chinook salmon habitat, aid in spring-run recovery, and benefit doubling goals. A salmon life history study was completed in partnership with the California Department of Fish & Game.

On Butte Creek, Action 18 was nearly completed with construction of the White Mallard Dam and fish ladder scheduled to be completed by mid October 2007. Preliminary engineering and environmental assessment for the Five Points/Behring Ranch Diversion Canal were provided in association with the White Mallard Dam project. The White Mallard Dam project will facilitate passage and reduce entrainment, benefiting salmonid survival and production. A salmon life history study was completed (Butte Evaluation 14) in partnership with the California Department of Fish & Game.

On the Yuba River fluvial geomorphology, sediment transport dynamics, and in-stream hydraulics of key spawning reaches were characterized to build a predictive model for adult spawning locations (Evaluation 4). Gravel movement was monitored with tracer rocks and redd surveys for a pilot gravel injection to be implemented for spring-run Chinook directly below Engelbright Dam. Data was collected from fish passage events to better understand the timing, abundance, population trends, and response to changing flow and temperature conditions of adult spring and fall-run Chinook salmon, and Central Valley steelhead in the Lower Yuba River (Action 7). This information will help improve management of these species in the Lower Yuba River, including actions such as salmonid habitat restoration projects and providing appropriate in-stream flow regimes. Activities included synthesizing collected information to improve management of these species through actions such as aquatic habitat restoration projects and regulating in-stream flow regimes. AFRP is turning over the monitoring equipment to be operated by the California Department of Fish and Game with oversight by the South Yuba River Citizens League.

Accomplishments for FY 2007 in the San Joaquin Basin

On the Cosumnes River permitting and final phases of project planning were completed for the Passage and Habitat Improvement Project (Action 6, Evaluation 2). The project will improve adult salmonid passage and enhance habitat by adding spawning gravel, resulting in improved survival and reproduction.

On the Calaveras River data was collected on steelhead and fall-run Chinook salmon passage and stranding (Action 3, Evaluation 2). The data collected will be used to manage flows and assist in prioritization and evaluation of structural repairs.

On the Mokelumne River, analyses of fall-run Chinook salmon otoliths were conducted to determine the ratio of hatchery to wild fish. Data will be used to update the production calculations which the AFRP program goals are based and is necessary to accurately measure progress toward doubling goals. Funds were also provided to purchase spawning gravel materials used for an ongoing project to increase spawning gravel quantity and improve gravel quality at known spawning sites for fall-run Chinook salmon and steelhead downstream of Camanche Dam in partnership with the East Bat Municipal Utility District (Actions 2, 7). Enhanced habitat provides opportunity for increased natural production.

On the Stanislaus River accomplishments included the collection of both juvenile and adult passage data, initiation of a pilot project to coded-wire tag emigrating juvenile salmonids, and an evaluation of environmental variables effecting juvenile Chinook salmon outmigration at a rotary screw trap monitoring location (Action 1). This study allows for evaluation of long term benefits resulting from habitat restoration actions. Conceptual models for each race of Chinook and steelhead, and a summary table highlighting top priorities for anadromous fish restoration on the Stanislaus River were completed (Actions 1, 2). Also, progress was made towards completing a decision support system to provide capacity for identifying the effects of identified restoration activities. This restoration planning effort will result in a plan that prioritizes research and restoration actions. Implementation of the plan will provide increased production. Instream spawning habitat was created using 25,000 tons of material to enhance habitat (Action 2). This is the largest instream project ever conducted on the Stanislaus River and will provide additional spawning habitat, improved rearing habitat, and reduced predator habitat. A project to test and demonstration a portable Alaskan weir to count and characterize runs of anadromous fish was completed. A five year comprehensive completion report is being drafted. The weir hardware was loaned out to Tri-dam for continuing operation during the fall-run Chinook migration season. The weir project has provided exceptional data on timing and magnitude of salmonid populations and has enumerated passage of both steelhead and spring-run Chinook, providing data where data were previously scarce.

On the Merced River a rotary screw trap was operated and collected data January 23rd to June 1st. A draft report on the natural and hatchery juvenile Chinook salmon movement was completed. Monitoring of juvenile outmigration allows evaluation of the effectiveness of restoration actions.

FY 2008 Tasks, Costs, Schedules and Deliverables

Task or Subtask Number	Name of Activity	Description of Activity	Completion Date	Total Cost	Funding Source RF
1.1	Program Management				
1.1.1		CNO Management/Admin - Sacramento	08-Sep	\$151,515	\$151,515
1.1.2		FWS co-lead - Stockton	08-Sep	\$164,284	\$164,284
1.1.3		USBR co-lead - Sacramento	08-Sep	\$34,759	\$34,759
1.1.4		FWS Assistant Program Manager – Stockton [Directs the day to day program activities, develops annual work plan, manages program budget.]	08-Sep	\$172,930	\$172,930
	<u>Subtotal Costs</u>	3.2 FTEs		\$523,488	\$523,488
1.2	Program Support				
1.2.1		Habitat Restoration Coordinators/Assistants - Stockton	08-Sep	\$890,589	\$890,589
1.2.2		Habitat Restoration Coordinators - Red Bluff	08-Sep	\$421,965	\$421,965
		HRCs manage contracts and grants, develop projects, facilitate communication, provide outreach to watershed and technical groups, and analyze and report on data. Assistants assist in these duties.			
	<u>Subtotal Costs</u>	8.15 FTEs		\$1,312,554	\$1,312,554
1.4	Restoration Actions				
1.4.1		Mokelumne River: Channel restoration and spawning habitat improvement project - A7(high) structural Y, endpoint Y	09-Jun	\$100,000	\$100,000
1.4.2		Stanislaus River: Knights Ferry floodplain and side-channel restoration - Phase II - A2(high) structural Y, endpoint Y	09-Jun	\$340,000	\$340,000
1.4.3		Cow Creek: Passage Improvement Demo Project (Phase 2) - A3(medium) structural Y, endpoint Y	09-Jun	\$468,000	\$468,000
1.4.4		Merced River: River Ranch Floodplain Enhancement - Phase I - A3(high) structural Y, endpoint N	09-Jun	\$140,000	\$140,000
1.4.5		Stanislaus River: Honolulu Bar Floodplain Restoration - Phase I - A2(high) structural Y, endpoint Y	09-Jun	\$100,000	\$100,000
1.4.6		Antelope Creek: Fish Passage Improvement (Edwards Dam bypass pipe) - A1(high) structural N, endpoint N (note: project loosely tied to Action)	09-Jun	\$40,000	\$40,000
1.4.7		Merced River: Snelling Floodplain Restoration - Phase I - A3(high) structural Y, endpoint N	09-Jun	\$100,000	\$100,000

Task or Subtask Number	Name of Activity	Description of Activity	Completion Date	Total Cost	Funding Source RF
1.4.8		Upper Mainstem Sacramento River: La Barranca Phase III (Floodplain Restoration) - E5(high) structural N, endpoint Y	09-Jun	\$100,000	\$100,000
1.4.9		Antelope Creek: Wildlife Area Crossing Repair, Permitting and Design - A1(high) structural N, endpoint N (note: project loosely tied to Action)	09-Jun	\$100,000	\$100,000
1.4.10		Calaveras River: Passage improvements - Phase I - A3(medium) structural Y, endpoint Y	09-Jun	\$187,000	\$187,000
1.4.11		Cottonwood Creek Nonnative Invasive Weed Control - A5(high) structural Y, endpoint Y	09-Jun	\$100,000	\$100,000
1.4.12		Cosumnes River Passage Improvement, Rooney Brothers Dam - E2(medium) structural Y, endpoint Y (note: Evaluation classified as structural)	09-Jun	\$150,000	\$150,000
		June 2009 estimated as end dates not known.			
	<u>Subtotal Costs</u>			\$1,925,000	\$1,925,000
1.5					
	Evaluations Studies Investigations Research				
1.5.1		Cow, Cottonwood and Bear creeks: Video Weir Technology - Provide equipment necessary to facilitate collection of adult escapement data. Funding is provided to DFG to run escapement data collection. Documentation of escapement is necessary to evaluate program performance in regard to doubling, and provide a measure of success of restoration actions. - Cow A3(Medium) structural Y, endpoint Y; Cottonwood A4(High) structural N, endpoint N; Bear A2(Medium) structural Y, endpoint Y;	09-Jun	\$50,000	\$50,000
1.5.2		San Joaquin Basin: Fish health screening - Phase I - Tuolumne: This project will evaluate the effect of flow and temperatures on juvenile survival, which addresses the key limiting factor in the San Joaquin Basin. CA-NV Fish Health Center would evaluate lipid content in muscle tissue, disease, and contaminant impacts for juvenile fall-run Chinook salmon. A total of 240 fry, parr, and smolts would be sampled each year. - E1(High) structural Y, endpoint Y	09-Jun	\$50,000	\$50,000
1.5.3		San Joaquin Basin: Fish health screening - Phase I - Stanislaus: This project will evaluate the effect of flow and temperatures on juvenile survival, which addresses the key limiting factor in the San Joaquin Basin. CA-NV Fish Health Center would evaluate lipid content in muscle tissue, disease, and contaminant impacts for juvenile fall-run Chinook salmon. A total of 240 fry, parr, and smolts would be sampled each year. - E3(High) structural n, endpoint Y	09-Jun	\$50,000	\$50,000

Task or Subtask Number	Name of Activity	Description of Activity	Completion Date	Total Cost	Funding Source RF
1.5.4		San Joaquin Basin: Fish health screening - Phase I - Merced: This project will evaluate the effect of flow and temperatures on juvenile survival, which addresses the key limiting factor in the San Joaquin Basin. CA-NV Fish Health Center would evaluate lipid content in muscle tissue, disease, and contaminant impacts for juvenile fall-run Chinook salmon. A total of 240 fry, parr, and smolts would be sampled each year. - E1(High) structural Y, endpoint N	09-Jun	\$50,000	\$50,000
	<u>Subtotal Costs</u>			\$200,000	\$200,000
1.7	Outreach and Public Involvement	HRCs and specific projects address this task.		\$0	\$0
1.8	Planning	Most planning is accomplished within projects.			
		DFG Habitat Restoration Coordinator Funding [FY07 funding plus 5%]		\$250,950	\$250,950
	<u>Subtotal Costs</u>			\$250,950	\$250,950
1.9	Environmental Compliance				
1.9.1		FWS Sacramento ES office staff to provide ESA and environmental compliance expertise.		\$127,636	\$127,636
	<u>Subtotal Costs</u>			\$127,636	\$127,636
1.1	Design	Design is generally included in the restoration project.		\$0	\$0
1.11	Construction	Construction is usually included in the restoration project.		\$0	\$0
1.12	Monitoring	Monitoring is usually included as part of the restoration project.		\$0	\$0
1.13	Modeling	While no independent modeling projects are anticipated, some project specific modeling is occurring.		\$0	\$0
		Modeling and peer review of Spawning and Rearing Habitat in the Yuba River (IFIM)	08-Sep	\$160,000	\$160,000

Task or Subtask Number	Name of Activity	Description of Activity	Completion Date	Total Cost	Funding Source RF
	Total Costs			\$4,499,628	\$4,499,628
	FWS Costs			\$4,464,869	\$4,464,869
	BOR Costs			\$34,759	\$34,759

Table B. Projected FY 2008 Tasks, Costs, Schedules and Deliverables.

CVPIA Program Budget

Budget Breakout

Task	Agency	FTE	Direct Salary and Benefits Costs	Contract and Grant Costs	Misc. Costs	Admin Costs	Total Costs
1.1 Program Management	FWS	2.95	\$427,920				\$488,919
	BOR	0.25	\$34,759				\$34,759
1.2 Program Support	FWS	7.15	\$1,050,468				\$1,050,468
	BOR						\$0
1.4 Restoration Actions	FWS			\$2,248,000			\$2,248,000
	BOR						\$0
1.5 Evaluations, Studies, Investigations, Research	FWS			\$200,000			\$200,000
	BOR						\$0
1.8 Planning	FWS			\$250,950			\$250,950
	BOR						\$0
1.9 Environmental Compliance	FWS			\$127,636			\$127,636
	BOR						\$0
1.13 Modeling	FWS		\$160,000				\$160,000
	BOR						\$0
FWS Total Costs		10.1	\$1,638,388	\$2,826,586	\$0	\$0	\$4,526,059
BOR Total Costs		0.25	\$34,759	\$0	\$0	\$0	\$34,759
Total		10.35	\$1,673,147	\$2,826,586	\$0	\$0	\$4,560,628

Table C. Project FY08 Budget split between FWS and USBR.

Five Year Budget Plan

DRAFT CVPIA 5-Year Budget Plan FY 2009 – 2013

Funding Source	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Total
W&RR						
RF	\$6,144	\$7,680	\$9,599	\$11,999	\$14,999	\$50,421
State						
Other (identify)						
Total	\$6,144	\$7,680	\$9,599	\$11,999	\$14,999	\$50,421

Table D. Unconstrained 5-Year budget plan for Fiscal Years 2009-2013 (amounts in thousands of dollars). Note: This plan provides estimates of capability only. These figures do not reflect the future Congressional Appropriations process. All of these estimates will be adjusted annually as RF collections are realized.

AFRP has identified 37 additional projects for fiscal year 2009 and beyond. The total estimated cost for these projects and to continue funding ongoing and fiscal year 2008 projects (see Table B) is \$20,718,000. Assuming current overhead rates (~\$2,000,000) the program needs \$33,416,000 over the five year period from FY09-FY13. Dividing the total need by five, results in \$6,144,000 for the FY09 unconstrained need. It is assumed that the program can increase spending by 25% per year over the five year period as new projects are identified and funded.

Major program activities projected for FY09-FY13 include continuation of existing and FY08 funded projects, as well as the 37 new projects identified. These projects focus primarily on high and medium ranked actions from the AFRP Final Restoration Plan, and evaluations necessary to implement actions. Projects include floodplain restoration on the Stanislaus, Tuolumne, and Merced rivers, identifying and repairing passage barriers, and instream habitat work.