Draft CVPIA Fiscal Year 2010 Annual Work Plan

October 1, 2009

Flow Fluctuation – CVPIA Section 3406(b)(9); and Reservoir Storage – CVPIA Section 3406(b)(19)

Responsible Entities

Staff Name	Agency	Role
Paul Fujitani	USBR	Lead
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Program Goals and Objectives for FY 2010

1. The program goal is to develop and implement a program to eliminate, to the extent possible, losses of anadromous fish due to flow fluctuations caused by the operation of any Central Valley Project storage or re-regulating facility. There is currently no funding specifically for reservoir storage (b)(19). However, 3406 (b)(2) studies for dedication and management of project yield consider reservoir storage. The source documents for these objectives are noted and their relationship, if any, to the CALFED Program Ecosystem Restoration Program Implementation Plan.

a. American River- Develop and implement a program to eliminate, to the extent possible, losses of anadromous fish (steelhead and fall-run Chinook salmon) due to flow fluctuations caused by the operation of Nimbus Dam. Have monthly American River Operations Work Group meetings to discuss flow in the rivers and temperature model results.

b. Stanislaus River- Develop and implement a program to eliminate, to the extent possible, losses of anadromous fish (steelhead and fall-run Chinook salmon) due to flow fluctuations caused by the operation of Goodwin Dam. Have Stanislaus River Group meetings to discuss flow in the rivers and temperature model runs. Evaluate instream flow needs of the Stanislaus River fishery.

Status of the Program

The (b)(9) program was established by the CVPIA in 1992, well before the current suite of Biological Opinion flow requirements and ramping rates were enacted. In it's current form the (b)(9) program helps ensure compliance with the NOAA Biological Opinion (2009), and short-term (b)(9) operations are often implemented that provide even more protections than are mandated by the Opinion.

The American River flow fluctuation study by California Department of Fish and Game (CDFG) on salmon and steelhead in the lower American River (December 11, 2001) is used by fisheries biologists and the American River Operations Group as guidance when discussing flows on the lower American River and water management of Folsom Reservoir.

The Stanislaus River flow fluctuation study was started in 1999 and completed in 2009.

The definition of CVPIA 3406 (b)(19) is to reevaluate existing operational criteria in order to maintain carryover storage at Sacramento and Trinity River reservoirs to protect and restore the anadromous fish of the Sacramento and Trinity Rivers in accordance with the mandates and requirements of this subsection and subject to the Secretary's responsibility to fulfill all project purposes, including agricultural water delivery.

The National Marine Fisheries Service issued its Biological Opinion on the Long-term Operations of the Central Valley Project and the State Water Project on June 4, 2009 (BO). The Reasonable and Prudent Alternatives in the BO contain sets of actions determined by Shasta Reservoir end of September storage. The actions vary for Shasta Reservoir storages over 2,400,000 acre-feet (af), 2,400,000 af to 1,400,000 af, and under 1,900,000 acre-feet. These actions are specified to minimize storage impacts to the anadromous fish from water temperatures, minimum flows, and flow fluctuations.

The 2009 BO requires Reclamation to establish a Stanislaus Operations Group to provide a forum for real-time operational flexibility implementation of the alternative actions defined in the BO. The group will assist to adaptively manage the flow schedule contained in the BO and work to minimize flow fluctuations on the Stanislaus River.

FY 2009 Accomplishments

The American River Operations Work Group continued to meet monthly to discuss both the American River operations and to discuss the work to determine threshold flows and ramping rates required to protect Lower American fishery resources.

Reclamation coordinated with the Department of Fish and Game, Fish and Wildlife Service, and the National Marine Fisheries Service to develop a fish rescue/salvage plan in October 2008. The monitoring and rescue provisions in the plan were implemented in FY 2009 to increase protection of three listed anadromous salmonid species - Winter-run Chinook salmon, Spring-run Chinook salmon, and Central Valley steelhead - in the American and upper Sacramento Rivers during periods when the operation of the Reclamation's facilities may result in the stranding or isolation of such listed species. In FY 2009, several monitoring surveys took place but fish rescue efforts were not needed.

The Stanislaus River Group may be restructured to form the Stanislaus Operations Group. Meetings of the Stanislaus River Group are typically held a few times throughout the year. During the Vernalis Adaptive Management Plan in April and May there are more regular

discussions about the flows. The Stanislaus River fish monitoring studies and habitat mapping are in progress. The Stanislaus Flow Fluctuation Study was completed in 2009.

Table 1. FY 2010 Tasks, Costs, Schedules and Deliverables

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Restoration Fund Anticipated	Water & Related Resources Anticipated	State or Other Sources Anticipated	Total All Sources Anticipated
1.1	**Program Management**							
1.1.1		0.02	Reclamation -The program Is managed by Reclamation and the Fish and Wildlife Service. There is no specific funding for b(19) however 3406(b)(2) studies for dedication and management of project yield consider reservoir storage and carryover. Reclamation regularly meets with fishery agencies to coordinate operations designed to reduce flow fluctuation impacts. Flow fluctuation related studies are being conducted on the American and Stanislaus Rivers and are being managed by the Central California Area Office. (High Priority)	Ongoing	$2,200	$0	$0	$2,200
		0.02	FWS	Ongoing	$3,800	$0	$0	$3,800
	Subtotal Costs	0.04			$6,000	$0	$0	$6,000
1.3	**Technical Support**							
1.3.1		0.14	CVO-400 manages operations on the Stanislaus River and coordinates with fishery agencies to minimize flow fluctuation impacts to the fishery. Coordination with USFWS (High Priority)		$28,000	$0	$0	$28,000
1.3.2			CVO-400 manages operations on the American River and coordinates with fishery agencies to minimize flow fluctuation impacts to the fishery. Costs included in 1.3.1 above. Coordination with USFWS		$0	$0	$0	$0
	Subtotal Costs	0.14			$28,000	$0	$0	$28,000
1.5	**Evaluations Studies Investigations Research**							
1.5.1		0.08	American River and Stanislaus River flow studies and monitoring by Reclamation, DFG, and USFWS for salmon and steelhead. Funds managed by MP-150. (High Priority)		$16,000	$0	$0	$16,000
	Subtotal Costs	0.08			$16,000	$0	$0	$16,000
1.7	**Outreach and Public Involvement**							
1.7.1			Funding partially supports American River Group. The ARG provides input to Reclamation in managing the Folsom Reservoir and the American River. Costs are included in 1.5.1 above		$0	$0	$0	$0
	Subtotal Costs				$0	$0	$0	$0

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Restoration Fund Anticipated	Water & Related Resources Anticipated	State or Other Sources Anticipated	Total All Sources Anticipated
1.12	**Monitoring**							
1.12.1			Ongoing monitoring by DFG and USFWS on both the American and Stanislaus Rivers supporting fishery studies. Costs included in 1.5.1 above		$0	$0	$0	$0
	Subtotal Costs				$0	$0	$0	$0
1.13	**Modeling**							
1.13.1			Funding supports temperature modeling efforts on the American River. Modeling by CVO. Costs included in 1.3.1 above. (High Priority)		$0	$0	$0	$0
	Subtotal Costs				$0	$0	$0	$0
	Total Costs	**0.26**			**$50,000**	**$0**	**$0**	**$50,000**
	Service Total Cost	0.02			$3,800	$0	$0	$3,800
	USBR Total Cost	0.24			$46,200	$0	$0	$46,200

Table 2. 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	0.02	$2,964	$836	$0	$0		$3,800
	USBR	0.02	$2,200		$0		$0	$2,200
1.3 Technical Support	FWS		$0	$0	$0	$0		$0
	USBR	0.14	$28,000		$0		$0	$28,000
1.5 Evaluations, Studies, Investigations, Research	FWS		$0	$0	$0	$0		$0
	USBR	0.08	$16,000		$0		$0	$16,000
Administrative Total - FWS			$2,964	$836		$0		$3,800
Contracts, Grants and Agreements Total - FWS					$0			$0
FWS Total Costs		0.02	$2,964	$836	$0	$0		$3,800
Administrative Total - USBR			$46,200				$0	$46,200
Contracts, Grants and Agreements Total - USBR					$0			$0
USBR Total Costs		0.24	$46,200		$0		$0	$46,200
TOTAL ALL		**0.26**	**$49,164**	**$836**	**$0**	**$0**	**$0**	**$50,000**

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. Three-Year Budget Plan FY 2011-2013

($ amounts in thousands)

Year	Description of Activities	Requested RF Funding	Requested W&RR Funding
2011	Flow fluctuation management, temperature management, and fish rescue activities for CVPIA Section 3406(b)(9); and Reservoir Storage – CVPIA Section 3406(b)(19)	$50	0
2012	Flow fluctuation management, temperature management, and fish rescue activities for CVPIA Section 3406(b)(9); and Reservoir Storage – CVPIA Section 3406(b)(19)	$51.5	0
2013	Flow fluctuation management, temperature management, and fish rescue activities for CVPIA Section 3406(b)(9); and Reservoir Storage – CVPIA Section 3406(b)(19)	$53	0

Note: The FY 2011 – 2013 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.

Table 4. FY 2010 CVPIA Monitoring Projects

Project Description:	Flow fluctuation – CVPIA 3406(b)(9) and (b)(19)
FY 2009 Project Complete?	Ongoing
CVPIA annual work plan subtask number:	1.5.1
Scope of the monitoring effort:	Real time field fish surveys and fish rescue operations in response to reservoir release changes
Product/deliverable:	Minimize fish loss from flow fluctuations
Cost:	$16,000 (for subtask number 1.5.1 which may be used for other necessary surveys or flow studies as needed)
Questions posed:	Should Reclamation and fishery agencies maintain better documentation about the numbers of fish affected by flow fluctuations and location of problem areas?
Objectives:	To minimize fish loss from flow fluctuations
Results – expected or actual:	Improve documentation to minimize fish loss from flow fluctuations

Data collection methods:	Field surveys performed by biologists
Data management:	Currently, few records exist about the extent of the fish rescue losses. Reclamation will seek to improve data collection and records.
Assessment:	Evaluate location of fish impacts, flow thresholds, a numbers of fish affected.
Use of information in future decision making:	Data will help with planning fish rescue efforts and planning project operations
NMFS OCAP BO RPA	