

DRAFT CVPIA Fiscal Year 2009 Annual Work Plan

December 1, 2008

Program Title

Dedicated Project Yield CVPIA Section 3406 (b)(2)

Responsible Entities

Staff Name	Agency	Role
Roger Guinee	USFWS	Program Manager
Paul Fujitani	USBR	Program Manager

Program Goals and Objectives for FY 2009

The Department of the Interior (Interior) has the responsibility to dedicate and manage annually 800,000 acre-feet of CVP water (i.e., (b)(2) water) for fish, wildlife, and habitat restoration purposes. The program objectives are enumerated below. The source documents for these objectives include the CVPIA Programmatic Record of Decision (ROD), Final Restoration Plan for the Anadromous Fish Restoration Program (AFRP), CALFED Programmatic ROD, and Interior's May 9, 2003 Decision on Implementation of Section 3406 (b)(2) of the CVPIA. The program objectives have been cross-referenced against the actions the program will undertake in FY 2009 in Section VI below.

- a. Improve habitat conditions for anadromous fish in CVP controlled rivers and streams and the Bay-Delta to help meet the AFRP doubling goals
- b. Increase survival of out migrant juvenile anadromous fish, especially in the Bay-Delta.
- c. Contribute to recovery of listed threatened and endangered fish species.
- d. Monitor and evaluate to assess the effectiveness of (b)(2) measures.

Status of the Program

On May 9, 2003, Interior released a revised Final Decision on Implementation of Section 3406 (b)(2), in response to a ruling by the federal District Court in March, 2002. The revised Final Decision set out a calculation of CVP yield, the method of accounting for use of the dedicated CVP yield, and procedures for management of the yield.

On June 3, 2003 and again on January 23, 2004, the U.S. Court of Appeals for the Ninth Circuit upheld the District Court's ruling on offset/reset, but stated the District Court erred in concluding that Interior lacks discretion to specify what portion of the 800,000 acre feet be set aside for water quality and Endangered Species Act purposes. Section 3406 (b)(2) provides that the "primary purpose" to which the 800,000 acre feet should be dedicated is the implementation of "fish, wildlife, and habitat restoration purposes authorized by this title..." (i.e., CVPIA). The language of the statute gives Interior discretion to allocate the 800,000 acre feet among fish and

wildlife, water quality, and endangered species obligations, as long as Interior's allocation gives effect to the hierarchy of purposes established in Section 3406 (b)(2).

The CALFED Programmatic ROD, signed on August 28, 2000, established an Environmental Water Account (EWA) program whose purpose is to provide protection (supplemental to a baseline level of protection) to the fish of the Bay-Delta estuary. Beginning in water year 2001, the management of the (b)(2) water was closely coordinated with the management of the EWA water. Both (b)(2) and the EWA contribute to the CVPIA's goal of doubling natural production of anadromous fish and provide concurrent benefits to other fish and wildlife, including endangered species. However, it is our understanding that in WY 2009 the EWA will be limited to the acquisition of approximately 60,000 AF of environmental water from the Yuba River pursuant to the Yuba River Accord. Monitoring and evaluation will continue to assess the effectiveness of the (b)(2) environmental measures.

Biological Benefits

Since 1993, (b)(2) water has been dedicated and managed annually for fish, wildlife, and habitat restoration purposes; to assist the State of California in its efforts to protect the waters of the San Francisco Bay/Sacramento-San Joaquin Delta estuary; and to help meet post 1992 ESA requirements.

In general, (b)(2) fish actions have included: (1) instream flow augmentations on CVP-controlled streams to protect salmon and steelhead and contribute toward meeting AFRP flow objectives; (2) increased releases from New Melones Reservoir to help meet Water Quality Control Plan (WQCP) requirements for San Joaquin River flows at Vernalis; (3) increased releases from Shasta and/or Folsom reservoirs to help meet WQCP Delta outflow requirements; and (4) export reductions at the CVP Tracy pumps to protect at-risk fish species (notably salmon, steelhead, and delta smelt).

Many factors have contributed to the decline of anadromous fish in Central Valley rivers and streams. Pursuant to CVPIA and AFRP numerous restoration efforts have been implemented that are intended to positively affect multiple stressors, including the use of (b)(2) water to help meet AFRP flow objectives. Consequently, assessing the biological benefits of (b)(2) fish actions in isolation from other restoration activities is very difficult. However, the Service believes increased instream flows in particular have helped maintain or improve salmon and steelhead habitat and populations in CVP-controlled streams. The Service also believes that export reductions at critical times have helped protect delta smelt as well as salmon and steelhead in the Delta.

The (b)(2) water is just one of the environmental tools created by the CVPIA to achieve the AFRP anadromous fish doubling goal. The Final Restoration Plan for the AFRP establishes Chinook salmon doubling targets for each of the main rivers and streams in the Central Valley. On the CVP-controlled streams, where (b)(2) water is available, Clear Creek appears to be making progress toward meeting the doubling goal for fall run Chinook salmon. The Service is

still evaluating whether the doubling of natural production will be sustainable on a long-term basis.

FY 2008 Accomplishments

Interior's May 2003 Decision on Implementation of Section 3406(b)(2) was implemented for the fifth year in 2008 and was coordinated with the eighth year implementation of CALFED's EWA.

However, it is important to note that the EWA was limited in 2008 to the acquisition of approximately 60,000 AF of environmental water from the Yuba River pursuant to the Yuba River Accord.

Water year 2008 (which started October 1, 2007) began with lower than average storage conditions in CVP reservoirs and the spring of 2008 turned out to be extremely dry. For the Northern Sierra 8-Station Index, the Water Year 2008 combined March through July total precipitation was only 3.4 inches, the driest on record (since 1921). Both the Sacramento Valley Water Year Type Index and the San Joaquin Valley Water Year Type Index were classified as critical in 2008.

As a result, the (b)(2) shortage criteria in the May 2003 (b)(2) Decision was triggered and the total amount of (b)(2) water available for WY 2008 was reduced to 600,000 acre-feet.

Using the WY 2008 (b)(2) allocation, Interior implemented upstream actions and several Bay-Delta actions consistent with the May 2003 (b)(2) Decision that contributed to the CVPIA's goal of doubling natural production of anadromous fish and providing concurrent benefits to other fish and wildlife, including endangered species.

In FY 2008 the following (b)(2) actions were taken:

Increased flows in Clear Creek from low base levels throughout the year to improve habitat conditions for anadromous fish, including benefits to Chinook salmon and steelhead upstream migration, spawning, egg incubation, rearing, and downstream migration.

Sacramento River flows were augmented in the fall and early winter with (b)(2) water to maintain flows between 4,000 - 4,500 cfs. In recognition of the dry conditions the use of (b)(2) water was decreased in early January, 2008 and stopped altogether in late January when flows went to the minimum required flow of 3,250 cfs. The use of (b)(2) water during this period was intended to improve instream conditions for fall run Chinook, late-fall run Chinook, and steelhead during their spawning, incubation, and rearing periods.

American River flows were augmented in December with (b)(2) water to maintain 1,250 cfs to protect fall-run Chinook redds. In recognition of the dry conditions the use of (b)(2) water was decreased to maintain 1,110 cfs from January to March to improve instream conditions for fall

run Chinook rearing and steelhead spawning and rearing.

On the Stanislaus River, (b)(2) water was used in conjunction with (b)(3) acquired water to provide an October attraction flow for fall-run Chinook spawners. From late October through January, (b)(2) water was used to augment low base flows and maintain 225 -280 cfs. From April 22 – May 22, 2008, (b)(2) water was used in conjunction with (b)(3) acquired water to provide a pulse flow for outmigrating fall run Chinook smolts in coordination with the 2008 Vernalis Adaptive Management Program (VAMP).

Exports at the CVP Jones pumping plant were largely controlled by critically dry hydrologic conditions, WQCP requirements, and implementation of the Federal Court Order from late December 2007 through June 20, 2008 to protect listed delta smelt. In addition, CVP exports were reduced to approximately 850 cfs during the VAMP period, from April 22 – May 22 to protect outmigrating salmon smolts as well as larval and juvenile delta smelt.

Interior provides detailed accounting of (b)(2) fish actions on an annual basis, usually in December following the close of the water year. This information is posted on the internet at the US Bureau of Reclamation, Mid-Pacific Region, Central Valley Operations Office homepage at www.usbr.gov/mp/cvo.

We continued monitoring and evaluation to assess and inform decision-making regarding the effectiveness of (b)(2) environmental measures. Real-time fish monitoring helps inform (b)(2) decisions on when and where actions should be taken. On a weekly basis fishery biologists from the Sacramento, San Joaquin, and Delta update the Data Assessment Team on fish movements. The sites sampled include the mainstem Sacramento and San Joaquin Rivers, their major tributaries, and various locations in the Delta, including the export facilities.

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

Task or Subtask Number	Name of Activity	FTE	Description of Activity	Completion Date	Total Cost	Anticipated Funding Source RF	Anticipated Funding Source WRR
1.1	Program Management		(USFWS) Program Lead, (USBR) Co-Lead. Dedicate and manage annually 800,000 acre-feet of CVP water for fish, wildlife, and habitat restoration purposes. High priority.				
1.1.1			USFWS	annual ongoing	1,000	1,000	\$0
1.1.2			USBR	annual ongoing	1,000	1,000	\$0
	<u>Subtotal Costs</u>				2000	2,000	0
1.2	Program Support		USFWS staff USBR staff . Dedicate and manage annually 800,000 acre-feet of CVP water for fish, wildlife, and habitat restoration purposes. High priority.				
1.2.1			USFWS contracting and budget staff support	annual ongoing	15,000	15,000	0
1.2.2			USFWS -	annual ongoing	1,000	1,000	0
1.2.3			USBR -	annual ongoing	1,000	1,000	0
	<u>Subtotal Costs</u>				17,000	17,000	0
1.3	Technical Support		Technical support for the b2 program includes coordination and budget prep, developing monthly CVP operations forecasts, weekly b2 interagency team meetings, daily accounting of b2 usage, participation in the American River FMS process, and participation in the ongoing OCAP process. High priority.				
1.3.1			USFWS hydrologist	annual ongoing	26,250	26,250	0
1.3.2			USFWS biologist	annual ongoing	26,250	26,250	0
1.3.3			USBR lead engineer	annual ongoing	26,250	26,250	0
1.3.4			USBR engineer	annual ongoing	26,250	26,250	0
	<u>Subtotal Costs</u>				105000	105000	0

Task or Subtask Number	Name of Activity	FTE	Description of Activity	Completion Date	Total Cost	Anticipated Funding Source RF	Anticipated Funding Source WRR
1.4	Restoration Actions		b2 water is used to improve habitat conditions for anadromous fish in CVP controlled streams and the Bay-Delta to help meet the AFRP doubling goals; to increase the survival of outmigrant juvenile anadromous fish (especially in the Delta); and to enhance recovery of listed threatened and endangered fish species (FWS Region 8); Tasks 1.3 and 1.4 are directly linked to each other and the total costs have been split between technical support and restoration actions to illustrate that the b2 program efforts improve instream and Delta conditions. High priority.				
1.4.1			USFWS staff (Region 8)	annual ongoing	52,500	52,500	0
1.4.2			USBR staff (CVO)	annual ongoing	52,500	52,500	0
	<u>Subtotal Costs</u>				105000	105000	0
1.5	Evaluations Studies Investigations Research		For each evaluation provide: description of work to be performed; cross reference CPAR and PART performance goals; AFRP evaluation #; project phase #; name of contractor performing work (if applicable); break out multiple evaluations in to sub tasks 1.5				
1.5.1							
1.5.2							
	<u>Subtotal Costs</u>				0	0	0
1.7	Outreach and Public Involvement		Interior has established a stakeholder and public involvement process to present and discuss information on the annual b2 fishery action plan and how the plan is integrated into the operations forecast. High priority.				
1.7.1			FWS (Hilts, Hindman)	annual ongoing	4,000	4,000	0
			BOR (Fujitani, Manza)	annual ongoing	4,000	4,000	0
	<u>Subtotal Costs</u>				8,000	8,000	0
1.12	Monitoring		Monitoring and evaluation efforts assess the effectiveness of b2 environmental actions. Monitoring elements are high priority, but if budget shortfall occurs the number of acoustic tags purchased in 1.12.3 will be reduced accordingly.				

Task or Subtask Number	Name of Activity	FTE	Description of Activity	Completion Date	Total Cost	Anticipated Funding Source RF	Anticipated Funding Source WRR
1.12.1			Participate in acoustic tag studies for modified VAMP (tagging, receiver download, coordination, data analysis, report prep) - Pat Brandes FWS Stockton. The VAMP study evaluates the effect of different San Joaquin flows and project exports on juvenile fall-run Chinook survival.	annual ongoing	124,355	124,355	0
1.12.2			Fish health analysis (VAMP smolts) at California/Nevada Fish Health Center - Scott Foote FWS Coleman NFH.	annual ongoing	12,200	12,200	0
1.12.3			Ultrasonic tags and recovery of late fall-run Chinook juveniles for Delta Action 8 to evaluate the effects of exports on smolt survival (tags, tagging, receiver, coordination, data analysis, report prep) - Pat Brandes FWS Stockton.	annual ongoing	294,042	294,042	0
1.12.4			Conduct analysis of past data related to fry survival studies (hatchery origin fish). Depending on results, may propose additional studies in future years – Pat Brandes FWS Stockton.	New element	13,702	13,702	0
1.12.5			Conduct analysis of past data related to smolt survival studies (hatchery origin fish). Depending on results, may propose additional studies in future years – Pat Brandes FWS Stockton.	New element	13,702	13,702	0
1.12.6			FWS Region 8 coordination of b2 monitoring efforts.	annual ongoing	3,000	3,000	0
	<u>Subtotal Costs</u>				461,000	461,000	0
1.13	Modeling		Hydrologic computer model evaluations will be conducted on a monthly basis (CVP Forecast model) to assess various b2 implementation scenarios, and CALSIM II and ECOSYM modeling will be done on an as-needed basis. High priority.				
1.13.1			FWS hydrologist Hilts	annual ongoing	45,000	45,000	0
1.13.2			BOR Lead engineer Manza	annual ongoing	45,000	45,000	0
	<u>Subtotal Costs</u>				90000	90000	0
1.14	Other - Describe		Prepare information for litigation. High priority.				
1.14.1	Litigation prep		FWS - Guinee, Hilts, Hindman	annual ongoing	5,000	5,000	0
1.14.2	Litigation prep		BOR - Fujitani, Manza	annual ongoing	7,000	7,000	0
	<u>Subtotal Costs</u>				12,000	12000	0

Task or Subtask Number	Name of Activity	FTE	Description of Activity	Completion Date	Total Cost	Anticipated Funding Source RF	Anticipated Funding Source WRR
	Total Costs				800,000	800,000	0
	USBR				163,000	163,000	0
	USFWS				637,000	637,000	0
	Potential 15% funding cut		\$120,000 from task 1.12		120,000	120,000	0
	Unfunded Needs				200,000	200,000	0

UNFUNDED NEEDS FOR FY2008 (in order of priority)				Total Cost	Anticipated Funding Source RF	
1.3 Unfunded	Technical Support & Restoration Actions	.5	Increased funding for developing monthly CVP operations forecasts, American River FMS, weekly b2 Interagency Team meetings, daily accounting of b2 usage and implementation of b2 fish actions. (FWS: Hiltz, Hindman. BOR: Fujitani, Manza)	annual ongoing	\$100,000	\$100,000
1.13 Unfunded	Modeling	.25	Additional funds for hydrologic computer model evaluations. (FWS Hiltz. BOR: Fujitani, Manza)	annual ongoing	\$50,000	\$50,000
1.14 Unfunded	Litigation	.25	Additional funds for ongoing litigation. Includes coordination with agency staff and counsel. FWS staff: Guinee, Hiltz, Hindman. BOR staff: Fujitani and Manza. (Objectives a, b, c).	Annual ongoing	\$50,000	\$50,000
Additional Cost with full funding					\$200,000	\$200,000
		.5		BOR	\$100,000	\$100,000
		.5		FWS	\$100,000	\$100,000

Table 2. CVPIA Program Budget

Task	Agency	FTE	LABOR			CONTRACTS			Misc. Costs	Total Costs
			Direct Salary and Benefits Costs	FWS Costs on Salary & Benefits (35%)	FWS Overhead Assess: 22% of Direct Salary and Benefits Costs	Contract, Grant, and Agreement Costs	FWS Overhead Assess: 6% Contract Costs ^{2/}			
1.1 Program Management	USFWS	0.005	533	287	180	0	0	0	1,000	
	USBR	0.005	650	350	0	0	0	0	1,000	
1.2 Program Support	USFWS	0.08	533	287	180	0	0	0	16,000	
	USBR	0.005	650	350	0	0	0	0	1,000	
1.3 Technical Support	USFWS	0.262	27,971	15,061	9,467	0	0	0	52,500	
	USBR	0.262	34,125	18,375	0	0	0	0	52,500	
1.4 Restoration Actions	USFWS	0.262	27,971	15,061	9,467	0	0	0	52,500	
	USBR	0.262	34,125	18,375	0	0	0	0	52,500	
1.7 Outreach and Public Involvement	USFWS	0.02	2,131	1,148	721	0	0	0	4,000	
	USBR	0.02	2,600	1,400	0	0	0	0	4,000	
1.12 Monitoring	USFWS	1.052	101,826	54,829	54,038	236,139	14,168	0	461,000	
	USBR	0	0	0	0	0	0	0	0	
1.13 Modeling	USFWS	0.225	23,975	12,910	8,115	0	0	0	45,000	
	USBR	0.225	29,250	15,750	0	0	0	0	45,000	
1.14 Other	USFWS	0.025	2,664	1,434	902	0	0	0	5,000	
	Other		0	0	0	0	0	0	0	
	Other		0	0	0	0	0	0	0	
	USBR	0.035	4,550	2,450	0	0	0	0	7,000	
	Other		0	0	0	0	0	0	0	
	Other		0	0	0	0	0	0	0	
USFWS Total Costs		1.931	245,438	132,159	83,071	166,351	9,981	0	0	
USBR Total Costs		0.814	105,950	57,050	0	0	0	0	0	
TOTAL ALL		2.745	351,388	189,209	83,071	166,351	9,981	0	800,000	

Table 3. Three Year Budget Plan FY 2010 – 2012

Year	Description of Activities	Requested RF Funding	Requested W&RR Funding
2010	Augment the existing b2 program (\$1,100,000), develop New Melones water management guidelines (\$225,000), conduct additional monitoring (\$482,715), additional stakeholder involvement, litigation costs, and model evaluations (\$285,000)	\$2,092,715	
2011	Augment the existing b2 program (\$1,100,000), develop New Melones water management guidelines (\$225,000), conduct additional monitoring (\$482,715), additional stakeholder involvement, litigation costs, and model evaluations (\$285,000)	\$2,092,715	
2012	Augment the existing b2 program (\$1,100,000), develop New Melones water management guidelines (\$225,000), conduct additional monitoring (\$482,715), additional stakeholder involvement, litigation costs, and model evaluations (\$285,000)	\$2,092,715	

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.