

CVPIA Fiscal Year 2008 Annual Work Plan

November 2, 2007

Program Title

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

Responsible Entities

Staff Name	Agency	Staff Name	Role
Lead	FWS	Roger Guinee	Program Manager
Co-Lead	Reclamation	Ann Lubas-Williams	Program Manager

Program Goals and Objectives for FY 2008

The Department of the Interior (Interior) has the responsibility to dedicate and manage annually 800,000 acre-feet of CVP water (b)(2) water for fish, wildlife, and habitat restoration purposes. The management of (b)(2) water will be closely coordinated with the management of CALFED's Environmental Water Account (EWA). 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 2008 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. Enhance 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.

The management of the (b)(2) water was closely coordinated with the management of the EWA. 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. Monitoring and evaluation will continue to assess the effectiveness of the 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 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. The Service is still evaluating whether the doubling of natural production will be sustainable on a long-term basis.

FY 2007 Accomplishments

The May 2003 Decision on Implementation of Section 3406(b)(2) was implemented for the fourth year in 2007 and was coordinated with the seventh year implementation of CALFED's EWA.

Water year 2007 began with good reservoir storage conditions but winter and spring precipitation was lower than average. The Sacramento Valley Water Year Type Index was dry, and the San Joaquin Valley Water Year Type Index was critical.

Using the WY 2007 (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 2007 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 with Water Year 2007 (b)(2) water as well as 2006 (b)(2) water that was carried over and banked in Shasta Reservoir. The (b)(2) water was used from November 2006 through March 2007 to maintain flows between 4,500 – 5,500 cfs to improve instream conditions for fall run Chinook, late-fall run Chinook, and steelhead during the spawning, incubation, and rearing period. Approximately 126,000 acre-feet of the WY 2006 banked water was used on the Sacramento River in WY 2007. The unused portion of the banked water, approximately 69,000 acre-feet, will be made available for other project purposes on October 1, 2007.

Used (b)(2) water to augment low American River base flows from late October through mid-February to maintain between 1,500 - 2,000 cfs to improve instream conditions for fall run Chinook and steelhead during important spawning, incubation, and rearing periods.

Due to high carryover storage from the wet conditions in the winter and spring of 2006, base flows on the Stanislaus River were relatively high in the fall of 2006 and the winter of 2007. (b)(2) water was used to provide a pulse flow for outmigrating fall run Chinook smolts from April 22 – May 22, 2007 in coordination with the 2007 Vernalis Adaptive Management Program (VAMP).

(b)(2) was used to reduce CVP exports 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.

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.

FY 2008 Tasks, Costs, Schedules and Deliverables

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source RF
1.1	Program Management					
1.1.1		0.01	(FWS) Program Lead. Dedicate and manage annually 800,000 acre-feet of CVP water for fish, wildlife, and habitat restoration purposes. (Objectives a, b, c).	annual ongoing	\$2,000	\$2,000
	<u>Subtotal Costs</u>				\$2,000	\$2,000
1.2	Program Support					
1.2.1		0.01	(BOR) Co-lead. Dedicate and manage annually 800,000 acre-feet of CVP water for fish, wildlife, and habitat restoration purposes. (Objectives a, b, c).	annual ongoing	\$2,000	\$2,000
	<u>Subtotal Costs</u>				\$2,000	\$2,000
1.3	Technical Support	0.5				
1.3.1			#1 FWS support: (hydrologist)		\$26,250	\$26,250
1.3.2			#2 FWS support: (biologist)		\$26,250	\$26,250
1.3.3			#3 BOR support: (lead engineer)		\$23,250	\$23,250
1.3.4			#4 BOR support: (engineer)		\$23,250	\$23,250
			Technical support for the (b)(2) 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. (Objectives a, b, c).	annual ongoing		
	<u>Subtotal Costs</u>				\$99,000	\$99,000
1.4	Restoration Actions	0.5				
1.4.1			(b)(2) 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 survival of outmigrant juvenile anadromous fish (especially in the Delta); and to enhance recovery of listed threatened and endangered fish species (FWS CNO). Tasks 1.3 and 1.4 are directly linked to each other and the total costs (i.e., \$198,000 in staff time) have been split between Technical Support and Restoration Actions to illustrate that the (b)(2) program efforts improve instream and Delta conditions. (Objectives a, b, c).	annual ongoing	\$99,000	\$99,000

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source RF
	<u>Subtotal Costs</u>				\$99,000	\$99,000
1.7	Outreach and Public Involvement					
1.7.1			Interior has established a stakeholder and public involvement process to present and discuss information on the annual (b)(2) fishery action plan and how the plan is integrated into the operations forecast. FWS staff: Hiltz, Hindman. BOR staff: Fujitani, Manza. (Objectives a, b, c).	annual ongoing	\$8,000	\$8,000
	<u>Subtotal Costs</u>				\$8,000	\$8,000
1.12	Monitoring					
1.12.1			Recover fall run Chinook smolts (VAMP) in San Joaquin River and Delta (Pat Brandes FWS Stockton)	annual ongoing	\$187,512	\$187,512
1.12.2			Fish health analysis (VAMP smolts) at California/Nevada Fish Health Center (Scott Foote FWS Coleman NFH)	annual ongoing	\$10,980	\$10,980
1.12.3			Stanislaus rotary screw trapping for fall run Chinook juveniles (JD Wikert FWS Lodi).	annual ongoing	\$100,000	\$100,000
1.12.4			Tag 290,000 late fall Chinook smolts at CNFH for Delta action 8 (Jim Smith FWS Red Bluff). Recovery in Sacramento River and Delta (Pat Brandes FWS Stockton).	annual ongoing	\$126,906	\$126,906
1.12.5			Ultrasonic tags and recovery fall run Chinook juveniles for Delta action 8 (Pat Brandes FWS Stockton)	annual ongoing	\$2,440	\$2,440
1.12.6			Tag 140,000 late fall Chinook smolts at CNFH for spring run surrogates (Jim Smith FWS Red Bluff). Recovery in Sacramento River and at the CVP and SWP pumping facilities (Pat Brandes FWS Stockton).	annual ongoing	\$28,656	\$28,656
1.12.7			Tag 200,000 fall run Chinook fry at CNFH for fry survival indexing (Jim Smith FWS Red Bluff). Recovery in Sacramento River and Delta (Pat Brandes FWS Stockton).	annual ongoing	\$30,501	\$30,501
1.12.8			CNO coordination of (b)(2) monitoring efforts	annual ongoing	\$3,005	\$3,005
			All of the b2-funded monitoring elements are intended to assess the effectiveness of b2 actions for CVPIA primary purposes.			
	<u>Subtotal Costs</u>		All of the above tasks are intended to meet objective d.		\$490,000	\$490,000

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source RF
1.13	Modeling					
1.13.1			Hydrologic computer model evaluations will be conducted on a monthly basis (CVP Forecast model) to asses various b2 implementation scenarios, and CALSIM II and ECOSYM modeling will be done on an as-needed basis. FWS staff: Hiltz. BOR staff: Manza and Fujitani. (Objectives a, b, c).	annual ongoing	\$90,000	\$90,000
	<u>Subtotal Costs</u>				\$90,000	\$90,000
1.14	Other - Describe	0.05				
1.1.4.1	Litigation		Prepare info for litigation. FWS staff: Guinee and Hindman. BOR staff: Fujitani and Manza. (Objectives a, b, c).	annual ongoing	\$10,000	\$10,000
	<u>Subtotal Costs</u>				\$10,000	\$10,000
	Total Costs				\$800,000	\$800,000
	Total Service Funding				\$651,000	\$651,000
	Total Reclamation Funding				\$149,000	\$149,000

			UNFUNDED NEEDS FOR FY2008 (in order of priority)		Total Cost	Anticipated Funding Source RF
1.3 Unfunded	Technical Support & Restoration Actions	0.47				
1.4 Unfunded			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	\$92,000	\$92,000
1.13	Modeling	0.15	Additional funds for hydrologic computer model evaluations.(FWS Hiltz. BOR: Fujitani, Manza)	annual ongoing	\$30,000	\$30,000
1.12 unfunded	Monitoring					
	1.12.9		full funding Stanislaus rotary screw trapping for fall run Chinook (JD Wikert FWS Lodi).	annual ongoing	\$102,248	\$102,248
	1.12.10		additional 240 ultrasonic tags for DA-8 (P. Brandes FWS Stockton)	annual ongoing	\$85,280	\$85,280

UNFUNDED NEEDS FOR FY2008 (in order of priority)			Total Cost	Anticipated Funding Source RF
1.12.11	fall run fry survival indexing FRH (200k). (P. Brandes FWS Stockton)	annual ongoing	\$32,184	\$32,184
1.12.12	fall smolt survival - Sacto index (225k)(J. Smith FWS Red Bluff, P. Brandes FWS Stockton)	annual ongoing	\$73,964	\$73,964
	minus \$2,676 for CNO staff monitoring		-\$2,676	-\$2,676
Additional Cost with full funding			\$413,000	\$413,000
		BOR	\$61,000	\$61,000
		FWS	\$352,000	\$352,000

CVPIA Program Budget

Task	Agency	FTE	Direct Salary and Benefits Costs	Contract and Grant Costs	Misc. Costs	Admin Costs	Total Costs
1.1 Program Management	FWS	0.01	820			180	1,000
	BOR	0.01	820			180	1,000
1.2 Program Support	FWS	0.01	820			180	1,000
	BOR	0.01	820			180	1,000
1.3 Technical Support	FWS	0.27	43,033			9,467	52,500
	BOR	0.24	38,115			8,385	46,500
1.4 Restoration Actions	FWS	0.27	43,033			9,467	52,500
	BOR	0.24	38,115			8,385	46,500
1.7 Outreach and Public Involvement	FWS	0.02	3,279			721	4,000
	BOR	0.02	3,279			721	4,000
1.12 Monitoring	FWS	1.81	290,762	135,270		63,968	490,000
	BOR	0					0
1.13 Modeling	FWS	0.23	36,885			8,115	45,000
	BOR	0.23	36,885			8,115	45,000
1.14 Other (litigation)	FWS	0.03	4,098			902	
	Other	0.00	0			0	
	Other	0.00	0			0	5,000
	BOR	0.03	4,098			902	
	Other	0.00	0			0	
	Other	0.00	0			0	5,000
FWS Total Costs		2.63	422,729	135,270	0	93,001	651,000
BOR Total Costs		0.76	122,131	0	0	26,869	149,000
Total		3.39	544,860	135,270	0	119,870	800,000

Five Year Budget Plan FY 2009 – 2013

(\$ thousands)

Funding Source	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Total
W&RR						
RF	2,092,715	2,092,715	2,092,715	2,092,715	2,092,715	10,463,575
State						
Other (identify)						
Total	2,092,715	2,092,715	2,092,715	2,092,715	2,092,715	10,463,575

Priority list for 5-Year Budget Plan:

1. Augment the existing (b)(2) program - \$1,100,000
2. New Melones water management guidelines - \$225,000
3. Additional monitoring and evaluation to assess effectiveness of (b)(2) actions – \$482,715
4. Additional stakeholder involvement, litigation costs, and model evaluations - \$285,000

Total budget needs - \$2,092,715 per year