

## **work Plan for Fiscal Year 2007**

### I. Program Title Dedicated Project Yield CVPIA Section 3406 (b)(2)

### II. Responsible Entities

	Agency	Staff Name	Role
Lead	USFWS	Roger Guinee	Program Manager
	USFWS	Derek Hilts	Lead Hydrologist
	USFWS	Nick Hindman	Lead Biologist
	USFWS	Andrew Hamilton	Biologist
Co-Lead	USBR	Ann Lubas-Williams	Program Manager
	USBR	Paul Fujitani	Lead Engineer
	USBR	Peggy Manza	Engineer

### III. Program Objectives for FY 2007

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 2007 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.

### IV. 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 non-mandatory 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.

#### V. FY 2006 Accomplishments

A. The May 2003 Decision on Implementation of Section 3406(b)(2), was implemented for the third year in 2006 and was coordinated with the sixth year implementation of CALFED's EWA.

Per the language in CVPIA Section 3408(d), as well as the May 2003 Decision, Interior banked 125,000 acre-feet of unused (b)(2) water from WY 2005 for potential use in WY 2006 in Shasta Reservoir (80,000 AF) and Folsom Reservoir (45,000 AF). Of this amount approximately 800 AF was used in October and November for a pilot study on pre-wetting flows in the Cosumnes River. The remaining banked (b)(2) water spilled out of Shasta and Folsom when flood control releases commenced in December.

B. Using the WY 2006 (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.

Water Year 2006 was unusually wet, and with the exception of Clear Creek the CVP-controlled streams (i.e., Sacramento, American, and Stanislaus Rivers) were characterized by flood control operations from mid-December 2005 through April 2006. For the most part (b)(2) upstream actions were not required during this period. In FY 2006 the following (b)(2) actions were taken:

- Approximately 800 AF of banked (b)(2) water was routed through the Folsom South Canal and released into the Cosumnes River to conduct a pilot study on pre-wetting flows and groundwater interactions in October and November 2005.
- 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.
- Augmented decreasing base flows in the Sacramento River in early December to improve habitat conditions for Chinook salmon and steelhead upstream migration, spawning, egg incubation, and rearing.
- Augmented low base flows in the Stanislaus River in the fall and early winter to improve habitat conditions for Chinook salmon and steelhead upstream migration, spawning, egg incubation, and rearing. Due to wet conditions,

additional (b)(2) water was not required for conducting the VAMP spring pulse flows to assist juvenile salmon downstream migration in 2006.

- Closed Delta cross channel gates December 3, 2005 to protect emigrating juvenile salmonids from the Sacramento basin, including listed Chinook salmon and steelhead.
- Reduced Delta exports May 3 – June 2, 2006 to protect delta smelt and conduct the VAMP experiment, which examines the relationship between Vernalis flows, export levels, and survival of San Joaquin basin salmon.
- Maintained a reduced export level of 6,000 cfs (combined) from June 3 - 21 to protect San Joaquin smolts.

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](http://www.usbr.gov/mp/cvo).

C. 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.

## VI. Tasks, Costs, Schedules and Deliverables

### A. Narrative Explanation of Tasks.

1. Program Management. Service and Reclamation Program managers are responsible for co-managing this program.
  - 1.1 Coordination and Budget. Service and Reclamation Program managers are responsible for preparing the Annual Work Plan and implementing the overall program including outreach and coordinating with other agencies and stakeholders.
2. Project Management. The Service and Reclamation share responsibility for project management.
  - 2.1 Spreadsheet Model and Forecast. Every month, after consultation with the State Water Project (SWP), Reclamation will prepare an annual operations forecast representing the 1992 baseline conditions and the 1995 Water Quality Control Plan (WQCP) conditions. Based on the operations forecast, the Service will consult with biologists from the other federal and state agencies in preparing an annual (b)(2) fishery action plan. An iterative process will take place in developing a final operations forecast that incorporates the annual (b)(2) fishery action plan. The forecast will be updated monthly and coordinated with the (b)(2) Interagency Team and management of EWA.
  - 2.2 Monthly and Annual Accounting of (b)(2) Actions. Reclamation and the Service will jointly develop a preliminary accounting of (b)(2) water on the

15<sup>th</sup> day of every month showing the current accounting for the accounting year as of the end of the previous month. Final accounting for all (b)(2) actions during the entire water year will be calculated by October 31.

- 2.3 Stakeholder and Public Involvement. To assist Interior in developing the annual fish actions to dedicate and manage the 800,000 acre feet, 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.
  - 2.4 Monitoring and Evaluation. Monitoring and evaluation will be implemented to assess the effectiveness of (b)(2) measures.
  - 2.5 Model Evaluations. Limited computer model evaluations will be conducted assessing various (b)(2) implementation scenarios and integrating preliminary water acquisition decisions. This will contribute to an integrated environmental water plan.
3. Litigation
    - 3.1 Prepare Information for Litigation. The preparation of the administrative record and updated information for the lawsuits and/or appeals on Interior's proposed management of the (b)(2) water will be completed by the Service and Reclamation.
4. Interior will continue to coordinate with the signatories to the lower American River Flow Management Standard MOU to assess the additional (b)(2) exposure, address the flow standard's relationship to OCAP, and develop objective base case criteria for the lower American River.

B. Schedule and Deliverables.

#	Task	Dates		Deliverable
		Start	Complete	
1	Program Management	10/01/06	09/30/07	Revised FY2007 Annual Work Plan (AWP), a draft FY2007 AWP, and grants, agreements, and contracts.
1.1	Coordination and Budget	10/1/06	9/30/07	AWP, grants, agreements, and contracts.
2	Project Management	10/1/06	9/30/07	The Service and Reclamation share responsibility for project management.
2.1	Spreadsheet Model and Forecast	10/1/06	9/30/07	Monthly and Annual Operations Forecast coordinated with the (b)(2) Interagency Team and management of EWA.
2.2	Monthly and Annual Accounting of (b)(2) Actions	10/1/06	9/30/07	Preliminary monthly accounting report on 15 <sup>th</sup> of each month. Final accounting report October 31.
2.3	Stakeholder and Public Involvement	10/1/06	9/30/07	Seek input developing (b)(2) fish actions through bi-annual workshops and monthly CALFED Operations Group meetings.
2.4	Monitoring and Evaluations	10/1/06	9/30/07	Monitoring and evaluation to assess effectiveness of (b)(2) fish actions.
2.5	Model Evaluations	10/1/06	9/30/07	Model evaluations conducted to assess various (b)(2) implementation scenarios.
3.1	Prepare Information for Litigation	10/1/06	9/30/07	Prepare administrative record and updated information for lawsuits and/or appeals.
4	(b)(2) and American River flow standard	10/1/06	9/30/07	Assess (b)(2) exposure, relationship to OCAP, and develop base case criteria for lower American River.

Explanatory Notes: The monitoring and evaluations (2.4) are multi-year efforts. The preliminary results are reported in a variety of forums, such as the IEP newsletter, CALFED EWA Science Review Panel, VAMP Annual Report, and others. The contractors provide an annual report to the Service each year.

C. Summary of Program Costs and Funding Sources.

#	Task	Total Cost	Funding Sources
			RF
1	Program Management	\$ 4,000	\$ 4,000
1.1	Coordination and Budget	\$ 4,000	\$ 4,000
2.1	Spreadsheet Model and Forecast	\$100,000	\$100,000
2.2	Monthly and Annual Accounting of (b)(2) actions	\$100,000	\$100,000
2.3	Stakeholder and public involvement	\$ 16,282	\$ 16,282
2.4	Monitoring and Evaluation	\$571,962	\$571,962
2.5	Model evaluations	\$95,756	\$95,756
3.1	Prepare Information for litigation	\$4,000	\$4,000
4	(b)(2) and American R. standard	\$4,000	\$4,000
<b>Total Program Budget</b>		<b>\$900,000</b>	<b>\$900,000</b>

Explanatory Notes: Reclamation and the Service will split the budget for tasks 1, 1.1, 2.1, 2.2, 2.3, 2.5, 3.1, and 4. The Service with assistance from contractors will conduct the monitoring and evaluation (2.4). See Attachment for details.

D, CVPIA Program Budget

#	Task	FTE	Direct Salary and Benefits Costs	Contract costs	Miscellaneous Costs	Administrative Costs	Total Costs
1	Program Management (USBR)	0.01	\$1,639			\$361	\$2,000
	Program Management (FWS)	0.01	\$1,639			\$361	\$2,000
1.1	Coordination and Budget(USBR)	0.01	\$1,639			\$361	\$2,000
	Coordination and Budget(FWS)	0.01	\$1,639			\$361	\$2,000
2.1	Spreadsheet Model Forecast (USBR)	0.26	\$40,984			\$9,016	\$50,000
	Spreadsheet Model Forecast(FWS)	0.26	\$40,984			\$9,016	\$50,000
2.2	Accounting of (b)(2) actions (USBR)	0.26	\$40,984			\$9,016	\$50,000
	Accounting of (b)(2) actions (FWS)	0.26	\$40,984			\$9,016	\$50,000
2.3	Stakeholder Involvement (USBR)	0.04	\$6,673			\$1,468	\$8,141
	Stakeholder Involvement (FWS)	0.04	\$6,673			\$1,468	\$8,141
2.4	Monitoring and Evaluation (FWS)	2.1	\$322,384	\$178,653		\$70,925	\$571,962
2.5	Model Evaluations (USBR)	0.24	\$37,505			\$8,251	\$45,756
	Model Evaluations(FWS)	0.26	\$40,984			\$9,016	\$50,000
3.1	Prepare Info for litigation (USBR)	0.01	\$1,639			\$361	\$2,000
	Prepare Info for litigation (FWS)	0.01	\$1,639			\$361	\$2,000
4	(b)(2) and American R. standard	0.01	\$1,639			\$361	\$2,000
4	(b)(2) and American R. standard	0.01	\$1,639			\$361	\$2,000
	<b>Total (USBR)</b>	<b>0.85</b>	<b>\$132,702</b>			<b>\$29,195</b>	\$161,897
	<b>Total (FWS)</b>	<b>2.95</b>	<b>\$458,565</b>	<b>\$178,653</b>		<b>\$100,885</b>	\$738,103
	<b>Overall Total</b>	<b>3.8</b>	<b>\$591,268</b>	<b>\$178,653</b>		<b>\$130,079</b>	\$900,000

Table E

DRAFT CVPIA 5-Year Budget Plan  
 FY 2008 - 2012  
 (\$ Thousands)

Program Description and Section		FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	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:							

Priority list for Table E for FY 2007-2011:

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

Total budget needs - \$2,092,715