Draft CVPIA Fiscal Year 2010 Annual Work Plan

October 1, 2009

Water Acquisition Program - CVPIA Section 3406(b)(3), (d)(2) and (g)

Responsible Entities

Staff Name	Agency	Role
Tim Rust	USBR	Program Manager
Dale Garrison	USFWS	Refuge Co-lead
Dan Cox	USFWS	Instream Co-lead

Program Goals and Objectives for FY 2010

The major objectives of the program are as follows:

1.6.1 To provide supplemental water for refuges referred to as Incremental Level 4, for critical wetland habitat supporting resident and migratory waterfowl, threatened and endangered species, and wetland dependent aquatic biota.

1.6.2 To acquire and manage instream flows in support of the Vernalis Adaptive Management Plan (VAMP) and the San Joaquin River Agreement (SJRA).

1.6.3 To acquire instream flows to improve spawning and rearing habitat and increase migration flows for fall-, winter- and spring-run Chinook salmon and steelhead, in support of the Anadromous Fish Restoration Plan and in coordination with the CALFED Environmental Water Account or similar environmental water programs.

Source Documents

- Title 34 (CVPIA)
- CVPIA Programmatic Record of Decision
- Report on Refuge Water Supply Investigations – March 1989
- San Joaquin Action Plan Report - 1989
- Anadromous Fish Restoration Plan (AFRP)
- 1999-2003 Five Year Plan for AFRP and Water Acquisitions Program (WAP)
- Annual CVPIA Accomplishment Reports

Status of the Program

Refuges – Incremental Level 4

Provide supplemental refuge water supplies (Incremental Level 4) through purchases from willing sellers. This consisted of annual purchases from the San Joaquin River Exchange Contractors Water Authority (Exchange Contractors), Stevinson and Grassland Water Districts.

As a supplement to surface water acquisitions, the WAP continues to look at the potential for using groundwater to lower costs and increase reliability of providing supplemental refuge water supplies.

The WAP has also been involved in development of a "Refuge Water Quality Best Management Practices (BMP) Plan". Refuge Water Quality Best Management Practices are being developed consistent with the requirement in CALFED legislation (H.R. 2828) to develop a BMP Plan to reduce the water quality impacts of the discharges of refuges that receive federal water and discharge into the San Joaquin River. Additional funding has been provided to implement a water quality monitoring program. The final BMP Plan is expected in the winter of 2009.

Fisheries - In-stream

The Water Acquisition Program manages an agreement with the San Joaquin River Group Authority (SJRGA) and its member agencies to provide additional spring and fall fishery flows on the Stanislaus, Tuolumne, Merced, and lower San Joaquin rivers. This water is used in support of the San Joaquin River Agreement (SJRA) and the Vernalis Adaptive Management Plan (VAMP), which is a scientifically based fishery management plan to determine the relationships between flows, exports, and other factors on fish survival in the Sacramento-San Joaquin Delta. The increased flows benefit numerous resident and anadromous fish species but are acquired primarily to benefit Chinook salmon. Central Valley Chinook salmon constitute the majority of salmon produced in California, and at times have accounted for 70% or more of the statewide commercial harvest.

The SJRA and VAMP will continue as an on-going requirement through 2009 and negotiations are underway to extend this agreement. An "Annual Technical Report" is issued by the SJRGA consisting of a consolidated annual SJRA Operations Report and VAMP Monitoring Report. This report includes conclusions regarding biological benefits and program objectives, and recommended modifications to the VAMP experimental program implementation.

FY 2009 Accomplishments

Refuges - Incremental Level 4

2009 was the fourth year of a 5-Year Agreement with the Exchange Contractors, San Luis & Delta-Mendota Water Authority and Madera Irrigation District for the annual purchase of up to 80,000 acre feet of Exchange Contractors transfer water. Pursuant to the agreement, WAP acquired 24,132 acre feet from the Exchange Contractors in Contract Water Year (CWY) 2008.

In 2009, The WAP continued a three year agreement with the Stevinson Water District for the acquisition of up to 8,800 acre feet a year, for delivery to the East Bear National Wildlife Refuge (NWR). In CWY 08, 3,222 acre feet of water was purchased.

In 2009, The WAP continued a three year agreement with the Grassland Water District for the acquisition of up to 10,000 acre feet a year. In CWY 08, 2,954 acre feet of water was purchased.

In September 2009, WAP modified our agreement to provide additional funds to Grassland Water District (GWD), in cooperation with the Department of Fish and Game and the Fish and Wildlife Service, to implement a three year water quality monitoring program on lands within the Grassland Ecological Area (GEA) that receive Central Valley Project (CVP) water in accordance with CVPIA. The agreement includes monitoring sites with Grassland Water District and on lands of the California Department of Fish and Game and Fish and Wildlife Service. The study monitors the volume of water, as well as salt load of all major water sources entering the wetlands and all major outflows draining from the region. Data from this monitoring effort will provide information to land use managers which will serve to better understand the dynamics of water quantity and quality used to manage the GEA.

In FY 2009, due to the dry year and unavailability of water for sale, along with Water Acquisition Program's funding constraints, the program was able to purchase less than 35,000 acre feet of water.

Fisheries - Instream

Pursuant to VAMP/SJRA, WAP acquired 12,500 acre feet from Merced ID in fall 2008 (FY 2009) for fall attraction flows and habitat improvement in the Merced and lower SJR. Due to the third consecutive dry year, the spring pulse flows normally provided by the San Joaquin River Group Authority pursuant to the VAMP experiment were not provided in 2009. The WAP also acquired 26,000 acre feet from Oakdale ID (of which 11,000 acre feet was "difference water") for the Stanislaus and lower SJR to support flow requirements, water quality and other authorized New Melones purposes.

In lieu of the traditional spring VAMP Pulse flows the WAP staff were able to coordinate some flows on the Stanislaus River utilizing a combination of (b)(3) "difference water", and (b)(2) water to provide a pulse flow on the Stanislaus River between April 19 and May 19, 2009. On the Tuolumne River, FERC base flows were reshaped to provide two moderate pulses in late April and early May and on the Merced River, a third-party water transfer took place in May which also provided a short pulse flow.

These additional tributary releases during the 31-day "VAMP" period were provided in lieu of the normal SJRA tributary contributions, and were notably smaller on the Tuolumne and Merced than prior years.

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		0.4	Program Manager/USBR: Provides oversight for all aspects of the Water Acquisition Program (Program). Serves as primary contact and coordinator for the Program. Represents the Program at various internal and external meetings. Prepares and provides presentations on the program at various internal and external meeting. Provides guidance and oversight to the technical support personnel on contracting, budget and environmental issues. Primary responsibility for long and short term program strategy. (High) .30 FTE/$73,832 L4 (12056050) .05 FTE/$18,366 Instream (12056051) .05 FTE/$21,679 VAMP (02142030)		$113,877	$0	$0	$113,877
	Subtotal Costs	0.40			$113,877	$0	$0	$113,877
1.2	**Program Support**							
1.2.1		1	Water Acquisition Spec/USBR: Consults with water rights, water transfers, area office personnel, solicitor's office, etc., in order to negotiate, prepare and administer water acquisition contracts. Coordinates refuge delivery schedules with refuge personnel, area office personnel, CVO and DWR. Tracks and monitors all obligations and expenditures. (high) .75 FTE/$154,690 L4 (12056050) .05 FTE/$25,824 Instream (12056051) .20 FTE/$57,912 VAMP (02142030)		$238,426	$0	$0	$238,426
1.2.1.1		0.1	Assists with coordination of reguge delivery schedules and water accounting		$13,147			$13,147
1.2.2		0.5	Environmental Specialist/USBR: Ensure environmental compliance for certain water acquisition projects as needed. (High) .15 FTE/$21,998 VAMP (02142030) .30 FTE/$54264 L4 (12056050) .05 FTE/$7,333 Instream (12056051)		$83,595	$0	$0	$83,595
1.2.3		0.01	CVO Hydrologist: Provides assistance on VAMP (0214-2030) (high)		$3,000	$0	$0	$3,000

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
1.2.4		0.02	Contract Specialist/MP-3800: Administer coop/interagency agreements for water quality monitoring ($5K 1205-6050 & $6K 0214-2030) (high)		$11,000	$0	$0	$11,000
1.2.5		0.01	MP-157: Provide technical assistance for coop/interagency agreements for water quality monitoring (1205-6050) (High)		$2,000	$0	$0	$2,000
1.2.6		0.4	Refuge Co-lead USFWS: Provides technical support as needed for refuge water acquisitions (1205-6050) (High)		$84,101	$0	$0	$84,101
		1	Instream Co-lead USFWS: Provides technical support as needed for Instream water acquisitions (High) .4 FTE .25 FTE .35 FTE (1205-6051) ($244,295)		$210,253	$0	$0	$210,253
		0.15	CVPIA Admin USFWS: Provides technical support as needed on administraiton of CVPIA (High) .15 FTE (1205-6050) ($80,618)		$31,538	$0	$0	$31,538
	Subtotal Costs	3.19			$677,060	$0	$0	$677,060
1.6	**Water Acquisitions**							
1.6.1.			FY10 is the 4th year of a 5 year agreement with the SJR Exchange Contractors for Incremental Level 4 refuge water supplies; annual qty and price vary depending on the South of Delta agricultural allocation. Estimated purchase of 40k af at average price of $143 per acre foot. (1205-6050) ($3,618,000) (High)	2/1/2010	$3,618,000	$0	$0	$3,618,000
1.6.1.1			Acquire up to 8,863 acre feet of Level 2 water from Stevinson Water District for East Bear NWR, to be exchanged for Inc Level 4 water. Total FY10 request has been reduced by available FY09 funds. (1205-6050) (High)	2/1/2010	$506,457	$0	$0	$506,457
1.6.1.2			Acquire up to 10,000 acre feet of Level 4 water from Grassland Water District. (1205-6050) (High)	2/1/2010	$750,000	$0	$0	$750,000

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
1.6.1.3			Acquire Incremental Level 4 refuge water. Quantity is dependent on cost per acre foot, availability of funding, and willing sellers. Estimating cost at $200 per acre feet, current funding would allow WAP to acquire approx 6,146 acre feet of Incremental Level 4. This is in addition to planned acquisitions noted above. (1205-6050) (Med)	Unknown	$1,229,295	$0	$0	$1,229,295
1.6.1.4			National Fish & Wildlife Foundation Agreement. One half of agreement costs. (1205-6050) (Med)	2/1/2010	$25,000	$0	$0	$25,000
1.6.2			Agreement with the San Joaquin River Group Authority for VAMP/ SJRA (0214-2030) (High)		$0	$0	$0	$0
1.6.2.1			VAMP pulse flow. Up to 110,000 acre feet is provided depending on hydrology and amount required to meet the target flows. (0214-2030) (High)	12/31/2010	$4,000,187	$0	$0	$4,000,187
1.6.2.2			Instream supplemental flows under SJRA. Up to 26,000 acre feet is acquired from Oakdale each year depending on hydrology and 12,500 acre feet from Merced ID. Balance of actual need to be show under **unfunded**in the amount of $879,154. (1205-6051) (High)	6/30/2010	$1,535,500	$0	$0	$1,535,500
1.6.2.3			Doublestep to supplement VAMP flows, up to 47,000 acre feet. (0214-2030) If it is a doublestep year $2,709,896 will be unfunded	5/30/2010	$90,104	$0	$0	$90,104
1.6.3			Instream acquisitions other than VAMP/SJRA 10,000 acre feet at $200 acre feet. (1205-6051) (Med)	Unknown	$0	$0	$0	$0
1.6.4			National Fish & Wildlife Foundation Agreement. One half of agreement costs. (1205-6051) (Med)	2/1/2010	$25,000	$0	$0	$25,000
	Subtotal Costs				$11,779,543	$0	$0	$11,779,543
1.7	**Outreach and Public Involvement**							
1.7.1			WAP meets frequently with the IRWMT (comprised of Reclamation, FWS, DFG and Grassland WD) to discuss refuge water issues including water acquisitions, water needs, delivery schedules). WAP meets on a regular basis with the Central Valley Joint Venture water committee to discuss a wide range of refuge issues. Limited availability of water and funding constraints have been identified as major issues/concerns. Generally meet twice a year with CVPIA stakeholders to discuss work plans for the fiscal year and provide status updates. Funding included under program management and technical support.		$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
	Subtotal Costs				$0	$0	$0	$0
1.8	**Planning**							
1.8.1			Continue pilot aquifer pump tests and water quality monitoring program at various refuges to further explore a groundwater conjunctive use program. (1205-6050) (Med)	12/1/2010	$129,520	$0	$0	$129,520
	Subtotal Costs				$129,520	$0	$0	$129,520
1.9	**Environmental Compliance**							
1.9.1			Ensure that water acquisition projects are in compliance. E.A.s or other environmental documents may need to be prepared for water acquisitions, groundwater projects, etc. The cost for the environmental documents is under labor cost for technical support, task 1.2.2.		$0	$0	$0	$0
	Subtotal Costs				$0	$0	$0	$0
1.12	**Monitoring**							
1.12.1			Provide funding for a portion (50%) of the VAMP monitoring cost. This includes the 25% of the cost that Reclamation and the FWS are responsible for and 25% that the State of California is responsible for of which the States reimburses Reclamation via SCAMPI. WAP administers cooperative agreement with San Joaquin River Group Authority (SJRGA) to provide monitoring and issue a technical report each year. The report is posted on SJRGA's website and CD's are provided to numerous stakeholders and interested parties. The annual report summarizes the previous year's SJRA/VAMP program. The report provides conclusions and recommendations for the program technical and monitoring elements. The SJRA/VAMP Policy and Technical Teams consider the recommendations identified in the annual report for incorporation into the current year's VAMP monitoring program. (0214-2030) (High)		$300,000	$0	$0	$300,000
			USGS provides monitoring assistance with VAMP (0214-2030) (High)		$200,000	$0	$0	$200,000
1.12.2			Real time water quality monitoring at South of Delta refuges per agreement with DFG/GWD in accordance with the proposed Regional Board Management Agency Agreement and refuge BMP's (1205-6050) (Med)		$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
	Subtotal Costs				$500,000	$0	$0	$500,000
	Total Costs	**3.59**			**$13,200,000**	**$0**	**$0**	**$13,200,000**
	Service Total Cost	1.55			$375,892	$0	$0	$375,892
	Reclamation Total Cost	2.04			**$12,824,108**	$0	$0	**$12,824,108**
	Unfunded Needs							
1.6	**Water Acquisitions**							
	Unfunded Needs							
1.6.2.3			VAMP - Double step		$2,709,896	$0	$0	$2,709,896
1.6.1.3			An additional $16,000,000 would acquire 80,000 acre feet of Incremental Level 4 refuge water. (1205-6050) (Med)	Unknown	$16,000,000	$0	$0	$16,000,000
1.6.3			Instream acquisitions other than VAMP/SJRA 10,000 acre feet at $200 acre feet. (1205-6051) (Med)	Unknown	$2,000,000	$0	$0	$2,000,000
	Total Unfunded Needs				**$20,709,896**	**$0**	**$0**	**$20,709,896**

Table 2. Budget Breakout

Task	Agency	FTE	LABOR			CONTRACTS		USBR Only Misc. Costs	Total Costs
			Direct Salary and Benefits Costs [1/]	Overhead (O/H) Costs on Salary & Benefits [1/]	FWS Overhead Burden Assess: 22% of Salary, Benefits & Labor O/H Costs [2/]	Contract, Grant, and Agreement Costs	FWS Overhead Assess: 6% Contract Costs/22 % Utility Costs [2/]		
1.1 Program Management	FWS		$0	$0	$0	$0	$0		$0
	USBR	0.4	$53,449	$60,428		$0		$0	$113,877
1.2 Program Support	FWS	1.55	$109,521	$157,604	$58,768	$0	$0		$325,893
	USBR	1.6	$155,962	$160,294		$0		$34,911	$351,167
1.6 Land, Water and Conveyance Acquisitions	FWS		$0	$0	$0	$50,000	$0		$50,000
	USBR		$0	$0		$11,729,543		$0	$11,729,543
1.8 Planning	FWS		$0	$0	$0	$0	$0		$0
	USBR		$0	$0		$129,520		$0	$129,520
1.12 Monitoring	FWS		$0	$0	$0	$0	$0		$0
	USBR		$0	$0		$500,000		$0	$500,000
Administrative Total - FWS			$109,521	$157,604	$58,768		$0		$325,893
Contracts, Grants and Agreements Total - FWS						$50,000			$50,000
FWS Total Costs		1.55	$109,521	$157,604	$58,768	$50,000	$0		$375,893
Administrative Total - USBR			$209,411	$220,722				$34,911	$465,044
Contracts, Grants and Agreements Total - USBR						$12,359,063			$12,359,063
USBR Total Costs		2	$209,411	$220,722		$12,359,063		$34,911	$12,824,107
TOTAL ALL		**3.55**	**$318,932**	**$378,326**	**$58,768**	**$12,409,063**	**$0**	**$34,911**	**$13,200,000**

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	1.1 Program Management	$119	
	1.2 Program Support	$791	
	1.6 Land, Water and conveyance Acquisitions		
	Incremental Level 4 water for refuges (100K @ $200)	$20,000	
	VAMP flows for SJRA	$7,881	
	Instream water purchases	$2,000	
	1.8 Planning	$146	
	1.12 Monitoring	$500	
	Total Request	**$31,437**	
2012	1.1 Program Management	$124	
	1.2 Program Support	$823	
	1.6 Land, Water and conveyance Acquisitions		
	Incremental Level 4 water for refuges (100K @ $225)	$22,500	
	VAMP flows for SJRA	$8,117	
	Instream water purchases	$2,000	
	1.8 Planning	$146	
	1.12 Monitoring	$500	
	Total Request	**$34,210**	
2013	1.1 Program Management	$129	
	1.2 Program Support	$856	
	1.6 Land, Water and conveyance Acquisitions		
	Incremental Level 4 water for refuges (100K @ $250)	$25,000	
	VAMP flows for SJRA	$8,361	
	Instream water purchases	$2,000	
	1.8 Planning	$146	
	1.12 Monitoring	$500	
	Total Request	**$36,992**	

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. The annual RF budgets are estimates and these figures do not reflect the future Congressional Appropriations process. All of these estimates will be adjusted annually as RF collections are realized.

Notes: WRR – Water and Related Resources Appropriations
RF- Restoration Fund (Section 3407)
State – State of California cost share funding

Additional assumptions:

RF funds are to acquire 100,000 acre feet of Incremental Level 4 refuge water supplies for San Joaquin Valley refuges estimating a $200 per acre foot beginning in FY2011 and expected price increases in 2012 ($225 acre feet) and 2013 ($250 acre feet). **Task 1.6.1**

RF funds also support VAMP/SJRA. VAMP/SJRA terminates in 2009. However the assumption is that the agreement may be extended or revised beyond this date.

State funds were provided for VAMP through 2008. However there is a possibility that the State will not continue to cost share beyond 2008. **Task 1.6.2**

Table 4. FY 2010 CVPIA Monitoring Projects

Project Description:	VAMP: 12 year study to gather scientific information on the relative effects of flows in the lower San Joaquin River and SWP/CVP Delta export pumping on salmon smolt survival
FY 2009 Project Complete?	VAMP monitoring is annual and ongoing
CVPIA annual work plan subtask number:	1.12.1
Scope of the monitoring effort:	San Joaquin River tributaries and the Delta
Product/deliverable:	Provide monitoring and issue a technical report each year. The report is posted on SJRGA's website and CD's are provided to numerous stakeholders and interested parties. The annual report summarizes the previous year's SJRA/VAMP program. The report provides conclusions and recommendations for the program technical and monitoring elements.
Cost:	$300,000 $200,000 for assistance from USGS
Questions posed:	The goal of VAMP is to assess the relative impacts of changes in Vernalis flow and SWP and CVP export rates on the survival of San Joaquin salmon smolts passing through the delta.
Objectives:	The objectives of VAMP were to measure the recapture rates of salmon smolts released upstream of Vernalis to sampling locations in the western delta under consistent flow and export conditions that would vary from year to year.
Results – expected or actual:	Annual estimate of survivorship of emigrating smolts from the San Joaquin river tributaries through the Delta at various flows and environmental conditions.
Data collection methods:	Acoustic telemetry studies were initiated in 2006 to determine if the equipment, techniques, and results would be a valuable complement to existing VAMP studies in future years. During 2007 and 2008 sufficient numbers of fish were not available to implement the VAMP coded wire tag (CWT) study design in these years. Following successful demonstration of the technology during 2006, acoustic telemetry studies were expanded during 2007 and 2008 to serve as the primary means of estimating survival through the Delta.
Data management:	Data is managed by USFWS (Pat Brandes) in electronic form.
Assessment:	Annual estimate of survivorship of emigrating smolts from the San Joaquin river tributaries through the Delta at various flows and environmental conditions.
Use of information in future decision making:	Information gathered during VAMP will be used to help determine flows and effective water operations of the San Joaquin River and Delta for Salmonids.

NMFS OCAP BO RPA	Page 584, section 11.2.1.2. Research and Adaptive Management