# **Draft CVPIA Fiscal Year 2011 Annual Work Plan**

#### January 31, 2011

#### Program Title

Contra Costa Canal Pumping Plant Mitigation Program Section 3406(b)(5) Contra Costa Canal Intake Fish Screening Project

#### **Responsible Entities**

Staff Name	Agency	Role
J. Carl Dealy	USBR	Lead, Project Manager
Dan Meier	USFWS	Interim Co-Lead

# Program Goals and Objectives for FY 2011

This program is in response to the requirements of Section 3406(b)(5) of the CVPIA and the U. S. Fish and Wildlife Service's 1993 Biological Opinion for the threatened Delta smelt. The program is also referenced in the Operations Criteria and Plan (OCAP) Biological Opinion (BO).

As new fish species were listed, authorized incidental take for Contra Costa Water District's diversions (including Rock Slough) were included in the OCAP BO for the long-term operations of Central Valley Project and State Water Project, most recently June 4, 2009. A decision by Reclamation and FWS as to screening Rock Slough has been delayed several times due to funding and appropriate land acquisition. On April 15, 2009, Secretary of the Interior Ken Salazar announced that \$20 million of American Recovery and Reinvestment Act (ARRA) funding was being allocated to build a new Contra Costa Canal fish screen. The proposed project would eliminate the annual incidental take of ESA listed species due to project pumping effects as described in previous NMFS and FWS Biological Opinions. The proposed project tiers off of the CVPIA programmatic Biological Opinion, and is consistent with the OCAP BO issued June 4, 2009

The major objectives remain: 1) Minimize the entrainment of fish resources associated with the diversion of water at the Rock Slough Intake of the Contra Costa Canal; 2) Reduce potential predation on target species in the Rock Slough Intake (Species Benefited - Chinook Salmon (fall- and winter-run), Steelhead, Sturgeon (white and green), Striped Bass, American Shad, Delta and Longfin smelt, Sacramento splittail, and Sacramento blackfish); 3) Design and build a fish screen that minimizes take of endangered species and debris loading.

The Contra Costa Program integrates directly and indirectly with other CVPIA programs. Contra Costa Pumping Plant Mitigation actions benefit delta fisheries. Consequently, the benefit is shared by the Tracy Fish Test Facility, CVPIA (b)(4), as well as the Anadromous Fish Screen Program CVPIA (b)(21). Apart from CVPIA programs, the work benefits Central Valley ESA actions including the Contra Costa Water District Canal Replacement Project, Alternative Intake Project, Contra Costa County Habitat Conservation Plan as well as East Bay Regional Park District.

# Status of the Program

Reclamation proposes to build a fish screen structure approximately 320 feet long located at the entrance to the Contra Costa Canal in Rock Slough. The fish screen is designed for a flow rate of 350 cubic feet per second (cfs), however, because it is located in a tidally influenced portion of the Delta, flows within the canal can be as high as 600 cfs. A control structure may be built behind the fish screen to minimize tidal effects and meet the velocity criteria. The approach velocity is designed for no more than 0.2 feet per second and a screen size of 2/32 inch or 1.75 millimeter (mm) wedge wire slot openings. The screen size is more restrictive than the NMFS criteria (i.e., 3/32 inch or 2.25 mm) in order to protect larval delta smelt. The screens will be cleaned by 4 automated trash rakes, or brushes. Debris will be moved via a conveyor belt to a temporary storage dumpster that can be hauled offsite. The height of the structure will be approximately 14 feet extending from 7.6 feet below mean sea level to an elevation of 6.4 feet above mean sea level. The operating deck will be built of precast concrete with slots for fish monitoring. Adjustable baffles on the downstream side of the fish screen will provide a uniform approach velocity.

Maintenance and operations will be managed by the Contra Costa Water District (CCWD). Periodic dredging may be required to remove sediment build up in front of the fish screen. A post-construction evaluation and monitoring plan will be developed prior to start of operations. An onsite electrical building is planned for instruments and controls used to operate the screens.

The program tasks for FY 2011 are enumerated below.

1.1 Program Management - Planning, budget oversight, and coordination of all activities and offices associated with this comprehensive fish screen project is accomplished by the Program Manager, task managers, and support staff. Coordination with regulatory agencies is also included under this item.

1.10 Designs Modifications – Final design is complete, however to adapt to changing field conditions design modifications may be anticipated.

1.11 Construct the Fish Screen - Involves initiation of construction by contractor, construction management, construction and contract support. Contractors will be utilized for construction of the fish screen.

1.12 Monitoring and Evaluation – Includes the current monitoring program under the provisions of the ESA. Post construction monitoring to be

specified.

1.3 Construction Contract Administration – Monitoring and management of the construction contract, including needed inspections.

#### FY 2010 Accomplishments

- A. Land Acquisition / Contracting
  - 1. For the Phase II Cooperative Agreement we completed Amendment 2, which included bypass power provisions and real property transfers. Additionally we modified the post-award surveillance plan.
  - 2. We also completed an internal audit of the Cooperative Agreement in July.
  - 3. For the Phase III Contracting proposals received, Price Evaluation Team established and review complete in April. Congressional Notification Issued AWARD; contract signed. Post Award meeting and Notice to Proceed given end of May.
- B. Construction
  - 1. Construction Activities included the bypass pumping facilities and the replacement irrigation pumps installations are complete and operational. By July the de-watering the site had commenced.
  - 2. Fabrication of composite piles and concrete piles.
  - 3. Excavation of levies for site access. Excavation for the fish screen footing and placement of the foundation for the screening structure.

# Table 1. FY 2011 Activities and Costs

									FY2011 Anticipated Funding			ing
AWP Activity Number	Type of Activity	# of FTE's	Activity Name & Description	NMFS OCAP RPA#	Performance Metric	Performance Target	Complete this FY? Y/N	Total Project Cost	Restoration Fund	Water and Related Resources	State or Other Sources*	Total All Sources
1.1	Program N	lanager										
1.1.1		0.81	Program Manager. All actions are in response to the requirements of Section 3406 (b)(5) of the CV PIA and the U.S Fish and Wildlife Service's 1993 Biological Opinion for the threatened Delta smelt. The program is also referenced in the OCAP Biological Opinion. Responsibilities include coordination of all technical support, budgeting and planning.				Ν	\$70,000	\$0	\$70,000	\$0	\$70,000
						Subtotal Fundin	g	\$70,000	\$0	\$70,000	\$0	\$70,000
						Reclamation	-	\$70,000	\$0	\$70,000	\$0	\$70,000
						Service		\$0	\$0	\$0	\$0	\$0
						Other		\$0	\$0	\$0	\$0	\$0
1.2	Program S	Support										
1.2.1		1.25	MP-3600, MP3800, Cooperative Agreement, Contracting Support				Ν	\$100,000	\$0	\$100,000	\$0	\$100,000
1.2.2		0.78	Other Program Support – ARRA				N	\$60,000	\$0	\$60,000	\$0	\$60,000
						Subtotal Fundin	g	\$160,000	\$0	\$160,000	\$0	\$160,000
						Reclamation		\$160,000	\$0	\$160,000	\$0	\$160,000
						Service		\$0	\$0	\$0	\$0	\$0
						Other		\$0	\$0	\$0	\$0	\$0
1.3	Technical											
1.3.1			Denver TSC, Design and Construction Support				N	\$240,000	\$0	\$240,000	\$0	\$240,000
1.3.2			MP-200, Design Data and Contract Management				9/30/2011		\$0	\$100,000	\$0	\$100,000
1.3.3			MPCO Construction Management				9/30/2011		\$0	\$800,000	\$0	\$800,000
1.3.4		0.25	Site Management				N	\$20,000	\$0	\$20,000	\$0	\$20,000
						Subtotal Fundin	g	\$1,160,000	\$0	\$1,160,000	\$0	\$1,160,000
						Reclamation		\$1,160,000	\$0	\$1,160,000	\$0	\$1,160,000
						Service		\$0	\$0	\$0	\$0	\$0
						Other		\$0	\$0	\$0	\$0	\$0

									FY20	011 Anticip	ated Fund	ing
AWP Activity Number	Type of Activity	# of FTE's	Activity Name & Description	NMFS OCAP RPA#	Performance Metric	Performance Target	Complete this FY? Y/N	Total Project Cost	Restoration Fund	Water and Related Resources	State or Other Sources*	Total All Sources
	Design								<b>.</b>	<b>.</b>		
1.10.1			Contractor, Design and Modifications				N	\$100,000	\$0	\$100,000	\$0	\$100,000
						Subtotal Fundin	g	\$100,000	\$0	\$100,000	\$0	\$100,000
						Reclamation		\$100,000	\$0	\$100,000	\$0	\$100,000
						Service		\$0	\$0	\$0	\$0	\$0
						Other		\$0	\$0	\$0	\$0	\$0
1.11	Construct	on			Structures and							
1.11.1			Cooperative Agreement, Phase II		operational changes to reduce fish losses	Construction of fish screen	N	\$3,526,000	\$0	\$3,526,000	\$0	\$3,526,000
1.11.2			Phase II Construction Contingencies		Structures and operational changes to reduce fish losses	Construction of fish screen	N	\$360,000	\$0	\$360,000	\$0	\$360,000
1.11.3			Construction Phase III, Contract		Structures and operational changes to reduce fish losses	Construction of fish screen	N	\$21,000,000	\$0	\$21,000,000	\$0	\$21,000,000
1.11.4			Phase III Construction Contingencies		Structures and operational changes to reduce fish losses	Construction of fish screen	N	\$3,000,000	\$0	\$3,000,000	\$0	\$3,000,000
				***************************************		Subtotal Fundin	g	\$27,886,000	\$0	\$27,886,000	\$0	\$27,886,000
						Reclamation		\$27,886,000	\$0	\$27,886,000	\$0	\$27,886,000
						Service		\$0	\$0	\$0	\$0	\$0
						Other		\$0	\$0	\$0	\$0	\$0

									FY20	011 Anticip	ated Fund	ing
AWP Activity Number	Type of Activity	# of FTE's	Activity Name & Description	NMFS OCAP RPA#	Performance Metric	Performance Target	Complete this FY? Y/N	Total Project Cost	Restoration Fund	Water and Related Resources	State or Other Sources*	Total All Sources
1.12	Monitorin	9			Structures and							
1.12.1			Monitoring at Rock Slough Canal and pump		operational changes to reduce fish losses	Construction of fish screen	Ν	\$103,000**	\$0	\$103,000**	\$0	\$103,000
						Subtotal Fundin	g	\$103,000	\$0	\$103,000	\$0	\$103,000
						Reclamation		\$103,000	\$0	\$103,000	\$0	\$103,000
						Service		\$0	\$0	\$0	\$0	\$0
						Other		\$0	\$0	\$0	\$0	\$0
	TOTAL F	UNDING	G						\$0	\$29,479,000	\$0	\$29,479,000
	Total Fund	ling Brea	akdown by Agency:									
	Re clam ati	on							\$0	\$29,479,000	\$0	\$29,479,000
	Service								\$0	\$0	\$0	\$0
	Other								\$0	\$0	\$0	\$0

\* ARRA Funding - Facilitating Services, Investigations, Design and Specifications, Construction and Construction Supervision.

\*\* Monitoring is an ongoing expense, not ARRA

The FY 2010 funding will come primarily through ARRA. Current funding is 20 million; however, a variance was filed in July 2009 for the shortage of 18.2 million for a project total of 38.2 million.

# Table 2. Budget Breakout

				ABOR	CONT	RACTS			
					CONT	NAC13			
Task	Agency	FTE	Direct Salary and Benefits Costs <u>1</u> ′	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/	USBR Only Misc. Costs	Total Costs	
1.1 Program	FWS		\$0	\$0	\$0	\$0		\$0	
Management	USBR	0.81	\$70,000		\$0		\$0	\$70,000	
1.2 Brogrom Support	FWS		\$0	\$0	\$0	\$0		\$0	
1.2 Program Support	USBR	2.03	\$160,000		\$0		\$0	\$160,000	
1.3 Technical	FWS		\$0	\$0	\$0	\$0		\$0	
Support	USBR	14.5	\$1,160,000		\$0		\$0	\$1,160,000	
1.6 Land, Water and	FWS		\$0	\$0	\$0	\$0		\$0	
Conveyance	USBR		\$0		\$0		\$0	\$0	
1.10 Design	FWS		\$0	\$0	\$0	\$0		\$0	
1.10 Design	USBR		\$0		\$100,000		\$0	\$100,000	
1.11 Construction	FWS		\$0	\$0	\$0	\$0		\$0	
	USBR		\$0		\$27,886,000		\$0	\$27,886,000	
Administrative Total - FV	WS		\$0	\$0	:	\$0		\$0	
Contracts, Grants and A Total - FWS	greements				\$0			\$0	
FWS Total Costs		0	\$0	\$0	\$0	\$0		\$0	
Administrative Total - USBR			\$1,640,000				\$0	\$1,191,000	
Contracts, Grants and Agreements Total - USBR					\$28,213,000			\$28,288,000	
USBR Total Costs		17.34	\$1,640,000		\$28,213,000		\$0	\$29,479,000	
TOTAL ALL		17.34	\$1,640,000	\$0	\$28,213,000	\$0	\$0	\$29,479,000	

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 2012 – 2014

(\$ amounts in thousands)

Year	Description of Activities	Requested RF Funding	Requested W&RR Funding
2012	Construction Contract Close-Out	\$0	\$1,800
2013		\$0	
2014		\$0	

Note: The FY 2012 – 2014 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.