

Draft CVPIA Fiscal Year 2009 Annual Work Plans

December 1, 2008

Program Title: CVPIA Section 3406(b)(4) - Tracy (Jones) Pumping Plant Mitigation Program

Responsible Entities

Staff Name	Agency	Role
Ron Silva	USBR	Lead
Dan Meier	USFWS	Co-Lead

Program Goals and Objectives for FY 2009

- A. Improve Fish Protection and Fish Salvage at Tracy Fish Collection Facility (TFCF). Action is in compliance with CVPIA 3406(b)(4), and CVP OCAP Biological Opinions for Winter-Run Chinook salmon, Delta smelt, Central Valley Steelhead and Green Sturgeon.”
- B. Determine Best Practical Fish Protection Technology for making Long-term Future Improvements at Tracy and Other South Delta Facilities Proposed by CALFED - Integral to CALFED’s South Delta Program and is in conformance with the Record of Decision (ROD) and Framework documents released previously and the CALFED South Delta Fish Facilities Forum recommendations.
* Species benefited - Chinook salmon, Steelhead, Delta smelt, Splittail, Sacramento blackfish, Longfin smelt, Striped bass, Threadfin shad and American shad.

Status of the Program

The Tracy Fish Test Facility (TFTF) as originally proposed was intended to be a new fish screening technology development and evaluation facility located adjacent to the existing TFCF in the South Delta. The TFTF was to develop critical information for new fish screens and salvage technology for the south Delta export facilities at Tracy and at Clifton Court Forebay, and a possible screened through Delta facility on the Sacramento River. The TFTF was to allow for the testing and evaluation of new facilities for fish screening, holding, sorting, and transportation in the South Delta which is influenced by tides, heavy debris loads, and a mix of 51 species. The TFTF was to be designed by Reclamation with

the oversight and assistance of a multi-agency coalition of fish facility experts pursuant to a “Project Management and Organization Agreement” signed by involved regulatory and water interests. The original TFTF Project was to be implemented as part of Section 3406(b)(4) of the CVPIA, and would have been integral to CALFED’s South Delta and Conveyance Programs. Funding sources would have and did include appropriations from Reclamation, the State of California, and CALFED.

However, due primarily to large construction cost concerns, it had been recommended by the CALFED South Delta Fish Facilities Forum (SDFF) to not further proceed with construction of a large scale fish test facility (TFTF) at this time. Instead, the SDFF recommended focusing on fixing up and improving the existing fish collection facilities in the south Delta as best as possible to meet original design criteria and minimize loss of fish and also implement other alternative actions outside of new fish screens to improve fish populations and assist in meeting agency fish population goals. Included in the recommendations was improvements in debris and predation management (e.g. new debris cleaning equipment and regular predator removals), phasing in replacement of a new secondary screening system, and continued facility research activities to better assess the existing facilities for current conditions and to implement and evaluate operational improvements. In essence, the existing facilities will be used as the “test facility” to develop and evaluate improvements in technology and fish protection. It is expected that it will take approximately seven to 10 years to complete facility assessment and research efforts and phase in improvements to the existing facilities.

FY 2008 Accomplishments:

Specific research activities conducted in 2008 included the following:

1. Ongoing whole facility evaluations for delta smelt
2. Ongoing recessed holding tank stress tests for different species of delta fish
3. Ongoing effort to determine appropriate loading and hauling densities for fish species of the Sacramento-San Joaquin Delta
4. Ongoing improved debris management techniques
5. Ongoing facility hydraulic evaluations for improved operations
6. Completed distribution of Tracy Research Volume Series Nos. 34, 35, 37, & 41.
7. Distribution of Ph D Dissertation (D. Portz) *Fish-holding Associated Stress in Sacramento River Chinook Salmon at South Delta Fish Salvage Operations: Effects of Plasma Constituents, Swimming Performance , and Predator Avoidance*
8. Ongoing water quality analysis at the TFCF
9. Ongoing development of Tracy Fish Facility Improvement Program technical web site and enhanced data accessibility

Prior Year Accomplishments:

Additional accomplishments are included to facilitate reviewer’s understanding of this complex

and comprehensive program for developing new fish facility technology for the Delta of California.

In 1999 the Tracy Pumping Plant Mitigation (b)(4) program accomplished the following goals:

1. February 19 the (b)(4) program became classified as Notice Of Intent in Federal Register
2. Between March 17-18, the program held Public Scoping Meetings
3. On April 6 CALFED's Policy Group agreed that Reclamation should proceed with the planning of a 500cfs fish screen facility for testing and evaluating new technologies.
4. In June the CALFED Bay Delta Program Draft EIS included the proposed 500 cfs structure
5. During September, the Agreement on Project Management and Organization for the TFTF and Clifton Court Fish Facility was signed by Reclamation, Service, Department of Water Resources, CALFED, CalFED, California Department of Fish and Game (CDFG), and National Marine Fisheries Service (NMFS).
6. Tracy Technical Advisory Team (TTAT) meetings have been held periodically since November 1998 which has resulted in a preferred option for the test facilities

In 2000, the Tracy Pumping Plant Mitigation (b)(4) program accomplished the following goals:

1. A Value Engineering Study conducted February 10th, identified a number of actions to reduce costs
2. Project Management Plan was completed May 15 to serve as a road map to all activities and tasks for the Program and established 12 task teams
3. Draft EA/IS released for public comments July 28
4. Framework and Agreements Document provides a continuous record of all decisions agreed to by the TTAT, Central Valley Fish Facilities Review Team and Coordination Team
5. Participation in Site Infrastructure Workshop in May, which covered building, additions, upgrades, staffing, and resources
6. Completed a Site Infrastructure Workshop Final Report and recommendations on Final Feasibility Report on August 14
7. Completed 30% and 60%, and preliminary 90% Design Reports
8. Public Workshops for the Environmental Assessment Impact Statement were conducted August 15-16
9. Developed Fishery Engineering Flumes at Denver where TFTF Research and Technology Development has been ongoing since 1998
10. Research Studies at Tracy Site for TFTF including leaky louver efficiencies, traveling screens for debris control, and fish friendly pumping tests, etc., have been ongoing since 1998
11. Research Studies for TFTF at Red Bluff Pumping Plant on fish friendly lifts and screens that have been ongoing since 1995 have now been completed
12. Completed work with the University of California Davis (UCD) to cooperate on laboratory studies needed to refine facilities to be built at the TFTF
13. Ongoing California Department of Fish and Game (CDFG) Studies are exploring new

fish handling, transportation, and release strategies to compliment the new facilities

Disbanded the Establishment of Research Team for Tracy Fish Research Evaluation and Development, which was responsible for developing the test procedures and evaluations to be conducted at the TTF

Biological Benefits – The data and information generated is invaluable towards understanding present day operation and efficiencies of the existing TFCF for multiple species of fish. Without this information, decisions on how to improve the existing TFCF could not be made. The data generated is also valuable to both the USBR and Department of Water Resources (DWR) towards improving existing fish salvage facilities in the south delta and/or if the decision is ever made to move forward with new fish screening facilities in the south Delta.

The results so far have shown the existing TFCF to be significantly less efficient towards screening and salvaging fish as originally designed in the 1950s. Monitoring of results is incorporated into the study plan efforts and will be evaluated as improvements are implemented and further tests conducted.

Table 1. FY2009 Tasks, Costs, Schedules and Deliverables

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source Restoration Fund	Funding Source Water & Related Resources
1.1	Program Management						
1.1.1		0.8	(USBR). Program management consists of planning and implementation for all the 3406b4 activities through periodic interagency (TTAT) and internal planning meetings, completion of annual work plans, accomplishment reports, CPAR and PART documents, Activity Plans, CVPIA workshops, etc., etc.	9/30/2009	\$219,200	\$0	\$219,200
	<u>Subtotal Costs</u>				\$219,200	\$0	\$219,200
1.2	Program Support						
1.2.1		0.0	(USFWS). Although the USFWS is the co-lead for this program their presence and involvement the past couple years has been lacking. There has been a lot of change over within the agency and the person designated for this position has changed several times over the past few years. USBR Public Affairs also provides assistance with Press Releases.	9/30/2009	\$0	\$0	\$0
	<u>Subtotal Costs</u>				\$0	\$0	\$0
1.3	Technical Support						
1.3.1		0.7	(USBR). Denver TSC – Publishes Various Tracy Research Volume Series.	9/30/2009	\$148,000	\$0	\$148,000
1.3.2		0.2	(USBR) Denver TSC – Updates and Maintains the Tracy Research Website.	9/30/2009	\$42,400	\$0	\$42,400
	<u>Subtotal Costs</u>				\$190,400	\$0	\$190,400
1.5	Evaluations Studies Investigations Research						
1.5.1		0.45	(USBR) Denver TSC – TFCF Collection Efficiency for Delta Smelt	9/30/2009	\$93,500	\$0	\$93,500
1.5.2		0.35	(USBR) Denver TSC – TFCF Collection Efficiency for Chinook Salmon	9/30/2010	\$65,000	\$0	\$65,000
1.5.3		0.35	(USBR) Denver TSC – TFCF Collection Efficiency for White Sturgeon	9/30/2010	\$65,000	\$0	\$65,000

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source Restoration Fund	Funding Source Water & Related Resources
1.5.4		1.0	(USBR) Denver TSC – Determine Appropriate Bucket Loading & Truck Hauling Densities at the TFCF (Update “Bates Table”)	9/30/2009	\$202,000	\$0	\$202,000
1.5.5		0.3	(USBR) Denver TSC – Evaluate Modifications to Bypass System to Improve Hydraulic Control	9/30/2009	\$59,900	\$0	\$59,900
1.5.6		0.2	(USBR) Tracy – Chinook Salmon Efficiency at the TFCF during VAMP	9/30/2009	\$45,000	\$0	\$45,000
1.5.7		0.35	(USBR) Tracy – Evaluation of Abundance of Large Striped Bass in the Primary Channel of the TFCF	9/30/2009	\$70,000	\$0	\$70,000
1.5.8		0.25	(USBR) Tracy – Evaluation of TFCF Holding Tank Screen Efficiency for Juvenile Delta Smelt	9/30/2009	\$50,000	\$0	\$50,000
1.5.9		0.25	(USBR) Tracy – Evaluation of Debris Removal from the Circular Holding Tanks at the TFCF by Lifting of the Screens	9/30/2009	\$50,000	\$0	\$50,000
1.5.10		0.25	(USBR) Tracy – Evaluation of CO2 as an Alternative Predator Removal Technique	9/30/2009	\$50,000	\$0	\$50,000
1.5.11		0.25	(USBR) Tracy – Fish Taxonomy. Update Fishes of the Delta Manuscript.	9/30/2009	\$50,000	\$0	\$50,000
1.5.12		0.5	(USBR) Tracy – Evaluation of Holding Tank Screen Efficiency for Larval Delta Smelt.	9/30/2008	\$90,000	\$0	\$90,000
1.5.13		0.2	(USBR) Tracy – Dietary Analysis of Predators Located in the Secondary Channel of the TFCF	9/30/2009	\$30,000	\$0	\$30,000
	<u>Subtotal Costs</u>				\$900,400	\$0	\$900,400
1.7	Outreach and Public Involvement						
1.7.1		0.1	Conduct periodic interagency/stakeholder meetings (TTAT) to discuss program accomplishments and goals. Attend CVPIA Public meetings and Workshops. Conduct tours of TFCF and explain operation and improvement program. Issue Press Releases and update internet website.	9/30/2009	\$20,000	\$0	\$20,000
	<u>Subtotal Costs</u>				\$20,000	\$0	\$20,000
1.8	Planning						
1.8.1			Conduct periodic interagency and internal planning meetings to assist with developing overall scope of the program.				
	<u>Subtotal Costs</u>				\$0	\$0	\$0

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source Restoration Fund	Funding Source Water & Related Resources
1.11	Construction						
1.11.1			Location will be a the TFCF. USBR will be performing the work. Still need to do an engineering feasibility study for the project before USBR can commence with design.				
	<u>Subtotal Costs</u>				\$0	\$0	\$0
1.12	Monitoring						
1.12.1		0.7	USBR (MP-157) Conduct water quality monitoring at the intake to the Delta Mendota Canal (located on the trashrack structure at the TFCF). Water quality data is of interest to the 3406b4 researchers and outside parties.	9/30/2009	\$47,000	\$0	\$47,000
	<u>Subtotal Costs</u>				\$47,000	\$0	\$47,000
	Total Costs				\$1,377,000	\$0	\$1,377,000
	USFWS Cost				\$0	\$0	\$0
	USBR Cost				\$1,377,000	\$0	\$1,377,000

Table 2. Budget Breakout

Task	Agency	FTE	LABOR			CONTRACTS		Misc. Costs	Total Costs
			Direct Salary and Benefits Costs	Overhead Costs on Salary & Benefits	USFWS Overhead Assess: 22% of Direct Salary and Benefits Costs	Contract, Grant, and Agreement Costs	USFWS Overhead Assess: 6% Contract Costs		
1.1 Program Management	USFWS		0	0	0	0	0	0	
	USBR	0.8	130,000	89,200	0	0	0	219,200	
1.3 Technical Support	USFWS		0	0	0	0	0	0	
	USBR	0.9	0	0	0	190,400	0	190,400	
1.5 Evaluations, Studies, Investigations, Research	USFWS		0	0	0	0	0	0	
	USBR	4.65	260,000	185,000	0	455,400	0	900,400	
1.7 Outreach and Public Involvement	USFWS		0	0	0	0	0	0	
	USBR	0.1	11,000	9,000	0	0	0	20,000	
1.12 Monitoring	USFWS		0	0	0	0	0	0	
	USBR	0.3	0	0	0	47,000	0	47,000	
USFWS Total Costs		0	0	0	0	0	0	0	
USBR Total Costs		6.75	401,000	283,200	0	692,800	0	1,377,000	
TOTAL ALL		0	0	0	0	0	0	0	

Table 3. Three Year Budget Plan FY2010-2012

Year	Description of Activities	Requested RF Funding	Requested W&RR Funding
2010	Continue to conduct/complete research, assessment, and improvement activities at the federal TFCF commensurate with 3406b4 objectives and goals.		\$2,011,000
2011	Continue to conduct research, assessment, and improvement activities at the federal TFCF commensurate with 3406(b)(4) objectives and goals		\$2,105,000
2012	Continue to conduct research, assessment, and improvement activities at the federal TFCF commensurate with 3406(b)(4) objectives and goals		\$2,165,000

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.