CVPIA Fiscal Year 2008 Annual Work Plans

November 2, 2007

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

Program

RESPONSIBLE ENTITIES

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

Program Goals and Objectives for FY 2008

- 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, and Central Valley Steelhead."
- 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 ROD and Framework documents released previously and the CALFED South Delta Fish Facilities Forum recommendations.
 - * Species Benefitted 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 completed facility was to include a 250-500 cfs test channel, new state-of-the-art fish screens, new fish friendly lifts, holding and sorter

facilities in one large enclosed building, fish transfer/off loading facilities to fish tanker trucks, debris and sediment management structures, and support infrastructure including laboratory, office, and maintenance buildings. 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 included appropriations from Reclamation, the State of California, and CALFED.

However, due primarily to large construction cost concerns, it has been recommended by the CALFED South Delta Fish Facilities Forum (SDFF) to not 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 ten years to complete facility assessments and phase in improvements to the existing facilities.

FY 2007 Accomplishments:

Specific research activities conducted in 2007 include the following:

- 1.Ongoing Whole facility evaluations for delta smelt
- **2.** Completed Predator tracking using sonic tags
- 3. Ongoing recessed holding tank stress tests
- 4. Ongoing effort to determine Appropriate Loading and Hauling Densities for Fish Species of the Sacramento-San Joaquin Delta
- 5. Ongoing improved debris management
- 6. Ongoing facility hydraulic evaluations
- 7. Ongoing evaluation of pumped fish bypass and above ground holding tank
- 8. Completed distribution of Tracy Research Volume Series Nos. 31 33, 35, 36, 38, & 40
- 9. Distribution of Tracy Technical Bulletin 2006 -1-
- 10. Ongoing water quality analysis at the TFCF
- 11. Ongoing Evaluation of Dual-Frequency Identification Sonar (DIDSON) for direct observation of fish movement and behavior near structures
- 12. Ongoing development of TFFIP 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 NOI 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, CDFG, and National Marine Fisheries Service (NMFS).
- 6.Monthly Tracy Technical Advisory Team (TTAT) meetings have been held 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. Completing 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 UCD to cooperate on laboratory studies needed to refine facilities to be built at the TFTF
- 13. Ongoing 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 TFTF

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 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.

FY2008asks, Costs, Schedules and Deliverables

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source RF	Funding Source WRR
1.1	Program Management						
1.1.1		0.7	(BOR). 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.	9/30/2008	\$200,000		\$200,000
	Subtotal Costs				\$200,000	0	\$200,000
1.2	Program Support						
1.2.1			(FWS). Although the FWS 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. BOR Public Affairs also provides assistance with Press Releases.	9/30/2008			
	Subtotal Costs				0	0	0
			"-				
1.3	Technical Support						
1.3.1		0.2	(BOR). Schedules room in Sacramento for TTAT meetings and captures the minutes from each TTAT meeting.	9/30/2008	48,000		48,000
	Subtotal Costs				48,000	0	48,000
1.5	Evaluations Studies Investigations Research						
1.5.1		11.5	(see FY2008 Applied Research Studies - Tracy Fish Facility Improvement Program (128 pages)		1,717,300		1,717,300
	Subtotal Costs				1,717,300	0	1,717,300

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source RF	Funding Source WRR
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.	9/30/2008	10,000		10,000
	Subtotal Costs				10,000	0	10,000
1.8	Planning						
1.8.1	- Talling		Conduct periodic interagency and internal planning meetings to assist with developing overall scope of the program.				
	Subtotal Costs				0	0	0
1.10	Design						
1.10.1	Design		Construction of a new secondary louver system at the TFCF utilizing new fish salvage technologies developed through the program. The new secondary louver system will allow the TFCF to operate more properly, meeting D-1485 fish salvage critetia more often. UNFUNDED NEED	9/30/2008	230,000		
	Subtotal Costs				230,000	0	0
1.11	Construction						
1.11.1			Location will be a the TFCF. BOR will be performing the work. Still need to do an engineering feasibility study for the project before BOR can commence with design.				
	Subtotal Costs		<u> </u>		0	0	0
1.12	Monitoring						
1.12.1		0.7	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.	9/30/2008	107,700		107,700
	Subtotal Costs				107,700	0	107,700

Task or Subtask Number	Name of Activity	FTE's	Description of Activity	Completion Date	Total Cost	Funding Source RF	Funding Source WRR
	Total Costs				2,313,000		2,083,000
	Service Cost				0		
	Reclamation Cost				2,313,000		

CVPIA Program Budget

Budget Breakout

Task	Agency	FTE	Direct Salary and Benefits Costs	Contract Costs	Misc. Costs	Admin Costs	Total Costs
1.1 Program Management	FWS						
Wanagement	BOR	0.7	200,000				200,000
1.3 Technical	FWS						
Support	BOR	0.2	48,000				48,000
1.5 Evaluations,	FWS			***************************************			
Studies, Investigations, Research	BOR	11.5	1,617,300	100,000			1,717,300
1.7 Outreach and Public Involvement	FWS						
	BOR	0.1	10,000				10,000
1.13 Modeling	FWS						
	BOR	0.7	107,700				107,700
FWS Total Costs							
BOR Total Costs		13.2	2,083,000	·			2,083,000
Total		13.2	2,083,000				2,083,000

Five Year Budget Plan DRAFT CVPIA 5-Year Budget Plan FY2009-2013

(\$ thousands)

Funding Source	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Total
W&RR	1,377,000	2,661,000	2,105,000	2,165,000	1,580,000	9,888,000
RF						
State						
Other (identify)						
Total	1,377,000	2,661,000	2,105,000	2,165,000	1,580,000	9,888,000

2. FY2009 – The major activities expected to be accomplished in FY2009 with funding provided under CVPIA 3406(b)(4) include continuation of and/or completion of various research and improvement efforts at the federal Tracy fish Collection Facility (TFCF).

Included are assessment of the existing TFCF for present-day salvage efficiencies for different species of fish, continued study of and implementation of improved debris

management techniques, continued study of and implementation of improved predation management techniques, continuation of and implementation of improved hydraulic performance of the TFCF, and other efforts related to fish salvage improvements (e.g. hauling, handling, etc.)

FY2010 – Same as FY2009, however, specific activities will depend on what gets funded and accomplished the prior year and any new TFCF improvement activities that may arise.

FY2011 – Same as FY2010, however, specific activities will depend on what gets funded and accomplished the prior year and any new TFCF improvement activities that may arise.

FY2012 – Same as FY2011, however, specific activities will depend on what gets funded and accomplished the prior year and any new TFCF improvement activities that may arise.

FY2013 – Same as FY2012, however, specific activities will depend on what gets funded and accomplished the prior year and any new TFCF improvement activities that may arise.