Work Plan for Fiscal Year 2003

I Program Title Red Bluff Diversion Dam Fish Passage Program CVPIA Section 3406(b)(10) (Fish Passage Planning Program)

II Responsible Entities

	Agency	Staff Name	Role
Lead	USBR	Max J. Stodolski	Program Manager
		Sandy Borthwick, Buford Holt	Support
Co-Lead	FWS	Andrea Leigh-Bartoo	Biologist

III Program Objectives for FY 2003

The program objectives are listed below. The source documents for these objectives are noted and their relationship, if any, to the CALFED Program Ecosystem Restoration Program Implementation Plan. The program objectives have been cross-referenced against the actions the program will undertake in FY03 in Section VI below.

A. Improve safe passage of juveniles migrating downstream. Particularly chinook salmon - (fall, late fall, winter and spring runs). (Source document, CVPIA)
B. Improve upstream passage of adults. (Particularly Chinook salmon - fall, late fall, winter and spring runs, and Steelhead). (Source document, CVPIA)
C. Provide water to users (farmers and wildlife refuges) served by the Tehama-Colusa and Corning Canals. (Source document, CALFED)
D. Continue to allow Lake Red Bluff to exist if possible, by keeping the gates in during the summer months, while meeting Objectives A, B, C and E.
E. Select and implement further actions to minimize fish passage problems at Red Bluff Diversion Dam (RBDD). (Source document, CVPIA)

IV. Status of the Program

The exploration of alternatives for further improvements of fish passage compatible with irrigation needs and local interests in the first four years of the six year Fish Passage Planning Program has been implemented by Reclamation under Section 3406(b)(10) of the Act, leading to general recognition of the efficacy of the operations implemented in response to the 1993 Biological Opinion for the operation of the Central Valley Project and State Water Project on winter-run chinook salmon. The increased duration of gate removal at RBDD prompted by the Biological Opinion dramatically improved baseline conditions for anadromous salmon and changed the standard against which additional

measures to minimize fish passage problems would be measured. This raised standard and the high costs of improvements or refinements at RBDD, which in the end could run counter to later CALFED decisions, led to acceptance of the resulting improvement in fish passage for the short term, as being all that was practical pending new developments

The first such development came in FY00 when the Tehama-Colusa Canal Authority (TCCA) concluded that the availability of CALFED funds opened new possibilities for resolution of water delivery and fish passage problems, leading to a renewal of investigations of pumping plants and river by-pass options. Several pending actions will further change the context from which additional measures to minimize fish passage problems must be considered. The pending decisions by the Secretary of the Interior concerning operations of Reclamations: Trinity River Division, the California State Water Resources Control Board concerning water quality standards in the Sacramento-San Joaquin Delta, and current judicial decisions/litigation in the San Joaquin Valley may impact CVP operations and flows in the Sacramento River at RBDD.

In addition, CALFED is seeking long-term solutions to ecosystem restoration and water supply reliability. Off channel storage adjacent to the Tehama-Colusa Canal is being considered as part of the CALFED process. The construction of additional storage in this area has the potential to dramatically impact the remaining fish passage issues at RBDD by changing the economics of canal operations.

Apart from the TCCA's new willingness to consider full pumping alternatives, the interests of the major players remains unchanged. The fishery agencies would prefer to see full reliance on screened pumps, the local community is primarily interested in retention of Lake Red Bluff, and the TCCA is concerned about the continuing pressure to shorten the four month period when diversions at Red Bluff can be made by gravity flow from Lake Red Bluff and the unreliability of the Black Butte Reservoir supply, which is critical to meeting demands during gates-out periods.

Thus, study of the fish passage and water diversion options has been reopened with the aid of CALFED and Reclamation funding.

V. FY 2002 Accomplishments.

The accomplishments for Objectives C, D and E are continuing administrative accomplishments and are discussed in Status of the Project above. A Biological Assessment and a draft EIS/EIR was completed and made available for public review.

The FY02 administrative accomplishments for the program focused on selecting three alternatives and a sub-alternative (2b) to consider for the solution of the fish passage problem at RBDD. The three alternatives selected are;

Alternative (1), Gates in four months, improve the fish ladders and build a 1700 cfs pumping plant.

Alternative (2a), Gates in two months, improve the fish ladders, build a new ladder at the center of the dam and build a 2000 cfs pumping plant.

Alternative (2b), Gates in two months, improve the fish ladders, no new ladder at the center of the dam and build a 2000 cfs pumping plant.

Alternative (3), Remove the gates year around and build a 2500 cfs pumping plant.

CH2MHill (CH2M), sub-contractor for TCCA, provided for through a Federal Grant to the TCCA, and the Study Management Group (SMG), comprised of the U.S. Bureau of Reclamation (Reclamation), U.S. Fish and Wildlife Service (Service), National Marine Fisheries Service (NMFS), California Dept. of Fish and Game (CDFG), California Dept. of Water Resources (DWR) and the TCCA developed a study to evaluate the effects of gates in at the RBDD on all fish species in the Sacramento River. The study was eventually narrowed down to focus on salmonids, green sturgeon and pike minnow. The purpose of the study is to gain a better understanding of how the three alternatives affect fish passage.

The SMG continues to provide assistance to CH2M in organizing and participating in numerous work group meetings with interested stakeholders and held three public meetings for the purpose of sharing information and to receive public input.

The Service submitted a draft Fish and Wildlife Coordination Act report in August 2002; including as an appendix draft EIR/EIS document. In FY03, a final report will be submitted.

VI. Tasks, Costs, Schedules and Deliverables.

A. Narrative Explanation of Tasks.

1. Program Management
   There are four Program Management funding requirements. The Bureau of Reclamation (Reclamation), as lead federal agency; the Service, co-lead federal agency; The Tehama-Colusa Canal Authority (TCCA), as lead state agency and CH2M.

1.1. Program Management - The Reclamation program manager is responsible for oversight of the program including budgeting and disbursement of federal funds and administering a grant to the TCCA which provides funding to the TCCA to procure the sub-contractor.

1.1a <u>Program Management</u> – The Service, as a member of the SMG, will assist Reclamation and TCCA in developing the alternatives for fish passage improvement at RBDD. They will conduct biological studies at RBDD to evaluate salmonid fish passage behavior past the fish ladders by utilizing radio tagged adults and monitoring movement using radio telemetry.

1.2 <u>Program Management</u> - The TCCA program is responsible for administering the contract provided for under the grant and Prop 204 funding.

1.3 <u>Program Management</u> - CH2Ml is responsible for providing the resources to accomplish the Tasks listed below, (2 through 8).

2 <u>Environmental Documentation</u> - Prepare environmental documentation to meet the requirements of CEQA/NEPA and address the impacts and benefits of each alternative developed carried forward.

3 <u>Alternative Refinement</u> - Develop fish impact assessment criteria. Assess potential of each alternative to meet the applicable fish passage criteria established by the agencies. Develop screening evaluation factors. These factors will include fish passage improvement, water supply reliability improvement, socioeconomic issues, environmental and permitting issues.

4 <u>Initiate Permitting</u> - Initiate permit applications with appropriate agencies.

5 <u>Update Implementation Plan</u> - Resolve implementation constraints and issues.

Additional Funding Needs.

6 <u>Program Management</u> - Provide management and administrative support to complete EIS/EIR documents and continue public outreach.

7 Design Specifications - Begin final design and construction specifications drawings.

8 Acquire Land - Purchase land for the construction and operation of the pumping plant.

B. Schedule and Deliverables

#	Task	Dates		Deliverable
		Start	Complete	
1	Program Management	10/01/02	09/30/03	Monitor program for accomplishment, schedule and budget; provide deliverables as stated in Tasks 1.1, 1.2, 1.3 below
1.1	Program Management (BOR)	10/01/02	09/30/03	Provide a revised FY03 Work Plan and a new FY04 Work Plan; close Grant with TCCA; provide Grant for Phase III.
1.1.a	Program Management (FWS)	02/02	09/03	Assist in developing alternatives. Continue conducting biological studies on adult salmonid passage behavior at RBDD and prepare status report for FY02 study
1.2	Program Management (TCCA)	10/01/02	9/30/03	Close out current contract; provide schedule for Phase III
1.3	Program Management (CH2M)	10/01/02	9/30/03	Provide reports and documents as noted below for Tasks 2 through 10.
2	Environmental Documentation	10/01/02	3/01/03	Provide NEPA/CEQA documents and the Record of Decision.
3	Alternative Refinement	10/01/02	1/31/03	Select a preferred alternative
4	Initiate Permitting	10/01/02	6/30/03	Obtain permits, required by other Agencies, for construction
5	Update Implementation Plan	10/01/02	9/30/03	Final Implementation Plan Report

Schedule and Deliverables - Additional Funding Needs

#	Task	Dates		Deliverable
		Start	Complete	
6	Program Management (CH2M only)	10/01/02	09/30/03	Monitor program for accomplishment, schedule and budget; same as Task 1, 1.1, 1.2, 1.3 above and assist in Tasks 7 and 8 below.
7	Final Design	10/01/02	09/30/03	Complete design for pumping plant and provide construction specifications.
8	Land Purchase	10/01/02	09/30/03	Acquire land for the construction and operation of the pumping plant.

Explanatory Notes: Funding for these tasks was not provided for in the FY03 budget.

C. Summary of Program Costs and Funding Sources.

#	Task	Total Cost	W&RR
1	Program Management		
1.1	Program Management (BOR)	$560,000	$560,000
1.1a	Program Management (FWS)	$50,000	$50,000
1.2	Program Management (TCCA)	$70,000	$0
1.3	Program Management (CH2M)	$90,000	$ 90,000
2	Environmental Documentation (CH2M)	$170,000	$170,000
3	Alternative Refinement (CH2M)	$570,000	$570,000
4	Initiate Permitting (CH2M)	$50,000	$50,000
5	Update Implementation Plan (CH2M)	$10,000	$10,000
Total Program Budget		$1,570,000	1,500,000

Explanatory Notes: The CALFED (Prop 204 funds) will not provide any funding for the FY03 program.
1.1 Includes funding for USBR Denver Technical Service Center to assist in design work.
1.2 TCCA will provide in-kind services for their program management activities which is valued at $70,000.

Program Costs and Funding Sources - Additional Funding Needs.

#	Task	Total Cost	W&RR
6	Program Management (CH2M only)	$50,000	$50,000
7	Final Design (CH2M only)	$1,450,000	$1,450,000
8	Land Purchase(CH2M only)	$1,000,000	$1,000,000
Total Program Budget		**$2,500,000**	**$2,500,000**

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D. CVPIA Program Budget

#	Task	FTE	Direct Salary and Benefits Costs	Contract Costs	Misc. Costs	Admin Costs	Total Costs
1	Program Management						
1.1	BOR	4.4	$253,000	$0	$22,500	$302,000	**$577,500**
1.1a	FWS	.25	$27,000	$0	$0	$5,416	**$32,500**
1.2	TCCA		In-kind				**In-kind**
1.3	CH2M		$0	$890,000	$0	$0	**$890,000**
	Total by Category	**5.4**	**$280,000**	**$890,000**	**$22,500**	**$307,416**	**$1,500,000**

Explanatory Notes: 1.3 A breakdown of the contract costs is not available. These funds are assigned to CH2M through a Grant Agreement between Reclamation and the TCCA.

CVPIA Program Budget - Additional Funding Needs.

#	Task	FTE	Direct Salary and Benefits Costs	Contract Costs	Misc. Costs	Admin Costs	Total Costs
6	Program Management (CH2M only)	0.0	$ 0	$50,000	$	$ 0	**$50,000**
7	Final Design	0.0	$ 0	$1,450,000	$	$ 0	**$1,450,000**
8	Land Purchase	0.0	$ 0	$1,000,000	$	$ 0	**$1,000,000**
	Total by Category		**$**	**$2,500,000**	**$**	**$ 0**	**$2,500,000**

Explanatory Notes: A breakdown of the contract costs is not available. These funds are assigned to CH2M through a Grant Agreement between Reclamation and the TCCA.

VII. Future Years Commitments/Actions

We are engage in the NEPA/CEQA process for this Program. The completion schedule for Tasks 1 through 5 under Phase II of the Project is the end of the first quarter of FY03 with a Record of Decision (ROD) expected in the third quarter of FY03. Phase III of the Project begins at the start of FY03 and includes Final Designs and Land acquisition. Phase IV follows which includes Project Construction concluding with Phase V which is Monitoring of the Project.

Currently we are looking at three alternatives plus one sub-alternative (2b):
Note: All alternatives include utilizing the Research Pumping Plant with additional pump added to Bay #4.

Alt. (1) Leave the gates in at RBDD, i.e., utilize gravity flows to the T-C and Corning Canals, from May 15 to Sept 15 each year. Build 1700 cfs pumping capacity with fish screens, build a new center fish ladder and improve both existing right and left abutment ladders. Cost estimate, $87,900,000. All cost estimates are feasibility level.

Alt. (2a) Gates in from July 15 to Sept 15 each summer. Build 2000 cfs pumping capacity with fish screens, improve left and right abutment fish ladders, new center ladder not required. Cost estimate, $93,500,000.

Alt. (2b) Same as Alternative (2a) except, no improvement to abutment fish ladders and no new center fish ladder would be constructed. Cost estimate $78,100,000.

Alt (3) Gates at RBDD remain open year around, no gravity flow to Canals. Build 2500 cfs pumping capacity with fish screens. Cost estimate, $88,200,000.