

EXECUTIVE SUMMARY

Project Title and Applicant Name

Title: Fish Passage Improvement Project at the Red Bluff Diversion Dam

Applicant: Tehama-Colusa Canal Authority

Project Description and Primary Biological/Ecological Objectives

The project will identify alternatives to operate the Red Bluff Diversion Dam (RBDD) to maximize fish passage while minimizing impacts to agricultural water supply by means of a new screened intake to the Tehama-Colusa (TC) Canal and Corning Canal (Canals). Alternative facility sites, land requirements and ownership, environmental and other regulatory requirements, preliminary design criteria, and potential funding sources to implement the project will be developed. The study will provide preliminary cost estimates and a project implementation plan.

The primary biological/ecological objective of the project is to reduce or minimize the impacts of the RBDD on juvenile and adult anadromous fish migration. The RBDD is a barrier to anadromous fish migration from May 15 through September 15 when its gates are closed and obstruct normal river flows. Eliminating the current dependence on the RBDD for agricultural irrigation supply would potentially enable RBDD operations to be modified to improve fish passage for spring-run, fall-run, late-fall-run, and winter-run chinook salmon and steelhead trout.

Approach/Tasks/Schedule

The proposed approach is to identify concepts and potential sites for facilities that will provide a year-round water supply to the Canals with reduced or eliminated reliance on gravity diversion at the RBDD. The new intake facility would potentially include a fish screen that meets all applicable regulatory criteria, conveyance system from the new intake to the TC Canal, and a pump station to lift water into the Canals.

The proposed study would include 13 tasks, including data compilation/review; map (siting) study; field reconnaissance; hydrologic/hydraulic studies; developing preliminary concepts for pipelines/canals, pump station, fish screens, and other structures; developing a biological monitoring plan; identifying permitting requirements, environmental issues, and rights-of-way; cost estimating and financial planning; developing a preliminary concept report; Board presentation; and project management. The study would commence as soon as funding is available and would be completed in 8 months. It is anticipated that funding will be available in September 1998 so that the proposed project could be completed by May 1999.

Justification for Project and Funding by CALFED

A reliable, year-round water delivery system that minimizes reliance on the RBDD, which the Ecosystem Restoration Program Plan (ERPP) identifies as an adult and juvenile anadromous fish migration barrier, will enhance fish passage at the RBDD. The ERPP identifies objectives, targets, and programmatic actions aimed at reducing or eliminating the RBDD anadromous fish migration barrier.

Budget Costs and Third Party Impacts

The amount requested from CALFED is \$340,600. The Tehama-Colusa Canal Authority (TCCA) would administer the project with input from resource agency staff who are involved with RBDD fish passage issues. These agencies, which have representatives on the Red Bluff Fish Passage Study Management Group (SMG) and include Reclamation, USFWS, NMFS, CDFG, DWR, and TCCA, should participate as part of their funded, ongoing efforts. The estimated total in-kind contribution from the state and federal agency SMG participants through their involvement in the project is about \$50,000. These costs are not included in the \$340,600 requested from CALFED.

TCCA's costs to administer the project, \$39,100, are included in the cost table on page 10 of this proposal to show total estimated project cost. However, TCCA will bear these administrative costs and these costs are not included in the \$340,600 requested from CALFED to fund the project.

Significant third party impacts are not anticipated, because it is not proposed under this project to remove the RBDD or eliminate operations of the RBDD. Potential project environmental impacts would be fully mitigated under NEPA and CEQA requirements. Third parties might realize significant project benefits as described below.

Applicant Qualifications

The TCCA is a joint powers authority formed approximately 10 years ago to improve maintenance procedures on the TC and Corning canals. TCCA, with a staff of 22 full-time employees, currently operates and maintains 140 miles of concrete-lined canals with an annual budget of more than \$2 million. TCCA has significant experience administering water supply capital improvement projects. TCCA partners with Reclamation in operating the RBDD and addressing associated fisheries issues. TCCA participates in public forums and technical groups doing RBDD fisheries research and makes significant financial and technical contributions to such efforts.

Monitoring and Data Evaluation

Task 6.0 of the Scope of Work involves developing a conceptual plan for a biological monitoring program to be implemented during later phases of the proposed project.

Local Support/Coordination with other Programs/Compatibility with CALFED Objectives

This project was authorized by the unanimous vote of 12 of the TCCA Member Districts on May 12, 1998. These Member Districts serve agricultural areas in Tehama, Glenn, Colusa, and Yolo counties. The proposed project is compatible with and supportive of the CALFED Bay-Delta Program, CVPIA, Biological Opinion for Operation of the RBDD, RBDD Research Pumping Plant, RBDD Long-term Fish Passage Program, and the Draft Winter-run Salmon Recovery Plan.

The proposed project relates explicitly to and will facilitate CALFED objectives and associated targets and programmatic actions relating to "Water Diversions"; "Dams, Reservoirs, Weirs, and Other Structures"; and "Predation and Competition" as presented on pages 151 through 153 in Volume II of the ERPP.

The proposed project has the apparent interest and support of the Red Bluff Fish Passage Study Management Group, described above, which will be given periodic progress reports, along with requests to review and provide information, as appropriate.