

A Historical Review of the Fish Passage Improvement Project

Originally designed as the point for agricultural water diversion for customers in Tehama, Glenn, Colusa, and Yolo counties, the Red Bluff Diversion Dam (RBDD) has raised concern for state and federal environmental agencies because of the dam's negative effects on upstream and downstream fish migration. Over the years, operations of the dam have seen several adjustments with the goal of enhancing the passage of fish by the dam. In addition to concern about the dam's effect on fish habitat, the current design features and operations of the dam do not provide agricultural users with the reliable water supply promised years ago.

To address these critical issues for the present and future needs of the fish and the farmers, the Tehama-Colusa Canal Authority (TCCA) and the U.S. Bureau of Reclamation (USBR) are working together to:

- Substantially improve upstream and downstream fish passage for endangered and threatened species
- Substantially improve the reliability of the agricultural water supply

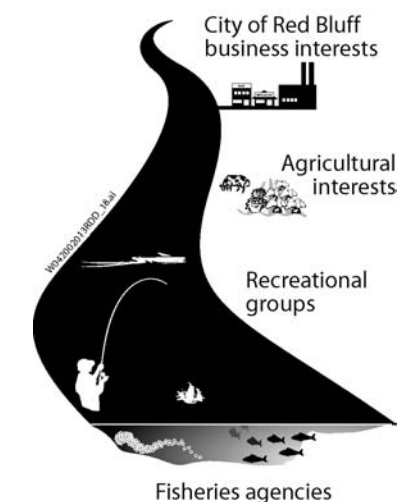
To adequately address the two main objectives and balance the variety of needs and issues raised by local community members and local, state, and federal agencies, TCCA and USBR created a Stakeholders Working Group (SWG). This group provides a forum for representatives of various interest groups and organizations to learn about the project and its associated technical issues and discuss their concerns and ideas for solving the issues at RBDD. The group has been meeting monthly to provide the Project Team with insight to the views of the community and other special interests.

Some of the SWG representatives include:

- The City of Red Bluff
- Fisheries agencies
- Local business interests
- Agricultural interests
- Recreational groups

SWG members act as liaisons to their respective interest groups and the public regarding the status and issues of the project. SWG has helped the project identify critical issues regarding the importance of recreation and the aesthetics of Lake Red Bluff, as well as concerns about power consumption by the proposed pump station.

This project development process has helped to identify additional options for project alternatives. The sharing of project information and collaboration with the local community parallels the extensive environmental review process required for a project of this magnitude. The environmental review process for this project will result in an Environmental Impact Statement/Environmental Impact Report (EIS/EIR) to meet state and federal requirements. This document will be published with a recommendation on the preferred solution.

SWG Representatives

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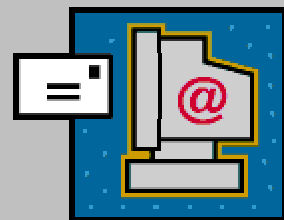
Watch for Our Next Newsletter**Announcing the Release of the Draft EIS/EIR in Late August!**

For additional information...

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Environmental Review of Potential Solutions

The Project Team is making progress on the environmental review of each potential solution developed to address the fish passage and water supply reliability issues. Through detailed studies conducted by TCCA, USBR, and many other organizations and governmental agencies, and with input from SWG, the alternatives studied in this environmental document have been narrowed to the following:

- **No Action Alternative** - The current operating conditions remain the same with a 4-month dam (gates in) creating Lake Red Bluff from May 15 to September 14. The impacts of this option must be studied to a similar level of detail as others. It is used as a baseline of comparison for other alternatives.
- **1A: 4-month Gates-in Improved Ladder Alternative** - This alternative continues current dam operations with lowered gates from May 15 to September 14. This option improves fish passage by increasing the amount of flow through the fish ladders. By increasing the flow, more fish would be attracted to the ladders and successfully pass the dam. A new pumping station (1,700 cubic feet per second [cfs] total) to offset current shortfalls in reliability would be required to provide agricultural water supply from the river into the water delivery canals when the dam gates are raised.



The term "cubic feet per second" or "cfs" refers to the water flow rate equal to 1 cubic foot of water per second or about 7.5 gallons per second.

- **1B: 4-month Gates-in Bypass Alternative** - This alternative continues current dam operations with lowered gates from May 15 to September 14. This option creates a fish-friendly channel around the dam with sufficient water flow to attract and provide passage for fish moving upstream and to safely deliver juvenile fish moving downstream when the dam gates are in the lowered position. A new pumping station (1,700 cfs total) to offset current shortfalls in reliability would be required to provide agricultural water supply from the river into the water delivery canals when the dam gates are raised.
- **2A: 2-month Gates-in Improved Ladder Alternative** - This alternative lowers the dam gates for 2 months (July 1 through August 31). Improvements would be made to the existing ladders as under Alternative 1A, but the reduction in gates-in operation would also provide improved fish passage. A new pumping station (2,000 cfs total) to offset the additional shortfalls from the reduction in gate operation would be required to provide reliable agricultural water supply from the river into the water delivery canals.
- **2B: 2-month Gates-in with Existing Ladders Alternative** - This alternative retains the current fish ladders and decreases lowering of the dam gates to 2 months (July 1 through August 31). The only source of improved fish passage would be the reduction in gate operations. A new pumping station (2,000 cfs total) to offset the additional shortfalls from the reduction in gate operation would be required to provide reliable agricultural water supply from the river into the water delivery canals.
- **3: Gates-out Alternative** - This option keeps the dam gates open year-round, creating a free-flowing river, unimpeded by the dam. Fish ladders or other bypass options would no

longer be necessary, and Lake Red Bluff would no longer be created. A new pumping station would be required to provide reliable agricultural water supply from the river into the water delivery canals. The pump station under this alternative is the largest under consideration (2,500 cfs total) – capable of supplying the entire agricultural water demand.



In October 2001, the U.S. Fish and Wildlife Service circulated a Planning Aid Memorandum that ranked the alternatives according to their ability to pass fish. The Gates-out Alternative was determined to provide the best passage for fish, and the 2-month alternatives were found to provide substantial passage for fish. The 4-month alternatives were determined not to provide substantial passage. The National Marine Fisheries Service, California Department of Fish and Game, and California Department of Water Resources all concurred with the

U.S. Fish and Wildlife Service memorandum. The Tehama-Colusa Canal Authority Board of Directors selected the full-sized pumping plant under Alternative 3 (Gates-out) as its preferred alternative but expressed a willingness to consider dam operations that created fewer overall adverse impacts to other interests.

These statements will be considered in the environmental process; however, they are not the only determining factors for selecting a solution. The environmental review process must consider all input and entertain new solutions if they could solve the project objectives and have not previously been evaluated.

Where We Go from Here - Schedule Update

The project is on schedule to have a Draft EIS/EIR available for public review and comment the final week in August 2002. The original schedule was delayed to allow the cooperating agencies additional time to provide technical input on the document. A hearing/meeting is planned for mid-September 2002 for the public to provide input on the document. To keep everyone informed of our progress, a future newsletter and notice of the Draft EIS/EIR release date and public hearing date will be mailed in late August. Below is a schedule that shows the project development process and some key milestones.

PROJECT SCHEDULE	2000	2001	2002	2003
ENVIRONMENTAL DOCUMENTATION				
PUBLIC INFORMATION MEETINGS	⊙ ⊙	⊙	⊙	
PLANNING & DATA COLLECTION	[Bar]			
PREPARE DRAFT EIS/EIR		[Bar]		
DRAFT EIS/EIR COMMENT PERIOD			[Bar]	
PREPARE FINAL EIS/EIR			[Bar]	
RECEIVE RECORD OF DECISION				⊙

WE ARE HERE