NEWSLETTER

MARCH 2003

TRACY FISH TEST FACILITY

RESOURCE PROTECTION AND TECHNOLOGY DEVELOPMENT

NEW PROJECT NEWSLETTER

This newsletter is designed to provide an update on the Tracy Fish Test Facility (TFTF) Project. Providing water for a growing population and a healthy economy requires a sophisticated and complex pumping diversion and distribution system. In California, this system impacts many native and non-native fish species — so much so, that the Bureau of Reclamation (Reclamation) and the California Department of Water Resources (DWR), as well as other interested state and federal agencies and stakeholders, are working together on a proposed joint project that will provide much needed scientific information on critical issues related to fish protection and salvage. The state-of-the-art biological and technological advances made in fish protection at the proposed TFTF will determine the technology used to modernize fish protection facilities at the federal and state pumping plants in the south Bay-Delta. The TFTF is attracting national attention as a model for addressing the challenge of operating water projects while protecting the environment.

The location for the proposed TFTF is on the site of the existing Tracy Fish Collection Facility (TFCF) about 2.5 miles northeast of the Tracy Pumping Plant and about 9 miles northwest of Byron, California.

PROJECT STATUS

Project partners are in the process of reviewing the project size and cost and anticipate a final TFTF design to be completed by 2004. The Phase 1 construction schedule will then be determined.

PROJECT NEED

Operation of Reclamation's Tracy Pumping Plant and DWR's Harvey O. Banks Pumping Plant alters flows in the Bay-Delta thus drawing fish towards the entrance of the Delta-Mendota Canal and Clifton Court Forebay. Existing fish protection facilities are out-of-date and inefficient and allow many smaller fish to enter the pumps. Under the Endangered Species Act, when threatened or endangered species are taken, pumping operations often have to be curtailed, impacting contracted water deliveries. New fish protection facilities are being considered to reduce the loss of fish, meet environmental requirements, and better ensure water deliveries to agricultural and urban users.

By developing the TFTF, Reclamation and DWR can conduct the research necessary to design and construct modern fish screens and salvage facilities for both the State Water Project (SWP) and Central Valley Project (CVP) export facilities.

BENEFITS OF THE TFTF INCLUDE:

- Improving pumping operations to increase water export reliability and enhance fish protection;
- Contributing to the overall goals and specific objectives of fishery restoration programs including the Central Valley Project Improvement Act and the CALFED Bay-Delta Program;
- Developing new technologies for safely collecting and redistributing fish in order to improve management decision-making and the protection of scarce resources.

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

CALFED BAY-DELTA PROGRAM

Participating TFTF Agencies:

California

The Resources Agency:

- Department of Water Resources
- Department of Fish and Game
- The Reclamation Board
- Delta Protection Commission
- Department of Conservation
- San Francisco Bay Conservation & Development Commission

CA Environmental Protection Agency:

- State Water Resources Control Board

Department of Health Services

Department of Food & Agriculture

San Luis & Delta-Mendota Water Authority

Federal

Department of the Interior:

- Bureau of Reclamation
- Fish and Wildlife Service
- Geological Survey
- Bureau of Land Management

Environmental Protection Agency

Army Corps of Engineers

Department of Agriculture:

- Natural Resources Conservation Service
- Forest Service

U.S. Department of Commerce:

- National Marine Fisheries Service

Western Area Power Administration

Relationship to CALFED

The CALFED Bay Delta Program is a cooperative, interagency effort of 23 Federal and State agencies with the management and/or regulatory responsibilities for the Bay-Delta system. CALFED's mission is to develop a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses for the Bay-Delta system. Accordingly, CALFED has recommended several actions for the lower San Joaquin River and South Delta Region to address long-standing concerns with respect to water quality, fisheries, wildlife habitat, and water supply availability. By striving to improve fish facility efficiencies, the TFTF meets CALFED's Stage 1 conveyance program objectives and has authorization to receive CALFED funding and oversight.

Environmental Review

Reclamation, as the lead Federal agency representing the Department of the Interior, and the DWR, the lead State agency representing the State of California, completed the initial environmental review of the TFTF in 2001 according to the standards established by the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), respectively. This review included a scientific study and evaluation of possible physical, biological, social and economic impacts associated with building the TFTF. The completed Environmental Assessment (EA)/Initial Study (IS) is available for public review.

Background

Reclamation constructed the original Tracy complex 50 years ago. The facilities were designed to export water for irrigation, municipal, and industrial needs in the San Joaquin Valley via the Delta-Mendota Canal. The pumping plant, intake channel, and a pilot fish screening structure were completed in 1951. The existing fish collection facility began operation in 1957.

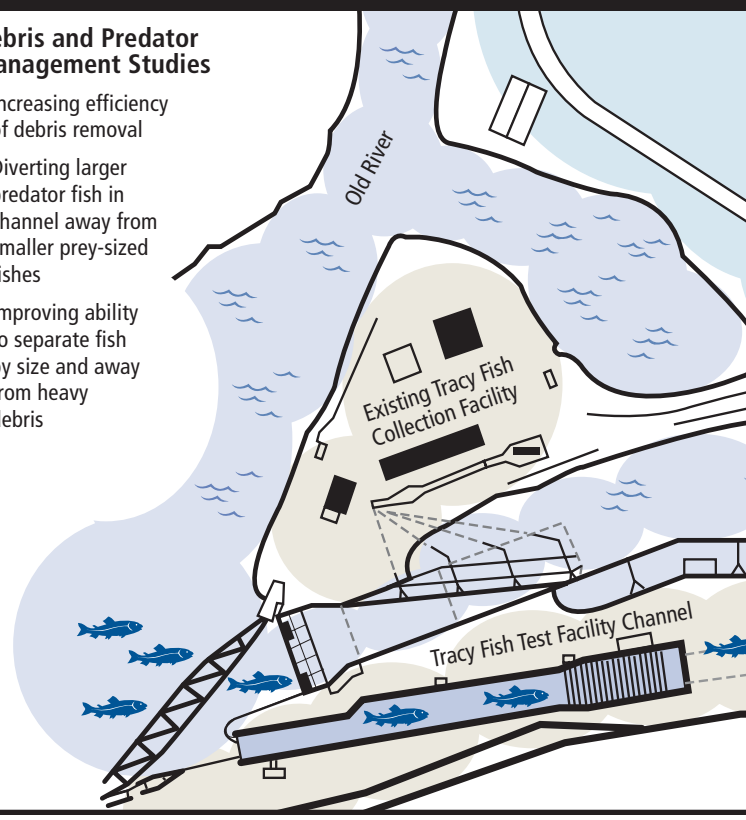
Just north of the Reclamation pumping plant, the SWP's California Aqueduct originates at the

TFTF – Resource Prote

The results of TFTF research will be used to design modern fish facilities for the Federal and State pumping operations. To develop this scientific data, the TFTF will extensively research and evaluate how fish respond to various fish facility components. The major areas of study are diagrammed to the right with examples of issues the engineering and fisheries/biological researchers will analyze to improve fish salvage operations.

Debris and Predator Management Studies

- Increasing efficiency of debris removal
- Diverting larger predator fish in channel away from smaller prey-sized fishes
- Improving ability to separate fish by size and away from heavy debris



Clifton Court Forebay. The forebay provides storage and regulation capability for pumping by the Banks Pumping Plant. The water from the pumping plant passes through the John E. Skinner Delta Fish Facility where fish are separated before moving down the aqueduct. Operation of these facilities began in 1968.

Presently, pumping operations at both facilities can be curtailed when special status species protected under the Federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) are abundant. Reductions in pumping and shutdowns affect the ability for the agencies to meet their contracted water supply obligations. With the scientific information gained from the TFTF, water diversion capabilities and reliability can increase while reducing the direct losses of fish.

Public Information/ Community Relations

Construction of the project will create some disruption and inconvenience for area residents. Reclamation and DWR are committed to fully informing and engaging residents, commuters, and other potentially impacted communities throughout the TFTF construction process. Direct mailings, road signs, a telephone information line, neighborhood meetings, web site updates, as well as other useful communication tools will be utilized to inform the community about the construction schedule, related impacts, and where to direct questions and comments.

As Phase 1 construction approaches, this timely information will be made available. For current information, please visit the project web site at www.mp.usbr.gov/tftf or call the information line at (800) 742-9474.

Aerial view of construction site at the existing Tracy Fish Collection Facility.

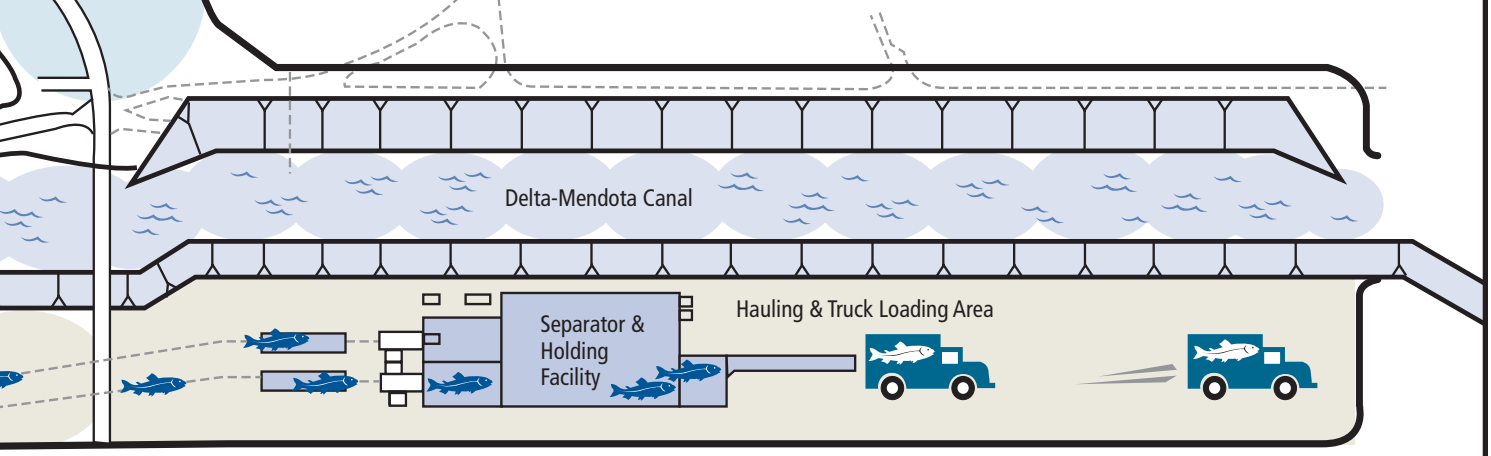
ECTION AND TECHNOLOGY DEVELOPMENT

Lift Systems, Screening, Sorting, and Holding Studies

- Identifying the best hydraulic conditions for fish separation
- Improving barrier screen capabilities to separate smaller fish
- Assessing "fish friendly" pumping technology and gravity systems
- Improving ability to remove debris from holding tanks
- Improving ability to recapture small fish that have "slipped" through the secondary louvers
- Evaluating holding tank influences on louvered and screened fish and minimizing harm inflicted

Transportation and Release Studies

- Minimizing injury to fish when transferred from holding tanks to hauling trucks
- Identifying best distribution points for fish to re-enter system



TRACY FISH TEST FACILITY

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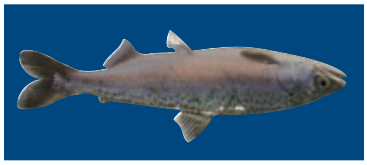
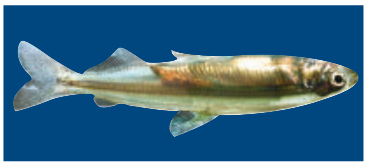
SPECIES UNDER STUDY BY THE TRACY FISH TEST FACILITY:

- American shad
- Chinook salmon – fall-, spring-, and winter-run
- Delta smelt
- Longfin smelt
- Sacramento blackfish
- Sacramento splittail
- Steelhead
- Striped bass
- Sturgeon – white and green

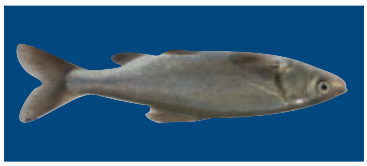
American Shad



Chinook Salmon



Longfin Smelt



Sacramento Blackfish

Sacramento Splittail

Striped Bass

FIND MORE PROJECT INFORMATION INSIDE

TRACY FISH TEST FACILITY

2600 V Street
Sacramento, CA 95616
Attn: Tracy Fish Test Facility

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