Significant Project Milestones

1950 Red Bluff Diversion Dam (RBDD) and canals authorized as part of the Sacramento Canals Unit of the Central Valley Project

1964 RBDD construction completed, followed by more than 20 years of year-round diversions

1986 Annual period of permitted RBDD operations begins to be reduced

Fall 1994 Annual period of permitted RBDD operations limited to May 15 to September 15

1994 Sacramento River winter-run Chinook salmon listed as endangered

1995 Research Pumping Plant (RPP) constructed by Reclamation to test new fish-protection pumping technology

1998 Sacramento winter-run steelhead listed as threatened

1999 Central Valley spring-run Chinook salmon listed as threatened

2000-2002 CH2M HILL completed preliminary design and Draft EIS/EIR describing pumping plant alternatives to RBDD water diversion

2002 Draft EIS/EIR released

2003 Final EIS/EIR delayed by Endangered Species Act consultations related to implications of implementing the Central Valley Project Improvement Act and CALFED Bay-Delta Program

2006 Another pump added to RPP, raising total pumping capacity to 310 cfs

2006 Green sturgeon listed as threatened in Sacramento River

2006 Reclamation re-released Draft EIS/EIR addressing improved upstream and downstream fish passage through RBDD and improved long-term water supply and conveyance reliability in T-C and Corning Canals

2006-2008 Final EIS/EIR preparation

2008 RBDD operations came under jurisdiction of Federal Court in Fresno; annual period of RBDD operation potentially to be shortened

May 15, 2008 Final EIS/EIR released

June 4, 2008 TCCA certified the EIR and issued Notice of Determination

July 16, 2008 Reclamation Record of Decision on EIS selects a pumping plant alternative and provides that annual RBDD period of operation may be reduced when the Project becomes operational

August 2008 Final design begins

December 31, 2008 Fast-track design and construction started for 500-cfs temporary pumping plant to enable 2009 mandated change of RBDD operations from June 15 to August 31

February 2009 Project receives $109.8 million in ARRA Funding

August 28, 2009 Two construction packages ready for public bid: (1) prepurchase of pumps and motors and (2) landfill excavation, canal, siphon, and access bridge

December 2009 Third and last construction package ready for public bid: fish screen, forebay, and pumping plant

January 8, 2010 Landfill excavation, canal, siphon and access bridge construction contract awarded

January 16, 2010 Pump and motor construction contract awarded

2012 Project online

Brochure Produced by

CH2MHILL

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U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

TCCA
Tehama Colusa Canal Authority

Fish Passage Improvement Project at Red Bluff Diversion Dam
Tehama-Colusa Canal Authority, Red Bluff, California

The Red Bluff Diversion Dam (RBDD), located on the Sacramento River, features a series of 11 large gates that, when lowered (gates in), form Lake Red Bluff and provide for gravity diversion of irrigation water from the Sacramento River into the Tehama-Colusa and Corning Canals. Although the RBDD was initially operated to provide continuous diversion, the annual gates-in diversion period has been reduced over the years to less than three months to improve fish passage of several salmonid species and now green sturgeon, recently listed under the Endangered Species Act.

The construction of a screened pumping plant will improve fish passage conditions while ensuring continued water deliveries to 150,000 acres of high-value cropland. New features of the project will include construction of a flat-plate fish screen, intake channel, 2,500 cubic feet per second (cfs) capacity pumping plant, access bridge and discharge conduit to divert water from the Sacramento River into the Tehama-Colusa and Corning Canals.

The RBDD and the Tehama-Colusa Canal were built in the early 1960s by the Bureau of Reclamation, which owns the facilities. The Tehama-Colusa Canal Authority operates and maintains the delivery system, providing water to its 17 member water districts throughout a four county service area, providing an economic benefit of over one billion dollars to the region annually.

Project Features

Joint design, permitting and construction management effort by Reclamation, CH2M HILL, and NewFields

Total project cost estimated at $230 million

Project was awarded $109.8 million of American Recovery and Reinvestment Act stimulus funding through Reclamation for Project construction

Second largest diversion on the Sacramento River

1,118-foot-long flat-plate fish screen structure with 60 screen bays, 7 fish refuge bays, 4 automated travelling screen cleaning mechanisms, and sediment removal jetting system

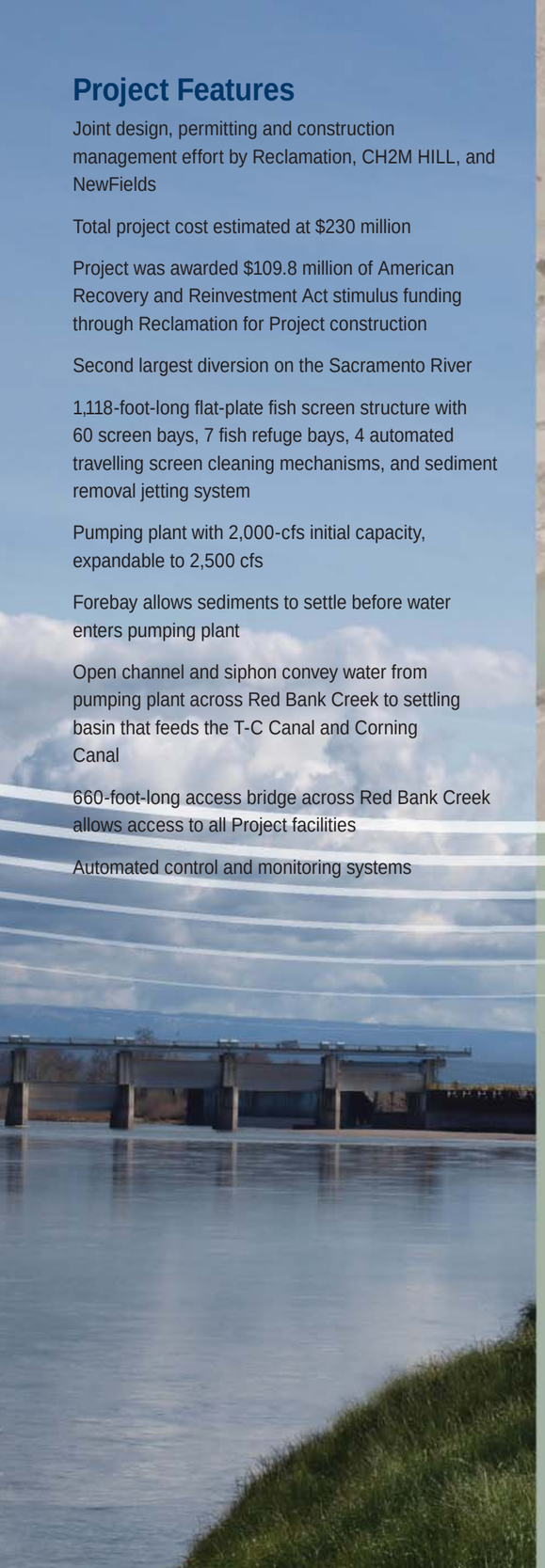
Pumping plant with 2,000-cfs initial capacity, expandable to 2,500 cfs

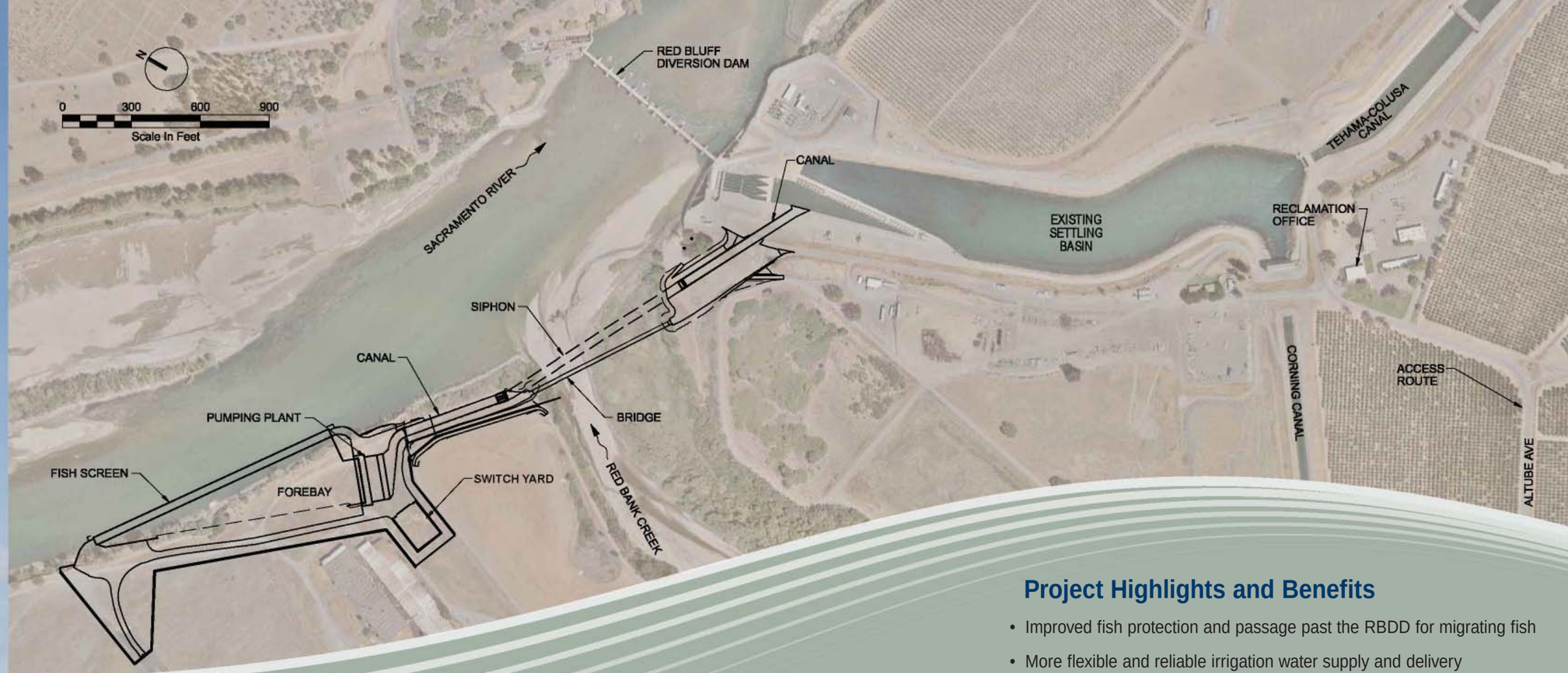
Forebay allows sediments to settle before water enters pumping plant

Open channel and siphon convey water from pumping plant across Red Bank Creek to settling basin that feeds the T-C Canal and Corning Canal

660-foot-long access bridge across Red Bank Creek allows access to all Project facilities

Automated control and monitoring systems





Project Participants

United States Department of the Interior, Bureau of Reclamation
Donald R. Glaser, Regional Director
Brian L. Person, Northern California Area Office Manager

Tehama-Colusa Canal Authority
Kenneth LaGrande, Chairman, Board of Directors
Jeffrey P. Sutton, General Manager

Design and Construction Engineering
Bureau of Reclamation
CH2M HILL, Inc.

Permitting Consultant
NewFields

Key Participating Resource Agencies
United States Fish and Wildlife Service
NOAA – Fisheries
California Department of Fish and Game
California Department of Water Resources
California Regional Water Quality Control Board

Project Highlights and Benefits

- Improved fish protection and passage past the RBDD for migrating fish
- More flexible and reliable irrigation water supply and delivery infrastructure
- No interruptions to water deliveries during construction
- Minimal disturbances to Sacramento River water quality and aquatic ecosystems during construction

Construction of Temporary Pumping Plant

Red Bluff Diversion Dam Gates Up

Completed Temporary Pumping Plant