

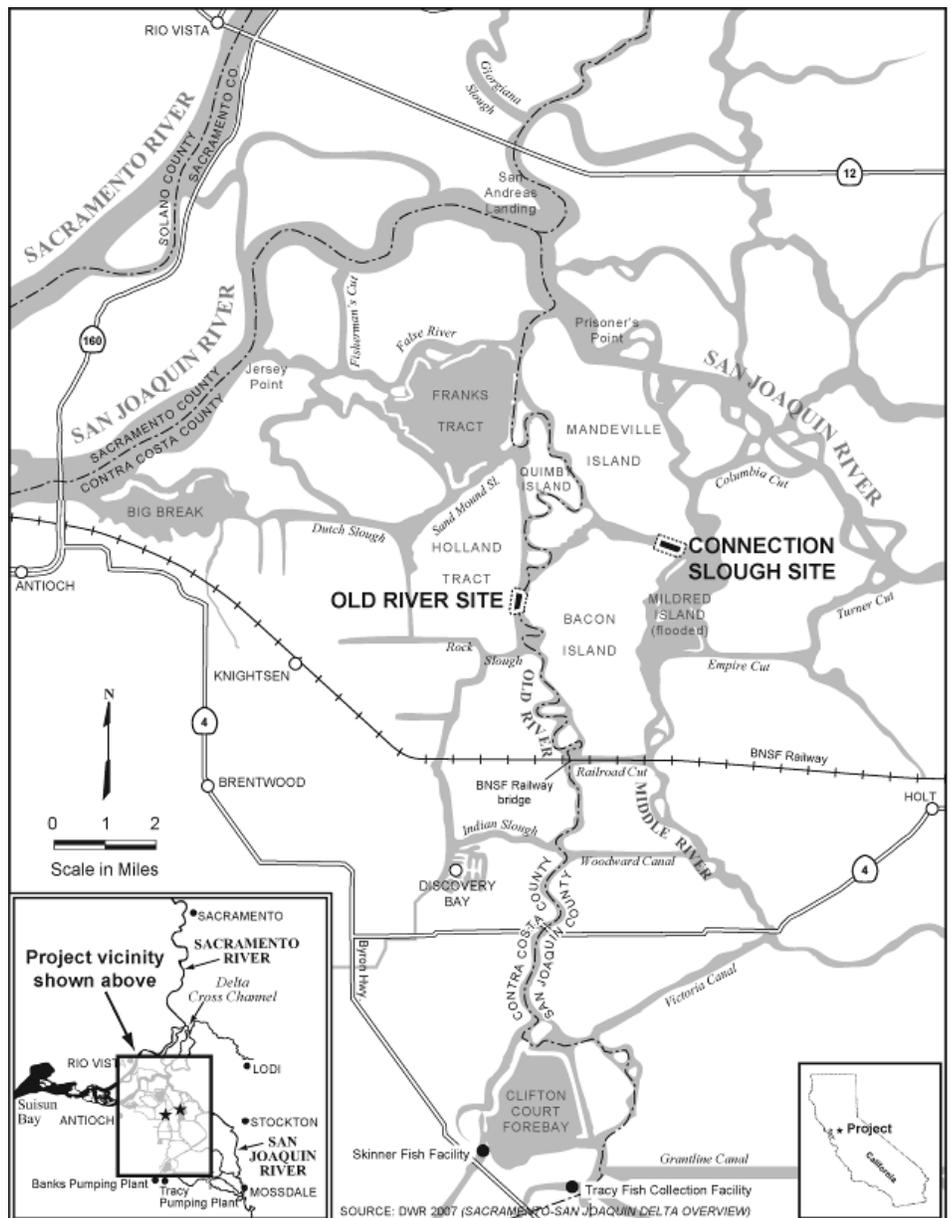
## The 2-Gates Fish Protection Demonstration Project

**Overview:** The 2-Gates Fish Protection Demonstration Project was developed by the Metropolitan Water District of Southern California and the San Luis & Delta-Mendota Water Authority (SLDMWA) to test alternative ways of protecting Delta Smelt (smelt). This 5-year experiment is designed to modify flows in the Sacramento-San Joaquin Delta (Delta) to reduce entrainment of smelt and other sensitive aquatic species in Central Valley Project (CVP) and State Water Project (SWP) export pumps.

The abundance of smelt populations in the Delta is considered to be an indicator of the overall health of the Delta ecosystem. Several factors are thought to contribute to the decline of smelt populations, such as environmental contaminants, changes in the abundance and composition of food organisms, and competition and predation from exotic invasive aquatic species. In addition, entrainment of smelt in the CVP and SWP pumps has been determined to be a factor in smelt decline and has resulted in changes to CVP and SWP operations.

Research suggests that the pre-spawning migration of smelt is tied to the amount of sediment and suspended particles in the water (turbidity). The participating local, State, and Federal agencies are considering the Demonstration Project to obtain a better understanding of the relationship of smelt behavior to turbidity and to test whether modifying flows will affect turbidity, and, therefore smelt movement.

As shown on the map, two gates would be placed at strategic locations on Old River and Connection Slough in the central Delta. The gates would be operated to manipulate the flow of turbid water to keep it away from the CVP and SWP export facilities/pumps; therefore, the smelt that are in the turbid water may also be kept away from the pumps.



# RECLAMATION

Managing Water in the West

**Proposed Gate Operations:** (operations are subject to change)

December-Early March: The gates would be closed a total of 0.5 to 2.5 hours daily.

Early March-March 31: Old River gate would close on flood tide (twice daily, 10 hours total) and would be open on ebb and slack tides (14 hours total daily) and for 15-20 minutes every 2 hours for boating during daylight hours. Connection Slough gate would close 20 hours total daily and would be open during slack tide.

April 1-May 31: The gates would be open at all times.

June: Old River gate would close on flood tide (twice daily, 10 hours total), and would be open on ebb and slack tides (14 hours total daily) and for 15-20 minutes every 2 hours for boating during daylight hours. Connection Slough gate would close 20 hours total daily and would be open during slack tide.

July-November: The gates would be open at all times.

**Construction/Timeline:** Installing the two gates on Old River and Connection Slough may take an estimated 7-9 weeks between July 1 and November 30, as determined by State and Federal regulation. Construction at the sites includes removing material from the channel floor, replacing it with gravel, fabricating butterfly gates mounted on two barges, sinking the barges in place, installing sheet piling, and constructing boat ramps. The Demonstration Project provides for the gates and sheet piling to be removed after 5 years.

**Operation/Maintenance/Monitoring:** A partnership between Federal, State, and local water managers would own, operate, and maintain the gates during the demonstration period. In addition, Federal and State agencies would conduct the comprehensive monitoring and scientific studies essential to the Demonstration Project.

**Authority:** Reclamation is participating in the Demonstration Project pursuant to Section 3406(b)(4) of the Central Valley Project Improvement Act.

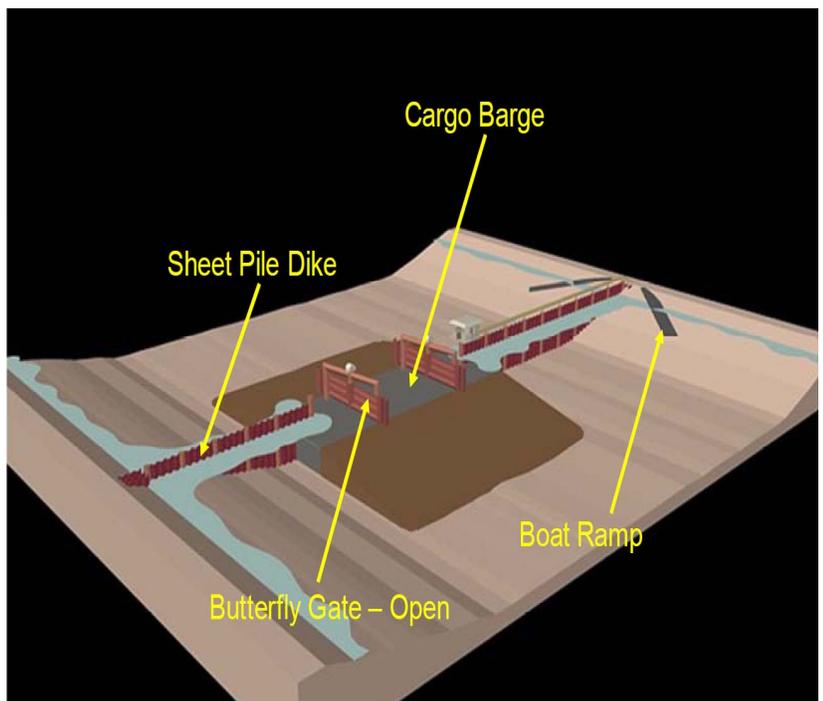
**Environmental Documents/Permits:** The Demonstration Project is being developed in compliance with applicable National Environmental Policy Act, Endangered Species Act, State of California environmental requirements, and other applicable laws. Reclamation released the Draft Environmental Assessment and Finding of No Significant Impact for public comment on October 19, 2009, with comments due November 30, 2009.

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For additional information, please visit  
<http://www.usbr.gov/mp/2gates>

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