

2 - Gates Project

A project led by the U.S. Bureau of Reclamation
A pilot demonstration project to improve protection of at-risk fish species in the south Delta



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The proposed 2-Gates Fish Protection Demonstration Project would install and operate removable gate structures at two key Delta locations to test the ability of the structures to improve protection for delta smelt and other sensitive aquatic species. In a five-year pilot study, the gates would control flows in selected interior Delta channels to evaluate whether these changes reduce entrainment of fish into pumps and improve water supplies to the California's State Water Project (SWP) and the Federal Central Valley Project (CVP).

Under State-Federal water operating criteria and in compliance with environmental safeguards for fish, the gates would be used to validate proposed modifications of Delta flow patterns for fish protection and management of reliable water supplies. Cost of structure development is estimated at \$30 million, including an initial \$5 million for planning defrayed by the Metropolitan Water District of Southern California. The U.S. Bureau of Reclamation is the lead agency for the project, with the State Department of Water Resources providing technical assistance. Scientific advice will be provided by a panel of experts facilitated by the CALFED Bay-Delta Program. A funding source for the project has yet to be identified. Operational costs are undetermined.

The central Delta locations are on Old River between Bacon Island and Holland Tract, and Connection Slough between Mandeville and Bacon Islands. The structures would include sheet pile dikes from each channel bank to the gates, which are centered in the channel, and pile-supported boat ramps to reduce impacts to recreational boating. Barge-mounted butterfly gates will be floated to the sites for installation. The gates will rotate on center pivots to open and close.

Computer simulation studies indicate the 2-Gates Project may at times allow more water to be delivered from the Delta for use in the San Joaquin Valley, Bay Area and Southern California while providing better protection for delta smelt than currently exists. State and Federal water and fish agencies are evaluating the project for water quality, water supply and fish protection benefits. Currently, efforts to protect delta smelt and other aquatic species impose severe restrictions on pumping operations, thus reducing water supplies and reliability of the SWP and CVP.

The project hypothesis is that by operating the gates, movement of adult and juvenile delta smelt into the South Delta pumping area can be controlled. Gates would be closed for short periods December through February to control adult delta smelt movement and for moderate periods March through June to control larvae/juvenile delta smelt movement. Boat ramps would be used to allow boat passage when the gates are closed. From July through November, a period of high Delta boating activity, the gates would not operate, remaining in a fully open position.

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