



WATER 4 FISH
Targeting California's Water Management

Special Report

Gates Project Boosts Mokelumne Salmon Runs to Record Highs

The Mokelumne River salmon got a big boost in 2011. Following three years of urging by Water4Fish, The Golden Gate Salmon Association and East Bay MUD, the Bureau of Reclamation gave the salmon just what they needed. The Bureau closed the Delta cross channel gates for ten days in October thereby allowing the adult salmon to find their way back to their spawning grounds in the Mokelumne River. The result was dramatic. In the first 18 days of October, 7,000 adult salmon moved into the river. This is a modern record and will result in more than 100,000 adult salmon in the ocean for the next three years. As recently as 2008, only 19 adult salmon moved into the Mokelumne in this same time period.



The Mokelumne River drains from the South Sierra watershed. The hatchery sits at the base of Comanche Reservoir near Lodi

*In 2011, 7,000 adult salmon
entered the Mokelumne River by
October 18th compared to only
19 in 2008*

Background

The cross channel gates near Walnut Grove connect the Sacramento River to the North and South branches of the Mokelumne River. When the gates are open large volumes of Sacramento water move through the gates on the way to the State and Federal pumps that pump the water to the San Joaquin Valley and Southern California. The main stem of the Mokelumne enters just south of the cross channel gates. In the Fall of the year (October) the water flows through the gates runs at 3,000 CFS (cubic feet per second). At the same time the main stem Mokelumne runs at only 80 CFS. Salmon find their spawning rivers by smell. If they miss the smell they will go to the heaviest flows. At the Mokelumne, the majority of the salmon miss the 80 CFS smell and swim through the cross channel gates into the Sacramento River. They never find their way back (see the map on the next page).

The problem is solved if the gates are closed when the adults are migrating. In the past three years the Bureau of Reclamation has turned down the requests for an extended closure. In 2011, they granted it and the salmon responded.

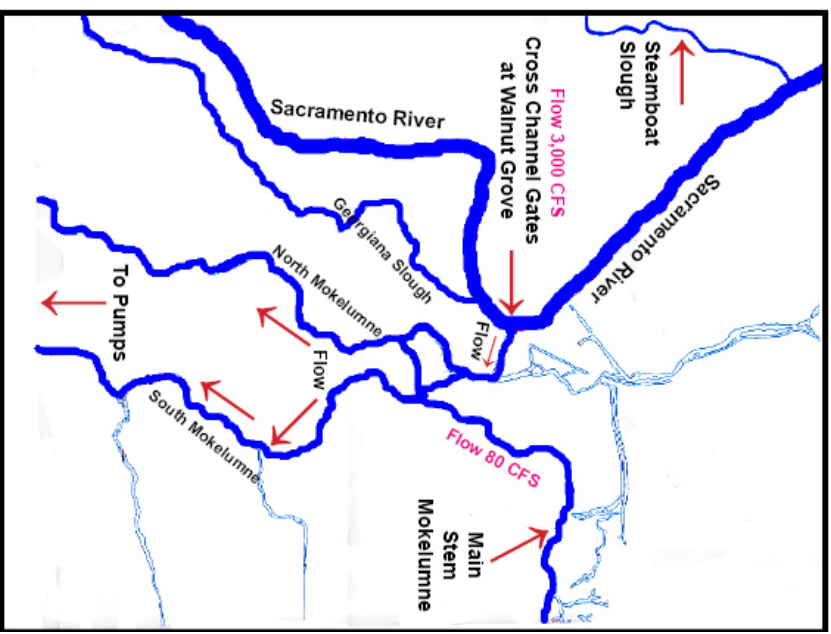
The map on the right shows the area of the cross channel gates and where the main stem Mokelumne enters.

The chart at the bottom of the page shows the results of the 2011 closure compared to previous years. On Monday October 18th a modern record for one day was set. 955 salmon entered the Mokelumne on this day.

The achievement of these record returns is truly remarkable. All the Central Valley salmon runs have been crashing badly for the past decade. The Golden Gate Salmon Association, Water4Fish and other groups have been seeking projects that can begin the rebuilding of the runs. No other project in the Central Valley watershed can match this one in the short term impact it will have on the salmon populations. It will result in over 100,000 fall run adults in the ocean all by itself. In 2009 only 43,008 adult fall run fish returned to the entire Central Valley system and in 2010 it was 133,014.

There are lots of people to thank for this success. First of all the Bureau of Reclamation. Regional Director Don Glaser, Assistant Director Dave Gore and Senior Scientist Josh Israel all worked extremely hard to solve the Delta salinity and flow conditions it took to allow the gates closure. They were supported by Bureau Commissioner Mike Connor in Washington DC.

The wildlife staff of the East Bay Municipal Utility District worked for three years with the



salmon groups to bring this about. Our thanks and congratulations go to Director Richard Sykes and his biological staff of Joe Miyamoto and Jose Setka.

Congresswoman Grace Napolitano, and her 2010 Staff Director David Wegner took a great interest in this project and provided lots of Congressional encouragement.

Joe Johnson of California Fish and Game and Don Ratcliff of the U.S. Fish and Wildlife Service provided biological leadership and key agency support.

The Golden Gate Salmon Association offers a very special thanks to all of these people.

