

SALMON NUMBERS BOOMING

OCEAN CONDITIONS, DELTA EXPERIMENT CREDITED FOR GROWTH

By **Alex Breitler**
January 06, 2012
Record Staff Writer

A record number of fall-run Chinook salmon returned to the Mokelumne River to spawn in 2011, just three years after salmon populations plummeted across the Central Valley.

Fish counts at Woodbridge Dam exceeded any year since monitoring began in the 1940s. Some swam upstream all the way to the fish hatchery below Lake Camanche, where they were killed and their eggs and sperm harvested to make baby fish. Or, they spawned in the river on their own.

Either way, officials say the Mokelumne has rebounded from the disaster of the late 2000s faster than any other stream in the Valley, swelling from a mere 418 fish in 2008 to more than 18,500 this past season (with a few stragglers still heading home this week).

Improved conditions in the ocean, where salmon spend most of their adult lives, are believed to be one reason for the overall increase in Central Valley salmon.

But a unique experiment with Delta plumbing appears to have also helped Mokelumne fish. And if an upcoming study proves that to be true, officials say the remarkable improvement could help frame future cooperation among agencies and interest groups that might normally disagree.

"You don't have to sacrifice environmental or economic issues, one against another," said Calaveras County Supervisor Steve Wilensky. "For no cost, we have the beginnings of the restoration of a tremendous salmon run. This has all kinds of implications for recreation and local economies. ... The idea that a river could go from near extinction to this level just holds all kinds of promise."

The "experiment" happened in October, when federal officials closed a gate on the Delta Cross Channel, which connects the Mokelumne to the nearby Sacramento River.

Normally, fresh water from the Sacramento is diverted through the channel into the central Delta instead of flowing farther west toward San Francisco Bay. The diverted water is then pulled to south Delta pumps that supply cities and farms from the Bay Area to San Diego.

The jet of Sacramento River water confuses migrating salmon. Instead of returning to their native stream, they follow the fresh water and turn up the Sacramento. They wind up many miles from home.

Last October's 10-day closure kept more fish in the Mokelumne. Just how many more is unknown, but thousands of fish heads should provide the needed clues.

When they were young, the salmon were implanted with tags the size of a grain of rice. Biologists must now cut open the heads of the dead adults, extract the tags and read them with a microscope to learn where the fish originated.

That work won't be finished for three or four months, said Richard Sykes. He is the director of water and natural resources for the East Bay Municipal Utility District, which diverts Mokelumne water to the Bay Area and has worked to repair the once-broken river.

"We have so many fish heads to read," Sykes said.

But he does believe closing the gate helped the fish.

An even bigger return might be in store for 2012. Most salmon spawn after three or four years in the ocean, but a large number of returning salmon this year were only 2 years old, foretelling greater numbers to come.

"We could burst the riverbanks next year," Sykes said.

The Mokelumne could be reopened to recreational salmon fishing for the first time since the crash, he said.

Other streams, including the Stanislaus River, also saw more fish last year but have not recovered to levels seen a decade ago.

The Tuolumne River swelled from 264 fish in 2009 to 2,810 fish in 2011. "Going from a couple hundred fish to a couple of thousand in a short period of time, it really does show you how resilient the populations are," said Doug Demko, a consulting fisheries biologist.

Even the Calaveras River through Stockton hosted salmon for the first time in four years.

Demko cautions that more fish doesn't always mean a healthy population. Many returning fish were bred in hatcheries, meaning they lack the genetic diversity of wild salmon and might be more susceptible to disease.

Historical perspective is also important. While this year's Mokelumne run is a record, thousands more fish probably made it upstream before records were kept - before the dams were built, blocking upstream habitat, and before intensive Gold Rush mining activities poisoned and dewatered the river.

Finally, the fact that there was plenty of water last year made it possible to close the cross channel without denting water supplies for cities and farms. That's not a given in future years.

For now, however, Wilensky said a rebound on the Mokelumne can only be good news. He credits collaboration among state and federal agencies, East Bay MUD and upstream interests.

For Calaveras County itself, salmon attract fishermen who buy fuel at gas stations, stay at hotels and eat in restaurants, Wilensky said.

"This kind of thing brings attention to the recreational possibilities in our area," he said.

Contact reporter Alex Breitler at (209) 546-8295 or abreitler@recordnet.com. Visit his blog at recordnet.com/breitlerblog.

http://www.recordnet.com/apps/pbcs.dll/article?AID=/20120106/A_NEWS/201060326