Smallest fall run of chinook salmon reported

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(02-18) 20:50 PST -- The smallest number of Pacific Ocean salmon ever recorded swam back to the Sacramento River via San Francisco Bay last fall, the latest evidence of the decline of the storied fish along the West Coast, officials said Wednesday.

The Pacific Fishery Management Council, a federal body that regulates commercial and sport fishing, estimated that only 66,286 adult salmon returned to the Sacramento River to spawn. Six years ago, the peak return was 13 times higher.

In 2007, only 87,881 of the fish returned to spawn in the river, falling far short of the agency's goal of 122,000 to 180,000 fish.

The latest count comes as officials consider imposing fishing restrictions off California's coast again this summer.

Chinook - also known as king salmon - are the prized fish of Northern California streams, once proliferating in four genetically distinct runs, or races.

For centuries, they have fought their way up the Sacramento and San Joaquin rivers and their tributaries to bear young, which hatch in the rivers, swim through the bay and live in the ocean until they return three years later to spawn and die in their natal streams.

The fish have supported an economy worth hundreds of millions of dollars and supplied restaurants and retailers with a local source of heart-healthy protein famous for its rich, buttery flavor.

The Sacramento River fall run, the bread-and-butter chinook run, is the one facing collapse, although Lagunitas Creek in Marin County this year had its smallest run of coho salmon ever recorded.

Scientists believe warmer ocean conditions in 2005 and 2006 led to a lean food supply as young salmon were entering the ocean. That played a part in the low spawning returns in 2007 and 2008.
In addition, in 2004 and 2005, the years the chinook were born and traveled to the ocean, the federal Central Valley Project and the State Water Project exported record amounts of Sacramento-San Joaquin River Delta water to urban and agricultural customers throughout the state, documents show.

Federal researchers also blame 50 years of water management in California for the decline of the fish. The state and federal water projects constructed dams and conveyance systems that separated the fish from their habitats. Pumps, canals and hatcheries built to make up for lost water also depleted once-diverse runs, at one time the pride of the state.

Next week, the management council, which is made up of representatives of states and tribes as well as government agencies and fishing groups, is expected to release numbers estimating the chinook salmon available in the ocean, agency spokeswoman Jennifer Guilden said Wednesday.

Based on stock assessments from the National Marine Fisheries Service and other federal agencies, the management council then will set quotas for the fishing season, which typically begins in May.

Last year, the low estimates resulted in a ban on commercial fishing off California and Oregon, the first time all seasons were closed in California history. Similar restrictions are expected this year, according to officials who have seen the stock assessments.

"Almost for certain there will be no fishing this year," said Zeke Grader, executive director of the Pacific Federation of Fishermen's Associations, which represents commercial fishermen. The industry has received some financial aid, which Grader says may have to carry over to this season as well.

His group was lead plaintiff in a 2004 lawsuit asking the federal government to deem the winter and spring runs of salmon in jeopardy of extinction. The fish are listed under the federal Endangered Species Act.

The system in the Klamath and Trinity rivers had 31,000 returning spawners, a better return than in the Central Valley, but still short of its management goal of 40,700 fish, according to the Pacific Fishery Management Council.

According to the National Oceanic and Atmospheric Administration's Southwest Fisheries Science Center in Santa Cruz, the fall run appears to have suffered from "poor ocean conditions when the juveniles left the fresh water to enter the ocean," said Churchill Grimes, fishery biologist and a leader of the group preparing a paper on causes of the decline.

But the ultimate cause of the decline is "sort of by 1,000 cuts" related to habitat destruction of the delta, once 1,500 square kilometers of rearing habitat, he said.

"It was a huge marsh, habitat for all of the runs. Now it's been diked, levied and rip-rapped until it's not more than a big ditch," Grimes said. Dams, pumping water by the state and federal water projects and the operation of hatcheries all contribute to the problem, he said.
There was a big run of chinook in the Butte Creek tributary to the Sacramento River in May, where a healthy habitat was established.