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Why aren't the fish jumping?

SACRAMENTO (AP) — The declining striped bass population of San Francisco Bay and Sacramento-San Joaquin Delta is linked to oil spills in the bay and pesticide runoff into the rivers flowing to the bay, a new study says.

Refinery wastes, hydrocarbons from treated sewage and storm water runoff also have added to the problem of declining bass populations, the report added.

The report was released Thursday by the State Water Resources Control Board, which participated in the study with the National Oceanic and Atmospheric Administration, researchers from the Davis and Santa Cruz campuses of the University of California and the state Department of Fish and Game.

Water Resources Control Board spokeswoman Christine May said the adult striped bass population of the bay and delta has declined by 75 percent or more since 1960 — down from 4.5 million bass in 1960 to 1.1 million in 1979 and possibly below 1 million currently.

The study pinpointed petroleum products and zinc as major factors affecting fish health and reproduction, and it said PCB and toxaphene residues were found in "potentially harmful levels" in bass ovaries.

The study also said a 1978 field study found that fish exposed to toxic pollutants produced 45 percent fewer normal eggs. It said studies on laboratory fish exposed to petroleum hydrocarbons were also more vulnerable to parasitic infections, lowering their survival rate.

Oil spills and pesticide runoff

It said chronic toxic chemical exposure in the bay and delta negatively affects every stage of the life of striped bass from egg through adult.

The researchers compared bay and delta striped bass with similar fish from the Coos River in Oregon. They said the Oregon fish had none of the tapeworms that infest bay and delta bass, had significantly lower levels of toxic pollutants in their tissue, and were generally in better health and lived longer.

The study said bass from the San Joaquin River had higher levels of pollutant residue in their tissue, had more parasites and were in poorer health than Sacramento River bass.

PCB and toxaphene were found in Sacramento River striped bass eggs at concentrations "associated with increasing egg and larval mortality and ab-

normalities," the study added.

Citing possible causes of the pollutants affecting the striped bass population, the report concluded that "oil spills top the pollutant suspect list."

"Over 125,280 gallons were spilled into the Bay-Delta estuary in 1980, nearly triple the 1978 volume. Hydrocarbons found in treated sewage, refinery wastes, pesticides and storm water runoff add to the problem," the study said.

The researchers also said more than 2 million pounds of petroleum-based pesticides are used annually in the delta, a substantial portion of which ultimately are washed into waterways flowing into the bay.

No specific sources of pollution were named in the study, which is scheduled for completion by October.