

# Toxins troubling in fish caught in local waters

## Six-year study is step toward dealing with chemicals in coastal waters



Harley Keech of El Cajon casts a fishing line into San Diego Bay from the Shelter Island Pier. A new study found contaminant loads higher in fish from the bay than from elsewhere along the county's coast. — Howard Lipin

The largest-ever study of toxins in California sport fish shows concerning levels of PCBs and methylmercury at several spots along the San Diego County coastline and elsewhere, the legacy of industrial activity that continues to haunt state waters.

About three-fourths of the 42 spots sampled in California had what state officials called “moderate” degrees of pollution from the two most problematic contaminants, but concentrations at several sites spiked high enough to trigger “no consumption” warnings if more sampling confirms dangerous amounts of the contaminants.

Moderate-to-high levels of pollutants were found in several local species, including various bass, perch, rockfish and shark. Contaminant loads were heaviest in San Diego Bay, a spot that's long been known as a toxic hot spot much like other industrial and military hubs across the country.

The data are from a \$4.5 million series of studies paid for by the State Water Resources Control Board and the U.S. Environmental Protection Agency. The six-year effort focuses on sport fish because they provide information about human exposure to chemicals and the condition of the aquatic food web. Results from 27 more coastal spots are scheduled to be released next year.

“Before these surveys, we really had no benchmark — mostly just anecdotal information — for where to focus our efforts,” said Dave Clegern, a spokesman for the state water board. “Now we can look toward seeing what the best way to deal with these chemicals may be. In the case of mercury, it's so heavy many researchers believe the best solution is to let it be so it is eventually buried. PCBs are often regarded the same way, but that may not be the best course everywhere.”

California's coastal waters are some of the most abundant in the world, thanks to the upwelling of cold waters that bring nutrients near the surface. But the California Current is under many pressures, such as the changing climate, fishing and pollution.

Contaminants in fish are particularly troublesome for children, people with compromised immune systems and those who eat large quantities of local seafood, a common practice in some ethnic communities. They also are a reminder about the unintended consequences that many 20th-century products created in the environment.

While several contaminants have been reduced in recent decades, toxins continue to linger in wastewater and storm-water, and they become concentrated in humans and other mammals.

“Maybe people don’t eat fish from the bay, but everybody is connected to the food web,” said [Laura Hunter](#), a veteran activist with the Environmental Health Coalition in National City.

She said studies such as the one recently released by the state show that “we are not doing enough to address these issues of legacy pollutants.”

Six years ago, the San Diego Regional [Water Quality Control Board](#) proposed removing or capping a relatively small segment of polluted sediment from San Diego Bay. The agency identified copper, mercury, PCBs, arsenic, cadmium, lead and other chemicals of concern.

The cleanup plan still hasn’t been finalized, partly because of objections by companies and agencies on the hook for the bill, but momentum is building for a plan to be adopted by the end of this year.

For the statewide fish study, California scientists looked in fish from metropolitan areas for several pollutants, including dieldrin, DDT, chlordanes and selenium. Most substances were found at low levels, but that wasn’t the case for methylmercury and PCBs.

Methylmercury contamination of coastal waters likely originates from multiple sources, including mercury, gold, and silver mining; regional and global emissions into the atmosphere; and wastewater and stormwater. Methylmercury can affect the nervous system in children and adolescents, potentially leading to learning disabilities.

Many of the highest concentrations of methylmercury were found in sharks, which tend to concentrate the substance in their tissue.

PCBs, or polychlorinated biphenyls, are a group of chemicals consisting of more than 200 individual compounds. They can cause cancer, damage the liver and affect development, reproduction and the immune system. They were used widely during the mid-1900s in electrical, industrial and other applications — and they still haven’t disappeared, despite being banned by the U.S. Environmental Protection Agency in 1979.

State health officials have urged residents to eat more fish for its health benefits, but they suggest eating different varieties to avoid relying on one that retains lots of chemicals.

They also said people should eat only the fillets, trim visible fat and thoroughly cook seafood before eating it, preferably using a method that allows the juices to drain.

*mike.lee@uniontrib.com (619) 293-2034 • Twitter: @sdutlee*

### **High levels of toxins found in sport fish along San Diego coastline**

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SAN DIEGO (CNS) - Sport fish found along the San Diego coastline show concerning levels of toxins, according to a series of new studies.

The studies by state and federal authorities concentrate on sport fish in order to uncover information about human exposure to chemicals and the condition of the aquatic food web, a local news source reported.

The \$4.5 million studies were paid for by the State Water Resources Control Board and the U.S. Environmental Protection Agency as part of a six-year effort.

Moderate to high levels of pollutants were found in several local species of sport fish, including various bass, perch, rockfish and shark, the news source reported, noting that contaminant levels were highest in San Diego Bay, an industrial and military hub. "Before these surveys, we really had no benchmark -- mostly just anecdotal information -- for where to focus our efforts," State water board spokesman Dave Clegern told the newspaper. "Now we can look toward seeing what the best way to deal with these chemicals may be."