



CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

NEWS RELEASE

OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT

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OEHHA Finalizes Advisory on Mercury in Fish in Clear Lake, Cache Creek and Bear Creek

SACRAMENTO -- The California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA) has finalized a fish advisory concerning elevated levels of mercury in fish in Clear Lake, Cache Creek and Bear Creek (Lake, Yolo and Colusa counties).

"This region has an abundance of naturally occurring mercury. As a result of both natural processes and mining activity, some of the mercury has worked its way into the fish," OEHHA Director Dr. Joan Denton said. "Fish and shellfish from Bear Creek should be avoided. But fish from Clear Lake and Cache Creek can still be part of a healthy, balanced diet if people – especially women of childbearing age and children – carefully monitor and limit their fish consumption."

The advisory contains guidelines for consumption of fish from these water bodies. One set of guidelines is for women of childbearing age and children age 17 and younger, who are particularly sensitive to methylmercury, the most prevalent and toxic form of mercury in fish. A second set of guidelines is for women beyond their childbearing years and men.

The new advisory updates a 1987 state fish advisory for Clear Lake, and expands the advisory to include the entire 81-mile length of Cache Creek from Clear Lake to the Yolo Bypass of the Sacramento River, as well as the North Fork of Cache Creek, and Bear Creek, a 39-mile-long tributary of Cache Creek. The advisory incorporates the results of fish sampling that has been conducted by state agencies and university researchers in the Clear Lake and Cache Creek watersheds and along Bear Creek since 1987.

The advisory recommends that no one eat any fish or shellfish from Bear Creek.

For Clear Lake and Cache Creek, the advisory recommends consumption limits for various species, including largemouth and smallmouth bass, channel catfish, white catfish, brown bullhead, green sunfish, black crappie, Sacramento blackfish, Sacramento pikeminnow, hardhead and Sacramento sucker. Women of childbearing age and children 17 years and younger should limit consumption

of those fish to a total of one meal a month, while women beyond childbearing years and adult men should limit consumption of those fish to a total of one meal a week. If none of those fish are eaten, women of childbearing age and children 17 years and younger can have one meal a week of bluegill, hitch, carp, trout or crayfish, while women beyond childbearing age and adult men can have up to three meals a week of those fish.

The Clear Lake area is rich in mineral deposits, and prospecting for mercury and other ores has taken place in the area since the mid-1800s. Mercury both from natural weathering and mining waste is believed to have entered water bodies in the area. Also, geothermal springs venting directly into Clear Lake or draining into Cache Creek and Bear Creek can contain mercury. Mercury from coal-burning power plants, medical waste incineration and volcanic emissions may also enter the environment and migrate to these water bodies.

After entering rivers, streams, and estuaries, mercury accumulates in the sediment. Bacteria convert the inorganic mercury to the more toxic methylmercury, which fish take in from their diet. Methylmercury can accumulate in fish to concentrations many thousands of times greater than mercury levels in the surrounding water.

Women can pass methylmercury on to their fetuses through the placenta, and to infants through breast milk. Excessive exposure to methylmercury may affect the nervous system in children, leading to subtle decreases in learning ability, language skills, attention and/or memory. These effects may occur through adolescence as the nervous system continues to develop. In adults, the most subtle symptoms associated with methylmercury toxicity are numbness or tingling sensations in the hands and feet or around the mouth. Other symptoms at higher levels of exposure could include loss of coordination and vision problems.

A fact sheet and report containing the advisory and OEHHA's evaluation of potential health threats in the fish posed by methylmercury (the most prevalent and toxic form of mercury in fish) are available for viewing and downloading on OEHHA's Web site at www.oehha.ca.gov.

The Office of Environmental Health Hazard Assessment is one of six entities within the California Environmental Protection Agency. OEHHA's mission is to protect and enhance public health and the environment by objective scientific evaluation of risks posed by hazardous substances.