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NEWS RELEASE

OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT

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OEHHA Releases Advisory on Mercury in Fish in Tomales Bay

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 Tomales Bay in Marin County.

"With the exception of sharks, fish caught in Tomales Bay can be part of a healthy, balanced diet. But the public – and particularly women of childbearing age and children – should monitor and limit their fish consumption to avoid excessive exposure to mercury," OEHHA Director Dr. Joan Denton said.

A fact sheet and a report containing the advisory and OEHHA's evaluations 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 advisory contains guidelines for consumption of fish and shellfish from Tomales Bay. One set of guidelines is for women of childbearing age and children age 17 and younger, who are particularly sensitive to methylmercury. A second set of guidelines is for women beyond their childbearing years and men.

The advisory recommends that women of childbearing age and children age 17 and younger refrain from eating all sharks (including brown smoothhound sharks, Pacific angel sharks and leopard sharks), while limiting consumption to one meal a month of bat rays; or one meal a week of California halibut, redbtail surfperch, pile surfperch, shiner surfperch or red rock crab; or three meals a week of jacksmelt.

Women beyond childbearing years and adult men should limit consumption to one meal a month of brown smoothhound sharks or leopard sharks; or one meal a week of Pacific angel sharks or bat rays; or three meals a week of California halibut, redbtail surfperch, pile surfperch or red rock crab. Jacksmelt and shiner surfperch can be eaten daily provided that no other fish are eaten.

The advisory does not apply to commercial oysters, clams and mussels from Tomales Bay, as elevated levels of mercury have not been found in commercially grown shellfish in the area.

A principal source of mercury in Tomales Bay is believed to be the Gambonini mercury mine, which operated from 1968 to 1972 about six miles upstream from Tomales Bay. Water-quality studies have suggested that mercury-containing drainage from the mine entered Walker Creek, which flows into Tomales Bay. Remediation work at the mine has focused on reducing runoff from the mine into Walker Creek. The overall prevalence of naturally occurring mercury in the California Coast Ranges may also be contributing to mercury in Tomales Bay. Mercury from coal-burning power plants, medical waste incineration and volcanic emissions may also enter the environment and migrate to the bay.

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.

The new advisory contains the same consumption guidelines as an earlier draft advisory that OEHHA released for public review and comment in May 2004. The draft advisory replaced an interim advisory issued in December 2000 by Marin County Department of Health and Human Services, in cooperation with OEHHA. The county advisory was based on fish and shellfish samples taken in 1999 by the San Francisco Bay Regional Water Quality Control Board. Samples taken since the county advisory have provided additional information on mercury levels in Tomales Bay fish and shellfish.

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.

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