

SWAMP Newsletter

Sound science for informed water quality management

Summer 2016 | Issue 3

Mercury in Coastal Fish of California and Western North America

by Jay Davis, San Francisco Estuary Institute/Aquatic Science Center (jay@sfei.org)

In 2009 and 2010, SWAMP conducted a survey of contaminants in fish from 68 locations across the entire coast of California. The survey, performed in collaboration with the Regional Monitoring Program for Water Quality in San Francisco Bay and the Southern California Bight Regional Monitoring Program, provided the first systematic statewide assessment of contaminants in coastal fish. The survey results indicated that mercury accumulation in sport fish is of high concern along much of the California coast, especially in the North and Central coast regions.

A journal article published in April used the robust dataset generated by SWAMP and others for California as a foundation for a broad review of mercury in fish on the coast of western North America. The article was written as part of a series of articles summarizing mercury science for all of western North America in a special issue of the journal *Science of the Total Environment*. Mercury in western US coastal fish, especially long-lived predators, presents a significant exposure risk to fish consumers. The North and Central coast



regions of California stand out as having relatively high concentrations across this entire region (Figure 1). The limited data available indicate no decline in concentrations over the past 40 years. The article is available online.

Based largely on data from this survey, the California Office of Environmental Health Hazard Assessment is developing fish consumption advice for the California coast. Release of a draft advisory is anticipated in the next few months.

SWAMP is planning to conduct repeated surveys of coastal fish on a 10-year cycle in order to keep track of this water quality issue. A second systematic survey is planned, with a multi-year effort beginning in 2018.

(Continued on next page)



SWAMP Newsletter Summer 2016 | Issue 3

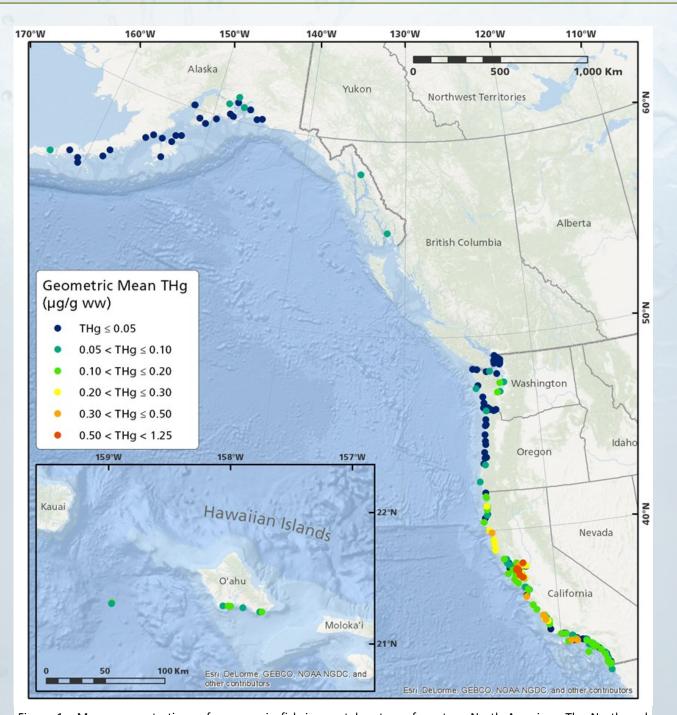


Figure 1. Mean concentrations of mercury in fish in coastal waters of western North America. The North and Central coast regions of California stand out as having relatively high concentrations across this entire region. The means represent raw data and do not control for variation in species, size, or year.