Statewide Mercury Control Program for Reservoirs

The State Water Resources Control Board and nine Regional Water Quality Control Boards are in the process of developing a statewide mercury control program for reservoirs.

Overview

Fish containing potentially harmful amounts of mercury are found in numerous reservoirs across the state. Mercury is a heavy metal that is poisonous in very small amounts. Infants, young children, and women of childbearing age are most at risk. It is known to cause brain damage as well as kidney and lung problems in humans and wildlife. To begin to address this widespread mercury contamination, the Water Boards are developing a multi-part program that will focus first on mercury in California's reservoirs. There are currently 74 reservoirs identified as impaired and that number is expected to increase substantially as more data are collected.

Learn more, stay in touch!

You can obtain fact sheets and project updates at the State Water Board website:

http://www.waterboards.ca.gov/water_issues/programs/mercury/

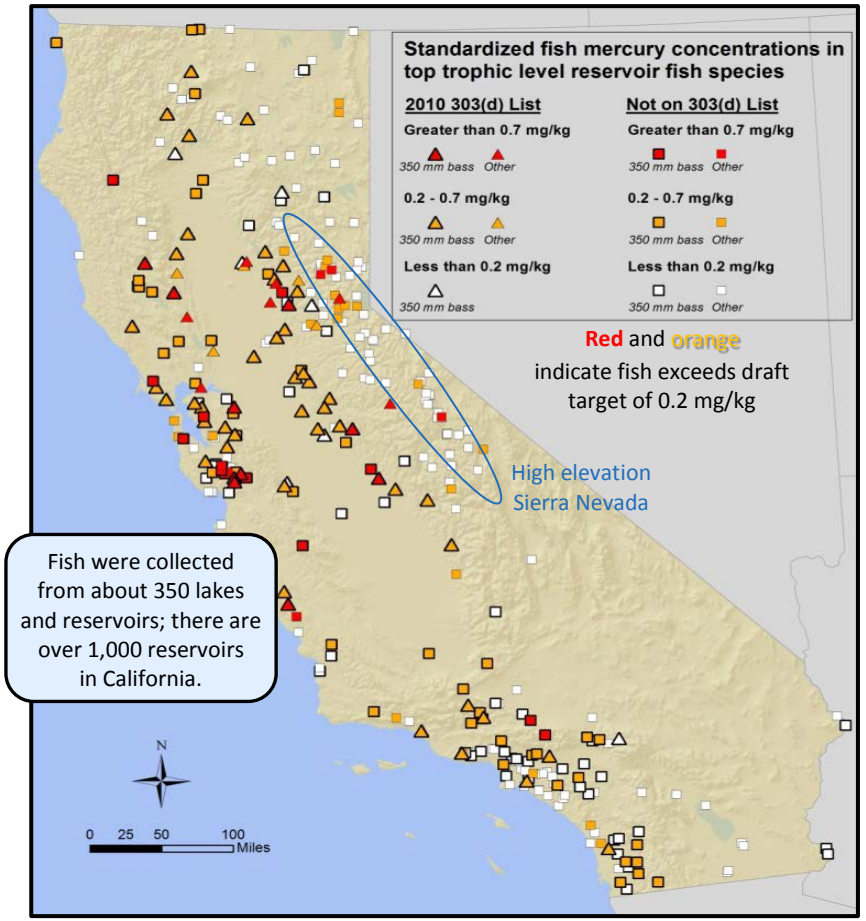
To automatically receive an email notice as new information becomes available, subscribe to our Email Distribution Lists for the "Mercury – Objectives Policy" and "Mercury – Statewide Control Program for Reservoirs" at:

http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml#quality

If you have questions, please email **MercuryProject@waterboards.ca.gov** or refer to the following website for additional contact information:

http://www.waterboards.ca.gov/water_issues/programs/mercury/

The Mercury Problem: Elevated methylmercury in reservoir fish



Average methylmercury concentrations in 350 mm (standardized length) black bass or other high trophic level fish

High elevation Sierra Nevada reservoirs tend to have the lowest fish methylmercury concentrations, likely because they are dominated by trout, which is lower in the food chain than black bass.

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Fish Mercury Impairment in California Reservoirs: Historic Mines and Other Factors

Presentation at the EPA Region 9 State-of-the-Science Workshop on Mercury Remediation in Aquatic Environments (September 26, 2013)

Key Questions for Workshop Participants

1. Where can mine waste remediation make quick reductions in reservoir fish MeHg?

2. What other factors can we consider?

Initial mine-related factors considered:

- High reservoir sediment Hg compared to background
  - Indicates substantial mine contribution
- Mine sites localized to a relatively small watershed area
  - Indicates highly contaminated soils likely not dispersed throughout watershed
- Mines near reservoirs (e.g., within 10 to 20 km)
  - Likely do not have many miles of creek channels filled with waste that can be difficult to remediate

3. What factors do we consider to prioritize specific mine waste sites within a watershed?

Initial mine-related factors considered:

- Proximity and erosion of waste to surface water:
  - High threat – visual evidence or high potential of wastes eroding into surface waters
  - Medium threat – wastes near waters but no visual evidence of erosion
  - Low threat – wastes located far from waters and no visible evidence of erosion
- Level of Hg contamination:
  - Historical mine processes and productivity
  - Waste pile and portal discharges: Hg concentrations and volumes
  - Hg concentrations in downstream water and sediment
- Site accessibility

Stay in Touch!

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