

# Water Quality Report Card

**Regional Water Board:** San Francisco Bay, Region 2

**Beneficial Uses Affected:** COMM, EST, MAR, WILD

**Implemented Through:** Walker Creek Mercury TMDL and previous cleanup of upstream mercury mine

**Effective Date:** July 3, 2012

**Attainment Date:** N/A

## Mercury in Tomales Bay

**STATUS** Conditions Improving

**Pollutant Type:** Nonpoint Source Legacy

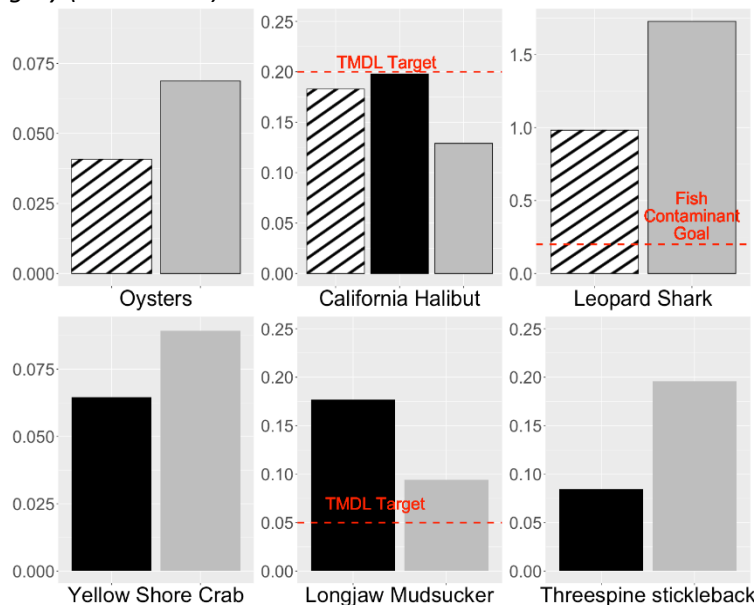
**Pollutant Source:** Abandoned Mines

### Water Quality Improvement Strategy

Tomales Bay is located north of San Francisco Bay in Marin County. In 1982, a dam failed at the Gambonini mercury mine allowing mercury-laden waste and soil to enter Walker Creek and contaminate Tomales Bay. In 1996, Tomales Bay was designated as impaired by mercury and placed on the federal 303(d) list due to concerns that drainage from this mine had contaminated wildlife and sport fish. In 1999, the San Francisco Bay Regional Water Board and the U.S. Environmental Protection Agency initiated an emergency superfund cleanup. Additional implementation actions were required by the [Walker Creek Watershed Mercury Total Maximum Daily Load \(TMDL\)](#), such as the [Tomales Bay grazing waiver](#). As a result of mine cleanup and TMDL implementation actions, mercury concentrations in Walker Creek have decreased substantially (see [Walker Creek TMDL Report Card](#)). Mine cleanup also resulted in significant decrease of mercury concentrations in sediment at the Walker Creek Delta (see previous [Tomales Bay TMDL Report Card](#)). Therefore, in 2019 and 2020 we collected additional biota mercury data.

### Biota Mercury Levels in Tomales Bay

**Below:** results are average mercury (ug/g ww) except methylmercury for shore crabs. Before mine cleanup (1998–2001) is striped and after mine cleanup is black (2010) and gray (2019–2020). Note that the vertical axis scale varies.



### Tomales Bay Watershed Map



### Water Quality Outcomes

- **Left, top row:** results are for the protection of human health. Commercial oyster mercury concentrations were higher in 2019 than in 1998 but are still well below California's fish contaminant goal of 0.22 ug/g that applies to both fin and shellfish for human health.
- California halibut consistently have mercury concentrations at or below the TMDL target for sport fish and California's fish contaminant goal.
- 2020 Leopard shark are much larger than 1998–2001 sharks, so they are not directly comparable. All years have highly elevated mercury levels.
- **Left, bottom row:** results are for the protection of predatory birds. These data are for shore crab and prey fish from the Walker Creek Delta. Mercury levels were higher in 2019 compared to 2010 in two of three species