Water Quality Report Card		Mercury in Tomales Bay	
Regional Water Board: Sa	an Francisco Bay, Region 2	STATUS	☑ Conditions Improving
Beneficial Uses Affected: C	OMM, EST, MAR, WILD	STATUS	
Implemented Through:		Pollutant Type:	☑ Nonpoint Source ☑Legacy
Walker Creek Mercury TMDL, Superfund cleanup of upstream			
mercury mine, Tomales Bay Grazing Waiver			
Effective Date: Ju	ıly 3, 2012	Pollutant Source:	Abandoned Mines
Attainment Date: N	/Α		

## Water Quality Improvement Strategy

Tomales Bay is located north of San Francisco Bay, in Marin County. This report card focuses on one listing for mercury, which is addressed by the Tomales Bay Mercury TMDL and actions associated with the previously adopted Walker Creek Watershed Mercury TMDL. The biggest anthropogenic source of mercury to Tomales Bay is the legacy Gambonini mercury mine, which operated in the 1960s. In 1982, the mine tailings dam failed catastrophically, allowing mercury-laden waste and soil to enter Walker Creek and contaminate Tomales Bay. In 1999, the 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 TMDL, particularly the Tomales Bay grazing waiver. Best management practices in the grazing waiver prevent cattle from severely disturbing mercury-bound sediments along Walker Creek. As a result of mine cleanup and TMDL implementation actions, mercury concentrations in Walker Creek have decreased substantially (see Walker Creek TMDL Report Card). Therefore, we initiated sampling at the Walker Creek Delta in Tomales Bay, to determine if TMDL load allocations were achieved for Tomales Bay.

## Sediment Mercury Levels in Tomales Bay

Surface sediment mercury data are proxies for mercury in suspended sediment, which is the form for the TMDLs.



## Tomales Bay Watershed Map



## Water Quality Outcomes

- Mercury levels in surface sediment at the Walker Creek delta in Tomales Bay has declined significantly, from 1.7 ppm in 2000 to 0.52 ppm in 2018 (see figure at left) since mine cleanup.
- By 2018, average mercury had nearly met 0.5 ppm, the load allocation established by the Tomales Bay TMDL (and the TMDL for the Walker Creek Watershed mercury TMDL).
- The next step is for Water Board staff to measure methylmercury in biota at the Walker Creek delta. This sampling is scheduled for 2019