Water Quality Report Card		Mercury in Walker Creek Watershed -update		
Regional Water Board:	**San Francisco Bay, Region 2**	**STATUS**	☑ Conditions Improving ☐ Data Inconclusive ☐ Improvement Needed ☐ Targets Achieved/Water Body Delisted	
Beneficial Uses Affected:	COLD, RARE, REC-1, COMM, SPAWN, WILD			
Implemented Through:	NPDES Permits, Waiver of WDRs, CWC §13267 Requirements, 319(h) Grants, Cleanup & Abatement	**Pollutant Type:**	☐ Point Source ☐ Nonpoint Source ☑Legacy	
Effective Date:	September 11, 2008	**Pollutant Source:**	Abandoned Mines	
Attainment Date:	N/A			

Water Quality Improvement Strategy

The Walker Creek Mercury TMDL addresses mercury in the creek, its floodplain, and the Soulajule Reservoir, which drains into the creek.

Mercury sources in the watershed include the Gambonini Mine site, where mercury was mined beginning in the 1960's, and two former mercury mines in the Soulajule Reservoir sub-watershed. Mercury was mined in the Walker Creek watershed from the 1960s through the early 1970s.

In 1982, a tailings dam at Gambonini failed catastrophically, sending large quantities of mercury-laden sediment downstream into Walker Creek and out into Tomales Bay. Discharges of mercury from the mine to Walker Creek continued until 1998-2000, when the mine site was remediated by waste pile stabilization, revegetation with native plants, and storm water diversion. Although the primary mine source of mercury has been cut off, there continues to be in-stream storage of mercury-bound sediments along Walker Creek.

The goal of the TMDL is to reduce mercury levels in Walker Creek and Soulajule Reservoir so that fish-eating wildlife and humans who consume local sport fish are protected from this bio-accumulative pollutant.

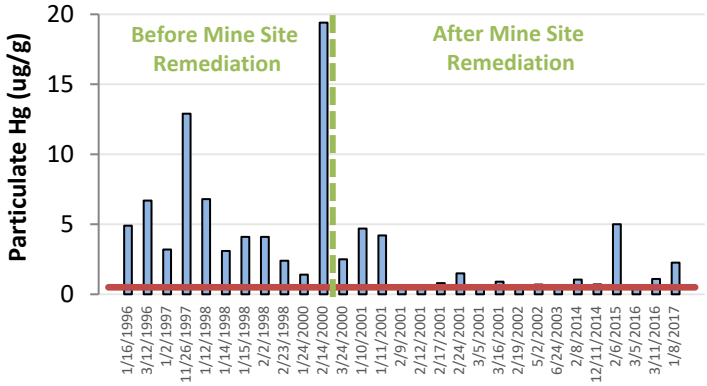
The TMDL allocates discharges of mercury-laden sediment and methylmercury production to sources in the watershed. The allocation to mercury on sediment suspended in the water column (particulate Hg) is 0.5 micrograms per gram for downstream of the mine as shown in the figures below.

Watershed Map

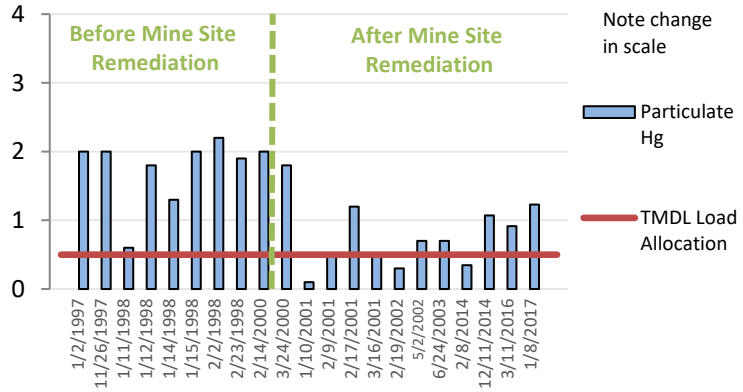
Water Quality Outcomes

- *Mercury and sediment loads to Walker Creek have been significantly reduced by mine cleanup.*
- *Water quality graphs (below) show that mine site remediation has decreased mercury concentrations in Walker Creek downstream of the mine. However, more time is needed to achieve TMDL load allocation.*
- *Grazing management practices (e.g., streambank stabilization, fencing, etc.) required under a Waiver of Waste Discharge Requirements should further limit remobilization of mercury-laden sediments along Walker Creek.*

Walker Creek Ranch Mercury Concentrations and TMDL Allocation



HWY 1 Mercury Concentrations and TMDL Allocation



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