Total Maximum Daily Load Progress Report		Walker Creek Watershed Mercury TMDL	
Regional Water Board	San Francisco Bay, Region 2	STATUS	 ✓ Conditions Improving □ Data Inconclusive □ Improvement Needed □ TMDL Achieved/Waterbody Delisted
Beneficial uses affected:	COLD, RARE, REC-1, SPAWN, WILD		
Pollutants addressed:	Mercury		
Implemented through:	<u>NPDES Permits</u> , Waiver of WDRs, <u>CWC §13267 Requirements</u> , <u>319(h)</u> <u>Grants</u> , <u>Cleanup & Abatement</u>		
Approval date:	September 29, 2008		

TMDL Summary

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 stabilizing the waste pile, revegetation with native plants, and storm water diversion. Although the primary mine source of mercury has been cut off, there remains 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.

Gambonini Mine Runoff Mercury Concentrations and TMDL Allocation





Water Quality Outcomes

- Mercury and sediment loads to Walker Creek have been significantly reduced by mine cleanup.
- Inorganic mercury concentrations in sediment at the mouth of Walker Creek have also declined significantly.
- 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.

Comparison of 2000 and 2009 Mercury Concentrations at Mouth of Walker Creek



Walker Creek Watershed Map