

Water Quality Report Card		Pathogens in Tomales Bay Tributaries	
Regional Water Board:	San Francisco Bay, Region 2	STATUS	<input checked="" type="checkbox"/> Conditions Improving <input type="checkbox"/> Data Inconclusive <input type="checkbox"/> Improvement Needed <input type="checkbox"/> Targets Achieved/Water Body Delisted
Beneficial Uses Affected:	REC-1		
Implemented Through:	WDRs, Discharge Prohibitions, NPDES Permits	Pollutant Type:	<input checked="" type="checkbox"/> Point Source <input checked="" type="checkbox"/> Nonpoint Source <input type="checkbox"/> Legacy Urban Storm Water Runoff Grazing Confined Animal Facilities Boats Onsite Wastewater Treatment Systems
Effective Date:	January 10, 2007 (TMDL)	Pollutant Source:	
Attainment Date:	To Be Determined		

Water Quality Improvement Strategy

The Tomales Bay Watershed is located approximately 30 miles northwest of the City of San Francisco, in western Marin County. In 2007, the [Tomales Bay Pathogen TMDL](#) was approved to address pathogen impairments in Tomales Bay (Bay), and its main tributaries: Lagunitas, Walker, and Olema creeks. The main sources of pathogens (indicated by fecal coliform), were identified as on-site wastewater treatment systems (OWTS), such as septic systems, small wastewater treatment facilities, boat discharges, cattle grazing, dairies, equestrian facilities, and urban storm water runoff. The TMDL is implemented through a strategy for reducing pathogen sources to the Bay and its tributaries. Implementation actions include: discharge prohibitions for OWTS, wastewater treatment facilities, and boats; increased regulation of grazing lands, dairies, and horse facilities through waste discharge requirements; and the regulation of urban storm water runoff through the Statewide Phase II NPDES municipal storm water permit.

Tomales Bay Watershed

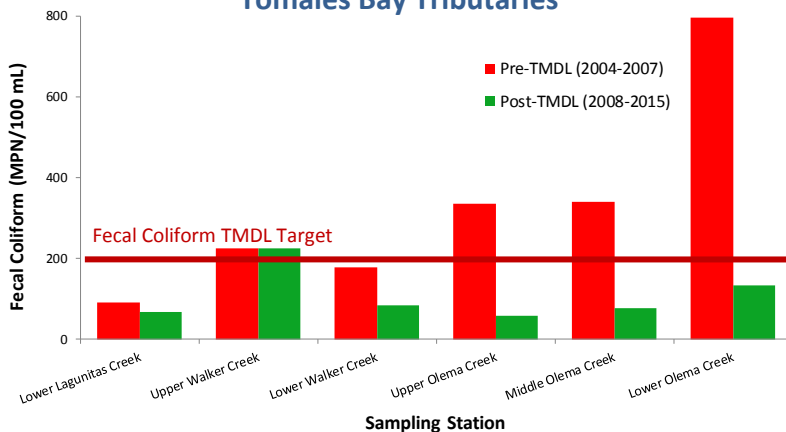


TMDL Numeric Target

Water Body	Fecal Coliform (MPN ^a /100 mL)
Tomales Bay Tributaries	Geometric Mean ^b < 200

- a. Most Probable Number
- b. Based on a minimum of five consecutive samples equally spaced over a 30-day period.

Average Fecal Coliform Concentrations for Tomales Bay Tributaries



Water Quality Outcomes

- Water quality data are collected and reviewed every year to determine the success of TMDL implementation actions and to see if TMDL targets have been achieved.
- Water quality data show a significant reduction in fecal coliform concentrations at most sampling stations.
- Key actions resulting in improved water quality include: implementation of Best Management Practices (BMPs) on grazing lands and at dairies, and construction of a community wastewater treatment system to collect and treat septage from more than 50 individual septic systems.
- Next steps include the modification and enhancement of scheduled implementation actions, the adoption of new and revised permits for confined animal facilities (CAFs) and grazing operations, and the refinement of water quality monitoring.