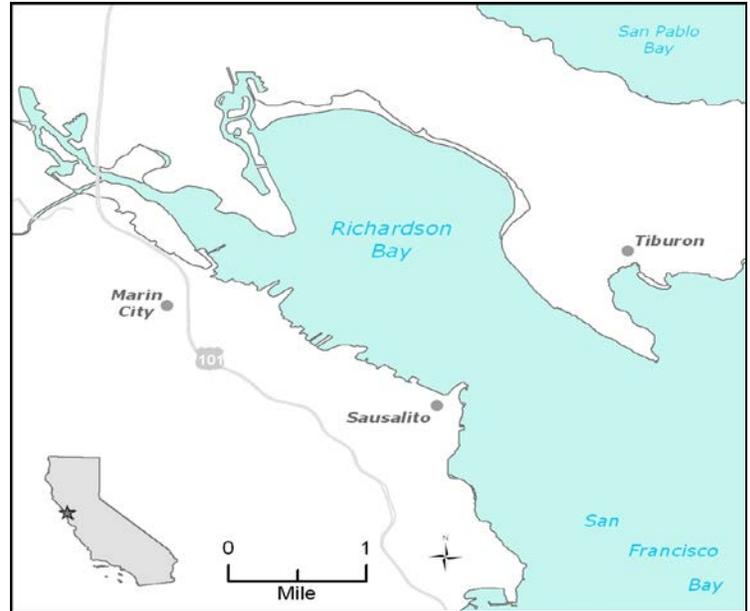


Total Maximum Daily Load Progress Report		Richardson Bay Pathogens TMDL
Regional Water Board	San Francisco Bay, Region 2	<b>STATUS</b> <input type="checkbox"/> Conditions Improving <input checked="" type="checkbox"/> <b>Data Inconclusive</b> <input type="checkbox"/> Improvement Needed <input type="checkbox"/> TMDL Achieved/Waterbody Delisted
Beneficial uses affected	SHELL, REC1, REC2	
Pollutant(s) addressed:	Pathogens (Fecal Coliform)	
Implemented through:	WDRs, Discharge Prohibitions, NPDES	
Approval date:	December 2009	

**TMDL summary:**

[Richardson Bay](#) is impaired by pathogens. We infer the presence of pathogens from high fecal coliform bacteria (pathogen indicator) concentrations. Pathogens pose potential health risks to recreational users and shellfish consumers. The main sources of pathogens to the Bay are sanitary sewer system failures, stormwater runoff, and houseboat and vessel discharges. A TMDL for Richardson Bay and its watershed was completed by the San Francisco Bay Regional Water Board in December 2009. The TMDL is implemented through prohibitions of discharge for houseboats and vessels, waste discharge requirements (WDRs) for Sanitary Sewer Systems, and the Statewide Phase II NPDES stormwater permit. Data does not yet show conclusive improvements in water quality.

**Richardson Bay Watershed**



**TMDL Waste Load Allocations/Load Allocations**

Indicator Bacteria	WLA and LA (WQOs for SHELL)	
	Median <sup>a</sup>	90 <sup>th</sup> Percentile <sup>b</sup>
Fecal Coliform	14 MPN <sup>c</sup> /100 mL	43 MPN/100 mL

a. Based on a minimum of five consecutive samples equally spaced over a 30-day period.  
 b. No more than 10% of total samples during any 30-day period may exceed this number.  
 c. Most probable number.

**Water Quality Outcomes**

- Fecal coliform concentrations, for the most part, have been meeting water quality objectives for REC1.
- Shellfish harvesting water quality objectives are still being exceeded.
- Data may be showing some improvement in water quality; however, a larger dataset (longer monitoring) is needed to assess trends in water quality.
- Additional water quality improvement is needed to meet shellfish water quality objectives

**Richardson Bay Water Quality for Fecal Coliform**

