Total Maximum Daily Load Progress Report		Richardson Bay Pathogens TMDL	
Regional Water Board	San Francisco Bay, Region 2		
Beneficial uses affected:	SHELL, REC1, REC2	STATUS	<ul> <li>□ Conditions Improving</li> <li>☑ Data Inconclusive</li> <li>□ Improvement Needed</li> <li>□ TMDL Achieved/Waterbody Delisted</li> </ul>
Pollutant(s) addressed:	Pathogens (Fecal Coliform)		
Implemented through:	WDRs, Discharge Prohibitions,		
	NPDES Permits		
Approval date:	December 18, 2009		

### **TMDL Summary**

Richardson Bay is impaired by pathogens. The presence of pathogens is indicated by 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. The <a href="Pathogens TMDL">Pathogens TMDL</a> for Richardson Bay and its watershed was completed by the San Francisco Bay Regional Water Board in December 2009.

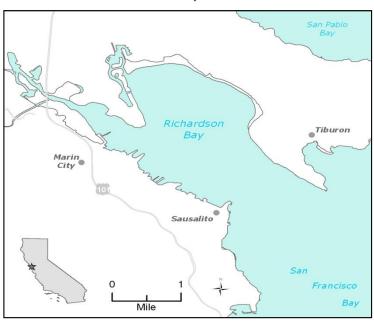
The TMDL is implemented through prohibitions of discharge for houseboats and vessels, waste discharge requirements (WDRs) for sanitary sewer systems, and the Statewide Phase II NPDES stormwater permit. Data does not yet show conclusive improvements in water quality.

#### **TMDL Waste Load Allocations/Load Allocations**

Indicator Bacteria	WLAs and LAs (WQOs for SHELL)		
maleator Bacteria	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	

<sup>&</sup>lt;sup>a</sup> Based on a minimum of five consecutive samples equally spaced over a 30-day period.

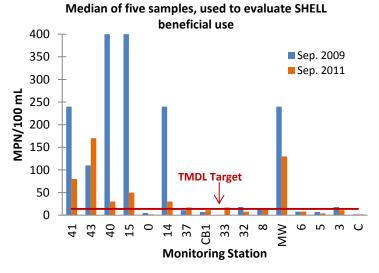
### **Richardson Bay Watershed**

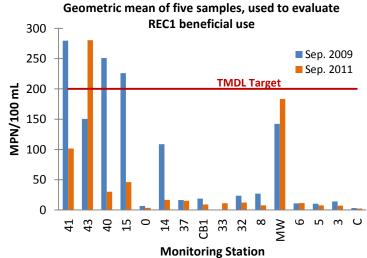


# **Water Quality Outcomes**

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

# **Richardson Bay Water Quality for Fecal Coliform**





<sup>&</sup>lt;sup>b</sup> No more than 10% of total samples during any 30-day period may exceed this number.

 $<sup>^{\</sup>rm c}$  Most probable number.