Water Quality Report Card

Indicator Bacteria in Shelter Island Shoreline Park

Regional Water Board:	San Diego, Region 9
Beneficial Uses Affected:	REC-1, REC-2
Implemented Through:	MS4 Permits
Effective Date:	September 15, 2009
Attainment Date:	December 31, 2012

STATUS	☑ Data Inconclusive
Pollutant Type:	☑ Point Source ☑ Nonpoint Source
Pollutant Source:	Urban Storm Water Runoff Naturally Occurring

Water Quality Improvement Strategy

Shelter Island Shoreline Park (SISP), located within San Diego Bay, has historically exceeded water quality objectives for indicator bacteria (total coliform, fecal coliform, and/or Enterococcus), threatening or impairing the water contact (REC-1) beneficial use of the waterbody. SISP was included in the 2002 Clean Water Act 303(d) List for bacteria impairment. The San Diego Water Board adopted a Total Maximum Daily Load (TMDL) for indicator bacteria in June 2008 which went into effect on September 15, 2009.

The TMDL was calculated through watershed and receiving water modeling using different numeric targets for wet weather (single sample maximum (SSM)) and dry weather (SSM and geometric mean) conditions. The TMDL is implemented through the regional MS4 permit.

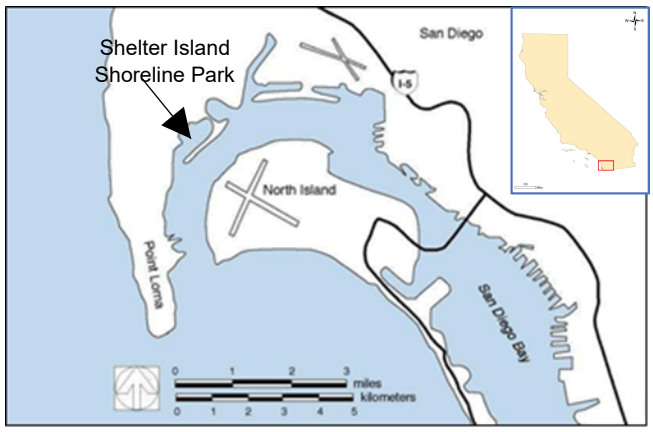
The Port of San Diego (Port) is charged with managing the tidelands area of San Diego Bay and is responsible for TMDL implementation. The Port has developed a SISP bacteria monitoring work plan for assessing water quality conditions. In the event of exceedances, the Port initiates source investigations which includes microbial source tracking to determine the genetic origin of bacteria in receiving waters.

TMDL Numeric Targets

	Total Coliform (MPN*/100 mL)	Fecal Coliform (MPN/100 mL)	Enterococcus (MPN/100 mL)
Dry Season			
30-day geomean	1,000	200	35
SSM	10,000	400	104
Wet Season			
SSM	10,000	400	104

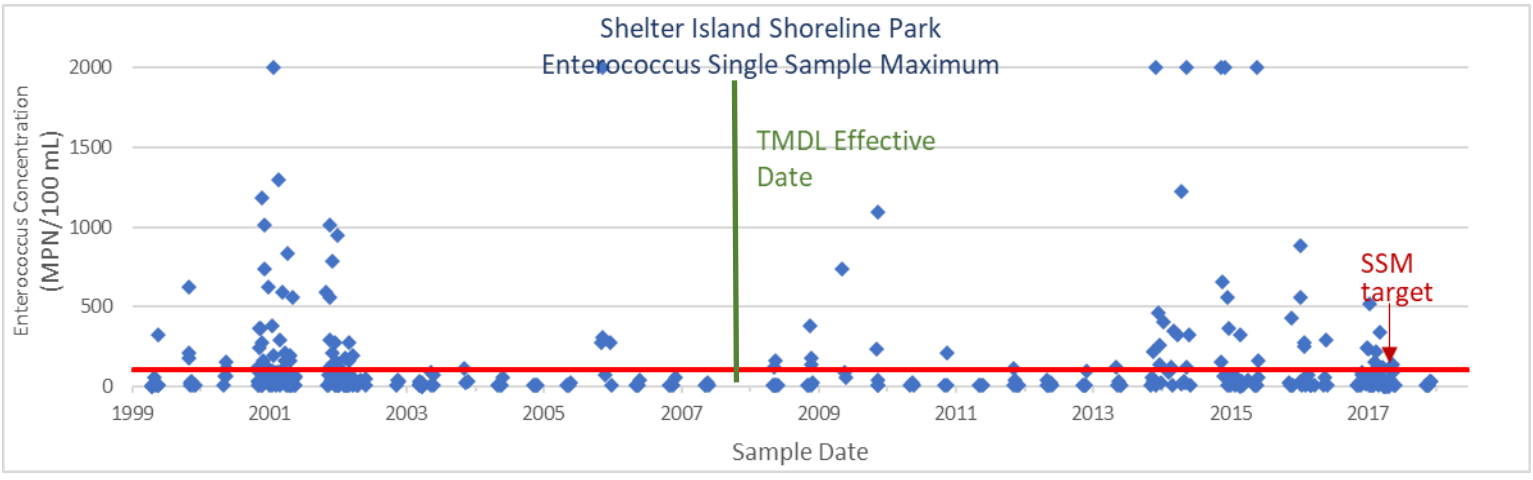
*MPN – most probable number (of bacteria colonies)

Shelter Island Shoreline Park



Water Quality Improvement Projects

- *Both dry and wet season SSM Enterococcus results had exceedance frequencies greater than 10%, indicating the REC-1 beneficial use may not be fully supported.*
- *Dry weather geometric mean had exceedance frequencies of greater than 10% indicating the REC-1 beneficial use may not be fully supported.*
- *Wet season exceedance frequencies are higher than during the dry season.*
- *A source tracking study conducted by the Port of San Diego indicates there may be a correlation between elevated bacteria levels and bird populations. An increase in bird presence may be a result of an increase in litter and bird feeding in the SISP parking lot and beach.*



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