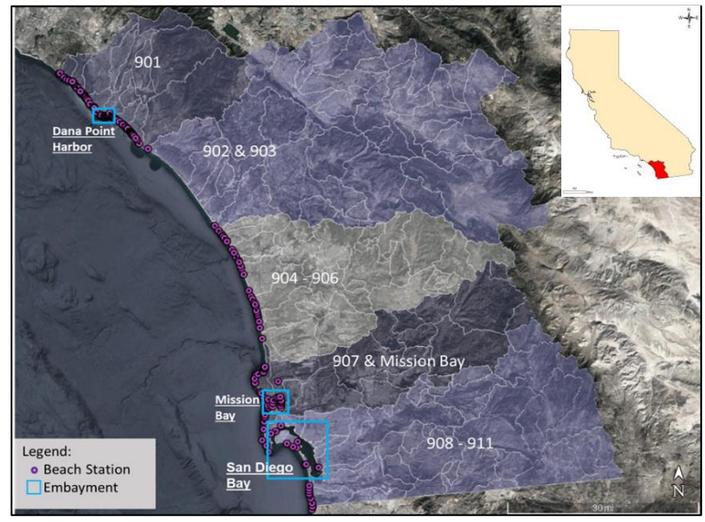
Water Quality Report Card		Indicator Bacteria (Fecal Coliform and Enterococcus) at San Diego Region Beaches		
Regional Water Board:	**San Diego, Region 9**	**STATUS**	☐ Conditions Improving ☑ **Data Inconclusive** ☐ Improvement Needed ☐ Targets Achieved/Water Body Delisted	
Beneficial Uses Affected:	REC-1			
Implemented Through:	MS4 Permit, WDRs, Caltrans	**Pollutant Type:**	☑ Point Source ☑ Nonpoint Source ☐ Legacy	
Effective Date:	April 4, 2011	**Pollutant Source:**	Wastewater Discharges	Homeless Encampments
Attainment Date:	2030		Urban Storm Water Runoff	

Water Quality Improvement Strategy

Many San Diego Region waterbodies and beaches are listed as impaired on the USEPA Clean Water Act section 303(d) List for elevated bacteria levels. Fecal indicator bacteria (Fecal Coliform and Enterococcus) originate from the intestines of warm-blooded animals, and their presence is used as an indicator of human pathogens, which can cause illness. Sources of fecal indicator bacteria in coastal waters include: leaking sewer lines, wildlife, discharges of pet wastes through storm drains, and homeless encampments. The San Diego Water Board adopted TMDLs for Indicator Bacteria, Project I - 20 Beaches and Creeks in the San Diego Region in February, 2010, which established targets to address the various bacteria impairments. The TMDL requires stakeholders to develop bacteria load reduction plans that will reduce non-storm water discharges to the municipal storm water system, thereby reducing bacterial loading to coastal waters. For areas not covered under the TMDL, the Regional Municipal Separate Storm Sewer Systems Permit (MS4) requires implementation of programs to control the contribution of pollutants, including bacteria.

San Diego Region Watershed Map



Map displays watershed management units and beach water quality stations used in data analysis. Data are inclusive of all stations, not just Indicator Bacteria TMDLs locations.

Water Quality

Beach Water Quality by Management Unit (MU)

Evaluation Measure: GM		Summer			Winter			Wet Seasonally		
		PERCENTAGES (%) OF STATIONS								
Management Unit	Total Number of Stations	Fail	NES	Clean	Fail	NES	Clean	Fail	NES	Clean
San Juan (901)	73	10	10	81	16	11	73	18	18	26
Northern (902 & 903)	1			100			100		100	
Central (904 - 906)	46	0	13	87	0	19	80	0	61	39
Mission Bay and San Diego River (907)	24	13	25	63	33	38	29	8	91	0
Southern (908-911)	27	7	15	78	22	18	59	33	59	7

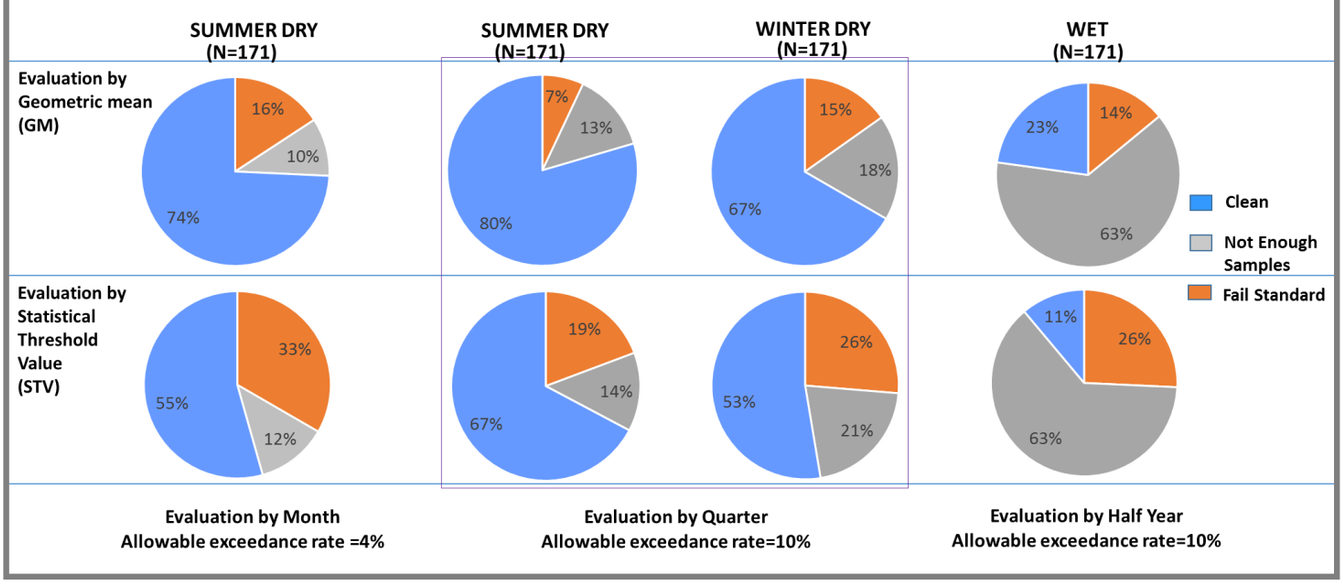
Fail: Fail Standard NES: Not Enough Samples Clean: Meet Standard

Water Quality Outcomes and Planning

- *During dry weather, water quality at most beaches support water contact recreation activities.*
- *During dry weather, stations in the ocean showed better water quality than those in bays and harbors.*
- *Higher percentages of beach stations near flowing drains "failed (to meet) standard" in both dry and wet weather (Figure 2, bottom panel), suggesting negative impacts of surface water runoff on beach water quality.*
- *The percentage of clean stations is greater in the summer than in winter, and in dry weather than in wet weather, suggesting adverse impacts from storm water runoff on beach water quality during/following rain events.*

Figure 1. Five-Year Beach Water Quality Conditions across the San Diego Region (May 2012- April 2017)

Under Dry Weather, Water Quality at Most Beaches Support Water Contact Recreation Activities



Released September 2018