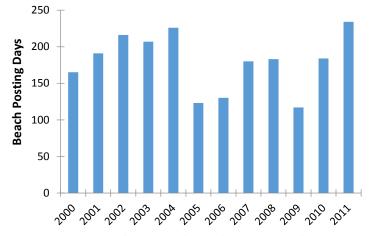
Water Quality Report Card		Bacteria in the Pacific Ocean at Doheny State Beach	
Regional Water Board:	San Diego, Region 9	STATUS	☐ Conditions Improving
Beneficial Uses Affected:	REC-1, REC-2		☐ Data Inconclusive
Implemented Through:	MS4 Permit, WDR		☑ Improvement Needed
Effective Date:	April 4, 2011		☐ Targets Achieved/Waterbody Delisted
Attainment Date:	2030	Pollutant Type	: ☑ Point Source ☑ Nonpoint Source ☐ Legacy

### **Water Quality Improvement Summary**

Doheny State Beach, located in Orange County, is one of California's most popular state beaches. The 2002 303(d) list showed that the most common impairment in San Diego Region waters, which includes Doheny State Beach, was elevated bacteria levels. Fecal bacteria originate from the intestines of warm-blooded animals, and their presence is used as an indicator of human pathogens, which can cause illness. Fecal bacteria in coastal waters are primarily caused by human bacteria leaking sewer lines, as well as wildlife, discharges of pet wastes via storm drains, and homeless encampments along San Juan Creek (that drains to the beach). Because the bacteria impairment was so widespread, Region 9 adopted TMDLs for Indicator Bacteria, Project I - 20 Beaches and Creeks in the San Diego Region, which established targets for indicator bacteria for a number of beaches, including Doheny State Beach. 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.

# **Number of Beach Posting Days Per Year**



Data source: 2011 Annual Ocean, Harbor, and Bay Water Quality Report

## **Doheny State Beach**



### **Water Quality Outcomes**

- Water quality data demonstrate Enterococcus targets are being achieved more frequently. Since 2006, the concentrations and the number of target exceedances have decreased.
- Despite efforts to control non-storm water discharges from storm drains, the number of beach closures per year (due to the presence of indicator bacteria) has not been reduced.
- Recent studies by the <u>Southern California Coastal Research</u>
   <u>Project</u> found that human-associated bacteria were detected at Doheny State Beach at concentrations and frequencies that suggest a significant contribution to the total bacterial load.
- The <u>MS4 Permit</u> has addressed almost all significant pollutant sources. Upcoming repair of leaking sewer lines is expected to address the last pollutant source, and will improve water quality at Doheny State Beach (i.e., reduce indicator bacteria concentrations and number of beach posting days).

### Indicator Bacteria (Enterococcus) Concentrations in the Pacific Ocean at Doheny State Beach (Monitoring Site S2)<sup>a</sup>

