| Water Quality Report Card | | Indicator Bacteria at Orange County Beaches | | |
|------------------------------|---|---|----------------------------------|--|
| Regional Water Board: | San Diego, Region 9 | | ☑ Conditions Improving | |
| Beneficial Uses Affected: | REC-1 | STATUS | | |
| Implemented Through: | MS4 Permits, WDRs, Caltrans | Pollutant Type: | ☑ Point Source ☑ Nonpoint Source | |
| | | | Urban Storm Water Runoff | |
| Effective Date: | April 4, 2011 | Pollutant Source: | | |
| Attainment Date: | 2020 (Dry Weather, May-Sept) 2030 (Wet Weather, Oct-Apr) | | | |

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 Total Maximum Daily Loads (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.

TMDL Numeric Target

| Indicator Bacteria | Numeric Target (SSM) | Allowable Exceedance Frequency | |
|-----------------------|----------------------------|-----------------------------------|---------|
| Fecal Coliform | 400 | Wet: 22% | Dry: 0% |
| Total Coliform | 10,000 | Wet: 22% | Dry: 0% |
| Enterococci | 104 | Wet: 22% | Dry: 0% |



Orange County Beaches

Water Quality Improvement Projects

- Data for all stations evaluated between January 2008 and December 2018 indicate all three locations support the REC-1, water contact, beneficial use.
- At Laguna Beach, approximately 8% of wet weather samples and <1% of dry weather samples exceeded the single sample maximum (SSM). The TMDL allows a 22% exceedance during wet weather; there is no allowable exceedance during dry weather.
- At Aliso County Beach, <1% of dry and wet weather samples exceeded the SSM.
- At San Clemente State Beach, approximately 5% of wet weather samples and <1% of dry weather samples exceeded the SSM

