

| Water Quality Report Card |                            |
|---------------------------|----------------------------|
| Regional Water Board:     | San Diego, Region 9        |
| Beneficial Uses Affected: | REC-1                      |
| Implemented Through:      | MS4 Permit, WDRs, Caltrans |
| Effective Date:           | April 4, 2011              |
| Attainment Date:          | 2030                       |

| Indicator Bacteria (Fecal Coliform and Enterococcus) at San Diego Region Beaches |  |
|--|--|
| STATUS   | <input type="checkbox"/> Conditions Improving  |
|  | <input checked="" type="checkbox"/> <b>Data Inconclusive</b>   |
|  | <input type="checkbox"/> Improvement Needed  |
|  | <input type="checkbox"/> Targets Achieved/Water Body Delisted  |
| Pollutant Type:  | <input checked="" type="checkbox"/> Point Source <input checked="" type="checkbox"/> Nonpoint Source <input type="checkbox"/> Legacy |
| Pollutant Source:  | Wastewater Discharges  |
|  | Urban Storm Water Runoff   |
|  | Homeless Encampments   |

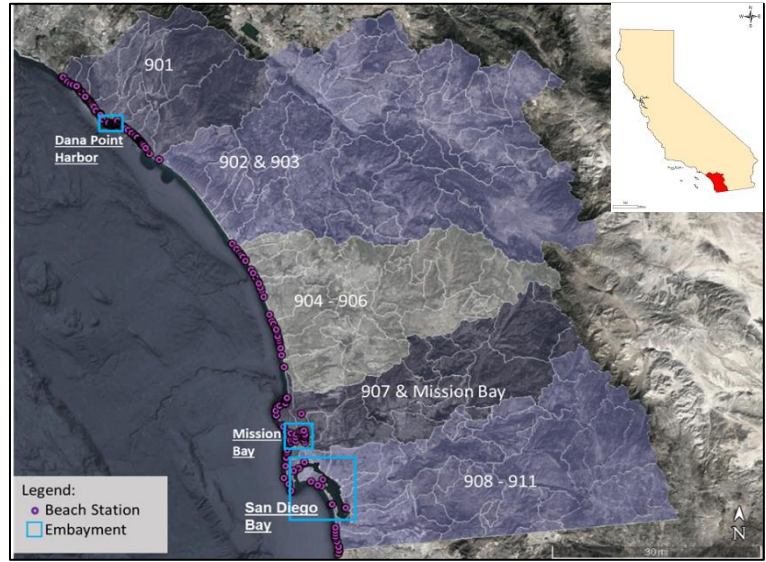
### Water Quality Improvement Strategy

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.

### Water Quality

| Beach Water Quality by Management Unit (MU) |                          |                         |     |       |                      |     |       |                |     |       |  |  |
|---|--------------------------|-------------------------|-----|-------|----------------------|-----|-------|----------------|-----|-------|--|--|
| Evaluation Measure: GM                      | Total Number of Stations | Summer                  |     |       | Winter               |     |       | Wet Seasonally |     |       |  |  |
|   |                          | 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 |     |       |                |     |       |  |  |

### 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 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)

