

# Water Quality Report Card

## Nutrients in Newport Bay and San Diego Creek

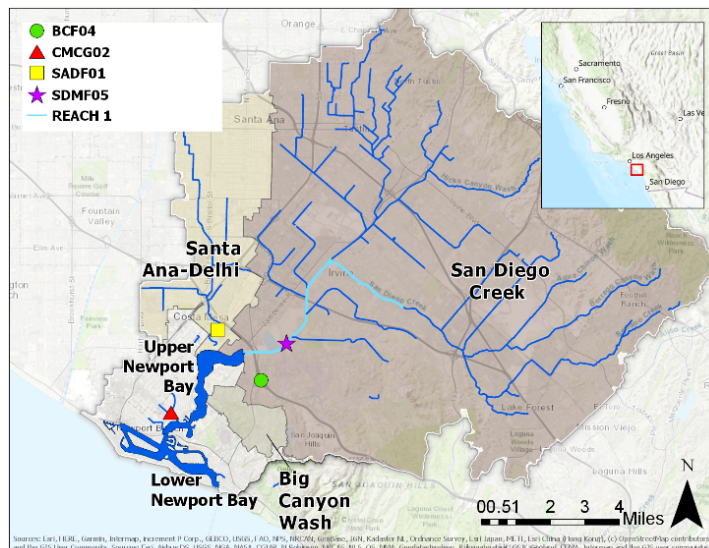
<b>Regional Water Board:</b>	Santa Ana, Region 8
<b>Beneficial Uses Affected:</b>	REC-1, REC-2, WARM, WILD, EST, COMM, RARE, SPWN, MAR, SHEL
<b>Implemented Through:</b>	NPDES permits, WDRs, Nonpoint Source Programs, Cooperative Stakeholder Projects
<b>Effective Date:</b>	April 1999 (TMDL)
<b>Attainment Date:</b>	2012

<b>STATUS</b>	<b>Targets Achieved</b>
<b>Pollutant Type:</b>	Point Source, Nonpoint Source, Legacy
<b>Pollutant Source:</b>	Non-point Source Runoff Urban Stormwater Runoff Irrigated Crop Production Erosion/Siltation

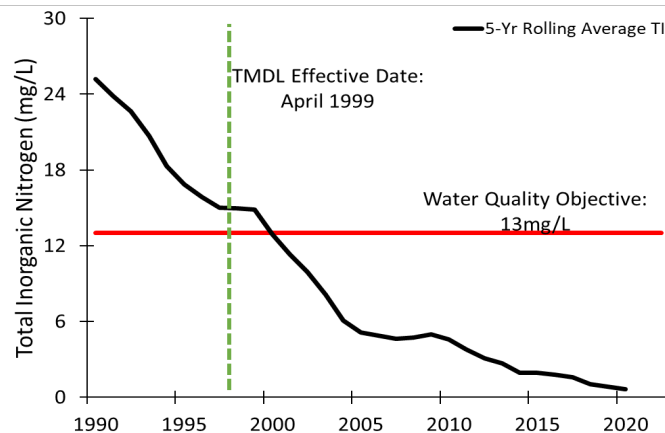
### Watershed Improvement Strategy

San Diego Creek, in Orange County, discharges into Upper Newport Bay where nutrient loading has led to significant algae blooms since the 1980s. Both San Diego Creek and Upper Newport Bay were listed on the Federal Clean Water Act 303(d) list as impaired for nutrients. To address the impairment, a [Nutrient Total Maximum Daily Load \(TMDL\)](#) was developed requiring a 50 percent reduction in nutrient loading (nitrogen and phosphorus) to Newport Bay with the intent of reducing algae biomass. Compared with pre-TMDL annual Total Nitrogen (TN) loads (1,087,000 lbs.), significant reductions have been achieved over time. These reductions are the result of the conversion of irrigated agriculture to urban land use, closure of the remaining commercial nurseries, and development of a regional natural treatment system, most notably the San Joaquin Marsh treatment ponds. Stakeholders continue to monitor San Diego Creek and Upper Newport Bay and report collected data annually.

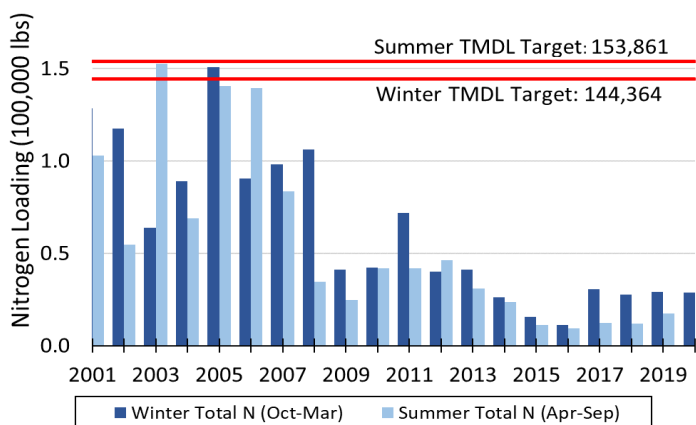
### Newport Bay and San Diego Creek Watershed Map



### Total Inorganic Nitrogen in San Diego Creek Reach 1



### Total Seasonal Nitrogen Loads to Newport Bay



### Water Quality Outcomes

- Nitrogen loads to Newport Bay are below TMDL targets.
- Nitrogen concentrations in Reach 1 of San Diego Creek are below the water quality objective.
- Algae biomass has not been detected at the Upper Newport Bay mudflat monitoring stations since 2012.

### Macroalgae Biomass in Upper Newport Bay

