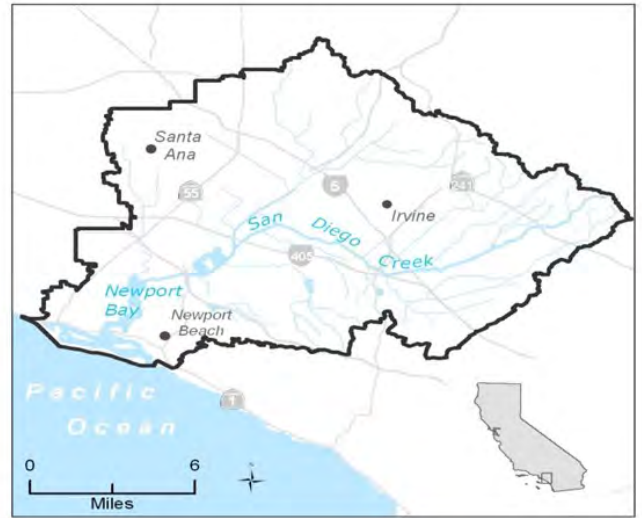


Water Quality Report Card		Nitrogen and Phosphorus in Newport Bay and San Diego Creek	
Regional Water Board:	Santa Ana, Region 8	STATUS	<input checked="" type="checkbox"/> Conditions Improving <input type="checkbox"/> Data Inconclusive <input type="checkbox"/> Improvement Needed <input type="checkbox"/> Targets Achieved/Water Body Delisted
Beneficial Uses Affected:	REC-1, REC-2, WARM, WILD, EST, COMM, RARE, SPWN, MAR, SHEL		
Implemented Through:	NPDES permits, WDRs, Nonpoint Source Programs, Cooperative Stakeholder Projects	Pollutant Type:	<input checked="" type="checkbox"/> Point Source <input checked="" type="checkbox"/> Nonpoint Source <input type="checkbox"/> Legacy
Effective Date:	April 1999 (TMDL)	Pollutant Source:	Irrigated Crop Production      Nonpoint Source Runoff Erosion/Siltation                  Urban Storm Water Runoff
Attainment Date:	To Be Determined		

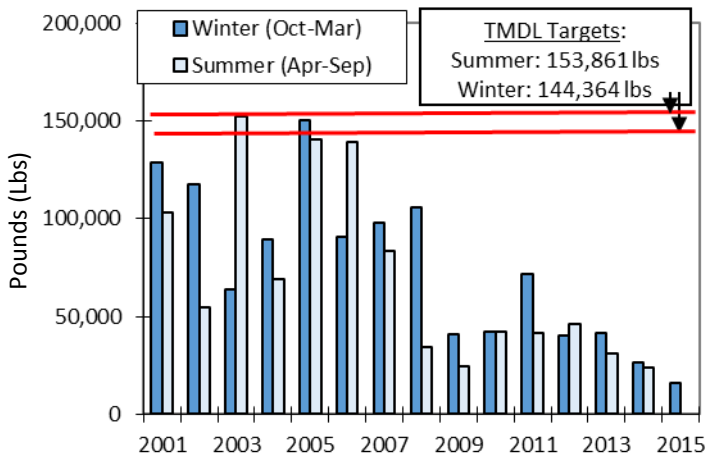
### Water Quality Improvement Strategy

Newport Bay (Bay) and San Diego Creek (SDC) are currently listed on the 303(d) List as impaired for nutrients. To address the nutrient impairment, a [Nutrient TMDL for the Newport Bay/San Diego Creek Watershed](#) was developed and became effective in April 1999. The TMDL requires a 50 percent reduction in nutrient loading (nitrogen and phosphorus) to the Bay, and the re-evaluation of [nitrogen water quality objectives](#) to ensure that they are protective of Bay and SDC beneficial uses. Nutrient loading to the Bay, particularly from the SDC watershed, contributes to seasonal algal blooms. The TMDL is being implemented through waste load allocations to point source dischargers, and cooperative efforts with stakeholders to address nonpoint sources, particularly rising groundwater, which contains elevated nitrate concentrations from historical agricultural land uses. Although the TMDL load targets for discharge to the Bay have been achieved, not all water quality standards in SDC are being met.

### Newport Bay and San Diego Creek Watershed



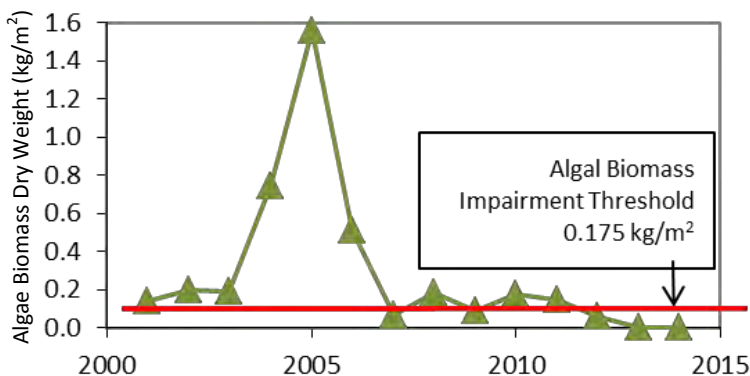
### Total Nitrogen Loads to Newport Bay



### Water Quality Outcomes

- Nitrogen loads to Newport Bay have declined to below TMDL targets.
- Nitrogen concentrations in Reach 1 of San Diego Creek have declined to below the existing water quality objective, but still exceed the Reach 2 water quality objective.
- Phosphorus loads to the Bay are below the TMDL target.
- Algal biomass in Upper Newport Bay has declined significantly. Continued data collection is needed to demonstrate that biomass levels are below levels that indicate impairment (impairment threshold of 0.175 kg/m<sup>2</sup> dry weight)
- Algal biomass in San Diego Creek remains elevated.

### Macroalgae Biomass in Upper Newport Bay



### Total Inorganic Nitrogen Concentrations in San Diego Creek

