

Water Quality Report Card		Nutrients in Loma Alta Slough	
Regional Water Board:	San Diego, Region 9	STATUS	<input type="checkbox"/> Conditions Improving
Beneficial Uses Affected:	REC-1, REC-2, EST, MAR, WILD, RARE		<input type="checkbox"/> Data Inconclusive
Implemented Through:	MS4 Permit		<input checked="" type="checkbox"/> Improvement Needed
Effective Date:	June 2014		<input type="checkbox"/> Targets Achieved/Water Body Delisted
Attainment Date:	2023	Pollutant Type:	<input checked="" type="checkbox"/> Point Source <input type="checkbox"/> Nonpoint Source <input type="checkbox"/> Legacy

Water Quality Improvement Strategy

The Loma Alta Watershed is a small coastal drainage that includes Loma Alta Creek and Loma Alta Slough. Loma Alta Slough is a highly modified coastal estuarine wetland located within the City of Oceanside that empties directly into the Pacific Ocean at Buccaneer Beach. The Slough is listed on the 303(d) list for eutrophic conditions, and the impairment is limited to the summer dry-weather season when excessive algal growth occurs. The Regional Water Board was pursuing the development of a TMDL for the Slough, but in June 2014, the Regional Water Board adopted a [Commitment to an Alternative Process](#) in lieu of a traditional TMDL, which acknowledges the 2013 Regional Municipal Separate Storm Sewer System ([MS4](#)) storm water permit. This alternative process directs the restoration of the Slough through the reduction of urban runoff. The primary sources for nutrients contributing to eutrophic conditions in the Slough have been identified as illicit flows and non-storm water (i.e., excess irrigation water) entering the City's MS4. Phosphorus has been identified as the causative pollutant for eutrophication and assigned a total maximum load of 31.5 grams per month. Additionally, biological indicators have been established as the ultimate measure of environmental health in the Slough. The biological indicators are the amount of algae on and below the surface of the water. Biological indicators provide a reliable and precise measure of ecosystem health in the Slough because organisms integrate conditions over time.

Load Allocations and Numeric Targets

Loma Alta Slough	
Clean Water Act Section 303(d) Listing	Eutrophic Conditions
Causative Pollutant	Phosphorus
Sources	Non-storm water and illicit flows into the MS4
Total Maximum Daily Load	31.5 grams per month of phosphorus
Numeric Targets: Apply during the summer dry season only	<i>Surface Water Macroalgal Biomass:</i> Less than 90 grams dry weight per cubic meter. <i>Surface Water Macroalgal Cover:</i> Less than 50 percent.
Load and Waste Load Allocations for Phosphorus	<i>Load Allocation:</i> 19.7 grams per month <i>Waste Load:</i> 11.8 grams per month <i>Margin of Safety:</i> implicit
Implementation Mechanisms	Implementation of existing effluent-based discharge limitations and prohibitions, including those in the Regional MS4 Permit (Order No. R9-2013-0001).
Estimated Attainment of Numeric Targets and Beneficial Uses	2023

Source of table: [Draft TMDL Report](#)

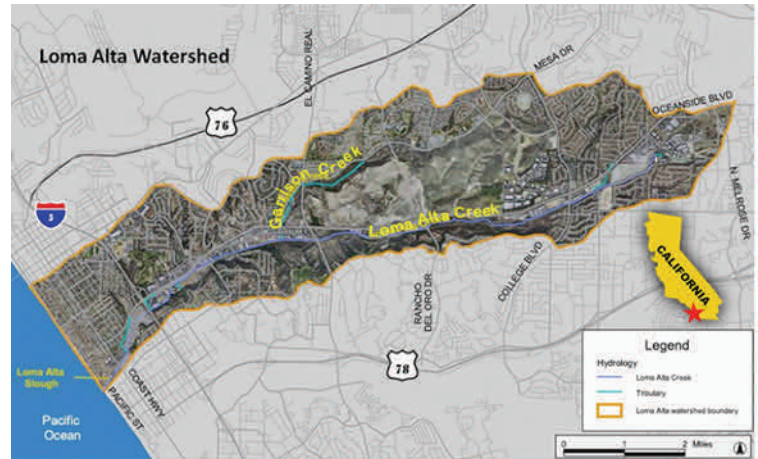
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STATUS

- Conditions Improving
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Pollutant Type: Point Source Nonpoint Source Legacy

Loma Alta Slough Watershed



Water Quality Outcomes

The MS4 Permit requires the municipalities to submit Water Quality Improvement Plans (WQIP) for each of the 11 major watersheds in the San Diego Region. WQIPs require the implementation of pollutant controls and water quality management actions, which will result in the restoration of beneficial uses in water bodies impaired by discharges stemming from the MS4s. Implementation actions to reduce nutrient loading in the Slough will be included in the Carlsbad WQIP, which will be submitted for final approval to the Regional Water Board in late 2015. After approval, annual reporting to the Regional Water Board will commence demonstrating the effectiveness of implementation actions and providing measured progress on the health of Loma Alta Slough.

Loma Alta Slough



JULY 2013

North view of Slough, east of the railroad bridge.

OCTOBER 2013

North view of Slough, east of the railroad bridge.



December 2015