Water Quality Report Card

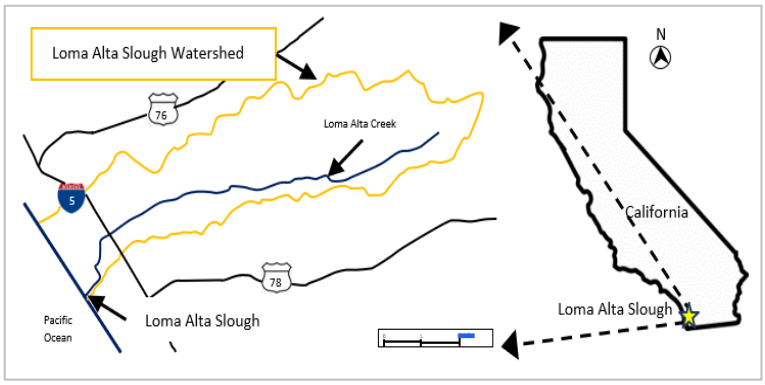
Nutrients in Loma Alta Slough

Regional Water Board:	**San Diego, Region 9**
Beneficial Uses Affected:	**EST, MAR, RARE, REC-1, REC-2, WILD,**
Implemented Through:	**MS4 Storm Water Permit**
Effective Date:	**June 2014**
Attainment Date:	**2023**
STATUS	Improvement Needed
Pollutant Type:	Point Source
Pollutant Source:	Non-storm water Illicit flows into the MS4

Water Quality Improvement Strategy

Loma Alta Slough (Slough) is a 3-acre coastal estuarine wetland located in a small coastal drainage in Oceanside CA. The Slough is on the USEPA Clean Water Act 303(d) list as impaired for eutrophic conditions caused by excessive nutrients. The impairment is limited to the warmer dry-weather season when excessive algal growth occurs. The primary sources of nutrients are identified as excessive irrigation water entering Oceanside's Municipal Separate Storm Sewer System (MS4). Phosphorus has been identified as the primary cause of the eutrophication. The San Diego Water Quality Control Board adopted a Commitment to an Alternative Process instead of a traditional TMDL in June 2014. Annual permit reporting requirements under the Regional MS4 storm water permit are used to document progress to meet targets, reduce loads and restore the Slough. Phosphorus has been assigned a total maximum load of 31.5 grams per month. The load allocation is 19.7 grams per month, and the waste load allocation is 11.8 grams per month of phosphorus. The City of Oceanside must reduce phosphorus loads and restore the Slough by 2023. Additionally, biological indicators were set as targets to measure the Slough's condition. The biological indicators are the dry weight and percent coverage of algae biomass on and below the water surface.

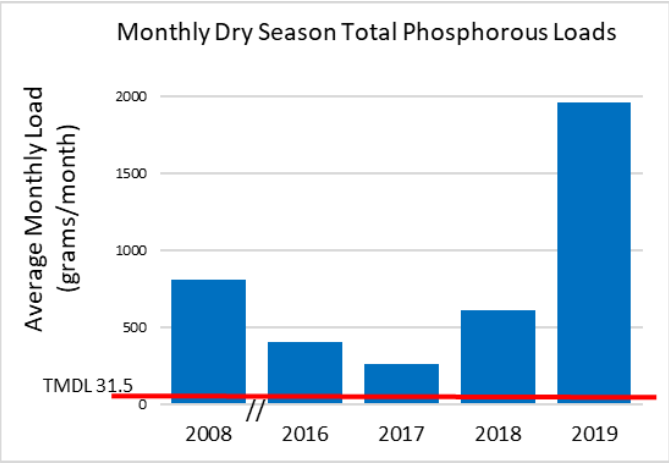
Loma Alta Slough Watershed Map



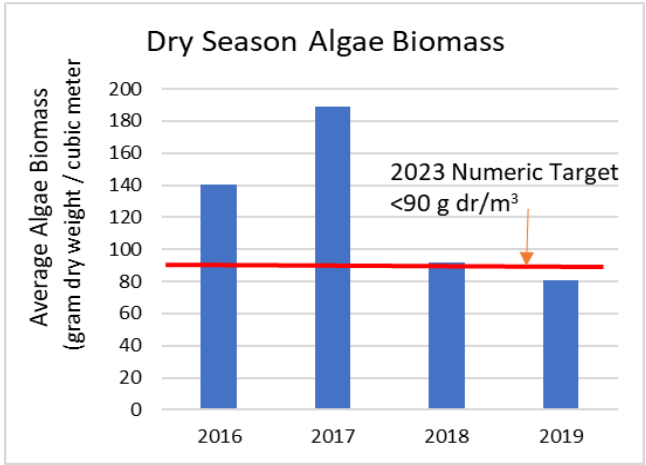
Water Quality Outcomes

- *Phosphorus loading is increasing rather than decreasing towards the 2023 target.*
- *Algal biomass results approached final targets in 2018 and 2019.*
- *Continued monitoring is necessary to evaluate effects of increasing phosphorus on biomass targets under varying inflow conditions.*
- *The City of Oceanside will need to continue implementing the MS4 illicit discharge detection and elimination program to reduce discharges.*
- *The City of Oceanside needs to continue monitoring and evaluate adaptive management strategies for reducing phosphorus loading.*

TMDL Waste Load Allocations/Load Allocations



Water Quality



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