

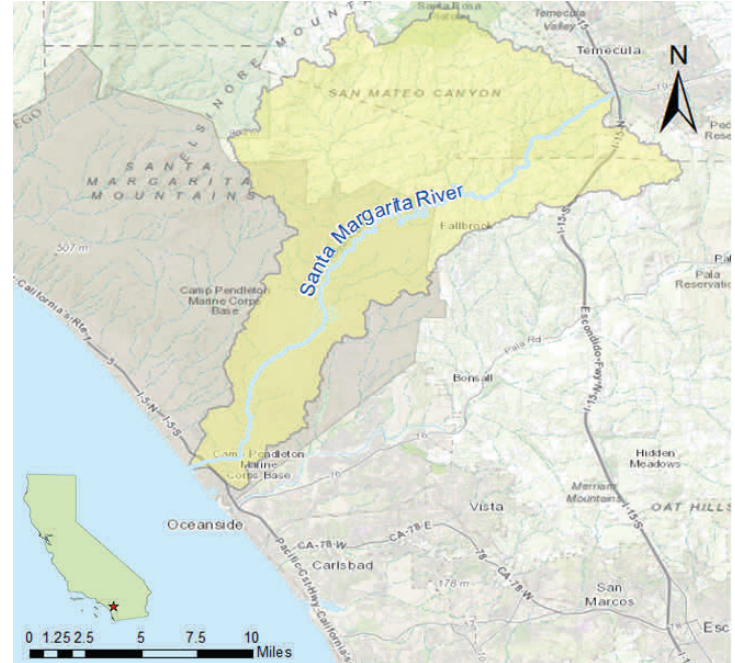
Water Quality Report Card	
Regional Water Board:	San Diego, Region 9
Beneficial Uses Affected:	EST
Implemented Through:	Early Actions; TMDL/Alternative Actions
Effective Date:	Pending
Attainment Date:	TBD

Nutrients in Santa Margarita River Estuary	
STATUS	<input type="checkbox"/> Conditions Improving
	<input type="checkbox"/> Data Inconclusive
	<input checked="" 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

Water Quality Improvement Strategy

The Santa Margarita River Watershed is located in both San Diego and Riverside counties, and drains to the Pacific Ocean just north of the City of Oceanside. The San Diego Regional Water Board is working collaboratively with stakeholders in the watershed to complete special studies to identify implementation plans to address impaired water bodies, and select the most appropriate regulatory tool(s) to restore beneficial uses. Although this is a watershed-wide effort, the initial focus is on the Santa Margarita River Estuary. The Santa Margarita River Estuary was placed on the 303(d) list in 1986 for eutrophic conditions. Eutrophic conditions cause dissolved oxygen (DO) concentrations to fall below 5 mg/l, making it difficult for the Estuary to support healthy aquatic life (see the graph below). The eutrophic condition of the Estuary is the result of excess nutrient inputs. Nutrients (nitrogen and phosphorus) discharged into the Estuary from the surrounding watershed stimulate excessive algal growth, which are causing overabundant algal growth, and the algal life cycle to consume more oxygen than it produces. Two sources of nutrients to the Estuary, treated sewage and groundwater dewatering from a transit project, have been eliminated. Until a TMDL is adopted, reducing eutrophication in the Estuary will focus on early actions (using existing regulatory authority to address nutrient sources), and selecting the most appropriate regulatory tools to address the remaining upland sources of nutrients, which are primarily urban and agricultural runoff.

Santa Margarita River Watershed

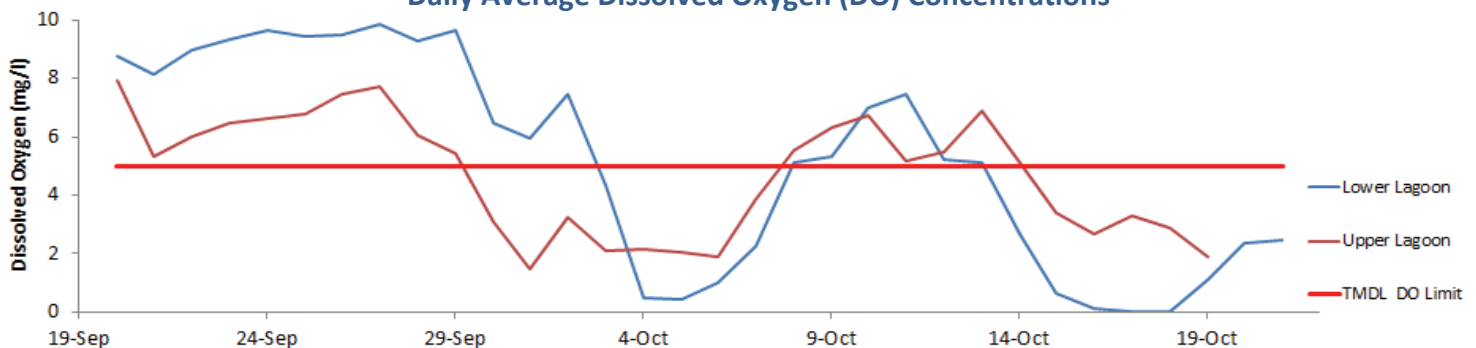


Water Quality Outcomes

- Conducting special studies to determine the loading of nutrients to the Santa Margarita River Estuary via groundwater, and to assess its current condition now that discharges from the transit project have ceased.
- Completing the development of watershed and Estuary models to identify TMDLs and management strategies, and to select the most appropriate regulatory actions.
- The San Diego Regional Water Board is working with stakeholders in the watershed to take early actions that address nutrient sources as they are identified using existing regulatory authority (i.e., Regional MS4 Permit and General Agricultural Order).
- The status of the TMDL for the watershed can be viewed by visiting the [San Diego Region TMDL website](#)



Daily Average Dissolved Oxygen (DO) Concentrations



Santa Margarita Lagoon Water Quality Monitoring Data, prepared by SPAWAR Systems Center, San Diego. Data collected between Sep. 20 and Oct. 21, 2010, a critical season for algal growth and eutrophic conditions. The Lower and Upper Lagoon monitoring locations are at the Railroad and Stuart Mesa Bridges, respectively.