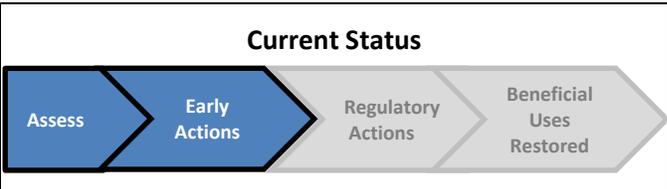


Santa Margarita River Estuary Nutrient TMDL

Beneficial Uses Affected		Estuarine Habitat
Pollutants		Nitrogen and phosphorus
Sources	Current Discharges	Urban and agricultural
	Historic Discharges	Sewage treatment plant and groundwater dewatering.
Implementation		To be determined
Next Milestone		June 2015: Completion of modeling effort, calculation of TMDL, and preparation of TMDL Report.

SUMMARY: The San Diego Water Board is working collaboratively with the Santa Margarita River Nutrient Initiative Stakeholder Group to conduct special studies to determine TMDLs and implementation plans for the affected water bodies and identify the most appropriate regulatory tool(s) to restore the 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 occur when insufficient amounts of dissolved oxygen (<5 mg/l) are available to support healthy aquatic life (see graph below).

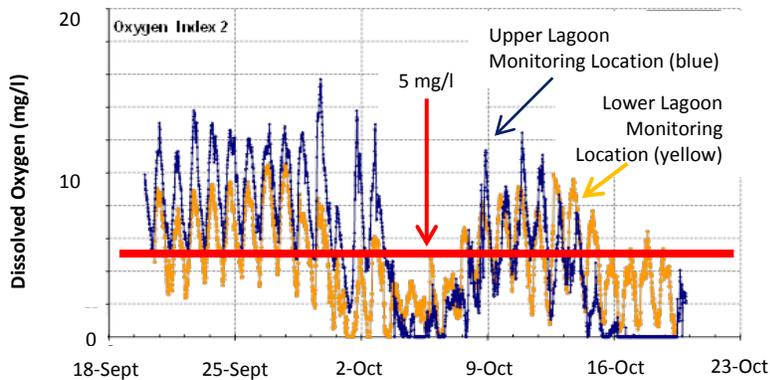


1. Conducting special studies to determine loading of nutrients to Santa Margarita River Estuary via groundwater, and estuary monitoring to determine its current condition.
2. Developing watershed and estuary model to determine TMDL, management strategy, and selection of appropriate regulatory action.
3. Working with Stakeholders to take "early actions" by addressing sources as they are identified using existing regulatory authority.



The eutrophic condition is the result of excessive algal growth, whose life cycle uses more oxygen than it produces. The excessive algal growth results from nutrients delivered to the Estuary from the watershed and current and former direct discharges to the Estuary.

Two sources of nutrients to the Estuary (discharges from a sewage treatment plant and a transit-project's groundwater dewatering) have been eliminated. The focus is now to begin early actions and to select the most appropriate regulatory action for addressing the remaining upland sources of nutrients, urban runoff and agricultural runoff.



Source: Santa Margarita Lagoon Water Quality Monitoring Data, prepared by SPAWAR Systems Center San Diego, dated May 2012.

Data collected between September 20 and October 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.