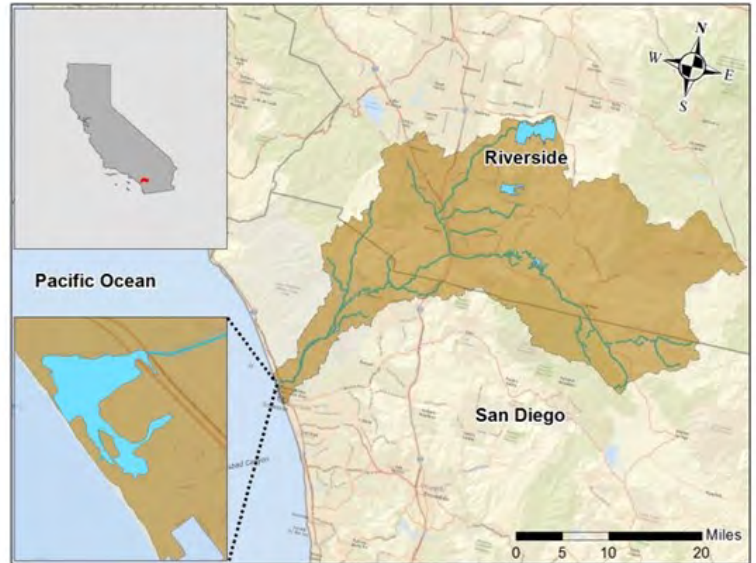


Water Quality Report Card		Nutrients in the Santa Margarita River Estuary	
Regional Water Board:	San Diego, Region 9	STATUS	<input type="checkbox"/> Conditions Improving <input type="checkbox"/> Data Inconclusive <input checked="" type="checkbox"/> Improvement Needed <input type="checkbox"/> Targets Achieved/Water Body Delisted
Beneficial Uses Affected:	EST, MAR, RARE, REC-1, REC-2, SPWN, WILD		Pollutant Type:
Implemented Through:	Existing Regulatory Authority, Permits	Pollutant Source:	Nonpoint Source Runoff
Effective Date:	N/A		Urban Storm Water Runoff
Attainment Date:	To Be Determined		

Water Quality Improvement Strategy

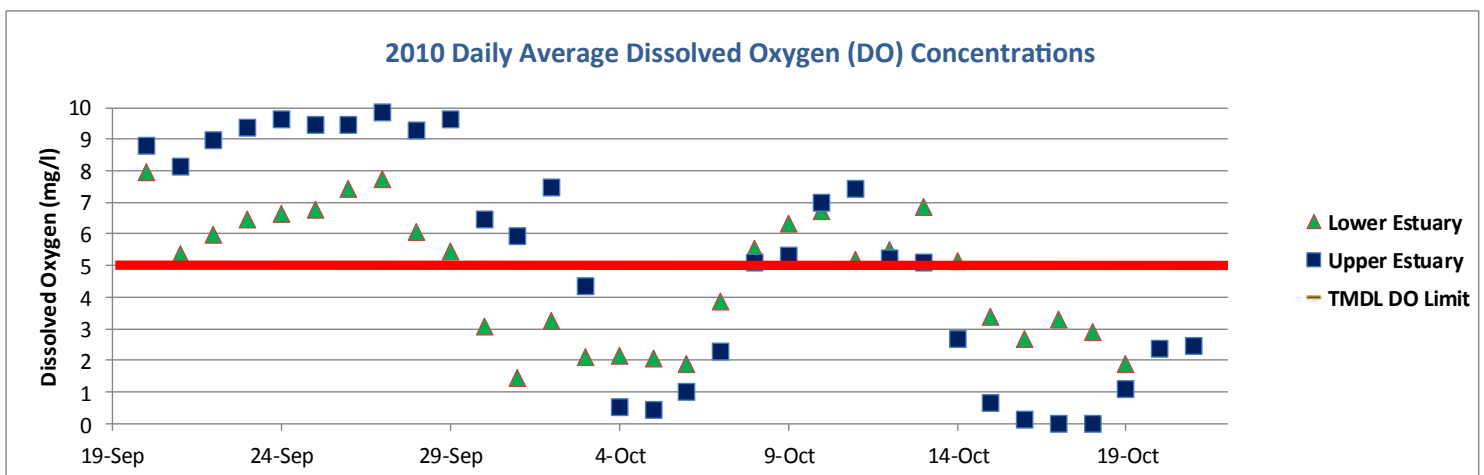
The 750-square mile Santa Margarita River Watershed (Watershed) is located in both San Diego and Riverside counties, and drains into the Pacific Ocean just north of the City of Oceanside at the Santa Margarita River Estuary (Estuary). The Estuary was placed on the 303(d) List in 1986 for eutrophic conditions. Eutrophic conditions are caused by excessive nutrient loading, which leads to excessive growth and decomposition of algae, and low dissolved oxygen conditions. When dissolved oxygen decreases to low concentrations, it becomes difficult for the Estuary to support healthy aquatic life. Two sources of nutrients to the Estuary, treated sewage and groundwater dewatering from a transit project, have been eliminated. The Regional Water Board is working actively with stakeholders [to identify the most appropriate regulatory tools](#) to address the remaining sources of nutrients (primarily urban and agriculture runoff) to restore the Estuary. This restoration approach will use existing regulatory authority (Regional Storm Water (MS4) Permit, Caltrans Permit, Phase II MS4 Permit, and the proposed General Agricultural Order). Proposed restoration actions include: development and implementation of macroalgal biomass and dissolved oxygen numeric targets for the Estuary, adoption of Water Quality Improvement Plans; monitoring the effectiveness of best management practices (BMPs) and management practices (MPs); monitoring; and adaptive management. Restoration efforts are funded by Proposition 84* funds, federal funds, and stakeholder financial contributions.

Santa Margarita River Estuary Watershed



Water Quality Outcomes

- The goal of this restoration approach is to reduce nutrient loading to the Estuary so that it fully supports its designated beneficial uses.
- The Regional Water Board is in the process of selecting numeric target values for dissolved oxygen (DO) and macroalgae and determining allowable loads using the nutrient numeric endpoint (NNE) approach. The NNE approach employs ecological indicators rather than nutrient concentrations to evaluate the risk to beneficial uses from eutrophication.
- Daily average DO concentrations in 2010 show data falling below the TMDL limit of 5.0 mg/L over 40 percent of the time.



Data Source: Santa Margarita Estuary Water Quality Monitoring Data, collected by SPAWAR Systems Center, San Diego.

*Proposition 84: The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006