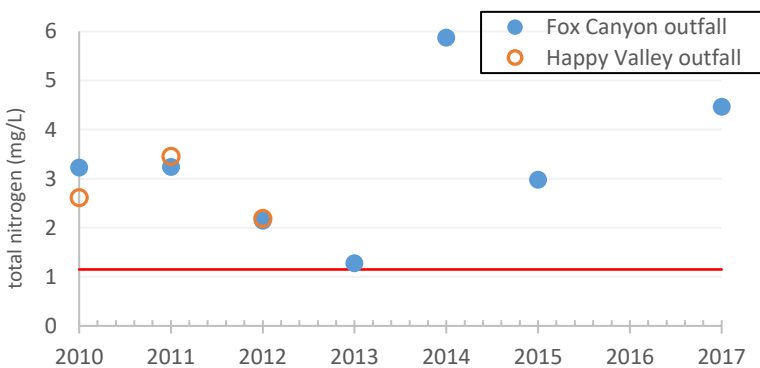


Water Quality Report Card		Algae in the Ventura River							
Regional Water Board:	Los Angeles, Region 4	STATUS	<input type="checkbox"/> Conditions Improving						
Beneficial Uses Affected:	REC-1, REC-2, WARM, COLD, EST, WILD, RARE, MIGR, SPWN, WET, MUN		<input type="checkbox"/> Data Inconclusive						
Implemented Through:	NDPES Permits, MS4 Permits, Conditional Waivers		<input checked="" type="checkbox"/> Improvement Needed						
Effective Date:	June 28, 2013	<input type="checkbox"/> Targets Achieved/Water Body Delisted							
Attainment Date:	2023	Pollutant Type:	<input checked="" type="checkbox"/> Point Source <input checked="" type="checkbox"/> Nonpoint Source <input type="checkbox"/> Legacy						
		Pollutant Source:	<table border="1"> <tr> <td>Urban Storm Water Runoff</td> <td>Irrigated Crop Production</td> </tr> <tr> <td>Onsite Wastewater Treatment Systems</td> <td>Wastewater Discharges</td> </tr> <tr> <td>Horses and Livestock</td> <td>Non-Point Source Runoff</td> </tr> </table>	Urban Storm Water Runoff	Irrigated Crop Production	Onsite Wastewater Treatment Systems	Wastewater Discharges	Horses and Livestock	Non-Point Source Runoff
Urban Storm Water Runoff	Irrigated Crop Production								
Onsite Wastewater Treatment Systems	Wastewater Discharges								
Horses and Livestock	Non-Point Source Runoff								

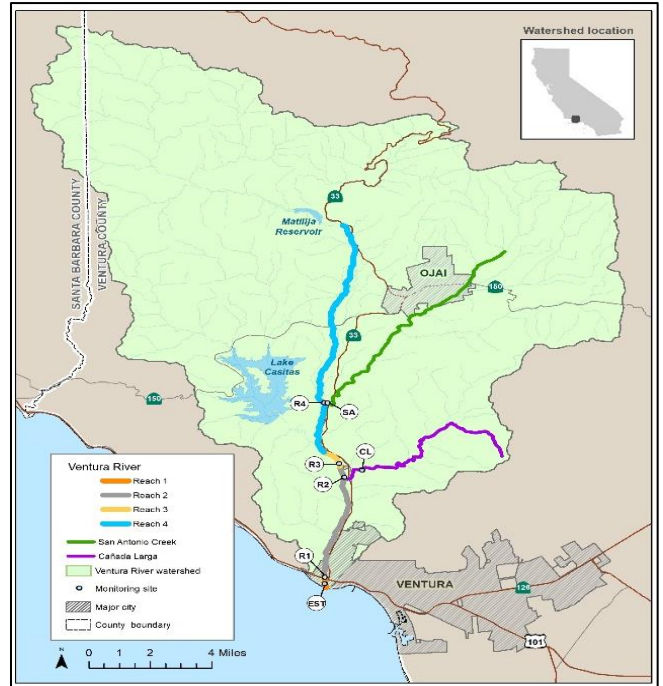
Water Quality Improvement Strategy

The Ventura River watershed is in Ventura and Santa Barbara Counties in Southern California. The Ventura River, including its estuary and tributaries, is impaired due to algae, eutrophic conditions, low dissolved oxygen, and elevated nitrogen. The primary sources of these impairments are nutrients discharged from the municipal separate storm sewer system (MS4), agriculture operations, livestock facilities, onsite wastewater treatment systems (OWTS), and the Ojai Valley Waste Water Treatment Plant (WWTP). In 2013, USEPA approved the [TMDL for Algae, Eutrophic Conditions, and Nutrients in the Ventura River and Its Tributaries](#) to restore water quality. The TMDL includes numeric targets for algal biomass, dissolved oxygen, and pH, and load allocations (LAs) and waste load allocations (WLAs) for total nitrogen and total phosphorus. The TMDL assigns more stringent nitrogen and phosphorus allocations for dry weather than wet weather because dry weather (May 1 to September 30) is the growing season. The TMDL allows the Ojai WWTP 12 years, MS4 permittees six years, agriculture operations six years, livestock facilities 10 years, and OWTS 10 years to attain allocations. The Ojai WWTP intends to attain WLAs by upgrading its nutrient removal processes. Agriculture operations will implement iterative management practices to control nutrients in their discharges. The MS4 permittees' compliance approach is to eliminate dry-weather discharges by implementing best management practices (BMPs). Horse facilities will implement manure management plans. Individual responsible parties are monitoring their discharges to demonstrate compliance with allocations and multiple responsible parties are jointly monitoring algal biomass, nutrients, and other constituents in receiving waters to assess watershed-wide conditions. The Board intends to adopt a Conditional Waiver for horse facilities in FY 18-19. Agriculture operations will implement nutrient management plans as required by the Conditional Waiver.

Comparison of MS4 Effluent to Dry Weather WLA (Blank Total Nitrogen Values Are Due to Zero Flow and Represent WLA Attainment)



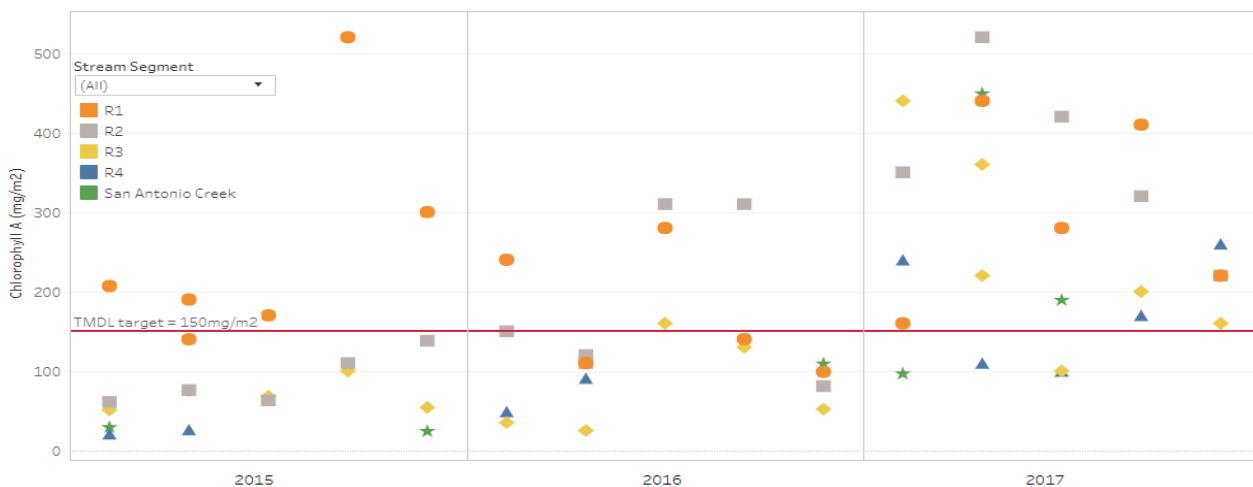
Ventura River Watershed



Water Quality Outcomes

- Monitoring data show that algal biomass continues to exceed the numeric target. Total nitrogen in MS4 outfalls exceeds the WLA when there is sufficient flow to sample. However, no flow and no sample in the outfalls amounts to WLA attainment.
- WLAs have not been incorporated into the MS4 permits, but permittees are implementing BMPs, including a bioswale at the Happy Valley outfall in Reach 4, which has reduced dry-weather flow.
- The Ojai WWTP is on schedule to implement the nitrogen removal upgrades required by its permit to attain the WLAs. Ventura County is studying which OWTS will be upgraded to advanced treatment. The agriculture LAs are incorporated into a Conditional Waiver.
- The TMDL is still in the early stages of implementation. The multiple sources, complex interaction between groundwater and surface water, and variable flow make this a complicated TMDL.
- Responsible parties will continue implementation actions.

Algal Biomass in Ventura River Watershed (Dry Weather)



click on graph to access data)