

# Water Quality Report Card

## Toxaphene in Santa Clara River

<b>Regional Water Board:</b>	<b>Los Angeles, Region 4</b>
<b>Beneficial Uses Affected:</b>	NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN, WET
<b>Implemented Through:</b>	NPDES Permits, Conditional Waiver of WDRs
<b>Effective Date:</b>	September 21, 2011
<b>Attainment Date:</b>	October 7, 2025

<b>STATUS</b>	<input checked="" type="checkbox"/> <b>Improvement Needed</b>
<b>Pollutant Type:</b>	<input checked="" type="checkbox"/> Point Source <input checked="" type="checkbox"/> Nonpoint Source
<b>Pollutant Source:</b>	Wastewater Discharges Irrigated Crop Production Non-Point Source Runoff Urban Storm Water Runoff

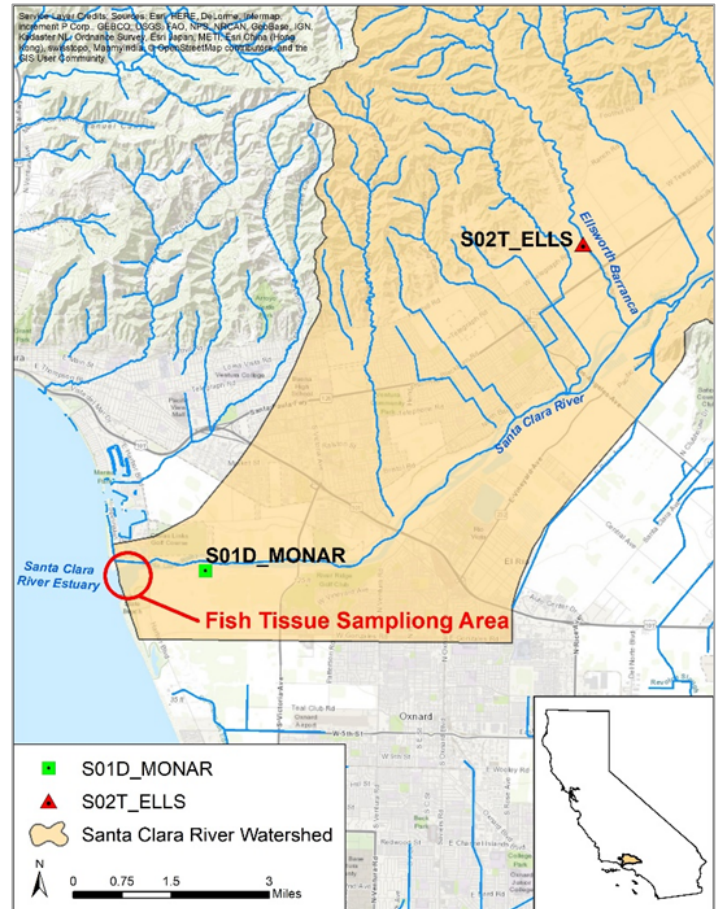
### Water Quality Improvement Strategy

The Santa Clara River (SCR) Estuary is designated a Natural Reserve within McGrath State Beach in Ventura County. It lies between the cities of Ventura and Oxnard. The exposure of SCR Estuary to chemical group A (Chem A) and toxaphene has impaired the beneficial uses of the Estuary. Chem A is a suite of bio-accumulating pesticides that includes aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, endosulfan hexachlorocyclohexane (including lindane), and toxaphene. Only toxaphene has been recently detected in fish tissue at levels that exceed the Fish Contaminant Goal of 6.1 ppb developed by the Office of Environmental Health Hazard Assessment, although its use and manufacture in the United States was banned in 1990. In 2010, the Los Angeles Regional Water Board adopted the [Santa Clara River Estuary Toxaphene Total Maximum Daily Load \(TMDL\)](#) as a single regulatory action implemented through the Conditional Waiver of Waste Discharge Requirements (WDRs) for Discharges from Irrigated Lands (Conditional Waiver). The TMDL assigns load allocations (LAs) to the agricultural dischargers as numeric targets for suspended sediment and fish tissue. The LAs will be implemented through the Conditional Waiver to ensure that LAs and targets are attained. The LA for toxaphene in fish tissue is 6.1 ug/kg, and in suspended sediment is 0.1 ug/kg. LAs must be met by October 7, 2025.

### TMDL Load Allocations and Results

The 2010 and 2016 Conditional Waivers incorporated toxaphene LAs for suspended sediment and fish tissue as water quality benchmarks for the Santa Clara River Estuary and contained monitoring requirements. Two monitoring sites were selected to meet the sediment TMDL requirements, an upstream site on Ellsworth Barranca waterbody (S02T\_ELLS), and a downstream site on an agricultural drain that discharges to the Santa Clara River Estuary (S01D\_MONAR). During the sampling period from January 2012 to March 2018, the suspended sediment LA for toxaphene was exceeded twice at site S01D\_MONAR on January 2017 (25.7 ug/kg) and March 2018 (640 ug/kg). The remaining suspended sediment toxaphene samples were non-detect. During three fish sampling events (2012, 2015, 2018) in the estuary, the fish tissue LA for toxaphene was exceeded once, on May 26, 2015.

### Santa Clara Estuary Area Map



### Water Quality Outcomes

- The Ventura County Agricultural Irrigated Lands Group began monitoring in 2012 and submitted their Annual Monitoring Report in compliance with the TMDL.
- Water quality data in the Ellsworth Barranca waterbody near Telegraph Rd indicates that the water quality target for suspended sediment is being met for toxaphene.
- Water quality data show that agriculture discharges to the Santa Clara River Estuary continue to exceed the TMDL targets for suspended sediment and fish tissue.