

Water Quality Report Card

Regional Water Board:	Central Coast, Region 3
Beneficial Uses Affected:	COLD, WARM, EST, WILD, RARE, MIGR, SPWN, COMM, SHELL
Implemented Through:	Conditional Waiver of WDRs
Effective Date:	October 29, 2014 (TMDL)
Attainment Date:	October 2016

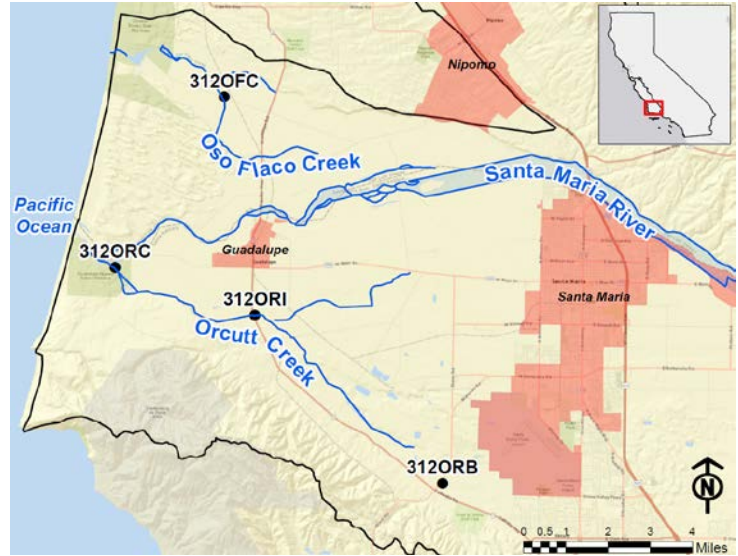
Chlorpyrifos and Diazinon in the Santa Maria River Watershed

STATUS	<input checked="" type="checkbox"/> Conditions Improving
	<input type="checkbox"/> Data Inconclusive
	<input type="checkbox"/> Improvement Needed
Pollutant Type:	<input type="checkbox"/> Point Source <input checked="" type="checkbox"/> Nonpoint Source <input type="checkbox"/> Legacy
	Irrigated Crop Production
Pollutant Source:	Erosion/Siltation

Water Quality Improvement Strategy

The Santa Maria River Watershed encompasses approximately 1.2 million acres along the border of Santa Barbara and San Luis Obispo counties. Multiple surface waters within the lower watershed are polluted with pesticides at levels that exceed water quality objectives and that are toxic to aquatic invertebrate organisms. The pollutants addressed in this report card are the organophosphate (OP) pesticides, chlorpyrifos and diazinon. Discharges from irrigated agriculture were identified as the primary source of these and other pesticides within the watershed. To address the impairments, the [Santa Maria River Watershed Toxicity and Pesticides TMDL](#) was developed. The TMDL establishes numeric targets and load allocations for a variety of pesticides in the watershed, including chlorpyrifos and diazinon. The TMDL is implemented through the Regional Water Board's [2012 Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands](#) (Agricultural Order), and the accompanying [Monitoring and Reporting Program](#). The TMDL implementation schedule calls for achieving numeric targets for chlorpyrifos and diazinon by October 2016.

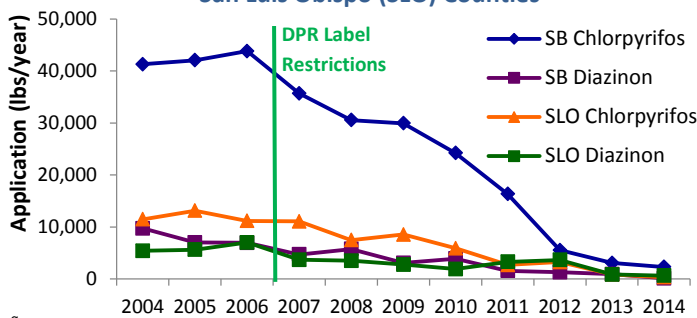
Santa Maria River Watershed



Water Quality Outcomes

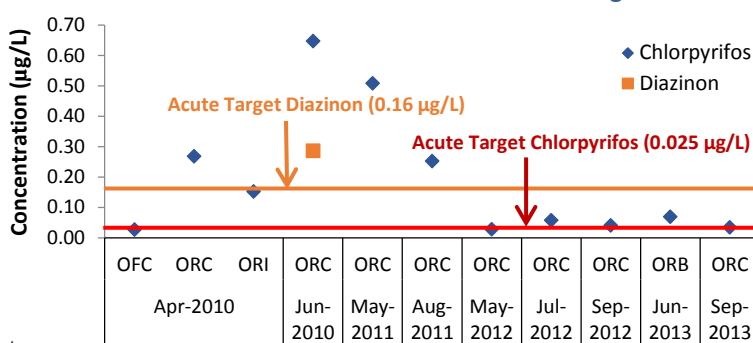
- Significant reductions in chlorpyrifos and diazinon application use have been observed in Santa Barbara and San Luis Obispo counties since 2008.
- A general decrease in water column concentrations of chlorpyrifos and diazinon (at some monitoring sites) has been observed since various pesticide restrictions, based on [reevaluations of pesticide products](#), by the CA Department of Pesticide Regulation became effective.
- Water quality data show exceedances of numeric targets and toxicity at multiple sampling locations.
- Possible switch in types of OP pesticides being used (e.g., malathion) could also be contributing to toxicity.
- The Regional Water Board will continue the oversight of Agricultural Order implementation and monitoring efforts in the Santa Maria River Watershed.

Pesticide Use in Santa Barbara (SB) and San Luis Obispo (SLO) Counties^a



^aData source: CA Department of Pesticide Regulation Pesticide Use Reports 2004-2014

Exceedances in Chlorpyrifos and Diazinon Concentrations at Four Santa Maria River Watershed Monitoring Sites^b



^bData source: CA Department of Pesticide Regulation Surface Water Database (SURF)

Malathion Concentrations at Three Santa Maria River Watershed Monitoring Sites^b

