

Water Quality Report Card		Pesticides in Sacramento County Urban Creeks	
Regional Water Board:	Central Valley, Region 5	STATUS	<input checked="" type="checkbox"/> Conditions Improving
Beneficial Uses Affected:	WARM, COLD		<input type="checkbox"/> Data Inconclusive
Implemented Through:	Sacramento MS4 Storm Water Permit		<input type="checkbox"/> Improvement Needed
Effective Date:	September 2004		<input type="checkbox"/> Targets Achieved/Water Body Delisted
Attainment Date:	2019	Pollutant Type:	<input checked="" type="checkbox"/> Point Source <input type="checkbox"/> Nonpoint Source <input type="checkbox"/> Legacy

Water Quality Improvement Strategy

Adopted by the Central Valley Regional Water Board in September 2004, the [Sacramento County Urban Creeks TMDL](#) addresses impairments caused by the pesticides diazinon and chlorpyrifos in Arcade Creek, Elder Creek, Elk Grove Creek, Morrison Creek, Chicken Ranch Slough, and Strong Ranch Slough. These two pesticides were commonly applied to residential and commercial properties and are transported to waterways through urban storm water runoff. This TMDL is implemented through the Sacramento Municipal Separate Storm Sewer Systems Permit (Sacramento [MS4 Storm Water](#) Permit) and associated monitoring and reporting program.

Water quality is improving in the six impaired urban creeks through successful efforts to reduce pesticide contamination, including the USEPA cancellation of sales of urban diazinon and chlorpyrifos products by December 2004, and implementation of the MS4 permittees public education efforts. Since the phase-out of urban uses, diazinon concentrations in receiving waters, when detected, have been consistently below water quality objectives (except for Strong Ranch Slough), and chlorpyrifos has rarely been detected in receiving waters. An MS4 special monitoring study of diazinon and chlorpyrifos at seven creek locations indicated these sites are sufficiently characterized by the Arcade Creek at Watt Avenue, and Willow Creek at Blue Ravine Road locations. These locations are part of ongoing monitoring specified by the MS4 Storm Water Permit.

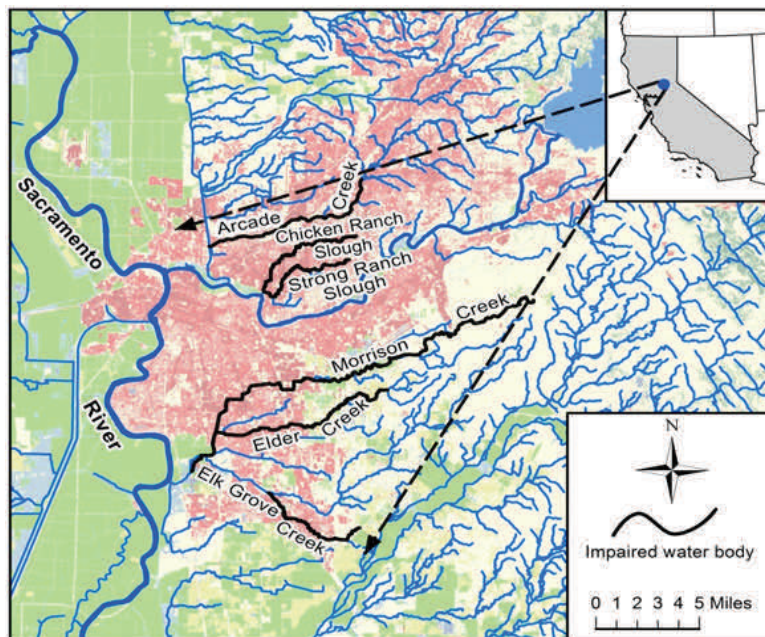
Pesticide Water Quality Criteria Values

Chemical	Criterion Value	Criterion Type
Chlorpyrifos	Acute	0.020 µg/L ¹ (1 hour average)
	Chronic	0.014 µg/L (4 day average)
Diazinon	Acute	0.080 µg/L (1 hour average)
	Chronic	0.050 µg/L (4 day average)

Values are not to be exceeded more than once in a three year period.

¹µg/L = micrograms per liter

Sacramento County Watershed

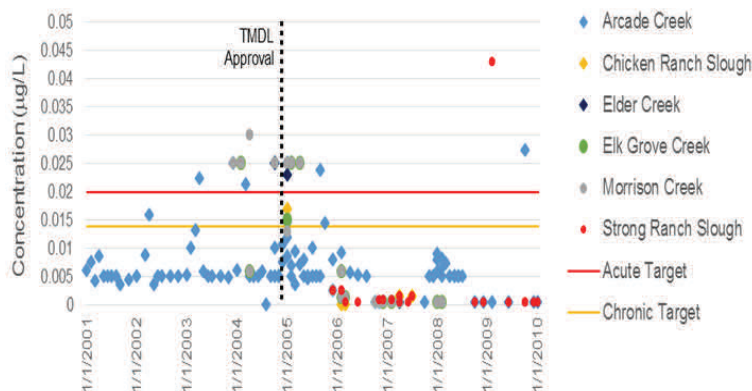


Water Quality Outcomes

- Data show that conditions are significantly improving and chlorpyrifos and diazinon concentrations are decreasing, though some exceedances still occur.
- Continuing efforts will be tracking the results of the MS4 Storm Water Permit monitoring program and determining the potential to delist these six impaired urban creeks as being impaired.

Pesticide Concentrations in Sacramento County Urban Creeks

Chlorpyrifos Concentration Trends in Sacramento County Urban Creeks



Diazinon Concentration Trends in Sacramento County Urban Creeks

