Water Quality Report Card		Chlorpyrifos and Diazinon in Alamo River Watershed	
Regional Water Board:	Colorado River Basin, Region 7		Conditions Improving
Beneficial Uses Affected:	WARM, WILD, RARE, REC-1, REC-2	STATUS	 Data Inconclusive Improvement Needed Targets Achieved/Water Body Delisted
Implemented Through:	Regional Water Board Resolution Agricultural Conditional Waiver	Pollutant Type:	□Point Source ☑Nonpoint Source □Legacy
Effective Date: Attainment Date:	September 19, 2013 (Resolution) December 2018	Pollutant Source:	Irrigated Crop Production
Water Quality Improvement Strategy		Alamo River Watershed	

Salton

Water Quality Improvement Strategy

The Alamo River originates in Mexico about a half mile south of the International Boundary, and flows north into the U.S. to its terminus at the Salton Sea in Imperial County, California. Dominated by discharges from Imperial Valley agriculture, the Alamo River exceeds water quality standards (WQS) for chlorpyrifos and diazinon, and is listed on the 303(d) List as impaired for both pesticides. To address the pesticide impairment, the Regional Water Board adopted a resolution in September 2013 certifying revisions to the Imperial County Farm Bureau's (ICFB) existing Voluntary TMDL Compliance Program. The revisions promote implementation of management practices (e.g., land leveling and irrigation water management), and require pesticide reporting to the Regional Water Board on actions to control chlorpyrifos and diazinon. The Regional Water Board has deemed that the revised pesticide management practices are adequate for addressing the chlorpyrifos and diazinon impairments. In January 2015, the Regional Water Board adopted an agricultural conditional waiver and is implementing requirements for management practices and pesticide monitoring. The Regional Water Board recently revised the numeric evaluation guidelines (targets) for chlorpyrifos and diazinon in the Alamo River, to reflect current research, from 25 ng/L to 14 ng/L for chlorpyrifos and from 160 ng/L to 100 ng/L for diazinon.

Annual Chlorpyrifos and Diazinon Use in Imperial County^a



^a <u>CA Department of Pesticide Regulation data</u> for Imperial County (includes New River and Alamo River watersheds)



Chlorpyrifos and Diazinon in Alamo River



Watershed Boundary

Monitoring Sites

 Outlet Sinclair Road

O Drop 6

Orop 6A

Harris Road

- concentrations consistently exceed WQS at lower and middle Alamo River monitoring sites.
- Increase in chlorpyrifos use in Imperial County in recent years is reflected in the increased concentrations in the Alamo River.
- Diazinon concentrations are decreasing and meeting WQS in recent years.
- Currently, the Regional Water Board is implementing an agricultural conditional waiver, which requires dischargers in the Imperial Valley to monitor for all agricultural water quality constituents of concern in the Alamo River, including these two pesticides, and to implement management practices.
- The Imperial Irrigation District will start monitoring chlorpyrifos and diazinon in the Alamo River and agricultural drains in mid-2016.
- The Regional Water Board will review the ICFB monitoring data and determine if significant progress has been made prior to the 2013 resolution's expiration in December 2018.



2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

• Lower (Sinclair Road, Outlet)

Middle (Drop 10, Harris Road, Drop 6A, Drop 6)

Upper (International Boundary)

^b Monitoring data are available on CEDEN and CA Department of Pesticide Regulation websites.

^c Non-detects are represented as 0 (zero) on the chlorpyrifos graph. Non-detects are represented as 1 (one) on the diazinon graph with log scale.