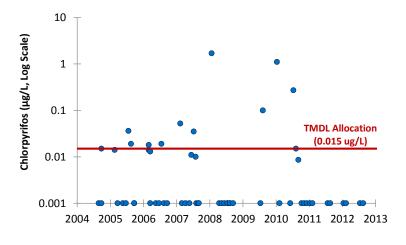
Water Quality Report Card			Diazinon and Chlorpyrifos in the Sacramento-San Joaquin Delta	
Regional Water Board:	Central Valley, Region 5		☑ Conditions Improving	
Beneficial Uses Affected:	WARM, COLD	STATUS	☐ Data Inconclusive	
Implemented Through:	ILRP, NPDES Permit, Grants	SIAIUS	☐ Improvement Needed	
Effective Date:	October 10, 2007		☐ Targets Achieved/Waterbody Delisted	
Attainment Date:	2019	Pollutant Type	e: □ Point Source ☑ Nonpoint Source □ Legacy	

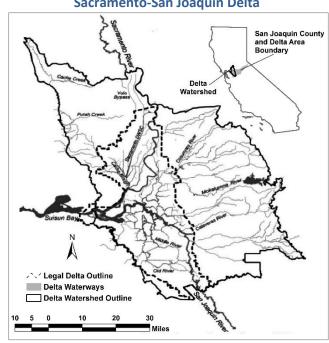
#### **Water Quality Improvement Strategy**

Diazinon and chlorpyrifos are organophosphate pesticides that are used on crops in and around the Sacramento-San Joaquin Delta. In the early 1990's, these pesticides were detected in the Delta at levels toxic to aquatic life, and the Delta was listed as impaired. Since then, efforts have been undertaken by a variety of agricultural dischargers and other stakeholders, researchers, and regulatory agencies to reduce these discharges. To address the impairment, the Central Valley Regional Water Board adopted a TMDL for diazinon and chlorpyrifos in the Delta, which established concentration limits for these pesticides in discharges. The TMDL is implemented in conjunction with the pesticide TMDLs for the Delta's two major tributaries, the Sacramento River and the San Joaquin River, which were adopted in 2003 and 2006, respectively. As a result of changes in agricultural practices, discharges are now meeting the TMDL targets and water quality objectives most of the time, but there are still occasional exceedances in some of the smaller Delta streams and sloughs. The Irrigated Lands Regulatory Program (ILRP) is working with dischargers to address these exceedances, as well as potential impacts of replacement products.

# **Chlorpyrifos in Lone Tree Creek (Delta Tributary)**



# Sacramento-San Joaquin Delta

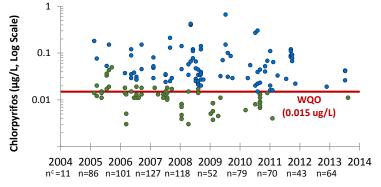


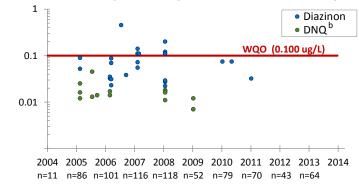
# **Water Quality Outcomes**

- Water quality data demonstrate diazinon and chlorpyrifos targets are being achieved most of the time. Over time, concentrations and the number of detections per year decreased, while lab detection ability improved (i.e., DNQ<sup>b</sup> observations decreased).
- Remaining chlorpyrifos and diazinon exceedances will be addressed through continued implementation of the ILRP and working with the Department of Pesticide Regulation (DPR) and County Agricultural Commissioners.
- Potential impacts of replacement pesticides, particularly pyrethroids, remain a concern. They will be addressed through (1) Board monitoring and regulatory programs, (2) working with pesticide use regulators at USEPA and the DPR, and (3) development of additional Basin Plan Amendments and TMDLs.

### Detectable Chlorpyrifos and Diazinon Concentrations per Year within the San Joaquin County and Delta Area Boundary a

Diazinon (µg/L, Log Scale)





<sup>&</sup>lt;sup>a</sup> Monitoring performed by <u>San Joaquin County and Delta Water Quality Coalition</u> as part of ILRP.

<sup>&</sup>lt;sup>b</sup> DNQ = Detected, Not Quantified

<sup>&</sup>lt;sup>c</sup> n= number of tests performed annually.