Total Maximum Daily Load Progress Report		Lower San Joaquin River Diazinon and Chlorpyrifos TMDL	
Regional Water Board	Central Valley, Region 5	STATUS	 Conditions Improving Data Inconclusive Improvement Needed IMDL Achieved/Waterbody Delisted
Beneficial uses affected:	WARM		
Pollutant(s) addressed:	Diazinon, chlorpyrifos		
Implemented through:	<u>Irrigated Lands Regulatory</u> <u>Program</u> , <u>NPDES Permits</u> , State and Federal Grants		
Approval date:	December 20, 2006		

TMDL Summary

Diazinon and chlorpyrifos are organophosphate pesticides that are used on crops in the San Joaquin Valley, primarily almonds, walnuts, alfalfa and cotton. In the early 1990's, these pesticides were observed in the lower San Joaquin River (SJR) at levels that are toxic to aquatic life, and the river 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. The Central Valley Water Board adopted a <u>TMDL for diazinon and</u> <u>chlorpyrifos in SJR</u> that was approved by the U.S. EPA in December 2006. The TMDL established limits on concentrations of diazinon and chlorpyrifos in discharges.

Through the implementation of changes in agricultural practices, discharges are now meeting the TMDL targets and water quality objectives in the main-stem of the lower SJR. Exceedances in the tributaries are still somewhat frequent, although less than those observed in previous decades, and the Irrigated Lands Regulatory Program is working with dischargers to address these exceedances.

Agricultural Diazinon and Chlorpyrifos Applications^a



^a Pounds of diazinon and chlorpyrifos applied in the East San Juaquin Water Quality Coalition agricultural areas.



San Joaquin River Water Quality



San Joaquin River Basin



Water Quality Outcomes

- Water quality data show that TMDL is being achieved in the lower SJR for diazinon and chlorpyrifos; two reaches were <u>delisted for diazinon in 2010</u>.
- Since January 2010, there has been one chlorpyrifos exceedance and no diazinon exceedances.
- In 2011, all SJR water quality samples were in compliance with the water quality objectives and the loading capacity.
- To address impairments to remaining SJR reaches, Regional Board staff will continue with scheduled TMDL actions, including water quality monitoring and revision of management plans if exceedances occur.
- Remaining impairments in SJR tributaries will be addressed through the Irrigated Lands Regulatory Program and the development of additional Basin Plan Amendments.

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