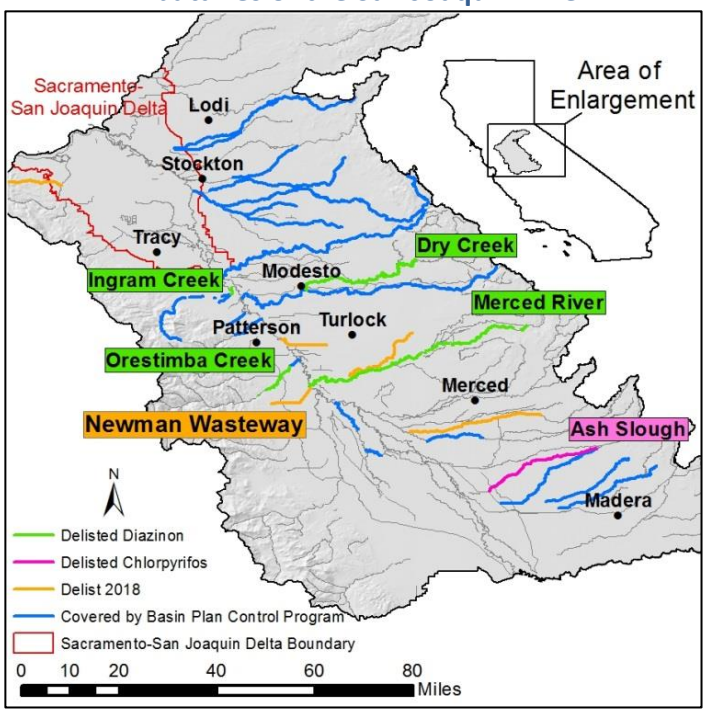
Water Quality Report Card		Pesticides (Diazinon and Chlorpyrifos) in Tributaries of the San Joaquin River		
Regional Water Board:	**Central Valley, Region 5**	**STATUS**	☑ Conditions Improving ☐ Data Inconclusive ☐ Improvement Needed ☑ Targets Achieved/Water Body Delisted	
Beneficial Uses Affected:	Warm and Cold Freshwater Habitat			
Implemented Through:	Irrigated Lands Regulatory Program (ILRP)	**Pollutant Type:**	☐ Point Source ☑ Nonpoint Source ☐ Legacy	
Effective Date:	N/A	**Pollutant Source:**	Irrigated Crop Production	
Attainment Date:	2007-2027			

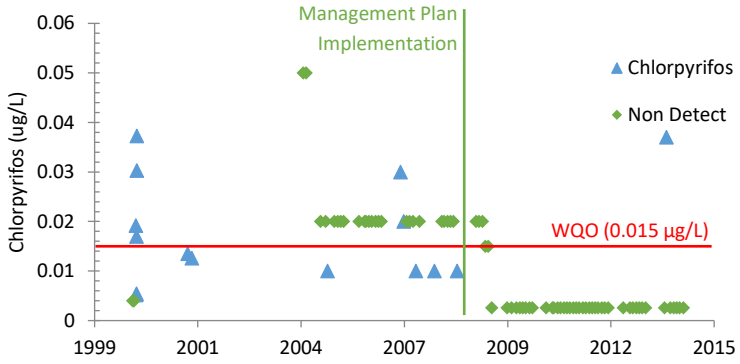
Water Quality Improvement Strategy

Diazinon and chlorpyrifos are organophosphate insecticides that are widely used by growers in the San Joaquin River (SJR) Basin. In the early 1990s, these pesticides were detected in many SJR Basin waterbodies at levels toxic to aquatic life. Subsequently 26 waterbodies in the SJR Basin were listed on the 2012 U.S. EPA Clean Water Act Section 303(d) List as impaired by these pesticides. The main source of these pesticides is discharges from irrigated agriculture, as almost all non-agricultural uses, such as residential uses, were cancelled over 10 years ago. These pesticides have been a focus of the Irrigated Lands Regulatory Program (ILRP), as well as multiple TMDLs, including TMDLs for the SJR and the Delta. The ILRP and TMDLs require growers to implement management practices to meet water quality objectives (WQOs). Five of these waterbodies were proposed for delisting in the 2014 Integrated Report. The other 21 are proposed to be classified as being addressed by the ILRP and requirements of a 2014 Basin Plan Amendment that established numeric WQOs which must be met by 2027. At least eight more of these will be proposed for delisting in the 2018 Integrated Report.

Tributaries of the San Joaquin River



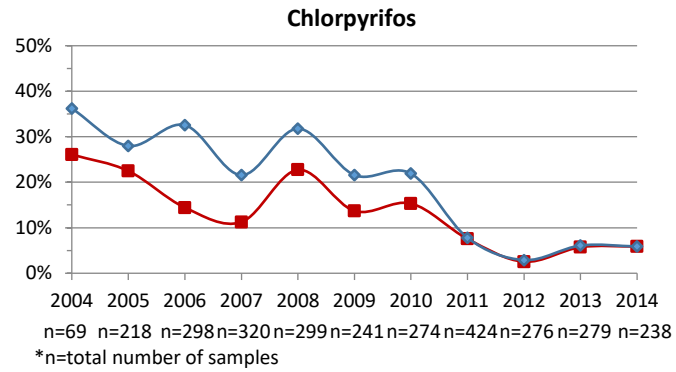
Chlorpyrifos in Newman Wasteway



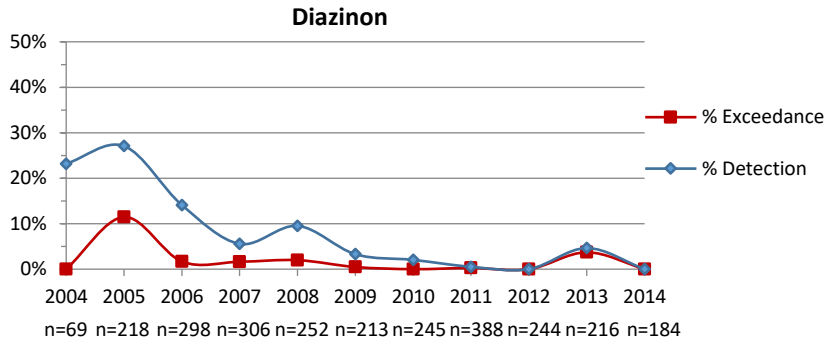
Water Quality Outcomes

- *Chlorpyrifos and diazinon water quality objectives (WQOs) are almost consistently achieved since implementation of management practices. The number of exceedances has decreased over time in all of these waterbodies.*
- *Five waterbodies are proposed for delisting in the 2014 Integrated Report due to attainment of diazinon and chlorpyrifos WQOs.*
- *In the 2018 Integrated Report cycle, at least eight additional delistings will be proposed due to attainment of the diazinon and chlorpyrifos WQOs.*

Percent of Samples that Exceed WQOs for Chlorpyrifos and Diazinon within Tributaries of the SJR



*n=total number of samples



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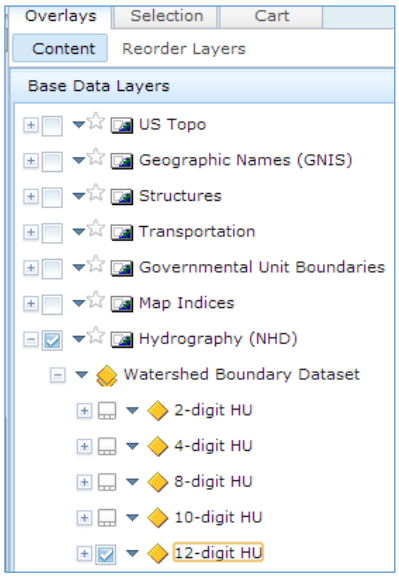
NOTE: *This information will* ***not*** *be posted; it will be used to prioritize implementation actions, assess the effectiveness of those actions and provide information or the development of USEPA SP-12 and WQ10a Reports.*

1. Regional Board contact/expert:
   Name: Danny McClure_____
   Phone number: (916) 464-4751_____
   Email: dmcclure@waterboards.ca.gov_____
   Supervisor's Name: Jeanne Chilcott_____



2. Select the Pollutant Category (ies) for this impaired waterbody: Pesticides

3. Provide watershed location by Hydrologic Unit(s) (HUC) at HUC 12 level. Please include all HUC 12 values for the watershed.

   The HUC12 Code is 12 digits; the stream reach code is 14 digits. HUC12 can be identified using the USGS National Map Viewer (http://viewer.nationalmap.gov/viewer/). Turn on HUC12 layer by clicking through the following pull downs on the right side of the page: Overlays>Content>Base Data Layers >Hydrography (NHD)>Watershed Boundary Dataset>12-digit HU.

   - HUC 12: Dry Creek – 180400091308, 180400091307, 180400091306
   - HUC 12: Ingram Creek - 180400020502_____
   - HUC 12: Orestimba Creek - 180400020104_____
   - HUC 12: Newman Wasteway - 180400012104_____
   - HUC 12: Merced River – 180400080803, 180400080802___
   - HUC 12: Ash Slough - 180400070505_____
   - HUC 12: (too many to list- all tributaries of the San Joaquin River)

4. List the Major Stakeholder Groups (e.g. agriculture, stormwater, watershed groups, etc.) Include State and Regional Water Board programs.

   - Central Valley Water Board – Irrigated Lands Regulatory Program
   - San Joaquin County and Delta Water Quality Coalition
   - Westside San Joaquin River Water Quality Coalition
   - East San Joaquin Water Quality Coalition

5. Provide the following information for each implementation action taken *(if you require more rows to describe implementation actions, please add them)*:

Implementation Action	Result of Implementation Action	Action Taken By (Y/N)		
		Discharger	CWA 319(h) Staff	Other
Management plan development	Sources and controls identified, BMPs implemented, use and runoff reduced	Y		

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6. Has the State devoted any resources to these implementation actions?
   a. Complete table:

Funding Resource	Yes	No
California CWA 319(h) Project funds		x
SWAMP, CAF, etc.		x
California Prop 1, 84, 50, 40, 13, etc. funds		x
California State Revolving Fund – CWSRF and/or DWSRF		x
Federal funds – US EPA, USFS, BLM, USDA, NOAA, etc.		x
Other Agencies (e.g., CDWR, CDPR, CDFA, CDOC, CDFW, , etc.)		

   b. If CWA 319(h) grant project funds were used provide the grant project numbers:
      -
      -
      -

7. Have the Dischargers devoted any private resources to these implementation actions? (Briefly describe).

Discharger	Resources – Financial or In-kind	Amount	When
Westside San Joaquin Coalition	Management plan development, monitoring		ongoing
San Joaquin County and Delta Coalition	Management plan development, monitoring		ongoing
East San Joaquin Coalition	Management plan development, monitoring		ongoing
Multiple SJ Basin Growers	BMP implementation		ongoing

8. What are the next steps based upon results described in question #5?
   (If you require more rows to describe next steps, please add them.)

Next Steps	By When	By Whom
Continue Monitoring	Every year - ongoing	Agricultural coalitions
Delist 8 Waterbody Impairments	2018	Central Valley Water Board

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Status Definitions

(select checkbox for one (1) status that best describes the water quality improvement project)

Conditions Improving

Water quality data and/or other indicators demonstrate improvement; **BUT**
The final water quality targets not consistently being met.

Data Inconclusive

Not enough data (of acceptable quality) has been collected to demonstrate that the water quality targets are consistently met; **OR**
Variability in data do not permit a determination in water quality trends (positive or negative).

Improvement Needed

Final water quality targets not consistently met; **AND**
In Water Board staff judgment, water quality data and/or other indicators demonstrate that water quality is either declining or not improving.

Targets Achieved/ Water body Delisted

Water quality data or other information demonstrate that final water quality targets are consistently met; **OR**
The water body has been removed from the 303(d) list.

Glossary *(on Outcomes Page)*

Attainment Date

The attainment date is the projected year water quality targets are expected to be achieved. The attainment date is estimated based on available information at the time of the most recent update to the water quality restoration plan. The attainment date is subject to change.

Beneficial Uses

Beneficial uses define the uses of water. The California Water Code defines beneficial uses of the waters of the state as uses that may be protected against quality degradation include, but are not limited to: domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

Effective Date

The effective date is the date upon which the TMDL or other implementation action (e.g., Cleanup and Abatement Order) is considered to take effect.

Impaired Water (Listing)

An impaired water is a water body that does not meet the water quality objectives or protect the beneficial uses of the water due to the presence of one or more pollutants. Such waters are identified on the Water Boards' Clean Water Act Section 303(d) list. These impaired waters are sometimes called "listings".

Implementation Outcome Status Assessed

A summary report has been prepared showing the outcome of implementing water quality restoration plans (TMDLs or other approach) that have already been adopted. It is important to note that Regional Boards may be implementing water quality restoration plans (e.g., incorporating TMDL requirements into permits, reviewing water quality data, etc.) for projects for which a Water Quality Improvement Report Card has not yet been created.

Pollutant

A pollutant is a waste or substance that alters the quality of the waters to a degree which unreasonably affects the waters for beneficial uses. The monitoring programs of the Water Boards and others provide information on the levels of pollutants in the State's waters.

Pollutant Type *(select checkboxes for all applicable pollutant types)*

Point Source Pollutant

Point source pollutants are pollutants that are, or may be, discharged from any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft.

Nonpoint Source (NPS) Pollutant

Nonpoint source pollutants are pollutants that are or may be discharged from diffuse sources without a single identifiable point of origin. These discharges include, but are not limited to, runoff from agriculture, forestry, grazing, hydromodification, wetlands, and marinas and recreational boating activities.

Legacy Pollutant

Legacy pollutants are pollutants that are primarily the result of historical contributions. Legacy pollutants are the residual from activities such as mining, manufacturing, and agricultural no longer practiced and include some pollutants currently banned by regulation. These pollutants have the common characteristic of persistence in the environment and may have an affinity for sediments. Typically, the decline in environmental legacy pollutant concentrations occurs as a result of natural attenuation processes. The pesticide DDT is an example of a legacy pollutant.

Water Quality Objective

The limit or level of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.

Water Quality Target

The water quality target is a description of the desired condition in the watershed or water body. Typically, targets are tied to specific water quality standards that provide measurable goals for the water quality restoration plan.