

San Joaquin County Resource Conservation District
3422 W. Hammer Lane, Suite A
Stockton, California 95219
209-472-7127 ext 12

April 27, 2012

Ms. Pamela Creedon, Executive Officer
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

Re: Compliance monitoring locations for the Sacramento San Joaquin Delta TMDL.

Dear Ms. Creedon,

The San Joaquin County and Delta Water Quality Coalition (SJCDWQC or Coalition) is proposing to update its current monitoring program to include additional locations that will be used to characterize agricultural discharge of chlorpyrifos and diazinon and comply with the Sacramento San Joaquin Delta Total Maximum Daily Load (TMDL) requirements.

BACKGROUND

The Basin Plan Amendment (BPA) to the Water Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Diazinon and Chlorpyrifos Runoff into the Sacramento-San Joaquin Delta (adopted in 2006) indicates that monitoring should be conducted on the Sacramento, San Joaquin, Mokelumne, Old and Middle Rivers, and in Cache Slough. Of these, the Sacramento River and Cache Slough are irrelevant for the Coalition. In addition, to determine compliance in the hundreds of other Delta Waterways, monitoring is required in representative Delta Waterways that receive agricultural drainage. This latter element requires that the monitoring network be carefully designed to guarantee that water quality conditions are representative of the wide range of discharges and hydrologic conditions likely to occur in the Delta and should include sites within back sloughs, upland drainages, and water bodies receiving discharges from crops receiving the greatest applications of diazinon and chlorpyrifos.

The compliance points must be representative of the Delta Waterways including: the western portion, the southern portion, the eastern portion, the central portion, the Stockton Ship Channel, the export area, Mosher Slough, Five-mile Slough, and the San Joaquin River (Stanislaus River to Delta Boundary), and also be consistent with the general monitoring elements. The Coalition currently is in compliance with TMDL requirements as interpreted by the ILRP staff by incorporating analyses for chlorpyrifos and diazinon into the monitoring conducted at the Coalition's Core and Assessment Monitoring locations.

PROPOSED PROGRAM

The Coalition believes that the proposed monitoring program better meets the monitoring requirements of the BPA and is more representative of the impact that agricultural drainage has on the water quality

of the Delta. The D&C TMDL monitoring program being proposed consists of four sites monitored once between January and March (aimed at capturing storm runoff) and five times during peak periods of chlorpyrifos and diazinon use during the irrigation season.

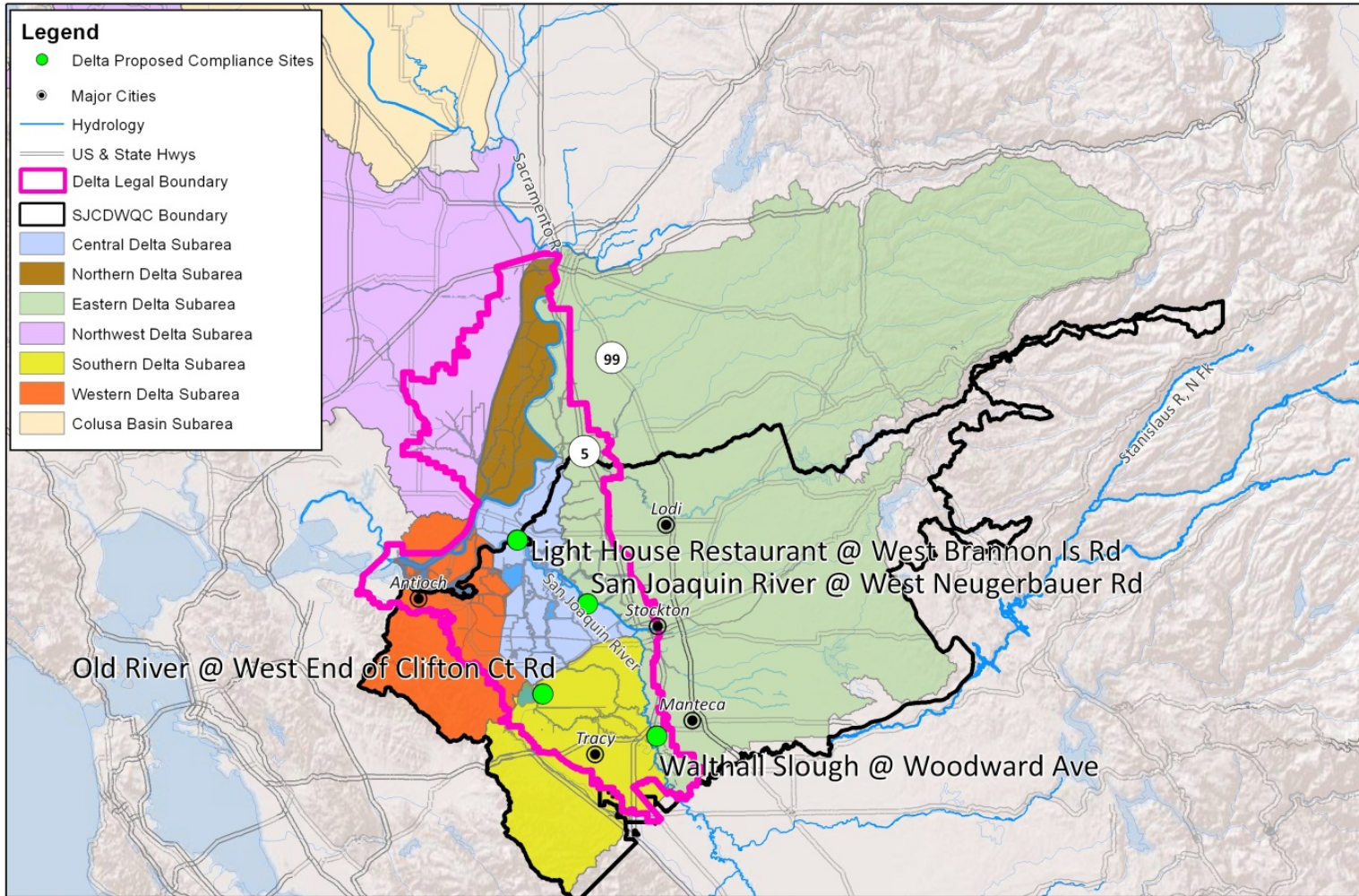
Monitoring Locations

The Coalition is proposing to monitor at three new monitoring sites within Delta channels in addition to monitoring at Walthall Slough, the Core Monitoring location for Coalition Zone 5 and current TMDL monitoring location. These four locations represent the Delta Waterway areas identified in the D&C TMDL that fall within the Coalition boundaries (Table 1).

The proposed TMDL compliance locations are (Figure 1):

1. Old River at the West End of Clifton Court Rd
2. San Joaquin River @ West Neugerbauer Rd (Roberts Island off Windmill Cove)
3. Light House Restaurant @ West Brannon Island Rd (West Brannon Island)
4. Walthall Slough @ Woodward Ave

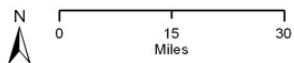
Figure 1. Sites proposed for monitoring under the Diazinon and Chlorpyrifos TMDL requirements. The different colored boundaries reflect the Delta zones.



Source of Layers:
 Hydrology - NHD hydrodata, 1:24,000-scale, <http://nhd.usgs.gov/>
 Roads, highways, railroads, county boundary, city outlines - California Spatial Information Library.
 Delta Subareas - ILRP
 Basemap, Shaded Relief - ESRI
 GSC North America 1983

Date Prepared: 03/26/12
 SJCDWQC

Delta Subareas & Delta Proposed Compliance Sites



Delta_Waterways

Table 1. Name, coordinates, and the Delta zone represented by proposed compliance site.

Proposed TMDL Compliance Site	Coordinates	303d listed Delta Waterway Represented
Light House Restaurant @ West Brannon Island Rd.	38.10487, -121.59299	Delta Waterways (central portion)
		Delta Waterways (eastern portion)
		Mosher Slough (downstream of I-5)
		Five Mile Slough (Alexandria Place to Fourteen Mile Slough)
Old River @ the West End of Clifton Court Rd	37.84195, -121.53721	Delta Waterways (southern portion)
		Delta Waterways (western portion)
		Delta Waterways (export area)
Walthall Slough @ Woodward Ave	37.770460, -121.29227	San Joaquin River (Stanislaus River to Delta Boundary)
San Joaquin River @ West Neugerbauer Rd (Roberts Island off Windmill Cove)	37.99493, -121.44173	Delta Waterways (Stockton Ship Channel)

The new compliance sites, in addition the previous one, capture the largest amount of agricultural discharge into the Delta for which the Coalition is responsible. The Coalition will collect samples for analysis of chlorpyrifos and diazinon and conduct field measurements of water temperature, dissolved oxygen (DO), specific conductance (EC) and pH at the time of sample collection. Discharge will be measured at Walthall slough and recorded from the following CDEC sites: San Joaquin R @ Prisoners Pt near Termino (PRI), Rough and Ready Island (RRI), and Old River at Clifton Court Intake (ORI).

Monitoring Frequency

The Coalition analyzed Pesticide Use Report (PUR) data for chlorpyrifos and diazinon in order to characterize the months of highest use (Figures 2). Chlorpyrifos was used to determine monitoring frequency due to the larger amounts applied and more frequent overall use. A cutoff of ≥10% of annual pounds of chlorpyrifos applied was used to select the months in which to monitor for chlorpyrifos and diazinon (Figure 3). From 2004 through 2010, 54% of total diazinon use occurred between January and March. The majority of diazinon use occurs as dormant sprays on deciduous orchards and will be captured during the January – March sampling event. Because deciduous orchards require deeper soils, few orchards are located in the Delta.

January – March

Monitoring between January and March will occur once during a storm event or in March if a storm event cannot be monitored. Monitoring coincides with chlorpyrifos and diazinon applications to dormant deciduous orchards.

May – August

Monitoring between May and August will occur monthly and will capture applications of chlorpyrifos to walnuts, almonds, and alfalfa as well as diazinon applications to walnuts, cherries, and apples.

Figure 2. Chlorpyrifos use within the Coalition boundary (2004 – 2011).

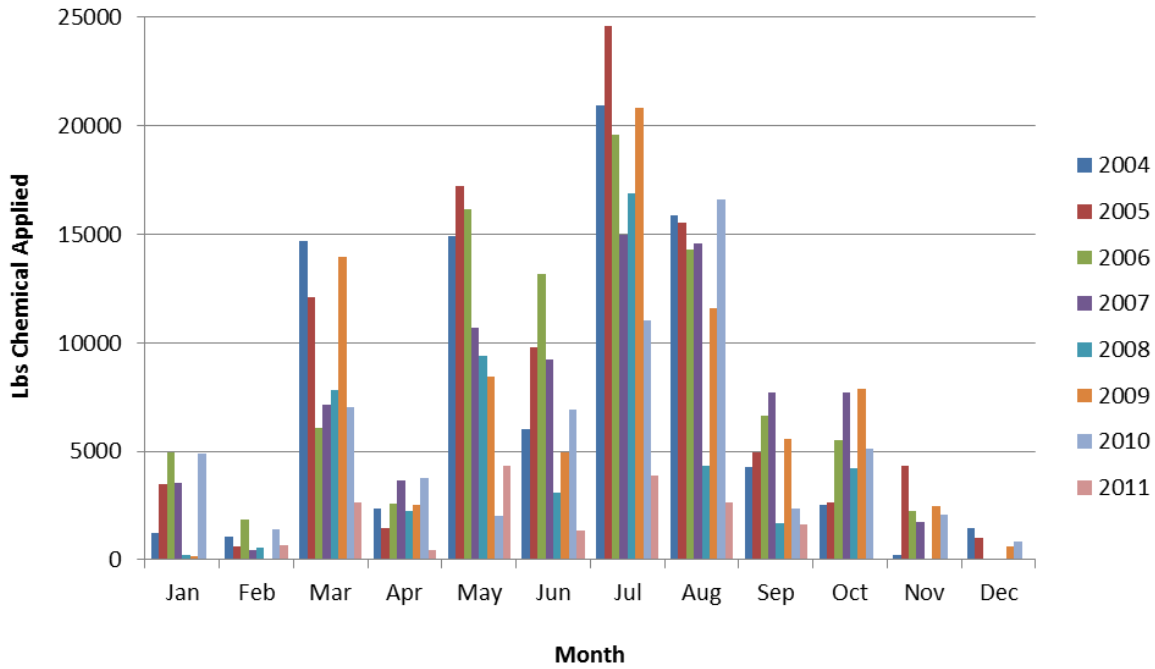
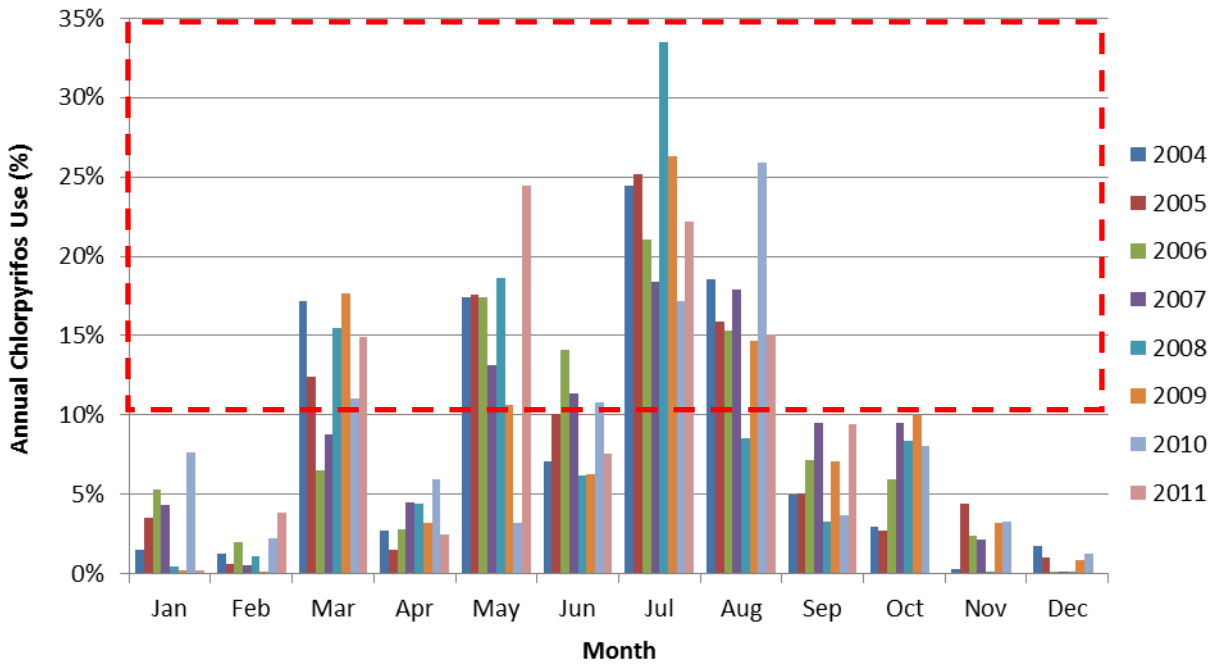


Figure 3. Chlorpyrifos use within the Coalition boundary as a percent of annual pounds applied (2004 – 2011).

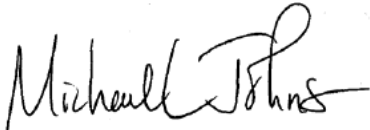


REPORTING

Reporting of compliance with the Sacramento-San Joaquin Delta TMDL for Chlorpyrifos and Diazinon will continue to occur annually in the SJCDWQC Management Plan Update Report.

Please let us know if you require additional information.

Respectfully,

A handwritten signature in black ink that reads "Michael Johnson". The signature is written in a cursive style with a large initial "M" and "J".

Michael L. Johnson
Technical Program Manager

Cc:

Chris Jimmerson, CVRWQCB

Susan Fregien, CVRWQCB

Mike Wackman, SJCDWQC