

## Central Valley Regional Water Quality Control Board

31 January 2018

Mr. Parry Klassen  
Executive Director  
East San Joaquin Water Quality Coalition  
1201 L Street  
Modesto, CA 95354

Dr. Michael Johnson  
Technical Program Manager  
East San Joaquin Water Quality Coalition  
1480 Drew Ave. Suite 130  
Davis, CA 95618

### APPROVAL OF MANAGEMENT PLAN COMPLETION – EAST SAN JOAQUIN WATER QUALITY COALITION

Thank you for submitting the 15 November 2017 request to remove specific constituents from select East San Joaquin Water Quality Coalition (Coalition) site subwatershed management plans. The request proposes to remove 14 site/constituent pairs from active management plan status and from the management plan monitoring schedule.

The Coalition has implemented management plans according to requirements in the Waste Discharge Requirements General Order R5-2012-0116-R3 for Growers within the Eastern San Joaquin River Watershed that are Members of a Third-party Group (Order). The Coalition's approved Surface Water Management Plan has been implemented as a part of the Order. The conditions for requesting completion of a Management Plan outlined in the Order apply (Attachment B, Appendix MRP-1, Section III, pages 8 and 9).

Based on the information provided in the request letter and in the enclosed staff review, I approve the completion of management plans for the following ten site/constituent pairs.

- Berenda Slough @ Ave 18 ½ (chlorpyrifos)
- Duck Slough @ Gurr Rd (*Hyaella azteca*, *Pimephales promelas*)
- Lateral 2 ½ near Keyes Rd (chlorpyrifos)
- Levee Drain @ Carpenter Rd (*Ceriodahnia dubia*, *Hyaella azteca*)
- Livingston Drain @ Robin Ave (*Selenastrum capricornutum*)
- Miles Creek @ Reilly Rd (pH)
- Mootz Drain downstream of Langworth Pond (diuron)
- West Port Drain @ Vivian Rd (*Selenastrum capricornutum*)

Implementation of management plans must continue for Deadman Creek @ Gurr Rd (*Ceriodahnia dubia*, *Pimephales promelas*), Deadman Creek @ Hwy 59 (chlorpyrifos) and Hatch Drain @ Tuolumne Rd (*Hyaella azteca*) because the monitoring data do not support completion of the management plans.

If you have any questions or comments regarding this letter, or need further information, please contact Yared Kebede at [yared.kebede@waterboards.ca.gov](mailto:yared.kebede@waterboards.ca.gov) or by phone at 916-464-4828.

Sincerely,

*Original signed by*

Pamela C. Creedon  
Executive Officer

Enclosures: Staff Review of Request to Remove Constituents from Management Plan –  
East San Joaquin Water Quality Coalition

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## Central Valley Regional Water Quality Control Board

**TO:** Susan Fregien  
Senior Environmental Scientist  
Monitoring and Implementation Unit  
Irrigated Lands Regulatory Program

**FROM:** Yared Kebede  
Environmental Scientist  
Monitoring and Implementation Unit  
Irrigated Lands Regulatory Program

**DATE:** 26 December 2017

**SUBJECT:** REQUEST TO REMOVE CONSTITUENTS FROM MANAGEMENT PLAN –  
EAST SAN JOAQUIN WATER QUALITY COALITION

The East San Joaquin Water Quality Coalition (Coalition) is required to implement management plans for constituents that exceed water quality objectives at the same site more than once in a three-year period per Order No. R5-2012-0116-R3 (Order). The Central Valley Water Board received a request from the Coalition on 15 November 2017 to remove a total of 14 site/constituent pairs in 11 site subwatersheds from the management plan monitoring schedule, (i.e., management plan completion).

The Coalition's management plans are subject to the requirements found in the Order. The following key components must be addressed in the request: (1) at least three years of compliance with receiving water limitations during the times of year when previous exceedances occurred including a consideration of periods of peak use when the parameter is likely to be present, (2) documentation of third-party education and outreach, (3) documentation of management practice implementation, and (4) demonstration of management practice effectiveness. In addition, management plan monitoring scheduled during months of peak pesticide use as approved in the Monitoring Plan Update reports are considered when evaluating the three years of monitoring requirements during the times of past exceedances.

Staff reviewed the Coalition's request and evaluated whether completion of management plans for petitioned site/constituent pairs is justified. Staff's recommendations fall into one of two categories: (I) there is sufficient information to justify the removal of site/constituent pairs from the management plan or (II) the completion of management plans cannot be recommended because additional monitoring data is required to demonstrate that the water quality problem is no longer occurring.

### **I. Management plan no longer required**

Staff recommends that management plans are no longer required for ten site/constituent pairs since there has been sufficient monitoring to demonstrate that water quality problems are no longer occurring. Since the most recent exceedance, education and outreach, implemented

KARL E. LONGLEY ScD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

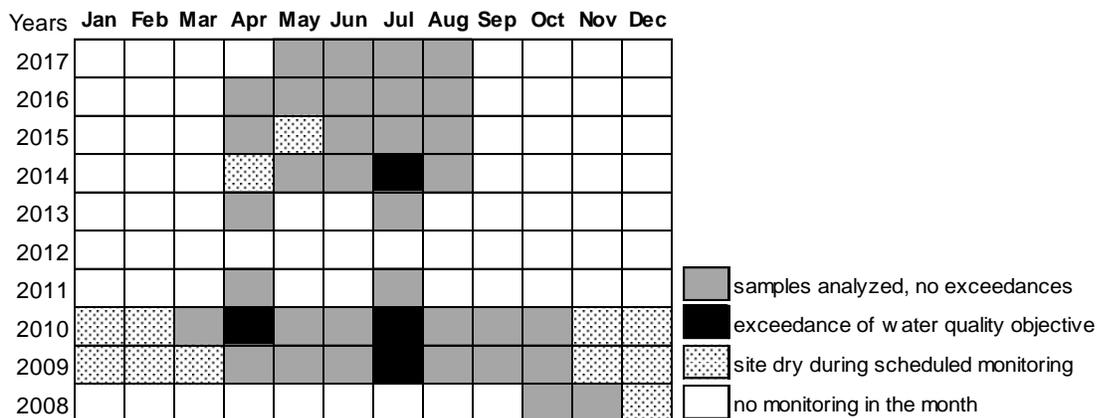


There were six exceedances of sediment toxicity in Duck Slough @ Gurr Rd in between 2004 and 2013. Pyrethroids and chlorpyrifos were detected in sediment samples associated with the September 2010 (70% survival) and 2013 (0% survival) toxicities. Since the September 2013 exceedance, the Coalition has completed three years of monitoring with no *H. azteca* toxicity.

There were two instances of *P. promelas* toxicity in Duck Slough @ Gurr Rd in October 2011 (90% survival) and March 2014 (85% survival); TIEs were not required since survival was more than 50% of the control. Since the March 2014 exceedance, the Coalition has completed three years of monitoring with no toxicity to *P. promelas*.

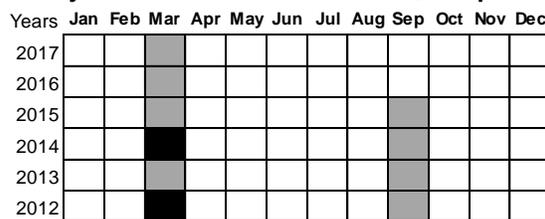
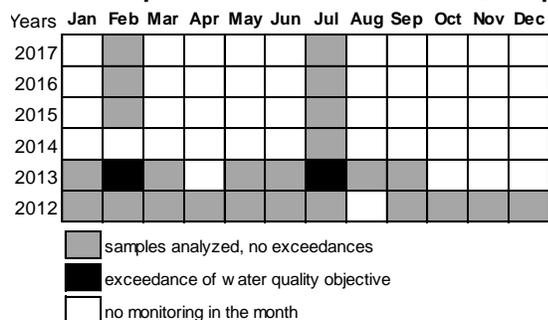
Focused outreach to targeted growers in Duck Slough @ Gurr Rd subwatershed occurred from 2010 to 2012. The Coalition contacted six targeted growers farming 2,656 irrigated acres in 2010, and provided information to manage spray drift and the retention of water and sediment on the field (tailwater return system and sediment ponds). The summary of implemented management practices is documented in the 2012 MPUR (Pages 91-93). The Coalition also conducted additional focused outreach to eight targeted growers (5,418 irrigated acres) during the 2016 WY, and determined that the management practices implemented by the growers are protective of water quality. Monitoring results since the most recent exceedances demonstrated the effectiveness of the implemented management practices.

**D. Chlorpyrifos in Lateral 2 1/2 near Keyes Rd**



There were four instances of chlorpyrifos exceedances in Lateral 2 1/2 near Keyes Rd subwatershed in July 2009, April and July 2010, and July 2014. The Coalition conducted focused outreach to 25 targeted growers farming 1,826 acres from 2011 to 2013 (2013 MPUR, pages 63-66), and followed up with three targeted growers in 2012 to determine if the recommended/new practices were implemented. According to the survey and follow-up results, targeted growers implemented management practices including shutting off outside nozzles when spraying next to surface water, calibrate spray equipment before application, and use of nozzles that provide the largest effective droplet size. In addition, the PUR data indicate chlorpyrifos use in the Lateral 2 1/2 near Keyes Rd site subwatershed has significantly declined since 2014 (Appendix II). Monitoring data, pesticide use and focused outreach efforts justify chlorpyrifos management plan completion.

**E. *Ceriodaphnia dubia* in Levee Drain @ Carpenter Rd** **F. *Hyalella azteca* in Levee Drain @ Carpenter Rd**



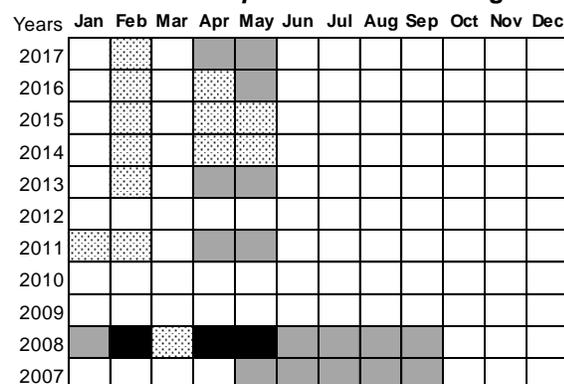
samples analyzed, no exceedances  
 exceedance of water quality objective  
 no monitoring in the month

The *C. dubia* management plan at Levee Drain @ Carpenter Rd is based on two exceedances in 2013 (February, July). The TIE results indicated high levels of ammonia in the water column samples. The Coalition has completed three years of monitoring with no toxicity to *C. dubia*.

There were two instances of *H. azteca* toxicity in Levee Drain @ Carpenter Rd in March 2012 (26% survival) and 2014 (76% survival). Bifenthrin, chlorpyrifos, lambda-cyhalothrin, and permethrin were detected in sediment samples associated with both toxicities. Monitoring results during three consecutive years of monitoring shows no sediment toxicity.

Focused outreach in Levee Drain @ Carpenter Rd occurred from 2015 to 2017. The Coalition contacted four targeted growers farming 542 irrigated acres (2017 Annual Report pages 123-124). In 2016, the Coalition followed-up with one of the targeted grower farming 48 acres to document the implementation of new management practices. According to the survey and follow-up results, the targeted grower implemented the recommended management practices: installing tailwater return system and sprayed areas close to the waterbody when the wind is blowing away. Monitoring results during three consecutive years of monitoring shows the effectiveness of implemented management practices.

**G. *Selenastrum capricornutum* in Livingston Drain @ Robin Ave**

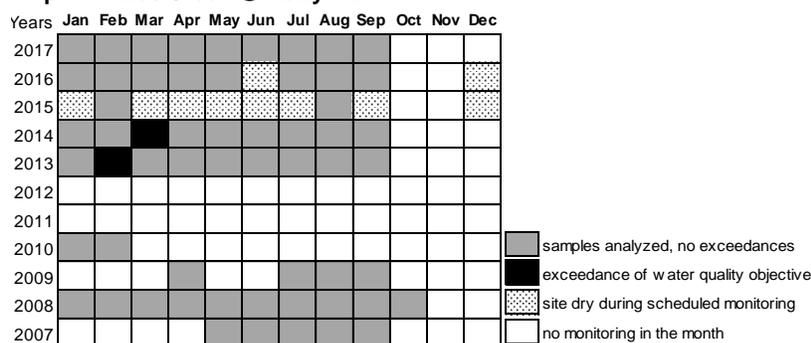


samples analyzed, no exceedances  
 exceedance of water quality objective  
 site dry during scheduled monitoring  
 no monitoring in the month

There were three exceedances of *S. capricornutum* water column toxicity in Livingston Drain @ Robin Ave in 2008 (February, April and May). TIEs were not required for any of the samples as growth was greater than 50%. The site remained consistently dry during the February monitoring event (2011; 2013-2017) indicating that the site condition is unrelated to drought. In addition, no toxicity was observed during the April and May monitoring events since the last exceedances in 2008. Therefore, staff recommends completion of the *S. capricornutum* management plan.

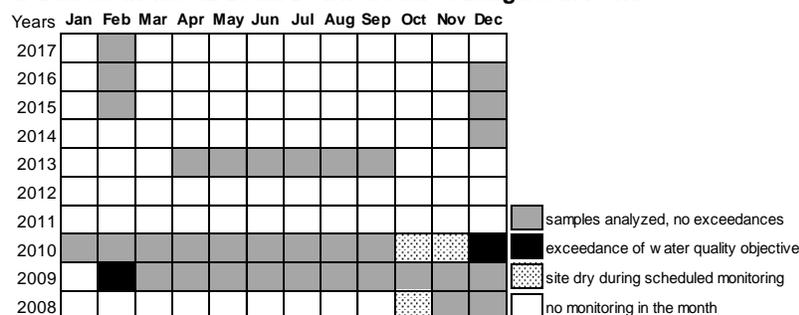
Focused outreach in Livingston Drain @ Robin Ave occurred from 2011 to 2013. The Coalition conducted individual meetings with 11 growers farming 335 acres, and provided information to encourage the retention of stormwater and reduce spray drift. Continued follow-up with all targeted growers was conducted in 2012 to document the implementation of recommended/new management practices. According to the survey and follow-up results, the targeted growers only sprayed areas close to the waterbody when the wind is blowing away, reduced water use in surface irrigation, and installed drip irrigation systems. A summary of implemented and recommended management practices is provided in the 2013 MPUR (Pages 68-69). Monitoring results since the most recent exceedances in 2008 demonstrated the effectiveness of the implemented management practices in the subwatershed.

**H. pH in Miles Creek @ Reilly Rd**



The management plan for pH was triggered due to two exceedances of the upper WQTL for pH in February 2013 and March 2014. Since three years of monitoring data has been attained during periods of past exceedances, management plan completion is justified; the Coalition has monitored for pH 25 times since the most recent exceedance in March 2014. Consequently, the data show that pH is no longer a problem during the times of the year when previous exceedances occurred and is in compliance with the Order’s receiving water limitations.

**I. Diuron in Mootz Drain Downstream of Langworth Pond**



The management plan for diuron at Mootz Drain downstream of Langworth Pond is due to exceedances of the diuron WQTL in Feb 2009 and December 2010. As part of focused management plan implementation from 2015 to 2017, the Coalition contacted six members farming 482 irrigated acres within the subwatershed, and provided information to encourage the retention of water and sediment on the field (tailwater return system and sediment ponds) and manage spray drift. The Coalition followed-up with two targeted growers in 2016, and the targeted growers have installed sprinklers and spray areas near waterbodies when the wind is

