
Central Valley Regional Water Quality Control Board

9 February 2018

Mr. Michael Wackman
San Joaquin County and Delta Water Quality Coalition
3294 Ad Art Road
Stockton, CA 95215

APPROVAL OF MANAGEMENT PLAN COMPLETION FOR SELECT CONSTITUENTS

Thank you for submitting the 16 November 2017 request to remove specific constituents from select San Joaquin County and Delta Water Quality Coalition (Coalition) site subwatershed management plans. The request proposes to remove five 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 R5-2014-0029-R1 for Growers within the San Joaquin County and Delta Area 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 four site/constituent pairs.

- Lone Tree Creek @ Jack Tone Rd (pH and *Pimephales promelas*)
- Roberts Island @ Whiskey Slough Pump (*Ceriodaphnia dubia*)
- Union Island Drain @ Bonetti Rd. (*Ceriodaphnia dubia*)

Management Plan implementation must continue for Terminous Tract Drain @ Hwy 12 (arsenic) because the monitoring data do not support management plan completion.

If you have questions regarding this letter, please contact Chris Jimmerson at (916) 464-4859 or by email at Chris.Jimmerson@waterboards.ca.gov.

Sincerely,

Original signed by

Pamela C. Creedon
Executive Officer

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

Central Valley Regional Water Quality Control Board

TO: Susan Fregien
Senior Environmental Scientist
IRRIGATED LANDS REGULATORY PROGRAM

FROM: Chris Jimmerson
Environmental Scientist
IRRIGATED LANDS REGULATORY PROGRAM

DATE: 17 November 2017

SUBJECT: REQUEST TO REMOVE SITE/CONSTITUENT PAIRS FROM MANAGEMENT PLAN MONITORING – SAN JOAQUIN COUNTY AND DELTA WATER QUALITY COALITION

The San Joaquin County and Delta 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. R5-2014-0029-R1 (Order). The Central Valley Water Board received a request from the Coalition on 16 November 2017 to remove a total of five site/constituent pairs from the management plan monitoring schedule (i.e. management plan completion request). Those five site/constituent pairs are discussed in this memorandum.

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.

Staff evaluated the information provided by the Coalition on a case-by-case basis to determine whether the components for management plan completion have been addressed. One of the key components is addressing if there are at least three or more years with no exceedances during the times of the year when previous exceedances occurred. This requirement was not met for the arsenic management plan at Terminous Tract drain because only two years of storm season monitoring data are available since the last exceedance in March 2013.

Table 1 presents the five site/constituent pairs included in the request for management plan completion. There has been sufficient monitoring for four of the requested site/constituent pairs, demonstrating that the water quality problems are no longer occurring. In addition, documentation of outreach/education was provided, including documented implementation of management practices. Based on the water quality data and other evidence discussed below, staff recommends approval of management plan completion for four site/constituent pairs.

Table 1. Management Plans Monitoring Data Evaluation

Management Plan	Most Recent Exceedance	Monitoring Events Since last Exceedance	Requirements for Completion Met?
Lone Tree Creek @ Jack Tone Rd			
pH	2/11/2014	14	Yes
<i>P. promelas</i>	1/23/2008	13	Yes
¹Roberts Island @ Whiskey Slough Pump			
<i>C. dubia</i>	7/15/2014	27	Yes
Terminus Tract Drain @ Hwy 12			
Arsenic	3/19/2013	35	No
²Union Island Drain @ Bonetti Rd			
<i>C. dubia</i>	8/21/2012	43	Yes

¹ In 2012, this site inherited management plans by replacing two other nearby monitoring sites to better represent discharges from the island.

² In 2014 this site inherited management plans by replacing two other nearby monitoring sites to better represent discharges from the island.

Lone Tree Creek @ Jack Tone Rd.

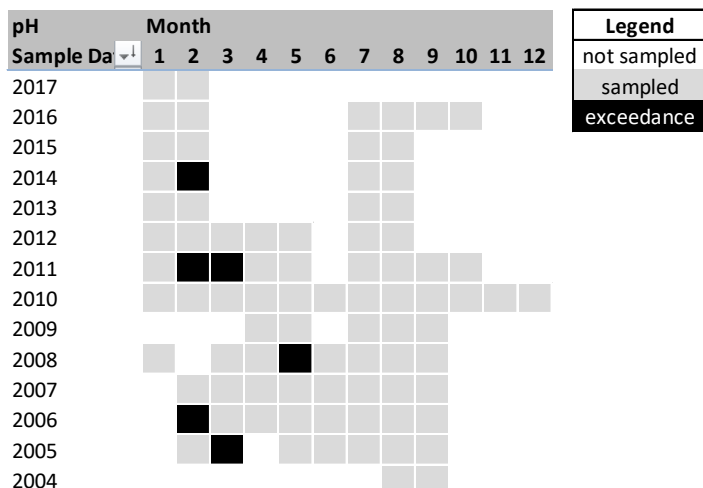
The Coalition proposed pH and *Pimephales promelas* toxicity test species for management plan completion.

Focused outreach and education to two targeted growers was conducted in 2016 and will continue through 2018. As a result of the outreach, growers implemented management practices to control runoff and reduced overall pesticide use. Surveys indicated the three most common implemented practices were 1) reduced use of pesticides found in exceedances, 2) installation of sprinkler or micro irrigation system, and 3) use of center grass rows, grass waterways, or grass filter strips.

The results of management plan monitoring for each management plan is discussed in the following subsections and reflect the effectiveness of management practices.

a. pH

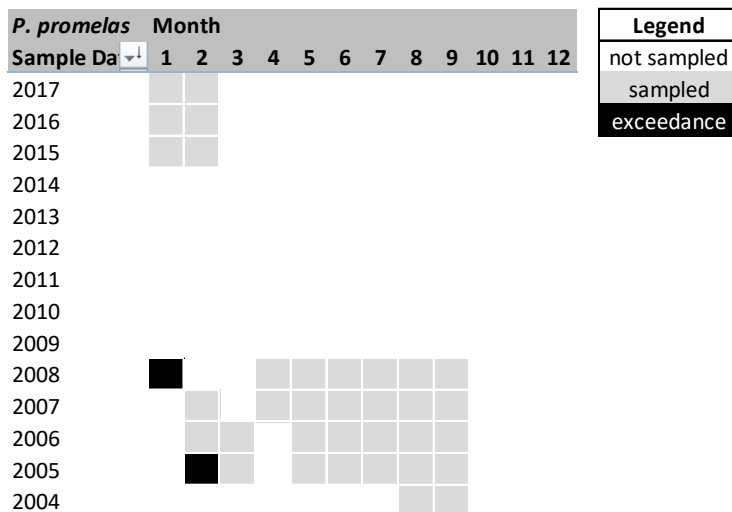
The management plan was triggered by exceedances in March 2005 and February 2006 with four more exceedances in following years up until the last exceedance in 2014. Since 2014, 14 sampling events have taken place in the last three years with no additional exceedances. Even though monitoring did not occur in all the months when historical exceedances occurred, specifically March, monitoring did take place in February, which is similar with March timing. Consequently, the data demonstrates 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 surface receiving water limitations.



b. Water toxicity to *P. promelas*

February 2005 and January 2008 exceedances triggered a *P. promelas* management plan. The Coalition’s laboratory performed a Toxicity Identification Evaluation in 2005 indicating elevated levels of ammonia in the sample. The 2008 sample contained elevated levels of suspended solids and high oxygen demand. Resamples were taken during both events and toxicity was not persistent in either sample.

Since the last exceedance in 2008, three years of monitoring events have taken place during the times of the year when previous exceedances occurred with no additional exceedances. This demonstrates compliance with the Order’s surface receiving water limitations.



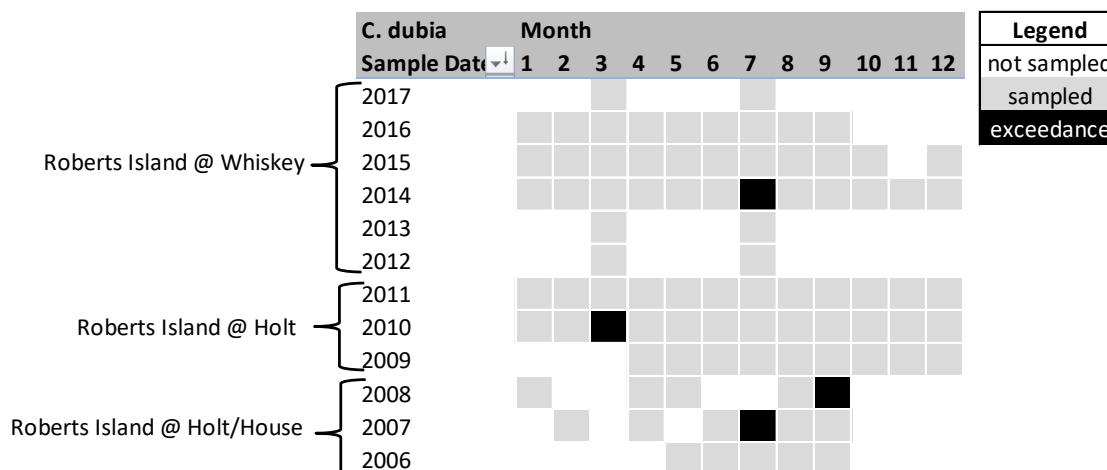
II. Roberts Island at Whiskey Slough Pump

The Coalition proposed *Ceriodaphnia dubia* for management plan completion. In 2012, this site replaced two other sites on the island to better represent drainage from the entire island. In doing so, the site inherited a *C. dubia* management plan. The TIE results for the 2014 toxicity event indicated non-polar organics were present in the sample; a dichlorvos exceedance coincided with the toxicity. Since then, three years of monitoring have taken place without any *C. dubia* or dichlorvos exceedances at the sample site. The Coalition conducted focused outreach and education in the site subwatershed from 2013 through

2015 with seven growers contacted to document management practices. Follow-up surveys indicated the two most commonly implemented practices after contact were reduced dichlorvos use and reduced runoff.

C. dubia

The management plan was triggered by exceedances that occurred in 2007, 2008, 2010, and 2014. Since 2014, three years and 27 monitoring events have been completed with no additional *C. dubia* exceedances demonstrating the effectiveness of implemented management practices.



III. Terminous Tract Drain at Hwy 12

Arsenic has been proposed for management plan completion. Focused outreach and education began in the site subwatershed in 2016 and continues in this watershed. Although, there are not any known current agriculture applications of arsenic in this watershed, management practices are required if agricultural activities cause or contribute to water quality problems. The two most common implemented practices observed after focused outreach were reduced runoff water volumes and installation of sprinkler or micro irrigation system. These practices are known to be effective at reducing the offsite movement of irrigation tailwater and sediment, and thus any offsite movement metals like arsenic.

Arsenic (Total)

Exceedances triggered the management plan in May 2006 and February 2007. Five more exceedances occurred in the following years up through 2013. Three years of monitoring have not taken place since 2013 during the time of year of the March exceedance. The Order requires at least three years of compliance with receiving water limitations during the times of year when previous exceedances occurred. The Coalition has three years of water quality data in the irrigation season, but not in the storm season. Consequently, the Coalition will need to continue sampling during the storm season to comply with this requirement. The Coalition may resubmit the arsenic management plan completion request once it meets all requirements.

