



California Regional Water Quality Control Board Central Valley Region

Karl E. Longley, ScD, P.E., Chair



Linda S. Adams
Secretary for
Environmental
Protection

Sacramento Main Office
11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114
Phone (916) 464-3291 • FAX (916) 464-4645
<http://www.waterboards.ca.gov/centralvalley>

Arnold
Schwarzenegger
Governor

TO: Margie Lopez-Read
Senior Environmental Scientist
Irrigated Lands Conditional Waiver
Program

FROM: Chris Jimmerson
Environmental Scientist
Irrigated Lands Conditional
Waiver Program

DATE: 14 February 2007

SIGNATURE: _____

SAN JOAQUIN COUNTY AND DELTA WATER QUALITY COALITION 21 JANUARY 2007 SEMI-ANNUAL MONITORING REPORT

On 23 January 2007, the Central Valley Regional Water Quality Control Board (Water Board) staff received the San Joaquin County and Delta Water Quality Coalition (Coalition) 21 January 2007 *Semi-Annual Monitoring Report* (SAMR). The Coalition's SAMR stated, "...this report experienced delays that did not allow for the full quality control and quality assurance to be completed on time. As a result, this report is being submitted late." The Executive Officer issued a Notice of Violation to the Coalition for the late submittal.

Staff reviewed the SAMR, and this memorandum summarizes the review findings. The list of comments below follows the order of the sequence of the SAMR Table of Contents. Each comment has additional details to aid with the subject matter.

1. Cover Letter

- The cover letter heading reads "East San Joaquin Water Quality Coalition", but should read San Joaquin County and Delta Water Quality Coalition.
- Table 1 itemizes all the Coalition's unreported exceedances for the 2006 irrigation season. The Coalition did not initially communicate these exceedances within the required five business days. However, staff recognizes the Coalition's effort with identifying unreported exceedances and reporting them in the SAMR, as required in the MRP Order.

2. Executive Summary

- The last paragraph in page 1 identifies 43 pesticide and 13 chlorpyrifos exceedances that occurred in the 2006 irrigation season. The number of exceedances could be changed to 42 and 12, respectively, because one exceedance equals the water quality objective of 0.015 ug/L, but does not actually exceed the objective. Table 62 (page 140) and page 147 could reflect this change too.
- On page 2, in the first paragraph, the text reads Total Dissolved Solids (TDS) as exceeding the water quality limit 12 times. The Coalition should be using 450 ug/L not

500 ug/L to determine TDS exceedances. Water Board staff used 450 ug/L (1995 Bay Delta Plan & Agriculture Water Quality Goal) and found three additional TDS exceedances. Table 64 (page 143) should also reflect three additional exceedances too.

- The last paragraph in page 3 states that, “Individual growers have also been contacted personally when needed.” It is not clear when the Coalition would consider personal contact “when needed”, nor was there any documentation of this type of activity.
- The Coalition has handed out numerous Management Practice Surveys to growers within the Coalition area, and approximately 10.1% have responded (page 3). With the apparent untimely return rate, the Coalition needs to discuss how it plans to increase the return rates and what will be done with the survey findings.

3. Description of Watersheds

- Figure 1 (Coalition area land use map) does not include land use data for the upper Calaveras County portion of the Coalition area. Staff believes the land use layers are not available from Department of Water Resources or California Department of Conservation. For the record, the Coalition should describe why it did not show land use data for upper Calaveras County.
- Page 20 of the SAMR referenced that the Coalition added two monitoring sites in April 2006. For clarity, the Coalition should say it exchanged two other sites for two sites in the Delta because the number of sites monitored (15) did not change from the previous season.
- The SAMR included large-color land use maps to augment the text. These maps are very helpful with assisting the reader in determining types of crops and regions near the monitoring points.
- The water body inventory from the June 2006 SAMR lists Kellogg Creek, Sand Creek, and Grant Line Canal as intermediate water bodies. However, the SAMR submitted 23 January (page 21) lists these same water bodies as “small” water bodies. The Coalition needs to clarify if these water bodies are intermediate or small.
- The legend for Figure 7 references East San Joaquin Water Quality Coalition (ESJ Coalition), but should reference the San Joaquin County and Delta Water Quality Coalition.

4. Location Maps

- Table 5 (page 34) describes the number of acres and land use for the six monitoring sites including Marsh Creek at Concord Ave. The site was dry three (7/06, 8/06, 9/06) out of the five irrigation season sample events. Staff recommends that the Coalition consider exchanging this site for another site to lessen the occurrences of weather related dryness.

5. Chains of Custody

- This section needs to refer the reader to where the COCs are located in the appendix section or remove this tabulated section from the SAMR.

6. Precision and Accuracy

- On page 744, in the *Chemistry* section, the text reads, "...BOD was only tested for during September 2007..." The text should reference September 2006.
- On page 746, in the *Biological Oxygen Demand* section, the text should reference September 2007 not September 2006.

7. Pesticide Use Information

- The Coalition provided many maps demonstrating pesticide applications (location, rate, chemical) in relation to the monitoring point(s) that exhibited an exceedance. This geographic representation is very helpful to the reader.
- Sample collected at Sand Creek at Highway 4 Bypass demonstrated a significant number of pesticide exceedances, as compared to other sites, during the irrigation season. Pesticide exceedances for this site include chlorpyrifos, diazinon, lambda cyhalothrin, DDE, DDT, dieldrin, endrin, and methomyl. The Coalition reported that the pesticide exceedances are mainly subject to culvert or upstream golf course discharges above the monitoring point. There was no reported use of chlorpyrifos, diazinon, or unregistered chemicals (DDE, DDT, dieldrin) in upstream-irrigated fields. In October, the Coalition reported it would determine the culvert source through conversations with the local county authorities so that the Coalition could verify if the culvert contributes to the exceedances. The Coalition also stated it would attempt to sample just below the golf course. The Coalition needs to provide an update of determining the culvert source and update staff on sampling below the golf course, as proposed in previous deliverables.
- On page 119, the last sentence of the first paragraph references Table 43, but it should reference Table 46 that reports the TIE results from Grant Line Canal near Calpack Road.

8. Data Interpretation

- In Table 63, page 142, monitoring point names for Grant Line Canal near Calpack Road and Grant Line Canal at Clifton Court seem to be interchanged with each other.
- In Table 64, page 143, the 20 June 2006 E.coli result for Grant Line Canal near Calpack Road reads as zero, and the 19 September 2006 result for Lone Tree Creek at Jack Tone Road reads as 560. Electronic data submitted to the Water Board for these dates and sites reads >2400 and 220, respectively. In addition, the 18 July 2006 TDS result for Roberts Island Drain along House Road should read 460, not zero. The Coalition should also edit pages 149 and 150 to reflect the correct number of exceedances for constituents E.coli and EC.

9. Management Practices

- Page 153 contains a statement indicating that the Coalition is currently unable to summarize management practices because few growers have responded to surveys and no data have been placed into the database. The date of March 2007 was given as a probable response date. Since management practices are a key element of the

Irrigated Lands Conditional Waiver Program, it is critical that the Coalition discuss the management practices that are being implemented, how their effectiveness will be evaluated, and, if appropriate, how the management practices will be implemented in other areas where similar exceedances occur.

10. Actions

- In the first paragraph of section *Actions Taken to Address Water Quality Impacts*, the Coalition reported that it informed growers of the sampling results to promote implementation of management practices. Other than periodic grower meetings, the SAMR is unclear how or when the Coalition communicated monitoring results.

After the Coalition observes exceedances, the Coalition procured Pesticide Use Reports and, in general, successfully identified the parcels where pesticide applications occurred. The Coalition needs to followup with these growers, identify the growers' management practices and document which practices are working or not working, then adjust the management practices to reduce discharges of pesticides/herbicides that result in exceedances and/or toxicity.

- The SAMR Section *Actions Taken to Address Water Quality Impacts* includes a discussion of pesticides/toxicity, E.coli, DO, BOD/COD, EC/TDS, and pH. This section should also include a discussion of metal exceedances discussed in the SAMR.

11. Part III (Table of Contents)

- The Table of contents for this section allows the reader to identify all of the Exceedance and Communication Report submittal dates. This table was compared to documents received from the Coalition. With the exception of a missing 31 December 2006 thiobencarb Communication Report, the Coalition included all Exceedance and Communication Reports.

Since staff only found one missing report in the SAMR, staff concludes that the Coalition's tracking tools used to track deliverables and monitoring results has substantially improved from past SAMR deliverables.

12. Conclusions and Recommendations

- The Coalition states, "Determining [management practice] effectiveness remains an elusive task." Page 12 (item 3) of the MRP Order states, "The Coalition groups shall be responsible for monitoring the success of identified management practices through the MRP Plan as well as the evaluation of the management practices." The Coalition should describe the steps it will take to improve their ability to address this requirement.