
Central Valley Regional Water Quality Control Board

21 February 2013

Mr. Joseph McGahan
Summers Engineering
P.O. Box 1122
Hanford, CA 93232

NOVEMBER 2012 SEMI-ANNUAL MONITORING REPORT REVIEW– WESTSIDE SAN JOAQUIN RIVER WATERSHED COALITION

Thank you for submitting the Westside San Joaquin River Watershed Coalition (Coalition) Semi-Annual Monitoring Report (SAMR), which was received on 30 November 2012. Staff has completed a review (enclosed with this letter) of the SAMR for compliance with Monitoring and Reporting Program Order R5-2008-0831 (MRP Order).

The Coalition's SAMR reports on MRP Order requirements, Total Maximum Daily Load (TMDL) activities, and Management Plan progress during the reporting period. Based upon staff's review noted in the attached memorandum and checklist, the SAMR demonstrates that the Coalition's SAMR complies with the terms and conditions of the Conditional Waiver and the MRP Order requirements, including the following:

- Discussion of data to clearly indicate compliance
- Meeting precision, accuracy, and completeness requirements
- Discussion of Management Practice implementation and reporting

If you have any questions or comments regarding this letter or the attached review memorandum, or need any further information, please contact Chris Jimmerson at (916) 464-4859.

Original signed by:

Joe Karkoski, Program Manager
Irrigated Lands Regulatory Program

Susan Fregien, Senior Environmental Scientist
Monitoring and Implementation Unit
Irrigated Lands Regulatory Program

Enclosure: Staff Review of Westside San Joaquin River Watershed Coalition SAMR
Semi-Annual Monitoring Report Review Checklist

Central Valley Regional Water Quality Control Board

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

FROM: Chris Jimmerson
Environmental Scientist
Monitoring and Implementation Unit
Irrigated Lands Regulatory Program

DATE: 30 January 2013

SUBJECT: NOVEMBER 2012 SEMI-ANNUAL MONITORING REPORT REVIEW–
WESTSIDE SAN JOAQUIN RIVER WATERSHED COALITION

The California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) received the 30 November 2012 Irrigation Season Semi-Annual Monitoring Report (SAMR) from the Westside San Joaquin River Coalition (Coalition). The SAMR covers the monitoring period from March through August 2012 (Sampling Events 89 through 94). The SAMR also reports on activities from the three focused management plans: Focused Management Plan I - Hospital and Ingram Creek, Focused Management Plan II - Westley Wasteway, Del Puerto Creek and Orestimba Creek, and Focused Management Plan III – Salt Slough. The SAMR was submitted to meet the requirements of Monitoring and Reporting Program Order R5-2008-0831 (MRP Order) and the associated Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands adopted by the Regional Board on 1 July 2006 (Order No. R5-2006-0053).

The review section numbers in this memorandum are the same as the section numbers used in the SAMR Checklist (see attached). Staff derived the checklist directly from the MRP Order and it provides an itemized account of the compliance components. If the SAMR text necessitated staff comment, this memorandum provides a discussion. Generally, a discussion is not provided for those items that met the compliance components but they are addressed in the attached checklist.

A. MRP ORDER REQUIREMENTS

Item 7.2.1:

Page 7, none of the storm events produced significant runoff to collect two storm event samples during the reporting period. Section 3 presents information regarding insufficient rain fall. Assessment monitoring samples were collected at all sites containing sufficient water in accordance with the Westside Coalition's Monitoring and Reporting Plan.

Item 9.2:

The tabulated sediment toxicity results are inconsistent in Figure 4 and Attachment 5. The Figure indicates four exceedances were observed in the spring of 2012. Attachment 5 indicates three exceedances were observed between March and September 2012. Appendix A indicates four exceedances during event 89. These are all for essentially the same time period. On 17 January, the Coalition indicated the correct tally should be four exceedances.

Item 10

The Coalition met sampling compliance by collecting the required number of samples at all 22 sites. There did not appear to be any missing samples.

Aquatic toxicity was observed 10 times (two *Ceriodaphnia dubia*, seven *Selenastrum capricornutum*, one *Pimephales promelas*) during the reporting period. The TIEs determined that Chlorpyrifos and diuron was the cause of *Ceriodaphnia dubia* toxicity in April and May 2012. In addition, diuron was the cause of toxicity for *Selenastrum capricornutum* in March and May. Otherwise the TIEs could not determine the cause of the toxicity for the remaining events, including the *Pimephales promelas* toxic event.

Sediment samples were collected, as scheduled. Sediment toxicity was observed at four sites. Chemistry analysis indicated pyrethroids as the source of toxicity.

Staff presents a simple comparison (Table 1) to show the changes in water quality since the last irrigation season reporting period. The exceedance data indicate that a decrease (green icons) in percent exceedances for chlorpyrifos, DDE, Malathion, *Hyalella azteca*, and *Ceriodaphnia dubia* have been observed between the two reporting periods. Conversely, an increase (red icons) in percent exceedances for analytes EC, pH, *E.coli*, arsenic, boron, total dissolved solids, dimethoate, *Pimephales promelas*, and *Selenastrum capricornutum* have been observed.

Table 1: Comparing two Irrigation Season Reporting Periods.

Type	Analyte	(NOW) Exceedances / Tests 3/1/12 to 9/1/12	(THEN) Exceedances / Tests 3/1/11 to 9/1/11	Change in Pct. Exceedance From THEN to NOW
Field Data	DO	13/133	14/138	0%
Field Data	EC	110/133	54/138	44%
Field Data	pH	30/154	10/138	12%
General Chemistry	Ammonia as N	4/88	0/110	0%
General Chemistry	E. Coli	37/106	40/121	2%
General Chemistry	Arsenic	9/146	3/103	3%
General Chemistry	Boron	22/64	27/122	12%
General Chemistry	Total Dissolved Solids	86/106	53/122	38%
Pesticide	Chlorpyrifos	7/129	9/124	-2%
Pesticide	DDT(p,p')	4/71	6/107	0%
Pesticide	DDE(p,p')	20/71	35/107	-5%
Pesticide	Diazinon	0/129	0/124	0%
Pesticide	Diuron	5/106	5/105	0%
Pesticide	Dimethoate	1/130	0/128	1%
Pesticide	Malathion	4/130	5/124	-1%
Toxicity	<i>Hyalella azteca</i>	4/13	5/14	-5%
Toxicity	<i>Pimephales promelas</i>	1/18	0/106	6%
Toxicity	<i>Selenastrum capricornutum</i>	7/146	1/106	4%
Toxicity	<i>Ceriodaphnia dubia</i>	2/106	7/106	-5%

As part of the Coalition's management plan implementation, staff reviewed the SAMR for outreach activities concerning pyrethroids, diuron, and chlorpyrifos. The SAMR indicated that the Coalition has been circulating surveys, conducting outreach meetings and workshops. A number of individual contacts were the direct result of exceedances. Topics discussed at the meetings include management practices to address those pesticides.

Item 16:

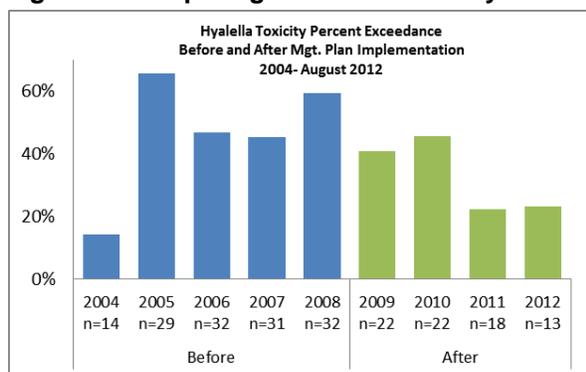
The laboratory QA/QC test results for samples collected during the reporting period were greater than 90% in meeting the acceptance criteria. Based on the evaluation of the results, none of the failures affected data usability.

Item 22:

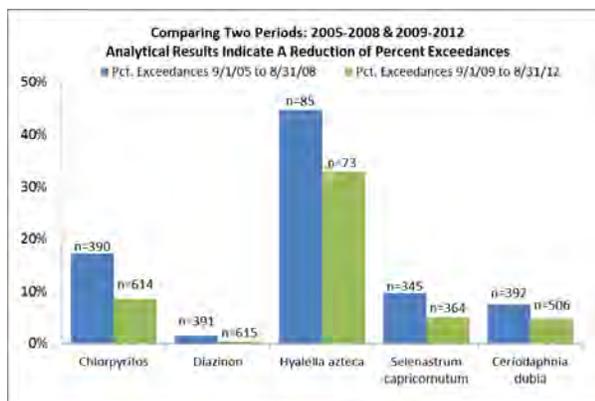
According to the SAMR, four of 14 toxicity tests showed significant toxicity to *Hyalella azteca*. In all four cases, pyrethroids (bifenthrin, lambda-cyhalothrin, Es/Fenvalerate) were present in sufficient quantity to cause toxicity. Consequently, efforts to curb sediment discharges should continue to be emphasized in the Coalition area. The Coalition provides sources of funding for sediment discharge management that include tailwater return systems, drip systems, and sediment ponds.

Staff compared the *Hyalella azteca* percent exceedances for each year before and after General/Focused Plan implementation (Figure 1). General/Focused Management Plans were first implemented in 2008. The data indicates that the frequency of sediment toxicity is reduced since implementing management Plans (n=No. of tests), with a slight increase from 2011 to 2012.

Figure 1: Comparing Sediment Toxicity Before and After Management Plan Implementation.



Staff compared the time frames 2005-2008 and 2009-2012. The results are presented in Figure 2. This is a good range for comparing water quality because the Conditional Waiver uses a three year period to activate a Management Plan if more than one exceedance occurs within the period. Overall, the analytical results for each item in Figure 2 indicate a reduction of percent exceedances (n= No. of tests). See the next page.

Figure 2: Comparing Analytes for Two Similar Periods

The data presented in Figure 2 indicate that there are fewer exceedances in the 2009-2012 period than in the 2005-2008. The frequency of *Hyalella azteca* exceedances continues to be high, but is trending downward. The causes of sediment toxicity tend to be from pyrethroid applications according to the TIEs and supported by the pesticide use reports. This indicates that controlling sediment and runoff will reduce sediment toxicity. The SAMR reports that the Coalition has taken steps to control runoff, namely grant funding, installation of sediment ponds, installation of drip, PAM applications. Other activities have also taken place.

The frequency of chlorpyrifos and diazinon testing increased in the 2009-2012 period and showed a drop in the percent exceedances. The same observation is noted for the aquatic toxicity results.

B. MANAGEMENT PLAN ACTIVITIES

This section includes updates to the Management Plan activities for Focus Plan I (Ingram and Hospital Creeks), Focus Plan II (Del Puerto Creek, Westley Wasteway, Orestimba Creek watersheds) and Focus Plan III (Salt Slough). According to staff's review, there were no incomplete items noted. The checklist attached provides comments for each review item.

Item I.13, II.13, III.13

According to the Focused Plan Performance Goals, the Coalition's target is to calibrate ground spray rigs and report the affected acreage in this SAMR. The calibration machine is in for repairs. To date growers have expressed little interest, but the Coalition believes this service is important for pesticide use management.

C. BASIN PLAN - TMDL REQUIREMENTS

The discussion of Sacramento and San Joaquin River Basin Plan TMDL requirements has been divided according to the appropriate TMDLs that the Coalition is required to implement, including Chlorpyrifos and Diazinon, Dissolved Oxygen, and Salt and Boron TMDLs.

San Joaquin River Chlorpyrifos and Diazinon TMDL:

As part of the monitoring design, the ESJWQC and Westside Coalitions split and coordinated the monitoring at the six SJR TMDL Basin Plan sites. The ESJWQC is responsible for monitoring at: (1) San Joaquin River (SJR) at the Airport Way Bridge near Vernalis, (2) SJR at the Maze Boulevard, and (3) SJR at Hills Ferry. The Westside is responsible for monitoring at: (4) SJR at Las Palmas Avenue near Patterson, (5) SJR at Highway 165 (Lander Ave) near

Stevinson, and (6) SJR at Sack Dam. The Coalition provided a summary of TMDL monitoring results. Based on the results, no exceedances of chlorpyrifos/diazinon were observed in the San Joaquin River during the reporting period for the Westside Coalition TMDL sites. Additionally, diazinon was not detected while chlorpyrifos had eight detections. A San Joaquin River TMDL report will be submitted in May 2013.

San Joaquin River Dissolved Oxygen TMDL:

See attached checklist.

San Joaquin River at Vernalis Salt and Boron TMDL:

See attached checklist.

Annual Monitoring Report Review Checklist

Report Name: Westside SJR SAMR 2012 Irrigation Season				Reviewer Name: Chris Jimmerson					
Submittal Date: 30 November 2012				Review Date: 1/17/12					
Item No.		SAMR Component Name	Acceptable	Unacceptable	Incomplete/ Not Included	Not Applicable	Page Number	Comments	
1		Signed Transmittal Letter							
1.1		Penalty of Perjury Statement	✓						
1.2		Signature of Authorized Coalition Representative	✓						
1.3		Dated	✓						
1.4		Discussion of exceedances, and corrective actions taken or planned (or reference to previous correspondence)	✓				1	Discussed in the Executive Summary	
1.5		Submitted on time	✓					Received on 11/30/12	
2		Title Page							
2.1		Report title	✓						
2.2		Date of the report	✓						
2.3		Monitoring date range covered by the report	✓				1	March 2012 through August 2012	
2.4		Coalition Group name	✓						
3		Table of Contents							
3.1		List of sections/chapters, tables, figures, appendices/attachments with page numbers	✓						
4		Executive Summary							
4.1		Summary of key results and activities	✓				1, 2		
4.2		Brief summary of conclusions and recommendations	✓						
5		Description of the Coalition Group Geographical Area							
5.1		General description of relevant geographic features of the Coalition area, such as location and extent of area, major landforms, land uses, vegetation types, crop types, climate patterns, key waterways, and cities	✓				9-12		

Annual Monitoring Report Review Checklist

Item No.		SAMR Component Name	Acceptable	Unacceptable	Incomplete/ Not Included	Not Applicable	Page Number	Comments
6	Monitoring Objectives and Design							
6.1		Brief description of monitoring objectives (references to section and page numbers in MRP Plan or QAPP, as appropriate)	✓				2-4	
6.2		Monitoring design aligns with MRP Plan, any deviations from MRP Plan or QAPP are described (references to section and page number in MRP Plan or QAPP, as appropriate)	✓					Only deviation is no storm samples collected due to dry conditions.
	6.2.1	Assessment Monitoring: sites, parameters, schedule	✓				5	No assessment monitoring this reporting period.
	6.2.2	Core Monitoring: sites, parameters, schedule	✓				5	
	6.2.3	Special monitoring (Management Plan, TMDL, source identification): sites, parameters, schedule	✓				5	
7	Sampling Site Descriptions and Rainfall Records for the time period covered under the SAMR							
7.1		Sampling site name and description (e.g. geographic area, watershed, crop type and drainages that the site represents), or unique information about the site or surrounding area	✓					
7.2		Rainfall records in graphic or narrative form (in inches of precipitation)	✓				7,8	No significant rainfall to trigger rain sampling event.
8	Location Maps(s) of sampling sites, crops, and land uses							
8.1		Location maps show sampling sites, crops, and land use with informative level of detail	✓				14	Provided top 10 crops grown by county
	8.1.1	Datum identified on map (<u>must be</u> WGS 1984 or NAD 1983)	✓				Map	Monitoring sites projected WGS84
	8.1.2	Source and date of all data layers identified on map	✓				Map	
8.2		Accompanying list or table indicates: site name, ID number, ILRP station code number, and GPS coordinates (latitude and longitude in decimal degrees to at least five decimal places)	✓				12	
9	Tabulated Results							
9.1		Data are in tabular form, clearly organized and readily discernible	✓				Appendix A	
9.2		Tabulated results agree with the electronically submitted data	✓				31, Attachment 5	The 2012 sediment toxicity results are inconsistent in Figure 4 and Attachment 5. VIA email, the Coalition indicated the tally should be 4 not 3 exceedances.

Annual Monitoring Report Review Checklist

Item No.		SAMR Component Name	Acceptable	Unacceptable	Incomplete/ Not Included	Not Applicable	Page Number	Comments
9.3		Previously reported exceedances match exceedances identified in the SAMR	✓				Attachment 5, Exceedance Smry	Compared submitted exceedance reports to the exceedance summary.
9.4		All required constituents for each site have reported results	✓				Appendix A	
9.5		All necessary re-sampling completed and results reported				✓	Attachment 4	Resampling not needed. Followup samples conducted due to sediment toxicity event 89..
10	Data Discussion to Illustrate Compliance							
10.1		Results discussed in text agree with tabulated data	✓				18-24 Attachment 5	
10.2		Discussion illustrates compliance with the Conditional Waiver, or if a required component was not met an explanation of missing data or a reason for non-compliance is included	✓					See Item 10 in memorandum.
10.3		Results are compared to ILRP requirements, water quality standards and trigger limits; toxicity results, TIE's and possible causes of toxicity are discussed	✓				18-24 Attachment 5	See Item 10 in memorandum.
11	Electronic data submitted in a SWAMP comparable format, <u>either</u> Option A or B							
11.1	A	<u>Option A. Spreadsheet format: Lab data submitted electronically within the SWAMP comparable spreadsheets; Field data submitted electronically, or in paper copy on SWAMP comparable field sheets within SAMR</u>	✓					
	B	<u>Option B. SWAMP database format: All field and lab data uploaded into a SWAMP comparable database (following the most current <i>Required Data Submission Format</i> document)</u>				✓		
11.2		Sample results and required QC results are included: field blanks, field duplicates, lab blanks, spikes (LCS, MS), duplicates (LCD, MSD, replicates), surrogates (for pesticide analyses)	✓				2,16-18 Attachment 3	> 90% in compliance
11.3		Toxicity analyses include: individual sample results, negative control summary results, replicate results, water quality measurements (pH, ammonia, temperature, SC, DO)	✓				Attachment 2 Appendix D	> 90% in compliance
11.4		Data not meeting project QA acceptance guidelines are flagged and include brief notes detailing the problem in the <i>Comments</i> field	✓				Appendix D	> 90% in compliance

Annual Monitoring Report Review Checklist

Item No.		SAMR Component Name	Acceptable	Unacceptable	Incomplete/ Not Included	Not Applicable	Page Number	Comments
12	Sampling and analytical methods used							
12.1		Description of sampling methods used (e.g. type of collection, collection containers, sample preservation, transportation, handling, field measurements), with references to SOP's if appropriate	✓				Appendix C 16,18	
12.2		Description of analytical methods used (references to SOP's and QAPP as appropriate); any deviations from the QAPP are described and explained	✓				6, Appendix C	
13	Copies of chain-of-custody forms and sample receipt documentation							
13.1		Copies of all COCs are included, legible and completed accurately; any anomalies are noted/explained	✓				Appendix A	
14	Field Data Sheets, Lab Reports, Lab Raw Data							
14.1		Copies of all field data sheets (attached/provided electronically on CD) are included, legible, contain the required elements in the ILRP template, and are completely filled out	✓				Appendix C	Overall, the QC met minimum requirements. Some calculated RPD was outside the range for pesticides and toxicity, but these accounted for less than 10% of the total number of tests.
14.2		All analytical reports (attached/provided on CD) are included, complete, and signed by authorized laboratory representative	✓				Appendix C	
	14.2.1	Sample results with units, RLs and MDLs	✓				Appendix C	
	14.2.2	Sample preparation, extraction and analysis dates	✓				Appendix C	
	14.2.3	Results for all QC samples: field and laboratory blanks, lab control spikes, matrix spikes, field and laboratory duplicates, surrogate recoveries	✓				Attachment 3	
	14.2.4	Chemistry lab narrative describes all QC failures, analytical problems and anomalous occurrences.	✓				See lab reports. 16-18	
14.3		All toxicity lab reports (attached/provided on CD) are included, complete, and signed by authorized lab representative	✓				Appendix C	
	14.3.1	All toxicity sample results included	✓					
	14.3.2	Results for all QC samples: field duplicate, negative control, narrative summary of reference toxicant results	✓				Appendix D	

Annual Monitoring Report Review Checklist

Item No.		SAMR Component Name	Acceptable	Unacceptable	Incomplete/ Not Included	Not Applicable	Page Number	Comments
	14.3.3	All raw data (including failed tests) and original bench sheets showing individual replicates	✓				Appendix D	
	14.3.4	Toxicity lab narrative describes all QC failures, analytical problems and anomalous occurrences	✓				Appendix D	Tables, A, B, D summarize QC test results.
15	Associated laboratory and field quality control samples results							
	15.1	Chemical analyses include: field blank, field duplicate, lab blank, matrix spike and MSD, lab control spike and LCSD	✓				Appendix D	Overall, the QC met minimum requirements Greater than 90% met acceptance criteria.
	15.2	Microbiological analyses include: field blank, field duplicate, negative control, positive control	✓				Appendix D	
	15.3	Toxicity tests include: field duplicate, negative control, reference toxicant (narrative OK, raw data not required)	✓				Appendix D	
16	Summary of Quality Assurance Evaluation results							
	16.1	Acceptance criteria for all field and laboratory QA/QC measurements identified and in agreement with ILRP requirements; any adjustments to acceptance criteria documented and discussed	✓				Appendix D	Overall 99% met acceptance criteria.
	16.2	Summary of accuracy (lab control spike and matrix spike recovery) and precision (RPD for field duplicate, LCS/LCSD and MS/MSD pairs) included for all constituents and tests	✓				Appendix D	
	16.3	QA/QC results that did not meet acceptance criteria identified in a table or narrative description that is prepared by the Coalition (not laboratories)	✓				Appendix D	Coalition summarized lab acceptance criteria.
	16.3.1	Discussion of how the failed QA/QC results affect the validity of the reported data	✓				Appendix D	Greater than 90% met compliance. According to the laboratories, failed results did not affect usability of the data.
	16.3.2	Corrective actions for QA/QC results that did not meet acceptance criteria are described, laboratory exception reports are included when samples are reanalyzed due to exceedance of the linear range	✓				Appendix D	No corrective action required.
	16.4	Both field and laboratory completeness are calculated and reported; overall Project completeness is determined	✓				Appendix D	100% completeness. Several sites not sampled due to dryness.

Annual Monitoring Report Review Checklist

Item No.		SAMR Component Name	Acceptable	Unacceptable	Incomplete/ Not Included	Not Applicable	Page Number	Comments
17	Flow Monitoring Method(s)							
17.1		The method used to obtain flow measurement at each monitoring site during each monitoring event is listed	✓				9-11	Flow is calculated, reported by CDEC, or measured across the dam.
18	Monitoring Site Photos							
18.1		Photos are included for each monitoring site for every monitoring event, either electronically or in hard copy	✓				Appendix E	
18.2		Each photo is clearly labeled with site ID and date	✓				Appendix E	
18.3		Photos are descriptive and useful	✓				Appendix E	
19	Summary of Exceedance Reports submitted during the reporting period and related pesticide use information							
19.1		Summary of all Exceedance Reports submitted during the SAMR period is included	✓				19-24	Ceriodaphnia exceedances likely caused by chlorpyrifos or diuron. Selenastrum exceedances likely caused by diuron or Prowl (pendamethalin). Hyalella toxicity likely caused by pyrethroids.
19.2		Pesticide use data for all pesticide and toxicity exceedances occurring during the SAMR time period (unless under a Management Plan): all chemicals applied within the monitoring site subwatershed during the four weeks prior to the measured exceedance	✓				Pesticide use report summary	
20	Actions Taken to Address Water Quality Exceedances							
20.1		Discussion of actions taken to address water quality exceedances during the time frame of the SAMR is included	✓				25-30	
20.2		Updates or additional management practices implemented	✓				A6-2 through 9	
21	Status update on preparation and implementation of all management plans and other special projects							
21.1		Brief update on status of all Management Plans and special projects that are in preparation or being implemented	✓				A6-2	Approximately \$27K of funding has been provided by the Coalition for clean out of 34 sediment ponds.
22	Conclusions and Recommendations							
22.1		Conclusions are supported by the data presented in the SAMR	✓					The monitoring results indicate improvements within the subwatersheds. Outreach and funding appear to be having a positive affect.
22.3		Recommendations are appropriate and adequately detailed	✓					

Westside Coalition Semi-Annual Monitoring Report (SAMR) Review Checklist

Report Name: Westside SJR SAMR 2012 Irrigation Submittal Date: 30 November 2012		Reviewer Name: Chris Jimmerson Review Date: 1/17/12				
Item No.	Management Plan Check List Components	Review Criteria			Document(s) Page No. (Section No.)	Comments
		Acceptable	Unacceptable	Incomplete		
I. Westside Management Plan General Approach						
I.1	Continue a water quality monitoring program	x			Attachment 6	
I.2	Develop and implement Focused Watershed Management Plans	x			Attachment 6	Focused Plan I and II and III underway.
I.3	Compile Management Practices Inventory	x			Attachment 6	Table A6-1 reports a baseline of drip used for each subwatershed. Table A6-2 reports PAM usage by number of acres. Table A6-5 summarizes management Practices surveyed.
I.4	Develop subwatershed maps	x			26, Attachment 6, subwatershed maps	Completed for all three focused areas. Maps indicate prop 84 projects, implemented BMPs and sediment pond projects.
I.5	Determine regional pesticide application	x			15, 26, Attachment 6	Pesticide use report data is collected from the agricultural commissioners in the various counties occupied by the Westside Coalition. Most commonly applied pesticides are listed by county for the 2012 irrigation season.
I.6	Boron Dischargers into the Lower San Joaquin River (Basin Plan IV 32.00)	x			23,32	Agriculture does not apply boron. Boron is typically found in shallow groundwater and can be discharging from fields during runoff events in some subwatersheds.
I.7	Analyze results of E. coli study and map/inventory potential sources	x			27	In a letter dated 2/17/12, the Coalition was requested to participate in a group discussion to develop a joint workplan. The Coalition continues participation in a technical committee to develop a plan.
I.8	Continue outreach and education efforts	x			27-28 Attachment 6	Outreach meetings (members, PCAs) conducted throughout the year. Exceedances reported at meetings.
I.9	Analyze for correlation between low DO and other parameters	x			29	Reported in 2009
I.10	Continue participation in Salinity TMDL program	x			30, 31	Coalition participating in CV-Salt.
I.11	Executive Summary	x			25-33	Narrative provides brief summaries.
II. Westside Focused Watershed Management Plan I Ingram and Hospital Creeks ⁽²⁾						
II.1	Source Identification - Identify parcels	x			Management Practice Maps	Parcel ID'd to show BMPs implemented
II.2	Development of survey document	x			A6-2 through A6-10	100% returned to Coalition
II.3	Completion of grower survey	x			A6-2 through A6-10	Completed in 2010
II.4	Finalize management practice survey findings, develop baseline MP inventory	x			A6-2 through A6-10	Table A6-1 reports acreage that have high efficiency irrigation systems. Table A6-2 reports PAM usage by number of acres. Table A6-5 summarizes management Practices surveyed.

Westside Coalition Semi-Annual Monitoring Report (SAMR) Review Checklist

Item No.	Management Plan Check List Components	Acceptable	Unacceptable	Incomplete	Document(s) Page No. (Section No.)	Comments
II.5	Determine effective MPs and develop next steps	x			A6-2 through A6-10	Long term MPs include: construct sediment basins, drip irrigation, reduce pesticide use, calibrate spray rigs, address overspray, increase buffer strips, implement more PAM use.
II.6	Detailed subwatershed maps	x			Management Practice Maps	Provided maps reporting areas where drip systems and tail water ponds are in use and Prop 84 projects.
II.7	Determination of pesticide use baseline	x				Pesticide use baseline based on county. Coalition should discuss if there are major shifts in pesticide use from the PUR baseline provided. 31 pages of pesticide use summary provided, but staff could not find an analysis of the use (i.e. trends, replaced by changes in crop).
II.8	Identification of management practices to be implemented	x			A6-2 through A6-10	Provides updates of BMPS implemented (i.e. sediment basin cleanout, PAM, drip, spray calibration, buffer zones)
II.9	Intensified outreach to growers	x			A6-2 through A6-10	Held outreach meetings and individual meetings.
II.10	Approach to implement additional management practices	x			A6-2 through A6-10	Surveys, individual meeting, grants
II.11	Monitoring to determine management practice effectiveness	x			A6-4, Exceedance Tally	Listed for each subwatershed
II.12	E. coli watershed-specific field surveys to identify potential agricultural contributions	x			23,27	As per Central Valley Water Board 2/17/12 letter, the Coalition was requested to develop a joint workplan. Technical committee is developing an approach.
II.13	Develop specific performance goals and a schedule	x			A6-1	Performance goals development completed in 2011.
II.14	Surveillance-Level Monitoring	x			A6-2 through A6-10	
II.15	Constituent-specific monitoring	x			A6-2 through A6-10	
II.16	Develop grant program to assist with costs of installing and maintaining tailwater ponds	x			29, A6-2	\$27,200 in grant funding reported during this reporting period to cleanout 34 ponds. Approximately 91% of the pond grant funding has been distributed. Private, EQUIP, Proposition 84 funds also distributed. Grant funding reported Coalition wide, not by subwatershed.
II.17	Increase the number and use of tailwater ponds and tailwater return systems	x			A6-9, Management Practice Maps	Completed 12 irrigation improvement projects in Coalition boundary in 2012 irrigation season. These are mapped.
II.18	Encourage conversion to drip/micro sprinkler irrigations systems	x			A6-2 through A6-10	See Table A6-1 of SAMR
II.19	Encourage usage of PAM on field crops	x			A6-2 through A6-10	See Table A6-2 of SAMR
II.20	Create/distribute maps of areas that are sensitive to aerial overspray	x			A6-2 through A6-10	Completed
II.21	Establish baseline and feasibility of increased size of buffer zones	x			A6-2 through A6-10	
II.22	Process & schedule for evaluating management practice effectiveness	x			A6-2 through A6-10	See Performance Goals
III. Westside Focused Watershed Management Plan II Westley Wasteway, Del Puerto Creek, Orestimba Creek						
III.1	Source Identification - Identify parcels	x			Management Practice Maps	Parcel ID'd to show BMPs implemented
III.2	Development of survey document	x			Attachment 6	Surveys complete
III.3	Completion of grower survey	x			Attachment 6	Surveys complete

Westside Coalition Semi-Annual Monitoring Report (SAMR) Review Checklist

Item No.	Management Plan Check List Components	Acceptable	Unacceptable	Incomplete	Document(s) Page No. (Section No.)	Comments
III.4	Finalize management practice survey findings, develop baseline MP inventory	x			Attachment 6	Surveys complete
III.5	Determine effective MPs and develop next steps	x			A6-2 through A-610	BMPs described in text
III.6	Detailed subwatershed maps	x			Management Practice Maps	
III.7	Determination of pesticide use baseline	x			A6-2 through A6-10	
III.8	Identification of management practices to be implemented	x			A6-2 through A6-10	
III.9	Intensified outreach to growers	x			A6-2 through A6-10	
III.10	Approach to implement additional management practices	x			A6-2 through A6-10	
III.11	Monitoring to determine management practice effectiveness	x			A6-4, Exceedance Tally	
III.12	E. coli watershed-specific field surveys to identify potential agricultural contributions	x			23,27	As per Central Valley Water Board 2/17/12 letter, the Coalition was requested to develop a joint workplan. Technical committee is developing an approach.
III.13	Develop specific performance goals and a schedule	x			A6-1	Performance goals development completed in 2011.
III.14	Constituent-specific monitoring	x			A6-2 through A6-10	
III.15	Process & schedule for evaluating management practice effectiveness	x			A6-2 through A6-10	See Performance Goals
IV. Westside Focused Watershed Management Plan III Salt Slough						
IV.1	Source Identification - Identify parcels	x			A6-2 through A6-10	Mapped parcels
IV.2	Development of survey document	x			A6-2 through A6-10, Table A6-7	Completed
IV.3	Completion of grower survey	x			A6-2 through A6-10, Table A6-7	Completed
IV.4	Finalize management practice survey findings, develop baseline MP inventory	x			A6-2 through A6-10, Table A6-7	Surveys completed in June 2012.
IV.5	Determine effective MPs and develop next steps	x			A6-2 through A6-10	BMPs include: Construct sediment basins, drip irrigation, reduce pesticide use, calibrate spray rigs, address overspray, increase buffer strips, implement more PAM use.
IV.6	Detailed subwatershed maps	x			A6-2 through A6-10	In progress, only partial data collected to date.
IV.7	Determination of pesticide use baseline	x			A6-5	PURs indicate pesticide applications reduced between 2011 and 2012 Coalition wide.
IV.8	Identification of management practices to be implemented	x			A6-2 through A6-10	
IV.9	Intensified outreach to growers	x			A6-8	Held tailgate meetings in subwatershed
IV.10	Approach to implement additional management practices	x			A6-2 through A6-10	In addition to Coalition efforts, irrigation districts are in the process of planning regional projects.
IV.11	Monitoring to determine management practice effectiveness	x			A6-4, Exceedance Tally	
IV.12	E. coli watershed-specific field surveys to identify potential agricultural contributions	x			23,27	As per Central Valley Water Board 2/17/12 letter, the Coalition was requested to develop a joint workplan. Technical committee is developing an approach.
IV.13	Develop specific performance goals and a schedule	x			A6-1, Table A6-7	Completed
IV.14	Constituent-specific monitoring	x			A6-2 through A6-10	

Westside Coalition Semi-Annual Monitoring Report (SAMR) Review Checklist

Item No.	Management Plan Check List Components	Acceptable	Unacceptable	Incomplete	Document(s) Page No. (Section No.)	Comments
IV.15	Process & schedule for evaluating management practice effectiveness	x			A6-1, Table A6-7	See Performance Goals
<p>Footnotes</p> <p>(1) Monitoring and Reporting Program Order No. R5-2008-0831 for Westside San Joaquin River Watershed Coalition under the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands Amended Order No. R5-2006-0053. Section II.D (Pages 22 - 24)</p> <p>(2) Includes specific performance goals identified in the 31 January 2009 Management Practice Report, Performance Goals document</p>						

Westside Coalition Semi-Annual Monitoring Report (SAMR) Review Checklist

Item No.	Management Plan Check List Components	Acceptable	Unacceptable	Incomplete	Document(s) Page No. (Section No.)	Comments

Westside Coalition Semi-Annual Monitoring Report (SAMR) Review Checklist

Report Name: Westside SJR SAMR 2012 Irrigation Season Submittal Date: 30 November 2012		Reviewer Name: Chris Jimmerson Review Date: 1/17/12				
Item No.	I. Basin Plan Component Description ⁽¹⁾ TMDL Chlorpyrifos/Diazinon Check List	Review Criteria			Page No. (Section No.)	Comments
		Acceptable	Unacceptable	Incomplete		
1	Determine compliance with established water quality objectives and the loading capacity applicable to diazinon and chlorpyrifos in the San Joaquin River.	X			24, 32	The Coalition prepares a 1 May chlorpyrifos/diazinon Annual Monitoring Report each year. No detections of diazinon/chlorpyrifos on San Joaquin River.
2	Determine compliance with established load allocations for diazinon and chlorpyrifos.	X			24, 32	see above
3	Determine the degree of implementation of management practices to reduce off-site movement of diazinon and chlorpyrifos.	X				BMPs discussed in the SAMR, but not specifically for the TMDL. Specifics to be listed in the May chlorpyrifos/diazinon Annual Monitoring Report. Eighty-three letters mailed and 180 individual grower meetings held for the TMDL.
4	Determine the effectiveness of management practices and strategies to reduce off-site migration of diazinon and chlorpyrifos.	X				To be provided in the May report
5	Determine whether alternatives to diazinon and chlorpyrifos are causing surface water quality impacts.	X				Alternatives not required to be discussed in the SAMR. The Coalition should provide this information in the May report.
6	Determine whether the discharge causes or contributes to a toxicity impairment due to additive or synergistic effects of multiple pollutants.	X				To be provided in the May report
7	Demonstrate that management practices are achieving the lowest pesticide levels technically and economically achievable.	X				No exceedances at the SJR monitoring sites.
<p>Footnotes</p> <p>(1) Fourth Edition of the Water Quality Control Plan (Basin Plan) for the Sacramento River and San Joaquin River Basins (Diazinon and Chlorpyrifos Runoff in the San Joaquin River Basin, page V-4.00)</p>						

Westside Coalition Semi-Annual Monitoring Report (SAMR) Review Checklist

Report Name: Westside SJR SAMR 2012 Irrigation Submittal Date: 30 November 2012			Reviewer Name: Chris Jimmerson Review Date: 1/17/12			
Item No.	I. Basin Plan Component Description ⁽¹⁾	Review Criteria			Page No. (Section No.)	Comments
		Acceptable	Unacceptable	Incomplete		
Dissolved Oxygen TMDL Related Sections Check List						
1	Determine compliance with established water quality objectives and the loading capacity applicable to dissolved oxygen in the San Joaquin River.	X			Attachment 5, Exceedance Tally	Coalition provided DO data for sampling points that apply to the SJR in the data summaries
II. ILRP MRP Component Description ⁽²⁾						
2	Process to comply with Dissolved Oxygen TMDL - Status	X			27	A funding agreement was completed in April 2012 between the parties and a mechanism in place to fund short term operation of the Stockton Deepwater Ship Channel aerator until May 31, 2014.
<p>Footnotes</p> <p>(1) Fourth Edition of the Water Quality Control Plan (Basin Plan) for the Sacramento River and San Joaquin River Basins. Boron Dischargers into the Lower San Joaquin River (Basin Plan IV 32.00) Channel was adopted in 27 January 2005, and is in effect since 23 August 2006 by Resolution No. R5-2005-0005 into the Lower San Joaquin River. Final Staff Report October 2005</p> <p>(2) Monitoring and Reporting Program Order No. R5-2008-0831 for Westside San Joaquin River Watershed Coalition under Executive Summary No. R5-2006-0053. Sections I.B and I.C (Pages 6 and 7)</p>						

Westside Coalition Semi-Annual Monitoring Report (SAMR) Review Checklist

Report Name: Westside Semi-Annual Management Plan Submittal Date: 30 November 2012		Reviewer Name: Chris Jimmerson Review Date: 1/17/12				
Item No.	I. Basin Plan Component Description ⁽¹⁾	Review Criteria			Page No. (Section No.)	Comments
		Acceptable	Unacceptable	Incomplete		
Salt/Boron TMDL Related Sections Check List						
1	Salt/boron at Vernalis: Nonpoint source dischargers operating under waiver of waste discharge requirements must participate in a Regional Water Board approved real-time management program (Basin Plan IV 32.00 - IV 32.08).	X			30	The Regional Board and State Water Board are addressing the Basin Plan Salt and Boron requirements through the (1) Basin Plan Amendment for the San Joaquin River at Vernalis Salinity and Boron TMDL and (2) Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS).
II. ILRP MRP Component Description ⁽²⁾						
2	Process to comply Salt and Boron TMDL - Status	X			30	According to the SAMR, the Coalition is actively engaged in CVSALTS process and is an active member of the Central Valley Salinity Coalition that has been organized to facilitate the funding of the CVSALT effort. In addition the San Joaquin Valley Drainage Authority is providing contracting and contract administration services for the CVSALT effort. According to the SAMR, the Coalition has committed to substantial resources to help ensure that the CVSALT effort results in an effective and efficient salinity management program for the Central Valley.
<p>Footnotes</p> <p>(1) Fourth Edition of the Water Quality Control Plan (Basin Plan) for the Sacramento River and San Joaquin River Basins. Control Program for Salt and Boron Dischargers into the Lower San Joaquin River (Basin Plan IV 32.00) and is in effect since 23 August 2006 by Resolution No. R5-2005-0005 into the Lower San Joaquin River. Final Staff Report October 2005</p> <p>(2) Monitoring and Reporting Program Order No. R5-2008-0831 for Westside San Joaquin River Watershed Coalition under the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands, Amended Order No. R5-2006-0053. Sections I.B and I.C (Pages 6 and 7)</p>						