
Central Valley Regional Water Quality Control Board

5 September 2012

Mr. Joseph McGahan
Summers Engineering
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JUNE 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 15 June 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, the SAMR demonstrates that the Coalition complies with the terms and conditions of the Conditional Waiver and the majority of MRP Order requirements. For the next SAMR, the Coalition will need to address the two following items.

- Item 22.1 – The Coalition should provide an analysis of the monitoring results before and after management plan implementation.
- Item 22.3 – The Coalition should provide an analysis of the monitoring results between comparable three-year reporting periods.

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: 22 August 2012

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

APPROVED	
Author	_____
Senior	_____

The California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) received the 15 June 2012 non-irrigation Season Semi-Annual Monitoring Report (SAMR) from the Westside San Joaquin River Coalition (Coalition). The SAMR covers the monitoring period from September 2011 through February 2012 (Sampling Events 83 through 88). 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.

Staff reviewed the previous SAMR staff comment letter and determined that with the exception of providing an analysis of the monitoring results before and after management plan implementation, the Coalition implemented staff's recommendations. For example, this SAMR concentrates on reporting activities that occurred during the reporting period, whereas the previous SAMR included activities that occurred in previous reports.

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 8.1.1:

At staff's request, on 3 July, the Coalition corrected and replaced the map on page 14. The map had several labeling errors.

Item 9.8:

Appendix A should contain all of the Electronic Data Deliverable (EDD) sampling results as required by the MRP Order. Staff was not able to locate the hardness data for three source monitoring sites named San Joaquin River at Sack Dam, Delta Mendota Canal at DPWD, and San Joaquin River at PID pumps. The purpose of the source monitoring sites is to characterize incoming irrigation water before it is applied to the fields. The source sites are not used to characterize agricultural discharges. On 21 August staff contacted the Coalition. The Coalition stated that it looks like the hardness data was lost when the Coalition transitioned into an assessment year (data stops in February 2011) and no one caught it. Consequently, hardness was not used to calculate metal limits at these sites. Since the transition, the Coalition has collected the hardness data. During this reporting period the Coalition will not have the benefit of knowing if the source water contributed to any metal exceedances.

Item 19.1.1

Sediment samples were collected in September 2011, as scheduled. Sediment toxicity was observed at Blewett Drain, Hospital Creek, Ingram Creek, and Orestimba Creek (at Highway 33). Survival in all three samples was less than 80% of the control sample. Chemistry analysis indicated pyrethroids as the source of toxicity.

Selenastrum capricornutum toxicity was observed at Poso Slough, Salt Slough at Sand Dam, Salt Slough at Lander Avenue, and the San Joaquin River at Lander Avenue. Chemical analysis indicated that diuron was the likely cause.

Seven chlorpyrifos exceedances and one diazinon exceedance were observed during the reporting period. The diazinon exceedance may have contributed to *Ceriodaphnia dubia* toxicity.

As part of the Coalition's management plan implementation, staff reviewed the SAMR for outreach activities concerning pyrethroids, diuron, chlorpyrifos, and diazinon. The SAMR indicated that the Coalition has been circulating surveys, conducting outreach meetings and workshops. Topics discussed at the meetings include management practices to address those pesticides. In addition the Coalition mailed out 289 letters to growers within the watersheds where chlorpyrifos was detected and held several one-on-one meetings.

Item 19.2.1:

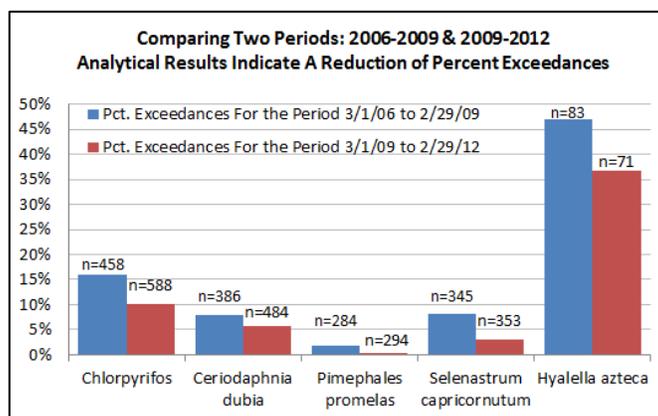
Page 16, Figure 2, presents the storm season monthly pesticide applications within the Westside Coalition area. The Coalition has stated that the data is not an accurate

As staff stated in the previous SAMR, the Coalition should be providing an analysis of the monitoring results before and after management plan implementation in the SAMR Section 11 (Conclusions and Recommendations). Using the above figures as an example, the Coalition should consider preparing figures for each of the exceedances listed in Attachment 5 of the SAMR.

Item 22.3

Page 34 attempts to compare toxicity and chlorpyrifos results from the previous three year monitoring period (March 2008 through February 2011) to the most recent three year period (March 2009 through February 2012) to show changes in water quality. However, these three year periods overlap and do not provide a straightforward comparison. The Coalition should revise the comparison using time frames March 2009 through February 2012 and March 2006 through February 2009 in the next SAMR. The previous SAMR made a comparison using the appropriate time periods for the irrigation seasons. Three years is a good range for comparing water quality because the Conditional Waiver also uses a three year period to activate a Management Plan if more than one exceedance occurs within the period. Any trends should be supported by reporting both the percentage of exceedances ($\text{No. of exceedances} \div \text{No. of tests} \times 100$) and the number of tests for comparison. Using chlorpyrifos and toxicity results as the example presented in the SAMR, staff compared the time frames March 2006 through February 2009 and March 2009 through February 2012 with results presented below.

The analytical results for chlorpyrifos and toxicity indicate a reduction of percent exceedances when comparing the two 3-year periods 2006-2009 and 2009-2012 ($n = \text{No. of tests}$), although *Hyalella azteca* exceedances are frequent.



In addition to comparing the last three years of exceedance data, the Coalition could compare this reporting period exceedance results to the previous June 2011 SAMR exceedance results. Staff presents a simple comparison below to show the changes in water quality since the last reporting period for the same months. The table only presents analytes that had exceedances and leaves out all of the required sample analytes that did not have exceedances. The exceedance data indicate that a decrease (green icons) in percent exceedances for ammonia as N, *E.coli*, arsenic, DDT, DDD, diuron, *Hyalella azteca*, and *Selenastrum capricornutum* have been observed between the two reporting periods (June 2011 SAMR and June 2012 SAMR). Conversely, an increase (red icons) in percent exceedances for analytes EC, pH, boron, total dissolved solids, chlorpyrifos, diazinon, and DDE have been observed.

Type	Constituent	(NOW) Exceedances / Tests 9/1/11-2/29/12	(THEN) Exceedances / Tests 9/1/10-3/1/11	Change in Pct. Exceedance From 9/1/10-3/1/11 to 9/1/11-2/29/12
Field Data	DO	8/116	9/135	0%
Field Data	EC	61/116	67/135	3%
Field Data	pH	12/116	2/135	9%
General Chemistry	Ammonia as N	0/81	2/107	-2%
General Chemistry	E. Coli	22/99	54/125	-21%
General Chemistry	Arsenic	1/81	2/38	-4%
General Chemistry	Boron	30/99	11/58	11%
General Chemistry	Total Dissolved Solids	57/99	71/125	1%
Pesticide	Chlorpyrifos	7/99	2/77	4%
Pesticide	Diazinon	1/99	0/74	1%
Pesticide	DDT(p,p')	1/81	2/47	-3%
Pesticide	DDD(p,p')	1/81	1/47	-1%
Pesticide	DDE(p,p')	13/81	7/47	1%
Pesticide	Diuron	5/81	8/59	-8%
Toxicity	Hyalella azteca	4/17	4/10	-16%
Toxicity	Selenastrum capricornutum	4/81	3/47	-1%
Toxicity	Ceriodaphnia dubia	2/81	1/58	0%

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, and Orestimba Creek watersheds), and Focus Plan III (Poso Slough, Salt Slough). The Coalition recently developed Performance Goals matrices for each Focus Plan which should be included in the November SAMR.

Item II.16

The Coalition provides grant funding to growers who wish to install sedimentation ponds. According to the SAMR, the Coalition is providing outreach to its members about grant funding availability. Approximately \$21,000 was distributed during the reporting period. This is part of the Performance Goal reporting. The bulk of Management Plan reporting will be presented in the November SAMR.

Item III.13

According to the Focused Plan II Performance Goals, the Coalition's target is to calibrate at least 10 ground spray rigs and report the affected acreage in this SAMR. Growers are not electing to take advantage of the offered spray rig calibrations.

Item IV.4

Management practice surveys received to date indicate that nearly 90% of growers discharge tailwater or stormwater in the Salt Slough subwatershed and 4 of the 5 diuron exceedances and 3 of the 4 algal toxicity events for this reporting period also occurred in this subwatershed. Additional surveys are expected to be returned later this year after conducting scheduled field meetings with the growers. According to the Salt Slough Performance Goal Schedule, the survey findings are to be completed by 31 August 2012 and then reported in the November SAMR. As of 15 July, 96% of the surveys were returned. The remaining surveys will be collected through one-on-one visits.

C. BASIN PLAN - TMDL REQUIREMENTS

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 San Joaquin River 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. Staff acknowledges that reporting details were presented in the May 2012 TMDL report.

The Coalition provided a brief summary of TMDL monitoring results on page 33. According to the Coalition, the monitoring results indicate that chlorpyrifos and diazinon were not detected during the reporting period at the Westside Coalition TMDL sites.

San Joaquin River Dissolved Oxygen TMDL:

See attached checklist.

San Joaquin River at Vernalis Salt and Boron TMDL:

See attached checklist.

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

Report Name: Semi-Annual Monitoring Report, Westside SJ River Watershed Coalition					Reviewer Name: Chris Jimmerson					
Submittal Date: 15 June 2012					Review Date: 6/15/12-8/22/12					
Item No.					A Acceptable	U Unacceptable	N Not Included or Incomplete	NA Not Applicable	Page # (Section #)	Comments
1 Signed Transmittal Letter										
1.1				Transmittal letter included	X					
1.2				Penalty of Perjury Statement	X					
1.3				Signature of Authorized Coalition Representative	X					
1.4				Dated	X					
1.5				Submitted by Deadline	X					
2 Title Page										
2.1				Report title	X					
2.2				Date of the report	X					
2.3				Monitoring date range covered by the report	X					
2.4				Coalition Group name	X					
3 Table of Contents										
3.1				List of sections or chapters with page numbers	X					
4 Executive Summary										
4.1				Brief summary of activities	X				1,2	
4.2				Brief summary of results	X				1,2,7,8	
4.3				Brief summary of conclusions	X				34	
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	X				2,3, 9-12	SAMR should mention that 4 sites removed from monitoring as per 2/23/12 letter.
6 Monitoring Objectives and Design										
6.1				<u>Monitoring Objectives</u>						
	6.1.1			List or brief description of monitoring objectives based on MRP Plan	X				2-6	
	6.1.2			Reference to MRP Plan section and page number where detailed monitoring objectives are found				X		
	6.1.3			Reference to QAPP section and page number where detailed monitoring objectives are found				X		
6.2				<u>Monitoring Design</u>						
	6.2.1			Aligns with monitoring design description in MRP Plan	X				5-8	
	6.2.2			Monitoring parameters	X				5, Attachment 7	Each monitoring analyte listed.
	6.2.3			Monitoring frequency	X				4,5	
	6.2.4			Time period of monitoring covered in the report	X					Time period: March 2011 through February 2012.
	6.2.5			Brief description of Management Plan monitoring	X				Attachment 6	
	6.2.8			Description of any deviation from the MRP Plan or QAPP				X	7	Lack of rain resulted in zero storm sampling events. Two are required.
	6.2.2			Reference to MRP Plan section and page number where detailed monitoring design is found				X		
	6.2.3			Reference to QAPP section and page number where detailed monitoring design is found				X		
7 Sampling site descriptions and rainfall records for the time period covered under the SAMR										
7.1				<u>Sampling Site Descriptions</u>						
	7.1.1			Site Name	X				5, 13	
	7.1.2			Site Identification Number	X				5	
	7.1.3			GPS Coordinates	X				13	
	7.1.4			Description of site representativeness (i.e. what geographic area, watershed, crop type does the site represent)	X				9-12	
	7.1.5			Site-specific monitoring type (core, assessment, special project) information	X				5	
	7.1.6			Any other unique information about the site or surrounding area	X				9-12	
7.2				<u>Rainfall Records</u>						
	7.2.1			Graphic or narrative form, in inches of precipitation	X				7	Table 5 presents monthly rainfall record.
8 Location map(s) of sampling sites, crops and land uses										
8.1				<u>Map(s)</u>						

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

Item No.				SAMR Component Name	A Acceptable	U Unacceptable	N Not Included or Incomplete	NA Not Applicable	Page # (Section #)	Comments
	8.1.1			Sampling Sites with informative level of detail	X				14	Coalition corrected map on 7/3/12. Two sites labeled with triangles (monitoring location) for #19 thru #27. Site #9 not identified with triangle. SJR at Fremont Ford is not identified on map nor in lower left hand table. Excess triangles (#28 thru #39) on map.
	8.1.2			Crop Types with informative level of detail	X				15	Provided in text and Table 7. Table displays top 10 crops by county in Coalition area.
	8.1.3			Land Uses with informative level of detail	X				9-12, 15	Provided in text
	8.1.4			Datum identified on map as either WGS 1984 or NAD 1983	X				14	NAD 27
	8.1.5			Source and date of all data layers identified on map	X				14	DWR Base Map
8.2				<u>List or Table of Monitoring Site Information</u>						
	8.2.1			Site name	X				9-12	
	8.2.2			Site identification number	X				5, 9-12	
	8.2.3			GPS coordinates at latitude and longitude in decimal degrees to at least five decimal places	X				13	
9	Tabulated results of all analyses arranged in tabular form so that the required information is readily discernible (example table is included in MRP Order Attachment C)									
	9.1			Data is in tabular form	X				Appendix A	
	9.2			Data is clearly organized (i.e. readily discernible)	X				Appendix A	
	9.3			Tabulated results agree with the electronic data submittal results	X				Appendix C	
	9.4			Tabulated results agree with results discussed in the text	X				Exceedance tally, Attachment 5	
	9.5			Previously reported exceedances match exceedances identified in the SAMR	X				Attachment 5	
	9.8			All required constituents for each site have reported results			X		Appendix A, Attachment 5	Hardness is missing for 3 source monitoring sites (SJR at Sack Dam, DMC at Dowdy and SJR at PID. Sites do not represent agriculture discharge.
	9.9			All toxic events were re-sampled and results reported				X		
	9.10			10% check on the QC data came back ok	X				17-19, Attachment 3	
10	Discussion of data to clearly illustrate compliance with the Coalition Group Conditional Waiver, water quality standards, and trigger limits									
	10.1			Data discussion to illustrate compliance with the Conditional Waiver terms and conditions	X				17-26	
	10.1.1			Where compliance not achieved, explanation of why required component not met				X		
	10.2			Data discussion to illustrate compliance with water quality standards and trigger limits	X				17-26	
	10.2.1			Where compliance not achieved, explanation of missing data and/or reason for non-compliance	X					Some samples not collected due to unsafe access or dry conditions. Relocation of one site due to construction.
11	Electronic data submitted in a SWAMP comparable format									
	11.1			<u>Electronic submittal data package in spreadsheet format</u>						
	11.1.1			Lab data is entered and submitted within the ILRP SWAMP comparable data spreadsheets	X					Currently utilizing electronic data feedback to identify data not meeting submittal standards.
	11.1.2			ILRP SWAMP comparable field sheets in paper copy				X		
12	Sampling and analytical methods used									
	12.1			Description of sampling methods used	X				17, QAPP, Field sampling manual	More description found in QAPP, Field sampling manual.
	12.2			Description of analytical methods used	X				6, 19, table 4, Appendix C	
13	Copy of chain-of-custody forms									
	13.1			Copies of all COCs are included	X				Appendix A	
	13.2			COCs are legible	X				Appendix A	
	13.3			COCs are completed accurately	X				Appendix A	
14	14. Field data sheets, signed laboratory reports, laboratory raw data (as identified in Attachment C)									
	14.1			<u>Field Data Sheets</u>						
	14.1.1			If Coalition chose Option A for electronic data submittal package, field data sheets are the ILRP SWAMP comparable field data sheets (see 11.1) in paper copy	X				Appendix C	
	14.1.2			Copies of all field data sheets are attached to AMR or provided electronically in attached CD (see 14.1.1)	X				Appendix C	

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

Item No.					SAMR Component Name	A Acceptable	U Unacceptable	N Not Included or Incomplete	NA Not Applicable	Page # (Section #)	Comments
		14.1.3			Field sheets are completely filled in	X				Appendix C	
		14.1.4			Field sheets are legible	X				Appendix C	
	14.2				<u>Toxicity Lab Reports</u>						
		14.2.1			All toxicity lab reports included as attachments to the SAMR_OR electronically on a CD	X				Appendix C, PER	
		14.2.2			All toxicity lab report copies submitted are complete	X				Appendix C, PER	
		14.2.3			All toxicity lab reports are signed by authorized lab representative	X				Appendix C, PER	
		14.2.4			Toxicity lab narrative describes all QC failures, analytical problems and anomalous occurrences	X				Appendix C, PER	
		14.2.5			All raw lab data for acceptable toxicity tests is included	X				Appendix C, PER	
		14.2.6			All raw lab data for failed toxicity tests is included	X				Appendix C, PER	
		14.2.7			All original bench sheets showing results of individual replicates, such that all calculations and statistics can be reconstructed	X				Appendix C, PER	
		14.2.8			All QC sample results including field and lab blanks, lab control spikes, matrix spikes, field and lab duplicates, and surrogate recoveries are included	X				17,18,19, Appendix C, PER	Met completeness and acceptability criteria for accuracy and precision.
	14.3				<u>Chemistry Lab Reports</u>						
		14.3.1			All chemistry lab reports included as attachments to the SAMR_OR electronically on a CD	X				Appendix C -Appl, Caltest	Events 77-82 lab reports. Included on CD
		14.3.2			All chemistry lab report copies submitted are complete	X				Appendix C -Appl, Caltest	
		14.3.3			All chemistry lab reports are signed by authorized lab representative	X				Appendix C -Appl, Caltest	
		14.3.4			Chemistry lab narratives describe all QC failures, analytical problems and anomalous occurrences	X				Attachment 3, Appendix C -Appl, Caltest	Most failures are due to outside of acceptable recovery limits and the relative percent difference (RP) for duplicates. However, >90 percent of tests are within limits.
		14.3.5			All sample results for contract and subcontract labs including units, RLs and MDLs are included	X				Appendix C -Appl, Caltest	
		14.3.6			Sample preparation, extraction, and analysis dates are included	X				Appendix C -Appl, Caltest	
		14.3.7			All QC sample results including field and lab blanks, lab control spikes, matrix spikes, field and lab duplicates, and surrogate recoveries are included	X				Attachment 3, Appendix C -Appl, Caltest	
15	Associated laboratory and field quality control samples results										
					These requirements covered under section 14						
16	Summary of Quality Assurance Evaluation results (as identified in Attachment C for Precision, Accuracy and Completeness)										
	16.1				<u>Quality Assurance Evaluation for LAB Data</u>						
		16.1.1			Acceptance criteria for all measurements of precision and accuracy are listed and coincide with ILRP requirements in MRP Attachment C, Appendix B	X				17,18, Appendix D	Percent level of lab QC acceptance criteria for each lab: PER 100%, APPL 94%, CalTest 97%.
		16.1.2			QA/QC results that did not meet acceptance criteria are identified in a table or narrative description that is prepared by the Coalition (not lab)	X				17,18, Appendix D	98% overall within criteria range.
		16.1.3			Discussion of how the failed QA/QC results affect the validity of the reported data	X				17,18, Appendix D	
		16.1.4			Discussion of corrective actions for QA/QC results that did not meet acceptance criteria is included	X				17,18, Appendix D	Retest on Ceriodaphnia test due to control failure to meet acceptance criteria.
		16.1.5			Calculation of completeness (percentage of QC data that met acceptance criteria and a determination of project completeness based on this)	X				19	
		16.1.6			Document and discuss any adjustments made to acceptance criteria	X				Appendix E,	No adjustments
		16.1.7			Laboratory exception reports are included when samples are reanalyzed due to exceedance of the linear range				X	Appendix D	
	16.2				<u>Quality Assurance Evaluation for FIELD Data</u>						
		16.2.1			Acceptance criteria for all measurements of precision and accuracy are listed and coincide with ILRP requirements in MRP Attachment C, Appendix B	X				17, Appendices A, C	Calibration sheets for field data complete and within acceptance criteria. Further information in report on unacceptable ranking..
		16.2.2			QA/QC results that did not meet acceptance criteria are identified in a table or narrative description that is prepared by the Coalition (not lab)	X				17, 18, Appendices A, C, D	Less than 6% of laboratory QC samples did not meet acceptance criteria, but did not affect usability.
		16.2.3			Discussion of how the failed QA/QC results affect the validity of the reported data				X	17, 18, Appendix D	Provided in laboratory reports and by Coalition. QC compliance testing >90% accurate.
		16.2.4			Discussion of corrective actions for QA/QC results that did not meet acceptance criteria				X		Corrective action included retest.

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

Item No.					SAMR Component Name	A Acceptable	U Unacceptable	N Not Included or Incomplete	NA Not Applicable	Page # (Section #)	Comments
		16.2.5			Calculation of completeness (percentage of QC data that met acceptance criteria and a determination of project completeness based on this)				X	18, 19,	100% Completeness met.
		16.2.6			Document and discuss any adjustments made to acceptance criteria				X		
17	Specification of the method(s) used to obtain flow at each monitoring site during each monitoring event										
	17.1				The method used to obtain flow measurement at each monitoring site during each monitoring event is listed	X				6, 9-12, 17	Weir measured, reported by CDEC, or by velocity calculation.
18	Electronic or hard copies of photos obtained from all monitoring sites, clearly labeled with site ID and date										
	18.1				Photos are included for each monitoring site for every monitoring event, either electronically or in hard copy	X				Appendix E	
	18.2				Each photo is clearly labeled with site ID and date	X				Appendix E	Dates missing from some photos in Appendix E. However, dates found on electronic photos (CD).
	18.3				Photos are descriptive and useful	X				Appendix E	
19	Summary of exceedances occurring during the reporting period and related pesticide use information										
	19.1				Summary of Exceedance Reports submitted during the SAMR period	X				Appendix B, Attachment 5,	PDF of exceedance reports provided in SAMR and summary of exceedances.
		19.1.1			Summary includes all needed exceedance reports	X				Appendix B, Attachment 5, 19-26	Exceedance reports provided in appendix. Pyrethroids likely cause of sediment toxicity. Diuron likely cause of algal toxicity.
		19.2			<u>Pesticide Use Data</u>						
			19.2.1		Pesticide use data is included for all pesticide and toxicity exceedances occurring during the SAMR time period (except those that fall under a Management Plan)	X				15,16, 27	2010 pesticide use data is most current available, but maybe inaccurate because of PUR duplicates according to the Coalition. Coalition should meet with staff to discuss the duplicates because not all coalitions are experiencing the same problem. It is assumed the procurement method for each coalition is identical.
			19.2.2		Pesticide use data is directly relevant to the monitoring sites where exceedances occurred	X				14-16, 27, Pesticide Use Report Summary	Pesticide use is grouped by county and by monitoring site.
			19.2.3		Pesticide use data includes all pesticides applied within the monitoring site drainage area during the four weeks prior to the measured exceedance	X				14, 15, 27	Pesticide use is grouped by county and PUR Summary list all the pesticides applied, as the MRP, page 22, requires.
20	Actions taken to address water quality exceedances that have occurred, including but not limited to, revised or additional management practices implemented										
		20.1			Discussion of actions taken to address water quality exceedances during the time frame of the SAMR is included	X				26-33, Attachment 6	Held 7 individual grower meetings within subwatersheds in addition to several other grower meetings, mailed 3 letters to 143 growers, as per Table 13 page 29. Tally's are inconsistent with text on page 28 and need to be clarified.
		20.2			Actions taken to address the exceedances are adequate	X				26-33, Attachment 6	Narratives of the focused management plans are also included.
21	Status update on preparation and implementation of all Management Plans and other special projects					X				Attachment 6	
22	Conclusions and recommendations										
		22.1			Conclusions are supported by the data presented in the SAMR	X				18-34	As stated in the SAMR, the fall season presents more toxicity persistence than in the spring season. Should be comparing the results before and after management plan implementation.
		22.2			Discussion is adequately detailed	X				18-34	Pyrethroids concluded most often cause of sediment toxicity. Management practices to implement will most likely be sediment control. All four algae toxicity events caused by diuron.
		22.3			Recommendations are appropriate and adequately detailed	X				33,34	Coalition should concentrate on sediment discharges. Sediment discharges are linked to pyrethroidal hyalella toxicity. SAMR reports that diuron is major cause of algal toxicity. The 3-year comparison years should be revised in the next SAMR. See memorandum.

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

Report Name: Westside Semi-Annual Management Plan		Reviewer Name: Chris Jimmerson				
Submittal Date: 15 June 2012		Review Date: 6/15/12-8/22/12				
Item No.	Management Plan Check List Components	Review			Document(s) Page No. (Section No.)	Comments
		Acceptable A	Unacceptable U	Incomplete I		
I. Westside Management Plan General Approach						
I.1	Continue a water quality monitoring program	x			27-34, Attachment 6	
I.2	Develop and implement Focused Watershed Management Plans	x			26-34, Attachment 6	Focused Plan I and II and III underway. Salt Slough Performance Goals approved.
I.3	Compile Management Practices Inventory	x			26-34, Attachment 6	Table A6-1 reports a steady increase in use of drip since 2010. Table A6-2 reports PAM usage by number of acres. Table A6-3 summarizes management Practices surveyed. Focus Plan III survey has been developed and distributed to growers. The return rate of surveys is approximately 85% for all Focus Plans.
I.4	Develop subwatershed maps	x			27, Attachment 6, subwatershed maps	Ongoing activity, completion date scheduled for Jan. 2013.
I.5	Determine regional pesticide application	x			27	Pesticide use report data is collected from the agricultural commissioners in the various counties occupied by the Westside Coalition. Obtaining timely pesticide use information is getting more difficult. As a result, pesticide use information availability limits the usability to track trends.
I.6	Boron Dischargers into the Lower San Joaquin River (Basin Plan IV 32.00)	x			26, 28	Coalition working to provide funding for operation of an aerator installed by DWR. "A funding agreement anticipated to be completed within the next few months." was stated in the last SAMR. An update should be provided in the next SAMR.
I.7	Analyze results of E. coli study and map/inventory potential sources	x			27-28	As per Central Valley Water Board 2/10/12 letter, management plan actions regarding E.coli are suspended.
I.8	Continue outreach and education efforts	x			28-30 Attachment 6	Eight grower meetings held during reporting period. Outreach included individual grower meetings in response to chlorpyrifos exceedances and sediment discharges. Notices and certified letters sent to potential sources. Coalition continues to offer grant funding.
I.9	Analyze for correlation between low DO and other parameters	x			30	
I.10	Continue participation in Salinity TMDL program	x			30, 31	Coalition participating in CV-Salt.
I.11	Executive Summary	x			26-34	Narrative provides brief summaries.
II. Westside Focused Watershed Management Plan I Ingram and Hospital Creeks ⁽²⁾						
II.1	Source Identification - Identify parcels	x			Attachment 6	Identified acreage in Table A6-1
II.2	Development of survey document	x			Attachment 6	100% returned to Coalition
II.3	Completion of grower survey	x			Attachment 6	Completed in 2010

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
		A	U	I		
II.4	Finalize management practice survey findings, develop baseline MP inventory	x			Attachment 6	Table A6-1 reports acreage that have high efficiency irrigation systems. Table A6-2 reports PAM usage by number of acres. Table A6-3 summarizes management Practices surveyed.
II.5	Determine effective MPs and develop next steps	x			Attachment 6	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			15, 16	Determined through PUR and application timing and rate of application. PURs becoming less useful because data is dated.
II.8	Identification of management practices to be implemented	x			Attachment 6	Provides list of management practices
II.9	Intensified outreach to growers	x			Attachment 6	Held outreach meetings and individual meetings.
II.10	Approach to implement additional management practices	x			Attachment 6	Surveys, individual meeting, implementation.
II.11	Monitoring to determine management practice effectiveness	x				
II.12	E. coli watershed-specific field surveys to identify potential agricultural contributions	x			26	As per Central Valley Water Board 2/10/12 letter, Management Plan actions regarding E.coli are suspended.
II.13	Develop specific performance goals and a schedule	x			Attachment 6	Performance goals developed for Ingram, Hospital creeks, Westley Wasteway, Del Puerto Creek, Orestimba Creek and Salt Slough, Poso Slough.
II.14	Surveillance-Level Monitoring	x			Attachment 6	
II.15	Constituent-specific monitoring	x			Attachment 6	
II.16	Develop grant program to assist with costs of installing and maintaining tailwater ponds	x			Attachment 6	\$21,000 in grant funding reported during this reporting period. Outreach efforts include specific information on grant funding availability.
II.17	Increase the number and use of tailwater ponds and tailwater return systems	x			30	Two tailwater return projects identified in Hospital Creek and Ingram Creek areas, funding being sought.
II.18	Encourage conversion to drip/micro sprinkler irrigations systems	x			Attachment 6	See Table A6-1 of SAMR
II.19	Encourage usage of PAM on field crops	x			Attachment 6	See Table A6-2 of SAMR
II.20	Create/distribute maps of areas that are sensitive to aerial overspray	x			Attachment 6	Completed
II.21	Establish baseline and feasibility of increased size of buffer zones	x			Attachment 6	
II.22	Process & schedule for evaluating management practice effectiveness	x			Attachment 6	
III. Westside Focused Watershed Management Plan II Westley Wasteway, Del Puerto Creek, Orestimba Creek						
III.1	Source Identification - Identify parcels	x			Attachment 6	
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
		A	U	I		
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			Attachment 6	
III.6	Detailed subwatershed maps	x			Attachment 6	
III.7	Determination of pesticide use baseline	x			Attachment 6	
III.8	Identification of management practices to be implemented	x			Attachment 6	
III.9	Intensified outreach to growers	x			Attachment 6	
III.10	Approach to implement additional management practices	x			Attachment 6	
III.11	Monitoring to determine management practice effectiveness	x			Appendix A	
III.12	E. coli watershed-specific field surveys to identify potential agricultural contributions	x			26	As per Central Valley Water Board 2/10/12 letter, Management Plan actions regarding E.coli are suspended.
III.13	Develop specific performance goals and a schedule	x			Attachment 6	Maps distributed to growers and PCAs. Growers not taking advantage of spray rig calibrations.
III.14	Constituent-specific monitoring	x			Attachment 6	
III.15	Process & schedule for evaluating management practice effectiveness	x			Attachment 6	
IV. Westside Focused Watershed Management Plan III Salt Slough (Draft)						
IV.1	Source Identification - Identify parcels	x			Attachment 6	Underway
IV.2	Development of survey document	x			Attachment 6	
IV.3	Completion of grower survey	x			Attachment 6	Due by 8/31/12. 96% completed.
IV.4	Finalize management practice survey findings, develop baseline MP inventory	x			Attachment 6	Surveys indicate nearly 90% of growers discharge off property in the Salt Slough subwatershed and 4 of the 5 diuron exceedances 3 of the 4 algal toxicity events occurred in this subwatershed.
IV.5	Determine effective MPs and develop next steps	x			Attachment 6	
IV.6	Detailed subwatershed maps	x			Attachment 6	Underway
IV.7	Determination of pesticide use baseline	x			Attachment 6	PURs indicate cotton and tomatoes receive the majority of pesticides.
IV.8	Identification of management practices to be implemented	x			Attachment 6	
IV.9	Intensified outreach to growers	x			Attachment 6	
IV.10	Approach to implement additional management practices	x			Attachment 6	
IV.11	Monitoring to determine management practice effectiveness	x			Attachment 6	
IV.12	E. coli watershed-specific field surveys to identify potential agricultural contributions	x			Attachment 6	As per Central Valley Water Board 2/10/12 letter, Management Plan actions regarding E.coli are suspended.
IV.13	Develop specific performance goals and a schedule	x			Attachment 6	Completed
IV.14	Constituent-specific monitoring	x			Attachment 6	
IV.15	Process & schedule for evaluating management practice effectiveness	x			Attachment 6	See Performance Goals
Footnotes						
(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)					
(2)	Includes specific performance goals identified in the 31 January 2009 Management Practice Report, Performance Goals document					

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

Report Name: Westside Semi-Annual Management Plan Update Report			Reviewer Name: Chris Jimmerson			
Submittal Date: 15 June 2012			Review Date: 6/15/12-8/22/12			
		Review Criteria				
Item No.	I. Basin Plan Component Description ⁽¹⁾	Acceptable	Unacceptable	Incomplete	Page No. (Section No.)	Comments
		A	U	I		
	TMDL Chlorpyrifos/Diazinon Check List					
1	Determine compliance with established water quality objectives and the loading capacity applicable to diazinon and chlorpyrifos in the San Joaquin River.	X			25, 26, 33	The Coalition prepares a 1 May chlorpyrifos/diazinon Annual Monitoring Report each year. No chlorpyrifos or diazinon exceedances reported.
2	Determine compliance with established load allocations for diazinon and chlorpyrifos.	X			25, 26, 33	see above
3	Determine the degree of implementation of management practices to reduce off-site movement of diazinon and chlorpyrifos.	X			25, 26, 33	see above
4	Determine the effectiveness of management practices and strategies to reduce off-site migration of diazinon and chlorpyrifos.	X			25, 26, 33	see above
5	Determine whether alternatives to diazinon and chlorpyrifos are causing surface water quality impacts.	X			25, 26, 33	see above
6	Determine whether the discharge causes or contributes to a toxicity impairment due to additive or synergistic effects of multiple pollutants.	X			25, 26, 33	see above
7	Demonstrate that management practices are achieving the lowest pesticide levels technically and economically achievable.	X			25, 26, 33	see above
	Boron Dischargers into the Lower San Joaquin River (Basin Plan IV 32.00)					
	Footnotes					
(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)					
	Executive Summary					

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

Report Name: Westside Semi-Annual Management Plan		Reviewer Name: Chris Jimmerson				
Submittal Date: 15 June 2012		Review Date: 6/15/12-8/22/12				
Item No.	I. Basin Plan Component Description ⁽¹⁾	Review Criteria			Page No. (Section No.)	Comments
		Acceptable A	Unacceptable U	Incomplete I		
	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			27, 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	The Coalition is participating in the DO TMDL. Funding for the TWG meeting ended Dec 2010. Coalition is participating with other stakeholders to provide funding for operation of an aerator.
	Footnotes					
	(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					
	(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)					

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

Report Name: Westside Semi-Annual Management Plan		Reviewer Name: Chris Jimmerson				
Submittal Date: 15 June 2012		Review Date: 6/15/12-8/22/12				
Item No.	I. Basin Plan Component Description ⁽¹⁾	Review Criteria			Page No. (Section No.)	Comments
		Acceptable A	Unacceptable U	Incomplete I		
	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.
	Footnotes					
(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					
(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)					
	Executive Summary					