



Central Valley Regional Water Quality Control Board

15 April 2024

Mr. Orvil McKinnis, Watershed Coordinator
Westside San Joaquin River Watershed Coalition
P.O. Box 2157
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REQUIREMENT TO REVISE THE PYRETHROID MANAGEMENT PLAN – WESTSIDE SAN JOAQUIN RIVER WATERSHED COALITION

On 6 October 2023, Central Valley Regional Water Quality Control Board (Water Board) staff received a response to a request for revisions to the Pyrethroid Management Plan from the Westside San Joaquin River Watershed Coalition (Coalition).

Based on staff's review findings in the attached Staff Review Memo, I am requiring the Coalition to revise the Pyrethroid Management Plan. Please address the five staff recommendations as recommended or with an equivalent process and submit a draft revised Management Plan by **1 August 2024**.

If you have any questions or comments regarding this letter, please contact Dana Kulesza at dkulesza@waterboards.ca.gov or (916) 464-4847.

Adam Laputz  Digitally signed by Adam Laputz
Date: 2024.04.16 08:47:40 -07'00'
Water Boards

Patrick Pulupa
Executive Officer

Enclosure: 27 October 2023 Staff Review Memo



Central Valley Regional Water Quality Control Board

TO: Sue McConnell
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FROM: Dana Kulesza
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DATE: 27 October 2023

**SUBJECT: COMPLIANCE ANALYSIS FOR SURFACE WATER PESTICIDE
MANAGEMENT PLANS – WESTSIDE SAN JOAQUIN RIVER WATERSHED
COALITION**

On 6 October 2023, Central Valley Regional Water Quality Control Board (Water Board) staff received a draft proposed pyrethroid management plan revision from the Westside San Joaquin River Watershed Coalition ('Coalition' or 'Third-Party'). The draft proposal was submitted in response to on-going discussions and requests from staff to revise the management plan process due to concerns over lack of clarity and compliance deficiencies with the current pesticide management plan process. Most recently, staff listed the specific issues that need to be addressed in an email sent 6 September.

Staff reviewed the 6 October submittal and finds that it does not address the issues specified in staff's 6 September email.

The information provided by the Coalition in Management Plan Progress Reports demonstrates that the Coalition needs to augment Focused Outreach actions to increase the Coalition's understanding of where management practice changes are needed and to increase member participation in management practice adoption.

Order requirements for Management Plans

Staff has had difficulty during review of recent annual Management Plan Progress Reports determining whether the Pesticide Management Plan is adequately addressing the following:

- whether the Coalition is meeting Order requirements, and
- whether all members targeted for management plan implementation (referred to as "Focused Outreach Members") are meeting Order requirements.

Waste Discharge Requirements General Order for Growers in the Western San Joaquin River Watershed that are Members of a Third-Party Group, Order R5-2014-0002-11 ([Order](#)¹) requires implementation of a management plan when a water quality objective or trigger limit has been exceeded twice in a three-year period for the same constituent at a monitoring location (Order requirement VIII.M). **With information currently provided by the Coalition, staff finds it difficult to evaluate the compliance status of the following Order requirements:**

1. All members shall implement water quality management practices as necessary to protect water quality and to achieve compliance with surface water and groundwater receiving water limitations of this Order (Order provision IV.C.6 and MRP Appendix 1 section I.C.2.c).
2. The Third-Party shall develop and implement plans to track and evaluate the effectiveness of water quality management practices, pursuant to approved Surface Water Quality Management Plans and Groundwater Quality Management Plans (Order provision IV.D.4). Include a specific schedule for the implementation of management practices outlined in the management plan. The schedule must include a timetable for implementation of identified management practices (MRP Appendix 1 section I.C.4.d).
3. The Third-Party shall work cooperatively with the Central Valley Water Board to ensure that all Members are providing required information and taking necessary steps to address exceedances or degradation identified by the Third-Party or Board. (Order provision IV.D.9).
4. Represented Watersheds – Any applicable surface water quality management plan actions associated with the representative monitoring site must take place in represented drainages without monitoring sites (Order Attachment B MRP section III.A).

WSJR Pesticide Management Plans

There are currently 11 subwatersheds with a pyrethroid management plan. Current pesticide management plans are shown in Table 1. Here is a summary of the management plan Focused Outreach process currently used by the WSJR Coalition once a pesticide ² management plan is triggered:

1. The Coalition develops a list of members in the subwatershed who will be subject to the management plan. These are the 'Focused Outreach (FO) Members.' Members included on the list used the pyrethroid(s) prior to the measured exceedance and have close proximity to the surface waterway. On average, the number of Focused Outreach Members per subwatershed that are targeted for implementation of the management plan is 12 members (see Table 2 below for more detailed information).

¹https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/regulatory_information/western_san_joaquin_watershed_wdrs/

² The majority of active pesticide management plans in the WSJR Coalition are for pyrethroid exceedances, and this memo will focus on the pyrethroid management plans.

2. The Coalition mails an initial survey to the Focused Outreach Members. The survey requests information on what practices are currently used, and what practices the member is considering implementing within the next year. The length of time between when the management plan was triggered and when the initial survey is sent has ranged from within a year to four years later.
3. The Coalition conducts an outreach training event for Focused Outreach Members in the subwatershed(s) around the time the initial surveys are sent. This can either be an in-person group meeting, an online viewable presentation, or a mailed pamphlet. Each Focused Outreach member needs to attend or view one meeting or training material. At the meeting or in the training material, the Coalition provides information on the management plan exceedances and management practices that can address the exceedances.
4. One year after the initial survey, the Coalition sends a final survey to a subset of members remaining in the Focused Outreach process. The final survey requests information on changes in management practices within the last year. Anyone who responds to the initial survey that they are not considering implementing any practices in the next year *has completed their management plan responsibilities and are not sent a follow-up survey.*
5. The Coalition tallies up the counts and acreage for each management practice in use by the Focused Outreach members and includes tallies in the annual Management Plan Progress Report. The subwatershed process is then complete until the Coalition decides to repeat the same process in the watershed again.

Table 1. Completed and Planned Focused Outreach (FO) in Pyrethroid Management Plan Watersheds.

Gray shading indicates when the management plan was triggered.

Subwatershed	Monitoring Year (runs March through February)							
	2019	2020	2021	2022	2023	2024	2025	2026
Blewett Drain			FO					
Del Puerto Ck *				FO				
Hospital Ck *				FO				
Marshall Rd Drain				FO				
Ingram Ck *					FO			
Salt Slough					FO			
Westley Wasteway			FO		FO			
Mud Slough			FO			FO		
Los Banos Ck						FO		
Newman Wasteway						FO		
Poso Slough								

No reported planned Focused Outreach yet

* 303(d) listed for pyrethroids. Pyrethroid Basin Plan Amendment became fully effective in February 2019.

Table 2. Recent Pesticide / Pyrethroid Management Plan Focused Outreach To-Date.

Subwatershed	FO Initiation Year	# FO Members Sent Surveys	# Surveys Sent Back to CG	# 1-Yr Follow-up Surveys Sent (ie, # FO Members Who Might Add a Mgt Practice)	# Follow-up Surveys Sent Back to CG	# Attending Mtg or Other Training
Blewett Drain	2021	12	12	4	4	12
Mud Slough	2021	15	15	0	NA	11
Del Puerto Ck	2022	11	11	4	- *	9
Hospital Ck	2022	9	5	1	- *	5
Marshall Rd Drain	2022	20	17	2	- *	11
Ingram Ck	2023	11	5	0	NA	9
Salt Slough	2023	23	Too early for data			
Westley Wasteway	2020	8	8	4	0	NA
Westley Wasteway	2023	7	4	0	NA	4

* The Coalition reports this field as “not applicable” in the 6 October submittal, but it is unclear why the field is not applicable.

Staff Review of the Current Pyrethroid Management Plan Process (Items that Need to be Addressed)

Potentially Inadequate Management Practice Implementation

The Coalition provides the Water Board with a tally of practices that are reported to be in use in the management plan subwatershed. Some Focused Outreach members implement practices in response to the management plan, but most do not. Because there is not an evaluation conducted by the Coalition of adequacy of the implemented practices, staff cannot determine whether current practices in place are adequate to meet Order requirements.

For example, most FO members do not plan to or actually end up implementing new practices (see the 5th column in table 2). Of the 116 members that the Coalition targeted for pyrethroid Focused Outreach, 87 percent (100 members) reported back to the Coalition that they would not be making any management practice changes on their farm in response to the pyrethroid exceedances. Of the 16 members that initially said they might implement a new practice, only 4 returned the final survey.³ The Coalition does not visit member farms to evaluate management practices and determine if changes are needed or not, *so there is no way to know whether practices on these farms are already protective of water quality or whether they are out of compliance with the Order and need to make changes.*

It appears that few management practice changes are being made in response to the management plan requirements; therefore, the Coalition’s Management Plan Progress Report should discuss potential issues with the Focused Outreach Process and suggest changes for improving participation and compliance (this discussion is a required component of the Report). When no changes are made in the subwatershed by members, the one-year Focused Outreach process is deemed complete by the Coalition, and the Report states that monitoring will continue and be the sole measurement of whether practices have been implemented enough to improve water quality. The Management Plan Progress Report does

³ The Salt Slough subwatershed is still in process and may receive some surveys back.

not address the extremely low rate of management practice implementation or the next steps to be taken with the members that don't make changes. It is difficult to understand how the exceedances will be addressed with such limited action on the part of the growers.

Phasing of Subwatershed Focused Outreach Missing Justification

Other coalitions conduct on-farm evaluations for every Focused Outreach member to determine whether existing practices are protective of water quality or whether changes could be needed and suggest practices that should be used at a particular operation. This is a time and resource-intensive process, and thus justifies conducting the process in a subset of subwatersheds every year (i.e., "Phasing" of Focused Outreach).

The WSJR Focused Outreach process in a subwatershed consists of two surveys mailed/emailed and a group meeting. Also, there is a relatively small number of FO members per subwatershed; 12 on average. Staff has encouraged the Coalition to begin on-farm evaluations by a qualified professional to determine where practices are needed and recommends that on-farm evaluations be required for the WSJR Coalition to justify the proposed phased approach for Focused Outreach. If on-farm evaluations are not added to the Focused Outreach Process, FO phasing will be removed.

Meeting the Order's Time Schedule for Compliance

Even though the Coalition did not receive information from members that practices were implemented and with exceedances still occurring in these watersheds in 2023, the Coalition does not currently plan to continue the management plan process (except Mud Slough) in 2024 and beyond (see Table 1 above and Table 1 of the 6 October submittal). It is unclear how the Coalition considers the Focused Outreach process to be successful if (a) members are not implementing practices and (b) exceedances are still occurring.

The Order requires that the water quality problem must be addressed in as short a timeline as is practicable, but not to exceed 10 years. Considering that (a) we are already three to four years into the pyrethroid management plan in some subwatersheds; (b) many members appear not to be participating in the required process; and (c) older management plans have extended beyond the maximum 10-year timeline⁴, there is strong reason to more urgently prioritize the pyrethroid management plans.

Are Members in Represented Subwatersheds Meeting Order Requirements?

All actions that occur in Monitored Subwatersheds are required to occur in Represented Subwatersheds, including Focused Outreach. The Management Plan Progress Reports (including 2023 and prior) do not specify any data for Represented Subwatersheds, and it appears that the data provided is only for Monitored Subwatersheds. If this is the case, then requirements in the Represented Subwatersheds are not being met.

The WSJR Coalition does not monitor in Represented Subwatersheds but is required instead to conduct management plan focused outreach there for exceedances that occurred in the Representative Watershed. WSJR Coalition Representatives have expressed difficulty in working with Represented Subwatershed members on exceedances measured elsewhere,

⁴ Active management plans for currently registered pesticides include dimethoate initiated in 2008 in 3 subwatersheds, diuron initiated in 2008 in 2 subwatersheds, diazinon in 2005 and 2013 in 2 subwatersheds, and methyl parathion in 2006 in 1 subwatershed.

since the data was not collected from their waterway. Other Coalitions monitor in Represented Subwatersheds if exceedances occur in the nearby Representative Subwatershed, and then implement a management plan if needed. This approach would likely be more effective for the WSJR Coalition if they are having issues with the current approach.

Specific information for each Represented Watershed is needed so that staff can determine how each Represented Watershed is meeting Order requirements and what the next steps will be. This information may include, for example, proposed changes to the Management Plan process, proposed changes to the subwatershed boundaries, information on drainage patterns, etc.

Staff Recommendation

Staff recommends changes to the Pyrethroid Management Plan process be required to be implemented, including the following four items:

1. Determine whether each Focused Outreach Targeted Member's operation that does not return a survey or does not implement a new practice has adequate management practices in place or whether additional practices may be feasibly implemented to reduce the chance of causing or contributing to pyrethroid exceedances. Provide this information in the Management Plan Progress Report (without identifying the specific member). For those operations found to need additional management practices, discuss the process that will occur.
2. Conduct on-farm assessments or equivalent process for each Focused Outreach targeted Member's operation, which would provide adequate justification for keeping the phased approach to Focused Outreach (i.e., in order to continue addressing a subset of subwatersheds each year). The goals of the on-farm assessment or equivalent process would be to (a) determine if practices are site-specifically currently adequate or if a new practice(s) should/could be feasibly added and (b) inform and educate the member on the requirements of the program.
3. The Management Plan Progress Reports have been providing detailed information for Focused Outreach Targeted Members in each of the Monitored Watersheds. The same information (or equivalent) is needed in the Management Plan Progress Reports for Targeted Members in the Represented Watersheds.
4. Include a detailed discussion in each Management Plan Progress Report, per subwatershed, of the rates of Focused Outreach Targeted Member survey responses, meeting attendance, management practice implementation, potential causes and solutions (if needed) to survey non-responders and those with no management practice changes. Also include a discussion of changes that will occur to address low participation in both the next Focused Outreach Cycle (other subwatersheds) and the current subwatersheds.

Provide these discussion and analyses separately for the Targeted Members in Monitored versus in Represented Subwatersheds so that it is clear what occurred in each subwatershed (both Monitored and Represented) individually.