



# Central Valley Regional Water Quality Control Board

17 December 2024

Caitie Diemel Executive Director East San Joaquin Water Quality Coalition 1201 L Street Modesto, CA 95354

# Approval Of The 2025 Water Year Monitoring Plan Update – East San Joaquin Water Quality Coalition

Thank you for the 18 November 2024 submittal of the Monitoring Plan Update (MPU) for the 2025 water year within the East San Joaquin Water Quality Coalition (Coalition) Area. This schedule provides detailed plans for monitoring water quality constituents during application periods, or the time when constituents affected water quality in the past, as required under Monitoring and Reporting Program (MRP) R5-2012-0116-11 (Order).

Staff reviewed the 2025 Water Year MPU and determined that the proposed monitoring meets the requirements of the MRP Order and the Pyrethroid Control Program Basin Plan Amendment (Resolution R5-2017-0057). Therefore, I approve the Coalition's Monitoring Plan for the 2025 water year.

If you have any questions regarding this letter, or need further information, please contact Yared Kebede by e-mail at Yared.Kebede@Waterboards.ca.gov.

Sincerely,



Patrick Pulupa Executive Officer

Enclosure: Staff Review of 2025 Water Year Monitoring Plan Update





# Central Valley Regional Water Quality Control Board

To: Petra Lee

Senior Environmental Scientist Irrigated Lands Regulatory Program

FROM: Yared Kebede

**Environmental Scientist** 

Irrigated Lands Regulatory Program

DATE: 2 December 2024

SUBJECT: EAST SAN JOAQUIN WATER QUALITY COALITION'S

MONITORING PLAN UPDATE FOR THE 2025 WATER

YEAR

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) received a Monitoring Plan Update (MPU) report from the East San Joaquin Water Quality Coalition (Coalition) on 1 August 2024, as required by the Monitoring and Reporting Program (MRP) R5-2012-0116-11 (Order). Staff and Coalition representatives held a meeting on 26 September to discuss staff's comments on the MPU. The Coalition submitted a revised monitoring schedule on 18 November 2024. The MPU report provides the proposed surface water monitoring schedule for the 2025 water year (1 October 2024 through 30 September 2025).

Staff reviewed the 2025 WY MPU to determine compliance with requirements pursuant to the MRP Order and the Pyrethroid Control Program Basin Plan Amendment (Resolution R5-2017-0057). Overall, the proposed monitoring plan meets the requirements of the Order and the Pyrethroids Control Program, and staff recommends approval of the Coalition's 2025 WY MPU.

A summary of the main elements of the proposed monitoring plan is below.

## 1. Monitoring Sites, Parameters, Schedule and Frequency

The monitoring design for the 2025 WY includes six Core sites (one Core site for each of the six zones in the Coalition region) and 20 Represented sites. As required by the MRP Order, the Coalition identified a specific set of monitoring parameters for each site that is scheduled to be monitored, selected appropriate monitoring periods, and included a discussion of the rationale to support the proposed schedule. The Coalition will also schedule sampling events to capture at least two storm runoff events per year.

MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

#### 1.1. Core Site Monitoring

The Coalition scheduled monitoring at the second set of Core sites for the 2025 WY as required by the Order. These Core sites will be monitored monthly for field parameters, nutrients, pathogens, pesticides, metals, and toxicity to *Ceriodaphnia dubia*, *Selenastrum capricornutum*, and *Hyalella azteca*. When a water quality objective or a trigger limit is exceeded at the monitored Core site, the parameter associated with the exceedance will be monitored for a third consecutive year, unless the site is under a management plan.

#### 1.1.1. Pesticides

The Coalition utilized the updated Pesticides Evaluation Protocol (PEP) to select the pesticides proposed in the MPU (Attachment B). The pesticides proposed for each subwatershed depend on pesticides use and prioritization of monitoring (ranking of pesticides) based on aquatic life and human health reference values. In addition, environmental fate factors, available monitoring data, availability of analytical methods and site-specific considerations (i.e., average monthly use, management plan status) were evaluated when selecting the pesticides proposed for the 2025 WY monitoring. Staff conducted a thorough review of implementation of the protocol steps and concurs with proposed pesticides monitoring.

#### 1.1.2. Metals

The Coalition utilized the PEP to determine the monitoring frequency of applied metals (boron, copper, and zinc). In addition, the Coalition followed the flowchart in Figures 3 of the MPU and provides justification for a decision whether monitoring is needed for arsenic, cadmium, lead, molybdenum, nickel, and selenium. The evaluation considers previous monitoring data, 303(d) status, monitoring history (adequate characterization and exceedances) and management plan status. Staff reviewed the Coalition's decision process and proposed monitoring schedule and concurs with the metals monitoring decision.

#### 1.1.3. Aquatic and Sediment Toxicity

The Coalition proposes to conduct *C. dubia* and *S. capricornutum* toxicity monitoring based on an evaluation of pesticide applications that were identified through the PEP process and assessment of whether the test species are sensitive to pesticides that warrant monitoring. As stated in the 27 October 2017 staff memo (2018 WY MPU), the Coalition is required to resume toxicity monitoring after a period of 6 years of no monitoring during a given month, even if the pesticide evaluation suggests a low risk of toxicity to the species. The Coalition will also monitor sediment toxicity to *H. azteca* twice a year at each Core site, once each during irrigation and storm runoff events. Additional sediment chemistry analyses will be conducted on sediment samples when survival of *H. azteca* is less than 80% compared to the control and statistically significant.

#### 1.2. Represented Site Monitoring

The proposed monitoring at the Represented sites (MPU pages 22-36) is based on a) the management plans for high-priority constituents (pesticides, applied metals, and toxicity) already in place at each Represented site, and b) exceedances of the trigger limit for a constituent at the representative Core site that are evaluated and deemed to also pose a threat to water quality at the Represented site.

Monitoring for constituents with potential irrigated agriculture sources that need further evaluation (ammonia, nitrate, arsenic, lead, molybdenum, and DDE) will occur at the Represented sites once an appropriate management plan strategy is approved.

# 1.3. Management Plan Monitoring

The Coalition followed an evaluation process (MPU Figure 5) to conduct focused outreach and water quality monitoring in site subwatersheds with pyrethroid management plans. The Coalition's Management Plan Strategy will allow the Coalition to identify and implement management practices necessary to meet the receiving water limitations, evaluate compliance, and meet the 10-year deadline, as required by the Order.

The management plan monitoring for field parameters (DO, pH), *E. coli*, metals (arsenic, molybdenum), nutrients (ammonia, nitrate) and the legacy pesticide DDE will occur as part of an approved source identification study.

# 2. Delta RMP Monitoring

Similar to the 2024 WY monitoring swap, the Coalition proposes to suspend all management and assessment monitoring at the Highline Canal @ Lombard Rd, and utilize the ongoing management plan monitoring at the downstream Highline Canal @ Hwy 99 site to demonstrate compliance with the Order. In addition, toxicity monitoring for *Pimephales promelas* will be suspended at the Core sites that have been adequately characterized. The 2025 WY monitoring trades will support the Coalition's monetary contribution to the Delta RMP.

## 3. TMDL Monitoring

On 7 May 2021, the Executive Officer approved the East San Joaquin and Westside San Joaquin River Water Coalitions' request to discontinue chlorpyrifos monitoring on the San Joaquin River and tributary sites. The Executive Officer also approved the Coalitions to target diazinon monitoring at the TMDL sites per the PEP selection for diazinon monitoring in the upstream tributary areas. TMDL monitoring for diazinon is required at San Joaquin River at Hills Ferry Rd at Bridge (Mar, Apr), and San Joaquin River at Maze Blvd (Mar). Monitoring requirements for the remaining adopted TMDLs (salt, boron, and pyrethroids) will continue to be conducted at the Core and Represented monitoring sites.

# 4. Pyrethroid BPA Monitoring

The Coalition proposes to conduct pyrethroids monitoring as required in the Pyrethroid Basin Plan Amendment. Monitoring is scheduled at the Core sites based on the PEP, and at the Represented sites based on exceedances of the chronic pyrethroid concentration goal unit, with the frequency of monitoring determined by the PEP. The proposed monitoring schedule includes pyrethroids in water column identified through the PEP (bifenthrin, cyfluthrin, cypermethrin, esfenvalerate, lambda-cyhalothrin, and permethrin), and water column and sediment toxicity to *H. azteca*. Water column *H. azteca* toxicity testing associated with pyrethroid monitoring is scheduled to occur during one irrigation and one storm event as approved by the EO 22 October 2024 letter.

#### 5. Staff Recommendations

- A revised monitoring schedule must be submitted by 15 January 2025 based on evaluation of monitoring results from July through September 2024 and associated Pesticide Use Report data.
- Staff recommends approval of the Coalition's 2025 WY Monitoring Plan Update.