



Central Valley Regional Water Quality Control Board

14 June 2024

Morgan Campbell
Westside Water Quality Coalition
5555 California Ave, Suite 209
Bakersfield, CA 93309

APPROVAL OF SOURCE IDENTIFICATION STUDY WORK PLAN, WESTSIDE WATER QUALITY COALITION

On 5 April 2024 the Westside Water Quality Coalition submitted a Source Identification Study Workplan (SIS Workplan) in accordance with Waste Discharge Requirements General Order R5-2013-0120-09. The proposed study is intended to investigate the potential causes of surface water quality trigger limit exceedances observed within the Coalition's coverage area. Specific constituents of concern addressed in the work plan include boron, pH, and selenium.

The SIS Work Plan is approved. Should the Coalition collect sufficient information to determine the cause(s) of the observed water quality exceedances or eliminate agriculture as a potential source before the 10-year study concludes, it is expected that the Coalition will act expeditiously to synthesize the findings in a final report submittal to the Central Valley Water Board and develop a Surface Water Quality Management Plan (if applicable).

I also acknowledge that salinity within the region is being comprehensively addressed under the Central Valley Salinity Alternatives for Long Term Sustainability (CV-SALTS) Salt Control Program, and that the Westside Water Quality Coalition is currently an active participant.

The enclosed memorandum summarizes the work plan contents and provides staff's recommendation. If you have any questions regarding this letter, please contact Eric Warren at (559) 445-5035 or by email at eric.warren@waterboards.ca.gov.

A handwritten signature in blue ink, appearing to read "Patrick Pulupa".

For Patrick Pulupa
Executive Officer

Enclosure: Staff Review of the Source Identification Study Work Plan

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

Central Valley Regional Water Quality Control Board

TO: Eric Warren, PE
Senior Water Resource Control Engineer
IRRIGATED LANDS REGULATORY PROGRAM

FROM: Ryan K. West
Engineering Geologist
IRRIGATED LANDS REGULATORY PROGRAM

DATE: 14 June 2024

SUBJECT: SOURCE IDENTIFICATION STUDY WORK PLAN, WESTSIDE WATER QUALITY COALITION

The Westside Water Quality Coalition (WWQC or Coalition) submitted a *Source Identification Study Work Plan* (SIS Work Plan), dated 5 April 2024. The WWQC is proposing the study in accordance with Section I.G of Appendix MRP-1 of Waste Discharge Requirements General Order R5-2013-0120-09 (General Order) and to identify potential sources that may be causing or contributing to observed exceedances of applicable water quality trigger limits in surface water. This memorandum summarizes the SIS Work Plan and provides staff comments.

SOURCE IDENTIFICATION STUDY WORK PLAN SUMMARY

Constituents of Concern

Multiple exceedances of applicable water quality trigger limits for electrical conductivity and boron have occurred at the Avenal Creek at Devils Den surface water monitoring sites. The Coalition is currently managing electrical conductivity under the Central Valley Salinity Alternatives for Long Term Sustainability (CV-SALTS) Salt Control Program and will continue to financially contribute to the program's Prioritization and Optimization Study in lieu of developing a separate workplan, Source Identification Study, or Surface Water Quality Management Plan for electrical conductivity.

Although boron is the only constituent of concern that has triggered the General Order requirement to develop a Surface Water Quality Management Plan, the Coalition has chosen to expand the scope of the Source Identification Study to also include pH and selenium. These two constituents both had single exceedances of their respective water quality trigger limit during the 2023 Water Year and were added to the SIS Work Plan to proactively address any potential future exceedances.

Based on preliminary research, the WWQC has developed a hypothesis that the sources of constituents of concern may be naturally occurring within and around the coalition area, and not the result of irrigated agricultural practices implemented by growers. The Coalition also suspects that anthropogenic activities such as oil and gas extraction and livestock grazing in the area could be contributing to constituent exceedances in surface waters.

Source Identification Study Work Plan Proposal

The SIS Work Plan proposes to add two supplemental monitoring sites upgradient of the existing surface water monitoring sites on Avenal Creek and Bitterwater Creek. One supplemental monitoring site will be located on Cottonwood Creek (an upstream tributary of Avenal Creek), and the other supplemental monitoring site will be located further upgradient on Bitterwater Creek. Both proposed sites are upstream of irrigated agriculture and were selected to capture monitoring results that are representative of naturally occurring water quality conditions. Coalition staff have physically investigated the proposed supplemental monitoring sites after two precipitation events and have determined that the sites can be safely accessed.

As both creeks are ephemeral and only flow for short durations after major storm events, the Coalition is proposing a long-term supplemental monitoring program that will remain in place for 10 years to collect a defensible amount of data to analyze trends. When flows are sufficient to collect samples from the existing monitoring sites on Avenal Creek and Bitterwater Creek, samples will also be collected from the proposed supplemental monitoring sites for pH, electrical conductivity, boron, and selenium. If constituent exceedances are observed at existing monitoring sites and not at the supplemental monitoring sites, the Coalition will work to determine the source of exceedances through grower outreach or relocate sampling sites to narrow down a source location.

STAFF COMMENTS

Staff has reviewed the SIS Work Plan and found that it meets the Source Identification Study requirements contained in Section I.G of Appendix MRP-1 of the General Order and has no comments. Staff recommends approval of the SIS Work Plan.