



August 31, 2016

Yared Kebede
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114
Sent via email to: yared.kebede@waterboards.ca.gov

**Re: Comments on East San Joaquin River Region
Revised Groundwater Quality Management Plan**

Dear Mr. Kebede,

Thank you for the opportunity to comment on the revised Groundwater Quality Management Plan (GQMP) for the East San Joaquin River region.

According to the general order “GQMPs are the key mechanism under this Order to help ensure that waste discharges from irrigated lands are meeting Groundwater Receiving Water Limitation III.B.” This document fails to meet that charge. The GQMP, as drafted, includes neither adequate steps nor adequate measures to ensure that groundwater quality will be protected as required by the Order.

The GQMP’s complete reliance upon the outcome of the Management Practices Effectiveness Program undermines both its utility and its conformity with the Order. The Order lays out distinct roles for the GQMP and MPEP in protecting water quality. As stated in the Order “The MPEP will be the process used to identify the effectiveness of management practices, where there is uncertainty regarding practices effectiveness under different site conditions. However, the GQMP will be expected to include a schedule for implementing practices that are known to be effective in partially or fully protecting groundwater quality.” While the MPEP is a crop-specific study program, the GQMP must look at the underlying water quality, develop a suite of actions to reduce the impact of agricultural discharges in a specific hydrologic environment, and meet receiving water limitations within 10 years. Thus, the stated objectives of this GWMP do not comply with the order.

The first objective of a GQMP, according to the monitoring and reporting program (MRP) for the Order, is “Compliance with the Order’s receiving water limitations.” The MRP also requires “a specific schedule and milestones for the implementation of management practices and tasks



outlined in the plan”, including the “time estimated to identify new management practices as necessary to meet the Order’s surface and groundwater receiving water limitations.” The MRP further requires that the plan “Establish measurable performance goals that are aligned with elements of the management plans strategy. Performance goals include specific targets that identify the expected progress towards meeting a desired outcome.” This plan lacks all of these elements, not least of which is any sense of urgency in addressing the challenges faced by people and communities whose wells are contaminated by past and current nitrate discharges.

The GQMP, so that it may comply with the Order, must develop specific actions, with benchmarks and timelines, to measure and reduce nitrogen loading to groundwater, and ensure that discharges meet receiving water limitations within 10 years. While ultimately the responsibility of the Coalition members to comply with the Order’s mandates, we provide the following suggested actions by the Coalition to facilitate such compliance.

- The ESJR Coalition is conducting a literature search for best practices. The Coalition should ensure implementation of those practices, and the annual report, beginning in 2017, should reflect how and where those practices have and have not been implemented and what steps are being taken to increase their adoption.
- The reporting of abandoned wells is currently a passive recording exercise on the part of the Coalition. The Coalition should instead proactively review publicly available well drilling logs to identify areas where abandoned wells may be located, check with members and map wells so identified. Such activity could begin in Priority 1 areas in year one and then expand to Priority areas 2 and 3.
- Now that the first NMP Summary reports have been received, the GQMP should explicitly promote the use of nitrogen in irrigation water to offset fertilizer application. These efforts and their success should be quantified in terms of reductions in nitrogen loading in the annual report.
- The Coalition should establish a pilot groundwater recharge program in one or more Priority 1 areas to determine the impact of targeted recharge on drinking water supply wells that currently exceed the MCL.
- The Coalition should monitor nitrate concentration in the vadose zones of Priority 1 areas to come up with an understanding of the travel time needed for nitrate to reach groundwater in these areas and the potential, if any, for denitrification.
- The Coalition should accelerate implementation of the Management Practices Effectiveness Program to the crops that have the highest level of nitrate loading to groundwater in the region. We suggest a four-year deadline for affirming practice effectiveness for crops covering 90% of the HVAs;



- The GQMP should have a process identified for ensuring adoption of practices shown through the MPEP to be effective in reducing nitrogen loading.
- The results of the NMP Summary Reports should be used to identify townships with high nitrogen application and/or nitrogen loading numbers and target members within those townships for wider adoption of identified best practices.

In addition to these substantive comments, we must mention the problems we had with the inaccurate labeling of several tables in the document:

- Tables 8-11 purport to provide acreage estimates in the high vulnerability areas (HVAs) covered by the GQMP. But in fact, the acreage estimates are not correct, and instead represent a far larger area (perhaps county-level data?) than that covered by HVAs. These acreage errors are repeated in various places in the text of the document, which should also be identified and corrected. At minimum these tables should be labeled correctly, but our preference is that the acreage figures be corrected to reflect the acreage in the HVAs, as that is useful information that is appropriate to a GQMP.
- The document identifies high-priority areas (1, 2 and 3) in the text and in Figures 54, 55, and 56, yet no mention is made of these areas in the actual strategy. We think the identification of areas with the greatest impact on safe drinking water is useful and strategies that focus on meeting receiving water limitations in these areas need to be included in the plan.

The Groundwater Quality Management Plans are the most important implementation step for the Order, because they represent areas most impacted by nitrate contamination and provide an opportunity to improve and protect groundwater quality in areas that are clearly impacted. Unfortunately, this plan is long on maps and tables and short on effective strategies to reduce nitrate loading. Communities and residents are forced to deal with an acute contaminant which at minimum results in skyrocketing costs for water and in worse case impacts the health and well-being of Coalition members and their neighbors. We wish this document contained the sense of urgency, reflected in actions, that we feel.

The Board also has a role to play here. Its adoption of a Human Right to Water Resolution earlier this year was a mandate to protect those who cannot access safe, reliable and affordable water supplies. Your review of this plan should incorporate the recommendations of that resolution.



Thank you for providing us the opportunity to comment on these documents. We look forward to working with your staff and the coalitions on the implementation of these Groundwater Management Plans

Sincerely,

Phoebe Seaton
Leadership Counsel for Justice and Accountability

Laurel Firestone
Co-Executive Director and Attorney at Law
Community Water Center

Jennifer Clary
Water Policy Analyst
Clean Water Action

CC: Parry Klassen
Members, Central Valley Water Quality Control Board
Darrin Polhemus, Deputy Director, Division of Administrative Services, State Water Board