State Water Resources Control Board

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180/400 FOOT AQUIFER GROUNDWATER SUSTAINABILITY PLAN, GROUNDWATER SUBBASIN NO. 3-004.01

Provided for your consideration are comments submitted on behalf of the State Water Resources Control Board (State Water Board) by the State Water Board's Groundwater Management Program in support of the Department of Water Resources' (DWR) review of the Groundwater Sustainability Plan (GSP) for the Salinas Valley – 180/400 Foot Aquifer Groundwater Subbasin (subbasin). The State Water Board recognizes that DWR will determine the adequacy of the GSP, and these comments are intended to support DWR's review by providing the State Water Board's additional expertise and regulatory experience with regard to GSPs. In preparing comments, the Groundwater Management Program has consulted the State Water Board's Division of Water Rights and Division of Drinking Water as well as the appropriate Regional Water Quality Control Board to seek local information and programmatic concerns.

The State Water Board's comments on the GSP relate to the following areas:

- Water Budget
- Seawater Intrusion and Potential Drinking Water Impacts
- Depletions of Interconnected Surface Water
- Groundwater Quality
- Projects Reliant on Water Rights
- Engagement

Water Budget

1. The GSP's estimation of sustainable yield is only based on groundwater storage and does not consider the other sustainability indicators (e.g., localized water level requirements for beneficial uses and users, and seawater intrusion). Staff recommend the GSP further evaluate the potential for causing other undesirable results when defining the sustainable yield.

2. The GSP states that the historical and current water budgets need to be updated when USGS releases the Salinas Valley Integrated Hydrologic Model (SVIHM). The Salinas Valley Basin Groundwater Sustainability Agency (GSA) should add a timeline or action plan for updating their GSP with the model results.

Seawater Intrusion and Potential Drinking Water Impacts

3. The GSP sets protective criteria for seawater intrusion, proposing to improve conditions slightly from 2017 levels; however, the monitoring network for seawater intrusion does not include sites for some parts of the shallower aquifer that provide drinking water for disadvantaged communities (e.g., Moss Landing, Castroville, Salinas, Marina). Because the GSA is already proposing to expand the monitoring network for groundwater levels in those areas, the GSA should add those new wells to its monitoring network for seawater intrusion as well. In addition, Board staff note that the GSP has proposed adding an additional site for monitoring groundwater levels in the 180-foot Aquifer within the data gap area near Marina, which is also the location of a community designated as economically disadvantaged (Figure 7-4). Board staff suggest also adding this site as a monitoring point for seawater intrusion.

Depletions of Interconnected Surface Water

4. The GSP proposes managing for a long-term average annual surface water depletion rate evaluated at 5-year intervals. While the rate is set to keep conditions stable at 2015 conditions rather than allow problems to worsen, the GSA may miss seasonal or local effects from groundwater pumping using this approach, particularly if there are any changes in pumping patterns (location, timing, or volume) in the subbasin.

5. The GSP's monitoring plan may be insufficient for improving the understanding of the interconnection between surface water, shallow water-bearing sediments, and the 180/400 Foot Aquifers. The GSP proposes to install up to two new shallow monitoring wells along the Salinas River if existing wells are deemed inadequate or not accessible for study after inspecting the SVIHM model (Section 10.4.6, p. 10-8). Given the high uncertainty and spatial extent of uncertainty in interconnection as described in the GSP (e.g., Section 7.7, p. 7-24), two wells are unlikely to sufficiently address the data gap in locations and levels of interconnection.

6. The GSP's dependence on the SVIHM model as the main source of additional data to reduce uncertainty in interconnection (Section 10.4.6, p. 10-8) is somewhat lacking. While the numerical model is a main tool to assess the depletion of interconnected surface water, the numerical model is built upon field data of hydrogeological investigation and the hydrogeologic conceptual model derived from them. To reduce the uncertainty, Board staff recommend that the GSA examine the primary field data used to construct the model, as well as any additional existing field data and reports when designing its monitoring network, rather than relying on the numerical model as the primary source of data.

Groundwater Quality

7. The GSP states that only water quality impacts caused by GSP implementation are unacceptable but does not explain how SGMA-related water quality changes will be distinguished from other water quality changes. The GSP should outline the process the GSAs would use to decide whether or not an exceedance of an MT for water quality degradation was caused by GSP implementation; otherwise, it is difficult to judge how adequately the GSP addresses undesirable results related to water quality degradation. Staff recommends that the GSAs consult with the Central Coast Water Board in developing this process.

8. The minimum thresholds and measurable objectives are not set for monitoring wells with existing exceedances, which are likely in areas particularly subject to concentration increases (e.g., for nitrate or arsenic) due to groundwater pumping. Not all water quality impacts to groundwater must be addressed in the GSP, but significant and unreasonable water quality degradation due to groundwater conditions occurring throughout the subbasin, and that were not present prior to January 1, 2015, must be addressed in the GSP's minimum thresholds. Increasing concentrations of nitrate, arsenic, and other constituents at monitoring wells with existing exceedances may represent worsening of existing conditions due to groundwater pumping. Staff recommend setting concentration threshold levels for these wells in order to determine if impacts due to pumping are occurring.

Projects Reliant on Water Rights

9. Implementing some of the projects identified in the GSP may require new or amended water rights:

    a. New surface water right permits: An applicant must gather all information necessary to complete the application, which could be extensive. Once the application is publicly noticed, other water right holders may protest the project based on potential injury to their water rights. Parties may also protest if the project has the potential to harm public trust resources. The GSA should contact the Division of Water Rights' Permitting and Licensing Division or consult the Division's Permitting and Licensing Frequently Asked Questions (https://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/faqs.html) to develop an informed timeline for project implementation that includes necessary water right actions.

    b. Amendment of an existing surface water right: The time required to amend an existing water right depends on multiple factors, including but not limited to whether the change is minor, major, or controversial. The GSA can learn more from the Division of Water Rights' Petitions Frequently Asked Questions (https://www.waterboards.ca.gov/waterrights/water_issues/programs/petitions/faqs.html).

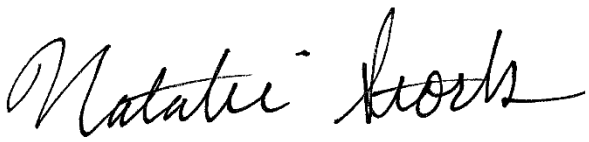
10. Given there is no certainty that a particular water right permit or petition will ultimately be approved, or when, it is important the GSP clarify its proposed timelines for projects and management actions and consider how changes in those timelines could impact the subbasin's ability to achieve sustainability by 2040. This would ensure the GSA can effectively evaluate when it should move towards implementing contingency projects or management actions if primary projects or management actions are not implemented on projected timelines.

Engagement

11. The GSP does not describe any process for identifying or reaching out to Tribes with potential interests in groundwater management in the subbasin. Without this information, it is difficult to discern whether the GSA appropriately considered the interests of California Native American Tribes in developing the GSP (Cal. Water Code, §10723.2(h)). The GSP should elaborate on the GSA's tribal engagement effort. If the GSA has not already done so, they should consult with the Native American Heritage Commission (NAHC) to obtain information about Tribes that have current and ancestral ties in the subbasin. To request this information, GSA can email the NAHC at nahc@nahc.ca.gov.

If you have any questions regarding these comments, please do not hesitate to contact State Water Board Groundwater Management Program staff by email at SGMA@waterboards.ca.gov or by phone at 916-322-6508.

Sincerely,



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