
Central Coast Regional Water Quality Control Board

December 20, 2019

Dear GSA General Manager,

CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD ISSUES FOR CONSIDERATION IN DEVELOPMENT OF GROUNDWATER SUSTAINABILITY PLANS FOR CENTRAL COAST GROUNDWATER BASINS

The Central Coast Regional Water Quality Control Board (Central Coast Water Board) is engaging with Groundwater Sustainability Agencies (GSAs) to provide input to the development of Groundwater Sustainability Plans (GSPs) being prepared in the Central Coast region. The Sustainable Groundwater Management Act (SGMA) requires avoidance of undesirable results in groundwater basins, including avoidance of significant and unreasonable seawater intrusion and groundwater quality degradation. Towards this goal, the Central Coast Water Board has been interfacing with the various GSAs to provide input on what we recognize to be significant groundwater quality priorities in the Central Coast region, identify key water quality issues for consideration in GSPs, and offer a variety of resources GSAs may find valuable, including Central Coast Water Board regulatory authority, permit streamlining, and technical staff expertise.

The purpose of this letter is to describe key issues for your consideration when developing GSPs and to briefly describe some of the resources that are available to assist in the development and/or implementation of GSPs.

Key Issues for Consideration in Groundwater Sustainability Plans

The Central Coast Water Board has identified the following four key issues for consideration in GSPs:

1. Protection of groundwater recharge areas and increase in groundwater recharge projects;
2. Coordination of monitoring data generation used to evaluate groundwater quantity and quality over time;
3. Consideration of water quality objectives and beneficial uses established in the Water Quality Control Plan (Basin Plan) for the Central Coast Region; and
4. Protection of beneficial uses and existing high-quality waters in planned projects and management actions that require permits or approval from the Central Coast Water Board.

DR. JEAN-PIERRE WOLFF, CHAIR | JOHN M. ROBERTSON, EXECUTIVE OFFICER

Each of these issues is described in further detail below.

1. Protection of Groundwater Recharge Areas and Support for Groundwater Recharge Projects

The Central Coast Water Board encourages groundwater recharge efforts that maximize both recharge volume in appropriate areas and the use of high-quality recharge water. Not all land overlying a groundwater basin recharges equally well, with some areas providing substantially higher infiltration rates or more storage than others. The Central Coast Water Board wants to ensure that high-potential recharge areas are protected both in terms of their ability to recharge large volumes of water and the ability to be recharged with high-quality water. Recharge of aquifers with high-quality water can dilute, and thereby improve, the quality of polluted groundwater. Conversely, recharge in pollutant source areas may cause or exacerbate water quality problems by flushing pollutants into the groundwater zone and recharge can cause geochemical changes resulting in undesirable water quality results. Therefore, GSAs must consider potential adverse effects of proposed recharge projects on groundwater quality and we recommend GSAs consider projects that both augment groundwater supplies and improve groundwater quality. We also recommend GSAs identify and protect high value recharge areas in coordination with local land use planning agencies as part of their sustainability efforts.

The Central Coast Water Board supports development of appropriately located projects that enhance recharge, such as recycled water projects, aquifer storage and recovery, surface water diversion and recharge, and stormwater capture and recharge. The Central Coast Water Board can help facilitate these types of projects by assisting with permit streamlining and by providing technical expertise.

2. Coordination of Monitoring Data Generation and Use

A significant amount of water quality data have been – and will continue to be - generated due to the Central Coast Water Board's regulation of discharges to groundwater and surface water from a variety of industries in the region, including irrigated agriculture. For instance, the Central Coast Water Board has required the agricultural community to monitor on-farm domestic wells and select irrigation wells since 2012, and Central Coast Water Board staff is currently preparing a revised agricultural order that will include requirements for the continuation of on-farm groundwater monitoring and initiation of water quality trend monitoring of groundwater basins in the region. We expect regional trend monitoring programs to already be underway by the time GSAs initiate implementation of their respective GSPs. While

this regional monitoring data, as well as other Central Coast Water Board-required monitoring data, can inform groundwater sustainability indicators, it may be valuable for GSAs to initiate their own monitoring programs targeting specific indicators in specific locations to evaluate management actions or projects defined in GSPs.

The Central Coast Water Board encourages GSAs to coordinate SGMA-related monitoring with existing monitoring efforts (especially agriculture-related monitoring) so as to minimize duplication, maximize efficiency, and provide mutually beneficial information. To that end, we recommend that, at a minimum, GSAs incorporate the following groundwater monitoring data into their evaluation of baseline water quality conditions and progress towards achieving sustainability: major dissolved ions¹, nitrate, and any other basin-specific constituents of concern², particularly those that are ubiquitous in agriculturally dominated basins.

3. Consideration of Water Quality Objectives and Beneficial Uses Established in the Basin Plan for the Central Coast Region

The Central Coast Water Board's Basin Plan³ identifies water quality objectives (WQOs) and beneficial uses for each groundwater basin within the Central Coast region. As such, the Basin Plan can be a valuable source of information for helping to inform the measurable objectives and minimum thresholds developed in the GSPs. WQOs identified in the Basin Plan protect present and future beneficial uses, prevent nuisance conditions, and protect historical or existing water quality conditions.

The Basin Plan is implemented through issuance and enforcement of waste discharge requirements (WDRs) to ensure that discharges do not cause or contribute to water quality degradation. SGMA-related projects and management actions that will require WDRs must not conflict with the Basin Plan (including WQOs). For example, certain aquifer recharge projects would be required to obtain WDRs to address specifics of the projects' discharge of stored water to groundwater (i.e., volume, water quality, etc.).

¹ Major dissolved ion analysis is critical because it provides important information about groundwater recharge areas and flow paths to inform groundwater management.

² We encourage GSAs to evaluate Department of Pesticide Regulation (DPR) pesticide use and water quality data to inform project implementation and monitoring efforts, particularly with respect to recharge projects in agricultural areas that could result in unintended water quality impacts. Information associated with DPR can be found at <https://calpip.cdpr.ca.gov/main.cfm>.

³ Central Coast Regional Water Quality Control Board's Water Quality Control Plan for the Central Coast Basin (Basin Plan) can be found online: https://www.waterboards.ca.gov/centralcoast/publications_forms/publications/basin_plan/docs/2019_basin_plan_r3_complete.pdf.

Central Coast Water Board staff have substantial technical expertise regarding water quality in the basins of the Central Coast Region. GSAs are encouraged to consult this expertise when developing water quality baselines, thresholds, and measurable objectives.

4. Protection of Beneficial Uses and Existing High-Quality Waters Identified in the Water Quality Control Plan in the Central Coast Region

The Central Coast Water Board encourages GSAs to develop GSPs that protect existing high-quality waters and beneficial uses identified in the Basin Plan. Some of the beneficial uses specific to groundwater include municipal, domestic, agricultural, and industrial supply, and preservation of biological habitats of significance in the form of groundwater dependent ecosystems. Water Boards are required to protect high-quality waters by Resolution No. 68-16, "Statement of Policy with respect to Maintaining High Quality of Waters in California,"⁴ which is also known as the State Antidegradation Policy. The Central Coast Water Board cannot authorize any degradation, or lowering of the baseline water quality, without first finding that the degradation complies with Resolution No. 68-16. Therefore, implementation actions identified in the GSP that will require permits from the Regional Board must comply with the State Antidegradation Policy.

The Central Coast Water Board acknowledges that GSAs face a myriad of challenges in implementing SGMA. However, it is critically important that regulatory standards for water quality be considered when developing the GSPs. Sustainability plans that include management actions in conflict with the requirements and authority of the Central Coast Water Board may not, in fact, be achievable or sustainable. The Central Coast Water Board would like to provide input to GSAs early in the process in order to avoid any such conflict and to help facilitate development and implementation of the GSPs in the region.

⁴ See https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1968/rs68_016.pdf.

To discuss the Central Coast Water Board's goals, priorities, requirements, and resources as they pertain to SGMA and the development of GSPs, please contact Daniel Pelikan, James Bishop, or Diane Kukol as noted below.

Daniel Pelikan, P.G., C.Hg.
Engineering Geologist
Central Coast Water Board
Daniel.Pelikan@Waterboards.ca.gov
805-549-3880

James Bishop, P.G.
Engineering Geologist
Central Coast Water Board
James.Bishop@waterboards.ca.gov
805-542-4628

Diane Kukol, P.G.
Senior Engineering Geologist
Central Coast Water Board
diane.kukol@waterboards.ca.gov
805-542-4637

Sincerely,



John M. Robertson
Executive Officer

cc:

Natalie Stork
Groundwater Management Program
Office of Research, Planning and Performance
State Water Resources Control Board
Natalie.Stork@Waterboards.ca.gov

Taryn Ravazzini
Deputy Director of Statewide Groundwater Management
Department of Water Resources
Taryn.ravazzini@water.ca.gov