

Regional Water Quality Control Board
North Coast Region

Executive Officer's Summary Report
December 10, 2020

ITEM: 4

SUBJECT: Update on Groundwater Basin Evaluation and Prioritization – Groundwater Protection Strategy in the North Coast Region (*Chris Watt*)

BOARD ACTION: This item is an informational item only; no action will be taken by the Regional Water Board.

BACKGROUND: Over the last decade and a half, at the direction of the Regional Water Board and in concert with statewide policies, staff advanced the development of a Groundwater Protection Strategy (Strategy). The purpose of the Strategy is to (1) establish water quality objectives, (2) identify priority basins, and (3) identify and implement strategies to protect high groundwater quality of the region and improve groundwater quality in areas where it is degraded. Foremost was the effort to develop a Basin Plan Amendment incorporating water quality objectives for groundwater (adopted in 2015). In 2009, the State Water Board adopted the Recycled Water Policy which as part of streamlining the permitting of recycled water projects, intended the establishment of stakeholder funded Salt and Nutrient Management Plans (SNMPs) to facilitate the management of salts and nutrients for the protection of groundwater in the 515 groundwater basins/subbasins within California. Subsequently, the State Water Board Executive Director clarified how basins should be prioritized for salt and nutrient management planning. In the North Coast Region where there are 62 groundwater basins, and where nearly 70 percent of communities are considered small and disadvantaged, and many groundwater basins have limited waste discharges, the cost-benefit of developing stakeholder funded SNMPs is limited. In 2010, staff of the North Coast Regional Water Board and State Water Board agreed to: 1) support a programmatic region-wide approach to addressing salts and nutrients in the North Coast; and 2) implement the Recycled Water Policy through existing regulatory and non-regulatory approaches within the region. At present, the North Coast Region approach is to incorporate salt and nutrient management and monitoring requirements within applicable permits.

In 2018, the Recycled Water Policy was amended for the second time and incorporated groundwater basin prioritization (referred as Basin Evaluation) to implement the SNMP provision of the Recycled Water Policy. The 2018 Recycled Water Policy Amendment includes language requiring regional water boards to evaluate groundwater basins within their region for the potential threat from salts and nutrients to groundwater quality. Based on that evaluation, the regional water boards prioritize the need for salt and nutrient management planning. Regional water boards may also use the evaluation process to categorize basins having a relatively low threat from salts and nutrients and thus would not benefit from salt and nutrient management planning. The Amendment includes basin characteristics to consider in this evaluation, along with a requirement

that the basins be re-evaluated periodically. To satisfy this requirement, the regional water boards may determine that using existing state prioritization programs are appropriate for their region (such as 2016 State Water Board Groundwater Ambient Monitoring and Assessment Priority Basins or the 2019 Department of Water Resources Sustainable Groundwater Monitoring Act Basin Priorities). However, in many cases, regional water boards may prefer to use a region-specific evaluation process more representative of regional conditions. The Amendment requires each regional water board to identify its Priority Basins through a resolution or Executive Officer determination and submit the list of basins where salts and/or nutrients are a threat to water quality to the State Water Board.

DISCUSSION: The purpose of this informational item is to update the Regional Water Board on the basin evaluation and prioritization process and present preliminary results. Staff will provide an interactive presentation with time for Q&A.

In 2020, staff evaluated and prioritized the 62 groundwater basins of the North Coast Region using a process informed by the following: a) the GAMA Groundwater Information System; b) the DWR SGMA Basin Prioritization Process; and c) the seven evaluation factors listed in the Recycled Water Policy. The seven evaluation factors used by staff consist of: 1) status and trends in the concentrations of nitrate and salts (as total dissolved solids -TDS) in groundwater; 2) contribution of imported water and recycled water to the basin water supply; 3) reliance on groundwater; 4) population and growth; 5) number and density of on-site wastewater treatment systems; 6) acres of irrigated agriculture and density of confined animal facilities; and 7) five basin specific factors (depth to water, aquifer thickness, surface water impairment from nutrients and/or pathogens, hydrogeologically vulnerable areas, and number of open groundwater cleanup cases).

Looking ahead to the April 2021 Board meeting and following a 30-day public review period anticipated to start in January 2020, staff will present a Basin Evaluation technical report along with the final recommended Priority Basins that would benefit from salt and nutrient management planning. At the April 2021 meeting, the Board will consider taking action to adopt a Resolution with the recommended list of basins having an elevated threat from salts and nutrients. Staff will also include a brief synopsis of potential implementation approaches to protect high groundwater quality and improve degraded groundwater quality within the region. The Board can expect to hear a future (2021-2022) agenda item with a recommended implementation approach which may consist of a Policy Statement providing direction to staff. Staff welcomes comments from interested stakeholders and will be available to receive oral comments and answer questions from Board members at both the December 10, 2020 information item and the April 2021 hearing.

RECOMMENDATIONS: N/A

SUPPORTING DOCUMENTS: N/A