CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD NORTH COAST REGION RESOLUTION NO. R1-2021-0006

GROUNDWATER BASIN EVALUATION AND PRIORITIZATION RESULTS SUPPORTING SALT AND NUTRIENT MANAGEMENT PLANNING AS REQUIRED BY STATE WATER RESOURCES CONTROL BOARD RECYCLED WATER POLICY

WHEREAS: the California Regional Water Quality Control Board North Coast Region, (Regional Water Board) finds that:

- The Water Quality Control Plan for the North Coast Region (hereinafter the Basin Plan) designates the beneficial uses of groundwater within the North Coast Region. Existing and potential beneficial uses applicable to groundwater in the Region include, Municipal and Domestic Water Supply, Agricultural Supply, Industrial Service Supply, Industrial Process Supply, Native American Culture, and Aquaculture. The Basin Plan also establishes water quality objectives for the protection of these beneficial uses. Groundwater water quality objectives in the North Coast Region include objectives for bacteria, chemical constituents, radioactivity, taste and odors, and toxicity. The Basin Plan also requires a program of implementation needed for achieving water quality objectives.
- 2. The North Coast Region is abundant in high quality groundwater resources and includes 63 groundwater basins or subbasins designated by the Department of Water Resources (DWR). A groundwater basin is defined as a hydrogeologic unit containing one large aquifer or several connected and interrelated aquifers. Groundwater is defined as subsurface water in soils and geologic formations that are fully saturated all or part of the year. Groundwater may also exist even where groundwater basins have not been identified. It includes areas where saturation of the soils and geology fluctuate, including areas of capillary fringe. Groundwater bearing formations sufficiently permeable to transmit and yield significant quantities of water are called aquifers. In the context of water quality protection, groundwater includes all subsurface waters, whether these waters occur within the classic definition of an aquifer or identified groundwater basins.
- 3. As stated in the California 2020 Water Resilience Portfolio, the North Coast Region encompasses nearly 20,000 square miles with about half of the region protected as open space. The population totaled about 690,000 in 2017, less than two percent of the state's population, with the highest percentage of Native American tribal members compared to other water board regions. Groundwater accounts for about one-third of water supply in the Region; however, in about half of the groundwater basins, groundwater comprises more than two-thirds of the water supply. About 1,000 active public supply wells are regulated by the State Water Resources Control Board Division of Drinking Water and approximately 38,000 private domestic wells supply groundwater used for drinking water. As agricultural supply water,

groundwater within North Coast groundwater basins is approximately 50 percent of the water supply for about 250,000 acres of irrigated land. Generally, groundwater in the North Coast Region is the least degraded in the state. Statewide, salts and nutrients are the most common groundwater pollutants. Naturally occurring manganese, iron, and arsenic commonly occur in groundwater at concentrations requiring treatment before use as drinking water.

- 4. In about a quarter of North Coast groundwater basins, salts and nutrients are the most common pollutant and have caused or threaten to cause an exceedance of water quality objectives and impacts to beneficial uses. Salts are typically measured as total dissolved solids and nitrate is the predominate nutrient of concern. Waste discharges from Onsite Wastewater Treatment Systems (OWTS), agricultural operations, and municipal and industrial wastewater treatment facilities are believed to be the primary threats to groundwater quality and the sources of salts and nutrients found in groundwater. In some basins, high density residential areas reliant on OWTS for wastewater disposal and domestic wells for domestic water supply may compound impacts to groundwater quality and threaten public health. Irrigation using imported water, surface water, groundwater, and/or recycled water may increase salt and nutrient loading. Saltwater intrusion induced by sea level rise and falling groundwater elevations in coastal aquifers will reduce the capacity of an aquifer to assimilate salt loads and support beneficial uses.
- 5. State Water Resources Control Board (State Water Board) Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California (state Antidegradation Policy), requires that whenever the existing quality of water is better than the quality established in plans and policies as of the date on which such polices became effective, (e.g. water quality objectives established in such plans and policies) such existing water quality shall be maintained unless otherwise provided by the provisions of the state Antidegradation Policy. The state Antidegradation Policy allows a discharge that may degrade high quality water if the change in water quality is: 1) consistent with the maximum benefit to the people of the State, 2) will not unreasonably affect present and anticipated beneficial use of such water, and 3) will not result in water quality less than that prescribed in water quality control policies and plans. Further, any activities that result in discharges to such high quality waters are required to use: the best practical treatment or control necessary to avoid pollution or nuisance and maintain the highest water quality consistent with the maximum benefit to the people of the state the maximum benefit to the people of the state of avoid pollution or nuisance and maintain the highest water quality consistent with the maximum benefit to the people of the state.
- 6. Many small and disadvantaged communities in the North Coast rely on OWTS (i.e., septic systems) for wastewater treatment and disposal, which are prone to failure if not properly sited, operated, and maintained. Nearly 70 percent of North Coast communities are considered disadvantaged. Some of these communities have old and undersized community wastewater collection and treatment facilities. These wastewater facilities can pose significant public health and safety threats and adversely affect beneficial uses of surface water and groundwater.

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- 7. Several water supply facilities serving small and disadvantaged communities in the North Coast were installed decades ago and need upgrades to meet current demand. Meeting increasing demand for water has further elevated the need to augment water supplies and restore watershed processes, and to further incentivize groundwater sustainability, storm water capture for beneficial reuse, and wastewater recycling. Many small and disadvantaged communities, however, lack the resources to plan and construct wastewater recycling projects; storm water capture, infiltration and reuse projects; or to develop and implement groundwater management plans.
- 8. On February 16, 2016, the State Water Board adopted Resolution No. 2016-0010 declaring the Human Right to Water as a core value and directing its implementation in Water Board programs and day-to-day activities. The resolution directs State Water Board staff and encourages Regional Water Boards, as resources allow, to meaningfully engage with communities that lack adequate, affordable, or safe drinking water, including providing community outreach, technical assistance and financial resources, as part of the Water Boards' administration of programs or project funding pertinent to the human right to water. The Regional Water Board on April 18, 2019, adopted Resolution No. R1-2019-0024 also declaring the Human Right to Water as a core value and directing its implementation in board activities.
- 9. On December 11, 2018, the State Water Board adopted a Water Quality Control Policy for Recycled Water (Recycled Water Policy) to encourage the safe use of recycled water from wastewater sources that meets the definition in California Water Code (Water Code) section 13050(n), in a manner that implements state and federal water quality laws and protects public health and the environment. The intent of the Recycled Water Policy is that salts and nutrients from all sources be managed on a basin-wide or watershed-wide basis in a manner that ensures attainment of water quality objectives, protection of beneficial uses and supports sustainable land use practices.
- 10. From 2007 to 2018, through the Basin Plan Triennial review process, development of a two-phase Groundwater Protection Strategy evolved as a high priority project of the Regional Water Board. Phase I, completed in 2015, was a Basin Plan Amendment for the update of water quality objectives for groundwater. The goal of Phase II is to organize with strategic purpose all existing Regional Water Board tools and developing statewide tools for the protection of groundwater quality on a basin wide scale to protect ecosystem function and the Human Right to Water now and under future changed climatic conditions. The Groundwater Protection Strategy includes developing a programmatic approach to salt and nutrient management throughout the 63 groundwater basins or subbasins in the North Coast Region.
- 11. To sustain the ongoing development of salt and nutrient management plans in groundwater basins and subbasins where plans are needed and to clarify where salt and nutrient management planning is not needed, the Recycled Water Policy requires each regional water board to evaluate each basin or subbasin in its region

before April 8, 2021, and identify basins through a resolution or executive officer determination where salts and/or nutrients are a threat to water quality and therefore need salt and nutrient management planning to achieve water quality objectives in the long term. Each regional water board shall review and update this evaluation every five years to consider any changes in these factors that have occurred that would change the findings from the initial evaluation. Regional water boards shall consider the following factors in this determination, as well as any additional region-specific factors: a) magnitude of and trends in the concentrations of salts and nutrients in groundwater; b) contribution of imported water and recycled water to the basin water supply; c) reliance on groundwater to supply the basin or subbasin; d) population; e) number and density of OWTS; f) other sources of salts and nutrients, including irrigated agriculture and confined animal facilities; and g) hydrogeologic factors, such as regional aquitards, depth to water, and other basin- or subbasin-specific factors.

- 12. In response to legislation enacted in California's 2009 Comprehensive Water Package, the Department of Water Resources (DWR) completed groundwater basin prioritization based on population and groundwater use through implementation of the California Statewide Groundwater Elevation Monitoring (CASGEM) Program. In September 2014, Governor Brown signed into law three bills that formed the Sustainable Groundwater Management Act (SGMA) which required DWR to update the priority of each groundwater basin. In 2019, the SGMA Basin Prioritization process was conducted to reassess basin priority using the process and methodology developed for the CASGEM 2014 Basin Prioritization, adjusted as required by SGMA and related legislation.
- 13. Basin Prioritization components specified in Water Code section 10933(b) consist of the following: a) the population overlying the basin or subbasin; b) the rate of current and projected growth of the population overlying the basin or subbasin; c) the number of public supply wells that draw from the basin or subbasin; d) the total number of wells that draw from the basin or subbasin; e) the irrigated acreage overlying the basin or subbasin; f) the degree to which persons overlying the basin or subbasin rely on groundwater as their primary source of water; g) any documented impacts on the groundwater within the basin or subbasin, including overdraft, subsidence, saline intrusion, and other water quality degradation; and h) any other information determined to be relevant by DWR, including adverse impacts on local habitat and local stream flows.
- 14. Regional Water Board staff developed a Groundwater Basin Evaluation and Prioritization Process consistent with the Recycled Water Policy to inform salt and nutrient management planning within North Coast groundwater basins. Where evaluation Factors of the Recycled Water Policy are similar to SGMA Basin Prioritization Components, staff utilized the 2019 SGMA Basin Prioritization Process and Results. Technical process for the remaining evaluation factors was informed by SGMA, the Recycled Water Policy, the State Water Board Onsite Wastewater

Treatment System Policy, Groundwater Ambient Monitoring and Assessment Program, DWR Bulletin 118, Waste Discharge Permittee Reports, and publicly available GIS information.

- 15. The Final Staff Report North Coast Hydrologic Region Salt and Nutrient Management Planning Groundwater Basin Evaluation and Prioritization (Staff Report) identifies the priority basins for salt and nutrient management planning within the North Coast Region and provides potential regulatory and non-regulatory implementation strategies to protect groundwater quality.
- 16. The State Water Board prepared a "substitute environmental document" (SED) for the Recycled Water Policy that contains the required environmental documentation under the State Water Board's California Environmental Quality Act (CEQA) regulations. (Cal. Code Regs., tit. 23, § 3777.) The substitute environmental documentation produced for the Recycled Water Policy includes consideration of any environmental impacts that may result from a Regional Water Board's identification of priority basins. The adoption of this Resolution will not result in any additional impacts beyond those addressed in the SED such that supplemental CEQA documentation is required. In addition, this action is categorically exempt from CEQA pursuant to California Code of Regulations, title 14, section 15306 as it involves data collection, research and resource evaluation activities which do not result in any serious or major disturbance to an environmental resource.

THEREFORE, BE IT RESOLVED THAT:

The Regional Water Board:

- 1. Accepts the technical process for evaluating and developing priority basins described in the Final Staff Report.
- 2. Accepts the Priority Category 1 and 2 basins listed below as Priority Basins having a relatively high threat from salts and nutrients and thus would benefit from salt and nutrient management planning.

Priority Category	Basin or Subbasin
1	Santa Rosa Plain
2	Smith River Plain, Scott River Valley, Mad River Lowland, Eureka Plain, Eel River Valley, Anderson Valley, Fort Bragg Terrace Area, Ukiah Valley, Sanel Valley, Alexander Area, Cloverdale Area, Healdsburg Area, Rincon Valley, Wilson Grove Formation Highlands, Lower Russian River Valley, Fort Ross Terrace Deposits

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- 3. Acknowledges that the priority status of groundwater basins may change and the list of priority basins will be updated a minimum of every 5 years as required by the Recycled Water Policy.
- 4. Acknowledges that the Recycled Water Policy grants the authority to the Regional Water Board Executive Officer to determine priority groundwater basins for salt and nutrient management planning and to update the list of priority basins.
- 5. Directs staff to proceed with developing a Policy Statement for Groundwater Protection which outlines a range of strategies to protect high groundwater quality and improve degraded groundwater quality within the region and to present the Policy Statement for Board consideration within the shortest time practicable.

Certification:

I, Matthias St. John, Executive Officer do hereby certify that the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, North Coast Region, on April 15, 2021.

Matthias St. John Executive Officer

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