

**California Regional Water Quality Control Board
North Coast Region**

Resolution No. R1-2018-0030

**Adoption of the FY 2018 Triennial Review of the
Water Quality Control Plan for the North Coast Region,
Basin Planning Project Priorities**

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

Introduction

1. The California Regional Water Quality Control Board, North Coast Region (Regional Water Board), adopted the Water Quality Control Plans (Basin Plans) for the Klamath River Basin (1A) and the North Coastal Basin (1B) and their abstracts on March 20, 1975. The abstracts of the Klamath River Basin Plan (1A) and the North Coastal Basin Plan (1B) were combined to form *the Water Quality Control Plan for the North Coast Region* (Basin Plan) on April 28, 1988. The Regional Water Board has updated and amended the Basin Plan numerous times since then in response to changes in regulation and other conditions. The Basin Plan was last updated in March 2018.
2. The Basin Plan includes definitions of beneficial uses of water, water quality objectives necessary to protect those beneficial uses, implementation plans to control point and nonpoint sources of waste discharges, acknowledgement of and coordination with statewide plans and policies and surveillance and monitoring component.
3. The Regional Water Board is responsible for adopting water quality standards (beneficial uses and objectives) and implementation plans and for modifying such standards and plans, as appropriate, under the provisions of Clean Water Act sections 303(c), (d), and (e) and Water Code section 13240.
4. During its adoption of the 2014 Triennial Review of the Basin Plan, the Regional Water Board approved non-substantive revisions to Chapters 1, 3, and 5 of the Basin Plan. The Regional Water Board has approved four substantive amendments to the Basin Plan since the adoption of the 2014 Triennial Review of the Basin Plan in March 2015. Those amendments include: in June 2015 an update to Water Quality Objectives including a narrative toxicity objective applicable to groundwater an amendment to the Dissolved Oxygen Objective, and the incorporation of the statewide Onsite Waste Treatment System (OWTS) Policy; and in May 2016 the adoption of an Action Plan for the Upper Elk River Watershed Sediment Total Maximum Daily Load.

Summary of 2018 Triennial Review

5. On May 5, 2018, the Regional Water Board released the *Draft Staff Report for the 2018 Triennial Review of the Water Quality Control Plan for the North Coast Region* (2018 Triennial Review), including a draft *Planning Program Workplan for Fiscal Years 2018 through 2021*.
6. On May 5, 2018, the Regional Water Board published the Public Notice announcing the availability of documents and the hearing date of September 6, 2018.
7. The Regional Water Board conducted a public workshop on May 17, 2018 and received comments from the Board and members of the public on the proposed 2018 Triennial Review and draft *Planning Program Workplan for Fiscal Years 2018 through 2021*.
8. The Regional Water Board staff has reviewed and carefully considered all comments and testimony received, and has prepared a response to comments document on the 2018 Triennial Review and *Planning Program Workplan for Fiscal Years 2018 through 2021*. In response to comments, the *draft Planning Program Workplan for Fiscal Years 2018 through 2021* (Attachment 1) has been revised as follows:
 - a. [To be determined]
9. The *Planning Program Workplan for the Fiscal Years 2018 through 2021* ranks triennial review issues to reflect both water quality concerns and the availability of resources to work on the projects.
10. The Regional Water Board conducted a public hearing on September 6, 2018 for the purpose of soliciting final comments regarding the 2018 Triennial Review and proposed *Planning Program Workplan for Fiscal Years 2018 through 2021*.
11. The Regional Water Board has reviewed its water quality standards, implementation plans and policies and finds them appropriate with the exception of those issues identified in the 2018 Triennial Review and reflected in the proposed *Planning Program Workplan for Fiscal Years 2018 through 2021*.

Policy Statements

12. The Regional Water Board also is authorized to issue policy statements relating to any water quality matter within its jurisdiction, under the provisions of Water Code section 13224. A policy statement expresses in a resolution an opinion of the board without having effect as regulation. A policy statement can encourage certain actions, give general direction to staff, or make other non-regulatory statements.

13. Several important water quality issues were identified during the 2014 and 2018 Triennial Reviews that either in advance of an amendment to the Basin Plan or in lieu of a basin plan amendment can be addressed, at least partially, by implementing existing authorities. Specific issues of note are:
 - a. Climate Change
 - b. Contaminants of Emerging Concern
 - c. Water Conservation
 - d. Protection of Groundwater Resources

Climate Change

14. In March 2017, the State Water Resources Control Board (State Water Board) adopted Resolution No. 2017-0012 (Attachment 2) to comprehensively respond to climate change by acknowledging the climate change impacts to water resources across the state, directing certain actions of State Water Board staff, and encouraging certain actions of Regional Water Boards.
15. Resolution No. 2017-0012 encourages Regional Water Boards to support the development and implementation of the California Air Resources Board's Short-Lived Pollutant (SLCP) Reduction Strategy. Specifically, to collaborate with the Division of Water Quality (DWQ) to assess opportunities for reducing methane emissions from landfills through organic waste diversion, and co-digestion at existing or new anaerobic digesters, or through composting, while achieving water quality objectives. Regional Water Boards are also encouraged to identify opportunities to reduce methane emissions from dairies and concentrated animal feeding operations while achieving water quality objectives. Provide information on Regional Water Board activities to reduce methane emissions in the Water Boards' annual Performance Reports.
16. Resolution No. 2017-0012 encourages Regional Water Boards to coordinate with DWQ to make annual reporting of recycled water data a requirement of waste discharge permits and water reclamation requirements.
17. Resolution No. 2017-0012 encourages Regional Water Boards to update plans, permits, and policies, and coordinate with other agencies to enhance ecosystem resilience to the impacts of climate change, including but not limited to actions that protect headwaters, facilitate restoration, enhance carbon sequestration, build and enhance healthy soils, and reduce vulnerability to and impacts from fires. Regional Water Boards are encouraged to document climate resilience benefits of ecosystem protection and restoration actions.
18. Resolution No. 2017-0012 encourages Regional Water Boards to coordinate with DWQ to identify actions, including those recommended by the West Coast Ocean

Acidification and Hypoxia Science Panel, which the Regional Water Board could take to minimize impacts associated with ocean acidification, hypoxia, increasing temperature and nutrients.

19. Resolution No. 2017-0012 encourages Regional Water Boards to work with California Department of Forestry and Fire Protection, federal land management and other relevant agencies to restore and maintain healthy watersheds, reduce vulnerability to catastrophic fires, and support resilience in recovery efforts.
20. Resolution No. 2017-0012 encourages Regional Water Boards to refer to projections of sea level rise as directed in the most recent Ocean Protection Council Sea-level Rise Guidance Document, the most current data available through Cal-Adapt, and the California Coastal Commission's Sea Level Rise Policy Guidance, and consult with the Ocean Protection Council, the Coastal Commission, Bay Conservation and Development Commission, State Lands Commission, and other relevant agencies.

Contaminants of Emerging Concern

21. Contaminants of Emerging Concern (CECs) include substances such as endocrine disrupters, pharmaceuticals, and personal care products that may impact the beneficial uses of water at very low concentrations. CECs may pass untreated through waste water treatment processes to be discharged to waters of the state-- either via direct point source discharge to surface water, discharge to groundwater via discharge through percolation ponds or unlined evaporations ponds, or discharge to groundwater or runoff to surface water via application as recycled water.
22. In January 2013, the State Water Resources Control Board adopted the Recycled Water Policy, to support the statewide increase in recycled water use, while defining certain limitations and protections for recycled water use. Two Blue Ribbon Panels (Panels) have been convened to provide recommendations with respect to the research and monitoring needs associated with recycled water use and CECs. The Panels have identified the need to develop improved analytical methods and screening tools and conduct toxicological studies, so as to improve our understanding of the prevalence and persistence of CECs in water and their impact on human and aquatic life. Thus far the Panels' monitoring recommendations have been focused on recycled water use and ambient waters, and are being implemented statewide or considered for regional pilot studies to better understand which CECs present a risk to public health and the environment. The latest pilot projects implemented throughout the state have resulted in a better understanding of the relative prioritization, presence, and persistence of CECs in the environment.
23. While the Panels' recommended strategies have been helpful in focusing and aligning efforts statewide, specific recommendations are focused on their

implementation through Salt and Nutrient Management Plans (SNMPs) and groundwater recharge projects that use recycled water. Of the 58 groundwater basins in the North Coast Region, only the Santa Rosa Plain has an SNMP and basin-scale groundwater monitoring program in development. Yet, recycled water use occurs in locations throughout the North Coast Region. Further, the implementation of the point source discharge prohibition contained within the Basin Plan results in the discharge of municipal and other waste to land as a preference to point source discharge to surface waters in most watersheds. As such, in the North Coast Region, groundwater effectively serves as the receiving water of concern and discharges of recycled water or other wastewater to land serve as a source of groundwater recharge.

Water Conservation

24. The effects of seasonal and multi-year drought are likely to intensify as populations continue to grow and competition for water resources intensifies. Under current water supply schemes and pollution management practices, water in some North Coast streams will be of insufficient quantity or quality to support all beneficial uses during all times of the year, for example to provide full domestic water supply needs and cold freshwater habitat during summer months. This is especially the case under drought conditions. Implementing water conservation practices increases the likelihood that surface water and groundwater supplies can support all beneficial uses of water and forestalls the need for emergency water rights actions.
25. Water conservation is a practice by which one assesses the specific water needs associated with a given activity and implements methods to minimize fresh water use for that activity. When possible, one should monitor water use to ensure it aligns with actual needs, manage the withdrawal of water in such a way as to minimize the amount of water withdrawn, alter the timing of withdrawal and use to coordinate with seasonal availability, and reuse water for multiple purposes.
26. On May 9, 2016, Governor Brown signed Executive Order B-37-16 titled "Making Water Conservation a California Way of Life" (Attachment 3) ordering state agencies to transition to permanent long-term improvements in water programs to: use water more wisely, eliminate water waste, strengthen local drought resilience, and improve agricultural water use efficiency and drought planning. Water conservation is consistent with this Executive Order.

Protection of Groundwater Resources

27. The North Coast Region is recognized as an area with an abundance of high quality waters¹. Our high quality groundwater is a particularly valuable resource, which, in the face of climate change and drought, should be afforded full protection. A number of laws, regulations, and policies have potential effects on groundwater quality and quantity including, but not limited to the Basin Plan Point Source Discharge Prohibition, the Underground Storage Tank (UST) Low Threat Closure Policy, the Recycled Water Policy, and the Sustainable Groundwater Management Act (SGMA). Yet, such plans and policies may also promote discharges to groundwater, promote relative prioritization of groundwater basins, and encourage streamlined approaches to permitting that may not result in effective strategies to ensure the preservation of high-quality waters.
28. Nearly all the North Coast Region's groundwater is considered to be an existing or a potential source of drinking water. According to the Department of Water Resources (DWR), groundwater accounts for at least one-third of the total water use in the North Coast Region, and for many communities is the sole domestic supply. Increased demands on these groundwater resources have become evident. Years of drought and decades of groundwater pollution have resulted in impairment to portions of these basins. Finally, one of the more tangible effects of climate change is the restriction of surface water diversions and the increased demand on groundwater withdrawals, potentially increasing stress on groundwater dependent ecosystems and aquifers' assimilative capacity for pollutants.
29. Historical and ongoing urban, industrial, and agricultural activities can degrade the quality of groundwater. Discharges to groundwater from these activities include: underground and aboveground tank and sump leaks; industrial chemical spills, landfill leachate, septic system failures, and chemical seepage via shallow drainage wells and abandoned wells. In addition to effects on groundwater quality from underground tanks and spills, there are ongoing alterations to groundwater quality from numerous other discharges of waste to land. These wastes are generally applied to land for the purpose of re-use as soil amendments, to improve crop productivity through the addition of nutrients, to eliminate or reduce competing vegetation, and to eliminate or reduce the impact of insects and other pests on the crop being grown. When applied to land such wastes have the potential to negatively impact groundwater quality through the contribution of salinity, nutrients, pathogen indicator organisms, and various other toxic chemicals. Discharges of waste to land must be assessed and authorized by Waste Discharge Requirements (WDRs) to protect against the potential for groundwater impact.

¹ High-quality waters are waterbodies with constituent concentrations that are better than the conditions and values established by water quality objectives necessary for protecting beneficial uses.

30. As a general matter, impacts on groundwater from unauthorized discharges can be long-term, costly, and in some cases infeasible to remediate. There are numerous examples in the State of municipal, domestic, industrial, and agricultural supply wells that have been taken out of service due to the presence of pollution. To the degree that this issue affects the North Coast Region, as waste discharges are identified, prompt and expedient efforts to clean up and contain source areas, as well as to prevent further groundwater quality impacts, must be undertaken.
31. Groundwater in the North Coast Region generally supplies high quality drinking water, agricultural irrigation and industrial supplies, as well as supplies for cultural uses, freshwater replenishment, wildlife habitat, and aquaculture. In light of this, the North Coast Region has a unique obligation to protect and maintain the existing high quality waters.

THEREFORE, BE IT RESOLVED that:

1. The Regional Water Board, in fulfillment of the requirements described in Clean Water Act sections 303(c), (d), and (e) and in section 13240, Division 7 of the California Water Code, hereby approves the *2018 Triennial Review of the Water Quality Control Plan for the North Coast Region, Proposed Planning Program Workplan for Fiscal Years 2018-2021*, which is incorporated herein and described in Attachment 1 of this Resolution.
2. The Basin Plan as it currently exists remains effective until such time as it is changed by formal Regional Water Board action.
3. As a statement of its opinion on the issues of climate change the Regional Water Board directs staff to:
 - a. Support the development and implementation of the Air Resources Board's Short-Lived Pollutant (SLCP) Reduction Strategy;
 - b. Identify opportunities to reduce methane emissions from dairies and concentrated animal feeding operations while achieving water quality objectives;
 - c. Update permits and policies, and coordinate with other agencies to enhance ecosystem resilience to the impacts of climate change, including but not limited to actions that protect headwaters, facilitate restoration, enhance carbon sequestration, build and enhance healthy soils, and reduce vulnerability to and impacts from fires;
 - d. Work with California Department of Forestry and Fire Protection, federal land management and other relevant agencies to restore and maintain healthy

- watersheds, reduce vulnerability to catastrophic fires, and support resilience in recovery efforts;
- e. Coordinate with DWQ to assess opportunities for reducing methane emissions from landfills while meeting water quality objectives; make annual reporting of recycled water data a requirement of waste discharge permits and water reclamation requirements; and identify actions that the Regional Water Board can take to minimize impacts associated with ocean acidification, hypoxia, increasing temperature and nutrients;
 - f. Provide information in annual Performance Report on Regional Water Board activities to reduce methane emissions; and,
 - g. Refer to projections of sea level rise as directed in the most recent Ocean Protection Council Sea-level Rise Guidance Document, the most current data available through Cal-Adapt, and the California Coastal Commission's Sea Level Rise Policy Guidance, and consult with the Ocean Protection Council, the Coastal Commission, Bay Conservation and Development Commission, State Lands Commission, and other relevant agencies.
4. As a statement of its opinion on the issue of CECs the Regional Water Board directs staff to:
- a. Develop, where appropriate, special studies to further the understanding of how CECs impact groundwater and surface water;
 - b. Require monitoring for CECs in accordance with the findings and recommendations of national and statewide studies in new and revised permits and orders as deemed appropriate and necessary to protect water quality in the North Coast Region;
 - c. Coordinate with other statewide CEC efforts and use existing tools for standardized and integrated data sharing. As new science and technologies are continually improving, new monitoring tools such as bioanalytical screening techniques shall be promoted and required as appropriate; and,
 - d. To ensure the maintenance of high quality waters and protection of beneficial uses, CECs shall be monitored periodically through the appropriate regional programs and permitting mechanisms including ambient water studies to identify any potential new concerns, sources, persistence in the environment, and trends over time.
5. As a statement of its opinion on the issue of water conservation the Regional Water Board directs staff to encourage in permits and orders: planning and

implementation of practices, which conserve water, enhance stream flow protections and reduce impacts on timing and variations to the natural hydrograph while protecting and improving water quality in the North Coast Region.

6. As a statement of its opinion on the issue of groundwater protection the Regional Water Board directs staff to require groundwater monitoring wherever discharges to land have the reasonable potential to impact groundwater quality and the results of such monitoring are necessary to support further assessment or action.

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 [Date].

Matthias St. John
Executive Officer

Attachment 1: Draft Planning Program Workplan for Fiscal Years 2018 through 2021

Attachment 2: State Water Board Resolution No. 2017-0012

Attachment 3: EO B-37-16