

**STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2019-0057**

APPROVING AMENDMENTS TO THE WATER QUALITY CONTROL PLANS FOR
THE SACRAMENTO RIVER AND SAN JOAQUIN RIVER BASINS AND THE
TULARE LAKE BASIN TO INCORPORATE A CENTRAL VALLEY-WIDE SALT AND
NITRATE CONTROL PROGRAM

WHEREAS:

1. On May 31, 2018, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) adopted [Resolution No. R5-2018-0034](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/resolutions/r5-2018-0034_res.pdf) (https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/resolutions/r5-2018-0034_res.pdf), amending the Water Quality Control Plans for the Sacramento River and San Joaquin River Basins and the Tulare Lake Basin (Basin Plans).
2. In 2006, the Central Valley Water Board initiated a collaborative stakeholder initiative, known as Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS), to develop a Central Valley-wide Salt and Nitrate Management Plan (SNMP). The SNMP provides a regulatory and programmatic approach for the management of salts and nitrate in groundwater and surface water in the Central Valley. The SNMP goals are (1) to ensure a safe drinking water supply, (2) to achieve balanced salt and nitrate loadings, and (3) to implement long-term and managed aquifer restoration programs where reasonable, feasible and practicable. The amendments to the Basin Plans establish a prioritized Nitrate Control Program for discharges to groundwater and a phased Salt Control Program for discharges to surface water and groundwater.
3. The Central Valley Water Board found that the phased and prioritized nature of the proposed amendments to the Basin Plans allow discharges of waste to continue at levels that may have an adverse effect on certain beneficial uses in surface water and groundwater, as applicable, during at least the next 10 years in order to prioritize provision of safe drinking water to impacted users. In addition, the Central Valley Water Board found that implementation of the proposed amendments to the Basin Plans is expected to indirectly result in the need for dischargers to construct specific projects for salt and nitrate management. As described in the Central Valley Water Board's staff report, the reasonably anticipated future activities may result in significant and unavoidable impacts to aesthetics, agricultural and forestry resources, and hydrology and water quality. The Central Valley Water Board adopted findings and statements of overriding consideration regarding the environmental effects of the amendments to the Basin Plans. The State Water Board has reviewed the staff report and incorporates the Central Valley Water Board's findings and statements of overriding consideration. The State Water Board further finds that the revisions to the amendments to the Basin Plans directed in paragraph 4 below do not result in any of the conditions that require a subsequent environmental impact report in accordance with California Code of Regulations, title 14, section 15162.

4. The Central Valley Water Board found that the amendments to the Basin Plans are consistent with the Statement of Policy with Respect to Maintaining High Quality of Waters in California (State Water Board [Resolution No. 68-16](https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1968/rs68_016.pdf) (https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1968/rs68_016.pdf)) and the federal Antidegradation Policy (40 C.F.R. section 131.12), as described in the Central Valley Water Board's staff report.
5. The State Water Board's understandings of the amendments to the Basin Plans include the following:
 - a. One of the three management goals of the amendments to the Basin Plans is to achieve "balanced loading" of salt into surface and groundwater and nitrate into groundwater. Balanced loading was defined by Central Valley Water Board staff during a presentation at the State Water Board workshop on July 2, 2019 as a condition where the loading of salt and nitrate mass into a system is equal to the mass of salt and nitrate removed from that system.
 - b. Early Action Plans are intended to address the immediate needs of those drinking groundwater from public water supply or domestic wells that exceed the primary maximum contaminant level for nitrate. Longer-term drinking water solutions will be addressed by management zones or individual permittees.
 - c. Central Valley Water Board staff clarified that, in evaluating requests to change the prioritization scheme for basins and sub-basins in the Nitrate Control Program, the factors identified in the amendments to the Basin Plans will be considered. For areas in prioritized basins or sub-basins, requests to change the timeline for the issuance of a Notice to Comply will be decided by the Central Valley Water Board. For areas in basins or sub-basins that are not prioritized and areas that are not part of a groundwater basin, requests to issue a Notice to Comply will be decided by the Central Valley Water Board's Executive Officer.
6. The State Water Board finds that the amendments to the Basin Plans are in conformance with Water Code section 13240, which specifies that regional water quality control boards may revise basin plans, and Water Code section 13242, which requires a program of implementation for achieving water quality objectives.
7. A Basin Plan amendment does not become effective until approved by the State Water Board and until the regulatory provisions are approved by the Office of Administrative Law (OAL) and the regulations relevant to surface water (NPDES permitting and the variance policy) receive approval from the U.S. Environmental Protection Agency (U.S. EPA).

8. The State Water Board shares some of the concerns regarding some implementation aspects of the amendments to the Basin Plans raised during the public participation process conducted by the State Water Board. The more immediate concerns can be addressed in the short term by providing specific direction regarding implementation to the Central Valley Water Board, as stated below. Other concerns relate to longer-term implementation of the amendments to the Basin Plans by the Central Valley Water Board and are therefore best addressed by directing the Central Valley Water Board to promptly make targeted revisions to the amendments to the Basin Plan. During the pendency of those revisions, it is appropriate for the State Water Board to approve the amendments to the Basin Plans so that the short-term implementation of the amendments to the Basin Plans can commence.

THEREFORE, BE IT RESOLVED THAT:

The State Water Board:

1. Approves the amendment to the Basin Plans adopted under Central Valley Water Board Resolution No. R5-2018-0034 with the following understandings and directions:
 - a. The Central Valley Water Board will take all appropriate actions to protect all designated or existing beneficial uses of surface waters and groundwater unless the Central Valley Water Board amends the applicable Basin Plan to de-designate some or all beneficial uses of the relevant waterbody and the State Water Board approves the de-designation.
 - b. In determining whether achieving balanced salt loading or implementing managed aquifer restoration for salt or nitrate is “reasonable, practicable, and feasible,” the Central Valley Water Board will consider costs borne by dischargers and affected residents, as applicable.
 - c. Balanced salt and nitrate loading are acceptable interim goals for basins that are currently exceeding water quality objectives, but achieving balanced loading may only result in maintaining the status quo. The final goal for ongoing discharges is to reduce loading of salt and nitrate so that the ongoing discharges are no longer causing or contributing to exceedances of water quality objectives in the receiving water, or degrading high quality waters absent appropriate findings by the Central Valley Board, and the final goal for aquifer restoration is to restore the basins so that they no longer exceed water quality objectives.
 - d. Management Zone Implementation Plans will not be approved or implemented until after the revisions directed in paragraph 4, below, are adopted by the Central Valley Water Board and approved by the State Water Board and the Office of Administrative Law.

- e. In developing and implementing Early Action Plans and Management Zone Implementation Plans, dischargers shall meaningfully consult with affected residents, affected water systems, representatives of environmental justice organizations, and other stakeholders. The Central Valley Water Board shall ensure that this consultation occurs and may request assistance from State Water Board staff in conducting outreach to affected residents and water systems.
- f. The Central Valley Water Board shall consult with the State Water Board Division of Drinking Water on its approval and implementation of Early Action Plans and drinking water provisions within Management Zone Implementation Plans in order to facilitate the employment of effective and appropriate mechanisms for providing drinking water in the short- and long-terms and ensure that the dischargers' provision of drinking water is consistent with any related activities by the Division of Drinking Water.
- g. The Central Valley Water Board shall ensure that affected residents in localized areas within management zones with nitrate concentrations exceeding 10 mg/L ("hot spots") are identified and provided access to drinking water through Early Action Plans and Management Zone Implementation Plans.
- h. The Central Valley Water Board shall report to the State Water Board if there are any communities or areas where there are affected residents drinking water with nitrate concentrations exceeding 10 mg/L that are not covered within the area of a management zone and whether and how the Central Valley Water Board intends to address the lack of coverage.
- i. The Central Valley Water Board shall review Early Action Plans and Management Zone Implementation Plans every two years to confirm whether they are achieving quantifiable progress towards the goal of providing drinking water to affected residents, as applicable.
- j. The amendments to the Basin Plans specify that Early Action Plans must include a funding mechanism, and that Management Zone Implementation Plans must identify funding or cost-share agreements, or a process for developing funding or cost-share agreements, to implement the Management Zone Implementation Plans. The dischargers may seek funding from other sources, including local, state, and federal funds, but the Central Valley Water Board has confirmed that the dischargers are ultimately responsible for ensuring timely implementation of Early Action Plans and Management Zone Implementation Plans. The unavailability of public funding is not an acceptable reason for dischargers to delay implementing Early Action Plans or emergency, interim, or permanent replacement water projects identified in approved Management Zone Implementation Plans.

- k. It is crucial that dischargers of nitrates that cause or contribute to exceedances of water quality objectives take all reasonable steps to reduce their nitrate loading. To that end, the State Water Board recently adopted [Order WQ 2018-0002](#) regarding the petition of the Central Valley Water Board's Waste Discharge Requirements General Order No. R5-2012-0116 for Growers Within the Eastern San Joaquin River Watershed that are Members of a Third-Party Group. Order WQ 2018-0002 contains several precedential requirements for all irrigated lands regulatory programs statewide, including requirements designed to reduce nitrate loading. The amendments to the Basin Plans do not supersede the precedential requirements in Order WQ 2018-0002. The Central Valley Water Board shall implement the amendments to the Basin Plans consistent with Order WQ 2018-0002.
- l. The amendments to the Basin Plans create a regulatory framework for future Central Valley Water Board planning activities and permitting actions. Waste discharge requirements (WDRs) must comply with the Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy) as applicable, including establishing quantifiable milestones and time schedules for compliance with water quality objectives. Therefore, Management Zone Implementation Plans and alternative compliance projects need to include proposals for enforceable and quantifiable interim deadlines that focus on reducing nitrates in ongoing discharges, and proposed final compliance dates for ongoing discharges of nitrate to cease causing or contributing to exceedances of the applicable water quality objective in the receiving water.
- m. Dischargers must ultimately not cause or contribute to the exceedance of water quality objectives in the receiving water. WDRs adopted by the Central Valley Water Board shall include enforceable and quantifiable interim deadlines and shall state the final dates for not causing or contributing to exceedances of water quality objectives in the receiving water.
- n. The State Water Board may review Early Action Plans submitted by permittees and management zone approvals and WDRs issued by the Central Valley Water Board upon receipt of a petition under Water Code section 13320 or upon its own motion.
- o. The development and review of management zones will be a significant challenge for dischargers and the Central Valley Water Board staff. The success of the amendments to the Basin Plans is largely contingent on the effectiveness of management zones. The State Water Board expects the following with respect to delineation and review of management zones:
 - 1. The boundaries of management zones shall be based primarily on hydrogeology;
 - 2. Potential impacts to groundwater associated with downgradient migration of nitrate from each management zone shall be assessed and clearly documented using quantitative methods;

3. Agreements with adjacent management zones regarding responsibility for providing drinking water and restoring aquifers shall be clearly documented;
 4. Zones of influence associated with discharges, both within and outside of each management zone, shall be technically justified; and
 5. Robust justification shall be provided for any areas where impacted groundwater used for domestic or municipal supply is excluded from a management zone including: an analysis if that area is covered by a different management zone, modeling to justify the exclusion, and documentation that meaningful outreach was conducted to potentially affected parties.
- p. The State Water Board encourages collaborative work among management zones, stakeholders, the Central Valley Water Board, and groundwater sustainability agencies formed under the Sustainable Groundwater Management Act to achieve the goals of groundwater sustainability and water quality protection.
 - q. The State Water Board interprets the terms for compliance contained in the Exceptions Policy in the amendments to the Basin Plans to be equivalent to a “time schedule” as authorized under Water Code sections 13242 and 13263, subdivision (c).
 - r. The failure of any entities to act on the Central Valley Water Board’s “Recommendations for Implementation to Other Agencies” does not relieve dischargers from complying with their enforceable obligations.
 - s. The State Water Board recognizes that the amendments to the Basin Plans do not authorize exceedances of water quality objectives in the Delta, except as provided in the Bay-Delta Water Quality Control Plan’s implementation provisions.
 - t. The State Water Board directs State Water Board staff, within one year of approval of this resolution, to identify internal and external options for developing and expanding the capacity of local community organizations to participate meaningfully in the development of management zone implementation plans and related processes.
2. Directs the Central Valley Water Board to provide progress reports to the State Water Board on the implementation of the amendments to the Basin Plans (a) annually on short-term implementation and (b) every five years on long-term trends. Results of this review may serve as a basis for the State Water Board to direct the Central Valley Water Board to consider revisions to the amendments to the Basin Plans.
 - a. Progress reports on short-term implementation shall include the following information:

1. The status of overall implementation of the amendments to the Basin Plans;
 2. The status of the provision of safe drinking water to all affected parties;
 3. The status of any communities or areas where there are affected residents drinking water with nitrate concentrations exceeding 10 mg/L that are not covered within the area of a Management Zone, and how the Central Valley Water Board intends to address the lack of coverage;
 4. Any identified new or expanded impacts to drinking water wells; and
 5. Any additional staffing resources required by the Central Valley Water Board to fully implement the amendments to the Basin Plans.
- b. Progress reports on long-term trends shall also include the following additional information:
1. Documentation of trends in changes to the loading of salts and nitrates into the basin;
 2. Documentation of trends in changes to groundwater quality in the basin;
 3. Any progress towards attaining water quality objectives for salts in surface waters and groundwater and nitrate in groundwater; and
 4. A review of technological advances in reducing nitrate discharges.
3. Authorizes the Executive Director or designee to submit the amendments adopted under Central Valley Water Board Resolution No. R5-2018-0034 as approved and the administrative record for this action to the Office of Administrative Law for approval of the regulatory provisions and to the U.S. Environmental Protection Agency for approval of the regulatory provisions related to surface water, and to make any appropriate revisions without regulatory effect identified during the Office of Administrative Law's review.
4. Directs the Central Valley Water Board to promptly initiate the water quality control plan amendment process to make targeted revisions to the amendments to the Basin Plans consistent with the following specific directions. If the Central Valley Water Board has not adopted revisions to the amendments to the Basin Plans consistent with the following specific directions within one year of the approval of the amendments to the Basin Plans by the Office of Administrative Law, the State Water Board shall review the Central Valley Water Board's failure to act on the following specific directions on its own motion in accordance with Water Code section 13248.
- a. Convert the Nitrate Control Program's goal of balanced nitrate loading to an interim goal, with a new additional final goal of ceasing causing or contributing to exceedances of the applicable water quality objectives in the receiving water.

- b. Remove the qualifier that the Nitrate Control Program’s goal of balanced nitrate loading should be achieved only to the extent “reasonable, feasible, and practicable.”
- c. Clarify that the managed aquifer restoration limitation in the amendments to the Basin Plans (“only to the extent it is reasonable, feasible, and practical to do so”) is derived from existing provisions in the Porter-Cologne Water Quality Control Act and other applicable laws, and does not create a new standard for de-designating beneficial uses of aquifers or adopting less stringent site specific water quality objectives. Any determination by the Central Valley Water Board that managed aquifer restoration activities need not commence or continue shall be made in the context of a future proposed amendment to the Basin Plans to either de-designate beneficial uses or adopt a site specific water quality objective, and the Central Valley Water Board will apply the law in effect at the time of the future proposed amendment to the Basin Plans.
- d. Include a requirement that Management Zone Implementation Plans include a residential sampling program that is designed to assist in identifying affected residents within portions of the management zone where nitrate concentrations in the shallow zone may exceed nitrate concentrations of 10 mg/L and where there are nitrate discharges from regulated sources that may impact groundwater. Such sampling shall occur only with the consent of the current resident, and the availability of such sampling shall be included in the management zone’s outreach efforts to potentially affected residents.
- e. Include an alternative process for the Central Valley Water Board to modify a management zone’s boundaries if it determines that the proposed management zone inappropriately excludes portions of basins with nitrate concentrations exceeding 10 mg/L.
- f. Specify that when preparing a Management Zone Implementation Plan and evaluating long-term drinking water solutions, the management zone must consider future impacts on public water systems from nitrate contamination. When preparing such plans, the management zone shall consult with the Central Valley Water Board and the Division of Drinking water with respect to determining available solutions for addressing drinking water. The Management Zone Implementation Plans shall also address the impact that potential solutions may have on operation and maintenance costs, particularly for disadvantaged communities.
- g. Specify that the Management Zone Implementation Plans and alternative compliance projects must include proposals for enforceable and quantifiable interim deadlines that focus on reducing nitrate in ongoing discharges and a proposed final compliance date for ongoing discharges of nitrate to cease causing or contributing to exceedances of the applicable water quality objective in the receiving water, and that the implementing waste discharge requirements must be consistent with the NPS Policy, as applicable, by including enforceable and quantifiable interim deadlines and final deadlines for discharges to cease causing or contributing to exceedances of water quality objectives in the receiving water.

- h. Revise the Exceptions Policy to require that all discharges of nitrate must cease causing or contributing to exceedances of water quality objectives in the receiving water within a term that is as short as practicable for each discharger or category of dischargers participating in the management zone but in no case is longer than 35 years. Revise the 5-year status report section to add the Central Valley Water Board's public review, and revisions if appropriate, of the length of the terms to confirm whether they are still as short as practicable for each discharger or category of dischargers. The Central Valley Water Board should also set a maximum of 50 years as a goal for restoring basins to achieve nitrate water quality objectives throughout the basin. The Central Valley Water Board may recognize, however, that some basins may require more than 50 years to achieve restoration or may qualify for de-designation of beneficial uses through the water quality control plan amendment process.
- i. Remove the option for management zones developed in accordance with the Nitrate Control Program to use a volume-weighted average to allocate assimilative capacity as an alternative compliance pathway.
- j. Revise the Offsets policy to:
 - 1. Specify that offsets for nitrate shall not be utilized as an alternative means of compliance by dischargers that are discharging into a portion of a groundwater aquifer that (a) underlies an inhabited territory as defined by Government Code § 56046, (b) is currently relied upon as a source of drinking water, or (c) that, based on local and regional plans and other readily available information, is likely to be relied upon as a source of drinking water;
 - 2. Require that, before authorizing an offset for nitrate, the Central Valley Water Board:
 - a. Find that the discharge, when considered in conjunction with the offset project, will be consistent with the maximum benefit to the people of the state, and the net effect of the discharge and the offset project will improve a currently used source of drinking water;
 - b. Find that, absent authorization of the offset, the resulting nitrate reductions associated with the offset project would not occur or would not occur as quickly;
 - c. Find that the nitrate reductions associated with the offset project are not otherwise required by applicable law or regulation, except that an offset may be authorized for nitrate reductions to occur more quickly than as otherwise required by applicable law or regulation;
 - d. Require that the offset for nitrate result in a net improvement in water quality;
 - e. Specify that all data regarding reporting and monitoring related to the offset project shall be made available to the public; and


- f. Limit the offset for nitrate to a time period of no more than ten years.
- k. Revise the Drought and Conservation Policy to limit the application of interim permit limits for discharges established under the Drought and Conservation Policy that exceed the "Upper" level specified in California Code of Regulations, title 22, Table 64449-B, for discharges to waters designated MUN to no more than a total of 3 years in any 10-year period. Revise the Secondary Maximum Contaminant Level Policy to remove the references to the Drought and Conservation Policy.
- l. Revise the Variance Program for Salinity Water Quality Objectives and the Drought and Conservation Policy to be consistent with the Central Valley Water Board's intent to not rely upon either the Variance Program for Salinity Water Quality Objectives or the Drought and Conservation Policy as a multi-discharger variance program, as described in the State Water Board's response to comments submitted by the U.S. Environmental Protection Agency, Region IX.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on October 16, 2019.

AYE: Chair E. Joaquin Esquivel
 Vice Chair Dorene D'Adamo
 Board Member Tam M. Doduc
 Board Member Sean Maguire

 NAY: None
 ABSENT: Board Member Laurel Firestone
 ABSTAIN: None



 Jeanine Townsend
 Clerk to the Board