CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

RESOLUTION R5-2025-0058

AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR
THE TULARE LAKE BASIN TO REMOVE THE MUNICIPAL AND DOMESTIC SUPPLY
(MUN) AND AGRICULTURAL SUPPLY (AGR) BENEFICIAL USES FROM
GROUNDWATER WITHIN A DESIGNATED HORIZONTAL AND VERTICAL AREA
WITHIN AND SURROUNDING THE ADMINISTRATIVE BOUNDARIES OF THE SOUTH
BELRIDGE, MONUMENT JUNCTION AND CYMRIC OIL FIELDS IN KERN COUNTY
NEAR MCKITTRICK, CALIFORNIA

WHEREAS, the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board), finds the following:

- 1. The Central Valley Water Board adopted the Water Quality Control Plan for the Tulare Lake Basin (Tulare Lake Basin Plan) in 1975 and has amended it as necessary.
- 2. The Tulare Lake Basin Plan contains the beneficial uses, water quality objectives and implementation programs for the Tulare Lake Basin.
- 3. The Tulare Lake Basin Plan defines the Municipal and Domestic Supply (MUN) beneficial use as "Uses of water for community, military, or individual water supply systems, including, but not limited to, drinking water supply." (page 2-1).
- 4. The Tulare Lake Basin Plan defines the Agricultural Supply (AGR) beneficial use as "Uses of water for farming, horticulture, or ranching, including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing." (page 2-1).
- 5. The Central Valley Water Board may only remove MUN and AGR beneficial use designations from water bodies in the Tulare Lake Basin from by amending the Tulare Lake Basin Plan.
- 6. The Central Valley Water Board incorporated the State Water Resources Control Board Resolution No. 88-63, the *Sources of Drinking Water Policy* (Sources of Drinking Water Policy), into the Tulare Lake Basin Plan with Central Valley Water Board Resolution 89-098. The Tulare Lake Basin Plan designates all groundwater as supporting the MUN beneficial use unless a particular water body is specifically exempted by the Regional Board as not supporting the MUN beneficial use in the Tulare Lake Basin Plan.
- 7. The Tulare Lake Basin Plan identifies criteria the Central Vallely Water Board

must consider when reviewing a proposal to remove the MUN beneficial use designation. One of the criteria for the MUN beneficial use de-designation is for waterbodies where the Total Dissolved Solids (TDS) exceeds 3,000 milligrams per liter (mg/L) (5,000 microsiemens per centimeter (µS/cm) as electrical conductivity (EC)), provided that "the aquifer cannot be reasonably expected to supply a public water system" (page 2-3).

- 8. The Tulare Lake Basin Plan also states that, "unless otherwise designated by the Regional Water Board, all ground waters in the Region are considered suitable or potentially suitable, at a minimum, for agricultural supply (AGR)... (page 2-4)."
- 9. The Tulare Lake Basin Plan identifies criteria the Central Valley Water Board must consider when reviewing a proposal remove the AGR beneficial use designation. One of the criteria for de-designation of the AGR beneficial use for waterbodies is where there is pollution that cannot reasonably be treated for agricultural use (page 2-4).
- 10. The Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) initiative conducted a review of literature related to salinity impacts on both irrigation and stock watering and identified guidance from the National Research Committee of the National Academy of Science (NRC) that recommend a maximum TDS limit of 5,000 mg/L for stock watering of all classes of livestock.
- 11. Based on the recommended maximum TDS limit, the Central Valley Water Board utilized a numeric threshold of 5,000 mg/L TDS as the upper limit for groundwater quality capable of supporting the AGR beneficial use.
- 12. The land use for the area evaluated for de-designation is currently oil and gas production, agricultural production, industrial use, and disposal (landfill), but most of the land is vacant. It is anticipated that these land uses will continue into the foreseeable future.
- 13. The Project Zone is a three-dimensional space, delineated in the Draft Staff Report, that Board staff evaluated for potential de-designation of MUN and AGR beneficial uses in this proposed Basin Plan Amendment (proposed BPA). The Project Zone is located near the unincorporated community of McKittrick in Kern County, within and surrounding the administrative boundaries of the South Belridge, Monument Junction and Cymric Oil Fields. The horizontal extent of the Project Zone is called the Project Area and is outlined in Figures 1-3 in the Draft Staff Report. The Project Zone consists of the Holocene Alluvium and the Tulare Formation and extends vertically to the base of the Tulare Formation.

- 14. Central Valley Water Board staff evaluated the currently available data in the Project Zone (detailed in the Draft Staff Report) to determine where dedesignation of the MUN and AGR beneficial uses in groundwater is supported.
- 15. The Revised Project Zone is the three-dimensional space within the Project Zone where Central Valley Water Board staff have determined that dedesignation of the MUN and AGR beneficial uses in groundwater is supported, through evaluation of the current available data in the Project Zone. The horizontal and vertical boundaries of the Revised Project Zone are specified in the Draft Staff Report. The vertical boundary is defined as the top of an extensive clay-rich layer called the Corcoran Clay Equivalent (CCE), which underlies the Holocene Alluvium. The CCE acts as a barrier to vertical groundwater movement from within the identified Revised Project Zone. Additionally, the horizontal boundaries of the Revised Project Zone are called the Revised Project Area and are depicted in Figure 2 of the Draft Staff Report.
- 16. The Central Valley Water Board staff evaluation of the available data in the Project Zone indicated that, in the Revised Project Zone, groundwater quality exceeds the Tulare Lake Basin Plan criteria for de-designation of the MUN beneficial use where the TDS exceeds 3,000 mg/L. Therefore, the available data supports de-designation for the MUN beneficial use for groundwater located in the Revised Project Zone.
- 17. The Central Valley Water Board staff evaluation of the available data in the Project Zone additionally indicated that, in a large portion of the Revised Project Zone, the groundwater quality exceeds 5,000 mg/L. Utilizing the numeric threshold of 5,000 mg/L TDS for pollution that cannot support agricultural use, the available data supports de-designation for the AGR beneficial use for groundwater located in a large portion of the Revised Project Zone. This three-dimensional portion is defined in the Draff Staff Report, as well as depicted in Figure 2.
- 18. A portion of the Revised Project Zone is proposed for de-designation for the MUN beneficial use, but not the AGR beneficial use, based on the available groundwater data. The Central Valley Water Board staff evaluation of the available data in the Project Zone further indicated that, in the Revised Project Zone, where defined in the Draft Staff Report and indicated in Figure 2 of the Draft Staff Report, groundwater quality is between 3,000 mg/L and 5,000 mg/L for TDS. The groundwater quality in this specified portion of the Revised Project Zone exceeds the Tulare Lake Basin Plan criteria for de-

designation of the MUN beneficial use where the TDS exceeds 3,000 mg/L Therefore, the available data supports de-designation for the MUN beneficial use for groundwater located in this specified section of the Revised Project Zone. However, the groundwater quality in this specified portion of the Revised Project Zone does not exceed the salinity threshold of 5,000 mg/L identified to support AGR beneficial uses. Therefore, the available data supports the AGR beneficial use in this portion of the Revised Project Zone, and no de-designation of the AGR beneficial use for groundwater in this specified section of the Revised Project Zone is proposed.

- 19. Central Valley Water Board staff evaluated all of the water supply wells known to be located in the Project Area. This evaluation confirmed that no active drinking water supply wells are located within the Project Zone. The evaluation also confirmed there is one agricultural irrigation well (Well WW-3 owned by Starrh & Starrh Cotton Growers LP) and one industrial supply well (New Well V owned by Clean Harbors) located in the Project Area. The agricultural supply well WW-3 is located in the Revised Project Area, but it is reportedly not used regularly for crop irrigated water, as it is known to supply water that exceeds 15,000 mg/L TDS.
- 20. There are no residences located in the Revised Project Area and groundwater in the Revised Project Zone is not used for municipal purposes. Additionally, there is no currently known current or anticipated future use of groundwater in the Revised Project Area for agricultural purposes. De-designation of MUN and AGR beneficial uses in the groundwater in specified areas of the Revised Project Zone would not create any effects on water quality or hydrology.
- 21. The Central Valley Water Board has prepared a proposed BPA which will remove the MUN and AGR beneficial uses from groundwater within the Revised Project Zone, a delineated horizontal and vertical portion of the Project Zone specified in the Draft Staff Report.
- 22. The proposed BPA will modify Chapter 2 of the Tulare Lake Basin Plan, adding a new row to the bottom of Table 2-3, thereby establishing an Exception Area 6 (column 1), with an Area Description (column 2), which shall be applicable to Detailed Analysis Unit (DAU) #259 (column 3). The proposed BPA language (including the Area Description) is detailed in the Draft Staff Report, which is included in this resolution as Attachment 1.
- 23. State Water Resources Control Board Resolution 68-16 (*Statement of Policy with Respect to Maintaining High Quality of Waters in California*, referred to hereafter as the State Anti-Degradation Policy) generally prohibits the Central

Valley Water Board from authorizing activities that will result in the degradation of high-quality waters unless it has been shown that:

- The degradation will not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives;
- The degradation will not unreasonably affect present and anticipated future beneficial uses;
- The discharger will employ Best Practicable Treatment or Control (BPTC) to minimize degradation; and
- The degradation is consistent with the maximum benefit to the people of the state.

As a threshold matter, this proposed BPA does not trigger the Anti-Degradation Policy, as it does not involve the degradation of "high quality waters." The Revised Project Zone groundwater subject to potential dedesignation has been demonstrated to be entirely unsuitable for MUN or AGR beneficial uses in the respective specified locations in the Revised Project Zone. The groundwater in the Revised Project Zone is not currently being used for MUN and AGR beneficial uses and is not anticipated to be utilized in the future. Accordingly, the proposed BPA is consistent with the State Anti-Degradation Policy.

- 24. An External Scientific Peer Review was conducted that evaluated regarding six key scientific and technical conclusions that inform the proposed BPA. The External Scientific Peer Review was initiated on 26 March 2025. Four independent peer reviewers each evaluated only the conclusions that were in their area of expertise. The final External Scientific Peer Review reports were submitted to the Central Valley Water Board on 14 July 2025. Central Valley Water Board staff developed a document that responded to the External Scientific Peer Review comments received. The External Scientific Peer Review results and the Central Valley Water Board responses to the External Scientific Peer Review are included in the Draft Staff Report for the proposed BPA, in Appendix E.
- 25. The proposed BPA justifies the de-designation of the MUN beneficial use in the Revised Project Zone groundwater, based on an existing criterion established in the Tulare Lake Basin Plan. De-designation for the MUN beneficial use in the Revised Project Zone is consistent with the criterion in the Tulare Lake Basin Plan that de-designation is appropriate for waterbodies where the TDS exceeds 3,000 mg/L and that cannot reasonably be expected to supply a public water system.

- 26. The proposed BPA justifies the de-designation of the AGR beneficial use in the Revised Project Zone groundwater based on an existing narrative criterion established in the Tulare Lake Basin Plan with a numeric threshold that is based on a review of peer-reviewed scientific and technical literature. Dedesignation for the AGR beneficial use in the specified section of the Revised Project Zone is consistent with the criterion in the Tulare Lake Basin Plan that de-designation is appropriate for waterbodies where there is pollution, either by natural processes or by human activity (unrelated to a specific pollution incident), that cannot reasonably be treated for agricultural use using either Best Management Practices or best economically achievable treatment practices. Central Valley Water Board staff determined that an appropriate threshold to use for TDS being considered pollution, a value above which agricultural beneficial uses are not supported, is 5,000 mg/L. This threshold is based on a review of peer-reviewed scientific and technical literature and was supported by all three (out of the four total) External Scientific Peer Reviewers that had the expertise to evaluate the appropriateness and scientific soundness of this threshold for this proposed BPA.
- 27. In compliance with Water Code section 106.3, it is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. The proposed BPA does not lessen water quality protections in any portion of the basin that is currently, or is expected to, serve as a domestic or municipal water source. The proposed BPA is consistent with Water Code section 106.3.
- 28. Health and Safety Code section 57004 requires that any portions of a proposed BPA Basin Plan Amendment be subject to peer review if the proposed BPA contains new science. Additionally, the State Water Resources Control Board requires an external peer review of the scientific basis of a proposed BPA to be performed before approving proposed BPAs. Approval from the State Water Resources Control Board is required for a proposed BPA to become effective in the Tulare Lake Basin Plan.
- 29. The regulatory action meets the "necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b).
- 30. The Central Valley Water Board is the Lead Agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) and is responsible for evaluating potentially significant environmental impacts that may occur as a result of the proposed BPA. The Secretary of Resources has determined that the Board's Basin Planning Process qualifies as a certified regulatory program pursuant to Public Resources Code section 21080.5 and

California Code of Regulations, title 14, section satisfies the requirements of State Water Resources Control Board's regulations for the implementation of CEQA for exempt regulatory programs (Cal. Code Regs., tit. 23, §§ 3775 et seq.). This determination means that the Central Valley Water Board may prepare Substitute Environmental Documentation, which includes the Draft Staff Report and a Draft Environmental Checklist, instead of preparing an environmental impact report. The Substitute Environmental Documentation satisfies the requirements of State Water Resources Control Board's regulations for the implementation of CEQA for exempt regulatory programs (Cal. Code Regs., tit. 23, §§ 3775 et seq.).

- 31. Central Valley Water Board staff conducted a CEQA scoping meeting on 25 May 2023 to discuss and solicit comments from the public regarding both the appropriate application of the MUN and AGR beneficial uses and level of protection in ground waters.
- 32. The Central Valley Water Board staff developed and evaluated alternatives for the proposed BPA with stakeholder input, which was provided during the public CEQA scoping meeting held on 25 May 2023.
- 33. Central Valley Water Board staff prepared a draft proposed BPA and a Draft Staff Report dated November 2025. The Draft Staff Report included a description of the proposed BPA and analysis of reasonable alternatives to the proposed BPA. The Draft Staff Report included an analysis of the reasonably foreseeable environmental impacts of the methods of compliance and an analysis of the reasonably foreseeable alternative methods of compliance with the proposed BPA.
- 34. Central Valley Water Board staff completed a Draft Environmental Checklist, included as Appendix D in the Draft Staff Report, that concluded that the proposed BPA does not have the potential to significantly impact the environment. Because the proposed BPA does not have the potential to significantly impact the environment, no mitigation measures are proposed.
- 35. On 16 September 2025 Central Valley Water Board staff circulated a Notice of Opportunity to Comment/Notice of Public Hearing/Notice of Filing of Draft Environmental Documents (the Notice), a written Draft Staff Report (which includes the proposed BPA language), Draft Environmental Checklist, and the External Scientific Peer Review results and Central Valley Water Board responses to the External Scientific Peer Review comments. This was circulated to interested individuals, parties, and public agencies, including persons having special expertise with regard to the environmental effects potentially involved with the proposed BPA, for review and comment in accordance with state environmental regulations (Cal. Code Regs., tit. 23, section 3775.). The Notice, which included the Notice of Public Hearing, was sent to all interested persons and parties and published in accordance with

- Water Code section 13244. This public comment period started 16 September 2025 and ended 31 October 2025.
- 36. The Central Valley Water Board received five public comment letters on the Draft Staff Report, proposed BPA language, Environmental Checklist, and the External Scientific Peer Review results and the Central Valley Water Board responses to the External Scientific Peer Review. The five public comment letters were received from the following: Starrh & Starrh Cotton Growers LP on 23 October 2025, Western States Petroleum Association (WSPA) on 31 October 2025, California Independent Petroleum Association (CIPA) on 31 October 2025, and Valley Water Management Company (VWMC) on 31 October 2025.
- 37. In response to the comments received on the September 2025 Draft Staff Report, Central Valley Water Board staff prepared a revised Draft Staff Report dated November 2025, and prepared written responses to comments received on the September 2025 draft.
- 38. Based on the record as a whole, including the Staff Report, an Environmental Checklist, the proposed BPA language, and public comment letters received, the Central Valley Water Board concurs with staff's conclusion that no actions are expected to cause a potentially significant impact to the environment as a result of the adoption of the proposed BPA. The Central Valley Water Board finds that the record as a whole and the procedures followed by staff comply with applicable CEQA requirements. (Cal. Code Regs., tit. 23, § 3775 et seq., Pub. Res. Code §§ 21080.5, 21083.9, and 21159, Cal. Code Regs., tit. 14, § 15250 et seq.)
- 39. The proposed BPA must be approved by the State Water Resources Control Board and the Office of Administrative Law (OAL). The proposed BPA is not under federal jurisdiction as it relates to groundwater and so becomes effective under state law after OAL approval.
- 40. The Central Valley Water Board finds that the proposed BPA was developed in accordance with Water Code section 13240, et seq.
- 41. The VWMC approached Central Valley Water Board staff with concerns regarding the horizontal extent of the Revised Project Area and noted that the original Revised Project Area did not fully encompass the McKittrick 1-1 Facility and the associated high TDS discharges from the McKittrick 1-1 Facility. Staff evaluated the request and available data and revised the de-designation area for both MUN and AGR beneficial uses to extend around the McKittrick 1-1 Facility due to the associated high TDS discharge from the McKittrick 1-1 Facility. Figure 2 in the Draft Staff Report and Appendix D was amended to include the revised horizontal extent of the Revised Project Area. Valley Water also expressed concern with the

inconsistency of the vertical boundaries in the draft Staff Report between the base and the top the CCE. Staff amended the Revised Project Zone to clarify that the de-designation vertical boundaries are from the ground surface to the base of the CCE.

42. VWMC noted that if additional criteria such as boron concentration or low well yield had been evaluated for the Project Area groundwater, it could have resulted in a larger de-designation area than the current Revised Project Area for the proposed BPA, for both MUN and AGR beneficial uses.

Additional criteria such as boron and low well yield will be considered as appropriate in future Basin Plan Amendments. The proposed future CIPA Basin Plan Amendment does propose to utilize boron as well as TDS data for dedesignation evaluation. Board staff are supportive of this approach and are working with CIPA to provide the necessary support for inclusion of both constituents when considering de-designation of the MUN and AGR beneficial uses in the proposed future CIPA BPA.

THEREFORE, BE IT RESOLVED:

- 1. Pursuant to Water Code section 13240, et seq., the Central Valley Water Board, after considering the entire record, including oral testimony received at the hearing, hereby approves, with the Late Revisions incorporated, the Draft Staff Report and Substitute Environmental Document, and adopts the proposed BPA into the Tulare Lake Basin Plan as set forth in Attachment 1.
- 2. The Executive Officer is directed to forward copies of the proposed BPA to the State Water Resources Control Board in accordance with the requirements of section 13245 of the Water Code.
- 3. The Central Valley Water Board requests that the State Water Resources Control Board approve the proposed BPA in accordance with the requirements of Water Code sections 13245 and 13246 and forward it to OAL.
- 4. If, during OAL's approval process, the Central Valley Water Board staff, State Water Resources Control Board, or OAL determines that minor, non-substantive corrections to the language of the proposed BPA are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Central Valley Water Board of any such changes.
- 5. The Central Valley Water Board hereby approves and adopts the CEQA Substitute Environmental Documentation for the proposed BPA, which was prepared in accordance with Public Resources Code section 21159, California Code of Regulations, title 14, section 15187, and California Code of Regulations, title 23, section 3777.

6. Following approval of the proposed BPA by OAL, the Executive Officer shall file a Notice of Decision with the Secretary for Resources in accordance with Public Resources Code section 21080.5, subsection (d)(2)(E), and California Code of Regulations, title 23, section 3781.

I, PATRICK PULUPA, Executive Officer, certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Valley Region on 12 December 2025.

PATRICK PULUPA, Executive Officer

Attachments

Attachment 1: Amendment to the Water Quality Control Plan for the Tulare Lake Basin to Remove the Municipal and Domestic Supply (MUN) and Agricultural Supply (AGR) Beneficial Uses from Groundwater Within a Designated Horizontal and Vertical Area Within and Surrounding the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields in Kern County Near McKittrick, California

Attachment 1

Amendment to the Water Quality Control Plan for the Tulare Lake Basin to Remove the Municipal and Domestic Supply (MUN) and Agricultural Supply (AGR) Beneficial Uses from Groundwater Within a Designated Horizontal and Vertical Area Within and Surrounding the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields in Kern County Near McKittrick, California