

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

RESOLUTION R5-2022-0035

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 PORTION OF THE SOUTHERN LOST  
HILLS OILFIELD

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 Basin Plans contain the beneficial uses, water quality objectives and implementation programs for the Sacramento and San Joaquin Rivers Basins and the Tulare Lake Basin.
3. The Central Valley Water Board has incorporated State Water Board Resolution No. 88- 63, the Sources of Drinking Water Policy (Sources of Drinking Water Policy), into the Tulare Lake Basin Plan, and has designated all surface and ground water bodies in the Tulare Lake Basin as supporting the MUN beneficial use unless a particular water body is specifically designated as not supporting the MUN beneficial use in the Tulare Lake Basin Plan.
4. The Sources of Drinking Water Policy identifies exceptions to the MUN beneficial use that can apply to certain water bodies, including an exception that applies to water bodies where the total dissolved solids (TDS) exceed 3,000 milligrams per liter (mg/L) (5,000 microsiemens per centimeter ( $\mu\text{S}/\text{cm}$ ) as electrical conductivity (EC), provided that the water body is not expected to supply a public water system.
5. The Central Valley Water Board may only remove waterbodies in the Tulare Lake Basin from MUN and AGR beneficial use designations by amending the Tulare Lake Basin Plan.
6. The Tulare Lake Basin Plan also states that, unless otherwise designated by the Central Valley Water Board, "all ground waters in the region are considered suitable or potentially suitable, at a minimum, for agricultural supply (AGR)...."
7. The AGR beneficial use includes the use of groundwater for irrigation, livestock watering, and support of vegetation for range grazing.

RESOLUTION R5-2022-0035  
TULARE LAKE BASIN PLAN MUN/AGR USE  
DE-DESIGNATION

8. 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.
9. The designated land use for the Lost Hills Oilfield is for oil and gas production. It is anticipated that this land use will continue into the future.
10. Characterization studies were conducted in the Southern Lost Hills Oilfield area that identified confined groundwater conditions within the Project Zone (below the Mid-Tulare Shale, within the Lower Tulare Member of the Tulare Formation and the Etchegoin Formation) and groundwater of very poor quality with naturally occurring Total Dissolved Solids (TDS) concentrations exceeding 10,000 mg/L.
11. The characterization studies indicate that groundwater quality exceeds both the Sources of Drinking Water Policy exception 1a criteria (EC is 5,000  $\mu$ S/cm or greater) and the maximum salinity concentration identified to support AGR beneficial uses.
12. The vertical extent of Project Zone is bounded by laterally extensive clay layers (The Mid-Tulare Shale above the Lower Tulare Member and extensive clays within the lower portion of the Etchegoin Formation) that act as barriers to vertical groundwater movement from within the identified Project Zone.
13. The very poor quality of groundwater within the Project Zone, as well as their status as federal non-Underground Source of Drinking Water (non-USDW) formations authorized to receive underground injection of fluids associated with oil and gas operations under the Safe Drinking Water Act exemption, are inconsistent with and preclusive of use as sources of drinking water.
14. Following identification of the proposed de-designation zone, a thorough well reconnaissance effort was performed both within and outside of the proposed project boundaries to identify active and abandoned or destroyed water supply wells, including those utilized for municipal and domestic supply. The characterization studies confirmed that no active drinking water supply or agricultural supply wells are located within the proposed de-designation zone nor will the closest drinking water wells or agricultural supply wells to the Project Area be impacted by groundwater from within the proposed de-designation zone.

RESOLUTION R5-2022-0035  
TULARE LAKE BASIN PLAN MUN/AGR USE  
DE-DESIGNATION

15. The Central Valley Water Board has prepared a draft amendment which will remove the MUN and AGR beneficial uses from groundwater within a delineated horizontal and vertical portion of the Southern Lost Hills Oilfield (the “proposed Amendment”).
16. The proposed Amendment will modify Chapter 2 of the Basin Plan, adding a new row to the bottom of Table 2-3 (p. 2-9), thereby establishing an Exception Area 5 (column 1) with an Area Description (column 2), which shall be applicable to Detailed Analysis Unit (DAU) #259 (column 3).
17. 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 Basin Plan Amendment does not trigger the Anti-Degradation Policy, as it does not involve the degradation of “high quality waters.” The Project Zone groundwater subject to potential de-designation has been demonstrated to be entirely unsuitable for MUN and AGR beneficial uses. The groundwater is not being applied, has not been applied, and is not expected to ever be applied, for MUN and AGR beneficial uses. De-designation for MUN beneficial uses is also consistent with “Exception 1a” of the Sources of Drinking Water Policy. The groundwater is also too poor to meet the Chemical Constituents Narrative WQO for AGR beneficial use. Accordingly, the proposed Basin Plan Amendment is consistent with the State Anti-Degradation Policy.

18. 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

RESOLUTION R5-2022-0035  
TULARE LAKE BASIN PLAN MUN/AGR USE  
DE-DESIGNATION

accessible water adequate for human consumption, cooking, and sanitary purposes. The proposed Amendment 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 Amendment is consistent with Water Code section 106.3.

19. The proposed Amendment justifies the de-designation of the MUN beneficial use based on an existing criterion established by the Sources of Drinking Water Policy. The proposed Amendment justifies the de-designation of AGR beneficial use based on a review of peer reviewed scientific and technical literature that concludes that existing groundwater quality renders the groundwater unsuitable for AGR uses. Health and Safety Code section 57004 does not require that any portions of the proposed Basin Plan Amendment be subject to peer review because no portion of the proposed Basin Plan Amendment contains new science; all of the scientific and technical conclusions that inform the proposed Basin Plan Amendment are based on existing regulatory criteria and/or previously peer-reviewed literature.
20. The regulatory action meets the “necessity” standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b).
21. 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 Amendment. 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 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 Board may prepare Substitute Environmental Documentation, which includes the Staff Report and an Environmental Checklist, instead of preparing an environmental impact report. The Substitute Environmental Documentation satisfies the requirements of State Water Board’s regulations for the implementation of CEQA for exempt regulatory programs. (Cal. Code Regs., tit. 23, §§ 3775 et seq.)
22. Central Valley Water Board staff conducted an online CEQA scoping meeting on 30 November 2021 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.

RESOLUTION R5-2022-0035  
TULARE LAKE BASIN PLAN MUN/AGR USE  
DE-DESIGNATION

23. The Central Valley Water Board staff developed and evaluated alternatives for the proposed Amendment with stakeholder input, which was provided during the public meeting held on 30 November 2021.
24. Central Valley Water Board staff has prepared a draft Amendment and a Staff Report dated March 2022. The Staff Report included a description of the proposed Amendment and analysis of reasonable alternatives to the proposed Amendment. The 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 Amendment.
25. Central Valley Water Board staff completed an Environmental Checklist that concluded that the proposed Amendment does not have the potential to significantly impact the environment. Because the proposed Amendment does not have the potential to significantly impact the environment, no mitigation measures are proposed.
26. Central Valley Water Board staff has circulated a Notice of Public Hearing/Notice of Filing, a written Staff Report, an Environmental Checklist, and the proposed Amendment to interested individuals and public agencies, including persons having special expertise with regard to the environmental affects potentially involved with the proposed Amendment, for review and comment in accordance with state environmental regulations. (Cal. Code Regs., tit. 23, section 3775.)
27. The Central Valley Water Board did not received any public comments on the Staff Report, an Environmental Checklist, and the proposed Amendment from 25 March through 9 May 2022. Notice of the public hearing was sent to all interested persons and published in accordance with Water Code section 13244. 27.
28. Based on the record as a whole, including the Staff Report, an Environmental Checklist, the proposed Amendment, and public comments 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 Amendment. 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.) 28.

RESOLUTION R5-2022-0035  
TULARE LAKE BASIN PLAN MUN/AGR USE  
DE-DESIGNATION

29. The proposed Amendment must be approved by the State Water Board and the Office of Administrative Law (OAL). The proposed Amendment is not under federal jurisdiction as it relates to groundwater and so becomes effective under state law after OAL approval. 15251(g).
30. The Central Valley Water Board finds that the proposed Amendment was developed in accordance with Water Code section 13240, et seq.

**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 the Staff Report and adopts the proposed Amendment into the Tulare Lake Basin Plan as set forth in Attachment 1.
2. The Executive Officer is directed to forward copies of the Basin Plan Amendment to the State Water Board in accordance with the requirements of section 13245 of the Water Code.
3. The Central Valley Water Board requests that the State Water Board approve the Basin Plan Amendment 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 Board or OAL determines that minor, non-substantive corrections to the language of the Amendment 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, 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 Basin Plan Amendment by the 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.

RESOLUTION R5-2022-0035  
TULARE LAKE BASIN PLAN MUN/AGR USE  
DE-DESIGNATION

I, PATRICK PULUPA, Executive Officer, do hereby 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 10 June 2022

---

PATRICK PULUPA, Executive Officer

Attachments

**Attachment 1:** Amendment to the Tulare Lake Basin Plan to Remove Municipal and Domestic Supply (MUN) and Agricultural Supply (AGR) Beneficial Uses from Groundwater within a Designated Horizontal and Vertical Portion of the Southern Lost Hills Oilfield

RESOLUTION R5-2022-0035  
TULARE LAKE BASIN PLAN MUN/AGR USE  
DE-DESIGNATION

**ATTACHMENT 1**

Modify Chapter 2 of the Basin Plan, adding a **new row** to the bottom of **Table 2-3** (p. 2-9), thereby establishing an Exception Area 5 (column 1) with the following Area Description (column 2), which shall be applicable to Detailed Analysis Unit (DAU) #259 (column 3):

Ground water contained within the Lower Tulare Member and the Etchegoin Formation, at a depth of approximately 600 feet to 6,600 feet below ground surface (bgs), within the South Lost Hills Oilfield in Sections 14, 15, 22, 23, 26 and 27 of T27S R21E, MDM, is not suitable, or potentially suitable, for municipal or domestic supply (MUN) or agricultural supply (AGR), including, but not limited to, AGR applications for irrigation, stock watering and support of vegetation for range grazing .

This Exemption does not extend to the Upper Tulare Member, which overlies the Lower Tulare Member and the Etchegoin Formation and is separated from the Lower Tulare Member by the Mid-Tulare Shale.