

APPENDIX D: ENVIRONMENTAL CHECKLIST/SUBSTITUTE ENVIRONMENTAL DOCUMENT – 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

ENVIRONMENTAL CHECKLIST

The Central Valley Regional Water Quality Control Board (Central Valley Water Board or Board), as a Lead Agency under the California Environmental Quality Act (CEQA), is responsible for evaluating all the potential environmental impacts that may occur because of changes made to the Water Quality Control Plan for the Tulare Lake Basin (Basin Plan) (Public Resources Code, Section 21000 et seq.). The Secretary of Resources has determined that the Central Valley Water Board's Basin Planning Process qualifies as a certified regulatory program pursuant to Public Resources Code Section 21080.5 and California Code of Regulation, Title 14, Section 15251(g). This determination means that the Central Valley Water Board's Basin Planning process needs only to comply with abbreviated CEQA requirements. The Staff Report and this Checklist satisfy the requirements of State Water Board's Regulations for Implementation of CEQA, Exempt Regulatory Programs, which are found in the California Code of Regulations, Title 23, Section 3775 et seq.

PROJECT INFORMATION

1. Project Title: **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**
2. Lead Agency Name and Address: Central Valley Regional Water Quality Control Board
(Central Valley Water Board)
11020 Sun Center Drive, #200, Rancho Cordova, CA 95670
3. Contact Person and Phone Number: Jennifer Fuller, Senior Environmental Scientist
(Specialist), (916) 464-4646
4. Project Location: **REVISED PROJECT ZONE:** Three-dimensional space where it has been determined that AGR and MUN de-designation is appropriate. The Revised Project Zone is composed of alluvium, situated above the Corcoran Clay Equivalent (CCE), and underlying the Revised Project Area, which is defined as: the two-dimensional area where it has been determined that AGR and MUN de-designation is appropriate, which is composed of an approximately 6.00 square mile two-

dimensional surface area composed of: the east quarter of Section 13, the southeast quarter of Section 23, the east half of the southwest quarter of Section 23, the south half and the east quarter of Section 24, the north quarter of Section 25, the north half of the northeast quarter of Section 26, and the northeast quarter of the northwest quarter of Section 26, of T29S/R21E, Mount Diablo Baseline and Meridian (MDBM), and Sections 17, 18, and 19, the west quarter of Section 16, the west and north quarters of Section 20, the northwest quarter of the northwest quarter of Section 21, the northwest quarter of the northwest quarter of Section 29, and the north quarter of Section 30, of T29S/R22E, MDBM.

MUN de-designation is also appropriate in a half square mile two-dimensional area composed of the north half of the northeast quarter of Section 16, the east half of the west half of Section 16, the southwest quarter of the southeast quarter of Section 16, the northeast quarter of the northwest quarter of Section 21, and the northwest quarter of the northeast quarter of Section 21, of T29S/R22E, MDBM.

The Revised Project Zone is located within the Project Area, which is approximately 4.5 miles northwest of the unincorporated community of McKittrick in western Kern County. See attached Figures 1 and 2.

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|--|---|
| 5. Project Sponsor's Name and Address: | Central Valley Water Board
11020 Sun Center Drive, #200, Rancho Cordova, CA 95670 |
| 6. General Plan Designation: | Agriculture (88%), Industrial (8.5%), Miscellaneous (3.5%) |
| 7. Zoning: | Agriculture (99%), and Platted Lands and Residential Combining (1%) |
| 8. Surrounding Land Uses: | Oil and gas production operations and land disposal cover most of the Revised Project Area and surrounding land to the north and northwest. Agricultural uses are located on Section 18 of the Project Area, and to the north and east of the Project Area. |

9. Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement)

This is a Basin Plan amendment that will require approval by the State Water Resources Control Board and the Office of Administrative Law before going into effect. California Department of Fish and Wildlife Null Impact Decision is also required.

10. Description of Project:

To amend 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 the unincorporated community of McKittrick, California.

PROJECT AREA: Two-dimensional surface area of approximately 14 square miles composed of Sections 13, 14, 23, 24, and the North three quarters of Sections 25 and 26 of Township 29 South, Range 21 East, MDBM and Sections 16 through 21 and the north three quarters of Sections 28 through 30 of Township 29 South, Range 22 East, MDBM.

PROJECT ZONE: A three-dimensional space consisting of the surficial Holocene Alluvium.

REVISED PROJECT AREA: Two-dimensional area where it has been determined that AGR and MUN de-designation is appropriate, which is composed of an approximately 6.00 square mile two-dimensional surface area composed of: the east quarter of Section 13, the southeast quarter of Section 23, the east half of the southwest quarter of Section 23, the south half and the east quarter of Section 24, the north quarter of Section 25, the north half of the northeast quarter of Section 26, and the northeast quarter of the northwest quarter of Section 26, of T29S/R21E, MDBM, and Sections 17, 18, and 19, the west quarter of Section 16, the west and north quarters of Section 20, the northwest quarter of the northwest quarter of Section 21, the northwest quarter of the northwest quarter of Section 29, and the north quarter of Section 30, of T29S/R22E, MDBM.

MUN de-designation is also appropriate in a half square mile two-dimensional area composed of the north half of the northeast quarter of Section 16, the east half of the west half of Section 16, the southwest quarter of the southeast quarter of Section 16, the northeast quarter of the northwest quarter of Section 21, and the northwest quarter of the northeast quarter of Section 21, of T29S/R22E, MDBM.

REVISED PROJECT ZONE: Three-dimensional space where it has been determined that de-designation is appropriate which is composed of alluvium, situated above the CCE, and underlying the Revised Project Area.

This Environmental Checklist is intended to provide supporting environmental review documentation for a proposed amendment to the Basin Plan to de-designate the MUN and AGR beneficial uses from groundwater within the alluvium underlying the Revised Project Area.

BACKGROUND

The Water Quality Control Plan for the Tulare Lake Basin, Third Edition, Revised May 2018 (Basin Plan) was amended in 1989 to be consistent with State Water Resources Control Board (State Water Board) Resolution No. 88-63 (*Sources of Drinking Water Policy*). The 1989 amendment to the Basin Plan designated all surface and ground water bodies in the basin as supporting the MUN beneficial use unless specifically exempted by the Regional Water Board and approved for exemption by the State Water Board through a BPA. Only groundwater areas in Table 2-3 of the Basin Plan are currently exempted from MUN. The Basin Plan provides criteria the Central Valley Water Board must apply when considering exceptions to the MUN designation.¹ One of the criteria applies to water bodies where the total dissolved solids (TDS) exceed 3,000 milligrams per liter (mg/l) [or 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.

However, this criterion is not self-implementing – the Central Valley Water Board is required to protect the MUN beneficial use even in water bodies that meet the criteria unless and until a Basin Plan Amendment is adopted that specifically de-designates the MUN use in such water bodies.

With regard to the AGR beneficial use, the Basin Plan 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

¹ These criteria mirror the *Sources of Drinking Water Policy*’s criteria for determining that groundwater is not suitable for the MUN beneficial use designation.

(AGR)....” Agricultural supply includes the use of groundwater for irrigation, livestock watering, and support of vegetation for range grazing.

The Basin Plan also provides criteria the Central Valley Water Board must apply when considering exceptions to the AGR designation. One of those criteria is for “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...” (page 2-4 of the Basin Plan). In the absence of an established salinity water quality objective for the protection of the AGR beneficial use, the Central Valley Water Board relies upon scientific literature to provide salinity threshold concentrations that are generally considered to be protective of AGR. Groundwater that is above that concentration may be considered “polluted” under the criterion and de-designated through a basin plan amendment.

The Central Valley Water Board has utilized salinity guidelines identified in Ayers and Westcot (1985) and has previously considered irrigation water supply with EC at 700 $\mu\text{S}/\text{cm}$ to be protective of all crops at all times. CV-SALTS conducted a review of literature related to salinity impacts on both irrigation and stock watering and found that the literature concurred with the Ayers and Westcot finding that only the most salt tolerant crops may be sustainably irrigated with water with EC exceeding 3,000 $\mu\text{S}/\text{cm}$ (CV-SALTS, 2013). As part of the literature review, CV-SALTS also identified a range of acceptable salt levels for livestock watering. Regional Board staff have selected a salinity threshold value of 5,000 mg/L TDS to evaluate whether the groundwater in the Project Zone is polluted and does not support the AGR beneficial use. This threshold is from the National Research Committee of the National Academy of Science (NRC, 1974) for an acceptable level of salinity for livestock watering.

The Project Area is the surface area evaluated for de-designation of beneficial uses MUN and AGR. Clean Harbors Buttonwillow, Inc. (Clean Harbors) operates a solid waste disposal landfill, which is within the Project Area. Valley Water Management Company (Valley Water) operates three unlined oil field produced wastewater disposal pond systems at two facilities named the McKittrick 1-1 Facility and McKittrick 1 & 1-3 Facility (together referred to as “Facilities”). These Facilities are located within the Project Area, which is approximately 4.5 miles northwest of the unincorporated community of McKittrick in western Kern County (See Figure 1). Both Valley Water and Clean Harbors operate monitoring well networks, which collect data on groundwater that is submitted to Central Valley Water Board staff (Staff). The Facilities receive produced wastewater from oil and gas producers in adjacent oil fields and discharge that wastewater to unlined ponds. The produced wastewater percolates into the sediments of the Project Zone, which is the three-dimensional area considered for de-designation. The Project Zone includes the surficial alluvial sediments, the Corcoran Clay Equivalent (CCE), and the underlying Tulare Formation. According to data collected from monitoring wells, groundwater in the alluvium beneath the Facilities has TDS concentrations ranging from

approximately 1,600 to 16,000 mg/L. Groundwater generally flows to the east toward the valley floor.

The Basin Plan currently applies blanket MUN and AGR beneficial uses designations to the aquifers below these Facilities. The proposed Basin Plan Amendment will de-designate MUN and AGR beneficial uses from these aquifers within Revised Project Zone. A technical report was prepared by Central Valley Water Board staff (Staff Report) that defines the Revised Project Area as the parts of the Project Area where underlying groundwater meet the criteria for de-designation of MUN and/or AGR. The Revised Project Zone is the three-dimensional space underlying the Revised Project Area, which includes the alluvium down to the Corcoran Clay Equivalent (CCE). The alluvial aquifer is vertically separated from the Tulare Formation beneath the Revised Project Area by the CCE. The Revised Project Zone can be split into two areas: one where de-designation of both MUN and AGR is proposed and a second where only de-designation of MUN is proposed. In the Revised Project Zone area where de-designation of both AGR and MUN is being proposed, TDS concentrations in the alluvium generally exceed 5,000 mg/L TDS. In the area of the Revised Project Zone where only MUN is being proposed for de-designation, the alluvial groundwater generally exceeds 3,000 mg/L TDS. Data collected from the Tulare Formation within the Project Zone is sparse, but shows that TDS concentrations in the Tulare Formation within the Project Zone range from 2,280 to 5,500 mg/L TDS. Staff interpret this to show that the CCE can act as an effective vertical barrier between the alluvium and Tulare Formation within the Project Zone.

The Staff Report concludes that within the Revised Project Zone, de-designation of MUN was appropriate under the salinity criterion of TDS concentrations greater than 3,000 mg/l in the Basin Plan, and of AGR because groundwater is polluted with elevated TDS and cannot support the agricultural beneficial use. Within the Revised Project Area, there are no domestic, municipal, or agricultural uses for the groundwater, and local agriculture relies on imported surface water.

The technical and regulatory information developed in support of this evaluation is compiled in the Staff Report.

PROJECT ALTERNATIVES FOR MUN

The following four project alternatives pertaining to the MUN beneficial use designations for the groundwater contained beneath the Revised Project Area were considered:

1. No Action.
2. De-designate MUN Beneficial Use within the Revised Project Area horizontal boundaries from the surface down, with no vertical de-designation boundary, where groundwater meets the salinity criterion in the Basin Plan based on existing groundwater quality.

3. De-designate MUN Beneficial Use within the Revised Project Area horizontal boundaries within specific depth zones where groundwater meets the salinity criterion in the Basin Plan based on existing groundwater quality, where data is available.
4. Development of MUN Site-Specific Salinity Water Quality Objectives within the Revised Project Area boundaries. Site-specific water quality objectives must protect the beneficial uses of a water body and must be developed in accordance with all applicable laws and regulations based on sound scientific rationale and must be adopted by the Regional Board in a Basin Plan Amendment.

PROJECT ALTERNATIVES FOR AGR

The following four project alternatives pertaining to the AGR beneficial use designations for the groundwater contained beneath the Revised Project Area were considered:

1. No Action.
2. De-designate AGR Irrigation Supply and Livestock Watering Beneficial Uses within the Revised Project Area horizontal boundaries from the surface down, with no vertical boundaries based on a groundwater quality salinity concentration threshold limit of 5,000 mg/L TDS.
3. De-designate AGR Irrigation Supply and Livestock Watering Beneficial Uses within the Revised Project Area horizontal boundaries within specific depth zones based on a groundwater quality salinity concentration threshold limit of 5,000 mg/L TDS.
4. Development of AGR Site-Specific Salinity Water Quality Objectives within the Revised Project Area boundaries for Irrigation Supply and Livestock Watering.

Under the No Action Alternative, dischargers would retain an undue responsibility under the Basin Plan to protect portions of groundwater within the Revised Project Zone, which is not being used or feasible for municipal or agricultural purposes, and portions of which are already considered a non-USDW under the federal Sources of Drinking Water Act.

Alternative 3 for MUN and Alternative 3 for AGR are the preferred alternatives for this project. The alluvium is vertically separated by the CCE in the Revised Project Area. Therefore, de-designation of the MUN and AGR beneficial uses from groundwater in the alluvium, warranted by the high TDS concentrations, is appropriate for the purposes of this project.

Under Alternative 3 regarding MUN and Alternative 3 regarding AGR designation, the current MUN and AGR beneficial uses designations in the described Revised Project Zone would be removed in recognition of the fact that these designations are not appropriate given the quality of groundwater in that zone. Removing these designations in the Revised Project Zone is supported by the criteria in the Basin Plan for de-designation of both the MUN and AGR beneficial uses.

PROPOSED ACTION

Modify Chapter 2 of the Basin Plan, adding a new row to the bottom of Table 2-3, thereby establishing an Exception Area 6 with the following description:

Groundwater contained within the Holocene Alluvium (alluvium), from ground surface to the base of the Corcoran Clay Equivalent (CCE), within the approximately 6.0 square mile two-dimensional surface area composed of: the east quarter of Section 13, the southeast quarter of Section 23, the east half of the southwest quarter of Section 23, the south half and the east quarter of Section 24, the north quarter of Section 25, the north half of the northeast quarter of Section 26, and the northeast quarter of the northwest quarter of Section 26, of T29S/R21E, MDBM, and Sections 17, 18, and 19, the west quarter of Section 16, the west and north quarters of Section 20, the northwest quarter of the northwest quarter of Section 21, the northwest quarter of the northwest quarter of Section 29, and the north quarter of Section 30, of T29S/R22E, MDBM 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. Additionally MUN de-designation may be appropriate underlying the half square mile two dimensional area composed of the north half of the northeast quarter of Section 16, the east half of the west half of Section 16, the southwest quarter of the southeast quarter of Section 16, the northeast quarter of the northwest quarter of Section 21, and the northwest quarter of the northeast quarter of Section 21, or T29S/R22E, MDBM.

PROPOSED PROGRAM OF IMPLEMENTATION

Implementation of this Basin Plan Amendment is an administrative control that would result in no change to existing oil field operations and no change to the Revised Project Area at the ground surface, or the alluvium within the Revised Project Zone. The Facilities would continue to receive produced wastewater from oil and gas producers in adjacent oil fields in accordance with applicable permits and regulations. In addition, dischargers would be relieved of the existing responsibility under the Basin Plan to protect groundwater for the MUN and AGR beneficial uses within the Revised Project Zone.

Injection of produced wastewater in the Revised Project Area was not considered as part of this Project. Injection of produced wastewater via underground injection control wells does not currently occur in the Revised Project Area and is not anticipated to in the future.

GROUNDWATER QUALITY MONITORING

Groundwater quality in the Revised Project Area is currently being monitored and will continue to be monitored by Valley Water and Clean Harbors as appropriate in

accordance with their permits. In addition, implementation will rely on general monitoring under other programs overseen by Staff, including Staff of the Oil Fields program and Title 27 program.

WQO COMPLIANCE POINT FOR PROPOSED ACTIONS

The de-designation boundary associated with the two preferred alternatives (MUN Alternative 3 and AGR Alternative 3) is a three-dimensional (3D) space, referred to as the Revised Project Zone, which is the alluvium underlying specific portions of the Project Area. According to the Staff Report, the thickness of the alluvium is variable. Vertically, the point of compliance at which groundwater is required to be protective of designated beneficial uses is at the Upper Tulare Member of the Tulare Formation, underlying the CCE. The horizontal boundaries of the Revised Project Area establish the compliance point outside of which groundwater quality must be protective of designated beneficial uses.

DIRECT AND INDIRECT PHYSICAL ENVIRONMENTAL EFFECTS

Implementation of the proposed action would result in de-designation of MUN and AGR beneficial uses within the alluvium (the vertical boundaries) within the defined horizontal boundaries of the Revised Project Area appropriate for each beneficial use. For a large part of the Revised Project Area, the groundwater meets criteria for de-designation of both the MUN and AGR beneficial uses and so use the same beneficial use de-designation boundary. The remaining part of the Revised Project Area is an area where only the preferred MUN beneficial use alternative has a de-designation boundary, without an AGR beneficial use de-designation boundary.

The salinity thresholds used as a basis for de-designation are appropriate for municipal and agricultural uses. Salinity levels of the ambient groundwater within the proposed de-designation boundary for MUN exceed 3,000 mg/L TDS. Salinity levels of the ambient groundwater within the proposed de-designation boundary for AGR exceed 5,000 mg/L TDS (MUN is de-designated here as well). As discussed in the Staff Report, groundwater has not been used and is not considered a viable source of municipal or irrigation water in the Revised Project Zone. Any future ground crop cultivation in the Revised Project Area would rely on imported surface water or treated wastewater. No disadvantaged communities or municipalities are located in the Revised Project Area, therefore no disadvantaged communities or municipalities currently use the groundwater within the Revised Project Zone for municipal and domestic purposes, and there is no foreseeable potential for any municipalities to use the groundwater in the alluvium. Because the groundwater is not currently used or proposed for use for these beneficial uses within the vertical bounds of the Revised Project Zone, de-designation of the MUN and AGR beneficial uses within the vertical boundaries would not result in a known or substantive change in the water use. Therefore, no direct or indirect physical substantial environmental effect would be expected as a result of the proposed action. Any new projects would be subject to a separate environmental evaluation under CEQA.

PUBLIC COMMENTS RECEIVED

The Central Valley Regional Water Quality Control Board held a public scoping meeting on 25 May 2023. Stakeholders and interested parties were notified of the 25 May 2023 scoping meeting through announcements sent on 10 April 2023 to the Basin Planning Triennial Review electronic email list. The public comment period for the scoping meeting ended when the public CEQA scoping meeting concluded on 25 May 2023. Two comment letters were received before the scoping meeting, from Downey Brand LLP on behalf of Valley Water, and from the California Independent Petroleum Association (CIPA).

Valley Water Letter

One comment letter was received on 22 May 2023 from Valley Water. The Valley Water letter includes comments about the proposed Basin Plan Amendment regarding:

- Support of the comments included in the CIPA comment letter.
- Support for de-designation portions of the groundwater in the Project Area to establish appropriate beneficial uses and appropriate water quality objectives for groundwater in and around the Project Area, including re-evaluation of the blanket designations of MUN and AGR beneficial uses in the Project Area.
- Suggestion that the Central Valley Water Board conduct a comprehensive search for additional groundwater monitoring data to better characterize the Project Area de-designations for MUN and AGR beneficial uses and make available all the data that was used for the Basin Plan Amendment conclusions. Also suggested including an evaluation of whether MUN and AGR beneficial uses are occurring in the Project Area.
- Suggestion to expand the scope of the criteria being considered for de-designation in the Project Area with respect to:
 - Evaluations of all of the other potential de-designation criteria in the Project Area, not just TDS concentrations, including development of other project alternatives.
 - Recognition that a limited approach to de-designation of MUN and AGR beneficial uses in the Project Area could have indirect impacts of trucking operations or construction of infrastructure for compliance for MUN and AGR beneficial uses where it may not be necessary to comply.
 - Evaluation of all environmental impacts that this project could create, including those impacts pertaining to water resources, agriculture, biological resources, air quality and greenhouse gas emissions, hydrology, and cumulative impacts.
 - Consideration of the Project Area as a salt sink for future salinity management in the region around the Project Area.
 - Determination of policy choice to de-designate groundwater for the MUN beneficial use underneath a waste processing facility and undertake a site-specific modification to the *Sources of Drinking Water Policy*.

- Evaluation of an alternative where the Project Area groundwater MUN and AGR beneficial uses are sub-categorized as a potential, instead of existing, beneficial uses.
- That the Project be defined as: *“De-designate MUN and AGR Irrigation Supply and Livestock Watering Beneficial Uses within the Project Area horizontal boundaries from the surface down, with no vertical boundaries, based on any of the delineated exceptions criteria.”*
- Suggestion to correct inconsistencies in the Basin Plan in Table 2-2.
- Suggestion to define the Project as a de-designation of MUN and AGR beneficial uses within the Project Area horizontal boundaries from the surface down, with no vertical boundaries, based on any of the delineated exceptions criteria.

CIPA Letter

One comment letter was received on 24 May 2023 from CIPA. The CIPA comment letter includes comments about the proposed Basin Plan Amendment regarding:

- Alignment with this project and a proposed CIPA Basin Plan Amendment.
- Caution about Central Valley Water Board blanket designations for MUN and AGR beneficial uses.
- Support for Central Valley Water Board choosing the Alternative 2 for the MUN beneficial use de-designation with some stated modifications.
- Suggestion that the Central Valley Water Board de-designate the AGR beneficial use within the Project Area horizontal boundaries from the surface down, with no vertical boundaries, based on a groundwater salinity concentration threshold limit of 3,000 mg/L TDS or other applicable exception. This suggestion is based on the guideline from the Central Valley Water Board Staff Report for the April 2017 Tulare Lake Basin Plan Amendment for a threshold of 3,000 mg/L TDS for crop irrigation and all classes of livestock. CIPA recognizes this would be subject to a formal peer review process and encourages the initiation of that process by the Central Valley Water Board.
- Suggestion that the Central Valley Water Board evaluate the potential lack of significant adverse effects to water quality, hydrology, and water supply in consideration of the existing regulatory framework (namely the Central Valley Water Board General Orders for Discharge of Oil Field Waste to Land) and the lack of use of groundwater in the Project Area for agricultural or municipal/private drinking water purposes.

Comments received during 25 May 2023 Public CEQA Scoping Meeting

Jason Meadors – General Manager Valley Water Management Company:

*Remind the Central Valley Water Board that this Basin Plan Amendment action is a result of a court order to not only consider de-designation but to also confirm the factual accuracy of the 1998 [sic] designation of this area for MUN and AGR beneficial uses.

*If data gaps exist now then those same data gaps likely existed in 1998 [sic] and would not have justified the presumption that the MUN and AGR beneficial uses applied in the Project Area. Thus, those areas without data should also be de-designated until information justifies an MUN or AGR designation.

*The Central Valley Water Board should use all available data for this process, including data from GeoTracker, CIPA, Westside Water Quality Coalition, and CV-SALTS consultants' databases.

*Also want to make sure data are sorted to each different aquifer so that the vertical designations are considered as well.

*Utilize all exemption criteria, not just the criteria related to using the threshold of 3,000 mg/L TDS for MUN de-designation. The exception criterion of contamination from either natural processes or by human activity, along with the criterion of a minimum yield of 200 gallons per day, and the criterion of a reasonable expectation of supplying a public water supply are other criteria that can be used for MUN de-designation in the Project Area. For de-designation for AGR, similar criteria must be considered. The Central Valley Water Board must provide evidence of existing or probable future existence of livestock if livestock criteria are used for beneficial use protection. The surrounding crop land relies on surface water and are in favor of de-designation of the groundwater in the Project Area. The Central Valley Water Board must not only consider the science but also the policy considerations for not having these use designations.

*Where groundwater is under current or former permitted waste use management units, such as Clean Harbor's, or produced water ponds, that water should not be designated MUN or AGR as use of that water for those purposes should not be encouraged. Instead, an Industrial beneficial use should be the only designation. Proper designation of uses is important to be able to prioritize protections to those areas in greatest need, as we are doing in CV-SALTS with the Nitrate Priority Zones. Not designating areas as MUN when not being used for MUN use is also important to not impose unnecessary Proposition 65 liability now that more and more compounds are being listed under Proposition 65 at lower and lower levels, some beyond the ability of detection.

*Look forward to working together to create a reasonable regulation that understands that the water quality regulation must be reasonable and consider numerous factors. To this end, as set forth in the Valley Water Comment Letter dated 22 May 2023, we suggest a refined and different project definition: De-designate MUN and AGR beneficial uses within the Project Area horizontal boundaries from the surface down with no vertical boundaries, based on any of the delineated exceptions criteria.

[Richard Garcia, President of the Kern County League of United Latin American Citizens \(LULAC\), Council 3272:](#)

*Support for the de-designation of groundwater aquifers.

*Want de-designations done in an environmentally sensitive way.

*The reason they support the de-designations is that it is so important for the economy in Kern County, to keep things moving in the right direction and supplying a lot of good jobs in Kern County.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

- | | | |
|---|---|---|
| ☐ Aesthetics | ☐ Agriculture and Forest Resources | ☐ Air Quality |
| ☐ Biological Resources | ☐ Cultural Resources | ☐ Geology / Soils |
| ☐ Greenhouse Gas Emissions | ☐ Hazards & Hazardous Materials | ☐ Hydrology / Water Quality |
| ☐ Land Use / Planning | ☐ Mineral Resources | ☐ Noise |
| ☐ Population / Housing | ☐ Public Services | ☐ Recreation |
| ☐ Transportation / Traffic | ☐ Utilities / Service Systems | ☐ Mandatory Findings of Significance |
| | | ☐ None With Mitigation |

EVALUATION OF THE ENVIRONMENTAL IMPACTS IN THE CHECKLIST

1. The Board must complete an environmental checklist prior to the adoption of plans or policies for the Basin/208 Planning program as certified by the Secretary for Natural Resources. The checklist becomes a part of the Substitute Environmental Documentation (SED).
2. For each environmental category in the checklist, the Board must determine whether the project will cause any adverse impact. If there are potential impacts that are not included in the sample checklist, those impacts should be added to the checklist.
3. If the Board determines that a particular adverse impact may occur as a result of the project, then the checklist boxes must indicate whether the impact is {Potentially Significant," "Less than Significant with Mitigation Incorporated," or "Less than Significant."
 - a. "Potentially Significant Impact" applies if there is substantial evidence that an impact may be significant. If there are one or more "Potentially significant Impact" entries on the checklist, the SED must include an examination of the feasible alternatives and mitigation measures for each such impact, similar to the requirements for preparing an environmental impact report.
 - b. "Less than Significant with Mitigation Incorporated" applies if the Board or another agency incorporates mitigation measures in the SED that will reduce an impact that is "Potentially Significant" to a "Less than Significant Impact." If the Board does not require the specific mitigation measures itself, then the Board must be certain that the other agency will in fact incorporate those measures.
 - c. "Less than Significant" applies if the impact will not be significant, and mitigation is therefore not required.
 - d. If there will be no impact, check the box under "No Impact."
4. The Board must provide a brief explanation for each "Potentially Significant," "Less than Significant with Mitigation Incorporated," "Less than Significant," or "No Impact" determination in the checklist. The explanation may be included in the written report described in section 3777(a)(1) or in the checklist itself. The explanation of each issue should identify" a) the significance criteria or threshold, if any, used to evaluate each question: and(b) the specific mitigation measure(s) identified, if any, to reduce the impact to less than significant. The Board may determine the significance of the impact by considering factual evidence, agency standards, or thresholds. If the "No Impact" box is checked, the Board should briefly provide the basis for that answer. If there are types of impacts that are not listed in the checklist, those impacts should be added to the checklist.
5. The Board must include mandatory findings of significance if required by CEQA Guidelines section 14054.

6. The Board should provide references used to identify potential impacts, including a list of information sources and individuals contacted.

1 AESTHETICS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS				
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

1.1.1 Discussion

The proposed action includes de-designation of MUN and AGR beneficial uses from the alluvium underlying the Revised Project Area which includes the vicinity of the McKittrick 1-1 Facility, McKittrick 1 & 1-3 Facility and portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. Implementation of the proposed action will not result in any physical changes at the ground surface. No residences exist within the Project Area, and the groundwater in the subject aquifers is not used for municipal or agricultural uses. There is one agricultural supply well known to exist in the Revised Project Area. However, it is not used regularly, and is known to supply water that exceeds 15,000 mg/L TDS. The action will not require any ground disturbance, vegetation removal, development of structures/facilities, or any other physical effect that would be visible. Project operation would not include any new sources of light or nighttime glare, nor would implementation affect the integrity of any State Scenic Highway. The project would result in **no impact**.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

2 AGRICULTURE AND FOREST RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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II. AGRICULTURE AND FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, and are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ☒ |
| b) Conflict with existing zoning for agricultural use or a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | ☐ | ☐ | ☐ | ☒ |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

2.1.1 Discussion

No forest land exists at the ground surface above the Revised Project Area. Because the Revised Project Area does not contain forest lands, the proposed action would have **no impact** on forest land.

The Revised Project Area does not contain any towns or communities. The closest community is the unincorporated community of McKittrick, California, located approximately 4.5 miles southeast of the Project Area. The groundwater in the area of the Revised Project Zone that is proposed for AGR de-designation currently contains very high levels of TDS such that groundwater at these depths is not used for irrigation or livestock watering. Implementation of the proposed action would de-designate the AGR beneficial use from the Revised Project Zone which includes portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. There is a single agricultural supply well within the Revised Project Zone, which is owned by Starrh & Starrh Cotton Growers LP (Starrh Farms). This well is not used regularly for crop irrigated water as it supplies water with TDS that exceeds 15,000 mg/L. Agricultural supply water for crops in the Project Area is imported surface water. Because groundwater within the Revised Project Zone is not currently used for irrigation purposes and because current agricultural practices convey surface water from outside the de-designation boundary, the proposed project would not adversely affect current agricultural operations and would not convert important farmland to a non-agricultural use. The proposed action would also not conflict with a Williamson Act contract. The proposed action would result in **no impact** to agricultural resources.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

3 AIR QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the following determinations.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under and applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

3.1.1 Discussion

The Revised Project Area is located in Kern County. The Revised Project Area is located within the area regulated for air quality standards attainment by the San Joaquin Valley Air Pollution Control District (SJVAPCD). SJVAPCD is considered an attainment area for the federal 8-hour Carbon Monoxide (CO) standard and an extreme ozone nonattainment area for the federal 8-hour ozone standard.

As previously discussed, the proposed action includes de-designation of MUN and AGR beneficial uses from alluvial aquifers beneath the Revised Project Area that includes the vicinity of the McKittrick 1-1 Facility, McKittrick 1 & 1-3 Facility and portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. No residences exist within the Revised Project Area and the groundwater at the affected depths is not currently used for municipal or agricultural uses. Current irrigation practices, relying on other water sources, would continue.

Implementation and operation of the proposed action would not involve any new or changed activities that would produce air pollutants. Local air quality plans established by SCVAPCD would not be affected nor would any sensitive receptors in the Revised Project Area experience an increase in concentrations of air pollutants. There would be **no impact**.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

4 BIOLOGICAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES				
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

4.1.1 Discussion

The proposed action includes de-designation of MUN and AGR beneficial uses from alluvial aquifers beneath the Revised Project Area that includes the vicinity of the McKittrick 1-1 Facility, McKittrick 1 & 1-3 Facility and portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. Implementation of the proposed action would not require any ground disturbance, vegetation removal, or development/operation of structures or facilities, or any other physical effect that could negatively impact biological resources. The removal of MUN and AGR as beneficial groundwater uses would not produce a physical change that would conflict with any Habitat Conservation Plans, Natural Community Conservation Plans, or local policies designed to protect biological resources. No adverse impacts would occur to federally- or State-listed species as a result of project implementation, nor would the proposed action deplete biodiversity in aquatic and riparian habitats. There would be **no impact**.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

5 CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES				
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as define in Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

5.1.1 Discussion

The proposed action includes de-designation of MUN and AGR beneficial uses from alluvial aquifers underlying the Revised Project Area that includes the vicinity of the McKittrick 1-1 Facility, the McKittrick 1 & 1-3 Facility, and portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. There are no residences in the Revised Project Area and the groundwater within the subject aquifers is not currently used for municipal or agricultural uses. There is always the possibility of archaeological, paleontological, and cultural artifacts that might be found in the Revised Project Area. If previously undiscovered cultural resources are found, these resources would be evaluated and mitigation would be required that would result in the recording, protecting, and/or preservation of these resources. There would be **no impact**.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

6 GEOLOGY AND SOILS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS				
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse??	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?	☐	☐	☐	☒

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

6.1.1 Discussion

The Project Area is not located within any Earthquake Fault Zones; Landslide and Liquefaction Zones; or Fault Zones, Landslide and Liquefaction Zones (California Department of Conservation, Earthquake Zones of Required Investigation). The Revised Project Area is located in Kern County, approximately 12 miles inland of the San Andreas Fault. The proposed action includes de-designation of MUN and AGR beneficial uses from the Revised Project Zone. There are no residences in the Revised Project Area and groundwater in the Revised Project Zone is not used for municipal or agricultural purposes. The proposed project would not result in changes to rates of groundwater extraction; therefore, no impacts related to ground subsidence would result. Implementation of the proposed action would not require any ground disturbance, vegetation removal, or development/operation of structures or facilities, or any other physical change that would expose people or structures to seismic activity or unstable soils. The use of septic tanks or additional wastewater disposal systems is not a component of the proposed action. The Revised Project Area does not contain any locations subject to potential significant seismic shaking, landslides, or liquefaction; therefore, there is **no impact**.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

7 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS				
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☒
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

7.1.1 Discussion

The proposed action includes de-designation of MUN and AGR beneficial uses from the Revised Project Area that includes the vicinity of the McKittrick 1-1 Facility, McKittrick 1 & 1-3 Facility and portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. There are no residences in the Revised Project Area and groundwater in the Revised Project Zone is not used for municipal or agricultural purposes.

Implementation and operation of the proposed action would not involve activities that would produce GHG emissions. There would be **no impact**.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

8 HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within on-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

8.1.1 Discussion

The proposed action includes de-designation of MUN and AGR beneficial uses from the alluvium beneath the Revised Project Area that includes the vicinity of the McKittrick 1-1 Facility, McKittrick 1 & 1-3 Facility and portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. There are no residences in the Revised Project Area and groundwater in the Revised Project Zone is not used for municipal or agricultural purposes.

Implementation of the proposed action would not require any ground disturbance, vegetation removal, or development/operation of structures or facilities, or any other physical effects that would generate or require the handling of hazardous materials. There would be **no impact**.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

9 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY				
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on or offsite erosion or siltation?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or offsite flooding?	☐	☐	☐	☒

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

9.1.1 Discussion

The proposed action includes de-designation of MUN and AGR beneficial uses from alluvial aquifers beneath the Revised Project Area that includes the vicinity of the McKittrick 1-1 Facility, McKittrick 1 & 1-3 Facility and portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. There are no residences in the Revised Project Area and groundwater in the Revised Project Zone is not used for municipal or agricultural purposes. Implementation of the proposed action would not require any ground disturbance, vegetation removal, or development/operation of structures or facilities, or any other physical effects on water quality or hydrology.

The de-designation of MUN and AGR uses would not create a physical impact on water quality and supply, as such uses are already non-existent in the Revised Project Area and the groundwater is already highly impacted.

Hydrogeologic data show that the alluvial aquifer that comprises the Revised Project Zone is vertically separated from the Tulare Formation aquifer by the CCE.

Water supply for agriculture within the project area is currently provided by surface water. De-designation would not alter this use or associated supply sources. There would be **no impact**.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

10 LAND USE AND PLANNING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING				
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

10.1.1 Discussion

The proposed action includes de-designation of MUN and AGR beneficial uses from alluvial aquifers beneath the Revised Project Area that includes the vicinity of the McKittrick 1-1 Facility, McKittrick 1 & 1-3 Facility and portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. There are no residences in the Revised Project Area and groundwater in the Revised Project Zone is not used for municipal or agricultural purposes. Implementation of the proposed action would not require any ground disturbance, vegetation removal, or development/operation of structures or facilities, or any other physical change that would divide an established community, or conflict with a Habitat conservation Plan, Natural Community Conservation Plan, or policy adopted to mitigate an environmental effect. The proposed action will not require current land uses to be modified. The proposed action would not result in any land use changes; therefore, there is **no impact**.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and

mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

11 MINERAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES				
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

11.1.1 Discussion

The proposed action includes de-designation of MUN and AGR beneficial uses from alluvial aquifers beneath the Revised Project Area that includes the vicinity of the McKittrick 1-1 Facility, McKittrick 1 & 1-3 Facility and portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. While oil and gas resources exist in the Revised Project Area, the de-designation of MUN and AGR beneficial uses would not affect the availability or accessibility of these mineral resources. Therefore, implementation of the proposed action would not require any ground disturbance, vegetation removal, or development/operation of structures or facilities, or any other physical change that would affect mineral resources. Project completion would not alter the availability of any known mineral resources or conflict with a mineral resource recovery site. There would be **no impact**.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

12 NOISE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. NOISE				
Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

12.1.1 Discussion

The proposed action includes de-designation of MUN and AGR beneficial uses from alluvial aquifers beneath of the Revised Project Area that includes the vicinity of the McKittrick 1-1 Facility, McKittrick 1 & 1-3 Facility and portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. There are no residences in the Revised Project Area and groundwater in the Revised Project Zone is not used for municipal or agricultural purposes.

The proposed project would not generate increased noise. There would be **no impact**.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

13 POPULATION AND HOUSING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING				
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

13.1.1 Discussion

The proposed action includes de-designation of MUN and AGR beneficial uses from alluvial aquifers beneath the Revised Project Area that includes the vicinity of the McKittrick 1-1 Facility, McKittrick 1 & 1-3 Facility and portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. There are no residences in the Revised Project Area and groundwater in the Revised Project Zone is not used for municipal or agricultural purposes. Implementation of the proposed action would not require any ground disturbance, vegetation removal, or development/operation of structures or facilities. The proposed action would not result in addition or removal of any homes and therefore, would not result in an increase in population or in the displacement of people or homes. There would be **no impact** on population and housing.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

14 PUBLIC SERVICES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES				
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire Protection?	☐	☐	☐	☒
Police Protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

14.1.1 Discussion

The proposed action includes de-designation of MUN and AGR beneficial uses from aquifers in the Revised Project Area that includes the vicinity of the McKittrick 1-1 Facility, McKittrick 1 & 1-3 Facility and portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. The Revised Project Area is non-residential and there are no parks or schools. Changing the designated beneficial uses of groundwater will not change or increase the need for fire or police protection, or affect performance objectives for parks, schools, or other public facilities. The de-designation of MUN and AGR as beneficial groundwater uses would not create a physical effect that would cause an environmental impact or result in the obstruction of service-designated routes or roadways. Therefore, implementation of the proposed action would not require any

ground disturbance, or development/operation of additional structures or facilities for the purpose of maintaining public services. There would be **no impact**.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

15 RECREATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. RECREATION				
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

15.1.1 Discussion

The proposed action includes de-designation of MUN and AGR beneficial uses from aquifers in the Revised Project Area includes the vicinity of the McKittrick 1-1 Facility, McKittrick 1 & 1-3 Facility and portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. There are no residences in the Revised Project Area and groundwater in the Revised Project Zone is not used for municipal or agricultural purposes.

Implementation of the proposed action would not require any ground disturbance, or development/operation of recreational structures or facilities. Therefore, project implementation would not result in an increase in recreational activities or increase demand for new recreational facilities. There would be **no impact**.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

16 TRANSPORTATION/TRAFFIC

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC				
Would the project:				
a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

16.1.1 Discussion

The proposed action includes de-designation of MUN and AGR beneficial uses from aquifers in the Revised Project Area that includes the vicinity of the McKittrick 1-1 Facility, McKittrick 1 & 1-3 Facility and portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. There are no residences in the Revised Project Area and groundwater in the Revised Project Zone is not used for municipal or agricultural purposes.

Implementation of the proposed action would not require any ground disturbance, or development/operation of structures or facilities, or any other physical effect that could adversely impact transportation. Therefore, the de-designation of MUN and AGR beneficial uses would not create an increase in traffic flow, or conflict with any traffic-related plans or policies. Project completion would have no effect on air traffic. There would be **no impact**.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

17 UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS				
Would the project result in:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

17.1.1 Discussion

The proposed action includes de-designation of MUN and AGR beneficial uses from aquifers in the Revised Project Area that includes the vicinity of the McKittrick 1-1 Facility, McKittrick 1 & 1-3 Facility and portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. There are no residences in the Revised Project Area and groundwater in the Revised Project Zone is not used for municipal or agricultural purposes.

Implementation of the proposed action would not require any ground disturbance, or development/operation of structures or facilities for the purpose of increased utility usage. Therefore, project activities would not include the construction of supplementary facilities or additions to existing facilities. Water supply for irrigation is already provided by imported surface water, and de-designation would not alter this use. Project implementation would not generate solid waste; therefore, there would be no conflict with federal, state, and local policies regarding solid waste. There would be no impact.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts.

18 MANDATORY FINDINGS OF SIGNIFICANCE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
Would the project result in:				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past project, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☐	☒
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Authority: Public Resources Code Section 21083, 21083.5. Reference: Government Code Sections 65088.4. Public Resources Code Sections 21080, 21083.5, 21095; <i>Eureka Citizens for Responsible Govt. v. City of Eureka</i> (2007) 147 Cal.App.4th 357; <i>Protect the Historic Amador Waterways v. Amador Water Agency</i> (2004) 116 Cal.App.4th at 1109; <i>San Franciscans Upholding the Downtown Plan v. City and County of San Francisco</i> (2002) 102 Cal.App.4th 656.				

18.1.1 Discussion

The proposed action includes de-designation of MUN and AGR beneficial uses from aquifers in the Revised Project Area that includes the vicinity of the McKittrick 1-1 Facility, McKittrick 1 & 1-3 Facility and portions of an area within the Administrative Boundaries of the South Belridge, Monument Junction and Cymric Oil Fields, in western Kern County. There are no residences in the Revised Project Area and groundwater in the Revised Project Zone is not used for municipal or agricultural purposes.

Implementation of the proposed action would not require any ground disturbance, or development/operation of structures or facilitates. The Project activities do not require the physical alteration of existing structures or habitats and would not result in the loss of an endangered, threatened, or listed species, or any historically significant resources. There would be no cumulative considerable adverse effects. The project will have no environmental effects that will cause substantial adverse effects on human beings either directly or indirectly. Implementation of the proposed action would not affect water quality of the Revised Project Area. There would be **no impact** on fish or wildlife species, cultural resources, or humans.

Any indirect effect of the proposed action would undergo separate project-specific environmental review and permitting. Through these processes, impact avoidance and mitigation measures would be introduced to projects, if needed, to avoid substantial impacts

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FIGURES

Figure 1. The whole Project Area considered for beneficial use de-designation (white box), and waste disposal facilities within the Project Area.

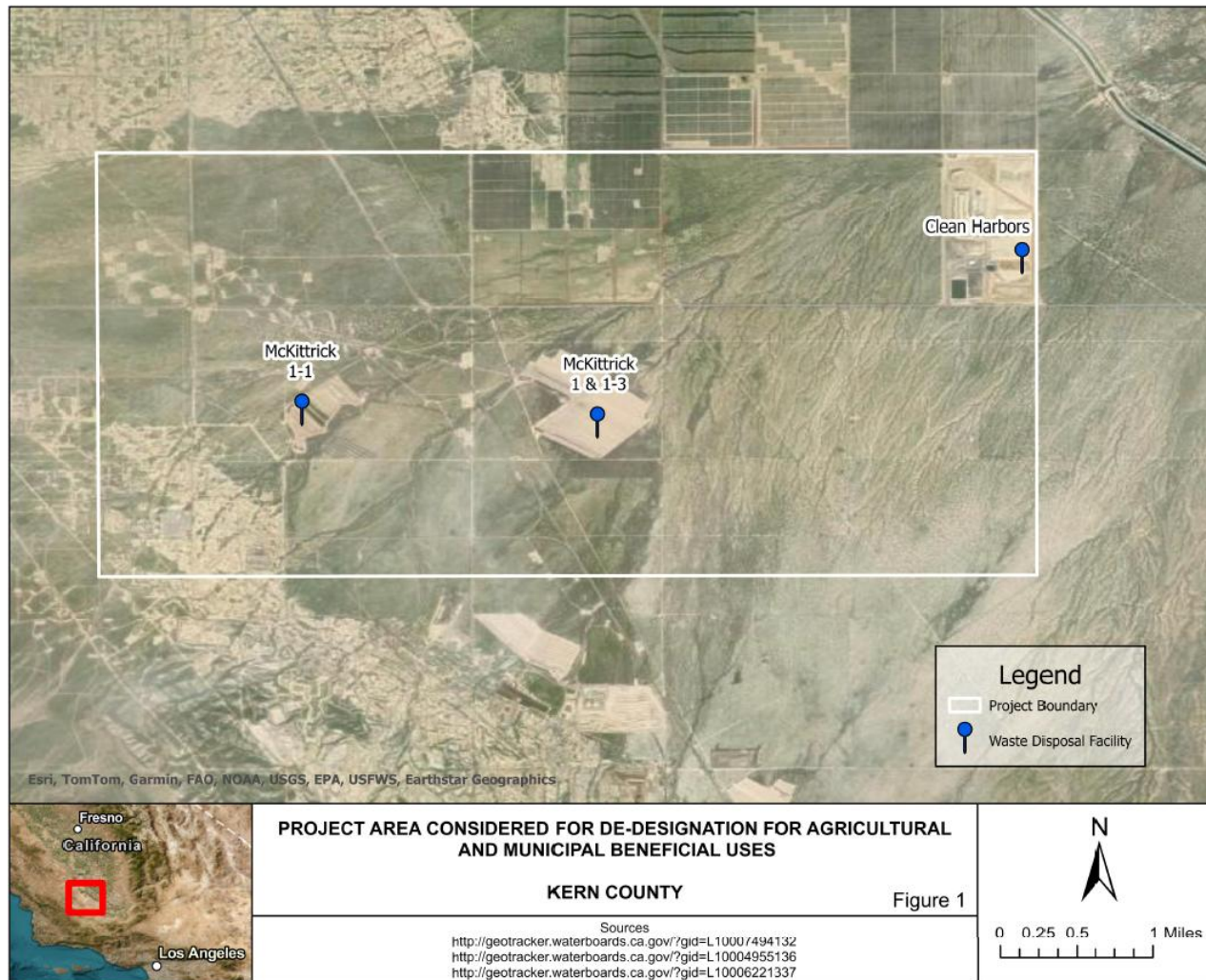


Figure 2. Project Area showing the whole area considered for de-designation (white box), area where alluvium groundwater exceeds 5,000 mg/L TDS (red box – Revised Project Area proposed for de-designation for both MUN and AGR beneficial uses), area where alluvium groundwater is between 3,000 and 5,000 mg/L (blue box – Revised Project Area proposed for de-designation of only MUN beneficial use), and area where there is no data for groundwater in the alluvium (purple box).

