NOTICE OF PREPARATION AND INITIAL STUDY OF AN ENVIRONMENTAL IMPACT REPORT AND PUBLIC SCOPING MEETING

FOR THE PALMS GROUNDWATER RECOVERY PROJECT

Prepared for:

Buena Vista Water Storage District

June 16, 2020

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FOR THE PALMS GROUNDWATER RECOVERY PROJECT

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June 16, 2020

Project No. 1610807, Task 1.1008

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1.0 Notice of Preparation

1.1 NOTICE OF PREPARATION

Notice is hereby given that the Buena Vista Water Storage District (BVWSD or District) (Lead Agency) will prepare an Environmental Impact Report (EIR) for the proposed Palms Groundwater Recovery Project (Recovery Project). The EIR will address the potential physical and environmental effects of the Recovery Project for each of the environmental topics outlined in the California Environmental Quality Act (CEQA). The District will use the EIR when considering approval of the proposed Recovery Project. Responsible Agencies, which are public agencies other than the District that have a role in approving or implementing the Recovery Project, will also need to consider the EIR when issuing approvals for the implementation of the Recovery Project. The District has prepared this Notice of Preparation (NOP) / Initial Study (IS) to provide Responsible Agencies, Trustee Agencies, and other Interested Parties with a description of the proposed Recovery Project and to identify potential environmental effects pursuant to State CEQA requirements. The NOP/IS for the proposed Recovery Project is available for review on the District's website at http://bvh2o.com/Projects.html. Under CEQA, a Lead Agency (in this case, the District) shall conduct an IS to determine if a project may have a significant effect on the environment (CEQA Guidelines Section 15063[a]). If the Lead Agency determines there is substantial evidence that any aspect of the project may cause a significant effect on the environment, the Lead Agency shall prepare an EIR, or one of the other options listed in CEQA Guidelines Section 15063(b)(1). The District has prepared an IS and made a determination that the Recovery Project may cause a significant effect on the environment, so an EIR will be prepared.

1.2 PUBLIC REVIEW AND COMMENT PERIOD

Further notice is hereby given that the District invites comments on the scope and content of the EIR in response to this NOP/IS. Pursuant to Section 15082 of the State CEQA Guidelines, this NOP/IS will be circulated for a 30-day review period. At a minimum, responses to this NOP/IS should focus on the potentially significant environmental effects that the proposed Recovery Project may have on the physical environment that should be addressed in the EIR, ways in which those effects might be minimized, and potential alternatives to the proposed Recovery Project that should be addressed in the EIR. In your response, include your name, the name of your agency or organization (if applicable), and contact information. Comments on the NOP/IS may be received in writing at the above District mailing address to the attention of Tim Ashlock, or via email to tim@bvh2o.com, by 8:30 a.m. on July 17, 2020. In addition, comments may be provided at the Public Scoping Meeting, noticed below.

1.3 PUBLIC SCOPING MEETING

Further notice is hereby given that the District has scheduled a Public Scoping Meeting at the time and location indicated below. The purpose of the Public Scoping Meeting is to describe the proposed Recovery Project and the environmental review process, and to receive verbal input. The

District will consider all comments, written and oral, in determining the final scope of the evaluation to be included in the EIR.

Public Scoping Meeting:

Thursday, July 2, 2020,
11:00 a.m.

https://zoom.us/j/89798178986
Password: 546152
or
Dial in: 1-669-900-6833
Password: 546152

1.4 PROJECT DESCRIPTION

1.4.1 *Introduction*

The District is located in the southern San Joaquin Valley, approximately 16 miles west of the city of Bakersfield and encompassing the town of Buttonwillow. The District has a gross area of approximately 49,000 acres and lies within a portion of the lower Kern River Watershed characterized by heavy clay soils originating from former swamp and overflow lands.

The District is divided into two distinct service areas. The principal service area, known as the Buttonwillow Service Area, is situated north of the historic Buena Vista Lake. The smaller service area, lying east of the historic Buena Vista Lake, is known as the Maples Service Area.

The District has successfully followed a conjunctive management policy by which surface water is recharged when available and stored in the principal aquifer system for recovery by pumping in years when surface water is insufficient to meet demands. Conjunctive management within the District begins with deliveries of surface water from the Kern River and the California Aqueduct with these two sources generating an average annual supply sufficient to meet District-wide demands. Thus, during years when supplies are above average, surface water is recharged, and during years when supplies are limited, recharged water is pumped as a supplemental source of supply.

A high proportion of recharge in the District takes place through seepage from facilities constructed by the District including canals, laterals and recharge basins. In January 2016, the District approved construction of the Palms Groundwater Banking Project (Palms Project) in the southern portion of the Buttonwillow Service Area. The Palms Project is a groundwater replenishment and water banking project that covers approximately 1,150 acres and includes features needed to apply surface water for groundwater recharge (**Figure 1-1**).

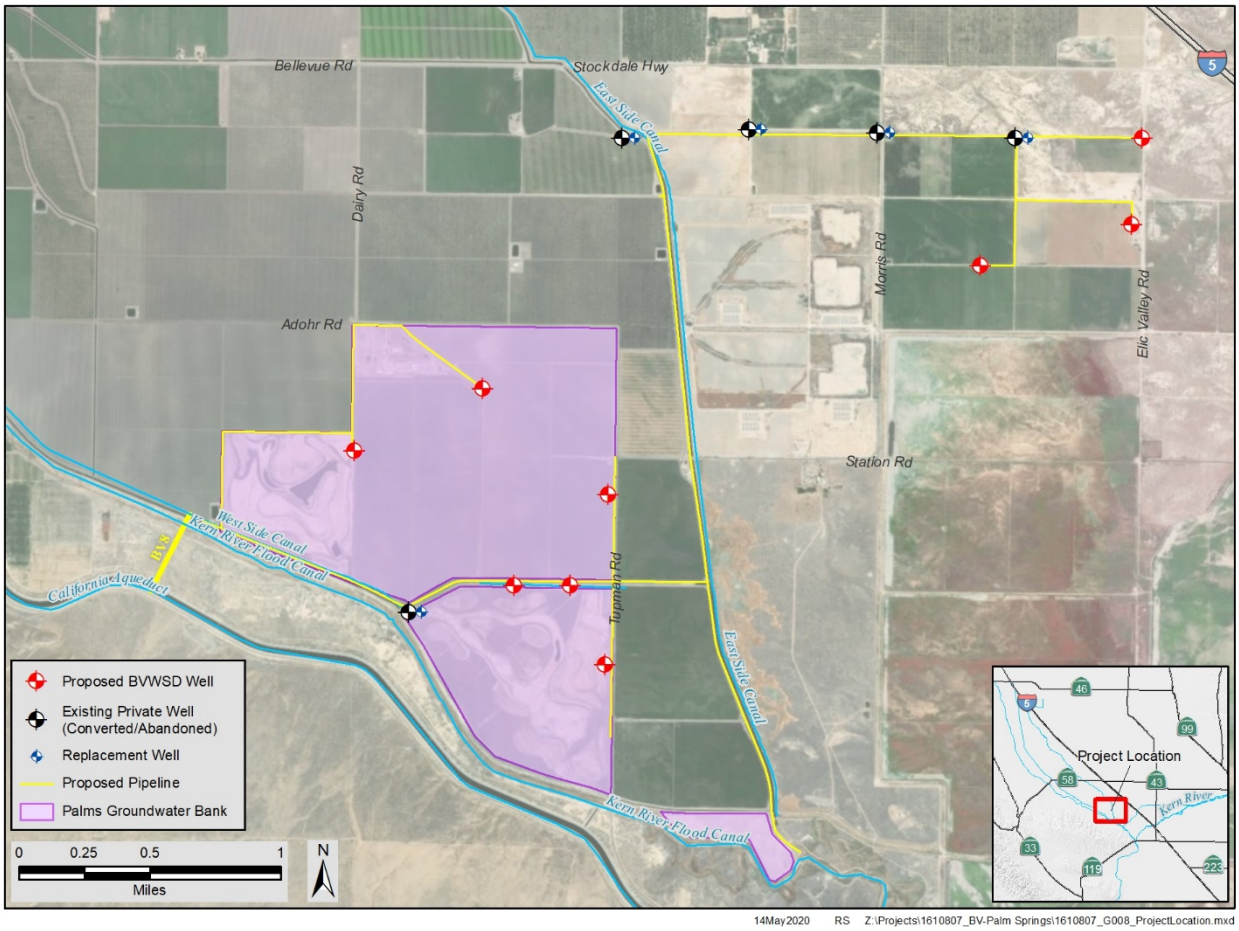

Figure 1-1. Project Location and Site/

An Initial Study/Mitigated Negative Declaration (IS/MND) (SCH # 2015121030) was prepared for the Palms Project in 2015, and the Notice of Determination was filed in January 2016. Initial construction of the recharge portion of the project was completed in 2016. The recharge ponds were subsequently enlarged and today are located within an area of approximately 1,150 acres. To date, the District has recharged approximately 27,166 acre-feet of surplus water in the Palms Project, 14,164 acre-feet in 2017 and 13,002 acre-feet in 2019. High quality water recharged at the Palms Project flows to aquifers that are sources for domestic and municipal wells providing water to residents of Taft, Tupman, and to the disadvantaged community of Buttonwillow, and replenishes groundwater under the Tule Elk Reserve.

The purpose of this Initial Study is to analyze the potential environmental impacts of the Recovery Project.

1.4.2 *Project Facilities and Construction*

In order to extract water banked within the District, including but not limited to water recharged in District canals and the Palms Project, the District would utilize a suite of 14 wells: nine proposed new wells and five replacement wells (**Figure 1-1**).

Conveyance pipes would be installed to connect new and replacement wells for the Recovery Project water delivery system. Construction activities would include excavation and trenching to install the wells, and approximately 11.9 miles of conveyance pipe. The total area of disturbance would be approximately 72 acres. The new and replacement wells would be drilled to a depth of up to 500 feet and include an 18-inch casing. Trench depths would be 5 feet for pipes less than 24 inches and 6 feet for pipes greater than 24 inches in diameter. Trench widths would be 3 feet for pipe sizes less than or equal to 24 inches and 6 feet for pipes greater than 24 inches. Anticipated construction activities would begin in the fall of 2020 and be completed within 11 months. Staging areas for the construction equipment and materials would be adjacent to the Recovery Project area on previously disturbed land. Construction vehicles for the pipeline would consist of a front wheel loader, two excavators, two water trucks, backhoe, and three pickup trucks. Construction equipment for the well construction would consist of a drilling rig, air compressor, backhoe, and pipe trailer.

The water pipelines will connect to the District's existing turnout at the California Aqueduct at BV8. BV8 can be used to either input water to the Aqueduct or to withdraw water from the Aqueduct.

1.4.3 *Project Operation*

Available surplus water supply will continue to be recharged at the Palms during wet years. The District anticipates recharging up to 100,000 acre-feet annually through the Palms Project when surplus water supply is available. The District also recharges groundwater through their existing canal system during wet years, a District practice for many decades.

Water recovered by the District will be distributed to District water users or exchanged with other districts or sold to other industrial or municipal users. This Recovery Project may also discharge into the California Aqueduct to satisfy existing and future water contracts between the District and other Public Water Agencies.

The Recovery Project will be managed so that groundwater elevations will, in the long term, improve from those observed historically. Annual water recovery will be limited to no more than 25,000 acre-feet. Wells will be pumped at a rate of no more than 5 cfs, and the wells selected for recovery will be selected to optimize groundwater recovery and minimize impacts to groundwater levels.

For landowners, there would be an alternative delivery option of groundwater recovery to provide flexibility by allowing private pumping in lieu of surface water deliveries. Landowners would have the option, in addition to surface water delivery, utilize on-farm wells to pump water for irrigation needs or continue to receive surface water deliveries through the District canals and pipelines. No additional District facilities would need to be constructed for this alternative delivery option. Landowners interested in this optional delivery method would be required to sign up for the District program, and participation would be limited by the amount of water available for recovery, no more than 25,000 acre-feet per year.

This alternative delivery option would allow wider participation and flexibility for water users. It is anticipated that water users south of Perral Road in the Buttonwillow Service Area would be eligible to participate in the program. The water pumped from landowner wells would be treated as recovered water, leaving a similar amount of water (SWP, Kern River, or other water) available for a different beneficial use.

1.4.4 *Water Quality*

For the District to use the California Aqueduct (Aqueduct) to convey the recovered groundwater, approval of the Department of Water Resources (DWR) is required. It is DWR policy to assist with the conveyance of water to provide a reliable water supply, and to protect the State Water Project (SWP) water quality within the Aqueduct. In order to facilitate this policy, DWR provides an implementation process to accept Non-SWP Project water into the Aqueduct. To do so, the District is required to submit a Pump-In Proposal (PIP) to DWR which identifies the water sources, planned operation, inflow water quality, and any anticipated impacts to SWP water quality and/or operations. The PIP will also include a water quality monitoring plan in order to continuously demonstrate that the water quality is consistent with that of the Aqueduct water.

In order to ensure that water quality will meet DWR requirements, aquifer isolation zone water quality testing will be conducted. The wells will then be designed to collect water from portions of the aquifer with favorable water quality. This method will likely be used during construction of the first few wells and may be discontinued for wells constructed after the local water quality parameters are better understood.

1.4.5 *Memorandum of Understanding*

On October 26, 1995, the Kern Water Bank Authority and its Member Entities (including Buena Vista Water Storage District, Rosedale-Rio Bravo Water Storage District, Kern Delta Water District, Henry Miller Water District, and West Kern Water District, as the "Adjoining Entities," entered into a Memorandum of Understanding (MOU), which provides that "…any future project within the Kern Fan Area, the Parties hereto shall use good faith efforts to negotiate an agreement substantially similar in substance to this MOU…" In subsequent years, a Joint Operating Committee has been formed among these parties, which utilizes multiple groundwater models to assess impacts to groundwater from banking and recovery operations. Therefore, the District will either amend the existing MOU or develop a new MOU, or join the Joint Operating Committee, to address the operation and monitoring of the Recovery Project.

1.4.6 *Project Objectives*

The Recovery Project has the following primary objectives:

- Increase conjunctive management on the west side of Kern County by improving the District's ability to meet demands during periods when supply of surface water is limited with previously banked water supplies.

- Improve conveyance of previously stored water throughout the District and to neighboring Districts.
- Provide water for urban use in Kern County and possibly elsewhere.

1.4.7 *Project Benefits*

The Recovery Project will provide up to 25,000 acre-feet of banked groundwater to the District's water customers in dry years, while meeting the requirements of the Sustainable Groundwater Management Act.

1.4.8 *Need for Project*

The District has a net irrigated acreage maximum of about 40,000 acres. Currently about half the District lands are planted with permanent crops, as growers migrate away from row crops. The conversion to permanent crops may increase the water demand by 1 acre-foot per acre. In the short term, this conversion typically reduces demand, as a pistachio tree will not reach full demand for water until about the 12th year, with the first year being as low as 0.25 acre-feet per acre. The Recovery Project will allow for the highs and lows of the District's water supply to be managed in a manner that ensures full production of permanent crops regardless of the current years water supply.

With the District's Kern River Water Supply as well as its State Water Project water supply, the District should be able to meet future demands. This Recovery Project will help in meeting those demands, as well as being available to partner with others to help meet their water supply needs.

1.5 AGENCY REVIEW AND APPROVALS

The District is required to apply for approval from the California Department of Water Resources to pump into the California Aqueduct.

1.6 PROBABLE ENVIRONMENTAL IMPACTS

The EIR will address environmental impacts of the Recovery Project's construction and operation activities and will propose mitigation measures to address significant impacts that are identified. The following describes the anticipated environmental issues that will be addressed in the EIR.

- **Biological Resources** – The Recovery Project area contains natural lands with native habitat that may be suitable for special-status species. The EIR will evaluate potential impacts of the Recovery Project on terrestrial special-status animal and plant species, sensitive habitats, mature native trees, and migratory birds that may occur in the Recovery Project area.
- **Cultural Resources** – Based on archival records search, background studies, and on-foot surface reconnaissance cultural resources survey, one prehistoric archaeological site has been recorded in the Recovery Project's vicinity. The EIR will include an evaluation of whether the site will be impacted and provide mitigation, if necessary, to reduce impacts.

Concurrently with release of this NOP, the District will extend invitations to consult with Native American tribes that are traditionally and culturally affiliated with the geographic area of the Recovery Project and that have filed written request to be notified of opportunities to consult. Because the time period for tribes to respond will remain open through the NOP process, it is uncertain at this time whether the Recovery Project could impact tribal cultural resources. The EIR will, therefore, include a discussion of potential impacts to these resources.

- **Hydrology and Water Quality** – Through the use of groundwater modeling and hydrogeologic analyses, the EIR will evaluate changes in local groundwater quality, storage, and levels within the groundwater basin as a whole and their subbasins, as appropriate. The EIR will describe potential impacts of recovery activities and evaluate compliance with the Groundwater Sustainability Plan(s) under the Sustainable Groundwater Management Act.

Impacts Not Found Significant. The EIR will also explain why other effects were determined to not be potentially significant and were not discussed in detail in the EIR. For example, the Recovery Project site is in an agricultural area, would not damage scenic resources, or produce light and glare; therefore, no significant aesthetic impacts are anticipated. The Recovery Project would not result in additional service/utility demands related to police or fire protection, schools, parks and recreation, or wastewater generation. Impacts to air quality, agriculture and forestry resources, geology, hazards and hazardous materials, population and housing, mineral resources, and wildfire are also expected to be less than significant, or less than significant with mitigation incorporated, and therefore will be discussed in this section.

Other Sections. The EIR will include additional topics as required by the CEQA Guidelines including growth inducement, cumulative impacts, and alternatives.

The EIR will also examine a reasonable range of alternatives to the Recovery Project, including the CEQA-mandated No Project Alternative, and other potential alternatives that may be capable of avoiding or substantially reducing any of the significant effects of the Recovery Project.

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2.0 Initial Study

Project Information

#1. Project title:	Buena Vista Water Storage District Palms Groundwater Recovery Project
#2. Lead agency name and address:	Buena Vista Water Storage District
#3. Contact person and phone number:	Tim Ashlock (661) 324-1101
#4. Project location:	Buena Vista Water Storage District, and an annexed area located to the east of the Buena Vista Water Storage District (*see* Figure 1-1).
#5. Project sponsor's name and address:	Same as lead agency
#6. General plan designation:	Agriculture
#7. Zoning:	Agriculture
#8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)	The Recovery Project includes the development of conveyance pipelines and wells to facilitate the recovery of previously stored groundwater.
#9. Surrounding land uses and setting: Briefly describe the project's surroundings:	The Recovery Project is located near the unincorporated community of Buttonwillow, Kern County, in an area dominated by agricultural production. Several other small, unincorporated communities such Lokern and Tupman are located within the vicinity of the Recovery Project. The city of Bakersfield is located approximately 23 miles east of the Recovery Project site.
#10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)	California Water Resources Control Board, and the San Joaquin Valley Air Pollution Control District
#11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?	Yes. Consultation is described in more detail in Cultural Resources and Tribal Cultural Resources.

Note: Conducting consultation early in the California Environmental Quality Act (CEQA) process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (*See* PRC Section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. **Please also note** that PRC Section 21082.3(c) contains provisions specific to confidentiality.

Environmental Factors Potentially Affected

Several environmental resources were found to have "potentially significant impacts," and will be discussed further in the subsequent EIR. The environmental factors listed as "Yes" in **Table 2-1** would be potentially affected by the Recovery Project, involving at least one impact that has "Potentially Significant" as indicated by the checklist on the following pages.

Table 2-1. Environmental Resources with Potentially Significant Impacts

Environmental Resources	Yes or No?
Aesthetics	No
Agriculture and Forestry Resources	No
Air Quality	No
Biological Resources	**Yes**
Cultural Resources	**Yes**
Energy	No
Geology/Soils	No
Greenhouse Gas Emissions	No
Hazards and Hazardous Materials	No
Hydrology/Water Quality	**Yes**
Land Use/Planning	No
Mineral Resources	No
Noise	No
Population/Housing	No
Public Services	No
Recreation	No
Transportation	No
Tribal Cultural Resources	**Yes**
Utilities/Service Systems	No
Wildfire	No
Mandatory Findings of Significance	**Yes**

Evaluation of Environmental Impacts

#1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

#2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts. Operations and maintenance impacts of the proposed project are routine, minimal, and essentially the same as current operations and maintenance of the existing facilities. There is no potential for a significant impact to any resource category from project operations and maintenance of the existing and proposed facilities.

#3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required. "Beneficial impact" is also identified where appropriate to provide full disclosure of any benefits from implementing the proposed project.

#4. "Less-than-Significant Impact with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-than-Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

#5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063[c][3][D]). In this case, a brief discussion should identify the following:

#5 -a. Earlier Analysis Used. Identify and state where they are available for review.

#5 -b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

#5 -c. Mitigation Measures. For effects that are a "Less-than-Significant Impact with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

#6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

#7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

#8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

#9. The explanation of each issue should identify:

#9 -a. the significance criteria or threshold, if any, used to evaluate each question; and

#9 -b. the mitigation measure identified, if any, to reduce the impact to less than significance.

Significance thresholds are identified for certain resources, but others are not explicitly identified because there is clearly no impact or the checklist question itself serves as the significance threshold.

2.1 Aesthetics

#1. **AESTHETICS**. Except as provided in PRC Section 21099, **would the project**:

#1 -a. Have a substantial adverse effect on a scenic vista?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#1 -b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#1 -c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#1 -d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.

2.1.1 *Environmental Setting*

The Recovery Project is located west of Interstate 5, near the unincorporated community of Buttonwillow, Kern County. The Recovery Project site is zoned as letter "A" (signifying, exclusive agriculture) (Kern County, 2020). The project area is flat and is comprised of dirt roads, open water canals, and various agricultural crops (*see* **Figure 2-1**). There are no designated scenic vistas within the vicinity of the Recovery Project (Caltrans 2019).

Figure 2-1. View of the Palms Recovery Project Area.

2.1.2 *Discussion*

#1 -a, b, c, and d. Have a substantial adverse effect on a scenic vista, Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway, In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality, or Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

There are no significant view-sheds, scenic vistas, or scenic highways located in the vicinity of the Recovery Project (Caltrans, 2019). The Recovery Project would be constructed in agricultural land and would consist of buried pipelines for conveying recovered water, and new well structures in an area that already contains wells. There would be little change to the visual character of the site and surrounding area. Construction would take approximately 11 months and would require several vehicles and equipment onsite, which is not substantially different that normal agricultural operations. Following the completion of construction activities all construction related equipment would be removed and the site would be restored to pre-construction conditions. The Recovery Project would not change the existing views, nor would it create new sources of light or glare. All construction activities would occur during daylight hours. Therefore, there would be **no impact** to visual resources and this topic will not be evaluated further in the EIR.

2.2 Agriculture and Forestry Resources

#2. AGRICULTURE AND FORESTRY 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, 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:**

#2 -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?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#2 -b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#2 -c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#2 -d. Result in the loss of forest land or conversion of forest land to non-forest use?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#2 -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?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.

2.2.1 *Environmental Setting*

The Recovery Project site is designated as exclusive agriculture (Kern County 2020). The Recovery Project consists of Prime Farmland and Grazing land, as delineated by the Farmland

Mapping and Monitoring Program (FMMP) (D.O.C. 2018). The Recovery Project is located on parcels currently under active Williamson Act contracts (Kern County, 2010). However, the land is currently fallow open space, as it is being used for groundwater recharge.

2.2.2 *Discussion*

#2 -a and b. 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? Conflict with existing zoning for agricultural use, or a Williamson Act contract?

The Recovery Project would be implemented on the outer edges of agricultural parcels, along the established dirt roads which are primarily barren. Implementation of the Recovery Project would not convert farmland to non-farmland. The land will continue to be fallow open space, used for groundwater recharge so would not conflict with existing Williamson Act contracts. There would be **no impact** to agricultural land, and this topic will not be evaluated further in the EIR.

#2 -c and d. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? Result in the loss of forest land or conversion of forest land to non-forest use?

The Recovery Project site is not forest land, timberland, or timberland zoned as Timberland Production, therefore, no loss or conversion of forest land to non-forest land would be necessary. There would be **no impact** to forestland or timberland and this topic will not be evaluated further in the EIR.

#2 -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?

The Recovery Project would not convert farmland to non-agricultural use. The Recovery Project's purpose is to benefit agriculture by providing irrigation water supplies in years with limited surface water supplies. There would be **no impact** to agriculture or forestland and this topic will not be evaluated further in the EIR.

2.3 Air Quality

#3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the following determinations. **Would the project:**

#3 -a. Conflict with or obstruct implementation of the applicable air quality plan?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? **Yes.**	Have Less-than-Significant Impact? No.	Have No Impact? No.	Have Beneficial Impact? No.
#3 -b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? **Yes.**	Have Less-than-Significant Impact? No.	Have No Impact? No.	Have Beneficial Impact? No.
#3 -c. Expose sensitive receptors to substantial pollutant concentrations?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? **Yes.**	Have Less-than-Significant Impact? No.	Have No Impact? No.	Have Beneficial Impact? No.
#3 -d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes.**	Have No Impact? No.	Have Beneficial Impact? No.

2.3.1 *Environmental Setting*

The Recovery Project is located in the San Joaquin Valley Air Basin (S.J.V.A.B.) within Kern County. The San Joaquin Valley Air Pollution Control District (S.J.V.A.P.C.D.) is responsible for obtaining and maintaining air quality conditions in the County.

The Federal Clean Air Act and California Clean Air Act required the U.S. Environmental Protection Agency (EPA) and California Air Resource Boards (C.A.R.B.) to establish health-based air quality standards at the federal and state levels. National Ambient Air Quality Standards (N.A.A.Q.S.) and California Ambient Air Quality Standards (C.A.A.Q.S.) were established for the following criteria pollutants: carbon monoxide (C.O.), ozone (O_3), sulfur dioxide ($S.O._{2.}$), nitrogen dioxide ($N.O._{2.}$), particulate matter less than 10 microns in diameter (PM_{10}), particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), and lead. Areas of the state are designated as attainment,

nonattainment, maintenance, or unclassified for the various pollutant standards according to the Federal Clean Air Act and California Clean Air Act.

An "attainment" designation for an area signifies that pollutant concentrations did not violate the N.A.A.Q.S. or C.A.A.Q.S. for that pollutant in that area. A "nonattainment" designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as identified in the criteria. A "maintenance" designation indicated that the area previously categorized as nonattainment is currently categorized as attainment for the applicable pollutant; though the area must demonstrate continued attainment for a specific number of years before it can be re-designated as an attainment area. An "unclassified" designation signifies that data does not support either an attainment or a nonattainment status. The EPA established N.A.A.Q.S. in 1971 for six air pollution constituents. States have the option to add other pollutants, to require more stringent compliance, or to include different exposure periods. C.A.A.Q.S. and N.A.A.Q.S. are listed in **Table 2-2**.

Table 2-2. Federal and California Ambient Air Quality Standards and Attainment Status.

Pollutant	Averaging Time	California Standards Concentration	Federal Primary Standards Concentration
Ozone (O_3)	8-hour	0.070 parts per million. (137 micrograms per cubic meter).	0.070 parts per million (137 micrograms per cubic meter.) (*See* Note #1.)
	1-hour	0.09 parts per million. (180 micrograms per cubic meter).	(None; *see* Note #2.)
Respirable Particulate Matter (PM_{10})	24-hour	50 micrograms per cubic meter.	150 micrograms per cubic meter.
	Annual Arithmetic Mean	20 micrograms per cubic meter.	(None.)
Fine Particulate Matter ($PM_{2.5}$)	24-hour	(None.)	35 micrograms per cubic meter.
	Annual Average	12 micrograms per cubic meters.	12 micrograms per cubic meter.
Carbon Monoxide	8-hour	9 parts per million. (10 milligrams per cubic meter.)	9 parts per million. (10 milligrams per cubic meter).
	1-hour	20 parts per million. (23 milligrams per cubic meter).	35 parts per million. (40 micrograms per cubic meter).
Nitrogen Dioxide	Annual Average	0.03 parts per million. (57 micrograms per cubic meters.)	0.053 parts per million. (100 micrograms per cubic meters.)
	1-hour	0.18 parts per million. (339 micrograms per cubic meters.)	0.100 parts per million. (188 micrograms per cubic meters.)
Lead	30-day Average	1.5 micrograms per cubic meters.	(None.)
	Rolling 3-Month Average	(None.)	0.15 micrograms per cubic meter.

Pollutant	Averaging Time	California Standards Concentration	Federal Primary Standards Concentration
	Quarterly Average	(None.)	1.5 micrograms per cubic meter.
Sulfur Dioxide	24-hour	0.04 parts per million. (105 micrograms per cubic meter.)	0.14 parts per million (for certain areas)
	3-hour	(None.)	(None.)
	1-hour	0.25 parts per million. (655 micrograms per cubic meter.)	0.075 parts per million. (196 micrograms per cubic meter.)
Sulfates	24-hour	25 micrograms per cubic meter.	No Federal Standard.
Hydrogen Sulfide	1-hour	0.03 parts per million. (42 micrograms per cubic meter.)	No Federal Standard.
Vinyl Chloride	24-hour	0.01 parts per million. (26 micrograms per cubic meter.)	No Federal Standard.

Notes:

#1. On October 1, 2015, the national 8-hour ozone (O_3) primary and secondary standards were lowered from 0.075 to 0.070 ppm.

#2. 1-Hour ozone standard revoked effective June 15, 2005, although some areas have continuing obligations under that standard.

Source: C.A.R.B. 2019, EPA 2016

Under the N.A.A.Q.S., Kern County is designated as nonattainment for 8-hour ozone, and $PM_{2.5}$ (C.A.R.B. 2018). Under C.A.A.Q.S., Kern County is designated nonattainment for 1-hour ozone, 8-hour ozone, $PM_{2.5}$, PM_{10} (C.A.R.B. 2018).

The area's air quality monitoring network provides information on ambient concentrations of air pollutants in the S.J.V.A.B. S.J.V.A.P.C.D. operates several monitoring stations in Kern County, air quality data was obtained from the Bakersfield-California Avenue station. **Table 2-3** compares a 5-year summary of the highest annual criteria air pollutant emissions collected at this station with applicable C.A.A.Q.S., which are more stringent than the corresponding N.A.A.Q.S. Due to the regional nature of these pollutants, O_3, $PM_{2.5}$, and PM_{10} are expected to be fairly representative of the Recovery Project.

As indicated in **Table 2-3**, O_3, $PM_{2.5}$, and PM_{10} standards have been exceeded over the past 5 years.

Table 2-3. Ambient Air Quality Monitoring Data Measured at the Bakersfield-California Avenue Monitoring Station.

Pollutant Standards, 1-Hour Ozone	2014	2015	2016	2017	2018
Maximum 1-hour concentration (ppm)	0.102*	0.104*	0.092*	0.122*	0.107*
Days Exceeding[a] C.A.A.Q.S. 1-hour (>0.09 parts per million)	3	6	0	11	8
Pollutant Standards, 8-Hour Ozone	**2014**	**2015**	**2016**	**2017**	**2018**
National maximum 8-hour concentration (parts per million).	0.092*	0.096*	0.085*	0.104*	0.098*
State max. 8-hour concentration (parts per million).	0.093*	0.097*	0.086*	0.104*	0.098*
Days Exceeding[a] N.A.A.Q.S. 8-hour. (>0.075 parts per million.) (*See* note #1.)	20	28	30	47	34
Days Exceeding[a] C.A.A.Q.S. 8-hour. (>0.070 parts per million.) (*See* note #1.)	39	54	63	87	64
Pollutant Standards, Particulate Matter (PM_{10})	**2014**	**2015**	**2016**	**2017**	**2018**
National max. 24-hour concentration (micrograms per cubic meter).	430.1*	104.7	90.9	138.0	136.1
State max. 24-hour concentration (micrograms per cubic meter).	419.5*	103.6*	92.2*	143.6*	142.0*
State max. 3-year average concentration (micrograms per cubic meter).	41	44	44	44	43
State annual average concentration (micrograms per cubic meter).	N/A	44.1	40.9	42.6	N/A
Days Exceeding[a] N.A.A.Q.S. 24-hour (>150 micrograms per cubic meter).	N/A	0	0	0	0
Days Exceeding[a] C.A.A.Q.S. 24-hour (>50 micrograms per cubic meter).	N/A	121.4	121.4	98.7	N/A
Pollutant Standards, Particulate Matter ($PM_{2.5}$)	**2014**	**2015**	**2016**	**2017**	**2018**
National max. 24-hour concentration (micrograms per cubic meter).	101.9*	107.9*	66.4*	101.8*	98.5*
State max. 24-hour concentration (micrograms per cubic meter).	101.9	111.9	66.4	101.8	98.5
State annual average concentration (micrograms per cubic meter).	18.6*	16.6*	15.9*	15.9*	15.6*
Days Exceeding[a] N.A.A.Q.S. 24-hour (>35 micrograms per cubic meter).	39.3	32.3	25.5	30.2	40.3

2.3.2 *Discussion*

#3 -a and b. Conflict with or obstruct implementation of the applicable air quality plan? Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?

The Recovery Project would generate criteria pollutants from the use of gasoline and diesel-powered vehicles and equipment, and earthmoving activities. Construction of the Recovery Project would require approximately 383 round trips to drop off all required material and equipment to the site. An additional 3,080 truck trips, or 14 trips per day, would be required for workers commuting to the site during construction. A total of 3,463 trips would be required to implement the project.

To streamline the process of assessing significance of criteria pollutant emissions from common construction projects, S.J.V.A.P.C.D has developed a screening tool, the Small Project Analysis Level (SPAL) to assist in determining if constructing a project in the County would exceed the construction significance threshold for criteria pollutants. The tool uses project type and size, and S.J.V.A.P.C.D. pre-quantified emissions to determine a size below which it is reasonable to conclude that a project would not exceed applicable thresholds of significance for criteria pollutants (S.J.V.A.P.C.D., 2017). Construction of a project that does not exceed the screening level are considered to have a less-than-significant impact on air quality (**Table 2-4**). The proposed project would result in a total of 3,463 trips during the entire construction period, which is significantly lower than the SPAL threshold.

Table 2-4. Small Project Analysis Level by Vehicle Trips.

Land Use Category	Project Size
Residential Housing	1,453 trips per day
Commercial	1,673 trips per day
Office	1,628 trips per day
Institutional	1,707 trips per day
Industrial	1,506 trips per day

Source: S.J.A.P.C.D. 2012

However, since the Recovery would disturb more than 1 acre, the District would obtain the following permits: SWRCB N.P.D.E.S. for general construction activity (Order 2009-0009 DWQ as amended by Order 2012-0006-DWQ), and SWPPP. The District would also need to submit a Dust Control Prevention Plan, which is required for non-residential developments that include 5 acres or more of disturbed surface area (S.J.V.A.P.C.D 2004). The Recovery Project would comply with all BMPs outlined in the above-mentioned permits. The Recovery Project would also comply with all S.J.V.A.P.C.D. rules and regulations. S.J.V.A.P.C.D. Regulation VIII implements measures to reduce ambient concentrations of PM_{10} and oxides of nitrogen (NO_x). Implementation of the following mitigation measure would ensure that S.J.V.A.P.C.D. practices would be implemented during construction, and this impact would be **less-than-significant with mitigation**. This topic will not be evaluated further in the EIR.

Mitigation Measure AQ-1: District Regulation VIII Fugitive PM_{10} Prohibitions Best Management Practices

All projects are subject to S.J.V.A.P.C.D. rules and regulations in effect at the time of construction. Control of fugitive dust is required by S.J.V.A.P.C.D. Regulation VIII. The District shall implement or require its contractor to implement all of the following measures as identified by S.J.V.A.P.C.D.:

- Apply water to unpaved surfaces and areas
- Use non-toxic chemical or organic dust suppressants on unpaved roads and traffic areas
- Limit or reduce vehicle speed on unpaved roads and traffic areas
- Maintain areas in a stabilized condition by restricting vehicle access
- Install wind barriers
- During high winds, cease outdoor activities that disturb the soil
- Keep bulk materials sufficiently wet when handling
- Store and hand material in a three-sided structure
- When storing bulk material, apply water to the surface or cover the stage pile with a tarp
- Don't overload haul trucks. Overlanded trucks are likely to spill bulk materials
- Cover haul trucks with a tarp or other suitable cover. Or, wet the top of the load enough to limit visible dust emissions
- Clean the interior of cargo compartments on emptied haul trucks prior to leaving the site
- Prevent track-out by installing a track-out control device
- Clean up track-out at least once a day. If along a busy road or highway, clean up track-out immediately
- Monitor dust-generating actives and implement appropriate measures for maximum dust control

Implementation of the above-mentioned mitigation measure and acquisition of a N.P.D.E.S. construction activity general permit and SWPPP, and submitting a Dust Control Prevention Plan, would reduce significant impacts to a **less-than-significant** level. This topic will not be evaluated further in the EIR.

#3 -c. Expose sensitive receptors to substantial pollutant concentrations?

Some members of the population are especially sensitive to emissions of air pollutants and should be given special consideration during the evaluation of the Recovery Project air quality impacts. These people include children, senior citizens, and persons with pre-existing respiratory or cardiovascular illnesses, and athletes and other who engage in frequent exercise, especially outdoors. Sensitive receptors include schools, residences, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The Recovery Project is located in a predominately agricultural area; however, a residential property resides approximately 300 feet from the Recovery Project site.

During construction, most of the particulate matter (PM), emissions are released in the form of fugitive dust during ground disturbance activities, mostly during the drilling and grading phases. PM emissions are also generated in the form of equipment exhaust and re-entrained road dust from vehicle travel. Impacts from PM emissions would be temporary and would go back to normal after completing the construction phase. Given the short-term emissions, and incorporation of Mitigation Measure AQ-1, impacts would be **less-than-significant with mitigation**. This topic will not be evaluated further in the EIR.

#3 -d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Human response to odors is subjective, and sensitivity to odor varies from person to person. Typically, odors are considered an annoyance rather than a health hazard. However, a person's response to odor can range from psychological (e.g., irrigation, anger, anxiety) to physiological (e.g., circulatory and respiration reaction, nausea, headaches, etc.). During construction, the Recovery Project would generate odor from the use of diesel fuels that could affect the nearby residence, though this impact would be short-term and nonsignificant. During operation, the Recovery Project would consist of the operation of electrically powered pump. No odors would be generated by this use. Potential odor effects would be **less-than-significant** and would not be evaluated further in the EIR.

2.4 Biological Resources

#4. BIOLOGICAL RESOURCES. Would the project:

#4 -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 U.S. Fish and Wildlife Service?	Have Potentially Significant Impact? **Yes.**	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? No.	Have Beneficial Impact? No.
#4 -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 U.S. Fish and Wildlife Service?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes.**	Have No Impact? No.	Have Beneficial Impact? No.
#4 -c. Have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes.**	Have No Impact? No.	Have Beneficial Impact? No.
#4 -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?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes.**	Have No Impact? No.	Have Beneficial Impact? No.
#4 -e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#4 -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?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.

2.4.1 *Environmental Setting*

The Recovery Project site and surrounding areas is almost entirely comprised of agricultural land and associated facilities. Topography is generally flat, with an average elevation of approximately 280 feet above mean sea level. The Tule Elk Reserve borders the eastern side of the Recovery Project.

2.4.2 *Discussion*

#4 -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?

The Recovery Project has the potential to have a substantial adverse effect on special-status species located within the vicinity of the site. This impact is likely **potentially significant**. Therefore, impacts to special-status species will be evaluated further in the EIR.

#4 -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 U.S. Fish and Wildlife Service?

The Recovery Project has the potential to have a substantial adverse effect on riparian habitat or other sensitive natural communities. However, the Recovery Project is located in an agricultural dominant area and as such is unlikely to contain any riparian habitat or other sensitive natural communities. Therefore, this impact is likely **less than significant**, however, potential impacts related to riparian habit or other sensitive natural communities will be evaluated further in the EIR.

#4 -c. Have a substantial adverse effect on state- or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Aquatic habitat within the Recovery Project is limited to irrigation canals that are frequently maintained, generally lack vegetation, and provide very poor aquatic habitat. Therefore, impacts associated with disturbance of small portions of several canals during construction would likely be **less-than-significant**, however, potential impacts to wetlands will be evaluated further in the EIR.

#4 -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?

The Recovery Project does not contain aquatic habitat that could support fish. The Recovery Project has the potential to interfere substantially with the movement of native resident and wildlife

species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursey sites. This impact is likely **less than significant**, however impacts related to the movement corridors will be evaluated further in the EIR.

#4 -e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The 2004 Kern County General Plan, which is currently being updated, includes several policies and implementation measures designed to protect and conserve threatened and endangered species and oak trees (Kern County 2004a). No oak trees are present onsite, therefore, there is **no impact** and this topic will not be evaluated further in the EIR.

#4 -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?

The Recovery Project is within the area anticipated to be covered by the Kern County Valley Floor Habitat Conservation Plan. A draft of the plan was issued many years ago (Kern County Planning Department 2006), but a final plan has not been released. The majority of the site is within the "White Zone," which is of lower conservation concern and not identified for acquisition of preserve areas, and a small portion of the site is within the "Green Zone,' which is defined as habitat of moderate importance for conservation purposes. The Recovery Project is north of the existing Metropolitan Bakersfield Habitat Conservation Plan area and the plan area for the Bakersfield Habitat Conservation Plan that is currently in development. Therefore, implementing the Recovery Project would not conflict with any provisions, guidelines, goals, or objectives related to biological resources anticipated to be included in a potential final and adopted version of this plan, there would be **no impact**, and this topic will not be evaluated further in the EIR.

2.5 Cultural Resources

#5. CULTURAL RESOURCES. Would the project:

#5 -a. Cause a substantial adverse change in the significance of a historical resource pursuant to CCR Section 15064.5?	Have Potentially Significant Impact? **Yes.**	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? No.	Have Beneficial Impact? No.
#5 -b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CCR Section 15064.5?	Have Potentially Significant Impact? **Yes.**	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? No.	Have Beneficial Impact? No.
#5 -c. Disturb any human remains, including remains interred outside of dedicated cemeteries?	Have Potentially Significant Impact? **Yes.**	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? No.	Have Beneficial Impact? No.

2.5.1 *Environmental Setting*

Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historic, architectural, archaeological, cultural, or scientific importance. All potential impacts to cultural resources from the implementation of the Recovery Project will be discussed further in the subsequent EIR, and the level of impact may change from what is stated below.

2.5.2 *Discussion*

a and b) Cause a substantial adverse change in the significance of a historical resource pursuant to in CCR Section 15064.5? Cause a substantial adverse change in the significance of an archaeological resource pursuant to CCR Section 15064.5?

The Recovery Project has the potential to have a substantial adverse change in the significance of a historic resource or archaeological resource pursuant to CCR Section 15064.5. This impact is likely **potentially significant.** Potential impacts on historic and archaeological resources will be evaluated further in the EIR.

c) Disturb any human remains, including remains interred outside of dedicated cemeteries?

Although unlikely, the Recovery Project has the potential to disturb human remains, including remains interred outside of dedicated cemeteries, therefore this impact is likely **potentially significant**. Potential impacts on human remains will be evaluated further in the EIR.

2.6 Energy

#6. ENERGY. Would the project:

#6 -a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Have Potentially Significant Impact? No	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes**.	Have No Impact? No.	Have Beneficial Impact? No.
#6 -b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.

2.6.1 *Environmental Setting*

Southern California Edison, and Southern California Gas (Kern County 2004a). In 2018, the total electricity consumption for Kern County was approximately 15,942 million kilowatts per hour (kWh) (California Energy Commission [CEC] 2018). The District would install nine new wells and five replacement wells, which would be configured with new electrical pumps.

2.6.2 *Discussion*

#6 -a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The proposed project is not likely to result in significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources. The project would involve the use of diesel-fueled vehicles during constructions, however, use of these vehicles would be temporary and nonsignificant. The proposed project involves the installation of 250 horsepower pump motors in all proposed new wells, and replacement wells. The Recovery Project would be limited to the recovery of previously banked water at generally higher groundwater levels which would result in lower energy usage. Energy use will not be wasteful, inefficient, or unnecessary, therefore the impact is **less than significant** and will not be evaluated further in the EIR.

#6 -b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Kern County does not have a local plan for renewable energy or energy efficiency. The proposed project would comply with the state's Climate Commitment to reduce the reliance on non-renewable energy sources by half by 2030 (CEC 2015). There would be **no impact** and this topic will not be evaluated further in the EIR.

2.7 Geology and Soils

#7. GEOLOGY AND SOILS. Would the project:

#7 -a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:					
#7 -a. 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.)	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#7 -a. ii. Strong seismic ground shaking?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes.**	Have No Impact? No.	Have Beneficial Impact? No.
#7 -a. iii. Seismic-related ground failure, including liquefaction?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes.**	Have No Impact? No.	Have Beneficial Impact? No.
#7 -a. iv. Landslides?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes.**	Have No Impact? No.	Have Beneficial Impact? No.
#6 -b. Result in substantial soil erosion or the loss of topsoil?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes.**	Have No Impact? No.	Have Beneficial Impact? No.
#7 -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?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation	Have Less-than-Significant Impact? **Yes.**	Have No Impact? No.	Have Beneficial Impact? No.

		Incorporated? No.			
#7 -d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated),), creating substantial direct or indirect risks to life or property?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes.**	Have No Impact? No.	Have Beneficial Impact? No.
#7 -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?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#7 -f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? **Yes.**	Have Less-than-Significant Impact? No.	Have No Impact? No.	Have Beneficial Impact? No.

2.7.1 *Environmental Setting*

The Recovery Project sites are located on the following soil types: Buttonwillow clay drained, and Lokern clay drained (NRCA, 2020). There are several small unnamed Quaternary faults located within 6 miles of the Recovery Project (CGS 2010a). There are no Alquisto-Priolo fault zones located within the vicinity of the site (CGS 2020a).

Inelastic subsidence typically occurs in the clay layers within aquifers and aquitards due to the withdrawal of water in storage within these layers during over-pumping, which induces the permanent rearrangement or collapse of the clay layer structure (BVGSA, 2020). According to DWR (2014), the Kern County Subbasin was rated at a high risk for future subsidence due to 1) a significant number of wells (51%) with water levels at or below historic lows; 2) documented historical subsidence; and 3) documented current subsidence.

The Buena Vista Groundwater Sustainability Agency (BVGSA) covers an agricultural area of Kern County located in the trough of California's southern San Joaquin Valley approximately sixteen miles west of the city of Bakersfield. The boundaries of the BVGSA coincide closely with those of the District. Concerns regarding historical subsidence within the BVGSA have been limited to areas in the northern portion of the District, between Milepost 195 and 215 of the California Aqueduct. Subsidence has not been observed to have affected infrastructure in the Recovery Project area (BVGSA, 2020).

2.7.2 *Discussion*

#7 -a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

#7 -a. 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.)

The Recovery Project is not located within an Alquisto-Priolo Earthquake fault zone (CGS 2020a). Surface fault rupture is most likely to occur on active faults (i.e., faults showing evidence of displacement within the last 11,700 years). Damage from surface fault rupture is generally limited to a linear zone a few yards wide. Since the Recovery Project is not located within the vicinity of an active fault line, there would be **no impact** and this topic will not be evaluated further in the EIR.

#7 -a. ii, iii and iv. Strong seismic ground shaking, Seismic-related ground failure, including liquefaction or landslides?

The Recovery Project facilities, wells and conveyance pipes, would either be buried or extend only a few feet above ground, and would not pose a direct risk to people during seismic activity. If a seismic event should cause a pipeline break or well to collapse, the water would be released underground in a low gradient, agricultural area, posing minimal risk to people or structures. Therefore, there would be no significant impact to people or structures from any seismic-related activity as a result of implementation of the Recovery Project. If additional water treatment facilities are determined to be needed, these facilities would be subject to a separate CEQA process at the time they are proposed. The Recovery Project is not located within a known liquefaction or landslide zone (CGS 2020b). Impacts related to seismic activities, including liquefaction or landslides would be **less-than-significant** and will not be evaluated further in the EIR.

#7 -b, c, and d. Result in substantial soil erosion or the loss of topsoil? 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? Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

Soils present at the Recovery Project site consist of, buttonwillow clay drained, and Lokern clay drained, which are considered expansive soils, however, the soils in the project area have been extensively farmed and managed for agricultural purposes (NRCA 2020). The pipelines would be buried within these soils' types. The Recovery Project is not located on unstable soils and implementation of the proposed project would not result in instability or excessive soil erosion.

Because construction activities would disturb an area larger than 1 acre, the District is required by law to obtain coverage under the SWRCB N.P.D.E.S. stormwater permit for general construction

activity, including preparation and submittal of a Notice of Intent (NOI) to discharge with the Central Valley Regional Water Quality Control Board. The District is required to prepare a SWPPP and comply with the conditions of the N.P.D.E.S. general stormwater permit for construction activities. The SWPPP shall describe the construction activities to be conducted, BMPs that would be implemented to prevent soil erosion and contaminated stormwater discharges into waterways, and inspection and monitoring activities that would be conducted.

Topsoil may be stripped and stockpiled for later reuse on the site. With the implementation of a Dust Control Plan or Construction Notification form loss of topsoil would be minimized during construction. Operation of the Recovery Project would not create the potential for soil erosion or loss of topsoil as the area is in a cultivated agricultural field and is topographically flat. Therefore, impacts related to soil erosion, unstable soils, or expansive soils would be **less-than-significant** and these topics will not be evaluated further in the EIR.

Inelastic land subsidence is a major concern in areas of active groundwater extraction due to risks to canal and infrastructure damage, permanent reduction in the groundwater storage capacity of the aquifer, well casing collapse, and increased flood risk in low lying areas.

The BVGSA proposes to monitor subsidence as described in the BVGSA Groundwater Sustainability Plan. In addition, the BVGSA discourages groundwater extraction from beneath the E-clay, in part, because of the potential for extraction from this confined zone to induce subsidence (BVGSA 2020). Recovery wells constructed as part of the Recovery Project will not be constructed below the E-clay. Given that the range of groundwater elevations expected during implementation of the Recovery Project will be within the range of elevations that has been experienced in the past, the risk of subsidence which result in damage to infrastructure is **less-than-significant** and these topics will not be evaluated further in the EIR.

#7 -e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The Recovery Project would not require the use of septic tanks or alternative wastewater disposal systems. Temporary portable restrooms would likely be provided for construction workers. Therefore, there would be **no impact** and this topic will not be evaluated further in the EIR.

#7 -f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The Recovery Project sites are located on marine and non-marine sedimentary rock that consist of alluvium, lake, playa, and terrace deposits, and is from the Pleistocene-Holocene ages (CGS 2010b). Sediments associated with Holocene-age alluvium are too young to contain paleontologically sensitive resources and the likelihood of finding paleontological resources is unlikely. However, since the exact age of the bedrock is unknown and paleontological resources are found almost exclusively in sedimentary rock, there is a chance of discovering unknown

paleontological resources within the Recovery Project site. With implementation of the below mentioned mitigation measure impacts would be **less-than-significant with mitigation**.

Mitigation Measure CR-2: Avoid Potential Effects on Paleontological Resources.

In the event that a paleontological resource is uncovered during Recovery Project implementation, all ground-disturbing work within 165 feet (50 meters) of the discovery shall be halted. A qualified paleontologist shall inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts will occur, no further effort shall be required. If the resource cannot be avoided and may be subject to further impact, a qualified paleontologist shall evaluate the resource and determine whether it is "unique" under CEQA, Appendix G, part VII. The determination and associated plan for protection of the resource shall be provided to the District for review and approval. If the resource is determined not to be unique, work may commence in the area. If the resource is determined to be a unique paleontological resource, work shall remain halted, and the paleontologist shall consult with the District staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA. Preservation in place (i.e., avoidance) is the preferred method of mitigation for impacts to paleontological resources and shall be required unless there are other equally effective methods. Other methods may be used but must ensure that the fossils are recovered, prepared, identified, catalogued, and analyzed according to current professional standards under the direction of a qualified paleontologist. All recovered fossils shall be curated at an accredited and permanent scientific institution according to Society of Vertebrate Paleontology standard guidelines; typically, the Natural History Museum of Los Angeles County and University of California, Berkeley accept paleontological collections at no cost to the donor. Work may commence upon completion of treatment, as approved by the District.

With the incorporation of Mitigation Measure CR-2, potentially significant impacts related to paleontological resources would be reduced to **less-than-significant** and will not be evaluated further in the EIR.

2.8 Greenhouse Gas Emissions

#8. GREENHOUSE GAS EMISSIONS. Would the project:

#8 -a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes.**	Have No Impact? No.	Have Beneficial Impact? No.
#8 -b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.

2.8.1 *Environmental Setting*

Kern County has not adopted a local plan for reducing greenhouse gas (GHG) emissions. The S.J.V.A.P.C.D. has adopted the *Guidance for Valley Land-use Agencies Addressing GHG Emissions Impacts for New Projects under CEQA* (S.J.V.A.P.C.D. 2009). The guidance addresses stationary source projects and development projects.

2.8.2 *Discussion*

#8 -a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

GHG emissions would be generated during the construction phase of the Recovery Project. Temporary GHG emissions, primarily for the use of diesel-powered vehicles, would occur during construction. Equipment that would be used during project implementation is described in the project description. Due to the short-term impacts from the construction phases and minimal impacts during operation, impacts related to the generation of greenhouse gas emissions would be **less than significant** and will not be evaluated further in the EIR.

#8 -b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

California has more than 10 Executive Orders directing state agencies to implement programs to reduce GHG emissions to meet 2030 target of 40 percent below 1990 levels (California, 2018). C.A.R.B. is the primary state agency responsible implementing GHG reduction programs. Kern County does not have an adopted local greenhouse gas reduction plan. The S.J.V.A.P.C.D. provides guidance for addressing GHG emissions from stationary source projects and development projects, but not for development of groundwater banking projects. Therefore, there is no conflict

with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG. There would be **no impact** and this topic will not be evaluated further in the EIR.

2.9 Hazards and Hazardous Materials

#9. HAZARDS AND HAZARDOUS MATERIALS. Would the project:

#9 -a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#9 -b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#9 -c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#9 -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?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#9 -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 or excessive noise for people residing or working in the project area?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#9 -f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#9 -g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.

2.9.1 *Environmental Setting*

To identify known hazardous materials and contaminated sites, a database search was conducted for all data sources in the Cortese List (enumerated in PRC Section 65962.5), including: the GeoTracker database, a groundwater information management system that is maintained by the State Water Resources Control Board (SWRCB); the Hazardous Waste and Substances Site List (i.e., the EnviroStor database), maintained by the California Department of Toxic Substances Control (DTSC); and EPA's Superfund Site database (DTSC 2020, SWRCB 2020a and 2020b, CalEPA 2016). There were no hazardous materials sites identified within 0.25 mile of the CCSB borrow site. There are also no known naturally occurring asbestos hazards in the vicinity of the CCSB borrow site (DOC 2000).

2.9.2 *Discussion*

#9 -a, b, c, d, f, and g. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? 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? f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The Recovery Project would be implemented adjacent to active agriculture, farm roads, and canals. The Recovery Project is located away from population centers; involving hazardous materials; and would rely on electric power rather than liquid fuels. The closest school is the Elk Hills Elementary School located approximately 1 mile southeast of the proposed project. The Recovery Project would not expose people to increased risks from wildland fire as the site is comprised entirely of farmland and are not located within a high severity fire zone. The Recovery Project would not affect emergency response plans as facilities would not interfere with traffic routes or response vehicle transport. There would be **no impact** and these topics will not be evaluated further in the EIR.

#9 -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 or excessive noise for people residing or working in the project area?

Kern County has established an Airport Land Use Compatibility Plan which has been incorporated into the General Plan (Kern County 2012). The purpose of the Airport Land Use Compatibility Plan is to establish procedures and criteria by which the Kern County and affected incorporated cities can address compatibility issues when making planning decisions. The Elk Hills – Buttonwillow Airport is located approximately 3 miles west of the Recovery Project. The Recovery Project is not within the Elk Hills – Buttonwillow Airport Influence Area (Kern County 2012). There would be **no impact** and this topic will not be evaluated further in the EIR.

2.10 Hydrology and Water Quality

#10. HYDROLOGY AND WATER QUALITY. Would the project:

#10 -a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes**.	Have No Impact? No.	Have Beneficial Impact? No.
#10 -b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Have Potentially Significant Impact? **Yes.**	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? No.	Have Beneficial Impact? No.
#10 -c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:					
#10 -c. i. result in substantial erosion or siltation on- or off-site;	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes**.	Have No Impact? No.	Have Beneficial Impact? No.
#10 -c. ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	Have Potentially Significant Impact? **Yes.**	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? No.	Have Beneficial Impact? No.
#10 -c. iii. 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; or	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes**.	Have No Impact? No.	Have Beneficial Impact? No.
#10 -c. iv. impede or redirect flood flows?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation	Have Less-than-Significant Impact? **Yes**.	Have No Impact? No.	Have Beneficial Impact? No.

		Incorporated? No.			
#10 -d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Have Potentially Significant Impact? **Yes.**	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? No.	Have Beneficial Impact? No.
#10 -e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes**.	Have No Impact? No.	Have Beneficial Impact? No.

2.10.1 *Environmental Setting*

The District, established in 1924, is a public agency, which supplies surface water from the Kern River and State Water Project (SWP) via the California Aqueduct and pumps groundwater to agricultural customers, primarily. The District's principal source of surface water is the Kern River. The District has utilized Kern River water under a schedule of long-standing diversion rights. Typically, surface water supplies meet the majority of the Districts water demand, the remaining water demands are meet from privately-owned wells.

2.10.2 *Discussion*

#10 -a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

In order to evaluate the impacts to water quality, water pumped from the proposed wells would need to be tested during and after the construction of the wells. In the event that water quality monitoring finds that the existing groundwater is not the same or better than the water in the California Aqueduct, then blending will be used to meet water quality standards in the Aqueduct. If additional water treatment facilities are determined to be needed, these facilities would be subject to a separate CEQA process at the time it is proposed. This impact is **less-than-significant,** and impact to water quality or waste discharge requirements will not be evaluated further in the EIR.

#10 -b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The Recovery Project will recover groundwater banked in existing District recharge facilities, including the District canals and the Palms Groundwater Bank. Groundwater modeling will be conducted to evaluate the potential impact of the proposed operational scenario. The results of the

groundwater modeling will be included in the EIR. This impact is **potentially significant** and will be evaluated further in the EIR.

#10 -c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

#10 -i, ii, iii, and iv) Result in substantial erosion or siltation on- or off-site; Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; 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; or Impede or redirect flood flows?

The Recovery Project will not alter the existing drainage pattern of the site or the area, therefore there will be **no impact** and this topic will not be evaluated further in the EIR.

#10 -d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The Recovery Project is not located in a flood hazard, tsunami, or seiche zone, therefore there will be **no impact** and this topic will not be evaluated further in the EIR.

#10 -e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Recovery Project purpose is to enhance groundwater management by increasing the District's ability to recharge groundwater in wet years and return that banked water in dry years. Groundwater levels would decrease when water is groundwater is pumped to meet to local demands or for delivery to agricultural users, however the Recovery Project would be operated to provide a long-term benefit to the basin. Therefore, the impact is **less-than-significant,** and this topic will not be evaluated further in the EIR.

2.11 Land Use and Planning

#11. LAND USE AND PLANNING. Would the project:

#11 -a. Physically divide an established community?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#11 -b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.

2.11.1 *Environmental Setting*

The Recovery Project site is zoned as agriculture (Kern County 2020). The Recovery Project is located in a rural area and are surrounded by various agricultural crops and water conveyance canals.

2.11.2 *Discussion*

#11 -a and b. Physically divide an established the community, and cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The Recovery Project would be developed within existing farm roads, in areas zoned for agriculture (Kern County 1988). The Recovery Project is located outside of existing communities and are consistent with existing zoning. There are no adopted HCPs, NCCPs, other local, regional, or state habitat conservation plans within the site or vicinity, *see* Section 2.11 "Biological Resources". There would be **no impact** and these topics will not be evaluated further in the EIR.

2.12 Mineral Resources

#12. MINERAL RESOURCES. Would the project:

#12 -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?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes.**	Have No Impact? No.	Have Beneficial Impact? No.
#12 -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?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.

2.12.1 *Environmental Setting*

The Recovery Project sites are located within a Surface Mining and Reclamation Act of 1975 (S.M.A.R.A.) study area for aggregate materials in the Bakersfield production-consumption region. The Recovery Project is locations are designated as mineral resource zone [MRZ]-3 (areas containing mineral deposits, the significance of which cannot be evaluated from available data) (DOC 2009).

2.12.2 *Discussion*

#12 -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?

The Recovery Project is located in a S.M.A.R.A. study area and though unlikely, have the potential to contain mineral resources. The Recovery Project would include the construction of nine new wells and approximately 11.9 miles of conveyance pipeline. The pipelines would be installed primarily in or along the edge of existing dirt roads within agricultural fields. The Recovery Project is not located in areas of known significant mineral deposits. Although unlikely, there is potential for the temporary loss of access to a small amount of mineral resources, however, the amount that could be lost would be minimal and would not affect the overall availability of mineral resources in Kern County. Therefore, this impact would be **less-than-significant,** and loss of available mineral resources will not be evaluated further in the EIR.

#12 -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?

The Recovery Project is not located within the vicinity of a locally important mineral resource recovery site. There would be **no impact** and this topic will not be evaluated further in the EIR.

2.13 Noise

#13. NOISE. Would the project:

#13 -a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable standards of other agencies?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes.**	Have No Impact? No.	Have Beneficial Impact? No.
#13 -b. Generation of excessive groundborne vibration or groundborne noise levels?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? **Yes.**	Have No Impact? No.	Have Beneficial Impact? No.
#13 -c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 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?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.

2.13.1 *Environmental Setting*

The Recovery Project is located in a predominately agricultural area. The closest sensitive receptor is located approximately 300 feet from the Recovery Project. Interstate 5 is located approximately 0.5 mile from the eastern most pipeline segment. The Kern County Code of Ordinances states that construction related noise is limited to the hours of 6:00 a.m. to 9:00 p.m. on weekdays and 8:00 a.m. to 9:00 p.m. on weekends (Kern County 2020).

2.13.2 *Discussion*

#13 -a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable standards of other agencies?

Construction of the Recovery Project would temporarily increase the ambient noise levels within the vicinity of the project site due to the use of heavy machinery during construction activities. Increase ambient noise would occur intermittently during the construction of the well. All work at the Recovery Project sites would be limited to the hours identified in Kern County's Noise Ordinance.

Although construction activities would for the most part occur only during the daytime hours, uncontrolled construction noise could still be considered disruptive to residents adjacent to the Recovery Project. The closest residence is approximately 300 feet from the Recovery Project; however, impacts would be short-term and nonsignificant. Typical composite noise levels for construction activities, and distances of various noise contours from construction sites are presented in **Table 2-5**.

Table 2-5. Typical Noise Levels During Construction.

		Approximate Distance (feet) to Reduce Noise to Given dBA, Leq)[1]		
Construction Activity	**Noise Level at 50 feet (dBA), equivalent continuous sound level in decibels [Leq])[2]**	**60**	**65**	**70**
Ground Clearing	84	790	450	250
Excavation	89	1,400	800	450
Well drilling (driver)	80	430	235	150
Foundation	78	400	220	130
Erection	85	890	500	280
Finishing (exterior)	89	1,400	800	450

Notes:

1 EPA, Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, December 1971; United States Department of Transportation, Federal Highway Administration, Office of Planning, Environment, and Realty, Roadway Construction Noise Model, June 28, 2017.

2 Calculations assume a 6 dBA reduction for each doubling of distance from the noise source.

dBA = A-weighted decibels

Leq = equivalent continuous sound level in decibels

During operations, minimal noise would be generated from the use of existing electric well motors and pumps. Impacts related to noise levels would be **less-than-significant** and will not be evaluated further in the EIR.

#13 -b. Generation of excessive groundborne vibration or groundborne noise levels?

Ground vibration would only be caused during construction activities and would primarily occur during well drilling. Vibrations could be detectable by nearby sensitive receptors. One residence is located approximately 300 feet from the Recovery Project. The closest proposed well is approximately 0.5 east of this residence. Construction activities associated with the installation of the all proposed well would be short-term. No adverse levels of vibration would be generated during project operations. Therefore, impact related to groundborne vibration or noise levels would be **less-than-significant** and will not be analyzed further in the EIR.

#13 -c) For a project located within-the vicinity of a private airstrip or-an airport land use plan or, where such a plan has not been adopted, within 2 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?

Kern County has established an Airport Land Use Compatibility Plan which has been incorporated into the General Plan (Kern County 2012). The Elk Hills – Buttonwillow Airport is located

approximately 3 miles west of the Recovery Project. The Recovery Project is not within the Elk Hills – Buttonwillow Airport Influence Area (Kern County 2012). The Recovery Project would not expose people residing or working in the area to excessive noise levels. There would be **no impact** and this topic will not be analyzed further in the EIR.

2.14 Population and Housing

#14. POPULATION AND HOUSING. Would the project:

#14 -a. Induce substantial unplanned 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)?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#14 -b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.

2.14.1 *Environmental Setting*

The Recovery Project is located in an unincorporated area of Kern County. The population was estimated in 2019 to be 916,464 in Kern County (Department of Finance [DOF] 2019).

2.14.2 *Discussion*

#14 -a and b) Induce substantial unplanned 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) or displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The Recovery Project would increase the amount of water available for domestic and municipal wells that provide water to residences located within the District boundaries and the surrounding towns, as well as replenish groundwater under the Tule Elk Reserve. The Recovery Project is located in a primarily agricultural area away from population centers; therefore, the Recovery Project would not be growth inducing. The Recovery Project would not result in the development of new housing, nor would it displace people or housing. The Recovery Project would not require additional employees to operate. There would be **no impact** and these topics will not be evaluated further in the EIR.

2.15 Public Services

#15. PUBLIC SERVICES. Would the project:

#15 -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:	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
Fire protection?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
Police protection?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
Schools?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
Parks?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
Other public facilities?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.

2.15.1 *Environmental Setting*

The Kern County Sheriff and California Highway Patrol provide law enforcement services for the unincorporated Kern County. The Kern County Fire Department provides fire protection to residents of the unincorporated areas of the County, and the cities of Arvin, Delano, Maricopa, McFarland, Ridgecrest, Shafter, Tehachapi and Wasco (Kern County 2004b). A mutual agreement between the County and the cities of Bakersfield, Taft, and California City allows for protection and assistance in the jurisdiction of each as needed. The County also has a mutual aid contract with U.S.F.W.S. and a service agreement with the Bureau of Land Management.

2.15.2 *Discussion*

#15 -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:

The Recovery Project would not require new or altered government facilities, as the Recovery Project would not increase the need for public services from the existing conditions. There would be **no impact** and these topics will not be evaluated further in the EIR.

2.16 Recreation

#16. RECREATION. Would the project:

#16 -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?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#16 -b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.

2.16.1 *Environmental Setting*

The Tule Elk Reserve borders the eastern side of the proposed project. The Tule Elk Reserve protects a small herd of Tule elk that were once in danger of extinction, as well as offering recreational benefits to the public by having picnic areas and interpretive exhibits for public use (DPR 2020).

2.16.2 *Discussion*

#16-a and b. 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 or include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

The Recovery Project is not growth inducing and would not increase the use of existing parks or recreational facilities or require the construction or expansion of recreational facilities. There would be **no impact** and these topics will not be evaluated further in the EIR.

2.17 Transportation

#17. TRANSPORTATION. Would the project:					
#17 -a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#17 -b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#17 -c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#17 -d. Result in inadequate emergency access?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.

2.17.1 *Environmental Setting*

The Recovery Project is located near the town of Buttonwillow, Kern County. Access to the site is provided via Interstate 5. There are no transit or on-street bicycle/pedestrian facilities near the Recovery Project site.

2.17.2 *Discussion*

#17 -a, b, c, and d). Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)? Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? Result in inadequate emergency access?

The Recovery Project would not conflict with any program plan, ordinance, or policies. Construction traffic would utilize existing public roads to deliver equipment, supplies, and workers to and from the site. Construction of the Recovery Project would result in a total of 3,463 vehicle trips. The Recovery Project would be implemented in agricultural fields and along dirt roads located on the edge of the agricultural fields. Therefore, the Recovery Project would not require any road closures or result in inadequate emergency access. Since no new roads are being developed, there would be no increase hazards due to a geometric design feature or incompatible uses. Therefore, the impact is **less-than-significant,** and these topics will not be evaluated further in the EIR.

2.18 Tribal Cultural Resources

#18. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

#18 -a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or	Have Potentially Significant Impact? **Yes.**	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? No.	Have Beneficial Impact? No.
#18 -b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Have Potentially Significant Impact? **Yes.**	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? No.	Have Beneficial Impact? No.

2.18.1 *Environmental Setting*

A Tribal Sacred Lands search has not yet been completed for the project. The District sent a letter to the Torres Martinez Desert Cahuilla Indians in accordance with requirements of Assembly Bill 52 (PRC Section 21080.3.1). A request for consultation has not been received. Should a request for consultation be received, a summary report of the consultation process included in the subsequent EIR for review by the District Board of Directors prior to their consideration of the project. All potential impacts to tribal cultural resources from the implementation of the Recovery Project will be discussed further in the subsequent EIR, and the level of impact may change from what is stated below.

2.18.2 *Discussion*

#18 -a and b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k)? A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In

applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

The Recovery Project has the potential to cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC sections 21074, 5020.1(k), or pursuant to criteria set forth in section 5024.1(c). Therefore, impacts related to tribal cultural resources are considered **potentially significant** and will be analyzed further in the EIR.

2.19 Utilities and Service Systems

#19. UTILITIES AND SERVICE SYSTEMS. Would the project:

#19 -a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#19 -b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#19 -c. 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?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#19 -d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#19 -e. Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.

2.19.1 *Environmental Setting*

The Recovery Project and vicinity are served by PG&E, Southern California Edison, and Southern California Gas (Kern County 2004a). Sewage disposal is handled by both public and private agencies, and by private individual systems. Several incorporated and unincorporated communities are severed by wastewater treatment plants managed by community service districts. The closest wastewater treatment plant is the Bakersfield wastewater plant. Domestic water is serviced to the public by various water purveyors consisting of public and private water systems. The Kern County Waste Management Department currently owns and operates 7 Class II Landfills, the

closest one being the Taft Landfill located approximately 8.5 miles south of the proposed project. (Kern County 2004b).

2.19.2 *Discussion*

#19 -a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No utility services would need to be constructed or expanded as a result of the Recovery Project. There would be **no impact** and this topic will not be evaluated further in the EIR.

#19 -b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

The Recovery Project would not require a water supply. There would be **no impact** and this topic will not be evaluated further in the EIR.

#19 -c. 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?

See Question "a" above. The Recovery Project would not result in a significant amount of wastewater. There would be **no impact** and this topic will not be analyzed further in the EIR.

#19 -d and e) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? Comply with Federal, State, and local management and reduction statues and regulations related to solid waste?

The Recovery Project would not create substantial amounts of solid waste, and as such would not exceed the capacity of local infrastructure. The Taft Landfill has a remaining capacity of approximately 7,380,708 cubic yards, with a maximum permitted throughput of 800 tons/day. Minimal waste would be generated during construction and no increase in waste production would occur during the operation of the Recovery Project. The project would comply with federal, state, and local management and reduction statues and regulations related to solid waste. There would be **no impact** and these topics will not be evaluated further in the EIR.

2.20 Wildfire

#20. WILDFIRE. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, **would the project:**

#20 -a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#20 -b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#20 -c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.
#20 -d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? **Yes.**	Have Beneficial Impact? No.

2.20.1 *Environmental Setting*

The Recovery Project is not located in a high severity fire zone (CALFIRE 2007a and 2007b). The Kern County Fire Department provides fire protection for residents of the unincorporated areas of the County and the cities of Arvin, Delano, Maricopa, McFarland, Ridgecrest, Shafter, Tehachapi and Wasco (Kern County 2004b).

2.20.2 *Discussion*

#20 -a, b, c, and d) Substantially impair an adopted emergency response plan or emergency evacuation plan? Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? Require the installation or maintenance of associated infrastructure (such

as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The Recovery Project is located in a high severity fire zone; however, implementation of the proposed project would not increase the fire risk. There would not be an increase in the number of users at the site that could impair emergency response or evacuation. Additionally, the short-term, temporary nature of construction and the intermittent nature of material drop-off via large trucks at the site would not pose a risk to emergency response or evacuation during an emergency. The Recovery Project would not require any infrastructure that would exacerbate fire risk or the risk of flooding, slope instability, or drainage changes. There would be **no impact** and these topics will not be evaluated further in the EIR.

2.21 Mandatory Findings of Significance

#21. MANDATORY FINDINGS OF SIGNIFICANCE. Would the project:

#21 -a. 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, substantially 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?	Have Potentially Significant Impact? **Yes.**	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? No.	Have Beneficial Impact? No.
#21 -b. 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 projects, the effects of other current projects, and the effects of probable future projects)?	Have Potentially Significant Impact? **Yes.**	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? No.	Have Beneficial Impact? No.
#21 -c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Have Potentially Significant Impact? **Yes.**	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? No.	Have Beneficial Impact? No.

2.21.1 *Discussion*

#21 -a. Would 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, substantially 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?

The analysis conducted in this IS concludes that implementation of the Recovery Project could have a potentially significant impact on the environment. This impact would be **potentially significant** and will be evaluated further in the subsequent EIR.

#21 -b. Would 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 projects, the effects of other current projects, and the effects of probable future projects.)

The Recovery Project has the potential to have cumulative impacts on water quality. To consider cumulative impacts[1] to the environment, past, present, and reasonably foreseeable probable future projects that discharge non-project water into the California Aqueduct would need to be considered and analyzed for potential cumulative impacts to water quality. Impacts to water quality or quantity are considered **potentially significant** and will be discussed further in the subsequent EIR.

#21 -c. Would the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

The Recovery Project would have the potential to cause substantial adverse effects on human beings from potential impacts to water quality or quantity. This impact would be **potentially significant** and will be discussed further in the subsequent EIR.

[1] The CEQA Guidelines, Section 15355 state, "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

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