

CONSOLIDATED IRRIGATION DISTRICT

Rose Recharge Basin

Initial Study and Environmental Checklist

June 2026

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ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1. Project Title:	Rose Recharge Basin
2. Lead Agency Name and Address:	Consolidated Irrigation District, 2255 Chandler St., Selma, CA 93662
3. Contact Person and Phone Number:	Michael Carbajal; 559-896-1660
4. Project Location:	Approximately 2 miles E of Selma in Fresno County; 36.57231°, -119.56035°, APN 393-031-23
5. Project Sponsor's Name and Address:	Consolidated Irrigation District
6. General Plan Designation:	Agriculture
7. Zoning:	AE-20

PROJECT DESCRIPTION:

The proposed project includes construction of a new approximately 34-acre recharge basin, including earthwork and structures, on Consolidated Irrigation District (District)-owned land at 12796 Rose Avenue, identified as APN 393-031-23 in Fresno County (See Figure 1). With two exceptions, the site is currently vacant and clear of vegetation, having previously supported vine crops. There is one large cork tree and one large oak tree on the property that will be maintained by constructing a “peninsula” levee around them. The project could potentially provide over 2,000 acre-feet of groundwater recharge annually based on an assumed infiltration rate of one foot per day for approximately 60 days per year.

Compacted earthen levees will be constructed along the perimeter of the site and one interior levee running in the east-west directly will divide the basin roughly in half. The levees will be approximately 4-feet above existing ground and keyed into the existing soil to a depth of 18-inches. The top of the levees will be 20-feet wide and the sides will be sloped at 5:1 (horizontal to vertical). Soil material used to construct the levees will be excavated from the interior of the site such that the volumes of excavation and levee fill are roughly equal and no soil material will need to be imported or exported from the site.

The District's Kingsburg Branch Canal runs along the northeast border of the site and near to the east border. A new concrete turnout structure will be constructed on the west bank of the canal a short distance upstream of an existing canal check structure. The turnout will include

a metal trash rack at the inlet and canal gate with an integral acoustic flow meter. A concrete pipeline will cross under the northeastern levee, connecting the turnout structure to the basin. The area around the pipe outlet will be armored with rip rap rock slope protection to minimize erosion. A second concrete structure with a canal gate and pipeline will be constructed through the interior levee to regulate discharges from the northern to the southern half of the basin. A new barbed wire fence will be constructed along the site perimeter with one or more vehicle access gates.

An existing agricultural production well located on the site will be abandoned in accordance with Fresno County requirements. An existing domestic well located near the aforementioned cork and oak trees will be preserved and used strictly for measuring groundwater levels. Two existing homes and several agricultural buildings which are clustered together near the domestic well and the two trees will be demolished and removed from the site. Prior to demolition, the existing building materials will be tested for the presence of asbestos, and if necessary, remediation will be implemented.

Project Location:

The Proposed Project is located approximately 2 miles east of Selma, California. It is bordered by Rose Avenue to the south and the Kingsburg Branch Canal to the north and east. The project latitude is 36.57231° and the longitude is -119.56035°.

Figure 1: Project Location Map

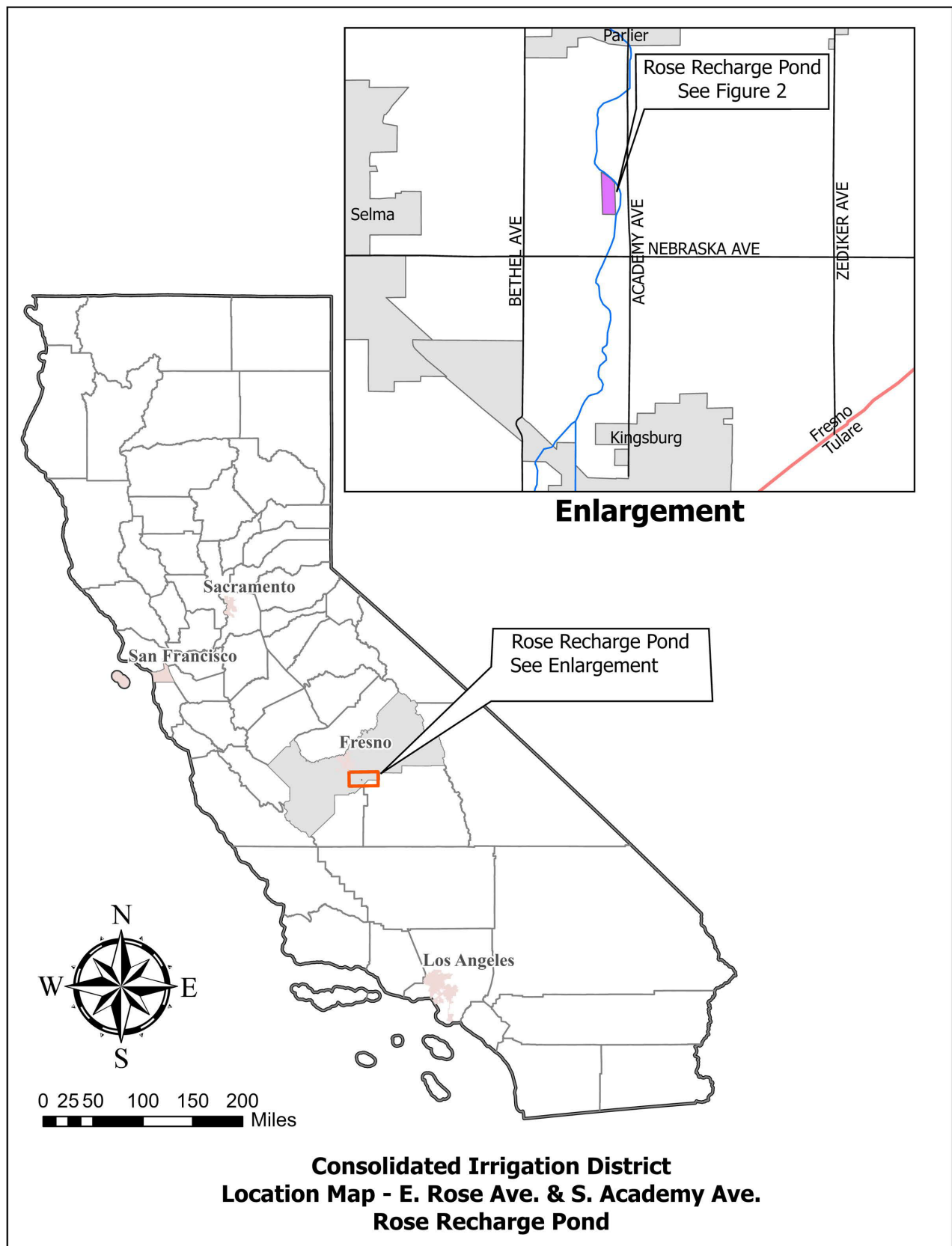


Figure 2 – Proposed Project Site Map



Project Surrounding Land Use

The Proposed Project site is completely surrounded by active agriculture or agricultural support facilities, including canals, roads, homes and farm buildings. The site is not farmed, and is maintained to prevent weed growth.

Other Agency Approval

The Proposed Project does not require any approval from other agencies.

California Native American Interest

The Proposed Project site has no known tribal or cultural interests from any Native American tribe.

Construction Component Description

Construction of the recharge basin would be completed over approximately six months. Access to the site would be via Rose Avenue. The site would be cleared of any existing vegetation, fencing, structures, and other debris. Construction would include mobilization, site preparation, shallow excavation and embankment construction, new concrete structures, and installation of new canal gates, metal work, and fencing. New embankment construction would not exceed six feet, measured from the exterior toe to the top of new levee. The existing production well would be backfilled and capped in accordance with Fresno County requirements for well abandonment.

Construction would likely involve the following equipment:

- Excavators
- Graders
- Loaders
- Hauling trucks
- Scrapers
- Compactors
- Bull dozers
- Tractors with discing units
- Water trucks, watercannons, and hoses for dust control and soil moisture conditioning

Post-construction activities would include commissioning and site clean-up. Construction would require temporary staging and storage of materials and equipment. Staging areas would be located onsite.

OPERATIONS AND MAINTENANCE

The District's operation of the basin would be consistent with their operation of other similar facilities. When water is available for groundwater recharge, it will be delivered through the District's canals and diverted into the recharge basin. Groundwater levels would be periodically measured at the monitoring well on site as well as other nearby wells in the District's monitoring well network. Maintenance would include vegetation control, ripping the bottom of the basin to maintain good infiltration rates, and occasionally regrading areas with erosion or settlement.

PROJECT PERMITS

- State Water Resources Control Board – National Pollutant Discharge Elimination System Construction General Permit.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. Where checked below, the topic with a potentially significant impact will be addressed in an environmental impact report.

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

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- ☒ I find that the proposed project could not have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- ☐ I find that although the proposed project COULD have a significant effect on the environment, there WILL NOT be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- ☐ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- ☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Printed Name

Title

Agency

1.1 AESTHETICS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. Aesthetics.				
Except as provided in Public Resources Code section 21099 (where aesthetic impacts shall not be considered significant for qualifying residential, mixed-use residential, and employment centers), would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
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 publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

1.1.1 Environmental Setting

The Proposed Project site is entirely surrounded by active agriculture and agricultural support facilities, including roads, canals, and farm shops and barns. Crops in the vicinity of the site are primarily perennial crops including grape vineyards, and orchards (primarily almond and walnut), with some annual field crops. The Proposed Project site includes two uninhabited houses and other farm structures as well as a large oak tree, a large cork tree and other smaller trees. The Proposed Project site is bordered by Consolidated Irrigation District's Kingsburg Branch Canal on the northeast, Rose Avenue on the south, and existing farm land and farm-related facilities on the east and west sides.

The Proposed Project would include four-foot high levees along the perimeter of a 34-acre parcel to form a basin. New canal turnout facilities would connect the basin to Consolidated Irrigation District's Kingsburg Branch Canal which would deliver water supplies to the basin for groundwater recharge. The existing houses and other farm structures and smaller trees would be demolished and removed from the site. A peninsula levee would be constructed from the east levee to preserve the existing oak and cork trees and provide access to the monitoring well.

Public viewing of the site is only possible from Rose Avenue. After construction, the public view would be of maintained levees, approximately four feet in height, in the foreground, with the basin in the background, consistent with other agricultural storage and recharge basins

common in the area. Depending on the time of year, migrating waterfowl may use the site for foraging and provide an opportunity for bird watching.

1.1.2 Discussion

- a) Have a substantial adverse effect on a scenic vista?

Although the reservoir will be visible from Rose Avenue and different from the current vista, it is not inconsistent with the existing vista and would not represent a significant aesthetic change. The current vista is of uncultivated farmland and abandoned structures, which would be improved with the Proposed Project.

- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The Proposed Project is not located within a state scenic highway.

- 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 publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The current vista is of uncultivated farmland and uninhabited structures, which provide no substantial visual character or quality to public view. The Proposed Project would construct levees that would impound water, creating a new, pleasant vista for the public.

- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The Proposed Project will not include significant lighting and will have no impact on day or nighttime views in the area

1.2 AGRICULTURE AND FOREST RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. Agriculture and Forest Resources.				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.				
In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

1.2.1 Environmental Setting

The Proposed project is located in southern Fresno County in a region dominated with active agriculture. Crops in the vicinity of the site are a combination of almond and walnut orchards, vineyards, and some annual field crops. The District provides irrigation water to farmers within its service area, as well as groundwater recharge and management of groundwater supplies within its boundaries.

The Proposed Project site is classified as Prime Farmland by the California Department of Conservation, however the site is no longer farmed. The proposed project will construction a groundwater recharge basin on the site which will provide up to 2,000 acre feet of groundwater

recharge annually. The Proposed Project will directly support agricultural activities within Consolidated Irrigation District by contributing to long-term groundwater sustainability.

1.2.2 Discussion

- 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?

The proposed project will occupy a site designated by the California Department of Conservation as Prime Farmland. However, it has not been farmed since 2024. The Proposed Project directly supports agricultural operations and is critical to long-term groundwater sustainability.

- b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

The proposed project will support agricultural operations. The project is located in southern Fresno County and zoned AE-20. The Proposed Project is consistent with the AE-20 zoning. The project parcel is not enrolled in a Williamson Act contract.

- c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

The proposed project site is not forest or timberland.

- d) Result in the loss of forest land or conversion of forest land to non-forest use?

The proposed project site is not forest land nor will it affect any forest land.

- 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 land on which the Proposed Project would be constructed is not an actively farmed parcel. The proposed project will support agricultural operations within the District by providing groundwater recharge in a region that is highly dependent on groundwater supplies.

1.3 AIR QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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III. 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.

Are significance criteria established by the applicable air district available to rely on for significance determinations? ☒ Yes ☐ No

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒

1.3.1 Environmental Setting

The Project footprint lies between Rose Avenue and the Floral Avenue alignment, approximately two miles east of Selma in southern Fresno County. The surrounding area includes canals and ditches of varied sizes which are used to convey water for irrigation, barns, farm storage yards and shops, farm housing, and farmed fields and orchards. The Site is bounded by Rose Avenue on the south, the Floral Avenue alignment on the north, the Kingsburg Branch canal on the northeast, and active agriculture on the east and west sides.

The Project is located within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). A 23,490 square-mile area, that consists of approximately 4 million residents, several major metropolitan areas, agricultural land, industrial sources, highways, and schools. The San Joaquin Valley Air Basin (SJVAB) is generally characterized as having mild winters interrupted by periods of extremely hot summer weather. Air basins share a common "air shed", the boundaries of which are defined by surrounding topography. Although mixing between adjacent air basins inevitably occurs, air quality conditions are relatively uniform within a given air basin. The Air Basin experiences episodes of atmospheric mixing caused by inversion layers formed when temperature increases with elevation above ground, or when a mass of warm, dry air settles over a mass of cooler air near the ground.

The SJVAB has been designated a non-attainment area for federal and state standards for federal PM_{2.5} and ozone standards, and is in attainment of the federal standards for lead (Pb),

Nitrogen dioxide (NO₂), Sulfur dioxide (SO₂), and Carbon monoxide (CO). In addition, the Valley is an attainment/maintenance area for PM₁₀. The State of California and the Federal government have established ambient air quality standards, or criteria, for outdoor air pollutants to protect public health. The U.S. Environmental Protection Agency established national ambient air quality standards pursuant to adoption of the federal Clean Air Act. The California Air Resources Board (CARB) establishes state air quality standards under the mandate of the Mulford-Carrell Act. California standards have been established for ozone (O₃), carbon monoxide (CO), nitrogen oxide (NO_x), sulfur dioxide (SO_x), particulate matter, lead, sulfates, hydrogen sulfide, vinyl chloride and visibility reducing particles.

The primary air quality concerns for the Proposed project are related to earthwork activity dust emissions (generated from clearing the site during the demolition phase and the construction of the basin levees), and vehicle emissions (associated with operations of gasoline and diesel powered heavy-duty mobile construction equipment). SJVAPCD has one rule that addresses fugitive dust (Rule 403). Several elements of Rule 403, such as protocols for control of potential fugitive dust emissions, have been incorporated into this project. Excavation/trenching, loading, and transport of aggregate materials and soils will be in compliance with Rule 403 prevention, reduction, and Best Management Practices for fugitive dust emissions. However, notification of the SJVAPCD is required only for large operations (disturbing more than 100 acres). Therefore, no notification or filing of a Fugitive Dust Emission Control Plan is required due to the project size.

The Proposed Action would involve the operation of construction equipment to construction the Proposed Project as described above. The construction period would last approximately six months from May through October. The California Emissions Estimator Model (CalEEMod) was utilized to estimate the emissions from project construction, which are presented below, along with the SJVAPCD emission thresholds. Emissions were modeled with required Tier 4 construction equipment and dust control site watering.

Rose Recharge Pond Project – Summary of Construction Emissions

	CO	NO _x	ROG	SO _x	PM ₁₀	PM _{2.5}
Threshold (tons per year)	100	10	10	27	15	15
Total Construction Emissions (tons)	0.45	0.25	0.01	<0.005	0.04	0.01

As indicated in the table above, emissions from project construction would not exceed SJVAPCD emission thresholds and would not cause an adverse impact to air quality.

Post construction operations will not cause emissions impacting air quality compared to existing conditions. There are no pump stations or other facilities that would generate emissions and vehicle trips along the Kingsburg Branch Canal to operate the basin turnout would not be different from existing conditions.

1.3.2 Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

The Proposed Project will not conflict or obstruct the implementation of any applicable air quality plan. Emissions related to the construction of the Proposed Project will be limited to the

construction period and are less than the thresholds established by the SJVAPCD. Operation of the proposed project will not result in any emissions.

- 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?

The Proposed Project will not result in an increase in emissions. Emissions caused by the construction of the Proposed Project will be limited to the construction phase and would not exceed San Joaquin Valley Air Pollution Control Board thresholds. Project operations will not result in emissions.

- c) Expose sensitive receptors to substantial pollutant concentrations?

There are no sensitive receptors in the vicinity of the project nor any production of substantial pollutants.

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

The Proposed Project site is not in the vicinity of significant housing, schools, or office buildings and will not generate any emissions associated with odors.

1.4 BIOLOGICAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. Biological Resources.				
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

1.4.1 Environmental Setting

The Proposed Project site is surrounded by active agriculture, including orchards and vineyard crops, field crops, and farmsteads. Rose Avenue runs along the southerly boundary of the project and the Kingsburg Branch Canal runs along the northeasterly boundary and near the east boundary of the project.

The project site was historically farmed with vines. Two existing homes, several agricultural buildings, a domestic well and agricultural production well are clustered together in the southern half of the site. The remainder of the site is currently denuded of vegetation and structures. The homes and building will be demolished, the domestic well will be preserved for

groundwater monitoring, and the production well will be abandoned in accordance with county requirements. An existing oak tree and a cork tree, located near the agricultural buildings, will remain and be protected during project construction.

The proposed project will construct a groundwater recharge basin on the site to support long-term agricultural water supplies. Earthen levees will be constructed along the perimeter and an interior levee will divide the basin into two cells. A peninsula will extend from the easterly levee to preserve the oak and cork trees.

A biological survey was performed at the Proposed Project site to identify any critical habitat and signs of use by special-status species. Additionally, the California Natural Diversity Database (CNDDDB) was queried to identify any special-status species that could potentially occur within a 5-mile radius of the project site. A copy of this report is included in Appendix A.

The CNDDDB identified 29 special-status species within a 5-mile radius of the project. However, based on the results of the biological survey, habitat requirements for each of the listed species are not present at the site, with the exception of Swainson's Hawk. Although Swainson's Hawk was not observed, nesting habitat exists nearby and the CNDDDB noted 30 records of Swainson's hawk within 5-miles of the project site.

1.4.2 Discussion

- 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?

There is no habitat on the project site that is utilized by special-status species and a pre-activity survey did not identify the presence of any special-status species. The construction phase of the Proposed Project has the potential to disrupt nesting of Swainson's Hawk and Burrowing Owls. Additional pre-activity surveys will be conducted prior to the start of construction to ensure there are no impacts. If possible, project construction will be scheduled to avoid the Swainson's Hawk nesting period from April through August.

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

There are no riparian habitat or other sensitive habitats at the Proposed Project site.

- 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?

There are no wetlands at the Proposed Project site.

- 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 Proposed Project will not interfere with the movement of wildlife. However, activities during the construction phase may cause wildlife to avoid the area. This would be limited to the construction phase of the Proposed Project.

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

The Proposed Project does not conflict with any local policies or ordinances.

- 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 Proposed Project does not conflict with any conservation plan.

1.5 CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. Cultural Resources.				
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☐	☒
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒

1.5.1 Environmental Setting

A cultural resource is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. The area affected by the Proposed Project covers a field that has been most recently farmed with grapes, along with two houses and other farm related structures. Although the houses and other structures are likely older than 50 years, none of them are unique or are otherwise of cultural significance. Cultivation of a vineyard includes the process of deep ripping the soil to a depth of 24", which is deeper than the proposed construction excavation.

1.5.2 Discussion

- a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

There are no historical resources affected by the Proposed Project.

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

There are no known archaeological resources within the proposed project site.

- c) Disturb any human remains, including those interred outside of formal cemeteries?

There are no known or suspected human remains within the proposed project site.

1.6 ENERGY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy.				
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

1.6.1 Environmental Setting

The Proposed Project is located in a region dominated with active agriculture. Most electrical use in the area is associated with irrigation activities including landowner pump stations and electrically powered well pumps, as wells as office and farms shop electrical use, all of which is provided through Southern California Edison.

Water delivered through the Consolidated Irrigation District's system is conveyed by gravity with very little electrical demand. Water delivered to the proposed project will be diverted from the District's Kingsburg Branch Canal by gravity through a new turnout facility. Water level monitoring and flow measurement systems will have very low power demands and will likely be powered by solar panels. Therefore, there will be no significant electrical demand by the Proposed Project.

1.6.2 Discussion

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

Operation of the proposed project will require very little energy resources.

- b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

The Proposed Project is consistent with state and local renewable energy plans.

1.7 GEOLOGY AND SOILS

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

1.7.1 Environmental Setting

The surface soils of the San Joaquin Valley are a heterogeneous assemblage of alluvium consisting of channel gravels, riverbank sand, silt, and clay, derived from granitic and sedimentary sources (University of California Davis 2008; U.S. Department of Agriculture 2019, cited in AECOM 2019). Most of these sediments were deposited in the Pleistocene and Holocene during times of increased precipitation by runoff from the surrounding Sierra Nevada, Tehachapi, and Coastal ranges. The bedrock beneath the alluvium consists of older marine sediments deposited during the mid-Mesozoic to Cenozoic eras. A series of turbidity currents,

likely caused by undersea earthquakes, landslides, or volcanic eruptions, moved large amounts of sediments downslope to a rapidly subsiding ocean basin. The variable and mixed marine sedimentary, volcanic, and metamorphic rock formations found in the San Joaquin Valley, such as mudstone, sandstone, shale, basalt, andesite, and serpentine, are the result of such erosions and depositions (DeCourten 2010, cited in AECOM 2019).

Fresno County contains the San Joaquin Fault Zone and is located east of the Ortigalita Fault. http://www.conservation.ca.gov/cgs/information/outreach/Documents/Simplified_Fault_Activity_Map.pdf

According to the Fresno County 2040 General Plan Background Report (Fresno County 2017), Chapter 8, Hazards and Safety (page 8-6):

“The Ortigalita fault zone is approximately 50 miles long, originating near Crow Creek in western Stanislaus County and extending southeast to a few miles north of Panoche in western Fresno County. Most of the fault is considered active due to displacement during Holocene time and is designated an earthquake fault zone under the Alquist-Priolo Earthquake Fault Zoning Act of 1994. As illustrated in Figure 4.20, the southernmost extension of the fault lies in Fresno County.”

The Proposed Project does not involve construction of any new buildings or structures that would place people at risk of loss, injury, or death. The Project site is located more than 60 miles from the nearest active fault line.

1.7.2 Discussion

- a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.); ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides?

The Proposed Project does not include any buildings or structures that would place people at risk of injury or death.

- b) Result in substantial soil erosion or the loss of topsoil?

The Proposed Project will not substantially change the grade or flow of stormwater across the subject property and will not increase soil erosion.

- 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?

The existing soil conditions are capable of supporting the Proposed Project.

- 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?

The Proposed Project is not located on expansive soils.

- 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?

The Proposed Project does not make use of any waste disposal systems.

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

There are no known paleontological or geologic resources within the Proposed Project site.

1.8 GREENHOUSE GAS EMISSIONS

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

1.8.1 Environmental Setting

Naturally occurring GHGs include water vapor (H₂O), carbon dioxide (CO₂), methane (CH₄), nitrous oxide (NO₂), and ozone (O₃). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also GHGs, but they are, for the most part, solely a product of industrial activities. Chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) are halocarbons that contain chlorine, while halocarbons that contain bromine are referred to as bromofluorocarbons (i.e., halons). In the amended CEQA Guidelines Section 15364.5, greenhouse gas emissions (GHGs) include, but are not limited to, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. In California, due to stringent air pollution control rules and regulations, natural gas is the only fossil fuel used to fire steam turbine, gas turbine, or combined cycle power plants. The primary concern here is for emissions that would be generated from equipment use (carbon dioxide and nitrous oxide through the burning of fossil fuels) rather than the emissions associated with ongoing agricultural practices (methane and nitrous oxide) and industrial activities (nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride).

The Proposed Project would involve limited use of construction equipment (excavator, backhoe, graders, scrapers, trencher, sheep's foot compactor, and water trucks) to construct the project. The construction period will be limited to approximately 180 days. All construction vehicles will be Tier 4 compliant. An analysis of the greenhouse gas emissions related to construction efforts indicated that they were well below thresholds. Operation of the Proposed Project would not cause any emissions. See Section 1.3

1.8.2 Discussion

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

Emission impacts during construction, as a result of the operation of construction equipment, are limited to the 34-acre project site for a period of approximately 180 days, and are clearly de minimis. Operation of the Proposed Project will not cause any emissions.

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

Fresno County: A Climate Action Plan is a comprehensive and focused plan that includes strategies to guide efforts for reducing GHG emissions. While Fresno County does not have its own Climate Action Plan, described below is the principal regional plan relating to climate change that applies to Fresno County and are most relevant to the Proposed Project in western Fresno County (Fresno County 2017b).

“San Joaquin Valley Air Pollution Control Board Climate Change Action Plan. The SJVAPCD adopted the Climate Change Action Plan (CCAP) in August 2008, which required the District Air Pollution Control Officer to develop guidance for assessing and reducing project-specific GHG emissions. In December 2009, the SJVAPCD adopted the Guidance for Valley Land-use Agencies in Addressing GHG Emissions Impacts for New Projects Under CEQA. The SJVAPCD also adopted a new district policy, Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency. Both the guidance and policy rely on Best Performance Standards (BPS), which assess the significance of project-specific GHG emissions. (page 9-4)”

According to the Valley Air District (SJVAPCD), GHG emission from development projects primarily occur through energy consumption and vehicle miles traveled (VMT). For development projects, BPS includes project design elements, land use decisions, and technologies that reduce GHG emissions. Project proponents can reduce GHG emissions from energy consumption through building designs that increase energy efficiency, water conservation, and the use of energy efficient appliances. For development projects, BPS also includes project design elements, land use decisions, and technologies that reduce GHG emissions during project operation over time. Project proponents can reduce GHG emissions from energy consumption through building designs that increase energy efficiency, water conservation, and the use of energy efficient appliances.

The Valley Air District’s CEQA guidelines are for land use agencies and apply to stationary sources and development projects (SJVAPCD 2009). The Proposed Project does not include any operational components that would generate GHG emissions, and all emissions associated with the Proposed Project are limited to a short construction window.

1.9 HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. Hazards and Hazardous Materials.				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

1.9.1 Environmental Setting

According to the California Health and Safety Code Section 25501(o), "hazardous material" means a material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering regulatory agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released

into the workplace or environment. A number of properties may cause a substance to be considered hazardous including toxicity, ignitibility, corrosivity, or reactivity.

The Proposed Project will not make use of, nor expose existing hazardous materials, nor will it generate hazardous waste.

1.9.2 Discussion

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The Proposed Project does not involve the use of hazardous materials, nor their transport.

- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

The Proposed Project does not involve the use of hazardous materials, nor their transport.

- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The Proposed Project will not cause any emissions or require handling of any hazardous materials. There are no existing or proposed schools within ¼ mile of the Proposed Project site.

- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The Proposed Project is not located on a known or suspected hazardous materials site.

- 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?

The Proposed Project is not located within an airport land use plan.

- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Proposed Project will not interfere with any emergency response or evacuation plan, nor inhibit access to any site for emergency vehicles.

- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The Proposed Project site would not expose people or structures to increased wildfire risk. The Project site will be maintained to prevent excessive weed growth that could contribute to wildfire risk.

1.10 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. Hydrology and Water Quality.				
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☐	☒
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
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:				
i) Result in substantial on- or offsite erosion or siltation;	☐	☐	☐	☒
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒
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	☐	☐	☐	☒
iv) Impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

1.10.1 Environmental Setting

The region surrounding the Proposed Project is dominated by irrigated agriculture. Water for irrigation is supplied by a combination of surface water, supplied through the Kings River and Consolidated Irrigation District's canal system, and pumped groundwater. Consolidated Irrigation District utilizes a number of management tools to sustain groundwater supplies including in-channel recharge, conjunctive use, and direct recharge. These efforts support sustainable water supplies for the District's farmers, are consistent with the local Groundwater

Sustainability Plan (GSP), and are in compliance with the Sustainable Groundwater Management Act (SGMA).

The intent of the Proposed Project is to improve groundwater sustainability by increasing the District's groundwater recharge capacity. The Proposed Project would construct four-foot high levees around a 34 acre parcel to form a groundwater recharge basin. New canal turnout facilities would connect the basin to Consolidated Irrigation District's Kingsburg Branch Canal, which would deliver water supplies to the basin for up to 2,000 acre feet of groundwater recharge annually.

1.10.2 Discussion

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

The Proposed Project will not discharge storm or drain water affecting water quality or generate waste.

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

The Proposed Project will improve groundwater sustainability through groundwater recharge.

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

The Proposed Project will not substantially alter the drainage pattern. The recharge basin will be constructed with approximately 4-foot-high levees, which could retain runoff from the project site. Some storm runoff would be redirected along the toe of the new levees. However, due to the relatively flat slope of the local area, there would not be a substantial change in drainage patterns.

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

The Proposed Project is not within a flood hazard, tsunami, or seiche zone and there is not a risk of pollutant release as a result of project inundation.

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

The Proposed Project will improve groundwater sustainability.

1.11 LAND USE AND PLANNING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. Land Use and Planning.				
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒

1.11.1 Environmental Setting

The Proposed Project is located within a single parcel east of the community of Selma. The project site is entirely surrounded by irrigated agriculture and agricultural support facilities including farm shops and ranch homes. The Proposed Project will construct a groundwater recharge basin within the site parcel and is consistent with zoning, land use planning, and the Districts Groundwater Sustainability Plan (GSP).

1.11.2 Discussion

- a) Physically divide an established community?

The proposed project will not alter any community access routes or otherwise divide any community.

- 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?

The Proposed Project does not conflict with any land use plan or interfere with any mitigation measures. The Proposed Project is in support of the District's GSP.

1.12 MINERAL RESOURCES

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

1.12.1 Environmental Setting

The Proposed Project is located in a region dominated with sandy soil types and active agriculture. There are no known mineral resources being extracted or known quantities of mineral resources.

1.12.2 Discussion

- 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?

There are no known mineral resources of value at the Proposed Project Site.

- 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?

There is no known locally important mineral resource recovery from the Proposed Project Site, nor is the site part of any land use plan or mineral recovery.

1.13 NOISE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII.Noise.				
Would the project result in:				
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 local, state, or federal standards?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
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 two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

1.13.1 Environmental Setting

The current land use in the vicinity of the site is highly developed agricultural. The area in the vicinity of the Proposed Project is entirely surrounded by cultivated agriculture and agriculture-supporting infrastructure. Background noise levels are typical of agricultural practices, including vehicle traffic, farm equipment operations, and aviation operations (including airplane and helicopter crop dusting). There is no airport or airstrip in the vicinity of the Proposed Project and the Proposed Project site is not within an airport land use plan.

Construction of the Proposed Project would involve a limited amount of construction equipment, including graders, excavators, and compactors, which will generate noise and vibrations at levels associated with the operation of such equipment. This noise and vibration generation would be limited to the construction period, during daylight hours, and would not be substantially different than the operation of tractors and other farm equipment operating in the vicinity of the Proposed Project. Post construction operation of the Proposed Project would not include the operation of any equipment that would generate noise of vibration.

1.13.2 Discussion

- 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 local, state, or federal standards?

The noise and vibration generation associated with the Proposed Project would be limited to the construction period and would not be substantially different than the operation of tractors

and other farm equipment operating in the vicinity of the Proposed Project. Post construction operation would not result in the generation of any noise or vibration.

b) Generation of excessive groundborne vibration or groundborne noise levels?

The noise and vibrations generated would be similar to that already generated through existing agricultural operations. This is a less than significant impact.

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 two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The Proposed Project is not within the vicinity of an airstrip or airport land use plan area.

1.14 POPULATION AND HOUSING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. Population and Housing.				
Would the project:				
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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

1.14.1 Environmental Setting

The area in the vicinity of the Proposed Project is highly disturbed and entirely surrounded by cultivated agriculture and agriculture-supporting infrastructure. The Proposed Project would be located in southern Fresno County, approximately 2 miles east of the City of Selma. Rural residences, farmworker housing complexes, and farm offices are spread out across the landscape surrounding the Proposed Project area, and no communities would be affected or created by the Proposed Project.

1.14.2 Discussion

- 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)?

The Proposed Project will not have an impact on population growth either directly or indirectly.

- b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The Proposed Project would not cause any displacement.

1.15 PUBLIC SERVICES

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

1.15.1 Environmental Setting

The project Site is located in an area developed for agricultural operations. Access to public services such as fire and police services is readily available. Emergency response personnel have uninterrupted access to the project Site as necessary. Law enforcement for the Proposed Project area is provided through the Fresno County Sherriff Department and fire protection is provided through the Fresno County Fire Protection District. There are no schools served by the proposed project nor are any located in the vicinity of the Proposed Project. The Proposed Project would not alter or affect parks located in the vicinity of the Site. All proposed activities will be contained within the project Site boundary. Project implementation will not require any new or altered off-Site public utilities or infrastructure services above existing conditions.

1.15.2 Discussion

- a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

No additional or special fire protection services will be required as a result of the Proposed Project.

Police protection?

No additional or special police protection services will be required as a result of the Proposed Project.

Schools?

The Proposed Project will not have any effect on schools, school attendance or school transportation.

Parks?

The Proposed Project will not have any effect on parks.

Other public facilities?

There are no other public facilities in the vicinity of the Proposed Project.

1.16 RECREATION

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

1.16.1 Environmental Setting

Recreational opportunities do not currently exist at or adjacent to the Proposed Project site. The Proposed Project site is zoned for agricultural use and consists of paved and unpaved roadways and irrigation conveyance facilities. The Proposed Project activities will not impact any existing parks or recreational facilities, and does not include construction or modification of recreational facilities. Proposed Project activities will not require public parks or recreation areas to be constructed or expanded. The Proposed Project does not provide recreational uses and would not substantially deteriorate current conditions at the Site.

1.16.2 Discussion

- 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?

There are no neighborhood or regional parks or other recreational facilities in the vicinity of the Proposed Project.

- b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

The Proposed Project does not include any recreational facilities.

1.17 TRANSPORTATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. Transportation.				
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

1.17.1 Environmental Setting

Traffic corridors within the Proposed Project area include Rose Avenue and Academy Avenue, which are proximate to the Proposed Project. Traffic on these roads varies from light to moderate and fluctuates seasonally, mostly as a function of farming activities.

The Proposed Project would result in a small increase in traffic during the construction period as construction workers commute to the Project site and construction vehicles are operated. Construction workers would commute to the Project via county roads and state highways. Construction would be limited to the Proposed Project footprint and would not require any disruption in the flow of traffic or require a traffic control plan. This increase would be limited to the construction phase of the Proposed Project and would not be substantial in relation to the existing traffic load nor exceed the capacity of existing roads or highways. Measurable increases in transportation and/or vehicular circulation are not expected from the Project activities. Construction equipment and worker parking would be on-site, and all construction staging activities would be contained within the project Site. All transportation activities will be performed in strict compliance with all regulations and ordinances. All Department of Transportation and California Highway Patrol safety regulations will be strictly followed. The proposed project would not alter the Site's current emergency access features.

1.17.2 Discussion

- a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

The Proposed Project would result in a short term and small increases in traffic during the construction of the Project. This would be limited to the construction phase and is a less than

significant impact. Operation of the Proposed Project will not result in an increase in traffic compared to existing conditions.

- b) Conflict or be inconsistent with CEQA Guidelines section 15064.3(b), which pertains to vehicle miles travelled?

The Proposed Project is a groundwater recharge basin located within a rural, agricultural unincorporated area. It is not a land use or transportation project; therefore, this section is not applicable (i.e., no impact). The short-term, temporary construction aspect would involve less than 15 workers on-site and does not require a “vehicle miles travelled” (VMT) approach that identifies the amount and distance of automobile traffic attributable to the project. The VMT approach is most suitable for large projects that involve urban land uses and roadway capacity improvements.

- c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The Proposed Project will not include any design features that will introduce or increase transportation hazards.

- d) Result in inadequate emergency access?

The Proposed Project does not require any special emergency access and will not impact emergency access in the vicinity of the project.

1.18 TRIBAL CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. Tribal Cultural Resources.				
Has a California Native American Tribe requested consultation in accordance with Public Resources Code section 21080.3.1(b)?	☐ Yes		☒ No	
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☐	☐	☒
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 Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☐	☐	☒

1.18.1 Environmental Setting

The Proposed Project is located within a developed agricultural region with no known tribal cultural resources. As part of typical agricultural operations, surface disturbances down to a depth of at least 24" have not exposed any buried tribal resources. The proposed groundwater recharge basin would not excavate deeper than 18".

1.18.2 Discussion

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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:

- a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

The Proposed Project site does not include any features that are listed or eligible for listing as historical resources.

- 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 Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

The Proposed Project site does not include any known resources of tribal significance.

1.19 UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. Utilities and Service Systems.				
Would the project:				
a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

1.19.1 Environmental Setting

A variety of public utilities and services are provided in the Proposed Project Region. Electrical power is provided by Southern California Edison and natural gas is provided by the Southern California Gas Company. Irrigation water is provided by the Consolidated Irrigation District. There are no public potable water or sewer systems, water treatment plants, or wastewater treatment plants in the vicinity of the Proposed Project. Domestic water is typically supplied by landowner wells. Energy sources required for implementing the project include gasoline and diesel fuels as well as electricity during the construction phase of the Proposed Project. Additionally, a new turnout from the District's Kingsburg Branch Canal will be constructed. Operation of the Proposed Project will not require any electrical energy.

1.19.2 Discussion

- a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

The Proposed Project will not require any wastewater, stormwater, natural gas, or telecommunication services. Water for groundwater recharge will come from available flood flow in the Kings River.

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

The Proposed Project does not support a current or future development. This category does not apply.

- 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?

The Proposed Project will not produce any wastewater.

- 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?

The Proposed Project will not generate any solid waste.

- e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The Proposed Project will not generate any solid waste.

1.20 WILDFIRE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. Wildfire.				
Is the project located in or near state responsibility areas or lands classified as high fire hazard severity zones?				
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	☐ Yes			☒ No
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Require the installation 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

1.20.1 Environmental Setting

The 2018 California Strategic Fire Plan "...reflects CAL FIRE's focus on (1) fire prevention and suppression activities to protect lives, property, and ecosystem services, and (2) natural resource management to maintain the state's forests as a resilient carbon sink to meet California's climate change goals and to serve as important habitat for adaptation and mitigation. A vision for a natural environment that is more fire resilient; buildings and infrastructure that are more fire resistant; and a society that is more aware of and responsive to the benefits and threats of wildland fire; all achieved through local, state, federal, tribal, and private partnerships."

CAL FIRE provides maps for the state of California showing zones of moderate, high, and very high risk of fire severity.

In southern Fresno, a moderate fire severity zone has been identified at the foothills of the Sierra Nevada Mountains, approximately 16 miles east of the Proposed Project Site. The Proposed Project site is located in an area identified as having no Fire Hazard Severity Zone.

1.20.2 Discussion

- a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

The Proposed Project is not located in or near a state responsibility area or high fire severity zone and will not impair any emergency response or evacuation plan.

- b) Due to slop, 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?

The Proposed Project does not include any occupants. The Project site is in a low lying, relatively flat area, and is not on slopes with winds that exacerbate the risk of wildfires. During the construction period, onsite workers would carry fire suppression devices when operating construction equipment to ensure fire safety from equipment use.

- c) Require the installation 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?

The Proposed Project includes an access road within the site for construction and maintenance of the improvements. Therefore, fire risk in the area would not be exacerbated.

- 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?

The Project would not expose people or structures to significant risks. The Project is located in a relatively flat area and does not include changes to topography that would increase the risk of downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

1.21 MANDATORY FINDINGS OF SIGNIFICANCE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. Mandatory Findings of Significance.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?	☐	☐	☐	☒
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☐	☒
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

1.21.1 Discussion

- a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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 Proposed Project would be constructed at a site that is developed and surrounded by active agriculture, and would allow the District to improve the sustainability of groundwater supplies through opportunistic recharge up to 2,000 acre feet per year. The Proposed Project does not have the potential to degrade environmental quality or threaten any special status species.

- b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

The Proposed Project would not have any cumulatively considerable impacts.

- c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

The Proposed Project would not have any adverse impacts on human beings.

Authority for the Environmental Checklist: Public Resources Code Sections 21083, 21083.5.

Reference: Government Code Sections 65088.4.

Public Resources Code Sections 21080, 21083.5, 21095; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

Appendix A - Biological Survey Report

July 2nd, 2025

Summers Engineering
887 North Irwin Street
Hanford, CA 93232
Attention: Scott Jacobson

CONSOLIDATED IRRIGATION DISTRICT ROSE AVENUE RECHARGE BASIN

The following report has been prepared for Consolidated Irrigation District (District) at the request of Summers Engineering and consists of a database search and site assessment for the Rose Avenue recharge basin project. This document is meant to support the environmental permitting required for the project. Included below are results from the California Natural Diversity Database (CNDDDB) that have occurred within a 5-mile radius of the project site. For any special-status species with the potential to occur, avoidance and minimization measures (AMMs) have been recommended.

PROJECT DESCRIPTION

The proposed project includes construction of a new approximately 34-acre recharge basin, including earthwork and structures, on Consolidated Irrigation District-owned land on Rose Avenue, identified as APN 393-031-23 in Fresno County (See Figure 1). With two exceptions, the site is currently vacant and will be cleared of vegetation, having previously supported vine crops. There is one large cork tree and one large oak tree on the property that will be maintained by constructing a "peninsula" levee around them. The project could potentially provide over 2,000 acre-feet of groundwater recharge annually based on an assumed infiltration rate of one foot per day for approximately 90 days per year.

Compacted earthen levees will be constructed along the perimeter of the site and one interior levee running in the east-west directly will divide the basin roughly in half. The levees will be approximately 4-feet above existing ground and keyed into the existing soil to a depth of 18-inches. The top of the levees will be 20-feet wide and the sides will be sloped at 5:1 (horizontal to vertical). Soil material used to construct the levees will be excavated from the interior of the

site such that the volumes of excavation and levee fill are roughly equal and no soil material will need to be imported or exported from the site.

The District's Kingsburg Branch Canal runs along the northeast border of the site and near to the east border. A new concrete turnout structure will be constructed on the west bank of the canal a short distance upstream of an existing canal check structure. The turnout will include a metal trash rack at the inlet and canal gate with an integral acoustic flow meter. A concrete pipeline will cross under the northeastern levee, connecting the turnout structure to the basin. The area around the pipe outlet will be armored with rip rap rock slope protection to minimize erosion. A second concrete structure with a canal gate and pipeline will be constructed through the interior levee to regulate discharges from the northern to the southern half of the basin. A new barbed wire fence will be constructed along the site perimeter with one or more vehicle access gates.

An existing agricultural production well located on the site will be abandoned in accordance with Fresno County requirements. An existing domestic well located near the aforementioned cork and oak trees will be preserved and used strictly for measuring groundwater levels. Two existing homes and several agricultural buildings which are clustered together near the domestic well and the two trees will be demolished and removed from the site. Prior to demolition, the existing building materials will be tested for the presence of asbestos, and if necessary, remediation will be implemented.

PROJECT SITE LOCATION

The Project is located in southern Fresno County approximately 3 miles east of the community of Selma.

Coordinates: 36.572290°, -119.560271°

USGS 7.5 Minute Quad Map: Selma

APN: 393-031-23

SURVEY METHODOLOGY

A site visit was conducted by driving the footprint of the project site along the perimeter and interior of the project site. Binoculars (Nikon 8x40) were used when needed to inspect any tree canopy, areas inaccessible by foot, and to help identify any species seen within the project area.

SPECIES OBSERVED

The following species were identified during the site assessment.

Common Name - Fauna	Scientific Name
Mourning dove	<i>(Zenaida macroura)</i>
California quail	<i>(Callipepla californica)</i>
Western scrub jay	<i>(Aphelocoma californica)</i>
Side-blotched lizard	<i>(Uta stansburiana elegans)</i>
Cliff swallow	<i>(Petrochelidon pyrrhonota)</i>
Coyote (scat)	<i>(Canis latrans)</i>
California ground squirrel	<i>(Otospermophilus beecheyi)</i>
Western kingbird	<i>(Tyrannus verticalis)</i>
House finch	<i>(Haemorhous mexicanus)</i>
Common Name – Flora	Scientific Name
Wire lettuce	<i>(Stephanomeria exigua)</i>
Crapemyrtle	<i>(Lagerstroemia indica)</i>
Ash tree	<i>(Fraxinus sp.)</i>
Oak tree	<i>(Quercus sp.)</i>
Walnut tree	<i>(Juglans sp.)</i>
Lime tree	<i>(Tilia sp.)</i>
Cork oak tree	<i>(Quercus suber)</i>
Tree of heaven	<i>(Ailanthus altissima)</i>
Horseweed	<i>(Erigeron canadensis)</i>
Telegraphweed	<i>(Heterotheca grandiflora)</i>
Puncturevine	<i>(Tribulus terrestris)</i>
Frosted orache	<i>(Atriplex laciniata)</i>
Jimsonweed	<i>(Datura stramonium)</i>
Manyflower tobacco	<i>(Nicotiana acuminata)</i>

Mimosa	<i>(Mimosa pudica)</i>
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CALIFORNIA NATURAL DIVERSITY DATABASE RESULTS

The California Natural Diversity Database (CNDDDB) was queried for listings of special-status species using the Selma quadrangle and all quadrangles within a 5-mile radius of the project site. Additional quadrangles searched included Conejo, Sanger, Wahtoke, Reedley, and Burris Park. The results of the database search are summarized below.

Table 1 – CNDDDB Search Results

Scientific Name	Common Name	Federal Status	State Status
<i>Actinemys marmorata</i>	northwestern pond turtle	Proposed Threatened	CSSC
<i>Ambystoma californiense</i> pop. 1	California tiger salamander - central California DPS	Threatened	Threatened
<i>Antrozous pallidus</i>	pallid bat	None	CSSC
<i>Athene cunicularia</i>	burrowing owl	None	Candidate Endangered
<i>Atriplex minuscula</i>	lesser saltscale	None	1B.1
<i>Bombus crotchii</i>	Crotch's bumble bee	None	Candidate Endangered
<i>Bombus morrisoni</i>	Morrison bumble bee	None	None
<i>Bombus pensylvanicus</i>	American bumble bee	None	None
<i>Branchinecta lynchi</i>	vernal pool fairy shrimp	Threatened	None
<i>Buteo swainsoni</i>	Swainson's hawk	None	Threatened
<i>Carex comosa</i>	bristly sedge	None	2B.1
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	Threatened	Endangered
<i>Desmocerus californicus dimorphus</i>	valley elderberry longhorn beetle	Threatened	None
<i>Eryngium spinosepalum</i>	spiny-sepaed button-celery	None	1B.2
Great Valley Mixed Riparian Forest	Great Valley Mixed Riparian Forest	None	None
<i>Helianthus winteri</i>	Winter's sunflower	None	1B.2
<i>Imperata brevifolia</i>	California satintail	None	2B.1
<i>Lasiurus cinereus</i>	hoary bat	None	None

<i>Lasthenia chrysantha</i>	alkali-sink goldfields	None	1B.1
<i>Lepidurus packardii</i>	vernal pool tadpole shrimp	Endangered	None
<i>Linderiella occidentalis</i>	California linderiella	None	None
<i>Orcuttia inaequalis</i>	San Joaquin Valley Orcutt grass	Threatened	Endangered
<i>Pseudobahia peirsonii</i>	San Joaquin adobe sunburst	Threatened	Endangered
<i>Rana boylei</i> pop. 5	foothill yellow-legged frog - south Sierra DPS	Endangered	Endangered
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	None	1B.2
<i>Spea hammondi</i>	western spadefoot	Proposed Threatened	None
<i>Tuctoria greenei</i>	Greene's tuctoria	Endangered	Rare
Valley Sacaton Grassland	Valley Sacaton Grassland	None	None
<i>Vulpes macrotis mutica</i>	San Joaquin kit fox	Endangered	Threatened

CSSC - California Species of Special Concern

CFP - California Fully Protected

CNPS - California Native Plant Society

1A - Plants presumed extirpated in California and either rare or extinct elsewhere

1B - Plants rare, threatened, or endangered in California and elsewhere

2A - Plants presumed extirpated in California but common elsewhere

2B - Plants rare, threatened, or endangered in California but more common elsewhere

4 - Watch List, Plants of Limited Distribution

0.1 - Seriously threatened in California

0.2 - Moderately threatened in California

Table 2 – Potential for Species to Occur at Project Site

Species	Potential to occur
Northwestern pond turtle	Absent. Project site lacks upland habitat necessary for supporting nesting, foraging, and refuge for the species.
California tiger salamander	Absent. The project site lacks both suitable upland burrowing habitat and seasonal aquatic breeding features required to support CTS.
Pallid bat	Unlikely. Site provides opportunity for foraging habitat but has limited and poor roosting habitat.
Burrowing owl	Unlikely. Species not observed during the site assessment but canal banks, such as those bordering the north and east boundaries of the project site, are common locations to find burrows that could potentially be used by owls.
Lesser saltscale	Absent. Land use conversion and ongoing operations and maintenance have excluded native vegetation from the site.
Crotch's bumble bee	Unlikely. Project site lacks suitable nesting habitat due to routine soil disturbance and conversion of site to agriculture.
Morrison bumble bee	Absent. The project site is outside species' range.
American bumble bee	Unlikely. Project site lacks suitable nesting habitat due to routine soil disturbance and conversion of site to agriculture.
Vernal pool fairy shrimp	Absent. The site consists of agricultural land that has been previously leveled and regularly disced. Cultural practices would include the ongoing disking for vegetation control. Native vernal pool habitat is not present at the site.
Swainson's hawk	Possible. Species not observed during the site assessment but trees surrounding the project site could provide nesting habitat and the earthwork activities of the project might provide a temporary foraging opportunity.
Bristly sedge	Absent. Land use conversion and ongoing operations and maintenance have excluded native vegetation from the site.
Western yellow-billed cuckoo	Absent. The adjacent canal does not provide suitable riparian habitat necessary for nesting or foraging.
Valley elderberry longhorn beetle	Absent. Necessary habitat, riparian scrub with blue elderberry, not present at the project site.
Spiny-sepaed button-celery	Absent. Land use conversion and ongoing operations and maintenance have excluded native vegetation from the site.
Great Valley Mixed Riparian Forest	Absent. Land use conversion to agricultural purposes (vineyard), no native habitat communities are present at the site.
Winter's sunflower	Absent. Species not observed at project site.

California satintail	Absent. Species not observed at project site.
Hoary bat	Unlikely. Site provides opportunity for foraging habitat but has limited and poor roosting habitat.
Alkali-sink goldfields	Absent. Land use conversion and ongoing operations and maintenance have excluded native vegetation from the site.
Vernal pool tadpole shrimp	Absent. The site consists of agricultural land that has been previously leveled and regularly disced. Cultural practices would include the ongoing disking for vegetation control. Native vernal pool habitat is not present at the site.
California linderiella	Absent. The site consists of agricultural land that has been previously leveled and regularly disced. Cultural practices would include the ongoing disking for vegetation control. Native vernal pool habitat is not present at the site.
San Joaquin Valley Orcutt grass	Absent. As part of its life cycle the species is dependent on vernal pool habitat, which is not present at the project site.
San Joaquin adobe sunburst	Absent. Land use conversion and ongoing operations and maintenance have excluded native vegetation from the site.
Foothill yellow-legged frog	Absent. Project site is outside the known range for the species. Habitat is typically foothill and mountain streams.
Sanford's arrowhead	Absent. Habitat, which includes marshes, swamps, and freshwater ponds, is not present at the project site.
Western spadefoot	Absent. As part of its life cycle the species is dependent on vernal pool habitat, which is not present at the project site.
Greene's tuctoria	Absent. Outside known range and species is dependent on vernal pool habitat which is not present at the project site.
Valley Sacaton Grassland	Absent. Land use conversion to agricultural purposes (vineyard), no native habitat communities are present at the site.
San Joaquin kit fox	Absent. The project site does not provide suitable upland habitat or denning opportunities for the species.

Definitions for Potential to Occur:

Present: Species or sign of their presence observed on site.

Likely: Species or sign not observed on site, but reasonably certain to occur.

Possible: Species or sign not observed on site, but conditions are suitable.

Unlikely: Species or sign not observed on site, conditions are marginal.

Absent: Species or sign not observed on site, conditions are unsuitable.

AVOIDANCE AND MINIMIZATION MEASURES

Biological Pre-Activity Surveys

AMM 1 - A pre-activity survey shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to cause potential impacts to species.

Swainson's Hawk

Swainson's hawks are typically seen in the Central Valley during the spring and summer months before migrating to South America (Audubon 2022). Swainson's were not observed during the site visit but thirty records are listed in the CNDDDB within a five-mile radius of the project site. It is recommended that construction be scheduled to avoid Swainson's hawk nesting season (April - August) and any potential impacts during this timeframe (SHTAC 2000). However, CDFW requirements for Swainson's hawk mitigation might still need to be met based on the start date selected for the project.

AMM 2 - If construction activity occurs during nesting season, Swainson's hawk surveys will be conducted in accordance with Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley.

Burrowing Owl

Burrowing owls utilize underground burrows instead of nesting above ground or in trees (USFWS 2024). They are typically found in wide open, sparsely vegetated areas such as grasslands or the edges of agricultural fields (USFWS 2024). Another common area they are found is along canal banks and irrigation ditches, particularly where they can take advantage of burrows created by other species such as ground squirrels.

AMM 3 - Pre-construction surveys prior to the start of ground disturbance.

FINAL COMMENTS

The findings in this report are intended for the purpose of supporting the permit application process necessary for approval of the project. If you have any questions regarding this report please don't hesitate to contact me.

Thank you,

Jason Dean

Wildlife Biologist

559-694-1562

REFERENCES

- Audubon. 2025. Guide to North American Birds, <https://www.audubon.org/field-guide>.
- California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines.
- California Department of Fish and Wildlife. 1994. Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California.
- California Department of Fish and Wildlife. 2025. California Natural Diversity Data Base (CNDDB), Rarefind 5. <https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx>.
- California Native Plant Society. 2025. California Rare Plant Ranks. <https://www.cnps.org/rare-plants/california-rare-plant-ranks>.
- Steinhart, P. 1990. California's Wild Heritage: Threatened and Endangered Animals in the Golden State. Sierra Club Books.
- Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley.
- United States Fish and Wildlife Service. 2011. U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance.
- United States Fish and Wildlife Service. 2025. FWS Focus Burrowing Owl. <https://www.fws.gov/species/burrowing-owl-athene-cunicularia>
- United States Fish and Wildlife Service. 2025. FWS Focus San Joaquin Kit Fox. <https://www.fws.gov/species/san-joaquin-kit-fox-vulpes-macrotis-mutica>
- United States Fish and Wildlife Service. 2025. FWS Focus Western Pond Turtle. <https://www.fws.gov/species/western-pond-turtle-actinemys-marmorata>
- United States Fish and Wildlife Service. 2025. FWS Focus Greene's Tuctoria. <https://www.fws.gov/species/greenes-tuctoria-tuctoria-greeni>

Appendix A – Figures

Figure 1 – Site Map

Appendix B - Site Photos



Photo 1 – Rose Avenue Vineyard



Photo 2 - Rose Avenue Vineyard



Photo 3 - Kingsburg Branch Canal



Photo 4 – Water control structure in canal



Photo 5 – Cork Oak at site



Photo 4 – Oak tree at site