Draft

# Initial Study/Proposed Mitigated Negative Declaration

## Freeman Diversion Fish Passage Facility Geotechnical Exploration Project

May 2021

Prepared for:

United Water Conservation District

Prepared by:

GEI Consultants

Consulting Engineers and Scientists

Draft

# Initial Study/Proposed Mitigated Negative Declaration

## Freeman Diversion Fish Passage Facility
## Geotechnical Exploration Project

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May 2021

Project No. 2005205

**NOTICE OF INTENT and NOTICE OF PUBLIC HEARING**
**TO ADOPT A MITIGATED NEGATIVE DECLARATION**
(Pursuant to CEQA Section 21092 and CEQA Guidelines Section 15072)
**FREEMAN DIVERSION FISH PASSAGE FACILITY**
**GEOTECHNICAL EXPLORATIONS PROJECT**

The United Water Conservation District (District) is proposing the Freeman Diversion Fish Passage Facility Geotechnical Exploration Project (proposed project or project) along the alignment of a future fish passage facility at the Freeman Diversion facility, located on the Santa Clara River approximately 4 miles southwest of the city center of Santa Paula, Ventura County, California The District is considering two alternatives for a new fish passage facility location at the Freeman Diversion facility: a hardened ramp and a vertical slot. The proposed geotechnical explorations would inform the design and construction of either fish passage facility alternative. The geotechnical field exploration is critical to the understanding of subsurface conditions.

The project consists of the following exploration activities: collecting soil and rock core samples from approximately 13 borings along and adjacent to the existing Freeman Diversion facility, excavating six test pits at key locations; and conducting seismic refraction traverses. Additionally, one boring will define the depth of a landslide mass and install an inclinometer for monitoring potential movement of the landslide mass; and after the boreholes are drilled, two of the boreholes in upland areas would be converted to open standpipe piezometers for collecting groundwater level data and monitoring. Geotechnical explorations would occur after September 1, 2021, and at locations within the Santa Clara River channel would occur between September 16 and October 3, 2021. The duration of the field work is approximately 4 weeks. Staff would travel to the inclinometer and piezometer weekly or monthly to collect monitoring data. Trips to the site would continue until monitoring is no longer needed and the boreholes are backfilled.

The District is the lead agency for the project, under CEQA, and has directed the preparation of an Initial Study (IS) on the proposed project in accordance with CEQA requirements and the State CEQA Guidelines. The IS describes the proposed project and assesses the proposed project's potentially significant adverse impacts on the physical environment. It concludes that the proposed project's potentially significant or significant adverse effects on the environment can be mitigated to less-than-significant levels; therefore, a proposed Mitigated Negative Declaration (MND) has been prepared. The project site is not present on any of the lists enumerated under Section 65962.5 of the Government Code.

Agencies and members of the public are invited to provide written comments on the IS/MND. **The comment period is from May 20, 2021 to June 18, 2021**. The IS/MND can be reviewed at the District office at 1701 N. Lombard Street, Suite 200, Oxnard, CA, 93030 or on the Districts web site at: https://www.unitedwater.org/key-documents/#ceqa-documents

Comments can be sent to Randall McInvale, at 1701 N. Lombard Street, Suite 200, Oxnard, CA, 93030, or email at RandallM@unitedwater.org. All comments must be received by 5:00 p.m. on June 18, 2021. For e-mailed comments, please include the project title in the subject line, attach comments in MS Word format, and include the commenter's name and U.S. Postal Service mailing address.

# PROPOSED MITIGATED NEGATIVE DECLARATION

| | |
|---|---|
| **Project:** | **Freeman Diversion Fish Passage Facility Geotechnical Exploration Project** |
| **Lead Agency:** | **United Water Conservation District** |

## PROJECT LOCATION

The United Water Conservation District (District) proposes the Freeman Diversion Fish Passage Facility Geotechnical Exploration Project (project or proposed project) along the alignment of the future fish passage facility at the Freeman Diversion facility, located on the Santa Clara River approximately 4 miles southwest of the city center of Santa Paula, and approximately 10 river miles upstream of the Pacific Ocean in Ventura County, California. General site access would occur from State Route 118 (Los Angeles Avenue) to Southern Pacific Milling Road. An alternative access road to either side of the canal is provided approximately, 0.75 mile downstream (west) of the Freeman Diversion facility near where the concrete lined portion of the canal terminates.

## PROJECT DESCRIPTION

The District is considering two alternatives for a new fish passage facility location at the Freeman Diversion facility: a hardened ramp and a vertical slot. The proposed geotechnical explorations would inform the design and construction of either fish passage facility alternative. The geotechnical field exploration is critical to the understanding of subsurface conditions.

The project consists of the following exploration activities: collecting soil and rock core samples from approximately 13 borings along and adjacent to the existing Freeman Diversion facility, excavating six test pits at key locations; and conducting seismic refraction traverses. Additionally, one boring will define the depth of a landslide mass and install an inclinometer for monitoring potential movement of the landslide mass; and after the boreholes are drilled, two of the boreholes in upland areas would be converted to open standpipe piezometers for collecting groundwater level data and monitoring. Geotechnical explorations would occur after September 1, 2021 and at locations within the Santa Clara River channel would occur between September 16 and October 3, 2021. The duration of the field work is approximately 4 weeks.

Staff would travel to the inclinometer and piezometer weekly or monthly to collect monitoring data. Trips to the site would continue until monitoring is no longer needed and the boreholes are backfilled.

## FINDINGS

An IS was prepared to assess the proposed project's potential effects on the environment and the significance of those effects. Based on the IS, it has been determined that the proposed project would not result in significant adverse effects on the physical environment after implementation of mitigation measures. This conclusion is supported by the following findings:

1. The proposed project would have no impacts on land use and planning, public service, recreation, tribal cultural resources, and wildfire.

2. The proposed project would have less-than-significant impacts on aesthetics, agriculture and forestry, energy, greenhouse gas emissions, mineral resources, noise, population and housing, transportation, and utilities and service systems.

3. The proposed project would have potentially significant impacts on air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, and hydrology and water quality.

4. The proposed project would not 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.

5. The proposed project would not have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.

6. The proposed project would not have possible environmental effects that are individually limited but cumulatively considerable and contribute to a significant cumulative impact. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

7. The environmental effects of the proposed project would not cause substantial adverse effects on human beings, either directly or indirectly.

Following are the proposed mitigation measures that would be implemented by the District to avoid or minimize environmental impacts. Implementation of these mitigation measures would reduce the environmental impacts of the proposed project to less-than-significant levels.

**Mitigation Measure AQ-1: Best Management Practices to Reduce Fugitive Dust, Reactive Organic Compound, and Nitrogen Oxide Emissions.**

The following measures will be implemented during/ following geotechnical exploration activities to the extent possible.

- The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust.
- Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (screened water from the District's diversion facilities) should penetrate sufficiently to minimize fugitive dust during grading activities.
- Fugitive dust produced during grading, excavation, and construction activities shall be controlled by the following activities:
    - All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved onsite roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary.
- Graded and/or excavated inactive areas of the construction site shall be monitored by the District at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally safe dust control materials, shall be periodically applied to portions of the project site that are inactive for over 4 days, as determined to be necessary and/or as part of normal District operations. For the geotechnical exploration areas that are located outside of the existing footprint of the Freeman Diversion facility and outside of the Santa Clara River channel, if no further grading or excavation operations are planned for the area, disturbed areas should be seeded with a native seed mix and watered until grass growth is evident, or periodically treated with environmentally safe dust suppressants, to prevent excessive fugitive dust.
- Signs shall be posted onsite limiting traffic to 15 miles per hour or less.
- During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by onsite activities and operations from being a nuisance or hazard, either offsite or onsite. The site superintendent/supervisor shall use his/her discretion in conjunction with the Ventura County Air Pollution Control District (VCAPCD) in determining when winds are excessive.
- Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.
- Minimize equipment idling time
- Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications

- Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time
- Use alternatively fueled construction equipment, such as compressed natural gas, liquefied natural gas, or electric, if feasible.

**Mitigation Measure BIO-1: Implement Measures to Minimize Potential for Direct Impacts on Steelhead and Steelhead Habitat.**

To minimize potential direct effects of geotechnical explorations on steelhead and its habitat, the District will ensure that the following measures are implemented:

- Heavy equipment operation will be limited to the minimum area necessary. Work area boundaries will be clearly identified before investigations begin, and no work will occur outside these work areas unless approved by the District Environmental Scientist responsible for permit compliance. All boundary markers will be removed immediately after work in a given area is complete.
- Before entering the site, all equipment will be washed at a location designated by the District Environmental Scientist responsible for permit compliance to ensure equipment is free of mud, algae, snails, and other debris. All equipment will be inspected before leaving the site to ensure it is free of mud and other debris that could contain invasive species.
- If an in-channel boring location is vegetated and vegetation removal is not covered by the existing Freeman Diversion Maintenance Project authorizations, the boring will be moved to an alternate location that does not require vegetation trimming/cutting, if feasible. If an appropriate alternative location that would provide the necessary geotechnical data and avoid vegetation trimming/cutting is not available, vegetation impacts will be limited to trimming/cutting the minimum area and extent required to allow access. Vegetation may be cut to near ground level, but complete removal will not occur. Cut vegetation will be immediately removed from and deposited where it cannot re-enter the channel.
- If areas not covered by the existing Freeman Diversion Maintenance Project authorizations require flow rerouting or dewatering to access boring locations in the Upstream or Downstream Work Area, surveys will be conducted before flow rerouting or dewatering begin in an effort to identify steelhead and other native fish. Relevant areas will be surveyed by two or more biologists/technicians knowledgeable and experienced in steelhead and other native fish identification and ecology. Survey methods may include bank observations and snorkeling. Snorkeling will be conducted when water depth (e.g., >1 foot) or in-channel complexity (e.g., woody debris or riprap) causes bank observations to be ineffective. If conditions are not conducive for confidently surveying the work area for steelhead presence, activities in the affected area will be postponed until such conditions exist or alternate means of access (e.g., crane) will be employed. If steelhead are observed, flow rerouting and/or dewatering in occupied areas will not occur, and the affected boring(s) will be relocated as necessary. If steelhead are not observed, a biologist knowledgeable and experienced in steelhead identification and ecology will be on the site during flow rerouting and/or dewatering to exclude native fish and confirm steelhead do not enter the flow rerouting/

dewatering area. Pacific lamprey ammocoetes found present in the flow rerouting/ dewatering area will be collected and relocated to adjacent suitable habitat.

- All project work will cease if a listed species is observed in the work areas until the individual(s) leaves on its own accord, or until USACE completes additional consultation with USFWS and/or NMFS, as appropriate. If a listed species is observed, project personnel will notify the designated District Environmental Scientist who will be responsible for contacting the USACE as well as CDFW.
- A worker environmental awareness training will be provided by a District Environmental Scientist or qualified biologist to all workers before they are allowed access to work areas. A record of trained personnel will be kept by the District Environmental Scientist responsible for permit compliance. The training and associated handout will include contact information for the District Environmental Scientist; a description of required avoidance and minimization measures; information on sensitive species; instructions on correct techniques and procedures for working within the river channel and associated riparian vegetation; instructions to notify the foreman and the District Environmental Scientist in case of a hazardous material spill or equipment leak or upon the discovery of soil or groundwater contamination; instructions to notify the foreman and the District Environmental Scientist if a sensitive species is observed; and instructions that noncompliance with any laws, rules, regulations, or conservation measures could result in a worker being barred from participating in any remaining geotechnical investigations.

**Mitigation Measure BIO-2: Minimize Potential for Destruction of Western Pond Turtle Nests and Injury or Death of Special-status Reptiles.**

To minimize potential direct effects of geotechnical explorations on special-status reptiles, the District will ensure that the following measures are implemented:

- Within 10 days before in-channel geotechnical exploration activities begin, a qualified biologist will conduct an initial survey for western pond turtles along the access in-channel access routes and work areas. If a pond turtle is found, it will be allowed to move out of the area on its own. If evidence of an unhatched nest is found, a no-disturbance buffer will be established and implemented around the nest until the eggs have hatched and the young have dispersed from the area.
- Immediately before geotechnical exploration activities begin in a given area, a qualified biologist will survey the anticipated disturbance and/or dewatering area for special-status reptiles. If any individuals of target species are found, they will be allowed to move out of the area on their own before equipment moves into the area. If an individual does not leave the area and the biologist determines it can be safely captured, the animal will be relocated to suitable habitat in the vicinity, from which it is unlikely to reenter the work area. Work in the area will not begin until the animal has been relocated or is thought to have left the area on its own.
- A worker environmental awareness training will be provided by a District Environmental Scientist or qualified biologist to all workers before they are allowed access to work areas. A record of trained personnel will be kept by the District Environmental Scientist responsible for permit compliance. The training and associated

handout will include contact information for the Districts Environmental Scientist; a description of required avoidance and minimization measures; information on sensitive species; instructions on correct techniques and procedures for working within the river channel and associated riparian vegetation; instructions to notify the foreman and District Environmental Scientist in case of a hazardous material spill or equipment leak or upon the discovery of soil or groundwater contamination; instructions to notify the foreman and District Environmental Scientist if a sensitive species is observed; and instructions that noncompliance with any laws, rules, regulations, or conservation measures could result in a worker being barred from participating in any remaining geotechnical investigations.

- If a pond turtle or other possible special-status reptile is discovered in a work area during geotechnical exploration activities, it will be allowed to move out of the area on its own. If the individual does not leave the work area, the District Environmental Scientist will be notified, and a qualified biologist will attempt to safely capture and relocate the animal to suitable habitat in the vicinity, from which it is unlikely to reenter the work area. Work in the area will not resume until the animal has been relocated or is thought to have left the area on its own.

**Mitigation Measure CR-1: Address Previously Undiscovered Historic Resources, Archaeological Resources, and Tribal Cultural Resources.**

If cultural resources are identified during Project-related ground-disturbing activities, all potentially destructive work in the 100-feet of the find should cease immediately and the District Environmental Scientist will be notified. In the event of an inadvertent discovery, the District will retain a qualified archaeologist to assess the significance of the find, make a preliminary determination, and if appropriate, provide recommendations for a treatment plan to mitigate further impacts to the resource. Ground-disturbing activities should not resume near the find until the treatment, if any is recommended, is complete or the qualified archaeologist determines the find is not significant.

**Mitigation Measure CR-2: Avoid Potential Effects on Undiscovered Burials.**

If human remains are found, the District should be immediately notified. The California Health and Safety Code requires that excavation be halted in the immediate area and that the county coroner be notified to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code, Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, the coroner must contact the Native American Heritage Commission (NAHC) by telephone within 24 hours of making that determination (Health and Safety Code, Section 7050.5[c]).

Once notified by the coroner, the NAHC shall identify the person determined to be the Most Likely Descendant (MLD) of the Native American remains. With permission of the legal landowner(s), the MLD may visit the site and make recommendations regarding the treatment and disposition of the human remains and any associated grave goods. This visit should be conducted within 24 hours of the MLD's notification by the NAHC (PRC, Section 5097.98[a]). If a satisfactory agreement for treatment of the remains cannot be

reached, any of the parties may request mediation by the NAHC (PRC, Section 5097.94[k]). Should mediation fail, the landowner or the landowner's representative must reinter the remains and associated items with appropriate dignity on the property in a location not subject to further subsurface disturbance (PRC, Section 5097.98[b]).

**Mitigation Measure GEO-1: Prepare and Implement a Storm Water Pollution Prevention Plan, if required, Implement Erosion Control Best Management Practices, and Comply with Ventura County Standards for Grading and Erosion Control.**

If project activities would disturb more than 1 acre, then activities would be subject to SWRCB's statewide Stormwater General Permit for Construction (2009-0009-DWQ) requirements construction-related stormwater permit requirements of the NPDES program. Any permits will be obtained by the District before any ground-disturbing construction activity.

If a Construction General Permit is needed, it would also require preparation of a Storm Water Pollution Prevention Plan (SWPPP) that identifies best management practices (BMPs) for erosion control and to prevent or minimize the introduction of contaminants into surface waters. Such BMPs could include, but would not be limited to, silt fencing, straw bale barriers, fiber rolls, storm drain inlet protection, hydraulic mulch, and a stabilized construction entrance. The SWPPP will include development of site-specific structural and operational BMPs to prevent and control impacts on runoff quality, measures to be implemented before each storm event, inspection and maintenance of BMPs, and monitoring of runoff quality by visual and/or analytical means. The SWPPP will also include dust control practices to prevent wind erosion, sediment tracking, and dust generation by construction equipment. The BMPs shall be clearly identified and maintained in good working condition throughout the construction process. The construction contractor shall retain a copy of the approved SWPPP on the construction site and modify it as necessary to suit specific site conditions.

If it's determined that a construction General Permit and SWPPP is not necessary for the proposed project, the District would still identify and implement BMPs for erosion control, similar to those listed above, to prevent contaminants entering surface water.

The District would obtain and comply with all provisions of a Ventura County Grading Permit, if required.

**Mitigation Measure GEO-2: Implement Construction Worker Personnel Training, Stop Work if Paleontological Resources are Encountered During Earthmoving Activities and Implement a Recovery Plan, if Appropriate.**

To minimize the potential for destruction of or damage to potentially unique, paleontological resources during earth-moving activities, the District will implement the measures described below.

- Before the start of construction activities at the project site, construction personnel involved with earth-moving activities (including the site superintendent) will be informed of the possibility of encountering fossils and proper notification procedures should potential fossils be encountered. This worker training may be prepared and presented by an experienced field archaeologist at the same time as construction worker education on cultural resources is presented.

- If paleontological resources are discovered during earth-moving activities, the construction crew will notify the District and will immediately cease work in the vicinity of the find. The District will retain a qualified paleontologist to inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts will occur, no further effort shall be required.

- If the resource cannot be avoided and may be subject to further impact, a qualified paleontologist shall evaluate the resource in accordance with SVP Guidelines (2010) and determine whether it is "unique" under CEQA, Appendix G, part VII. The determination and associated plan for protection of the resource shall be provided to the District for review and approval. If the resource is determined not to be unique, work may commence in the area. If the resource is determined to be a unique paleontological resource, work shall remain halted, and the paleontologist shall consult with the District staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA.

- Preservation in place (i.e., avoidance) is the preferred method of mitigation for impacts to paleontological resources and shall be required unless there are other equally effective methods. Other methods may be used but must ensure that the fossils are recovered, prepared, identified, catalogued, and analyzed according to current professional standards under the direction of a qualified paleontologist. All recovered fossils shall be curated at an accredited and permanent scientific institution according to Society of Vertebrate Paleontology standard guidelines; typically, the Natural History Museum of Los Angeles County and University of California, Berkeley accept paleontological collections at no cost to the donor. Work may commence upon completion of treatment, as approved by the District.

**Mitigation Measure HAZ-1: Implement Best Management Practices to Minimize the Potential Release of Hazardous Materials.**

Project-related vehicles and equipment will be maintained prior to site access and checked and maintained daily to prevent leaks of materials that, if introduced to the water, could be deleterious. Equipment fueling will occur outside the channel whenever possible. If a stationary piece of equipment cannot be readily moved out of the channel for fueling, a containment system will be used to capture any accidental spill. Onsite fueling trucks and fueling areas will contain spill kits and/or other spill protection devices. Vehicle and equipment fluid spills will be cleaned up immediately. Equipment and material staging/storage will occur outside the channel.

No project-related hazardous substances will be allowed to contaminate the soil and/or enter into or be placed where it may be washed by rainfall or runoff into the Santa Clara River.

# Table of Contents

## List of Tables



## List of Figures



## List of Appendices

# Abbreviations and Acronyms

| | |
|---|---|
| APE | area of potential effect |
| AQMP | Air Quality Management Plan |
| BMP | best management practices |
| BHR | borehole |
| Cal | calibrated |
| Caltrans | California Department of Transportation |
| CARB | California Air Resource Boards |
| CAAQS | California Ambient Air Quality Standards |
| CALFIRE | California Department of Foresty and Fire Protection |
| California Ocean Plan | Water Quality Control Plan – Ocean Waters of California |
| California Thermal Plan | Water Quality Control Plan for the Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries in California |
| CCR | California Code of Regulations |
| CEC | California Energy Commission |
| CEQA | Californi Environmental Quality Act |
| CGS | California Geologic Survey |
| CRHR | California Register of Historical Resources |
| CDFW | California Department of Fish and Wildlife |
| CFGC | California Fish and Game Code |
| CME | central mine equipment |
| CNDDB | California Natural Diversity Database |
| CNPS | California Native Plant Society |
| CO | carbon monoxide |
| County | Ventura County |
| dBA | A-weighted decibel |
| District or UWCD | United Water Conservation District |
| DOF | Department of Finance |
| DPS | distinct population segment |
| DWR | Department of Water Resources |
| DTSC | Department of Toxic Substance Control |
| EIR | Environmental Impact Report |
| ESA | Endangered Species Act |
| GHG | greenhouse gas |

| | |
|---|---|
| HCWC | Habitat Connectivity and Wildlife Corridor |
| Highway 126 | Santa Paula Highway |
| IS/MND | Initial Study/Proposed Mitigated Negative Declaration |
| IWMD | Integrated Waste Management Division |
| KWh | kilowatts per hour |
| LARWQCB | Los Angelos Regional Water Quality Control Board |
| Leq | equivalent continuous sound level in decibels |
| Lmax | maximum instantaneous sound level |
| MLD | most likely descendant |
| MRP | Mineral Resource Protection |
| NAAQS | National Ambient Air Quality Standards |
| NAHC | Native American Heritage Comission |
| NMFS | National Marine Fisheries Services |
| $NO_2$ | nitrogen dioxide |
| NOx | nitrogen oxides |
| NRCS | Natural Resources Conservation Service |
| NRHP | National Register of Historic Places |
| $O_3$ | ozone |
| OS-80 | Open Space 80 acres |
| OHP | Office of Historic Preservation |
| PM | particulate matter |
| $PM_{10}$ | particulate matter less than 10 microns in diameter |
| $PM_{2.5}$ | particulate matter less than 2.5 microns in diameter |
| PRC | Public Resources Code |
| proposed project /project | Freeman Diversion Fish Passage Facility Geotechnical Exploration Project |
| ROC | reactive organic compounds |
| SCCAB | South-Central Coast Air Basin |
| SCCIC | South Central Coast Information Center |
| $SO_2$ | sulfur dioxide |
| SPT | Standard Penetration Test |
| SWPPP | Storm Water Pollution Prevention Plan |
| SWRCB | State Water Resource Control Board |
| USACE | United States Army Corps of Engineers |
| USFWS | United States Fish and Wildlife Service |
| VCAPCD | Ventura County Air Pollution Control District |

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|---|---|
| VCREA | Ventura County Regional Energy Alliance |
| VMT | Vehicle miles traveled |
| Vs30 | seismic velocity survey |

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# 1.0 Introduction

The United Water Conservation District (District) has prepared this Initial Study/proposed Mitigated Negative Declaration (IS/MND) in compliance with the California Environmental Quality Act (CEQA) and Guidelines to address the potentially significant environmental impacts of the Freeman Diversion Fish Passage Facility Geotechnical Exploration Project (proposed project or project) in Ventura County, California (County). The District is the lead agency under CEQA.

The District has completed the following documents, as required by CEQA:

- a notice of intent to adopt an MND for the proposed project
- a proposed MND
- an IS

After the required public review of this document is complete, the District's Board of Directors will consider all IS/MND comments received, and the entirety of the administrative record for the project, in whether to adopt the proposed MND and a Mitigation Monitoring and Reporting Program and approve the proposed project.

## 1.1 Purpose of the Initial Study

This document is an IS prepared in accordance with CEQA (California Public Resources Code [PRC], Section California Code of Regulations [CCR] 21000 et seq.) and the state CEQA Guidelines (Title 14, Section 15000 et seq. of the CCR). The purpose of this IS is to (1) determine whether proposed project implementation would result in potentially significant or significant impacts on the physical environment; and (2) incorporate mitigation measures into the proposed project design, as necessary, to eliminate the proposed project's potentially significant or significant project impacts or reduce them to a less-than-significant level. An MND is prepared if the IS identified one or more potentially significant impacts, and: (1) revisions in the proposed project mitigate the potentially significant impacts to less-than-significant levels; and (2) there is no substantial evidence, in light of the whole record before the lead agency, that the proposed project, as revised, may have a potentially significant or significant impact on the physical environment.

An IS presents environmental analysis and substantial evidence in support of its conclusions regarding the significance of environmental impacts. Substantial evidence may include expert opinion based on facts, technical studies, or reasonable assumptions based on facts. An IS is neither intended nor required to include the level of detail provided in an Environmental Impact Report (EIR).

CEQA requires that all state and local government agencies consider the potentially significant and significant environmental impacts of projects they propose to carry out or over which they

have discretionary authority, before implementing or approving those projects. The public agency that has the principal responsibility for carrying out or approving a proposed project is the lead agency for CEQA compliance (state CEQA Guidelines, CCR Section 15367). The District is a public agency and has principal responsibility for carrying out the proposed project and is therefore the CEQA lead agency for this IS/MND.

If there is substantial evidence (such as the findings of an IS) that a proposed project, either individually or cumulatively, may have a significant or potentially significant impact on the physical environment, the lead agency must prepare an EIR (state CEQA Guidelines, CCR Section 15064[a]). If the IS concludes based on substantial evidence that impacts would be less-than-significant, or that mitigation measures committed to by the project proponent (the District) would reduce impacts to a less-than-significant level, a Negative Declaration or MND may be prepared.

The District has prepared this IS to evaluate the potential environmental impacts of the proposed project and has incorporated mitigation measures to eliminate or reduce any potentially significant project-related impacts. Therefore, an MND has been prepared for this project.

## 1.2 Summary of Findings

Chapter 3 of this document contains the analysis and discussion of potential environmental impacts of the proposed project. Based on the issues evaluated in that chapter, it was determined that:

The proposed project would result in no impacts on the following issue areas:

- Land Use and Planning
- Public Service
- Recreation
- Tribal Cultural Resources
- Wildfire

The proposed project would result in less-than-significant impacts on the following issue areas:

- Aesthetics
- Agriculture and Forestry
- Energy
- Greenhouse Gas
- Mineral Resources
- Noise
- Population and Housing
- Transportation
- Utilities and Service System

The proposed project would result in less-than-significant impacts *after* mitigation implementation on the following issue areas:

- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality

## 1.3 Document Organization

This document is divided into five sections:

**Chapter 1, Introduction.** This chapter describes the purpose of the IS/MND, summarizes findings, and describes the organization of this IS/MND.

**Chapter 2, Project Description.** This chapter describes the project location and background, project need and objectives, project characteristics, construction activities, project operations, and discretionary actions and approvals that may be required.

**Chapter 3, Environmental Checklist.** This chapter presents an analysis of environmental issues identified in the CEQA environmental checklist and determines whether project implementation would result in a beneficial impact, no impact, less-than-significant impact, less-than-significant impact with mitigation incorporated, potentially significant impact, or significant impact on the physical environment for each resource topic identified in CEQA Guidelines Appendix G. Should any impacts be determined to be potentially significant or significant, an EIR would be required. For this proposed project, however, mitigation measures have been incorporated as needed to reduce all potentially significant and significant impacts to a less-than-significant level.

**Chapter 4, References.** This chapter lists the references used to prepare this IS/MND.

**Chapter 5, Report Preparers.** This chapter identifies report preparers who contributed to the preparation of this document.

# 2.0 Project Description

## 2.1 Project Background

The Freeman Diversion facility includes a Denil fish ladder that was designed to provide upstream passage for adult steelhead, however, as a result of litigation, the United States District Court for the Central District of California determined the current facility is inadequate and the District is required to analyze alternative fish passage facility designs for eventual replacement in consultation with the resource agencies and as part of the Freeman Diversion Multiple Species Habitat Conservation Plan. The District is considering two alternatives for a new fish passage facility: a hardened ramp and a vertical slot. The proposed geotechnical explorations would inform the design and construction of either fish passage facility alternative. Previous geotechnical explorations nearby the Freeman Diversion facility were conducted in 1983, 1989, 2013 and 2016. The currently proposed geotechnical explorations would supplement the previously collected data with borings to greater depths and at more specific locations needed to better characterize the subsurface conditions along the proposed alignment, as well as test pits and a seismic refraction survey.

## 2.2 Project Location

The Freeman Diversion facility is located on the Santa Clara River approximately 4 miles southwest of the city center of Santa Paula, and approximately 10 river miles upstream of the Pacific Ocean in Ventura County, California (**Figure 2-1**). The proposed geotechnical explorations would occur along the alignment of the future fish passage facility. The proposed geotechnical explorations, including boring locations, test pit locations, seismic refraction survey lines, and associated access routes are shown in **Figure 2-2**. General site access would occur from State Route 118 (Los Angeles Avenue) to Southern Pacific Milling Road. The main roadway at Los Angeles Avenue is paved, whereas the Southern Pacific Milling Road is a well-maintained gravel road. An alternative access road to either side of the canal is provided approximately 0.75 mile downstream (west) of the Freeman Diversion facility near where the concrete lined portion of the canal terminates.

## 2.3 Project Objectives

The District is pursuing the project to investigate the geotechnical site characteristics to inform final design and construction of the future fish passage facility alignment at the Freeman Diversion facility. The geotechnical field exploration is critical to the understanding of subsurface conditions, as follows:

**Figure 2-1. Freeman Diversion Facility Location**

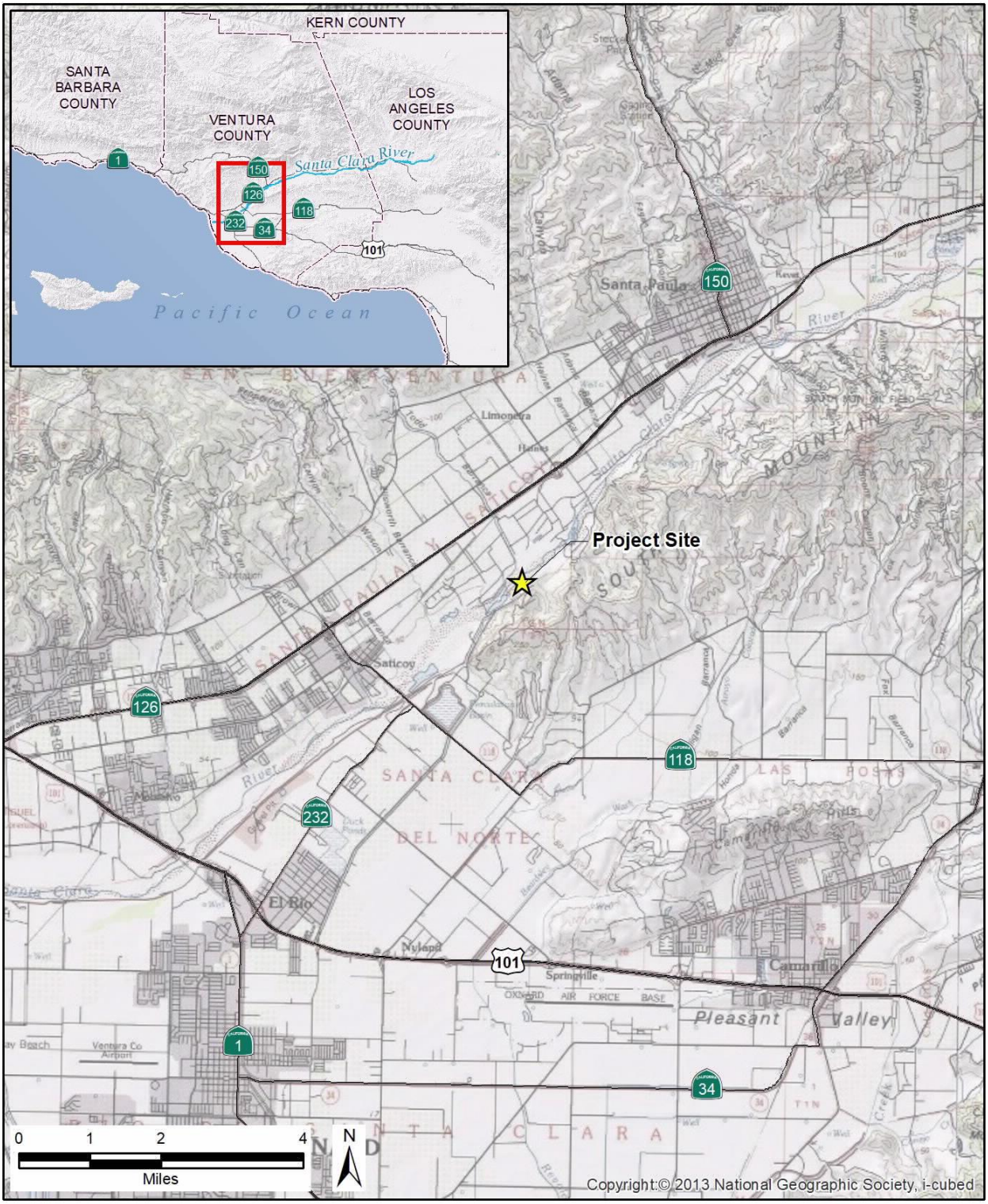


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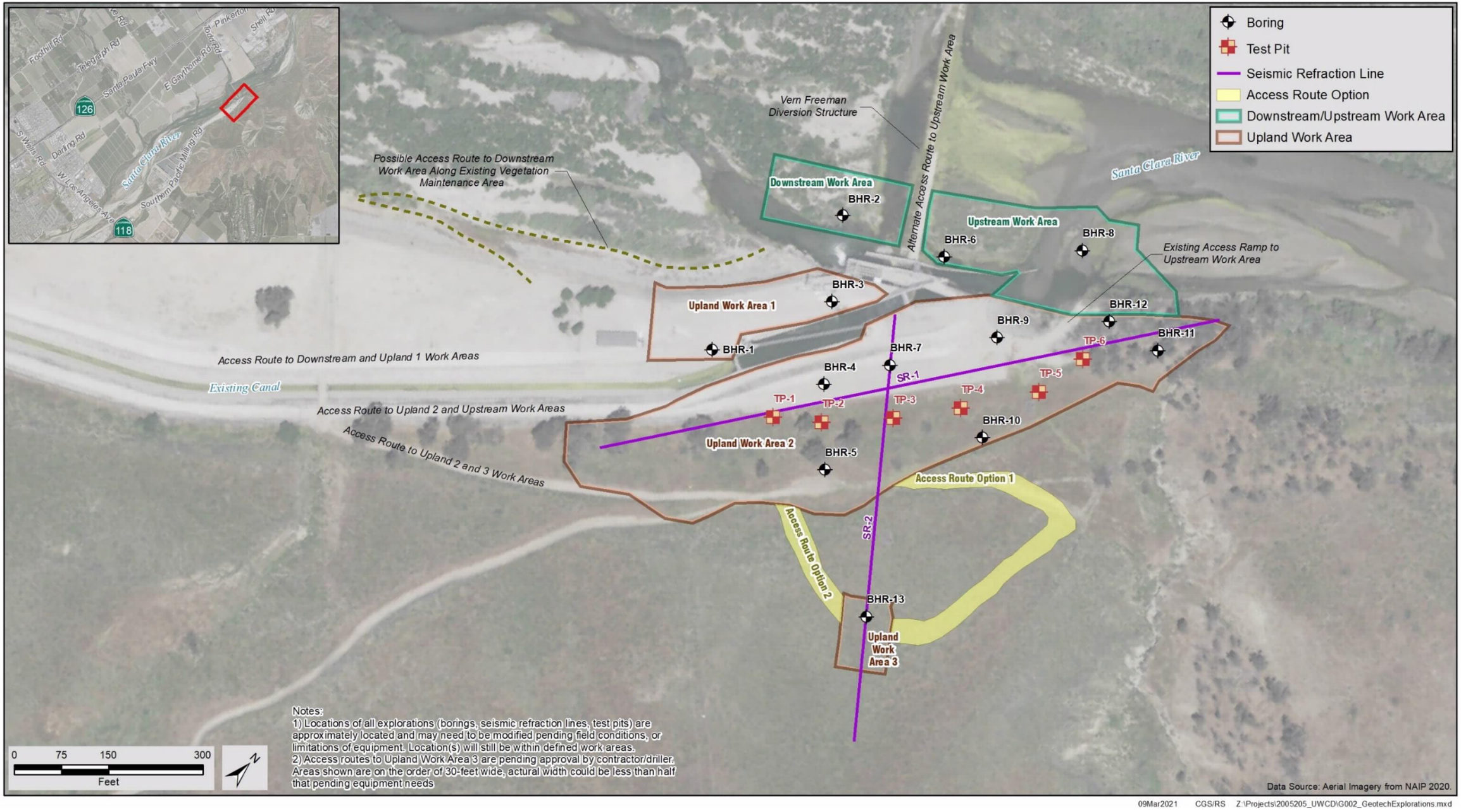
**Figure 2-2. Geotechnical Field Exploration Locations**



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- characterizing the lithology, structure, and rock mass properties of the bedrock
- identifying adverse conditions such as low strength, weathered, and/or highly fractured bedrock
- characterizing potential seismic hazards and groundwater conditions
- evaluating the rippability of the bedrock
- calculating the amount of overburden and excavation required during construction

## 2.4 Geotechnical Exploration Activities

The project would consist of the following exploration activities, described below in this section:

- collecting soil and rock core samples from approximately 13 borings taken along and adjacent to the existing Freeman Diversion facility
- excavating 6 test pits at key locations
- conducting seismic refraction traverses

### *2.4.1 Borings*

Approximately 13 borings would be drilled as close as feasible to the locations shown in **Figure 2-2**. The exact boring locations would be determined depending on the drill rig and specific site conditions (e.g., presence of open water) but would be within the work area boundaries shown. Up to an approximately 50-foot-square drill pad may be required for each boring. BHR-1 and 3 are located to determine the depth to bedrock and characterize foundation conditions. BHR-4, 5, 7, 9, 10, 11, and 12 are located to determine the depth to bedrock and characterize foundation conditions for the roller compact concrete support. BHR-2, 6, and 8 are located in the Santa Clara River channel to inform foundation conditions for the future fish passage facility and prefabricated bridge foundation. A seismic velocity survey would be performed in one borehole (at either BHR-4, 7, 9, or 12) after drilling and sampling is complete. The procedure involves lowering a suspended probe equipped with a dipole seismic energy source near the tip of the probe and a pair of geophones within the middle to upper section of the probe.

The purpose of BHR-13 is to define the depth of the landslide mass and install an inclinometer for monitoring potential movement of the landslide mass. After the boreholes are drilled, two of the boreholes in upland areas (in either BHR-1, 3, 4, 5, 7, 9, 10, 11, or 12) would be converted to open standpipe piezometers for collecting groundwater level data and monitoring. The inclinometer and piezometers would be left in place after completion exploration activities to collect data prior to, during, and/or after the future fish passage facility is constructed.

#### Borehole Construction

Boring diameters would range from approximately 4 to 6 inches and borehole depth would range from approximately 25 to 150 feet. Rotary wash drilling techniques would be used, which include a polymer as the additive to water to create the drilling mud. Bentonite may be used in place of a polymer in the soil portion of the borings, as necessary to keep the borehole from collapsing. The

boring machines require a water source and a polymer for lubrication during drilling. Water for drilling would be obtain by one of the following methods:

- drawn from the canal downstream of the Freeman Diversion facility by filtered pump, distributed by flexible, temporary hose to each drill site, and collected along with the drill muck for disposal; or
- trucked onsite from a to be determined treated water source.

#### Cutting Disposal

The cuttings generated by drilling and drilling fluids are forced up the side of the borehole outside the drill rods and collected into a tank at the ground surface. The heavier cuttings fall out as the fluid travels through partitions in the tank and the fluids are re-circulated within the closed drilling system. The cuttings are removed by either pumping directly into a portable storage tank or by shoveling them from the tank. Where practical, solid stem augers may be used until groundwater is encountered.

Overburden soils (alluvium and fill) and hard rock would be sampled and transported offsite for analysis. Disposal of cuttings would be determined based on sampling. It is anticipated that material encountered in boreholes would be free of contaminants and suitable for spreading on the ground surface at or near the drill sites (in locations where runoff would not return materials to the streambed), using small hand dug ditches or berms as necessary to control runoff. No cuttings would be spread at the drill sites in the Santa Clara River channel. Alternatively, cuttings would be temporarily stored in 55-gallon drums or 20-cubic-yard, plastic-lined bins located in the designate work areas, prior to disposal at an appropriate inland site location (inland area of the adjacent property owned by the District) or landfill.

#### Borehole Completion

Unless converted to a piezometer or inclinometer, boreholes would be backfilled with cement-bentonite grout using the tremie method, where a tremie (watertight pipe) is used to pour concrete underwater in a way that avoids washout of cement from water coming into contact with the concrete while it is flowing. The grout would displace the fluid remaining from borehole construction. Displaced fluid would be collected in the tank for offsite disposal. The grout would be checked for settlement and refilled as needed. Local soils would be used to top off the backfill at the ground surface. The backfilling procedures would be in accordance with Ventura County Department of Health Requirements.

### *2.4.2 Test Pits*

Approximately six test pits would be excavated in upland areas adjacent to the future fish passage facility within Upland Work Area 2. The test pits would be excavated to inform the stability of anticipated cuts along the fill and alluvium. Each test pit would be approximately 3 feet by 15 feet and would be excavated with a track-mounted excavator. Test pits would be excavated until digging cannot go further or to a depth of approximately 12 feet. The test pits may be excavated in a stepped or slope configuration at one end to allow safe entry and exiting. Material would be stockpiled adjacent to excavations and used for backfilling after data collection. A sufficient

amount of compaction effort would be applied to place the backfill material to a relatively firm and unyielding condition. After backfilling, the test pit location would be returned to near pre-excavation conditions and with a free-draining surface, such that ponding does not occur at the test pit location. Any excess spoils would be smoothly mounded over the test pit footprint in anticipation of future minor settlement.

### *2.4.3 Seismic Refraction Survey*

Seismic refraction surveys would be conducted along the ground surface of the proposed alignment shown on **Figure 2-2** to evaluate the rippability of the bedrock, thickness of the overburdened and weathering characteristic of the bedrock. The seismic refraction surveys are conducted from the ground surface by striking a sledgehammer onto a metal plate placed on the ground. Very sensitive geophones mounted a few inches deep into the soil measure resulting subsurface wave velocities and the depth of overburden soil is computed based on the test results.

## 2.5 Work Areas and Access

Four generalized work areas have been defined, as follows, and shown on **Figure 2-2**: Upland Work Area 1, Upland Work Area 2, Upland Work Area 3, and In-Channel Work Areas (Upstream and Downstream). Before entering the work areas, all equipment would be washed at a location designated by the District to ensure equipment is free of mud, algae, snails, and other debris. All equipment would be inspected before leaving the site to ensure it is free of mud and other debris that could contain invasive species. The rest of this section discusses access to each of these work areas and other important details for conducting work.

- **Upland Work Area 1 and the Upstream and Downstream (in-channel) Work Areas** would be accessed along the primary Freeman Diversion facility access road on the north side of the canal. This provides easy drive-up access to borings BHR-1 and 3.
- **Upland Work Areas 2 and 3** would be accessed along the well-graded road on the south side of the canal. This provides easy drive-up access to BHR-4, 7, and 9 and relatively easy drive-up access to BHR-5, 10, 11, and 12 and TP-1 through TP-6. The southern portion of Upland Work Area 2, including BHR-5 and 10, would be accessed via an existing dirt road on the adjacent property. Upland Work Area 3, which includes BHR-13, would also be accessed along this dirt road but would require cross-country travel, likely including grading. Two potential routes to Work Area 3 are shown on **Figure 2-2**. The exact path and area of impact would be determined depending on the drill rig and grade limitations. The routes shown are 30 feet wide but may be considerably narrower. In addition to grading the access route, an approximately 50-foot-square drill pad may be required.
- **Upstream and Downstream Work Areas** would initially be accessed via existing ramps and routes identified for the Freeman Diversion Maintenance Project. Because the river channel is a dynamic river system capable of depositing and redistributing large quantities of sediment within the channel, the exact access routes to BHR-2, 6, and 8 are uncertain. Depending on the amount of river flow during the 2020-21 water year, the District may need to prepare and implement a dewatering and diversion plan. It is possible access can be readily obtained by non-extraordinary means such as drive-up access with a truck-mounted drill rig, but steel plates or drill mats may be necessary, particularly where soft ground may be encountered. However,

relatively deep pools (at times exceeding a depth of 6 feet) may obstruct overland travel entirely, requiring the use of a crane to mobilize a compact drill rig. Lastly, it is possible that access to the Upstream Work Area could be provided along the crest of the Freeman Diversion facility from the right abutment off Todd Road (*see* **Figure 2-2**).

## 2.6 Schedule, Staffing and Equipment

Geotechnical explorations would be conducted beginning September 1 or later in the year and within the Santa Clara River channel would only be conducted between September 16 and October 3, 2021. The duration of the field work is approximately 4 weeks. Project activities would occur Monday-Friday from 6 a.m. to 7 p.m.

Borings would be conducted using a track-carrier mounted or truck mounted drill and/or a smaller more light-weight rig for borings if they require the use of a crane to deliver the equipment to in-channel drilling location(s) (at BHR-2, 6 and 8). Heavy equipment operation would be limited to the minimum area necessary. Support vehicles would include up to five pickup trucks and a water truck. It is possible a small all-terrain utility vehicle would also be used. Onsite work crews would typically include approximately five personnel.

## 2.7 Monitoring

Staff would travel to the inclinometer and piezometer weekly or monthly to collect monitoring data. Trips to the site would continue until monitoring is no longer needed and the boreholes are backfilled, as described above.

## 2.8 Regulatory Requirements, Permits, and Approval

### *2.8.1 Existing Freeman Diversion Maintenance Project Permits*

In 2019, the United States Army Corps of Engineers (USACE) issued a Programmatic Individual Permit (SPL-2013-00171-EBR) for the Freeman Diversion Maintenance Project; authorizing activities annually to maintain this facility through December 18, 2024. In support of the Individual Permit and as required under Section 7 of the Endangered Species Act (ESA), the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) issued letters of concurrence. The Water Quality Certification was deemed to be waived by USACE.

Among other items, the Programmatic Individual Permit authorizes downstream dewatering activities of the Freeman Diversion facility, upstream and downstream flow diversion, vegetation removal within 15 feet of the Freeman Diversion facility, riprap berms, and access routes, and repair of access routes. To the maximum extent practicable, the District would implement the Freeman Diversion Maintenance Project activities immediately prior to or during the geotechnical explorations to facilitate access to the exploration locations. For the aforementioned activities (e.g., dewatering, vegetation removal), the District would adhere to all permit terms and conditions, including geographical limitations and timing requirements.

### *2.8.2 Proposed Project*

The District would also obtain permits and approvals for geotechnical exploration activities and work areas that are beyond the scope of permits obtained for the Freeman Diversion Maintenance Program. The following permits and approvals are anticipated.

- **USACE Clean Water Act (CWA) Section 404 Permit**. This permit is required for discharge of dredge and fill material into waters of the United States, including the Santa Clara River.
- **ESA Section 7 Consultation.** Consultation with the NMFS and USFWS is required for possible effects on federally listed species pursuant to Section 7 of the federal ESA.
- **NRHP Section 106 Consultation.** Consultation with the State Historic Preservation Officer and other consulting agencies, including the Advisory Council on Historic Preservation to develop an agreement that addresses the treatment of historic properties.
- **Los Angeles Regional Water Quality Control Board (LARWQCB) CWA Section 401 Water Quality Certification.** This certification is required for issuance of federal permits including the CWA Section 404 permit and discharge of dredge and fill material to waters of the state.
- **California Department of Fish and Wildlife (CDFW), Lake and Streambed Alteration Agreement.** Compliance with California Fish and Game Code Section 1602 may be required for alteration of the bed and bank of the Santa Clara River.

# 3.0 Environmental Checklist

## Project Information

| | |
|---|---|
| #1. Project title: | Freeman Diversion Fish Passage Facility<br>Geotechnical Exploration Project |
| #2. Lead agency name and address: | United Water Conservation District<br>1701 North Lombard Street, Suite 200<br>Oxnard, CA 93030 |
| #3. Contact person and phone number: | Randall McInvale: (805) 525-4431 |
| #4. Project location: | 4 miles southwest of the city center of Santa Paula, Ventura County, California |
| #5. Project sponsor's name and address: | Same as lead agency |
| #6. General plan designation: | Agriculture and Open Space |
| #7. Zoning: | Open Space 80 acres (OS-80)/Mineral Resource Protection (MRP)/Habitat Connectivity and Wildlife Corridor (HCWC) |
| #8. Description of project:<br>(Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or offsite features necessary for its implementation. Attach additional sheets if necessary.) | The proposed project proposes geotechnical explorations to investigate the geotechnical site characteristics to inform final design and construction of the future fish passage facility at the Freeman Diversion facility, owned by the District. |
| #9. Surrounding land uses and setting: Briefly describe the project's surroundings: | The surrounding land use consists of the Santa Clara River, the Southern Pacific Milling Company, bare ground, and a vegetated hillside |
| #10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.) | NMFS, USFWS, USACE, LARWQCB, State Historic Preservation Officer, and CDFW. |
| #11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to PRC Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.? | No California Native American tribes have requested consultation. |

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

## Environmental Factors Potentially Affected

No environmental resources were found to have "potentially significant impacts". The environmental factors listed as "Yes" in the table below would be potentially affected by this project, involving at least one impact that has "Less-than-Significant Impacts with Mitigation Incorporated" as indicated by the checklist on the following pages. Impacts to all resources for the proposed project are reduced to less-than-significant with the incorporation of mitigation measures.

**Table 3-1. Environmental Resources with Potentially Significant Impacts Prior to Mitigation.**

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

## Determination (To be completed by the Lead Agency)

| On the basis of this initial evaluation: | Yes or No? |
|---|---|
| I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. | No |
| 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. | Yes |
| I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. | No |
| 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. | No |
| 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 Environmental Impact Report (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. | No |

Signature

May 18, 2021
Date

Linda Purpus
Print Name

Environmental Services Manage
Title

United Water Conservation District
Agency

## 3.1 Aesthetics

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

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

### *3.1.1 Environmental Setting*

The project site is located approximately 1 mile south of Santa Paula Highway (Highway 126), and 2.25 miles northeast of Highway 118. To access the site, from Highway 118 take the unnamed dirt road exit (approximately 0.10 mile from East Vineyard Avenue) onto South Pacific Milling Road and continue for 2.25 miles until reaching BHR-1. The project area is moderately sloped and is comprised of the Santa Clara river channel and floodplain, a vegetated hillside, and bare unpaved ground. The western section of the project site surrounds a mineral resource processing station. There are no scenic vistas within the vicinity of the project site. There are public views of the portion of the project site along the hillside from highways 126 and 118. The majority of the project site would not be visible due to the agricultural fields to the north, and hillsides to the south of the project site. There are no designated scenic highways within the vicinity of the project site (Caltrans 2015 and 2019).

### *3.1.2 Discussion*

**#1 -a, b, and d. Have a substantial adverse effect on a scenic vista? Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

There are no significant viewsheds, scenic vistas, or scenic highways located in the vicinity of the project site (Caltrans 2015 and 2019). Geotechnical exploration activities would be conducted during the day and the project would not create new sources of light. There would be no change to visual resources. There would be **no impact**.

**#1 -c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

There would be workers onsite for a period of approximately 4 weeks, collecting soil and rock samples, performing seismic refraction traverses, and performing test pit sampling along key locations. However, following geotechnical explorations, the project site would be restored to approximate pre-project conditions. If vegetation is removed from the river channel, these areas are anticipated to become naturally revegetated. Since the project would not result in any new built structures or damage to the existing landscape, the project would not permanently change the existing views. Therefore, this impact is considered **less than significant**.

## 3.2 Agriculture and Forestry Resources

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

| | | | | | |
|---|---|---|---|---|---|
| #2 -a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |
| #2 -b. Conflict with existing zoning for agricultural use, or a Williamson Act contract? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |
| #2 -c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |
| #2 -d. Result in the loss of forest land or conversion of forest land to non-forest use? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |

| | | | | | |
|---|---|---|---|---|---|
| #2 -e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? **Yes.** | Have No Impact? No. | Have Beneficial Impact? No. |

### *3.2.1 Environmental Setting*

The project site is zoned as OS-80/MRP/HCWC (Ventura County 2020). There is no agriculture land within the project site. PRC Section 12220(g) defines "forestland" as land that can support 10 percent native tree cover and forest vegetation of any species, including hardwoods, under natural conditions and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. According to this definition, small portions of the project site would qualify as forestland, near BHR 11 and 13.

### *3.2.2 Discussion*

**#2 -a and b. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

The project site does not contain any agricultural lands, and therefore, the project would not convert any farmland to non-agriculture uses and would not conflict with a Williamson Act contract. There would be **no impact**.

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

The project site is zoned as OS-80/MRP/HCWC, which allows for the management of forest land and rangelands (Ventura County 2020). However, the project would not require the rezoning of existing lands because no development is proposed. There would be **no impact**.

### #2 -e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

There is no agricultural land within the project site. There are small patches of forestland within the project site, near BHR 11 and 13 on the hillside. The project would likely require removal of vegetation at these locations. However, the relatively small amount of vegetation removal would be insignificant. The Los Padres National Forest accounts for approximately 574,000 acres, or 47 percent of the Ventura County's total land area. Therefore, this impact would be **less than significant**.

## 3.3 Air Quality

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

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

### *3.3.1 Environmental Setting*

The proposed project is located in the South-Central Coast Air Basin (SCCAB) within Ventura County. The Ventura County Air Pollution Control District (VCAPCD) is responsible for obtaining and maintaining air quality conditions in the County.

The federal Clean Air Act and California Clean Air Act required the United States Environmental Protection Agency and California Air Resource Boards (CARB) to establish health-based air quality standards at the federal and state levels. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) were established for the following criteria pollutants: carbon monoxide (CO), ozone (O3), sulfur dioxide (SO2), nitrogen dioxide (NO2), particulate matter less than 10 microns in diameter (PM10), particulate matter less than 2.5 microns in diameter (PM2.5), and lead. Areas of the state are designated as attainment, nonattainment, maintenance, or unclassified for the various pollutant standards according to the federal Clean Air Act and California Clean Air Act.

An “attainment” designation for an area signifies that pollutant concentrations did not violate the NAAQS or CAAQS for that pollutant in that area. A “nonattainment” designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as identified in the criteria. A “maintenance” designation indicated that the area previously categorized as nonattainment is currently categorized as attainment for the applicable pollutant; though the area must demonstrate continued attainment for a specific number of years before it can be re-designated as an attainment area. An “unclassified” designation signifies that data does not support either an attainment or a nonattainment status. The United States Environmental Protection Agency established NAAQS in 1971 for six air pollution constituents. States have the option to add other pollutants, to require more stringent compliance, or to include different exposure periods. CAAQS and NAAQS are listed in **Table 3-2**.

Under the CAAQS, the County is designated as nonattainment for 8-hour ozone, and PM10, and attainment/unclassified for PM2.5, CO, NO2., SO2., lead, and sulfates (CARB 2019). Under NAAQS, the County is designated as nonattainment for 8-hour ozone, and attainment/unclassified for PM2.5, PM10, CO, NO2, SO2, lead, and sulfates (CARB 2019).

The area’s air quality monitoring network provides information on ambient concentrations of air pollutants in the SCCAB. VCAPCD operates several monitoring stations in Ventura County, air quality data was obtained from the El Rio station. **Table 3-3** compares a 5-year summary of the highest annual criteria air pollutant emissions collected at this station with applicable CAAQS, which are more stringent than the corresponding NAAQS. Due to the regional nature of these pollutants, O3, PM2.5, and PM10 are expected to be fairly representative of the project site. As indicated in **Table 3-3**, O3 and PM10 standards have been exceeded over the past 5 years.

## Table 3-2. Federal and California Ambient Air Quality Standards and Attainment Status.

| Pollutant | Averaging Time | California Standards Concentration | Federal Primary Standards Concentration |
|---|---|---|---|
| Ozone ($O_3$) | 8-hour | 0.070 parts per million (ppm). (137 micrograms per cubic meter). | 0.070 ppm (137 micrograms per cubic meter.) (*See* Note #1.) |
| | 1-hour | 0.09 ppm. (180 micrograms per cubic meter). | (None; *see* Note #2.) |
| Respirable Particulate Matter ($PM_{10}$) | 24-hour | 50 micrograms per cubic meter. | 150 micrograms per cubic meter. |
| | Annual Arithmetic Mean | 20 micrograms per cubic meter. | (None.) |
| Fine Particulate Matter ($PM_{2.5}$) | 24-hour | (None.) | 35 micrograms per cubic meter. |
| | Annual Average | 12 micrograms per cubic meters. | 12 micrograms per cubic meter. |
| Carbon Monoxide | 8-hour | 9 ppm. (10 milligrams per cubic meter.) | 9 ppm. (10 milligrams per cubic meter). |
| | 1-hour | 20 ppm. (23 milligrams per cubic meter). | 35 ppm. (40 micrograms per cubic meter). |
| Nitrogen Dioxide | Annual Average | 0.03 ppm. (57 micrograms per cubic meters.) | 0.053 ppm. (100 micrograms per cubic meters.) |
| | 1-hour | 0.18 ppm. (339 micrograms per cubic meters.) | 0.100 ppm. (188 micrograms per cubic meters.) |
| Lead | 30-day Average | 1.5 micrograms per cubic meters. | (None.) |
| | Rolling 3-Month Average | (None.) | 0.15 micrograms per cubic meter. |
| | Quarterly Average | (None.) | 1.5 micrograms per cubic meter. |
| Sulfur Dioxide | 24-hour | 0.04 parts per million. (105 micrograms per cubic meter.) | 0.14 parts per million (for certain areas) |
| | 3-hour | (None.) | (None.) |
| | 1-hour | 0.25 parts per million. (655 micrograms per cubic meter.) | 0.075 parts per million. (196 micrograms per cubic meter.) |
| Sulfates | 24-hour | 25 micrograms per cubic meter. | No federal Standard. |
| Hydrogen Sulfide | 1-hour | 0.03 parts per million. (42 micrograms per cubic meter.) | No federal Standard. |
| Vinyl Chloride | 24-hour | 0.01 parts per million. (26 micrograms per cubic meter.) | No federal Standard. |

**Notes:**

#1. On October 1, 2015, the national 8-hour ozone ($O_3$) primary and secondary standards were lowered from 0.075 to 0.070 ppm.
#2. 1-Hour ozone standard revoked effective June 15, 2005, although some areas have continuing obligations under that standard.
Source: CARB 2016

## Table 3-3. Ambient Air Quality Monitoring Data Measured at the El Rio Monitoring Station.

| Pollutant Standards | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|
| **1-Hour Ozone** | | | | | |
| Maximum 1-hour concentration (ppm) | 0.070 | 0.084 | 0.084 | 0.072 | 0.078 |
| Days Exceeding[a] CAAQS 1-hour (>0.09 parts per million) | 0 | 0 | 0 | 0 | 0 |
| **8-Hour Ozone** | | | | | |
| National maximum 8-hour concentration (ppm). | 0.066 | 0.071* | 0.071* | 0.062 | 0.070 |
| State max. 8-hour concentration (ppm). | 0.066 | 0.071* | 0.072* | 0.062 | 0.070 |
| Days Exceeding[a] NAAQS 8-hour. (>0.075 ppm) (*See* note #1.) | 0 | 0 | 0 | 0 | 0 |
| Days Exceeding[a] CAAQS 8-hour. (>0.070 ppm) (*See* note #1.) | 0 | 1 | 1 | 0 | 0 |
| **Particulate Matter (PM10)** | | | | | |
| National max. 24-hour concentration (micrograms per cubic meter). | 93.3 | 105.0 | 287.9* | 209.0* | 187.8* |
| State max. 24-hour concentration (micrograms per cubic meter). | 92.0* | 101.6* | 286.0* | 208.4* | 192.4* |
| State max. 3-year average concentration (micrograms per cubic meter). | 27 | 27 | 29 | 29 | 29 |
| State annual average concentration (micrograms per cubic meter). | 25.6 | N/A | 29.0 | 26.6 | N/A |
| Days Exceeding[a] NAAQS 24-hour (>150 micrograms per cubic meter). | 0 | 0 | 1 | 2 | 2 |
| Days Exceeding[a] CAAQS 24-hour (>50 micrograms per cubic meter). | 6 | N/A | 29.5 | 21 | N/A |
| **Particulate Matter (PM2.5)** | | | | | |
| National max. 24-hour concentration (micrograms per cubic meter). | 25.5 | 22.7 | 81.3* | 41.2* | 25.5 |
| State max. 24-hour concentration (micrograms per cubic meter). | 25.5 | 22.7 | 81.3 | 41.2 | 25.5 |
| State annual average concentration (micrograms per cubic meter). | 9.5 | 8.1 | N/A | 8.3 | N/A |
| Days Exceeding[a] NAAQS 24-hour (>35 micrograms per cubic meter). | 0 | 0 | 4.1 | 1.0 | 0 |

Notes:

* = Values in excess of applicable standard.

N/A =There was insufficient (or no) data available to determine the value.

2018 is the latest year of data available as of preparation of this Chapter.

#1. An exceedance is not necessarily a violation. Sources: CARB 2019.

### *3.3.2 Discussion*

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

The VCAPCD has established direct impact thresholds of 25 pounds per day of reactive organic compounds (ROC) and the same for nitrogen oxides ($NO_x$) and cumulative impact thresholds of 2 pounds per day of ROC and the same for $NO_x$. The *Ventura County Air Quality Assessment Guidelines* states that an environmental document for a proposed project must address a projects consistency with the Air Quality Management Plan (AQMP). Project consistency with the AQMP can be determined by comparing the actual population growth in the county with the projected growth rates used in the AQMP. However, a project that conforms to the applicable General Plan designation and has the VCAPCD cumulative threshold of 2 pounds per day of ROC and NOx, is not required to assess consistency with the AQMP. Consequently, a project with emissions below these levels is also considered to have a less-than-significant cumulative adverse air quality impact. (VCAPCD 2003). Additionally, the *Ventura County Air Quality Assessment Guidelines* state that a project that may be reasonably expected to generate fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public, or which may cause, or have a natural tendency to cause, injury or damage to business or property (*see* California Health and Safety Code, Division 26, §41700) would have a significant adverse air quality impact (VCAPCD 2003).

The project would generate minimal short-term emissions from the use of equipment needed for exploration activities and from workers commuting to the project site. Only a few pieces of construction equipment would be used as a time and intermittently each day. Additionally, up to five pickup trucks, one water truck, and one small all-terrain utility vehicle would be onsite. The proposed activities would require approximately five round trips each day to transport crew members, materials, and equipment to the project site. Due to the very small amount of construction equipment and truck trips needed each day to complete the proposed project, project activities are not anticipated to generate daily emissions over the established direct impact thresholds. Additionally, the proposed project would not be growth inducing as it would not include construction of new developments. The project would conform to the Ventura County General Plan and is not anticipated to produce cumulative emissions over 2 pounds per day of ROC and NOx. Therefore, direct and cumulative emissions of NOx and ROC would not exceed applicable VCAPCD thresholds.

During construction, a small amount of the particulate matter (PM) emissions would be generated in the form of fugitive dust during ground disturbance activities and in the form of equipment exhaust and re-entrained road dust from vehicle travel. Impacts from PM emissions would be small and intermittent each day of construction. However, the VCAPCD guidelines indicate these fugitive dust emissions are an important issue, and this impact would be considered **potentially significant**. The following mitigation measure has been identified to address this impact.

**Mitigation Measure AQ-1: Best Management Practices to Reduce Fugitive Dust, Reactive Organic Compound, and Nitrogen Oxide Emissions.**

The following measures will be implemented during/following geotechnical exploration activities to the extent possible.

- The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust.
- Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (screened water from the District's diversion facilities) should penetrate sufficiently to minimize fugitive dust during grading activities.
- Fugitive dust produced during grading, excavation, and construction activities shall be controlled by the following activities:
    - All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved onsite roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary.
- Graded and/or excavated inactive areas of the construction site shall be monitored by the District at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally safe dust control materials, shall be periodically applied to portions of the project site that are inactive for over 4 days, as determined to be necessary and/or as part of normal District operations. For the geotechnical exploration areas that are located outside of the existing footprint of the Freeman Diversion facility and outside of the Santa Clara River channel, if no further grading or excavation operations are planned for the area, disturbed areas should be seeded with a native seed mix and watered until grass growth is evident, or periodically treated with environmentally safe dust suppressants, to prevent excessive fugitive dust.
- Signs shall be posted onsite limiting traffic to 15 miles per hour or less.
- During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by onsite activities and operations from being a nuisance or hazard, either offsite or onsite. The site superintendent/supervisor shall use his/her discretion in conjunction with the VCAPCD in determining when winds are excessive.
- Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with the California Division of Occupational Safety and Health regulations.
- Minimize equipment idling time
- Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications
- Lengthen the construction period during smog season (May-October), to minimize the number of vehicles and equipment operating at the same time

- Use alternatively fueled construction equipment, such as compressed natural gas, liquefied natural gas, or electric, if feasible.

Implementation of Mitigation Measure AQ-1 would reduce PM impacts by minimizing fugitive dust from construction activities. Therefore, the impact from the project would be **less-than-significant with mitigation incorporated**.

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

Some members of the population are especially sensitive to emissions of air pollutants and should be given special consideration during the evaluation of the project air quality impacts. These people include children, senior citizens, and persons with pre-existing respiratory or cardiovascular illnesses, and athletes and others who engage in frequent exercise, especially outdoors. Sensitive receptors include schools, residences, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The closest sensitive receptor is a residence located approximately 0.6-mile northwest of the project site.

Transport to and from the project and use of construction equipment onsite would generate diesel PM, additionally driving along unpaved roads and ground disturbing activities would generate fugitive dust. However, emissions would be short-term and insignificant due to the small number of equipment that would be operating at any time, there are no sensitive receptors immediately adjacent to the project site that would be exposed to these air pollutants, and effects from toxic air contaminants are typically observed over long-term (many years) exposure periods. Therefore, this impact is considered **less-than-significant**.

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

Human response to odors is subjective, and sensitivity to odor varies from person to person. Typically, odors are considered an annoyance rather than a health hazard. However, a person's response to odor can range from psychological (e.g., irrigation, anger, anxiety) to physiological (e.g., circulatory and respiration reaction, nausea, headaches, etc.). The proposed project would not create new objectionable odors. There would be **no impact**.

## 3.4 Biological Resources

**#4. BIOLOGICAL RESOURCES. Would the project:**

| | | | | | |
|---|---|---|---|---|---|
| #4 -a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? **Yes.** | Have Less-than-Significant Impact? No. | Have No Impact? No. | Have Beneficial Impact? No. |
| #4 -b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? **Yes.** | Have No Impact? No. | Have Beneficial Impact? No. |
| #4 -c. Have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | Have Potentially Significant Impact? No.. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? **Yes.** | Have No Impact? No. | Have Beneficial Impact? No. |
| #4 -d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? **Yes.** | Have No Impact? No. | Have Beneficial Impact? No. |
| #4 -e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |
| #4 -f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |

### *3.4.1 Environmental Setting*

Information presented in this environmental setting is based on observations made during a biological field survey for the proposed project, review of existing biological survey and assessment documents completed for previous activities at the Freeman Diversion facility, and publicly available biological resource databases and documents on species distribution and habitat requirements. The field survey for the proposed project was conducted by a GEI biologist on January 14, 2021 and focused on evaluating potential for special-status species to occur on or adjacent to the work areas and for special-status species and sensitive habitats to be affected by geotechnical exploration activities.

#### Habitat Conditions

Elevation in the work areas ranges from approximately 150 feet above mean sea level at the Upstream and Downstream Work Areas in the Santa Clara River channel to approximately 400 feet on the hillside at Upland Work Area 3. Representative photographs of the work areas are provided in **Appendix A**.

Upland Work Area 1 and the northern portion of Upland Work Area 2 are within developed areas associated with the Freeman Diversion facility and are completely unvegetated. The southern portion of Upland Work Area 2 is sparsely vegetated, primarily with weedy, nonnative grasses and black mustard (*Brassica nigra*) and scattered blue gum (*Eucalyptus globulus*) trees. Upland Work Area 3 and the associated potential access routes are on a relatively steep hillside that supported grazed shrubland before it burned in the October 2019 Maria Fire. Based on observations made during the January 2021 field survey, no shrubs appear to have survived, and the hillside vegetation is currently dominated by early successional weedy non-native grasses and black mustard.

The Upstream and Downstream Work Areas are in the Santa Clara River channel, which is a dynamic system driven primarily by periodic short duration, high intensity flood events (Stillwater Sciences 2007). Stream flow at the Freeman Diversion facility is seasonally variable and most directly influenced by winter rainfall events (typically December-March). Flow can increase dramatically after significant storm events, and such flows typically include high sediment loads. Channel morphology and vegetation are affected primarily by large flood flows, rather than by the moderate discharges that frequently characterize channels in temperate climates. Large winter storms periodically scour out vegetation, which fills back in during periods of lower flows. These factors result in a mixture of riparian vegetation that shifts in extent, structure, and composition in response to deposition, scour, and inundation by large flood flows (Stillwater Sciences 2007).

The in-channel work areas are a mosaic of unvegetated rocky and sandy bars, arroyo willow (*Salix lasiolepis*) thicket (CNPS 2021a), and varying extents of open water, depending on the time of year and recent rainfall amounts. Arroyo willow thicket occurs upstream and downstream of the Freeman Diversion facility, though the upstream areas are generally more sparsely vegetated with young, recently recruited saplings; downstream vegetation cover is more dense and more extensive. Other portions of the channel, outside the work areas, support more developed vegetation, including late-successional riparian scrub and woodland, dominated by arroyo willow, red willow (*Salix laevigata*), sandbar willow (*Salix exigua*), and mulefat (*Baccharis*

*salicifolia*), along with nonnative giant reed (*Arundo donax*) and saltcedar (*Tamarix ramosissima*).

### Federal and State Jurisdictional Waters and Riparian Habitat

The Santa Clara River is a jurisdictional water of the United States and water of the state subject to regulation by the USACE and State Water Resources Control Board (SWRCB) under Sections 404 and 401 of the Clean Water Act, respectively. Based on recent consultation, the SWRCB has delegated it authority to LARWQCB for this project. The Santa Clara River channel and associated riparian vegetation also fall under CDFW jurisdiction pursuant to Section 1602 of the California Fish and Game Code (CFGC).

### Special-status Species

For purposes of this analysis, special-status species include plants and animals in one or more of the following categories:

- taxa (i.e., taxonomic categories or groups) officially listed by the state or federal government as endangered, threatened, or rare
- candidates for state or federal listing as endangered or threatened
- taxa that meet the criteria for listing, even if not currently included on any list, as described in state CEQA Guidelines CCR Section 15380
- species identified by CDFW as species of special concern
- species listed as Fully Protected under the CFGC
- plants considered by CDFW to be "rare, threatened, or endangered in California (i.e., List 1B and 2B plants)"

The California Natural Diversity Database (CNDDB) (CDFW 2021) and the California Native Plant Society (CNPS) online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2021b) were reviewed for occurrences of special-status species in the United States Geological Survey Santa Paula 7.5-minute quadrangle, within which the Freeman Diversion facility is located, and the surrounding eight quadrangles (Ojai, Santa Paula Peak, Fillmore, Saticoy, Moorpark, Oxnard, Camarillo, and Newbury Park). United reports observation of special-status species to the CNDDB annually; however, not all observations have been added to the database. A list of federally listed species and designated critical habitat that could be affected by geotechnical exploration activities was obtained from the USFWS Information for Planning and Conservation website (USFWS 2020). The CNDDB, CNPS, and USFWS species lists are provided in **Appendix B** (Note: Not all species tracked in the CNDDB and CNPS inventory and included on species lists meet the definition of special-status species described above.)

A preliminary list of special-status plant, fish, and wildlife taxa to be evaluated for potential to occur in or adjacent to the work areas was developed based on information from previous surveys and assessments, information on species habitat requirements and current distribution, CNDDB species and occurrence information, and the USFWS species list. **Table 3-4** provides information on special-status taxa that were determined to have potential to occur in or adjacent to the work

areas, based on current distribution, known occurrences, habitat and microhabitat requirements, and observations made during the 2021 field survey. These species are discussed further below.

Species eliminated from consideration and not discussed further include those whose current range does not include the project vicinity and those with habitat requirements that are not supported by the work areas. For example, plants, invertebrates, and amphibians that are restricted to vernal pools and other aquatic habitat absent from the work areas and birds and mammals that are restricted to coastal scrub, chaparral, and other upland scrub and woodland habitats are not discussed. In addition, riparian-nesting special-status birds that have not been documented during annual nesting bird surveys also are not addressed because they are known to be absent from the work areas. Santa Ana sucker (*Catostomus santaanae*) is not discussed because the Santa Clara River populations are not included in the federal listing (USFWS 2017) or any state listings of special-status species. However, the state does regulate Santa Ana sucker as a native species, affording it, as well as other native species, protection under CFGC.

## Table 3-4. Special-status Species with Potential to Occur in or Adjacent to the Work Areas

| Species | Status[1] | | Habitat Associations | Potential to Occur on or Adjacent to Work Areas |
|---|---|---|---|---|
| | Federal | State | | |
| **Plants** | | | | |
| white rabbit-tobacco *Pseudognaphalium leucocephalum* | – | 2B.2 | Sandy, gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland | Moderate; arroyo willow thicket provides marginally suitable habitat, and occurrences are known from the project vicinity. |
| **Fish** | | | | |
| arroyo chub *Gila orcuttii* | – | SSC | Coastal streams, typically with slow-moving water and mud or sand substrate | High; an introduced population occurs in the Santa Clara River. |
| steelhead (southern California distinct population segment [DPS]) *Oncorhynchus mykiss* | E | SSC | Anadromous; coastal streams from the Santa Maria River system south to the Mexico border | High; adults and juveniles migrate through the project area and occur at the Freeman Diversion facility. |
| Pacific lamprey *Entosphenus tridentatus* | – | SSC | Anadromous; coastal streams along the Pacific coast, south to Los Angeles County | Moderate; adults and juveniles migrate through the project area and are now occasionally observed at the Freeman Diversion facility. |
| **Reptiles** | | | | |
| southern California legless lizard *Anniella stebbinsi* and California legless lizard *Anniella* spp. | – | SSC | Variety of habitats, generally in moist, loose soils | Moderate; portions of work areas provide potentially suitable habitat, and numerous occurrences are known from primarily upland locations in the project vicinity. |

## Table 3-4. Special-status Species with Potential to Occur in or Adjacent to the Work Areas

| Species | Status[1] | | Habitat Associations | Potential to Occur on or Adjacent to Work Areas |
|---|---|---|---|---|
| | Federal | State | | |
| coastal whiptail<br>*Aspidoscelis tigris stejnegeri* | – | SSC | Deserts and semi-arid areas with sparse vegetation and open areas; also found in riparian and woodland areas | Moderate; work areas provide potentially suitable habitat, and a recent occurrence is known from upland floodplain approximately 5 miles upstream. |
| coast horned lizard<br>*Phrynosoma blainvillii* | – | SSC | Woodland, scrub, and grassland, most commonly along sandy washes with scattered low bushes | High; work areas provide suitable habitat, and occurrences are known from the river channel in the immediate project vicinity. |
| two-striped garter snake<br>*Thamnophis hammondii* | – | SSC | Streams, creeks, pools and other aquatic habitats and adjacent vegetation types | High; in-channel work areas provide suitable habitat, and occurrences are known from immediate project vicinity. |
| south coast garter snake<br>*Thamnophis sirtalis* | – | SSC | Marsh and upland habitats near permanent water and riparian vegetation | Moderate; work areas provide potentially suitable habitat, and a recent occurrence is known from an upland area within 1 mile. |
| western pond turtle<br>*Emys marmorata* | – | SSC | Permanent or nearly permanent water bodies; nests in sunny uplands near suitable aquatic habitat | High; in-channel work areas provide suitable habitat, and occurrences are known from immediate project vicinity. |
| **Birds** | | | | |
| yellow-billed cuckoo (western DPS)<br>*Coccyzus americanus occidentalis* | T | E | Deciduous riparian woodland with dense understory | Moderate; in-channel work areas provide marginally suitable habitat, and recent occurrences are known from approximately 8 miles upstream. |
| burrowing owl<br>*Athene cunicularia* | – | SSC | Grassland, agricultural land, and other open habitats with natural or artificial burrows or friable soils | Low; upland work areas provide poor-quality habitat and suitable burrows are currently absent. |
| white-tailed kite<br>*Elanus leucurus* | – | FP | Nests in woodlands and isolated trees and forages in grasslands, pasture, and agricultural fields | High; work areas provide suitable foraging and nesting habitat. |
| northern harrier<br>*Circus cyaneus* | – | SSC | Grasslands, field crops, and marshes; nests on the ground in patches of dense, often tall, vegetation | Moderate; work areas provide marginally suitable foraging habitat but are unsuitable for nesting. |
| loggerhead shrike<br>*Lanius ludovicianus* | – | SSC | Savannah, shrublands, and open woodlands with shrubs and small trees for nesting | Moderate; work areas provide marginally suitable foraging and nesting habitat. |
| southwestern willow flycatcher<br>*Empidonax traillii extimus* | E | E | Dense riparian habitats, typically near surface water or saturated soil | Moderate; in-channel work areas provide marginally suitable habitat, and recent occurrences are known from approximately 1 mile downstream. |

## Table 3-4. Special-status Species with Potential to Occur in or Adjacent to the Work Areas

| Species | Status[1] | | Habitat Associations | Potential to Occur on or Adjacent to Work Areas |
|---|---|---|---|---|
| | Federal | State | | |
| least Bell's vireo *Vireo bellii pusillus* | E | E | Structurally diverse riparian habitat with dense shrub layer | High; known to nest in immediate project vicinity. |
| yellow-breasted chat *Icteria virens* | – | SSC | Riparian habitat, typically with dense shrub layer and open tree canopy | High; known to nest in immediate project vicinity. |
| yellow warbler *Setophaga petechia* | – | SSC | Riparian woodland and scrub, open scrub, and second-growth woodland, primarily near water | High; known to nest in immediate project vicinity. |
| **Mammals** | | | | |
| American badger *Taxidea taxus* | – | SSC | Dry, open areas in various habitats with friable soils and uncultivated ground | Moderate; Upland Work Area 3 provides marginally suitable habitat and occurrences are known from project vicinity. |

[1] Status Definitions
E = Listed as Endangered under the federal or state Endangered Species Act
T = Listed as Threatened under the federal or state Endangered Species Act
SSC = California Species of Special Concern
FP = Fully protected under the California Fish and Game Code
2B.2 = Plant species considered rare or endangered in California but more common elsewhere; moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat)
Notes: DPS = distinct population segment
Sources: CNPS 2021; CDFW 2021; GEI Consultants, Inc. data collected in 2020; Griffith Wildlife Biology 2020; Hall et al. 2020; Thomson et al. 2016; USFWS 2017, 2020; Booth 2016

#### *Special-status Plants*

White rabbit-tobacco (*Pseudognaphalium leucocephalum*) is a List 2B perennial herb that occurs in sandy and gravelly soils in chaparral, coastal scrub, cismontane woodland, and riparian woodland of the southwestern United States (CNPS 2021). Numerous occurrences are known from the Santa Clara River and elsewhere in southern California, including within 1 mile upstream of the work areas. Recent nearby occurrences have primarily been on open, sandy elevated river channel benches (CDFW 2021).

#### *Special-status Fish*

Arroyo chub (*Gila orcuttii*) is a California species of special concern native to several southern California creeks and rivers and introduced to several others; the Santa Clara River population is considered introduced. Arroyo chub occur in areas of slow-moving water, typically with mud or sand substrate, though they have also been found in pools with gravel, cobble, and boulder substrates (Moyle 2015). The nearest Santa Clara River occurrence documented in the CNDDB is near Fillmore, approximately 13 miles upstream of the Freeman Diversion facility (CDFW 2021); however, the species has been documented anecdotally in the immediate vicinity of the Freeman Diversion in recent years.

The southern California DPS of steelhead (*Oncorhynchus mykiss*) is federally listed as endangered and a California species of special concern. Adult steelhead typically migrate upstream when stream flows rise during winter storm events (Moyle 2002) and after sandbars at the mouths of the rivers breach (Shapovalov and Taft 1954). The upstream and downstream steelhead migration season is typically considered to be January to June. Depending on rainfall, upstream migration and spawning occurs in winter and early spring, typically from January through March, in most southern California streams. Upstream migrant adults and downstream migrant smolts and kelts have been recorded at the Freeman Diversion facility. Sixteen adult steelhead were observed at the Freeman Diversion facility between 1993 and 2014. All adults, including downstream migrant kelts, were observed in March and April (Booth 2016). In 2020, for the first time since 2012, two adult steelhead were observed in March leaping over the false weir and activating motion-sensor cameras after ascending the Denil fish ladder at the Freeman Diversion. Smolts are typically observed at the Freeman Diversion facility between early March and late May but have been observed as late as mid-July (Booth 2016). In the past, the District operated a downstream migrant fish trap, allowing for the collection of data related to the timing and abundance of smolt migration; however, due to requirements imposed by NMFS, the fish trap has not been operated since April 2014. The in-channel work areas are within designated critical habitat for the southern California DPS and support at least one of the physical or biological features that constitute critical habitat.

Pacific lamprey (*Entosphenus tridentata*) is an anadromous, widely distributed California species of special concern that has declined severely in southern California (Goodman and Reid 2012). Most adult spawning migrations occur between March and late June (Moyle et al. 2015), with peak migration into the Santa Clara River typically occurring in May. Historical records of Pacific lamprey in the Santa Clara River include numerous observations of migrating adults and downstream migrant juveniles and larvae at the Freeman Diversion facility. The Santa Clara River supported the last substantial population in the region, but recent observations have been very limited. The most recent lamprey observations have been a single juvenile in 2006 (Goodman and Reid 2012) and a spawned out adult female in the fish screen bay in April 2017 (UWCD unpublished data).

#### *Special-status Reptiles*

Southern California legless lizard (*Anniella stebbinsi*) and *Anniella* not yet assigned to new species within the *Anniella pulchra* complex are California species of special concern that occur in a variety of sparsely vegetated habitats, including coastal dunes, grasslands, chaparral, and riparian. Microhabitat requirements include sandy or loose, loamy soils, and high soil moisture may be a key factor (Thomson et al. 2016). Numerous occurrences of legless lizard have been documented in a variety of habitats in the project vicinity, although none of the recent occurrences are from the Santa Clara River corridor (CDFW 2021).

Coastal whiptail (*Aspidoscelis tigris stejnegeri*) is a California species of special concern whose distribution is limited to southern California and northern Baja California. This taxon occurs in a variety of habitats, including coastal scrub, chaparral, riparian, and woodlands. Preferred habitat may be brushy areas in sandy and gravelly washes, but gravelly chaparral and coastal scrub are

also used (Thomson et al. 2016). One occurrence is known from upland floodplain habitat approximately 5 miles upstream of the Freeman Diversion facility (CDFW 2021).

Coast horned lizard (*Phrynosoma blainvillii*) is a California species of special concern with a broad coastal and inland distribution. This species occurs in a wide variety of habitats, such as chaparral, sage scrub, annual grassland, and oak and riparian woodland but has narrow microhabitat preferences and requires loose, fine sand for burrowing, open areas for thermoregulation, and shrub cover for refugia (Thomson et al. 2016). The Santa Clara River channel and adjacent uplands provide suitable habitat for coast horned lizard, and individuals have been documented upstream and downstream of the Freeman Diversion facility, including within 0.5 mile (CDFW 2021).

Two-striped garter snake (*Thamnophis hammondii*) is a California species of special concern that occurs in coastal and inland foothills and mountains of southern and central California. This species is primarily aquatic and typically found in or near streams, creeks, and pools; associated vegetation types include willow, oak woodland, coastal sage scrub, chaparral, and coniferous woodland (Thomson et al. 2016). The Santa Clara River channel and adjacent uplands provide suitable habitat for two-striped garter snake, and individuals have been documented in and around the Freeman Diversion facility and within 5 miles upstream of the Freeman Diversion facility (CDFW 2021).

South coast garter snake is a distinct taxon of common garter snake (*Thamnophis sirtalis*) designated as a California species of special concern and thought to be limited to several disjunct extant populations in southern California. This taxon is thought to be restricted to marsh and upland habitats near permanent water and riparian vegetation (Thomson et al. 2016). An individual was recently documented in a California sagebrush (*Artemisia californica*) and grassland area immediately north of the Santa Clara River channel, less than a mile northeast of the Freeman Diversion facility (CDFW 2021).

Western pond turtle (*Emys marmorata*) is a California species of special concern that occurs in a broad range of aquatic habitats. These turtles can temporarily use semipermanent or ephemeral water bodies, though preferred aquatic habitat is deep, still, or slow-moving water with underwater refugia. Structures such as logs, rocks, bedrock outcrops, and exposed banks are required for basking (Ashton et al. 1997). Pond turtles also require upland habitat that is suitable for nesting and overwintering; nesting soils must be loose enough for excavation (Thomson et al. 2016). The Santa Clara River channel and adjacent uplands provide suitable wintering and nesting habitat for western pond turtle. More than 10 to 20 individuals at a time have been observed throughout the spring and summer months, immediately upstream and downstream of the Freeman Diversion facility. Individuals are also occasionally encountered in the fish trap and fish bay.

#### *Special-status Birds*

The western DPS of yellow-billed cuckoo (*Coccyzus americanus occidentalis*) is a federally threatened and state endangered breeding migrant that nests in deciduous riparian woodlands with a dense understory near water (Wiggins 2005). Because nests are constructed generally in willow (*Salix* spp.), but foraging occurs in cottonwood (*Populus* spp.) canopy, this subspecies require

multi-story structure (Laymon and Halterman 1987). Yellow-billed cuckoo was detected during focused surveys conducted in 2018 and 2019 approximately 8 miles upstream of the Freeman Diversion facility (Hall et al. 2020) in an area that supports more than 200 acres of high-quality, dense riparian woodland habitat. Despite these cuckoo detections and abundant and accessible food resources, no nesting behavior, nests, or fledglings were observed. Therefore, it was concluded that an actively breeding population may not have been present (Hall et al. 2020). The District has conducted annual protocol surveys for federally listed birds, including yellow-billed cuckoo, upstream and downstream of the Freeman Diversion facility since 2012. Although habitat along the Freeman Diversion facility reach of the river has been identified as suitable habitat for yellow-billed cuckoo, no individuals have been documented during the District surveys. The work areas provide relatively poor-quality habitat, because vegetation is dominated by young arroyo willow and lacks structural vegetation diversity present in nearby portions of the channel and upstream habitat where individuals have been documented.

Burrowing owl (*Athene cunicularia*) is a California species of special concern that prefers relatively flat, open, dry habitats. It is primarily a grassland species but can thrive in some landscapes that are highly altered by human activity if suitable burrows for roosting and nesting and short vegetation are present. Burrowing owls typically nest and roost in burrow systems created by medium-sized mammals or in artificial features (e.g., drainpipes and culverts) (Gervais et al. 2008). An individual was recently documented on the north side of the river, within 1 mile upstream of the project site. Habitat in and adjacent to the work areas, however, is of relatively poor quality. No suitable artificial burrows were observed in the developed areas, and no natural burrows were observed in the undeveloped areas during the January 14, 2021 field survey. In addition, the relatively steep slopes in Upland Work Area 3 provides poor-quality habitat for this species that prefers flat or gently rolling habitat.

White-tailed kite (*Elanus leucurus*) is fully protected under the CFGC. This species occurs in virtually all California lowlands. White-tailed kite nests in trees in lowland grasslands, agricultural areas, wetlands, oak woodland and savanna, and riparian areas with nearby open habitats (Moore 2000). They forage in grasslands, pasture, and some agricultural crops. Undeveloped upland portions of the project site provide suitable nesting habitat for white-tailed kite, and blue gum trees in Upland Work Area 2 provide potential nest sites.

Northern harrier (*Circus cyaneus*) is a California species of special concern that occurs primarily in lowlands of the state. This species nests and forages in a variety of open habitats, including marsh, wet meadows, borders of lakes, rivers, and streams, grasslands, weedy fields, and some agricultural crops. Nest are built on the ground in dense, often tall vegetation in relatively undisturbed areas (Davis and Niemla 2008). The work areas provide marginally suitable foraging habitat for northern harrier, but suitable nesting habitat is absent.

Loggerhead shrike (*Lanius ludovicianus*) is a California species of special concern that inhabits lowland and foothill areas with scattered shrubs and trees throughout most of California. On the coastal slope, loggerhead shrikes occur in chaparral, oak woodland, or oak savannah (Humple 2008). The project site provides marginally suitable foraging and nesting habitat for this species.

Southwestern willow flycatcher (*Empidonax trailii extimus*) is a state and federally endangered breeding migrant that nests in dense riparian habitats, typically near surface water or saturated soil (Sogge et al. 2020). In 2016 and 2017, protocol surveys documented a southwestern willow flycatcher pair nesting near Ellsworth Barranca, approximately 1 mile downstream of the Freeman Diversion facility. This pair successfully fledged offspring in each of these years but was not detected in 2018, 2019, or 2020. A single territorial female was detected in 2018 at the same nesting site, but no male was detected, and no breeding or nesting was observed (Griffith Wildlife Biology 2020). In addition, only migrant willow flycatchers were documented elsewhere along the Santa Clara River during other focused surveys in 2018 and 2019 (Hall et al. 2020). As with yellow-billed cuckoo, the Freeman Diversion facility reach of the river provides suitable habitat for southwestern willow flycatcher, but habitat in the work areas is of marginal quality for nesting, and the species is unlikely to nest in or immediately adjacent to the area. The in-channel work areas are within designated critical habitat for southwestern willow flycatcher and support the primary constituent elements that constitute critical habitat.

Least Bell's vireo (*Vireo bellii pusillus*) is a state and federally endangered breeding migrant that is largely associated with early successional riparian scrub and woodland with a developed canopy layer and dense shrub layer. Preferred habitat is typically dominated by willow (*Salix* spp.), mulefat (*Baccharis* spp.), and Fremont cottonwood (*Populus fremontii*). Protocol surveys have documented numerous least Bell's vireo territories and nests in 2012 through 2020. The number of documented least Bell's vireo territories has generally increased each year through 2018, with a slight drop (7%) in 2019, followed by a 20 percent increase in 2020 (Griffith Wildlife Biology 2020). In 2020, male least Bell's vireo territories were located approximately 200 feet from the edge of the Upstream Work Area and immediately adjacent to the Downstream Work Areas boundaries and approximately 200 to 300 feet from the nearest proposed boring locations.

Yellow warbler (*Setophaga petechia*) and yellow-breasted chat (*Icteria virens*) are breeding migrant California species of special concern that nest in riparian habitat. Yellow warblers generally occupy riparian vegetation in close proximity to water along streams and in wet meadows (Heath 2008). Chats occur in blackberry, wild grape, and other typically riparian vegetation that forms dense thickets and tangle (Comrack 2008). Numerous territorial singing males of both species are present each breeding season in the vicinity of the Freeman Diversion facility (Griffith Wildlife Biology 2020).

#### *Special-status Mammals*

American badger is a California species of special concern that occurs in a variety of habitats but is most abundant in grassland and dry, open shrubland and forest with friable soils for burrowing (CDFW 2021). Badgers can use marginal habitat (e.g. agriculture, residential areas, roadsides) at the edge of intact habitat patches, but they do not appear to persist in fragmented habitat (Quinn 2008). Potential evidence of badger (i.e., distinctive diggings) was documented in 2008 at two locations along the ridgeline southwest of the project site, approximately 0.5 to 1 mile from Upland Work Area 3 (CDFW 2021), and badgers occasionally forage in the District recharge basins 2 to 3 miles southwest of the Freeman Diversion facility.

### *3.4.2 Discussion*

**#4 -a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the United States Fish and Wildlife Service?**

One special-status plant species and 19 special-status wildlife species were identified as having potential to occur in or adjacent to the work areas, as discussed above in this section. Potential for geotechnical exploration activities to impact these species is discussed below.

#### Special-status Plants

The Upstream and Downstream Work Areas provide suitable habitat for the perennial herb white rabbit-tobacco, although nearby documented occurrences have different microhabitat conditions from the project site and the species has not been previously identified on or in the immediate vicinity of the project site. Disturbance within the in-channel work areas is anticipated to be limited to approximately 0.1 acre of potentially suitable habitat in which boring equipment and associated vehicles would operate. This represents a very small fraction of suitable habitat in the Santa Clara River channel, which includes an approximately 1.5-mile channel reach beginning approximately 0.75 mile upstream of the project site, where more than 700 white rabbit-tobacco plants were documented in 2018 (CDFW 2021). There would be no permanent habitat loss, and potential impacts would be limited to short-term, vehicle-related disturbance. In addition, equipment would be washed before accessing work areas in the river channel, thereby minimizing the introduction or spread of nonnative invasive species that could degrade habitat quality. Therefore, conducting the geotechnical explorations is very unlikely to have a substantial adverse effect on the local population of white rabbit-tobacco, if individuals occur in the work areas, and this impact would be **less than significant**.

#### Special-status Fish

Potential for direct effects on steelhead and Pacific lamprey would be avoided primarily by conducting in-channel borings outside the migration season for these species. In addition, lamprey numbers in the vicinity of the Freeman Diversion facility appear to have declined substantially in the past 20 years, and the species is very unlikely to be present in the vicinity when borings occur. Arroyo chub is also unlikely to be present, because in-channel borings would occur at the end of the dry season, when little, if any habitat is present. However, there is a small potential for juvenile steelhead and arroyo chub to be present, if open water occurs in the in-channel work areas or access routes. If present, individuals could be directly impacted during flow re-routing or dewatering, if necessary, to complete the borings.

Designated critical habitat for steelhead could be indirectly impacted by boring activities. Up to approximately 0.05-acre of arroyo willow thicket could require trimming/cutting to allow equipment access to in-channel boring locations. Based on January 2021 field observations, this vegetation would primarily be limited to recently recruited saplings. These habitat effects are anticipated to be short-term, likely only a single steelhead migration season. Because the Santa

Clara River is a dynamic system subject to a regular disturbance regime, instream habitat features are altered each year by winter flows, often substantially. Therefore, the very small amount of potential short-term, temporary adverse effects to in-channel vegetation would have a minor effect on steelhead, Pacific lamprey, and arroyo chub habitat.

Equipment operation in and adjacent to the river channel could result in additional indirect effects. Measures would be implemented to minimize potential for equipment operation in the channel to introduce or spread of nonnative invasive species that could degrade habitat quality. However, if equipment is not properly maintained and inspected, or equipment refueling is not properly conducted, accidental leaks of hazardous materials (e.g., fuel, oil, other fluids) could occur directly in the channel or be transported into the channel via runoff. Exposure to such materials can result in adverse behavioral responses and sublethal and lethal effects in affected fish, depending on the exposure level. Potential direct impacts to steelhead, if present in the work areas, and potential indirect impacts associated with habitat degradation could have a substantial adverse effect on the southern California steelhead due to the status of the population in the Santa Clara River, and this impact would be **potentially significant**. Potential direct and indirect impacts to Pacific lamprey and arroyo chub, if present in the work areas, could also result in an adverse effect to these species; however, based on their known status in the Santa Clara River, these effects are not likely to be substantial. The following mitigation measure has been identified to address these direct and indirect impacts and avoid adverse effects to special-status fish. While focused largely on measures to protect steelhead, the mitigation measure also includes actions to protect Pacific lamprey and arroyo chub, if present.

**Mitigation Measure BIO-1: Implement Measures to Minimize Potential for Direct Impacts on Steelhead and Steelhead Habitat.**

To minimize potential direct effects of geotechnical explorations on steelhead and its habitat, the District will ensure that the following measures are implemented:

- Heavy equipment operation will be limited to the minimum area necessary. Work area boundaries will be clearly identified before investigations begin, and no work will occur outside these work areas unless approved by the District Environmental Scientist responsible for permit compliance. All boundary markers will be removed immediately after work in a given area is complete.
- Before entering the site, all equipment will be washed at a location designated by the District Environmental Scientist responsible for permit compliance to ensure equipment is free of mud, algae, snails, and other debris. All equipment will be inspected before leaving the site to ensure it is free of mud and other debris that could contain invasive species.
- If an in-channel boring location is vegetated and vegetation removal is not covered by the existing Freeman Diversion Maintenance Project authorizations, the boring will be moved to an alternate location that does not require vegetation trimming/cutting, if feasible. If an appropriate alternative location that would provide the necessary geotechnical data and avoid vegetation trimming/cutting is not available, vegetation impacts will be limited to trimming/cutting the minimum area and extent required to allow access. Vegetation may be cut to near ground level, but complete removal will

not occur. Cut vegetation will be immediately removed from and deposited where it cannot re-enter the channel.

- If areas not covered by the existing Freeman Diversion Maintenance Project authorizations require flow rerouting or dewatering to access boring locations in the Upstream or Downstream Work Area, surveys will be conducted before flow rerouting or dewatering begin in an effort to identify steelhead and other native fish. Relevant areas will be surveyed by two or more biologists/technicians knowledgeable and experienced in steelhead and other native fish identification and ecology. Survey methods may include bank observations and snorkeling. Snorkeling will be conducted when water depth (e.g., >1 foot) or in-channel complexity (e.g., woody debris or riprap) causes bank observations to be ineffective. If conditions are not conducive for confidently surveying the work area for steelhead presence, activities in the affected area will be postponed until such conditions exist or alternate means of access (e.g., crane) will be employed. If steelhead are observed, flow rerouting and/or dewatering in occupied areas will not occur, and the affected boring(s) will be relocated as necessary. If steelhead are not observed, a biologist knowledgeable and experienced in steelhead identification and ecology will be on the site during flow rerouting and/or dewatering to exclude native fish and confirm steelhead do not enter the flow rerouting/ dewatering area. Pacific lamprey ammocoetes found present in the flow rerouting/ dewatering area will be collected and relocated to adjacent suitable habitat.
- All project work will cease if a listed species is observed in the work areas until the individual(s) leaves on its own accord, or until USACE completes additional consultation with USFWS and/or NMFS, as appropriate. If a listed species is observed, project personnel will notify the designated District Environmental Scientist who will be responsible for contacting the USACE as well as CDFW.
- A worker environmental awareness training will be provided by a District Environmental Scientist or qualified biologist to all workers before they are allowed access to work areas. A record of trained personnel will be kept by the District Environmental Scientist responsible for permit compliance. The training and associated handout will include contact information for the District Environmental Scientist; a description of required avoidance and minimization measures; information on sensitive species; instructions on correct techniques and procedures for working within the river channel and associated riparian vegetation; instructions to notify the foreman and the District Environmental Scientist in case of a hazardous material spill or equipment leak or upon the discovery of soil or groundwater contamination; instructions to notify the foreman and the District Environmental Scientist if a sensitive species is observed; and instructions that noncompliance with any laws, rules, regulations, or conservation measures could result in a worker being barred from participating in any remaining geotechnical investigations.

Implementation of Mitigation Measure BIO-1 would avoid and minimize direct impacts by establishing work area boundaries, not allowing any work outside of these areas, avoiding introduction or spread of nonnative invasive species, minimizing vegetation removal/trimming, conducting surveys for steelhead and other native fish prior to dewatering or water diversion, and conducting worker environmental training. Overall, through implementation of this mitigation measure, direct impacts to steelhead would be avoided by ensuring in-channel activities only

occur if boring locations and any potential flow re-routing or dewatering areas are free of steelhead, while also avoiding direct impacts to Pacific lamprey and arroyo chub to the extent practicable. Further, implementation of Mitigation Measures AQ-1, GEO-1 and HAZ-1 would substantially avoid and minimize indirect impacts to special-status fish species through the control of fugitive dust, implementation of erosion and sediment control measures, and the control of hazardous materials to avoid the potential for accidental hazardous material contamination. Therefore, potential direct and indirect impacts to special-status fish species and their habitat would be **less than significant with mitigation incorporated**.

### Special-status Reptiles

Geotechnical exploration activities would temporarily disturb habitat suitable for six reptile species of special concern that have moderate or high potential to occur in the work areas. This disturbance would be limited to short-term equipment and vehicle movement in a very small portion of the channel (approximately 0.1 acre); approximately 1 acre of undeveloped uplands, composed of a mixture of previously disturbed land and vegetated habitat, also would be disturbed by borings, test pits, and associated off-road access. This temporary habitat disturbance would not have a substantial adverse effect on special-status reptiles. However, equipment and vehicle movement could result in individuals being crushed. Although in-channel borings would occur after the peak nesting season for western pond turtle, unhatched eggs could still be present and potentially impacted if nests occur in the work areas. Because there is potential for individuals of special-status reptiles to be directly or indirectly impacted, and some of these species have limited distributions or are known from few locations in the region, this could result in a substantial adverse effect on local populations, and this impact would be **potentially significant**. The following mitigation measure has been identified to address this impact.

**Mitigation Measure BIO-2: Minimize Potential for Destruction of Western Pond Turtle Nests and Injury or Death of Special-status Reptiles.**

To minimize potential direct effects of geotechnical explorations on special-status reptiles, the District will ensure that the following measures are implemented:

- Within 10 days before in-channel geotechnical exploration activities begin, a qualified biologist will conduct an initial survey for western pond turtles along the access in-channel access routes and work areas. If a pond turtle is found, it will be allowed to move out of the area on its own. If evidence of an unhatched nest is found, a no-disturbance buffer will be established and implemented around the nest until the eggs have hatched and the young have dispersed from the area.
- Immediately before geotechnical exploration activities begin in a given area, a qualified biologist will survey the anticipated disturbance and/or dewatering area for special-status reptiles. If any individuals of target species are found, they will be allowed to move out of the area on their own before equipment moves into the area. If an individual does not leave the area and the biologist determines it can be safely captured, the animal will be relocated to suitable habitat in the vicinity, from which it is unlikely to reenter the work area. Work in the area will not begin until the animal has been relocated or is thought to have left the area on its own.
- A worker environmental awareness training will be provided by a District Environmental Scientist or qualified biologist to all workers before they are allowed access to work areas. A record of trained personnel will be kept by the District Environmental Scientist responsible for permit compliance. The training and associated handout will include contact information for the Districts Environmental Scientist; a description of required avoidance and minimization measures; information on sensitive species; instructions on correct techniques and procedures for working within the river channel and associated riparian vegetation; instructions to notify the foreman and District Environmental Scientist in case of a hazardous material spill or equipment leak or upon the discovery of soil or groundwater contamination; instructions to notify the foreman and District Environmental Scientist if a sensitive species is observed; and instructions that noncompliance with any laws, rules, regulations, or conservation measures could result in a worker being barred from participating in any remaining geotechnical investigations.
- If a pond turtle or other possible special-status reptile is discovered in a work area during geotechnical exploration activities, it will be allowed to move out of the area on its own. If the individual does not leave the work area, the District Environmental Scientist will be notified, and a qualified biologist will attempt to safely capture and relocate the animal to suitable habitat in the vicinity, from which it is unlikely to reenter the work area. Work in the area will not resume until the animal has been relocated or is thought to have left the area on its own.

Implementation of Mitigation Measures BIO-2 would reduce this impact by conducting surveys prior to geotechnical activities, conducting workers environmental training, and allowing special-status reptiles found in the work areas to move out of the area on their own. Further, implementation of Mitigation Measure BIO-1 would also minimize direct impacts to special-status reptiles by establishing work area boundaries, not allowing any work outside of these areas,

avoiding introduction or spread of nonnative invasive species, minimizing vegetation removal/trimming, and conducting worker environmental training. The implementation of Mitigation Measures AQ-1, GEO-1 and HAZ-1 would substantially avoid and minimize indirect impacts to special-status fish species through the control of fugitive dust, implementation of erosion and sediment control measures, and the control of hazardous materials to avoid the potential for accidental hazardous material contamination. Therefore, potential direct and indirect impacts to special-status reptile species and their habitat would be **less than significant with mitigation incorporated**.

### Special-status Birds

Nine special-status bird species have low to high potential to occur in the work areas. Because all geotechnical exploration activities would occur outside the nesting season, there would be no adverse effects on active nests of these species. Burrowing owl is not anticipated to occur in or adjacent to the work areas, because habitat for this species is poor, and no suitable natural or artificial burrows are present. As described above under the special-status fish impact discussion, riparian vegetation trimming/cutting to allow equipment access to in-channel boring locations would be limited to a maximum of approximately 0.05 acre of primarily recently recruited saplings. This very small amount of potential short-term, temporary adverse effects to in-channel vegetation would have a minor effect on habitat for riparian special-status birds, including critical habitat for southwestern willow flycatcher. Impacts on upland vegetation would be limited primarily to nonnative ground cover because geotechnical exploration activities would occur in developed and recently burned areas in which native vegetation is currently nearly absent. If tree trimming is required to facilitate access to some boring and test pit locations, it is anticipated to be limited to blue gum trees. These minor habitat-related impacts would not have a substantial adverse effect on special-status birds, and this impact would be **less than significant**.

### Special-status Mammals

Based on regular disturbance at the Freeman Diversion facility facilities and marginal quality of habitat in the upland work areas, American badger is unlikely to den on or immediately adjacent to the work areas. More remote areas in the hills and canyons to the south where apparent badger diggings have been observed provide much higher-quality habitat and are more likely to support active dens. Movement of project equipment and support vehicles would adhere to established speed limits along the District access routes, and travel speeds in the work areas would be very slow. Therefore, potential for a badger moving through the work area or along access routes to be struck by project-related traffic is extremely low. Therefore, impacts on American badger would be **less than significant**.

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

The Santa Clara River channel and associated riparian vegetation are protected under the CFGC. In addition, the river channel is designated critical habitat for steelhead and southwestern willow

flycatcher. Up to a maximum of approximately 0.05 acre of arroyo willow thicket could require trimming/cutting to allow equipment access to in-channel boring locations. Based on January 2021 field observations, this vegetation would primarily be limited to recently recruited saplings. These habitat effects are anticipated to be very short-term because the Santa Clara River is a dynamic system subject to a regular disturbance regime, and instream habitat features are altered each year by winter flows, often substantially. Therefore, the very small amount of potential short-term, temporary adverse effects to in-channel vegetation associated with conducting the geotechnical explorations would not have a substantial adverse effect on riparian habitat or designated critical habitat in this portion of the river channel. This impact would be **less than significant.**

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

The Santa Clara River is state- and federally protected water. Disturbance of the river channel would be limited to conducting borings and associated equipment and support vehicle access. Disturbance within the in-channel work areas is anticipated to be limited to approximately 0.1 acre in which boring equipment and associated vehicles would operate. In-channel borings would be conducted in the fall, when water levels are at their lowest, and inundated areas would be avoided to the maximum extent practicable. However, if necessary, boring locations and access routes would be dewatered as described above under the special-status fish impact discussion. Therefore, potential for temporary increases in turbidity and other water quality degradation would be minimized. There would be no permanent impact on waters, and temporary impacts would be limited to short-term disturbance associated with equipment and potentially dewatering. This would not result in a substantial adverse effect on state- or federally protected waters. Therefore, this impact would be **less than significant**. In addition, appropriate authorizations would be obtained from USACE and SWRCB, as needed, and all conditions of these permits would be met.

### #4 -d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The Santa Clara River and adjacent undeveloped habitat provides a corridor and/or primary route for fish and wildlife migration and movement, including at the project site. Note that the Santa Clara River is identified in County Ordinance 4537, Habitat Connectivity and Wildlife Corridors, as a mapped wildlife corridor. Under the County Ordinance, vegetation modification associated with the project would be exempt from a discretionary permit (see Section 8109-4.8.3.2). In-channel borings would occur when the river channel is primarily dry, including from dewatering, if necessary, and would avoid anadromous fish migration periods. Geotechnical exploration activities also would not occur during the bird nesting season. In addition, activities would be conducted sequentially and limited to a very small proportion of the river corridor or adjacent upland area at any one time. This would not interfere substantially with fish or wildlife movement or corridor use during the day, and no activities would occur at night. For these reasons, impacts on fish and wildlife migration, movement, and nursery site use would be **less than significant**.

**#4 -e and f. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? 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 *Conservation and Open Space Element of the Ventura County 2040 General Plan* (County of Ventura 2020) includes goals and policies designed to identify, preserve, protect, and restore sensitive biological resources and their supporting habitats, wetland and riparian habitats, coastal habitats, habitat connectivity and wildlife corridors, and habitats and species identified as "locally important" by the County. Geotechnical explorations would result in only minor, temporary impacts on some of these resources and would not conflict with goals or policies of the Conservation and Open Space Element. In addition, there are no approved Habitat Conservation Plans or Natural Community Conservation Plans within Ventura County. Therefore, there would be **no impact** related to these issues.

## 3.5 Cultural Resources

**#5. CULTURAL RESOURCES. Would the project:**

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

### *3.5.1 Environmental Setting*

The Freeman Diversion facility is located on the Santa Clara River, approximately 4 miles southwest of the city of Santa Paula, Ventura County, California, and is situated on the southeastern boarder of the "Santa Paula Y Saticoy Rancho" Section of Township 3 North and Range 21 West (on the San Bernardino Meridian).

Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historic, architectural, archaeological, cultural, or scientific importance. The following is a regional culture history that emphasizes historical patterns that had the potential of creating cultural resources within the project site. The culture history comes from *California Prehistory: Colonization Culture and Complexity* (Glassow et al. 2007:191-214).

*The Paleo-Indian Period* (11,000 to 7,000 Calibrated [Cal.] B.C.) of the larger region left some of the earliest evidence for humans in California; including Clovis-style spearheads, radiocarbon dated human remains, and archaeological sites dating to between 8,000 and 7,000 cal. B.C. The *Early Period* (~7,000 to 2,000 cal B.C.) began with the Millingstone Horizon, which is identified by millingstones and stone manos, a diversity of flaked-stone tools, complete *Olivella* sp. shell-beads, and pit houses located on the high-ground near rivers. During the later Early Period millingstones became more elaborate, corner-notched spearheads appeared, villages became larger, and more bead types were made. Some cultural patterns of the ethnographically described Chumash emerged during the *Middle Period* (2,000 to A.D. 1,100), including stylized mortars and pestles, circular shell fishhooks, notched net-weights, and the use of asphaltum to make spears, baskets, and other tools. During the second half of the Middle Period both the distinctive *tomol* plank-canoe and the bow and arrow were developed, and the diversity of *Olivella* sp. beads

increased. Throughout the Middle Period the population continued to grow, with villages becoming larger and more permanent, with some locations occupied until the historic-era. Also, during this period, craftsmanship became more sophisticated, there was greater social stratification, and regional trade networks emerged. Most of these patterns continued into the *Late Period* (A.D. 1,100 to circa 1800), and by A.D. 1300 the historic-era cultural elements of Chumash society had largely been developed.

The project site is in the ethnographic territory of the Ventureño Chumash and is near the former village of *Śatikuy* (present day Saticoy). Settlements were composed of several communal houses, store houses, sweat lodges, and a village cemetery. Within Chumash society, wealth, *tomol* canoes, and social status were inherited along patrilineal lines. The power of the chief, however, was limited to leading ceremonies and war parties, and was subject to approval by all within a village.

The historic-era began with the arrival of Spanish explores between 1542 and 1769, with European settlement in Ventura County truly beginning in 1782 when Mission San Buenaventura was established. Shortly after the mission was founded, farms and ranches were established throughout the region (Santa Paula Chamber of Commerce 2021), including Rancho Santa Paula Y Saticoy where the project site is located. Between 1843 and the late 19th century farming and ranching remained the major industries of the Santa Clara Valley, though minimal oil exploration began in the 1860s. During the second half of the 19th century severe droughts hindered farming and ranching operations, and insufficient transportation lines prevented further development of the area (County of Ventura 2000:9-10). In the 1870s water companies formed and started to build irrigation infrastructure, and in 1887 the Southern Pacific Railroad was built through the Santa Clara Valley. Irrigation systems and the railroad together allowed agriculture to become profitable in the valley and the oil industry to expand. Grain crops were replaced with walnut, olive, apricot, and citrus orchards over the next few decades; and the population and communities of the Santa Clara Valley grew dramatically over after this time (San Buenaventura Research Associates 1996:3-4). As part of this growth, and the continued focus on conversing water in the region, the Santa Clara Water Conservation District was established in 1927, and became the District in 1950. The Freeman Diversion facility was constructed in 1991.

## Methods and Findings

The cultural resources investigations carried out for the proposed project included a records search at the South Central Coast Information Center (SCCIC), archival research, correspondence with the Native American Heritage Commission (NAHC), and archaeological and built environment field surveys of the project area.

### *Record Search*

In January 2021, GEI archaeologist Mathew Chouest requested an in-house records search of the area of potential effect (APE) and a surrounding 0.5-mile radius from the SCCIC; the results of the record search were received on January 22, 2021. The records search included a review of the Santa Paula USGS 7.5-minute series topographic cultural resource base map held at the SCCIC and associated records. The SCCIC cultural resource map review indicates that *no previously*

*recorded resources are within the project site*, or within 0.5-mile of the Project APE (SCCIC File Number: 21965.8114).

Two cultural resource study reports (VN-00785, -01262) cover the southeastern portion of the project site. The two reports are nearly identical, with the later report (VN-01262) being an update to the early report. The reports discuss the discovery of a scatter of shells near the project site that at first appeared to be an archaeological resource, but after an extensive identification effort, was determined to be fossilized and from long extinct shellfish species. No other archaeological resources or potential archaeological resources were identified in the reports, which cover the western portion of South Mountain.

#### *Field Surveys*

An archaeological pedestrian survey of the APE was conducted by GEI archaeologist Ben Curry, PhD, Registered Professional Archaeologist, on January 14, 2021. Intensive survey methods with 3-meter transects were employed within a 30-meter-diameter area around the proposed locations of the 12 boreholes and 6 test pits. BHR-13 is on private land and was not surveyed due to not having access permission from the landowner. Reconnaissance survey methods were employed for the access routes, seismic refraction transect path, and the remainder of the work areas. The portions of access routes and seismic refraction transect paths near BHR-13 were also not surveyed due to not having access to the neighboring private land.

A piece of shell and two pieces of possible lithic debitage were identified near BHR-5, however, the shell appeared to be fossilized and is likely of similar origin as those documented in earlier archaeological surveys, and the possible lithic debitage likely resulted from a fire in 2019 or previous access route construction and do not appear cultural or associated with a larger archaeological resource. No other archaeological or historic-era built environment resources were identified during the pedestrian survey.

### *3.5.2 Discussion*

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

Under CEQA, public agencies must consider the effects of their actions on "historical resources." CEQA defines an "historical resource" as any resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR). The CRHR includes resources listed in or formally determined eligible for listing in the NRHP, as well as some California Historical Landmarks and Points of Historical Interest. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be significant resources for purposes of CEQA unless a preponderance of evidence indicates otherwise (California PRC Section 5024.1, 14 CCR Section 4850). The

eligibility criteria for listing in the CRHR are similar to those for NRHP listing but focus on importance of the resources to California history and heritage.

A cultural resource may be eligible for listing in the CRHR if it:

1. is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
2. is associated with the lives of persons important in our past
3. embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of an important creative individual or possesses high artistic values
4. or has yielded, or may be likely to yield, information important in prehistory or history

In addition to meeting one or more of the above criteria, resources eligible for listing in the CRHR must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regards to the retention of location, design, setting, materials, workmanship, feeling, and association (OHP 1999).

No previously recorded archaeological resources of 50-years old or older built environment resources are present within the project site or within 0.5-mile of the project site, and no built environment resources were discovered during the pedestrian survey. A piece of shell and two potential lithic debitage flakes were identified in the southern portion of the project site, but these items are likely not cultural related materials and do not appear associated with an archaeological resource. No other archaeological resources or potential archaeological resources were identified during the pedestrian survey. However, the project site is located along the Santa Clara River, which on a regional level is the location of several known historic-era Native American villages and prehistoric archeological sites. Native American villages and archaeological sites in the broader area are typically located on high ground along rivers. The overall project site setting, in an active river channel and on a river bank at the foot of a steep hillside, makes it very unlikely that a previously unknown buried archaeological resource meeting CRHR significance criteria would be in this location, but there remains a small possibility that a buried resource could be encountered during project-related ground-disturbing activities. If this were to occur, then this impact would be considered **potentially significant**. The following mitigation measure has been identified to address this impact.

**Mitigation Measure CR-1: Address Previously Undiscovered Historic Resources, Archaeological Resources, and Tribal Cultural Resources.**

If cultural resources are identified during Project-related ground-disturbing activities, all ground disturbing work in the immediate vicinity of the find should cease immediately and the District should be notified. In the event of an inadvertent discovery, the District will retain a qualified archaeologist to assess the significance of the find, make a preliminary determination, and if appropriate, provide recommendations for a treatment. Any treatment

plan should be reviewed by the District and appropriate permitting agencies prior to implementation. Ground-disturbing activities should not resume near the find until the treatment, if any is recommended, is complete or the qualified archaeologist determines the find is not significant.

Implementing Mitigation Measure CR-1 would reduce this impact because the find would be assessed by an archaeologist and the treatment or investigation would be conducted in accordance with CEQA guidelines regarding cultural resources. Therefore, the impact from the project would be **less-than-significant with mitigation incorporated**.

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

No human remains have been discovered at the project site and it is not anticipated that human remains, including those interred outside of dedicated cemeteries, would be discovered during project ground-disturbing activities. There is no indication from the records searches or pedestrian survey that human remains are present within the project site locations. However, in the event that human remains, including those interred outside of formal cemeteries and including associated items and materials, are discovered during subsurface activities, the human remains and associated items and materials could be inadvertently damaged. If this were to occur, then this impact would be considered **potentially significant**. The following mitigation measure has been identified to address this impact:

**Mitigation Measure CR-2: Avoid Potential Effects on Undiscovered Burials.**

If human remains are found, the District shall be immediately notified. The California Health and Safety Code requires that excavation be halted in the immediate area and that the Ventura County coroner be notified to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code, Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, the coroner must contact the NAHC by telephone within 24 hours of making that determination (Health and Safety Code, Section 7050.5[c]).

Once notified by the coroner, the NAHC shall identify the person determined to be the Most Likely Descendant (MLD) of the Native American remains. With permission of the legal landowner(s), the MLD may visit the site and make recommendations regarding the treatment and disposition of the human remains and any associated grave goods. This visit should be conducted within 24 hours of the MLD's notification by the NAHC (PRC, Section 5097.98[a]). If a satisfactory agreement between interested parties (the MLD, land owner(s), lead agency, etc.) for treatment of the remains cannot be reached, any of the parties may request mediation by the NAHC (PRC, Section 5097.94[k]). Should mediation fail, the landowner or the landowner's representative must reinter the remains and associated items with appropriate dignity on the property in a location not subject to further subsurface disturbance (PRC, Section 5097.98[b]).

Implementing Mitigation Measure CR-2 would reduce this impact because the find would be assessed by an archaeologist and treated or investigated in accordance with state and federal laws. Therefore, impacts from the project would be **less-than-significant with mitigation incorporated**.

## 3.6 Energy

**#6. ENERGY. Would the project:**

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

### *3.6.1 Environmental Setting*

Electricity in the project area is primarily provided by Southern California Edison Company, while the Southern California Gas Company provides natural gas service (Ventura County 2020a). In 2019, the total electricity consumption for Ventura County was approximately 5344 million kilowatts per hour (kWh) (CEC 2019).

### *3.6.2 Discussion*

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

The proposed project would not result in significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources. The project would involve short-term and intermittent use of diesel-fueled vehicles and there would not be a substantial long-term increase in energy consumption. Therefore, impacts would be **less than significant**.

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

The Ventura County Regional Energy Alliance (VCREA) has served as a regional Joint Powers Authority since 2002 to address energy planning, conservation, and reliability. VCREA's mission is "to establish Ventura County, its communities and neighboring regions as the leader in developing and implementing durable, sustainable energy initiatives that support sensible growth, healthy environment and economy, enhanced quality of life, and greater self-reliance for the region" (VCREA 2021). The goals for VCREA are to: 1) lead and coordinate regional integrated energy resource planning, 2) develop a long-term, sustainable energy strategy and implementation plan, 3) develop regional capability to respond to energy emergencies and short-term disruptions., 4) increase awareness of and access to conservation, efficiency, and renewable opportunities, 5) add value to, but not duplicate, services offered by public utilities and other regional providers, 6) inform decision makers and stakeholders of energy policy, regulatory, and market changes, and

7) empower Ventura County to lead in research, development, demonstration, innovation, and commercialization of sustainable energy technologies (Ventura County 2020b). Since the proposed project is limited to conducting geotechnical exploration activities, it would not conflict with the goals set by VCREA. Additionally, the proposed project would comply with the state's Climate Commitment to reduce the reliance on non-renewable energy sources by half by 2030 (CEC 2015). There would be **no impact**.

## 3.7 Geology and Soils

**#7. GEOLOGY AND SOILS. Would the project:**

| | | | | | |
|---|---|---|---|---|---|
| #7 -a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | | |
| #7 -a. i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.) | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |
| #7 -a. ii. Strong seismic ground shaking? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? **Yes.** | Have No Impact? No. | Have Beneficial Impact? No. |
| #7 -a. iii. Seismic-related ground failure, including liquefaction? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? **Yes.** | Have No Impact? No. | Have Beneficial Impact? No. |
| #7 -a. iv. Landslides? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? **Yes.** | Have No Impact? No. | Have Beneficial Impact? No. |
| #7 -b. Result in substantial soil erosion or the loss of topsoil? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? **Yes.** | Have Less-than-Significant Impact? No. | Have No Impact? No. | Have Beneficial Impact? No. |

**#7. GEOLOGY AND SOILS. Would the project:**

| | | | | | |
|---|---|---|---|---|---|
| #7 -c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction or collapse? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? **Yes.** | Have No Impact? No. | Have Beneficial Impact? No. |
| #7 -d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated),), creating substantial direct or indirect risks to life or property? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? **Yes.** | Have No Impact? No. | Have Beneficial Impact? No. |
| #7 -e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |
| #7 -f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? **Yes.** | Have Less-than-Significant Impact? No. | Have No Impact? No. | Have Beneficial Impact? No. |

### *3.7.1 Environmental Setting*

The project site is located on the following soil types: San Benito clay loam, 50 to 75 percent slopes, Major Land Resource Area 20, and sandy alluvial land (NRCS 2021). Underlying geology of the project site includes unconsolidated surficial gravel and sand alluvial deposits (stream channel) and weakly consolidated surficial gravel alluvial terrace deposits (Dibblee and Ehrenspeck 1992). The Oak Ridge thrust fault is located within the project site. The Oak Ridge fault is a late Quaternary fault meaning displacement has occurred in the past 700,000 years. There are many small Quaternary faults located in the vicinity of the project site, the closest ones being the Wright Road fault, located approximately 0.5 mile south of the project site and an unnamed fault, located approximately 1 mile southeast of the project site (CGS 2015a). There are no Alquisto-Priolo fault zones located within the project site (CGS 2020). The project site is located within a liquefaction zone, as shown on the Ventura County Mapper (Ventura County 2021). Additionally, the project site is located within an area susceptible to landslides (CGS 2020).

### *3.7.2 Discussion*

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

**#7 -a. i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)**

The project site is not located within an Alquisto-Priolo Earthquake fault zone. Surface fault rupture is most likely to occur on active faults (i.e., faults showing evidence of displacement within the last 11,700 years). Damage from surface fault rupture is generally limited to a linear zone a few yards wide. Since the proposed project is not located within the vicinity of an active fault, there would be **no impact**.

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

The proposed project would not pose a direct risk to people during seismic activity. The project is located within a liquefaction zone; however, the project activities are limited to geotechnical explorations, would not be located in an area easily accessible to the public, and would not involve new development. The proposed project would not increase the risk of seismic ground shaking or seismic-related ground failure (CGS 2020). There would be no substantial risk to people or structures from seismic-related activity as a result of the proposed project. Therefore, this impact would be **less than significant**.

**#7 -a. iv. Landslides?**

The project site is located within an area susceptible to landslides (CGS 2015b). However, the project activities are limited to geotechnical explorations, would be located in an area not easily accessible to the public, and would not involve any new developments. Therefore, the project would not result in substantial adverse impacts including risk of loss, injury, or death, and the impact from the project would be **less than significant**.

**#7 -b. Result in substantial soil erosion or the loss of topsoil?**

Grading, stockpiling, and other project activities could result in the temporary and short-term disturbance of soil, which could be expose to rainfall if a storm event were to occur during project implementation. Rainfall of sufficient intensity could dislodge soil particles from the soil surface. Once particles are dislodged, and the storm is large enough to generate runoff, substantial localized erosion could occur. Additionally, eroded soils from project activities could be conveyed to the Santa Clara River channel in runoff. Topsoil may be stripped and stockpiled for later reuse on the site. Soil disturbance could result in substantial loss of topsoil due to wind erosion.

The project focuses on data collection and does not include an operations phase and would not create the potential for soil erosion or loss of topsoil after geotechnical explorations are complete. However, since there is potential for substantial soil erosion and loss of topsoil during project exploration and potential stockpiling activities, the impact from the project would be considered

**potentially significant**. The following mitigation measure has been identified to address this impact.

> **Mitigation Measure GEO-1: Prepare and Implement a Storm Water Pollution Prevention Plan, if required, Implement Erosion Control Best Management Practices, and Comply with Ventura County Standards for Grading and Erosion Control.**
>
> If project activities would disturb more than 1 acre, then activities would be subject to SWRCB's Statewide Stormwater General Permit for Construction (2009-0009-DWQ) requirements construction-related stormwater permit requirements of the NPDES program. Any permits will be obtained by the District before any ground-disturbing construction activity.
>
> If a Construction General Permit is needed, it would also require preparation of a SWPPP that identifies BMPs for erosion control and to prevent or minimize the introduction of contaminants into surface waters. Such BMPs could include, but would not be limited to, silt fencing, straw bale barriers, fiber rolls, storm drain inlet protection, hydraulic mulch, and a stabilized construction entrance. The SWPPP will include development of site-specific structural and operational BMPs to prevent and control impacts on runoff quality, measures to be implemented before each storm event, inspection and maintenance of BMPs, and monitoring of runoff quality by visual and/or analytical means. The SWPPP will also include dust control practices to prevent wind erosion, sediment tracking, and dust generation by construction equipment. The BMPs shall be clearly identified and maintained in good working condition throughout the construction process. The construction contractor shall retain a copy of the approved SWPPP on the construction site and modify it as necessary to suit specific site conditions.
>
> If it's determined that a construction General Permit and SWPPP is not necessary for the proposed project, the District would still identify and implement BMPs for erosion control, similar to those listed above, to prevent contaminants entering surface water.
>
> The District would obtain and comply with all provisions of a Ventura County Grading Permit, if required.

Implementing Mitigation Measure GEO-1 would minimize the potential impact from construction-related erosion because a SWPPP and/or BMPs would be implemented to prevent and control pollution and minimize and control runoff and erosion. Therefore, the impact from the project would be **less-than-significant impact with mitigation incorporated**.

**#7. -c and d. 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 offsite landslide, lateral spreading, subsidence, liquefaction or collapse? Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property**

A portion of the project site includes clay loam soils classified as having a moderate shrink-swell potential (NRCS 1970). Expansive soils can become unstable due to changes in moisture content. However, the proposed project is planned for the dry season, and in the unlikely event water is present, a dewatering or diversion plan would be in place to manage moisture on the project site, as described in the project description. Additionally, the project is limited to geotechnical exploration activities which are unlikely to be affected by expansive soils. The project does not include new development or structures and the presence of exploration pits and borings would not cause soils to become unstable. Therefore, this impact is **less than significant**.

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

The project would not require the use of septic tanks or alternative wastewater disposal systems. Temporary portable restrooms would likely be provided for construction workers. Therefore, there would be **no impact**.

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

The project sites are located on marine and non-marine sedimentary rock that consist of alluvium, lake, playa, and terrace deposits from the Pleistocene-Holocene ages (Dibblee and Ehrenspeck 1992). With few exceptions, paleontological resources are found almost exclusively in sedimentary rock. However, to be considered a unique paleontological resource, a fossil must be more than 11,700 years old (i.e., the generally accepted end of the last glacial period of the Pleistocene Epoch) (SVP 2010). Holocene deposits contain only the remains of extant, modern taxa (if any resources are present), which are not considered "unique" paleontological resources. The stream channel alluvial deposits would be considered of low paleontological sensitivity. Alluvial deposits that are of Pleistocene age or older (surficial terrace areas on the south side of the project) may be paleontologically sensitive and the potential exists for discovery, inadvertent damage to, or destruction of an unknown paleontological resources within the project site. Therefore, this impact would be considered **potentially significant**. The following mitigation measure has been identified to address this impact.

**Mitigation Measure GEO-2: Implement Construction Worker Personnel Training, Stop Work if Paleontological Resources are Encountered During Earthmoving Activities and Implement a Recovery Plan, if Appropriate.**

To minimize the potential for destruction of or damage to potentially unique, paleontological resources during earth-moving activities, the District will implement the measures described below.

- Before the start of construction activities at the project site, construction personnel involved with earth-moving activities (including the site superintendent) will be informed of the possibility of encountering fossils and proper notification procedures should potential fossils be encountered. This worker training may be prepared and presented by an experienced field archaeologist at the same time as construction worker education on cultural resources is presented.

- If paleontological resources are discovered during earth-moving activities, the construction crew will notify the District and will immediately cease work in the vicinity of the find. The District will retain a qualified paleontologist to inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts will occur, no further effort shall be required.

- If the resource cannot be avoided and may be subject to further impact, a qualified paleontologist shall evaluate the resource in accordance with SVP Guidelines (2010) and determine whether it is "unique" under CEQA, Appendix G, part VII. The determination and associated plan for protection of the resource shall be provided to the District for review and approval. If the resource is determined not to be unique, work may commence in the area. If the resource is determined to be a unique paleontological resource, work shall remain halted, and the paleontologist shall consult with the District staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA.

- Preservation in place (i.e., avoidance) is the preferred method of mitigation for impacts to paleontological resources and shall be required unless there are other equally effective methods. Other methods may be used but must ensure that the fossils are recovered, prepared, identified, catalogued, and analyzed according to current professional standards under the direction of a qualified paleontologist. All recovered fossils shall be curated at an accredited and permanent scientific institution according to Society of Vertebrate Paleontology standard guidelines; typically, the Natural History Museum of Los Angeles County and University of California, Berkeley accept paleontological collections at no cost to the donor. Work may commence upon completion of treatment, as approved by the District.

Implementation of Mitigation Measure GEO-2 would reduce this impact by identifying unique paleontological resource or site or unique geological feature discovered during construction, avoiding disturbance or avoiding substantial adverse changes to the significant of the resource. Therefore, the impact from the project would be **less-than-significant impact with mitigation incorporated**.

## 3.8 Greenhouse Gas Emissions

**#8. GREENHOUSE GAS EMISSIONS. Would the project:**

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

### *3.8.1 Environmental Setting*

Ventura County developed a Climate Protection Plan in 2012 that focused on County government operations, setting out six major action areas and 15 climate protection commitments (County of Ventura 2012). However, no additional climate protection commitments have been established to be implemented past 2020.

### *3.8.2 Discussion*

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

Temporary Greenhouse Gas (GHG) emissions would be generated during project activities, primarily from use of diesel-powered vehicles to conduct geotechnical explorations and mobilize equipment over the approximately 4-week construction period. Additionally, pickup trucks, a water truck, and one small all-terrain utility vehicle would be used onsite. The project would not have an operational phase. During project activities vehicle usage each day would be minimal. Therefore, only a very small amount GHG emissions would be temporarily generated, and this impact would be **less than significant**.

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

Ventura County does not currently have an adopted local plan for reducing GHG. California has more than 10 Executive Orders directing state agencies to implement programs to reduce GHG emissions to meet 2030 target of 40 percent below 1990 levels (State of California 2018). CARB is the primary state agency responsible for implementing GHG reduction programs. Since the proposed project is limited to geotechnical exploration activities, it would not conflict with plans, policies, or regulations prepared or established to reduce GHG emissions. The proposed project's incremental contribution to the cumulative impact of increasing atmospheric levels of GHGs would be less than cumulatively considerable. The impact would be **less than significant**.

## 3.9 Hazards and Hazardous Materials

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

| | | | | | |
|---|---|---|---|---|---|
| #9 -a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? **Yes.** | Have Less-than-Significant Impact? No. | Have No Impact? No. | Have Beneficial Impact? No. |
| #9 -b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? **Yes.** | Have Less-than-Significant Impact? No. | Have No Impact? No. | Have Beneficial Impact? No. |
| #9 -c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |
| #9 -d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |
| #9 -e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |
| #9 -f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |

| | | | | | |
|---|---|---|---|---|---|
| #9 -g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |

### *3.9.1 Environmental Setting*

A search of publicly accessible databases was conducted to identify known hazardous materials sites in the project area. There were no hazardous materials sites identified within 0.25 mile of the project site. The database search included all data sources included in the Cortese List (enumerated in PRC Section 65962.5). These sources include the GeoTracker database, a groundwater information management system that is maintained by the SWRCB; the Hazardous Waste and Substances Site List (i.e., the EnviroStor database), maintained by the California Department of Toxic Substances Control (DTSC); and EPA's Superfund Site database (DTSC 2021a and 2021b, SWRCB 2021a and 2021b, CalEPA 2021, EPA 2021). The project site is also not in an area identified as more likely to contain asbestos by the California Department of Conservation (DOC 2000). This issue is not discussed further in this IS. The project site is not located in a high severity fire hazard zone (CALFIRE 2007 and 2010).

### *3.9.2 Discussion*

**#9 -a and b. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

The project consists of data collection to investigate the geotechnical site characteristics and would involve the storage, transport, and use of small amounts of hazardous substances necessary to operate and maintain equipment such as oils, lubricants, and fuel. The project would not involve routine or long-term transport or disposal of such materials. However, due to the close proximity of the Santa Clara River and the need for storage, transport, and use of hazardous substance, this impact is considered **potentially significant**. The following mitigation measure was identified to address this impact.

**Mitigation Measure HAZ-1: Implement Best Management Practices to Minimize the Potential Release of Hazardous Materials.**

Project-related vehicles and equipment will be maintained prior to site access and checked and maintained daily to prevent leaks of materials that, if introduced to the water, could be deleterious. Equipment fueling will occur outside the channel whenever possible. If a stationary piece of equipment cannot be readily moved out of the channel for fueling, a containment system will be used to capture any accidental spill. Onsite fueling trucks and fueling areas will contain spill kits and/or other spill protection devices. Vehicle and equipment fluid spills will be cleaned up immediately. Equipment and material staging/storage will occur outside the channel.

No project-related hazardous substances will be allowed to contaminate the soil and/or enter into or be placed where it may be washed by rainfall or runoff into the Santa Clara River.

Implementation of Mitigation Measure HAZ-1 would minimize the potential for release of hazardous materials at the project site. Therefore, the impact from the project would be **less-than-significant with mitigation incorporated**.

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

There are no schools within 0.25 mile of the project site. There would be **no impact**.

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

The project site is not identified on lists compiled pursuant to Government Code Section 65962.5. There would be **no impact**.

### #9 -e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The project site is not within an airport land use plan area or within 2 miles of a public or public use airport. There would be **no impact**.

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

Ventura County does not have an adopted emergency response plan or emergency evacuation plan. There would not be such an increase in the number of users at the site that emergency response or evacuation could be impaired. Additionally, due to the location of the project and its short-term, temporary nature, the project would not pose a risk to emergency response or evacuation during an emergency. The proposed project would not adversely affect an adopted emergency response plan. There would be **no impact**.

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

The proposed project is not located within a fire hazard severity zone or state responsible area. Therefore, the project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. There would be **no impact**.

## 3.10 Hydrology and Water Quality

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

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

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

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

## *3.10.1 Environmental Setting*

### United Water Conservation District

The District is a public agency serving as the conservator of groundwater resources that are utilized by the cities of Oxnard, Port Hueneme, Ventura, Santa Paula, and Fillmore, as well as Naval Base Ventura County and several mutual water districts, farms and individual pumpers. Additionally, the District provides surface water for agricultural irrigation and treated drinking water to the cities of Oxnard and Port Hueneme. The District is situated in central Ventura County and District boundary encompasses the Santa Clara River Valley and Oxnard Coastal Plain for a total of 214,000 acres (UWCD 2020).

The Freeman Diversion was constructed on the mainstem of the Santa Clara River to enable United to divert Santa Clara River water for groundwater recharge under an existing water rights permit and license, as well as to stabilize the elevation of the upstream river channel. The Forebay of the Oxnard groundwater subbasin is recharged by infiltration from the riverbed of the Santa Clara River and surface flows diverted by the Freeman Diversion to recharge basins constructed for that purpose. The Freeman Diversion is a critical component of the water supply in the Oxnard subbasin and contributes a significant portion of the sustainable yield in the basin (FCGMA 2019).

### Water Quality

The project site is located in the Los Angeles Regional Water Quality Control Board (LARWQCB) Basin Plan within the Ventura Hydrologic Unit (LARWQCB 2014). In accordance with Clean Water Act Section 303, water quality standards for this basin are contained in the Water Quality Control Plan – Ocean Waters of California (California Ocean Plan), Water Quality Control Plan for the Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries in California (California Thermal Plan), and the Water Quality Control Plan for Enclosed Bays and Estuaries. The portion of the Santa Clara River that runs through the project site is listed

on the 303(d) list as an impaired water and is considered impacted due to the presence of chloride, indicator bacteria, selenium, total dissolved solids, toxicity, and trash (SWRCB 2017).

#### Groundwater

The project site is located within the Santa Clara River Valley Groundwater Basin (4-004) near the western edge of the Santa Clara River Valley – Santa Paula Groundwater Subbasin about 4 miles southwest of the city center of Santa Paula (DWR 2015). The project site is located within a Bulletin 118 designated groundwater basin and is prioritized as very low (DWR 2019).

#### Flood Management

The project site is located within a 100-year flood zone. The majority of the project site is located in a Federal Emergency Management Agency Zone AE (1 percent annual chance of flooding), with a small portion of the project site is located in Zone X (Area of Minimal Flood Hazard) (FEMA 2021). The project is not located in a coastal area and is outside of a tsunami hazard zone.

### *3.10.2 Discussion*

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

There is a chance that the project could contribute sediment or other contaminants directly or indirectly into the Santa Clara River from data collection activities. If water is present within the vicinity of the work area the District may need to prepare and implement a dewatering and diversion plan. Implementation of a dewatering and diversion plan would provide a dry work area for geotechnical exploration activities and minimize the potential for erosion. However, there is potential for runoff and erosion during ground disturbing activities, as discussed in Impact #7b in Chapter 3.7, "Geology and Soils," and impacts from the project related to erosion and water quality would be considered **potentially significant**. The following mitigation measure has been identified to address this impact.

> **Mitigation Measure GEO-1: Prepare and Implement a Storm Water Pollution Prevention Plan, if required, Implement Erosion Control Best Management Practices, and Comply with Ventura County Standards for Grading and Erosion Control.**
>
> Please refer to Mitigation Measure GEO-1 in Chapter 3.7, "Geology and Soils," for the full text of this mitigation measure.

Implementing Mitigation Measure GEO-1 would minimize the potential impact from construction-related erosion because a SWPPP and/or BMPs would be implemented to prevent and control pollution and minimize impacts to water quality. Therefore, the project would have a **less-than-significant impact with mitigation incorporated**.

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

Piezometers installed with the project would collect data on groundwater levels to help with future analysis of this site, but the project would not include the use of groundwater and would not interfere with groundwater recharge. Therefore, there would be **no impact**.

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

#### #10 -i) Result in substantial erosion or siltation on- or offsite?

The drainage pattern of the site would also be temporarily altered from ground disturbing activities. Implementation of a dewatering and diversion plan would provide a dry work area for geotechnical exploration activities and minimize the potential for erosion. However, there is potential for runoff and erosion during ground disturbing activities, as discussed in Impact #7b in Chapter 3.7, "Geology and Soils," and impacts from the project related to erosion would be considered **potentially significant**. The following mitigation measure has been identified to address this impact.

> **Mitigation Measure GEO-1: Prepare and Implement a Storm Water Pollution Prevention Plan, if required, Implement Erosion Control Best Management Practices, and Comply with Ventura County Standards for Grading and Erosion Control.**
>
> Please refer to Mitigation Measure GEO-1 in Chapter 3.7, "Geology and Soils," for the full text of this mitigation measure.

Implementing Mitigation Measure GEO-1 would minimize the potential impact from construction-related erosion because a SWPPP and/or BMPs would be implemented to prevent and control pollution and minimize and control runoff and erosion Therefore, the impact from the project would be **less-than-significant impact with mitigation incorporated**.

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

#### #10 - ii, iii, and iv) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?; Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?; or Impede or redirect flood flows?

If water is present within the vicinity of the work area, then the District would prepare and implement a dewatering and diversion plan. Implementation of a dewatering and diversion plan would provide a dry work area for geotechnical exploration activities and minimize the potential for erosion. A small area near the south riverbank would be dewatered, but water would continue

flowing around the work areas and downstream and flood flows would not be redirected offsite. The capacity of stormwater drainage systems also would not be exceeded. Therefore, the impact from the project would be **less than significant**.

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

The project site is located within a 100-year flood plain, but is not located in a tsunami, or seiche zone. The project would not propose new developments that could release pollutants due to project inundation. Therefore, this impact would be **less than significant.**

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

Since the project is limited to geotechnical exploration activities, it would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. The project consists of data collection to investigate the geotechnical site characteristics. There would be **no impact**.

## 3.11 Land Use and Planning

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

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

### *3.11.1 Environmental Setting*

The project site is zoned OS-80/MRP/HCWC (Ventura County 2020). The project site is located on undeveloped land in unincorporated Ventura County. The surrounding area consists of the Santa Clara River, the Southern Pacific Milling Company, bare ground, and a vegetated hillside.

### *3.11.2 Discussion*

#### #11 -a. Physically divide an established community?

The project does not propose new developments and would not divide an established community. There would be **no impact**.

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

As stated in Question "a" in this section, the project does not propose new developments. Therefore, the project would not conflict with any land use plan, policy, or regulations. There would be **no impact**.

## 3.12 Mineral Resources

**#12. MINERAL RESOURCES. Would the project:**

| | | | | | |
|---|---|---|---|---|---|
| #12 -a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? **Yes.** | Have No Impact? No. | Have Beneficial Impact? No. |
| #12 -b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |

### *3.12.1 Environmental Setting*

The project site is located within a Surface Mining and Reclamation Act of 1975 study area for sand, gravel, and crushed rock resource areas, known as the Simi production-consumption region. The project site is designated as mineral resource zone-2 (areas that contain identified mineral resources) (DOC 1993). The Southern Pacific Milling Company is located immediately adjacent the proposed project.

### *3.12.2 Discussion*

#### #12 -a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The project site is located in a Surface Mining and Reclamation Act of 1975 study area and has the potential to contain mineral resources. Boreholes would be backfilled with cement-bentonite grout and topped off with excavated materials from the site. Test pits would be backfilled with excavated material. There is potential for loss of a small amount material that could be considered mineral resources, however, the amount that could be lost would be minimal and would not affect the overall availability of mineral resources in Ventura County. The permitted aggregate reserves in the Ventura County Production Consumption Region are currently 168 million tons (Ventura County 2020). Therefore, this impact would be **less-than-significant**.

#### #12 -b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The project site is not located within the vicinity of a locally important mineral resource recovery site. There would be **no impact**.

## 3.13 Noise

**#13. NOISE. Would the project:**

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

### *3.13.1 Environmental Setting*

The closest sensitive receptor to the project site is a residence located approximately 0.6 mile northwest. The project site is located approximately 1 mile south of Santa Paula Highway (Highway 126), and 2.25 miles northeast of Highway 118. The Ventura County Municipal Code states that the maximum allowable average sound level (Leq) is as follows:

- Leq (1-hour) of 55 A-weighted decibel (dBA) or ambient noise level plus 3 dBA, whichever is greater, during any hour from 6:00 a.m. to 7:00 p.m.
- Leq (1-hour) of 50 dBA or ambient noise level plus 3 dBA, whichever is greater, during any hour from 7:00 p.m. to 10:00 p.m.
- Leq (1-hour) of 45 dBA or ambient noise level plus 3 dBA, whichever is greater, during any hour from 10:00 p.m. to 6:00 a.m. (Ventura County 2020)

### *3.13.2 Discussion*

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

The proposed project would temporarily increase ambient noise levels within the vicinity of the project site due to the use of construction equipment. Work at the project site would be limited to the hours identified in the Ventura County Municipal Code. The list of equipment that may be used for project construction activities with typical noise levels generated at 50 feet from the equipment (reference levels) is shown in **Table 3-5**. The closest residence is located approximately 0.6 mile northwest of the project site and actual construction noise levels at the sensitive noise receptors would be considerably lower than shown in **Table 3-5**. The proposed project would be consistent with the Ventura County Noise Ordinance. Due to the small amount of equipment that would be used during project activities and the distance to the nearest sensitive noise receptor, the proposed project would generate noise levels lower than the applicable standards. The project would not have an operational phase. Therefore, the impact from the project would be **less than significant**.

**Table 3-5. Equipment and Typical Equipment Noise Levels**

| Type of Equipment | Typical Noise Levels (dB) |
|---|---|
| | $L_{max}$ at 50 Feet |
| Truck Mounted Drill | 84 |
| Drill Rig | 85 |
| Excavator | 81 |
| Crane | 85 |
| Pick-up Truck | 75 |

Notes: dB = decibels; $L_{max}$ = maximum instantaneous sound level;
Source: Construction equipment list based on Federal Highway Administration (FHWA) 2006, adapted by GEI in 2021

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

Ground vibration would occur during project activities. Vibrations could be detectable by nearby sensitive receptors; however, the nearest sensitive receptor is 0.60 miles away from the project site and vibrations from the project are not anticipated to be perceptible at this distance. Additionally, the proposed project would not have an operational phase. Therefore, the impact from the project would be **less than significant**.

**#13 -c) For a project located within-the vicinity of a private airstrip or-an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

The project site is not within an airport land use plan area or within 2 miles of a public or public use airport. Therefore, the proposed project would not expose people residing or working in the area to excessive noise levels. There would be **no impact**.

## 3.14 Population and Housing

**#14. POPULATION AND HOUSING. Would the project:**

| | | | | | |
|---|---|---|---|---|---|
| #14 -a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |
| #14 -b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |

### *3.14.1 Environmental Setting*

The project site is located in the unincorporated area of Ventura County. The population in Ventura County was estimated in 2020 to be 842,886 (DOF 2020).

### *3.14.2 Discussion*

**#14 -a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

The proposed project involves data collection to inform final design and construction of the future fish passage facility. The proposed project would not result in new developments, and therefore, would not induce unplanned population growth. There would be **no impact**.

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

The project would not displace people or housing. The nearest residence is located 0.60-mile northwest of the project site and consists of one single residence with no other homes nearby. There would be **no impact**.

## 3.15 Public Services

**#15. PUBLIC SERVICES. Would the project:**

| | | | | | |
|---|---|---|---|---|---|
| #15 -a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: | | | | | |
| Fire protection? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |
| Police protection? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |
| Schools? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |
| Parks? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |
| Other public facilities? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |

### *3.15.1 Environmental Setting*

The Ventura County Sheriff provides law enforcement services for the unincorporated Ventura County. The Ventura County Fire Department provides fire protection to residents of the unincorporated areas of the County, and the cities of Thousand Oaks, Simi Valley, Moorpark, Camarillo, Port Hueneme, and Ojai (Ventura County 2020). The Olivelands Elementary School, located 2.75 miles north of the project site, is the nearest school to the project site. The nearest park is the Saticoy Community Park located approximately 2.30 miles west of the project site.

### *3.15.2 Discussion*

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

Since the project is limited to geotechnical explorations, it would not require new or altered government facilities, as the project would not increase the need for public services from the existing conditions. There would be **no impact**.

## 3.16 Recreation

**#16. RECREATION. Would the project:**

| | | | | | |
|---|---|---|---|---|---|
| #16 -a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |
| #16 -b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? No. | Have No Impact? **Yes.** | Have Beneficial Impact? No. |

### *3.16.1 Environmental Setting*

The project site is located in the unincorporated Ventura County with no nearby recreational facilities. The closest recreational facility is the Saticoy Community Park located approximately 2.30 miles west of the project site.

### *3.16.2 Discussion*

**#16-a and b. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated or include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?**

The project is not growth inducing and would not increase the use of existing parks or recreational facilities or require the construction or expansion of recreational facilities. There would be **no impact**.

## 3.17 Transportation

**#17. TRANSPORTATION. Would the project:**

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

### *3.17.1 Environmental Setting*

Access to the project site area would be via State Route 118 (Los Angeles Avenue) to Southern Pacific Milling Road.

### *3.17.2 Discussion*

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

The project would not conflict with any program plan, ordinance, or policies. Existing public and private roads would be utilized to deliver equipment, supplies, and workers to and from the project site. The project would not require any road closures or result in inadequate emergency access. Since no new roads are being developed, the project would not increase hazards due to a geometric design feature or incompatible uses. There would be **no impact**.

### #17 -b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Construction of the project would take approximately 4 weeks and would result in approximately 100 trips from workers commuting to and from the project site. Project activities would be conducted in a relatively undeveloped area, with the closest residence being 0.60 mile northwest of the project site. Due to the temporary, short-term nature of project activities, the proposed project would not significantly increase vehicle miles traveled within Ventura County. Therefore, the impact from the project would be **less than significant**.

## 3.18 Tribal Cultural Resources

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

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

### *3.18.1 Environmental Setting*

On January 4, 2021 GEI archaeologist Mathew Chouest, MA sent a request to the NAHC for a search of their Sacred Lands Files to determine if there were any previously reported tribal resources within the APE. The NAHC responded on January 20, 2021 with a list of potentially affiliated tribes, and a letter stating the search of the Sacred Lands Files had yielded negative results concluding that no tribal cultural resources are located on or in the vicinity of the proposed project site (NAHC 2021). A request for consultation has not been received from Tribes affiliated with the project site region. Similarly, no Native American archeological or historical resources listed or eligible for listing in the CRHR that could be considered a tribal cultural resource are located in the proposed project site. *See* Chapter 3.5 "Cultural Resources" for further details.

### *3.18.2 Discussion*

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

There are no known tribal cultural resources located in the vicinity of the project sites. There are no known Indian Sacred Sites in the vicinity of the project sites. Since no known Indian Sacred Sites have been identified within any of the project sites, there would be no direct, indirect, or cumulative impacts to Indian Sacred Sites from the proposed project. The proposed project would not have the potential to affect or prohibit access to any ceremonial use of Indian Sacred Sites. There would be **no impact**.

## 3.19 Utilities and Service Systems

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

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

### *3.19.1 Environmental Setting*

The project site and vicinity are provided electric and gas service by Southern California Edison and Southern California Gas, respectively (Ventura County 2020). Within the unincorporated Ventura County, wastewater collection, treatment, recycling, and disposal is provided by 16 agencies, districts, or service providers. The Ventura County Integrated Waste Management Division (IWMD) manages the collection and disposal of solid and hazardous waste in the unincorporated areas of Ventura County. The Toland Road landfill located approximately 9.5 miles northeast of the project site is the closest landfill.

### *3.19.2 Discussion*

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

No utility services would need to be constructed or expanded as a result of the proposed project. Implementation of the proposed project would result in **no impacts**.

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

The boring machine would require a water source and a polymer for lubrication during drilling. Water for drilling would be obtain by either drawing from the reservoir/canal by filtered pump and collected along with the drill muck for disposal; or trucked onsite from a to be determined clean water source. The proposed project would not require much water as all activities would be completed within 4 weeks and no operational phase would occur. Therefore, the project would have a **less-than-significant** impact.

**#19 -c. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

*See* Question "a" above. The project would not result in a significant amount of wastewater. There would be **no impact**.

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

The proposed project would not create solid waste, and as such would not exceed the capacity of local infrastructure. There would be **no impact**.

## 3.20 Wildfire

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

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

### *3.20.1 Environmental Setting*

The project site is not located within a fire hazard severity zone or state responsibility area (CALFIRE 2007 and 2010). The Ventura County Fire Department provides fire protection to residents of the unincorporated areas of the County, and the cities of Thousand Oaks, Simi Valley, Moorpark, Camarillo, Port Hueneme, and Ojai (Ventura County 2020).

### *3.20.2 Discussion*

**#20 -a, b, c, and d) Substantially impair an adopted emergency response plan or emergency evacuation plan? Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

The project site is not located in a high severity fire zone. There would not be such an increase in the number of users at the site that could impair emergency response or evacuation. Additionally, due to the location of the project site and the short-term, temporary nature of project activities, the project would not pose a risk to emergency response or evacuation during an emergency. The project would not require any infrastructure that could exacerbate fire risk or the risk of flooding, slope instability, or drainage changes. There would be **no impact**.

## 3.21 Mandatory Findings of Significance

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

| | | | | | |
|---|---|---|---|---|---|
| #21 -a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? **Yes.** | Have Less-than-Significant Impact? No. | Have No Impact? No. | Have Beneficial Impact? No. |
| #21 -b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? **Yes.** | Have Less-than-Significant Impact? No. | Have No Impact? No. | Have Beneficial Impact? No. |
| #21 -c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | Have Potentially Significant Impact? No. | Have Less-than-Significant Impact with Mitigation Incorporated? No. | Have Less-than-Significant Impact? **Yes.** | Have No Impact? No. | Have Beneficial Impact? No. |

### *3.21.1 Discussion*

**#21 -a. Would the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?**

The analysis conducted in this IS concludes that implementation of the proposed project would not have a significant impact on the environment. As evaluated in Chapter 3.4, Biological Resources, impacts on biological resources would be less-than-significant or less-than-significant with mitigation incorporated. The proposed project would not 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; or reduce the number or restrict the range of an endangered, rare, or threatened species. As discussed in Chapter 3.5, Cultural Resources, the proposed project would not eliminate important examples of the major periods of California history or prehistory. This impact would be **less-than-significant with mitigation incorporated**.

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

The proposed project would result in less-than-significant impacts with mitigation incorporated, less-than-significant impacts, or no impacts on aesthetics, agriculture and forestry, air quality, biological resources, cultural resources, energy, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire. The temporary nature of the proposed project's activities, and no long-term change, would result in no impacts or less-than-significant environmental impacts on the physical environment. None of the proposed project's impacts make cumulatively considerable, incremental contributions to significant cumulative impacts with incorporation of mitigation presented in this IS. This impact would be **less-than-significant with mitigation incorporated**.

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

The project would result in less-than-significant impacts and would not cause substantial adverse effects on human beings, either directly or indirectly. This impact would be **less-than-significant**.

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# 5.0 Report Preparers

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Jesse Martinez, RPA .....Archaeologist

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# Appendix A – Representative Photos

Photo 1: Facing northeast from the middle of Upland Work Area 1 (January 14, 2021).

Photo 2: Facing northeast from the northern portion of Upland Work Area 2 (January 14, 2021).

Photo 3: Facing north from the southern portion of Upland Work Area 2 (January 14, 2021).

Photo 4: Facing southwest from the Upstream Work Area (January 14, 2021).

Photo 5: Facing northeast from the southern portion of Upland Work Area 2 (January 14, 2021).

Photo 6: Facing southwest from the southern portion of Upland Work Area 2 (January 14, 2021).

Photo 7: Facing southwest from the eastern portion of Upland Work Area 2 (January 14, 2021).

Photo 8: Facing northeast from the eastern portion of Upland Work Area 2 (January 14, 2021).

Photo 9: Facing northeast from the eastern portion of Upland Work Area 2 (January 14, 2021).

Photo 10: Facing northeast at the Upstream Work Area from the boundary of Upstream Work Area 2 (January 14, 2021).

Photo 11: Facing west from the boundary between the Upstream Work Area and Upland Work Area 2 (January 14, 2021).

Photo 12: Facing north at the Downstream Work Area from the boundary of Upstream Work Area 1 (January 14, 2021).

# Appendix B – Species Database Searches

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# Selected Elements by Scientific Name

## California Department of Fish and Wildlife

## California Natural Diversity Database

**Query Criteria:** Quad IS (Ojai (3411942) OR Santa Paula Peak (3411941) OR Fillmore (3411848) OR Saticoy (3411932) OR Moorpark (3411838) OR Oxnard (3411922) OR Camarillo (3411921) OR Newbury Park (3411828) OR Santa Paula (3411931))

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| ***Agelaius tricolor*** tricolored blackbird | ABPBXB0020 | None | Threatened | G1G2 | S1S2 | SSC |
| ***Anniella spp.*** California legless lizard | ARACC01070 | None | None | G3G4 | S3S4 | SSC |
| ***Anniella stebbinsi*** Southern California legless lizard | ARACC01060 | None | None | G3 | S3 | SSC |
| ***Antrozous pallidus*** pallid bat | AMACC10010 | None | None | G4 | S3 | SSC |
| ***Aquila chrysaetos*** golden eagle | ABNKC22010 | None | None | G5 | S3 | FP |
| ***Arizona elegans occidentalis*** California glossy snake | ARADB01017 | None | None | G5T2 | S2 | SSC |
| ***Aspidoscelis tigris stejnegeri*** coastal whiptail | ARACJ02143 | None | None | G5T5 | S3 | SSC |
| ***Astragalus brauntonii*** Braunton's milk-vetch | PDFAB0F1G0 | Endangered | None | G2 | S2 | 1B.1 |
| ***Astragalus didymocarpus var. milesianus*** Miles' milk-vetch | PDFAB0F2X3 | None | None | G5T2 | S2 | 1B.2 |
| ***Astragalus pycnostachyus var. lanosissimus*** Ventura Marsh milk-vetch | PDFAB0F7B1 | Endangered | Endangered | G2T1 | S1 | 1B.1 |
| ***Athene cunicularia*** burrowing owl | ABNSB10010 | None | None | G4 | S3 | SSC |
| ***Atriplex serenana var. davidsonii*** Davidson's saltscale | PDCHE041T1 | None | None | G5T1 | S1 | 1B.2 |
| ***Bombus crotchii*** Crotch bumble bee | IIHYM24480 | None | Candidate Endangered | G3G4 | S1S2 | |
| ***California Walnut Woodland*** California Walnut Woodland | CTT71210CA | None | None | G2 | S2.1 | |
| ***Calochortus clavatus var. gracilis*** slender mariposa-lily | PMLIL0D096 | None | None | G4T2T3 | S2S3 | 1B.2 |
| ***Calochortus fimbriatus*** late-flowered mariposa-lily | PMLIL0D1J2 | None | None | G3 | S3 | 1B.3 |
| ***Calochortus plummerae*** Plummer's mariposa-lily | PMLIL0D150 | None | None | G4 | S4 | 4.2 |
| ***Catostomus santaanae*** Santa Ana sucker | AFCJC02190 | Threatened | None | G1 | S1 | |
| ***Centromadia parryi ssp. australis*** southern tarplant | PDAST4R0P4 | None | None | G3T2 | S2 | 1B.1 |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| ***Chaetodipus californicus femoralis*** Dulzura pocket mouse | AMAFD05021 | None | None | G5T3 | S3 | SSC |
| ***Charadrius nivosus nivosus*** western snowy plover | ABNNB03031 | Threatened | None | G3T3 | S2 | SSC |
| ***Chloropyron maritimum ssp. maritimum*** salt marsh bird's-beak | PDSCR0J0C2 | Endangered | Endangered | G4?T1 | S1 | 1B.2 |
| ***Cicindela hirticollis gravida*** sandy beach tiger beetle | IICOL02101 | None | None | G5T2 | S2 | |
| ***Coastal and Valley Freshwater Marsh*** Coastal and Valley Freshwater Marsh | CTT52410CA | None | None | G3 | S2.1 | |
| ***Coccyzus americanus occidentalis*** western yellow-billed cuckoo | ABNRB02022 | Threatened | Endangered | G5T2T3 | S1 | |
| ***Coelus globosus*** globose dune beetle | IICOL4A010 | None | None | G1G2 | S1S2 | |
| ***Danaus plexippus pop. 1*** monarch - California overwintering population | IILEPP2012 | Candidate | None | G4T2T3 | S2S3 | |
| ***Delphinium umbraculorum*** umbrella larkspur | PDRAN0B1W0 | None | None | G3 | S3 | 1B.3 |
| ***Diadophis punctatus modestus*** San Bernardino ringneck snake | ARADB10015 | None | None | G5T2T3 | S2? | |
| ***Dudleya blochmaniae ssp. blochmaniae*** Blochman's dudleya | PDCRA04051 | None | None | G3T2 | S2 | 1B.1 |
| ***Dudleya cymosa ssp. marcescens*** marcescent dudleya | PDCRA040A3 | Threatened | Rare | G5T2 | S2 | 1B.2 |
| ***Dudleya parva*** Conejo dudleya | PDCRA04016 | Threatened | None | G1 | S1 | 1B.2 |
| ***Dudleya verityi*** Verity's dudleya | PDCRA040U0 | Threatened | None | G1 | S1 | 1B.1 |
| ***Elanus leucurus*** white-tailed kite | ABNKC06010 | None | None | G5 | S3S4 | FP |
| ***Empidonax traillii extimus*** southwestern willow flycatcher | ABPAE33043 | Endangered | Endangered | G5T2 | S1 | |
| ***Emys marmorata*** western pond turtle | ARAAD02030 | None | None | G3G4 | S3 | SSC |
| ***Eremophila alpestris actia*** California horned lark | ABPAT02011 | None | None | G5T4Q | S4 | WL |
| ***Eriogonum crocatum*** conejo buckwheat | PDPGN081G0 | None | Rare | G1 | S1 | 1B.2 |
| ***Eucyclogobius newberryi*** tidewater goby | AFCQN04010 | Endangered | None | G3 | S3 | |
| ***Falco peregrinus anatum*** American peregrine falcon | ABNKD06071 | Delisted | Delisted | G4T4 | S3S4 | FP |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| ***Fritillaria ojaiensis*** Ojai fritillary | PMLIL0V0N0 | None | None | G3 | S3 | 1B.2 |
| ***Gasterosteus aculeatus williamsoni*** unarmored threespine stickleback | AFCPA03011 | Endangered | Endangered | G5T1 | S1 | FP |
| ***Gila orcuttii*** arroyo chub | AFCJB13120 | None | None | G2 | S2 | SSC |
| ***Gymnogyps californianus*** California condor | ABNKA03010 | Endangered | Endangered | G1 | S1 | FP |
| ***Lasiurus cinereus*** hoary bat | AMACC05030 | None | None | G3G4 | S4 | |
| ***Lasthenia glabrata ssp. coulteri*** Coulter's goldfields | PDAST5L0A1 | None | None | G4T2 | S2 | 1B.1 |
| ***Laterallus jamaicensis coturniculus*** California black rail | ABNME03041 | None | Threatened | G3G4T1 | S1 | FP |
| ***Lepechinia rossii*** Ross' pitcher sage | PDLAM0V060 | None | None | G1 | S1 | 1B.2 |
| ***Lepidium virginicum var. robinsonii*** Robinson's pepper-grass | PDBRA1M114 | None | None | G5T3 | S3 | 4.3 |
| ***Linderiella occidentalis*** California linderiella | ICBRA06010 | None | None | G2G3 | S2S3 | |
| ***Lupinus paynei*** Payne's bush lupine | PDFAB2B580 | None | None | G1Q | S1 | 1B.1 |
| ***Malacothrix similis*** Mexican malacothrix | PDAST660D0 | None | None | G2G3 | SH | 2A |
| ***Monardella hypoleuca ssp. hypoleuca*** white-veined monardella | PDLAM180A5 | None | None | G4T3 | S3 | 1B.3 |
| ***Monardella sinuata ssp. gerryi*** Gerry's curly-leaved monardella | PDLAM18163 | None | None | G3T1 | S1 | 1B.1 |
| ***Navarretia ojaiensis*** Ojai navarretia | PDPLM0C130 | None | None | G2 | S2 | 1B.1 |
| ***Neotoma lepida intermedia*** San Diego desert woodrat | AMAFF08041 | None | None | G5T3T4 | S3S4 | SSC |
| ***Oncorhynchus mykiss irideus pop. 10*** steelhead - southern California DPS | AFCHA0209J | Endangered | None | G5T1Q | S1 | |
| ***Passerculus sandwichensis beldingi*** Belding's savannah sparrow | ABPBX99015 | None | Endangered | G5T3 | S3 | |
| ***Pentachaeta lyonii*** Lyon's pentachaeta | PDAST6X060 | Endangered | Endangered | G1 | S1 | 1B.1 |
| ***Phrynosoma blainvillii*** coast horned lizard | ARACF12100 | None | None | G3G4 | S3S4 | SSC |
| ***Polioptila californica californica*** coastal California gnatcatcher | ABPBJ08081 | Threatened | None | G4G5T3Q | S2 | SSC |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| ***Pseudognaphalium leucocephalum*** white rabbit-tobacco | PDAST440C0 | None | None | G4 | S2 | 2B.2 |
| ***Quercus dumosa*** Nuttall's scrub oak | PDFAG050D0 | None | None | G3 | S3 | 1B.1 |
| ***Rana boylii*** foothill yellow-legged frog | AAABH01050 | None | Endangered | G3 | S3 | SSC |
| ***Rana draytonii*** California red-legged frog | AAABH01022 | Threatened | None | G2G3 | S2S3 | SSC |
| ***Riparia riparia*** bank swallow | ABPAU08010 | None | Threatened | G5 | S2 | |
| ***Senecio aphanactis*** chaparral ragwort | PDAST8H060 | None | None | G3 | S2 | 2B.2 |
| ***Setophaga petechia*** yellow warbler | ABPBX03010 | None | None | G5 | S3S4 | SSC |
| ***Southern California Steelhead Stream*** Southern California Steelhead Stream | CARE2310CA | None | None | GNR | SNR | |
| ***Southern Coast Live Oak Riparian Forest*** Southern Coast Live Oak Riparian Forest | CTT61310CA | None | None | G4 | S4 | |
| ***Southern Coastal Salt Marsh*** Southern Coastal Salt Marsh | CTT52120CA | None | None | G2 | S2.1 | |
| ***Southern Cottonwood Willow Riparian Forest*** Southern Cottonwood Willow Riparian Forest | CTT61330CA | None | None | G3 | S3.2 | |
| ***Southern Mixed Riparian Forest*** Southern Mixed Riparian Forest | CTT61340CA | None | None | G2 | S2.1 | |
| ***Southern Riparian Forest*** Southern Riparian Forest | CTT61300CA | None | None | G4 | S4 | |
| ***Southern Riparian Scrub*** Southern Riparian Scrub | CTT63300CA | None | None | G3 | S3.2 | |
| ***Southern Sycamore Alder Riparian Woodland*** Southern Sycamore Alder Riparian Woodland | CTT62400CA | None | None | G4 | S4 | |
| ***Southern Willow Scrub*** Southern Willow Scrub | CTT63320CA | None | None | G3 | S2.1 | |
| ***Spea hammondii*** western spadefoot | AAABF02020 | None | None | G2G3 | S3 | SSC |
| ***Sternula antillarum browni*** California least tern | ABNNM08103 | Endangered | Endangered | G4T2T3Q | S2 | FP |
| ***Symphyotrichum greatae*** Greata's aster | PDASTE80U0 | None | None | G2 | S2 | 1B.3 |
| ***Taxidea taxus*** American badger | AMAJF04010 | None | None | G5 | S3 | SSC |
| ***Texosporium sancti-jacobi*** woven-spored lichen | NLTEST7980 | None | None | G3 | S2 | 3 |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| ***Thamnophis hammondii*** two-striped gartersnake | ARADB36160 | None | None | G4 | S3S4 | SSC |
| ***Thamnophis sirtalis pop. 1*** south coast gartersnake | ARADB3613F | None | None | G5T1T2 | S1S2 | SSC |
| ***Trimerotropis occidentiloides*** Santa Monica grasshopper | IIORT36300 | None | None | G1G2 | S1S2 | |
| ***Tryonia imitator*** mimic tryonia (=California brackishwater snail) | IMGASJ7040 | None | None | G2 | S2 | |
| ***Valley Needlegrass Grassland*** Valley Needlegrass Grassland | CTT42110CA | None | None | G3 | S3.1 | |
| ***Valley Oak Woodland*** Valley Oak Woodland | CTT71130CA | None | None | G3 | S2.1 | |
| ***Vireo bellii pusillus*** least Bell's vireo | ABPBW01114 | Endangered | Endangered | G5T2 | S2 | |

**Record Count: 89**

CNPS California Native Plant Society

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

## Plant List

**49** matches found. *Click on scientific name for details*

**Search Criteria**

Found in Quads 3411942, 3411941, 3411848, 3411932, 3411931, 3411838, 3411922 3411921 and 3411828;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

| Scientific Name | Common Name | Family | Lifeform | Blooming Period | CA Rare Plant Rank | State Listing Status | Federal Listing Status |
|---|---|---|---|---|---|---|---|
| Abronia villosa var. aurita | chaparral sand-verbena | Nyctaginaceae | annual herb | (Jan)Mar-Sep | 1B.1 | | |
| Asplenium vespertinum | western spleenwort | Aspleniaceae | perennial rhizomatous herb | Feb-Jun | 4.2 | | |
| Astragalus brauntonii | Braunton's milk-vetch | Fabaceae | perennial herb | Jan-Aug | 1B.1 | | FE |
| Astragalus didymocarpus var. milesianus | Miles' milk-vetch | Fabaceae | annual herb | Mar-Jun | 1B.2 | | |
| Astragalus pycnostachyus var. lanosissimus | Ventura marsh milk-vetch | Fabaceae | perennial herb | (Jun)Aug-Oct | 1B.1 | CE | FE |
| Atriplex serenana var. davidsonii | Davidson's saltscale | Chenopodiaceae | annual herb | Apr-Oct | 1B.2 | | |
| Baccharis plummerae ssp. plummerae | Plummer's baccharis | Asteraceae | perennial deciduous shrub | May,Aug,Sep,Oct | 4.3 | | |
| Calochortus catalinae | Catalina mariposa lily | Liliaceae | perennial bulbiferous herb | (Feb)Mar-Jun | 4.2 | | |
| Calochortus clavatus var. clavatus | club-haired mariposa lily | Liliaceae | perennial bulbiferous herb | (Mar)May-Jun | 4.3 | | |
| Calochortus fimbriatus | late-flowered mariposa lily | Liliaceae | perennial bulbiferous herb | Jun-Aug | 1B.3 | | |
| Calochortus plummerae | Plummer's mariposa lily | Liliaceae | perennial bulbiferous herb | May-Jul | 4.2 | | |
| Centromadia parryi ssp. australis | southern tarplant | Asteraceae | annual herb | May-Nov | 1B.1 | | |
| Chloropyron maritimum ssp. maritimum | salt marsh bird's-beak | Orobanchaceae | annual herb (hemiparasitic) | May-Oct(Nov) | 1B.2 | CE | FE |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Convolvulus simulans | small-flowered morning-glory | Convolvulaceae | annual herb | Mar-Jul | 4.2 | | |
| Delphinium parryi ssp. blochmaniae | dune larkspur | Ranunculaceae | perennial herb | Apr-Jun | 1B.2 | | |
| Delphinium parryi ssp. purpureum | Mt. Pinos larkspur | Ranunculaceae | perennial herb | May-Jun | 4.3 | | |
| Delphinium umbraculorum | umbrella larkspur | Ranunculaceae | perennial herb | Apr-Jun | 1B.3 | | |
| Dudleya blochmaniae ssp. blochmaniae | Blochman's dudleya | Crassulaceae | perennial herb | Apr-Jun | 1B.1 | | |
| Dudleya cymosa ssp. marcescens | marcescent dudleya | Crassulaceae | perennial herb | Apr-Jul | 1B.2 | CR | FT |
| Dudleya parva | Conejo dudleya | Crassulaceae | perennial herb | May-Jun | 1B.2 | | FT |
| Dudleya verityi | Verity's dudleya | Crassulaceae | perennial herb | May-Jun | 1B.1 | | FT |
| Eriogonum crocatum | conejo buckwheat | Polygonaceae | perennial herb | Apr-Jul | 1B.2 | CR | |
| Fritillaria ojaiensis | Ojai fritillary | Liliaceae | perennial bulbiferous herb | Feb-May | 1B.2 | | |
| Heterotheca sessiliflora ssp. sessiliflora | beach goldenaster | Asteraceae | perennial herb | Mar-Dec | 1B.1 | | |
| Hordeum intercedens | vernal barley | Poaceae | annual herb | Mar-Jun | 3.2 | | |
| Horkelia cuneata var. puberula | mesa horkelia | Rosaceae | perennial herb | Feb-Jul(Sep) | 1B.1 | | |
| Juglans californica | Southern California black walnut | Juglandaceae | perennial deciduous tree | Mar-Aug | 4.2 | | |
| Juncus acutus ssp. leopoldii | southwestern spiny rush | Juncaceae | perennial rhizomatous herb | (Mar)May-Jun | 4.2 | | |
| Lasthenia glabrata ssp. coulteri | Coulter's goldfields | Asteraceae | annual herb | Feb-Jun | 1B.1 | | |
| Lepechinia fragrans | fragrant pitcher sage | Lamiaceae | perennial shrub | Mar-Oct | 4.2 | | |
| Lepechinia rossii | Ross' pitcher sage | Lamiaceae | perennial shrub | May-Sep | 1B.2 | | |
| Lepidium virginicum var. robinsonii | Robinson's pepper-grass | Brassicaceae | annual herb | Jan-Jul | 4.3 | | |
| Lilium humboldtii ssp. ocellatum | ocellated Humboldt lily | Liliaceae | perennial bulbiferous herb | Mar-Jul(Aug) | 4.2 | | |
| Lupinus paynei | Payne's bush lupine | Fabaceae | perennial shrub | Mar-Apr(May-Jul) | 1B.1 | | |
| Malacothrix similis | Mexican malacothrix | Asteraceae | annual herb | Apr-May | 2A | | |
| Monardella hypoleuca ssp. hypoleuca | white-veined monardella | Lamiaceae | perennial herb | (Apr)May-Aug(Sep-Dec) | 1B.3 | | |
| Monardella sinuata ssp. gerryi | Gerry's curly-leaved monardella | Lamiaceae | annual herb | Apr-Jun | 1B.1 | | |
| Monardella sinuata ssp. sinuata | southern curly-leaved monardella | Lamiaceae | annual herb | Apr-Sep | 1B.2 | | |
| Navarretia ojaiensis | Ojai navarretia | Polemoniaceae | annual herb | May-Jul | 1B.1 | | |
| Pentachaeta lyonii | Lyon's pentachaeta | Asteraceae | annual herb | (Feb)Mar-Aug | 1B.1 | CE | FE |

| | | | | | |
|---|---|---|---|---|---|
| Phacelia ramosissima var. austrolitoralis | south coast branching phacelia | Hydrophyllaceae | perennial herb | Mar-Aug | 3.2 |
| Piperia michaelii | Michael's rein orchid | Orchidaceae | perennial herb | Apr-Aug | 4.2 |
| Polygala cornuta var. fishiae | Fish's milkwort | Polygalaceae | perennial deciduous shrub | May-Aug | 4.3 |
| Pseudognaphalium leucocephalum | white rabbit-tobacco | Asteraceae | perennial herb | (Jul)Aug-Nov(Dec) | 2B.2 |
| Quercus dumosa | Nuttall's scrub oak | Fagaceae | perennial evergreen shrub | Feb-Apr(May-Aug) | 1B.1 |
| Senecio aphanactis | chaparral ragwort | Asteraceae | annual herb | Jan-Apr(May) | 2B.2 |
| Suaeda taxifolia | woolly seablite | Chenopodiaceae | perennial evergreen shrub | Jan-Dec | 4.2 |
| Symphyotrichum greatae | Greata's aster | Asteraceae | perennial rhizomatous herb | Jun-Oct | 1B.3 |
| Texosporium sancti-jacobi | woven-spored lichen | Caliciaceae | crustose lichen (terricolous) | | 3 |

**Suggested Citation**

California Native Plant Society, Rare Plant Program. 2021. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 18 May 2021].

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**Questions and Comments**
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# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
Phone: (805) 644-1766 Fax: (805) 644-3958

In Reply Refer To: January 31, 2021
Consultation Code: 08EVEN00-2021-SLI-0154
Event Code: 08EVEN00-2021-E-00406
Project Name: Geotechnical Field Explorations for Vern Freeman Diversion Hardened Ramp Option

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed list identifies species listed as threatened and endangered, species proposed for listing as threatened or endangered, designated and proposed critical habitat, and species that are candidates for listing that may occur within the boundary of the area you have indicated using the U.S. Fish and Wildlife Service's (Service) Information Planning and Conservation System (IPaC). The species list fulfills the requirements under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the species list should be verified after 90 days. We recommend that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists following the same process you used to receive the enclosed list. Please include the Consultation Tracking Number in the header of this letter with any correspondence about the species list.

Due to staff shortages and excessive workload, we are unable to provide an official list more specific to your area. Numerous other sources of information are available for you to narrow the list to the habitats and conditions of the site in which you are interested. For example, we recommend conducting a biological site assessment or surveys for plants and animals that could help refine the list.

If a Federal agency is involved in the project, that agency has the responsibility to review its proposed activities and determine whether any listed species may be affected. If the project is a major construction project*, the Federal agency has the responsibility to prepare a biological assessment to make a determination of the effects of the action on the listed species or critical habitat. If the Federal agency determines that a listed species or critical habitat is likely to be adversely affected, it should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation may be used to exchange information and resolve

conflicts with respect to threatened or endangered species or their critical habitat prior to a written request for formal consultation. During this review process, the Federal agency may engage in planning efforts but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act.

Federal agencies are required to confer with the Service, pursuant to section 7(a)(4) of the Act, when an agency action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10(a)). A request for formal conference must be in writing and should include the same information that would be provided for a request for formal consultation. Conferences can also include discussions between the Service and the Federal agency to identify and resolve potential conflicts between an action and proposed species or proposed critical habitat early in the decision-making process. The Service recommends ways to minimize or avoid adverse effects of the action. These recommendations are advisory because the jeopardy prohibition of section 7(a)(2) of the Act does not apply until the species is listed or the proposed critical habitat is designated. The conference process fulfills the need to inform Federal agencies of possible steps that an agency might take at an early stage to adjust its actions to avoid jeopardizing a proposed species.

When a proposed species or proposed critical habitat may be affected by an action, the lead Federal agency may elect to enter into formal conference with the Service even if the action is not likely to jeopardize or result in the destruction or adverse modification of proposed critical habitat. If the proposed species is listed or the proposed critical habitat is designated after completion of the conference, the Federal agency may ask the Service, in writing, to confirm the conference as a formal consultation. If the Service reviews the proposed action and finds that no significant changes in the action as planned or in the information used during the conference have occurred, the Service will confirm the conference as a formal consultation on the project and no further section 7 consultation will be necessary. Use of the formal conference process in this manner can prevent delays in the event the proposed species is listed or the proposed critical habitat is designated during project development or implementation.

Candidate species are those species presently under review by the Service for consideration for Federal listing. Candidate species should be considered in the planning process because they may become listed or proposed for listing prior to project completion. Preparation of a biological assessment, as described in section 7(c) of the Act, is not required for candidate species. If early evaluation of your project indicates that it is likely to affect a candidate species, you may wish to request technical assistance from this office.

Only listed species receive protection under the Act. However, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. We recommend that you review information in the California Department of Fish and Wildlife's Natural Diversity Data Base. You can contact the California Department of Fish and Wildlife at (916) 324-3812 for information on other sensitive species that may occur in this area.

[*A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.]

Attachment(s):

- Official Species List

# Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Ventura Fish And Wildlife Office**
2493 Portola Road, Suite B
Ventura, CA 93003-7726
(805) 644-1766

# Project Summary

Consultation Code: 08EVEN00-2021-SLI-0154
Event Code: 08EVEN00-2021-E-00406
Project Name: Geotechnical Field Explorations for Vern Freeman Diversion Hardened Ramp Option
Project Type: ** OTHER **
Project Description: United Water Conservation District is proposing to conduct geotechnical field explorations to investigate site characteristics and inform potential design and construction of a hardened ramp at the Vern Freeman Diversion Structure Facility. The facility is located on the Santa Clara River, approximately 4 miles southwest of the city center of Santa Paula in Ventura County. Explorations would occur in the vicinity of the left abutment of the existing diversion.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@34.2983962,-119.10821632035348,14z

Counties: Ventura County, California

# Endangered Species Act Species

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Birds

| NAME | STATUS |
|---|---|
| California Condor *Gymnogyps californianus*<br>Population: U.S.A. only, except where listed as an experimental population<br>There is **final** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/8193 | Endangered |
| Coastal California Gnatcatcher *Polioptila californica californica*<br>There is **final** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/8178 | Threatened |
| Least Bell's Vireo *Vireo bellii pusillus*<br>There is **final** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/5945 | Endangered |
| Southwestern Willow Flycatcher *Empidonax traillii extimus*<br>There is **final** critical habitat for this species. Your location overlaps the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/6749 | Endangered |

## Amphibians

| NAME | STATUS |
|---|---|
| California Red-legged Frog *Rana draytonii*<br>There is **final** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/2891 | Threatened |

## Crustaceans

| NAME | STATUS |
|---|---|
| Riverside Fairy Shrimp *Streptocephalus woottoni*<br>There is **final** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/8148 | Endangered |
| Vernal Pool Fairy Shrimp *Branchinecta lynchi*<br>There is **final** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/498 | Threatened |

## Flowering Plants

| NAME | STATUS |
|---|---|
| California Orcutt Grass *Orcuttia californica*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/4923 | Endangered |
| Gambel's Watercress *Rorippa gambellii*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/4201 | Endangered |
| Marsh Sandwort *Arenaria paludicola*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/2229 | Endangered |
| Spreading Navarretia *Navarretia fossalis*<br>There is **final** critical habitat for this species. The location of the critical habitat is not available.<br>Species profile: https://ecos.fws.gov/ecp/species/1334 | Threatened |

## Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

| NAME | STATUS |
|---|---|
| Southwestern Willow Flycatcher *Empidonax traillii extimus*<br>https://ecos.fws.gov/ecp/species/6749#crithab | Final |