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Pleasant Valley County Water District Board adoption scheduled  
for Tuesday January 24<sup>th</sup>, 2023 @ 10: 00 a.m.



# Groundwater Sustainability Improvement Program

Final Initial Study – Mitigated Negative Declaration

*prepared by*

**Pleasant Valley County Water District**  
154 South Las Posas Road  
Camarillo, California 93010  
Contact: Jared Bouchard, General Manager

*prepared with the assistance of*

**Rincon Consultants, Inc.**  
180 North Ashwood Avenue  
Ventura, California 93003

**January 2023**

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**January 2023**



**RINCON CONSULTANTS, INC.**

Environmental Scientists | Planners | Engineers

[rinconconsultants.com](http://rinconconsultants.com)

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Appendix B	Plant and Wildlife Species Observed in the Survey Area
Appendix C	Cultural Resources Letter Report (redacted)
Appendix D	Energy Calculations
Appendix E	Noise Modeling

# Initial Study

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## 1. Project Title

Groundwater Sustainability Improvement Program

## 2. Lead Agency Name and Address

Pleasant Valley County Water District  
154 South Las Posas Road  
Camarillo, California 93010

## 3. Contact Person and Phone Number

Jared Bouchard, General Manager  
(805) 482-2119

## 4. Project Location

The project site is located in unincorporated Ventura County, south of Camarillo and east of Oxnard, and consists of an approximately 9,000-linear-foot pipeline alignment extending along the unpaved road shoulder on the north side of Laguna Road from Wood Road to approximately 350 feet east of Las Posas Road. Figure 1 shows the regional location of the project site, and Figure 2 shows the project alignment at a local scale.

## 5. Project Sponsor's Name and Address

Pleasant Valley County Water District  
154 South Las Posas Road  
Camarillo, California 93010

## 6. General Plan Designation

The project would be located within existing public roadway rights-of-way, which do not have a General Plan designation.

## 7. Zoning

The project would be located within existing public roadway rights-of-way, which do not have a zoning designation.

## 8. Description of Project

The Pleasant Valley County Water District's (PVCWD) Groundwater Sustainability Improvement Program (project) includes construction of approximately 9,000 linear feet (LF) of new 18-inch recycled water pipeline that would interconnect two existing transmission laterals located along Wood Road and Las Posas Road, as shown in Figure 2. The purpose of the project is to facilitate ~~increased~~ transfer of existing water supplies available to the both the PVCWD service area and adjacent United Water Conservation District's Pumping Trough Pipeline system, specifically water supplied by the City of Oxnard's Advanced Water Purification Facility and the Conejo Creek Diversion Structure. The project would improve the efficiency and hydraulic capacity of PVCWD's system for blending and conveying water to its existing customers. The project would not enable the use of new water supply sources in the PVCWD service area and does not propose to change existing water use throughout the PVCWD system. The project also does not propose to modify the permits/agreements managed by Camrosa Water District for the Conejo Creek diversion or the City of Oxnard for its Advanced Water Purification Facility.

### **Construction Activities**

Construction would begin around late summer of 2023 and would occur over the course of approximately six months. Construction would occur from 8:00 a.m. to 5:00 p.m., Monday through Friday. Open trenching would be used to install the majority of the pipeline; however, trenchless methods would be used to install the portion of the pipeline that crosses the Las Posas Road Drain, which crosses perpendicular to the alignment, as shown in Figure 2. Trenchless methods may also be used for crossing Las Posas Road to minimize impacts. The two methods used for trenchless installation would be Horizontal Directional Drilling (HDD) and Jack and Bore. The HDD method would involve drilling a hole into the ground at a slight angle from the surface elevation. Once the desired length is drilled, the pipeline would be pulled back through the hole and connected to the open trench installed pipeline. The jacking and receiving pits would be located along the north side of Laguna Road within the road shoulder. The jacking pit would be approximately 36 feet by 12 feet, and the receiving pit would be approximately 12 feet by 12 feet. The maximum depth of excavation would be approximately 6.5 feet. Approximately 4,000 cubic yards of soil would be exported from the site and approximately 3,000 cubic yards of soil would be imported. Construction activities would require a temporary single-lane closure along Laguna Road. Traffic control measures would be implemented during the lane closure, including flaggers at both ends. Construction equipment staging and worker parking would occur along the project alignment.

### **Operation and Maintenance**

Upon completion of construction, the project would not require new operations and maintenance activities or electricity consumption beyond existing PVCWD operations. The anticipated minimum lifetime of the proposed pipeline is 50 years.

## 9. Surrounding Land Uses and Setting

The project alignment is surrounded primarily by agricultural fields and agro-industrial development to the north, south, west, and east. An agro-industrial facility is located along the project alignment to the north, and one residence along the project alignment is located to the south. The project alignment is bordered by Wood Road to the west and is intercepted by Las Posas Road on the east

end of the alignment. Revolon Slough is located approximately 0.2 mile to the west of the project alignment.

## 10. Other Public Agencies Whose Approval is Required

PVCWD is the lead agency for this project. The project would also require approval from the California Department of Water Resources Division of Drinking Water, County of Ventura, and Fox Canyon Groundwater Management Agency.



Figure 1 Regional Project Location



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★ Project Location

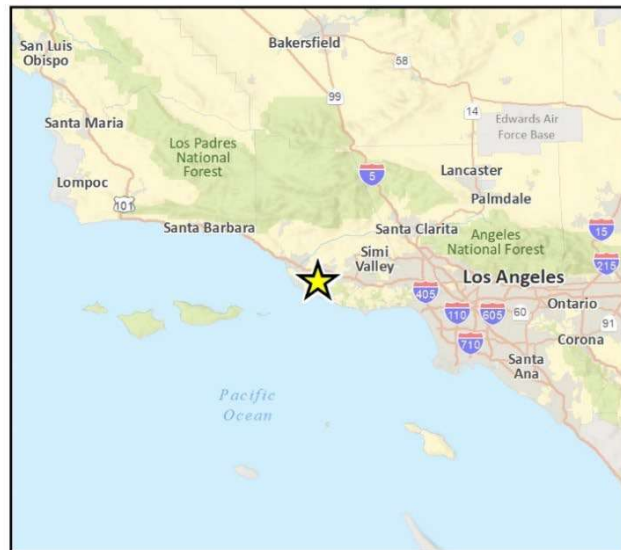


Fig. 1 Regional Location

Figure 2 Project Site Location

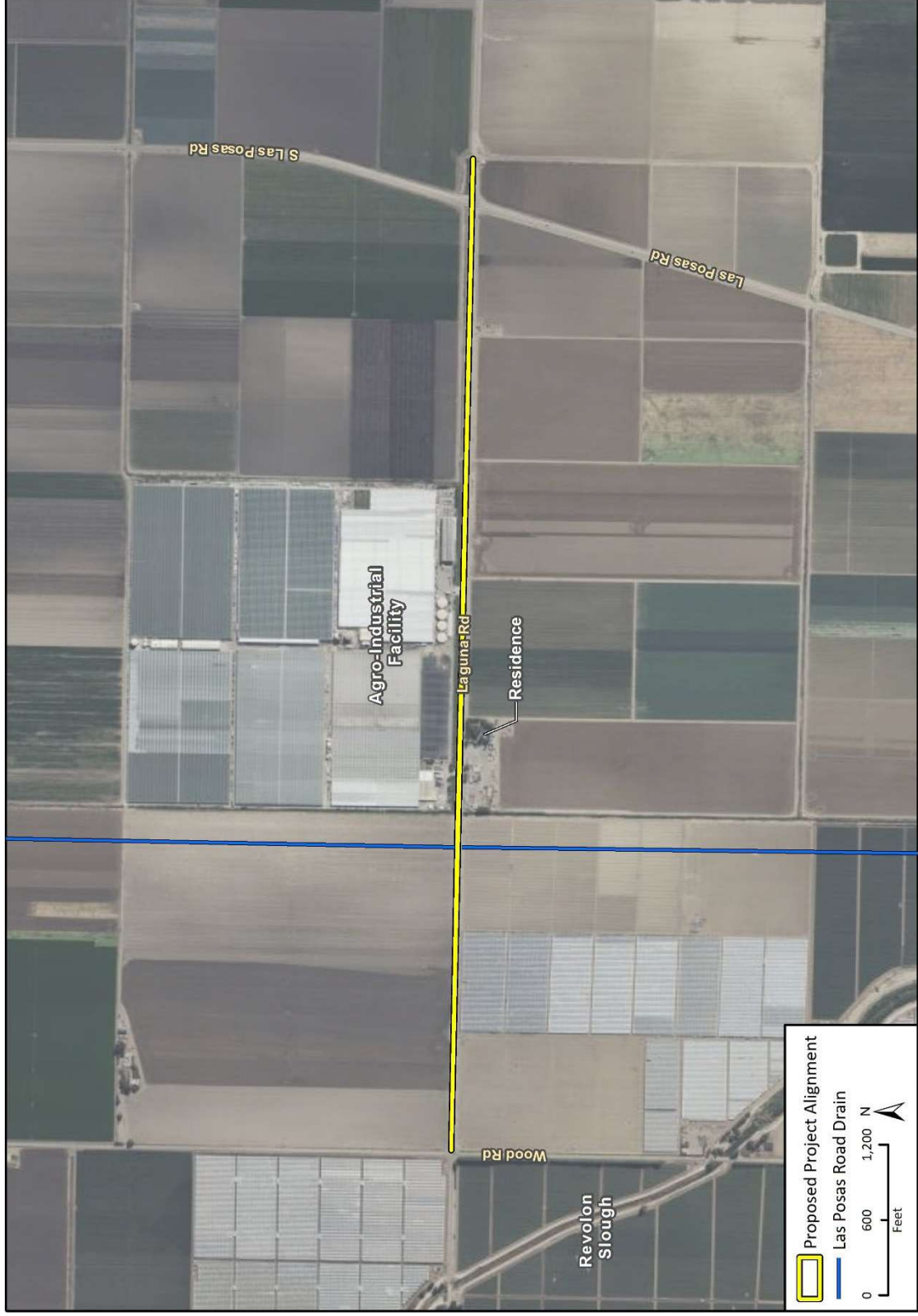


Fig 2 Project Site Location\_20220831

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## Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.


- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Aesthetics                         | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality                                   |
| <input checked="" type="checkbox"/> Biological Resources    | <input checked="" type="checkbox"/> Cultural Resources      | <input type="checkbox"/> Energy  |
| <input checked="" type="checkbox"/> Geology/Soils           | <input type="checkbox"/> Greenhouse Gas Emissions           | <input checked="" type="checkbox"/> Hazards & Hazardous Materials      |
| <input checked="" type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning                  | <input type="checkbox"/> Mineral Resources                             |
| <input type="checkbox"/> Noise                              | <input type="checkbox"/> Population/Housing                 | <input type="checkbox"/> Public Services                               |
| <input type="checkbox"/> Recreation                         | <input checked="" type="checkbox"/> Transportation          | <input type="checkbox"/> Tribal Cultural Resources                     |
| <input type="checkbox"/> Utilities/Service Systems          | <input checked="" type="checkbox"/> Wildfire                | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

## Determination

Based on this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
\_\_\_\_\_  
Signature

11-3-22  
\_\_\_\_\_  
Date

Jared Bouchard  
\_\_\_\_\_  
Printed Name

General Manager  
\_\_\_\_\_  
Title

# Environmental Checklist

## 1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Except as provided in Public Resources Code Section 21099, would the project:

a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project have a substantial adverse effect on a scenic vista?*

The Ventura County General Plan Conservation and Open Space Element (County of Ventura 2020a) establishes Goal COS-3, which seeks to preserve, protect, and enhance the unique scenic resources in Ventura County, and ensure access to scenic resources within Ventura County for present and future generations. Ventura County offers a variety of scenic resources including panoramic views of the Santa Monica Mountains in the south, northern vistas of the Topatopa mountain range in the Los Padres National Forest, and scenic views of coastal beaches and cliffs in the west (County of Ventura 2020a). Scenic vistas visible from the project site include distant views of the Santa Susana and Santa Monica Mountains. The project would be located entirely underground in the shoulder of an existing roadway ROW. Therefore, the project would have no potential to adversely affect views of scenic vistas in the local area. No impact would occur.

**NO IMPACT**

- b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

State Route (SR) 33, also known as Maricopa Highway, is the closest state-designated scenic highway to the project site (California Department of Transportation [Caltrans] 2019). SR 33 is located approximately 25 miles northwest of the project site, and the project site is not visible from this highway due to distance and intervening topography. The project also does not include removal of trees, modifications to rock outcroppings, or alterations to historic buildings. Given the distance from SR 33 and the nature of project activities, the project would not substantially damage scenic resources within a state scenic highway. Therefore, no impact would occur.

**NO IMPACT**

- c. Would the project, 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?*

According to Public Resources Code Section 21071(b), an unincorporated area is considered “urbanized” if 1) the area is completely surrounded by one or more incorporated cities, the total population of the unincorporated area and the surrounding cities is at least 100,000 persons, and the population density of the unincorporated area is at least equal to the population density of the surrounding cities; or 2) the area is located within an urban growth boundary and has an existing residential population of at least 5,000 persons per square mile. The general unincorporated area in which the project site is located is bordered by the city of Oxnard to the west and the city of Camarillo to the north. However, no incorporated cities are located to the south or east of the area. In addition, the project site is located outside the Camarillo Urban Restriction Boundary (City of Camarillo 2016). Therefore, the project site is located in a non-urbanized area.

The project would include installation of an underground pipeline in the shoulder of an existing roadway ROW. Because the pipeline would be located entirely underground, public views of the project site and its surroundings would not change as compared to existing conditions upon the completion of construction. Therefore, the project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. No impact would occur.

**NO IMPACT**

- d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

No nighttime construction or nighttime lighting would be required for the project. Operation of the project would not add reflective surfaces, such as windows or car windshields, or lighting to the project site or its surroundings. Therefore, the project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area, and no impact would occur.

**NO IMPACT**

## 2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

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

a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*

The project site is located on land designated as Farmland of Statewide Importance, Unique Farmland, and Other Land by the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (DOC 2016). The project site is zoned Agricultural Exclusive (AE). The project site is not subject to any Williamson Act contracts but is located adjacent to several parcels



zoned for agricultural use and subject to Williamson Act contracts (County of Ventura 2022a). The project would be installed in the ROW of an existing roadway and would not require construction activities within active agricultural fields located adjacent to the alignment. Furthermore, upon completion of construction, the project would be located entirely belowground. Therefore, the project would not convert Farmland to nonagricultural uses or conflict with existing zoning for agricultural uses or a Williamson Act contract. No impact would occur.

**NO IMPACT**

- c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*
- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

The project site is located in an existing roadway ROW that does not have a General Plan or zoning designation. The project site does not contain forest land or timberland. Therefore, the project would not conflict with existing zoning, or cause rezoning of, for forest land or timberland and would not result in loss of forest land or conversion of forest land to non-forest uses. No impact would occur.

**NO IMPACT**

- e. *Would the project 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?*

As discussed under thresholds (a) and (b), the project site is located on land designated as Farmland of Statewide Importance, Unique Farmland, and Other Land. However, the proposed pipeline would be installed in the ROW of an existing roadway and would not require construction activities within active agricultural fields located adjacent to the alignment. Therefore, the project would not involve result in the conversion of Farmland to non-agricultural use. In addition, the project site does not contain forest land, so the project would not result in the conversion of forest land to a non-forest use. No impact would occur.

**NO IMPACT**

### 3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project site is located in the South-Central Coast Air Basin (Basin), which covers San Luis Obispo, Santa Barbara, and Ventura counties. The Ventura County Air Pollution Control District (VCAPCD) monitors and regulates the local air quality in Ventura County and manages the Air Quality Management Plan (AQMP). The analysis presented in this section is based upon information found in the Ventura County Air Quality Assessment Guidelines (Guidelines), adopted by the VCAPCD in 2003.

Air quality is affected by stationary sources (e.g., industrial uses and oil and gas operations) and mobile sources (e.g., motor vehicles). Air quality at a given location is a function of several factors, including the quantity and type of pollutants emitted locally and regionally as well as the dispersion rates of pollutants in the region. Primary factors affecting pollutant dispersion are wind speed and direction, atmospheric stability, temperature, the presence or absence of inversions, and topography. The project site is in the southeastern portion of the Basin, which has moderate variability in temperatures, tempered by coastal processes. The air quality in the Basin is influenced by a wide range of emission sources, such as dense population centers, heavy vehicular traffic, industry, and weather.

#### Air Quality Standards and Attainment

The VCAPCD is required to monitor air pollutant levels to ensure National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are met. If the standards are met, the Basin is classified as being in “attainment.” If the standards are not met, the Basin is classified as being in “nonattainment,” and the VCAPCD is required to develop strategies to meet the standards. According to the California Air Resources Board (CARB) Area Designation Maps, Ventura County is designated nonattainment for the ozone NAAQS and CAAQS and nonattainment for the CAAQS for particulate matter measuring 10 microns or less in diameter (PM<sub>10</sub>) (VCAPCD

2022). To address the region's nonattainment of federal ozone standards, the VCAPCD adopted the 2016 Ventura County AQMP, which provides a strategy for achieving attainment (VCAPCD 2016).

San Joaquin Valley Fever (formally known as Coccidioidomycosis) is an infectious disease caused by the fungus *Coccidioides immitis*. San Joaquin Valley Fever (Valley Fever) is a disease of concern in the Basin. Infection is caused by inhalation of *Coccidioides immitis* spores that have become airborne when dry, dusty soil or dirt is disturbed by natural processes, such as wind or earthquakes, or by human-induced ground-disturbing activities, such as construction, farming, or other activities (VCAPCD 2003). From 2015 to 2019, the number of cases of Valley Fever reported in California averaged 6,614 per year, with an average of 192 cases per year reported in Ventura County (California Department of Public Health 2019). In 2022, 102 Ventura County residents have been identified with suspect, probable, or confirmed cases of Valley Fever through June 30 of this year (California Department of Public Health 2022).

### **Air Pollutant Emission Thresholds**

The VCAPCD's Guidelines recommend specific air pollutant emission threshold levels for determining whether a project may have a significant adverse impact on air quality within the Basin. The project would have a significant impact if operational emissions exceed 25 pounds per day of reactive organic compounds (also referred to as reactive organic gases) or 25 pounds per day of nitrogen oxides. As noted in the Guidelines, the 25 pounds per day threshold for reactive organic compounds and nitrogen oxides is not intended to be applied to construction emissions because such emissions are temporary. Nevertheless, VCAPCD's Guidelines state that construction-related emissions should be mitigated if estimates of reactive organic compounds or nitrogen oxides emissions from heavy-duty construction equipment exceed this threshold (VCAPCD 2003).

The VCAPCD has not established quantitative thresholds for particulate matter for either construction or operation. However, the VCAPCD indicates a project that may generate fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or which may endanger the comfort, repose, health, or safety of any such person, or which may cause or have a natural tendency to cause injury or damage to business or property, would have a significant air quality impact. This threshold is applicable to the generation of fugitive dust during construction activities. The VCAPCD Guidelines recommend application of fugitive dust mitigation measures to all dust-generating activities. Such measures include minimizing the project disturbance area, watering the site prior to commencement of ground-disturbing activities, covering all truck loads, and limiting on-site vehicle speeds to 15 miles per hour or less.

### **Applicable VCAPCD Rules and Regulations**

The VCAPCD implements rules and regulations for emissions that may be generated by various uses and activities. The rules and regulations detail pollution reduction measures that must be implemented during construction and operation of projects. Relevant rules and regulations to the project include the following:

- **Rule 50 (Opacity).** This rule sets opacity standards on the discharge from sources of air contaminants. This rule would apply during construction of the project.
- **Rule 51 (Nuisance).** This rule prohibits any person from discharging air contaminants or any other material from a source that would cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public or which endangers the comfort, health, safety, or

repose to any considerable number of persons or the public. The rule would apply during construction of the project.

- **Rule 55 (Fugitive Dust).** This rule requires fugitive dust generators, including construction and demolition projects, to implement control measures limiting the amount of dust from vehicle track-out, earth moving, bulk material handling, and truck hauling activities. The rule would apply during construction of the project.
- **Rule 55.1 (Paved Roads and Public Unpaved Roads).** This rule requires fugitive dust generators to begin the removal of visible roadway accumulation within 72 hours of any written notification from the VCAPCD. The use of blowers is expressly prohibited under any circumstances. This rule also requires controls to limit the amount of dust from any construction activity or any earthmoving activity on a public unpaved road. This rule would apply during construction activities.
- **Rule 55.2 (Street Sweeping Equipment).** This rule requires the use of PM<sub>10</sub>-efficient street sweepers for routine street sweeping and for removing vehicle track-out pursuant to Rule 55. This rule would apply during construction activities.

## Methodology

Air pollutant emissions generated by project construction were estimated using the Roadway Construction Emission (RCEM), version 9.0.0. RCEM uses project-specific information, including the project's land uses, construction equipment parameters, and location, to model a project's construction emissions. The project would not include any operational sources of air pollution; therefore, only construction emissions were modeled. The analysis reflects construction of the project as described under *Project Description*.

Construction emissions modeled include emissions generated by construction equipment used on-site and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. RCEM estimates construction emissions by multiplying the amount of time equipment is in operation by emission factors. It is assumed all construction equipment used would be diesel-powered. This analysis assumes the project would comply with all applicable regulatory standards. In particular, the project would comply with VCAPCD listed above under *Applicable VCAPCD Rules and Regulations*.

### a. *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

According to the VCAPCD's Guidelines (2003), a project may be inconsistent with the applicable air quality plan if it would cause the existing population to exceed forecasts contained in the most recently adopted AQMP. The VCAPCD adopted the 2016 Ventura County AQMP to demonstrate a strategy for, and reasonable progress toward, attainment of the federal 8-hour ozone standard. The 2016 Ventura County AQMP relies on the Southern California Association of Governments' (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) forecasts of regional population growth in its AQMP population projections (SCAG 2020).<sup>1</sup>

The proposed project involves construction of a pipeline that would not directly generate population growth through the construction of housing. Given the small-scale nature of project construction activities, it is likely construction workers would be drawn from the existing, regional

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<sup>1</sup> On September 3, 2020, SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS (titled Connect SoCal). However, the 2016 AQMP was adopted prior to this date and relies on the demographic and growth forecasts of the 2016-2040 RTP/SCS; therefore, these forecasts are utilized in the analysis of the project's consistency with the AQMP.

workforce and would not indirectly result in the relocation of people to Ventura County. In addition, no new PVCWD employees would be required to operate and maintain the project. Furthermore, the purpose of the project is to facilitate water transfers within PVCWD’s existing system and would not result in expanded water supply availability such that population growth would be induced. Therefore, the project would not result in population growth and therefore would not have the potential to conflict with or obstruct implementation of the AQMP. No impact would occur.

**NO IMPACT**

- b. *Would the project 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 Ventura County portion of the Basin is designated nonattainment for the NAAQs and CAAQS for ozone and the CAAQs for PM<sub>10</sub> (VCAPCD 2022). The following subsections discuss emissions associated with construction and operation of the proposed project.

**Construction**

Project construction would generate temporary air pollutant emissions primarily associated with fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) and exhaust emissions from heavy construction equipment and construction vehicles. Estimated construction emissions are summarized in Table 1. The VCAPCD’s 25 pounds per day thresholds for reactive organic compounds and nitrogen oxide do not apply to construction emissions because such emissions are temporary; however, the VCAPCD recommends mitigation be required if reactive organic compounds and nitrogen oxide emissions exceed 25 pounds per day. As shown in Table 1, construction-related and nitrogen oxide emissions would not exceed this level. Therefore, project construction would not result in a cumulatively considerable net increase of any criteria pollutants for which the project region is in nonattainment under applicable federal and state ambient air quality standards. Impacts related to construction emissions would be less than significant.

**Table 1 Estimated Maximum Daily Air Criteria Pollutant Emissions - Construction**

	Estimated Maximum Daily Emissions (pounds per day)					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Construction Activities	1.4	16.7	11.6	<0.1	1.8	0.8

ROG = reactive organic gases; NO<sub>x</sub> = nitrogen oxides; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide; PM<sub>10</sub> = particulate matter 10 microns or less in diameter; PM<sub>2.5</sub> = particulate matter 2.5 microns or less in diameter  
 See Appendix A for air quality modeling results

**Operation**

The project would not require new operations and maintenance activities within the PVCWD service area upon completion of construction activities. Therefore, no new operational emissions would be generated, and project operation would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard. No impact would occur.

**LESS THAN SIGNIFICANT IMPACT**

c. *Would the project expose sensitive receptors to substantial pollutant concentrations?*

The VCAPCD defines sensitive receptors as facilities or land uses that include members of the population particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of sensitive receptors listed in the VCAPCD Guidelines (2003) include schools, hospitals, and daycare centers; sensitive receptors also typically include residences. The closest sensitive receptor is a single-family residence located approximately 100 feet to the south of the project site across Laguna Road. The potential for project construction to expose sensitive receptors to substantial pollutant concentrations is discussed in the following subsections. The project does not include any stationary sources of air pollutant emissions, and once construction is complete, the proposed project would not require additional operation and maintenance activities beyond those already occurring to operate and maintain the PVCWD system. Therefore, project operation would not expose sensitive receptors to substantial pollutant concentrations and is not discussed further.

### **Criteria Pollutant and Fugitive Dust Emissions**

As discussed under threshold (b), project construction would result in emissions of criteria pollutants, including fugitive dust, reactive organic compounds, and nitrogen oxides. However, such emissions would be temporary in nature and would be reduced through compliance with existing regulations, such as VCAPCD Rule 55. Furthermore, emissions at a given sensitive receptor would occur for only a limited portion of the overall construction period because project construction would progress across the pipeline alignment, thereby limiting the exposure of any proximate individual sensitive receptor to substantial pollutant concentrations from active construction. Therefore, the project would not expose sensitive receptors to substantial concentrations of criteria pollutant and fugitive dust emissions, and impacts would be less than significant.

### **Carbon Monoxide Hotspots**

Traffic-congested roadways and intersections have the potential to generate elevated localized carbon monoxide levels (i.e., carbon monoxide hotspots). In general, carbon monoxide hotspots occur in areas with poor circulation or areas with heavy traffic. Existing carbon monoxide levels in Ventura County have been historically low enough that VCAPCD monitoring stations throughout the county ceased monitoring ambient carbon monoxide concentrations in March and July of 2004 (VCAPCD 2010). The proposed project would result in a minor increase in vehicle traffic along the project alignment as a result of worker vehicle trips, delivery of heavy-duty equipment and materials, and haul trips during construction. Because the project site is not located in an area with poor circulation or heavy traffic, project-related traffic would not cause or contribute to potential temporary carbon monoxide hotspots. Therefore, the project would not expose sensitive receptors to substantial concentrations of carbon monoxide, and impacts would be less than significant.

### **Toxic Air Contaminants**

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs generally consist of four types: organic chemicals, such as benzene, dioxins, toluene, and perchloroethylene; inorganic chemicals such as chlorine and arsenic; fibers such as asbestos; and metals such as mercury, cadmium, chromium, and nickel. The primary TAC emitted by project implementation would be diesel particulate matter (DPM) generated by heavy-duty equipment and

diesel-fueled delivery and haul trucks during construction activities. DPM was identified as a TAC by the CARB in 1998 and is primarily composed of PM<sub>10</sub> and PM<sub>2.5</sub> exhaust emissions (CARB 2022).

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur in phases over approximately six months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning a longer exposure period would result in a higher exposure level for the maximally exposed individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the California Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (i.e., six months) is approximately 0.7 percent of the total exposure period used for health risk calculation. Current models and methodologies for conducting health-risk assessments are associated with longer-term exposure periods of nine, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities, resulting in difficulties in producing accurate estimates of health risk (BAAQMD 2017).

Maximum DPM emissions would occur during site preparation and grading construction activities. DPM emissions would be lower during other construction phases such as paving and site restoration because these phases would require less construction equipment. While the maximum DPM emissions associated with site preparation and grading would only occur for approximately 2.4 months, or 40 percent of the overall construction period, these activities represent the worst-case condition for the total construction period. This would represent less than 0.3 percent of the total exposure period for health risk calculation. Therefore, project construction activities would not represent the type of long-term TAC emission sources typically subject to health risk assessments. Construction activities would also be subject to and would comply with California regulations limiting the idling of heavy-duty construction equipment to no more than five minutes, which would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Compliance with the standard construction measures required by the VCAPCD would also further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. As such, project construction would not expose sensitive receptors to substantial TAC concentrations, and impacts would be less than significant.

### **San Joaquin Valley Fever**

Construction activities, including site preparation and grading, would have the potential to release *Coccidioides immitis* spores. Nonetheless, the population of Ventura County has been and will continue to be exposed to Valley Fever from agricultural and construction activities occurring throughout the region. In addition, substantial increases in the number of reported cases of Valley Fever tend to occur only after major ground-disturbing events such as the 1994 Northridge earthquake (VCAPCD 2003). Construction of the proposed project would not result in a comparable major ground disturbance, and because of compliance with VCAPCD Rule 55 (Fugitive Dust), the project would not release a large number of spores. The VCAPCD does not have a recommended threshold for Valley Fever Impacts but instead recommends consideration of the following factors that may indicate a project's potential to result in significant impacts related to Valley Fever:

- Disturbance of the topsoil of undeveloped land (to a depth of about 12 inches)
- Dry, alkaline, sandy soils
- Virgin, undisturbed, non-urban areas
- Windy areas
- Archaeological resources probable or known to exist in the area (Native American midden sites)
- Special events (fairs, concerts) and motorized activities (motocross track, All Terrain Vehicle activities) on unvegetated soil (non-grass)
- Non-native population (i.e., out-of-area construction workers)

The project would require disturbance of the topsoil of undeveloped land to a depth of approximately 6.5 feet in a non-urban area with soils composed of Camarillo sandy loam, Camarillo loam, Camarillo loam - sandy substratum, Hueneme sandy loam, and Riverwash (United States Department of Agriculture 2022). Due to the relatively small size of the proposed project, it is anticipated construction workers would be from the local or regional area and would therefore have previous exposure to and immunity from Valley Fever. In addition, the project alignment is located in an area that has been previously disturbed and continues to be disturbed in conjunction with construction and maintenance of the roadway, drainage ditches, and other nearby agro-industrial development. The project site is also located in a rural area with very few sensitive receptors nearby. Furthermore, due to the nature of the project, ground disturbance would be relatively minimal and limited to the trench area and drill pits in which the pipeline is installed. Therefore, construction of the proposed project would not result in a substantial increase in entrained fungal spores that cause Valley Fever above existing background levels, and impacts related to Valley Fever would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Project construction could generate odors associated with heavy-duty equipment operation and earth-moving activities. Such odors would be temporary in nature and limited to the duration of construction in the vicinity of the project site. The project contractor(s) would also be required to adhere to VCPACD Rule 51 (Nuisance), which prohibits discharge of air contaminants or any other material from a source that would cause nuisance to any considerable number of persons or the public, including odor. Project operation would involve conveyance of water via an underground pipeline and would not result in the generation of odors. Therefore, the project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**



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# 4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

This biological analysis is based on the results of a desktop and database review of the project region and a reconnaissance-level biological survey of the project site.

The following resources were analyzed in the desktop/database review: United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation system (USFWS 2022b), USFWS Critical Habitat Portal (USFWS 2022a), USFWS National Wetland Inventory (USFWS 2022c), United States Geological Survey (USGS) National Hydrography Dataset (USGS 2022a), California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) (CDFW 2022a), CDFW Biogeographic Information and Observation System (BIOS) (CDFW 2022b) and California Native Plant Society (CNPS) Online Inventory of Rare, Threatened and Endangered Plants of California (CNPS 2022). The CNDDDB review focused on a query of biological resources previously documented within a five-mile radius around the project site. The query of the CNPS database included nine quadrangles surrounding the project site, including the following USGS 7.5-minute topographic quadrangles: *Camarillo, Newbury Park, Triunfo Pass, Point Mugu, Point Mugu OE W, Oxnard, Saticoy, Santa Paula, and Moorpark, California*. The review also analyzed available historical aerial imagery via Google Earth Pro and digitally available historical topographic imagery (USGS 2022b). The desktop/database review evaluated the potential for the project site to support special-status species, aquatic resources, and sensitive natural vegetation communities and assessed the potential for the project to result in significant impacts to these resources.

The field survey was conducted by a Rincon biologist on July 8, 2022, between 10:30 a.m. and 2:00 p.m., and included the project site and a 50-foot buffer (herein referred to as the “biological study area”). At the time of the survey, weather conditions included temperatures between 68 and 74 degrees Fahrenheit, partially cloudy skies, and a slight breeze. The purpose of the field survey was to document the existing biological conditions, including all plant and wildlife species, vegetation communities, land cover types, potentially suitable habitat for regionally occurring wildlife, and aquatic resources. The extents of vegetation communities, land cover types, aquatic resources, and special-status biological resources were mapped using a Geode Geographic Positioning System (GPS) with sub-meter accuracy and plotted on aerial imagery. Vegetation community classification was conducted using the systems provided in *A Manual of California Vegetation, Second Edition* (MCV2; Sawyer et al. 2009), in conjunction with the CDFW California Sensitive Natural Communities List (CDFW 2022c). Land covers were characterized for areas that are unvegetated or dominated by ornamental vegetation (e.g., disturbed/developed).

## **Existing Conditions**

Based on the results of the desktop/database review and field survey, the biological study area can generally be described as a disturbed roadside along Laguna Road. Two agricultural drainage ditches occur in the biological study area, one parallel to Laguna Road and one perpendicular to Laguna Road, crossing underneath it. The biological study area is generally flat and includes paved roads and driveways, unpaved road shoulders, agricultural fields, and ornamental vegetation. Elevations within the biological study area range from approximately 20 to 35 feet above mean sea level.

Plant and wildlife species observed in the biological study area were documented (see Table 1 and Table 2 in Appendix B). One special status wildlife species was observed near the eastern extent of the biological study area: California horned lark (*Eremophila alpestris actia*). This species is on the CDFW Watch List (WL), which is a list of species identified by CDFW as taxa that were either previously designated as a Species of Special Concern (SSC) but no longer merit that status or which do not yet meet SSC criteria but for which there is concern and a need for additional information to clarify status. No other special-status species were observed in the biological study area.

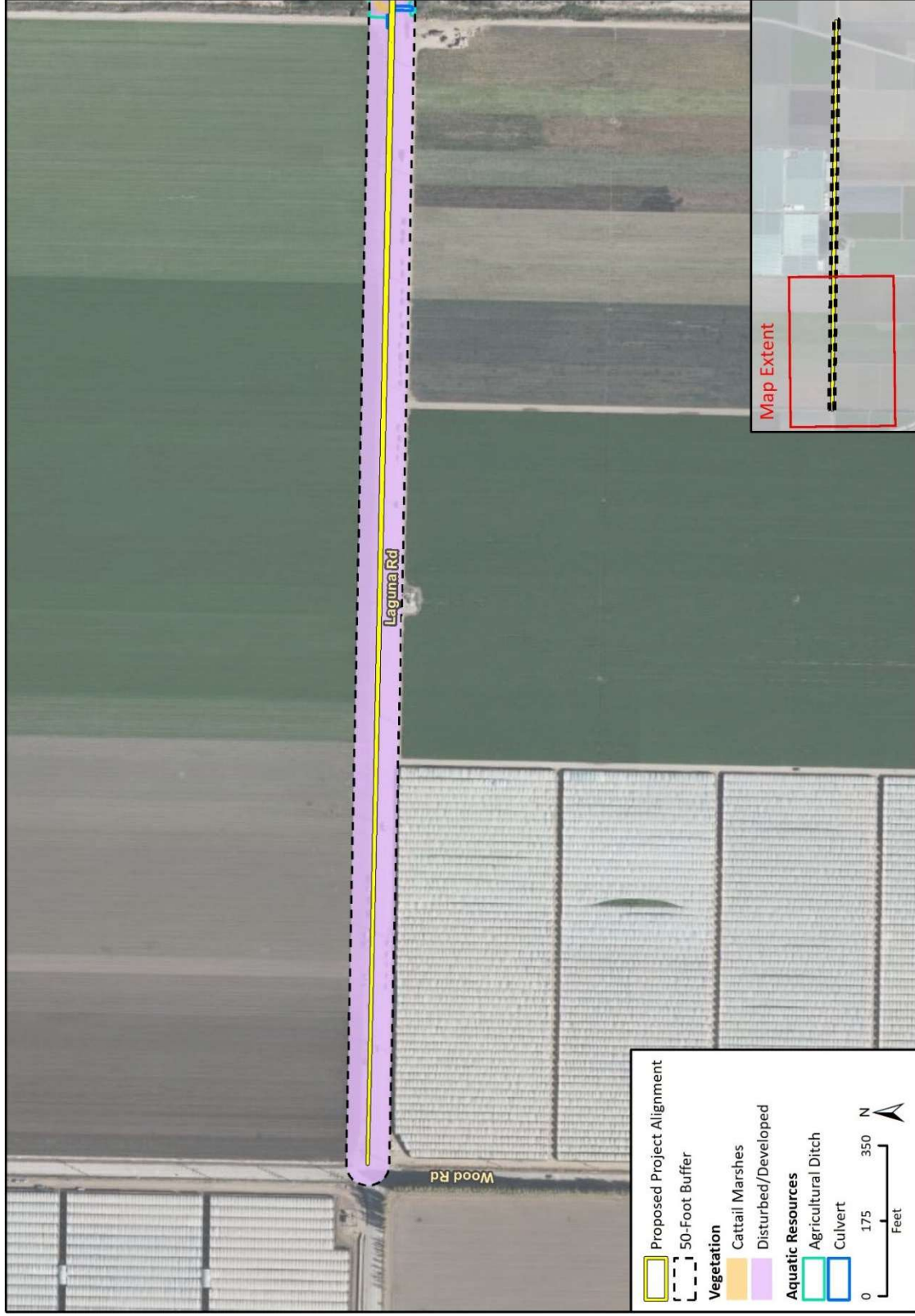
Three vegetation communities and one land cover type were documented in the biological study area and are shown on Figure 3 through Figure 5. These communities and land cover types include the following:

- Fields of fat hen (*Atriplex prostrata*), an Association of Fields of fat hen and brass buttons (*Atriplex prostrata* – *Cotula coronopifolia* Herbaceous Semi-Natural Alliance)
- Cattail marshes (*Typha* [angustifolia, domingensis, latifolia] Herbaceous Alliance)
- Bermudagrass – prickle grass – crowngrass turfs (*Cynodon dactylon* – *Crypsis* spp. – *Paspalum* spp. Herbaceous Semi-Natural Alliance)
- Disturbed/Developed

The fields of fat hen vegetation community is characterized by a dense herbaceous layer dominated by fat hen (*Atriplex prostrata*). The cattail marshes are dominated by narrowleaf cattail (*Typha domingensis*), rabbitsfoot grass (*Polypogon monspeliensis*), and summer mustard (*Hirschfeldia incana*). Bermudagrass – prickle grass – crowngrass turfs is characterized by a dense herbaceous layer dominated by rabbitsfoot grass (*Polypogon monspeliensis*), a non-native invasive species, with occurrences of fat hen, ditch beard grass (*Polypogon interruptus*), and sprangletop (*Leptochloa fusca*). These three vegetation communities were identified within the agricultural drainage ditches in the biological study area. Due to the regular maintenance activities in the drainage ditches, herbicide impacts, and disturbance from the adjacent road and nearby residential and commercial development, the quality of the habitat occurring in these ditches is considered marginal and may only support common wildlife foraging for short durations. None of the vegetation communities identified in the study area considered sensitive by CDFW (2022c).

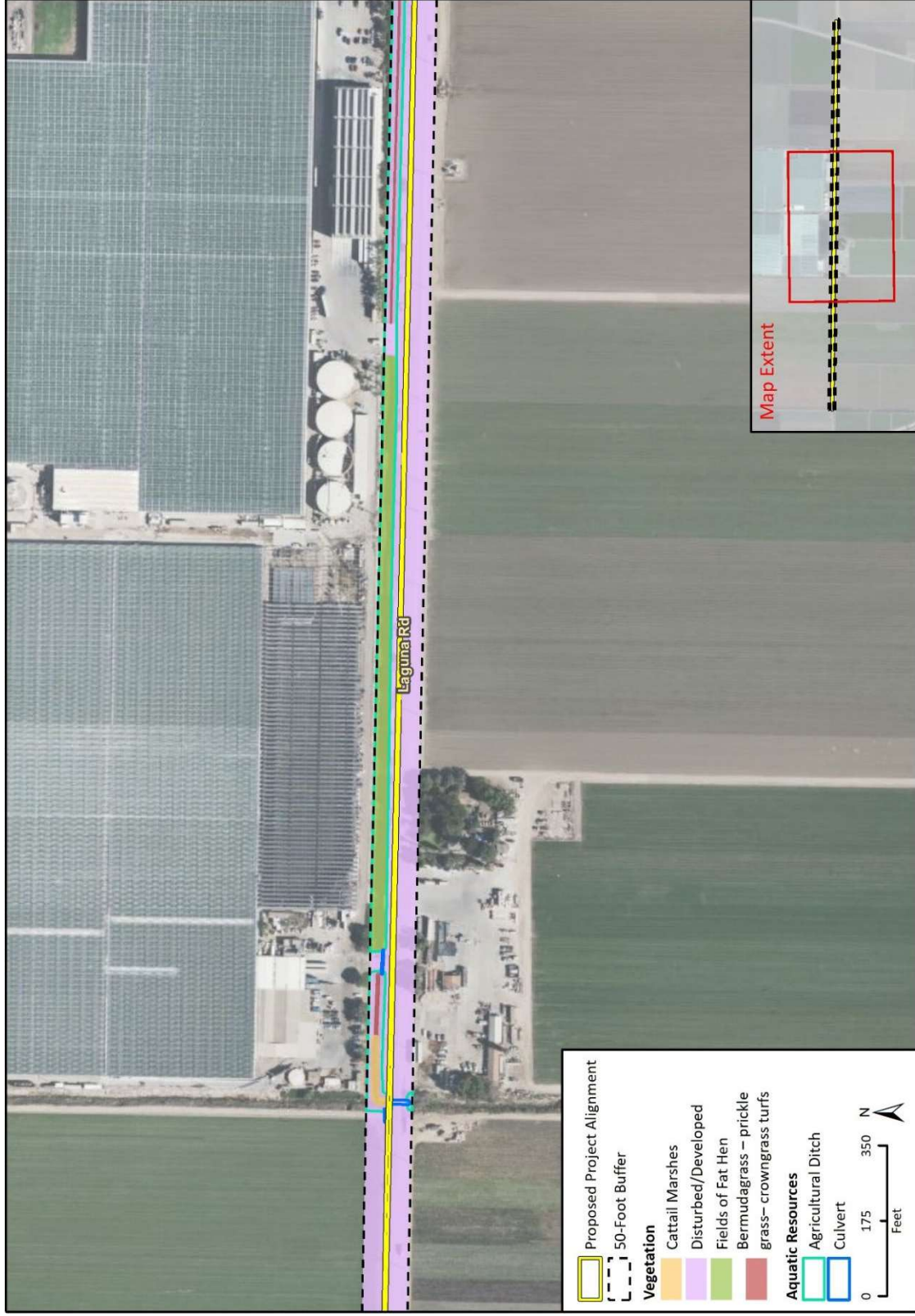
The remaining portions of the biological study area can be characterized as disturbed/developed land cover, which includes paved roads and driveways, agricultural fields, ornamental shrubs, and unpaved gravel or hardpacked dirt with little to no vegetation. Few ornamental trees were observed, including Peruvian pepper trees (*Schinus molle*) and cotoneaster (*Cotoneaster* sp.). A few coast live oak (*Quercus agrifolia*) trees were also observed in the biological study area; however, no trees were observed in the proposed project work areas. Some herbaceous plants are present on the unpaved road shoulders and banks of the two agricultural ditches; however, these plants appear to be regularly removed using herbicide and mechanical methods and do not constitute a vegetation community.

**Figure 3 Biological and Potentially Jurisdictional Resources – Western Extent**



Imagery provided by Microsoft Bing and its licensors © 2022. Fig X Biological and Aquatic Resources

**Figure 4 Biological and Potentially Jurisdictional Resources – Central Extent**



Imagery provided by Microsoft Bing and its licensors © 2022. Fig X Biological and Aquatic Resources

**Figure 5 Biological and Potentially Jurisdictional Resources – Eastern Extent**



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The two unnamed agricultural ditches occurring within the biological study area consist of steep dirt banks with sparse vegetation and flat channel bottoms. Aquatic life including algae, aquatic insects, and small fish were observed in the ditches; however, the ditches were significantly disturbed by trash and herbicide/pesticides. One agricultural ditch runs in an east-west direction parallel to the project alignment, along the northern side of Laguna Road, beginning east of Las Posas Road, where water outlets from a pipe. This east-west ditch extends through most of the biological study area, before intersecting with the second ditch, which runs north to south. The east-west agricultural ditch is approximately 10 feet deep and 20 to 30 feet wide, from bank to bank. The channel bottom is 6 to 10 feet wide and contains water to a depth of 6 to 12 inches. The east-west ditch flows through several culverts in the biological study area, which direct it under existing access roads. The north-south agricultural ditch crosses the biological study area via a culvert under Laguna Road. This ditch is approximately 40 feet wide from bank to bank and 10 feet deep. The channel bottom is approximately 20 feet wide and contains water to a depth of approximately one foot.

The project site is located within the Revolon Slough-Calleguas Creek Watershed (Hydrologic Unit Code 12180701030107). Revolon Slough is located approximately 1.2 miles downstream of the biological study area and ultimately meets with Calleguas Creek, which then discharges into Mugu Lagoon and the Pacific Ocean. The two unnamed agricultural ditches within the biological study area receive all of their water from nearby agricultural activities. In review of the historical USGS topographic imagery that illustrates blue-line streams, the ditches were constructed from upland habitat sometime between 1904 and 1942 to support agricultural activities. The ditches are maintained by the Revolon Drainage Corporation, which was founded in 1953 (Arnold 2022).

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Based on the desktop/database review of the project region, field observations, and review of potentially suitable habitat within the survey area, no special-status plants were observed or previously documented. In addition, none are expected to occur on the project site or in the nearby vicinity based on the lack of suitable habitat and disturbed nature of the site.

One special-status wildlife species was observed in the biological study area during the field survey – the California horned lark. Other special-status wildlife determined to have a potential for occurrence, primarily due to the marginal aquatic habitat occurring in the agricultural ditches, include western pond turtle (*Emys marmorata*; CDFW SSC), arroyo chub (*Gila orcuttii*; CDFW SSC), and two-striped gartersnake (*Thamnophis hammondi*; CDFW SSC). The two agricultural ditches were observed during the field survey to support some water and aquatic life, including algae, aquatic insects, and small fish that may provide habitat. However, during the field survey, a portion of the water in the ditches was dyed blue, and a significant amount of trash was accumulated. Therefore, the potential for these species to occur in biological study area is very low. Furthermore, the project does not include any disturbance to the agricultural ditches that may support potentially suitable habitat for these species. Therefore, no impacts to these species would occur. Other special-status wildlife previously documented in the vicinity, based on the desktop/database review, were determined to have no potential for occurrence based on lack of suitable habitat and disturbed nature of the site. As such, special-status wildlife expected to occur within the project site are limited to the California horned lark. The project could directly (e.g., via direct mortality or vegetation removal) and indirectly (e.g., via construction noise and motion) impact this species.



Impacts to California horned lark would be potentially significant, and implementation of Mitigation Measure BIO-1 would be required to reduce impacts to a less-than-significant level.

The biological study area may also support nesting birds, including raptors, and are protected under the California Fish and Game Code Sections 3503, 3503.5, and 3513 and the Migratory Bird Treaty Act (16 United States Code Sections 703 to 712). While common birds are not designated as special-status species, unlike the California horned lark observed in the survey area, destruction of all native bird eggs, nests, and nestlings is prohibited by federal and state law. Established ornamental trees within the biological study area, bare ground, shrubs, and grasses on site could provide nesting areas. The project could directly (e.g., via vegetation removal) and indirectly (e.g., via construction noise and motion) impact nesting birds; therefore, impacts would be potentially significant, and implementation of Mitigation Measure BIO-1 would be required to reduce impacts to a less-than-significant level.

## **Mitigation Measure**

### *BIO-1 Nesting Bird Pre-Construction Survey and Avoidance Buffers*

Project construction activities shall commence outside of the bird breeding season (February 1 to August 31) to the extent practicable. If construction must commence within the bird breeding season, then a nesting bird pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 300-foot buffer, where feasible, no more than 14 days prior to initiation of ground disturbance and/or vegetation removal. If construction activities stop for more than two weeks during the bird breeding season, a subsequent pre-construction nesting bird survey shall be completed no more than 14 days prior to the re-initiation of construction, should it re-commence during the bird breeding season.

Pre-construction nesting bird surveys shall be conducted during a time of day when birds are active and shall factor in sufficient time to perform the survey adequately and completely. A report of the nesting bird survey results, if applicable, shall be prepared and serve as documentation of results.

If no nesting birds are observed during the pre-construction survey, no further action is necessary. If nests are found, their locations shall be flagged to facilitate avoidance. An appropriate avoidance buffer of 150 feet for passerines and up to 300 feet for raptors, and depending on the proposed work activity, shall be determined by a qualified biologist and demarcated with bright orange construction fencing or other suitable flagging. Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance shall occur within the buffer(s) until the qualified biologist confirms the breeding/nesting is completed and all the young have fledged. If construction activities must occur within the buffer, they shall be conducted at the discretion of the qualified biologist.

## **Significance after Mitigation**

Mitigation Measure BIO-1 would achieve compliance with federal and state laws through the implementation of a pre-construction nesting bird survey if construction occurs during the nesting bird season (typically February 1 to August 31). If active nests are identified, avoidance buffers would be established to minimize impacts to nesting birds until nests are no longer active. Therefore, implementation of Mitigation Measure BIO-1 would reduce impacts to special-status species, including California horned lark, and nesting birds to a less-than-significant level.

## **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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

The agricultural ditches within the biological study area support riparian habitat in the form of hydrophytic vegetation within the fields of fat hen, cattail marshes, and rabbitsfoot grass turfs. However, these communities would not be impacted by the proposed project because they are located outside the proposed work areas. Therefore, the project would not 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 CDFW or USFWS. No impact would occur.

**NO IMPACT**

- c. *Would the project 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 two agricultural ditches occurring in the biological study area support water flow from agricultural activities, aquatic vegetation, aquatic insects, and small fish. The ditches also connect to downstream waters that eventually flow to the Pacific Ocean. The ditches may be provided state and federal protection; however, the proposed project would avoid direct removal and hydrological interruption of the two agricultural ditches because project construction would not encroach into the east-west ditch and trenchless methods would be used to install the pipeline under the north-south ditch. However, project construction could indirectly impact these features if erosion, spills, or leaks occur such that sediment or other contaminants enter the ditches. Therefore, the project would result in potentially significant impacts to aquatic resources that may be under state and federal protection, and implementation of Mitigation Measure BIO-2 would be required to reduce impacts to a less-than-significant level. Implementation of Mitigation Measure HAZ-1, outlined in Section 9, *Hazards and Hazardous Materials*, would further reduce impacts associated with the potential for reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment to impact the two agricultural ditches.

**Mitigation Measure**

*BIO-2 Avoidance Buffers and Best Management Practices for Aquatic Resources*

Project construction activities shall maintain a 10-foot buffer from the top of the bank of the agricultural ditches. In addition, the following best management practices shall be implemented during project construction:

- Prior to the start of project activities, all limits of construction work adjacent to the ditches shall be clearly delineated with orange construction fencing or similar highly visible material to be maintained throughout the duration of construction.
- Any material/spoils generated from project activities shall be located away from the ditches to the extent practicable and protected from stormwater run-off using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate.
- Materials shall be stored on impervious surfaces or plastic ground covers to prevent spills or leakage from contaminating the waters and vegetation communities within the ditches.

- Any spillage of material shall be stopped if it can be done safely. The contaminated area shall be cleaned and any contaminated materials properly disposed of.
- All vehicles and equipment shall be in good working condition and free of leaks.
- Erosion control measures shall be implemented around active work areas, and only natural-fiber, biodegradable meshes and coir rolls, (i.e., no plastic-mesh temporary erosion control measures) shall be used.
- Trenches or pits that remain unfilled shall be secured at the end of each construction workday.
- Equipment and vehicle parking, driving, and storage as well as materials laydown and stockpiling shall be limited to previously compacted and developed areas to the extent practicable.
- Disturbances to native vegetation shall be minimized to the extent practicable.

#### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- d. *Would the project 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?*

Wildlife corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as between foraging and denning areas, or they may be regional in nature, allowing movement across the landscape. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The habitats in the linkage do not necessarily need to be the same as the habitats being linked. Rather, the linkage merely needs to contain sufficient cover and forage to allow temporary inhabitation by ground-dwelling species. Typically, habitat linkages are contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending upon the species using a corridor, specific physical resources (e.g., rock outcroppings, vernal pools, or oak trees) may need to be in the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time.

The project site is not situated within documented wildlife corridors or habitat linkages (Spencer et. al. 2010). Within the project site, there are significant barriers to wildlife movement including the surrounding agricultural fields and a network of paved and dirt agricultural roads fragmenting the landscape. Agricultural ditches within the biological study area may provide passage for wildlife movement in the surrounding region; however, the project would be located outside the limits of the east-west ditch and would be installed underneath the north-south ditch via trenchless construction methods. Therefore, the project would not 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. Impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The biological study area is located in unincorporated Ventura County but is not within the coastal zone or any defined Environmentally Sensitive Habitat Areas. The proposed project work areas do not include wetland resources, sensitive habitats, or protected trees. Therefore, the proposed project would not conflict with local policies and ordinances protecting biological resources, and no impact would occur.

**NO IMPACT**

- f. *Would the project 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 project site is not located in the planning area for any adopted local, regional, or state Natural Community Conservation Plans or Habitat Conservation Plans. Therefore, the project would not conflict with the provisions of any such plan, and no impact would occur.

**NO IMPACT**

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# 5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Rincon prepared a Phase 1 Cultural Resources Letter Report to evaluate potential project impacts to historical and archaeological resources (Pfeiffer et al. 2022). The report included the results of a California Historical Resources Information System records search, archival research, a Sacred Lands File (SLF) search conducted by the Native American Heritage Commission (NAHC), and a pedestrian field survey. The following analysis is based on the Phase 1 Cultural Resources Letter Report, which is provided as a redacted version in Appendix C.

a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

Public Resources Code (PRC) Section 21084.1 requires a lead agency determine whether a project could have a significant effect on historical resources. A historical resource is a resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR) (PRC Section 21084.1), a resource included in a local register of historical resources (PRC Section 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (PRC Section 15064.5[a][3]).

A resource shall be considered historically significant 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; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

A search of the California Historical Resources Information System at the South Central Coastal Information Center located at California State University, Fullerton was completed on May 18, 2022. The search was performed to identify previously recorded cultural resources as well as previously

conducted cultural resources studies within the project site and a 0.5-mile radius surrounding it. Rincon also reviewed the National Register of Historic Places, the CRHR, the California Historical Landmarks list, and the Built Environment Resources Directory, as well as its predecessor the California State Historic Property Data File. Results of these searches indicated no known historical resources are located within or near the project site (Appendix C). The Ventura County Resource Management Agency identified the property located at 582-94 Laguna Road (Assessor's Parcel Number 230-0-072-280) as a potentially eligible County of Ventura Cultural Heritage Site. This property was previously included within the *Eastern Oxnard Plain Historic Context & Reconnaissance Survey*, prepared by San Buenaventura Research Associates in December 2014.<sup>2</sup> According to this report, the residence and outbuildings were attributed to the 1898 to 1945 time period and associated with the Settlement and Agriculture context themes. On July 1, 2022, Rincon conducted a pedestrian field survey and identified no previously unknown historical resources within the project site (Appendix C).

The project would be constructed in the public right-of-way of Laguna Road outside of the 582-94 Laguna Road property and would not affect the residence or outbuildings of this potentially eligible County Cultural Heritage Site. Once construction is complete, the project would be located entirely belowground and thus would not change the visual setting of this property. As a result, the project would not have the potential to cause a substantial adverse change in the potential historical significance of the 582-94 Laguna Road property because no physical demolition, destruction, relocation, or alteration of this property or its immediate surroundings would occur such that the significance of this potential historical resource would be materially impaired. ~~Because no historical resources exist on the project site~~ Therefore, the project would not result in a substantial adverse change to the significance of a historical resource, and no impact would occur.

#### **NO IMPACT**

*b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

CEQA Guidelines Section 15064.5 defines significant archaeological resources as resources that meet the criteria for historical resources or resources that constitute unique archaeological resources. A significant impact could occur if the proposed project would significantly affect archaeological resources that fall under either of these categories.

If it can be demonstrated a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a-b]).

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;

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<sup>2</sup> San Buenaventura Research Associates. 2014. Eastern Oxnard Plain Historic Context & Reconnaissance Survey <https://docs.vcrma.org/images/pdf/planning/programs/chb/East-Oxnard-Plain-Context-12-2014.pdf> (accessed December 2022).

2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

The records search conducted did not identify any known archaeological resources within the project site or vicinity. Results of the NAHC SLF search also did not indicate any known Native American resources near the project site (Appendix C). A dispersed, low-density scatter of approximately 60 highly fragmented, marine clam shells was identified along an approximately 300-foot segment of the proposed project alignment during the pedestrian field survey. The origin of the marine clam shell is unknown. No prehistoric cultural materials such as flaked stone or animal bone were identified in association with the shell. Although the project site has been previously disturbed from roadway construction and underground utility installation, the presence of marine shells along the proposed alignment suggests there is potential for encountering subsurface archaeological deposits during project-related ground disturbances. Although the origin of the shell is unknown and there is no clear indication the shell is cultural, potential impacts to archaeological resources could occur in the event archaeological resources are unexpectedly discovered during project construction (Appendix C). Therefore, the project would potentially cause a substantial adverse change in the significance of an archaeological resource, and implementation of Mitigation Measures CR-1 and CR-2 would be required.

## **Mitigation Measures**

### *CR-1 Worker's Environmental Awareness Program*

A qualified archaeologist shall be retained to conduct a Worker's Environmental Awareness Program training on archaeological sensitivity for all construction personnel prior to the commencement of ground-disturbing activities. The training shall be conducted by a qualified archaeologist who meets the Secretary of Interior's Professional Qualification Standards for archaeology (National Park Service 1983). Archaeological sensitivity training shall include a description of the types of cultural material that may be encountered, cultural sensitivity issues, the regulatory environment, and the proper protocol for treatment of the materials in the event of a find.

### *CR-2 Unanticipated Discovery of Cultural Resources*

If archaeological resources are unexpectedly encountered during project-related ground-disturbing activities, work in the immediate area shall be halted and a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the find. If the find is prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be eligible for the CRHR and cannot be avoided by the proposed project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to historical resources.

## **Significance after Mitigation**

Mitigation Measures CR-1 and CR-2 would minimize the potential for impacts related to unexpected discoveries of archaeological resources to occur through the implementation of a Worker's Environmental Awareness Program training prior to construction and appropriate procedures for



evaluation and treatment should any discoveries be made during construction. Therefore, implementation of Mitigation Measures CR-1 and CR-2 would reduce impacts to archaeological resources to a less-than-significant level.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- c. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

No human remains are known to be present within the project site (Appendix C). However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, California Health and Safety Code Section 7050.5 states no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately by PVCWD. If the human remains are determined to be of Native American origin, the Coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to existing regulations, impacts to human remains would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

## 6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

As a state, California is one of the lowest per capita energy users in the United States, ranked 49<sup>th</sup> in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration 2022). Electricity and natural gas are primarily consumed by the built environment for lighting, appliances, heating and cooling systems, fireplaces, and other uses such as industrial processes in addition to being consumed by alternative fuel vehicles. The project would not result in a net increase in electricity usage in the PVCWD service area as compared to existing conditions and would not include natural gas connections. Therefore, electricity and natural gas consumption are not discussed further in this analysis.

Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes, with California being one of the top petroleum-producing states in the nation (CEC 2021). Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 13.8 billion gallons sold in 2021 (CEC 2022a). Diesel, which is used primarily by heavy-duty trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.8 billion gallons sold in 2019 (CEC 2022b).

Energy consumption is directly related to environmental quality in that the consumption of nonrenewable energy resources releases criteria air pollutant and greenhouse gas (GHG) emissions into the atmosphere. The environmental impacts of air pollutant and GHG emissions associated with the project's energy consumption are discussed in detail in Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, respectively.

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

### Construction Energy Demand

During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, and construction worker

travel to and from the project site. Total consumption of gasoline and diesel fuel during project construction was estimated using the assumptions and factors from RCEM used to estimate construction air emissions for Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions* (Appendix A). Table 2 presents estimated energy consumption during project construction. As shown therein, construction equipment, water truck trips, and haul trips would consume approximately 11,590 gallons of diesel fuel, and construction worker trips would consume approximately 1,315 gallons of gasoline.

**Table 2 Project Construction Energy Usage**

Source	Fuel Consumption (gallons)
Construction Equipment & Water Truck/Haul Trips	11,590
Construction Worker Vehicle Trips	1,315

See Appendix D for energy consumption calculations.

Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit off-road diesel vehicles and diesel-fueled commercial motor vehicles, respectively, from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the United States Environmental Protection Agency Construction Equipment Fuel Efficiency Standard, and water and haul trucks would be subject to the CARB Advanced Clean Trucks regulation, both of which would also minimize inefficient, wasteful, or unnecessary fuel consumption. These regulations would result in the efficient use of energy necessary to construct the project. Furthermore, in the interest of cost-efficiency, construction contractors would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, project construction would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and no impact would occur.

**Operational Energy Demand**

As discussed in Section 3, *Air Quality*, the project would not require new operations and maintenance activities within the PVCWD service area upon completion of construction activities. Therefore, no new operational emissions would be generated, and project operation would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy. No impact could occur.

**NO IMPACT**

*b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

PVCWD does not have any specific renewable energy or energy efficiency plans with which the project could comply. In addition, no state plans for renewable energy or energy efficiency would apply to the project. Therefore, no impact would occur.

**NO IMPACT**

# 7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a.1. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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?*
- a.2. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

Like all of Southern California, the project site is subject to strong ground shaking associated with active and/or potentially active faults in the region. The project site is not located along a currently active mapped fault or within an Alquist-Priolo Fault Zone (DOC 2022a). While the project may be subject to strong ground shaking in the event of an earthquake, it would not be subject to unusual levels of ground shaking as compared to the rest of the region. Although the project site is located in a seismically active area, the project would not expose people to seismically-induced risk. The proposed project involves installation of an underground pipeline and would not involve any habitable structures. Design and construction of the proposed project would conform to the current seismic design provisions of the California Building Code (CBC) (CCR Title 24). While the project would be susceptible to seismic activity given its location within a seismically active area, the project would be required to minimize this risk, to the extent feasible, through the incorporation of applicable CBC standards. A large seismic event, such as a fault rupture, seismic shaking, or ground failure, could result in breakage of the proposed pipeline, failure of joints, and/or underground leakage from the pipeline. In the event an earthquake compromises the pipeline during operation, PVCWD would temporarily shut-off water conveyance processes and conduct emergency repairs as soon as practicable. Compliance with such requirements would reduce seismic ground shaking impacts to the maximum extent practicable with current engineering practices. Therefore, the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault or strong seismic ground shaking. Impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- a.3. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

Liquefaction is the sudden loss of soil shear strength due to a rapid increase of soil pore water pressures caused by cyclic loading from a seismic event. This means a liquefied soil acts more like a fluid than a solid when shaken during an earthquake. The project site is located in a liquefaction zone (DOC 2022b). Soils therefore have the potential to liquefy during a seismic event, and seismically-induced liquefaction could potentially damage the proposed pipeline in the event of an earthquake, resulting in joint failure or leakage from the pipeline. As discussed under thresholds (a.1) and (a.2), the project would be constructed in accordance with the current seismic design provisions of the CBC. In the event seismically-induced liquefaction compromises the pipeline during operation, PVCWD would temporarily shut-off water conveyance processes and conduct emergency repairs as soon as practicable. In addition, the project involves construction of water infrastructure and would not involve placement of habitable structures within a liquefaction-prone area, thereby minimizing the potential to result in loss, injury, or death involving seismic-related ground failure due to liquefaction. As a result, with adherence to existing regulatory requirements, the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

The project site is located in a relatively flat area that is not within or near an earthquake-induced landslide hazard zone (DOC 2022a). Therefore, the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. No impact would occur.

**NO IMPACT**

- b. Would the project result in substantial soil erosion or the loss of topsoil?*

Soil erosion or the loss of topsoil may occur when soils are disturbed but not secured or restored, such that wind or rain events may mobilize disturbed soils, resulting in their transport off the project site. The project site is relatively flat; however, construction of the proposed pipeline would require grading and trenching on land that is currently undeveloped, which would involve exposing soil such that erosion and topsoil loss could occur.

Because the project disturbance area would be greater than one acre in size, the project would be subject to compliance with the requirements of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). The Construction General Permit requires the development of a Stormwater Pollution Prevention Plan (SWPPP) to reduce erosion and topsoil loss from stormwater runoff during construction activities. Compliance with the requirements set forth in this permit would require the project contractor(s) to implement best management practices (BMPs) for erosion control during construction, such as preventing runoff from unprotected slopes, keeping disturbed areas to a minimum, and installing check berms and desilting basins during construction activities, as necessary. With adherence to the requirements of the Construction General Permit, the project would not result in substantial soil erosion or loss of topsoil, and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

The proposed project would not be located in a seismically active area or in an earthquake-induced landslide hazard zone and therefore would have no potential to result in on- or off-site landslides. The project would also not include activities with the potential to result in subsidence, such as oil or groundwater extraction, or with the potential to result in lateral spreading and liquefaction, such as shallow groundwater injection. However, the project site is located in a liquefaction zone (DOC 2022b). As discussed above under threshold (a.3), the project would be constructed in accordance with the current seismic design provisions of the CBC to reduce the potential for the project to result in unstable geologic or soil conditions to the maximum extent practicable with current engineering practices. Therefore, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- d. *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

The project site contains soils composed of Camarillo sandy loam (14 percent clay), Camarillo loam (18.5 percent clay), Camarillo loam, sandy substratum (18.5 percent), Hueneme sandy loam (12.5 percent clay), and Riverwash (0.5 percent clay) (United States Department of Agriculture 2022). Due to the lack of clay content of the on-site soils, the potential for expansive soils to occur is low. In addition, the project does not include construction of habitable structures and would be unmanned during operation. Therefore, the proposed project would not expose people to risks related to expansive soils. As a result, the project would not create substantial direct or indirect risks to life or property as a result of expansive soils. No impact would occur.

**NO IMPACT**

- e. *Would the project 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 proposed project involves installation of a water pipeline that would serve as an interconnection between two existing PVCWD transmission lines. The project does not involve the use of septic tanks or alternative wastewater disposal systems. As a result, no impact would occur.

**NO IMPACT**

- f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows, etc.). Paleontological resources are not found in “soil” but are contained within the geologic deposits or bedrock that underlie the soil layer. Generally, fossils are greater than 5,000 years old (i.e., older than middle Holocene in age) and are typically preserved in sedimentary rocks. Although rare, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions (Society of Vertebrate Paleontology [SVP] 2010). Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors.

The geology of the region is mapped at a scale of 1:24,000 by Tan et al. (2004), who identified three geologic units underlying the project site, which are shown in Figure 6 - Quaternary wash deposits (Unit 2), Quaternary alluvial deposits (Unit 3), and Quaternary alluvial fan deposits. Rincon evaluated the paleontological sensitivity of the geologic units that underlie the project site to assess the project’s potential to result in significant impacts to scientifically important paleontological resources. The analysis was based on the results of a paleontological locality search from the Natural History Museum of Los Angeles County (NHMLA) and a review of existing information in the scientific literature regarding known fossils within geologic units mapped at the project site. According to the SVP (2010) classification system, geologic units can be assigned a high, low, undetermined, or no potential for containing scientifically significant paleontological resources. Following the literature review, a paleontological sensitivity classification was assigned to each geologic unit mapped within the project site. The classification is based on knowledge of rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies

to be present or likely to be present. The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units.

Quaternary wash deposits (Unit 2) underlie the western portion of the project site (Figure 6). Quaternary wash deposits consist of unconsolidated silt, sand, and gravel and are Holocene in age (Tan et al. 2004). Tan et al. (2004) assigned Holocene alluvial and wash deposits into three units based on which drainage they were associated with. Unit 2 deposits are associated with Revolon Slough. Quaternary wash deposits (Unit 2) are likely too young (i.e., less than 5,000 years old) to preserve paleontological resources and, therefore, have **low paleontological sensitivity**.

Quaternary alluvial deposits (Unit 3) underlie the eastern portion of the project site (Figure 6). Quaternary alluvial deposits consist of unconsolidated, poorly sorted, clayey sand with minor amounts of gravel containing scour and incised channel features that are Holocene in age (Tan et al. 2004). Tan et al. (2004) assigned Holocene alluvial and wash deposits into three units based on which drainage they were associated with. Unit 3 deposits are associated with Calleguas Creek. Quaternary alluvial deposits (Unit 3) are likely too young (i.e., less than 5,000 years old) to preserve paleontological resources and, therefore, have **low paleontological sensitivity**.

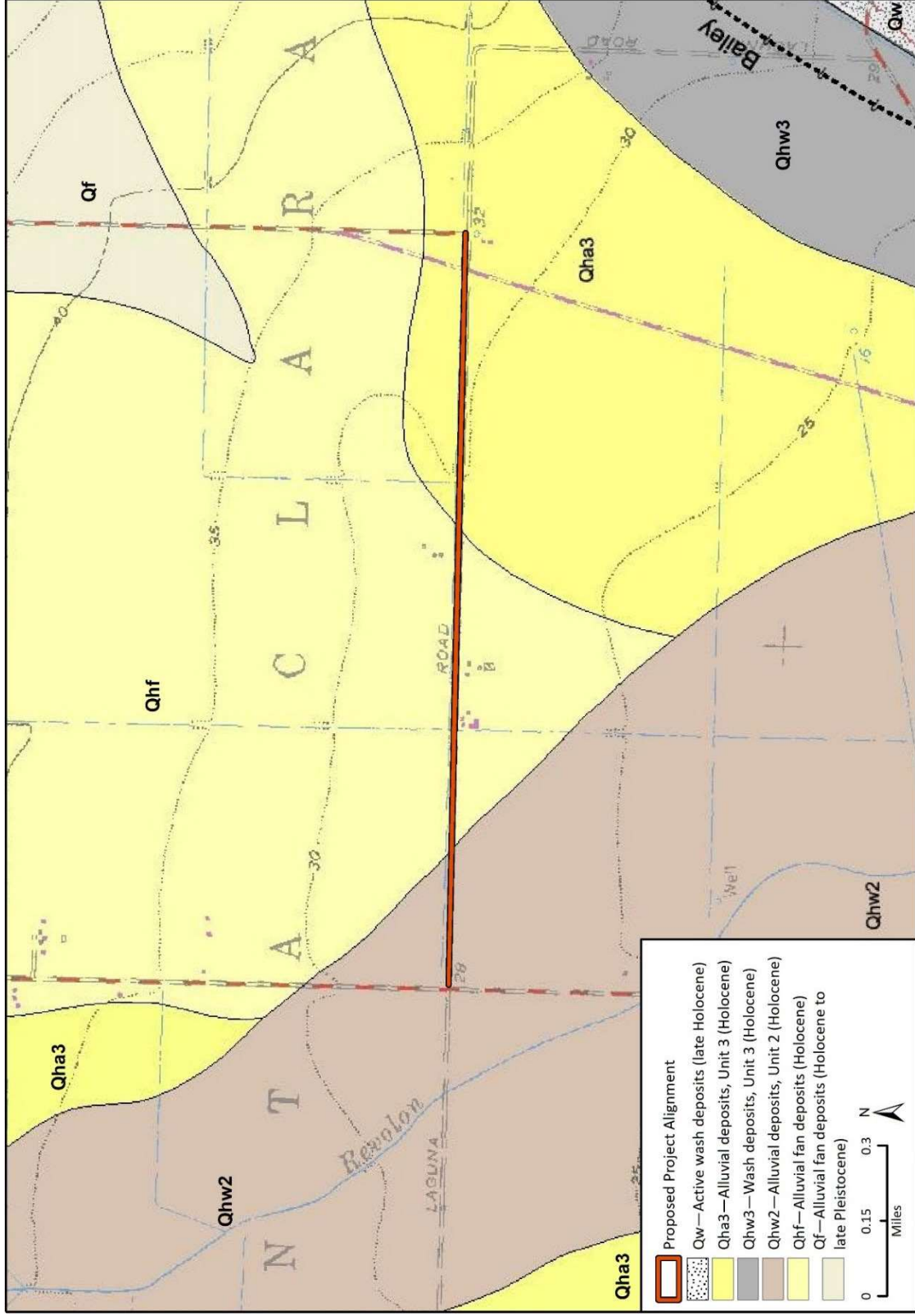
Quaternary alluvial fan deposits underlie the central portion of the project site (Figure 6). Quaternary alluvial fan deposits consist of moderately to poorly sorted, moderately to poorly bedded, sandy clay with some silt and gravel (Tan et al. 2004). Quaternary alluvial fan deposits represent Holocene and/or active alluvial fans whose sediment is deposited as debris flows, mudflows, or braided streams. Quaternary alluvial fan deposits are likely too young (i.e., less than 5,000 years old) to preserve paleontological resources and, therefore, have **low paleontological sensitivity**.

A fossil locality search from the NHMLA recovered no fossil localities from within the project site (Bell 2022).

All three of the geologic units underlying the project site - Quaternary wash deposits (Unit 2), Quaternary alluvial deposits (Unit 3), and Quaternary alluvial fan deposits - have low paleontological sensitivity. These geologic units are too young (i.e., less than 5,000 years old) to preserve paleontological resources. However, at some depth below the surface, these sediments will become old enough to preserve such resources and may therefore be highly sensitive. The proposed project would require excavation to a maximum depth of approximately 6.5 feet below the surface. The project site is located within an active depositional basin approximately 0.7 mile northwest of the nearest exposed bedrock (not depicted in Figure 6) and approximately 0.3 mile south of potentially early Holocene-Pleistocene sediments (Qf in Figure 6). As a result, sediments that are old enough to preserve paleontological resources are unlikely to be impacted by this project. Nevertheless, there is always potential to unexpectedly encounter paleontological resources during ground-disturbing activities. As a result, in the event of an unanticipated discovery, project impacts to paleontological resources would be potentially significant, and implementation of Mitigation Measure GEO-1 would be required to reduce impacts to a less-than-significant level.



**Figure 6 Geologic Map of the Project Site**



Basemap provided by Tan et al. 2004.

## **Mitigation Measure**

### *GEO-1 Unanticipated Discovery of Paleontological Resources*

In the event a fossil is discovered during construction of the project, ground disturbance within 50 feet of the find shall be temporarily halted or delayed until the discovery is examined by a Qualified Professional Paleontologist. PVCWD shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. If the find is determined to be significant, PVCWD shall retain a Qualified Professional Paleontologist to direct all mitigation measures related to paleontological resources. The Qualified Professional Paleontologist shall design and carry out a data recovery plan consistent with the SVP (2010) standards.

## **Significance after Mitigation**

Mitigation Measure GEO-1 would entail implementation of a paleontological WEAP prior to the start of construction and appropriate treatment procedures in the event of an unanticipated discovery of paleontological resources during ground-disturbing activities. Therefore, implementation of Mitigation Measure GEO-1 would reduce impacts to paleontological resources to a less-than-significant level.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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## 8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project:

- |   |                          |                          |                                     |                                     |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?       | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

### Overview of Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth’s atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of GHG emissions contributing to the “greenhouse effect,” a natural occurrence which takes place in Earth’s atmosphere to help regulate the temperature of the planet. The majority of radiation from the sun hits Earth’s surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHGs occur both naturally and as a result of human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO<sub>2</sub>), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Anthropogenic activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the concentration of GHGs in the atmosphere that trap heat. Since 1750, estimated concentrations of CO<sub>2</sub>, methane, and nitrous oxide in the atmosphere have increased over by 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity (Forster et al. 2007). Emissions resulting from human activities are thereby contributing to an average increase in Earth’s temperature. Potential climate change impacts in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (State of California 2018).

### Regulatory Framework

In response to climate change, California implemented Assembly Bill (AB) 32, the “California Global Warming Solutions Act of 2006.” AB 32 required the reduction of statewide GHG emissions to 1990 emissions levels (essentially a 15 percent reduction below 2005 emission levels) by 2020 and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-

effective GHG emissions reductions. On September 8, 2016, the Governor signed Senate Bill 32 into law, extending AB 32 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program and the Low Carbon Fuel Standard, and implementation of recently adopted policies and legislation, such as SB 1383 (aimed at reducing short-lived climate pollutants including methane, hydrofluorocarbon gases, and anthropogenic black carbon) and SB 100 (aimed at accelerating the Renewables Portfolio Standard Program). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) of CO<sub>2</sub>e by 2030 and two MT of CO<sub>2</sub>e by 2050 (CARB 2017).

### **Significance Thresholds**

Individual projects do not generate sufficient GHG emissions to influence climate change directly. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means the incremental effects of an individual project are significant when viewed in conjunction with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

To evaluate whether a project may generate a quantity of GHG emissions with the potential to have a significant impact on the environment, local air districts developed a number of bright-line significance thresholds. Significance thresholds are numeric mass emissions thresholds that identify the level at which additional analysis of project GHG emissions is necessary. If project emissions are equal to or below the significance threshold, with or without mitigation, the project's GHG emissions would be less than significant. VCAPCD has not established quantitative significance thresholds for evaluating GHG emissions in CEQA analyses, but it recommends using the California Air Pollution Control Officers Association (2008) CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act white paper and other resources when developing GHG evaluations (VCAPCD 2006). The *CEQA and Climate Change* paper provides a common platform of information and tools to support local governments and was prepared as a resource, not as a guidance document. CEQA Guidelines Section 15064.4 expressly provides a "lead agency shall have discretion to determine, in the context of a particular project," whether to "[q]uantify greenhouse gas emissions resulting from a project" and/or "[r]ely on a qualitative analysis or performance based standards." Updates to CEQA Guidelines Section 15064.4 that took effect in December 2018 further state that a lead agency should "focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change" and that the analysis should "reasonably reflect evolving scientific knowledge and state regulatory schemes."

In light of the lack of a specific GHG threshold recommended or adopted by VCAPCD or the County of Ventura or a GHG emission reduction plan adopted by PVCWD, it is appropriate to refer to guidance from other agencies when discussing GHG emissions. The South Coast Air Quality

Management District (SCAQMD), which is located adjacent to VCAPCD’s jurisdiction, has been evaluating GHG significance thresholds since April 2008. In December 2008, the SCAQMD adopted an interim 10,000 MT of CO<sub>2</sub>e per year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency. The SCAQMD has continued to consider adoption of significance thresholds industrial and non-industrial projects. The most recent proposal issued in September 2010 uses a tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010). Based on this approach, PVCWD has determined that the threshold of 3,000 MT of CO<sub>2</sub>e per year for non-industrial projects is the best available method to evaluate the significance of project-related GHG emissions.<sup>3</sup>

### Methodology

GHG emissions associated with project construction were estimated using RCEM version 9.0.0, with the assumptions described under Section 3, *Air Quality*. In addition, in light of the lack of specific guidance from VCAPCD regarding the amortization of construction emissions, GHG emissions from construction of the proposed project were amortized over a 30-year period in accordance with SCAQMD’s recommendation (SCAQMD 2008).<sup>4</sup>

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

### Construction

Construction of the proposed project would generate temporary GHG emissions primarily as a result of operation of construction equipment at the project site as well as from vehicles transporting construction workers to and from the project site and heavy trucks to transport demolished and new materials and soil import/export. This analysis considers the combined impact of GHG emissions from both construction and operation. Calculations of CO<sub>2</sub>, methane, and nitrous oxide emissions are provided to identify the magnitude of potential project effects. As shown in Table 3, project construction would result in emissions of approximately 128 MT of CO<sub>2</sub>e total, or 4 MT of CO<sub>2</sub>e when amortized over a 30-year period pursuant to SCAQMD guidance. Therefore, the project would not exceed the threshold of 3,000 MT of CO<sub>2</sub>e per year, and the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts would be less than significant.

**Table 3 Estimated Construction GHG Emissions**

Year	Project Emissions (MT of CO <sub>2</sub> e per year)
Total	128.1
Total Amortized over 30 Years	4.3
SCAQMD-Recommended Threshold	3,000
<b>Threshold Exceeded?</b>	<b>No</b>

MT = metric tons; CO<sub>2</sub>e = carbon dioxide equivalent; SCAQMD = South Coast Air Quality Management District  
See Appendix A for RCEM results.

<sup>3</sup> Because the project would neither directly nor indirectly generate new population, comparison to a per capita or per service population threshold is not appropriate.

<sup>4</sup> The lifetime of the proposed pipeline is expected to be a minimum of 50 years. Therefore, use of a 30-year amortization period provides a conservative estimate of project impacts.

## **Operation**

The project would not require new operations and maintenance activities within the PVCWD service area upon completion of construction activities. Therefore, no new operational GHG emissions would be generated, either directly or indirectly, that would have a significant impact on the environment. No impact would occur.

### **LESS THAN SIGNIFICANT IMPACT**

*b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

PVCWD does not have any specific GHG emission reduction plans, policies, or regulations with which the project could comply. Therefore, the project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, and no impact would occur.

### **NO IMPACT**

# 9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located in 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Project construction would involve the use of potentially hazardous materials such as vehicle fuels and fluids. These materials would be contained within vessels specifically engineered for safe storage and would not be transported, stored, or used in quantities that would pose a significant hazard to the public or construction workers themselves. In addition, any use of potentially hazardous materials during construction of the proposed project would be required to comply with all local, state, and federal regulations regarding the handling of hazardous materials, which would minimize the potential for the project to create a significant hazard to the public or the environment. Operation of the project would not include the use of hazardous materials. Therefore, the project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- b. *Would the project 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 presence of hazardous materials during project construction activities, including but not limited to ground-disturbing activities such as trenching, could result in an accidental upset or release of hazardous materials if they are not properly stored and secured. Hazardous materials used during project construction would be disposed of off-site in accordance with all applicable laws and regulations, including but not limited to the CBC and California Fire Code, as well the regulations of the federal and state Occupational Safety and Health Administrations. Nonetheless, upset or accident conditions could result in the unanticipated spill or release of hazardous materials such as vehicle and equipment fuels during project construction, potentially introducing a hazard to the public and/or the environment, which could result in a potentially significant impact especially if materials are released into the adjacent east-west drainage ditch. Implementation of Mitigation Measure HAZ-1 would be required to provide an additional level of safety during project construction, thereby reducing the potential impact to the public and environment due to release of hazardous materials during upset or accident conditions to a less-than-significant level.

As discussed under item (a), operation and maintenance of the project would involve the conveyance of water and would not require the routine use, storage, or disposal of hazardous materials. No impacts related to the release of hazardous materials due to reasonably foreseeable upset or accident conditions during project operation would occur.

#### **Mitigation Measure**

##### *HAZ-1 Hazardous Materials Management and Spill Control Plan*

PVCWD shall require its construction contractor(s) to submit a Hazardous Materials Management and Spill Control Plan (HMMSCP), including a project-specific contingency plan for hazardous materials and waste operations to PVCWD for review and approval. The HMMSCP shall establish policies and procedures consistent with applicable codes and regulations, including, but not limited to, the California Building and Fire Codes, as well as regulations promulgated by the United States Department of Labor, United States Occupational Safety and Health Administration, and California Occupational Safety and Health Administration. The HMMSCP shall articulate hazardous materials

handling practices to prevent the accidental spill or release of hazardous materials during project construction.

### **Significance after Mitigation**

Mitigation Measure HAZ-1 would require preparation and implementation of a HMMSCP with appropriate procedures to implement in the event of an accidental spill or release of hazardous materials during project construction. Therefore, implementation of Mitigation Measure HAZ-1 would reduce impacts from reasonably foreseeable upset and accident conditions involving the release of hazardous materials to a less-than-significant level.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The nearest school to the project site is Lemonwood Elementary School, located approximately 3.3 miles to the west. Therefore, the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. No impact would occur.

### **NO IMPACT**

*d. Would the project be located on a site that is included on a list of hazardous material 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 following databases compiled pursuant to Government Code Section 65962.5 were checked for known hazardous materials contamination within and adjacent to the project site:

- EnviroStor Database, California Department of Toxic Substances Control (DTSC)
- GeoTracker Database, California State Water Resources Control Board (SWRCB)

According to the database search, there is one known hazardous material site located near the project site (DTSC 2022; SWRCB 2022). The Rio Farms site is a listed cleanup site located approximately 0.1 mile north of the intersection of Las Posas Road and Laguna Road and 0.1 mile north of the project alignment. The Clean Up Status is listed as “closed” as of 2011 (SWRCB 2022). Due to the cleanup site’s closed status and distance from the project site, the proposed project would not create a significant hazard to the public or the environment due to this cleanup site. Therefore, no impact would occur.

### **NO IMPACT**

*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 approximately 2.2 miles south of the Camarillo Airport and is within the Camarillo Airport’s land use study area and but is not within the Airport’s Traffic Pattern Zone (TPZ), Runway Protection Zones, Outer Safety Zone, or Height Restriction Zone. The project site is also not located within the noise level contours for the airport (Ventura County Airport Land Use Commission 2000).

Therefore, the project would not result in a safety hazard or excessive noise for people working at the project site due to proximity to an airport. No impact would occur

### **NO IMPACT**

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The project site is within the planning area of the County of Ventura's Emergency Operations Plan (County of Ventura 2021). The proposed project involves installation of an underground pipeline and would not modify or block current emergency access routes or site ingress and egress. While implementation of the proposed project would increase traffic to and from the project site during construction, the project site is surrounded by major roadways, such as U.S. 101, which have sufficient capacity to provide access to and from the project site (see Section, 17 *Transportation*). Project construction would require a temporary single-lane closure along Laguna Road, which could slow traffic through the local area and thereby affect implementation of emergency response and emergency evacuation plans. Therefore, impacts would be potentially significant, and implementation of Mitigation Measure HAZ-2 would be required to reduce impacts to a less-than-significant level.

### **Mitigation Measure**

#### *HAZ-2 Traffic Control Plan*

PVCWD shall require the project contractor(s) to prepare and implement a traffic control plan that specifies how traffic will be safely and efficiently redirected during lane closures. All work shall comply with the Work Area Traffic Control Handbook, which conforms to the standards and guidance of the California Manual on Uniform Traffic Control Devices. Traffic control measures for lane closures shall be included, and priority access shall be given to emergency vehicles. The traffic control plan shall also include requirements to notify local emergency response providers at least one week prior to the start of work when lane closures are required.

### **Significance after Mitigation**

Mitigation Measure HAZ-2 would require the project contractor(s) to safely redirect traffic, utilize traffic control measures, and give emergency response providers advance notification and priority access such that the potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan would be minimized. Therefore, implementation of Mitigation Measure HAZ-2 would reduce impacts to a less-than-significant level.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

As discussed in detail in Section 20, *Wildfire*, the project site is near state responsibility areas (SRAs) or lands classified as Very High Fire Hazard Severity Zones (VHFHSZ) (California Department of Forestry and Fire Protection [CAL FIRE] 2020). According to the CAL FIRE, the project site is located approximately 0.8 mile west of the nearest SRA and approximately 1.5 miles northwest of the nearest VHFHSZ (CAL FIRE 2020). However, the project site is surrounded by existing irrigated agricultural fields and agro-industrial development and is not located near any undeveloped

wildland areas. In addition, the project consists of an underground pipeline and would not include habitable structures. Therefore, the project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. No impact would occur.

**NO IMPACT**

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# 10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

## **Construction**

As stormwater flows over a construction site, it can pick up sediment, debris, and chemicals, and transport them to receiving water bodies. Temporary site preparation and trenching activities associated with the project may result in soil erosion. Construction activities could also affect water quality in the event of an accidental fuel or hazardous materials leak or spill. Receiving water bodies in the vicinity of the project site include two unnamed agricultural ditches, one of which runs parallel to the project alignment in an east-west direction and one of which crosses perpendicular to the project alignment in a north-south direction.

As previously discussed in Section 7, *Geology and Soils*, construction activities would be required to comply with the NPDES Construction General Permit (Order No. 2009-2009-DWQ, as amended) because project construction would disturb more than one acre of land. The NPDES Construction General Permit requires preparation and implementation of a project-specific SWPPP, which requires operators to implement pollution prevention controls to minimize the discharge of pollutants from stormwater and spilled or leaked materials. Such controls include installation of silt fencing and sandbag barriers, covering of stockpiles, use of desilting basins, and post-construction revegetation and drainage requirements. In addition, pursuant to the NPDES Construction General Permit requirements, inspections would be conducted on the project site once every seven calendar days, or once every 14 calendar days and within 24 hours of a 0.25-inch storm event. Compliance with applicable regulatory requirements would minimize potential surface water quality impacts associated with sediment erosion during project construction. Mitigation Measure BIO-2, as outlined in Section 4, *Biological Resources*, would also further reduce the potential for sediment erosion to impact the two agricultural ditches through implementation of additional best management practices for protecting these resources.

There is potential for accidental leaks and spills of hazardous materials at the surface, which could result in potentially significant impacts to water quality if hazardous materials enter the unnamed agricultural ditches. Mitigation Measure HAZ-1, as described in Section 9, *Hazards and Hazardous Materials*, would reduce the potential for accidental leaks and spills of hazardous materials by requiring preparation and implementation of an HMMSCP. With implementation of Mitigation Measure HAZ-1, project construction would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, and the impact would be reduced to a less-than-significant level.

## **Operation**

The proposed project consists of an underground water pipeline that would not have the potential to release contaminants that would adversely affect water quality during operation. As such, project operation would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. No impact would occur.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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

The project site overlies the Pleasant Valley Groundwater Basin (California Department of Water Resources [DWR] 2006), which is designated as a high-priority groundwater basin under the Sustainable Groundwater Management Act. In December 2019, the Fox Canyon Groundwater Management Agency adopted its Draft Groundwater Sustainability Plan (GSP) for the Pleasant Valley Basin, which was approved by DWR in 2021 (Fox Canyon Groundwater Management Agency 2022).

The project consists of a water pipeline that would be installed underground along the shoulder of Laguna Road, and the project site would be restored to pre-project conditions after the completion of construction activities. The project does not include the addition of impervious surfaces, and the underground pipeline would not substantially alter the ability for groundwater to percolate through the subsurface. In addition, as discussed in Section 17, *Utilities and Service Systems*, the project would not facilitate increased groundwater pumping because water conveyed through the proposed pipeline would be supplied from existing water sources, specifically the City of Oxnard's Advanced Water Purification Facility and the Conejo Creek Diversion Structure. Accordingly, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. No impact would occur.

**NO IMPACT**

- c.(i) *Would the project 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 result in substantial erosion or siltation on- or off-site?*
- c.(ii) *Would the project 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) *Would the project 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 that would 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?*
- c.(iv) *Would the project 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 impede or redirect flood flows?*

The project consists of installing a pipeline underground in the existing ROW of Laguna Road. The project does not propose alterations to the course of a stream or river. As described above under threshold (b), the project would not result in an increase of impervious surfaces. As a result, the project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; 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. No impact would occur.

**NO IMPACT**

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

According to the Federal Emergency Management Agency Flood Insurance Rate Maps, the project alignment is not located in a flood hazard zone (Federal Emergency Management Act 2017). The project site is not located near any large bodies of water subject to seiche. The Pacific Ocean is located approximately six miles to the east of the project site; therefore, the project site is not located in a tsunami zone. As a result, the project would not risk release of pollutants due to project inundation by seiche, tsunami, or mudflow. No impact would occur.

**NO IMPACT**

- e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The project is subject to the requirements of Fox Canyon Groundwater Management Agency's Pleasant Valley Basin GSP. As described above in threshold (b), the project would not affect the result in increased groundwater pumping or otherwise affect the groundwater basin. Therefore, the project would not conflict with or obstruct the Pleasant Valley GSP.

The project is subject to the requirements of the Los Angeles Regional Water Quality Control Board's Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Los Angeles Regional Water Quality Control Board 2014). As described under threshold (a), the project would be required to comply with the NPDES Construction General Permit to protect water quality. The NPDES Construction General Permit requires preparation and implementation of a project specific SWPPP, which requires operators to implement pollution prevention controls to minimize the discharge of pollutants from stormwater and spilled or leaked materials. Compliance with applicable regulatory requirements would minimize potential surface water quality impacts associated with sediment erosion during project construction. Mitigation Measure BIO-2, as outlined in Section 4, *Biological Resources*, would also further reduce the potential for sediment erosion to impact the two agricultural ditches through implementation of additional best management practices for protecting these resources. There is potential for accidental leaks and spills of hazardous materials at the surface, which could result in potentially significant impacts to water quality if hazardous materials enter the unnamed agricultural ditches. Mitigation Measure HAZ-1, as described in Section 9, *Hazards and Hazardous Materials*, would reduce the potential for accidental leaks and spills of hazardous materials by requiring preparation and implementation of an HMMSCP. With implementation of Mitigation Measure HAZ-1, the project would not conflict with or obstruct implementation of the Los Angeles Regional Water Quality Control Board's Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. Impacts would be less than significant with mitigation.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

# 11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*a. Would the project physically divide an established community?*

The proposed project would include installation of an underground pipeline. Construction would be temporary in nature and would preserve one lane of access on Laguna Road during construction activities. The project does not include any aboveground infrastructure, and the project site would be restored to existing conditions after construction is complete. Therefore, the project would not have the potential to physically divide an established community, no impact would occur.

**NO IMPACT**

*b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

The proposed project would be located in unincorporated Ventura County. The project alignment is located in the public ROW of an existing roadway and does not have a General Plan land use designation or zoning. Pursuant to California Government Code 53091, the building and zoning ordinances of a county or city do not apply to the location or construction of facilities for the production, storage, or transmission of water, wastewater, or electrical energy by a local agency. Therefore, the project is only evaluated for consistency with the Ventura County General Plan.

The proposed project would be consistent with Policy PFS-7.4 of the Ventura County General Plan, which requires placement of new utility service lines underground when feasible (County of Ventura 2020a). In addition, as indicated in Section 4, *Biological Resources*, no biological resources protected by local policies and ordinances are located on the project site. Furthermore, the project would result in minimal changes to existing conditions upon completion of construction activities given that the proposed pipeline would be installed underground and no changes to PVCWD operations and maintenance would occur. As such, the project has minimal potential to conflict with other land use plans, policies, or regulations related to environmental resources during operation. As a result, the proposed project would not 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. No impact would occur.

**NO IMPACT**

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# 12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project 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 located in an area designated Mineral Resource Zone (MRZ)-1 (County of Ventura 2020b). MRZ-1 is defined as an area where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. As such, the proposed project would not reduce or eliminate access to known mineral resources. In addition, the proposed project does not involve mining or oil extraction activities. Therefore, the project would not 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 or 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. No impact would occur.

**NO IMPACT**

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# 13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Overview of Noise and Vibration

### Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

### HUMAN PERCEPTION OF SOUND

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Caltrans 2013).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Caltrans 2013).

### **SOUND PROPAGATION AND SHIELDING**

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions.

Sound levels are described as either a “sound power level” or a “sound pressure level,” which are two distinct characteristics of sound. Both share the same unit of measurement, the dB. However, sound power (expressed as  $L_{pw}$ ) is the energy converted into sound by the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers, such as an eardrum or microphone, which is the sound pressure level. Sound measurement instruments only measure sound pressure, and noise level limits are typically expressed as sound pressure levels.

Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011).

### **DESCRIPTORS**

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used for this study are the equivalent noise level ( $L_{eq}$ ), and the community noise equivalent level (CNEL; may also be symbolized as  $L_{den}$ ).

$L_{eq}$  is one of the most frequently used noise metrics; it considers both duration and sound power level. The  $L_{eq}$  is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a 1-hour period is assumed. The  $L_{max}$  is the highest noise level within the sampling period, and the  $L_{min}$  is the lowest noise level within the measuring period. Normal conversational levels are in the 60 to 65-dBA  $L_{eq}$  range; ambient noise levels greater than 65 dBA  $L_{eq}$  can interrupt conversations (Federal Transit Administration [FTA] 2018).

#### *Groundborne Vibration*

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent buildings or structures and vibration energy

may propagate through the buildings or structures. The primary concern from vibration is that it can be intrusive and annoying to building occupants at vibration-sensitive land uses and may cause structural damage. Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used as it corresponds to the stresses that are experienced by buildings (Caltrans 2020).

High levels of groundborne vibration may cause damage to nearby building or structures; at lower levels, groundborne vibration may cause minor cosmetic (i.e., non-structural damage) such as cracks. These vibration levels are nearly exclusively associated with high impact activities such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation. The American Association of State Highway and Transportation Officials has determined vibration levels with potential to damage nearby buildings and structures; these levels are identified in Table 4.

**Table 4 Maximum Vibration Levels for Preventing Damage**

Type of Situation	Limiting Velocity (in/sec PPV)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5

in/sec = inches per second; PPV = peak particle velocity  
Source: Caltrans 2020

Numerous studies have been conducted to characterize the human response to vibration. The vibration annoyance potential criteria recommended for use by Caltrans, which are based on the general human response to different levels of groundborne vibration velocity levels, are described in Table 5.

**Table 5 Vibration Annoyance Potential Criteria**

Human Response	Vibration Level (in/sec PPV)	
	Transient Sources	Continuous/Frequent Intermittent Sources <sup>1</sup>
Severe	2.0	0.4
Strongly perceptible	0.9	0.10
Distinctly perceptible	0.25	0.04
Barely perceptible	0.04	0.01

in/sec = inches per second; PPV = peak particle velocity

<sup>1</sup> Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans 2020

## Project Noise Setting

The primary existing noise sources in the vicinity of the project site include vehicular traffic on Laguna Road in addition to agro-industrial development immediately north of the project alignment. Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated



with those uses. The Ventura County Construction Noise Threshold Criteria and Control Plan defines noise-sensitive receivers as hospitals, nursing homes, single-family and multi-family dwellings, hotels, motels, schools, churches, and libraries (Advanced Engineering Acoustics 2005). The nearest noise-sensitive receiver is a single-family residence located approximately 100 feet south of the project alignment across Laguna Road.

- a. *Would the project result in 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 applicable standards of other agencies?*

## **Construction**

Project construction activities would generate temporary noise along the project alignment, exposing sensitive receivers to increased noise levels. Project construction noise would be generated by heavy-duty diesel construction equipment used for site preparation, trenching, infrastructure installation, and paving/site restoration activities. Each phase of construction has a specific equipment mix and associated noise characteristics, depending on the equipment used during that phase. Construction noise would be short-term and temporary at any given location given construction activities would move along the alignment over the course of the six-month construction schedule.

PVCWD has not adopted thresholds for construction noise. The project would not be subject to discretionary approval by the County of Ventura; however, for the purpose of this analysis, the construction noise thresholds outlined in the County's Construction Noise Threshold Criteria and Control Plan are utilized to evaluate project construction noise impacts (Advanced Engineering Acoustics 2005). The noise threshold criteria (NTC) set forth by the County of Ventura are based on the duration of construction affecting noise-sensitive receivers. Although project construction would occur over the course of six months, such a duration would not be characteristic of the duration in which individual sensitive receivers are exposed to construction noise due to the linear nature of the project. Exposure to any one single receptor would not typically exceed four to seven days, and the average distance from construction equipment over this time period is assumed to be 250 feet. According to the County's Construction Noise Threshold Criteria and Control Plan (2005), the NTC for an exposure duration of four to seven days is 70 dBA  $L_{eq}$ , or the ambient  $L_{eq}$  plus 3 dBA, whichever is greater, as measured at the nearest sensitive receiver or 10 feet from the nearest noise-sensitive building. In lieu of conducting ambient noise level measurements at the project site, the NTC of 70 dBA  $L_{eq}$  is conservatively utilized for the purpose of this analysis. In addition, consistent with the County's Construction Noise Threshold Criteria and Control Plan (2005), the threshold for maximum construction noise levels is the NTC plus 20 dBA, which cannot be exceeded more than eight times per daytime hour.

Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise-sensitive receivers near the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation rate of 6 dBA per doubling of distance for stationary equipment.

The nearest sensitive receiver to project construction activities would be the single-family residence located approximately 100 feet south of the project alignment across Laguna Road. Over the course of a typical construction day, construction equipment would be located as close as 100 feet to this

property but would typically be located at an average distance farther away due to the nature of construction and the linear nature of the project. For example, during a typical construction day, equipment may operate approximately 100 to 500 feet from the nearest sensitive receivers. Therefore, it is assumed, over the course of a typical construction day, construction equipment would operate at an average distance of 250 feet from the nearest sensitive receiver to the south.

Construction noise is typically loudest during activities that involve ground disturbance and move soil, such as grading/trenching. Based on information provided by the project engineer, a potential construction scenario for the project would include simultaneous operation of a dozer and a grader working during grading/trenching. At a distance of 250 feet, a dozer and a grader would generate a noise level of 68.7 dBA  $L_{eq}$ , which would not exceed the threshold of 70 dBA  $L_{eq}$  set forth in the County of Ventura Construction Noise Threshold Criteria and Control Plan (Advanced Engineering Acoustics 2005; RCNM calculations are included in Appendix D). Therefore, project construction would not generate a substantial temporary increase in ambient noise levels in the vicinity of the project, and impacts would be less than significant.

## Operation

The project would not include any sources of operational noise. As such, project operation would not generate a substantial temporary increase in ambient noise levels in the vicinity of the project, and no impact would occur.

### LESS THAN SIGNIFICANT IMPACT

- b. *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

## Construction

Project construction may require operation of vibratory equipment such as loaded trucks and bulldozers within 25 feet of the warehouses to the north of the project alignment and 100 feet of the residential buildings to the south of project site across Laguna Road. As shown in Table 6 and Table 7, respectively, construction vibration levels would not exceed 0.20 in/sec PPV at the nearest residence, the threshold at which damage can occur to residential buildings, or 1.0 in/sec PPV at the warehouses, the threshold at which damage can occur to engineered structures. In addition, construction vibration levels would not exceed 0.25 in/sec PPV, which is the threshold for human annoyance based on the level at which transient vibration sources are distinctly perceptible (see Table 5). Because the use of construction equipment would not exceed the threshold for structural damage or human annoyance, project construction would not generate excessive groundborne vibration or groundborne noise levels. Impacts would be less than significant.

**Table 6 Vibration Levels at Nearest Residential Residence**

<b>Equipment</b>	<b>Estimated Vibration Level at Nearest Residence (in/sec PPV) (100 feet)</b>
Large Bulldozer	0.019
Loaded Truck	0.017
<b>Threshold For Structural Damage to Residential Buildings<sup>1</sup></b>	<b>0.20</b>
Threshold Exceeded?	No
<b>Threshold For Human Annoyance<sup>2</sup></b>	<b>0.25</b>
Threshold Exceeded?	No

in/sec = inches per second; PPV = peak particle velocity  
<sup>1</sup> See Table 4 for maximum vibration levels for preventing damage.  
<sup>2</sup> Threshold based on vibration annoyance potential criteria recommended by Caltrans, which are based on the general human response to different levels of groundborne vibration velocity levels. See Table 5.  
 See Appendix E for vibration analysis worksheets.

**Table 7 Vibration Levels at Nearest Warehouse**

<b>Equipment</b>	<b>Estimated Vibration Level at Nearest Warehouse (in/sec PPV) (25 feet)</b>
Large Bulldozer	0.089
Loaded Truck	0.076
<b>Threshold For Structural Damage to Engineered Structures<sup>1</sup></b>	<b>1.0</b>
Threshold Exceeded?	No

in/sec = inches per second; PPV = peak particle velocity  
<sup>1</sup> See Table 4 for maximum vibration levels for preventing damage.  
 See Appendix E for vibration analysis worksheets.

## Operation

The proposed project consists of an underground pipeline, and operation would not include activities with the potential to generate significant vibration during operation, such as manufacturing or heavy equipment. Therefore, project operation would not result in generation of excessive groundborne vibration or groundborne noise levels. No impact would occur.

### LESS THAN SIGNIFICANT IMPACT

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

The nearest airport to the project site is Camarillo Airport, located approximately 2.2 miles to the north. The project site is not located within Camarillo Airport’s noise level contours (Ventura County Airport Land Use Commission 2000). Given the distance of the project site from the airport, the project would not expose people residing or working in the project area to excessive noise levels associated with airport operations. No impact would occur.

### NO IMPACT

# 14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

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

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

b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The project would involve installation of a water pipeline in the public ROW of a roadway to facilitate increased water transfers between the two existing PVCWD transmission laterals along Wood Road and Las Posas Road. The project does not include housing or other infrastructure that would directly lead to population growth. Given the small-scale nature of project construction activities, it is likely that construction workers would be drawn from the existing, regional workforce and would not indirectly result in the relocation of people to Ventura County. In addition, no new PVCWD employees would be required to operate and maintain the project. Furthermore, the project would not indirectly induce population growth because it does not include new water supply sources for the PVCWD service area. Therefore, the project would not directly or indirectly induce substantial unplanned population growth. No existing people or housing are located on project site; as such, the project would also not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. Accordingly, no impacts related to population/housing would occur.

**NO IMPACT**

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# 15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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a. Would the project 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:

1	Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a.1. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

A.2. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

A.3. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

a.4. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

*a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

As described in Section 14, *Population and Housing*, the project does not include development of structures or infrastructure that would directly or indirectly increase the population in Ventura County. In addition, as an underground pipeline, the project would not include components that would place additional demands on fire or police protection services. Therefore, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services, fire protection, police protection, schools, parks, or other public facilities. No impact would occur.

**NO IMPACT**

# 16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

As described in Section 14, *Population and Housing*, the project does not include development of structures or infrastructure that would directly or indirectly increase the population in Ventura County. Therefore, the project would not increase the population served by local recreation facilities or otherwise result in increased demand for or degradation of those facilities. As such, the project would not 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. The project also does not include recreational facilities or require the construction or expansion of recreational facilities. No impact related to recreation would occur.

**NO IMPACT**



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# 17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Regional and local plans and policies addressing the circulation system include the Ventura County General Plan Circulation, Transportation and Mobility Element; the SCAG 2020-2045 RTP/SCS; and Ventura County Transportation Commission Congestion Management Plan (County of Ventura 2009, 2020a; SCAG 2020). Access to the project site during construction would be provided by Laguna Road, which is a two-lane road. No transit stops, sidewalks, or bicycle lanes are located along the segment of Laguna Road adjacent to the project site. Construction traffic would be temporary and limited to the duration of the construction schedule (approximately six months). Construction activities would require a temporary one-lane closure along Laguna Road, and traffic control measures would be implemented during this closure, including flaggers at both ends, to minimize conflicts with the circulation system. After construction is complete, no changes to existing transportation patterns would occur because the pipeline would be located underground and no new operation and maintenance activities would be required for the project. The minimal level of traffic generated during project construction would not have the potential to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts. Specifically, the guidelines state VMT exceeding an applicable threshold of significance may indicate a significant impact. According to Section 15064.3(b)(3) of the CEQA Guidelines, a lead agency may include a qualitative analysis of operational and construction traffic if existing models or methods are not available to estimate the VMT for the particular project being considered. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. PVCWD has not adopted VMT thresholds. In 2020, the County of Ventura released its draft VMT thresholds of significance but has not yet adopted these thresholds (County of Ventura 2020c). In addition, the Ventura County General Plan includes Policy CTM 4,1, which encourages a reduction in the number of VMT (County of Ventura 2020a).

A VMT calculation is typically conducted on a daily or annual basis, for long-range planning purposes. As discussed under item (a) above, traffic on local roadways would temporarily increase during project construction due to worker trips and the necessary transport of construction vehicles, equipment, and soil material to and from the project site. Increases in VMT from construction would be short-term, minimal, and temporary. In addition, the project would not require new operations and maintenance activities within the PVCWD service area upon completion of construction activities. Therefore, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). No impact related to VMT would occur.

#### **NO IMPACT**

- c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

The project would not involve the construction of new roads or reconfiguration of any roadways or intersections that could result in a substantial increase in traffic hazards. During project construction, construction staging, and worker parking would occur along the project alignment adjacent to Laguna Road. Construction activities would require a temporary one-lane closure along Laguna Road, and traffic control measures would be implemented during this closure, including flaggers at both ends, to minimize the creation of traffic hazards. Upon the completion of construction, the pipeline would be located underground and thus would not substantially increase traffic hazards. Therefore, the project would not substantially increase hazards due to a geometric design feature or incompatible use. Impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- d. *Would the project result in inadequate emergency access?*

Construction of the project would require a temporary single-lane closure along Laguna Road, which would have the potential to impede emergency response in the project area. Therefore, the project would potentially result in inadequate emergency access during construction activities, and impacts would be potentially significant. Implementation of Mitigation Measure HAZ-2 (outlined in Section 9, *Hazards and Hazardous Materials*) would minimize interference with emergency access during project construction activities through implementation of traffic control measures and advance notification of emergency response providers prior to construction activities. With implementation of Mitigation Measure HAZ-2, impacts related to emergency access during project construction would be reduced to a less-than-significant level.

Operation of the pipeline would not introduce new vehicle trips or include aboveground features that would impede emergency access. Therefore, project operation would not result in inadequate emergency access, and no impact would occur.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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# 18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or 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:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <p>a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?</p>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

On July 1, 2015, Assembly Bill 52 (AB 52) was enacted, expanding CEQA by defining a new resource category, “tribal cultural resources.” AB 52 states, “a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC Section 21084.2). It further states the lead agency shall establish measures to avoid impacts altering the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Sections 21074 (a)(1)(A-B) define tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and are:

1. Listed or eligible for listing in the CRHR or in a local register of historical resources as defined in PRC Section 5020.1(k); or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). In applying

these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified or adopted. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those having requested notice of projects proposed in the jurisdiction of the lead agency.

On July 19, 2022, PVCWD distributed AB 52 consultation letters for the proposed project, including project information, a map, and PVCWD contact information, to nine Native American tribes. The AB 52 consultation letters were sent, via certified mail, to the following tribal governments:

- Barbareño/Ventureño Band of Mission Indians
- Chumash Council of Bakersfield
- Coastal Band of the Chumash Nation
- Gabrieleño/Tongva San Gabriel Band of Mission Indians
- Gabrieliño/Tongva Nation
- Gabrieliño-Tongva Tribe
- Northern Chumash Tribal Council
- San Luis Obispo County Chumash Council
- Santa Ynez Band of Chumash Indians

Under AB 52, Native American tribes have 30 days to respond and request further project information and formal consultation; however, none of the contacted tribes responded within 30 days of mailing of the letters. Accordingly, AB 52 consultation is complete for the project.

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 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 Public Resources Code Section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

No tribal cultural resources listed or eligible for listing in the CRHR or in a local register of historical resources were identified within the project site. In addition, no tribal cultural resources were identified within or near the project site that have been determined by PVCWD (the lead agency) to be significant. Therefore, the project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074 that is listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k) or that is a resource determined by PVCWD (the lead agency), in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). No impact would occur.

**NO IMPACT**

# 19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project 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?*

## Water

The project itself consists of installation of a water pipeline that would facilitate water transfers within PVCWD's existing system. The environmental impacts of this infrastructure have been evaluated throughout this document, and no additional environmental impacts would occur. In



addition, water conveyed through the proposed pipeline would be supplied from existing water sources, specifically the City of Oxnard's Advanced Water Purification Facility and the Conejo Creek Diversion Structure. Therefore, the project would not result the construction or relocation of additional new or expanded water facilities. No impact would occur.

### **Wastewater**

The project would not require permanent on-site personnel and does not include the installation of restroom facilities. Therefore, no wastewater would be generated, and the project would not result the construction or relocation of additional new or expanded wastewater facilities. No impact would occur.

### **Stormwater Drainage**

The proposed pipeline would be located underground and would not introduce any new impervious surfaces. Therefore, no new or expanded stormwater drainage facilities would be required, and no impact would occur.

### **Electric Power**

The project would not require connections to the electrical grid and would not result in a net increase of electricity of electricity consumption within the PVCWD service area. Therefore, no new or expanded electrical power facilities would be required, and no impact would occur.

### **Natural Gas**

The project would not require connections to natural gas facilities and would not result in a net increase of natural gas within the PCVWD service area. Therefore, no new or expanded natural gas facilities would be required, and no impact would occur.

### **Telecommunications**

The project would not require any connection to telecommunication facilities. Therefore, no new or expanded telecommunication facilities would be required, and no impact would occur.

### **NO IMPACT**

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

The project itself consists of installation of a water pipeline that would facilitate water transfers within PVCWD's existing system. Small quantities of water would be required during construction for dust suppression, which would be potable or non-potable water provided by PVCWD. Water consumption associated with dust suppression would be temporary and minimal because only disturbed areas would need to be watered. Water conveyed through the proposed pipeline would be supplied from existing water sources, specifically the City of Oxnard's Advanced Water Purification Facility and the Conejo Creek Diversion Structure. The project would not increase water supply availability or result in increased water consumption. Therefore, impacts related to water supply would be less than significant.

### **LESS THAN SIGNIFICANT IMPACT**

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

The project consists of installation of an underground water pipeline and would not generate wastewater. Therefore, the project would not result in a determination by the wastewater treatment that it has adequate capacity to serve the project's projected demand. No impact would occur.

**NO IMPACT**

- d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Construction activities may temporarily generate solid waste, including soil spoils or other construction waste, which would be disposed of in accordance with all applicable federal, state, and local statutes and regulations. While most soil is expected to be reused as backfill material within the project area, approximately 1,185 cubic yards of soils would be disposed of at a nearby landfill, such as the Simi Valley Landfill. This landfill had a remaining capacity of 82,954,873 cubic yards as of 2019 (California Department of Resources Recycling and Recovery 2022). Due to the temporary nature of construction and minimal amount of construction waste anticipated to require disposal, the project would not generate quantities of solid waste that would account for a substantial percentage of the total daily regional permitted capacity available at Simi Valley Landfill. In addition, operation of the proposed pipeline would not generate solid waste. Therefore, the project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

The project would be required to comply with all applicable laws and regulations related to solid waste generation, collection, and disposal. The project would result in a short-term and temporary increase in solid waste generation during construction but would not substantially affect standard solid waste operations of any landfill accepting waste. Recycling and reuse activities during construction would comply with the California Integrated Waste Management Act of 1989 (AB 939). Once operational, the proposed pipeline would not generate solid waste. Therefore, the project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Impacts related to solid waste would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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## 20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

According to the CAL FIRE, the project site is approximately 0.8 mile west of the nearest SRA and approximately 1.5 miles northwest of the nearest VHFHSZ (CAL FIRE 2020). Therefore, the project site is considered to be near an SRA and lands classified as a VHFHSZ for the purposes of this analysis.

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

The proposed project would not add residents or employees to the project site and does not include structures that would increase wildfire exposure or hazards. As discussed in Section 17, *Transportation*, project construction would require a temporary single-lane closure along Laguna Road, which would have the potential to impede emergency response in the project area. Therefore, impacts related to emergency response and emergency evacuation plans would be potentially significant, and implementation of Mitigation Measure HAZ-2 (outlined in Section 9,

*Hazards and Hazardous Materials*) would be required to reduce impacts to a less-than-significant level through providing advance notification to emergency response providers and granting priority access to emergency vehicles during construction.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, 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?*

The project site is surrounded by existing irrigated agricultural lands with no wildland vegetation in its vicinity. The proposed project involves installation of an underground pipeline that would not have the potential to exacerbate fire risk. In addition, the project does not include habitable structures and thus would not accommodate occupants. Therefore, the proposed project would not exacerbate fire risk and thereby expose occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. No impact would occur.

**NO IMPACT**

- c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?*

The proposed project would not require the installation or maintenance of any infrastructure, such as roads or fuel breaks, that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. No impact would occur.

**NO IMPACT**

- d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The proposed project involves installation of an underground pipeline in a relatively flat area that would not have the potential to exacerbate fire risk. The proposed project does not include construction of habitable structures. Upon the completion of construction activities, the project site would be restored to pre-project conditions. Therefore, the project would not expose people or structures to flooding or landslides as a result of post-fire runoff, slope instability, or drainage changes. No impact would occur.

**NO IMPACT**

# 21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Does the project:

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <p>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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>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)?</p>   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p>  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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

As discussed in Section 4, *Biological Resources*, the 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, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. In addition, as discussed in Section 5, *Cultural Resources*, the project would not eliminate important examples of the major periods of California history or prehistory. Impacts would be less than significant.

### **LESS THAN SIGNIFICANT IMPACT**

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

As described in the discussion of environmental checklist Sections 1 through 20, with respect to all environmental issues, the proposed project would not result in significant and unmitigable impacts to the environment. All anticipated impacts associated with project construction and operation would be either less than significant or less than significant with mitigation incorporated. This is largely due to the fact project construction activities would be temporary and project operation would result in minimal changes to the environmental baseline condition.

Cumulatively considerable impacts could occur if the construction of other projects occurs at the same time as the proposed project and in the same vicinity, such that the effects of similar impacts of multiple projects combine to expose adjacent sensitive receptors to greater levels of impact than would occur under the proposed project. For example, if the construction of other projects in the area occurs at the same time as construction of the proposed project, potential impacts associated with noise and traffic to residents in the project area may be more substantial. There are no other planned or pending projects within the immediate vicinity of the project site that could combine with the project to result in cumulative construction-related impacts (County of Ventura 2022b).

The project would result in no change to existing operations and maintenance activities in the PVCWD service area and would not increase water supply availability. Therefore, the project would not contribute to cumulative impacts related to direct or indirect population growth, such as impacts to public services, recreation, and population and housing. Impacts related to cultural resources, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, and tribal cultural resources are inherently restricted to the project site and would not contribute to cumulative impacts associated with existing and future development in Ventura County. In addition, air quality and GHG impacts are cumulative by nature, and as discussed in Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, the project would not generate air pollutant emissions in excess of VCAPCD thresholds or GHG emissions that would exceed the SCAQMD-recommended threshold. Therefore, the project would not contribute to the existing significant cumulative air quality impacts related to the Basin’s nonattainment status for ozone and PM<sub>10</sub> or the existing significant cumulative climate change impact. Furthermore, project impacts to resources such as aesthetics, agriculture and forestry resources, biological resources, hydrology and water quality, noise, transportation, and utilities and service systems would be minimal and would not have the potential to constitute a cumulatively considerable contribution to cumulative impacts that may occur due to existing and future development in the region. Therefore, the proposed project would not result in a cumulatively considerable contribution to a significant impact.

### **LESS THAN SIGNIFICANT IMPACT**

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

In general, impacts to human beings are associated with such issues as air quality, hazards and hazardous materials, and noise impacts. As detailed under Section 3, *Air Quality*, Section 9, *Hazards and Hazardous Materials*, and Section 13, *Noise*, the proposed project would not result, either

directly or indirectly, in substantial adverse effects related to air quality, hazardous materials, and noise. Therefore, impacts to human beings would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**



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# Appendix A

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Air Quality and Greenhouse Gas Emissions Modeling





Note: The program's estimates of construction period phase length can be overridden in cells D60 through D63, and F58 through F61.

Construction Periods	User Override of Construction Months		User Override of Program Calendar Dates		Program Default Dates	
	Start	End	Start	End	Start	End
Grubbing/Land Clearing	0.60	2.40	7/20/2023	2/1/2023	1/20/2023	1/20/2023
Grading/Excavation	2.40	2.40	10/3/2023	10/3/2023	6/25/2023	6/25/2023
Drainage/Utilities/Sub-Grade	2.40	0.50	10/3/2023	10/3/2023	6/25/2023	6/25/2023
<b>Total (Months)</b>	<b>6</b>	<b>0.50</b>				

Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

Soil Hauling Emissions	User Override of Program Estimate of Miles/round Trip		User Override of Truck Round Trip/Day		Default Values		Calculated Daily/MT	
	Miles/round Trip	Round Trip/Day	Miles/round Trip	Round Trip/Day	Round Trip/Day	Round Trip/Day	CO2	CO2e
Miles/round Trip - Grubbing/Land Clearing	20.00	0.00	0.00	0.00	0	0	180.00	0.00
Miles/round Trip - Grading/Excavation					9	0	0.00	0.00
Miles/round Trip - Drainage/Utilities/Sub-Grade					0	0	0.00	0.00
Miles/round Trip - Paving					0	0	0.00	0.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.04	0.43	3.54	0.12	0.05	0.02	1,726.74	0.00	0.27	1,807.67
Grading/Excavation (grams/mile)	0.04	0.43	3.54	0.12	0.05	0.02	1,726.74	0.00	0.27	1,807.67
Drainage/Utilities/Sub-Grade (grams/mile)	0.04	0.43	3.54	0.12	0.05	0.02	1,726.74	0.00	0.27	1,807.67
Paving (grams/mile)	0.04	0.43	3.54	0.12	0.05	0.02	1,726.74	0.00	0.27	1,807.67
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drainage/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.00	0.04	0.00	0.00	0.00	18.09	0.00	0.00	18.94

Note: Asphalt Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

Asphalt Hauling Emissions	User Override of Program Estimate of Miles/round Trip		User Override of Truck Round Trip/Day		Default Values		Calculated Daily/MT	
	Miles/round Trip	Round Trip/Day	Miles/round Trip	Round Trip/Day	Round Trip/Day	Round Trip/Day	CO2	CO2e
Miles/round Trip - Grubbing/Land Clearing					0	0	0.00	0.00
Miles/round Trip - Grading/Excavation					0	0	0.00	0.00
Miles/round Trip - Drainage/Utilities/Sub-Grade					0	0	0.00	0.00
Miles/round Trip - Paving					0	0	0.00	0.00

Emission Rates	ROG	CO	NOx	PM10	PM2.5	SOx	CO2	CH4	N2O	CO2e
Grubbing/Land Clearing (grams/mile)	0.04	0.43	3.54	0.12	0.05	0.02	1,726.74	0.00	0.27	1,807.67
Grading/Excavation (grams/mile)	0.04	0.43	3.54	0.12	0.05	0.02	1,726.74	0.00	0.27	1,807.67
Drainage/Utilities/Sub-Grade (grams/mile)	0.04	0.43	3.54	0.12	0.05	0.02	1,726.74	0.00	0.27	1,807.67
Paving (grams/mile)	0.04	0.43	3.54	0.12	0.05	0.02	1,726.74	0.00	0.27	1,807.67
Grubbing/Land Clearing (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drainage/Utilities/Sub-Grade (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving (grams/trip)	0.00	0.00	4.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Grading/Excavation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Drainage/Utilities/Sub-Grade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tons per const. Period - Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons per construction project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00









# Appendix B

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Plant and Wildlife Species Observed in the Survey Area

**Table 1 Plant Species Observed in the Biological Study Area**

Scientific Name	Common Name	Special Status <sup>1</sup>	Native or Introduced <sup>2</sup>
<i>Amaranthus blitoides</i>	prostrate pigweed	-	Native
<i>Araucaria</i> sp.	bunya bunya	-	Introduced
<i>Atriplex prostrata</i>	fat hen	-	Introduced
<i>Atriplex semibaccata</i>	Australian saltbush	-	Invasive; Cal-IPC Moderate
<i>Baccharis salicifolia</i>	mulefat	-	Native
<i>Bassia hyssopifolia</i>	five horn bassia	-	Invasive; Cal-IPC Limited
<i>Bromus catharticus</i>	rescue grass	-	Introduced
<i>Bromus madritensis</i> ssp. <i>rubens</i>	red brome	-	Invasive; Cal-IPC High
<i>Capsella bursa-pastoris</i>	shepherd's purse	-	Introduced
<i>Chenopodium album</i>	labs quarters	-	Introduced
<i>Convolvulus arvensis</i>	field bindweed	-	Introduced
<i>Cotoneaster</i> sp.	cotoneaster	-	Introduced
<i>Cressa truxillensis</i>	alkali weed	-	Native
<i>Cynodon dactylon</i>	Bermuda grass	-	Invasive; Cal-IPC Moderate
<i>Cyperus involucratus</i>	umbrella plant	-	Introduced
<i>Datura wrightii</i>	Jimsonweed	-	Native
<i>Erigeron bonariensis</i>	flax-leaved horseweed	-	Introduced
<i>Erigeron canadensis</i>	Canada horseweed	-	Native
<i>Erodium cicutarium</i>	red stemmed filaree	-	Invasive; Cal-IPC Limited
<i>Euphorbia serpens</i>	matted sandmat	-	Introduced
<i>Heliotropium curassavicum</i> var. <i>oculatum</i>	alkali heliotrope	-	Native
<i>Hirschfeldia incana</i>	summer mustard	-	Invasive; Cal-IPC Moderate
<i>Lactuca serriola</i>	prickly lettuce	-	Introduced
<i>Lepidium didymum</i>	lesser swine cress	-	Introduced
<i>Leptochloa fusca</i>	sprangletop	-	Native
<i>Malacothrix saxatilis</i>	cliff aster	-	Native
<i>Malva parviflora</i>	cheeseweed	-	Introduced
<i>Myoporum laetum</i>	ngaio tree	-	Invasive; Cal-IPC Moderate
<i>Nasturtium officinale</i>	watercress	-	Native
<i>Nicotiana glauca</i>	tree tobacco	-	Invasive; Cal-IPC Moderate
<i>Opuntia ficus-indica</i>	prickly pear	-	Introduced
<i>Persicaria</i> sp.	smartweed	-	-
<i>Phoenix canariensis</i>	Canary Island date palm	-	Invasive; Cal-IPC Limited
<i>Polypogon interruptus</i>	ditch beard grass	-	Introduced
<i>Polypogon monspeliensis</i>	rabbitsfoot grass	-	Invasive; Cal-IPC Limited
<i>Portulaca oleracea</i>	common purslane	-	Introduced
<i>Pseudognaphalium luteoalbum</i>	Jersey cudweed	-	Introduced



Pleasant Valley County Water District  
**Groundwater Sustainability Improvement Program**

Scientific Name	Common Name	Special Status <sup>1</sup>	Native or Introduced <sup>2</sup>
<i>Quercus agrifolia</i>	coast live oak	-	Native
<i>Ricinus communis</i>	castor bean	-	Invasive; Cal-IPC Limited
<i>Rumex</i> sp.	dock	-	-
<i>Schinus molle</i>	Peruvian pepper tree	-	Invasive; Cal-IPC Limited
<i>Schinus terebinthifolius</i>	Brazilian pepper tree	-	Invasive; Cal-IPC Limited
<i>Solanum elaeagnifolium</i>	horse nettle	-	Introduced
<i>Sonchus oleraceus</i>	common sow thistle	-	Introduced
<i>Stipa miliacea</i> var. <i>miliacea</i>	smilo grass	-	Invasive; Cal-IPC Limited
<i>Syagrus romanzoffiana</i>	queen palm	-	Introduced
<i>Tribulus terrestris</i>	puncture vine	-	Invasive; Cal-IPC Limited
<i>Typha domingensis</i>	narrowleaf cattail	-	Native
<i>Ulmus parvifolia</i>	Siberian elm	-	Introduced
<i>Washingtonia robusta</i>	Mexican fan palm	-	Invasive; Cal-IPC Moderate

Cal-IPC = California Invasive Plant Council

<sup>1</sup> Special Status includes the status of species identified as federally, state, and/or locally sensitive.

<sup>2</sup> Jepson Flora Project 2022, Cal-IPC 2022

**Table 2 Wildlife Species Observed in the Biological Study Area**

Scientific Name	Common Name	Special Status <sup>1</sup>	Native or Introduced
<i>Ardea alba</i>	great egret	-	Native
<i>Ardea herodias</i>	great blue heron	-	Native
<i>Eremophila alpestris actia</i>	California horned lark	WL	Native
<i>Euphagus cyanocephalus</i>	Brewer's blackbird	-	Native
<i>Haemorhous mexicanus</i>	house finch	-	Native
<i>Hirundo rustica</i>	barn swallow	-	Native
<i>Passer domesticus</i> <sup>2</sup>	house sparrow <sup>2</sup>	-	Introduced
<i>Sayornis nigricans</i>	black phoebe	-	Native
<i>Zenaida macroura</i>	mourning dove	-	Native

WL = CDFW Watch List

<sup>1</sup> Special Status includes the status of species identified as federally, state, and/or locally sensitive.

<sup>2</sup> Active nest observed in building eaves. See Figure 5 in *Draft Initial Study-Mitigated Negative Declaration for the Recycled Water Connection Project* for location.

# Appendix C

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Cultural Resources Letter Report (redacted)



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October 19, 2022  
Project No: 22-12605

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Michael K. Nunley and Associates, Inc.  
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Via email: [abugielski@mknassociates.us](mailto:abugielski@mknassociates.us)

**Subject: Cultural Resources Letter Report for the Pleasant Valley County Water District's Groundwater Sustainability Improvement Program, Unincorporated Ventura County, California**

Dear Mr. Bugielski:

This letter report presents the findings of a cultural resources study completed in support of the Pleasant Valley County Water District's (PVCWD) Groundwater Sustainability Improvement Program-Pipeline Connection Project (project) located in unincorporated Ventura County, California. Michael K. Nunley and Associates, Inc. (MKN) retained Rincon Consultants, Inc. (Rincon) to support the proposed project's compliance with the California Environmental Quality Act (CEQA). An Initial Study-Mitigated Negative Declaration is also being prepared for the project. This letter report documents the results of the tasks performed by Rincon, specifically a cultural resources records search, archival and background research, a Sacred Lands File (SLF) search conducted by the Native American Heritage Commission (NAHC), and a pedestrian field survey. All work was completed in accordance with CEQA for which PVCWD is the lead agency.

## Project Location and Description

The project site is located along the northern shoulder of Laguna Road, from Wood Road to approximately 350 feet east of the intersection of Laguna Road and Las Posas Road, south of the city of Camarillo and east of the city of Oxnard, in unincorporated Ventura County, California (Attachment 1: Figure 1). Specifically, the project encompasses portions of Sections 9, 15 and 16 of Township 1 North, Range 21 West on the *Camarillo, California* United States Geological Survey (USGS) 7.5-minute topographic quadrangle (Attachment 1: Figure 2). The project site is bound by agricultural fields and agro-industrial development to the north, south, west, and east.

The project includes the construction of approximately 9,000 linear feet (LF) of new 18-inch non-potable water pipeline that would connect two existing transmission pipelines located along Wood Road and Las Posas Road. The purpose of the project is to facilitate increased transfer of existing water supplies available to the PVCWD service area, specifically water supplied by the City of Oxnard's Advanced Water Purification Facility and the Conejo Creek Diversion Structure. The project would not enable the use of new water supply sources in the PVCWD service area. Open trenching would be used to install the majority of the pipeline; however, trenchless methods would be used to install the portion of the pipeline that crosses the Las Posas Road Drain and may also be used to cross Las Posas Road to



minimum traffic impacts, both of which cross perpendicular to the alignment. The maximum depth of excavation would be approximately 6.5 feet.

## Methods

### Background and Archival Research

Rincon completed background and archival research in support of this assessment in June 2022. A variety of primary and secondary source materials were consulted. Sources included historical maps and aerial photographs. The following sources were utilized to develop an understanding of the project site and its context:

- GoogleEarth imagery
- Historical aerial photographs accessed via NETR Online
- Historical aerial photographs accessed via University of California, Santa Barbara Library FrameFinder
- Historical USGS topographic maps

### California Historical Resources Information System Records Search

On May 18, 2022, Rincon received California Historical Resources Information System (CHRIS) records search results (Records Search File Number: 23676.9777) from the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton (Attachment 2). The SCCIC is the official state repository for cultural resources records and reports for Ventura County. The purpose of the records search was to identify previously recorded cultural resources, as well as previously conducted cultural resources studies within the project site and a 0.5-mile radius surrounding it. Rincon also reviewed the National Register of Historic Places, the California Register of Historical Resources (CRHR), the California Historical Landmarks list, and the Built Environment Resources Directory as well as its predecessor the California State Historic Property Data File.

### Sacred Lands File Search

Rincon contacted the NAHC on April 18, 2022, to request a search of the SLF as well as an Assembly Bill (AB) 52-specific contact list of Native Americans culturally affiliated with the project site vicinity (Attachment 3).

### Field Survey

Rincon archaeologist Mary Pfeiffer, BA, conducted a pedestrian survey of the project site on July 1, 2022, using transect intervals spaced five meters apart and oriented generally from east to west. Exposed ground surfaces were examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools), ecofacts (marine shell and bone), soil discoloration that might indicate the presence of a cultural midden, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramics). Ground disturbances such as drainages were also visually inspected. Survey accuracy was maintained using a handheld Global Positioning Satellite unit and a georeferenced map of the project site. Site



characteristics and survey conditions were documented using field records and a digital camera. Copies of the survey notes and digital photographs are maintained at the Rincon Ventura office.

## Findings

The following sections summarize the results of all background research and fieldwork as they pertain to archaeological resources that may qualify as historical resources and/or unique archaeological resources.

### Known Cultural Resources Studies

The CHRIS records search and background research identified seven cultural resources studies within a 0.5-mile radius of the project site (Attachment 2). Of these studies, four (VN-01341, VN-01403, VN-02978 and VN-03109) include a portion of the project site and two (VN-00491 and VN-01410) are located within 900 feet of the project site. Although the entire project site appears to have been studied previously, only approximately 20 percent of the project site has been previously surveyed. Known studies that covered a portion of the project site are discussed in further detail below.

#### **VN-01341**

Study VN-01341, *The Results of a Phase 1 Archaeological Study for Approximately 37 Acres, Located on the Southwest Corner of Los Posas Road and Laguna Road, City of Camarillo, County of Ventura, California*, was prepared by Robert J. Wlodarski in 1995. The study included archival research, a cultural resources records search, an archaeological pedestrian field survey and provided management recommendations. The pedestrian survey covered approximately 1,200 feet (approximately 15 percent) of the current project site. No archaeological resources were identified within the current project site as a result of the study.

#### **VN-01403**

Study VN-01403, *Phase I Archaeological Survey of the Proposed Hill Canyon 9.2 Mile Pipeline Corridor, Ventura County, California*, was prepared by W and S Consultants in 1994. The study included archival research, a cultural resources records search, an archaeological pedestrian field survey and provided management recommendations. The pedestrian survey covered approximately 300 feet (approximately four percent of the current project site). One previously unidentified archaeological site (CA-VEN-1152) was identified during the survey; however, it is located approximately [CONFIDENTIAL: REDACTED] from the current project site.

#### **VN-02978**

Study VN-02978, *Groundwater Recovery Enhancement and Treatment (GREAT) Program Cultural Resources Inventory Report*, was prepared by CH2M Hill in 2004. The study encompasses all of western Ventura County and included archival research, a cultural resources records search, a Sacred Lands File search performed by the NAHC, Native American outreach, an archaeological pedestrian field survey and provided management recommendations. This study did not survey the current project site. One previously unidentified historic-period isolate and six historic-period buildings were identified during the field survey; however, all of the resources are located outside of the current project site.



## VN-03109

Study VN-03109, *Archaeological Survey Report for Southern California Edison Company's Houweling Nursery Interconnection Project (IO 321669), New 16 kV Gen-Tie Line, Near Camarillo, Ventura County, CA*, was prepared by James J. Schmidt in 2012. The study included archival research, a cultural resources records search, an archaeological pedestrian field survey and provided management recommendations. The pedestrian survey covered approximately one percent of the current project area. No cultural resources were identified within the current project site as a result of the study.

## Known Cultural Resources

The CHRIS records search and background research identified no previously recorded cultural resources within the project site or a 0.5-mile radius surrounding it.

## Historical Topographic Maps and Aerial Imagery Review

Rincon completed a review of historical topographic maps and aerial imagery to ascertain the development history of the project site. A historical topographic map from 1904 shows Laguna Road and Wood Road in their current alignment, as well as adjacent building development on the north and south sides of Laguna Road (USGS 2022a). Available aerial imagery from 1932 to present-day shows the project site encompassed by agricultural fields (NETR 2022; GoogleEarth 2022; UCSB Map and Imagery Lab 1932). The two buildings depicted on the topographic map from 1904 remain unchanged until 1943 (USGS 2022a and 2022b). By 1950, two additional structures were erected adjacent to the building located on the south side of Laguna Road. That same year, the building on the north side of Laguna Road had been demolished with four smaller structures constructed within the same footprint (USGS 2022c). Maps and aerial imagery from 1967 show the construction of Las Posas Road in its current alignment, with continued building development on the south and north sides of Laguna Road through 1980 (NETR 2022; USGS 2022d). The project site and immediate vicinity do not experience any changes in building development or agricultural use as shown on aerial imagery from 1980 to 1994. A feature that appears to be an irrigation channel depicted on a 1982 topographic map begins at the intersection of Las Posas Road and Laguna Road and continues along the north side of Laguna Road for approximately one mile (NETR 2022; USGS 2022e). By 2002, an agro-industrial development was constructed on the north side of Laguna Road and remains unchanged (NETR 2022).

## Sacred Land File Search

On May 17, 2022, the NAHC responded to Rincon's AB 52 contacts and SLF request, stating the results of the SLF search were negative. See Attachment 3 for the NAHC response, including Tribal contacts list(s). AB 52 consultation was conducted between PVCWD and California Native American tribes who have requested notification of projects in their traditional area. No Tribes responded requesting consultation.

## Survey Results

During the archaeological pedestrian survey, ground visibility was excellent (approximately 90 percent) with 100 percent overhead exposure. Modern refuse in the form of tires, lumber, plastic, paper and glass lined the northern shoulder of Laguna Road (Figure 3 and Figure 4). Soil is a compacted light brown very fine-grained silty sand with a sparse imported gravel overlay (Figure 5). Blue patches of soil, likely the result of adjacent agricultural activity and spraying, were observed from the



intersection of Laguna Road and Las Posas Road, terminating at the agro-industrial nursery building (Figure 6). Surrounding vegetation consisted of seasonal grasses and mature crops. The project site has been extensively disturbed from the installation of underground water, gas, and telecommunications utilities as well as adjacent roadway construction and maintenance (Figure 7, Figure 8, and Figure 9). A low-density, dispersed scatter of approximately 60 highly-fragmented marine clam shells that were weathered and sun-bleached was identified [CONFIDENTIAL: REDACTED DUE TO THE CONFIDENTIALITY OF POTENTIAL CULTURAL MATERIAL LOCATIONS] (Figure 10, Figure 11, and Figure 12). No prehistoric cultural materials such as flaked stone or animal bone were observed in association with the shell. A v-ditch approximately 10 feet in depth is located adjacent to the project alignment and allowed for examination of the stratigraphic soil profile (Figure 13 and Figure 14). No changes in soil or cultural materials were observed in the wall of the v-ditch; however, the possibility of subsurface deposits associated with the clam shells remain.

A second shell scatter consisting of seven mussel shell fragments, concentrated in a small, five-foot by five-foot area, was identified [CONFIDENTIAL: REDACTED DUE TO THE CONFIDENTIALITY OF POTENTIAL CULTURAL MATERIAL LOCATIONS] of the clam shell scatter (Figure 15 and Figure 16). The mussel shells were not weathered or sun bleached and appeared to be discarded and broken in place. On August 25, 2022, PVCWD's General Manager Jared Bouchard provided additional information regarding the origin of the mussel shells via email. Mr. Bouchard stated the adjacent v-ditch is part of an extensive tile drain and agricultural tail waters collection system and when the ditch is cleared, debris is deposited and subsequently spread over the area. It is common for mussels to be in the PVCWD-supplied water because they grow inside the piping and are discharged through agricultural operations and can be found in the tail water that ends up in the ditch system. Given the lack of associated artifacts, context of the finds, and information provided by PVCWD, the mussel shell fragments are considered modern and are not considered a cultural resource.

## Conclusions and Recommendations

The impact analysis included here is organized based on the cultural resources thresholds included in CEQA Guidelines Appendix G: Environmental Checklist Form:

- a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?
- b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?
- c. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Threshold (a) broadly refers to historical resources. To more clearly differentiate between archaeological and built environment resources, the analysis under Threshold A is limited to built environment resources. Archaeological resources, including those that may be considered historical resources pursuant to CEQA Guidelines Section 15064.5 and those that may be considered unique archaeological resources pursuant to Public Resources Code Section 21083.2, are considered under Threshold (b).



## Historical Built Environment Resources

The records search, background research, and field survey did not identify any historical built environment resources within the project site. Therefore, the project would not result in a substantial adverse change to the significance of a historical resource. As such, implementation of the project would result in **no impact to historical resources** pursuant to CEQA.

## Historical and Unique Archaeological Resources

This cultural resources study identified a low-density marine clam shell scatter [**CONFIDENTIAL: REDACTED DUE TO THE CONFIDENTIALITY OF POTENTIAL CULTURAL MATERIAL LOCATIONS**] during the pedestrian field survey. The origin of the marine clam shell is unknown. The project site has been previously disturbed from roadway construction, underground utility installation, and routine grading (Bouchard 2022). However, the presence of marine clam shells within the project alignment suggests there is potential for encountering intact subsurface archaeological deposits during project-related ground disturbances. Although the origin of the shell is unknown and there is no clear indication the shell is cultural, potential impacts to archaeological resources could occur in the event archaeological resources are unexpectedly discovered during project construction. Rincon recommends the following mitigation measures for addressing unanticipated discoveries. With adherence to the mitigation measures described below, Rincon recommends a finding of **less than significant impact to archaeological resources with mitigation incorporated** under CEQA. The project would also be required to adhere to existing regulations regarding the unanticipated discovery of human remains, as detailed below.

### Recommended Mitigation Measures

#### *Worker's Environmental Awareness Program*

A qualified archaeologist shall be retained to conduct a Worker's Environmental Awareness Program (WEAP) training on archaeological sensitivity for all construction personnel prior to the commencement of ground-disturbing activities. The training shall be conducted by an archaeologist who meets the Secretary of Interior's Professional Qualification Standards for archaeology (National Park Service 1983). Archaeological sensitivity training shall include a description of the types of cultural material that may be encountered, cultural sensitivity issues, the regulatory environment, and the proper protocol for treatment of the materials in the event of a find.

#### *Unanticipated Discovery of Cultural Resources*

If archaeological resources are unexpectedly encountered during project-related ground-disturbing activities, work in the immediate area shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archeology (National Park Service 1983) shall be contacted immediately to evaluate the find. If the find is prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be eligible for the CRHR and cannot be avoided by the proposed project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to historical resources.





## Human Remains

No human remains are known to be present within the project site. However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are unexpectedly found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to existing regulations, Rincon recommends a finding of ***less than significant impact to human remains*** under CEQA.

If you have any questions regarding this cultural resources study, please do not hesitate to contact Rincon Archaeologist Mary Pfeiffer, BA, at (805) 644-4455 ext. 2052 or via email at [mpfeiffer@rinconconsultants.com](mailto:mpfeiffer@rinconconsultants.com).

Sincerely,

**Rincon Consultants, Inc.**

Mary Pfeiffer, BA  
Archaeologist

Ken Victorino, MA, RPA  
Senior Principal Investigator

Christopher Duran, MA, RPA  
Principal

## Attachments

- Attachment 1 Figures
- Attachment 2 California Historical Resources Information System Records Search
- Attachment 3 Native American Heritage Commission Documents



## References

Bouchard, Jared

2022. General Manager, Pleasant Valley County Water District. Personal communication regarding previous disturbances along project alignment with Adam Bugielski, Project Manager, Michael K. Nunley & Associates. August 25, 2022.

CH2M Hill

- 2004 *Groundwater Recovery Enhancement and Treatment (GREAT) Program Cultural Resources Inventory Report*. Report on file at the South Central Coastal Information Center.

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- 2022 Aerial photographs depicting the project site. Electronic document accessed May 20, 2022 from [www.historicaerials.com](http://www.historicaerials.com).

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- 1983 *Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines*. Electronic document accessed May 20, 2022 from [https://www.nps.gov/history/local-law/arch\\_stnds\\_0.htm](https://www.nps.gov/history/local-law/arch_stnds_0.htm).

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- 2012 *Archaeological Survey Report for Southern California Edison Company's Houweling Nursery Interconnection Project (IO 321669), New 16 kV Gen-Tie Line, Near Camarillo, Ventura County, CA*. Report on file at the South Central Coastal Information Center.

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United States Geological Survey (USGS)

- 2022a 1904, Hueneme 1:62500 topographic map. Electronic document accessed May 20, 2022, from <https://livingatlas.arcgis.com/topoexplorer/index.html>
- 2022b 1943, Hueneme 1:62500 topographic map. Electronic document accessed May 20, 2022, from <https://livingatlas.arcgis.com/topoexplorer/index.html>
- 2022c 1950, Camarillo 1:24000 topographic map. Electronic document accessed May 20, 2022, from <https://livingatlas.arcgis.com/topoexplorer/index.html>
- 2022d 1967, Camarillo 1:2400 topographic map. Electronic document accessed May 20, 2022, from <https://livingatlas.arcgis.com/topoexplorer/index.html>
- 2022e 1982, Santa Barbara 1:100000 topographic map. Electronic document accessed May 20, 2022 from <https://livingatlas.arcgis.com/topoexplorer/index.html>



W and S Consultants

- 1994 *Phase I Archaeological Survey of the Proposed Hill Canyon 9.2 Mile Pipeline Corridor, Ventura County, California.* Report on file at the South Central Coastal Information Center.

Wlodarski, Robert J.

- 1995 *The Results of a Phase 1 Archaeological Study for Approximately 37 Acres, Located on the Southwest Corner of Los Posas Road and Laguna Road, City of Camarillo, County of Ventura, California.* Report on file at the South Central Coastal Information Center.

# Attachment 1

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Figures



Figure 1 Regional Location Map



Imagery provided by Esri and its licensors © 2022.

 Project Location

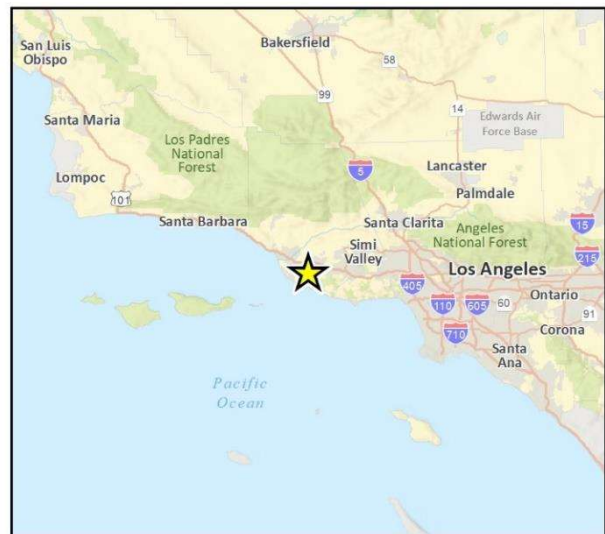
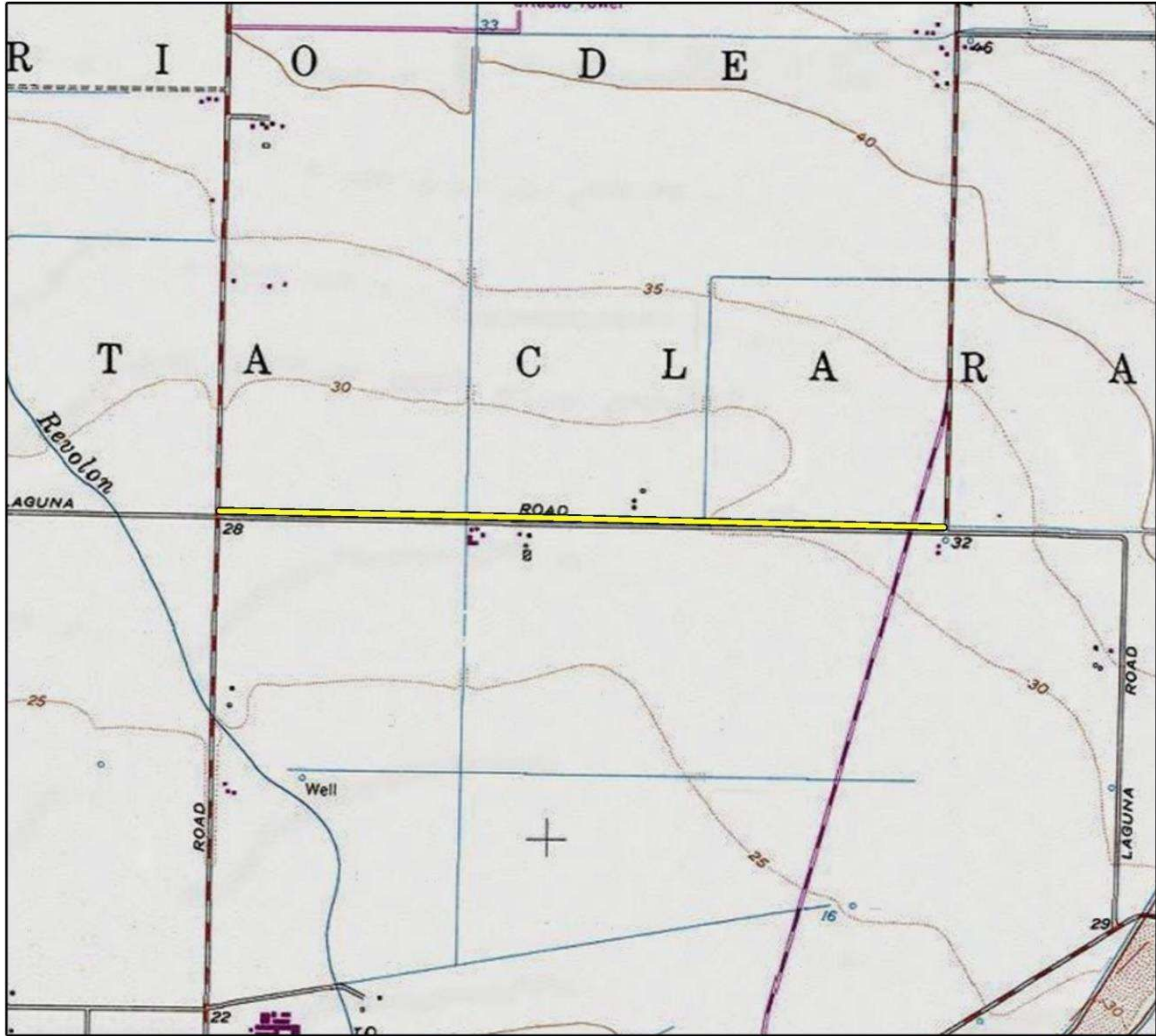


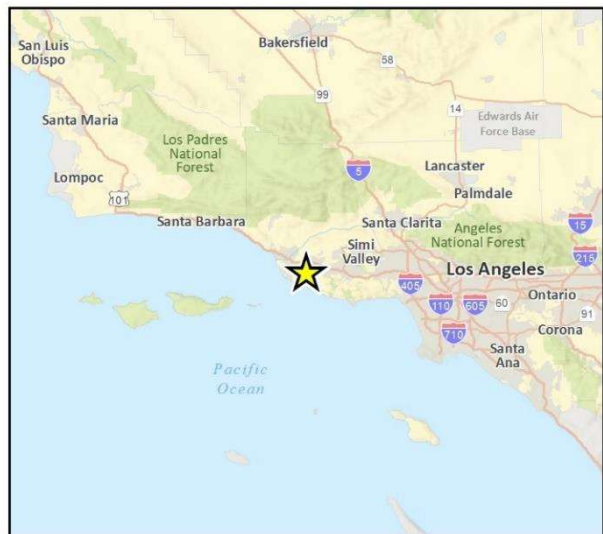
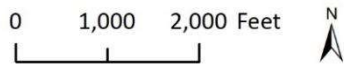
Fig. 1 Regional Location

**Figure 2 Project Location Map**



Basemap provided by National Geographic Society, Esri and their licensors © 2022. Camarillo Quadrangle. T01N R21W S09,15,16. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

Project Location



CRFig 1 Proj Loch Map

**Figure 3 Modern Refuse Along Proposed Alignment, Facing Northeast**



**Figure 4 Modern Refuse Along Proposed Alignment, Facing West**



**Figure 5 Soil Within Project Site, Facing East**



**Figure 6 Soil Discoloration, Facing West**





**Figure 7 Underground Utility Within Project Site, Facing West**



**Figure 8 Underground Utility Within Project Site, Facing North**



**Figure 9 Underground Utility Within Project Site**



**Figure 10 Clam Shell Scatter Overview, Facing West**

**CONFIDENTIAL: PHOTO REDACTED DUE TO THE CONFIDENTIALITY OF POTENTIAL CULTURAL MATERIAL LOCATIONS**

Figure 11 Shell Fragments, Planview



Figure 12 Shell Fragments, Planview

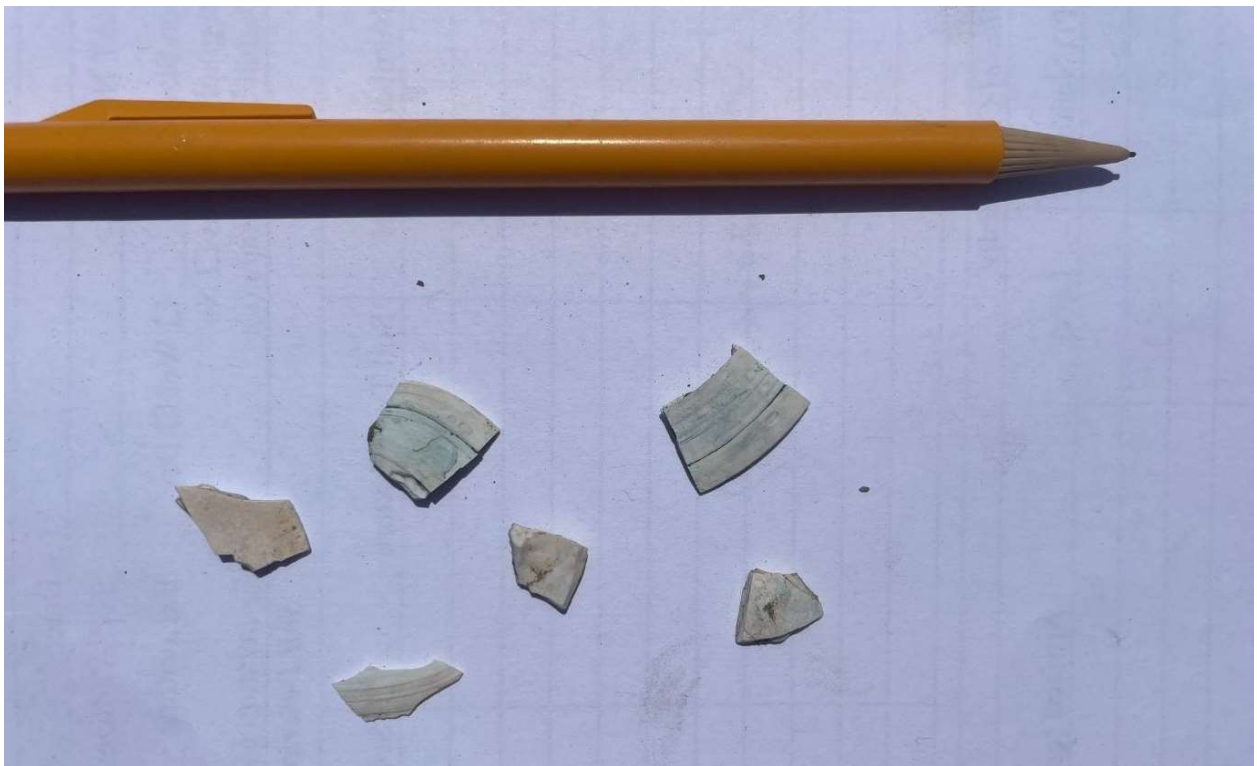


Figure 13 V-ditch Overview, Facing West



Figure 14 V-ditch Profile, Facing North



Figure 15 Mussel Shell Scatter Overview, Facing West



Figure 16 Mussel Shell, Planview



# Attachment 2

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California Historical Resources Information System Records Search

**CHRIS Data Request Form**

ACCESS AND USE AGREEMENT NO.: 56 IC FILE NO.: \_\_\_\_\_

To: South Central Coastal Information Center

Print Name: Mary Pfeiffer Date: 4/18/22

Affiliation: Rincon Consultants, Inc.

Address: 180 N. Ashwood Avenue

City: Ventura State: CA Zip: 93003

Phone: 805-644-4455 Fax: 805-644-4455 Email: mpfeiffer@rinconconsultants.com

Billing Address (if different than above): \_\_\_\_\_

Billing Email: ap@rinconconsultants.com Billing Phone: 805-644-4455

Project Name / Reference: Laguna Road 24-inch HDPE Pipeline Project

Project Street Address: N/A

County or Counties: Ventura

Township/Range/UTMs: Township 1N, Range 21W, Sections 8, 15 and 16

USGS 7.5' Quad(s): Camarillo

PRIORITY RESPONSE (Additional Fee): yes  / no

TOTAL FEE NOT TO EXCEED: \$ 600

(If blank, the Information Center will contact you if the fee is expected to exceed \$1,000.00)

Special Instructions:

Please contact me if the total fee is expected to exceed \$600

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**Information Center Use Only**

Date of CHRIS Data Provided for this Request: \_\_\_\_\_

Confidential Data Included in Response: yes  / no

Notes: \_\_\_\_\_

## CHRIS Data Request Form

Mark the request form as needed. Attach a PDF of your project area (with the radius if applicable) mapped on a 7.5' USGS topographic quadrangle to scale 1:24000 ratio 1:1 neither enlarged nor reduced and include a shapefile of your project area, if available. Shapefiles are the current CHRIS standard for submitting digital spatial data for your project area or radius. **Check with the appropriate IC for current availability of digital data products.**

- Documents will be provided in PDF format. Paper copies will only be provided if PDFs are not available at the time of the request or under specially arranged circumstances.
- Location information will be provided as a digital map product (Custom Maps or GIS data) unless the area has not yet been digitized. In such circumstances, the IC may provide hand drawn maps.
- In addition to the \$150/hr. staff time fee, client will be charged the Custom Map fee when GIS is required to complete the request [e.g., a map printout or map image/PDF is requested and no GIS Data is requested, or an electronic product is requested (derived from GIS data) but no mapping is requested].

For product fees, see the CHRIS IC Fee Structure on the [OHP website](#).

### 1. Map Format Choice:

Select One: Custom GIS Maps  GIS Data  Custom GIS Maps and GIS Data  No Maps

**Any selection below left unmarked will be considered a "no."**

#### Location Information:

	Within project area	Within <u>0.5</u> mi. radius
<b>ARCHAEOLOGICAL Resource Locations<sup>1</sup></b>	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>NON-ARCHAEOLOGICAL Resource Locations</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>Report Locations<sup>1</sup></b>	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>"Other" Report Locations<sup>2</sup></b>	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>

### 3. Database Information:

(contact the IC for product examples, or visit the [SSJVIC website](#) for examples)

	Within project area	Within <u>0.5</u> mi. radius
<b>ARCHAEOLOGICAL Resource Database<sup>1</sup></b>		
List (PDF format)	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
Detail (PDF format)	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
Excel Spreadsheet	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>NON-ARCHAEOLOGICAL Resource Database</b>		
List (PDF format)	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
Detail (PDF format)	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
Excel Spreadsheet	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>Report Database<sup>1</sup></b>		
List (PDF format)	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
Detail (PDF format)	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
Excel Spreadsheet	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
Include "Other" Reports <sup>2</sup>	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>

### 4. Document PDFs (paper copy only upon request):

	Within project area	Within <u>0.5</u> mi. radius
ARCHAEOLOGICAL Resource Records <sup>1</sup>	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
NON-ARCHAEOLOGICAL Resource Records	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
Reports <sup>1</sup>	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
"Other" Reports <sup>2</sup>	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>



**CHRIS Data Request Form**

**5. Eligibility Listings and Documentation:**

Within project area                      Within 0.5 mi.                      radius

**OHP Built Environment Resources Directory<sup>3</sup>:**

Directory listing only (Excel format)  
Associated documentation<sup>4</sup>

yes  / no   
yes  / no

yes  / no   
yes  / no

**OHP Archaeological Resources Directory<sup>1,5</sup>:**

Directory listing only (Excel format)  
Associated documentation<sup>4</sup>

yes  / no   
yes  / no

yes  / no   
yes  / no

**California Inventory of Historic Resources (1976):**

Directory listing only (PDF format)  
Associated documentation<sup>4</sup>

yes  / no   
yes  / no

yes  / no   
yes  / no

**6. Additional Information:**

The following sources of information may be available through the Information Center. However, several of these sources are now available on the [OHP website](#) and can be accessed directly. The Office of Historic Preservation makes no guarantees about the availability, completeness, or accuracy of the information provided through these sources. Indicate below if the Information Center should review and provide documentation (if available) of any of the following sources as part of this request.

<b>Caltrans Bridge Survey</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>Ethnographic Information</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>Historical Literature</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>Historical Maps</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>Local Inventories</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>GLO and/or Rancho Plat Maps</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>Shipwreck Inventory</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>Soil Survey Maps</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>

<sup>1</sup> In order to receive archaeological information, requestor must meet qualifications as specified in Section III of the current version of the California Historical Resources Information System Information Center Rules of Operation Manual and be identified as an Authorized User or Conditional User under an active CHRIS Access and Use Agreement.

<sup>2</sup> "Other" Reports GIS layer consists of report study areas for which the report content is almost entirely non-fieldwork related (e.g., local/regional history, or overview) and/or for which the presentation of the study area boundary may or may not add value to a record search.

<sup>3</sup> Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Includes, but not limited to, information regarding National Register of Historic Places, California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and historic building surveys. Previously known as the HRI and then as the HPD, it is now known as the Built Environment Resources Directory (BERD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.

<sup>4</sup> Associated documentation will vary by resource. Contact the IC for further details.

<sup>5</sup> Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Previously known as the Archaeological Determinations of Eligibility, now it is known as the Archaeological Resources Directory (ARD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.

**South Central Coastal Information Center**

California State University, Fullerton  
Department of Anthropology MH-426  
800 North State College Boulevard  
Fullerton, CA 92834-6846  
657.278.5395 / FAX 657.278.5542  
[sccic@fullerton.edu](mailto:sccic@fullerton.edu)

*California Historical Resources Information System*  
*Orange, Los Angeles, and Ventura Counties*

5/18/2022

Records Search File No.: 23676.9777

Mary Pfeiffer  
Rincon Consultants, Inc.  
180 N. Ashwood Avenue  
Ventura CA 93003

Re: Records Search Results for the Laguna Road 24-inch HDPE Pipeline Project

The South Central Coastal Information Center received your records search request for the project area referenced above, located on the Camarillo, CA USGS 7.5' quadrangle. Due to the COVID-19 emergency, we have temporarily implemented new records search protocols. With the exception of some reports that have not yet been scanned, we are operationally digital for Los Angeles, Orange, and Ventura Counties. See attached document for your reference on what data is available in this format. The following reflects the results of the records search for the project area and a 1/2-mile radius:

As indicated on the data request form, the locations of resources and reports are provided in the following format:  custom GIS maps  shape files  hand drawn maps

Resources within project area: 0	None
Resources within 1/2-mile radius: 0	None
Reports within project area: 4	VN-01341, VN-01403, VN-02978, VN-03109
Reports within 1/2-mile radius: 3	SEE ATTACHED LIST

- Resource Database Printout (list):**  enclosed  not requested  nothing listed
- Resource Database Printout (details):**  enclosed  not requested  nothing listed
- Resource Digital Database (spreadsheet):**  enclosed  not requested  nothing listed
- Report Database Printout (list):**  enclosed  not requested  nothing listed
- Report Database Printout (details):**  enclosed  not requested  nothing listed
- Report Digital Database (spreadsheet):**  enclosed  not requested  nothing listed
- Resource Record Copies:**  enclosed  not requested  nothing listed
- Report Copies:**  enclosed  not requested  nothing listed
- OHP Built Environment Resources Directory (BERD) 2019:**  available online; please go to [https://ohp.parks.ca.gov/?page\\_id=30338](https://ohp.parks.ca.gov/?page_id=30338)
- Archaeo Determinations of Eligibility 2012:**  enclosed  not requested  nothing listed
- Historical Maps:**  enclosed  not requested  nothing listed

**Ethnographic Information:**  not available at SCCIC  
**Historical Literature:**  not available at SCCIC  
**GLO and/or Rancho Plat Maps:**  not available at SCCIC  
**Caltrans Bridge Survey:**  not available at SCCIC; please go to  
<http://www.dot.ca.gov/hq/structur/strmaint/historic.htm>  
**Shipwreck Inventory:**  not available at SCCIC; please go to  
[http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks\\_Database.asp](http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp)  
**Soil Survey Maps: (see below)**  not available at SCCIC; please go to  
<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>


Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System,



Digitally signed by Michelle  
Galaz Cornforth  
Date: 2022.05.18 13:19:58  
-07'00'

Michelle Galaz Cornforth  
Assistant Coordinator

Enclosures:

(X) Emergency Protocols for LA, Orange, and Ventura County BULK Processing Standards – 2 pages

## Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-00347		1981	Hawthorne, Janice G.	Cultural Resource Reconnaissance and Impact Evaluation of a 14+ Mile Route for the Proposed Pumping Through Pipeline and Lower Aquifer System Wells, County of Ventura, California	NARC	56-000546, 56-000665, 56-000726
VN-00491		1986	Toren, George A.	Cultural Resource Investigation: G.e. Evans No. 1 Exploratory Drill Site, Oxnard	Greenwood and Associates	
VN-01341		1995	Wlodarski, Robert J.	The Results of a Phase 1 Archaeological Study for Approximately 37 Acres, Located on the Southwest Corner of Los Posas Road and Laguna Road, City of Camarillo, County of Ventura, California	Historical, Environmental, Archaeological, Research, Team	
VN-01403		1994	Anonymous	Phase I Archaeological Survey of the Proposed Hill Canyon 9.2 Mile Pipeline Corridor, Ventura County, California	W & S Consultants	56-000214, 56-000215, 56-001073, 56-001152
VN-01410		1975	Briuer, Frederick L.	Assessment of the Archaeological Impact Revolon--Beardsley Projects	Northridge Archaeological Research Center, CSUN	56-000013, 56-000024, 56-000110, 56-000167, 56-000223, 56-000224
VN-02978		2004	Sharpe, Jim and Durio, Lori	Groundwater Recovery Enhancement and Treatment (GREAT) Program, Cultural Resources Inventory Report	CH2MHill	56-000506, 56-000662, 56-000664, 56-000665, 56-000666, 56-000726, 56-000789, 56-000918, 56-100060, 56-152779, 56-152780, 56-152781, 56-152782, 56-152783, 56-152784
VN-03109		2012	Schmidt, James	Archaeological Survey Report for Southern California Edison Company's Houwelling Nursery Interconnection Project, New 16kV Gen-Tie, near Camarillo, Ventura Co. CA	Compass Rose	

# Attachment 3

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Native American Heritage Commission Documents

**Local Government Tribal Consultation List Request  
Native American Heritage Commission**

1550 Harbor Blvd, Suite 100  
West Sacramento, CA 95691  
916-373-3710  
916-373-5471 – Fax  
[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)

**Type of List Requested**

**CEQA Tribal Consultation List (AB 52) – Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2**

**General Plan (SB 18) - Per Government Code § 65352.3.**

**Local Action Type:**

**General Plan**  **General Plan Element**  **General Plan Amendment**

**Specific Plan**  **Specific Plan Amendment**  **Pre-planning Outreach Activity**

**Required Information**

**Project Title:** Laguna Road 24-inch HDPE Pipeline Project

**Local Government/Lead Agency:** Pleasant Valley County Water District

**Contact Person:** Mary Pfeiffer

**Street Address:** 180 N. Ashwood Avenue

**City:** Ventura **Zip:** 93003

**Phone:** (805) 644-4455 ext. 2052

**Email:** mpfeiffer@rinconconsultants.com

**Specific Area Subject to Proposed Action**

**County/Community:** Ventura County

**Additional Request**

**Sacred Lands File Search - Required Information:**

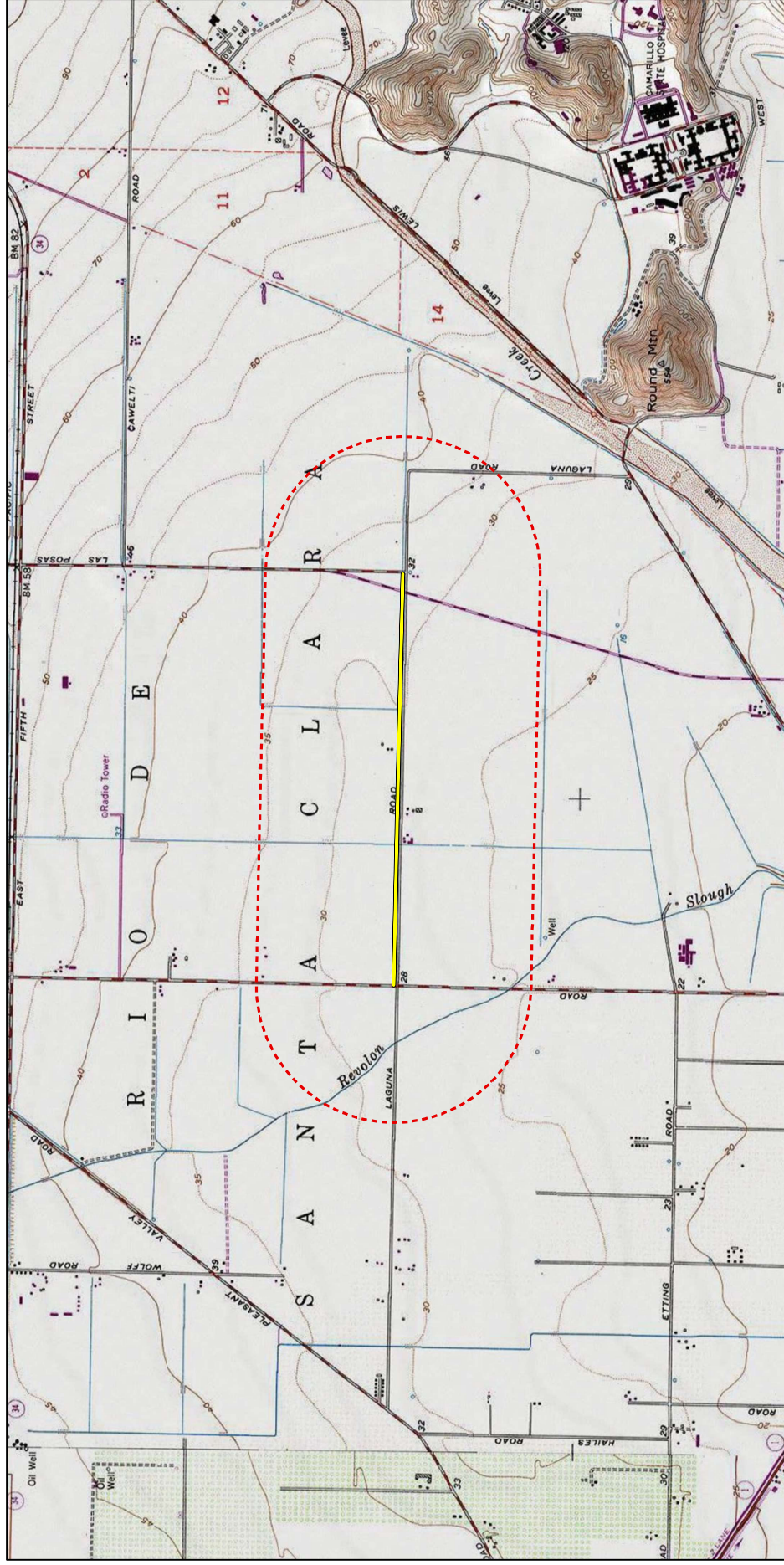
**USGS Quadrangle Name(s):** *Camarillo*

**Township:** 1 North

**Range:** 21 West

**Section(s):** 8, 15 and 16

Please see the attached map for reference



Imagery provided by National Geographic Society, ESRI and its licensors © 2022. Camarillo Quadrangle, T01.0N R21.0W S8-11, 14-17. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

## NATIVE AMERICAN HERITAGE COMMISSION

May 17, 2022

Mary Pfeiffer  
Rincon Consultants, Inc.

Via Email to: [mpfeiffer@rinconconsultants.com](mailto:mpfeiffer@rinconconsultants.com)

**Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Laguna Road 24-inch HDPE Pipeline Project, Ventura County**

Dear Ms. Pfeiffer:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

*Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.*

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:



CHAIRPERSON  
**Laura Miranda**  
Luiseño

VICE CHAIRPERSON  
**Reginald Pagaling**  
Chumash

PARLIAMENTARIAN  
**Russell Attebery**  
Karuk

SECRETARY  
**Sara Dutschke**  
Miwok

COMMISSIONER  
**William Mungary**  
Paiute/White Mountain  
Apache

COMMISSIONER  
**Isaac Bojorquez**  
Ohlone-Costanoan

COMMISSIONER  
**Buffy McQuillen**  
Yokayo Pomo, Yuki,  
Nomlaki

COMMISSIONER  
**Wayne Nelson**  
Luiseño

COMMISSIONER  
**Stanley Rodriguez**  
Kumeyaay

EXECUTIVE SECRETARY  
**Raymond C. Hitchcock**  
Miwok/Nisenan

**NAHC HEADQUARTERS**  
1550 Harbor Boulevard  
Suite 100  
West Sacramento,  
California 95691  
(916) 373-3710  
[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)  
[NAHC.ca.gov](http://NAHC.ca.gov)



- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

- Any report that may contain site forms, site significance, and suggested mitigation measures.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was negative.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: [Cody.Campagne@nahc.ca.gov](mailto:Cody.Campagne@nahc.ca.gov).

Sincerely,

*Cody Campagne*

Cody Campagne  
Cultural Resources Analyst

Attachment

Native American Heritage Commission  
Tribal Consultation List  
Ventura County  
5/17/2022

**Barbareno/Ventureno Band of Mission Indians**

Julie Tumamait-Stenslie,  
Chairperson  
365 North Poli Ave  
Ojai, CA, 93023  
Phone: (805) 646 - 6214  
jtumamait@hotmail.com  
Chumash

**Chumash Council of Bakersfield**

Julio Quair, Chairperson  
729 Texas Street  
Bakersfield, CA, 93307  
Phone: (661) 322 - 0121  
chumashtribe@sbcglobal.net  
Chumash

**Coastal Band of the Chumash Nation**

Mariza Sullivan, Chairperson  
P. O. Box 4464  
Santa Barbara, CA, 93140  
Phone: (805) 665 - 0486  
cbcntribalchair@gmail.com  
Chumash

**Gabrieleno/Tongva San Gabriel Band of Mission Indians**

Anthony Morales, Chairperson  
P.O. Box 693  
San Gabriel, CA, 91778  
Phone: (626) 483 - 3564  
Fax: (626) 286-1262  
GTTribalcouncil@aol.com  
Gabrieleno

**Gabrielino /Tongva Nation**

Sandone Goad, Chairperson  
106 1/2 Judge John Aiso St.,  
#231  
Los Angeles, CA, 90012  
Phone: (951) 807 - 0479  
sgoad@gabrielino-tongva.com  
Gabrielino

**Gabrielino-Tongva Tribe**

Charles Alvarez,  
23454 Vanowen Street  
West Hills, CA, 91307  
Phone: (310) 403 - 6048  
roadkingcharles@aol.com  
Gabrielino

**Northern Chumash Tribal Council**

Violet Walker, Chairperson  
P.O. Box 6533  
Los Osos, CA, 93412  
Phone: (760) 549 - 3532  
violetsagewalker@gmail.com  
Chumash

**San Luis Obispo County Chumash Council**

1030 Ritchie Road  
Grover Beach, CA, 93433  
Chumash

**Santa Ynez Band of Chumash Indians**

Kenneth Kahn, Chairperson  
P.O. Box 517  
Santa Ynez, CA, 93460  
Phone: (805) 688 - 7997  
Fax: (805) 686-9578  
kkahn@santaynezchumash.org  
Chumash

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Laguna Road 24-inch HDPE Pipeline Project, Ventura County.

# Appendix D

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Energy Calculations

# Laguna Road Pipeline

10/19/2022

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors [1]:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529
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Values above are expressed in gallons per horsepower-hour/BSFC.

CONSTRUCTION EQUIPMENT						
Construction Equipment	#	Hours per		Load Factor	Construction Phase	Fuel Used (gallons)
		Day	Horsepower			
Excavators	1	8	158	0.38	Demolition/Pavement Cutting	335
Tractors/Loaders/Backhoes	1	8	97	0.37	Demolition/Pavement Cutting	223
Graders	1	8	187	0.41	Site Preparation/Grading	1,712
Plate Compactors	1	8	8	0.43	Site Preparation/Grading	85
Rubber Tired Dozers	1	8	247	0.4	Site Preparation/Grading	2,206
Rubber Tired Loaders	1	8	203	0.36	Site Preparation/Grading	1,632
Plate Compactors	1	8	8	0.43	Infrastructure Installation	75
Rollers	1	8	80	0.38	Infrastructure Installation	660
Pavers	1	8	130	0.42	Paving/Site Restoration	457
Paving Equipment	1	8	132	0.36	Paving/Site Restoration	398
Rollers	1	8	80	0.38	Paving/Site Restoration	283
Rough Terrain Forklifts	1	8	100	0.4	Paving/Site Restoration	372
Skid Steer Loaders	1	8	65	0.37	Paving/Site Restoration	224
<b>Total Fuel Used</b>						<b>8,662</b>
						<b>(Gallons)</b>

Construction Phase	Days of Operation
Demolition/Pavement Cutting	13.2
Site Preparation/Grading	52.8
Infrastructure Installation	46.2
Paving/Site Restoration	19.8
<b>Total Days</b>	<b>132</b>

## WORKER TRIPS

Construction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Demolition/Pavement Cutting	24.1	12	20.0	131.45
Site Preparation/Grading	24.1	12	20.0	525.81
Infrastructure Installation	24.1	12	20.0	460.08
Paving/Site Restoration	24.1	12	20.0	197.18
<b>Fuel</b>				<b>1,314.52</b>

## HAULING AND VENDOR TRIPS

Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
<b>HAULING TRIPS</b>				
Demolition/Pavement Cutting	7.5	0	20.0	0.00
Site Preparation/Grading	7.5	438	20.0	1168.00
Infrastructure Installation	7.5	0	20.0	0.00
Paving/Site Restoration	7.5	0	20.0	0.00
<b>Fuel</b>				<b>1,168.00</b>

## WATER TRUCK TRIPS

Water Truck	7.5	10	10.0	1760.00
<b>Fuel</b>				<b>1,760.00</b>

<b>Total Gasoline Consumption (gallons)</b>	<b>1,315</b>
<b>Total Diesel Consumption (gallons)</b>	<b>11,590</b>

### Sources:

[1] United States Environmental Protection Agency. 2021. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2*. September. Available at: <https://www.epa.gov/system/files/documents/2021-08/420r21021.pdf>.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2021. *National Transportation Statistics*. Available at: <https://www.bts.gov/topics/national-transportation-statistics>.

# Appendix E

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Noise Modeling



## Groundborne Noise and Vibration Modeling

### Notes

The reference distance is measured from the nearest anticipated point of construction equipment to the nearest structure.

Equipment	Reference Level Inputs			
	PPV <sub>ref</sub> (in/sec)	Lv <sub>ref</sub> (VdB)	RMS <sub>ref</sub> (in/sec)	Reference Distance
Vibratory Roller	0.21	94	0.050	25
Hoe Ram	0.089	87	0.022	25
Large bulldozer	0.089	87	0.022	25
Caisson drilling	0.089	87	0.022	25
Loaded trucks	0.076	83	0.014	25
Jack hammer	0.035	79	0.009	25
Small bulldozer	0.003	58	0.001	25

Equipment	Vibration Level at Receiver			
	Distance (feet)	PPV <sub>x</sub> (in/sec)	Lv <sub>x</sub> (VdB)	RMS <sub>x</sub> (in/sec)
Large bulldozer	100	0.0194	74	0.005
Loaded trucks	100	0.0165	70	0.003

Equipment	Vibration Contours		
	Distance to (feet)		
	0.200 PPV	72.0 VdB	0.0080 RMS
Large bulldozer	12	120	64
Loaded trucks	10	79	42

### Source

California Department of Transportation (Caltrans). 2013. Transportation and Construction  
Last Updated: 4/11/2019

## Groundborne Noise and Vibration Modeling

### Notes

The reference distance is measured from the nearest anticipated point of construction equipment to the nearest structure.

Equipment	Reference Level Inputs			
	PPV <sub>ref</sub> (in/sec)	Lv <sub>ref</sub> (VdB)	RMS <sub>ref</sub> (in/sec)	Reference Distance
Vibratory Roller	0.21	94	0.050	25
Hoe Ram	0.089	87	0.022	25
Large bulldozer	0.089	87	0.022	25
Caisson drilling	0.089	87	0.022	25
Loaded trucks	0.076	83	0.014	25
Jack hammer	0.035	79	0.009	25
Small bulldozer	0.003	58	0.001	25

Equipment	Vibration Level at Receiver			
	Distance (feet)	PPV <sub>x</sub> (in/sec)	Lv <sub>x</sub> (VdB)	RMS <sub>x</sub> (in/sec)
Large bulldozer	25	0.0890	87	0.022
Loaded trucks	25	0.0760	83	0.014

Equipment	Vibration Contours		
	Distance to (feet)		
	0.200 PPV	72.0 VdB	0.0080 RMS
Large bulldozer	12	120	64
Loaded trucks	10	79	42

### Source

California Department of Transportation (Caltrans). 2013. Transportation and Construction  
Last Updated: 4/11/2019