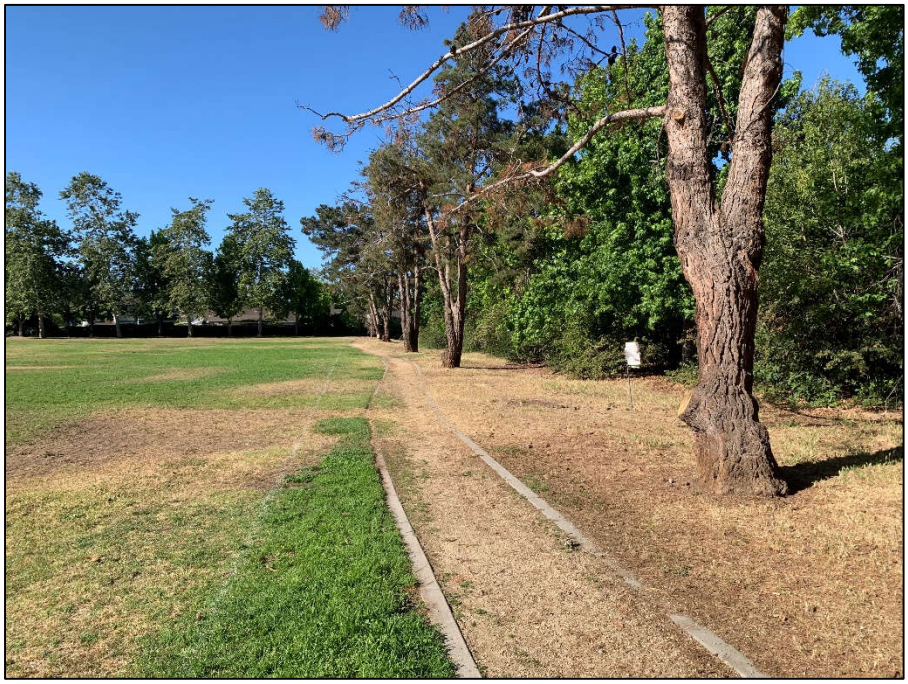
# DRAFT
# MITIGATED NEGATIVE DECLARATION

## EL CARRO PARK MONITORING WELLS



Lead Agency:

**Carpinteria Valley Water District**
1301 Santa Ynez Avenue
Carpinteria, California 93013
Contact: Mr. Bob McDonald
(805) 684-2816

Prepared by:

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(805) 644-2220

**December 2021**

Project No. 2102-1921

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## PROJECT DESCRIPTION

The proposed Carpinteria Valley Water District's (CVWD) El Carro Park Monitoring Wells Project (Project) is comprised of up to three groundwater wells to be used to monitor groundwater elevations and water quality within the Carpinteria Groundwater Basin.

The individual boreholes for each of the wells would be about 12.75-inches in diameter. The actual depths of the wells would not be known until the pilot hole for the deepest one has been drilled and logged; however, the Project hydrogeologist estimates that the completed wells would be constructed to the following approximate depths: 1,050 feet, 800 feet, and 350 feet. The pilot hole, which would then be completed as the deepest monitoring well, is expected to be drilled to about 1,200 feet. No above-ground structures are proposed.

The wells would be completed with a 3-inch diameter well casing, bentonite or cement annular seal, gravel pack within the annulus (area between the borehole and casing) and 3-inch diameter well screen. The tops of the wells would be covered by watertight, locking manholes, approximately 12-inches in diameter, constructed flush with the ground surface. The well casings would also be provided watertight, locking well caps for added protection and security.

The wells would be constructed using a conventional water/mud drilling rig and ancillary equipment, including a pipe trailer, mud tank, fluid tank and cuttings bin which would be temporarily located on-site. No above-ground earth movement is proposed as part of the Project. It is estimated that a combined volume of approximately 72 cubic yards of drill cuttings would be generated, which would be removed from the site and transported to a legal disposal facility.

It is estimated that approximately six weeks would be required to complete proposed well construction once equipment is mobilized to the site. Well construction would be scheduled to avoid predicted storm events. During this six-week period, there would be three periods during which 12-hour/day construction activity (drilling and well construction) would be required (7 a.m. to 7 p.m.). For the deep, intermediate, and shallow monitoring wells, the 12-hour operational periods are estimated to be six, four, and three days, respectively.

Once constructed, the monitoring wells would be incorporated into, and would become an extremely important component of, the Carpinteria Groundwater Sustainability Agency's Groundwater Sustainability Plan. As part of the Plan, samples are collected bi-annually from selected wells throughout the basin and analyzed for an array of water quality constituents. The Plan also includes the measurement of groundwater levels at selected wells on a bi-monthly basis. Each of the proposed monitoring wells would be included in the groundwater quality and water level monitoring elements of the Plan.

## PROJECT LOCATION

The proposed three groundwater monitoring wells would be installed within El Carro Park, which is located immediately south of Foothill Road and east of Seacoast Way in the City of Carpinteria.

## PROJECT PROPONENT AND LEAD AGENCY

Carpinteria Valley Water District
1301 Santa Ynez Avenue
Carpinteria, California 93013

Contact: Bob McDonald (805/684-2816)

## PROPOSED FINDINGS

The CVWD has prepared this Mitigated Negative Declaration (MND) pursuant to Sections 15070-15075 of the State Guidelines for the Implementation of the California Environmental Quality Act. This Mitigated Negative Declaration documents the CVWD's finding that there are no significantly adverse unavoidable impacts associated with the proposed project, and the project does not require the preparation of an Environmental Impact Report (EIR). The attached Initial Study identifies and discusses potential impacts, mitigation measures and residual impacts for identified subject areas.

## PUBLIC COMMENTS

In compliance with Section 15073 of the State Guidelines for the Implementation of the California Environmental Quality Act, the CVWD will accept written comments on the adequacy of the information contained in the Draft MND. Please make sure that written comments reach the CVWD's contact person by 5:00 p.m. on January __, 2022, the close of the public review period. As a result of this project, potentially significant, but mitigable effects on the environment are anticipated in the areas of water quality and noise. After the close of the public comment period, the CVWD will make appropriate changes to the document pursuant to the comments received and will release a Final MND.

Due to the non-complex nature of this project, a separate environmental hearing will not be held. However, public testimony will be accepted at the MND approval hearing before the CVWD's Board of Directors. For information regarding scheduling of this hearing, please contact Mr. Bob McDonald at (805) 684-2816.

## MITIGATION MEASURES

The following mitigation measures have been integrated into the proposed project and would reduce impacts to a level of less than significant.

### Water Quality

**MM HWQ-1: Water Quality Protection**. The drilling contractor shall develop and implement a storm water pollution prevention plan (SWPPP) in coordination with CVWD. The SWPPP shall focus on avoiding non-storm discharges to storm drains and controlling storm water discharges through soil stabilization, sediment control, wind erosion control, sediment tracking control and waste management measures. These measures may include fiber rolls placed at the adjacent storm drain inlet and other features to contain drilling fluids on-site.

Implementation of mitigation measure MM HWQ-1 would reduce potential water quality impacts associated with well construction to a less than significant level.

### Noise

**MM N-1: Temporary Sound Wall**. A minimum 16 foot-tall temporary sound wall shall be installed along the western and southern perimeter of El Carro Park (with a sound transmission class of STC-30 or better, minimum sound transmission loss of 11 dB at 63 hertz) to reduce noise impacts to adjacent residences associated with evening well drilling operations. Figure 4 provides the preliminary location of the temporary sound wall.

Implementation of mitigation measure MM N-1 would reduce noise levels at the nearest residence to 69.9 dBA CNEL which is below the City's construction noise standard and considered less than significant. Minor tree trimming within El Carro Park would be required to provide space to install the temporary sound wall. However, such trimming would not degrade the quality of public views of the Park from Foothill Road or views of Park users.

## MITIGATION MONITORING AND REPORTING

Section 15074(d) of the State Guidelines for the Implementation of the California Environmental Quality Act and Section 21081.6 of the Public Resources Code, requires the lead agency (CVWD) to adopt a monitoring program to ensure mitigation measures are complied with during implementation of the project. In compliance with these requirements, a Mitigation Monitoring Program Implementation Table is provided below. This Table identifies the timing, monitoring methods, responsibility and compliance verification method for all mitigation measures identified in this MND. Monitoring would be conducted by the CVWD's project manager and/or construction inspector.

# EL CARRO PARK MONITORING WELLS PROJECT
## MITIGATION MONITORING PROGRAM – IMPLEMENTATION TABLE

| Mitigation Measure | Implementation Timing | Monitoring Methods | Monitoring Frequency | Party Responsible for Monitoring | Method of Compliance Verification | Verification of Compliance | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Signature | Date | Remarks |
| **WTER QUALITY** | | | | | | | | |
| **MM HWQ-1: Water Quality Protection**. The drilling contractor shall develop and implement a storm water pollution prevention plan (SWPPP) in coordination with CVWD. The SWPPP shall focus on avoiding non-storm discharges to storm drains and controlling storm water discharges through soil stabilization, sediment control, wind erosion control, sediment tracking control and waste management measures. These measures may include fiber rolls placed at the adjacent storm drain inlet and other features to contain drilling fluids on-site. | Prior to well construction and throughout the construction period | The construction inspector will observe work in progress | Initially and weekly thereafter | CVWD staff | CVWD staff will review inspection reports | | | |
| **NOISE** | | | | | | | | |
| **MM N-1: Temporary Sound Wall**. A minimum 16-foot-tall temporary sound wall shall be installed along the western and southern perimeter of El Carro Park (with a sound transmission class of STC-30 or better, minimum sound transmission loss of 11 dB at 63 hertz) to reduce noise impacts to adjacent residences associated with evening well drilling operations. Figure 3 provides the preliminary location of the temporary sound wall. | Prior to well construction and throughout the construction period | The construction inspector will ensure the sound wall is in place | Initially and weekly thereafter | CVWD staff | CVWD staff will review inspection reports | | | |

# 1.0 INTRODUCTION

## 1.1 PURPOSE AND LEGAL AUTHORITY

This Initial Study has been prepared for the El Carro Park Monitoring Wells Project (Project), which will become a component of the Carpinteria Groundwater Sustainability Agency's program to monitor groundwater elevations and water quality within the Carpinteria Groundwater Basin. The Carpinteria Groundwater Sustainability Agency is comprised of four member agencies including the Carpinteria Valley Water District (CVWD), City of Carpinteria, Santa Barbara County Water Agency and the County of Ventura. The CVWD is the proponent of this Project and would be responsible for construction and operation of the proposed monitoring wells.

Section 2.0 of this document provides a description of the Project. The CVWD is the "lead agency" for the Project. As defined by Section 15367 of the CEQA Guidelines, the lead agency is "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant impact on the environment." Based on the findings of the Impact Analysis (Section 3.0 of this Initial Study), it has been determined that the Project (with mitigation) would not have a significant impact on the environment. As such, a Mitigated Negative Declaration has been prepared for the Project in accordance with CEQA.

## 1.2 PROJECT PROPONENT AND LEAD AGENCY

Carpinteria Valley Water District
1301 Santa Ynez Avenue
Carpinteria, California 93013

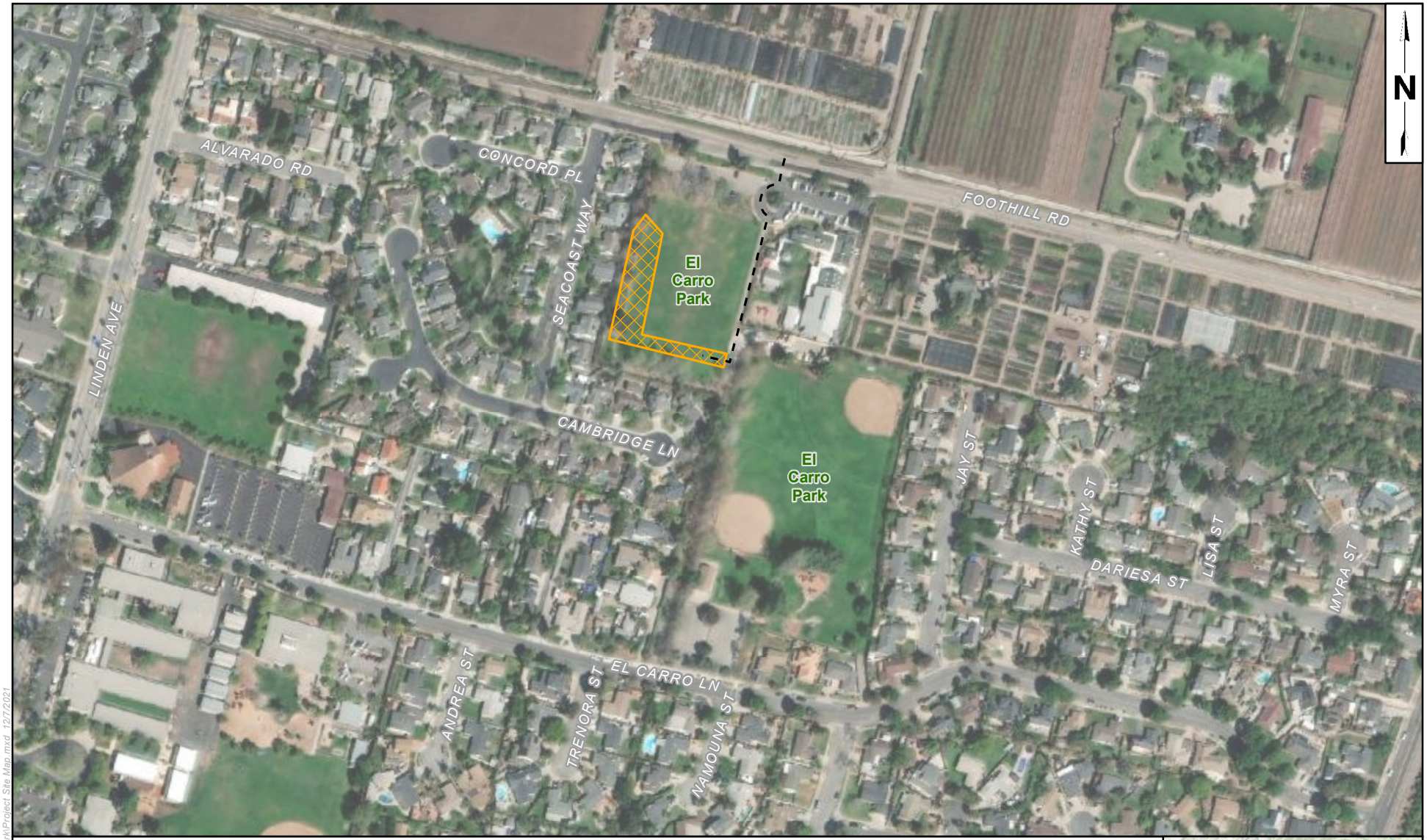
Contact: Bob McDonald (805/684-2816)

## 1.3 PROJECT LOCATION AND SITE DESCRIPTION

El Carro Park is located in in the City of Carpinteria and is composed of two rectangular fields (northwestern and southeastern) linked at their respective corners (see Figure 1). The northwestern field is composed of turfgrass with a walking path along the southern and western perimeter. This field is seasonally used as a youth soccer field. Single-family residences are located immediately west and south of this field. The southeastern field supports two softball fields and a playground. The proposed three groundwater monitoring wells would be located in the northwestern field of El Carro Park. The wells would be drilled about 15 to 20 feet apart. A preliminary site layout plan is provided as Figure 2. Photographs of the Project site are provided as Figure 3.

## 1.4 PROJECT BACKGROUND

The Carpinteria Groundwater Basin monitoring program includes the collection of data from 44 wells located throughout the Basin. The well network includes the CVWD's production wells, private production wells, and monitoring wells. The monitoring well network was expanded in 2019 with the addition of the Sentinel Well cluster, which includes three separate monitoring wells, completed discretely in the three principal water bearing zones within the Basin (A, B, and C Zones). The Sentinel Wells are located at a key strategic location in the southwestern portion of Storage Unit 1, near where the Rincon Creek Thrust Fault projects offshore, and where it is believed that the basin aquifers may be susceptible to seawater intrusion.




LEGEND:

- - Access Route

Well Construction Work Area

MAP EXTENT:


*Source: Esri Online Imagery Basemap, County of Santa Barbara*
*Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet*
*Notes: This map was created for informational and display purposes only.*

0 150 300
Feet

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME: EL CARRO MONITORING WELL
EL CARRO PARK, CARPINTERIA
SANTA BARBARA COUNTY, CA

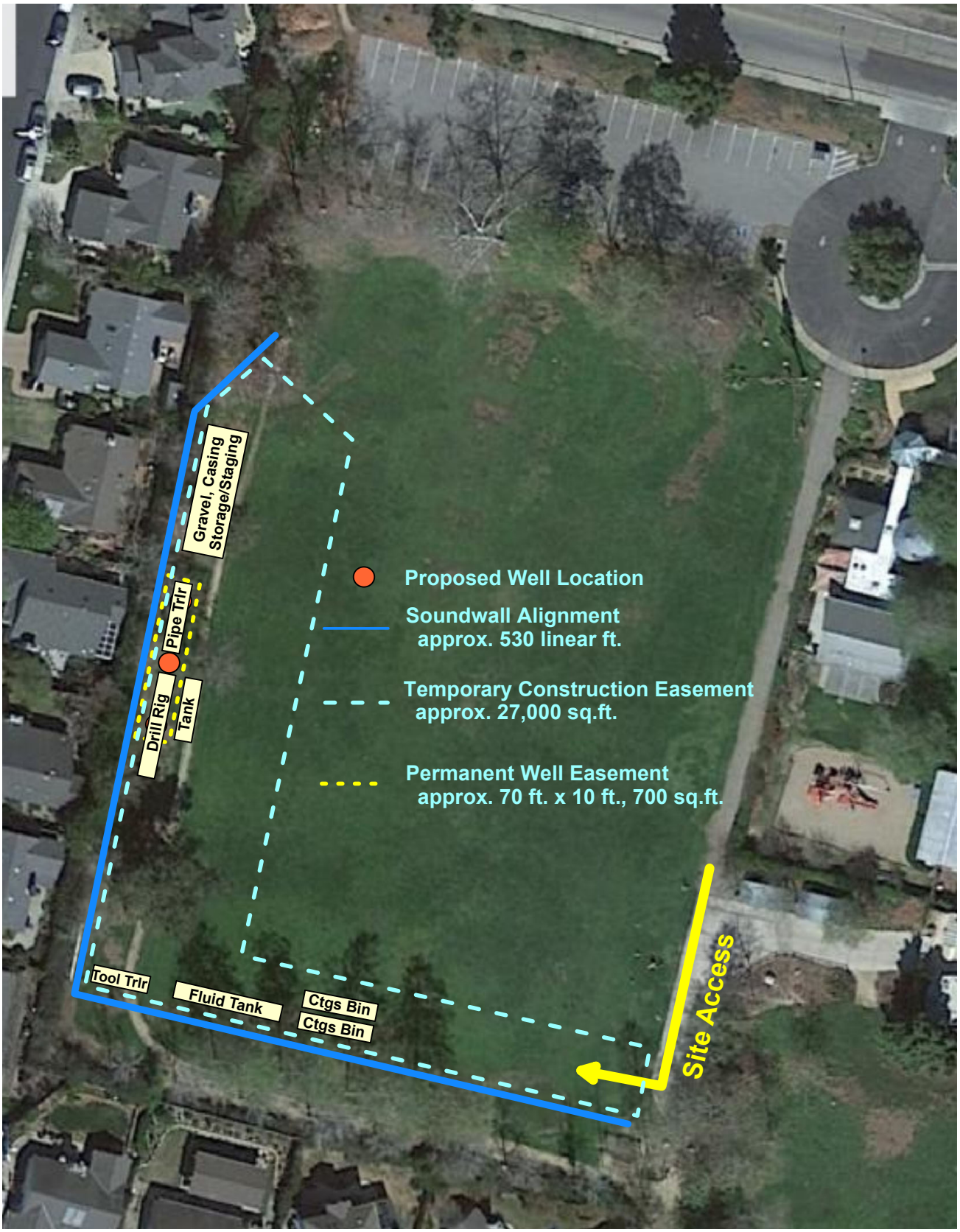
PROJECT NUMBER: 2102-1921

DATE: December 2021

# PROJECT SITE MAP

FIGURE 1

Z:\GIS Projects\GIS Maps\Map Project\El Carro Park\Project Site Map.mxd 12/7/2021




Source: Pueblo Water Resources
Notes: This map was created for informational and display purposes only.

| | | | |
|---|---|---|---|
| padre associates, inc. ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS | PROJECT NAME: EL CARRO MONITORING WELL<br>EL CARRO PARK, CARPINTERIA<br>SANTA BARBARA COUNTY, CA | SITE LAYOUT PLAN | FIGURE 2 |
| | PROJECT NUMBER: 2102-1921 / DATE: December 2021 | | |

Z:\GIS Projects\GIS Maps\Map Project\El Carro Park\Site Layout Plan.mxd 12/7/2021

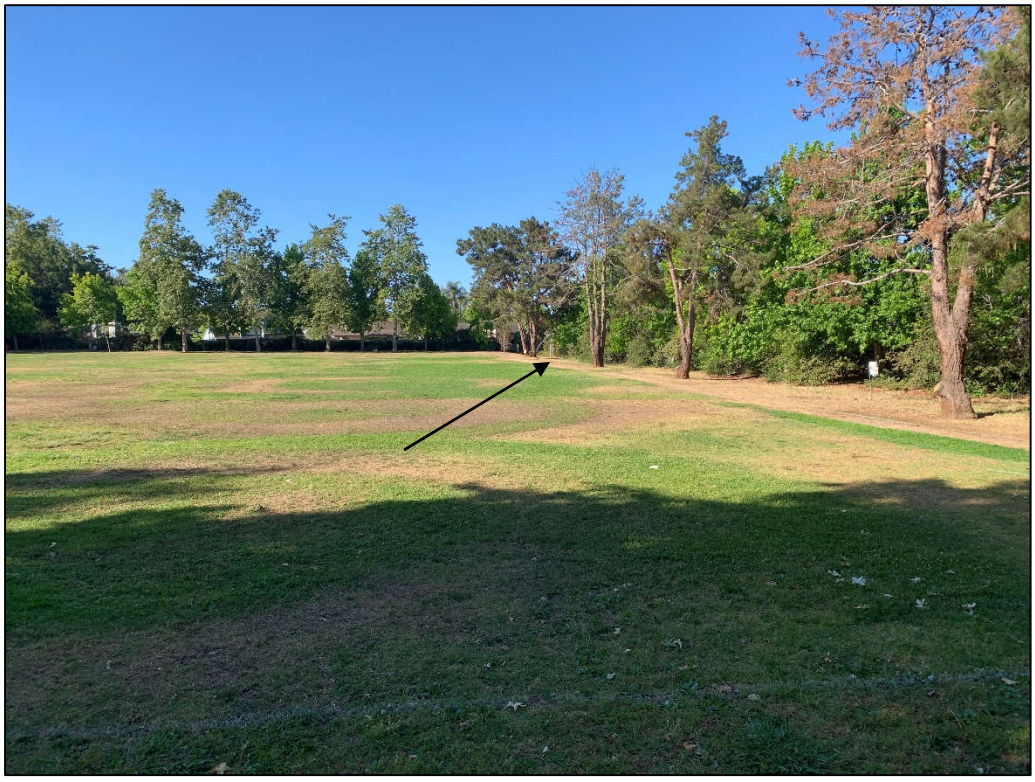


Photo 1. Well construction work area, facing southwest

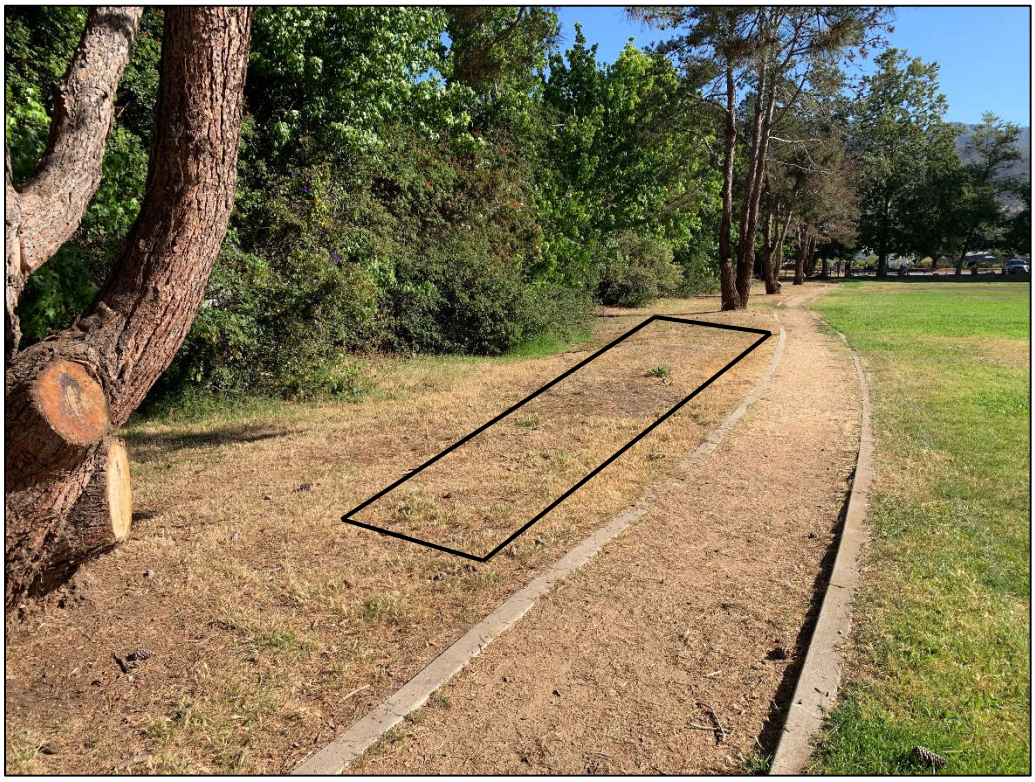


Photo 2. Well site location, facing northwest

**SITE PHOTOGRAPHS**
**FIGURE 3**

Water-level data are collected on a bi-monthly basis (every other month) from approximately 28 wells. Water-quality data are collected on a semi-annual basis (fall and spring of each water year) from approximately 28 wells. Water-quality data are also collected from six surface water sampling locations within the basin. The CVWD's existing El Carro groundwater production well is part of this monitoring program and is located approximately 400 feet east of the Project site.

## 1.5 PROJECT PURPOSE AND NEED

The proposed Project consists of three new monitoring wells that would provide groundwater elevation and water quality data from three different water-bearing zones of the western portion of the Carpinteria Groundwater Basin. Aside from the recently completed Sentinel Wells at the coast, there are no zone-specific monitoring wells in the Basin. This Project would provide a second set of clustered wells to monitor the water-bearing zones of the Basin. These data would be used to facilitate water supply planning and development and implementation of the Basin's Groundwater Sustainability Plan.

## 1.6 PROJECT APPROVALS

Project implementation will likely require a conditional use permit/coastal development permit from the City of Carpinteria to authorize construction and operation of the proposed monitoring wells.

## 1.7 MITIGATION MONITORING PLAN

Pursuant to California Resources Code Section 21081.6, a Mitigation Monitoring Plan will be developed to ensure the implementation of mitigation measures necessary to reduce or eliminate identified significant impacts. The Plan will be reviewed and adopted by the CVWD in conjunction with the findings required under CEQA.

## 1.8 ADOPTION OF THE FINAL MITIGATED NEGATIVE DECLARATION

The Draft MND will be circulated for review by responsible agencies and interested members of the public for a minimum 30-day period. Following the public review period, the CVWD will prepare responses to all comments received during the review period. Following the end of the review period, a Final MND will be prepared, and will be comprised of the Draft MND and any changes made in response to comments received during circulation of the Draft MND and responses to comments. At the time the Project is approved, the mandated CEQA Findings and a Mitigation Monitoring Plan will be adopted. The CVWD is the lead agency and has the responsibility of determining the adequacy of the MND pursuant to CEQA.

## 1.9 PREPARERS OF THE INITIAL STUDY

This document was prepared for the CVWD by Matt Ingamells, Rachael Letter and Lucas Bannan of Padre Associates, Inc.

# 2.0 PROJECT DESCRIPTION

The proposed Carpinteria Valley Water District's (CVWD) El Carro Park Groundwater Monitoring Project (Project) is comprised of up to three groundwater wells to be used to monitor groundwater elevations and water quality within the Carpinteria Groundwater Basin.

## 2.1 WELL DESCRIPTION

The individual boreholes for each of the wells would be about 12.75-inches in diameter. The actual depths of the wells would not be known until the pilot hole for the deepest one has been drilled and logged; however, the Project hydrogeologist estimates that the completed wells would be constructed to the following approximate depths: 1,050 feet, 800 feet, and 350 feet. The pilot hole, which would then be completed as the deepest monitoring well, is expected to be drilled to about 1,200 feet. No above-ground structures are proposed.

The wells would be completed with a 3-inch diameter well casing, bentonite or cement annular seal, gravel pack within the annulus (area between the borehole and casing) and 3-inch diameter well screen. The tops of the wells would be covered by watertight, locking manholes, approximately 12-inches in diameter, constructed flush with the ground surface. The well casings would also be provided watertight, locking well caps for added protection and security.

## 2.2 CONSTRUCTION

The wells would be constructed using a conventional water/mud drilling rig and ancillary equipment, including a pipe trailer, mud tank, fluid tank and cuttings bin which would be temporarily located on-site. The proposed well construction work area would be approximately 0.6 acres. A preliminary drill site layout plan is provided as Figure 2. No above-ground earth movement is proposed as part of the Project. It is estimated that a combined volume of approximately 72 cubic yards of drill cuttings would be generated, which would be removed from the site and transported to a legal disposal facility. The purpose and features of required well construction equipment are described as follows.

### 2.2.1 Drill Rig

The drill rig would be mounted on a heavy-duty truck and erected on-site using truck-mounted hydraulics. The drill rig would be provided drilling mud from the mud tank, and drill pipe from the pipe trailer.

### 2.2.2 Mud Tank

Drilling would be accomplished using drilling mud. The mud would be pumped down the drill pipe, then flow into the borehole through the drill bit, and return to the surface up the annulus of the drilled hole. The mud serves two very important purposes. First, it cools and lubricates the drill bit to preserve the integrity of the bit. Secondly, it carries drilled earth materials back to the surface. At the surface, the mud would be discharged into the mud tank. As such, the mud tank serves as a reservoir for the drilling fluids, and also allows for the 'cleaning' of the mud, that is the removal of solids (sand/clay/silt) that are drilled and carried up the borehole.

The solids are removed by filtering through what is called a shaker (a screen that vibrates aggressively), through natural settling in the tank, and through centrifuges that remove the really fine materials that are removed by the screen as it is too light to settle. The shaker and the centrifuges (called sand cones) are part of the mud tank. The tanks usually have internal baffles to facilitate settling. Finally, the mud tank allows for mixing of additional fluid, which is needed as drilling progresses deeper, and more mud volume is needed. A mud tank is usually about 18 feet long, 7 feet wide, and 5 feet high.

### 2.2.3 Cuttings Bin

As discussed above, the drilling fluid would be continuously cleaned. Most of the material is removed by the shaker screen and the sand cones. Material from the shaker and cones (cuttings) falls into a chute. From the chute, the cuttings would be collected by a hopper mounted on a small forklift and transported to the cuttings bin. The cuttings bin would be delivered and placed by a tank service company, which would come to the site when the bin is full, and haul the entire bin away, replacing it with another empty one. The cuttings bin is usually about 32 feet long, 7 feet wide, and 4 feet high.

### 2.2.4 Pipe Trailer

The pipe trailer is a flat trailer for the movement and handling of pipe; drill pipe, tremie pipe (small diameter pipe used to place gravel and concrete down the hole when building the well), and well casing pipe. The pipe trailer may be a truck with a flat bed, usually with a water tank underneath. The pipe trailer, when needed is placed back-to-back with the drill rig, so that the drill rig can attach onto and pick up the various types of pipe. This is the most ideal and safest arrangement, which results in a direct lift in one direction (up and towards the rig), because the pipe (drill pipe and casing especially) is quite heavy, so lifting it from the side is trick and can be quite dangerous. The Project site planning allows for the safe, direct orientation of the pipe trailer (back-to-back with the rig). The pipe trailers vary in length, but generally, are about 40 feet long, 8 feet wide, and 4 to 5 feet high (to the bed).

### 2.2.5 Fluid Tank

The fluid tank is used to temporarily contain fluids that are generated during the drilling process. Under certain drilling conditions (i.e. drilling through heavy clay), the drilling fluid becomes too thick which makes it difficult to pump and causes it to lose some of its functionality (harder to clean). When this occurs, it is necessary to ‘thin’ the mud. This is done by removing a volume of mud from the system (pumping it into the fluid tank) and adding water and drilling fluid additives (either bentonite clay or polymeric fluid mixtures).

The fluid tank is also needed when the well is constructed. After drilling the hole for the well is completed, the pipe would be removed, and the borehole filled with drilling mud remains. Into that borehole, the well materials are placed; the casing, the gravel pack, and cement grout. Gravel pack is a sand/fine gravel mixture that fills the annulus between the casing and the borehole wall. It stabilizes the borehole and acts as a filter to water that moves from the aquifer into the well.

Cement grout would be used to seal other parts of the annulus which either isolates aquifer zones from one another or provides a seal that prevents contaminants at the surface from entering the well. The grout seal that goes all the way to the ground surface is called the 'sanitary seal' for that reason. As gravel pack and cement grout is pumped into the annulus, the drilling fluids that filled up the hole prior to that are displaced. They are pumped into the fluid tank for temporary storage.

Finally, the fluid tank would be used to contain and temporarily store the initial development fluids. After the casing, the gravel pack, and the cement grout are in place, dirty fluid would remain within the casing and within the pore spaces of the gravel pack. These fluids would be removed from the well through a process called airlifting/airlift pumping and routed to the fluid tank. The fluid tank would remain in place during the course of the Project and emptied when needed using vacuum trucks. At the end of the Project, the tank would be emptied by this manner, cleaned, and removed from the site. The fluid tank is generally 32 feet long, 8 feet wide, and 10 feet high, and are commonly known as Baker tanks. Fluids removed from the tanks are hauled to and disposed at a legal disposal facility.

### 2.2.6 Restoration

Portions of El Carro Park affected by well construction activities would be restored, including restoration of pre-project topography (such as filling tire ruts) and replacement of turfgrass and any affected irrigation lines and sprinkler heads.

### 2.2.7 Schedule

It is estimated that approximately six weeks would be required to complete proposed well construction once equipment is mobilized to the site. Well construction would be scheduled to avoid predicted storm events. During this six-week period, there would be three periods during which 12-hour/day construction activity (drilling and well construction) would be required (7 a.m. to 7 p.m.). For the deep, intermediate, and shallow monitoring wells, the 12-hour operational periods are estimated to be six, four, and three days, respectively.

## 2.3 OPERATION

Once constructed, the monitoring wells would be incorporated into, and would become an extremely important component of, the Carpinteria Groundwater Sustainability Agency's Groundwater Sustainability Plan. As part of the Plan, samples are collected bi-annually from selected wells throughout the basin and analyzed for an array of water quality constituents. The Plan also includes the measurement of groundwater levels at selected wells on a bi-monthly basis. Each of the proposed monitoring wells would be included in the groundwater quality and water level monitoring elements of the Plan.

# 3.0 ENVIRONMENTAL IMPACT ANALYSIS

This section provides an assessment of the potential environmental impacts associated with the Project. The analysis is organized by environmental issue area (e.g., aesthetics, agricultural resources, air quality). Each issue area begins with a checklist, which identifies criteria that have been used to assess the significance or insignificance of each potential impact. The checklists used in this Initial Study were taken from the 2021 update to the State CEQA Guidelines prepared by the Association of Environmental Professionals. The checklists also indicate the conclusions made regarding the potential significance of each impact. Brief explanations of each conclusion are provided after the checklists.

Impact classifications used in the checklists are the following:

- **Potentially Significant Impact.** An impact that could be significant, and requires further study in an Environmental Impact Report (EIR).
- **Less than Significant Impact with Mitigation.** An impact that is potentially significant, but can feasibly be mitigated to a less than significant level with measures identified in the Initial Study.
- **Less than Significant Impact.** An impact that would not be significantly adverse.
- **No Impact.** Applied when the Project would not result in any impact to a specific issue area.

## 3.1 AESTHETICS

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **a.** Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☐ | ☒ |
| **b.** Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☐ | ☒ |
| **c.** In non-urban areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | ☐ | ☐ | ☒ | ☐ |
| **d.** Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☐ | ☒ |

### 3.1.1 Setting

As described in the City's General Plan/Coastal Land Use Plan, the City of Carpinteria is afforded views of the Santa Barbara Channel and Santa Ynez Mountains, including outstanding panoramic views of the Channel Islands. Other features contributing to the City's visual environment include marshes, creeks, bluffs, beaches, parks and agriculture. The Carpinteria Bluffs are considered an important viewing area, including trails along the bluffs. In addition, broad unobstructed views from the nearest public street to the ocean (including Linden Avenue, Bailard Avenue, Carpinteria Avenue and U.S. Highway 101) are considered important visual resources by the City. Views of the mountains from public spaces such as parks are also protected. Preservation of these views is important to the City to establish community identity and provide visual access to landforms, urban forms and environments that are familiar to local residents and unique to the City.

Currently, there are no designated scenic roadways in the City. Foothill Road (State Route 192) is not listed as eligible for designation as a scenic highway by the California Department of Transportation.

The Project site is within El Carro Park, which consists of two connected recreational areas located between Foothill Road and El Carro Lane. The affected portion of El Carro Park is composed of an open grassy area with landscaping trees along the north, west and south perimeter (see Figure 3). Public views of the Park are limited to Park users and motorists and bicyclists on Foothill Road; however, views from Foothill Road are mostly obscured by intervening trees.

### 3.1.2 Environmental Thresholds

Projects that would impair public views from designated open space (public easements and right-of-way), roads, or parks to significant visual landmarks or scenic vistas (Pacific Ocean, downtown skyline, mountains, waterways) are considered to have a significant aesthetics impact. To meet this significance threshold, one or more of the follow conditions must apply:

- The project would substantially impair a view through a designated public view corridor as shown in an adopted community plan, the General Plan or the Coastal Plan. Minor view blockages would not be considered to meet this condition. In order to determine whether this condition has been met, consider the level of effort required by the viewer to retain the view.
- The project would cause "substantial" view impairment of a public resource (such as the ocean) that is considered significant by the applicable community plan.
- The project exceeds the allowed height or bulk regulations, and this excess caused unnecessary view impairment.
- The project would have an architectural style or use building materials in stark contrast to adjacent development, where the adjacent development follows a single or common architectural theme.

- The project would result in the physical loss or degradation of a community identification symbol or landmark (e.g., a stand of trees, coastal bluff, historic landmark) which is identified in the General Plan, applicable community plan or Local Coastal Program.
- The project is located in a highly visible area (e.g., adjacent to an interstate highway) and would strongly contrast with the surrounding environment through excessive bulk, signage, or architectural projections.
- The project would have a cumulative effect by opening up a new area for development, which will ultimately cause "extensive" view impairment. View impairment would be considered "extensive" when the overall scenic quality of a resource is changes, for example, from an essentially natural view to a largely man-made appearance.

### 3.1.3 Impact Analysis

**a.** The proposed Project does not include any above-ground components and would not be visible from any scenic vistas or City designated scenic resource areas.

**b.** The proposed Project would not adversely affect public views of scenic resources or designated scenic roadways.

**c.** Although a small amount of tree trimming would be required to accommodate the drilling equipment and proposed sound wall mitigation (see Figure 4), trees would not be removed and affected trees represent only a small fraction of those present at El Carro Park. Proposed tree trimming would not affect trees screening work areas from Foothill Road. Overall, the proposed Project would not significantly degrade the visual character or quality of public views of or from the Park.

**d.** The proposed Project does not include any glare producing surfaces or new lighting.

### 3.1.4 Mitigation Measures and Residual Impacts

None required.

## 3.2 AGRICULTURAL AND FORESTRY RESOURCES

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **a.** Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ☒ |
| **b.** Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ |
| **c.** Conflict with existing zoning for, or cause rezoning of forest land, timberland or timberland zoned Timberland Production? | ☐ | ☐ | ☐ | ☒ |

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **d.** Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |
| **e.** Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |

### 3.2.1 Setting

The California Department of Conservation (2018) classifies the Project site as Urban and Built-Up Land. Areas immediately north and east of the Project site are located within Santa Barbara County, have agricultural zoning (AG-I-10) and currently support plant nurseries.

### 3.2.2 Environmental Thresholds

The following thresholds are used to determine the significance of impacts to agricultural resources:

- Development proposed on any property five acres or greater in size with a Prime Agricultural Soils designation may represent a significant environmental impact.
- Development proposed on any property in an Agricultural Preserve would represent a significant environmental impact.
- Development proposed on any property which in the past five years has been in agricultural production and which is agriculturally zoned may represent a significant environmental impact.
- Development of 10 or more acre non-prime parcels may be significant due to historical use or surroundings (conversion may make adjacent agricultural land ripe for conversion).

### 3.2.3 Impact Analysis

**a.** The Project would not result in the conversion of farmland to non-agricultural use and no loss of farmland soils would occur.

**b.** The Project would not conflict with any agriculturally zoned areas or any Williamson Act contracts.

**c.** The proposed monitoring wells would not conflict with any areas zoned for forestry and would not cause any forest land or timberlands to be rezoned.

**d.** The proposed Project would not result in the loss or conversion of forest land to non-forest uses.

**e.** Projects that involve public infrastructure (e.g., roads, power, water, sewer) in a previously undeveloped area may lead to inducement of population growth and associated conversion of agricultural lands or forest lands. The proposed Project is limited to the construction of monitoring wells which would not be used to produce additional potable water that could support new development or population growth.

### 3.2.4 Mitigation Measures and Residual Impacts

None required.

## 3.3 AIR QUALITY

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

### 3.3.1 Setting

**Climatological Setting**. The Project area is characterized by cool winters and moderate summers typically tempered by cooling sea breezes. Summer, spring and fall weather is generally a result of the movement and intensity of the semi-permanent high pressure area located several hundred miles to the west. Winter weather is generally a result of the size and location of low pressure weather systems originating in the North Pacific Ocean.

The Project site is located in the City of Carpinteria, where the maximum average monthly temperature is 76 degrees Fahrenheit ($^{o}$F) in August, and the minimum average monthly temperature is 46 $^{o}$F in January. The average monthly maximum precipitation is 3.80 inches in February, and the average monthly minimum is 0.02 inches in July, with an average annual precipitation of 17.35 inches. Air quality in the County is directly related to emissions and regional topographic and meteorological factors.

**Criteria Pollutants**. Criteria air pollutants are those contaminants for which State and Federal ambient air quality standards have been established for the protection of public health and welfare. Criteria pollutants include ozone ($O_3$) carbon monoxide (CO), oxides of nitrogen ($NO_X$), sulfur dioxide ($SO_2$), particulate matter with a diameter of 10 microns or less ($PM_{10}$) and particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$).

**Regulatory Overview**. Air pollution control is administered on three governmental levels. The U.S. Environmental Protection Agency (USEPA) has jurisdiction under the Clean Air Act, the California Air Resources Board (CARB) has jurisdiction under the California Health and Safety Code and the California Clean Air Act, and local districts (Santa Barbara County Air Pollution Control District [SBCAPCD]) share responsibility with the CARB for ensuring that all State and Federal ambient air quality standards are attained.

California is divided geographically into air basins for the purpose of managing the air resources of the State on a regional basis. An air basin generally has similar meteorological and geographic conditions throughout. The Project site is situated in the South Central Coast Air Basin, which encompasses the counties of Ventura, Santa Barbara and San Luis Obispo. The USEPA, CARB, and the local air districts classify an area as attainment, unclassified, or nonattainment depending on whether or not the monitored ambient air quality data shows compliance, insufficient data available, or non-compliance with the ambient air quality standards, respectively.

**Air Quality Planning**. The Federal government first adopted the Clean Air Act (CAA) in 1963 to improve air quality and protect citizens' health and welfare, which required implementation of the national ambient air quality standards. These standards are revised and changed when scientific evidence indicates a need. The CAA also requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The CAA Amendments of 1990 added requirements for states with non-attainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies.

The USEPA has been charged with implementing Federal air quality programs, which includes the review and approval of all SIPs to determine conformation to the mandates of the CAA and its amendments, and to determine whether implementation of the SIPs will achieve air quality goals. If the USEPA determines that a SIP is inadequate, a Federal Implementation Plan that imposes additional control measures may be prepared for the non-attainment area. Failure to submit an approvable SIP or to implement the plan within the mandated time frame may result in application of sanctions to transportation funding and stationary air pollution sources within the air basin.

A 2001 Clean Air Plan was prepared by the SBCAPCD to address the requirements of the CAA to demonstrate how the County will maintain attainment of the Federal 1-hour ozone standard. The Federal 1-hour ozone standard was revoked in 2005, and an 8-hour ozone standard was implemented. The County was found to be in attainment of the 8-hour ozone standard and a 2007 Clean Air Plan was prepared to demonstrate maintenance of this standard.

The 2019 Ozone Plan (2019 Plan) is the ninth triennial update to the initial State Air Quality Attainment Plan adopted by the SBCAPCD Board of Directors in 1991 (other updates were done in 1994, 1998, 2001, 2004, 2007, 2010, 2013, and 2016). Each of the plan updates have implemented an "every feasible measure" strategy to ensure continued progress toward attainment of the state ozone standards. Since 1992, Santa Barbara County has adopted or amended more than 25 control measures aimed at reducing emissions from stationary sources of air pollution. These measures have substantially reduced ozone precursor pollutants, which includes $NO_x$ and reactive organic compounds (ROC).

Along with the implementation of Statewide measures, the SBCAPCD's control measure strategy has successfully improved the County's air quality as indicated by the declining number of State 1-hour and 8-hour ozone exceedances that have occurred in the County since 1990. One-hour ozone standard exceedances have decreased from a high of 37 days in 1990 and 1991 to zero days in 2005, 2010, 2012, 2013, 2015 and 2016. The number of 8-hour ozone exceedance days range from a high of 97 days during 1991 to zero days in 2018. These significant improvements in air quality have occurred despite a 20 percent increase in County-wide population.

Santa Barbara County had three or fewer exceedances of the State 8-hour ozone standard, and the County was designated as nonattainment-transitional in April 2017. This designation means that the County is getting close to attaining the standard and SBCAPCD must determine whether additional control measures are necessary to accomplish expeditious attainment of the State standard.

In February 2021, CARB took action at a public hearing to change Santa Barbara County's designation from attainment to nonattainment for the State ozone standards. This change was based on data measured at multiple locations in the County for the 3-year period from 2017 to 2019, and it is expected to be finalized by the California Office of Administrative Law later in 2021.

**Applicable Regulatory Requirements**. The Portable Equipment Registration Program (PERP) establishes a uniform State-wide program to regulate portable engines and portable engine-driven equipment units. The term "portable" is defined as not residing at a location for more than 12 consecutive months. Once registered in the PERP, engines and equipment units may operate throughout California without the need to obtain individual permits from local air districts. To be eligible for the PERP, an engine must be certified to the current emission tier (non-road, on-highway or marine). The PERP does not apply to self-propelled equipment but would apply to engines used in drilling equipment.

SBCAPCD rules and regulations applicable to activities to be conducted under the proposed Project are limited to potential nuisances (typically dust and odors):

- Rule 303 (Nuisance): A person shall not discharge from any source whatsoever such quantities of air contaminants or other material in violation of Section 41700 of the Health and Safety Code which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety or any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.

**Air Quality Monitoring**. The ambient air quality of Santa Barbara County is monitored by a network of 18 stations. The nearest air quality monitoring station to the Project site is the Carpinteria station, located approximately 3.1 miles to the east. The nearest air quality monitoring station providing particulate matter data is the Santa Barbara station, located approximately 10.3 miles to the west of the Project site. As shown in Table 1, State and Federal 8-hour ozone standards were exceeded on three days at the Carpinteria station from 2018 through 2020. Concentrations of $PM_{10}$ and $PM_{2.5}$ monitored at the Santa Barbara station periodically exceed the State standards do not typically exceed Federal standards.

**Table 1. Summary of Ambient Air Pollutant Data Collected at the Carpinteria and Santa Barbara Monitoring Stations**

| Parameter | Standard | Year | | |
|---|---|---|---|---|
| | | 2018 | 2019 | 2020 |
| **Ozone – parts per million (ppm): Carpinteria** | | | | |
| Maximum 1-hr concentration monitored | | 0.084 | 0.086 | 0.103 |
| Number of days exceeding CAAQS | 0.09 | 0 | 0 | 2 |
| Maximum 8-hr concentration monitored | | 0.070 | 0.071 | 0.086 |
| Number of days exceeding 8-hour ozone NAAQS & CAAQS | 0.070 | 0 | 1 | 2 |
| **$PM_{10}$ – micrograms per cubic meter ($\mu g/m^3$): Santa Barbara** | | | | |
| Maximum 24-hour average sample (California sampler) | | 128.3 | 72.1 | 84.0 |
| Number of samples exceeding CAAQS | 50 | 11 | 4 | 11 |
| Number of samples exceeding NAAQS | 150 | 0 | 0 | 0 |
| **$PM_{2.5}$ – micrograms per cubic meter ($\mu g/m^3$): Santa Barbara** | | | | |
| Maximum 24-hour sample | | 37.7 | 22.5 | 63.0 |
| Number of samples exceeding NAAQS | 35 | 1 | 0 | 6 |

**Sensitive Receptors**. Some land uses are considered more sensitive to air pollution than others due to population groups and/or activities involved. Sensitive population groups include children, the elderly, the acutely ill and the chronically ill, especially those with cardio-respiratory diseases. Residential areas are also considered to be sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present.

Recreational land uses may be considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public.

Residential land uses occur immediately west and south of the Project site. Users of El Carro Park may also be considered sensitive receptors.

### 3.3.2 Environmental Thresholds

The CVWD typically uses significance thresholds developed by the SBCAPCD, as documented in Scope and Content of Air Quality Sections in Environmental Documents (updated 2017) which are listed below. However, these thresholds are not applicable to short-term construction emissions. Due to the temporary, short-term nature of construction emissions, the SBCAPCD has not developed emissions-based significance thresholds but requires standard emissions reduction measures be implemented during construction to reduce exhaust emissions and fugitive dust generation.

- Emits (from all sources, both stationary and mobile) greater than the daily trigger for offsets in the SBCAPCD New Source Review Rule (240 pounds per day for $NO_x$ or ROC; 80 pounds per day for $PM_{10}$).
- Emits greater than 25 pounds per day of $NO_x$ or ROC (motor vehicle trips only).
- Causes or contributes to a violation of a State or Federal air quality standard (except ozone).
- Exceeds the health risk public notification thresholds (10 excess cancer cases in a million hazard index of 1.0 for non-cancer risk).
- Is inconsistent with adopted State and Federal Air Quality Plans (2019 Ozone Plan).

The SBCAPCD typically suggests that lead agencies use Rule 202 emissions triggers to determine the significance of construction emissions from larger projects:

- Construction emissions associated with a stationary source requiring a permit from SBCAPCD exceeding 25 tons of any pollutant (except carbon monoxide) in a 12-month period.

### 3.3.3 Impact Analysis

**a.** Projects that cause local populations to exceed population forecasts in the Santa Barbara County Air Pollution Control District's (SBCAPCD) 2019 Ozone Plan may be inconsistent, as exceeding population forecasts can result in the generation of emissions beyond those which have been projected in the 2019 Ozone Plan. The proposed Project would not provide a new source of potable water or otherwise induce land development or population growth. Overall, the proposed Project would have no effect on implementation of the 2019 Ozone Plan and progress towards attainment of ozone air quality standards.

**b.** The proposed Project would not result in any additional water production, storage or distribution activities that may generate air pollutant emissions. Well construction activities would generate temporary air pollutant emissions, primarily exhaust emissions from heavy-duty trucks, worker vehicles and heavy equipment (drill rig, mud pump, hydraulic power unit, forklift). Due to the temporary, short-term nature of construction emissions, the SBCAPCD has not developed emissions thresholds, but requires standard emissions reduction measures be implemented during construction to reduce exhaust emissions and fugitive dust generation.

These standard SBCAPCD emissions reduction measures would be implemented as applicable during well construction and are listed in Section 3.3.4. Table 2 provides a comparison of estimated construction emissions to the SBCAPCD Rule 202 emissions trigger. Construction-related air pollutant emissions are considered a less than significant impact to air quality.

Air pollutant emissions associated with operation of the wells would be generated by a small electrical generator used to operate a pump to collect groundwater samples and a light-duty truck used by CVWD staff. Table 3 provides an estimate of operational emissions as compared to the SBCAPCD thresholds. Well operation air pollutant emissions are considered a less than significant impact to air quality.

**Table 2. Well Construction Air Pollutant Emissions Summary**

| Scenario | $NO_x$ | ROC | $PM_{10}$ |
|---|---|---|---|
| Total emissions (tons) | 0.11 | 0.01 | 0.03 |
| *SBCAPCD Rule 202 threshold* | *25* | *25* | *25* |

**Table 3. Well Operation Air Pollutant Emissions Summary**

| Scenario | $NO_x$ | ROC | $PM_{10}$ |
|---|---|---|---|
| Peak day: total (pounds) | 0.09 | 0.11 | 0.07 |
| *SBCAPCD CEQA threshold* | *240* | *240* | *80* |
| Peak day: motor vehicles only (pounds) | 0.01 | <0.01 | <0.01 |
| *SBCAPCD CEQA threshold* | *25* | *25* | -- |

**c.** Residences located near the Project site may be considered sensitive receptors. Well drilling operations would generate fugitive dust and equipment exhaust emissions. Project-related exposure of these sensitive receptors to air pollutants would be minimal due to the following factors:

- Emissions would be short-term (six weeks).

- Emissions would be low in magnitude due to the small amount of equipment required, and implementation of emissions reduction measures recommended by the SBCAPCD (see Section 3.3.4).
- The ambient air quality in the region is generally very good.

Therefore, impacts to sensitive receptors would be less than significant.

**d.** The proposed Project would not result in the generation of any new or modified odors.

### 3.3.4 Mitigation Measures and Residual Impacts

Although construction-related air pollutant emissions would not have a significant impact on air quality, the following standard construction mitigation measures provided in the SBCAPCD's *2017 Scope and Content of Air Quality Sections in Environmental Documents* would be implemented as applicable.

- During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible.
- Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.
- If importation, exportation and stockpiling of fill material is involved, soil stockpiles that may generate dust shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting dust-producing material to and from the site shall be tarped from the point of origin.
- If wet soil or mud is present, gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.
- After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise treated so that dust generation is minimized.
- The contractor shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the SBCAPCD prior to grading/building permit issuance and/or map clearance.
- All portable diesel-powered construction equipment shall be registered with the state's portable equipment registration program OR shall obtain an SBCAPCD permit.

- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-Use Off-Road Diesel Vehicles (Title 13, California Code of Regulations (CCR), §2449), the purpose of which is to reduce $NO_x$ emissions, diesel particulate matter (DPM), and other criteria pollutant emissions from in-use off-road diesel-fueled vehicles. Project-related mobile equipment shall comply with the State Off-Road Regulation.
- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-Use (On-Road) Heavy-Duty Diesel-Fueled Vehicles (Title 13, CCR, §2025), the purpose of which is to reduce DPM, $NO_x$ and other criteria pollutants from in-use (on-road) diesel-fueled vehicles. On-road heavy-duty trucks shall comply with the State On-Road Regulation.
- All commercial off-road and on-road diesel vehicles are subject, respectively, to Title 13, CCR, §2449(d)(3) and §2485, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.
- Diesel engines used to power off-road mobile equipment shall be certified to meet State Tier 3 or higher emissions standards.

## 3.4 BIOLOGICAL RESOURCES

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **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? | ☐ | ☐ | ☐ | ☒ |
| **b.** Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☐ | ☒ |
| **c.** Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☐ | ☒ |
| **d.** Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☐ | ☐ | ☒ |

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **e.** Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☒ | ☐ |
| **f.** Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ☒ |

### 3.4.1 Setting

The affected (northwestern) portion of El Carro Park supports a turfgrass area, with Aleppo pine (*Pinus halepensis*), western sycamore (*Platanus racemosa*) and maple trees (*Acer* sp.) planted along the northern, western and southern perimeter. The Project site consists of a mowed, weedy area located between the turfgrass of El Carro Park and landscaping trees planted along the western park perimeter (see Figure 3). A wildlife survey was conducted at the Project site on the morning of September 14, 2021. Species observed were limited to American crow (~15), Eurasian collared dove (~10), Anna's hummingbird, Townsend's warbler, starling, western gull and black phoebe.

Based on a review of the California Natural Diversity Data Base, the following special-status plant or wildlife species have been reported within two miles of the proposed monitoring well site:

- Late-flowered mariposa lily (*Calochortus fimbriatus*): considered a Santa Barbara County rare plant by the Santa Barbara Botanic Garden (SBRP), rare or endangered in California and elsewhere (California Native Plant Society [CNPS] List 1B)
- White-veined monardella (*Monardella hypoleuca* ssp. *hypoleuca*): CNPS List 1B
- Coulter's saltbush (*Atriplex coulteri*): SBRP, CNPS List 1B
- Nuttall's scrub oak (*Quercus dumosa*): SBRP, CNPS List 1B
- Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*): CNPS List 1B
- Saltmarsh birds-beak (*Chloropyron maritimum* ssp. *maritimum*): Federal Endangered, State Endangered, SBRP
- Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*): SBRP, CNPS List 1B
- Monarch butterfly (*Danaus plexippus*): Federal Candidate for listing as endangered
- Wandering skipper (*Panoquina errans*): International Union for the Conservation of Nature-Near Threatened
- Crotch bumble bee (*Bombus crotchii*): State Candidate for listing as endangered

- Globose dune beetle (*Coelus globosus*): International Union for the Conservation of Nature-Vulnerable
- Tidewater goby (*Eucyclogobius newberryi*): Federal Endangered
- California red-legged frog (*Rana draytonii*): Federal Threatened, California Species of Special Concern (CSC)
- California legless lizard (*Anniella* spp.): CSC
- Belding's savannah sparrow (*Passerculus sandwichensis beldingi*): State Endangered
- Western snowy plover (*Charadrius nivosus nivosus*): Federal Threatened, CSC

These species primarily occur along the beach, within the Carpinteria Salt Marsh or along Carpinteria Creek. The Project site does not provide suitable habitat for special-status species, and none were observed during the biological survey of the site.

### 3.4.2 Environmental Thresholds

The CVWD has not adopted significance thresholds for impacts to biological resources. However, impacts that would substantially adversely affect resources identified in the checklist questions are typically found to be significant.

### 3.4.3 Impact Analysis

**a.** Based on a review of the California Natural Diversity Data Base, special-status plant or wildlife species have not been reported in the vicinity of the proposed monitoring wells. The Project site and surrounding areas are developed and do not support native vegetation or habitat for special-status species reported from the region. Therefore, no impact to these species would occur as a result of Project implementation.

**b.** Riparian habitat occurs in Carpinteria Creek, approximately 0.7 miles southeast of the Project site. Designated critical habitat for Ventura marsh milkvetch is located 1.0 miles southwest of the Project site. The proposed Project would have no effect on these habitats.

**c.** Review of the U.S. Fish & Wildlife Service National Wetlands Inventory indicates wetlands occur in a tributary of Franklin Creek located approximately 400 feet north of the Project site. The proposed Project would not adversely affect these wetlands.

**d.** The Project site does not link two habitat areas or provide any habitat or cover that may facilitate fish or wildlife movement. No impacts to fish or wildlife migration would occur as a result of Project implementation.

**e.** The City of Carpinteria's Environmental Thresholds Manual indicates that all native trees should be considered biologically valuable, and removal of 10 percent or more of the trees of biological value on a site is considered a potentially significant impact. Aleppo pine, western sycamore and maple trees have been planted at El Carro Park and are located adjacent to the proposed well construction work area. Although planted at the Park, western sycamore is a native tree species. No trees would be removed as part of the project; however, approximately four western sycamore trees would be trimmed to accommodate the proposed sound wall mitigation. The proposed Project would not conflict with any City policies protecting biological resources.

**f.** The Project site is not subject to a habitat conservation plan or other conservation plan. Therefore, no adverse impacts related to compliance with habitat conservation plans are anticipated.

### 3.4.4 Mitigation Measures and Residual Impacts

None required.

## 3.5 CULTURAL RESOURCES

| Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **a.** Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines? | ☐ | ☐ | ☐ | ☒ |
| **b.** Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines? | ☐ | ☐ | ☐ | ☒ |
| **c.** Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☐ | ☐ | ☒ |

### 3.5.1 Setting

**Ethnographic Context**. The Project site is located within the ethnographic territory of the Chumash, who inhabited an area that extended from Morro Bay to Malibu along the coast (Kroeber, 1925), and east to the Carrizo Plain. The Chumash have been divided into several geographic groups, each associated with a distinct language dialect (Hoover, 1986). The Chumash living along the portion of the Santa Barbara County coast extending from Point Conception to Punta Gorda formed the Barbareño dialect group of the Chumash language family (Golla, 2007). This group was named for their association with the Spanish mission of Santa Barbara, founded in 1786. At the time of Spanish contact in A.D. 1542, the Barbareño population was concentrated most heavily near the mouths of canyons. Major Barbareño Chumash villages include *sukuw* at Rincon Point, *misopsno* at Carpinteria Creek, *helo?* at Mescaltitlan Island – Goleta Slough, *syuxtun* at Burton Mound, and *mikiw* and *kuyamu* at Dos Pueblos.

**Historic Period Context**. Junípero Serra founded Mission Santa Barbara, approximately 12.5 miles west-northwest of the Project site, on December 4, 1786. The mission was founded four years after the Royal Presidio had been constructed as a military garrison and seat of civil government in the middle section of the present limits of the City of Santa Barbara (Hawley, 1987). Newly baptized Chumash provided almost all the labor to construct and maintain the missions, which soon produced surplus amounts of wheat, beans, corn, cattle, and sheep for trade (Barter et al., 1995). Most of the missions were similar in design and consisted of a church and living quarters for the priests, soldiers, and baptized Chumash.

As a result of the Spanish influence, the protohistoric material and social elements of the Chumash culture were severely disrupted. Traditional lifeways were either barred outright or made difficult to practice, as access to certain resources, such as steatite and shellfish, for example, became restricted. From the time of European contact, the Chumash cultural tradition changed dramatically, particularly because of religious indoctrination within the Native American communities. By 1803, the surrounding Chumash villages were barely inhabited (Hoover, 1990).

In 1821 Mexico declared independence from Spain; a year later, California became a Mexican Territory. After the secularization of the missions in 1834, lands were gradually transferred to private ownership via a system of land grants (Hoover, 1990). Specifically, the Project site was once included within Rancho el Rincon (Arellanes), a 4,460-acre land grant awarded by Governor José Figueroa to Jose Teodoro Arellanes in 1835 (Hoffman, 1862). The grant extended along the Pacific coast near the Ventura County and Santa Barbara County line, encompassing Rincon Point, Rincon State Beach, and present-day La Conchita.

By 1830 the nearby town of Santa Barbara had attracted 400 settlers and contained around 60 adobe houses located randomly, due to the absence of a formal street grid system. Most of these residences were constructed with tile roofs, but many had only earthen floors. These residence structures were occupied by Spanish, Mexican, and Anglo-American pioneers. Secularization of the Missions in 1834 initiated the Mexican Period and was characterized by a continuation of the Spanish practice of granting large ranchos to prominent claimants (Avina, 1973).

A dramatic population increase during the Gold Rush caused the demand (and price) for California livestock to soar (Barter et al., 1995). The severe drought from 1862 to 1864 was devastating for the cattle industry. By 1869, emphasis was on dairy cattle, sheep herding, and crop farming. Many rancheros who survived financial ruin from the drought and the dramatic plunge in cattle prices, would eventually succumb to debts associated with ongoing legal challenges resulting from the Land Act of 1851. Often times, large land holders were unable to pay their property taxes and sold their land for as little as 25 cents per acre. New American settlers took advantage of depressed land prices, including Stephen Olmstead, a farmer who is regarded as the first American to settle in Carpinteria. Olmstead purchased the land west of Carpinteria Creek from various owners and began growing beans, grains, and potatoes (Gilbert, 2004).

During this period, the nearby town of Santa Barbara continued to expand. The use of adobe as the preferred construction material had largely been abandoned by 1860, in favor of more resilient materials such as brick and lumber. By 1870, pockets of Chinese, Italian, and German communities were established, often the product of local business enterprises. The transition from Mexican pueblo to American city saw the establishment of a new business district along State Street, between Gutierrez and Ortega Streets. In 1865, the first wharf was constructed in Santa Barbara, with a second, more substantial wharf that could accommodate larger ships constructed by John P. Stearns in 1872. These improvements reflected growing commerce in the city, with commodities arriving principally by sea.

In 1887, the Southern Pacific Railroad completed a link between Los Angeles and Santa Barbara, with the first depot in Santa Barbara constructed between Mason and Yanonali Streets (Myrick, 1987). Another depot was built in the Ellwood area in 1889. When the railroad was constructed through Carpinteria during the summer of 1887, the track was installed along mostly the lower elevations of the near-shore coastal bluffs and intruded within the southern portion of property owned by the locally prominent Bailard and Higgins families. With the arrival of the railroad, agricultural and industrial commodities could be transported in larger amounts and by more rapid means. A direct consequence of this an increased population in the Carpinteria Valley, reaching approximately 1,350 individuals by the end of the nineteenth century.

The discovery of oil during the early 1890s resulted in the drilling of numerous wells, and the J.C. Lillis Oil Plant was formed in Summerland immediately to the west of Carpinteria (Smith, 1990). During the last quarter of the nineteenth century, asphalt mining began in earnest. The Las Conchas Asphalt Mine, located east of Carpinteria Creek and approximately 0.25 mile west of the Project site, actively produced material for both local use and wider distribution during the late nineteenth century. Previous attempts to mine the asphalt at Las Conchas were made by the Crushed Rock and Asphaltum Company of San Francisco, who constructed the Alcatraz Refinery on a coastal bluff near the source. Products coming from the refinery were marketed as “Alcatraz Asphalt”. Gilbert (2004) notes that the name of the mine, Las Conchas (“The Shells”), refers to the large quantity of clam, mussel, and other marine shell overburden, six to eight feet deep, which needed to be removed prior to mining. This shell overburden, likely midden material associated with the former Chumash village of *mishopshnow* (Gilbert, 2004), was removed by hydraulic washing and dumped into the ocean (Crawford, 1896).

**Cultural Records Search**. Padre Associates ordered an archaeological records search from the Central Coast Information Center of the California Historical Resources Information System at the University of California, Santa Barbara on May 20, 2021. The records search included a review of all recorded historic-era and prehistoric archaeological sites within the Project site and a one-eighth mile radius, as well as a review of known cultural resource surveys and technical reports. Padre received the results on June 2, 2021. The records search revealed that there are no previously recorded cultural resources within the search radius. However, five cultural resource studies have been completed that included at least a portion of the record search area.

### 3.5.2 Environmental Thresholds

Section 15064.5 of the State CEQA Guidelines states that a substantial adverse change in the significance of a historical resource may have a significant effect on the environment. Adverse changes may include demolition, destruction, relocation or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired. For the purposes of this document, a substantial adverse change to a historically significant resource is considered a significant impact. Material impairment occurs when a project:

- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources;
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

A cultural resource shall be considered to be "historically significant" if the resource meets the criteria for listing on the California Register of Historic Resources (Public Resources Code Section 5024.1) including the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- 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
- Has yielded, or may be likely to yield, information important in prehistory or history.

### 3.5.3 Impact Analysis

**a.** The results of a cultural resources records search did not identify any historic resources within the Project site or an 1/8-mile search radius. The proposed Project does not involve the removal of any structures or other features that may be considered historic; therefore, impacts to historic resources are not anticipated.

**b.** The cultural resources records search did not identify any archeological resources within the Project site or an 1/8-mile search radius. Project-related ground disturbance would be limited to previously disturbed areas associated with the construction and maintenance of El Carro Park. Therefore, no archaeological resources would be affected.

**c.** The cultural resources records search did not identify any archeological sites that may contain human remains within the Project site or an 1/8-mile search radius. Project-related ground disturbance would be limited to previously disturbed areas associated with the construction and maintenance of El Carro Park. Therefore, no human remains would be disturbed.

### 3.5.4 Mitigation Measures and Residual Impacts

None required.

## 3.6 ENERGY

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

### 3.6.1 Setting

Energy is provided to the Project area in the form of electricity from Southern California Edison and natural gas from the Southern California Gas Company.

### 3.6.2 Environmental Thresholds

The CVWD has not adopted significance thresholds for energy-related impacts.

### 3.6.3 Impact Analysis

**a.** The proposed Project would consume non-renewable energy in the form of fuels for vehicles and equipment used to construct proposed monitoring wells. This energy use would not be wasteful, inefficient or unnecessary.

**b.** The proposed Project would not conflict with any State or local plan for renewable energy or energy efficiency.

### 3.6.4 Mitigation Measures and Residual Impacts

None required.

## 3.7 GEOLOGY AND SOILS

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

### 3.7.1 Setting

The Project site is located within the Transverse Ranges geomorphic province of southern California. The Transverse Ranges province is oriented generally east-west, which is oblique to the general north-northwest structural trend of California mountain ranges. The Transverse Ranges province extends from the Los Angeles Basin westward to Point Arguello and is composed of Cenozoic-to Mesozoic-age sedimentary, igneous, and metamorphic rocks. Near the Project site, the Santa Ynez Mountains and adjacent lowlands are comprised of sedimentary rocks and soil materials ranging in age from Cretaceous to Holocene.

Structural geology in the Carpinteria area consists of mountain, foothill, and low-lying coastal plain areas of generally south-dipping (and locally overturned north-dipping) bedrock units. Bedrock in the coastal plain and foothill areas are generally overlain by younger and older alluvium. The Carpinteria area generally contains a series of subparallel, east-west trending faults and folds that are the result of north-south compressional tectonics. The faults and folds roughly parallel the Santa Ynez Mountains and are present inland and offshore in the Santa Barbara Channel. Geology in the Project area consists of a low-lying coastal plain of Quaternary-age alluvium overlying a thick sequence of early Pleistocene-age to Tertiary-age sedimentary rocks.

The Project site is located on the coastal terrace and underlain by alluvium composed of Quaternary era floodplain deposits of silt, sand and gravel.

### 3.7.2 Environmental Thresholds

The CVWD has not adopted significance thresholds for geology and soils impacts. However, impacts that would result in substantial geologic hazards identified in the checklist questions are typically found to be significant.

### 3.7.3 Impact Analysis

**a.** The Project site is located within two miles of the Rincon Creek, Arroyo Parida and Shepard Mesa faults. However, none of these have been active during the Holocene period (last 11,700 years). The Project does not include any habitable structures that may increase the exposure of the public to seismic hazards. Engineering of the proposed monitoring wells would consider the seismic environment and would be designed and installed to be resistant to seismic-related damage, including liquefaction and seismic-induced landslides. The proposed Project would not increase the number of persons exposed to existing seismic hazards.

**b.** Due to the very small area of ground disturbance (about 0.1 acres) associated with installation of the proposed monitoring wells, soil erosion or loss of topsoil is not anticipated.

**c.** The Project site is not located in a subsidence zone. As such, the Project is not expected to generate impacts associated with land subsidence. See response a. for discussion of issues related to liquefaction and landslides.

**d.** The soil of the Project site has been mapped as Camarillo fine sandy loam (fine substratum) which considered to have a high shrink-swell potential (expansive) below six feet in depth. The proposed monitoring wells would be designed and installed to be resistant to expansion-related damage. Impacts to life or property are not anticipated.

**e.** Septic waste disposal systems are not proposed as part of the Project; therefore, no impacts would result.

**f.** Based on the Geological Map of the Carpinteria Quadrangle, the Project site is underlain by alluvial floodplain deposits. Due to the lack of intact geologic formations, paleontological resources are not anticipated to be present. In addition, the Paleontology Identification Report prepared for replacement of the U.S. 101 bridges over Carpinteria Creek (Linden Avenue & Casitas Pass Road Interchanges Project) located 0.4 miles south-southwest of the Project site indicated there is a low potential for encountering sensitive paleontological resources. The University of California Museum of Paleontology database includes fossils of nine contemporary bird species from the Carpinteria area. Therefore, impacts to paleontological resources are not anticipated. No unique geologic features have been identified in the Project area, and none would be adversely affected by Project implementation.

### 3.7.4 Mitigation Measures and Residual Impacts

None required.

## 3.8 GREENHOUSE GAS EMISSIONS

| Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **a.** Generate greenhouse gas emissions, either directly or directly, that may have a significant impact on the environment? | ☐ | ☐ | ☒ | ☐ |
| **b.** Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ☐ | ☒ |

### 3.8.1 Setting

Climate change, often referred to as “global warming” is a global environmental issue that refers to any significant change in measures of climate, including temperature, precipitation, or wind. Climate change refers to variations from baseline conditions that extend for a period (decades or longer) of time and is a result of both natural factors, such as volcanic eruptions, and anthropogenic, or man-made, factors including changes in land-use and burning of fossil fuels. Anthropogenic activities such as deforestation and fossil fuel combustion emit heat-trapping GHGs, defined as any gas that absorbs infrared radiation within the atmosphere.

According to data from the National Oceanic and Atmospheric Administration, the 2019 average temperature across global land and ocean surfaces was 1.71°F above the twentieth-century average of 57.0°F, making it the second-warmest year on record. The global annual temperature has increased at an average rate of 0.13°F per decade since 1880 and over twice that rate (0.32°F) since 1981. From 1900 to 1980 a new temperature record was set on average every 13.5 years; however, since 1981 the average period between temperature records has decreased to every 3 years.

GHG emissions are a global issue, as climate change is not a localized phenomenon. Eight recognized GHGs are described below. The first six are commonly analyzed for projects, while the last two are often excluded for reasons described below.

- Carbon Dioxide ($CO_2$): natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic degassing; anthropogenic sources of CO2 include burning fuels such as coal, oil, natural gas, and wood.
- Methane ($CH_4$): natural sources include wetlands, permafrost, oceans and wildfires; anthropogenic sources include fossil fuel production, rice cultivation, biomass burning, animal husbandry (fermentation during manure management), and landfills.
- Nitrous Oxide ($N_2O$): natural sources include microbial processes in soil and water, including those reactions which occur in nitrogen-rich fertilizers; anthropogenic sources include industrial processes, fuel combustion, aerosol spray propellant, and use of racing fuels.
- Chlorofluorocarbons (CFCs): no natural sources, synthesized for use as refrigerants, aerosol propellants, and cleaning solvents.
- Hydrofluorocarbons (HFCs): no natural sources, synthesized for use in refrigeration, air conditioning, foam blowing, aerosols, and fire extinguishing.
- Sulfur Hexafluoride ($SF_6$): no natural sources, synthesized for use as an electrical insulator in high voltage equipment that transmits and distributes electricity. SF6 has a long lifespan and high global warming potential.
- Ozone: unlike the other GHGs, ozone in the troposphere is relatively short-lived and, therefore, is not global in nature. Due to the nature of ozone, and because this Project is not anticipated to contribute a significant level of ozone, it is excluded from consideration in this analysis.
- Water Vapor: the most abundant and variable GHG in the atmosphere. It is not considered a pollutant and maintains a climate necessary for life. Because this Project is not anticipated to contribute significant levels of water vapor to the environment, it is excluded from consideration in this analysis.

The primary GHGs that would be emitted during construction and operation of the proposed Project are $CO_2$, $CH_4$ and $N_2O$. The Project is not expected to have any associated use or release of HFCs, CFCs or $SF_6$.

The heat absorption potential of a GHG is referred to as the “Global Warming Potential” (GWP). Each GHG has a GWP value based on the heat-absorption properties of the GHG relative to $CO_2$. This is commonly referred to as $CO_2$ equivalent ($CO_2E$). The GWP of the three primary GHGs associated with the proposed Project are defined by the Intergovernmental Panel on Climate Change (IPCC): $CO_2$ – GWP of 1, $CH_4$ – GWP of 28, and $N_2O$ – GWP of 265.

In efforts to reduce and mitigate climate change impacts, State and local governments are implementing policies and initiatives aimed at reducing GHG emissions. California, one of the largest state contributors to the national GHG emission inventory, has adopted significant reduction targets and strategies. The primary legislation affecting GHG emissions in California is the California Global Warming Solutions Act (Assembly Bill [AB] 32). AB 32 focuses on reducing GHG emissions in California and requires the CARB to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020. In addition, two State-level Executive Orders have been enacted by the Governor (Executive Order S-3-05, signed June 1, 2005, and Executive Order S-01-07, signed January 18, 2007) that mandate reductions in GHG emissions.

In December of 2009, the California Natural Resources Agency adopted amendments to the CEQA Guidelines (Title 14, Cal. Code of Regulations, §15000 et seq.) to comply with the mandate set forth in Public Resources Code §21083.05. These revisions became effective March 18, 2010. According to GHG amendments to the CEQA Guidelines, each public agency that is a CEQA lead agency needs to develop its own approach to performing a climate change analysis for projects that generate GHG emissions. A consistent approach should be applied for the analysis of all such projects, and the analysis must be based on best available information.

Santa Barbara County completed the first phase (Climate Action Study) of its climate action strategy in September 2011. The Climate Action Study provides a County-wide GHG inventory and an evaluation of potential emission reduction measures. The second phase of the County's climate action strategy is an Energy and Climate Action Plan (ECAP), which was adopted by the County Board of Supervisors on June 2, 2015. The ECAP includes a base year (2007) GHG inventory for unincorporated areas of the County, which identifies total GHG emissions of 1,192,970 metric tons $CO_2E$ and 28,560 metric tons $CO_2E$ for construction and mining equipment (primary Project-related GHG source). Note that the base year inventory does not include stationary sources and energy use (natural gas combustion and electricity generation).

The focus of the ECAP is to establish a 15 percent GHG reduction target from baseline (by 2020) and develop source-based and land use-based strategies to meet this target. The County has been implementing the plan's emission reduction measures since 2016. However, the County did not meet the 2020 GHG emission reduction goal contained within the ECAP, and an updated 2030 Climate Action Plan is in development.

### 3.8.2 Environmental Thresholds

The CVWD has not adopted any GHG emissions significance thresholds. The SBCAPCD has developed a GHG threshold of significance of 10,000 metric tons $CO_2E$ per year, which applies to stationary air pollutant sources. Although the proposed monitoring wells are not considered an industrial stationary source, due to the lack of any applicable threshold, the SBCAPCD's stationary source threshold is used in this environmental analysis to determine the significance of the Project's GHG emissions.

### 3.8.3 Impact Analysis

**a.** Construction of the proposed monitoring wells would generate greenhouse gas emissions, primarily in the form of $CO_2$ exhaust emissions from the use of off-road construction equipment and on-road vehicles. Project GHG emissions would be substantially less than any adopted significance threshold in the region (see Table 4). Therefore, both construction-related GHG emissions and operation-related (groundwater sampling) GHG emissions are considered a less than significant impact on global climate change.

**Table 4. Project GHG Emissions Summary (metric tons)**

| Parameter | $CO_2$ | $CH_4$ | $N_2O$ | $CO_2E$ |
|---|---|---|---|---|
| Construction GHG emissions | 29.3 | 0.001 | 0.001 | 29.5 |
| SBCAPCD's stationary source threshold | | | | ***10,000*** |
| Annual Operation GHG emissions | 0.02 | <0.001 | <0.001 | 0.02 |

**b.** The proposed Project would not involve any sources of greenhouse gases that are regulated under the State cap and trade program, or other plans or policies regulating these emissions, including the County's ECAP.

### 3.8.4 Mitigation Measures and Residual Impacts

None required.

## 3.9 HAZARDS AND HAZARDOUS MATERIALS/RISK OF UPSET

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **a.** Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ |
| **b.** Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☐ | ☒ |
| **c.** Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☐ | ☒ |
| **d.** Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ☒ |

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | 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? | ☐ | ☐ | ☐ | ☒ |
| **f.** Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ☒ |
| **g.** Expose people or structures to a significant risk of loss, injury or death involving wildland fires? | ☐ | ☐ | ☐ | ☒ |

### 3.9.1 Setting

The Project site has not supported any past land uses that may involve in the use, transportation, disposal or spillage of hazardous materials. Based on a review of the State Water Resources Control Board's Geotracker data base, known sites within one mile of the site with past soil or groundwater contamination are limited to existing or former gasoline fueling stations (Carpinteria Avenue and Casitas Pass Road), and an underground fuel storage tank leak at a private residence. These contaminated sites have been remediated to State Water Resources Control Board's standards and the respective cases closed.

### 3.9.2 Environmental Thresholds

The CVWD has not adopted significance thresholds for hazards and hazardous materials-related impacts. However, impacts that would result in substantial public hazards identified in the checklist questions are typically found to be significant.

### 3.9.3 Impact Analysis

**a.** The proposed Project would not use, transport or dispose of hazardous materials; however, diesel fuel may be brought on-site using a maintenance truck to fuel on-site construction equipment. No storage of diesel fuel would occur on-site. Drilling fluids would not include any hazardous materials or metals such as barium, mercury, cadmium, chromium or lead. However, spent drilling fluids and cuttings would be tested prior to disposal and would be disposed at a hazardous waste facility if determined to be hazardous. Therefore, significant hazards to the public or environment related to hazardous materials would not occur.

**b.** There are no sites with contaminated soil or groundwater that may be disturbed by Project construction and result in an environmental hazard.

**c.** The nearest schools are the Howard Carden School (950 feet to the southwest), Coast Family School (950 feet to the northwest) and Canalino Elementary School (1,000 feet to the southwest). The proposed Project would not involve the use of hazardous materials, hazardous waste or result in hazardous emissions.

**d.** No hazardous materials sites compiled pursuant to Government Code Section 65962.5 are located in the Project area. The proposed Project would not affect any such sites or result in a related hazard to the public or the environment.

**e.** The nearest airport to the proposed monitoring wells is the Santa Barbara Airport, located approximately 18.3 miles to the west. The proposed Project does involve any change in land use or other features that could increase safety or noise hazards resulting from airport proximity.

**f.** The proposed Project would not involve any change in land use or impair the use of the affected roadways for emergency response or evacuation.

**g.** Proposed monitoring wells would be entirely buried and would not involve any habitable structures or increase the risk of loss, injury or death from wildland fires.

### 3.9.4 Mitigation Measures and Residual Impacts

None required.

## 3.10 HYDROLOGY AND WATER QUALITY

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **a.** Violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality? | ☐ | ☒ | ☐ | ☐ |
| **b.** Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | ☐ | ☐ | ☐ | ☒ |
| **c.** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would: | | | | |
| 1. Result in substantial erosion or siltation on- or off-site? | ☐ | ☐ | ☐ | ☒ |
| 2. Substantially increase the rate or amount of surface run-off in a manner that would result in flooding on- or off-site? | ☐ | ☐ | ☐ | ☒ |
| 3. 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? | ☐ | ☒ | ☐ | ☐ |
| 4. Impede or redirect flood flows? | ☐ | ☐ | ☐ | ☒ |
| **d.** In flood hazard, tsunami or seiche zones, risk release of pollutants due to project inundation? | ☐ | ☐ | ☐ | ☒ |

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **e.** Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☐ | ☐ | ☐ | ☒ |

### 3.10.1 Setting

**Description of Surface Waters**. The Project site is located within the Franklin Creek watershed in southern Santa Barbara County. Franklin Creek extends about four miles southward from the foothills of the Santa Ynez Mountains to its confluence with Santa Monica Creek within the Marsh. The Franklin Creek watershed has been subdivided into 16 sub-watersheds composed of approximately 2,895 acres and reaches an elevation of 1,746 feet above msl. A stream flow gauge was in place approximately 2,900 feet upstream of the Carpinteria Salt Marsh and recorded peak surface flows from 1971 to 1992. The largest peak flow recorded was 1,600 cfs on October 1, 1983. This stream gauge also provided daily stream flow data from 1970 to 1978, and indicated surface water is typically present year-round with a monthly maximum of 2.7 cfs in February. The anticipated peak discharge during a 100-year storm event in Franklin Creek is estimated at 3,500 cfs.

**Groundwater Environment**. The Project site lies within the Carpinteria Valley sub-area of the South Coast Hydrologic Unit, which includes the City of Carpinteria and the coastal plain from Toro Canyon on the west to Rincon Creek on the east. The Carpinteria Valley is served by the CVWD, which develops water supplies from Cachuma Lake, the State Water Project and the Carpinteria Groundwater Basin. Not all users take delivery from CVWD, as a significant number of agricultural users rely on their own wells.

The Carpinteria Groundwater Basin underlies approximately 12 square miles of the Carpinteria Valley and is composed of two primary aquifers that extend from beyond the Ventura County line on the east, to Toro Canyon on the west. Total storage in the aquifer is estimated to be approximately 700,000 acre-feet. The two aquifers are separated by the Rincon Creek Fault and are called Storage Unit 1 and Storage Unit 2. Storage Unit No. 1 exhibits both higher water quality and storage capacity. Estimated total storage capacity of Unit No. 1 is 575,000 acre-feet. Overall, pumping from the Basin has not approached the estimated perennial yield since the drought in the early 1990s, as reflected by the recovery of generally high water levels.

Water bearing deposits within the Carpinteria Groundwater Basin include interbedded layers of sand, gravel, silt and clay. The coarser grained units comprise the major aquifer zones within the Basin, designated the A zone (youngest and shallowest), the B zone, the C zone, and the D zone (oldest and deepest). These primary water bearing zones are distinct in the central portion of the basin and generally on the order of 50 to 100 feet thick each, are separated by a series of fine-grained aquitards, and within the central portion of the Basin occur under confined conditions (i.e., the so-called Confined Area of the Basin). Based on hydrogeologic data collected from the CVWD's Sentinel Well, the shallowest aquifer zone (A) extends from about 190 to 330 feet below the ground surface (Pueblo Water Resources, 2021).

Currently, water-level data are collected by CVWD staff on a bi-monthly basis from approximately 25 wells located throughout the Carpinteria Groundwater Basin. The nearest well (El Carro Park) with recent water level data (28D2) is located approximately 400 feet east of the Project site. Data from this well indicates groundwater elevations have been dropping since 2013, with the most recent data (2019) indicating the groundwater elevation is at an elevation of 36 feet below sea level (85 feet below the ground surface) (Pueblo Water Resources, 2021).

**Water Supply Assessment**. The CVWD conducted a multiple dry water year assessment of groundwater, Cachuma surface water and State Water Project water as part of its 2020 Urban Water Management Plan Update. This assessment indicates that in year 4 of a drought period, the CVWD would have an estimated net surplus of approximately 119 to 305 acre-feet. Thus, no deficit was observed during this multiple dry water year assessment of supplies and demands. Overall, the Carpinteria area has current and future water supplies sufficient to meet current and expected future demand.

**Groundwater Management**. The 2014 Sustainable Groundwater Management Act requires establishment of a groundwater sustainability agency within two years from the date in which the basin was designated medium or high priority, and adoption of a groundwater sustainability plan within 5 years of the date of said designation. The Carpinteria Groundwater Basin has been prioritized as a high priority basin and the CVWD has formed a groundwater sustainability agency in coordination with the City of Carpinteria, Santa Barbara County and Ventura County. A groundwater sustainability plan for the Carpinteria Groundwater Basin is in preparation.

**Clean Water Act**. In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Consistent with the requirements of Clean Water Act Section 303(d) (approved 2018 list), the State Water Resources Control Board has identified Franklin Creek as impaired waters because identified beneficial uses are not consistently supported. Impairments for Franklin Creek are associated with fecal coliform, pH, nitrate, E. coli bacteria, sodium and aquatic toxicity.

**Water Quality Control Plan, Central Coast Region**. The California Porter-Cologne Act assigns the State Water Resources Control Board and Regional Water Quality Control Boards with the responsibility of protecting surface water and ground water quality in California. The Project site is within the jurisdiction of the Central Coast Regional Water Quality Control Board (CCRWQCB). Per the requirements of the Clean Water Act and the California Porter-Cologne Act, CCRWQCB has prepared a Water Quality Control Plan for the watersheds under its jurisdiction, last updated in June 2019. The Water Quality Control Plan has been designed to support the intentions of the Clean Water Act and the Porter-Cologne Act by (1) characterizing watersheds within the Central Coast Region; (2) identifying beneficial uses that exist or have the potential to exist in each water body; (3) establishing water quality objectives for each water body to protect beneficial uses or allow their restoration, and; (4) providing an implementation program that achieves water quality objectives. Implementation program measures include monitoring, permitting and enforcement activities.

The Water Quality Control Plan establishes general qualitative and/or quantitative water objectives that apply to all inland surface waters, estuaries and enclosed bays in the Central Coast Region. The general objectives pertain to the following water quality parameters: color, taste and odors, floating material, suspended material, settleable material, oil and grease, biostimulatory substances (e.g., nutrients), sediment, turbidity, pH, dissolved oxygen, temperature, toxicity pesticides, chemical constituents, other organics and radioactivity.

The Water Quality Control Plan also provides water quality objectives for specific beneficial uses such as municipal water supply, agricultural supply, water contact recreation, non-water contact recreation, cold freshwater aquatic life habitat, fish spawning habitat and shellfish harvesting. Water quality parameters of concern and numeric objectives vary considerably depending on the nature of the beneficial use. For example, objectives for municipal water supply and fish spawning habitat are much more stringent and apply to a greater number of parameters than those for agricultural or industrial water supply. Depending on the type of beneficial use, objectives can apply to parameters such as specific organic chemicals, heavy metals, inorganic ions, nutrients, pH, bacteria levels, temperature, dissolved oxygen, etc. In cases where multiple beneficial uses are designated for a given water body (as is the case for local water bodies), a combination of objectives apply, some of which are for the same parameters. In these cases, the most stringent objective for each water quality parameter applies to the water body.

### 3.10.2 Environmental Thresholds

The City's CEQA Guidelines provide the following thresholds for determination of impacts related to flooding, water supply and water quality:

- Significant impacts would result if the project would impose flood hazards on other properties. The Municipal Code prohibits development within areas of special flood hazard except under certain circumstances. The policy requires approval by the Floodplain Administrator before construction, development or alteration begins within any area of special flood hazard.
- Increased storm run-off may be considered significant if the area available for aquifer recharge is reduced. Impacts from moderate to large scale projects where grading would occur during the rainy season, or projects proximate to bodies of water or drainageways would be significant.
- Increased storm run-off may be significant if uncontrolled run-off results in erosion and subsequent sedimentation of downstream water bodies. Impacts from moderate to large scale projects where grading would occur during the rainy season, or projects proximate to bodies of water or drainageways would be significant.
- Modifications to existing drainage patterns may be significant impacts on biological communities if drainage patterns are changed. Significant impacts may be associated with projects where drainage patterns are influenced such that existing vegetation would decline because long-term or short-term soil plant-water relationships would no longer meet habitat requirements, and projects which would result in substantial changes to streamflow velocities.

- Extraction of water from aquifer would be significant if there would be a net deficit in the aquifer volume or reduction in the local groundwater table level (e.g. installation of wells for a golf course irrigation).
- Significant impacts on water quality may result from projects which would generate any amount of highly noxious substance, projects which would generate large amounts of substances which in small amounts are insignificant but are cumulatively hazardous and projects that would result in the deterioration of the quality of a drinking water source.
- Significant impacts on water quality may result from projects which would generate, or result in the accumulation of substances which affect health, or cause genetic defects of wildlife either by direct physical contact with contaminated water, or by water quality changes which cause decline in riparian or lacustrine vegetation which provide wildlife habitat.
- Significant impacts on water quality may result from erosion and subsequent sedimentation of water bodies caused by moderate to large-scale grading projects (>2,000 cubic yards per graded acre), and projects that result in loss of vegetation on slopes (e.g., brush management measures).

### 3.10.3 Impact Assessment

**a.** The proposed Project would not result in direct discharges that may affect surface water or groundwater quality. A storm drain inlet is located immediately adjacent to and down slope from the Project site and ultimately discharges to the Pacific Ocean. Any incidental spillage of drilling fluid or fuel, coolant or lubricants used in drilling equipment may result in violation of ocean water quality standards. This impact is considered potentially significant.

**b.** The 2014 Sustainable Groundwater Management Act requires establishment of a groundwater sustainability agency within two years from the date in which the basin was designated medium or high priority, and a groundwater sustainability plan for the Carpinteria Groundwater Basin is in preparation. The proposed wells would be used for monitoring water quality and groundwater levels, such that the proposed Project would not result in an increase in the pumping or consumption of groundwater.

**c.** The Project would not alter existing drainage patterns or alter the course of a stream or river. The Project would not result in any increase in impervious surfaces (except three 12-inch diameter well covers), such that an increase in storm run-off would not occur. No change in drainage systems serving the Project site would occur such that flood flows would not be impeded or redirected.

Since the Project would disturb less than one acre of soil it is not subject to the General Permit for Discharges of Storm Water Associated with Construction Activity, and a storm water pollution prevention plan is not required to be implemented. Storm water run-off from the Project site may be contaminated with drilling fluid and/or fuel, coolant or lubricants from drilling equipment. This potential source of polluted run-off may result in significant impacts to surface water quality.

**d.** The proposed monitoring wells would not be located in a flood hazard zone, tsunami inundation hazard zone or seiche hazard area. No Project-related increase in public exposure to flood, tsunami, seiche or water pollutant hazards would occur.

**e.** See the discussion under part b. above.

### 3.10.4 Mitigation Measures and Residual Impacts

**MM HWQ-1: Water Quality Protection**. The drilling contractor shall develop and implement a storm water pollution prevention plan (SWPPP) in coordination with CVWD. The SWPPP shall focus on avoiding non-storm discharges to storm drains and controlling storm water discharges through soil stabilization, sediment control, wind erosion control, sediment tracking control and waste management measures. These measures may include fiber rolls placed at the adjacent storm drain inlet and other features to contain drilling fluids on-site.

Implementation of mitigation measure MM HWQ-1 would reduce potential water quality impacts associated with well construction to a less than significant level.

## 3.11 LAND USE AND PLANNING

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **a.** Physically divide an established community? | ☐ | ☐ | ☐ | ☒ |
| **b.** Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☐ | ☒ |
| **c.** Conflict with any applicable habitat conservation plan or natural community conservation plan? | ☐ | ☐ | ☐ | ☒ |

### 3.11.1 Setting

The Project site is located within El Carro Park on APN 004-005-004 (4.07 acres). This parcel is zoned as REC (Recreation) and has a land use designation of OSR (Open Space/Recreation). Single-family residences are located to the west (zoned Planned Unit Development, maximum 5 units per acre) and to the south (zoned single-family residential district, minimum 8000 square foot lot size). A children's day care/recreation facility (Girls, Inc.) is located to the east of the Project site.

### 3.11.2 Environmental Thresholds

The CVWD nor the City of Carpinteria have adopted any significance thresholds related to land use and planning.

### 3.11.3 Impact Analysis

**a.** The proposed Project would not result in any change in land use or otherwise divide an established community.

**b.** The City may require a conditional use permit to authorize construction and operation of the proposed groundwater monitoring wells within a REC zoned area. However, the Project would be consistent with City policies protecting environmental resources.

**c.** The Project site is not subject to a habitat conservation plan or natural community conservation plan and would not conflict with any such plan.

### 3.11.4 Mitigation Measures and Residual Impacts

None required.

## 3.12 MINERAL RESOURCES

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

### 3.12.1 Setting

**Petroleum**. An idle oil and gas well is located approximately one mile south of the Project site. The nearest active oil well is located in the Rincon Oil Field, approximately 6.7 miles southeast of the Project site.

**Aggregate**. Non-petroleum mineral resources in the Project region are limited to construction-grade sand and gravel. The Project site and surrounding areas have been assigned a Mineral Land Classification of MRZ-3 by the California Geologic Survey (2011), meaning these lands contain known or inferred aggregated resources of undetermined significance. The nearest aggregate production site is the Ojai Quarry, located approximately 13.1 miles to the northeast.

### 3.12.2 Environmental Thresholds

The CVWD nor the City of Carpinteria have identified any thresholds of significance related to mineral resources.

### 3.12.3 Impact Analysis

**a.** The Project site is not located in a mineral resource area and would not hamper the extraction of such resources in the region. Therefore, no impacts to such resources would occur as result of Project implementation.

**b.** The proposed Project would not adversely affect petroleum production or other mineral resource production sites, or the availability of these resources.

### 3.12.4 Mitigation Measures and Residual Impacts

None required.

## 3.13 NOISE

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **a.** Generation of a substantial temporary or permanent increase in ambient noise in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☒ | ☐ | ☐ |
| **b.** Generation of excessive ground-borne vibration or ground-borne noise levels? | ☐ | ☐ | ☒ | ☐ |
| **c.** For a project 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? | ☐ | ☐ | ☐ | ☒ |

### 3.13.1 Setting

**Project Noise Environment**. The noise environment of areas potentially affected by the proposed Project is dominated by traffic noise generated by U.S. Highway 101 (0.4 miles south of the Project site) as well as local traffic on Foothill Road (400 feet north of the Project site) and other nearby roadways. In addition, noise (mostly voices) is generated by activities at Girls Inc. when in use, located about 300 feet east of the Project site.

The City considers noise sensitive land uses as residences, transient lodging, hospitals, nursing homes, schools, libraries, churches and places of public assembly. Noise sensitive land uses in close proximity to the Project site are limited to residences on Seacoast Way and Cambridge Lane.

A five-foot tall concrete wall is located between the western perimeter of El Carro Park and residences on Seacoast Way, which would provide some noise attenuation during proposed well construction.

**Existing Traffic Noise**. The City of Carpinteria's General Plan/Local Coastal Land Use Plan indicates the Project site is located just within the 55 dBA CNEL noise contour generated by vehicle traffic on U.S. Highway 101

**Project-Specific Noise Measurements**. Ambient noise levels were measured at two locations near sensitive receptors adjacent to the Project site on September 14, 2021. Ambient noise data collected is summarized in Table 5.

**Table 5. Summary of Ambient Noise Data Collected on September 14, 2021 (dBA)**

| Location | Dominant Noise Sources | Measurement Period | Noise Level dBA Leq |
|---|---|---|---|
| Project site, approximately 50 feet east of a residence on Seacoast Way | Traffic on Foothill Road, auto detailer washing vans at Girls, Inc. | 715 to 745 a.m. | 47.3 |
| El Carro Park adjacent to Girls, Inc. | Traffic on Foothill Road (Girls, Inc. not in use) | 757 to 817 a.m. | 45.8 |

**Sound, Noise and Acoustics Background**. Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected or annoying sound. In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver. The field of acoustics deals primarily with the propagation and control of sound.

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionth (0.00000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this huge range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level in terms of decibels (dB). The threshold of hearing for young people is about 0 dB, which corresponds to 20 mPa.

Because decibels are logarithmic units, sound pressure level cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3 dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one automobile produces a sound pressure level of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB, they would combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dB louder than one source.

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear. Human hearing is limited in the range of audible frequencies as well as in the way it perceives the sound pressure level in that range. In general, people are most sensitive to the frequency range of 1,000–8,000 Hz, and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an "A-weighted" sound level (expressed in units of dBA) can be computed based on this information.

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Other weighting networks have been devised to address high noise levels or other special problems (e.g., B-, C-, and D-scales), but these scales are rarely used in noise impact assessments. Noise levels for impact assessments are typically reported in terms of A-weighted decibels or dBA.

As discussed above, doubling sound energy results in a three dB increase in sound. However, given a sound level change measured with precise instrumentation, the subjective human perception of a doubling of loudness will usually be different than what is measured.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern one dB changes in sound levels, when exposed to steady, single-frequency ("pure-tone") signals in the midfrequency (1,000 Hz–8,000 Hz) range. In typical noisy environments, changes in noise of one to two dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of three dB in typical noisy environments. Further, a five dB increase is generally perceived as a distinctly noticeable increase, and a 10 dB increase is generally perceived as a doubling of loudness. Therefore, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a three dB increase in sound, would generally be perceived as barely detectable.

**Noise Descriptors**. Noise in our daily environment fluctuates over time. Some fluctuations are minor, but some are substantial. Some noise levels occur in regular patterns, but others are random. Some noise levels fluctuate rapidly, but others slowly. Some noise levels vary widely, but others are relatively constant. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors most commonly used in community noise analysis.

- Equivalent Sound Level (Leq) represents an average of the sound energy occurring over a specified period. The one-hour A-weighted equivalent sound level (Leq[h]) is the energy average of A-weighted sound levels occurring during a one-hour period.
- Percentile-Exceeded Sound Level represents the sound level exceeded for a given percentage of a specified period (e.g., L10 is the sound level exceeded 10% of the time, and L90 is the sound level exceeded 90% of the time).

- Maximum Sound Level is the highest instantaneous sound level measured during a specified period.
- Day-Night Level is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during nighttime hours between 10:00 p.m. and 7:00 a.m.
- Community Noise Equivalent Level (CNEL) is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during the nighttime hours between 10:00 p.m. and 7:00 a.m., and a five dB penalty applied to the A-weighted sound levels occurring during evening hours between 7:00 p.m. and 10:00 p.m.

**Characteristics of Ground-borne Vibration and Noise**. In contrast to airborne noise, ground-borne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of ground-borne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving and operating heavy earth-moving equipment.

The effects of ground-borne vibration include detectable movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls and rumbling sounds. In extreme cases, the vibration can cause damage to buildings. Building damage is not a factor for most projects, with the occasional exception of blasting and pile-driving during construction. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by only a small margin. A vibration level that causes annoyance would be well below the damage threshold for normal buildings.

Vibration is an oscillatory motion which can be described in terms of the displacement, velocity or acceleration. Because the motion is oscillatory, there is no net movement of the vibration element and the average of any of the motion descriptors is zero. Displacement is the easiest descriptor to understand. For a vibrating floor, the displacement is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement and acceleration is the rate of change of the speed. The peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak of the vibration signal. PPV is often used in monitoring of blasting vibration since it is related to the stresses that are experienced by buildings.

### 3.13.2 Environmental Thresholds

**Noise**. The City's CEQA Guidelines provide the following noise thresholds for projects involving new development:

- A proposed development that would generate noise levels in excess of 65 dB CNEL and could affect sensitive receptors would be considered to have a significant impact.
- Outdoor living areas of noise sensitive uses subjected to noise levels in excess of 65 dB CNEL would be considered to be significantly impacted.
- Interior noise levels of noise sensitive uses that cannot be reduced below 45 dB CNEL would be considered significantly impacted.

- A project will have a significant impact on the environment if it would substantially increase ambient noise levels for adjoining areas.

Temporary construction noise in excess of 75 dBA CNEL for 12 hours within a 24-hour period at residences is considered significant. In addition, temporary construction activities that result in the following noise increases for an extended period of time would be considered significant:

- Increase in noise levels associated of 10 dBA, if existing noise levels are below 55 dBA.
- Increase in noise levels that exceeds noise level standards, if existing noise levels are between 55 and 60 dbA.
- Increase in noise levels of five dBA, if existing noise levels are above 60 dBA.
- Construction traffic noise exceeding 65 dBA Leq.

**Vibration**. The City's CEQA Guidelines do not address ground borne vibration. Caltrans has published a Transportation and Construction Vibration Guidance Manual, which provides criteria for allowable vibration in terms of potential annoyance to people, as well as potential damage to buildings. The following thresholds for continuous/frequent intermittent sources such as construction equipment are provided by Caltrans (2013), expressed as the peak particle velocity (PPV, inch/seconds):

- Human effects: barely perceptible – 0.01; distinctly perceptible – 0.04; strongly perceptible – 0.10
- Damage to structures: fragile buildings - 0.1; older residential – 0.3; new residential and commercial – 0.5

### 3.13.3 Impact Analysis

**a.** Noise generated by well construction (especially evening drilling activities) would adversely affect nearby single-family residences and Girls Inc. (when in use). Well drilling noise was estimated as 80.2 dBA Leq at the nearest residence (on Seacoast Way) using the Federal Highway Administration's Roadway Construction Noise Model. This equates to a 24-hour noise level of 77.2 dBA CNEL based on 7 a.m. to 7 p.m. operations. This estimated noise value exceeds the City's short-term construction noise standard of 75 dBA CNEL and is considered a significant impact. The City's short-term construction noise standard would not be exceeded at Girl's Inc. Operational noise (collecting groundwater samples) would be limited to short-term operation (less than one hour) of a small portable generator, which would not exceed City thresholds.

**b.** Well construction would generate ground-borne noise and vibration. The peak day vibration level (PPV) was estimated as 0.07 inches/second at the nearest residence using California Department of Transportation's Transportation and Construction Vibration Guidance Manual. This vibration level would be distinctly perceptible but would not result in any structural damage. Therefore, Project-related ground-borne noise and vibration would be less than significant.

**c.** The Project site is not located in proximity to a public or private airport and would not increase the exposure of the public to aviation noise.

### 3.13.4 Mitigation Measures and Residual Impacts

**MM N-1: Temporary Sound Wall**. A minimum 16 foot-tall temporary sound wall shall be installed along the western and southern perimeter of El Carro Park (with a sound transmission class of STC-30 or better, minimum sound transmission loss of 11 dB at 63 hertz) to reduce noise impacts to adjacent residences associated with evening well drilling operations. Figure 4 provides the preliminary location of the temporary sound wall.

Implementation of mitigation measure MM N-1 would reduce noise levels at the nearest residence to 69.9 dBA CNEL which is below the City's construction noise standard and considered less than significant. Minor tree trimming within El Carro Park would be required to provide space to install the temporary sound wall. However, such trimming would not degrade the quality of public views of the Park from Foothill Road or views of Park users.

## 3.14 POPULATION AND HOUSING

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

### 3.14.1 Setting

Based on estimates provided by the California Department of Finance, the January 2021 population of the City of Carpinteria is 13,196. The number of housing units was 5,429 in 2010, with about 272 units added since then.

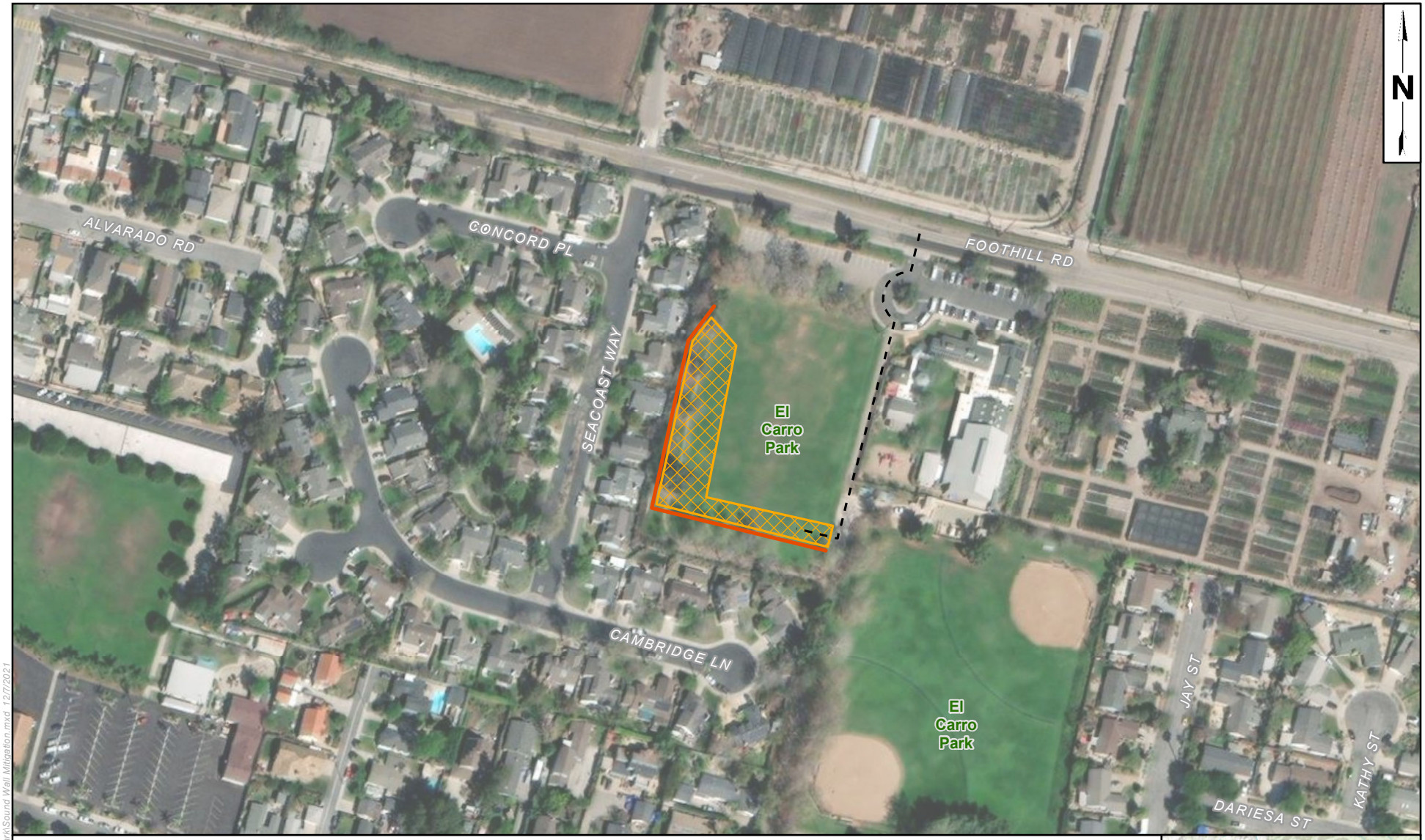
### 3.14.2 Impact Analysis

**a.** The proposed monitoring wells would not be used to produce groundwater, and the project does not involve any extension of the CVWD's water distribution infrastructure. Therefore, the Project would not induce development or population growth.

**b.** No people or housing would be displaced by the proposed monitoring wells and construction of replacement housing would not be necessary.

### 3.14.3 Mitigation Measures and Residual Impacts

None required.




LEGEND:

- Access Route
- Sound Wall Mitigation
- Well Construction Work Area

MAP EXTENT:


*Source: Esri Online Imagery Basemap, County of Santa Barbara*
*Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet*
*Notes: This map was created for informational and display purposes only.*

0 100 200
Feet

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME: EL CARRO MONITORING WELL
EL CARRO PARK, CARPINTERIA
SANTA BARBARA COUNTY, CA

PROJECT NUMBER: 2102-1921

DATE: December 2021

# SOUND WALL MITIGATION

FIGURE 4

Z:\GIS Projects\GIS Maps\Map Project\El Carro Park\Sound Wall Mitigation.mxd 12/7/2021

## 3.15 PUBLIC SERVICES

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

### 3.15.1 Setting

The Project site is provided fire protection by the Carpinteria-Summerland Fire Protection District and police protection by the Santa Barbara County Sheriff. The nearest schools are the Howard Carden School and Coast Family School. The nearest park is El Carro Park which includes the Project site.

### 3.15.2 Impact Analysis

**a.** The proposed Project would not provide or increase the demand for public services or facilities. Therefore, no impacts to schools, parks and other public facilities or increased demand for such facilities would occur.

### 3.15.3 Mitigation Measures and Residual Impacts

None required.

## 3.16 RECREATION

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | 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? | ☐ | ☐ | ☒ | ☐ |

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **b.** Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | ☐ | ☐ | ☐ | ☒ |

### 3.16.1 Setting

The Project site is located within El Carro Park, a City park used for passive recreation, walking, dog walking, youth softball, child's play (playground) and youth soccer. Other recreational facilities in the vicinity include Carpinteria State Beach, Carpinteria City Beach, Salt Marsh Nature Park, Franklin Park, Memorial Park, Heath Ranch Park and Lions Park.

### 3.16.2 Impact Analysis

**a.** The proposed Project would not result in population growth and would not increase the use of existing neighborhood or regional parks, or any other recreational facilities. As such, the proposed Project would not result in the accelerated physical deterioration of any recreational facilities. Proposed well construction would require closure of approximately one-half of the northwestern field for about six weeks. The proposed project includes restoration of portions of El Carro Park affected by well construction activities. Therefore, no long-term loss of recreational opportunities would occur.

**b.** The proposed Project would not involve the construction or expansion of any recreational facilities. Thus, the Project would not have any impacts on the physical environment associated with the construction or use of recreational facilities.

### 3.16.3 Mitigation Measures and Residual Impacts

None required.

## 3.17 TRANSPORTATION

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **a.** Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities? | ☐ | ☐ | ☐ | ☒ |
| **b.** Would the project conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)? | ☐ | ☐ | ☒ | ☐ |
| **c.** Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☐ | ☒ |

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **d.** Result in inadequate emergency access? | ☐ | ☐ | ☐ | ☒ |

### 3.17.1 Setting

Foothill Road provides access to the Project site, which can be reached from U.S. Highway 101 via Linden Avenue or Casitas Pass Road.

### 3.17.2 Impact Analysis

**a.** The proposed Project does not include any land uses that may create demand for transportation facilities and would not conflict with local or regional transportation planning.

**b.** The proposed Project would generate temporary construction-related vehicle trips, vehicle miles traveled and associated climate change and air quality impacts. The proposed Project would generate about 12 one-way vehicle trips per day associated with worker and equipment transportation, import of materials and export of used drilling fluids. Projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact (Governor's Office of Planning and Research, 2018). Therefore, the Project is consistent with Section 15064.3 of the State CEQA Guidelines.

**c.** The proposed Project would not involve any changes to roadways or incompatible uses of existing roadways. Therefore, no Project-related increases in traffic hazards would occur.

**d.** The proposed Project would not require emergency services or create conditions that would impede emergency access for adjacent land uses.

### 3.17.3 Mitigation Measures and Residual Impacts

None required.

## 3.18 TRIBAL CULTURAL RESOURCES

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **a.** Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, scared place, or object with cultural value to a California Native American tribe that is: | | | | |

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| 1. Listed or eligible for listing in the California Register of Historic Resources, or in the local register of historic resources as defined in Public Resources Code 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 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. | ☐ | ☐ | ☐ | ☒ |

### 3.18.1 Setting

See Section 3.5.1 for a discussion of the cultural resources setting of the Project site. No traditionally and culturally affiliated Native American tribes have requested the CVWD to be informed of proposed projects pursuant to Public Resources Code Section 21080.3.1. Therefore, it is presumed no tribal resources are present and consultation with Native American tribes is not required.

### 3.18.2 Impact Analysis

**a.** The cultural resources records search did not identify any archeological or tribal resources within the Project site or an 1/8-mile search radius. Project-related ground disturbance would be limited to previously disturbed areas associated with the construction and maintenance of El Carro Park. Therefore, tribal resources (if present) would not be disturbed.

### 3.18.3 Mitigation Measures and Residual Impacts

None required.

## 3.19 UTILITIES AND SERVICE SYSTEMS

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **a.** Require or result in the 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? | ☐ | ☐ | ☐ | ☒ |

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **b.** Have sufficient water supplies available to serve the project and reasonably foreseeable development during normal, dry and multiple dry years? | ☐ | ☐ | ☐ | ☒ |
| **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? | ☐ | ☐ | ☐ | ☒ |
| **d.** Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | ☐ | ☐ | ☒ | ☐ |
| **e.** Comply with federal, state, and local statutes and regulations related to solid waste? | ☐ | ☐ | ☐ | ☒ |

### 3.19.1 Setting

Utility providers serving the City and the Project site include:

- Water supply: CVWD
- Municipal wastewater collection and treatment: Carpinteria Sanitary District
- Solid waste collection: E.J. Harrison & Sons
- Solid waste disposal: Toland Road Landfill via the Del Norte Recycling and Transfer Station

### 3.19.2 Impact Analysis

**a.** The proposed Project would not involve any new land uses that may require the construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas or telecommunications facilities.

**b.** Small amounts of potable water would be used during well construction. However, this temporary consumption would not affect the CVWD's ability to meet the demand for existing and reasonably foreseeable development.

**c.** The proposed Project would not generate municipal wastewater and would not affect the capacity of any wastewater treatment provider.

**d.** A small amount of solid waste would be generated by Project construction, including drill cuttings and construction materials packaging. These materials would be recycled to the extent feasible and would not affect the capacity of local landfills or impair attainment of State-mandated municipal solid waste reduction goals.

**e.** The CVWD complies with all federal, state and local statutes relating to solid waste, and would continue to do so during the construction and operation of Project monitoring wells. As such, no impacts of this type are expected to result.

### 3.19.3 Mitigation Measures and Residual Impacts

None required.

## 3.20 WILDFIRE

| Would the project: | Potentially Significant Impact | Less than Significant Impact with Mitigation | 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? | ☐ | ☐ | ☐ | ☒ |
| **b.** Due to slope, prevailing winds, and other factors exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | ☐ | ☐ | ☐ | ☒ |
| **c.** Require the installation 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? | ☐ | ☐ | ☐ | ☒ |
| **d.** Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ☐ | ☒ |

### 3.20.1 Setting

The Project site is not located within or near a Very High Fire Hazard Severity Zone as designed by the California Department of Forestry and Fire Protection. The Carpinteria-Summerland Fire Protection District supports and assists the City of Carpinteria and the County of Santa Barbara with Community Emergency Response Team Training. The Carpinteria-Summerland Fire Protection District has also developed a personal wildfire action plan which is provided to property owners to facilitate individual wildfire emergency evacuation.

### 3.20.2 Impact Analysis

**a.** The Project site is not located in or near a very high fire hazard severity zone and would not impair emergency response or evacuation.

**b.** The Project site is not located in or near a very high fire hazard severity zone and would not involve any habitable structures or have any occupants.

**c.** The Project would not require any supporting infrastructure or increased maintenance of existing infrastructure.

**d.** The proposed Project would not increase the risk of people or structures to wildfire-related flooding and landslides.

### 3.20.3 Mitigation Measures and Residual Impacts

None required.

# 4.0 CUMULATIVE IMPACTS

Cumulative impacts are defined as two or more individual effects which, when considered together are considerable, or which compound or increase other environmental impacts. Under Section 15064 of the State CEQA Guidelines, the lead agency (CVWD) must identify cumulative impacts, determine their significance and determine if the effects of a project are cumulatively considerable.

## 4.1 DESCRIPTION OF CUMULATIVE PROJECTS

### 4.1.1 Santa Barbara County

The Santa Barbara Planning & Development Department's cumulative project list was reviewed to identify recently approved projects and projects currently under review in nearby County planning areas (Montecito, Summerland, Toro Canyon) that may result in a substantial physical change to the environment. These projects are limited to:

- Miradero LLC Tentative Parcel Map (three lots)
- Montecito YMCA Master Plan
- Carpinteria Valley Farms (12,188 square feet of new structures)
- Boubel Tentative Parcel Map (three lots)
- Via Real, LLC Tract Map (40 lots)

### 4.1.2 City of Carpinteria

The following projects that may result in a substantial physical change to the environment are under review or recently approved as listed in the City's June 2021 cumulative project list:

- Lagunitas Mixed Use (85,000 square foot office building)
- Faith Lutheran SFD (five new single-family residences)
- GranVida Phase II Expansion (50-unit assisted living facility)
- City Skate Park (36,500 square feet and 23 parking spaces)
- Via Real Hotel (72 rooms)
- Surfliner Inn (40 rooms)
- Punto de Vista (43,766 square foot office building)
- Family Baptist Church School (K-6 serving 49 students)
- Vernon Residences (five new single-family residences)

## 4.2 DISCUSSION OF CUMULATIVE IMPACTS

### 4.2.1 Aesthetics

The proposed Project would not incrementally contribute to aesthetics impacts of the cumulative projects.

### 4.2.2 Air Quality

Construction-related and operation-related air pollutant emissions associated with the Project would incrementally contribute to air pollutant emissions of the cumulative projects. However, the Project's incremental contribution to cumulative air quality impacts would not be considerable.

### 4.2.3 Biological Resources

The proposed Project would not incrementally contribute to biological resources impacts of the cumulative projects.

### 4.2.4 Cultural Resources

The proposed Project would not incrementally contribute to cultural resources impacts of the cumulative projects.

### 4.2.5 Geology and Soils

The proposed Project would not result in any impacts related to geology and soils, and would not incrementally contribute to impacts of the cumulative projects.

### 4.2.6 Greenhouse Gas Emissions

By their nature and potential global effects, greenhouse gas emissions are a cumulative issue. The Project would generate greenhouse gas emissions during construction and operation, which would incrementally contribute to cumulative impacts. However, Project emissions would be much less than any adopted threshold and are considered less than significant on a cumulative basis.

### 4.2.7 Water Resources

Potential construction-related surface water quality degradation associated with the Project may incrementally contribute to water quality impacts of cumulative projects that drain to the Pacific Ocean. Mitigation has been provided to minimize water quality impacts such that the incremental contribution to cumulative water quality impacts would not be considerable.

### 4.2.8 Noise

Construction-related noise associated with the cumulative projects would not be additive, because it would not affect the same noise receptors. In any case, mitigation has been provided to minimize Project noise impacts at nearby sensitive receptors. Overall, the incremental contribution to cumulative noise impacts would not be considerable.

### 4.2.9 Transportation

Construction-related and operation-related vehicle trips and miles travelled would be minor and consistent with local transportation planning. Therefore, the Project's incremental contribution to transportation impacts would not be cumulatively considerable.

# 5.0 MANDATORY FINDINGS OF SIGNIFICANCE

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

**a.** The Project would not degrade habitat for fish and wildlife or adversely affect cultural resources.

**b.** The incremental cumulative impacts of the Project (as mitigated) would not be cumulatively considerable.

**c.** The Project may result in adverse impacts air quality, water quality and noise. However, impacts would be less than significant, or measures have been incorporated into the Project to avoid and/or minimize impacts.

## 6.0 DETERMINATION OF ENVIRONMENTAL DOCUMENT

On the basis of this evaluation:

[ ] I find the Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION should be prepared.

[X] I find that although the Project could have a significant impact on the environment, there will not be a significant effect with the implementation of mitigation measures described in this Initial Study. A MITIGATED NEGATIVE DECLARATION should be prepared.

[ ] I find the Project, individually and/or cumulatively, MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.

12/14/2022

Signature of Person Responsible for Administering the Project Date

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