



COUNTY OF SANTA BARBARA

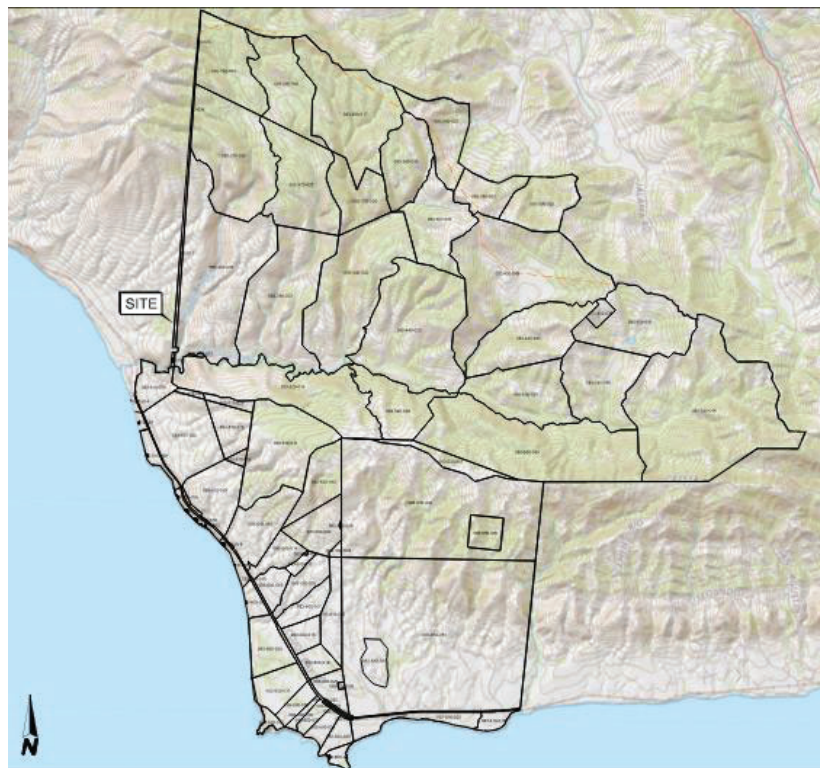
**Planning and Development**

# Draft Mitigated Negative Declaration

## Dangermond Preserve Water Wells

Case No. 17CDH-00000-00032

August 19, 2025



**Owner/Applicant**

The Nature Conservancy  
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Lompoc, CA 93436

**Agent**

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## 1.0 REQUEST/PROJECT DESCRIPTION

The proposed project is a request of Patsy Price, agent for The Nature Conservancy (TNC), the applicant, for a Coastal Development Permit with Hearing (CDH) to legalize 41 existing water wells drilled on the Dangermond Preserve (Preserve) between 1985 and 2021 to support the existing cattle operation on the property and to further the overall conservation and science goals of the Preserve. Nineteen (19) of the wells are proposed to operate as production wells and twenty-two (22) are proposed to be monitoring wells. Specifically, the proposed project includes the following:

- Install infrastructure to connect five existing wells (Oaks 1-5) to a new water distribution system to gravity feed cattle water troughs in the southern portion of the preserve (Oaks Water System). Infrastructure would include solar powered well pumps for each well, water storage tanks, water troughs, and distribution lines.
- Install infrastructure to connect the Tinta Water System (Tinta 1, Tinta 2, and Escondido 4 wells) to an existing permitted well (Upper Espada)<sup>1</sup> and to a new water distribution system in the northern portion of the preserve. Infrastructure would include solar powered well pumps for each well, water storage tanks, water troughs, and distribution lines.
- Install infrastructure to connect the Quarry 1 well to a new water distribution system in the western portion of the preserve (Quarry Water System). Infrastructure would include a solar powered well pump, water storage tanks, a water trough, and distribution lines.
- Install infrastructure to connect the Gaspar 1 well to a new water distribution system north of the Jalama Ranch Headquarters (Gaspar Water System). Infrastructure would include a solar powered well pump, water storage tanks, and distribution lines.
- Install infrastructure to connect the Venadito 1 well to a new water distribution system in the northern portion of the preserve (Venadito Water System). Infrastructure would include a solar powered well pump, water storage tanks, water troughs, and distribution lines.
- Add two additional 5,000-gallon water tanks to the two (2) existing water storage tanks at the Cojo Ranch headquarters to increase storage for wildfire suppression and facilities protection during a fire.
- The project is estimated to include 1,872 cubic yards of cut, and 1,866 cubic yards of fill, and estimated ground disturbance is 5.15-acres.

### Water Use

- Operate the Oaks, Tinta, Quarry, Gaspar, and Venadito Water Systems, including wells, and both the new and existing water distribution infrastructure, to gravity feed cattle water troughs in the preserve's pastures to meet conservation objectives.
- Operate three (3) wells (Buckhorn 2, Diamond Corral, Gaucho 2) as production wells to feed to existing cattle water troughs through an existing water distribution system and one proposed new cattle water trough immediately adjacent to the Buckhorn 2 well site.
- Operate five wells (Alegria, Buckhorn 1, Ramajal South, Ramajal East, Vaqueros) as production wells with associated existing electrical service to feed existing cattle water troughs through their associated existing water distribution systems.<sup>2</sup>

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<sup>1</sup> Permitted by Case No. 97-CDP-051

<sup>2</sup> Ramajal East is served by an existing solar power system. The other four (4) wells are served by existing electrical connections from Southern California Edison. No changes to the existing power sources for these wells are proposed.  
Proto Updated December 16, 2024

- Use water from one or more of the nineteen (19) production wells for temporary irrigation of restoration sites identified in the Coastal Commission Consent Order Nos. CCC-17CD-03 and CCC-17-RO-01<sup>3</sup> and riparian revegetation sites along Jalama Creek included in this project.
- Implement a monitoring and research program in the network of wells located across the preserve to provide additional data about the consolidated rock aquifer groundwater system underlying the preserve that will be used to inform successful groundwater basin management and provide valuable research opportunities.

### **Riparian Habitat Enhancement**

- Install approximately 63,360 feet (about 12 miles) of wildlife friendly cattle exclusionary fencing to prevent cattle access to approximately 6.5 miles of creek and riparian areas (approximately 271 acres).
- Strategically revegetate four (4) plots totaling eight (8) acres within the fenced riparian area to increase riparian diversity and canopy width in areas where cattle have historically had negative impacts on riparian resources.

### **Water System Infrastructure Details**

#### **Oaks Water System**

The Oaks Water System is proposed to consist of five (5) production wells connected to a water distribution system. Each well would be pumped using a submersible pump powered by a solar array into a total of six (6) new 5,000-gallon water tanks that would then feed four (4) new water troughs. The water tanks will be located in higher elevation locations so that water can be gravity fed to cattle water troughs through water pipelines. New pipelines, tanks, and troughs will be placed within the footprint of existing roads to the extent feasible, to minimize disturbance of natural areas. Approximately 12,915 linear feet of water pipelines would be installed to connect the wells to the water tanks and then to water troughs. The 1.25-inch diameter black HDPE pipelines would be installed approximately 18 inches below ground except in one location within the Oaks Water System where approximately 3,770 feet of the pipeline is proposed to be installed above-ground to avoid impacts to potential archaeological resources in the area. Minor grading within the footprint of the water tanks may be necessary to create level pads prior to placement of the solar arrays.

#### **Tinta Water System**

The Tinta Water System is proposed to consist of four (4) production wells (Tinta 1, Tinta 2, Escondido 4, and Upper Espada<sup>4</sup>) connected via new pipelines to new and existing water tanks and troughs. Each well would be pumped using a submersible pump powered by a solar array, connected to twelve (12) new and two (2) existing water tanks, and seven (7) new and two (2) existing water troughs via approximately 23,038 linear feet of below-ground water pipelines and sixty-two (62) linear feet of above-ground pipeline.

#### **Quarry Water System**

The Quarry Water System is proposed to consist of one production well (Quarry 1) connected to three (3) water tanks, two (2) new tanks and one (1) existing tank, via 4,150 linear feet of below-ground water pipeline that feeds one (1) new water trough on the western portion of the preserve.

#### **Gaspar Water System**

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<sup>3</sup> Other future restoration work would be permitted under a separate application.

<sup>4</sup> Permitted per 97-CDP-051

The Gaspar Water System is proposed to consist of one (1) production well (Gaspar 1) connected to three (3) water tanks (2 new and 1 existing) via 2,750 linear feet of below-ground water pipelines to one (1) existing water trough.

### **Vendadito Water System**

The Vendadito Water System is proposed to consist of one (1) production well (Vendadito 1) connected to two (2) new water tanks and three new water troughs, via 18,004 linear feet of below-ground water pipelines.

### **Water Distribution System Installation for All Systems**

Each proposed water system, solar array, and water pump use the same installation procedures which are described as follows: Proposed solar ray installation areas would be approximately 1,600 square feet (40 feet by 30 feet). Arrays would range from 25 to 100 square feet in size, depending on the size of the pump they are powering, and would be affixed to galvanized poles set in concrete footings approximately 2 feet wide by 2 feet long by 3.5 feet deep. Wiring from the arrays to the pumps would be placed in plastic conduits buried in 2-inch-wide trenches approximately 2 feet deep. A 10-foot radius vegetation clearance area would be provided around each solar array in compliance with California Fire Code requirements. The arrays, power conduits, and vegetation clearance areas would all be located within the solar array installation areas identified on the well site exhibits.

Access for installation of new water system infrastructure and equipment for the Water System would be via existing ranch roads. Staging and materials storage would be on or adjacent to ranch roads, outside of tree driplines, sensitive habitat areas, and sensitive archaeological areas. Well pumps would be installed using a boom truck parked adjacent to the well sites, within the identified disturbance areas.

The proposed 0.75-2.00 horsepower pumps would be connected to floats in the water tanks and water troughs so that pumps will only be running when water is needed to fill the tanks. This will reduce the amount of water lost to overflow of tanks and troughs. A low-water sensor would protect each pump from running dry should water supply drop below anticipated levels. Once the well cluster is operational, water levels would be monitored, and pumping schedules would be adjusted to maximize recovery rates for each well. After the water tanks are initially filled, subsequent pumping would be to maintain the tanks at full levels.

### **Additional Infrastructure**

The proposed project also includes new infrastructure associated with the project outside of the well clusters described above. This includes a new cattle trough to be located immediately adjacent to the Buckhorn 2 well and connected to the well via below-ground HDPE pipe and two (2) new 5,000-gallon water tanks at the Cojo Ranch headquarters to increase water storage for fire protection.

Monitoring equipment is proposed to be installed in each of the wells. Monitoring equipment would include instruments mounted on top of or inside the existing well housings to monitor groundwater levels.<sup>5</sup> These small devices can be transported to well sites by small truck, all-terrain vehicle, or on foot and installed with hand tools. Once the instrumentation is installed, data would be manually downloaded from the devices approximately monthly.<sup>6</sup> In the future, data could be collected through the preserve's wifi network, reducing the need to travel to each well site to collect data. In addition, researchers will visit each of the well sites up to several times per year to obtain groundwater samples for laboratory analysis.

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<sup>5</sup> Examples of monitoring equipment include pressure transducers, piezometers, and/or acoustic monitoring instruments. Badger Meter ([www.badgermeter.com](http://www.badgermeter.com)) and Wellintel ([www.wellintel.com](http://www.wellintel.com)) are examples of companies that provide this type of equipment.

<sup>6</sup> The devices are also capable of transmitting data through a wifi network. TNC is in the process of improving wifi connectivity on the preserve as a separate project and would discontinue physically accessing the monitoring well sites to download data once wifi is available.

The life of the equipment would be approximately ten (10) years after which time it would be replaced with similarly sized and functioning equipment for ongoing groundwater monitoring. The useful life of water wells can vary greatly from 25 to 100 years or more. Monitoring wells, given their extremely low intensity of use, could be expected to have an even longer life span.

### **Resource Protection Measures**

The proposed water system improvements have been designed and located to avoid significant impacts to cultural resources as identified and discussed in the Phase 1 Archaeological Study prepared by Padre Associates, Inc. (April 2024) and Addendum (June 2025). In addition, per the study recommendations, TNC will implement the following measures:

- A worker cultural resources sensitivity program will be implemented for the project. Prior to any ground-disturbing activity, TNC will provide an initial sensitivity training session to all project employees, contractors, subcontractors, and other workers, with subsequent training sessions to accommodate new personnel becoming involved in the project.
- Cultural resources monitoring will be conducted under the supervision of a County-approved archaeologist and a Native American representative. In the event that cultural materials are encountered during ground disturbance outside of sites identified in the Phase 1 Archaeological Study, TNC will stop all activity within a 50-foot radius of the find and contact a County-qualified archaeologist.
- To ensure that all unevaluated cultural resources are avoided during project-related ground disturbance to the extent feasible, prior to ground disturbance within 100 feet of a known cultural resource, a fenced exclusion zone will be installed where construction equipment and personnel are not permitted.

The proposed water system improvements have also been designed to avoid significant impacts to biological resources. Per the Biological Resources Assessment Report prepared by Padre Associates, Inc., updated April 2024 and Addendum dated October 2024, the project will incorporate all of the recommended avoidance and minimization measures included in Section 6.0 of the report.

### **Water System Operation and Access**

Access to well sites for collection of data from monitoring equipment and repair and maintenance of wells or equipment would generally be from existing preserve roads. Pursuant to Coastal Commission Consent Order Nos. CCC-17-CD-03 and CCC-17-RO-01 (Orders), road segments near five existing wells, Escondido 2 and Tinta 6, 9, 11, and 11B, have been abandoned. Other existing access roads near the Escondido, Tinta 9, and Tinta 11 well sites would continue to provide vehicular access to these wells. Walking access from the remaining roads nearest Tinta 6 and Tinta 11B would allow access to these wells. All of these wells are proposed to be monitoring wells which would require low-impact access for data collection and repair and maintenance of monitoring equipment, on an approximately monthly basis.

### **Riparian Habitat Enhancement Details**

The project includes proposed riparian habitat enhancements along Jalama Creek beginning about 1.4 miles upstream from the Pacific Ocean and concluding at the confluence of Escondido Creek as well as along the lower portions of three tributaries of Jalama Creek, Espada Creek, Gasper Creek, and Escondido Creek. The project will install approximately 63,260 linear feet (approximately 12 miles) of wildlife friendly cattle exclusionary fencing to prevent cattle access to approximately 6.5 miles of creek and riparian areas. Fencing will be designed using specifications produced by the Montana Department of Fish, Wildlife, and Parks and recommended by California Department of Fish and Wildlife to promote wildlife friendly

passage for a wide range of wildlife at various life stages. The total length of riparian habitat to be fenced is approximately 6.5 miles and includes 271 acres of riparian habitat.

### **Fence Locations**

Exact fence placement will be determined in the field working with landscape opportunities and constraints (i.e. slope, soils, desired resource protection). At minimum, fencing will be placed and extended at least 100-200 feet from the top of stream bank and will use natural topographical features to manipulate cattle movement away from sensitive resources. Additional considerations include fencing to exclude cattle from riparian areas along creek reaches that have the best potential for providing steelhead habitat or for providing passage to upstream reaches. The locations and mileage of fencing are as follows:

- Lower Jalama Mainstem: 5.3 miles
- Espada Creek: 1.6 miles
- Lower Gasper Creek: 0.25 miles
- Lower Escondido Creek: 3.15 miles
- Upper Jalama Mainstem: 1.65 miles

### **Fence Type**

The wildlife friendly fencing will reduce wildlife entanglement via usage of smooth top and bottom wires with appropriate spacing between wires. The fence will be outfitted with 30 single gates and two double gates to facilitate cattle movement between pastures. During rotational grazing schedules when cattle are not using adjacent pastures, gates will remain open to wildlife for passage through migration corridors.

### **Active Riparian Revegetation & Passive Regeneration Protection**

The proposed project also includes active revegetation and protection of naturally regenerated plants (i.e., passive regeneration) to address the negative impacts cattle have historically imposed on riparian resources in the Jalama Creek watershed. Upon installation of the exclusionary cattle fencing, target areas will be revegetated to increase riparian diversity and canopy width. Revegetation will occur in four distinct plots totaling eight (8) acres. The proposed restoration plantings will include, at minimum, the following elements:

1. Establish a diversity of native woody and herbaceous species on disturbed soil on the stream banks, from seed, nursery stock and cuttings.
  - a. Prepare ground by raking to roughen up the soil surface.
  - b. Hand-broadcast seed and rake into soil.
  - c. Plant native shrubs and trees from small nursery stock and cuttings.
  - d. All planting and seeding shall be done in the rainy season, or supplemental irrigation will be used to establish plantings.
  - e. Mulching and/or seeding shall be done on all exposed soil which may deliver sediment to the creek.
2. Natural regeneration protection
  - a. During monthly inspections, foliage protectors (i.e., herbivore exclosures) will be installed on naturally regenerated tree saplings to deter herbivory from wildlife.
3. Site maintenance (weeding)
  - a. Invasive non-native plants shall be hand-pulled from the restoration areas during the growing season (December-June) according to the following schedule: Year 1 – monthly basis; Years 2&3 – quarterly basis.
  - b. During the first-year irrigation, revegetation plots will be checked monthly during the dry season to ensure native plants are getting adequate water.

- c. Replacement plantings of cuttings, nursery stock or acorns shall be installed as needed to ensure the performance criteria are met or exceeded.
- d. Invasive weeds targeted for control include California Invasive Plant Council (Cal-IPC) ranked “high” and “moderate” species, exclusive of naturalized non-native European grasses.

### **Project Monitoring**

Cultural resource monitoring will be conducted by local native American monitors and will occur during fence installation and native vegetation planting. Following installation, the project also will employ two types of monitoring over the five years following the initial planting: (1) cattle fencing effectiveness monitoring and (2) biological effectiveness monitoring. Monitoring will occur monthly and an annual report will be submitted to planning staff.

The property is a 14,811-acre property on parcel's zoned AG-II-100 and AG-II-320 shown as Assessor's Parcel Numbers 083-550-032, 083-540-016, 083-530-050, 083-260-017, 083-360-023, 083-510-041, 083-510-026, 083-370-025, 083-450-042, 083-260-002, 083-610-035, 083-440-023, 083-370-026, 083-370-027: 558, 083-260-016, 083-440-022. The project is located on the Dangermond Preserve in the Gaviota Coast Plan area, 3<sup>rd</sup> Supervisorial District.

## **2.0 COSTS AND IMPACTS OF WELL ABANDONMENT**

On November 9, 2017 the California Coastal Commission issued a Consent Restoration Order identifying that unpermitted work occurred on the Dangermond property. The Coastal Commission Consent Restoration Order identify 37 wells on the property that were constructed without Coastal Development Permits (CDPs). The Orders allow the owner to apply to the County for after-the-fact CDPs for the wells. The Orders further require the “[r]emoval of wells for which authorization is sought and is subsequently denied, and restoration of the areas where such wells had been.” (Orders, Section 5.2.A(2).) The Nature Conservancy (TNC) is proposing to retain 41 existing wells, though 22 will be monitoring wells where no water will be pumped from the ground. TNC is proposing this in order to limit impacts to biological and cultural resources and to maintain monitoring wells for the purpose of scientific study. Retaining wells will also reduce costs.

Removal of the wells may result in significant impacts to sensitive biological and cultural resources on the Preserve that would require additional mitigation or that cannot be fully mitigated through restoration.

The process for destroying a well typically involves excavating approximately five feet around the well head using a backhoe or excavator on tracks, perforating or drilling out the well casing with a drill rig, filling the well boring with fill materials delivered by a dump truck, pressure sealing at least the top 20 feet of the boring with an approved materials (e.g., cement, sand-cemented grout, or concrete) using a concrete mixer/ready mix truck, backfilling the excavated hole and compacting the fill material using a backhoe using material delivered by a dump truck. Additional support vehicles such as pickup trucks to carry crews and equipment are also typically required. Destruction of a single well typically takes several days to complete once equipment is staged at the well site. Restoration of the surface of the well site would follow and may require additional equipment and vehicles.

Currently, access roads to a majority of the well sites are via unpaved dirt roads, accessible by ATV and on foot. However, if access roads to well sites are not currently in a condition that allows access by heavy equipment, grading, widening, and vegetation removal along the access roads would be required. In addition, several of the wells are accessed via roads that are required to be abandoned and restored per

the California Coastal Commission Orders, so abandoning wells in these locations would delay the start time for restoration of the roads.

### Impacts to Biological Resources

While it is impossible to fully assess the impacts that may have occurred when the prior owner installed the wells given the lack of information about conditions prior to drilling and the time that has passed since the wells were completed, those impacts have been addressed through the compensatory restoration and other requirements of the Commission’s Orders. In addition, all of the impacts that occurred during well installation were temporary construction impacts. There has been no ongoing impact resulting from the proposed monitoring wells since these wells have not been in use. Many of the well sites and access roads to them that are required to be abandoned pursuant to the Coastal Commission Orders have been revegetated and have begun recovery of ecosystem and habitat function. Well removal would repeat and approximately replicate the disturbance and damage to these areas and reverse the current state of natural recruitment and recovery that has already begun.

The activities necessary to remove the wells would result in significant and unavoidable impacts to numerous sensitive species and habitats. For example, almost the entire northwest quadrant of the Preserve is federally-designated California red-legged frog critical habitat. Twenty-four of the 28 proposed monitoring wells are located in this area. Further, all of the well sites are located in or adjacent to environmentally sensitive habitat as defined by the County’s Local Coastal Plan and Gaviota Coast Plan. Implementation of well removal and grading associated with access roads would disturb several acres or more of sensitive habitat, and could encourage erosion and impacts to surface waters and associated species and would be a direct disturbance that would impact wildlife behavior.

### Impacts to Cultural Resources

Sensitive Native American cultural resources are located throughout the Preserve.

The April 2024 Phase 1 Archaeological Survey Report for the wells project identified cultural resources in the immediate vicinity of two of the proposed monitoring wells (Tinta 1 and Jalama Vaqueros). TNC has also engaged experts to evaluate cultural resources in or near road segments that are required to be abandoned pursuant to the Commission’s Orders and identified cultural resources in some of these locations. The area of disturbance that would be required for staging equipment for well abandonment as well as access improvements necessary to get heavy equipment to well sites would be substantially larger than the areas studied for the proposed project. It is very likely that additional cultural resources would be identified in these expanded disturbance areas. These potential resources would be significantly adversely affected by the use and staging of heavy equipment required for well abandonment.

## **3.0 PROJECT LOCATION**

<b>2.1 Site Information</b>	
Comprehensive Plan Designation	A-II-320 (Agriculture-II, 320 acre minimum parcel size) Coastal, Gaviota Coast Plan Area, Rural Area, Gaviota Coast Rural Region
Zoning District, Ordinance	Article II Coastal Zoning Ordinance, AG-II-320 (Agriculture II, 320-acre minimum parcel size) California Coastal Commission Appeals Jurisdiction
Site Size	APN’s: 083-450-041: 1662 acres 083-550-032: 1662 acres 083-540-016: 1660 acres

	083-530-050: 1150 acres 083-260-017: 666 acres 083-360-023: 876 acres 083-510-041: 577 acres 083-510-026: 154 acres 083-370-025: 757 acres 083-450-042: 1127 acres 083-260-002: 448 acres 083-610-035: 2622 acres 083-440-023: 980 acres 083-370-026: 298 acres 083-370-027: 558 acres 083-260-016: 394 acres 083-440-022: 882 acres Total: 14,811 acres
Present Use & Development	Cattle ranch, restoration/conservation, existing unpermitted wells
Surrounding Uses/Zoning	North: Vandenburg Air Force Base, City of Lompoc, AG-II-320, AG-II-100 South: Pacific Ocean, Point Conception, AG-II-320 East: Hollister Ranch, Los Cruces, Gaviota State Park, Highway 1, AG-II-320, REC West: Vandenburg Air Force Base, Jalama Beach County Park, AG-II-320
Access	Water wells are accessed via unpaved ranch roads off of Cojo Jalama Road
Public Services	Water Supply: Private onsite wells Sewage: N/A Fire: Santa Barbara County Fire Department Law Enforcement: County Sheriff's Office

## 4.0 ENVIRONMENTAL SETTING

### 4.1 PHYSICAL SETTING

The Dangermond Preserve extends south to southeast along the California Coast from the Jalama Beach County Park to the western boundary of Hollister Ranch at Cañada del Cojo. The entire length of Jalama Creek, as well as many smaller contributing watersheds to the northwest and southeast, fall within the Dangermond Preserve boundary. Vandenburg Air Force Base abuts the western boundary of the property, and Hollister Ranch abuts the eastern boundary. Jalama Road, a County-maintained asphalt road, traverses the Preserve from the east to west. Elevation varies from sea level to approximately 1,680 feet at the crest of the Santa Ynez Mountains.

**Soils.** The United States Department of Agriculture (USDA) Soil Survey of Santa Barbara County, California South Coastal Part (1981) and Soil Survey of Northern Santa Barbara Areas, California (1972) describe over seventy soil map units within the Preserve, including the following four soil associations:

- Conception-Botella Association: “nearly level to steep, moderately well drained and well drained loamy sands, fine sandy loams, and silty clay loams on terraces and in small valleys.”
- Los Osos-Gaviota-Maymen Association: “Strongly sloping to very steep, somewhat excessively drained and well drained sandy loams, clay loams, and stony fine sandy loams in uplands.”
- Nacimiento-Linne-Capitan Association: “moderately steep to very steep, well drained, calcareous silty clay loams, clay loams and cobbly clay loams on uplands.”

- Santa Lucia-Lopez-Crow Hill Association: “strongly sloping to extremely steep, somewhat excessively drained and well drained shaley clay loams and silty clay loams on uplands.”

**Slope/Topography.** The dominant topographic features of the property are the Santa Ynez Mountains and the San Julian Ridge. Slopes range between 0-6% in the Jalama Valley, 5-20% in the foothills, and are 30% or more in the mountains.

**Flora.** Sensitive vegetation alliances which are afforded protection under CEQA were mapped at one or more well location or within a 200-foot buffer from a well location.. Specifically, the site consists of coast live oak woodland widespread in both the upland and bottomland situations at the Preserve. In addition, California walnut groves were found scattered along streams throughout the Preserve.

Vegetation and land cover types documented to occur include:

- Arroyo willow thickets (*Salix lasiolepis*) which occurred along perennial and seasonal drainages.
- Bush monkeyflower scrub (*Ceanothus cuneatus*) was mapped on north-facing slope along the Cojo Headquarters Road, and smaller stands have been mapped throughout the Preserve.
- Coast Live Oak Woodland (*Quercus agrifolia*), occur primarily on steeply to moderately sloped hillisdes in the central and eastern portions of the project area.
- California coffeeberry scrub (*Frangula californica*), numerous distinct stands as part of shrub canopy.
- Menzies golden bush scrub (*Isocoma menziesii*), in survey this alliance transitioned with grassland and scrub habitats and occurred on level ground to moderate slopes.
- Needle grass grassland (*Stip. Spp.*), occurred in and adjacent to unpaved roads and within wild oats ad annual brome vegetation and open spaces in scrub vegetation.
- Sawtooth goldenbush scrub (*Hazardia squarrosa*), occurred on moderate slopes and transitioned with surrounding grassland habitat.
- Silver bush lupine scrub (*Lupinus chamossonis*), species was dominant within the shrub layer with an open cover canopy and spares herbaceous understory.
- Western rush marshes (*Juncus occidentalis*), locatd near the Buckhorn 2 infrastructure

**Fauna:** A number of mammals, birds, amphibians, reptiles, and invertebrates occur or are determined to have a moderate to high potential to occur near one or more project locations. Some of these species that were observed include:

- Golden eagle (*Aquila chrysaetos*). Observed by Padre staff during a 2020 field survey
- Oak titmouse (*Baeolophus cunicularia*). USFWS bird of conservation concerns that has been documented calling approximately 75 feet east of the Tinta 2 well.
- Loggerhead shrike (*Lanius ludovicianus*). Observed during 2020 Padres survey.
- San Diego desert woodrat (*Neotoma lepida intermedia*). Nests observed in oak woodlands and scrub habitat during 2020 survey.

The site also contains species with moderate to high potential to occur including:

- mammals (e.g., American badger, pallid bat, Townsend big-eared bat, western mastiff bat, silver-haired bat, western red bat, and hoary bat);
- birds (e.g., Cooper’s hawk, sharp-shinned hawk, tricolored blackbird, southern California rufous-crowned sparrow, grasshopper sparrow, Bell’s sage sparrow, long-eared owl, western burrowing owl, ferruginous hawk, northern harrier, white-tailed kite, southwestern willow flycatcher, California horned hawk, prairie falcon, peregrine falcon, California condor, bald eagle, yellow-breasted chat, purple martin, yellow warbler, Lawrence’s goldfinch, California spotted owl, least Bell’s vireo, and yellow-headed blackbird);

- invertebrates (e.g., Point Conception Jerusalem cricket, Monarch butterfly, and Obscure bumblebee)
- amphibians (e.g., California red-legged frog, and coast range newt)
- reptiles (e.g., southwestern pond turtle, two-striped garter snake, and coast horned lizard).

**Archaeological Sites.** Two previous archaeological sites are located in the vicinity of existing water wells. In addition, new resources were identified within 200 feet of the previously constructed water wells. No prehistoric or historic period archaeological sites have been identified during the survey of proposed production well-related infrastructure components.

**Surface Water Bodies.** The Preserve contains most of the 25 square mile Jalama Creek Watershed except for a limited area draining from the Sudden Peak area and a reach extending approximately 3,000 feet upstream of the mouth of the creek. Water originating from the southern portion of the Preserve drains towards the west or south into the Pacific Ocean via ephemeral to perennial flows in steep deep canyons originating on the south slope of the Santa Ynez Mountains. Water originating from the northern portion of the Preserve drains to Jalama Creek via one of several stream systems, including Espada Creek, Gaspar Creek, and Escondido Creek.

**Surrounding Land Uses.** The Dangermond Preserve is located approximately five (5) miles southwest of Lompoc and 40 miles west of the City of Santa Barbara. The Preserve is located approximately five (5) miles from Highway 1 on Jalama Road. To the north and west of the Dangermond Preserve are the Vandenburg Air Force Base and Jalama Beach County Park. The Dangermond Preserve is also bounded by several small ranch properties on the north and east, and is bounded by the Pacific Ocean on the south and west.

**Existing Structures.** There are a number of structures that currently exist on the Dangermond Preserve, including structures related to the Cojo headquarters, Jalama headquarters, teacher and school house, and Jalama nursery trailer. For example, the headquarters includes a guest house, manager house, cook house, bathroom/laundry structure, guest complex, two (2) guest bunkhouses, a guesthouse, and an adobe office. In addition, the project site contains a school house, teacher's house, Diamond Corral bridge and crossing, Cojo bridge and crossing, and 41 existing water wells which are the subject of the proposed project.

#### 4.2 ENVIRONMENTAL BASELINE

The environmental baseline from which the project's impacts are measured consists of the physical environmental conditions in the vicinity of the project, as described above.

This project is associated with the violation of constructing 41 water wells without permits between 1985 – 2012. As such, the environmental baseline includes the construction of the 41 water wells onsite. Recent court decisions, including *Fat v. County of Sacramento* and *Riverwatch v. County of San Diego* support the approach requiring existing unpermitted development to be considered part of the environmental baseline (*Fat v. County of Sacramento*, No. C037610, 02 C.D.O.S. 3642, 2002 DJDAR 4646; *Riverwatch v. County of San Diego*, (1999) 76 Cal.App.4<sup>th</sup> 1428).

## 5.0 POTENTIALLY SIGNIFICANT EFFECTS CHECKLIST

The following checklist indicates the potential level of impact and is defined as follows:

**Potentially Significant and Unavoidable Impact:** A fair argument can be made, based on the substantial evidence in the file, that an effect may be significant.

**Significant but Mitigable:** Incorporation of mitigation measures has reduced an effect from a Potentially Significant Impact to an Insignificant Impact.

**Insignificant Impact:** An impact is considered adverse but does not trigger a significance threshold.

**No Impact:** There is adequate support that the referenced information sources show that the impact simply does not apply to the subject project.

**Beneficial Impact:** There is a beneficial effect on the environment resulting from the project.

**Reviewed Under Previous Document:** The analysis contained in a previously adopted/certified environmental document addresses this issue adequately for use in the current case and is summarized in the discussion below. The discussion should include reference to the previous documents, a citation of the page(s) where the information is found, and identification of mitigation measures incorporated from the previous documents.

#### 4.1 AESTHETICS/VISUAL RESOURCES

Will the proposal result in:	Poten. Signif. and Unavoid.	Significant but Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. The obstruction of any scenic vista or view open to the public or the creation of an aesthetically offensive site open to public view?				X	
b. Change to the visual character of an area?				X	
c. Glare or night lighting which may affect adjoining areas?				X	
d. Visually incompatible structures?				X	

**Impact Discussion.** No project components, including structures, land alterations or lighting, would be visible from any public viewing place, such as roads, highways, railroads, public and other open spaces, trails, beaches or other recreation areas. The 41 well locations are on the Dangermond Preserve property, and all structural development associated with the wells is less than 10 feet in height. There is no lighting existing or proposed at the well locations. All roads on the Dangermond Preserve property, including access roads to the wells, are private roads and are not accessible by the public. Further, the wells are not visible from any public viewing locations.

**Mitigation and Residual Impact.** No impacts are identified. No mitigations are necessary.

#### 4.2 AGRICULTURAL RESOURCES

Will the proposal result in:	Poten. Signif. and Unavoid.	Significant but Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Convert prime agricultural land to non-agricultural use, impair agricultural land productivity (whether prime or non-prime) or conflict with agricultural preserve programs?				X	
b. An effect upon any unique or other farmland of State or Local Importance?				X	

The project would not convert agricultural land to non-agricultural use, would not impair agricultural productivity, conflict with an agricultural preserve program, or adversely impact- unique farmland of State or Local importance. The water wells are located on parcels that total approximately 14,811 acres in size. The project is not located on lands under Agricultural Preserve contracts though they are adjacent to lands that are under contract. The proposed project will result in a total of 41 water wells, of which 22 will be used only as monitoring wells for research purposes and 19 that will be used as production wells for cattle operations. The project also includes associated water distribution infrastructure that will serve the onsite cattle operation. The 19 production wells and infrastructure would provide necessary water resources to the cattle operation, thereby providing a critical component of agricultural suitability and productivity without having to truck water into the site. In addition, increased water availability would provide greater stability in cattle operations and may allow an increase in the current size of the cattle herd to historic levels of up to 3,000 head (including mothers, calves, and bulls).

Existing water demands on the property, including water supplied to the Jalama Headquarters, Cojo Headquarters, irrigation-plant nursery, and cattle, totals 29.4 acre-feet per year. With the water wells and additional cattle capacity, the proposed water demands are estimated to be 42.8-51.8 acre-feet per year (Attachment 3, Safe Yield Report, February 2018, p. 7). The safe yield amount is well above what is required to support the groundwater demands of the Preserve. Specifically, the proposed maximum water demand for expanded cattle operations and existing demand is 51.8 AFY or 1.1% of the estimated safe yield of the study area. Therefore, groundwater use on the project site would not impact the neighboring agricultural operations since 98.9% of the estimated safe yield is still available to other adjacent properties in the same watershed.

Further, the site is expansive – while the parcels with water wells total 14,811 acres, the total acreage of the Dangermond Preserve is approximately 24,500 acres. Agricultural uses on the site and on surrounding ranches are primarily cattle ranching, with some dry and irrigated farming near Salsipuedes Creek. Since the cattle operation is compatible with adjacent agricultural uses, the construction/establishment of 41 water wells will not impact any neighboring agricultural operations.

**Mitigation and Residual Impact:** No impacts are identified. No mitigations are necessary.

### 4.3a AIR QUALITY

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. The violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation, or exposure of sensitive receptors to substantial pollutant concentrations (emissions from direct, indirect, mobile and stationary sources)?			X		
b. The creation of objectionable smoke, ash or odors?				X	
c. Extensive dust generation?			X		

**Existing Setting.** As the local air quality management agency, the Santa Barbara County APCD is responsible for monitoring air pollutant levels to ensure National Ambient Air Quality Standards and California Ambient Air Quality Standards are met, and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, Santa Barbara County is classified as being in “attainment” or “nonattainment”. Currently, Santa Barbara County is in nonattainment for the State standards for ozone and Particulate Matter with a diameter of 10 microns or less (PM<sub>10</sub>) (Santa Barbara APCD 2022a).

**Environmental Threshold.** Chapter 5 of the Santa Barbara County Environmental Thresholds and Guidelines Manual (as revised in July 2015) addresses the subject of air quality. The thresholds provide that a proposed project will not have a significant impact on air quality if operation of the project will:

- emit (from all project sources, mobile and stationary), less than the daily trigger for offsets for any pollutant (currently 240 pounds per day for NO<sub>x</sub> and ROC, and 80 pounds per day for PM<sub>10</sub>);
- emit less than 25 pounds per day of oxides of nitrogen (NO<sub>x</sub>) or reactive organic compounds (ROC) from motor vehicle trips only;
- not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone);
- not exceed the APCD health risk public notification thresholds adopted by the APCD Board; and
- be consistent with the adopted federal and state Air Quality Plans.

No thresholds have been established for short-term impacts associated with construction activities. However, the County’s Grading Ordinance requires standard dust control conditions for all projects involving grading activities. Long-term/operational emissions thresholds have been established to address mobile emissions (i.e., motor vehicle emissions) and stationary source emissions (i.e., stationary boilers, engines, and chemical or industrial processing operations that release pollutants).

**Impact Discussion Existing Condition:**

**(a-c)** Construction associated with the project includes installation of pumps and associated water system infrastructure in five Oak wells, Tinta water System, Quarry Water System, Gaspar Water System, and Venadito Water System. This includes installation of new linear water service HDPE pipelines, water storage tanks, water troughs, and distribution lines. The project also includes installation of approximately 63,360 linear feet of wildlife friendly exclusionary fencing to prevent cattle access to 6.5 miles of creek and riparian areas.

Vehicles would be traveling to the site from Santa Maria and/or Santa Barbara during non-peak hours for construction purposes. The table below lists the anticipated number of vehicle trips by type. The anticipated duration of construction is 6-months (172 working days).

Vehicle Type	Trips per day	Duration (days)	Total Vehicle Trips
Pickup trucks and UTVs for crew and materials for well infrastructure installation	4	60	240
Pickup truck and UTVs for setting well pumps	1	22	22
Pickup trucks for crew and materials for riparian fencing and restoration	4	90	360
Total	9	172	622

The total vehicle trips for construction of work lasting approximately 6 months would be 622 total vehicle trips, or an average of about 4 vehicle trips daily. Wells would be accessed via standard vehicle, off-road utility vehicles (UTVs), or on foot. Due to the number of wells in comparison to the size of the property, vehicle trips to the wells are not likely to generate air quality impacts. Further, these vehicles trips would not result in a violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation, or exposure to sensitive receptors to substantial pollutant concentrations.

Estimated earthwork as part of construction of concrete footings for additional solar panels, ground disturbance associated with trenching for conduit between solar panels and well pumps, and excavation necessary to connect the proposed water pipelines is minimal. Excavated material will be replaced and re-compacted in the excavated areas after installation of the conduit and connection of the water pipelines. Cut associated with solar panel footings will be stored in existing stockpiles at the Preserve. Specifically, the estimated cut is 1,872 cubic yards, estimated fill is 1,866 cubic yards, and estimated ground disturbance is 5.15-acres.

The work will require approximately 5-10 construction workers per day, and equipment consists of hand tools, a ready-mix truck, pickup trucks for crew and materials, a pickup truck for setting well pumps, solar panels with concrete footings, HDPE pipeline, and a new trough. Equipment will not result in the creation of smoke, ash, odors, or the violation of any air quality standard, a substantial contribution to an existing or projected air quality violation, or exposure of sensitive receptors to substantial pollutant concentrations.

In regards to well operation, it is estimated that approximately four trips per month will be required to each of the production wells to monitor equipment and well-functioning and one trip per month will be required to each of the monitoring wells to make measurements for research purposes. Trips would originate from one of the headquarters sites (Jalama Headquarters or Cojo Headquarters) and would be combined for efficiency (e.g., all of the Oaks wells would be visited in one trip or would be combined with trips for other purpose such as monitoring restoration sites). Trips will be by either utility task vehicle (UTV) or pickup truck depending on the site being accessed. Impacts from these trips would not result in substantial pollutant concentrations.

The project data was submitted through CalEEMod (Attachment 4) to analyze air quality impacts from temporary construction of the project. The results of the CalEEMod analysis found that during construction

which is only estimated to last approximately 6-months, the project would emit 66 lbs per day of NO<sub>x</sub>, 7 lbs per day of ROG, and 32 lbs per day of PM<sub>10</sub>. This data is more evidence that the project, including the temporary construction component will not generate a significant impact to air quality.

As identified above, the project would not result in significant new vehicle emissions (i.e., new vehicular trips during operation of the project to or from the site would be fewer than 100). It would not involve new stationary sources (i.e., equipment, machinery, hazardous materials storage, industrial or chemical processing, etc.) that would increase the amount of pollutants released in the atmosphere. The project would also not generate additional smoke, ash, odors, or long-term dust after construction. Water availability from the proposed production wells would reduce the need for trucking water to remote locations on the property, reducing the carbon footprint and other pollutants. The project’s contribution to climate change from the generation of greenhouse gases would be negligible.

**Cumulative Impacts.** The County’s Environmental Thresholds were developed, in part, to define the point at which a project’s contribution to a regionally significant impact constitutes a significant effect at the project level.

In this instance, the project has been found not to exceed the significance criteria for air quality. Therefore, the project’s contribution to regionally significant air pollutant emissions is not cumulatively considerable, and its cumulative effect is insignificant.

**Mitigation and Residual Impact.** No impact identified, no mitigation measures are required.

**4.3b AIR QUALITY - GREENHOUSE GAS EMISSIONS**

<b>Greenhouse Gas Emissions - Will the project:</b>	<b>Poten. Signif. and Unavoid.</b>	<b>Signif. But Mitigable</b>	<b>Insignif.</b>	<b>No Impact / Beneficial Impact</b>	<b>Reviewed Under Previous Document</b>
<b>a.</b> Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X		
<b>b.</b> Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?		X			

**Existing Setting.** Greenhouse gases (GHG) include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and nitrogen trifluoride (NF<sub>3</sub>) (California Health and Safety Code, § 38505(g)). These gases create a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as “the greenhouse effect,” human activities have accelerated the generation of GHG emissions above pre-industrial levels (U.S. Global Change Research Program 2018). The global mean surface temperature increased by approximately 1.8°F (1°C) in the past 80 years, and is likely to reach a 2.7°F (1.5°C) increase between 2030 and 2050 at current global emission rates (IPCC 2023).

The largest source of GHG emissions from human activities in the United States is from fossil fuel combustion for electricity, heat, and transportation. Specifically, the *Inventory of U.S. Greenhouse Gasses and Sinks: 1990-2022* (U.S. Environmental Protection Agency 2024) states that the primary sources of GHG emissions from fossil fuel combustion in 2022 included electricity production (25%), transportation (29%), industry (30%), agriculture (10%), and commercial and residential end users (31%, combined).

The County of Santa Barbara's 2030 Climate Action Plan (2030 CAP) and the accompanying Programmatic Environmental Impact Report (PEIR) contain a detailed description of the proposed project's existing regional setting as it pertains to GHG emissions. Regarding non-stationary sources of GHG emissions within Santa Barbara County specifically, the transportation sector produces 48% of the total emissions, followed by natural gas used in buildings and facilities (21%), agriculture (14%), electricity used in buildings and facilities (7%), off-road equipment (5%), and solid waste (4%) sectors (2030 CAP).

The overabundance of GHG in the atmosphere has led to a warming of the earth and has the potential to substantially change the earth's climate system. More frequent and intense weather and climate-related events are expected to damage infrastructure, ecosystems, and social systems across the United States (U.S. Global Change Research Program 2018). California's Central Coast, including Santa Barbara County, will be affected by changes in precipitation patterns, reduced foggy days, increased extreme heat days, exacerbated drought and wildfire conditions, and acceleration of sea level rise leading to increased coastal flooding and erosion (Langridge, Ruth 2018).

Global mean surface warming results from GHG emissions generated from many sources over time, rather than emissions generated by any one project (IPCC 2014). As defined in CEQA Guidelines Section 15355, and discussed in Section 15130, "'Cumulative impacts' refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Therefore, by definition, climate change under CEQA is a cumulative impact.

CEQA Guidelines Section 15064.4(b) states that a lead agency "should focus its analysis on the reasonably foreseeable incremental contribution of the project's [GHG] emissions to the effects of climate change." A project's individual contribution may appear small but may still be cumulatively considerable. Therefore, it is not appropriate to determine the significance of an individual project's GHG emissions by comparing against state, local, or global emission rates. Instead, the Governor's Office of Planning and Research recommends using an established or recommended threshold as one method of determining significance during CEQA analysis (OPR 2008, 2018). A lead agency may determine that a project's incremental contribution to an existing cumulatively significant issue, such as climate change, is not significant based on supporting facts and analysis [CEQA Guidelines Section 15130(a)(2)].

**Environmental Threshold.** In 2024, Santa Barbara County adopted its 2030 Climate Action Plan (2030 CAP), with an emission reduction goal of 50 percent below 2018 levels by 2030 and achieving carbon neutrality by 2045 or sooner, which are in line with the State's GHG emission reduction goals. The 2030 CAP is a qualified greenhouse gas emissions reduction plan pursuant to CEQA Guidelines Section 15183.5, which allows discretionary non-industrial projects to tier their GHG emissions analysis off the 2030 CAP Programmatic Environmental Impact Report (PEIR) if the project is found consistent with the 2030 CAP. To aid in determining a project's consistency with the 2030 CAP, the County has developed the Climate Action Plan Consistency Checklist (Checklist). A project found to be consistent with the 2030 CAP that tiers GHG emissions analysis off the 2030 CAP PEIR will have an insignificant environmental impact in regards to GHG emissions.

Concurrent with adoption of the 2030 CAP, Santa Barbara County adopted new GHG emissions thresholds of significance (Thresholds) for non-industrial stationary source projects based on the County's 2030 GHG target (i.e., 50 percent below 2018 levels by 2030). The thresholds were developed and adopted consistent with CEQA Guidelines Section 15064.7, Thresholds of Significance. The thresholds are designed to identify (1) a cumulatively considerable contribution to an existing adverse condition, and (2) a cumulatively significant impact in combination with other projects causing related impacts. A CEQA lead agency may determine that a project's incremental contribution to an existing cumulatively significant issue, such as climate change, is not significant based on supporting facts and analysis (CEQA Guidelines

Section 15130, Discussion of Cumulative Impacts, Subsection (a)(2)). The CEQA Guidelines direct that a project's contribution to a significant cumulative impact will be rendered insignificant if the project is required to implement or fund its fair share of a mitigation measure designed to alleviate the cumulative impact (CEQA Guidelines Section 15130(a)(3)). Any non-industrial stationary source project that does not demonstrate consistency with the 2030 CAP shall be subject to the following applicable threshold based on project type: 2.68 metric tons CO<sub>2</sub> equivalent (MT CO<sub>2</sub>e) per year per resident for residential projects; 2.63 MT CO<sub>2</sub>e/year per employee for non-residential projects; and 2.67 MT CO<sub>2</sub>e/year per service person for mixed-use projects. If the estimated GHG emissions are less than the applicable threshold, staff can conclude that the project will have an insignificant environmental impact, and the project would require no further analysis. For projects that exceed the threshold, mitigation measures are needed.

The proposed project has been found consistent with the 2030 Climate Action Plan, as demonstrated by the Climate Action Plan Consistency Checklist (Appendix 6). The proposed project can therefore tier GHG emissions analysis from the 2030 CAP PEIR pursuant to CEQA Guidelines Section 15183.5. Based on the 2030 CAP measures included in the proposed project description and applied as mitigation measures, the project would result in less than significant GHG emissions and would not result in a cumulatively considerable impact related to GHG emissions and climate change.

Certain 2030 CAP measures do not apply to the proposed project as follows, and inclusion of these measures is not required for consistency with the 2030 CAP. The requirement that all building be fully electric is not applicable because no buildings are proposed to be constructed or remodeled as part of this project. Since no new habitable structures are proposed as part of this project, the requirement that EV Charging Infrastructure be developed is also not applicable. In addition, a Transportation Demand Management Plan is not requirements because the project will not have more than 50 employees. The operation and maintenance of the project will not generate waste and the project will meet all state requirements.

**Mitigation and Residual Impact.** The following mitigation measures would reduce the proposed project's greenhouse gas impacts to an insignificant level:

1. **MM AQ-1 Carbon Free Electricity.** The Owner/Applicant shall use electricity from Southern California Edison and through the use of solar panel systems to power the pumps for the water wells. No fossil fuel generation will be used to power the pumps or any other maintenance for this project.
2. **MM AQ-2 Off-Road Equipment Electrification.** The project shall use electric chain saws and landscaping equipment to maintain fuel clearance areas around the project infrastructure including the wells and solar panels. No gas-powered landscaping equipment shall be used for ongoing maintenance activities.

With the incorporation of these measures residual impacts would be insignificant.

#### References:

County of Santa Barbara Sustainability Division, Community Services Department, *Climate Action Plan*, August 2024.

County of Santa Barbara Sustainability Division, Community Services Department, *Final Environmental Impact Report for the Climate Action Plan*, May 2024.

County of Santa Barbara Planning and Development, *Environmental Thresholds and Guidelines Manual*, October 2008 (Revised August 2024).

Governor’s Office of Planning and Research (OPR), *CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review*, June 2008.

Governor’s Office of Planning and Research (OPR), *CEQA and Climate Change Advisory, Discussion Draft*, December 2018.

Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II, and III to the Fifth Assessment report of the Intergovernmental Panel on Climate Change* [Core Writing Team, R.K. Pachauri and L.A. Mayer (eds.)]. IPCC, Geneva, Switzerland, 151 pp.

IPCC, 2023: Summary for Policymakers. In: *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, pp. 1-34, doi: 10.59327/IPCC/AR6-9789291691647.001

Langridge, Ruth (University of California, Santa Cruz). *California’s Fourth Climate Change Assessment, Central Coast Summary Report*, September 2018.

U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gasses and Sinks: 1990-20122*, April 2024.

U.S. Global Change Research Program, *Fourth National Climate Assessment, Volume II: Impacts, Risks, and Adaptation in the United States*, 2018.

#### 4.4 BIOLOGICAL RESOURCES

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
<b>Flora</b>					
a. A loss or disturbance to a unique, rare or threatened plant community?		X			
b. A reduction in the numbers or restriction in the range of any unique, rare or threatened species of plants?		X			
c. A reduction in the extent, diversity, or quality of native vegetation (including brush removal for fire prevention and flood control improvements)?		X			
d. An impact on non-native vegetation whether naturalized or horticultural if of habitat value?			X		
e. The loss of healthy native specimen trees?		X			
f. Introduction of herbicides, pesticides, animal life, human habitation, non-native plants or other factors that would change or hamper the existing habitat?			X		
<b>Fauna</b>					
g. A reduction in the numbers, a restriction in the range, or an impact to the critical habitat of any unique, rare, threatened or endangered species of animals?		X			

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
h. A reduction in the diversity or numbers of animals onsite (including mammals, birds, reptiles, amphibians, fish or invertebrates)?		X			
i. A deterioration of existing fish or wildlife habitat (for foraging, breeding, roosting, nesting, etc.)?			X		
j. Introduction of barriers to movement of any resident or migratory fish or wildlife species?			X		
k. Introduction of any factors (light, fencing, noise, human presence and/or domestic animals) which could hinder the normal activities of wildlife?		X			

**Existing Plant and Animal Communities/Conditions.**

*Background and Methods:*

Santa Barbara County has a wide diversity of habitat types, including chaparral, oak woodlands, wetlands and beach dunes. These are complex ecosystems and many factors are involved in assessing the value of the resources and the significance of project impacts. For this project, site visit was conducted by WRA in 2012, 2016, and 2017 and a Biological Survey Report was prepared on March 15, 2018. Padre Associates, Inc. conducted additional surveys on August and September 2020 and a biological report was prepared by Padre Associates, Inc. dated December 2020 and revised in April 2024 (Attachment 6). An Addendum dated October 31, 2024 (Attachment 7) was prepared by Padre & Associates following early consultation comments from the California Department of Fish and Wildlife. The following analysis is based on this information.

*Flora:*

The project site contains natural plant communities considered rare by the California Department of Fish and Wildlife including Arroyo willow thickets, California walnut groves, Coast live oak woodlands, Menzies golden bush scrub, Bush monkeyflower scrub, Needlegrass grasslands, Sawtooth golden bush scrub, Silver bush lupine scrub, and Western rush marshes.

The following identifies the biological setting and general vegetation habitat at each of the well locations surveyed by the biological study area:

- Quarry 1 – the well is located in an area classified as wild oats and annual brome grassland and upland mustard fields. The proposed water pipeline travels south along an existing access road to a proposed cattle trough. The proposed water pipeline is located near coyote bush, and coast live oak woodlands, with limited areas of California sagebrush scrub, deer weed scrub, holly leaf cherry chaparral, needlegrass grassland, purple sage scrub, and tarplant habitat.
- Escondido 4 is located within an area classified as wild oats and annual brome grasslands. The proposed water distribution system travels southwest along an existing access road towards the Tinta 2 well, with coast live oak woodland and coyote bush scrub on either side of the road with small area of California sagebrush scrub within the biological study area (BSA).
- Tinta 2 is located within an area classified as wild oats and annual brome grasslands. The proposed water distribution system travels southeast towards two proposed water tanks and a proposed water trough that are located in an area classified as coyote bush scrub.

Coast live oak woodland, coffeeberry scrub, California sagebrush scrub, and coyote brush scrub are located adjacent to the access road within the BSA. The water distribution system continues and connects with the existing system from the Upper Espada well.

- Tinta 3, Tinta 4, Tinta 5, Tinta 10, Tinta 11, and Tinta 11A are existing wells proposed as monitoring wells and are located along existing ranch roads and no water distribution system is proposed.
- Upper Espada is located in an area classified as wild oats and annual brome grasslands and is adjacent to coast live oak woodland area. An existing water distribution system travels east and south towards the Tinta 1 well. The existing water distribution system travels through wild oats and annual brome grasslands, California sagebrush scrub, coyote brush scrub, black sage scrub, bush monkeyflower scrub, and coffeeberry scrub.
- Tinta 1 – the well is located in an area classified as wild oats and annual brome grasslands. Two new water tanks are proposed just north of the Tinta 1 wells within wild oats and annual brome grasslands. The proposed water distribution infrastructure continues south along an existing ranch road, from the existing well adjacent to coffeeberry scrub, coast live oak woodland, coyote brush scrub, and purple sage scrub area.
- Gaspar 1 – the well is located in an area classified as wild oats and annual brome grasslands. The proposed water distribution system travels east along an existing ranch road adjacent to purple sage scrub coyote brush scrub, and California sage scrub towards two proposed water tanks. The water tanks are proposed in wild oats and annual brome grassland.
- Oaks 5 – the well is located within California sagebrush scrub habitat. The existing water distribution system travels east towards the Oaks 3 well and north towards two proposed water tanks. The two water tanks are located within California sagebrush scrub and sawtooth goldenbush scrub areas. A proposed water distribution system travels north towards another water tank within wild oats and redberry scrub. The water distribution system continues west and to the north towards two new cattle troughs. The cattle troughs are located within wild oats and annual brome habitat and sawtooth goldenbush scrub habitat.
- Oaks 3 – the existing well is located adjacent to coast live oak woodland. An existing water distribution line continues west and south towards a cattle trough and the Oaks 4 well.
- Oaks 3B – the existing well is proposed to be a monitoring well and is located east of the Oaks 3 well within coast live oak woodland area.
- Oaks 4 – The existing production well is located within wild oats and annual brome habitat adjacent to coast live oak area. A proposed water distribution system will move south along an existing access road adjacent to coast live oak woodland, California sagebrush scrub and wild oats and annual brome areas. A new water tank and a new water trough is proposed in wild oats and annual brome grasslands.
- Oaks 2 – The existing production well is located adjacent to a ranch road within deer weed scrub and coast live oak woodland. A proposed water distribution line will head south towards the Oaks 1 well along an existing ranch road adjacent to coast live oak woodland areas.
- Oaks 1 – the existing production well is located within wild oats and annual brome grasslands adjacent to coast live oak woodlands. Two new water tanks are proposed west of the Oaks 1 well within wild oats and annual brome grasslands. An existing water distribution line heads south towards a proposed water trough also within the wild oats and annual brome grasslands.
- Venadito 1 – The existing production well is located within wild oats and annual brome grasslands adjacent to coast live oak and black sage scrub area. A proposed water distribution line will head north along an existing ranch road adjacent to coast live oak, black sage scrub, coffeeberry scrub and wild oat & annual brome grasslands. Two water tanks are

proposed along this line north of the well within wild oat & annual brome grasslands and sawtooth goldenbush scrub. In addition, two new cattle troughs are proposed north of the proposed water tank also within wild oats and annual brome grasslands. A proposed water distribution line heads south from Vendadito 1 towards a new water trough within wild oats and annual brome grasslands.

- Buckhorn 2 – the existing production well is located east of an existing ranch road within wild oat and annual brome grasslands. A new proposed water distribution line heads east towards a new proposed cattle trough also within wild oat and annual brome grassland.
- Ramajal East – the existing production well is located near Coyote Brush Scrub, non-native grassland, and non-native upland forbs.
- Ramajal South – existing production well located adjacent to an existing access road. The well includes an existing water service line that serves two existing water troughs to the southwest. No further development is proposed.
- Jalachichi 2 – the existing monitoring well is located near California sagebrush scrub, chamise chaparral, coyote brush scrub, and non-native grassland.
- Buckhorn 1 – the existing production well is located near non-native upland forb habitat
- Buckhorn 2 – the existing production well is located near non-native grasslands and non-native upland forbs.
- Diamond Corral – the existing production well is located in a developed area.
- Gaucho 1 – the existing monitoring well is located in non-native grasslands.
- Gaucho 2 – the existing production well is located in a developed area.
- Alegria – the existing production well is located near black sage scrub and non-native upland forbs.
- Vaqueros – the existing production well includes chamise chaparral, non-native grassland, and non-native upland forbs
- Jalama Vaqueros – the existing monitoring well is located near California sagebrush scrub and non-native grasslands.
- Escondido 5 – the existing well is proposed to be a monitoring well and is located near black sage scrub and non-native grasslands.
- Escondido 2 – the existing well is proposed to be a monitoring well and is located near black sage scrub areas.
- Escondido 1 – the existing well is proposed to be a monitoring well and is located in a developed area.
- Escondido 3 – the existing well is proposed to be a monitoring well and is located near coyote brush scrub.
- Escondido 3B – the existing well is proposed to be a monitoring well and is located near coyote brush scrub.
- Tinta 9 – the existing well is proposed to be a monitoring well and is located near black sage scrub.
- Tinta 6 – the existing well is proposed to be a monitoring well and is located near California sagebrush scrub, coffeeberry scrub, coyote brush scrub, and non-native grassland.
- Tinta 7 – the existing well is proposed to be a monitoring well and is located near black sage scrub, and coyote brush scrub.

The California Natural Diversity Database (CNDDDB), California Department of Fish and Wildlife (CDFW) and California Native Plant Society (CNPS) indicate that the following special status plants have the potential to occur in the area:

Species Name	Status	Habitat Requirements	Blooming Period	Potential to Occur within BSA	Observed within the BSA
<i>Abronia maritima</i> Red sand verbena	CRPR 4.2 LC	Coastal dunes. Elevation 0-100 m.	February – November	<b>No.</b> Suitable habitat is not present within BSA. Observed on sand dunes within Dangermond Preserve (WRA, 2017)	No
<i>Ancistrocarphus keilii</i> Santa Ynez groundstar	CRPR 1B.1	Chaparral, cismontane woodland. Elevation: 40-130 m.	March-April	<b>Yes.</b> Suitable habitat is present, and documented occurrence within five miles of the BSA (CDFW, 2024a; WRA, 2017)	No
<i>Arctostaphylos purissima</i> La purissima manzanita	CRPR 1B.1, LC	Chaparral. Elevation: 120-300 m.	November-May	<b>Yes.</b> Suitable habitat is present, and documented occurrence within five miles of the BSA (CDFW, 2024a; WRA, 2017)	No
<i>Arctostaphylos refugioensis</i> Refugio manzanita	CRPR 1B.2, LC	Chaparral. Elevation 300-820 m.	December-May	<b>Yes.</b> Suitable habitat is present and documented occurrence within five miles of the BSA (CDFW, 2024a)	No
<i>Arcotostaphylos rudis</i> Sand mesa manzanita	CRPR 1B.2	Chaparral, coastal scrub. Elevation: 20-335 m.	November-February	<b>Yes.</b> Suitable habitat is present and documented occurrence within five miles of the BSA (CDFW, 2024a)	No
<i>Astragalus nuttallii</i> var. <i>nuttakkuu</i> Nuttall's milkvetch	CRPR 4.2	Coastal bluff scrub, coastal dunes. Elevation: 3-120 m.	January-November	<b>Yes.</b> Suitable habitat is present and documented occurrence within five miles of the BSA (CDFW, 2024a)	No <sup>2</sup>
<i>Atriplex coulterii</i> Coulter's saltbush	CRPR 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Elevation 3-460 m.	March-October	<b>Yes.</b> Suitable habitat is present and documented occurrence within five miles of the BSA (CDFW, 2024a)	No
<i>Atriplex pacifica</i> Southcoast saltscale	CRPR 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Elevation 3-460 m.	March-October	<b>Yes.</b> Suitable habitat is present and documented occurrence within five miles of the BSA (CDFW, 2024a)	No
<i>Calochortus fimbriatus</i> Late-flowered mariposa lily	CRPR 1B.3, LC	Chaparral, cismontane woodland, often associated with serpentine outcrops. Elevation: 270-1910 m.	June-August	<b>Yes.</b> Suitable habitat is present and documented occurrence within five miles of the BSA (CDFW, 2024a, WRA 2017)	No
<i>Cirsium rhotophilum</i> Surf thistle	FE, ST, CRPR 1B.1, LC	Coastal bluff scrub, coastal dunes. Elevation: 3-60 m.	April-June	<b>No.</b> Suitable habitat is not present within the BSA. Observed on sand dunes within Dangermond Preserve (WRA, 2017)	No

Species Name	Status	Habitat Requirements	Blooming Period	Potential to Occur within BSA	Observed within the BSA
<i>Cordylanthus rigidus</i> ssp. <i>Litoralis</i> Seaside bird's-beak	SE, CRPR 1B.1, LC	Closed cone coniferous forest, chaparral, cismontane woodland, coastal dunes, coastal scrub. Elevation: 0-215 m.	April-October	<b>Yes.</b> Suitable habitat is present and documented occurrence within five miles of the BSA (CDFW, 2024a).	Yes
<i>Deinandra increscens</i> ssp. <i>Villosa</i> Gaviota tarplant	FE, SE CRPR 1B.1, LC	Coastal scrub, valley and foothill grassland, coastal bluff scrub. Elevation: 35-430 m.	May-October	<b>No.</b> Gaviota tarplant occurrences were observed by WRA (2017) and Padre (2020) within the BSA. However, these occurrences were reclassified as <i>D. increscens</i> ssp. <i>increscens</i> are not considered a protected species (USFWS, 2022)	No
<i>Deinandra paniculata</i> Paniculate tarplant	CRPR 4.2	Vernally mesic, sometimes sandy, substrates in coastal scrub, valley and foothill grassland, and seasonal wetland habitats. Elevation: 25-950 m.	April-November	<b>Yes.</b> Suitable habitat is present (WRA, 2017 and 2018)	No
<i>Delphinium umbraculorum</i> Umbrella larkspur	CRPR 1B.3, LC	Cismontane woodland. Elevation: 400-1600 m.	April-June	<b>Yes.</b> Suitable habitat is present, and documented occurrences within five miles of the BSA (CDFW, 2024a, WRA, 2017)	No
<i>Dichondra occidentalis</i> Western dichondra	CRPS 4.2, LC	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Elevation: 50-500 m.	January-July	<b>Yes.</b> Suitable habitat is present, and documented occurrences within five miles of the BSA (WRA, 2017)	No
<i>Eriodictyon capitatum</i> Lompoc yerba santa	FE, SE CRPR 1B.2, LC	Closed-cone coniferous forest, chaparral. Elevation: 40-455 m.	May-August	<b>Yes.</b> Suitable habitat is present, and documented occurrence within five miles of the BSA (CDFW, 2024a; WRA, 2017)	No
<i>Erysimum suffrutescens</i> Large-leaved wallflower	CRPR 4.2, LC	Coastal bluff scrub, Chaparral (maritime), coastal dunes, coastal scrub. Elevation: 0-150 m.	January-August	<b>Yes.</b> Suitable habitat is present, and documented occurrence within five miles of the BSA (WRA, 2017)	No
<i>Horkelia cuneate</i> var. <i>puberula</i> Mesa horkelia	CRPR 1B.1	Chaparral, cismontane Woodland, coastal scrub. Elevation 15-1645 m.	February-July	<b>Yes.</b> Suitable habitat is present and documented occurrence within five miles of the BSA (CDFW, 2024a).	No
<i>Horkelia cuneate</i> var. <i>sericea</i> Kellogg's horkelia	CRPR 1B.1, LC	Closed-cone coniferous forest, coastal scrub, chaparral. Elevation: 10-200 m.	April-September	<b>Yes.</b> Suitable habitat is present, and documented occurrence within five miles of the BSA (CDFW, 2024a, WRA, 2017)	No

Species Name	Status	Habitat Requirements	Blooming Period	Potential to Occur within BSA	Observed within the BSA
<i>Juglans californica</i> California walnut	CRPR 4.2, LC	Chaparral, cismontane woodland, coastal scrub, riparian woodland. Elevation: 50-900 m.	March-August	<b>Observed.</b> Padre (2020) observed in BSA and documented occurrence within five miles of the BSA (WRA, 2017)	Yes
<i>Lepidium virginicum var. robinsonii</i> Robinson's peppergrass	CRPR 4.3	Chaparral, coastal scrub. Elevation 1-885 m.	March-August	<b>Yes.</b> Suitable habitat is present and documented occurrence approximately six miles of the BSA (WRA, 2017 and 2018)	No
<i>Lilium humboldtii ssp. Ocellatum</i> Ocellated Humboldt lily	CRPR 4.2, LC	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland. Elevation: 30-1800 m.	March-August	<b>Yes.</b> Suitable habitat is present and documented occurrence within 160 feet of Escondido 1 Well; 185 feet west of the Escondido 5 Well; 130 feet west of the gaucho 1 Well; and within 185 feet of the Gaucho 2 well. (WRA, 2018)	No
<i>Malacothrix saxatilis var. saxatilis</i> Cliff aster	CRPR 4.2	Coastal bluff scrub, coastal scrub. Elevation 3-200 m.	March-September	<b>Yes.</b> Suitable habitat is present and documented occurrence within five miles of the BSA (WRA, 2017)	No
<i>Monardella hypoleuca ssp. Hypoleuca</i> White-veined monardella	CRPR 1B.3	Chaparral, cismontane woodland. Elevation: 50-1525 m.	April-December	<b>Yes.</b> Suitable habitat is present and documented occurrence within five miles of the BSA (CDFW, 2024a)	No
<i>Mucronea californica</i> California spine flower	CRPR 4.2	Chaparral, cismontane woodland, coastal dunes, coastal scrub, valley and foothill woodland. Elevation: 0-1400 m.	March-August	<b>Yes.</b> Suitable habitat is present and documented occurrence within five miles of the BSA (WRA, 2017)	No
<i>Phacelia hubbyi</i> Hubby's phacelia	CRPR 4.2	Chaparral, coastal scrub, valley and foothill grassland; rocky gravelly soils. Elevation: 0-1000 m	April-July	<b>Yes.</b> Suitable habitat is present and documented occurrence within five miles of the BSA (WRA, 2017)	No
<i>Ribes amarum var. hoffmanii</i> Hoffman's bitter gooseberry	CRPR 3	Chaparral, riparian woodland. Elevation 5-1190 m.	March-April	<b>Yes.</b> Suitable habitat is present and documented occurrence within five miles of the BSA (WRA, 2017)	No
<i>Scrophularia atrata</i> Black-flowered figwort	CRPR 1B.2	Closed-cone riparian woodland. Elevation: 5-1190 m.	March-July	<b>Yes.</b> Suitable habitat is present and documented within 35 feet of Gaucho 1 Well (CDFW, 2024a; WRA, 2017)	No
<i>Senecio aphanactis</i> Chaparral ragwort	CRPR 2B.2, LC	Cismontane woodland, coastal scrub. Elevation: 20-575 m.	January-April	<b>Yes.</b> Suitable habitat is present and documented occurrence within five miles of the BSA (CDFW, 2024a)	No

Species Name	Status	Habitat Requirements	Blooming Period	Potential to Occur within BSA	Observed within the BSA
<p>Notes:</p> <p><sup>1</sup>Rare Holland Type considered a high priority for inventory (Holland, 1986)  <sup>2</sup>Genus observed within BSA but not identifiable to species.</p> <p>NA Not applicable                      FE Federally endangered                      FT Federally threatened                      SE State endangered                      ST State threatened                      SR State rare                      LC Local Concern (SBBG, 2012)</p> <p>CNPS Ranking System (CNPS, 2019):                      CRPR California Rare Plant Rank</p> <p>1A Plants presumed extirpated in California and either rare or extinct elsewhere                      1B Plants rare, threatened, or endangered in California and elsewhere                      2A Plants presumed extirpated in California, but common elsewhere                      2B Plants, rare, threatened, or endangered in California, but more common elsewhere                      3 Plants about which more information is needed –a review list                      4 Plant of limited distribution – a watch list                      CBR Considered but rejected</p> <p>CRPR Threat Ranks (CNPS, 2019)                      0.1 Seriously threatened in California                      0.2 Moderately threatened in California                      0.3 Not very threatened in California</p>					

As shown in the table above, of the 29-plant species identified in the CNDDDB database, 26 species have the potential to occur within the BSA, and 2 species (California walnut and seaside’s bird-beak) have been observed in the BSA.

*Fauna:*

The Biological Resource Assessment Report dated April 2024 indicates that the following special status animal species have the potential to occur in the area:

Species Name	Status	Habitat Requirements	Habitat Present within the BSA	Potential to Occur within BSA	Observed within the BSA
<b>Insects</b>					
<i>Ammopelmatus muwu</i> Point Conception Jerusalem cricket	SA	Coastal dunes at Point Conception. Potentially utilizes other surrounding habitat types.	P	<b>Yes.</b> Previously observed within the coastal dunes of the Preserve (CDFW, 2024a, WA, 2017)	No
<i>Bombus caliginosus</i> Obscure bumblebee	SA	Coastal areas from Santa Barbara County north to the state of Washington.	P	<b>Yes.</b> Suitable habitat is present and documented occurrence within five miles of the BSA (CDFW, 2024a)	No
<i>Danaus plexipus</i> Monarch butterfly	SA	Winter root sites extend along the coast from norther Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (Eucalyptus, Monterey pine, cypress) with adequate nectar and water sources.	P	<b>Yes.</b> Individuals and small roosts previously observed at various locations within the Preserve. Two large roosts observed, one at Jalama Creek near the railroad bridge and one within the eucalyptus woodland behind the Cojo Ranch Headquarters (CDFW, 2024a, WRA, 2017)	No
<b>Amphibians</b>					
<i>Rana draytonii</i> California red-legged frog	FT, CSC, SA	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergency riparian vegetation	P	<b>Yes.</b> Previously observed in suitable aquatic habitats throughout the Preserve, including stock ponds, water troughs, coastal lagoons, and all major streams. The western portion of Jalama Ranch has also been designated as Critical Habitat for this species (CDFW, 2024a, WRA, 2017)	No
<b>Reptiles</b>					
<i>Actinemys pallida</i> Southwestern pond turtle	CSC, SA	Permanent or nearly permanent bodies of water in many habitat types, below 6000 ft. elevation; requires basking sites such as submerged logs, vegetation mats or open mud banks. Breeds upland near water sources.	P	<b>Yes.</b> Previously observed in stock ponds, reservoirs, streams, and coastal lagoons throughout the Preserve (CDFW, 2024a, WRA, 2017)	No
<i>Thamnophis hammondi</i> Two-striped garter snake	CSC, SA	Coastal California from vicinity of Salinas to northwest Baja Californai from sea to about 7000 ft. elevation; highly aquatic, found in or near permanent fresh water	P	<b>Yes.</b> Previously observed in the riparian habitat along Jalama Creek and at stock ponds throughout the Preserve (CDFW, 2024a, WRA, 2017)	No
<b>Birds</b>					
<i>Accipiter cooperi</i> Cooper's hawk	MBTA, SA, WL	Woodland chiefly of open uninterrupted or marginal type; nest sites mainly in riparian growths of deciduous trees as in canyon bottoms on river floodplains; also live oaks.	P	<b>Yes.</b> Previously observed within the Preserve (WTA, 2017).	No

Species Name	Status	Habitat Requirements	Habitat Present within the BSA	Potential to Occur within BSA	Observed within the BSA
<i>Accipiter striatus</i> Sharp-shinned hawk	MBTA, SA, WL	Nests in mature mixed forests, hunts around houses and birdfeeders and in hedgerows and forest canopy	P	<b>Yes.</b> Suitable habitat present and previously observed within the Preserve (WRA, 2017)	No
<i>Aimophila ruficeps canescens</i> Southern California rufous crowned sparrow	MBTA, SA, WL	Resident in southern California coastal sage scrub and sparse mixed chaparral; frequents relatively steep often rocky hillsides with grass and forb patches.	P	<b>Yes.</b> Suitable habitat present and previously observed within the Preserve (WRA, 2017)	No
<i>Aquila chrysaetos</i> Golden eagle	FP, MBTA, SA, WL	Generally open country, in prairies, tundra, open coniferous forest and barren areas, especially in mountainous or hilly regions, nesting on cliff ledges and trees	P	<b>Observed</b> during Padre 2020 field surveys.	Yes
<i>Artemisospiza belli</i> Bell's sage sparrow	MBTA, SA, WL, BCC	Sagebrush and chaparral habitats	P	<b>No.</b> Although suitable habitat is present, documented occurrence is greater than ten miles from the BSA. Hollister Ranch about 10 miles east of the former Cojo Marine Terminal (Lehman, 1994)	No
<i>Athene cunicularia</i> Western burrowing owl	SE, CSC, BCC, SA	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	P	<b>Yes.</b> Suitable habitat present and previously observed within the Preserve (WRA, 2017)	No
<i>Baeolophus inornatus</i> Oak titmouse	SA, WL, BCC	Woodland, savannah, and riparian habitats where oaks are present.	P	<b>Observed</b> during Padre 2020 field surveys.	Yes
<i>Branta bernicla</i> Brant	CSC	Breeding occurs in the Artic. Eelgrass is the primary food source for this species during the non-breeding season, and strongly influences its distribution. Brandts occur along the entire length of the state during migration, but wintering occurs principally in four coastal bays with substantial eel-grass populations: Humboldt, Tomales, Morro, and San Diego/Mission Bays.	A	<b>No.</b> Although previously observed within the Preserve (WRA, 2017), no suitable habitat is present in the BSA	No
<i>Charadrius nivosus nivosus</i> Western snowy plover	FT, CSC, MBTA, SA	Flat, open coastal beaches, dunes near stream mouths	A	<b>No.</b> Although previously observed nesting and overwintering on beaches within the Preserve (WRA, 2017), no suitable habitat is present within the BSA	No

Species Name	Status	Habitat Requirements	Habitat Present within the BSA	Potential to Occur within BSA	Observed within the BSA
<i>Empidonax trailii extimus</i> Southwestern willow flycatcher	FE, SE, MBTA, SA	Broad, open river valleys or large mountain meadows with dense growth of shrubby willows, dense willow thickets are required for nesting and roosting	P	<b>Yes.</b> Suitable habitat is present and presumed present during previous surveys of the Preserve. As individual of willow flycatcher was caught during mist-netting, and although the subspecies of the individual could not be confirmed, it was assumed to be the endangered southwestern subspecies. Additional studies are needed to confirm the subspecies and determine whether nesting occurs within the Preserve (WRA, 2017)	No
<i>Eremophila alpestris actia</i> California horned lark	MBTA, SA, WL	Open, barren country, prefers bare ground to short grasses	P	<b>Yes.</b> Suitable habitat is present and previously observed within Preserve (WRA, 2017)	No
<i>Falco mexicanus</i> Prairie falcon	MBTA, SA, WL, BCC	Dry grasslands and prairies, suitable breeding habitat typically includes cliffs for nest sites; in winter, also cultivated fields and lakeshores	P	<b>Yes.</b> Some elements of suitable habitat may be present within the Preserve (WRA, 2017)	No
<i>Falco peregrinus anatum</i> Peregrine falcon	Delisted FE & SE, FP, MBTA, BCC	Found in a variety of habitats, most cliffs for nesting and open areas for foraging.	P	<b>Yes.</b> Suitable habitat is present and previously observed within the Preserve (WRA, 2017)	No
<i>Haliaeetus leucocephalus</i> Bald eagle	SE, FP, BCC	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests are within one mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	P	<b>Yes.</b> Suitable habitat is present and previously observed within the Preserve (WRA, 2017)	No
<i>Hydroprogne caspia</i> Caspian tern	BCC, SA, WL	Nests colonially on sparsely vegetated islands, sandbars, and beaches near expanses of open water	A	<b>No.</b> Although previously observed along the coastline and offshore of the Preserve (WRA, 2017), no suitable habitat is present within the BSA	No
<i>Icteria virens</i> Yellow-breasted chat	CSC, MBTA, SA	Dense brushy thickets and tangles near water, and thick understory in riparian woodland	P	<b>Yes.</b> Suitable habitat is present and observed on Hollister Ranch (Little, 1984)	No
<i>Lanius ludovicianus</i> Loggerhead shrike	CSC, MBTA, SA, BCC	Open pastures and prairies with scattered bushes, hedgerows and trees	P	<b>Observed</b> during Padre 2020 field surveys	Yes
<i>Pelecanus occidentalis californicus</i> California brown pelican	FP, MBTA, SA	Occurs along mainland shore open coast, beach sand/cobble structures; colonial nester on coastal islands just outside the surf line	A	<b>No.</b> Although previously observed along coastline and offshore of the Preserve (WRA, 2017), no suitable habitat is present within the BSA	No

Species Name	Status	Habitat Requirements	Habitat Present within the BSA	Potential to Occur within BSA	Observed within the BSA
<i>Setophaga petechia</i> Yellow warbler	CSC, MBTA, SA, BCC	Riparian woodlands, montane chaparral, open ponderosa pine, and mixed conifer habitats with substantial brush, from coastal and desert lowlands to the Sierra Nevada	P	<b>Yes.</b> Suitable habitat is present and previously observed within Preserve (WRA, 2017)	No
<b>Mammals</b>					
<i>Antrozous pallidus</i> Pallid bat	CSC, SA	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting	P	<b>Yes.</b> Suitable habitat is present and previously observed within Preserve (CDFW 2024a, WRA, 2017)	No
<i>Corynorhinus townsendii</i> <i>Townsend's big-eared bat</i>	CSC, SA	Wide variety of habitats, most common in mesic sites. Roosts in the open (do not tuck themselves into crevices), hang from walls and ceilings, extremely sensitive to human disturbance	P	<b>Yes.</b> Suitable habitat is present and previously observed within the Preserve (CDFW, 2024a, WRA, 2017)	No
<i>Eumops perotis californicus</i> Western mastiff bat	CSC, SA	Open, semi-arid to arid habitats including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral. Roosts in crevices in cliff faces, high building, trees and tunnels	P	<b>Yes.</b> Suitable habitat is present and previously observed on Bixby/Hollister Ranch (Little, 1984)	No
<i>Lasionycteris noctivagans</i> Silver-haired bat	SA	Primarily a coastal and montane forest dweller feeding over streams, ponds and open brushy areas	P	<b>Yes.</b> Suitable habitat is present and previously observed within Preserve (CDFW, 2024a, WRA, 2017)	No
<i>Lasiurus cinereus</i> Hoary bat	SA	Prefers open forested habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees	P	<b>Yes.</b> Suitable habitat is present and previously observed within the Preserve (WRA, 2017)	No
<i>Lasiurus frantzii</i> Western red bat	CSC, SA	Highly migratory and typically solitary, roosting primarily in the foliage of trees or shrubs. Roosts are usually in broad-leaved trees including cottonwoods, sycamores, alders, and maples. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchard, and sometimes in urban areas.	P	<b>Yes.</b> Suitable habitat present and previously observed within the Preserve (WRA, 2017).	No

Species Name	Status	Habitat Requirements	Habitat Present within the BSA	Potential to Occur within BSA	Observed within the BSA
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	CSC, SA	Coastal scrub of southern California from San Diego County to San Luis Obispo County; moderate to dense canopies preferred, particularly abundant in rock outcrops and rocky cliffs and slopes	P	<b>Observed.</b> Woodrat nests observed in oak woodlands and scrub habitat during Padre 202 field surveys	Yes
<i>Taxidea taxus</i> American badger	CSC, SA	Most abundant in drier open stages of most shrub, forest and herbaceous habitats, with friable soils	P	<b>Yes.</b> Suitable habitat present and previously observed within the Preserve (CDFW, 2024a, WRA, 2017)	No
Status Codes: CSC California Species of Special Concern (CDFW)      FP Fully protected under Fish and Game Code (CDFW) SA Special Animal (CDFW)      WL Watch List (CDFW) SE State Endangered (CDFW)      FT Federal Threatened (USFWS) ST State Threatened (CDFW)      FE Federal Endangered (USFWS) A Habitat Absent in BSA      BCC Birds of Conservation Concern (USFWS) P Habitat Present in BSA					

As shown in the table above, of the 33-wildlife species identified in the CNDDDB database search of the project region, 28 species have the potential to occur within the BSA, and four species (Golden eagle, Oak titmouse, Loggerhead shrike, San Diego desert woodrat) have been observed in the BSA.

**Environmental Thresholds.** Santa Barbara County’s Environmental Thresholds and Guidelines Manual (2008) includes guidelines for the assessment of biological resource impacts. The following thresholds are applicable to this project:

*Native Grasslands:* In general, project created impacts to native grasslands may be considered significant if they involve removal of or severe disturbance to a patch or a combined patch area of native grasses that is greater than one-quarter (1/4) acre in size. The grassland must contain at least 10% relative cover of native grassland species (based on a sample unit). Impacts to patch areas less than one-quarter acre in size that are clearly isolated and not part of a significant native grassland or an integral component of a larger ecosystem are usually considered insignificant.

*Oak Woodlands and Forests:* Project created impacts may be considered significant due to habitat fragmentation, removal of understory, alteration to drainage patterns, disruption of the canopy, removal of a significant number of trees that would cause a break in the canopy, or disruption in animal movement in and through the woodland.

*Other Rare Habitat Types:* The Manual recognizes that not all habitat-types found in Santa Barbara County are addressed by the habitat-specific guidelines. Impacts to other habitat types or species may be considered significant, based on substantial evidence in the record, if they substantially: (1) reduce or eliminate species diversity or abundance; (2) reduce or eliminate the quality of nesting areas; (3) limit reproductive capacity through losses of individuals or habitat; (4) fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources; (5) limit or fragment range and movement; or (6) interfere with natural processes, such as fire or flooding, upon which the habitat depends.

**Impact Discussion.**

**(a-d)** The project may result in the loss of special-status plants that are known to occur in grassland, oak woodland, coastal scrub, and riparian woodland areas since these plants have the potential to occur within 200 feet of the water distribution lines, water tanks, and water troughs. As described in the Padre Associates Inc. Biological Resource Assessment Report dated April 2024 (Attachment 6), there are approximately 29 special status plant species that have been documented within the vicinity of the biological study area. Based on an assessment of the habitats at project-specific components, it was determined that 26 special status plant species could be present at or near one or more project locations. Two species (California walnut and seaside’s bird-beak) have been observed in the BSA.

The following describes the impacts to native vegetation from installation of the proposed water distribution system, water tanks, cattle troughs, and cattle exclusionary fencing

Vegetation Community <sup>1</sup>	Permanent Impact		Temporary Impact		Revegetated Area
	Square Feet	Acre	Square Feet	Acres	
Black Sage Scrub	0	0	861	0.02	0.02
Bush Monkeyflower Scrub	0	0	284	0.007	0.007
California Sagebrush Scrub	1,932	0.044	36,939	0.848	0.848
<i>Coast Live Oak Woodland</i> <sup>2</sup>	0	0	16,290	0.374	0.374
Coffeeberry Scrub	0	0	10,638	0.244	0.244
Coyote Bush Scrub	257	0.006	20,062	0.461	0.461
Deer Weed Scrub	0	0	267	0.006	0.006
Developed/Disturbed Areas	129	0.003	160,762	3.691	3.691
<i>Needlegrass Grassland</i> <sup>2</sup>	230	0.005	107	0.002	0.002
Purple Sage Scrub	257	0.006	2,892	0.066	0.066
Redberry Scrub	79	0.002	304	0.007	0.007
<i>Sawtooth Golden Bush Scrub</i> <sup>2</sup>	0	0	3,196	0.073	0.073
Uplands Mustard Fields	1,027	0.024	513	0.012	0.012
Wild oats and annual brome grassland	18,770	0.431	128,841	2.958	2.958
<b>TOTALS:</b>	<b>22,681</b>	<b>0.524</b>	<b>381,956</b>	<b>8.769</b>	<b>8.769</b>
<i>Sensitive Vegetation Subtotals</i>	<i>230</i>	<i>0.005</i>	<i>19,877</i>	<i>0.456</i>	<i>0.456</i>
Notes:					
<sup>1</sup> Impacted vegetation communities will be revegetated with the Revegetation Habitat custom seed mixes: Coastal Scrub, Annual Grassland, Perennial Grassland, Coast Live Oak Woodland, and Basic Native Control Seed Mix					
<sup>2</sup> Sensitive vegetation community					
<sup>3</sup> Permanent impacts will be mitigated through implementation of the Jalama Creek Riparian Enhancement Project which will result in greater than 3:1 mitigation.					

The proposed project will result in temporary impacts to 8.769 acres of vegetation, including 0.374 acres of Coast Live Oak Woodland, 0.002-acres of Needlegrass Grassland, and 0.073-acres of Sawtooth Golden Bush Scrub which are classified as sensitive vegetation. MM BIO-20 requires implementation of a Revegetation Plan to ensure Temporary impacts will be restored to a minimum 1:1 ratio onsite. Temporary impacts will be restored using the targeted revegetation habitat following project implementation. Custom seed mixes will be applied using hydroseeding or hand-broadcasting methods. Appendix E of the Biological Assessment Report dated April 2024 includes a Draft Revegetation Plan that provides an example of the plan that will be required. Implementation of the Final Revegetation Plan required by MM BIO-20 will ensure that temporary impacts are mitigated and reduce the impact to sensitive plant species to an insignificant level.

The project also will result in permanent impacts to 0.524 acres of vegetation including impacts to 0.005 acres of Needlegrass Grassland. Sensitive vegetation communities will be protected by flagging by the biological monitor and installation of protective fencing. If impacts are unavoidable, they will be restored at a 3:1 ratio consistent with MM BIO-20.

The proposed project includes cattle exclusionary fencing and water troughs. The implementation of this project will allow the cattle to be rotated throughout the Preserve, thereby reducing the biomass of non-native plant species and light fuels within the Preserve, which may reduce competition with native species and reduce wildfire potential. The cattle exclusionary fencing will preserve riparian vegetation.

In addition, the project includes active riparian revegetation to increase riparian diversity and canopy width in the areas of the creek where the fencing was erected. Revegetation will be in four plots totaling 8 acres.

Mitigation Measures including MM BIO-21 requires that sensitive vegetation species be flagged, installation of temporary protection fencing to reduce the likelihood of an impact to the sensitive vegetation type. In addition, MM BIO-22 requires the preservation of oak trees and native protected trees to the maximum extent feasible. If impacts to the native trees is unavoidable then the tree will be mitigated at a minimum 10:1 ratio onsite.

**(e)** The project may result in a significant impact to healthy specimen trees because, while no trees are proposed for removal as part of this project, some of the water system distribution infrastructure is located near Coast Live Oak trees and burying the water distribution system may impact some of the roots from the trees. Mitigation Measure MM BIO-22 requires that the native specimen trees and protected trees be preserved to the maximum extent feasible, that trenching be outside of the tree critical root zone, and that tree protection fencing be installed during construction to protect trees from project impacts. Furthermore, in the unlikely event that a native protected tree is impacted by the project, the applicant is required to submit a Tree Replacement Plan that will mitigate at a minimum 10:1 ratio for the lost tree. With implementation of these mitigation measures the potential impact to native specimen trees will be reduced to a less than significant level.

**(f)** The project would not result in factors (i.e. such as herbicides, pesticides, animal life, human habitation, non-native plants, or other factors) that would change the habitat since construction of the wells has been completed and the relatively small project includes adding water distribution systems including tanks, troughs, and an underground and above ground water distribution system. The system mostly follows existing ranch roads, limiting disturbance and impacts to existing habitat. The cattle exclusionary fencing that will be installed near the creek will limit disturbance to vegetation by avoiding native vegetation when installing the posts. The well locations, water distribution system, water infrastructure, and cattle exclusionary fencing are in relatively remote areas of the Preserve. All of the wells already exist and the new water distribution system is primarily along existing ranch roads which are developed and do not contain native vegetation. The addition of the water distribution system and infrastructure will not result in a change to the existing habitat as much of the development already exists and people will not spend much time at each well location except to check the wells for monitoring data or for regular maintenance of the equipment. Herbicides may be used to treat large infestations of rhizomatous plants, however all herbicides must be applied under the direction of a contractor with a current Qualified Applicator License and be accompanied by a biologist during the initial site visit to identify weed species.

**(g-h)** The project may impact the habitat of a unique, rare, threatened or endangered animal as 16 species have the potential for habitat to be present within the study area and 4 species (golden eagle, oak titmouse, loggerhead shrike, and San Diego woodrat) were observed within the biological study area. In addition, there is the potential for California Red-Legged Frog (CRLF) to occur. Implementation of project elements including

water infrastructure such as water troughs, water tanks, and dispersal lines may impact special status species that are within the project vicinity.

CRLF have been documented to occur in the main stem of Jalama Creek between approximately 2,500 and 2,800 feet north and east of the nearest wells (Oaks 5 and Oaks 3/3B) and in ephemeral stream between 2,250 and 2,750 feet south and southwest from the nearest wells (Oaks 4, Oaks 2, and Oaks 1). However, these occurrences are located downstream from the project sites and no CRLF have been detected in the immediate vicinity of the Project area. Given the lack of nearby features, the Project area would be classified as upland dispersal habitat, and CRLF are therefore only capable of passing through the Project area during the wet season (November 2 – March 31).

Potential impacts specific to each water system is described below.

**Oaks Water System.** The Oaks Water System is located in area where several large burrows were observed, indicating that American badger or burrowing owls may exist nearby. Mitigation Measure MM BIO-13 requires that surveys be conducted to determine what occupies the burrows and application of mitigation measures to reduce any potential impact. As described in the Padre Associated Inc. Biological Resource Assessment Report dated April 2024 (Attachment 6), CRLF Critical Habitat is designated by USFWS for a portion of the system and may travel through the project area during migration. The proposed underground water pipeline and small project footprint will not significantly alter the quality of the upland dispersal habitat nor create impediments to movement.

**Tinta Water System.** The Tinta Water System is located within CRLF Critical Habitat designated by USFWS and 1 Oak titmouse was observed within 200 feet of the Tinta 1 well. As described in the Padre Associated Inc. Biological Resource Assessment Report dated April 2024 (Attachment 6), this species may travel through the project area during periods of migration. The above ground pipelines in the Tinta Water System and the relatively small project footprint should not significantly alter the quality of the upland dispersal habitat nor create impediments to movement of this species.

**Quarry Water System.** The Quarry Water System is located within CRLF Critical Habitat designated by the USFWS, the project is located approximately 800 feet upslope of Espada Creek, a perennial drainage and tributary to Jalama Creek. As described in the Padre Associated Inc. Biological Resource Assessment Report dated April 2024 (Attachment 6), Espada Creek has the potential to support CRLF which may travel through the project area during periods of migration, however the underground installation of the water distribution system and the small project footprint should not significantly alter the quality of the upland dispersal habitat nor create impediments to movement for this species.

**Gaspar Water System.** The Gaspar Water System is located within CRLF Critical Habitat designated by the USFWS. This project is between Gaspar and Escondido Creeks. As described in the Padre Associated Inc. Biological Resource Assessment Report dated April 2024 (Attachment 6), these creeks have the potential to support CRLF and that species may travel through the project area during periods of migration. The underground installation of the water distribution system and the relatively small project footprint should not significantly alter the quality of the upland dispersal habitat nor create impediments to movement of this species.

**Vendadito Water System.** The Vendadito Water System is located within CRLF Critical Habitat designated by USFWS throughout its northern portion and is located by drainages. As described in the Padre Associated Inc. Biological Resource Assessment Report dated April 2024 (Attachment 6), the nearby drainages have the potential to support CRLF which may travel through the project area during migration periods. The

underground water distribution system and the relatively small project footprint will not create a significant impact to the upland dispersal habitat nor create impediments to the movement of this species.

The proposed project is not expected to result in a significant impact to CRLF as any ground disturbing activities that may occur associated with the Project will be temporary, will be restored and compacted to the original grade, and will occur outside of the wet season (November 2 – March 31) with implementation of MM BIO-02. The project provides seasonal overland dispersal habitat and the proposed project will not result in any barriers that would impede or impair the movement of CRLF through the Project area. The Project will not modify or otherwise degrade any of the biotic or abiotic functions or values otherwise available to CRLF in the vicinity. No take of CRLF individuals nor any permanent modification of CRLF habitat is expected to occur during the Project installation and operation.

The addition the water infrastructure will provide a benefit to wildlife as it will facilitate cattle rotation and restrict cattle from accessing the creek. This will benefit the native vegetation that wildlife depends on and improve the water quality of the creeks by reducing turbidity and fecal coliform levels. This will be a beneficial impact to animals that depend on riparian habitat.

Mitigation Measure MM BIO-10 requires that special status species survey clearances be conducted no more than 24 hours prior to the onset of work within 50-feet of the work area. In addition, Mitigation Measure MM BIO-11 requires an onsite biologist to be monitoring onsite and will have the authority to halt construction if a special status species is found. Mitigation Measures MM BIO-13 - 16 reduce the potential impacts to the American Badger, San Diego woodrat, Crotch's bumblebee, and burrowing owl. With implementation of these measures the potential impact to special status species will be reduced to a less than significant level.

**(i-j)** The majority of well locations and water systems consist of the following:

- Potentially suitable non-breeding aquatic habitat for CRLF is present within 200 feet of the well and tanks; therefore, it is possible that CRLF would be found there.
- Suitable habitat for other special-status reptile and amphibian species is also present, and therefore it is possible that they could be found at these locations.
- The well and tanks are within the vicinity of suitable habitat for American badger, and therefore, it is possible that this species would be found at these locations.
- The well and tanks are within the vicinity of suitable habitat for bat maternity roosts, and therefore, it is possible that bat species would be found at these locations.
- Nesting birds, including special-status and non-status birds, have potential to be present during the nesting season (March 15-September 15).

Escondido 1, Escondido 3, Escondido 3B, Escondido 4, Escondido 5, Gaspar 1, Jalama Vaqueros, Oaks 2, Tinta 1, Tinta 3, Tinta 4, Tinta 5, Tinta 5B, Tinta 6, Tinta 7, Tinta 8, Tinta 9, Tinta 10, Tinta 11, Tinta 11B, Vendadito 2 are located within federally designated CRLF Critical Habitat.

As indicated in (g) above, the project provides seasonal overland dispersal habitat and the proposed project will not result in any barriers that would impede or impair the movement of CRLF through the project area, and the project will not modify or otherwise degrade any of the biotic or abiotic functions or values otherwise available to CRLF in the vicinity.

All portions of the project area with new improvements proposed are located away from mapped wetlands and streams, resulting in little opportunity for CRLF to shelter, hydrate, forage, etc. outside of dispersal events directly linked to precipitation events. Therefore, the project activities will be less than significant since CRLF habitat is not likely to be disturbed.

The project also has a limited disturbance area as much of the new development including the new water tanks, water troughs, and water distribution system are located in or near existing ranch roads away from sensitive vegetation.

Therefore, while there are species within the vicinity of the well locations, continued operation of the wells, the addition of the new water tanks, water troughs, and water distribution system would not have the potential to result in a reduction or deterioration of existing animals onsite, nor cause a deterioration of their habitat, or introduce barriers to movement.

**(j)** The proposed project includes approximately 12 miles of wildlife friendly cattle exclusionary fencing that is designed to prevent cattle from accessing certain creek areas on the Preserve. The proposed fencing was designed using specifications produced by the *Montana Department of Fish, Wildlife and Parks* and recommended by *California Department of Fish and Wildlife* to promote passage for a wide range of wildlife at various life stages. The fence is approximately 42 inches tall and includes an 18" space between the ground surface and the first barb wire. This allows smaller animals to pass under the fence and allow larger animals such as deer to jump over the fence. The design of the fence allows animals to pass while still preventing cattle from accessing the creek. Thus, the potential for the cattle exclusionary fence to restrict migratory fish or wildlife species is insignificant.

**(k)** The proposed project has the potential to generate a significant impact to biological resources by bringing in heavy equipment and vehicles needed to construct the project. The temporary construction could bring in additional noise, lights, and human presence that are usually absent from the remote areas of the Preserve. These potential impacts are temporary during construction and Mitigation Measures MM-BIO-3, MM-BIO-4, and MM-BIO-6 limits construction to daylight hours, requires defined staging and access points for heavy equipment, and designates washout area and for leaky equipment. With implementation of these measures, the potential impact is reduced to a less than significant level.

**Cumulative Impacts.** Since the project would not significantly impact biological resources onsite, it would not have a cumulatively considerable effect on the County's biological resources.

**Mitigation and Residual Impact.** The following mitigation measures would reduce the project's biological resource impacts to an insignificant level:

- 1. MM BIO-1 Environmental Sensitivity Training Program.** An Environmental Sensitivity Training Program shall be prepared and presented by a qualified biologist to all construction personnel. The program shall discuss sensitive species and habitat areas with potential to occur in the Project area, with emphasis on special-status wildlife and plant species. The program will include the occurrence and distribution of sensitive wildlife species of the Project Area, measures being implemented to protect sensitive resources during Project implementation, and applicable definitions and prohibitions under the State and Federal Endangered Species Acts. The program shall also explain the importance of minimizing disturbance and adhering to all permit conditions. **TIMING:** The training shall occur prior to initial ground disturbance and periodically as needed for new crew members and onsite project personnel. **MONITORING:** The training program materials, including a list of people who attended the training, shall be made available to permit compliance staff upon request.
- 2. MM BIO-2 Seasonal Work Window.** All work shall be limited to the dry season, between April 1 and November 1. In the event of any forecasted rainstorm with greater than 30 percent change of precipitation, suitable erosion control measures (e.g., straw wattles or jute netting) shall be installed around any soil stockpiles or areas of disturbed ground at least 12 hours in advance of the forecasted

event. No work shall occur during rain events or for a 48-hour dry-out period following rain events with greater than 0.1 inch of rain or more. **MONITORING:** P&D permit compliance staff and grading inspectors will inspect the site to ensure compliance.

3. **MM BIO-3 Construction Timing.** All construction activities shall be limited to daylight hours, between sunrise and sunset. **MONITORING:** P&D permit compliance monitor shall inspect the site as necessary to ensure compliance.
4. **MM BIO-4 Work Area Limits.** All work areas shall be designated and delineated with flagging and/or high visibility fencing prior to work activities. The work area should be the minimum necessary to accommodate the required work, including staging, access, and parking areas. **PLAN REQUIREMENTS:** The designated work areas shall be shown on the plans submitted for the Coastal Development Permit. **TIMING:** Final plans denoting the work areas shall be submitted prior to issuance of the Coastal Development Permit. **MONITORING:** The biological monitor shall ensure that the contractor denotes the limits of the work area in the field as shown on the project plans.
5. **MM BIO-5 Work Area Housekeeping.** All food-related trash shall be removed from the work areas at the end of each working day. **MONITORING:** Onsite biological monitor shall spot check to ensure compliance with the mitigation measure.
6. **MM BIO-6 Vehicles and Equipment.** Any vehicles or equipment arriving from off the Preserve shall be cleaned of any soil or organic debris prior to arrival at the site. The use of heavy equipment and vehicles shall be limited to the Project limits, existing roadways, and defined staging areas/access points. All vehicles and equipment shall be inspected for fluid leaks at the beginning of each workday. Vehicles with leaks shall not be used until the leak is fixed. Drip pans shall be maintained under any leaking vehicle or equipment. Refueling: All refueling and maintenance of vehicles and equipment shall occur at designated Preserve refueling and maintenance areas. No refueling of any vehicles or equipment shall occur within 100 feet of any wetland, stream, or riparian habitat. Spill and Fire Response: An emergency spill kit shall be maintained at each active work area and spills of any fluids shall be contained immediately. Spill response equipment and materials will be on-site and readily available to immediately clean up any oil and/or other hazardous materials that have the potential to leak from construction equipment. Fire suppressions equipment shall be maintained at each active work area. At a minimum this includes a fire extinguisher and a shovel. **TIMING:** This condition shall be maintained throughout construction. **MONITORING:** The biological monitor shall inspect all non-Preserve vehicles and equipment to ensure they have been properly cleaned before arriving onsite and shall inspect vehicles and equipment prior to the start of work each day for leaks and spills. The P&D permit compliance staff shall spot check as necessary to ensure compliance.
7. **MM BIO-7 Best Management Practices.** All erosion control materials shall be certified weed-free and monofilament netting shall never be used in any erosion control or other products used at the site. Suitable replacements include jute netting or woven materials. Project activities such as washing of concrete, paint, or equipment shall occur only in designated areas at a minimum of 50 feet from stream channels. Straw bales, sand bags, and sorbent pads shall be available to prevent water and/or spilled fuel from entering stream channels. In addition, all equipment and materials shall be stored/stockpiled away from the channel. Construction equipment shall be inspected by the operator on a daily basis to ensure the equipment is in good working order and no fuel, or lubricant leaks are present. **PLANS REQUIREMENTS:** The designated locations for washing of concrete, paint, or other equipment shall be shown on the project plans. **TIMING:** Plans showing designated washout locations shall be submitted prior to issuance of the Coastal Development Permit. **MONITORING:** The biological monitor shall inspect the erosion materials to ensure they are made of natural materials

and will periodically inspect the Project site for appropriate materials storage. P&D permit compliance staff shall spot check to ensure compliance as needed.

- 8. MM BIO-8 Threatened and Endangered Species Approvals.** The permittee shall obtain all necessary approvals from the California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, and/or National Marine Fisheries Service, including an Incidental Take Permit and/or Habitat Conservation Plan for the designated special-status species including but not limited to Crotch's bumble bee, California red-legged frog, coast range newt, western spadefoot, western pond turtle, and burrowing owl, if required, prior to commencement of work on-site. **TIMING:** Permittee shall provide to P&D copies of approvals obtained from CDFW, FWS and/or NMFS prior to commencement of work on-site. **MONITORING:** Permittee shall provide to P&D copies of approvals from CDFW, FWS, and/or NMFS to P&D Permit Compliance staff.
- 9. MM BIO-9 Nesting Bird Surveys.** To avoid disturbance of nesting birds, including raptorial species, protected by the Federal Migratory Bird Treaty Act (MBTA) and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code (CFG), the removal of vegetation, ground disturbance, exterior construction activities, and demolition shall occur outside of the bird nesting season (February 1 through August 31) whenever feasible. If these activities must occur during the bird nesting season, then a pre-construction nesting bird survey shall be performed by a County-qualified biologist. Pre-construction surveys for nesting birds shall occur within the area to be disturbed and shall extend outward from the disturbance area by 500 feet. The distance surveyed from the disturbance may be reduced if property boundaries render a 500-foot survey radius infeasible, or if existing disturbance levels within the 500-foot radius (such as from a major street or highway) are such that project-related activities would not disturb nesting birds in those outlying areas. If any occupied or active bird nests are found, a buffer shall be established and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. The buffer shall be 300 feet for non-raptors and 500 feet for raptors, unless otherwise determined by the qualified biologist and approved by P&D. Buffer reductions shall be based on the known natural history traits of the bird species, nest location, nest height, existing pre-construction level of disturbance in the vicinity of the nest, and proposed construction activities. All construction personnel shall be notified as to the location of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities or vegetation removal shall occur within this buffer until the County-qualified biologist has confirmed that nesting is completed, the young have fledged and are no longer dependent on the nest, or the nest fails, and there is no evidence of a second nesting attempt; thereby determining the nest unoccupied or inactive. If birds protected under MBTA or CFG are found to be nesting in construction equipment, that equipment shall not be used until the young have fledged and are no longer dependent on the nest, and there is no evidence of a second nesting attempt. **PLAN REQUIREMENTS AND TIMING:** If construction must begin within the nesting season, then the pre-construction nesting bird survey shall be conducted no more than one week (7 days) prior to commencement of vegetation removal, grading, or other construction activities. Active nests shall be monitored by the biologist at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults, and there is no evidence of a second nesting attempt. Bird survey results and buffer recommendations shall be submitted to County Planning and Development for review and approval prior to commencement of grading or construction activities. The qualified biologist shall prepare weekly monitoring reports, which shall document nest locations, nest status, actions taken to avoid impacts, and any necessary corrective actions taken. Active nest locations shall be marked on an aerial map and provided to the construction crew on a weekly basis after each survey is conducted. Active nests shall not be removed without written authorization from USFWS and CDFW. **MONITORING:** P&D

shall be given the name and contact information for the biologist prior to initiation of the pre-construction survey. Permit Compliance and P&D staff shall review the survey report(s) for compliance with this condition prior to the commencement of ground-disturbing activities and perform site inspections throughout the construction period to verify compliance in the field.

- 10. MM BIO-10 Biological Clearance Surveys.** A qualified biologist shall be on-site to provide clearance for special-status species prior to implementation of Project activities (i.e., excavation and vegetation removal) no more than 24 hours prior to the onset of work and should be conducted within 50-feet of any work area. The biological monitor shall have general knowledge of the natural resources of the area and shall be experienced in the identification of special-status wildlife species, including but not limited to, Crotch's bumble bee, California red-legged frog, coast range newt, western spadefoot, western pond turtle, and burrowing owl. In addition, the qualified biologist will be onsite during all ground disturbance and vegetation removal/trimming activities. The qualified biologist will have authority to halt construction activities to avoid impacts to special-status wildlife. Wildlife will be allowed to leave the Project area prior to restarting construction activities. Special-status wildlife will not be handled without prior permission from regulatory agencies. If a special-status species is found, no work shall occur within the vicinity of the animal, and it shall be allowed to leave the work area of its own accord. **TIMING:** Biological clearance surveys shall be conducted daily for the duration of ground disturbance activities. **MONITORING:** Clearance surveys shall be sent to P&D compliance monitoring staff prior to project initiation. Daily survey data shall be provided to P&D staff if special status species are found or upon request.
- 11. MM BIO-11 Biological Monitoring.** A qualified biologist shall serve as the biological monitor and shall be present onsite during all disturbance activities including vegetation removal, tree trimming, initial grading (top six inches of soil), trenching, and fence post installation. The Project site is located within USFWS-Designated habitat for red-legged frog and within dispersal distance of California red-legged frog and other special-status amphibians and reptiles from identified wetlands. In addition, grassland habitats may support burrowing owl. The biological monitor shall inspect the work area for presence of these and other potentially occurring special-status wildlife of the Project region. If a special-status species is observed, work will stop, and the animal will be allowed to move from the site on its own volition. If handling is necessary to avoid harm, the biological monitor shall notify TNC, P&D, and the appropriate agency. **TIMING:** The monitor shall be identified and contact information submitted to P&D compliance monitor prior to ground disturbance.
- 12. MM BIO-12 Wildlife Exclusion Fencing.** If special-status reptile or amphibian species are observed and work in that area is anticipated to take longer than five days, wildlife exclusion fencing shall be installed between the work area and potential habitat for those species. **TIMING:** Upon finding a special status species or amphibian species in the work area work shall be stopped and wildlife exclusion fencing shall be installed before work resumes. **MONITORING:** Installation of wildlife exclusion fencing shall be directed by the Project biologist or biological monitor. A site plan prepared by the project biologist showing the fencing location shall be provided to P&D permit compliance staff.
- 13. MM BIO-13 American Badger.** A qualified biologist shall conduct a burrow survey with emphasis on signs of American badger within the Project area and a surrounding 50-foot buffer including burrowing activity, badger prints, scat, and/or active dens. **TIMING:** Surveys shall occur prior to any ground-disturbing events and no more than seven days prior to any ground disturbance. Surveys may be conducted during the daily pre-activity clearance surveys and/or daily biological monitoring. If surveys determine the presence of burrowing activity, prints, scat and/or active dens, associated with

the American Badger, then specific protection measures shall be implemented. Specific measures are as follows:

- a. If a potentially active burrow is found within the immediate work area, install a trail camera at the burrow entrance for three consecutive nights to determine if the den is active. Avoid work in this area until the burrow is determined to be unoccupied;
- b. If an active burrow is found within the immediate work area, appropriate agencies will be notified immediately to determine further mitigation. As necessary, appropriate regulatory agency permits and/or approvals shall be obtained to allow relocation of special-status species from the Project area. Following agency consultation, the following methods may potentially be used:
  - i. If young are present, a buffer should be established around the den until the biologist has determined that the juveniles have left the den. The width of the buffer should be determined by the biologist based on specific site conditions and the extent and type of the work being proposed at that location.
  - ii. If no young are present, the biologist should install a one-way door at the den entrance and the animal should be allowed to leave on its own accord. The one-way door should be in place for at least 3 days prior to the onset of ground disturbance.
- c. All exposed openings of pipes, culverts, or similar structures shall be capped or temporarily sealed prior to the end of each working day;
- d. Project-related equipment shall remain within designated work areas and delineated access routes;
- e. All large burrows shall be avoided to the greatest extent feasible; and
- f. No rodenticides or herbicides shall be applied in the Project area.

**MONITORING:** Survey results shall be submitted to P&D Compliance Monitoring staff and, in the event that surveys find the presence of burrowing activity, prints, scat and/or active dens, associated with the American Badger, Compliance staff shall be notified of specific measures implemented to avoid impacts to this species.

- 14. MM BIO-14 Woodrat.** In the event a woodrat nest is found within the immediate work area, a qualified biologist shall break down the nest prior to Project activities to avoid incidental take by Project equipment. If the nest is not within immediate work limits and is not anticipated for removal, the nest shall be avoided. **TIMING:** Upon finding a woodrat nest in the immediate work area. **MONITORING:** Break down of the nest shall be directed by the Project biologist or biological monitor.

- 15. MM BIO-15 Crotch's Bumble Bee.** Crotch's bumble bee (CBB) is likely to occur in the Project vicinity due to the presence of suitable habitat and documented regional occurrences. To avoid impacts to CBB or other special status bumble bee species, a CDFW & P&D approved biologist shall conduct a habitat assessment and protocol surveys (per CDFW's *Survey Considerations for CESA Candidate Bumble Bee Species; 2023*) within suitable habitat during the Colony Active Season (March to August) to determine presence of the species within the Project disturbance footprint. All identified nests will be avoided. In areas of suitable habitat within 6.2 miles of a documented nest or individual CBB observations (Kraus et al. 2009; Jha and Kremen 2013; Williams et al 2014), vegetation removal and ground disturbance will be scheduled during August-September to avoid impacts to floral resources during the Active Colony Season and impacts to overwintering queens from October through March (overwintering season). **TIMING:** Protocol surveys shall be conducted prior to initial ground disturbance and submitted to P&D Permit Compliance staff for review, together with confirmation that the applicant will schedule ground disturbing activities consistent with this measure. **MONITORING:** P&D compliance staff shall inspect as needed to ensure compliance.

**16. MM BIO-16 Burrowing Owl.** Burrowing owls have the potential to occur in the Project site within grassland habitats. Surveys for burrowing owl will occur within a 250-foot buffer of all ground disturbing construction activities within grassland habitat. **TIMING:** These surveys will be conducted within 30 days of construction activities. Survey results shall be submitted to P&D compliance monitoring staff for review.

- a. If a potentially active burrow is found within the immediate work area, install a trail camera at the burrow entrance for three consecutive nights to determine if the den is active. Avoid work in this area until the burrow is determined to be unoccupied;
- b. If an active burrow is found within the immediate work area, appropriate agencies will be notified immediately to determine further mitigation. Following agency consultation, the following methods may potentially be used:
  - i. Delineate an exclusion buffer around the burrow to preclude construction activities within 50 meters during the non-breeding season (September 1-January 31) and within 75 meters during the breeding season (February 1-August 31)(CBOC, 1993).

**MONITORING:** P&D compliance monitoring staff shall spot check to ensure compliance.

**17. MM BIO-17 Follow-up Spring Botanical Survey.** A follow-up spring botanical survey shall be conducted by a qualified biologist to determine the presence and distribution of valley needlegrass grassland and potentially occurring special-status plant species within impact areas. **TIMING:** This survey shall be completed in the spring season (March to June) directly prior to ground disturbance. The results of these surveys shall be documented in a report to the County no less than one week before initial ground disturbance. **PLAN REQUIREMENTS:** If special-status plants are observed, a plan shall be developed to avoid the occurrences by relocating proposed water tanks, water lines, or other components or by using alternatives methods of construction or installation such as directional boring for waterlines. The revised plan should be developed by TNC with guidance by the Project biologist and approved by the County compliance monitoring and P&D staff, prior to the initiation of any work.

**18. MM BIO-18 Gaviota Tarplant.**

Cojo Ranch Headquarters: Gaviota tarplant at this location will be avoided by flagging individuals and locating the water tanks to avoid the plants. Pipelines will be installed above ground to avoid soil disturbance and impacts to individual plants and the seedbank.

Quarry Well Cluster: As surveyed by biologists trained by the USFWS to distinguish pure Gaviota tarplant from hybrids, this location contains the hybrid tarplant and is not protected by USFWS. A qualified biologist will conduct a survey during the appropriate season to flag Gaviota tarplant hybrids at this location. To be conservative, the water pipeline will be routed to avoid flagged hybrids, to the greatest extent feasible. Topsoil will be stockpiled during excavation and replaced on the surface to conserve the seedbank.

**TIMING:** A P&D approved biologist familiar with tarplant characteristics within the Preserve will conduct the survey during the appropriate season (approximately August through October) and flag Gaviota tarplant individuals and hybrids at this location. The final tank location and pipeline alignment will avoid the flagged individual Gaviota tarplants. **MONITORING:** Permit Compliance and P&D staff shall review the survey results for compliance with this condition prior to the commencement of ground-disturbing activities and perform site inspections throughout the

construction period to verify compliance in the field. The Project biologist or biological monitor shall provide on-site direction to construction personnel, consistent with the requirements of this mitigation measure, prior to project initiation.

**19. MM BIO-19 Vegetation Removal.** Vegetation removal and ground disturbance shall be minimized to the maximum extent feasible. No vegetation removal should occur in sensitive vegetation alliance or from wetlands, streams, or riparian habitat. Riparian vegetation may be trimmed along roadways to accommodate access, but trimming shall be minimized to the maximum extent feasible and shall be overseen by a biological monitor. **PLAN REQUIREMENTS:** Plans shall be submitted to P&D that clearly depict all proposed vegetation removal and ground disturbance. Plans shall clearly depict all sensitive vegetation alliances, wetlands, streams, and riparian habitats. **TIMING & MONITORING:** Plans shall be submitted to P&D staff to review for compliance with this mitigation measure, prior to approval of the Coastal Development Permit.

**20. MM BIO-20 Final Revegetation Plan.** A Final Revegetation Plan for the Project shall be prepared for review and approval. The Final Revegetation Plan shall be implemented to mitigate for at minimum 0.456-acre of temporary impacts to native vegetation communities. Temporary impact areas will be revegetated at the impact site. Revegetation efforts in the Revegetation Plan shall also focus on restoration of sensitive plant species if impacts are unavoidable. Further, the plan shall contain a list of recommended Best Management Practices (BMPs) for surface stabilization and minimizing silt and sedimentation impacts to adjacent areas. Details regarding the restoration areas, implementation of BMPs and planting plan shall be outlined in the Final Revegetation Plan. **TIMING:** The Final Revegetation Plan shall be submitted prior to issuance of the Coastal Development Permit that will revegetate at least 0.456-acres of vegetation. A final post construction report and annual monitoring report shall be submitted to permit compliance staff. **MONITORING:** The Owner/Applicant shall demonstrate to P&D compliance monitoring staff that all required components of the approved plan(s) are in place as required prior to Final Inspection Clearance and maintained throughout the monitoring period. The monitoring period shall be for 5-years after installation of plant material, unless the success criteria described in the Final Revegetation Plan is met early, then the monitoring period can be reduced to no less than 2-years after plant installation.

**21. MM BIO-21 Sensitive Communities and Habitats.** Sensitive vegetation communities and habitats including Environmentally Sensitive Habitat Areas (ESHAs), oak woodland, riparian, purple needlegrass grassland, etc., located within 25 feet of any area of ground disturbance shall be flagged by the Project biologist and construction fencing should be installed at the edge of the community within the general area of disturbance. If the biologist determines that installation of fencing will result in greater adverse impacts than flagging alone, the area may be flagged only. Construction personnel should be instructed on the sensitivity of the community and no work should be allowed beyond the fenced or flagged area. This measure does not apply to installation of aboveground waterline on existing Preserve roads unless it is determined necessary by the Project biologist or biological monitor.

If sensitive vegetation communities within 25 feet of any area of ground disturbance area located downslope of the area of disturbance, silt fencing shall be installed at the edge of the sensitive community to prevent erosion or sedimentation in the downslope sensitive communities. If the biologist determines that installation of fencing will result in greater adverse impacts than flagging alone, the silt fence may be omitted, or alternate erosion control device shall be used. This measure does not apply to installation of waterline in existing Preserve roads unless it is determined necessary by the Project biologist or biological monitor. **PLAN REQUIREMENTS:** Plans shall be submitted to compliance monitoring and P&D staff that clearly depict proposed ground disturbances, sensitive

vegetation communities and habitats, flags, fencing, silt fencing, and/or alternate erosion control devices. **TIMING:** Under the direction of the Project biologist, flags, fencing, silt fencing, and/or alternate erosion control devices shall be installed in compliance with this mitigation measure and plans shall be submitted to compliance monitoring and P&D staff, prior to any ground disturbance. **MONITORING:** Permit Compliance and P&D staff shall review the plans for compliance with this mitigation measure prior to the commencement of ground-disturbing activities and perform site inspections throughout the construction period to verify compliance in the field.

**22. MM BIO-22 Oak Trees and Other Native Trees.** Construction work shall avoid trench and ground disturbance within the dripline of native trees, such as, coastal live oak, California walnut, and other native trees, unless the existing well site is completely overtopped by oak canopy. This does not apply to aboveground waterline installation on existing Preserve roads. No roots greater than 4 inches in diameter should be cut; when such roots are encountered, the trench should be dug around the root by hand. Oak trees and protected native trees shall be preserved to the maximum extent feasible. Protected native trees are defined as mature native or roosting/nesting trees that do not pose a threat to health and safety. Protected trees include but are not limited to the following:

- a. Coast live oak;
- b. Sycamore;
- c. Willow (*Salix* spp.)
- d. Maple (*Acer macrophyllum*)
- e. California bay laurel (*Umbellularia californica*)
- f. Cottonwood;
- g. White Alder (*alnus rhombifolia*)
- h. California walnut
- i. Any tree serving as known or discovered raptor nesting and/or raptor roosting sites;
- j. Any trees serving as monarch butterfly habitat, including aggregation sites.

**PLAN REQUIREMENTS:** An oak and native tree protection and replacement plan shall be prepared and submitted for approval by P&D staff. The plan shall depict when protective fencing will be implemented, what work can occur within the dripline or sensitive root zones of trees, and how the biologist will determine when the removal of a tree is required because avoidance is infeasible. Oak and other native trees that are removed shall be mitigated at a 10:1 ratio with 5-gallon sized trees. The plan shall also identify success criteria for the replacement trees. **TIMING:** This plan shall be submitted prior to issuance of the Coastal Development Permit. A post construction plan that identifies what trees were impacted and the location of any replacement trees shall be submitted prior to Final Inspection to permit compliance staff. **MONITORING:** The Owner/Applicant shall demonstrate to P&D compliance monitoring staff that all required components of the approved plan(s) are in place as required prior to Final Inspection Clearance and maintained throughout the maintenance period.

**23. MM BIO-23 Revegetation and Passive Regeneration Protection Plan.** A Jalama Creek Protection Plan shall be prepared by the applicant that describes the riparian habitat enhancements that will occur along Jalama Creek approximately 1.4-miles upstream of the Pacific Ocean. Restoration will include at minimum 0.015-acres of native sensitive vegetation to mitigate for permanent impacts to 0.005-acres of permanent impacts and restoration of 0.912-acres of native vegetation to mitigate for temporary impacts to 0.456-acres of native sensitive vegetation. Thus, the total restoration area shall be at minimum 0.927-acres in size to mitigate for all project related vegetation impacts. The plan will also include the following elements:

- a. Native Planting: Establish a diversity of native woody and herbaceous species on disturbed soil on the stream banks, from seed, nursery stock and cuttings. Methods may

include ground preparation by raking to roughen up the soil surface, hand-broadcast seed and rake into soil, and planting native shrubs and trees from small nursery stock and cuttings. All planting and seeding shall be done in the rainy season, or supplemental irrigation will be used to establish plantings. Mulching and/or seeding shall be done on all exposed soil which may deliver sediment to the creek.

- b. Natural Regeneration Protection. During monthly inspections, foliage protectors (i.e., herbivore enclosures) will be installed on naturally regenerated tree saplings to deter herbivory from wildlife.
- c. Site Maintenance (weeding): Invasive non-native plants shall be hand-pulled from the restoration areas during the growing season (December-June) according to the following schedule: Year 1 – monthly basis; Years 2 & 3 – quarterly basis. During the first-year irrigation, revegetation plots will be checked monthly during the dry season to ensure native plants are getting adequate water. Replacement plantings of cuttings, nursery stock or acorns shall be installed as needed to ensure the performance criteria are met or exceeded. Invasive weeds targeted for control include California Invasive Plant Council ranked “high” and “moderate” species, exclusive of naturalized non-native European grasses.
- d. Success Criteria: The Jalama Creek Riparian Enhancement and Protection Plan shall identify success criteria for the enhancement areas that includes species richness and species cover of the native woody and herbaceous vegetation sites as compared to applicable reference sites.
- e. Adaptive Management: The plan shall also include an Adaptive Management component that will be implemented if the enhancement and protection plan is not meeting the success criteria identified in the plan.

**TIMING:** The Final Jalama Creek Protection Plan shall be submitted to P&D for review and approval prior to issuance of the Coastal Development Permit. **MONITORING:** An annual report shall be submitted to permit compliance staff yearly following implementation of the plan. The Owner/Applicant shall demonstrate to P&D compliance monitoring staff that all required components of the approved plan(s) are in place as required prior to Final Inspection Clearance and maintained throughout the monitoring period. The monitoring period shall be for 5-years after installation of plant material, unless the success criteria is met early, then the monitoring period can be shortened to no less than 2-years after plant installation.

With the incorporation of these measures, residual impacts would be insignificant.

#### 4.5 CULTURAL RESOURCES

Will the proposal:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Cause a substantial adverse change in the significance of any object, building, structure, area, place, record, or manuscript that qualifies as a historical resource as defined in CEQA Section 15064.5?			X		
b. Cause a substantial adverse change in the significance of a prehistoric or historic archaeological resource pursuant to CEQA Section 15064.5?		X			
c. Disturb any human remains, including those located outside of formal cemeteries?		X			

Will the proposal:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
<p><b>d.</b> Cause a substantial adverse change in the significance of a tribal cultural resource, defined in the Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p> <p>1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</p> <p>2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>		X			

**County Environmental Thresholds.** Chapter 8 of the Santa Barbara County Environmental Thresholds and Guidelines Manual (2008, revised February 27, 2018) contains guidelines for the identification, significance evaluation, and mitigation of impacts to cultural resources, including archaeological, historic, and tribal cultural resources. In accordance with the requirements of CEQA, these guidelines specify that if a resource cannot be avoided, it must be evaluated for importance under specific CEQA criteria. CEQA Section 15064.5(a)(3)A-D contains the criteria for evaluating the importance of archaeological and historic resources. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the significance criteria for listing in the California Register of Historical Resources: (A) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage; (B) Is associated with the lives of persons important in our past; (C) 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 (D) Has yielded, or may be likely to yield, information important in prehistory or history. The resource also must possess integrity of at least some of the following: location, design, setting, materials, workmanship, feeling, and association. For archaeological resources, the criterion usually applied is (D).

CEQA calls cultural resources that meet these criteria “historical resources”. Specifically, a “historical resource” is a cultural resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources, or included in or eligible for inclusion in a local register of historical resources, as defined in subdivision (k) of Section 5020.1, or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1. As such, any cultural resource that is evaluated as significant under CEQA criteria, whether it

is an archaeological resource of historic or prehistoric age, a historic built environment resource, or a tribal cultural resource, is termed a “historical resource”.

CEQA Guidelines Section 15064.5(b) states that “a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” As defined in CEQA Guidelines Section 15064.5(b), substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired. The significance of an historical resource is materially impaired when a project: (1) demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; (2) demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources; or (3) 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.

For the built environment, a project that follows the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Weeks and Grimmer 1995), is generally considered as mitigated to an insignificant impact level on the historical resource.

**Existing Setting.** For at least the past 10,000 years, the area that is now Santa Barbara County has been inhabited by Chumash Indians and their ancestors. Padre Associates, Inc. prepared a Phase 1 Archaeology Study (April 2024) for the proposed project and determined that cultural resources are located in the vicinity of the proposed project. The background research and cultural records search identified three cultural resources that overlap with portions of the Project sites and two previously recorded cultural resource immediately adjacent to the Project site. In addition, nine previously recorded cultural resources have been recorded within a 0.5-mile radius of the project area. Five cultural resources were identified during the pedestrian survey. Two of these resources are isolated artifacts that are not considered significant archaeological resources.

- During the Phase 1 survey, Padre Associates Inc. identified an archaeological site designated as Site 1 within the Tinta Water System project. The site consists of a moderately dense prehistoric lithic scatter situated on a mostly level, open hilltop adjacent to chert outcrops. Artifacts observed include primary, secondary, and tertiary Monterey chert flakes as well as shatter and tester chert cobble fragments.
- The Phase 1 survey also identified another archaeological site designated as Site 2 (CA-SBA-4158) within the Tinta Water System area. This site is a low to moderately dense prehistoric lithic and shell scatter that is about 69 meters long by 18 meters wide near Espada Creek. Artifacts include one Monterey chert projectile point base, secondary and tertiary Monterey chert flakes, and sparse concentration of California mussel, abalone, and shell fragments.
- The Phase 1 survey identified an archaeological site designated as Site 3 within the Oaks water System. This consists of sparse, prehistoric lithic scatter that measures approximately 150 meters long and ranges in size from 11 meter to 36 meters. Monterey chert debitage include three primary flakes, five secondary flakes, two tertiary flakes and two pieces of shatter.
- An isolate (referred to as Isolate 2) was discovered within the Oaks Water System. The isolate is a large Monterey chert biface fragment that is missing the distal and proximal ends

- Another isolate (referred to as Isolate 3) was discovered within the Oaks Water System. This isolate is a tertiary Monterey chert flake. Note that Isolate 2 and Isolate 3 may be part of one large low-density prehistoric habitat site, although no artifacts were found between the isolates, visibility was poor.
- Archaeological records show that CA-SBA-2063 first recorded in 1986 overlaps with cattle Exclusionary Zone D. This archaeological site was first recorded in 1986 as a concentration of artifacts consisting of cert knife, scraper, cores, and flakes indicating the remains of a small settlement.
- Archaeological records show that CA-SBA-2065 first recorded in 1986 overlaps with cattle exclusionary zone D. This archaeological site was first recorded in 1986 as an open-air site with shell midden, chert flakes, one pestle fragment, and several hammerstones.
- Archaeological records show that CA-SBA-4157 was recorded in 2018 as a prehistoric lithic scatter with one biface fragment and two cores.

Santa Barbara County has provided formal notice to the Barbareño/Ventureño Band of Mission Indians, the Santa Ynez Band of Chumash Indians, and the Coastal Band of the Chumash Nation, to participate in government-to-government consultation pursuant to Public Resources Code (PRC) Section 21080.3.1 and in accordance with the provisions of Assembly Bill (AB) 52. On April 3, 2024, a formal notice of application completeness for the proposed project was sent to Matthew Vestuto, Chair of the Barbareño/Ventureño Band of Mission Indians, Kenneth Kahn, Tribal Chairman of the Santa Ynez Band of Chumash Indians, and Gabriel Frausto, Chairman of the Coastal Band of the Chumash Nation. The notice provided notification of the opportunity for consultation under AB 52, and included a description of the proposed project and a summary of the Phase 1 and extended Phase 1 study methods and results. No reply was received and no additional resources beyond those identified in the Phase 1 and extended Phase 1, were identified within the project area.

## **Impact Discussion.**

### **(a, b) Archaeological and Historic Resources.**

**Archaeological Resources.** The Phase 1 Archaeology Study prepared by Padre Associates, Inc. (April 2024) identified eight archaeological resources during the survey and records search. Six of these are considered potentially significant archaeological resources under CEQA Guidelines criteria “d” for their potential ability to yield information important to prehistory or history.

**Site 1.** This archaeological site is located near the Tinta Water System with the eastern boundary of the site near the existing roadway and proposed pipeline corridor. Archaeological investigation surveyed the eastern boundary and no resources were found within 15 meters of the roadway and water distribution system corridor. In addition, the proposed water tanks are located approximately 160 feet north of the site. Mitigation Measure MM CUL-3 requires exclusionary fencing at least 10 feet from the recorded site boundary. Thus, the proposed project is not expected to impact the existing resources.

**Site 2 (CA-SBA-4158).** This archaeological site is located near the Tinta Water System by Espada Creek. The artifacts were observed on the ground surface and in rodent back dirt patches along the existing dirt access road and within a 20-meter radius on either side of the roadway. A 62-foot segment of the proposed water distribution pipeline to connect the Upper Espada well with an existing water tank and trough will be installed above ground to avoid impacts to this resource. Mitigation Measure MM CUL-3 requires exclusionary fencing at least 10 feet from the recorded site boundary. Since no ground disturbance is proposed to occur within this area, no impacts to this resource are anticipated and Mitigation Measure MM CUL-5 will further reduce the potential impact.

**Site 3, Isolate 2, and Isolate 3.** This archaeological site and isolates are located near the Oaks Water System and originally were going to be impacted by the proposed project. The isolates are located south east of Site 3. After this site and the two isolates was discovered, the project was redesigned to avoid these resources. Mitigation Measure MM CUL-3 requires exclusionary fencing at least 10 feet from the recorded site boundary. Since the proposed cattle trough and water distribution pipeline is not proposed to cross this site or impact the isolates, no impacts to these resources are anticipated and Mitigation Measure MM CUL-5 further reduces the potential impact.

**CA-SBA-2063.** This archaeological site is located within the proposed fence line for Cattle Exclusionary Zone D. Approximately 230 feet of the proposed fence overlaps with the site which includes approximately 3 pipe-posts and 24 t-posts. Impacts associated with this fencing are discussed below.

**CA-SBA-2065.** This archaeological site is located within the proposed fence line for Cattle Exclusionary Zone D. Approximately 175 feet of the proposed fence overlaps with the site which include approximately 2 pipe-posts and 18 t-posts. Impacts associated with this fencing are discussed below.

**CA-SBA-4157.** This site is located within the proposed fence line for Cattle Exclusionary Zone D. Approximately 174 feet of the proposed fence overlaps with the site which includes approximately 2 pipe-posts and 18 t-posts. Impacts associated with this fencing are discussed below.

Impacts to the archaeological site from Cattle Exclusionary Zone D have the potential to occur due to the overlap of the fence with the archaeological sites. However, the fence installation will only have minor ground disturbance where the posts are located. Proposed pipe fence posts are 2 7/8-inches in diameter and spaced approximately every 100 feet, to a depth of approximately 3 feet. Proposed fence t-posts are 2 7/8-inches in diameter and spaced approximately every 10 feet, to a depth of approximately 3 feet. Proposed gate posts are 4-to-6-inches in diameter and placed to a depth of approximately 3 feet. No grading is required to install the Cattle Exclusion Fence. Impacts from the installation of the fence will be reduced by Mitigation Measure CUL-6, which requires a pre-activity survey prior to fence installation to confirm presence of cultural resources. If resources are present, the fence placement shall be adjusted to avoid the resources. The project archaeologist that conducts the pre-activity survey will identify an appropriate buffer of either 50 feet or 100 feet from any resource that is identified and coordinate with P&D staff to identify the fence placement before final installation.

Due to the minor ground disturbance associated with the fencing around the Cattle Exclusion Zone D, and the mitigation measure that requires pre-activity survey and archaeological and cultural resource monitoring, and since the fence installation can be adjusted in the field to avoid resources, the environmental impact due to the fence installation around Cattle Exclusion Zone D will be mitigated to a less than significant level.

Mitigation Measure CUL-1 will be implemented which requires a Workers Cultural Resources Awareness Program, Cultural Resource Monitoring, the implementation of exclusion zones when working near archaeological resources, and details on how to respond in case a discovery is made. These measures will reduce the potential impact to archaeological resources to a less than significant level.

**Historic Resources (Built Environment).** The proposed development does not include the demolition or alteration of structures in excess of 50 years of age. As a result, no impacts to historic resources are anticipated.

**(c) Human Remains.** The Phase 1 Archaeology Study prepared by Padre Associates, Inc. (April 2024) did not identify not identify evidence that human remains have been encountered on the project site or in the areas of proposed disturbance. Except for the resources discussed above, no other cultural resources have been identified in the other areas of the site proposed for development. However, given the overall cultural sensitivity of the area, as demonstrated by the eight recorded sites in proximity to the project site, there is the potential that unknown cultural resources could be encountered during grading and ground disturbance. Impacts are considered significant but mitigable with pre-construction training of the construction personnel (MM CUL-1), monitoring of earth disturbances by a qualified archaeologist and Native American observer (MM CUL-2), and the standard measure requiring that work be stopped in the event that cultural materials are uncovered during grading (CulRes-09).

**(d) Tribal Cultural Resources.** As described above in the “Existing Setting” section, no site, feature, place, cultural landscape, or sacred places with cultural values to California Native American Tribes) was identified on the subject parcel. As discussed in Impact Discussion (b) above, the project location is near and overlaps with locations where previous archeological surveys found evidence of prehistoric lithic scatter, cert knives, scrapers, etc. indicating that tribal cultural resources may exists. In addition, given the overall cultural sensitivity of the site, as demonstrated by the number of recorded sites in proximity to the project site, there is the potential that unknown cultural resources, including Tribal Cultural Resources (TCRs), could be encountered during grading and ground disturbance. Impacts are considered significant but mitigable with pre-construction training of the construction personnel (MM CUL-1), monitoring (MM CUL-2), and the standard condition requiring that work be stopped in the event that cultural materials are uncovered during grading (MM CUL-5). In addition, due to the minor ground disturbance associated with the fencing around the Cattle Exclusion Zone D, and the mitigation measure that requires a pre-activity survey and archaeological and cultural resource monitoring, and since the fence installation can be adjusted in the field to avoid resources, the environmental impact due to the fence installation around Cattle Exclusion Zone D will be reduced to less than significant. These measures would ensure that any previously unidentified cultural resources discovered during site development, including Tribal Cultural Resources, are treated in accordance with the requirements of CEQA and Chapter 8 of the County’s Environmental Thresholds and Guidelines. Impacts would significant but mitigable.

**Cumulative Impacts.** Since the project would not significantly impact cultural resources, it would not have a cumulatively considerable effect on the County’s cultural resources with implementation of the mitigation measures described below.

**Mitigation and Residual Impact.** The following mitigation measures would reduce the project’s cultural resource impacts to an insignificant level:

- 1. MM CUL-1: Worker Cultural Resources Awareness Program.** A worker cultural resources awareness program shall be implemented for the Project. Prior to any ground-disturbing activity, a qualified archaeologist and Native American monitor hired by the applicant shall provide an initial sensitivity training session to all Project employees, contractors, subcontractors, and other workers prior to their involvement in any ground-disturbing activities, with subsequent training sessions to accommodate new personnel becoming involved in the Project. The program may be conducted together with other environmental or safety awareness and education programs for the Project, provided that the program elements pertaining to cultural resources are provided by a qualified archaeologist. The awareness program shall address: a) The cultural sensitivity of the Project site and how to identify sensitive resources; b) Specific procedures to be followed in the event of an inadvertent discovery; c) Safety procedures when working with monitors; and, d) Consequences in the event of noncompliance.  
**TIMING:** The worker cultural resource awareness program shall be conducted prior to ground

disturbance. **MONITORING:** An outline of the presentation shall be submitted to P&D permit compliance staff prior to the pre-construction meeting.

- 2. MM CUL-2: Cultural Resources Monitoring.** Cultural resources monitoring shall be conducted during Project-related ground-disturbing activities for the purpose of identifying and avoiding impacts to cultural resources. The monitoring shall be conducted under the supervision of a County-qualified archaeologist and a Native American representative. In the event of any inadvertent discovery of prehistoric or historic period archaeological resources during construction, all work within 50 feet of the discovery shall immediately cease (or greater or less distance as needed to protect the discovery and determined in the field by the Project archaeologist). The applicant shall immediately notify P&D Permit Compliance staff and other relevant agencies. The Project archeologist shall evaluate the significance of the discovery prior to resuming any activities that could impact the site/discovery. If the Project archaeologist determines that the find may qualify for listing in the CRHR, the site shall be avoided or shall be subject to a mitigation program, such as data recovery excavations, and funded by the applicant. Work shall not resume until authorization is received from the Leady CEQA Agency. **TIMING:** Prior to issuance of the grading/building permit the Owner/Applicant shall submit for P&D review and approval, a contract or Letter of Commitment between the Owner/Applicant and the archaeologist, consisting of a project description and scope of work, and once approved, shall execute the contract. **MONITORING:** The Owner/Applicant shall provide P&D compliance monitoring staff with the name and contact information for the assigned onsite monitor(s) prior to grading/building permit issuance and pre-construction meeting. P&D compliance monitoring staff shall confirm monitoring by archaeologist and Native American consultant and P&D grading inspectors shall spot check field work.
- 3. MM CUL-3: Exclusion Zones.** The Applicant shall, ensure that all unevaluated cultural resources are avoided during Project-related ground disturbance. At least one week prior to Project-related ground disturbance within 100 feet of a known cultural resource, an exclusion zone will be installed. An exclusion zone is a fenced area where construction equipment and personnel are not permitted. The exclusion zone fencing shall be installed (and later removed) under the direction of a County-approved archaeologist and a Native American representative and shall be placed 10 feet beyond the recorded site boundary of the defined area to avoid inadvertent damage during installation. **PLAN REQUIREMENTS:** The fencing requirement shall be shown on approved grading and building plans. **TIMING:** Fencing shall be in place prior to issuance of grading/building permits and pre-construction meeting. **MONITORING:** P&D compliance monitoring staff shall verify installation of fencing by reviewing photo documentation or by site inspection prior to approval of grading permits and ensure fencing remains in place throughout grading and construction through site inspections.
- 4. MM CUL-4 Discovery of Previously Unknown Cultural Resources.** In the event that unknown cultural resources are encountered during Project-related ground disturbance, all earth-disturbing work within 50 feet of the find shall be temporarily suspended or redirected until a County-approved archaeologist has evaluated the nature and significance of the discovery. In the event that a potentially significant cultural resource is discovered, the applicant and P&D shall be notified within 48 hours. The location of any such finds must be kept confidential and measures shall be taken such as the establishment of an Environmentally Sensitive Area (ESA) using fencing or other suitable material to ensure that the area is secured to minimize site disturbance and potential vandalism. Impacts to previously unknown significant cultural resources shall be avoided through preservation in place if feasible. A treatment plan developed by the Project archaeologist shall be submitted to the P&D for review and approval. **PLAN REQUIREMENTS:** This condition shall be printed on all building and grading plans. **MONITORING:** P&D permit processing planner shall check plans prior to issuance of Coastal Development Permit and P&D compliance monitoring staff shall spot check in the field throughout grading and construction.

5. **MM CUL-5 Stop Work at Encounter.** The Owner/Applicant and/or their agents, representatives or contractors shall stop or redirect work immediately in the event archaeological remains are encountered during grading, construction, landscaping or other construction-related activity. The Owner/Applicant shall immediately contact P&D staff, and retain a P&D approved archaeologist and Native American representative to evaluate the significance of the find in compliance with the provisions of the County Archaeological Guidelines and conduct appropriate mitigation funded by the Owner/Applicant. **PLAN REQUIREMENTS:** This condition shall be printed on all building and grading plans. **MONITORING:** P&D permit processing planner shall check plans prior to issuance of Coastal Development Permit and P&D compliance monitoring staff shall spot check in the field throughout grading and construction.
  
6. **MM CUL-6 Pre-activity Survey.** The Applicant shall hire a County-approved Archaeologist to conduct a pre-activity survey of the Cattle Exclusionary Zone D to determine if any cultural resources are identified. If any cultural resources are identified during the survey, then placement shall stop until the resource is identified by the archaeologist. The archaeologist shall then adjust the fence post placement to avoid the cultural resource and install an appropriate buffer that is at minimum 50 feet and can be adjusted to 100 feet or more based on the significance of the cultural resource that is identified. The project archaeologist in coordination with P&D staff shall identify the appropriate buffer zone based on the significance of the cultural resource identified. In addition, the location for gates in the fence shall be outside of any known cultural resource site. A post construction fencing plan shall be provided to P&D staff that shows the location of the installed Cattle Exclusion Fencing incorporating any changes made in the field to avoid resources. **TIMING:** The pre-activity survey shall occur prior to issuance of the grading or building permit. If a cultural resource is found, the project archaeologist shall notify P&D staff of the significance of the find, identify an alternative location for the fence and fence posts that will avoid the cultural resource, and provide an appropriate buffer. **MONITORING:** P&D permit compliance staff shall ensure that the survey is conducted and monitor to ensure that the fence is in the appropriate location, and review the Post Construction Fencing Plan.

With the incorporation of these measures, residual impacts would be insignificant.

#### 4.6 ENERGY

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Substantial increase in demand, especially during peak periods, upon existing sources of energy?			X		
b. Requirement for the development or extension of new sources of energy?				X	

**Impact Discussion:** The County has not identified significance thresholds for electrical and/or natural gas service impacts (Thresholds and Guidelines Manual). Private electrical and natural gas utility companies provide service to customers in Central and Southern California, including the unincorporated areas of Santa Barbara County. The proposed project consists of 19 production wells and 22 monitoring wells, new infrastructure will be powered by solar panels to support the new pumps and infrastructure installed. Of the 19 production wells, the following wells require service from Southern California Edison:

- Alegria: The existing water system infrastructure contains an electrical panel, two 5,000-gallon water tanks, well pump, booster pump, approximately 8 ft x 8 ft well pad cover, wire fence around the wells and tanks, buried water pipeline network, and cattle troughs.

- Buckhorn 1: The existing water system infrastructure contains an electrical box surrounded by a wood fence, well pump, wire fence around the well site, and three cattle troughs.
- Ramajal South: The existing water system infrastructure contains an electrical panel, well pump, wood fence around the well site, buried water pipeline, and two troughs.
- Vaqueros: The existing water system infrastructure contains an electrical panel, well pump, wood fence around the well site, buried water pipeline, three troughs, and a 5,000-gallon water storage tank.

Electrical use for cattle watering varies by several factors such as the season, the amount of land area/cattle troughs each well serves, and the amount of rain in a given year. Based on electrical usage over the past year, a reasonable worst-case scenario for electrical usage of use of these four wells for cattle watering is 50,000 kWh (or 50 MWh) annually total. In addition, the Ramajal South well is proposed to be used for temporary irrigation of oak restoration areas required as part of the Coastal Commission Orders. Irrigation would be used to establish the trees and as needed for the first two years and would then be significantly reduced and ultimately discontinued as the oak restoration areas become established. Estimated electricity usage for oak restoration irrigation would be approximately 64 kWh annually for two years.

**Energy Use**

Multiplier	Project Demand
Natural Gas (13.7 million BTU per capita <sup>7</sup> )	N/A
Electricity (7.4MWh/yr/home PG&E; 6.9 MWh/yr/home SCE) <sup>8</sup>	50 megawatt hours per year

In summary, the project would have a negligible effect on regional energy needs since the operation of wells for cattle watering would total, in a worst-case scenario the electricity usage of approximately seven homes. No adverse impacts would result.

**Cumulative Impacts.** The project’s contribution to the regionally significant demand for energy is not considerable, and is therefore insignificant.

**Mitigation and Residual Impact.** No mitigation is required. Residual impacts would be insignificant.

**4.7 FIRE PROTECTION**

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Introduction of development into an existing high fire hazard area or exposure of people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?		X			

<sup>7</sup> <http://apps1.eere.energy.gov/states/residential.cfm/state=CA#ng>

<sup>8</sup> <http://enduse.lbl.gov/info/LBNL-47992.pdf>

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
b. Project-caused high fire hazard?			X		
c. Introduction of development into an area without adequate water pressure, fire hydrants or adequate access for fire fighting?			X		
d. 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?			X		
e. Introduction of development that will substantially impair an adopted emergency response plan, emergency evacuation plan, or fire prevention techniques such as controlled burns or backfiring in high fire hazard areas?			X		
f. Development of structures beyond safe Fire Dept. response time?			X		

**County Standards.** The following County Fire Department standards are applied in evaluating impacts associated with the proposed development:

- The emergency response thresholds include Fire Department staff standards of one on-duty firefighter per 4,000 persons (generally 1 engine company per 12,000 people, assuming three firefighters/station). The emergency response time standard is approximately 5-6 minutes.
- Water supply thresholds include a requirement for 750 gpm at 20 psi for urban single family dwellings in urban and rural developed neighborhoods, and 500 gpm at 20 psi for dwellings in rural areas (lots larger than five acres).
- The ability of the County’s engine companies to extinguish fires (based on maximum flow rates through hand held line) meets state and national standards assuming a 5,000 square foot structure. Therefore, in any portion of the Fire Department’s response area, all structures over 5,000 square feet are an unprotected risk (a significant impact) and therefore should have internal fire sprinklers.
- Access road standards include a minimum width (depending on number of units served and whether parking would be allowed on either side of the road), with some narrowing allowed for driveways. Cul-de-sac diameters, turning radii and road grade must meet minimum Fire Department standards based on project type.
- Two means of egress may be needed and access must not be impeded by fire, flood, or earthquake. A potentially significant impact could occur in the event any of these standards is not adequately met.

**Impact Discussion.**

Predictions about the long-term effects of global climate change in California include increased incidence of wildfires and a longer fire season, due to drier conditions and warmer temperatures. Any increase in the number or severity of wildfires has the potential to impact resources to fight fires when they occur, particularly when the state experiences several wildfires simultaneously. Such circumstances place greater risk on development in high fire hazard areas.

(a) The project is located in the Very High Fire Hazard Area within the jurisdiction of the County of Santa Barbara Fire Department. The nearest fire station is Station 38, located at 17200 Calle Mariposa Reina. All

new structures and development would be required to meet updated fire code requirements for materials, access, and defensible space. Emergency access to the project site is available via Jalama Road and Cojo Bay Road. The project will introduce new development into existing high fire hazard area due to the installation of the new pipelines, pumps, tanks, troughs, and solar arrays to support the existing wells. New development also includes two new 5,000-gallon water tanks at the Cojo Ranch headquarters to increase water storage for fire protection. The riparian enhancement aspect of the project will install cattle exclusion fencing near Jalama Creek and revegetate 8-acres of riparian habitat. The restoration will be completed with native plants that are not expected to increase the fire risk of the area. While the new development is located in a Very High Fire Hazard area and may increase the risk of a fire due to the installation of new electrical equipment and solar arrays, mitigation measures have been developed to reduce the impact to a less than significant level. Mitigation measure FIRE-1 requires maintenance of a 10-foot defensible space requirement to clear brush and vegetation from all well locations and ground mounted solar arrays. With implementation of this mitigation measure, the impact will be insignificant.

**(b-f)** The project includes the installation of new pipelines, pumps, water tanks, troughs, and solar arrays to support existing well infrastructure. Of the 41 existing wells, 19 will be production wells to support the cattle operation and 22 will be monitoring wells. The project also proposes to install cattle exclusion fencing along Jalama Creek and restore 8-acres of riparian habitat. No aspect of the project will create a significant high fire hazard impact because the wells already exist and do not include any aspect that would create a fire hazard. The wells will increase the availability of water on the project site and the project also includes installation of two new 5,000-gallon water tanks to support fire suppression.

Minimal infrastructure is being proposed as part of this project because the water wells already exist on site. Access to the wells is provided via existing roadways. No new power lines are proposed as the project will use electricity from new solar arrays located at well sites. The new water pipelines, solar arrays, and other utilities that are proposed will support the existing wells and will not significantly exacerbate fire risk long-term due to the relatively small scale of development at each well site. Mitigation Measure FIRE-1 requires that at least 10-feet of defensible space is located at each well and solar array to reduce the risk of fire. With implementation of this mitigation measure, and with standard fire code requirements for development in a Very High Fire Hazard Area, the project will have an insignificant impact in this resource area.

The project will not impair any emergency response plans and will actually improve the fire protection services of the site by providing two new water tanks for fire suppression. The proposed project is outside of the standard 6-minute response time due to the remote location of the Dangermond Preserve, however water tanks for fire protection are available to reduce the risk of fire. In addition, the new development includes new solar arrays, water pipelines, water tanks, and troughs, all structures that are not habitable and will not increase the use of the property or allow more people in remote areas.

**Cumulative Impacts.** Since the project would not create significant fire hazards, it would not have a cumulatively considerable effect on fire safety within the County.

**Mitigation and Residual Impact.** The following mitigation measures would reduce the project's fire hazard impacts to an insignificant level:

- 1. MM-FIRE-1. Maintenance of Defensible Space.** This project shall comply with the California Fire Code, Section 605-11.2 that requires a 10-foot area that is clear of vegetation or brush from all well locations and solar arrays. **PLAN REQUIREMENTS:** Project plans shall include the defensible space requirement. **TIMING:** Plans shall be submitted prior to approval of the project. **MONITORING:** P&D

permit compliance monitors shall ensure that the defensible space requirement is met during site inspections.

With the incorporation of these measures, residual impacts would insignificant.

#### 4.8 GEOLOGIC PROCESSES

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving exposure to or production of unstable earth conditions such as landslides, earthquakes, liquefaction, soil creep, mudslides, ground failure (including expansive, compressible, collapsible soils), or similar hazards?			X		
b. Disruption, displacement, compaction or overcovering of the soil by cuts, fills or extensive grading?			X		
c. Exposure to or production of permanent changes in topography, such as bluff retreat or sea level rise?				X	
d. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X	
e. Any increase in wind or water erosion of soils, either on or off the site?			X		
f. Changes in deposition or erosion of beach sands or dunes, or changes in siltation, deposition or erosion which may modify the channel of a river, or stream, or the bed of the ocean, or any bay, inlet or lake?				X	
g. The placement of septic disposal systems in impermeable soils with severe constraints to disposal of liquid effluent?				X	
h. Extraction of mineral or ore?				X	
i. Excessive grading on slopes of over 20%?				X	
j. Sand or gravel removal or loss of topsoil?				X	
k. Vibrations, from short-term construction or long-term operation, which may affect adjoining areas?				X	
l. Excessive spoils, tailings or over-burden?				X	

**Environmental Thresholds.** Pursuant to the County’s Adopted Thresholds and Guidelines Manual, impacts related to geological resources may have the potential to be significant if the proposed project involves any of the following characteristics:

1. The project site or any part of the project is located on land having substantial geologic constraints, as determined by P&D. Areas constrained by geology include parcels located near active or potentially active faults and property underlain by rock types associated with compressible/collapsible soils or susceptible to landslides or severe erosion. "Special Problems"

areas designated by the Board of Supervisors have been established based on geologic constraints, flood hazards and other physical limitations to development.

2. The project results in potentially hazardous geologic conditions such as the construction of cut slopes exceeding a grade of 1.5 horizontal to 1 vertical.
3. The project proposes construction of a cut slope over 15 feet in height as measured from the lowest finished grade.
4. The project is located on slopes exceeding 20% grade.

**Impact Discussion.**

**(a) Potential to Result in Geologic Hazards.** The project site is not underlain by any known fault. Compliance with existing building regulations would reduce potential ground shaking impacts caused by movement along a distant fault to a less than significant level. Liquefaction potential in the area has been determined to be low. Any potential for expansive soils would be mitigated by the use of non-expansive engineered fill. All soils-related hazards would be less than significant through the normal building permit review and inspection process.

**(b, and i) Potential for Grading-Related Impacts.** The project would involve minimal grading as the access roads and wells already exist. Minor grading is required to install the proposed solar arrays at each well location. Standard conditions of approval require implementation of dust control measures and erosion and sediment control plans to prevent erosion runoff from entering drainage areas. With implementation of the standard conditions the project will be insignificant.

**(e, f) Potential Erosion and Sedimentation Impacts.** Grading operations that would occur on the project site would remove vegetative cover and disturb the ground surface, thereby increasing the potential for erosion and sedimentation impacts. However, the grading for the project is minimal and spread out over the Dangermond Preserve at dispersed well site. Therefore, the potential for the project to cause substantial erosion and sediment transport would be adequately mitigated by the County’s standard erosion control and drainage requirements. Thus, impacts would be insignificant.

**(c, d, g, h, j, k, l) Other Potential Geological Hazards.** There are no unique geological features located on the project site, and the project would not result in the use of septic systems. The project would not involve mining, the loss of topsoil, or construction-related vibrations. The project is not located near a coastal bluff and is not expected to changes due to sea level rise. No unique paleontological resources or unique geologic features are known to occur onsite. No grading on slopes of over 20% is proposed.

**Cumulative Impacts.** Since the project would not result in significant geologic impacts, and geologic impacts are typically localized in nature, it would not have a cumulatively considerable effect on geologic hazards within the County.

**Mitigation and Residual Impact.** No impacts are identified. No mitigation is necessary.

**4.9 HAZARDOUS MATERIALS/RISK OF UPSET**

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
<p><b>a.</b> In the known history of this property, have there been any past uses, storage or discharge of hazardous materials (e.g., fuel or oil stored in underground tanks, pesticides, solvents or other chemicals)?</p>			X		

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
b. The use, storage or distribution of hazardous or toxic materials?				X	
c. A risk of an explosion or the release of hazardous substances (e.g., oil, gas, biocides, bacteria, pesticides, chemicals or radiation) in the event of an accident or upset conditions?			X		
d. Possible interference with an emergency response plan or an emergency evacuation plan?				X	
e. The creation of a potential public health hazard?				X	
f. Public safety hazards (e.g., due to development near chemical or industrial activity, producing oil wells, toxic disposal sites, etc.)?			X		
g. Exposure to hazards from oil or gas pipelines or oil well facilities?			X		
h. The contamination of a public water supply?				X	

**Environmental Threshold.** The County’s safety threshold addresses involuntary public exposure from projects involving significant quantities of hazardous materials. The threshold addresses the likelihood and severity of potential accidents to determine whether the safety risks of a project exceed significant levels.

**Impact Discussion:**

**(a, f, g) Historical Hazards.** There is evidence that six (6) oil wells exist on the Dangermond Preserve in various locations, however all six wells are plugged and no longer in production. The project includes the installation of new water pipelines, pumps, water tanks, troughs, and solar arrays to support existing water well infrastructure. Of the 41 existing water wells, 19 will be production wells to support the cattle operation and 22 will be monitoring wells. The project also proposes to install cattle exclusion fencing along Jalama Creek and restore 8-acres of riparian habitat. This project is not proposing any work or grading near the existing oils wells and no changes to the plugged wells are proposed. No chemical or industrial activity exists on the site. No oil or gas pipelines exist on the project site and the likelihood of exposure to hazards from one of the six existing oil wells is very low because the well are plugged and no longer in production. Therefore, the project will not cause a significant adverse impact due to hazards or risk of upset due to the fact that the site historically had oil and gas development.

**(b-e, h) Potential Hazardous Materials/Risk of Upset Impacts.** The proposed project would not result in the development of products that require the long-term use of hazardous materials. While some hazardous materials such as engine oil, are use in the operation of vehicles and heavy equipment, use of this equipment will only occur during construction and the risk of a spill is minimal. The use of common household materials (cleaners, garden and automotive products, etc.) on the project site would not result in significant hazardous materials/waste impacts. Traffic that would be generated by the project is minimal as the wells will not be used all the time and monitoring will occur remotely once installed. Construction traffic is temporary and also relatively small and would not substantially interfere with emergency response capabilities to the project site or to other properties in the project area.

**Cumulative Impacts.** Since the project would not create significant impacts with respect to hazardous materials and/or risk of upset, it would not have a cumulatively considerable effect on safety within the County.

**Mitigation and Residual Impact.** No mitigation is required. Residual impacts would be insignificant.

#### 4.10 LAND USE

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Structures and/or land use incompatible with existing land use?				X	
b. Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?		X			
c. The induction of substantial unplanned population growth or concentration of population?				X	
d. The extension of sewer trunk lines or access roads with capacity to serve new development beyond this proposed project?				X	
e. Loss of existing affordable dwellings through demolition, conversion or removal?				X	
f. Displacement of substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X	
g. Displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X	
h. The loss of a substantial amount of open space?				X	
i. An economic or social effect that would result in a physical change? (i.e. Closure of a freeway ramp results in isolation of an area, businesses located in the vicinity close, neighborhood degenerates, and buildings deteriorate. Or, if construction of new freeway divides an existing community, the construction would be the physical change, but the economic/social effect on the community would be the basis for determining that the physical change would be significant.)				X	
j. Conflicts with adopted airport safety zones?				X	

**Existing Setting.** The project site is located approximately in the Lompoc region in the Gaviota Coast Plan area bounded by Vandenburg Air Force Base to the north and west, and Hollister Ranch to the east. The site is over 14,000 acres, and a portion of it runs along the coastline. Jalama Road, a County-maintained asphalt road, traverses the Preserve from east to west. The majority of the Preserve is located on the Lompoc Hills and Point Conception U.S. Geologic Survey (USGS) 7.5-minute topographic quadrangle maps.

The easternmost portion of the Preserve is located on the Santa Rosa Hills and Sacate quadrangle maps. Elevation varies from sea level to approximately 1,680 feet at the crest of the Santa Ynez mountains. Onsite resources vary widely with environmentally sensitive habitat such as riparian and oak woodland habitat, throughout the property. The project sites are zoned AG-II 100 and AG-II 320 (agricultural, 100-320 acre minimum parcel size), and the sites are primarily used for a cattle ranch and restoration/conservation. The existing unpermitted wells and associated development include 41 wells of which 19 will be used a production wells and 22 will be monitoring wells.

The proposed expansion of the availability of water on the Preserve to support cattle grazing may lead to improved conservation outcomes. The Nature Conservancy has considerable experience with ranch lands in the West and uses scientific evidence to support well-managed grazing as a tool to manage fuel loads, reduce wildlife risks, increase and regulate nutrient cycling, and enhance wildlife habitat biodiversity. Use of the 19 production wells would facilitate a nimbler grazing operation targeted to achieve these objectives because the cattle herd could be easily moved among existing grazing areas around the Preserve without the need to transport water via a water truck from existing permitted wells or rely on stock ponds that are increasingly dry for significant portions of the year due to the ongoing drought and climate change.

A groundwater monitoring network of 22 wells at the Preserve would provide research opportunity to better understand and manage the sensitive coastal ecosystem at the Dangermond Preserve and others like it throughout the world. While many aspects of the ecosystem can be easily observed, groundwater is not readily observable without monitoring wells. The Nature Conservancy has partnered with the University of California Santa Barbara (UCSB) to conduct conservation research on the Preserve. The wells provide value to study the shifting character of subsurface water resources and the effects of various conservation practices, and natural phenomena including grazing, prescribed burns, wildfires, drought, intensifying rainfall, and how ecosystems respond to these changes.

**Environmental Threshold.** The Thresholds and Guidelines Manual contains no specific thresholds for land use. Generally, a potentially significant impact can occur if a project would result in substantial growth inducing effects or result in a physical change in conflict with County policies adopted for the purpose of avoiding or mitigating an environmental effect.

#### **Impact Discussion.**

**(b)** As indicated in the biological resources section of this document above, special status plant and animal species exist on the project site. In addition, oak woodland and riparian habitat exist throughout the property and some of the wells and water infrastructure exist within 100 feet of the environmentally sensitive habitat. Due to development being located less than 100 feet from ESH, the project would be in conflict with Gaviota Coast Plan Development Standard NS-2. However, the overall footprint of the project is minimal and the potential impacts to these resources are mitigated by the mitigation measures identified in the biological resources section. These measures will ensure restoration for any project impacts and will protect endangered and special status species. With the mitigation measures identified above, under Section 4.4, biological resources, the projects impacts are less than significant.

**(a,c-j)** The implementation of the project is not anticipated to result in any significant land use impacts outlined in these criteria.

**Cumulative Impacts.** The implementation of the project is not anticipated to result in any substantial change to the site's conformance with environmentally protective policies and standards or have

significant growth inducing effects. Thus, the project would not cause a cumulatively considerable effect on land use.

**Mitigation and Residual Impact.** With the incorporation of the mitigation measures identified in the biological resources section, the project’s land use impacts would be reduced to a less than significant level.

**4.11 NOISE**

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Long-term exposure of people to noise levels exceeding County thresholds (e.g. locating noise sensitive uses next to an airport)?				X	
b. Short-term exposure of people to noise levels exceeding County thresholds?			X		
c. Project-generated substantial increase in the ambient noise levels for adjoining areas (either day or night)?				X	

**Environmental Setting/Threshold.** Noise is generally defined as unwanted or objectionable sound which is measured on a logarithmic scale and expressed in decibels (dB(A)). The duration of noise and the time period at which it occurs are important values in determining impacts on noise-sensitive land uses. The Community Noise Equivalent Level (CNEL) and Day-Night Average Level (L<sub>dn</sub>) are noise indices which account for differences in intrusiveness between day- and night-time uses. County noise thresholds are: 1) 65 dB(A) CNEL maximum for exterior exposure, 2) 45 dB(A) CNEL maximum for interior exposure of noise-sensitive uses, and 3) an increase in noise levels by 3 db(A) – either individually or cumulatively when combined with other noise-generating sources when the existing (ambient) noise levels already exceed 65 db(A) at outdoor living areas or 45db(A) at interior living areas. Noise-sensitive land uses include: residential dwellings; transient lodging; hospitals and other long-term care facilities; public or private educational facilities; libraries, churches; and places of public assembly.

The proposed project site is located outside of 65 dB(A) noise contours for roadways, public facilities, airport approach and take-off zones. Some residential dwelling exists on the Dangermond Preserve and adjacent properties, however the dwellings are dispersed over the 14,000-acre site.

**Impact Discussion:**

**(a, c)** The subject parcel is currently developed with structures related to the Cojo headquarters, Jalama headquarters, teacher and school house, and Jalama nursery trailer. Both headquarters include multiple residential structures, such as guest houses, a manager house, cook houses, bathroom/laundry structure, guest complex, and adobe office. Further details of the existing structures on the property can be found in Section 4.0 “Environmental Setting” of this document. The 41 wells already exist and do not serve residential development. The project also proposes water distribution system including water pipelines, water troughs, water tanks, water pumps, and solar panels. While some of this equipment such as the water pumps will generate noise when running, the noise will not exceed County thresholds. The water wells and infrastructure are located on the Preserve, far away from any neighboring property and is surrounded by other agricultural uses. The project site is approximately 14,811 acres, and as such, any noise associated with the 41 wells and the water distribution system would have a less than significant impact on the ambient noise in the area.

**(b)** The proposed project is dispersed on the Dangermond Preserve property on parcels that total 14,811 acres in size. Limited noise sensitive uses exist on the site and are not located adjacent to any of the 41 wells or water service infrastructure. During construction, noise generated by the use of heavy machinery could have short-term noise impacts on residential uses on the property, but it is unlikely to have any impacts on the residential development to the west or east of the site, since the subject property is so large and residential uses are far away from the existing water wells that serve the cattle operation and monitoring.

**Cumulative Impacts.** The implementation of the project is not anticipated to result in any substantial noise effects. Therefore, the project would not contribute in a cumulatively considerable manner to noise impacts.

**Mitigation and Residual Impact.** No impacts are identified. No mitigations are necessary.

#### 4.12 PUBLIC FACILITIES

Will the proposal require or result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. A need for new or altered police protection and/or health care services?				X	
b. Student generation exceeding school capacity?				X	
c. Significant amounts of solid waste or breach any federal, state, or local standards or thresholds relating to solid waste disposal and generation (including recycling facilities and existing landfill capacity)?				X	
d. The relocation or construction of new or expanded wastewater treatment facilities (sewer lines, lift-stations, etc.) the construction or relocation of which could cause significant environmental effects?				X	
e. The relocation or construction of new or expanded storm water drainage or water quality control facilities, the construction of which could cause significant environmental effects?				X	

**Impact Discussion:**

The proposed project would result in the increase of 41 water wells, water troughs, water tanks, and a water distribution system within the area. This level of new development would not have a significant impact on existing police protection or health care services. Existing service levels would be sufficient to serve the proposed project. The proposed project would not generate solid waste in excess of County thresholds. The project would not cause the need for new or altered sewer system facilities as it is already in the service district, and the District has adequate capacity to serve the project.

The proposed project does not result in the construction of new storm water drainage or water quality control facilities. However, the proposed water wells may result in increased surface runoff which would be accommodated within existing drainage features on the property and allow for groundwater recharge. No additional drainages or water quality control facilities would be necessary to serve the project. Therefore, the project would have no impact to public facilities.

**Mitigation and Residual Impact:** No impacts are identified. No mitigation is necessary.

**4.13 RECREATION**

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Conflict with established recreational uses of the area?				X	
b. Conflict with biking, equestrian and hiking trails?				X	
c. Substantial impact on the quality or quantity of existing recreational opportunities (e.g., overuse of an area with constraints on numbers of people, vehicles, animals, etc. which might safely use the area)?				X	

**Impact Discussion.**

**(a,b)** The project site is on private property and is not located on or near any established recreational uses, including biking, equestrian or hiking trails. No adverse impacts would result.

**(c)** The proposed project would not result in any population increase and would have no adverse impacts on the quality or quantity of existing recreational opportunities, either in the project vicinity or County-wide.

**Mitigation and Residual Impact.** No impacts are identified. No mitigation is necessary.

**4.14 TRANSPORTATION**

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?			X		
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)?			X		
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X	
d. Result in inadequate emergency access?				X	

**Setting.** The project site is located on the Dangermond Preserve which is developed with facilities include the Cojo & Jalama Headquarters. The existing unpermitted wells and associated development includes production wells and monitoring wells. Jalama Road is a County maintained road that is used to access the parcel. The existing wells and water service infrastructure are accessed via existing unpaved ranch roads. No new roadways are proposed.

**Environmental Thresholds.**

According to the County’s Environmental Thresholds and Guidelines Manual, a significant transportation impact would occur when:

- a. **Potential Conflict with a Program, Plan, Ordinance, or Policy.** A transportation impact occurs if a project conflicts with the overall purpose of an applicable transportation and circulation program, plan, ordinance or policy including impacts to existing transit systems and bicycle and pedestrian networks pursuant to Public Resource Code Section 21099(b)(1).
- b. **Potential Impact to VMT.** CEQA Guidelines Section 15064.3(a) defined VMT as “the amount and distance of automobile travel attributable to a project.” The County of Santa Barbara uses the screening criteria developed by the OPR Technical Advisory. The County presumes that land use or transportation projects that meet the screening criteria would have less than significant MT impacts and would not require further analysis.

Screening Criteria for Land Use Projects

Screening Categories	Project Requirements to Meet Screening Criteria
Small Projects	A project that generates 110 or fewer average daily trips.
Locally Serving Retail	A project that has locally serving retail uses that are 50,000 square feet or less, such as specialty retail, shopping center, grocery/food store, bank/financial facilities, fitness center, restaurant, or café. If a project also contains, a non-locally serving retail use(s) must meet other applicable screening criteria.
Projects Located in a VMT Efficient Area	A residential or office project that is located in an area that is already 15 percent below the county VMT (i.e., “VMT efficient area”). The County’s Project-Level Calculator determines whether a proposed residential or office project is located within a VMT efficient area.
Projects near Major Transit Stop	<p>A project that is located within a ½ mile of a major transit stop or within a ½ mile of a bus stop on a high-quality transit corridor (HQTC). A major transit stop is a rail station or a bus stop with two or more intersecting bus routes with a service frequency of 15 minutes or less during peak commute periods. A HQTC is a corridor with fixed route bus service with frequency of 15 minutes or less during peak commute periods. However, these screening criteria do not apply if project-specific or location-specific information indicates the project will still generate significant levels of VMT. Therefore, in addition to the screening criteria listed above, the project should also have the following characteristics:</p> <ul style="list-style-type: none"> <li>- Floor area ratio (FAR) of 0.75 or greater;</li> <li>- Consistent with the applicable SBCAG Sustainable Communities Strategy (as determined by the County);</li> <li>- Does not provide more parking than required by the County’s Comprehensive Plan and zoning ordinances; and</li> <li>- Does not replace affordable housing units (units set aside for very low income and low income households) with a smaller number of moderate or high-income housing units.</li> </ul>
Affordable Housing	A residential project that provides 100 percent affordable housing units (units set aside for very low

	income and low income households); if part of a larger development, only those units that meet the definition of affordable housing satisfy the screening criteria.
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**c. Design Features and Hazards.** This threshold considers whether a project would increase roadway hazards. An increase could result from existing or proposed uses or geometric design features. In part, the analysis should review these and other relevant factors and identify results that conflict with the County’s Engineering Design Standards or other applicable roadway standards. For example, the analysis may consider the following criteria:

- Project requires a driveway that would not meet site distance requirements, including vehicle queueing and visibility of pedestrians and bicyclists.
- Project adds a new traffic signal or results in a major revision to an existing intersection that would not meet the County’s Engineering Design Standards.
- Project adds substantial traffic to a roadway with poor design features (e.g., narrow width, roadside ditches, sharp curves, poor sight distance, inadequate pavement structure).
- Project introduces a new use and substantial traffic that would create potential safety problems on an existing road network (e.g., rural roads with use by farm equipment, livestock, horseback riding, or residential roads with heavy pedestrian or recreational use).

If a project would result in potential roadway hazards, the applicant would need to modify the project or identify mitigation measures that would eliminate or reduce the potential hazards.

**d. Emergency Access.** This threshold considers any changes to emergency access resulting from a project. A project that would result in inadequate emergency vehicle access would have a significant transportation impact and, as a result, would require project modification or mitigation measures.

**Impact Discussion:**

**(a) Potential Conflict with a Program, Plan, Ordinance, or Policy.** The proposed project has the potential to create short-term increases in construction-related vehicle trips as additional construction workers will be needed to complete the project. However, the implementation of the project long-term will not add additional trips on public roadways as the 41 wells already exist. The project will not increase the number of vehicle trips long-term, as once each well is operational, the only trips that will be needed are to conduct maintenance or collect monitoring data from the proposed monitoring wells. The additional traffic on public roadways from the project in the project area would be minimal and would not result in a significant traffic or other transportation related impact. The proposed project would not conflict with any applicable transportation plan or policy since it’s not adding a significant amount of vehicle trips. The Gaviota Coast Plan transportation policies focus on ensuring that future transportation development does not detract or impact the scenic, or biological resources that exist in that area. Since this proposed project does not include any improvements to the existing public roadway along Jalama Road, and will not generate a significant number of vehicle trips, the project is consistent with all applicable policies.

**(b) Potential Impact to VMT.** The proposed project is below the screening criteria developed by the California Governor’s Office of Planning and Research (OPR) that is used to screen projects that would typically be expected to cause a less than significant transportation impact. A project that meets the screening criteria, absent evidence to the contrary, would not require further VMT analysis. Small projects that generate 110 or fewer average daily trips (ADT) are typically expected to cause a less than significant transportation impact or less. The proposed project will permit 41 existing water wells and is not expected to generate a significant number of long-term vehicle trips above what exists today, and is well below 110 ADT. 19 wells will be production wells serving the cattle operation, 22 will be monitoring wells. The

monitoring wells may require access either by vehicle or foot traffic to collect the data monthly before remote data collection methods can be implemented.

**(c-d) Design Features, Hazards, and Emergency Access.** The proposed project will not create any design features or hazards due to the geometric design because the project does not include any new transportation features. In addition, the project will not result in inadequate emergency access because the project uses existing roadways and has been reviewed by the County Fire Department to ensure that access is adequate.

**Cumulative Impacts.** The County’s Environmental Thresholds were developed, in part, to define the point at which a project’s contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the project has been found not to exceed the threshold of significance for transportation. Therefore, the project’s contribution to the regionally significant transportation impacts is not considerable, and is insignificant.

**Mitigation and Residual Impact:** No mitigation is required. Residual impacts would be insignificant.

#### 4.15 WATER RESOURCES/FLOODING

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?				X	
b. Changes in percolation rates, drainage patterns or the rate and amount of surface water runoff?			X		
c. Change in the amount of surface water in any water body?			X		
d. Discharge, directly or through a storm drain system, into surface waters (including but not limited to wetlands, riparian areas, ponds, springs, creeks, streams, rivers, lakes, estuaries, tidal areas, bays, ocean, etc) or alteration of surface water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution?		X			
e. Alterations to the course or flow of flood water or need for private or public flood control projects?				X	
f. Exposure of people or property to water related hazards such as flooding (placement of project in 100-year flood plain), accelerated runoff or tsunamis, sea level rise, or seawater intrusion?				X	
g. Alteration of the direction or rate of flow of groundwater?			X		
h. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or recharge interference?			X		

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
i. Overdraft or over-commitment of any groundwater basin? Or, a significant increase in the existing overdraft or over-commitment of any groundwater basin?			X		
j. The substantial degradation of groundwater quality including saltwater intrusion?			X		
k. Substantial reduction in the amount of water otherwise available for public water supplies?				X	
l. Introduction of storm water pollutants (e.g., oil, grease, pesticides, nutrients, sediments, pathogens, etc.) into groundwater or surface water?		X			

**Water Resources Thresholds.** A project is determined to have a significant effect on water resources if it would exceed established threshold values which have been set for each over drafted groundwater basin. These values were determined based on an estimation of a basin’s remaining life of available water storage. If the project’s net new consumptive water use [total consumptive demand adjusted for recharge less discontinued historic use] exceeds the threshold adopted for the basin, the project’s impacts on water resources are considered significant.

A project is also deemed to have a significant effect on water resources if a net increase in pumpage from a well would substantially affect production or quality from a nearby well.

**Water Quality Thresholds.** A significant water quality impact is presumed to occur if the project:

- Is located within an urbanized area of the county and the project construction or redevelopment individually or as a part of a larger common plan of development or sale would disturb one (1) or more acres of land;
- Increases the amount of impervious surfaces on a site by 25% or more;
- Results in channelization or relocation of a natural drainage channel;
- Results in removal or reduction of riparian vegetation or other vegetation (excluding non-native vegetation removed for restoration projects) from the buffer zone of any streams, creeks or wetlands;
- Is an industrial facility that falls under one or more of categories of industrial activity regulated under the NPDES Phase I industrial storm water regulations (facilities with effluent limitation; manufacturing; mineral, metal, oil and gas, hazardous waste, treatment or disposal facilities; landfills; recycling facilities; steam electric plants; transportation facilities; treatment works; and light industrial activity);
- Discharges pollutants that exceed the water quality standards set forth in the applicable NPDES permit, the Regional Water Quality Control Board’s (RWQCB) Basin Plan or otherwise impairs the beneficial uses<sup>9</sup> of a receiving water body;

<sup>9</sup> Beneficial uses for Santa Barbara County are identified by the Regional Water Quality Control Board in the Water Quality Control Plan for the Central Coastal Basin, or Basin Plan, and include (among others) recreation, agricultural supply, groundwater recharge, fresh water habitat, estuarine habitat, support for rare, threatened or endangered species, preservation of biological habitats of special significance.

- Results in a discharge of pollutants into an “impaired” water body that has been designated as such by the State Water Resources Control Board or the RWQCB under Section 303 (d) of the Federal Water Pollution Prevention and Control Act (i.e., the Clean Water Act); or
- Results in a discharge of pollutants of concern to a receiving water body, as identified by the RWQCB.

### **Impact Discussion**

**(a, e, f, k, l)** The project would not result in impacts on surface water quality, including the changes in currents or course of water movements because the project is not located within a creek or water body that would cause such an impact. The installation of the water distribution system, water wells, and water tanks will not require the need for public or private flood control projects and they are not located within the Flood Hazard Area and will not generate flood impacts to people or property. The groundwater that the existing wells are using is located in a different aquifer than the nearest public water agency.

**(b-c)** The project would create minor amounts of additional storm water runoff as a result of newly constructed impermeable surfaces due to the new water tanks and water troughs. These proposed improvements are relatively small in size based on the total 14,811-acre site. Percolation rates and surface water flows from springs and creeks across the Preserve will not be significantly impacted by the small impervious areas.

**(d)** The project has the potential to generate a significant impact to surface water due to temporary Construction activities such as grading could also potentially create temporary runoff and erosion problems. Many of the project sites are located near drainage areas or creeks and have the potential to have construction equipment spills occur and drain into these sensitive areas. Mitigation measure MM WTR-1 requires that sediment be contained on the project site and that designated areas be installed away from sensitive habitat and water bodies to prevent spills from occurring and impacting these resources. Application of these measures will reduce the potential impact to an insignificant level.

**(g-j, k)** The coastal streams and Jalama Creek predominantly drain surface water on the Preserve to the Pacific Ocean. Smaller portions of the Preserve to the east and north drain to Salsipuedes Creek and the Santa Ynez River. Approximately 94% of the 15,714-acre Jalama Creek USGS Sub-Watershed is contained within the preserve boundaries. Approximately 11.6% of the 8,647-acre Canada De Santa Anita-Frontal Santa Barbara Channel USGS Sub-Watershed and 6.5% of the 12,249-acre Salsipuedes Creek Sub-watershed are contained within the preserve boundaries.

The preserve contains most of the 25-square-mile Jalama Creek Watershed except for a limited portion draining from the Sudden Peak area and a reach extending approximately 3,000 feet upstream of the mouth of the creek. The project would be supplied with water from private groundwater wells, which receive water from the Jalama Creek watershed, Salsipuedes Creek watershed, South Coastal watershed, and Monterey/Vaqueros Formation. The existing water demand for the proposed project site is 29.4 acre-feet per year (AFY), comprising water supplies for the Jalama headquarters, Cojo headquarters, irrigation-plant nursery, and the existing cattle operation. Proposed water demands would take additional cattle capacity into account, resulting in a proposed water demand of 42.8-51.8 AFY. The safe yield amount is well above the amount required to support the groundwater demands of the preserve. Specifically, the estimated safe yield for the Jalama Creek watershed is 3,248 AFY, Salsipuedes Creek watershed is 244 AFY, South Coastal watershed is 1,260 AFY, and the Monterey/Vaqueros Formation is 3,382. Thus, the proposed maximum water demand for expanded cattle operations, including the existing demand, is 51.8 AFY, which is 1.1% of 4,752 AFY, the estimated safe yield. Since the volume of water extracted annually does not exceed its safe yield,

this basin is not over drafted. The project will not alter the flow of groundwater as the surface area of any proposed improvements is minor compared to the scope of the groundwater basin.

**(I)** The project has the potential to have pollutants introduced into the groundwater or surface water due to the temporary construction of the water distribution system, water tanks, and water troughs. Construction vehicles and heavy equipment will be used during construction. Bringing this equipment into the watershed has the potential to result in spills which could affect the groundwater quality or surface water quality. Mitigation measure WTR-1 and WTR-2 requires that erosion control measure be in place during construction and that a designated area be in place to prevent spillages from affecting the surface water or groundwater. With implementation of these mitigation measures, the potential impacts will be insignificant.

**Cumulative Impacts.** The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the project has been found not to exceed the threshold of significance for water resources. Therefore, the project's contribution to the regionally significant issues of water supplies and water quality is not considerable, and is insignificant.

**Mitigation and Residual Impact.** The following mitigation measures would reduce the project's water resource impacts to an insignificant level:

1. **MM WTR-1 Sediment and Contamination Containment.** The Owner/Applicant shall prevent water contamination during construction by implementing the following construction site measures:
  - a. All entrances/exits to the construction site shall be stabilized using methods designed to reduce transport of sediment off site. Stabilizing measures may include but are not limited to use of gravel pads, steel rumble plates, temporary paving, etc. Any sediment or other materials tracked off site shall be removed the same day as they are tracked using dry cleaning methods. Entrances/exits shall be maintained until graded areas have been stabilized by structures, long-term erosion control measures or landscaping.
  - b. Apply concrete, asphalt, and seal coat only during dry weather.
  - c. Cover storm drains and manholes within the construction area when paving or applying seal coat, slurry, fog seal, etc.
  - d. Store, handle and dispose of construction materials and waste such as paint, mortar, concrete slurry, fuels, etc. in a manner which minimizes the potential for storm water contamination.

**PLAN REQUIREMENTS:** The Owner/Applicant shall ensure all above construction site measures are printed as notes on plans. **TIMING:** Stabilizing measures shall be in place prior to commencement of construction. Other measures shall be in place throughout construction. **MONITORING:** The Owner/Applicant shall demonstrate compliance with these measures to P&D compliance monitoring staff as requested during construction.

2. **MM WTR-2 Equipment Storage-Construction.** The Owner/Applicant shall designate a construction equipment filling and storage area(s) to contain spills, facilitate clean-up and proper disposal and prevent contamination from discharging to the storm drains, street, drainage ditches, creeks, or wetlands. The areas shall be no larger than 50 x 50 foot unless otherwise approved by P&D and shall be located at least 100 feet from any storm drain, waterbody or sensitive biological resources. **PLAN REQUIREMENTS:** The Owner/Applicant shall designate the P&D approved location on all grading and building permits. **TIMING:** The Owner/Applicant shall install the area prior to commencement of construction. **MONITORING:** P&D compliance monitoring staff shall ensure compliance prior to and throughout construction.

- 3. MM WTR-3 Equipment Washout-Construction.** The Owner/Applicant shall designate a washout area(s) for the washing of concrete trucks, paint, equipment, or similar activities to prevent wash water from discharging to the storm drains, street, drainage ditches, creeks, or wetlands. Note that polluted water and materials shall be contained in this area and removed from the site biweekly. The area shall be located at least 100 feet from any storm drain, waterbody or sensitive biological resources. **PLAN REQUIREMENTS:** The Owner/Applicant shall designate the P&D approved location on all grading and building permit plans. **TIMING:** The Owner/Applicant shall install the area prior to commencement of construction. **MONITORING:** P&D compliance monitoring staff shall ensure compliance prior to and throughout construction.

With the incorporation of these measures, residual impacts would be insignificant.

## 5.0 INFORMATION SOURCES

### 5.1 County Departments Consulted:

Police, Fire, Public Works, Flood Control, Parks, Environmental Health,

### 5.2 Comprehensive Plan:

<input checked="" type="checkbox"/> Seismic Safety/Safety Element	<input type="checkbox"/> Conservation Element
<input type="checkbox"/> Open Space Element	<input checked="" type="checkbox"/> Noise Element
<input checked="" type="checkbox"/> Coastal Plan and Maps	<input checked="" type="checkbox"/> Circulation Element
<input type="checkbox"/> ERME	<input type="checkbox"/>

### 5.3 Other Sources:

<input type="checkbox"/> Field work	<input checked="" type="checkbox"/> Ag Preserve maps
<input type="checkbox"/> Calculations	<input checked="" type="checkbox"/> Flood Control maps
<input checked="" type="checkbox"/> Project plans	<input checked="" type="checkbox"/> Other technical references (reports, survey, etc.)
<input type="checkbox"/> Traffic studies	<input checked="" type="checkbox"/> Planning files, maps, reports
<input checked="" type="checkbox"/> Records	<input checked="" type="checkbox"/> Zoning maps
<input checked="" type="checkbox"/> Grading plans	<input checked="" type="checkbox"/> Soils maps/reports
<input type="checkbox"/> Elevation, architectural renderings	<input checked="" type="checkbox"/> Plant maps
<input checked="" type="checkbox"/> Published geological map/reports	<input checked="" type="checkbox"/> Archaeological maps and reports
<input type="checkbox"/> Topographical maps	<input type="checkbox"/> Other
	<input type="checkbox"/>
	<input type="checkbox"/>

## 6.0 PROJECT SPECIFIC (short- and long-term) AND CUMULATIVE IMPACT SUMMARY

The proposed project would result in potentially significant impacts on Biological Resources (Section 5.4), Cultural Resources (Section 5.5), Fire Protection (Section 5.7), Land Use (Section 5.10), Noise (Section 5.11), and Water Resources (Section 5.15). However, implementation of the mitigation measures contained within this document would reduce residual impacts on these resources to an insignificant

level. With implementation of the required mitigation measures, the proposed project would not have considerable contribution to cumulative impacts on these resources.

### 7.0 MANDATORY FINDINGS OF SIGNIFICANCE

Will the proposal result in:	Poten. Signif. and Unavoid.	Signif. But Mitigable	Insignif.	No Impact / Beneficial Impact	Reviewed Under Previous Document
1. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, contribute significantly to greenhouse gas emissions or significantly increase energy consumption, or eliminate important examples of the major periods of California history or prehistory?		X			
2. Does the project have the potential to achieve short-term to the disadvantage of long-term environmental goals?			X		
3. 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.)			X		
4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X			
5. Is there disagreement supported by facts, reasonable assumptions predicated upon facts and/or expert opinion supported by facts over the significance of an effect which would warrant investigation in an EIR ?				X	

- 1) As discussed in Sections 4.3, 4.4, 4.5, 4.7, and 4.10 of this Initial Study, the proposed project has the potential to degrade the quality of the environment. However, mitigation measures proposed in these sections would reduce project impacts to levels of less than significance. With incorporation of the mitigation measures identified in this Initial Study into the project description, the project would not 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 communities, substantially reduce the number or restrict the range of a rare or endangered plant or animal, contribute significantly to greenhouse gas emissions or significantly increase energy consumption, or eliminate important examples of the major periods of California history or prehistory.
- 2) As designed and mitigated, the project would allow for the operation of existing wells on the property for agricultural production (cattle grazing) and scientific monitoring. While some of the wells are located adjacent to environmentally sensitive habitat, the wells would not directly impact sensitive plant or animal species as

they currently exist. However, removal of the wells may result in significant and unavoidable impacts to sensitive biological and cultural resources on the Preserve that cannot be fully mitigated through restoration. Therefore, by maintaining the wells for agricultural and scientific purposes, existing habitat would not be disturbed and short-term and long-term environmental goals would be achieved.

- 3) Although the project has the potential for significant and less than significant project specific impacts as discussed throughout this document, the required mitigation measures would reduce project impacts to levels of less than significance, and as mitigated, the project would not have impacts that are cumulatively considerable.
- 4) As discussed in Sections 4.3, 4.4, 4.5, 4.7, and 4.10 of this Initial Study, the proposed project has the potential to cause adverse effects on human beings. However, mitigation measures proposed in these sections would reduce the impacts to less than significant levels.
- 5) There is no disagreement supported by facts, reasonable assumptions predicated upon facts and/or expert opinion supported by facts over the significance of an effect which would warrant investigation in an EIR.

## **9.0 INITIAL REVIEW OF PROJECT CONSISTENCY WITH APPLICABLE SUBDIVISION, ZONING AND COMPREHENSIVE PLAN REQUIREMENTS**

**9.1 Zoning Requirements:** The project site is zoned AG-II-320 (Agriculture II, 320 acre minimum parcel size) and is subject to the requirements of this zone district. The project site is also in the Coastal Commission Appeals Jurisdiction.

**9.2 Comprehensive Plan Requirements:** The proposed project has a **Comprehensive Plan designation of A-II-320** (Agriculture-II, 320 acre minimum parcel size). The project is in the Gaviota Coast Plan Area, Rural Area, and the Gaviota Coast Rural Region. Therefore, the proposed project is subject to the following Policies of the County Comprehensive Plan, including the Gaviota Coast Plan:

**Coastal Act Policy 30250.** (a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases, for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels. (b) Where feasible, new hazardous industrial development shall be located away from existing developed areas.

**Coastal Act Policy 30231.** The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging wastewater reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

**Coastal Act Policy 30240.** (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas. (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

**Coastal Act Policy 30251.** The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.

**Coastal Land Use Plan Policy 10-2:** When developments are proposed for parcels where archaeological or other cultural sites are located, project design shall be required which avoids impacts to such cultural sites if possible.

**Coastal Land Use Plan Policy 11-1:** The provisions of the Air Quality Attainment Plan shall apply to the coastal zone.

**Gaviota Coast Plan Policy VIS-1: Visual Compatibility.** The height, scale, and design of structures shall be compatible with the character of the surrounding natural and agricultural environment.

**Gaviota Coast Plan Policy VIS-2: Visually Subordinate Development.** Development shall be visually subordinate to the natural and agricultural environment as seen from public viewing places. Visual subordination shall be achieved through adherence to the Site Design Hierarchy and Design Guidelines. "Visually subordinate" is defined as development that is partially visible but not dominant or disruptive in relation to the surrounding landscape as viewed from a public viewing place.

**Gaviota Coast Plan Policy LU-10: Development Siting.** Development shall be scaled, sited and designed to 1) avoid environmentally sensitive habitat consistent with Policy NS-2, 2) avoid visually prominent areas to the maximum extent feasible, 3) minimize infrastructure requirements and/or redundancy, 4) minimize fragmentation of the landscape, and 5) protect agricultural land and agricultural viability. Measures to avoid and minimize impacts to coastal resources shall at a minimum include consideration of the following: color; reflectivity and height of structures; length of roads and driveways; number and size of accessory structures; configuration and size of development envelopes, including concentrating and clustering development in existing development areas close to existing roads; amount and location of grading; vegetation removal; and night lighting.

**Gaviota Coast Plan Policy AG-1.A: Protect and Support Agricultural Land Use.** Land designated for agriculture shall be preserved and protected for agricultural use; the integrity of agricultural operations shall not be violated by non-compatible uses.

**Gaviota Coast Plan Policy AG-1.C: Support and Promote Local and Regional Agricultural Operations.** The County shall develop and promote programs to preserve agriculture in the Gaviota Coast Plan Area. Policies and programs shall seek to protect and enhance productive agricultural operations, while preserving and protecting valuable natural resources and the rural character of the Gaviota Coast.

**Gaviota Coast Plan Policy NS-2: Environmentally Sensitive Habitat (ESH) Protection.** Environmentally Sensitive Habitat (ESH) areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. A resource dependent use

is a use that is dependent on the ESH resource to function (e.g., nature study, habitat restoration, public trails, and low-impact campgrounds). Resource-dependent uses shall be sited and designed to avoid significant disruption of habitat values to ESH through measures including but not limited to: utilizing established disturbed areas where feasible, limiting grading by following natural contours, and minimizing removal of native vegetation to the maximum extent feasible. Non-resource dependent development, including fuel modification and agricultural uses, shall be sited and designed to avoid ESH and ESH buffer areas. If avoidance is infeasible and would preclude reasonable use of a parcel or is a public works project necessary to repair and maintain an existing public road or existing public utility, then the alternative that would result in the fewest or least significant impacts shall be selected and impacts shall be mitigated. Development in areas adjacent to ESH areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

**Gaviota Coast Plan Policy NS-7: Riparian Vegetation.** New development, including fuel modification, shall be sited and designed to protect riparian ESH, consistent with Policy NS-2 and all other applicable policies and provisions of this Plan and the LCP.

**Gaviota Coast Plan Policy NS-11: Restoration.** In cases where adverse impacts to biological resources as a result of new development cannot be avoided and impacts have been minimized, restoration shall be required. A minimum replacement ratio of 3:1 shall be required to compensate for adverse impacts to native habitat areas or biological resources, except that mitigation for impacts to wetlands shall be a minimum 4:1 ratio. Where onsite restoration is infeasible, the most proximal and in-kind offsite restoration shall be required. Preservation in perpetuity for conservation and/or open space purposes of areas subject to restoration shall be required as a condition of the CDP and notice of such restriction shall be provided to property owners through a recorded deed restriction or Notice to Property Owner.

**Gaviota Coast Plan Policy NS-12: Protected Trees.** Existing trees shall be preserved to the maximum extent feasible, prioritizing “protected trees.” Protected trees are defined for the purpose of this policy as mature native or roosting/nesting trees that do not pose a threat to health and safety. Protected trees include, but are not limited to:

- Oak (*Quercus agrifolia*)
- Sycamore (*Platanus racemosa*)
- Willow (*Salix* spp.)
- Maple (*Acer macrophyllum*).
- California Bay Laurel (*Umbellularia californica*)
- Cottonwood (*Populus* spp.)
- White Alder (*Alnus rhombifolia*)
- California Walnut (*Juglans californica*)
- Any tree serving as known or discovered raptor nesting and/or raptor roosting sites.
- Any trees serving as Monarch butterfly habitat, including aggregation sites.

All existing “protected trees” shall be protected from damage or removal to the maximum extent feasible. Where the removal of protected trees cannot be avoided through the implementation of project alternatives, or where development encroachments into the protected zone of protected trees result in the loss or worsened health of the trees, mitigation measures shall include, at a minimum, the planting of replacement trees on-site, if suitable area exists on the project site, at a ratio of 10 replacement trees for every one tree removed. Where on-site mitigation is not feasible, the most proximal off-site mitigation shall be required.

**10.0 RECOMMENDATION BY P&D STAFF**

**On the basis of the Initial Study, the staff of Planning and Development:**

- Finds that the proposed project WILL NOT have a significant effect on the environment and, therefore, recommends that a Negative Declaration (ND) be prepared.
- Finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures incorporated into the REVISED PROJECT DESCRIPTION would successfully mitigate the potentially significant impacts. Staff recommends the preparation of an ND. The ND finding is based on the assumption that mitigation measures will be acceptable to the applicant; if not acceptable a revised Initial Study finding for the preparation of an EIR may result.
- Finds that the proposed project MAY have a significant effect on the environment, and recommends that an EIR be prepared.
- Finds that from existing documents (previous EIRs, etc.) that a subsequent document (containing updated and site-specific information, etc.) pursuant to CEQA Sections 15162/15163/15164 should be prepared.


Potentially significant unavoidable adverse impact areas:


With Public Hearing  Without Public Hearing

**PROJECT EVALUATOR:** Chris Schmuckal **DATE:** July 30, 2025

**11.0 DETERMINATION BY ENVIRONMENTAL HEARING OFFICER**

- I agree with staff conclusions. Preparation of the appropriate document may proceed.
- I DO NOT agree with staff conclusions. The following actions will be taken:
- I require consultation and further information prior to making my determination.

SIGNATURE:  INITIAL STUDY DATE: 8/5/25

SIGNATURE:  NEGATIVE DECLARATION DATE: 8/20/25

SIGNATURE: \_\_\_\_\_ REVISION DATE: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ FINAL NEGATIVE DECLARATION DATE: \_\_\_\_\_

**12.0 ATTACHMENTS**

1. Vicinity Map
2. Site Plan
3. Safe Yield Report, Dudek
4. CalEEMod Summary Report Dangermond Wells Project
5. Climate Action Plan Consistency Checklist for Future Development
6. Biological Report, Padre Associates, Inc., April 2024
7. Addendum to Biological Report, Padre Associates, Inc., dated October 31, 2024

