2155 SOUTH THOMPSON AVENUE
NIPOMO, CALIFORNIA CANNABIS PROJECT
(APNs 090-261-014 and 090-261-015)
SAN LUIS OBISPO COUNTY, CALIFORNIA

BIOLOGICAL RESOURCES ASSESSMENT

Prepared for:

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Prepared by:

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Revised June 2020

AUTHENTICITY AND SIGNATURE PAGE

As a County-approved biologist, I hereby certify that this Biological Resources Assessment was prepared according to the Guidelines established by the County of San Luis Obispo Department of Planning and Building and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge and belief; and I further certify that I was present throughout the site visits associated with this report.

_____ June 23, 2020

Kevin Merk Date
Principal Biologist

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EXECUTIVE SUMMARY

Kevin Merk Associates, LLC (KMA) conducted this biological resources assessment (BRA) for proposed cannabis cultivation facilities on two adjacent properties in the unincorporated community of Nipomo, San Luis Obispo County, California (APNs 090-261-015 and 090-261-014). This BRA is a revision from the December 2019 BRA that evaluated a former project design containing "west" and "east" project sites. The revised BRA covers the "west" and "central" cannabis facilities on the two properties. The proposed "west" project involves converting an existing agricultural building to a cannabis curation/processing/packaging building and installing restrooms and leach field; 3 acres of outdoor cultivation; mixed-light indoor cultivation greenhouses; nursery greenhouses; Sea Trains for pesticide and nutrient storage; compost area; water storage tanks; and, parking spaces. Existing electric, natural gas, well, paved access road, and irrigation lines would be used. The proposed "central" project occurs on the eastern parcel and includes 3.75 acres of outdoor cultivation; flowering greenhouses; nursery greenhouses; processing building; parking area; loading area; trash/recycling/compost areas; septic and leach field; shipping containers for pesticides, nutrients and equipment; a150-kw solar system; and, decomposed granite drive would be constructed from the paved access road into the facility. Cattle would continue to be raised on approximately 305 acres of the properties outside of the cannabis cultivation areas, in compliance with the Williamson Act contract for the property.

The purpose of this assessment was to assist SLOCAL Farms with technical biological resources information to support the County of San Luis Obispo's (County) environmental review process pursuant to applications for Minor Use Permits under Ordinance 22.40.050. This report evaluates the potential for the project sites to support special-status biological resources, and evaluates whether these resources could be adversely affected by the project. A study area was developed for this project that included the "west", "east" and "central" project sites, plus at least a 500-foot buffer, within the limits of the parcels. KMA's Principal Biologist Kevin Merk conducted field reconnaissance and focused rare plant surveys of the impact areas on May 17, 2019, July 17, 2019 and March 27, 2020.

Six plant communities or land use types were identified within the study areas, and include: 1) Annual Grassland; 2) Agriculture; 3) Developed/Ruderal; 4) Riparian Scrub; 5) Coastal Scrub; and 6) Ornamental. In addition, an Ephemeral Swale and Ephemeral Drainages were mapped onsite. Several in-channel impoundments (Ponds) that are outside of the impact areas are also included in the evaluation, although not thoroughly surveyed. Only Annual Grassland, Agriculture and Developed/Ruderal occur within the project footprints. No sensitive natural communities or designated critical habitat occurs within the project sites or would be indirectly affected. The Ephemeral Drainages and Ephemeral Swale would not be affected by the projects. No permitting would be needed from these agencies because construction activities would remain outside of potential jurisdictional drainage features.

No special-status plant species were seen during the surveys. The entire area within the proposed project sites has been farmed in the past, and was composed of Annual Grassland dominated by weedy species. The background review coupled with on the ground field work confirmed no special-status plant species have the potential to occur onsite. Therefore, no rare plant species are expected to be affected by the project.

Numerous special-status animal species that are known to occur in the site vicinity were evaluated as their potential to occur in the study areas. Many of these species identified with potential to occur onsite are mobile species that would only use the site periodically while foraging or moving

through the site, without using the area for breeding or other key life history traits. Species considered to be mobile include monarch butterfly, birds (adults, non-nesting) and foraging bats. Individuals of these mobile species that use the site for foraging or on a transitory basis are expected to move away from any temporary disturbance during construction activities, and would not be directly affected. There are no suitable groves for monarch overwintering sites, or trees or structures for raptor nests.

Individuals of less mobile species (amphibians, reptiles, denning badgers and nesting birds) could potentially be affected by construction activities. Special-status wildlife species that could potentially occur in project impact areas at some point in time include: Blainville's horned lizard, California red-legged frog, northern California legless lizard, southwestern pond turtle, western spadefoot, American badger, and pallid bat. Birds that nest in grassland habitats or on structures or ornamental trees and shrubs in Developed/Ruderal areas, including special-status species and those protected under the Migratory Bird Treaty Act and California Fish and Game Code, could be affected if construction was initiated during the breeding season. Pallid bats or other protected bat species could roost inside of the existing agricultural building that would be converted to cannabis uses.

To avoid impacts to dispersing California red-legged frog, initial construction activities should be conducted in the dry season. Temporary (during construction) and permanent (during operations) wildlife exclusion fencing is required for the central project site due to the proximity to suitable aquatic habitat of special-status amphibians and reptiles. Avoidance and minimization measures involving preconstruction surveys by a qualified biologist prior to initial ground disturbance are required because avoidance by timing the construction period cannot cover each of these species with potential to occur. These surveys shall involve a visual search for amphibians, reptiles, American badger dens and bird nests within and adjacent to project impact areas. If any potential den is found and cannot be avoided, additional mitigation to ensure that the den is not occupied at the time of construction would be required. The survey shall also include searching the agricultural building for signs of bat roosting. If construction is initiated at different parts of the study sites at different times, separate pre-activity surveys shall be conducted for each project element. Other mitigation measures are provided to reduce project related impacts to wildlife species.

There would be no measurable negative effect on wildlife habitat as a result of construction of the cannabis facilities because a minimal amount of a common and disturbed habitat type would be lost. There would be no adverse indirect effects to other nearby habitat areas, as there is at least a 300-foot setback from offsite areas. No riparian habitats, wetlands, or Sensitive Resource Areas are present in impact areas, and BMPs described herein to protect water quality during construction are required. Additionally, a bioswale/basin system shall be designed to capture stormwater runoff from cultivated and developed areas through the life of the project.

In summary, potential negative impacts on biological resources resulting from implementation of the project would mostly be limited to construction activities that could directly affect individuals of special-status wildlife species, if present in impact areas. Conducting construction activities during the dry season would avoid potential impacts to dispersing California red-legged frogs. There would be no negative impacts on habitat quality, wildlife corridors, or other long-term impacts of the project. Mitigation measures to avoid and minimize the chance for project effects on these resources are described herein, and would bring project effects below a level of significance as defined under CEQA.

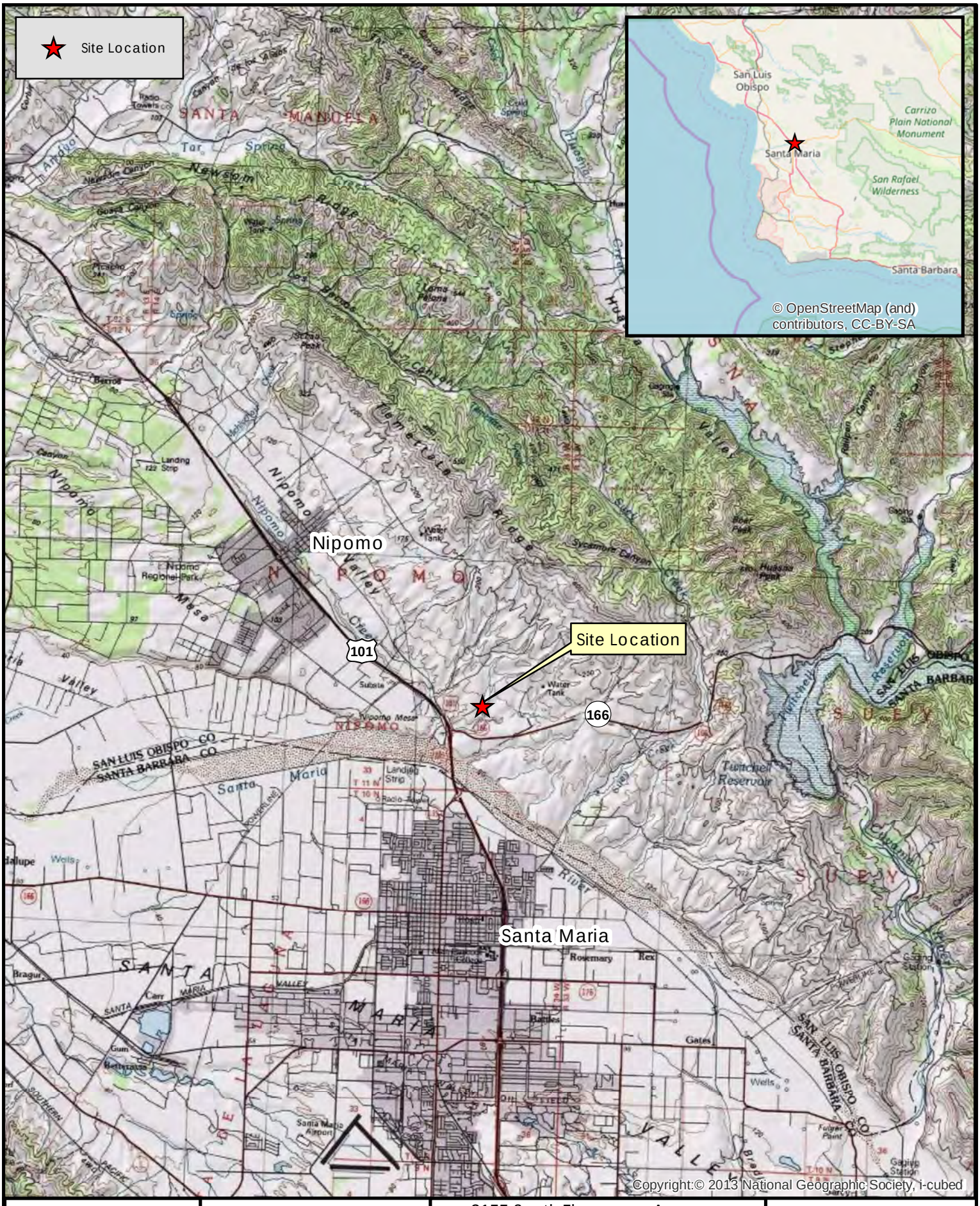
1.0 INTRODUCTION

Kevin Merk Associates, LLC (KMA) conducted this biological resources assessment (BRA) for proposed Cannabis cultivation activities on two agricultural properties in the unincorporated community of Nipomo, San Luis Obispo County, California. The properties are located approximately four (4) miles to the southeast of Nipomo and two and one-half (2.5) miles north-northwest of Santa Maria. They are located to the east of Highway 101/South Thompson Avenue, to the south of the northern loop of Wineman Road, and to the north of Highway 166 (Figures 1 and 2). The western property, consisting of 148.86 acres, is identified as Assessor's Parcel Number (APN) 090-261-015. The eastern property is 299.68 acres and identified as APN 090-261-014. The properties are located on the U. S. Geological Survey (USGS) Santa Maria and Nipomo 7.5-minute topographic quadrangles (T 11 N, R 34 W; west: 34.998159° N, -120.429786° W; east: 35.006547° N, -120.419802° W), and are situated in an agricultural area of grazed grasslands, dry land farming, and lemon and avocado orchards (Figure 2).

The purpose of this assessment was to assist SLOCAL Farms, Inc. with technical biological resources information to support the County of San Luis Obispo's (County) environmental review process pursuant to applications for Minor Use Permits under Ordinance 22.40.050 for cannabis cultivation at two areas on the parcels. An earlier BRA was prepared for "east" and "west" facilities; this BRA is revised to cover "west" and "central" cultivation areas following the removal of the "east" area from the scope of the project. This report evaluates the potential for the study area to support special-status biological resources (plants, animals, sensitive natural communities, and designated critical habitat) for the California Environmental Quality Act (CEQA) review being conducted by the County for the project. The study area for this investigation included all areas within the proposed project that may be subject to disturbance plus a buffer of at least 300 feet. The proposed site plans as described in Section 1.1 below were reviewed to determine potential impacts to biological resources as defined under the CEQA. Recommended mitigation measures are provided to reduce the impacts the proposed project could have on the biological resources. This document was prepared following the County's (2016) *Guidelines for Biological Resources Assessments*.

1.1 Project Description

Two cannabis cultivation areas are proposed under this project. As shown on the site plans prepared by Reiss Design Studio (March 28, 2019) and project descriptions provided by SLOCAL Farms, Inc., the "west" area is proposed on the western parcel and includes the following components: converting an existing 10,500 square foot agricultural building to a cannabis curation/processing/packaging building and installing restrooms and leach field; 3-acre canopy of outdoor cultivation (192,000 square foot of hoop houses); 22,000 square feet of mixed-light indoor cultivation greenhouses; a 30,000 square feet of nursery greenhouses; two 9'X40' Sea Trains for pesticide and nutrient storage; compost area; water storage tanks; and, 11 parking spaces (see Site Plans in Appendix A). The outdoor cultivation area would be encircled by 6-foot high chain link security fencing. The property has existing electrical and natural gas connections, private wells, and a septic. Irrigation lines are present throughout the property and are pressurized by a diesel generator. These irrigation lines would be used for the project and a diesel storage tank would be added. An existing paved road on the property would provide access to the site's gated entrance on South Thompson Avenue, and an existing dirt road that would provide access to the outdoor cultivation area would be improved with an all-weather surface. The property has existing electrical and natural gas connections, private wells and a septic system.



KEVIN MERK ASSOCIATES

N W E S

1 in = 2 miles

2155 South Thompson Avenue
Nipomo Cannabis Project
SLOCAL Farms, Inc.

Figure 1
Site Location

Study Area Boundary

Wetland Type

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

S. Thompson Ave.

Wineman Rd. (North)

101

Wineman Rd. (South)

166

Santa Maria River

Additional Sources: National Wetlands Inventory (USFWS 2019a)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

KEVIN MERK ASSOCIATES

N W E S

1 inch = 1,000 feet

0 125 250 500 750 1,000 Meters

2155 South Thompson Avenue Nipomo Cannabis Project

SLOCAL Farms, Inc.

Figure 2

Aerial Overview

The cannabis cultivation area known as "central" occurs on the eastern parcel. It contains the following components detailed in the May 7, 2020 site plan developed by Cody McLaughlin and also included in Appendix A: total of 163,350 square feet (3.75 acres) of outdoor cultivation within three plots; 27,216 square feet of flowering greenhouses; 29,232 square feet of nursery greenhouses; 10,500-square foot processing building; 21,200-square foot parking area; 20,000-square foot loading area; a total of 8,500 square feet trash/recycling/compost areas; 2,000-square foot septic and leach field; and, 1,080 square feet of storage consisting of three 8'X40' shipping containers for pesticides, nutrients and equipment. A 10,000-square foot drainage basin was shown on earlier plans but surface drainage from the site, as we understand, would be managed within the project footprints. Cultivation areas would be fenced as required by the County. A 150-kw solar system would be installed to provide electrical power. Access would be from an existing paved road through the western parcel that accesses South Thompson Avenue. A 20-foot wide decomposed granite drive would be constructed from the paved access road into the facility. Cattle would continue to be raised on approximately 305 acres of the properties outside of the cannabis cultivation areas, in compliance with the Williamson Act contract for the property.

1.2 Regulatory Overview

For the purpose of this report, special-status species are those plants and animals listed, or Candidates for listing, as Threatened or Endangered by the U.S. Fish and Wildlife Service (USFWS) under the federal Endangered Species Act (FESA); those listed as Threatened or Endangered under the California Endangered Species Act (CESA); and, animals designated as “Species of Special Concern,” “Fully Protected,” or “Watch List” by the California Department of Fish and Wildlife (CDFW; 2020a).

FESA provisions protect federally listed species and their habitats from unlawful take, which is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct.” Under these regulations, "harm" may include significant habitat modification or degradation that kills or injures wildlife. Candidate species are not afforded legal protection under FESA; however, Candidate species typically receive special attention during the CEQA environmental review process. CESA provides for the protection and preservation of native species of plants and animals that are experiencing a significant decline which if not halted would lead to a threatened or endangered designation. Habitat degradation or modification is not expressly included in the definition of take under CESA.

CDFW maintains a list of Species of Special Concern for those species in which declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. The goal of designating species as special concern is to halt or reverse their decline early enough to secure their long-term viability. Species of Special Concern may receive special attention during environmental review, but do not have statutory protection. FESA and CESA emphasize early consultation to avoid impacts on Threatened and Endangered species. As part of the consultation process, project proponents are directed to develop appropriate mitigation plans to offset project effects on listed species and their habitats.

Critical habitat is designated for species listed under FESA, and are areas that contain the physical or biological features which are essential to the conservation of those species and may need special management or protection. Critical habitat designations affect only federal agency actions or federally funded or permitted activities. Activities by private landowners are not affected if there is no federal nexus.

Rare plants are those defined as occurring on California Rare Plant Rank (CRPR) 1A, 1B, 2A, 2B, 3 and 4 developed by the CDFW working in concert with the California Native Plant Society (CNPS; CDFW 2020c). Rank 4 species are a watch list, and typically do not meet CEQA's rarity definition (Section 15380), but are included here because they may be of local concern. The CRPR definitions are as follows:

- *Rank 1A: Presumed extirpated in California and either rare or extinct elsewhere.* These species are presumed extirpated because they have not been recorded in the wild in California for many years.
- *Rank 1B: Rare, threatened or endangered in California and elsewhere.* Plants that are rare throughout their range and the majority in this rank are endemic to California.
- *Rank 2A: Presumed extirpated in California, but more common elsewhere.* These species are presumed extirpated because they have not been recorded in the wild in California for many years, but they are common outside of the state.
- *Rank 2B: Rare, threatened or endangered in California, but more common elsewhere.* Plants that have ranges that extend into California, where they are rare, but are common in areas outside of the state.
- *Rank 3: Plants needing more information - A review list.* Information necessary to assign the species to one of the lists or reject them is lacking. Most species in this rank are taxonomically unresolved.
- *Rank 4: Plants of limited distribution - A watch list.* Species of limited distribution or infrequent occurrence throughout their range in California but which their vulnerability to extirpation appears low at this time and should be monitored.

Additionally, the CRPR system further assigns threat codes as a decimal extension to the rank, ranging from 1 to 3. CRPR 3 species do not have a threat code due to insufficiency of information needed to assign it, and CRPR 1A and 2A also do not have threat codes because they not know to currently occur in California. The threat code extensions are as follows:

- *.1: Seriously threatened in California.* More than 80% of occurrences are threatened and there is high degree and immediacy of threat.
- *.2: Moderately threatened in California.* Approximately 20 to 80% of occurrences are threatened and there is a moderate degree of immediacy of threat.
- *.3: Not very threatened in California.* Less than 20% of occurrences are threatened and the is a low degree and immediacy of threat, or no current threats are known.

Raptors (e.g., eagles, hawks, and owls) and their nests are protected under both federal and state regulations. Birds of prey are protected in California under the California Fish and Game Code Section 3503.5. Disturbance that causes nest abandonment or loss of reproductive effort is considered take by CDFW. Eagles are protected under the Bald and Golden Eagle Protection Act. The federal Migratory Bird Treaty Act (MBTA) applies to many bird species, including common species, and prohibits killing, possessing, or trading in migratory birds, including whole birds, parts of birds, bird nests, and eggs. The act restricts construction disturbance during the nesting season that could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment.

Sensitive natural communities are those native plant communities listed in the CNDDB (CDFW 2020a) as rare or of limited distribution. They are evaluated using NatureServe's Heritage Methodology to assign global and state ranks based on rarity and threat, and these ranks are reviewed and adopted by CDFW's (2020b) *Vegetation Classification and Mapping Program* (VegCAMP). Evaluation with the state (S) level results in ranks ranging from 1 (very rare or threatened) to 5 (demonstrably secure). Those with ranks of S1 to S3 are to be addressed in the environmental review process under CEQA (CDFW 2020b).

CEQA defines a *significant effect on the environment* as "a substantial, or potentially substantial, adverse change in the environment." Projects that may have significant effects are required to be analyzed in an Environmental Impact Report (EIR). Under CEQA, a project's effects on biotic resources are deemed significant where the project would do any of the following:

- Potentially substantially degrade the quality of the environment
- Substantially reduce the habitat of a fish or wildlife species
- Cause a fish or wildlife population to drop below self-sustaining levels
- Threaten to eliminate a plant or animal community
- Substantially reduce the number or restrict the range of an endangered, threatened, or rare species
- Have possible environmental effects that are individually limited but cumulatively considerable

In addition to the criteria above that trigger mandatory findings of significance, Appendix G of the CEQA Guidelines includes six additional impacts to consider when analyzing the significance of project effects, which may or may not be significant, depending on the level of impact. A project's effects on biological resources could be deemed significant if the project would do the following:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

If the project proponent agrees to mitigation measures or project modifications that would avoid all significant effects or would mitigate the significant effect(s) to a point below the level of significance, an EIR would not be required. The project proponent would be bound to implement the mitigation measures to reduce the project effects to below a level of significance. Mitigation is not required for effects that are less than significant.

2.0 METHODS

Google Earth aerial imagery was employed in coordination with field surveys to define the current extent of onsite plant communities and assist in identifying potential habitat for special-status species. The "west" and former "east" project impact areas were surveyed in their entirety by KMA's Principal Biologist Kevin Merk on May 17, 2019 and July 17, 2019 to assess the potential of the project sites to support sensitive biological resources. These surveys also included focused searches for rare plant species. The site was accessed from South Thompson Avenue and the northern loop of Wineman Road, and the surveys were conducted by walking and visually inspecting all portions of the study area. During the first survey, weather conditions were sunny, with northwest winds approximately five (5) miles per hour, and air temperature was 65°F at 1000 hours. During the second survey conducted later in the blooming period, the weather conditions were clear with light wind. The "central" project impact area was surveyed by Kevin Merk on March 27, 2020. Other areas of the site were inspected again during that survey to confirm conditions had not changed since the 2019 field work was conducted. The March 2020 survey was conducted from 1000 to 1300 hours, and the air temperature was 60 to 64°F, with northwest winds approximately 5 miles per hour and mostly clear skies with periods of clouds.

The study area for this investigation covered the impact areas, plus a buffer ranging from 300 to 500 feet, as appropriate remaining within the property boundaries (Figure 2). Dominant plant species in each plant community were determined, and all plant and animal species observed during the surveys were recorded (Appendix B). Plant taxonomy followed the Jepson Flora Project (2020), and nomenclature for animals is reported as it appears in the CNDDB (CDFW 2020a) or as updates are available (California Herps 2020). Plant communities and habitat features were mapped on ESRI (2020) aerial imagery. Classification of the onsite plant communities was based on the CDFW's (2020b) *Vegetation Classification and Mapping Program* which generally follows Sawyer et al.'s (2009) *Manual of California Vegetation*. Holland's (1986) *Preliminary Descriptions of the Terrestrial Natural Communities of California* was also referenced as the sensitive natural communities listed in the CNDDB follows the Holland community names. *A Guide to Wildlife Habitats in California*, which is updated through the California Wildlife Habitat Relationships (CWHR) System (CDFW 2020d), was also cross-referenced. Representative photos of each of the habitat types onsite and the proposed project area were taken, and a photo plate is included as Appendix C.

The *Web Soil Survey* was used to identify the soil mapping units present within the project site (Natural Resources Conservation Service [NRCS] 2020). The *National Wetlands Inventory* (NWI) was examined to evaluate the extent of identified wetlands on the site and in the vicinity (USFWS 2020a). USGS topographic maps were also reviewed for information on hydrologic and topographic features. Designated critical habitat for species listed under FESA was identified according to information provided in *Environmental Conservation Online System* (USFWS 2020b).

The CNDDB (CDFW 2020a) was queried for special-status plant and animal species occurrences and sensitive natural communities within the following nine USGS 7.5-minute quadrangles: Santa Maria, Guadalupe, Oceano, Arroyo Grande NE, Tar Spring Ridge, Caldwell Mesa, Nipomo, Huasna Peak, and Twitchell Dam. These records occurring within a five-mile buffer of the study areas were mapped. For the list of special-status species in the nine-quadrangle CNDDB search, local distribution and ecological information was obtained from a variety of online and published sources (Hoover 1970, Jennings and Hayes 1994, Bolster 1998, Moyle et al. 2015, Thompson et al. 2016, Audubon 2020, Calflora 2020, California Native Plant Society 2020, California Herps 2020,

The Cornell Lab of Ornithology 2020a, 2020b; CDFW 2020d). Those species that occur within the Santa Maria Valley and southwestern-most foothills of the Santa Lucia Range, as well as each species recorded in the CNDDB within five miles, were considered to be within the project vicinity (Appendix D). Other species from the nine-quadrangle search that have limited distributions restricted to coastal areas, including the Oso Flaco Lake/Dune Lakes area and Vandenberg Air Force Base, the Arroyo Grande Creek drainage system, and higher elevations in the Santa Lucia Range, were considered to be outside of the project vicinity. Based upon our knowledge of the local area and other sources of species occurrence records, we included additional special-status biological resources that have been documented in the project vicinity.

From the list of all special-status species known from the project vicinity, an evaluation of those species with potential to occur onsite was performed based upon the suitability of habitat conditions on the property, and the local distribution (geographical and elevational ranges) and specific requirements (plant communities and soils) of the species considered. Definitive surveys for the presence or absence of special-status animal species were not conducted. We relied on existing information and known occurrence records in the region coupled with our site-specific observations from other locations in the Santa Maria Valley/southwestern Santa Lucia Range to make determinations for the probability of occurrence of special-status species in the study area. If any special-status species had been observed during the site surveys, these species would have been listed as "Present" in Appendix D. Those species listed as "Potential" met the following requirements: records on the site or in the vicinity, appropriate plant community and/or soil associations onsite, and within the elevational range of the species. If any one of these elements was not met or considered to be marginal for the site, but the other elements were present, that species was considered "Unlikely". If onsite environmental conditions were clearly inappropriate, or the species has a limited distribution that does not overlap the site, those species were considered "Not Expected". Special status plants not observed during botanical surveys were also listed as “Not Expected”. If any lifestage or particular life history use (i.e., foraging) fit the requirements of the onsite conditions, even while other aspects were inappropriate for certain functions (i.e., breeding), these species were still considered to have potential to occur onsite, but the likelihood of occurring onsite along with a description of site suitability are provided in the Special-status Biological Resources Summary (Appendix D), as well as a more in-depth analysis in the text.

We determined whether special-status plant and animal species, sensitive natural communities, designated critical habitat, and wetlands or other waters under state or federal jurisdiction could occur on or near the site. We then evaluated the potential impacts of the proposed project on each of these biological resource issues, including the six additional impacts in CEQA Appendix G. An evaluation of significance as defined under CEQA is provided for each potential impact, and mitigation is proposed to reduce impacts to a level below the significance threshold.

3.0 RESULTS

A list of plants and animals observed during the survey is included as Appendix B. Appendix C is a plate of photographs taken during the site visits to characterize the onsite conditions. Appendix D includes a list of all special-status species, sensitive plant communities, and designated critical habitat recorded within the site vicinity, and an evaluation as to their potential presence onsite. Figure 1 is a site location map, Figure 2 is an aerial overview map that shows the wetland habitats recorded in the NWI in the site vicinity, and a soils map is included as Figure 3. Figure 4 is a habitat map showing the plant communities and habitat features in the study area. Figure 5 shows the

locations of special-status plants and animals recorded in the CNDDB and designated critical habitat within five miles of the study area.

3.1 Existing Conditions

The study areas occur in flat to gently rolling grassland that has been used for livestock grazing, dry farmed grain and hay crops, and irrigated crops. The western parcel has agricultural areas that are plowed regularly, and as seen on historic aerial photography, has been in agriculture since at least 2002. Only a small portion of the western property has been developed for ranch infrastructure, including the metal agricultural building, materials storage yard, paved access road, livestock ring, horse shelters, irrigation lines, and livestock watering troughs (see photos in Appendix C). Irrigation lines and livestock watering troughs are also present. The central study area is currently used for livestock grazing, and as seen on historic aerial photographs, the area has been regularly dry farmed for grain crops for the past two decades. A paved access road is present from the property's entrance on South Thompson Avenue and traverses the western parcel, providing access to the central cultivation area. Onsite elevations in the study area range from 215 to 394 feet (66 to 120 meters) above mean sea level.

3.2 Hydrologic Features, Wetlands and Riparian Habitats

There is an onsite Ephemeral Drainage system that is unnamed and shown as intermittent streams on the USGS topographic maps. It is a tributary of the Santa Maria River, and historically flowed directly into the river just west of Highway 101. It originates on the southwestern slope of the Temettate Ridge, and contains several branches on the subject properties that converge just south of the livestock arena (Figure 2). Where there are agricultural fields onsite, it appears the course of the channels was modified to flow around the fields. It discharges into culverts under South Thompson Avenue, and thereafter the natural drainage course has been altered by the highway and development to the west. On the west side of Hutton Road, it daylights from the culvert system into a constructed channel and discharges into Nipomo Creek. Downstream from this point, the natural southerly course of Nipomo Creek has been altered to bend west around sand and gravel facilities, eventually discharging into the Santa Maria River.

Onsite, the Ephemeral Drainage was vegetated mainly by upland plant species that are characteristic of the surrounding annual grassland with a few scattered arroyo willows (Riparian Scrub). Water was present in several small pools during the May 2019 survey, and was dry by July 2019. In 2020, no flowing water was observed in the onsite drainage features, but water was present in the pond in the center of the site and at a culvert under the paved entrance road just east of the corrals and ranch storage area. Smaller branches of the drainage system with a faint bed and bank were considered to be Ephemeral Swales and are described in Section 3.4.7 below. There is an Ephemeral Swale the runs through the Central project area, and the project has been designed around it with a buffer. This feature had no indicators of flowing water and appeared to be more of a topographic draw in the hillside rather than an ephemeral swale. To be conservative, it was mapped as an ephemeral swale. There are at least three impoundments (Ponds) on this drainage system within the property and are discussed further below and shown on Figure 4, the Habitat Map.

The NWI classifies the Ephemeral Drainage system within the study area as having reaches with Freshwater Emergent Wetland and Riverine habitat types (Figure 2). It also identified an area of Freshwater Forested/Shrub Wetland, corresponding to the Riparian Scrub habitat type also

mapped in several small patches in Figure 4, and is described in Section 3.4.4 below. The NWI shows only one of the ponds (Figure 2).

3.3 Soils

The study area contains the following soil types that are mapped in Figure 3:

- **Concepcion loam, 5 to 9 percent slopes;**
- **Concepcion loam, 9 to 15 percent slopes;**
- **Diablo clay, 5 to 9 percent slopes;**
- **Diablo and Cibo clays, 9 to 15 percent slopes;**
- **Diablo and Cibo clays, 15 to 30 percent slopes;**
- **Marimel silty clay loam, drained;**
- **Suey silt loam, 2 to 9 percent slopes; and**
- **Tierra loam, 15 to 30 percent slopes.**

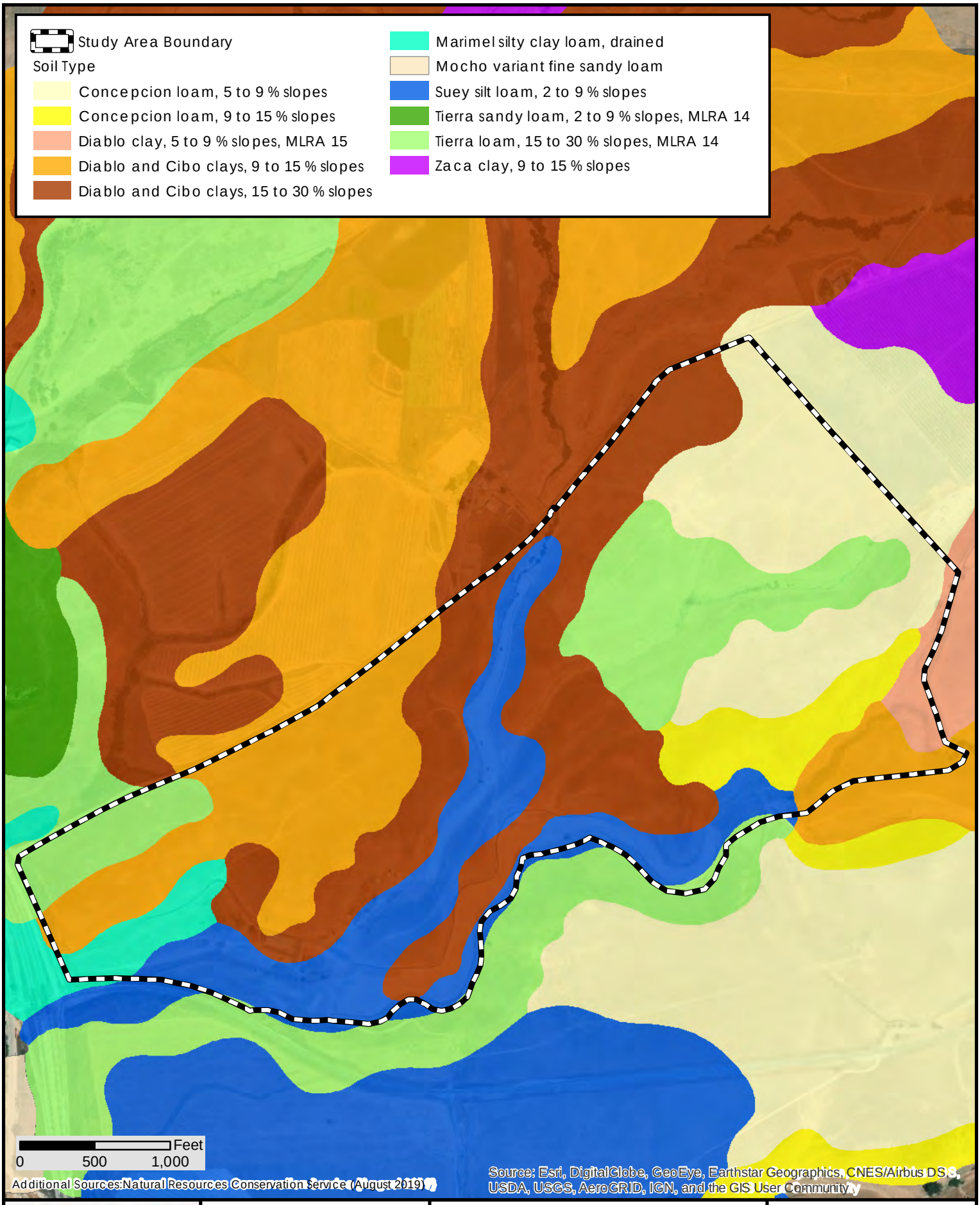
These soil types are generally clay loams that form on terraces or hills (NRCS 2020). The clays are residuum that is weathered from calcareous mudstone, sandstone and/or shale and the loams are alluvium derived from sedimentary rock (NRCS 2020). The Diablo and Cibo clays occur on hills and are residuum weathered from calcareous mudstone, sandstone and/or shale (NRCS 2020). These soils occur on the hills where the outdoor cultivation areas are proposed. The Suey silt loam is distributed along the major drainages onsite, and is derived from Loess. It is not considered to be a hydric soil. Tierra loam occurs on terraces and is alluvium derived from sedimentary rock (NRCS 2020). Marimel silty clay loam occurs in alluvial fans and valleys, and is located onsite in the lower floodplain of the onsite ephemeral drainage. It is not considered to be a hydric soil.

3.4 Habitat Types

Six plant communities or land use types were identified within the study areas, and include: 1) Annual Grassland; 2) Agriculture; 3) Developed/Ruderal; 4) Riparian Scrub; 5) Coastal Scrub; and 6) Ornamental. In addition, an Ephemeral Swale and Ephemeral Drainages were mapped onsite. Several in-channel impoundments (Ponds) that are outside of the impact areas are also shown on Figure 4. A description of these habitat types is given below and the areas occupied by these habitat types onsite is shown on Figure 4.

3.4.1 Annual Grassland

Annual Grassland is the primary habitat type in the study area (Figure 4). It is dominated by non-native grasses and herbs such as Italian rye grass (*Festuca perennis*), hare barley (*Hordeum murinum* ssp. *leporinum*), ripgut brome (*Bromus diandrus*), slender wild oat (*Avena barbata*), Harding grass (*Phalaris aquatica*), big heron bill (*Erodium botrys*), red stemmed filaree (*Erodium cicutarium*), fennel (*Foeniculum vulgare*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), and black mustard (*Brassica nigra*). Native grassland species are intermixed, and consist of common fiddleneck (*Amsinckia intermedia*), island morning-glory (*Calystegia macrostegia*), and blue eyed grass (*Sisyrinchium bellum*). As seen on historic aerial photography, both impact areas were farmed in entirety a decade ago, and subsequently Annual Grassland has become re-established and is currently used for livestock grazing. This history of disturbance has resulted in the species composition being almost entirely non-native, weedy species. This habitat type corresponds to the Non-native



KEVIN MERK ASSOCIATES

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2155 South Thompson Avenue
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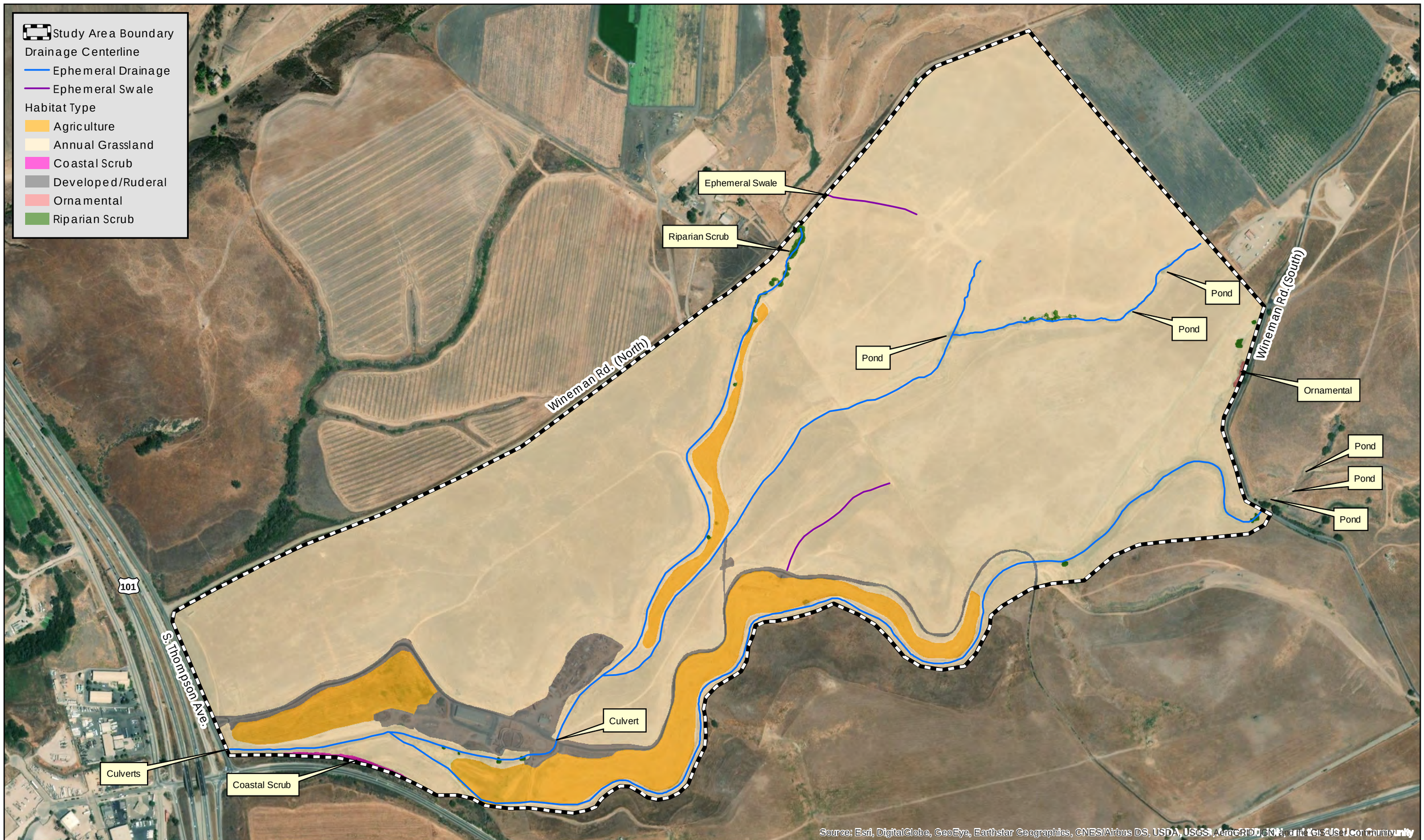
Figure 3
Soils Map



KEVIN MERK ASSOCIATES

1 inch = 500 feet

0 62.5 125 250 375 500 Meters

2155 South Thompson Avenue Nipomo Cannabis Project

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Figure 4

Habitat Map

Grassland community described by Holland (1986) and the Wild Oats and Annual Brome Grasslands semi-natural alliance (CDFW 2020b).

3.4.2 Agriculture

Dry farmed agricultural fields were present in the low-lying floodplain or terrace areas adjacent to the Ephemeral Drainage system (Figure 4). At the time of the surveys, wheat (*Triticum aestivum*) and oats (*Avena* sp. likely *A. fatua*) had been planted. Weedy species that were intermixed or on the edges of the field included Italian rye grass, curly dock (*Rumex crispus*), and prostrate knotweed (*Polygonum aviculare*). Irrigation lines were present, but were not in use at the time of the surveys. Agricultural areas are an anthropogenic land use and are not considered to be a natural plant community. Under the CWHR system, the type of Agriculture onsite would be classified as Dryland Grain Crops (CDFW 2020d).

3.4.3 Developed/Ruderal

The Developed/Ruderal areas onsite consist of ranch roads and their margins, materials storage areas, an existing agricultural building, horse shelters, a livestock arena, and disturbed areas around livestock water troughs (Figure 4). Within the Developed areas were planted, non-native Peruvian pepper (*Schinus molle*), tree of heaven (*Ailanthus altissima*) and fan palm (*Washingtonia* sp.). Along the margins of the ranch road with frequent disturbance were non-native, weedy species including dwarf mallow (*Malva neglecta*), spiny sowthistle, Italian thistle (*Carduus pycnocephalus*), and spiny cocklebur (*Xanthium spinosum*), as well as the native but weedy Canada horseweed (*Erigeron canadensis*). These Ruderal areas are disturbed to the extent that they are not considered to be a semi-natural alliance (CDFW 2019b).

3.4.4 Riparian Scrub

There are small patches of Riparian Scrub, dominated by arroyo willow (*Salix lasiolepis*) shrubs, along the Ephemeral Drainage system (Figure 4). Blue elderberry (*Sambucus nigra* ssp. *caerulea*) shrubs were also scattered along the drainages and were not necessarily associated with the drainage feature. Cattle grazing has affected the Riparian Scrub onsite and pruned shrubs and limbed up their canopies. This habitat type corresponds to the Central Coast Riparian Scrub community described by Holland (1986) and the Arroyo Willow Thickets association described by Sawyer et al. (1992).

3.4.5 Coastal Scrub

The Coastal Scrub habitat in the study area is restricted to the road fill and slope on the side of Highway 166 in the western property (Figure 4). It is dominated by coyote brush (*Baccharis pilularis*), which likely colonized the disturbed fill soils post construction of the highway. This habitat type corresponds to the Central (Lucian) Coastal Scrub community described by Holland (1986) and the Coyote Brush Scrub association described by Sawyer et al. (1992).

3.4.6 Ornamental

This community consists of planted, ornamental species. It is mapped on Figure 4 as a stand of planted pine (*Pinus* sp.) along Wineman Road (south). There are also ornamental species, such as fan palm and Peruvian pepper tree, within the Developed/Ruderal land use type. Because this

habitat type consists of non-native species, it is not considered to be a natural plant community.

3.4.7 Ephemeral Swale

There is an Ephemeral Swale in the Central project site that could be considered to be a topographic draw. It has a poorly defined bed and bank but no evidence of flow following a wet winter in 2020. Another Ephemeral Swale is in the northeastern part of the study area along an old roadcut that appears to contain some surface runoff seasonally (Figure 4). It is along an old ranch road, and is approximately 10 feet wide and vegetated by upland Annual Grassland species. A faint bed and bank were observed, and it consisted of an erosional feature downslope of an existing unimproved access road. The swale runs from east to west and passes through a culvert under Wineman Road and connects to the drainage feature offsite to the north.

3.4.8 Ephemeral Drainage

There is an unnamed Ephemeral Drainage system on the properties that consists of several channels running in a generally southwesterly direction (for more information on the hydrology of this drainage system, see Section 3.2 above). The lowermost reaches of this drainage system have been channelized into a ditch that runs along the edges of the agricultural fields. A branch that comes into the property from the north also exists in a channel modified by farming, in the sections downstream from the Riparian Scrub habitat mapped in Figure 4. The branch with the Ponds shown on Figure 4 has eroded slopes vegetated by weedy vegetation. In July 2019, this drainage was dry except for water present in the lowermost pond (see Section 3.4.9 below). The drainages were generally dry in March 2020 and the pond had surface water as shown in the photo plate. In the mid- to upper sections of the drainage system, there are scattered pools that appear to retain water when flow becomes intermittent. Most areas of the Ephemeral Drainages on the study areas are vegetated by non-native, upland plant species characteristic of the Annual Grassland habitat, and particularly those that prefer more mesic conditions such as poison hemlock (*Conium maculatum*) and curly dock (*Rumex crispus*). Scattered arroyo willows are also present in scattered locations, as described above in Section 3.4.4.

3.4.9 Ponds

There are several Ponds that have been created in the middle branch of the Ephemeral Drainage system (Figure 4). The lowermost pond was visited during the 2019 and 2020 field surveys, and standing water was present along with a patch of cattails (*Typha* sp.) and pondweed (*Potamogeton* sp.). The water appeared to be several feet deep. The impoundments further upstream were dry during the surveys, but appeared to be able to support ponded water and had scattered willows and occasional patches of wetland vegetation in the channel. The other Ponds identified in the vicinity of Wineman Road (South) were identified only from aerial photography, and were not inspected during field work. Based on the review of aerial imagery on Google Earth, the upstream-most Pond on this drainage segment appears to hold water into the summer during years with average rainfall, and appears to have some riparian habitat present. The southern branch of the ephemeral drainage system has additional ponds just offsite and upstream from the east property (Figure 4).

3.5 Special-status Biological Resources

Figure 5 illustrates the CNDDB-documented occurrences of special-status plants and animals, and designated critical habitat, within five miles of the study area. No sensitive natural communities were reported in the CNDDB within five miles of the site, but those known to occur in the larger

vicinity are included in Appendix D and described in Section 3.5.1 below. Appendix D also provides a list of special-status biological resources recorded from the site vicinity, their listing status, habitat associations, and our assessment as to whether these resources have potential to occur onsite. Those resources with potential to occur on the project site are described in further detail below.

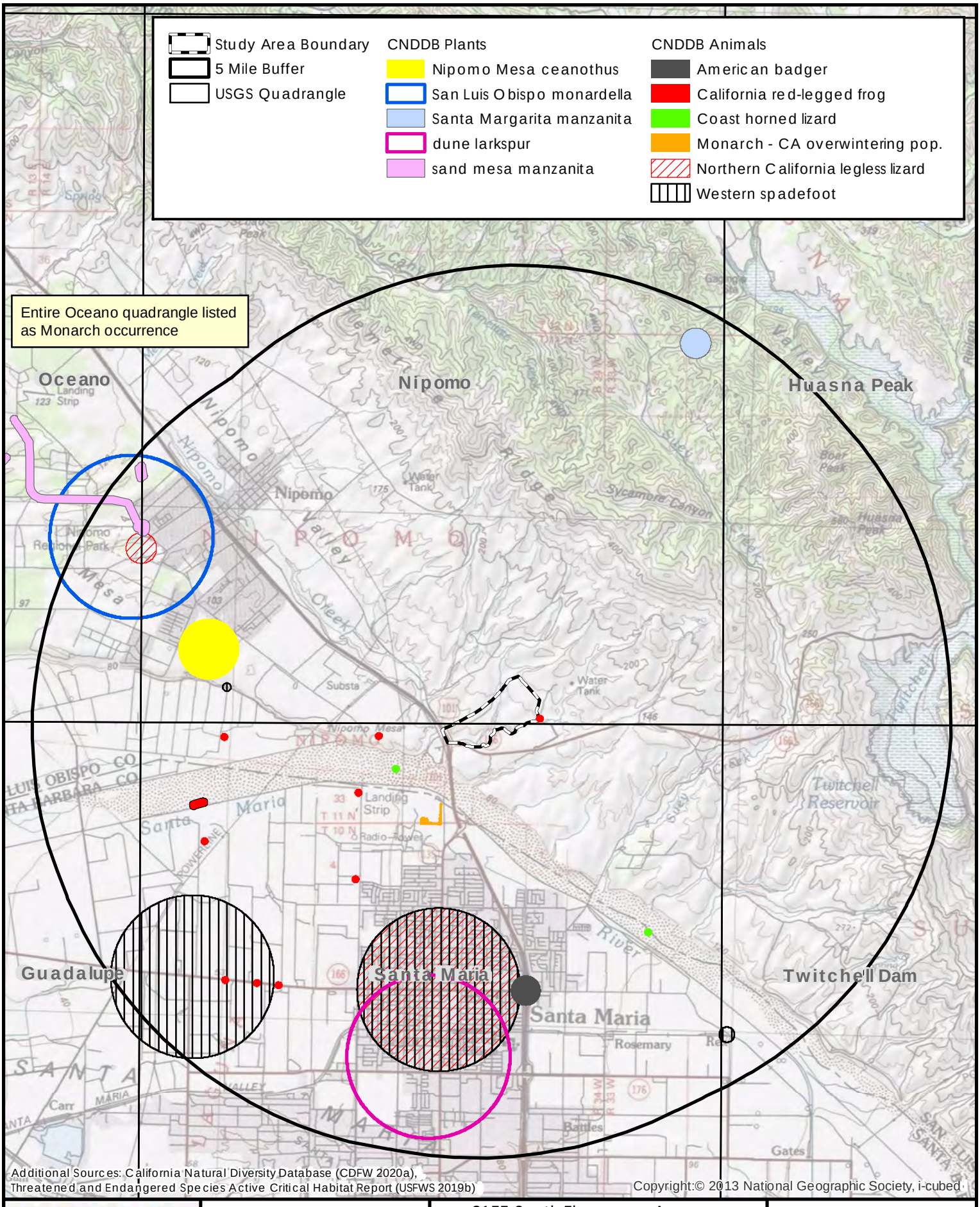
3.5.1 Special-status Plants

The impact areas were surveyed for rare plant species during spring and summer site visits conducted in 2019 and 2020, and no special-status plant species were observed. The surveys included searches for rare species such as Miles' milk-vetch (*Astragalus didymocarpus* var. *milesianus*; CRPR 1B.2) identified in the background review, as well as other species such as Cambria morning glory (*Calystegia subacaulis* ssp. *episcopalis*; CRPR 4.2) that were not reported in the CNDDB, but known to occur in coastal grasslands in the region. No special status plants were observed during the surveys. The surveys conducted in 2019 were during a year with above-average rainfall year when rare plants were in identifiable condition well past their typically reported blooming periods. May 2019 rainfall extended the blooming period of many species that typically flower in April and would be in fruit by May. The March 2020 site visit covered an earlier blooming period, and the focus was to cover the central impact area and confirm the conditions in the other parts of the study area remained consistent with observations from 2019. The entire area within the proposed project sites has been farmed in the past, and Annual Grassland has become re-established, but this past disturbance and on-going livestock grazing has favored non-native species that outcompete native species. Dense thatch was also noted in the study area, which can also preclude native species. The study area also included plant communities that have not been as heavily disturbed, such as the Riparian Scrub along select reaches of the ephemeral drainages.

3.5.2 Sensitive Natural Communities

The Annual Grassland habitat onsite, also called the Wild Oats and Annual Brome Grasslands semi-natural alliance, is comprised predominantly of non-native species and is not a CDFW-designated sensitive natural community. The Coastal Scrub habitat, corresponding to the Coyote Brush Scrub association, has a State Rarity Rank of S5, which is not considered under CEQA (CDFW 2019c).

The Riparian Scrub habitat in the study area is considered to be Central Coast Riparian Scrub, which is considered to be a sensitive natural community by CDFW with a State Rarity Rank of S3. Riparian habitats are also protected under the state Porter-Cologne Water Quality Act, and California Fish and Game Code. As such, the Riparian Scrub habitats in the study areas were identified as a special-status biological resource. The plant community within the majority of the Ephemeral Drainage system was predominantly Annual Grassland; thus, it is not a sensitive natural community, but the drainage features contained defined bed and bank structure and were identified as potentially falling under the jurisdiction of USACE, CDFW, and/or RWQCB due to a defined bed and bank with periodic flowing water. The Ephemeral Swales were composed of annual grassland habitat and had poorly defined bed and bank structure. While they are likely not subject to Clean Water Act regulation, the Ephemeral Swales could be regulated by CDFW pursuant to California Fish and Game Code section 1600 et seq.



Additional Sources: California Natural Diversity Database (CDFW 2020a), Threatened and Endangered Species Active Critical Habitat Report (USFWS 2019b)

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N W E S

1 inch = 1.5 miles

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Figure 5
CNDDB Map

The Coastal and Valley Freshwater Marsh community, State Rarity Rank S2.1, is indicated by the presence of cattails, and occurs in at least one of the Ponds on the Ephemeral Drainages, but the Ponds are outside of the project impact areas. No mappable areas of Coastal and Valley Freshwater Marsh habitat was present within the Ephemeral Drainages aside from within the impoundments.

The CNDDB lists Southern Vernal Pool as a sensitive natural community that occurs in the area west of the Santa Maria Airport (CDFW 2020a). Southern Vernal Pools are of local importance and could provide habitat for special-status species. The properties occur within the Santa Barbara Vernal Pool Region, but no topographic depressions indicative of vernal pool features was observed onsite. One area near the subject properties and to the north of the Santa Maria River has been documented to support vernal pool species, although habitats in this region may verge on wetlands, such as seeps and vernal marshes (Keeler-Wolf et al. 1998). The study area does have clay soils in some areas but no topographic depressions or areas that could support seasonally ponded water were observed. Furthermore, no wetland or vernal pool indicator plants were observed in the study area that would meet the vegetation classification as a vernal pool.

3.5.3 Special-status Animals

Based upon our background review of special-status species records, one invertebrate, five amphibian and reptile, eleven bird, and two mammal species were evaluated to determine their potential to occur on the properties. No special-status fish species could occur due to the lack of sufficient water in the Ephemeral Drainages onsite. Two vernal pool species, described below, are also considered unlikely to occur because there is no vernal pool habitat within the study areas. While the listing status, habitat associations and evaluation of occurrence are summarized in Appendix D, these 19 species with potential to occur are also described in further detail below. Also see Figure 5 for a map of CNDDB wildlife records within the vicinity of the property.

The **vernal pool fairy shrimp** (*Branchinecta lynchi*; federally Threatened) is restricted to completing its lifecycle in vernal pools, clear-water depressions, vernal swales and anthropogenic habitats such as long-lived water in tire ruts. This species does not occur in drainage systems where there is periodic flowing water; therefore, channels and any potential seasonal pool habitat in the Ephemeral Drainage system onsite are unsuitable. No vernal pool habitat or topographic depressions capable of holding water that could be used by this species were seen during the site surveys. Therefore, this species in not expected to occur within the study area.

The **California tiger salamander** (*Ambystoma californiense*; federally Endangered in Santa Barbara County; state Threatened; CDFW Watch List) occurs in the vicinity, but only in Santa Barbara County south of the Santa Maria/Sisquoc River system, and the species is not expected to occur in the study area due to limited distribution and absence of breeding habitat. All known occurrences of the Santa Barbara County Distinct Population Segment (DPS) are within the Santa Maria Basin Geomorphic Province (USFWS 2016), and the study sites are outside of this area. The Santa Barbara County DPS is geographically isolated and genetically distinct from other populations, and may qualify for recognition as a separate species (Shaffer et al. 2004). The population in San Luis Obispo County (federally and state Threatened; CDFW Watch List) is restricted to the northeastern-most edge of the county and is part of the Central Coast Range DPS. These two DPS are distributed 90 kilometers apart from each other and are significantly genetically divergent (Shaffer et al. 2004). This species does not occur along the coast in San Luis Obispo County because of the geologic history of the Santa Maria Plain, which was formed as an isolated region of lowland alluvial fill surrounded by mountains that are unsuitable for the species. The current range of the Santa

Barbara DPS has existed continuously as an isolated lowland habitat for several million years (Shaffer et al. 2004). The San Luis Obispo population was part of the Great Central Valley population that occurred in a ring around a large marine embayment in the Valley, being restricted to alluvium deposits between the lake and mountains (Shaffer et al. 2004). Although no mountainous habitat separates the study area from the Santa Barbara County DPS, the Santa Maria River is steeply incised and is a barrier to movement. Additionally, they have not been documented to occur in coastal areas of San Luis Obispo County, and no vernal pool habitat is present on the property. The Ponds in the Ephemeral Drainage system have potentially suitable habitat, but they are not expected to occur due to being located outside of the restricted distribution of the species.

The **monarch butterfly** (*Danaus plexippus,* population 1) is considered sensitive by CDFW for overwintering populations. This species roosts colonially during the winter in wind-protected groves of eucalyptus, Monterey pine and cypress. "Autumnal sites" are temporary sites used for roosting that do not persist through the winter and may not be used every year. No suitable groves of trees for winter roost sites or autumnal sites are present in the study areas. Milkweed is required as a host plant for caterpillars, and was observed in the study area. Adults nectar on a variety of blooming plants, and could potentially occur onsite periodically while foraging or migrating. Overwintering sites have been documented at several locations within the City of Santa Maria (Figure 5; CDFW 2020a), with the closest site being less than one mile away. Individuals migrating to or from these areas could stop over at the study area, but this habitat would not be used for overwintering due to lack of tree groves with sufficient structure.

Blainville's (=coast) horned lizard (*Phrynosoma blainvillii*) is a CDFW Species of Special Concern that occurs in a variety of habitat types, as long as those areas have open areas for basking in the sun, and shrubs or other objects for cover. They are surface active primarily in the spring and summer during periods of warm weather, and retreat underground during periods of low temperatures or extreme heat (California Herps 2020). While they can "swim" into loose sandy soil for burial, they are also found in areas with sandy gravel or loam substrates where they use small mammal burrows (Jennings and Hayes 1994). This species is negatively correlated with the presence of the invasive and non-native Argentine ants (*Linepithema humile*), which proliferate in developed areas and displace native ant species that are the food source of horned lizards (Fisher et al. 2002). There are two records from the Santa Maria River in close proximity to the properties, but are from sandy riverwash (CDFW 2020a). They could occur in Annual Grassland and Coastal Scrub habitats areas onsite, as well as along the Ephemeral Drainages, where there are patches of bare ground that they could use for thermoregulation and shrubs and/or burrows for refugia. Additionally, they could also occur in Developed/Ruderal areas such as the equipment storage yard or along unpaved roads.

The **California red-legged frog** (*Rana draytonii*) is a federally Threatened species and a CDFW Species of Special Concern. This species requires aquatic habitats for reproduction and inhabits aquatic sites most of the year. The types of aquatic habitats they use include seasonal and permanent ponds, intermittent and perennial streams, springs, well boxes, artificial impoundments (i.e., stock ponds, reservoirs), marshes, dune ponds and lagoons. Preferred aquatic habitat is characterized by dense shoreline or emergent vegetation, such as willows, cattails, and bulrushes, with still or slow-moving water at least 2.3 feet deep (Hayes and Jennings 1989). However, they also occupy ponds or pools with little or no emergent vegetation as long as they have sufficient depth to avoid predation. Other features in stream habitats that appear to be important for refuge are undercut banks and willow rootballs (USFWS 2010). Ephemeral sites must retain water at least into July/August in order for the tadpoles to reach metamorphosis. Sites that dry completely every few years may have higher quality habitat value because desiccation eliminates their predators,

such as non-native fish (Centrarchids and Ictalurids), American bullfrogs (*Lithobates catesbeianus*) and crayfish (*Procambarus* sp.), and maintains higher quality breeding habitat by limiting dense growth of emergent vegetation along the margins (Scott and Rathbun 2010, Doubledee et al. 2003).

Adult frogs also use a variety of upland habitats and can be far from water during the winter; when aquatic sites dry down in the late summer or fall; and, as post-metamorphic juveniles. In mesic habitats along the northern Central Coast region, they have been found to move through upland habitats up to a total distance of two (2) miles (3,200 meters) in one season, with the greatest segment without encountering a water source being 0.74 miles (1,200 meters) (Bulger et al. 2003). However, in other situations with xeric to moderately mesic local climates such as in the project region, California red-legged frogs generally remained within 200 feet (60 meters) of water (Rathbun et al. 1993, Christopher 2000, Tartarian 2008). While undergoing terrestrial movements, they move through grassland, forest, scrub, agricultural fields, and grazed pastures, including areas with substantial slopes or elevational changes (Bulger et al. 2003). While occupying upland habitats, the frogs use dense leaf litter and shrubby vegetation, such as willows, blackberry thickets, German ivy, nettles, and downed trees as cover and are not found out in the open during the daytime (Rathbun et al. 1993).

This species was recorded in 2002 on or adjacent to the property where the southern loop of Wineman Road crosses the Ephemeral Drainage (Figure 5). This observation was of an adult in July when no standing water was present (CDFW 2019a). Several ponds are visible on aerial photography within this drainage offsite, just upstream from the observation point (Figure 4). It is possible that this frog was moving between aquatic sites along the drainage in response to water levels dropping. This observation indicates that the onsite Ephemeral Drainage system and Ponds could be occupied by California red-legged frogs at some point in time. The Ponds have suitable habitat with sufficient standing water and cover by cattails, submergent pondweed, and willow. During the July 2019 survey, an adult frog in the true frog family Ranidae, which could have been a California red-legged frog or American bullfrog, was observed in the lowermost pond. No frogs were observed in March 2020.

A review of historical aerial photography indicates that at least three of the onsite ponds may provide suitable breeding habitat due to remaining inundated into the late summer and fall, when tadpoles metamorphose. There are several other observations of this species near the site (Figure 5) indicating that California red-legged frogs are relatively common in the vicinity. Potentially suitable upland habitat for juvenile dispersal, breeding migrations, and winter refugia is present throughout both properties. Individuals may temporarily take cover in Ruderal habitats where objects provide shelter and moisture. Adults would likely only occur in the Annual Grassland habitat within the project impact areas during wet conditions in the winter. They may also move throughout the drainage corridors after the aquatic habitats dry in the summer or fall and they are moving to other aquatic sites in the area. Juveniles may potentially occur in these upland habitats in the late-summer or fall during dispersal from breeding sites. However, they are unlikely to remain in Annual Grassland habitat during the daytime due to insufficient cover.

The **northern California legless lizard** (*Anniella pulchra*) is a CDFW Species of Special Concern that has been recorded at 50 locations in the site vicinity (CDFW 2020a). This species is fossorial and buries into loose soils, leaf litter, or is associated with cover objects that provide moisture. They forage just beneath the surface of loose soil or in leaf litter during the morning or evening, and may be active above the surface at dusk or at night (California Herps 2020). Their peak activity near the surface is from February through May (Yasuda 2012). The loamy soils on the properties may be suitable for this species, but they typically do not occur in heavy soils. In addition, objects in

Developed/Ruderal areas or fence boards and other materials associated with ranch activities may provide adequate cover. This species could occur in Riparian Scrub, Coastal Scrub or along Ephemeral Drainages on the properties where there is leaf litter outside the project disturbance footprints. They are unlikely to occur in open Annual Grassland away from the edge of woodland or scrub habitats.

The **southwestern (=western) pond turtle** (*Actinemys pallida*) is a CDFW Species of Special Concern. They occupy streams, rivers, lagoons, as well as created ponds and irrigation reservoirs, especially those with areas of open water and some perimeter vegetation such as bulrushes, cattails and willows (Bury et al. 2012). Southwestern pond turtles move away from aquatic sites in late-summer or fall when water levels decline, to begin a period of dormancy over the winter (Rathbun et al. 1993). At sites with permanent water, they remain buried in the substrate of the aquatic habitat during the winter (Bury et al. 2012). They have been found to undergo movements of up to 3,596 feet (1,096 meters) within upland habitats in one season, and they occupy woodland, scrub and chaparral vegetation within 1,640 feet (500 meters) from their aquatic sites for up to 30 weeks (Reese and Welsh 1997, Rathbun et al. 2002, Pilliod et al. 2013). During dormant periods, turtles remain buried under dense cover such as willow/blackberry thickets, patches of coyote brush, or Monterey pine stands (Rathbun et al. 1993). Nesting, which occurs in summer, is in upland areas 98 to 558 feet (30 to 170 meters) from aquatic habitats, in well-compacted soils of sunny open areas within sparse grassland (Rathbun et al. 1992, 1993, 2002; Scott et al. 2008). Hatchlings may leave the nest in the fall or overwinter in the nest and move to water the following spring. This species is primarily diurnal, and they make overland movements during the day. Suitable aquatic habitat is present in the Ponds on the property. They could move through the study area while traveling between other suitable aquatic sites nearby. They are unlikely to remain in the Annual Grassland habitats due to low cover, but potentially could take refuge at the base of shrubs or trees in leaf litter. They could nest in the Annual Grassland habitat in the central project site because a pond with suitable aquatic habitat is approximately 370 to 1,000 feet (113 to 305 meters) away, within the distance that they are found to move away from aquatic sites for nesting.

The **western spadefoot** (*Spea hammondii*) is a CDFW Species of Special Concern that was petitioned for listing under the FESA. In 2015, the USFWS issued a finding that listing may be warranted, and currently this species is under review (USFWS 2019b). This amphibian is primarily a terrestrial species that spends most of its life in burrows underground within grassland and open woodland or oak savanna habitats. During years with sufficient rainfall to fill the temporary pools where they breed, they emerge in large numbers and complete their reproductive period within a few months. The types of aquatic habitats used for breeding include vernal pools, ephemeral ponds (natural or man-made), stock ponds lacking fish, and streams that dry to isolated pools but may have flow earlier in the winter. Aquatic sites must have sufficient hydroperiod for their larval period, which is at minimum 30 days but is generally 8 to 16 weeks (Morey 1998, Christopher 2018). Little is known about the distance that individuals can migrate away from breeding sites during dispersal, and they have been observed to occupy recently filled ponds that are approximately 0.5 mile from known breeding ponds (S.V. Christopher, personal observation). There are numerous documented localities of the western spadefoot surrounding the properties, including within the Santa Maria River, and to the northwest, east, southeast and west of the site (CDFW 2020a). The impoundments on the Ephemeral Drainage system have potentially suitable breeding habitat for this species. Additionally, there may be stream pools within the onsite drainages that also could provide breeding habitat since the drainage dries down to isolated pools, which can be suitable breeding habitat for this species. The Annual Grassland within the study areas is suitable upland habitat for this species, and is within dispersal distance from potential

breeding ponds. Therefore, they could create burrows within the loamy soils within the project impact areas.

The **bald eagle** (*Haliaeetus leucocephalus*) is a state Endangered species for nesting and wintering habitats and is a CDFW Fully Protected species. There are numerous observations from along Highway 166 near Twitchell Reservoir, as well as in Santa Maria and Nipomo (The Cornell Lab of Ornithology 2020a). Their primary prey is fish, but they also feed on small mammals and could forage in the open Annual Grassland habitat onsite on a periodic basis. There are no suitable nesting or roosting substrates on the site.

The **burrowing owl** (*Athene cunicularia*) is designated as a CDFW Species of Special Concern for burrow sites and some wintering sites. It forages in grasslands and nests in burrows constructed by other species (typically ground squirrel) within grassland habitat. This species prefers areas with low vegetation and small hills that provide a vantage point of the surrounding area. Potentially suitable foraging and nesting habitat are present in Annual Grassland and Coastal Scrub areas onsite. However, the coastal populations in San Luis Obispo County are considered to no longer breed in this area (Wilkerson and Siegel 2010). No ground squirrels or burrow complexes that are required by this species were seen during the site surveys. There are numerous observations of this species to the west and northwest of Santa Maria, but none east of Highway101 in the vicinity (The Cornell Lab of Ornithology 2020a). This species could potentially occur onsite periodically while moving through the area because suitable Annual Grassland habitat is present, but they likely would not remain long due to lack of sufficient prey. They are not expected to nest in the region.

The **California horned lark** (*Eremophila alpestris actia*) is on the CDFW Watch List. It occurs in open habitats such as agricultural areas and grassland. There is a record of this species from the study area along the southern loop of Wineman Road (The Cornell Lab of Ornithology 2020a). Therefore, this species is likely to occur within onsite Agricultural, Ruderal or Annual Grassland habitats on a regular or transitory basis. Nests are placed on the ground in open areas, sparse vegetation, or next to a grass clump or other object (Audubon 2020). They could nest in Annual Grassland habitat, along the access roads, and in Agricultural or Ruderal areas within the project impact areas.

The **golden eagle** (*Aquila chrysaetos*) is considered a Fully Protected species by CDFW and is on the Watch List for nesting and wintering. Nesting is on cliffs, large trees or other structures such as electrical towers. They have been reported at numerous locations surrounding the property (The Cornell Lab of Ornithology 2019a). This species forages over a variety of open habitats, and is likely to forage at the study area, but no nesting habitat is present.

The **grasshopper sparrow** (*Ammodramus savannarum*) is a CDFW Species of Special Concern that occurs almost exclusively in grassland habitats. Other types of open habitats with patches of bare ground and little shrub cover, such as pastures and agricultural fields, may also be used. They nest on the ground at the base of clumps of grass. This species has been recorded at the property from southern Wineman Road in 1993 and 2013, and there are several other observations from the lower slope of the Temettate Ridge (The Cornell Lab of Ornithology 2020a). This species could forage in any of the habitats onsite, and could potentially nest within the Annual Grassland in the impact areas.

The **great blue heron** (*Ardea herodias*) does not have a specific listing status but is considered a sensitive species by CDFW for nesting colonies, which are located in forests near bodies of water.

Appropriate aquatic habitat for nesting colonies is not present in or near the study area. Individuals occasionally forage in grasslands or fields, and there are several sightings from near the study area, including from a neighboring property on South Thompson Avenue (The Cornell Lab of Ornithology 2020a). Individuals could occur onsite periodically as transients while foraging, but nesting would not occur due to lack of sufficient aquatic habitat.

The **loggerhead shrike** (*Lanius ludovicianus*) is a CDFW Species of Special Concern for nesting. This species occurs in variety of relatively open habitats, including grasslands, and prefers areas where there are objects to perch on such as fences, trees or shrubs (Audubon 2020). Nests are placed in dense and sometimes thorny trees or shrubs (Audubon 2020). There are numerous observations from near the properties (The Cornell Lab of Ornithology 2020a). Individuals could forage onsite in any of the habitat types, and potentially could nest in the Riparian Scrub or ornamental trees in the Developed/Ruderal area.

The **northern harrier** (*Circus cyaneus*) is a CDFW Species of Special Concern for nesting. This species prefers wide open country with wetlands, but they also occur in rolling grasslands or desert shrubland. Nests are placed on the ground usually in marshes, but occasionally they nest in dry open fields (Audubon 2020). There are numerous observations of this species in close proximity to the study area (The Cornell Lab of Ornithology 2020a). They could occur onsite occasionally while foraging, and could potentially nest in areas away from human activities.

The **prairie falcon** (*Falco mexicanus*) is on the CDFW Watch List for nesting. This species forages in open grasslands, and potential foraging habitat is present on the site. Nesting habitat is generally rock formations and large trees, which are not present onsite. An individual was recorded at the intersection of Wineman Road and Highway 166 in 2004 (The Cornell Lab of Ornithology 2020a). This species could occur on the site periodically while foraging, but would not be expected to nest onsite due to absence of nesting habitat.

The **tricolored blackbird** (*Agelaius tricolor*) is a state Threatened species and a CDFW Species of Special Concern for nesting colonies. This species nests and roosts colonially in freshwater marshes with dense tules, cattails, or blackberry thickets. They forage in areas with low-growing vegetation such as agricultural fields, grasslands and feedlots. Wintering tricolored blackbirds congregate in large multispecies flocks, often containing red-winged blackbirds (The Tricolored Blackbird Working Group 2007). There are four records of tricolored blackbirds on the subject property. In 2009, approximately 400 individuals were recorded at the feedlot on the west property (The Cornell Lab of Ornithology 2020a). In 2013, 17 were seen on the east property from the southern loop of Wineman Road (The Cornell Lab of Ornithology 2020a). Due to known occurrences over a span of recent years, this species has high probability to forage within the Annual Grassland, Agricultural, and Developed/Ruderal areas within the project sites. They could potentially roost in the cattails in the Ponds onsite, but the emergent vegetation is probably not extensive enough to support a nesting colony.

The **white-tailed kite** (*Elanus leucurus*) is a CDFW Fully Protected species for nesting sites. This species prefers open areas for foraging, including grasslands, river valleys, oak savanna, agricultural areas, deserts, and marshes (Audubon 2020). They nest in large isolated trees, and occasionally in riparian habitats (CDFW 2020c). During the non-breeding season, they roost communally in trees or tall shrubs at the edges of grasslands (The Cornell Lab of Ornithology 2020b). This species has been recorded at numerous locations in close proximity to the properties (The Cornell Lab of Ornithology 2020a). They could use the site periodically while foraging in the area. No large trees are present in the study area for nesting or communal roosting.

The **American badger** (*Taxidea taxus*) is a CDFW Species of Special Concern. This species occurs in a variety of open habitats, and prefers grassland, oak savannah and edges of shrubland. They are associated with friable soils in which they dig burrows. Suitable habitat is present in all of the habitats onsite, including the Ruderal areas because they tolerate some degree of human disturbance (CDFW 2020c). No ground squirrels were observed in the study areas that could provide a food source, but may nevertheless be present in low numbers. No potential dens were observed during the survey, but they may dig a new den each night, especially in summer (CDFW 2020c). Young are born in maternity dens in March and April (CDFW 2020c). Badgers are highly mobile and could move through the study area. The open and undeveloped nature of the surrounding area east of Highway 101 increases the chance that they could occur in the area, and the CNDDB contained numerous records from various locations surrounding the site (CDFW 2020a).

The **pallid bat** (*Antrozous pallidus*) is a CDFW Species of Special Concern. This species forages in a variety of dry, open habitats such as grasslands, desert, woodland and shrubland. Maternity and winter roost sites are cavities or caves in rock features, large trees or buildings, and these structures must substantially moderate temperature. Night roosts are in more open areas such as porches or agricultural buildings. This species has been recorded in the general vicinity of the site (CDFW 2020a). They could forage over any of the habitat types in the study area, and could potentially night roost in the agricultural structures, including the building that would be converted to cannabis uses.

3.5.4 Designated Critical Habitat

Designated critical habitat for the south-central California coast Distinct Population Segment (DPS) steelhead (*Oncorhynchus mykiss irideus*) occurs in the Los Berros Canyon drainage system on the northeast side of Temettate Ridge (Figure 5). This DPS occurs in watersheds to the north of the Santa Maria River, and thus the study site is not within the range of this DPS.

The Santa Maria River is designated critical habitat for the southern California DPS steelhead. The Ephemeral Drainage system onsite is not included in this habitat unit (Figure 5). The reaches of this unnamed drainage within the study areas are too ephemeral to support steelhead and are not included in the listing of critical habitat for this species.

3.5.5 Migratory Birds and Raptors

Bird species that nest on the ground in Annual Grassland habitat or on structures or ornamental trees and shrubs in Developed/Ruderal could occur in project impact areas during nesting season. In addition to the special-status bird species described above, avian species that could nest onsite also include common species that are protected under the MBTA and/or California Fish and Game Code. There are no large trees or appropriate structures that could be used as nesting substrates for raptors, and no stick nests were observed.

4.0 IMPACT ANALYSIS AND RECOMMENDED MITIGATION

The following impact analysis and recommended mitigation measures are intended to help guide project planning efforts and support the CEQA review process. The impact discussion addresses the range of impacts that could result from implementation of the proposed project. Direct effects (or impacts), as defined under CEQA, are caused by a project and occur at the same time and place.

Indirect effects are caused by a project, but occur at a different time or place. Cumulative effects are those that result from when the effects of the subject project combine with effects from other unrelated projects to compound environmental harm. Our understanding of the extent of proposed development footprint, along with the observations of onsite conditions from the site visits and desktop evaluation of special-status biological resources in the project vicinity, provided the basis for this analysis. Impact statements defining potential impacts on biological resources and proposed mitigation measures to reduce project-related impacts are described.

4.1 Direct and Indirect Effects

4.1.1 Adverse Effects on Candidate, Sensitive or Special-status Species

A suite of special-status plant and animal species that are known to occur in the region were evaluated to determine their potential to occur in the study areas. Three focused rare plant surveys were conducted during the seasonal period when the rare plants known to occur in the area would have been in flower or in identifiable condition; however, none were seen. The Annual Grassland habitat in the project impact areas has been disturbed historically by farming and is dominated by non-native, weedy species that are adapted to disturbance. The site history, coupled with the negative results from three rare plant surveys, indicate that rare plants are not expected to occur in the project impact areas, and the project would not adversely affect any rare plant populations. In addition, no special-status plant species were determined to have potential to occur on the site based upon the background review of species records in the vicinity and evaluation of onsite environmental conditions.

Many of the special-status animal species with potential to occur onsite are mobile species that would only use the site periodically while foraging or moving through the site, without using the area for breeding or other key life history traits. Species considered to be mobile include monarch butterfly, birds (adults, non-nesting) and foraging American badgers and bats. Individuals of these mobile species that use the site for foraging or on a transitory basis are expected to move away from any temporary disturbance during construction activities, and would not be directly affected. There are no suitable groves for monarch overwintering sites, or trees or structures for raptor nests. Individuals of less mobile species (amphibians, reptiles, denning badgers and nesting birds) could potentially be affected by construction activities if the work period coincided with the time of year that these species may be in impact areas. For instance, CRLF could be affected if construction occurred during the winter months once sufficient rain has occurred to support dispersal across grassland habitats. Additionally, effects could occur to special-status bat species if they roost in the existing agricultural building that would be converted to Cannabis production. Birds that nest in grassland habitats or on structures in Developed/Ruderal areas could also be affected if construction was initiated during the spring and summer nesting season. Depending on the time of year that construction takes place, these activities could cause the adults to abandon the nest site and result in the mortality of eggs or young reliant on the nest. Disturbance from construction activities could potentially disrupt nesting behavior of avian species in adjacent areas.

There is potential for the operations phase of the cannabis projects to affect special-status wildlife species. There would be increased vehicle traffic on the ranch roads, which could cause mortality from vehicle strikes. Pesticides and other chemicals could be carried in stormwater runoff into the Ephemeral Drainage system. Lighting could have some effects on nocturnal wildlife species. Bat species could benefit by the attraction of insects to lights, and there is ample area surrounding the cannabis facilities where foraging would be unaffected by lighting. Lighting could reach the Ponds

or other areas of the Ephemeral Drainage system, which could negatively affect the California red-legged frog. These effects and mitigation are described below.

The two project impact areas are composed of disturbed Annual Grassland, with the western area also containing Developed/Ruderal areas, and there would be no measurable negative effect on wildlife habitat as a result of construction of the cannabis facilities because a minimal amount of a common and disturbed habitat type would be lost in an area of extensive open space. The outdoor cultivation areas would be fenced, which would likely restrict the movement of medium- and large-mammals through the project sites. There would be no adverse indirect effects to other nearby habitat areas, as there are substantial setbacks from the proposed activities from offsite areas. Potential indirect effects to Ephemeral Drainages are described, and mitigation provided, as described below.

Impact Bio-1. Construction of the project could potentially impact special-status animal species. This is a potentially significant but mitigable impact.

Individuals of special-status animal species could potentially occur in the study areas on a seasonal basis, and be directly impacted by construction activities, and the seasonal timing of risk varies among species. Blainville's horned lizards bask on patches of open ground during the late-spring and summer, and likely would use underground retreats during the rest of the year. They could be onsite throughout the year, but detectable only during the warmer months. Horned lizards could occur in the more open areas along margins of Annual Grassland habitat, or where there is disturbance from cattle. It is unlikely that horned lizards would occur in grassland habitats with dense vegetation and thatch such as in the proposed project development areas. They could, however, be present in Ruderal areas such as along unpaved roads, road shoulders or around equipment storage areas where suitable refuge is present. Potential exists that horned lizards could be killed by vehicles during construction or operation of the project while basking on the surface, or by ground excavation activities while in burrows.

The California red-legged frog would only have the potential to occur in the impact area during the winter months following substantial rain events when the ground conditions are moist. Additionally, they are nocturnal and would undergo movements at night. They are unlikely to remain in the grassland impact areas during the day due to insufficient cover and moisture, but could take cover around the base of objects such as fence boards, equipment, or stored construction materials, especially along the drainage corridors. Additionally, California red-legged frogs could fall into and become entrapped in any steep-walled excavations should those excavations occur during the winter rain season. Adult California red-legged frogs would not be present in the study area during dry periods of the summer and fall, but juveniles migrating away from their natal ponds could move through the drainage corridors or project impact areas in the late-summer following metamorphosis. California red-legged frogs could suffer mortality from vehicle strikes during construction or operations phases, if these activities occurred at night.

Northern California legless lizards, if they occur onsite, likely would be outside of most project impact areas because they would not occur in open Annual Grassland or Agricultural areas on heavy soils. The highest potential for impacts is during construction activities in Ruderal areas, where they could be present under objects. However, the chance that they would occur in this area is remote due to lack of shrubs or other natural cover on the site.

Southwestern pond turtles could also move through the impact areas during the daytime beginning in the late-summer or fall through the winter. Adults would not remain long in open grassland

areas during winter due to lack of sufficient cover, but they could fall into excavations made during construction if they were open during the period that they use upland habitats. There is a chance that they could nest in the grassland habitat within the central impact area due to the presence of potentially suitable aquatic habitat nearby.

The western spadefoot could use the Ponds for breeding, and the impact areas are within the distance that this species could use upland habitats for burrows or during movement between aquatic sites. They could be killed in their burrows during grading and excavation for construction, by vehicle strikes during construction or operation should those activities occur at night, and they could fall into open trenches and excavations.

American badgers are a highly mobile species and could move through the area in search of prey. They could also have dens in the project vicinity in which they raise their young or utilize for refuge. If a natal den was present, then the badger would be considered less mobile and tied to the feature until its young can move on their own. Maternal or natal dens may be occupied in the spring and summer. Adults that are not raising young may be present in dens during the daytime at any time of year.

Pallid bats or other protected bat species could roost inside of the existing agricultural building that will be converted to cannabis uses. This metal structure is not likely to provide enough temperature moderation to be used during the winter or as a maternity roost site, but could be used by individual bats during the warmer months as day and/or night roosts.

Construction equipment or activities could injure or kill individuals of these species in work areas. Timing the initiation of construction activities to minimize the chance of effects is problematic because there is no one season when all species would be restricted to areas away from these habitats. Given the regulatory status of the California red legged frog as Threatened under the FESA, project activities should be designed to avoid any work along the drainage features and in proximity to onsite ponds. Avoiding construction activities during the winter rain season when red-legged frogs could potentially move through onsite grasslands is another important component for project activities to avoid impacts on this species.

Minimization measures involving preconstruction surveys by a qualified biologist prior to initial ground disturbance are required because avoidance by timing the construction period cannot cover each of these species with potential to occur. These surveys shall involve a visual search for amphibians, reptiles, American badger dens, and bird nests within and adjacent to project impact areas. If any potential den is found and cannot be avoided, additional mitigation to ensure that the den is not occupied at the time of construction would be required. The survey shall also include searching the agricultural building for signs of bat roosting such as piles of guano and insect remains before any project activities occur. If construction is initiated at different parts of the study area at different times, a separate pre-activity survey shall be conducted for each project element. Furthermore, construction activities involving open trenches or excavations, such as during the construction of the leach field or any upgrades to the irrigation system, shall occur during the dry season and a ramp to allow wildlife to get out of the excavation area would be required. Should project construction extend into the winter months, biological monitoring shall be conducted before the start of work each day to ensure that no special-status animal species have entered the work area or become entrapped in the excavations. To reduce potential project impacts on special-status wildlife species to a level below significance, the following Mitigation Measures BIO-1a through 1f are required.

Mitigation Measure BIO-1a: Conduct all initial grading and vegetation removal for project construction during the dry season to avoid impacts on California red-legged frogs or install wildlife exclusion fencing around the central disturbance area. The project elements are sited in upland grassland areas that are within potential dispersal distances from ponds on and adjacent to the study area. By limiting habitat removal and construction activities to the period of time between May 1st and October 15th, the proposed project would avoid potential impacts on adult frogs that may be moving through the area. While recently metamorphosed juvenile California red-legged frogs are known to use terrestrial habitats for movement during the later spring or early summer, the lack of cover in the project areas and distance from the ponds likely preclude recently metamorphosed individuals from moving through the project areas, and they would remain in the drainage corridors. If construction cannot be limited to the dry season, then erect temporary wildlife exclusion fencing around the perimeter of the central disturbance area for work through the winter rain season to preclude frogs from moving into the work area.

Due to the proximity of Ponds that could support California red-legged frogs, as well as southwestern pond turtles, and western spadefoot, a temporary wildlife exclusion fence should be erected around the central disturbance area for work that occurs from October 16th through April 30th. The wildlife exclusion fence shall completely encircle the central construction site. Given the location of the west project site, exclusion fencing is not required at that location. The fence shall be composed of an Ertec Environmental Systems E-Fence (or similar) with overhanging climbing barrier. The fence shall be installed into the ground at a depth of at least 6 inches. The ground surface shall be compacted up against the edge of the fence on both sides, leaving no gaps in which animals could enter and be undetectable. In some cases, fill material such as coarse sand may be needed to ensure there are no gaps. The entrance to the work site shall have a removable section that is opened at the start of work and closed each evening, with a lower sweep that is weighted to the ground during periods when the entrance is closed. Construction shall not commence until the wildlife exclusion fence installation has been 100% completed. A qualified biological monitor shall be present to oversee the installation of the fence, and to conduct daily pre-activity surveys (including weekends or other periods when construction is not taking place) until all vegetation within the work area has been removed. Thereafter the monitor shall conduct periodic spot checks of the fence and direct any maintenance needed to ensure the integrity of the fence throughout the construction period, until the permanent fence around the facility has been completed as detailed in Mitigation Measure BIO-1d.

Mitigation Measure BIO-1b: Include a wildlife exclusion barrier as part of the fencing around the central disturbance area. As detailed above, special-status amphibian and reptile species are known to occur in the vicinity and have potential to enter the project site during the winter rain season and may be affected by operations of the project occurring during winter months. The project plans show a fence around the outdoor cultivation areas, excluding the greenhouses, storage area and processing building. To avoid potential impacts to red-legged frog, pond turtle and spade foot during project operations, the fencing around the central disturbance area shall have slat or the wildlife exclusion fence attached to the lower portion of the fence to prevent animals from accessing the site. The permanent fence shall the wildlife exclusion material with a mesh size of less than 1 centimeter installed along the lower 36 inches to prevent frogs from climbing over it. The gate to the facility shall have sweeps as described above. A qualified biologist shall review and approve the final fence design, and then monitor the construction of the fence to ensure proper ground contact and function.

Mitigation Measure BIO-1c: Conduct a preconstruction wildlife survey and avoid construction in any areas with special-status wildlife species. Immediately prior to the start of vegetation removal or

grading for each element of the project, a qualified biologist shall survey the impact areas for special-status wildlife species, focused on the species detailed above. These surveys shall include searches under cover objects, such as fence boards and stored materials, as well as inspecting under construction equipment. The survey shall also include searching the existing agricultural building for bat sign, such as piles of guano or invertebrate parts. If work is initiated in different parts of the properties at different times, separate preconstruction surveys shall be conducted immediately prior to the start of work in each area. Construction activities can begin once it has been determined that there are no special-status wildlife species within impact areas. If any special-status wildlife species are found within the impact area or would otherwise be at risk during construction, work activities shall be delayed in that particular area and the animal allowed to leave the work zone on its own volition. The biologist shall monitor the area to determine when individuals of special-status species have left and work can commence. If any California red-legged frogs or other federally listed species are found in the impact area, the USFWS and County shall be contacted and work delayed until clearance is given. If roosting bats are found using the buildings/structures onsite, work on the building should be conducted during the winter when bats have left the area.

Mitigation Measure BIO-1d: Conduct a preconstruction den survey and establish no-work buffers around potential dens. Within seven days prior to the start of ground-disturbing activities, a qualified biologist shall survey the project impact area plus a 100-foot buffer for dens of the American badger. Any potential dens found shall be marked in the field with flagging, and a 50-foot no-work buffer shall be flagged. If the potential den cannot be avoided with at least a 50-foot buffer, the following mitigation measure would also be required.

Mitigation Measure BIO-1e: If any potential dens are found, employ wildlife trail cameras and/or track plates to determine whether the dens are active, and excavate non-active dens to prevent re-occupation. A qualified biologist shall install wildlife trail cameras and/or tracking medium outside any potential dens that are found during the preconstruction survey, and monitor those sites for at least three days to determine whether the den(s) are currently occupied. Any unoccupied dens shall be excavated to prevent badgers from re-entering. If the work takes place in the late-spring or summer, additional measures shall be employed to determine whether dens are occupied by young. No dens with young shall be disturbed, and no work shall be conducted within 50 feet of maternal dens, until they have left the den. Any occupied dens that are being used by an adult with no young that cannot be avoided shall be blocked incrementally by placing sticks and debris over the entrance to discourage the badger from using the den. Only after the badger has left the den, as determined by wildlife cameras and/or tracking medium, can the den be excavated and work proceed.

Mitigation Measure BIO-1f: Cover all excavations each night and include escape ramps in excavations so wildlife is not entrapped. During the installation of the leach fields or for any trenching for water or utility lines, trenches and excavation areas shall be covered each night to prevent wildlife entrapment. In addition, a wildlife ramp composed of earthen material at no steeper than a 2:1 slope shall be provided to ensure any animal that might fall into the trench can escape. If this is not possible, then biological monitoring shall be conducted before the start of work each day to ensure that no special-status animal species have become entrapped in the excavations. If any special-status animal species are found, work in the area shall be halted and appropriate authorizations shall be obtained from CDFW and/or USFWS to remove the animal(s) from the project site and relocate it to suitable habitat away from project activities. Only a qualified biologist shall handle wildlife and capture and relocate it to suitable habitat outside the disturbance area.

Impact Bio-2. Construction activities could potentially directly impact nesting of bird species protected under the Migratory Bird Treaty Act and/or California Fish and Game Code. This is a potentially significant but mitigable impact.

If construction activities are initiated during the nesting season (February 1 to August 31), nesting behavior could be disrupted and construction disturbance could cause adults to abandon nests containing eggs or young. Nesting birds that are protected under the MBTA and/or California Fish and Game Code could potentially nest in the Annual Grassland habitat or Developed/Ruderal areas within the project site. To reduce potential project impacts to a level below significance, Mitigation Measure BIO-2 is required.

Mitigation Measure BIO-2: Conduct a preconstruction nesting bird survey if initial construction activities take place during the nesting season (February 1 to August 31) and avoid active nests. A qualified biologist shall conduct a preconstruction survey for nesting birds within 500 feet of project impact areas, within seven days before the initiation of construction in each area of the project. Surveys shall include the Annual Grassland habitats, ornamental trees, existing agricultural building and any other structure or stored materials that will be involved in the cannabis facility. During this survey, the qualified biologist shall inspect the impact and buffer areas, and any nests identified will be monitored to determine if they are active. If no active nests are found, construction may proceed. If an active nest is found within 500 feet of the construction area, the biologist, in consultation with the County and CDFW if needed, shall determine the extent of a buffer to be established around the nest. The buffer will be delineated with flagging, and no work shall take place within the buffer area until the young have left the nest, as determined by the qualified biologist.

4.1.2 Adverse Effects on Riparian Habitat or Sensitive Natural Communities

No riparian habitat or sensitive natural communities occur within the proposed project impact areas. The Riparian Scrub (Central Coast Riparian Scrub; State Rarity Rank S3) occurs in small patches of the Ephemeral Drainage downstream from the impact areas. Stormwater runoff from the site could carry sediment and toxic compounds that potentially could negatively affect this habitat type. The effects and mitigation to address these effects is described in Section 4.1.3 below, under water quality effects on federally protected wetlands.

Coastal and Valley Freshwater Marsh, State Rarity Rank 2.1, occurs in at least one of the Ponds and is outside of the project impact areas. No project effects are expected on this community. The Annual Grassland semi-natural community within the project impact areas is not considered to be sensitive. Therefore, impacts to sensitive natural communities are not expected to occur as a result of the project and no mitigation is required.

4.1.3 Federally Protected Wetlands

As shown on the project plans (see Appendix A), the site development of the project will avoid all Ephemeral Drainages and Swales on the properties. No other wetland habitats were identified within the study areas (Figure 4). As currently proposed, no permitting would be needed from USACE, RWQCB or CDFW because the work will remain outside of jurisdictional areas.

Wetland and/or Ephemeral Drainage habitat in the onsite stream system could be indirectly affected by pollutants and/or sediment by surface runoff from the project sites even though the sites are setback from the drainage features. Measures are required under CEQA to reduce potential indirect

effects of construction activities on wetland habitat to a level below significance.

Impact Bio-3. Stormwater runoff from the project site could potentially result in pollutants and/or sediment entering federally protected wetland habitat in the onsite Ephemeral Drainage system. This is a potentially significant but mitigable impact.

The onsite Ephemeral Drainage system, which likely is under the jurisdiction of USACE as well as RWQCB and CDFW, lies downslope from the proposed project sites. Although these features will be avoided, construction of the cannabis facility will involve vegetation removal and grading, and disturbed soils could erode into the stream system if they are not stabilized prior to significant rainfall. Sedimentation is considered to be a type of pollutant in aquatic systems because it decreases water quality through increased turbidity, fills in pools or causes lateral spread of channels, and covers instream vegetation and other aquatic life. In addition, toxic substances from construction equipment such as oil, gas, diesel, and hydraulic fluid could leak or be spilled and be carried in stormwater runoff into the creek. The project plans incorporate hydroseeding, concrete washout, and erosion control guidelines (Appendix A). In addition to these guidelines, and to bring the chance of indirect effects on protected wetland and riparian habitats to a level below significance, the following mitigation detailing Best Management Practices (BMPs) are required, in addition to the measures specified in the site plans. An additional measure has been provided to address the operations phases of the project to prevent stormwater runoff from cultivated and developed areas from reaching sensitive habitats in the onsite Ephemeral Drainage system. Toxic substances may also be used during the operations phases of the project, such as pesticides and fertilizers, and if improperly used or stored could enter protected habitats. Mitigation measures to capture onsite runoff in a bioswale system or detention basin are also described to address runoff issues in the long-term. To bring the chance of indirect effects on protected wetland habitats, riparian habitat, and aquatic resources in offsite drainages to a level below significance, the following mitigation measures are required.

<u>Mitigation Measure Bio-3a:</u> *Install appropriate erosion and sediment controls and revegetate graded areas.* The following erosion and sedimentation control methods are required to be implemented:

1. If possible, the potential for erosion and sedimentation shall be minimized by scheduling construction to occur outside of the rainy season, which is typically defined from October 15 through April 15. Consistent with Mitigation Measure BIO-1a, the initial phases of construction shall occur during the dry season to avoid impacts on California red-legged frog. If construction cannot be completed by October 15, erosion control BMPs shall be installed as follows.
2. To minimize site disturbance, all construction related equipment shall be restricted to established roads, construction areas, and other designated staging areas.
3. A Sediment and Erosion Control Plan beyond what is shown on project plans may be required by the County. As proposed, the use of silt fence, straw wattles and other appropriate techniques will be employed to protect the drainage features on and off the property. All sediment and erosion control measures shall be installed per the engineer's requirements.
4. Spill kits shall be maintained on the site, and a Spill Response Plan shall be in place.
5. No vehicles or equipment shall be refueled within 100 feet of wetland areas and/or drainage features unless a bermed and lined refueling area is constructed. No vehicles or construction equipment shall be stored overnight within 100 feet of these areas unless drip pans or ground covers are used. All equipment and vehicles should be checked and

maintained on a daily basis to ensure proper operation and to avoid potential leaks or spills. Construction staging areas should attain zero discharge of stormwater runoff into these habitats.

6. No concrete washout shall be conducted on the site outside of an appropriate containment system. Washing of equipment, tools, etc. should not be allowed in any location where the tainted water could enter onsite drainages.
7. The use of chemicals, fuels, lubricants, or biocides shall be in compliance with all local, state, and federal regulations. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other state and federal legislation.
8. All project-related spills of hazardous materials within or adjacent to the project site should be cleaned up immediately.
9. All areas with soil disturbance shall have appropriate erosion controls and other stormwater protection BMPs installed to prevent erosion potential. Silt fencing, erosion control blankets, straw bales, sandbags, fiber rolls and/or other types of materials prescribed on the plan shall be implemented to prevent erosion and sedimentation. Biotechnical approaches using native vegetation shall be used as feasible.
10. Areas with disturbed soils shall be restored under the direction of the project engineer in consultation with a qualified restoration ecologist as needed. Methods may include recontouring graded areas to blend in with existing natural contours, covering the areas with salvaged topsoil containing native seedbank from the site, and/or applying the native seed mix shown on the project plans supplemented with species in Table 1. Native seed mix shall be applied to the graded areas through either direct hand seeding or hydroseeding methods. Seeding with the native erosion control seed mix should be provided on all disturbed soil areas prior to the onset of the rainy season (by October 15).

Table 1. Native Erosion Control Seed Mix

Species	Application Rate (lbs./acre)
Bromus carinatus (California brome)	10
Stipa pulchra (purple needlegrass)	5
Trifolium wildenovii (tomcat clover)	3
Vulpia microstachys (six weeks fescue)	7
Total	**25**

Mitigation Measure BIO-3b: Design bioswale system(s) or basin between the project facilities and the Ephemeral Drainage system to capture and manage surface runoff, and allow natural filtration by native plants. A qualified biologist/botanist with experience in designing bioswale systems shall work with the project engineer to design a system to capture surface runoff from both project sites. A swale system along topographic contours or a detention basin could be constructed by placing low berms and drainage channels that direct surface runoff from the sites into the basins. This system shall be designed to capture any sediment runoff from the outdoor cultivation areas, as well as other disturbed areas onsite, and prevent it from leaving the site where it could contaminate aquatic resources downstream. The swale should be planted with native herbaceous species that would aid in the removal of pollutants.

Mitigation Measure BIO-3c: Store and dispose of pesticides, fertilizers and other potentially toxic substances in an enclosed structure, in accordance with EPA and California Code of Regulations

requirements. Any pesticides, fertilizers or other potentially toxic substances used for the cultivation of cannabis shall be stored in accordance with current EPA guidelines and Title 3 Food and Agriculture, Division 6 Pesticides and Pest Control Operations. Pesticide use permitting must also be obtained from the Department of Agriculture/Weights and Measures. Any rodenticides used during operation of the cultivation facility shall be limited.

4.1.4 Interference with Movement of Native Fish or Wildlife, Wildlife Corridors, and Wildlife Nursery Sites

The proposed project would not affect the movement of native fish because all work will be conducted in upland grassland habitat, outside of stream channels. In addition, the Ephemeral Drainage system on the properties is too ephemeral to support fish. No equipment or materials will enter or be placed in the channel that could affect fish downstream.

The outdoor cannabis cultivation area in the western project site, consisting of 3 acres, will be surrounded by a 6-foot high chain link fence. As described above in Mitigation Measure BIO-1b, the entire cannabis facility for the central project site will require fencing to restrict the movement of amphibian and reptiles into the project area. This fencing would be a barrier to the movement of many species of wildlife, but the area surrounding these fenced-in areas will remain open grassland used for cattle grazing. Additionally, the properties are surrounded on the north and east sides by open grassland and agriculture. Vehicle traffic on Highways 101 and 166 may be barriers or impediments to wildlife movement, but the project site occurs at the junction of these two highways and will not constrict movement further. A larger wildlife movement corridor will remain along the Temettate Ridge and its slope. Therefore, there would be no negative impacts of the project on wildlife corridors or movement.

The disturbed grassland habitat in the project impact areas is not expected to be a wildlife nursery site for any species. Wildlife species that could breed in the area are limited to ground-nesting birds, small mammals such as rodents, and invertebrates. These species would be dispersed throughout the abundant grassland habitat in the general area, and not focused in the study areas for reproduction or other key life history stages. Therefore, there would be no impact of the project on wildlife nursery sites.

Because there would be no project impacts on the movement of native fish or wildlife, wildlife corridors or wildlife nursery sites, no mitigation is required.

4.1.5 Conflicts with Local Policies or Ordinances, Such as Tree Preservation

The project does not involve the removal of any oak trees, and furthermore, there are no oak trees in the study area. The properties fall within the South County Planning Area, and the South County Inland Sub Area. No Sensitive Resource Areas have been identified on or in the vicinity of the sites (County 2017). The area is outside of the Coastal Zone, and therefore there are no Environmentally Sensitive Habitats in the area. The cannabis projects would fall under Ordinance 22.40.050, which states that cannabis cultivation shall be setback at least 50 feet from the upland extent of riparian vegetation of any watercourse. Although the onsite Ephemeral Drainage has very little Riparian Scrub vegetation, the definition of jurisdictional drainages uses the top of bank as the limits when riparian habitat is absent. For the West project site, the agricultural building that would be converted to cannabis uses is at least 180 feet from the nearest drainage, and the nursery greenhouses have a setback of at least 135 feet. The indoor cultivation greenhouses appear to be approximately 75 feet from the drainage, as measured on Google Earth, and the outdoor cultivation

area is about 400 feet away. For the Central project site, the Ephemeral Swale is shown on the site plans along with a 50-foot buffer on each side of a 10-foot wide channel bottom (Appendix A). The topographic draw is a minor swale, and has no significant habitat resources being that it lacks flowing water and wetland or riparian vegetation. The project will avoid this feature and provide an adequate buffer consistent with current County requirements.

Because there would be no conflicts with local policies or ordinances related to biological resources, no mitigation is required.

4.1.6 Conflicts with Local, Regional or State Conservation Plans

No local, regional or state conservation plans have been prepared for the area in which the project is located; therefore, there would be no conflicts with these plans and no mitigation is required.

4.2 Cumulative Effects

The project is sited in a rural agricultural area of southern San Luis Obispo County. The subject property has been farmed and grazed for many years. Annual Grassland habitat within the study area is not considered to be a sensitive natural community, and is widespread in the local area surrounding the project site. The loss of a small area of grassland would not be significant from a biological perspective, especially since it does not support any rare plants. The land surrounding the project sites within the subject properties will continued to be used for livestock grazing, and will provide habitat for grassland species. With mitigation incorporated as described herein, no significant effects on biological resources are expected to occur as a result of project implementation. Because there would be no effects of the project in the context of the site's ecological importance in the overall area, the project would not contribute to cumulative effects of other non-federal projects planned in the area.

5.0 CONCLUSIONS

Two cannabis cultivation and production facilities are proposed on adjacent properties in a rural agricultural area of southern San Luis Obispo County. The properties have historically been in agriculture (i.e., grain and hay crops) and portions are continuing in agricultural production and livestock grazing. Areas on the properties that are not currently being farmed have had Annual Grassland become re-established, and the species composition is almost entirely non-native weedy species. A small proportion of the site has been developed for ranch infrastructure, which would be converted to cannabis uses. The cannabis facilities and outdoor cultivation areas are proposed on hills and would not directly impact any drainages, riparian or wetland habitat. The project sites have been designed to be located within the existing agricultural and developed/ruderal areas onsite, and there are no significant biological resources in these areas. Access would be from existing ranch roads.

All project elements have been designed to be located outside of the onsite drainages and have sufficient buffers. The site plans appear to be in compliance with setback requirements under the County cannabis ordinance. As designed, no permitting from regulatory agencies such as the USACE is expected, as there would be no impacts to potentially jurisdictional drainage features. Project plans contain specifications for hydroseeding, concrete washout, and erosion control guidelines. Additional BMPs for sedimentation and pollution control during construction activities, and re-establishing native vegetation on disturbed soils, are also provided herein. A bioswale system or detention basin may be installed in upland habitat to protect onsite drainage features

from indirect impacts, and shall be designed and implemented to protect aquatic, riparian and wetland resources onsite and in downstream areas off-site over the long-term operations of the project.

No special-status plant species were found within project impact areas during focused rare plant surveys, and none are expected to be impacted by the construction activities. Several special-status animal species could use the site periodically for foraging or movement. The loss of a small amount of a common habitat type would not have measurable effects on habitat loss. The potential for wildlife movement around the cannabis facilities will remain as the surrounding area on the properties will continue to be used for livestock grazing. Special-status amphibians and reptiles could occupy the onsite drainages; in particular, the Ponds that are impoundments on the Ephemeral Drainage system could be used by the California red-legged frog, southwestern pond turtle and western spadefoot. Other temporary pools in the drainages could also be used as breeding sites for the western spadefoot or as stopover points by the frog and turtle. Although no aquatic habitats are present in project impact areas, individuals of these species also use upland habitats at specific times of year and potentially could move through the project sites during the winter rain season. The initial construction phases should take place in the dry season to avoid impacts to dispersing adult California red-legged frogs. A suite of mitigation measures is prescribed to avoid impacts on special-status amphibian and reptile species, including temporary and permanent exclusion fencing, and preconstruction surveys. American badgers could have dens, including maternity dens, in the grassland habitat where the project is proposed. Special-status bat species could roost during the summer months in the barn that is proposed to be converted to cannabis uses. Because these special-status animal species could be present in or adjacent to the project impact areas during the initiation of construction, appropriate mitigation has been prescribed. With mitigation incorporated as described herein, no significant effects on biological resources are expected to occur as a result of project implementation.

6.0 REFERENCES

Audubon. 2020. Guide to North American Birds. Accessed via: https://www.audubon.org/bird-guide in April 2020.

Bolster, B.C. (editor). 1998. Draft Terrestrial Mammal Species of Special Concern in California. Contributing authors: P.V. Brylski, P.W. Collins, E.D. Pierson, W.E. Rainey and T.E. Kucera. Prepared for California Department of Fish and Game, Wildlife Management Division, Nongame Bird and Mammal Conservation Program. Contract FG3146WM.

Bulger, J.B., N.J. Scott, and R.B. Seymour. 2003. Terrestrial activity and conservation of adult California red-legged frogs *Rana aurora draytonii* in coastal forests and grasslands. Biological Conservation 110:85-95.

Bury, R., H.H. Welsh, D.J. Germano, and D.T. Ashton (editors). 2012. Western Pond Turtle: Biology, Sampling Techniques, Inventory and Monitoring, Conservation and Management. Northwest Fauna 7, Society for Northwestern Vertebrate Biology. 128 pages.

Calflora. 2020. Information on Wild California Plants for Conservation, Education, and Appreciation. Berkeley, California. Accessed via http://www.calflora.org/ in April 2020.

California Department of Fish and Game (CDFG). 2001. Fish and Game Code of California, Section 3503.5. Gould Publications, Altamonte Springs, FL.

California Department of Fish and Wildlife (CDFW). 2020a. California Natural Diversity Database (CNDDB). Commercial version dated February 1, 2020. Accessed via: https://www.wildlife.ca.gov/Data/CNDDB in April 2020.

California Department of Fish and Wildlife (CDFW). 2020b. Vegetation Classification and Mapping Program (VegCAMP). Accessed via: https://www.wildlife.ca.gov/Data/VegCAMP in April 2020.

California Department of Fish and Wildlife (CDFW). 2020c (January). Special Vascular Plants, Bryophytes, and Lichens List. California Natural Diversity Database.

California Department of Fish and Wildlife (CDFW). 2020d. California Wildlife Habitat Relationships System. Accessed via: https://www.wildlife.ca.gov/data/cwhr in April 2020.

California Herps. 2020. A Guide to the Amphibians and Reptiles of California. Accessed via: http://www.californiaherps.com in April 2020.

California Native Plant Society (CNPS). 2020. Inventory of Rare and Endangered Plants of California. Online edition V8-03 0.39. Accessed via: http://www.rareplants.cnps.org in April 2020.

Christopher, S.V. 2018. Ecology of the western spadefoot in eastern San Luis Obispo County. Central Coast Chapter of the Wildlife Society Annual Wildlife Symposium, November 9, 2018.

The Cornell Lab of Ornithology. 2020a. eBird. Accessed via: https://ebird.org in April 2020.

The Cornell Lab of Ornithology. 2020b. All About Birds. Accessed via: https://www.allaboutbirds.org in July 2020.

County of San Luis Obispo (County). 2016. Guidelines for Biological Resources Assessments, Guidelines for Biological Consultants. Department of Planning and Building.

County of San Luis Obispo (County). 2017 (March 7). Los Padres Sub Area South Rural Combining Designation Map. Department of Planning and Building.

Doubledee, R. A., E. B. Muller and R. M. Nisbet. 2003. Bullfrogs, disturbance regimes, and the persistence of California red-legged frogs. Journal of Wildlife Management 67(2):424-438.

Fisher, R.N., A.V. Suarez, and T.J. Case. 2002. Spatial patterns in the abundance of the coastal horned lizard. Conservation Biology 16(1):205-215.

Hayes, M. P., and M. R. Jennings. 1989. Habitat correlates of the distribution of the California red-legged frog (*Rana aurora draytonii*) and the foothill yellow-legged frog (*Rana boylii*): Implications for management. Pages 144-158 *in* R. E. Szaro, K. E. Severson and D. R. Patton (technical coordinators). Management of amphibians, reptiles and small mammals in North America. July 19-21, 1988 - Flagstaff, Arizona. USDA General Technical Report RM-166:1-458.

Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, Sacramento, California.

Hoover, R.F. 1970. The Vascular Plants of San Luis Obispo County, California. University of California Press, Berkeley, California.

Keeler-Wolf, T., D.R. Elam, K. Lewis, and S.A. Flint. 1998 (May). California Vernal Pool Assessment Preliminary Report. California Department of Fish and Game.

Jennings, M. R., and M. P. Hayes. 1994. Amphibian and reptile species of special concern in California, 1 November 1994. California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, California. 255 pp.

Jepson Flora Project (editors). 2020. Jepson eFlora. The Jepson Herbarium, University of California, Berkeley. Accessed via: http://ucjeps.berkeley.edu/eflora/ in April 2020.

Morey, S.R. 1998. Pool duration influences age and body mass at metamorphosis in the western spadefoot toad: Implications for vernal pool conservation. Pages 86-91 *in* C.W. Witham, E.T. Bauder, D. Belk, W.R. Ferren, Jr., and R. Ornduff (editors). Ecology, Conservation and Management of Vernal Pool Ecosystems, Proceedings from a 1996 conference. California Native Plant Society, Sacramento, California.

Moyle, P.B., R.M. Quinones, J.V. Katz, and J. Weaver. 2015. Fish Species of Special Concern in California, Third Edition. California Department of Fish and Wildlife, Sacramento.

Natural Resources Conservation Service (NRCS). 2020. Web Soil Survey. National Cooperative Soil Survey, U.S. Department of Agriculture. Accessed via: http://websoilsurvey.nrcs.usda.gov/

Pilliod, D.S., J.L. Welty, and R. Stafford. 2013. Terrestrial movement patterns of western pond turtles (*Actinemys marmorata*) in central California. Herpetological Conservation and Biology 8(1):207-221.

Rathbun, G.B., N. Siepel, and D. Holland. 1992. Nesting behavior and movements of western pond turtles, *Clemmys marmorata*. The Southwestern Naturalist 37(3):319-324.

Rathbun, G.B., M.R. Jennings, T.G. Murphey, and N.R. Siepel. 1993. Status and ecology of sensitive aquatic vertebrates in lower San Simeon and Pico Creeks, San Luis Obispo County, California. Final Report under Cooperative Agreement 14-16-0009-91-1909 between U.S. Fish and Wildlife Service and California Department of Parks and Recreation. Publication Number PB93-230779, National Technical Information Service, Springfield, Virginia.

Rathbun, G.B., N.J. Scott, Jr., and T.G. Murphey. 2002. Terrestrial habitat use by Pacific pond turtles in a Mediterranean Climate. The Southwestern Naturalist 47(2):225-235.

Reese, D.A., and H.H. Welsh. 1997. Use of terrestrial habitat by western pond turtles, *Clemmys marmorata*: Implications for management. Pages 352-357 *In* Proceedings: Conservation, Restoration, and Management of Tortoises and Turtles. An International Conference held by the New York Turtle and Tortoise Society.

Sawyer, J. O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, California.

Scott, N.J., Jr., and G. B. Rathbun. 2010 (March). California red-legged frog workshop. Elkhorn Slough Coastal Training Program.

Scott, N.J., G.B. Rathbun, T.G. Murphey, and M.B. Harker. 2008. Reproduction of Pacific pond turtles (*Actinemys marmorata*) in coastal streams of central California. Herpetological Conservation and Biology 3(2):143-148.

Shaffer, H.B., G.B. Pauly, J.C. Oliver, and P.C. Trenham. 2004. The molecular phylogenetics of endangerment: cryptic variation and historical phylogeography of the California tiger salamander, *Ambystoma californiense*. Molecular Ecology 13:3033-3049.

Tatarian, P.J. 2008. Movement patterns of California red-legged frogs (*Rana draytonii*) in an inland California environment. Herpetological Conservation and Biology 3(2):155-169.

The Tricolored Blackbird Working Group. 2007. Conservation Plan for the Tricolored Blackbird (*Agelaius tricolor*). Susan Kester (editor). Sustainable Conservation, San Francisco, California.

United States Fish and Wildlife Service (USFWS). 2010 (March 17). Revised guidance on site assessments and field surveys for California red-legged frogs.

United States Fish and Wildlife Service (USFWS). 2016. Recovery Plan for the Santa Barbara County Distinct Population Segment of the California Tiger Salamander (*Ambystoma californiense*). Pacific Southwest Region 8, Ventura, California.

United States Fish and Wildlife Service (USFWS). 2020a. National Wetlands Inventory. U.S. Department of the Interior, Washington, D.C. Accessed via: http://www.fws.gov in April 2020.

United States Fish and Wildlife Service (USFWS). 2020b. Threatened and Endangered Species Active Critical Habitat Report. ECOS Environmental Conservation Online System. Accessed via: https://ecos.fws. gov in August 2020.

Wilkerson, R.L. and R.B. Siegel. 2010. Assessing changes in the distribution and abundance of burrowing owls in California, 1993-2007. Bird Populations 10:1-36.

APPENDIX A

Site Plans

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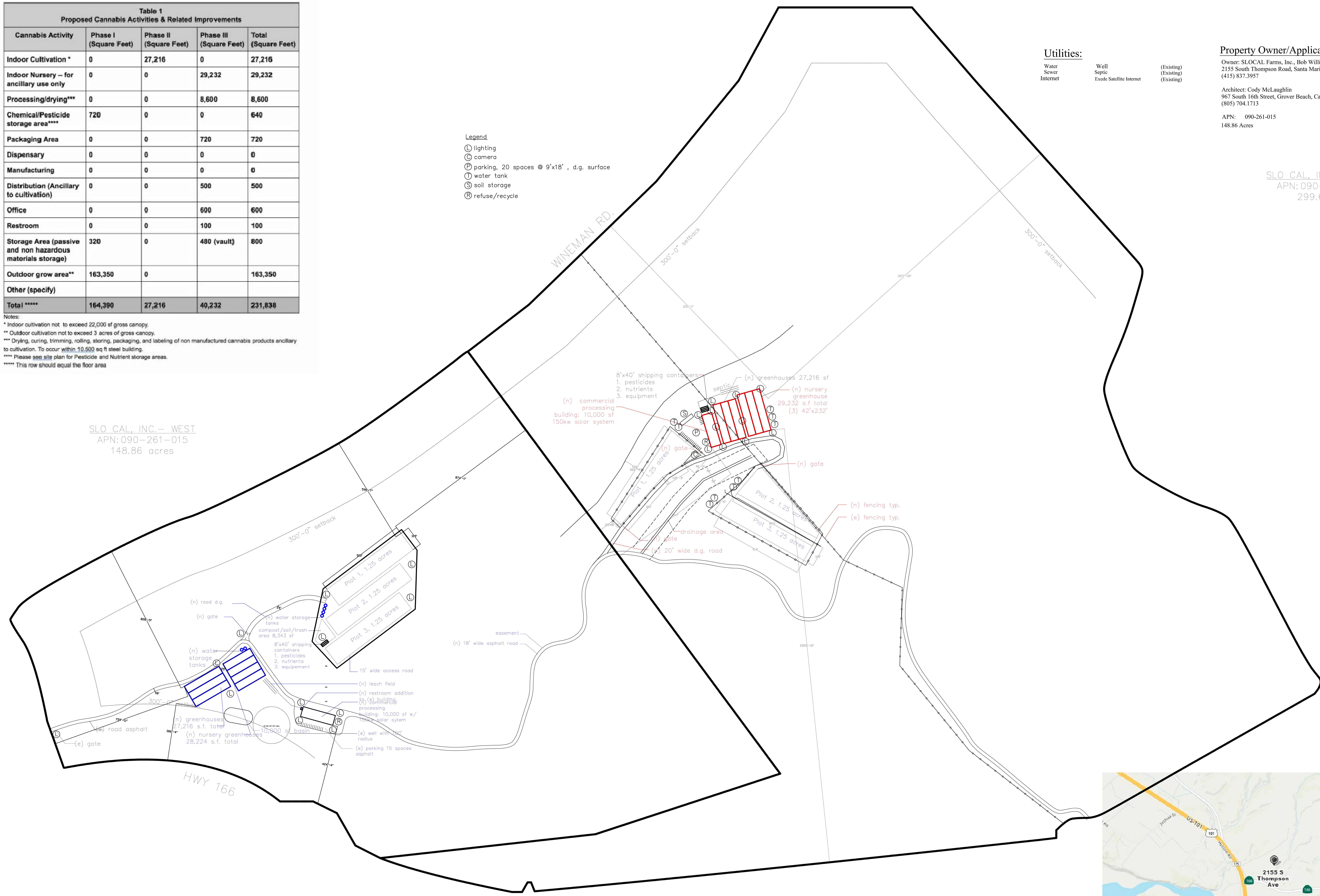
Table 1
Proposed Cannabis Activities & Related Improvements

Cannabis Activity	Phase I (Square Feet)	Phase II (Square Feet)	Phase III (Square Feet)	Total (Square Feet)
Indoor Cultivation *	0	27,216	0	27,216
Indoor Nursery – for ancillary use only	0	0	29,232	29,232
Processing/drying***	0	0	8,600	8,600
Chemical/Pesticide storage area****	720	0	0	640
Packaging Area	0	0	720	720
Dispensary	0	0	0	0
Manufacturing	0	0	0	0
Distribution (Ancillary to cultivation)	0	0	500	500
Office	0	0	600	600
Restroom	0	0	100	100
Storage Area (passive and non hazardous materials storage)	320	0	480 (vault)	800
Outdoor grow area**	163,350	0		163,350
Other (specify)				
Total *****	164,390	27,216	40,232	231,838

Notes:
* Indoor cultivation not to exceed 22,000 sf gross canopy.
** Outdoor cultivation not to exceed 3 acres of gross canopy.
*** Drying, curing, trimming, rolling, storing, packaging, and labeling of non manufactured cannabis products ancillary to cultivation. To occur within 10,500 sq ft steel building.
**** Please see site plan for Pesticide and Nutrient storage areas.
***** This row should equal the floor area



Utilities:

Water	Well	(Existing)
Sewer	Septic	(Existing)
Internet	Exede Satellite Internet	(Existing)

Property Owner/Applicant
Owner: SLOCAL Farms, Inc., Bob Williams
2155 South Thompson Road, Santa Maria, CA 93454
(415) 837.3957

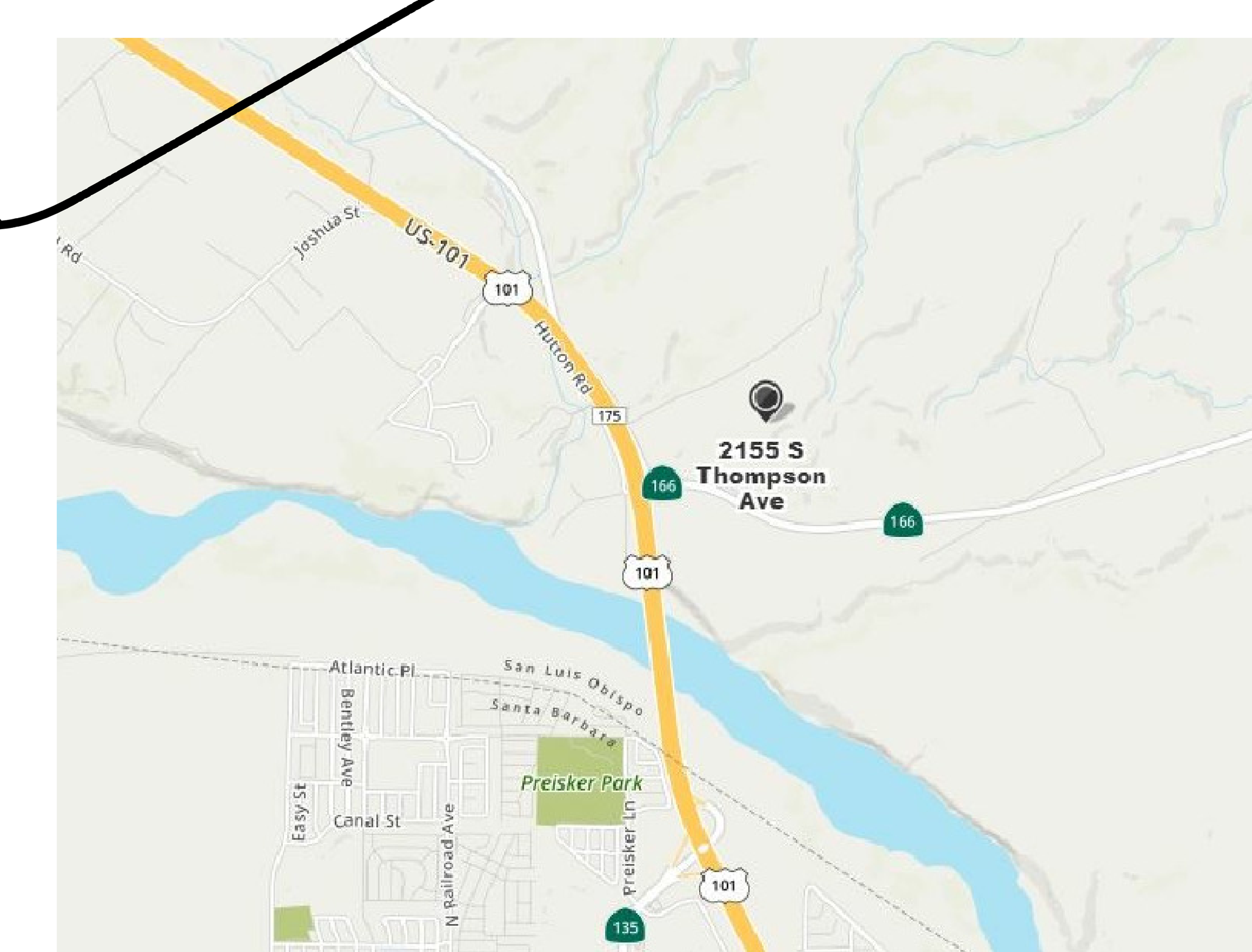
Architect: Cody McLaughlin
967 South 16th Street, Grover Beach, California 93433
(805) 704.1713

APN: 090-261-015
148.86 Acres

Cody McLaughlin, Architect
967 South 16th Street, Grover Beach, California 93433
(805) 704.1713 cmarchitect@live.com

Licensed Architect, Cody McLaughlin, C36916, State of California

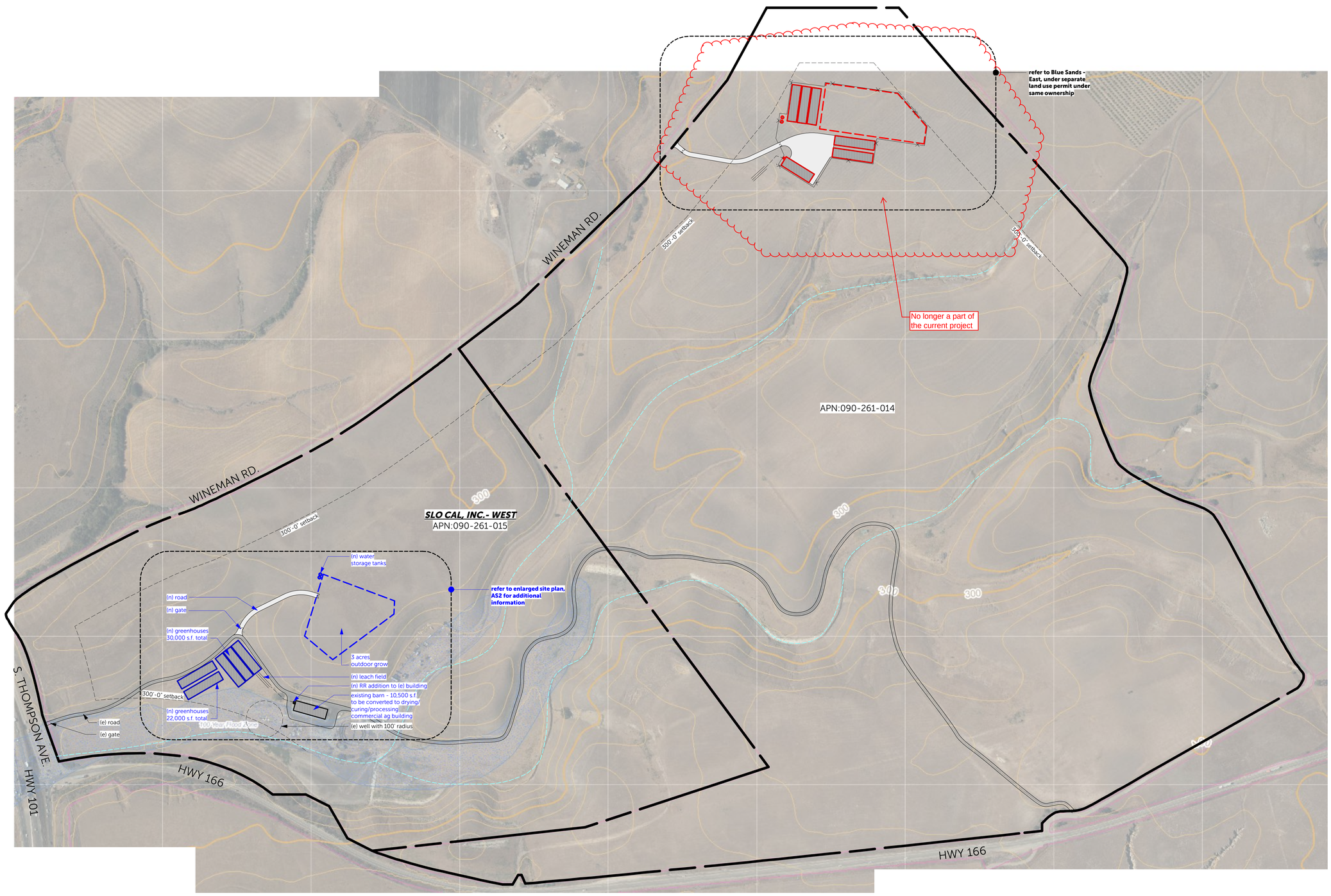
Site Plan and Project Data



Vicinity Map

2155 South Thompson Avenue
Nipomo, California

A.0
Scale: 1" = 200'
7 May 2020



OVERALL ARCHITECTURAL SITE PLAN

N

Scale: 1:3000

REISS DESIGN STUDIO
AN ARCHITECTURAL FIRM
3055 Duncan Lane Suite A, San Luis Obispo, CA 93401 • (805) 706-5645 • www.reissdesignstudio.com

PROJECT:

CANNABIS MUP

SLO CAL, INC.

(WEST)

CLIENT:

SLO CAL, INC.
Austen Connella
7731 Suey Creek Road
Santa Maria, CA 93454
Phone: (415) 837-3957

SHEET CONTENTS:

OVERALL ARCHITECTURAL SITE PLAN

CONSULTANT:

STAMP:

LICENSED ARCHITECT C-32913 REN. 09-30- STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

DATE:

March 28, 2019

REVISIONS:

JOB NUMBER:

1837

SHEET:

AS1

Time: 9:26:43 AM Filename: Blue Sands Cannabis - GOOD SITE FILE.vwx Date: March 29, 2019

APPENDIX B

List of Plants and Animals Observed Onsite During the Survey

List of Plants and Animals Observed Onsite During the Field Surveys

Scientific Name	Common Name
Plants	
Ailanthus altissima#*	Tree of heaven
Amsinckia intermedia	Common fiddleneck
Asclepias fascicularis	Narrow leaf milkweed
*Asphodelus fistulosus**	Onionweed
*Atriplex semibaccata**	Australian saltbush
*Avena barbata**	Slender wild oat
Avena fatua#*	Wild oat
Baccharis pilularis	Coyote brush
*Brassica nigra**	Black mustard
*Bromus diandrus**	Ripgut brome
Calystegia macrostegia	Island morning-glory
*Carduus pycnocephalus**	Italian thistle
*Conium maculatum**	Poison hemlock
*Convolvulus arvensis**	Field bindweed
Croton setiger	Turkey-mullein
Erigeron canadensis	Canada horseweed
*Erodium botrys**	Big heron bill
*Erodium cicutarium**	Red stemmed filaree
*Festuca perennis**	Italian rye grass
*Foeniculum vulgare**	Fennel
Gamochaeta ustaulata	Featherweed
*Helminthotheca echioides**	Bristly ox-tongue
*Hirschfeldia incana**	Summer mustard
Hordeum marinum ssp. *gussoneanum**	Mediterranean barley
Hordeum murinum ssp. *leporinum**	Hare barley
*Hypochaeris glabra**	Smooth cats ear
*Lysimachia arvensis**	Scarlet pimpernel
*Malva neglecta**	Dwarf mallow
*Medicago polymorpha**	California burclover
*Nicotiana glauca**	Tree tobacco
*Phalaris aquatica**	Harding grass
*Polygonum aviculare**	Prostrate knotweed
*Raphanus sativus**	Wild raddish
*Rumex crispus**	Curly dock
*Rumex pulcher**	Fiddleleaf dock
Salix lasiolepis	Arroyo willow
*Salsola tragus**	Russian thistle
Sambucus nigra ssp. *caerulea*	Blue elderberry
Schinus molle#*	Peruvian pepper tree
*Silybum marianum**	Milk thistle
Sisyrinchium bellum	Blue eyed grass
*Sonchus asper**	Spiny sowthistle
Triticum aestivum#*	Wheat
*Vicia villosa**	Hairy vetch
Washingtonia sp.*#	Fan palm

Scientific Name	Common Name
Animals	
Bos sp.*	Cattle
Cathartes aura	Turkey vulture
Family Ranidae	True frog (not identified to species-obs in pond)
Sceloporus occidentalis	Western fence lizard
Tyrannus tyrannus	King bird
Zenaida macroura	Mourning dove

*Non-native species
#Planted

APPENDIX C

Photo Plate

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Appendix C. Photo Plate

Photo 1. Annual Grassland habitat at the project site on the western study area, looking easterly. Cannabis cultivation would occur in this area composed of non-native species.

Photo 2. View of the existing agricultural building on the western study area that would be converted to cannabis curation/processing/packaging uses. Coastal Scrub is in the background on road fill for Highway 166.

Photo 3. The western study area, showing the existing agricultural building and grain field (right). The lower reaches of the Ephemeral Drainage are along the toe of the hill in the background.

Photo 4. View of the dry farmed grain crops in the Agricultural area on the west study area, looking west. Entrance driveway from Thompson Avenue separates agriculture from annual grassland. Mixed-light indoor cultivation and nursery greenhouses are proposed for this area.

Photo 5. View of the paved access road in the west study area looking southeast toward the existing agricultural building. The road and road shoulder are Ruderal (disturbed) and composed of patchy bare soils and weedy, non-native vegetation that are mowed.

Photo 6. Ephemeral Drainage in the southern part of the west study area, which is outside of the project impact area. Minor surface water was present during the May 2019 survey, but the drainage was dry at the time the July 2019 survey was conducted.

Photo 7. Overview photo from hillside in west study area overlooking Ruderal/Developed area with ranch materials storage. A patch of Coastal Scrub can be seen in the background on the road fill for Highway 166.

Photo 8. View of the Ephemeral Drainage taken in March 2020 at the crossing of the existing access road located within the west project area. This photo was taken after substantial late-season rains, and the drainage had a minimal amount of standing water only at the culvert and no evidence of flow.

Photo 9. View of Annual Grassland habitat in the proposed central cultivation area, taken in March 2020, showing weedy non-native species.

Photo 10. Additional view of Annual Grassland habitat at the central study area, looking southeast across the flat valley with Ephemeral Drainage (south branch) and existing access road.

Photo 11. View of the Ephemeral Swale in the middle of the proposed central cultivation area. The cannabis facilities would be located in a C-shape around this feature. No signs of flowing water were present in the bottom of the feature nor was there any change in vegetation from the surrounding hillsides.

Photo 12. Photo taken from within the proposed central cultivation area, with the Ephemeral Drainage (south branch) seen offsite in the distance. This area was in use for livestock grazing.

Photo 13. Overview of one of the Ponds onsite formed by an impoundment across the Ephemeral Drainage (north branch), located on the property but outside of the project impact areas. Photo taken in March 2020.

Photo 12. Northeasterly view in May 2019 of the seasonal pond created by an impoundment on the Ephemeral Drainage (north branch). Emergent wetland habitat is in the pond and grassland habitat is on the surrounding hills.

APPENDIX D

Special-status Biological Resources Summary

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Appendix D. Special-status Biological Resources Summary

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
PLANTS						
Cambria morning-glory	*Calystegia subacaulis* ssp. *episcopalis*	—	—	4.2	Perennial rhizomatous herb; chaparral, cismontane woodland, coastal prairie, and valley and foothill grassland usually on clay soils; 30-500 meters in elevation; blooms March to July.	**Not expected.** Potentially suitable soils and Annual Grassland habitat are present, but surveys during bloom period did not observe species in study area. Also, there are no records in CNDDB in the vicinity and the site is slightly outside of the species' local distribution.
Dune larkspur	*Delphinium parryi* ssp. *blochmaniae*	—	—	1B.2	Perennial herb; maritime chaparral and coastal dunes; 0-200 meters in elevation; blooms April to June.	**Not expected.** Site is outside of the local distribution of this species and the CNDDB record within 4 miles is imprecise and from more than 76 years ago.
Mesa horkelia	*Horkelia cuneata* var. *puberula*	—	—	1B.1	Perennial herb; chaparral, cismontane woodland, and coastal scrub on sandy or gravelly soils; 70- 810 meters in elevation; blooms February to September.	**Not expected.** A small amount of potentially suitable Coastal Scrub habitat is present, but suitable soils are absent and the site is slightly outside of the local distribution of the species.
Miles' milk-vetch	*Astragalus didymocarpus* var. *milesianus*	—	—	1B.2	Annual herb; coastal scrub habitats with clay soils; 20-90 meters in elevation; blooms March to June.	**Not expected.** Potentially suitable Coastal Scrub and clay soils are present, and the site is within the elevational range, but not observed during surveys. Coastal Scrub is limited to small area onsite and will not be affected by project. Only one record in the vicinity and it is from 1935.
Nipomo Mesa ceanothus	*Ceanothus impressus* var. *nipomensis*	—	—	1B.2	Perennial shrub; chaparral on sandy soil; 30-245 meters in elevation; blooms February to April.	**Not expected.** No suitable habitat or soils are present, and this species has a restricted range on the Nipomo Mesa with a few historic localities in the hills north of Pismo Beach. Not observed.

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Nipomo Mesa lupine	*Lupinus nipomensis*	E	E	1B.1	Annual herb; coastal dunes; 10-50 meters in elevation; blooms December to May.	**Not expected.** Species is restricted to coastal dunes, and the site is outside of the species' limited distribution and lacks suitable habitat. Not observed during surveys.
Pismo clarkia	*Clarkia speciosa* ssp. *immaculata*	E	R	1B.1	Annual herb; margins and openings of chaparral, cismontane woodland, and valley and foothill grassland in sandy soils; 25-185 meters in elevation; blooms May to July.	**Not expected.** The site is outside of the restricted distribution of the species and soils are unsuitable.
San Luis Obispo monardella	*Monardella undulata* ssp. *undulata*	—	—	1B.2	Perennial rhizomatous herb; coastal dunes and coastal scrub on sandy soils; 10-200 meters in elevation; blooms May to September.	**Not expected.** Species is restricted to coastal dune areas with sandy soils and the only record within 5 miles has an error in the locality.
Sand mesa manzanita	*Arctostaphylos rudis*	—	—	1B.2	Perennial shrub; maritime chaparral and coastal scrub habitats on sandy soils; 25-230 meters in elevation; blooms November to February.	**Not expected.** Species has been recorded on the Nipomo Mesa and the Santa Luis Range, but no sandy soils or manzanita species are present.
Santa Margarita manzanita	*Arctostaphylos pilosula* (=*A. wellsii*)	—	—	1B.2	Evergreen perennial shrub; occurs in closed-cone coniferous forests, broadleafed upland forest, cismontane woodland, and chaparral on shale, decomposed granite or sandstone; ranges from 170 to 1100 meters in elevation; blooms December to May.	**Not expected.** Species has been recorded on the Nipomo Mesa and the Santa Luis Range, but no suitable soils or manzanita species are present.
Southern curly-leaved monardella	*Monardella sinuata* ssp. *sinuata*	—	—	1B.2	Annual herb; chaparral, cismontane woodland, coastal dunes, and openings in coastal scrub on sandy soils; elevations below 300 meters; blooms May to September.	**Not expected.** No suitable habitat or soils are present, and the site is outside of the known distribution of the species. The record nearby is from 1895 and has an imprecise location.

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Straight awned spineflower	*Chorizanthe rectispina*	—	—	1B.3	Annual herb; openings in chaparral, cismontane woodland, coastal scrub on granite sand or disintegrating shale and tolerates disturbance; 85-1035 meters in elevation; blooms April to July.	**Not expected.** A small amount of Coastal Scrub is present on the edge of the study area, but suitable soils are absent and there is only one record nearby.

**E = Endangered; T = Threatened; R = Rare; '—' = no status; CRPR: Rank 1A - Presumed extirpated in California and either rare or extinct elsewhere; Rank 1B – Rare, threatened or endangered in California and elsewhere; Rank 2A – Presumed extirpated in California, but more common elsewhere; Rank 2B – Rare, threatened, or endangered in California, but more common elsewhere; Rank 3 - Plants needing more information, a review list; Rank 4 – Limited distribution, a watch list. Sources: California Natural Diversity Database (California Department of Fish and Wildlife 2020a); Special Vascular Plants, Bryophytes, and Lichens List (California Department of Fish and Wildlife 2020c); Inventory of Rare and Endangered Plants of California (California Native Plant Society 2020); Information on Wild California Plants for Conservation, Education, and Appreciation (Calflora 2020).*

SENSITIVE NATURAL COMMUNITIES	
Central Coast Riparian Scrub — State Rarity Rank S3	**Present.** A dense, shrubby streamside thicket dominated by any of several species of willows (*Salix* spp.) and has coyote brush (*Baccharis pilularis*) as a secondary component. Occurs on sand or gravel bars along rivers and streams with ground water close to the surface. Also occurs around dune slack ponds. Occurs in scattered patches along the Ephemeral Drainages in the study area, but is outside of the project footprint.
Coastal and Valley Freshwater Marsh — State Rarity Rank S2.1	**Present.** Occurs in permanently flooded sites with freshwater and lacking significant flow, dominated by perennial, emergent vegetation such as bulrushes (*Scirpus* sp. and *Schoenoplectus* sp.) and cattails (*Typha* sp.). Does not occur within the impact areas, but is present in at least one of the Ponds on the property.
Southern Vernal Pool — State Rarity Rank SNR	**Absent.** The study areas did not contain any topographic low areas that could support evidence of seasonal ponding in grassland habitat. No wetland or vernal pool indicator plants were observed in the proposed cultivation areas.
Valley Needlegrass Grassland — State Rarity Rank S3.1	**Absent.** No purple needlegrass (*Stipa pulchra*) was observed during the surveys, and the history of grain farming and grazing on the site has resulted in almost entirely non-native grassland species composition.

Sources: Preliminary Descriptions of the Terrestrial Natural Communities of California(Holland 1986); California Natural Community List (California Department of Fish and Wildlife 2020b); California Natural Diversity Database (California Department of Fish and Wildlife 2020a).

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
INVERTEBRATES						
Monarch butterfly	*Danaus plexippus* pop. 1	—	—	— (overwintering population)	Adults feed on the nectar of various blooming plants. During breeding can be found in fields, pastures, residential areas, grassland and scrub. Eggs are laid on and caterpillars feed on milkweed. Overwinters in wind-protected tree groves of eucalyptus, Monterey pine and cypress along the coast.	**Potential.** No groves of suitable trees occur in the study area that could be used as an overwintering site. Individuals could occur periodically while foraging.
Vernal pool fairy shrimp	*Branchinecta lynchi*	T	—	—	Grasslands with temporary ponded water. Inhabits small clear-water depressions in rock, vernal pools and swales, as well as anthropogenic habitats such as tire ruts, dozer scrapes and railroad pools. Needs standing water for at least 18 days to complete its lifecycle.	**Not expected.** No topographic depressions capable of holding seasonal water are present in the study area. Onsite drainages and ephemeral swale are not suitable as species does not occur in flowing water and swales do not support suitable hydroperiod for reproduction.
FISH						
Arroyo chub	*Gila orcuttii*	—	—	SSC	Native to rivers and streams of the Los Angeles plain, and widely introduced north to San Luis Obispo County. Tolerates wide fluctuations in temperature and dissolved oxygen, and most common in slow-flowing or backwater areas with sand or mud substrate.	**Not expected.** The streams onsite are too ephemeral to support fish. An introduced population has been recorded in the Santa Maria River, and introduced populations are not considered sensitive. Otherwise does not occur in this area.
South-central California coast DPS steelhead	*Oncorhynchus mykiss irideus* pop. 9	T	—	—	Adults spawn in freshwater streams with clear, well-oxygenated, cool water and clean gravel substrate. Also require instream cover (branches, logs) and streamside vegetation. Juveniles rear in freshwater reaches or lagoons before going to the ocean to mature, and then return to freshwater to reproduce.	**Not expected.** The streams onsite are too ephemeral to support this species. Additionally, this DPS occurs north of the Santa Maria River system and any steelhead in its tributaries would be Southern California steelhead.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Southern California DPS steelhead	*Oncorhynchus mykiss irideus* pop. 10	E	—	—	Adults spawn in freshwater streams with clear, well-oxygenated, cool water and clean gravel substrate. Also require instream cover (branches, logs) and streamside vegetation. Juveniles rear in freshwater reaches or lagoons before going to the ocean to mature, and then return to freshwater to reproduce.	**Not expected.** The streams onsite are too ephemeral to support this species. Known to occur in the Santa Maria River but would not occupy small tributaries such as those on the property.
AMPHIBIANS/REPTILES						
Arroyo toad	*Anaxyrus californicus*	E	—	SSC	River systems with sandy banks and terraces with riparian vegetation such as willow, sycamore, oak, and cottonwood. Breeds in shallow pools and margins of rivers and streams with sand or gravel substrate and clear, calm water. Constructs burrows or uses existing burrows in upland terraces, old flood channels and within riparian.	**Not expected.** Species is restricted to the mid-sections of river systems due to specific habitat requirements, and does not disperse far from floodplains. Would not occur in upland habitat onsite, and the drainages on the property are unsuitable.
Blainville's (=coast) horned lizard	*Phrynosoma blainvillii*	—	—	SSC	Grasslands, sandy washes, coastal scrub, chaparral, coniferous forest and woodlands with patches of open areas for sunning and bushes for cover. Often with loose sandy soils for burial, but also uses small mammal burrows. Preys on native species of ants and other small invertebrates.	**Potential.** Could occur around the more open margins of Annual Grassland, as well as in Coastal Scrub and along the Ephemeral Drainages. May also occur in Developed/Ruderal areas onsite. Has been recorded in the Santa Maria River in close proximity to the site but that is composed of sandy riverwash which is not present onsite.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
California red-legged frog	*Rana draytonii*	T	—	SSC	Forages and breeds in streams with deep slow-moving pools, stock ponds, reservoirs, springs, lagoons, and marshes; usually with emergent or riparian vegetation but also found at sites lacking vegetation. Uses riparian and various upland habitats in winter and for dispersal.	**Potential.** Recorded on or adjacent to the property in 2002. Several other records are 2 miles of the study area which is within the known dispersal distance of the species. Suitable aquatic habitat is present in the onsite Ponds in the Ephemeral Drainage, and a ranid frog was seen in one pond during the survey. Species could occur in any area of the drainages when water is present. Could occur in or move through upland areas during winter rain season or in late summer following metamorphosis.
California tiger salamander	*Ambystoma californiense*	E	T	WL	Grassland, low foothill oak savanna and edges of mixed woodland. Breeds in rain pools, vernal pools and temporary ponds. During dry season is fossorial and uses rodent burrows in upland habitat.	**Not expected.** The Santa Barbara County DPS is restricted to areas of the Orcutt Dune sheet and adjacent farmlands south of the Santa Maria River and west of the Sisquoc River. The steep escarpment along the Santa Maria River corridor would prevent dispersal north of the river. No vernal pools are present, and unlikely to occur in artificial impoundments on the drainage system.
Northern California legless lizard	*Anniella pulchra*	—	—	SSC	Beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, oak woodland, and stream terraces with riparian vegetation. Fossorial species requires moist, loose soils or leaf litter with plant cover or surface objects (rocks, boards, logs, etc.). Can occur in residential areas.	**Potential.** Numerous recorded occurrences are in the area surrounding the site. Loamy soils onsite could be suitable, but is unlikely to occur in Agricultural fields or Annual Grassland habitat as there is no shrub or tree cover. Could potentially occur in Riparian Scrub, in drainage corridors away from water and in the Developed/Ruderal areas where shrubs and cover objects are present. Not expected in cultivation areas.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Southwestern pond turtle (=western pond turtle)	*Actinemys pallida* (=*Emys marmorata*)	—	—	SSC	Ponds, lakes, rivers, streams, marshes, brackish lagoons, and irrigation ditches with a mosaic of vegetation and open areas for basking. Uses upland areas for nesting and in winter, including woodland, forest, grassland, chaparral, and grasslands.	**Potential.** Potentially suitable aquatic habitat is present in the Ponds, and could use upland habitats and drainage corridors for terrestrial movements. Has been recorded in the general area. Could nest in grassland areas along onsite drainage system and the central project site is within the distance they move for nesting from potential aquatic habitat.
Western spadefoot	*Spea hammondii*	— (under review)	—	SSC	Grassland, open woodland/savanna, coastal scrub, and chaparral habitats where it primarily occupies underground burrows that it digs in a variety of soils but often associated with sand. Breeds in vernal pools, ephemeral ponds, stock ponds and streams that dry to isolated pools which lack aquatic vertebrate predators.	**Potential.** This species is highly opportunistic, and breeds in stock ponds and instream pools with little to no flowing water. Known to occur throughout the lowland areas surrounding the study area, including in the Santa Maria River. The onsite Ponds and any temporary pools that could form in the Ephemeral Drainage system could be suitable breeding habitat. If present, could use upland habitat and construct burrows within impact areas.
BIRDS						
Bald eagle	*Haliaeetus leucocephalus*	—	E	FP	Open areas near water where they mainly feed on fish, and may also eat birds, amphibians, reptiles, small mammals, and crabs; nests in large mature trees such as ponderosa pine or occasionally on cliffs or the ground, within 1 mile of a large water source; occurs year-round in this area.	**Potential.** Several observations in eBird are from near the study area on Hwy. 166, and the site is open enough and surrounded by open country for foraging. No nesting habitat is present onsite.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Burrowing owl	*Athene cunicularia*	—	—	SSC (burrow sites & some wintering sites)	Open treeless areas with low sparse vegetation such as grasslands, deserts, pastures, agricultural fields, airports, and artificial embankments where they prey on small vertebrates and various invertebrates; nests in burrows created by other animals with nearby lookouts such as fence posts or shrubs. Formerly occurred year-round in this area, but now restricted to winter.	**Potential.** Suitable habitat for foraging is present, but no suitable burrows were observed in Annual Grassland habitat onsite. There are several records in eBird west and southwest of the site in the vicinity, but this species no longer nests in the region.
California horned lark	*Eremophila alpestris actia*	—	—	WL	Areas with sparse vegetation or bare ground in prairies, deserts, tundra, beaches, dunes, airports, plowed fields and heavily grazed pastures where they eat seeds and insects; nesting is on bare ground; occurs year-round in this area.	**Potential.** A record exists in eBird from the study area on Wineman Road (North). Could forage and nest within the Annual Grassland, Agricultural and Ruderal areas onsite.
Golden eagle	*Aquila chrysaetos*	—	—	FP, WL (nesting & wintering)	Uncommon resident of mountainous and valley-foothill areas. Foraging typically occurs in open terrain where they prey on small mammals. Nesting usually occurs on cliff ledges, and less commonly in large trees or on structures such as electrical towers.	**Potential.** Numerous records are in eBird surrounding the property. Suitable foraging habitat is present throughout Annual Grassland and Agriculture areas onsite, but no nesting habitat is present.
Grasshopper sparrow	*Ammodramus savannarum*	—	—	SSC	Grasslands, prairies, hayfields, and open pastures with little scrub cover and some bare ground where they prey on grasshoppers and other invertebrates. Nests on the ground at the base of clumps of grass within a large patch of tall grass. Occurs in this area during breeding season.	**Potential.** Has been recorded in eBird at the study area from Wineman Road (North). Could forage in any of the habitats onsite, and could nest within onsite grasslands.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Great blue heron	*Ardea herodias*	—	—	— (nesting colony)	Freshwater and saltwater marshes, also foraging in grasslands and agricultural fields. Nesting colonies are near lakes, ponds and wetlands bordered by forests. Nests are placed mainly in trees, but may also nest on the ground, in bushes or artificial structures. Occurs year-round in this area.	**Potential.** Individuals could forage periodically in Annual Grassland, Ponds and Agricultural areas onsite, but no nesting habitat is present. There are numerous records in eBird from near the site, but not likely to nest onsite due to lack of sufficient aquatic habitat.
Least Bell's vireo	*Vireo bellii pusillus*	E	E	WL	Riparian forest near permanent water or in dry river bottoms, with dense, low, shrubby vegetation where they forage on insects and spiders. Rare in this region during the breeding season and winters in southern Baja California.	**Unlikely.** This species was recorded in 2019 in close proximity to the site at a park in Santa Maria and historically occurred in the Santa Maria River (eBird). It is extremely rare this far north of the Santa Ynez River, and there is a very low possibility that it would occur onsite as a transient during migration. It is closely tied to dense riparian vegetation, and the Riparian Scrub onsite lacks sufficient structure to support nesting.
Loggerhead shrike	*Lanius ludovicianus*	—	—	SSC (nesting)	Open country with low vegetation and well-spaced shrubs or trees such as coastal scrub, grasslands, agricultural fields, pastures, riparian areas, desert scrub, savannas, prairies, golf courses, and along roadsides where they prey on insects, amphibians, reptiles and small mammals; nests in trees, shrubs, or brush piles; occurs in this area year-round.	**Potential.** Several observations in eBird are from near the study area. Could occur in any of the onsite habitat types for foraging and may nest in Riparian Scrub or ornamental trees in the Developed area. No nesting is present in grassland areas without suitable shrubs or trees.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Northern harrier	*Circus cyaneus*	—	—	SSC (nesting)	Large areas of wetlands and grasslands with low vegetation where they prey on small mammals, amphibians, reptiles and birds; nesting is in marshes, grazed meadows, and desert shrubland where they nest on the ground in a dense clump of vegetation such as willows, grasses, sedge, bulrushes or cattails; occurs year-round in this area.	**Potential.** There are several records from close proximity to the site. They could forage over the study area, and possibly nest in the grasslands away from human activities.
Prairie falcon	*Falco mexicanus*	—	—	WL (nesting)	Grasslands, desert shrubland, tundra, coastal scrub, feedlots, and agricultural fields where they feed on small mammals, insects and birds; nests on high cliff ledges, steep bluffs, trees, or on buildings or utility poles; occurs year-round in this area.	**Potential.** Suitable foraging habitat is present, but no nesting habitat occurs onsite. An individual has been recorded in eBird on the property.
Sharp-shinned hawk	*Accipiter striatus*	—	—	WL (nesting)	Forages along the edges of dense mixed woodlands and forests where they prey on birds; nests in dense forests with closed canopies in conifer trees; occurs in winter in this area.	**Unlikely.** No suitable woodland habitat is present on or adjacent to the property, but there are observations in the vicinity and could fly over the site. Would not nest onsite.
Tricolored blackbird	*Agelaius tricolor*	—	T	SSC (nesting colony)	Forages in a variety of habitats including pastures, agricultural fields, rice fields, and feedlots. Nests colonially in freshwater marshes with tules or cattails, or in other dense thickets of willow, thistle, blackberry, or wild rose in close proximity to open water. Occurs year-round in this area.	**Potential.** There are three records in eBird of this species near the study areas. Suitable foraging habitat is present in Annual Grassland and Developed/Ruderal habitats onsite. Could roost in cattails in onsite ponds but emergent wetland habitat may not be extensive enough to support a nesting colony.
White-tailed kite	*Elanus leucurus*	—	—	FP (nesting)	Savannas, open woodlands (oak or pine), riparian forest, marshes, desert grasslands, and fields where they prey on small mammals, birds, lizards, and insects. Nests and roosts in the edges of forests or in tall isolated trees. Occurs in this area year-round.	**Potential.** Suitable foraging habitat is present throughout all areas of the properties, but no large trees are present for nesting. Has been recorded in eBird at numerous locations in close proximity to the study areas.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Yellow warbler	*Setophaga petechia*	—	—	SSC	Wetland and riparian habitats with willows, cottonwoods, aspens, sycamores and alders where they eat insects; nesting is in shrubs or small trees; occurs year-round in this area.	**Unlikely.** This species has been recorded near the site, but the Riparian Scrub habitat onsite is patchy and has low probability to be suitable for foraging or nesting activities for this species.
MAMMALS						
American badger	*Taxidea taxus*	—	—	SSC	Open grasslands, fields and the edge of scrub and woodland habitats; requires dry loose soils for burrowing and shelter and feeds on a variety of small mammals such as California ground squirrel and pocket gopher.	**Potential.** Suitable grassland habitat onsite could be used for foraging, movement between other sites, and denning. No dens were seen during the surveys and potential prey were not observed. They have been recorded at various locations surrounding the study area, which abuts expansive suitable habitat.
Pallid bat	*Antrozous pallidus*	—	—	SSC	Open dry habitats including deserts, grasslands, shrublands, woodlands, and forests. Roosts in rocky outcrops, caves, crevasses, mines, hollow trees, and buildings that moderate temperature. Night roosts on porches and open buildings.	**Potential.** Could forage over the site and night roost in the building that would be converted to project uses. Has been recorded in the vicinity.

**E = Endangered; T = Threatened; C = Candidate; SSC = Species of Special Concern; FP = Fully Protected; WL = Watch List; '—' = no status; California Natural Diversity Database (California Department of Fish and Wildlife 2020a); Special Animals List (California Department of Fish and Wildlife 2019); California Wildlife Habitat Relationships System (CDFW 2020d); A Guide to the Amphibians and Reptiles of California (California Herps 2020); eBird (The Cornell Lab of Ornithology 2020a); All About Birds (The Cornell Lab of Ornithology 2020b); Guide to North American Birds (Audubon 2020).*

CRITICAL HABITAT	
South-central California coast DPS Steelhead	**Absent.** The nearest designated critical habitat is Los Berros Canyon on the opposite side of Temettate Ridge. The project sites are outside of the range of this DPS.
Southern California DPS Steelhead	**Absent.** The Santa Maria River is listed as critical habitat for this DPS, but the onsite Ephemeral Drainage System is too ephemeral to support this species and are not part of this designation.

Source: Threatened and Endangered Species Active Critical Habitat Report (United States Fish and Wildlife Service 2020b).