April 11, 2019

Krista Koenig From Start to Foundation San Luis Obispo Selects, LLC 3919 Huasna Road Arroyo Grande, CA 93420

Subject:

Biological Resources Assessment for Proposed Cannabis Cultivation at 3919 Huasna Road, Arroyo Grande, San Luis Obispo County, California

Dear Ms. Koenig:

Kevin Merk Associates, LLC (KMA) conducted a biological resources assessment for a proposed Cannabis cultivation project on a subset of a property located at 3919 Huasna Road east of Arroyo Grande in San Luis Obispo County, California. The property is approximately 56.5 acres in size; however, a study area was developed to cover the proposed project activities. The applicant provided the following project description:

"San Luis Obispo Selects, LLC (SLO Selects) proposes to conduct cannabis activities located at 3919 Huasna Road, Arroyo Grande, California 93420 (Project Site). The Assessor Parcel Number is 047-091-005. The Project Site is zoned Agriculture and is approximately 56.5 acres. The Project Site is approximately 2.45 miles northeast of the City of Arroyo Grande. Access to the Project Site will be provided by an improved existing access road off Huasna Road. The proposed land use includes three (3) acres of outdoor growing area, a total of 33,600 square feet of greenhouse/indoor growing functions, 4,800 square feet of drying/curing/processing areas, 8,200 square feet nursery area, 960 square feet for manufacturing, and a 960 square foot non-storefront dispensary for Cannabis. The number of average daily employees is 10, and during peak harvest seasons the total number of employees could reach 20. The seasonal employees would come to the site through an organized carpool program. The non-storefront dispensary would be operated by three (3) employees with one vehicle leaving the site around 8AM returning after 6PM. The non-retail storefront dispensary will not be open to the general public.

The following report provides the methods and results of the 2018 field survey, and includes a characterization of the study area's existing natural conditions and an evaluation of the potential for special status biological resources to be present within and adjacent to the proposed project area. For potentially significant impacts to biological resources, recommended mitigation measures are provided to avoid and/or minimize impacts and help facilitate the California Environmental Quality Act (CEQA) review process to be completed by the County of San Luis Obispo. The following provides the methods and results of the assessment.

METHODS

Prior to field work, KMA's Principal Biologist, Kevin Merk, conducted a review of available

background information including soil survey data acquired from the U.S. Department of Agriculture's (USDA) Web Soil Survey, historic aerial photographs obtained using Google Earth, and previous biological studies from the region. In addition, The USFWS's online Wetland and Critical Habitat Mappers (https://ecos.fws.gov/ecp/report/table/critical-habitat.html: https://www.fws.gov/wetlands/data/mapper.html) were reviewed to evaluate the extent of documented wetlands, drainage features and designated critical habitat defined in the immediate area.

The California Natural Diversity Database (CNDDB, 2019) was reviewed for documented special status resources within a five-mile radius of the property. The database was used to evaluate nearby documented occurrences of special-status plant and wildlife species, and natural plant communities of special concern to support presence/absence determinations. Special status species documented within the five-mile search radius were evaluated during analysis of the site's biological resources to determine if potentially suitable habitat was present and whether or not the particular species or plant community was present or had potential to be present within the study area.

Kevin Merk conducted a site survey on June 15 and July 3, 2018 to characterize vegetation types, conduct the floristic inventory, and assess potential impacts of the proposed project to on-site resources. The entire study area was walked to identify plant species and plant communities present. Existing plant communities were mapped on aerial photography obtained from ESRI (2018) and the USDA (2018). General wildlife observations were made during the site visits, including use of binoculars to identify bird species. Surveys were conducted during the day, and weather during the site visits was generally clear and warm with good visibility, with the presence of morning coastal fog. Please refer to the attached photo plate for further detail.

For the purpose of this report, special status natural communities are those listed in the CNDDB. Special status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS under the federal Endangered Species Act (ESA); those listed or proposed for listing as Rare, Threatened, or Endangered by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act (CESA); animals designated as "Species of Special Concern," "Fully Protected," or "Watch List" by the CDFW; and plants occurring on California Rare Plant Rank lists 1, 2, 3 and 4 developed by the CDFW working in concert with the California Native Plant Society. The specific code definitions are as follows:

- 1A = Plants presumed extinct in California;
- 1B.1 = Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- 1B.2 = Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened);
- 1B.3 = Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened or no current threats known);
- 2 = Rare, threatened or endangered in California, but more common elsewhere;
- 3 = Plants needing more information (most are species that are taxonomically unresolved; some species on this list meet the definitions of rarity under CNPS and CESA); and
- 4.2 = Plants of limited distribution (watch list), fairly endangered in California (20-80%)

occurrences threatened).

• 4.3= Plants of limited distribution (watch list), not very endangered in California.

The evaluation of special status animal species and identification of habitat that could support these species was based on our field observations to aid in the development of a habitat suitability analysis. The relatively small size of the site and limited habitat types present allowed for a thorough survey effort to be conducted. Our review of existing information and known occurrence records in the region coupled with our site-specific observations allowed us to make presence/absence determinations for special status species potentially occurring on-site.

RESULTS

The subject property is situated in the southeastern part of the USGS Arroyo Grande NE 7.5-minute topographic quadrangle map in the general Arroyo Grande Creek watershed (Tar Spring Creek subwatershed) and to the east of the town of Arroyo Grande in southern San Luis Obispo County. It is bounded by a pet food manufacturing plant to the northeast, and by agricultural and rural residential properties on all other sides. Huasna Road runs along the southern property boundary and provides access to the property.

The study area for the biological study was determined to be the extent of proposed Cannabis cultivation activities, and also included additional areas should the project site plan change. The study area is currently utilized for farming and ranching/equestrian activities and contains row crop agriculture, various outbuildings, a single-family residence and a barn. The site plan provided by Garing, Taylor & Associates, Inc. (dated 4/1/19) details the locations of site features and the proposed project elements.

The study area is composed primarily of disturbed/ruderal, annual (non-native) grassland, and agricultural habitats. Aerial photographs provided by Google Earth confirm that the property has been farmed since at least 1994 (the oldest available aerial photo is from September of 1994). During the on-site surveys it was apparent that historic and current agricultural activities have led to high occurrences of non-native weeds and the preclusion of many native plant species. The survey occurred during the Pismo clarkia (*Clarkia speciosa* ssp. *immaculata*) bloom period, and the surveys confirmed no Pismo clarkia was present. In addition, no special status wildlife were observed, and none are expected to occur in the project footprint given the regular cycle of disturbance associated with current farming and ranching activities.

Included as attachments to this report are site location maps (Figures 1 and 2), a habitat map (Figure 3), a soils map (Figure 4), and a map of all special status species occurrences recorded in the CNDDB within a five-mile radius of the site (Figure 5). Also included is a photo plate with representative pictures taken during the surveys; a list of all special status biological resources identified in the CNDDB within the five-mile search of the study area, and an evaluation as to their presence or absence from the site (Table 1); and a list of plants and animals observed during the surveys (Table 2).

Habitat Types

A mix of land uses and habitat types were present within the study area, and consisted of

agriculture, non-native annual grassland, oak woodland, riparian, riverine (stream course), and ruderal/developed. Please refer to the Habitat Map included as Figure 3. Habitat conditions observed onsite are discussed further below.

<u>Agriculture</u>

The primary land use on the property is row crop agriculture in the flat field proposed for the Cannabis cultivation project. Due to the high level of disturbance from historic plowing and soil disturbance, this area was composed of bare soils and crops. Generally, agricultural and rural developed areas provide marginal habitat for wildlife because the ongoing human disturbance disrupts breeding, and reduces the amount of available food. Active agriculture within the study area could supports birds and other wildlife adapted to rural and suburban settings, but otherwise, is not expected to support native wildlife. Common birds observed in these areas included Brewer's blackbird (Euphagus cyanocephalus), mourning dove (Zenaida macroura), and European starling (Sturnus vulgaris). The margins of agricultural fields with ruderal areas also provide habitat for small mammals such as the California ground squirrel (Spermophilus beecheyi) and Botta's pocket gopher (Thomomys bottae).

Non-Native Annual Grassland

Annual grassland habitat was observed on the hillside on the west side of the study area between the existing residence and farm field. Due to ranching and agricultural activities, a predominance of non-native species were observed in this habitat type including soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), wild oats (*Avena barbata*), black mustard (*Brassica nigra*), and Italian thistle (*Carduus pycnocephalus*).

California annual grasslands provide foraging and movement opportunities for many wildlife species. Given the regular human presence, the annual grassland habitat within the study area does not provide high quality breeding habitat similar to intact grasslands with no seasonal disturbance. Numerous invertebrate species (such as insects), many of which provide a food source for larger animals such as lizards, birds and some small mammals can also be found within grassland communities. A variety of birds rely on open expanses of grasslands for foraging habitat. Grasslands that are bordered by habitats containing trees are particularly important for raptors because the birds can use the large trees as nesting, roosting, and as observation points to locate potential prey within nearby grassland habitats.

Coast Live Oak Woodland

The site supports a stand of coast live oak (*Quercus agrifolia*) trees along the northeastern boundary of the study area. Observed trees were of varying age class and had both large stately single stemmed and multi-stemmed individuals. Very little understory was present due to agricultural influences, but in a few locations species such as poison oak (*Toxicodendron diversilobum*) were observed. Open areas supported coastal scrub species such as California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis*), and California coffeeberry (*Frangula californica*).

Oak savannah/woodland, in general, provides quality habitat for a large variety of wildlife species. Oaks provide nesting sites and cover for many species, as well as "hawking sights" for raptors and

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other bird species. They also contribute to woody debris to the duff in the woodland understory, which provides foraging areas for small mammals, reptiles, and amphibians. Acorns are also a food source for many animal species including scrub jay (Aphelocoma corulescens) and western gray squirrel (Sciurus griseus). Other species that could potentially occur in this habitat onsite include the great horned owl (Bubo virginianus), and the oak titmouse (Baeolophus inornatus).

<u>Riparian</u>

The riparian habitat observed onsite was associated with the small ephemeral drainage feature bisecting the study area from north to south. For the most part, the drainage feature supported only upland species due to its ephemeral nature. However, at the culvert of the existing ranch road crossing, a small patch of arroyo willow (*Salix lasiolepis*) and coast live oak were growing in the channel where water availability may be higher from seasonal flows being impounded for longer duration. Further upstream and downstream, the channel was composed of coastal scrub species with occasional oaks and a western sycamore (*Platanus racemosa*) further towards Huasna Road.

Developed/Ruderal

Developed/ruderal conditions are common in abandoned fields, along roadsides, in un-maintained areas adjacent to development, and areas that have been altered by construction, agriculture, landscaping, or other types of regular human activity that constrains plant growth. If vegetated, these areas are typically dominated by non-native annual grasses and herbaceous plants adapted to the regular cycle of disturbance from traffic and weed reduction practices such as mowing and herbicide application. Typical plants consist primarily of introduced species that exhibit clinging seeds, adhesive stems, and rough leaves that assist their invasion and colonization of disturbed lands, and landscape plants. This is not a native plant community, and is not described in the Manual of California Vegetation (2009) or in Holland's (1986) vegetation classification.

Plant species observed within and adjacent to developed areas of the site included weedy grasses, Italian thistle (*Carduus pycnocephalus*), bind weed (*Convolvulus arvensis*), and prickly sow thistle (*Sonchus asper*) to name a few. The developed/ruderal portions of the study area included the existing residence, driveways, out buildings, dirt roads and outdoor storage areas. These areas would typically attract common wildlife species adapted to human disturbance, and are not expected to provide significant habitat values for native species.

Hydrologic Features

The site is in the greater Arroyo Grande Creek watershed and Los Berros Canyon subwatershed. A small ephemeral drainage feature bisects the study area, and is an unnamed tributary to Tar Spring Creek further south of Huasna Road. No water was present in the drainage feature, but a defined bed and banks were observed. The majority of the drainage feature contained upland species similar to the surrounding coastal scrub or grassland habitats. As shown on Figure 3, the Habitat Map, an existing ranch road crosses the drainage feature, and several trees consisting of coast live oak and arroyo willow were present on the upstream and downstream sides of the culvert, which were mapped as riparian.

Given the presence of a defined bed and bank and connection to Arroyo Grande Creek via Tar Springs Creek, the feature is anticipated to be regulated by the U.S. Army Corps of Engineers

pursuant to Section 404 of the Clean Water Act as waters of the United States. In addition, the Regional Water Quality Control Board (RWQCB) and CDFW would also regulate this feature under the Clean Water Act Section 401 (RWQCB), Porter Cologne Water Quality Act (RWQCB) and California Fish and Game Code (CDFW). As currently proposed, the project will incorporate a 50 foot setback from the top of bank of the drainage feature and no impacts to the stream's bed or banks will occur. Therefore, no permits from the above referenced agencies would be required.

Soils

The Web Soil Survey (National Resources Conservation Service 2019) identified three soil types within the study area, all with generally loamy characteristics. The surface layer and descriptions of soil types are used in predicting suitability for certain plants, plant communities, and wildlife use. The following are the mapping units within the project site.

- Chamise channery loam, 9-15% slopes is present on the western side of the study area where the existing residence and equestrian facilities are located;
- Chamise channery loam, 15-30% slopes is mapped along the eastern study area boundary where the oak woodland was present on the north-facing hillside; and,
- Elder sandy loam, 2-5% slopes is the dominant soil map unit on the study area where active farming occurs;

The Chamise series is a well-drained soil with medium to rapid runoff and moderately slow permeability. Generally located on hills and dissected terraces at elevations of 100 to 1,500 feet and contains considerable shale fragments derived from siliceous and ashy shale sources. This soil is generally used for range land and growing small grains/hay.

The Elder series is a well-drained soil with low runoff and moderately rapid permeability. It is located on alluvial fans and flood plains, and formed in moderately coarse textured alluvium derived from sedimentary, granitic, and basic igneous rock sources. This soil supports a variety of uses including farming and urban development, and on the project site was actively farmed with row crops.

Please refer to the attached Soils Map (Figure 4) for further detail.

Special Status Biological Resources

The east Arroyo Grande area of southern San Luis Obispo County supports numerous special status, or rare, plant communities and species of plants and animals. The general region has been well documented for biological resources, but the coastal range east of the subject site contains rugged terrain and is remote compared to lowland coastal areas. While special status species have not been identified on-site, there are historic observations within five miles of the site. The CNDDB search conducted for this report identified fourteen special status plant species and eleven special status wildlife occurrences within five miles of the project site. Figure 5, included as an attachment, illustrates the documented occurrences of these resources within the five-mile search radius of the site.

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Table 1 contains a list of the special status biological resources including species of plants and animals, their listing status and habitat requirements documented within the search area. The only special status resource identified onsite is the unnamed tributary drainage to Tar Springs Creek. It supported a small patch of riparian habitat at the existing ranch road crossing, which would be considered a special status plant community given its proximity with the regulated stream course. No impacts to riparian habitat will occur from the project.

Special Status Plants

The CNDDB search identified fourteen special status plant species that are known to occur within the general project area (five-mile radius). The CNDDB identified one special status plant species as present within one mile of the project area, which is slender bush-mallow (*Malacothamnus gracilis*). This occurrence is mapped along Huasna Road for a stretch of approximately nine (9) miles. This linear occurrence is mapped at a dimension of approximately 600 feet wide (300 feet on both sides of the road); since the subject property is along Huasna Road, the occurrence buffer intersects the southern property boundary. The location details of this 1927 reported occurrence states: "Exact location unknown. Mapped by CNDDB as best guess non-specifically along the main road between Arroyo Grande and Huasna." While this is an indication the species could be present in the area, the study area was searched for this species, and no individuals were located. Therefore, this species is not expected to occur within the study area or be impacted by the proposed project.

Additional plant species not listed in the CNDDB search are included in the attached Table 1. The surveys occurred during June and July and covered the entire study area as well as a buffer that included the coastal scrub habitat on a slope outside the mapped study area. Habitat quality for these rare species within the study area is of low quality due to the historic farming and ranching activities. The agricultural field is regularly tilled thereby removing all plants native or non-native. The annual grassland area was also searched for species such as Pismo clarkia, and no special status plants were observed. Given the dense thatch and dominance of non-native species, it was concluded that rare plants would not be expected to occur in the annual grassland habitat. This was also the case for the ruderal/disturbed areas given the regular cycle of disturbance and lack of suitable habitat. Furthermore, the oak woodland area was also searched and it was disturbed from years of agricultural activities including storage of equipment and vegetation removal from the understory.

The surveys were conducted in June and July, and were floristic in nature, meaning all species observed were identified to a sufficient level to determine rarity. The survey effort covered the blooming periods of these plants, with the exception of San Luis Obispo owls clover (*Castilleja densiflora* ssp. *obispoensis*). Still this species is identifiable in June and July through skeletal remains. No remnants of an annual *Castilleja* were observed onsite, and thus it was concluded to not occur onsite. Given the project is proposed in existing cultivation areas, no special status plants are expected to occur in the project area or be affected by future site development. For more detailed analysis as to the habitat requirements and probability of occurrence onsite of all special status plants evaluated in this study, please refer to the attached Table 1.

Special Status Animals

The CNDDB search identified eleven special status animal species that are known to occur within

the general project area (five-mile radius). The CNDDB identified the following three special status animal species as present within one mile of the project area:

- Coast horned lizard (*Phrynosoma blainvillii*) mapped occurrence is approximately 0.7 mile to the northwest;
- Prairie falcon (Falco mexicanus) mapped occurrence consists of the entire Tar Spring Ridge quadrant; and
- Monarch CA overwintering population (Danaus plexippus) mapped occurrence consists of the entire Oceano quadrant.

The field work confirmed no suitable habitat is present within the proposed project footprint for the coast horned lizard, prairie falcon or monarch butterfly. Please refer to the attached Table 1 for further detail. A California red-legged frog (Rana draytonii; CRLF) occurrence was also reported approximately 1.5 miles northwest of the study area. Due to the highly ephemeral nature of the onsite drainage feature, the study area does not support suitable aquatic habitat for CRLF or any other aquatic species such as the western pond turtle (Emys marmorata). No suitable aquatic habitat was observed onsite, and as such, no aquatic special status species including species of fish, are expected to occur within the study area due to lack of suitable habitat.

A number of avian species are known from the general area and could potentially utilize the site as foraging habitat. While trees are present within the study area and along the perimeter of the site, the nesting habitat is not as high quality compared to surrounding areas away from agricultural uses. A number of birds protected by the Migratory Bird Treaty Act could utilize the site for foraging, but would be less likely to nest onsite due to the existing development and human presence in the area. Still, small songbirds could utilize the trees and shrubs onsite for nesting, but would likely only include those opportunistic species that are adapted to developed areas and increased human presence. The project area and surrounding areas do not appear to provide adequate nesting or foraging habitat for raptor species, and no large stick nests indicative of raptor nests were observed. Therefore, species such as Cooper's hawk (*Buteo cooperi*), red-tailed hawk (*Buteo jamaicensis*), and red-shouldered hawk (*Buteo lineatus*) would be expected primarily as transients across the site on their way to higher quality foraging and nesting grounds.

Bat species including western red bat (*Lasiurus blossevilli*), hoary bat (*Lasiurus cinereus*) and various species of *Myotis* are known to occur in the region and have the potential to forage over the site. While there were no sign of bats (i.e., guano piles under the structures in the study area) indicating a roost site was present, the study area contains suitable foraging habitat.

IMPACT ANALYSIS AND RECOMMENDED MITIGATION MEASURES

The proposed project is a continuation of agricultural activities on a rural property located at 3919 Huasna Road, east of Arroyo Grande in southern San Luis Obispo County. The proposed project elements as shown on the attached site plan dated April 1, 2019 are sited within disturbed, ruderal, and agricultural environments; therefore, negative impacts to onsite biological resources are not expected to occur. Field surveys in the summer 2018 covered all potential disturbance areas associated with the project as well as a buffer around the site, and confirmed these areas do not support special status plants. Oak woodland was observed along the study area boundary; however, no oak tree removal is proposed as part of the project, and direct impacts beyond tree

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trimming and potentially encroachment into the critical root zone of the trees within this habitat are not proposed or expected. Regardless, mitigation measures are outlined below to ensure proper steps are taken in the unlikely event that an oak trees(s) is impacted during implementation of the project.

No special status wildlife were identified, likely due to the regular disturbance from ongoing agricultural activities, consistent human presence, and overall lack of suitable habitat or significant prey base. The continued cultivation and construction of a greenhouse and other ancillary structures in the disturbed agricultural area is not expected to significantly increase the current level of wildlife disturbance. Based on the presence of oak woodland and a small patch of riparian habitat, a variety of nesting birds, including raptors, could be present. Roosting bats could also be present in onsite oak trees or in structures. However, due to the location of proposed cultivation areas, impacts to nesting birds and roosting bats are not expected to be significant with the incorporation of a pre-activity survey and buffering of any active nest site.

The following impact discussions and recommended mitigation measures are provided to reduce impacts to biological resources onsite resulting from continuation and expansion of agricultural activities.

Impact Bio-1. Project activities would impact agricultural, developed and ruderal habitats. This is anticipated to be a less than significant impact.

Maintaining agricultural areas and development of project elements including a site entry road and parking are proposed in disturbed habitats. These areas of the site have been impacted by ongoing human activities and are dominated by non-native plants. They are not considered sensitive plant communities by the CDFW unless they support special status plants or wildlife. Onsite surveys conducted on the property confirmed special status plants are not present in these areas and no signs of special status wildlife were observed. Therefore, any loss of the agriculture and ruderal habitats onsite would be considered less than significant pursuant to CEQA and mitigation would not be required to offset the impacts associated with project development.

Impact Bio-2. The proposed project includes impervious surfaces that could affect water quality in the onsite drainage feature as well as offsite. This is considered to be a potentially significant impact that can be reduced to less than significant with the incorporation of mitigation.

During construction disturbed soils could enter the stream channel, even with a 50 foot buffer, during the rainy season and cause sedimentation of downstream areas. The new greenhouse will also increase stormwater runoff that will need to be controlled and diverted away from the nearby drainage channel. Therefore, it is recommended that silt fencing and orange protection fencing (or high visibility staking) are placed along the eastern edge of the drainage channel to avoid and minimize sediment laden runoff from entering the channel, and from project personnel from encroaching into these areas. The silt fence and any other required erosion and sediment controls (i.e., straw wattles) deemed necessary by the project engineer should be installed per the manufacturers guidelines. Identification of the protected stream course should also be a component of an environmental awareness training so personnel can avoid and protect these areas during construction.

Temporarily disturbed areas onsite resulting from grading and construction activities should be stabilized with native vegetation at the end of the project, or as directed by the project engineer and the erosion and sediment control plan. The following native erosion control seed mix should be applied at an application rate of 25 pounds per acre to temporarily disturbed areas outside of any proposed landscaping zone:

- California brome (*Bromus carinatus*) 10 pounds per acre;
- Six weeks fescue (Vulpia microstachys) 10 pounds per acre; and
- Tomcat clover (Trifolium willdenovii) 5 pounds per acre.

The seed mix can be applied either by direct hand seeding or hydroseeding methods. Mulching with compost or another weed-free product could also be used in bare soil areas to prevent erosion into the channel. If hand seeding is employed, a light dusting (approximately one inch thick layer) of compost should be used to cover the seed.

Other important measures to protect water quality on the site include identifying specific areas for crews to wash equipment. Equipment washing should occur only in designated areas over 100 feet from the stream course where polluted water and materials can be contained. Best Management Practices (BMP's) for dust abatement should also be a component of the project's construction documents to minimize dust leaving the site and covering native vegetation.

Implementation of the above recommended measures would be sufficient to reduce project related impacts to water quality to a less than significant level. Should project plans change and direct impacts to the stream course be proposed, then additional analysis including a delineation of waters of the United States and State of California should be completed, as well as consultation with the U.S. Army Corps of Engineers, Regional Water Quality Control Board and CDFW.

Impact Bio-3. Constructing the new access road and associated parking may result in oak tree trimming and ground disturbance in the critical root system. This is considered to be a potentially significant impact that can be reduced to less than significant with the incorporation of mitigation.

Construction of a new all-weather fire access road and associated parking along the eastern study area boundary may necessitate oak tree trimming as well as possible encroachment into oak tree critical root zones (e.g., critical root zones are typically located within 1.5 times the distance of the outer dripline to the tree's trunk). While the plans do not propose oak tree removal, excessive trimming or damage to critical root zones could result in the loss of oak trees. In addition, it may be determined during construction that an oak tree may require removal, and in that case, standard County oak tree mitigation would be required.

Due to the potential for oak tree impacts, current County of San Luis Obispo oak tree mitigation guidelines shall be followed which includes the following:

- Per the County of San Luis Obispo, the loss of individual oak trees requires compensatory
 mitigation at a 4:1 replacement ratio (trees planted to trees removed) for each oak tree
 greater than or equal to six inches diameter at breast height (dbh);
- Replacement oaks should come from the general project area;

- Grading or any heavy machinery operation within 1.5 times the dripline (distance from the trunk to the outer most limits of leaves and branches) is also considered an impact to the affected tree, and may require mitigation at a reduced ratio of 2:1;
- Trees near proposed grading should be protected with orange temporary or chain link fencing surrounding the dripline or critical root zone of each oak tree or cluster of trees to minimize indirect impacts that could occur during construction; and
- Development in and around oak trees should avoid compaction of soils within the dripline
 of the trees, and should not direct supplemental irrigation or runoff to critical root zones
 during the dry season. Compaction of soils and irrigation during the dry season can lead to
 rapid decline of oak tree health.

As part of the overall effort to avoid impacts to oak trees, all work crews should attend an environmental awareness training about the importance of protecting oak trees on-site and the special measures in place to avoid and minimize impacts to oak trees. As stated above under Impact Bio-3, the training should identify the stream course and other important biological resources in the region. The County maintains specific language pertaining to the loss and protection of oak trees that should be followed and are incorporated into this report by reference. The information can be located online on the County's Planning and Development website.

Impact Bio 4: Project development could directly and indirectly impact wildlife such as nesting birds. This is a potentially significant impact that can be reduced to less than significant with the incorporation of mitigation.

Given the presence of suitable habitat, it was determined that the study area could support nesting birds on a seasonal basis in onsite trees and shrubs. Grading and earth disturbance activities have the potential to kill, injure or disrupt breeding activities of these species, and the following mitigation measures are provided to reduce project related impacts to a less than significant level.

Impacts to nesting birds and roosting bats. To minimize impacts to nesting bird species protected by the Migratory Bird Treaty Act and California Fish and Game Code, grading of the site should be limited to the time period between September 1 and February 14. If initial site disturbance cannot be conducted during this time period, a pre-construction survey for active bird nests within the limits of the project should be conducted by a qualified biologist.

- Surveys should be conducted two weeks prior to any construction activities proposed to occur between February 15 and August 31.
- If no active nests are located, ground disturbing activities can proceed.
- If active nests are located, then all construction work should be conducted outside a non-disturbance buffer zone to be developed based on the species (i.e., 50 feet for common species and upwards of 500 feet for raptors and special status species), slope aspect and surrounding vegetation.
- No direct disturbance to active nests should occur until the young are no longer reliant on the nest site as determined by a qualified biologist.
- The biologist should conduct monitoring of the nest until all young have fledged to inform construction personnel and the County when work can proceed in the setback area.

Implementation of the above recommended mitigation measures would be sufficient to reduce project related impacts to nesting birds as well as roosting bats to a less than significant level pursuant to CEQA.

CONCLUSION

The site supports two primary land use types: Agricultural and Ruderal/Developed. Native habitats observed onsite include Annual Grassland and a small amount of Oak Woodland and Riparian. These habitats are common to the region and are not in pristine condition due to regular disturbances. The proposed project would be sited in agricultural and disturbed areas of the site, and impacts to native habitat and species are not expected. The 2018 field work confirmed the impact areas do not support any special status plant or wildlife species. The on-site oak woodlands are an important natural resource that has special local regulatory status (i.e. tree removal requires review and approval from the County). Tree trimming or removal, if required, could impact nesting birds and potentially roosting bats, and a pre-activity survey is required to determine their presence or absence prior to any grading or earth disturbing activities.

The proposed project with the incorporation of the above-prescribed mitigation measures is not expected to result in significant unavoidable impacts to biological resources. A pre-activity survey to ensure nesting birds and roosting bats are avoided and an environmental awareness training for construction workers and employees will help the project avoid impacts to biological resources onsite and in the region. Given the results of the investigation and the implementation of the above mitigation measures, the project's contribution towards the regional loss of wildlife habitat and potential impacts to special status species is not considered to be a significant cumulative impact to biological resources pursuant to the California Environmental Quality Act.

REFERENCES

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Thank you for the opportunity to provide environmental consulting services for this project. If you have any questions regarding the information contained herein, please contact Kevin Merk at the phone number listed above or via email at kmerk@kevinmerkassociates.com.

Sincerely,

KEVIN MERK ASSOCIATES, LLC

Kevin B. Merk Principal Biologist

Attachments: Site Plan (4/1/19)

Photo Plate

Figure 1 – Site Location Map Figure 2 - Aerial Overview Map

Figure 3 – Habitat Map Figure 4 – Soils Map

Figure 5 - CNDDB Occurrence Map

Table 1 - Special Status Biological Resources Occurrence Information

Table 2 - Species Observed Table

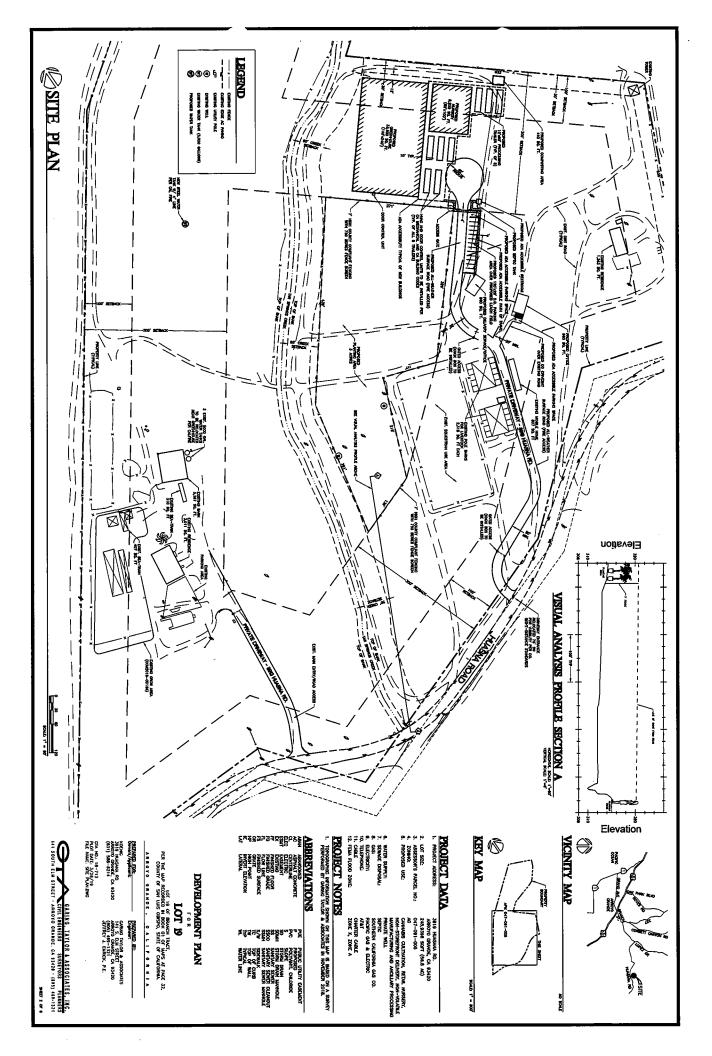




Photo Plate

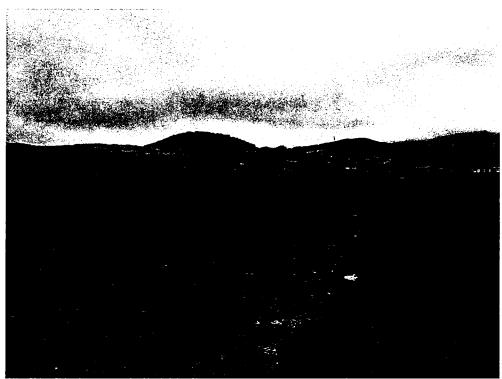


Photo 1. View from Huasna Road looking northerly across the existing farm field proposed for Cannabis cultivation. Structures and corrals can be seen to the right.



Photo 2. Overview of the proposed project area showing farmed row crops, ruderal developed areas and disturbed annual grassland in the foreground near the homesite.



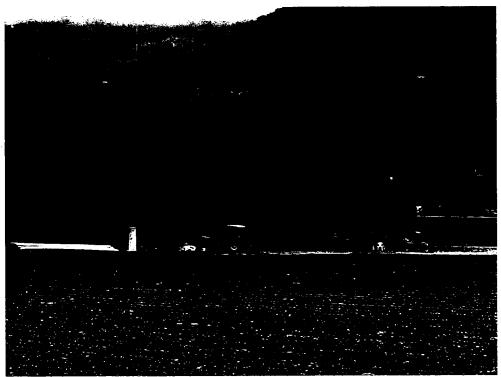


Photo 3. View of oak woodland on east side of study area with disturbed understory due to agricultural activities.



Photo 4. Westerly view of existing ranch road leading from homesite to the agricultural field. Non-native grassland occurs on heavier loamy soils not suitable for species such as Pismo clarkia.





Photo 5. Southerly view of equestrian area near homesite on the hill to the west of the proposed Cannabis cultivation area.

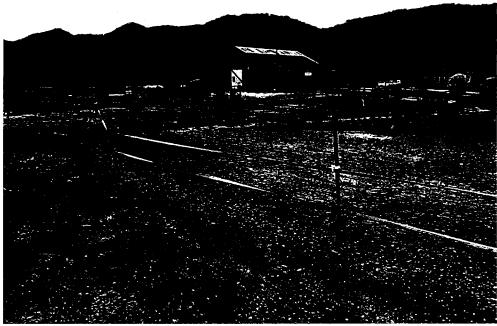


Photo 6. Northeasterly view of equestrian facilities, barn and homesite located on hill to the west of the farm field proposed for Cannabis cultivation.

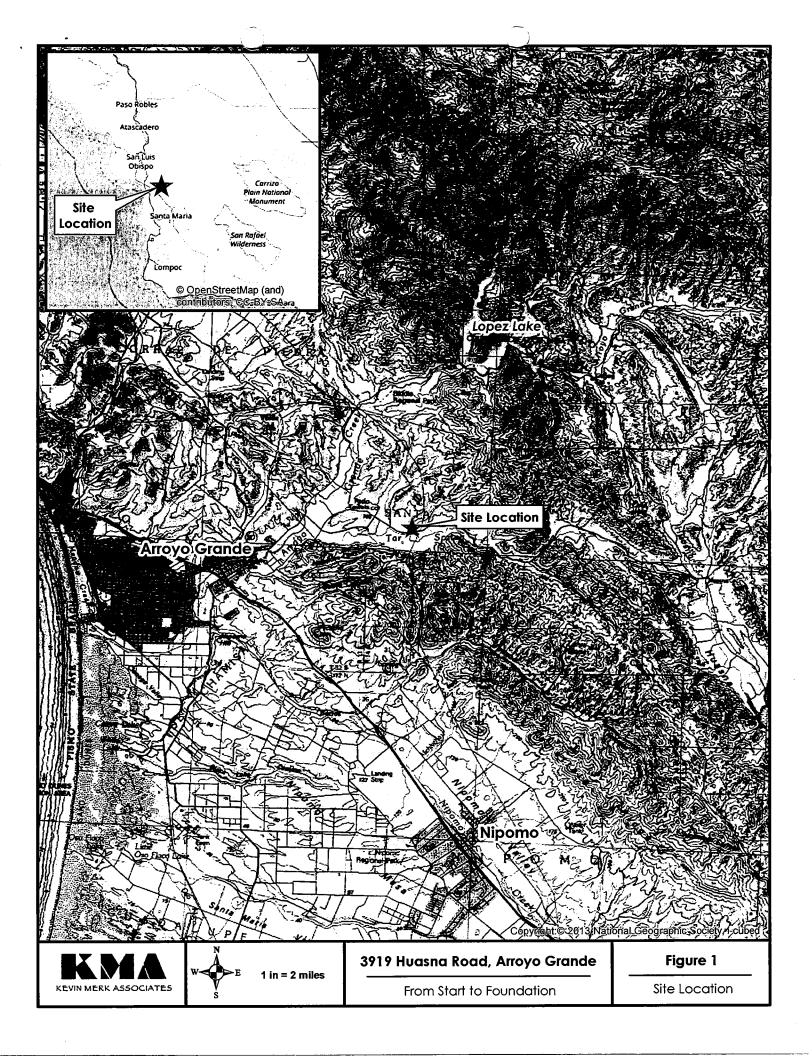


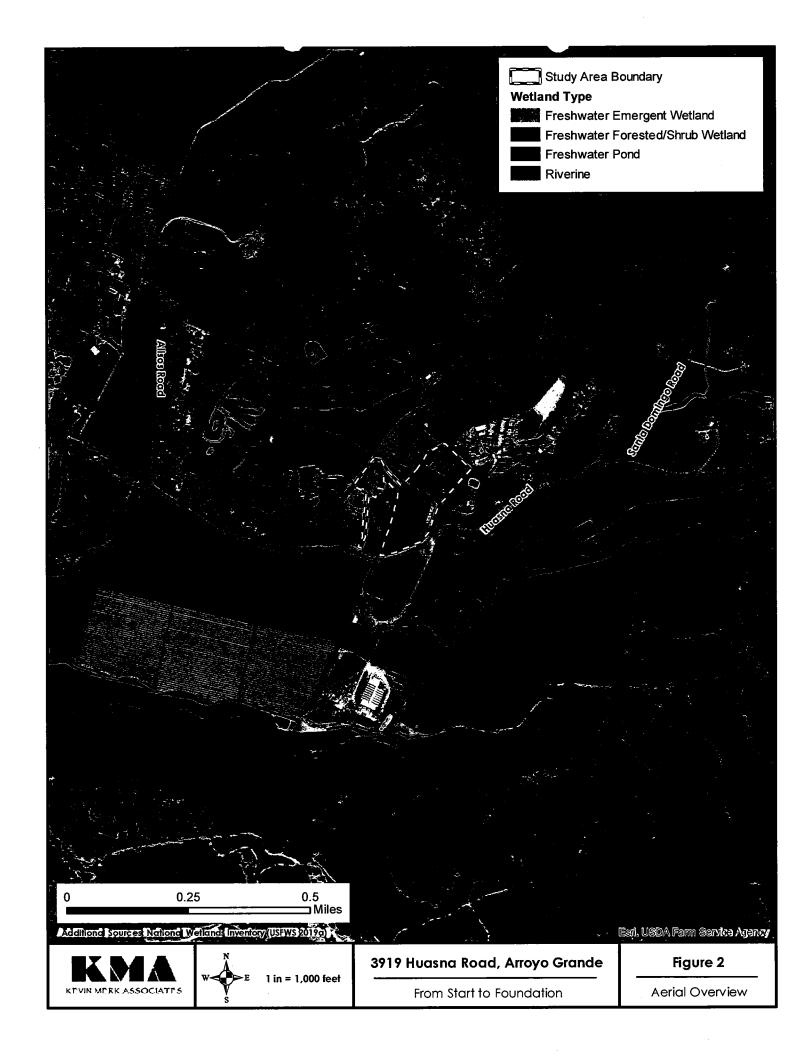


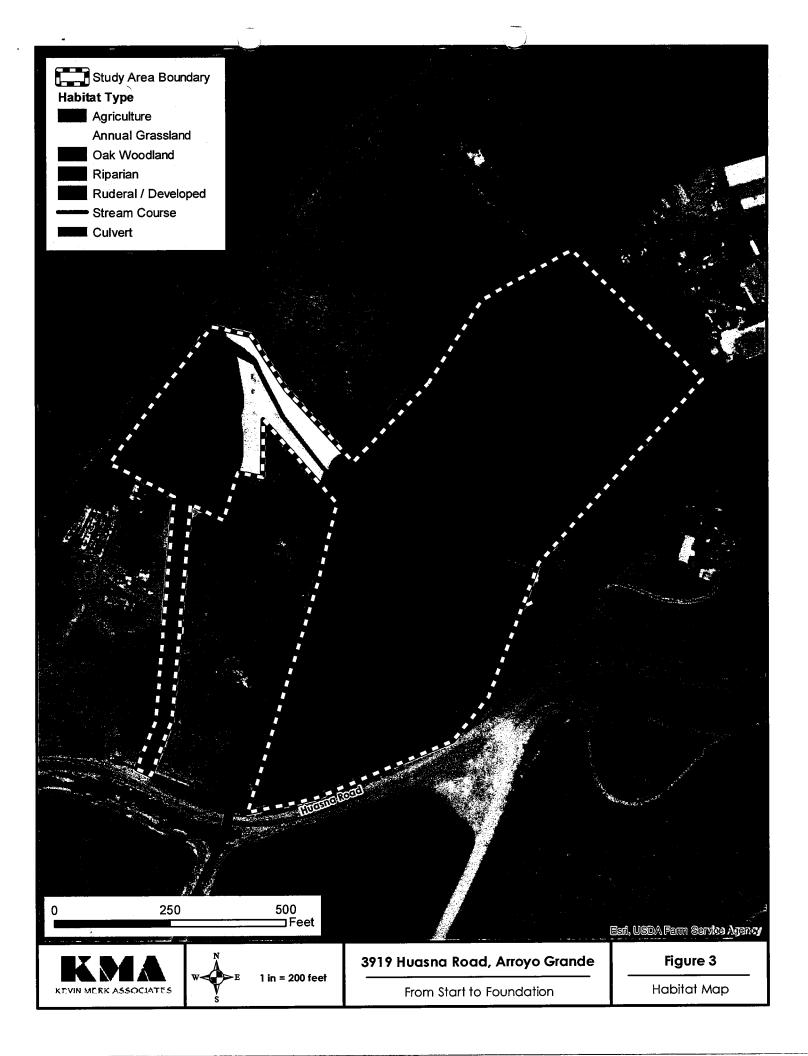
Photo 7. Small ephemeral drainage feature runs alongside the farm field. No standing water, potential pools or wetland habitats were present capable of supporting aquatic species.

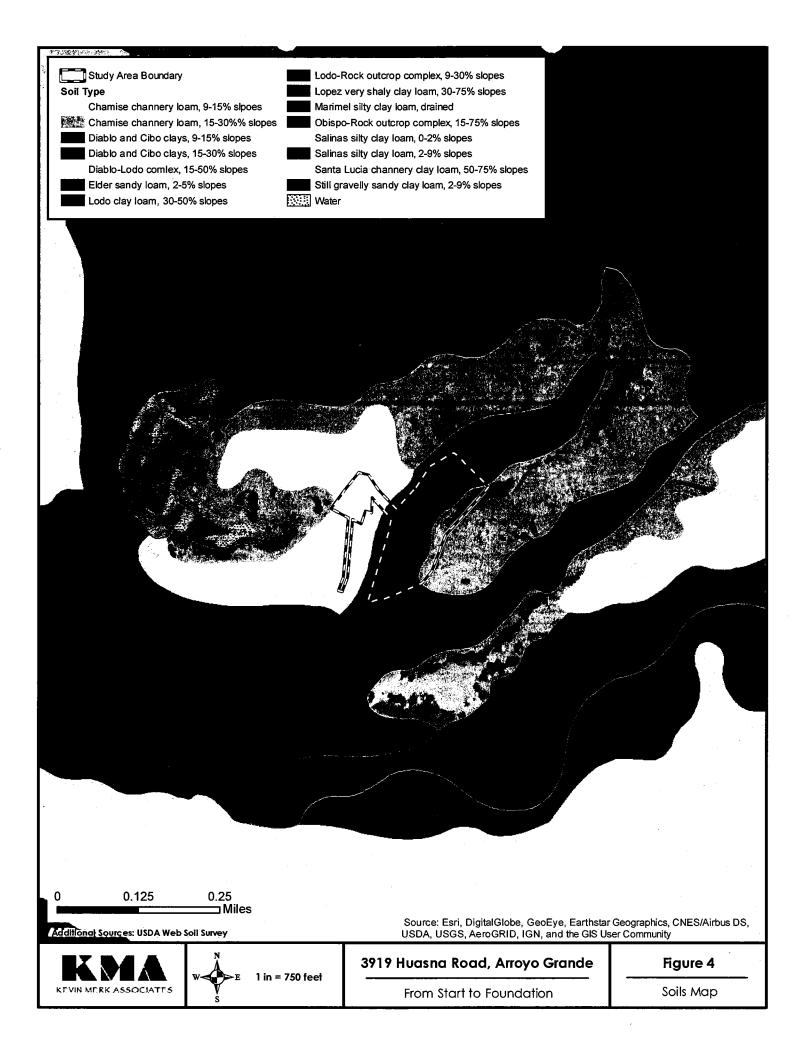


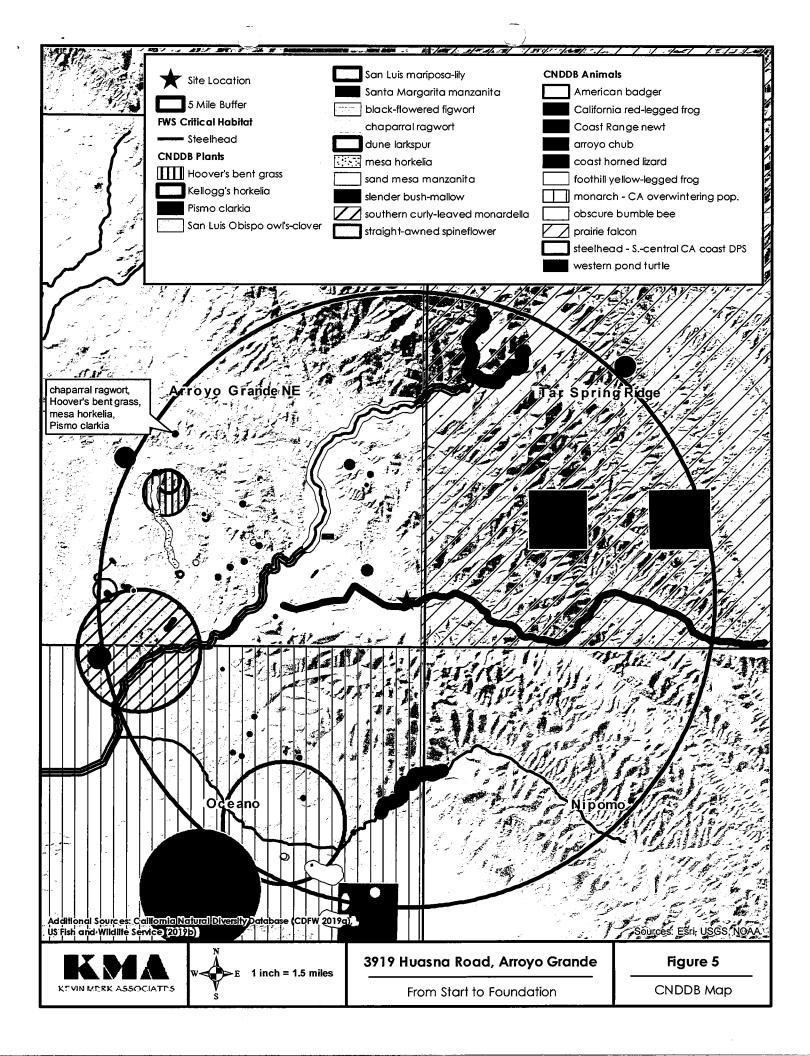
Photo 8. Additional view of farm field and small drainage feature to the right. Patch of trees in the distance are located at the small road crossing and were mapped as riparian.













Species	Status* Fed/CA/CDFW	Habitat Requirements	Probability of Occurrence / Project Site Suitability / Observations
		PLANTS	
Black-flowered figwort Scrophularia atrata	//18.2	Perennial herb; blooms April through July; ranges from 10 to 500 meters in elevation; occurs in closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, and riparian scrub habitats, typically on sandy or diatomaceous shale soils.	Not expected. No suitable chaparral, dunes, coastal scrub, or coniferous forest habitat present and not observed during site survey when it would have been in flower and easily identifiable. Not expected to occur within study area or be affected by the project.
Chaparral ragwort Senecio aphanactis	//18.2	Annual herb; blooms January to May; ranges from 15 to 800 meters in elevation and occurs in chaparral, cismontane woodland, and coastal scrub; can occur in alkaline soils.	Not expected. No suitable chaparral, cismontane woodland or coastal scrub habitat present and not observed during site survey. Not expected to occur within study area or be affected by the project.
Dune larkspur Delphinium parryi ssp. blochmaniae	//18.2	Perennial herb; blooms April to June; ranges from 0 to 200 meters in elevation and occurs in maritime chaparral and in coastal dunes.	Not expected. No suitable chaparral habitat observed onsite and not observed during site survey when it would have been in flower and easily identifiable. Not expected to occur within study area or be affected by the project.
Hoover's bent grass Agrostis hooveri	//18.2	Stoloniferous, perennial herb; blooms April to July; occurs between 60 and 600 meters on sandy soils in chaparral, cismontane woodland, and valley and foothill grassland habitats.	Not expected. Suitable grassland, coastal scrub and oak woodland habitats present onsite. Not observed during surveys when it would have been in flower and easily identifiable. Not expected to occur within study area or be affected by the project.
Kellogg's horkelia Horkelia cuneata ssp. sericea	//18.1	Perennial herb; blooms April to September; ranges from 10 to 200 meters on sandy/gravelly openings in closed cone coniferous forest, maritime chaparral, coast dunes, and coastal scrub.	Not expected. No suitable chaparral, dunes, coastal scrub, or coniferous forest habitat present and not observed during site survey when it would have been in flower and easily identifiable. Not expected to occur within study area or be affected by the project.



Species	Status* Fed/CA/CDFW	Habitat Requirements	Probability of Occurrence / Project Site Suitability / Observations
Mesa horkelia Horkelia cuneata ssp. puberula	//18.1	Sandy or gravelly sites in chaparral, open fields, old dunes, blooms February to July, 70 to 700 meter elevation range.	Not expected. No chaparral or old dune habitats present onsite. Not observed during surveys when it would have been in flower and identifiable. Not expected to occur within study area or be affected by the project.
Pismo clarkia Clarkia speciosa ssp. immaculata	E/R/1B.1	Annual herb; blooms May through July; ranges from 25 to 185 meters in elevation and occurs in sandy soils in chaparral (margins, openings), cismontane woodland, and valley and foothill grassland.	Not expected. All grassland and oak woodland habitats were searched and species was not observed when it would have been in flower and identifiable. Reference sites in Arroyo Grande area were visited to confirm species was in flower and identifiable at the time the survey was conducted. Not expected to occur within study area or be affected by the project.
San Luis mariposa-lily Calochortus obispoensis	//18.2	Bulbiferous, perennial herb; blooms May to July; ranges from 75 to 730 meters in elevation on sandstone, serpentine and/or sandy soils in chaparral, coastal scrub and valley and foothill grassland; endemic to San Luis Obispo County.	Not expected. No suitable habitat present due to lack of rocky serpentine soils. Not observed during surveys during the blooming period, not expected to occur within study area or be affected by the project.
San Luis Obispo owl's clover Castilleja densiflora ssp. obispoensis	//18.2	Annual herb; blooms in April; ranges from 10 to 400 meters in elevation and occurs in meadows, seeps, and valley and foothill grassland.	Unlikely. Surveys occurred in June and July, which is late in the bloom period for this species. Grassland area was searched and no dried remains of any annual Castilleja were observed. Occurrence of this species onsite is unlikely based on dominance of non-native species and dense thatch within the annual grassland habitat and years of agricultural and equestrian activities onsite. Would not be impacted by proposed project occurring in disturbed agricultural areas.
Sand mesa manzanita Arctostaphylos rudis	//18.2	Perennial evergreen shrub; blooms November to February; ranges from 25-300 meters in elevation on sandy soils in maritime chaparral and coastal scrub.	Not expected. No chaparral or coastal scrub habitats present in study area. Coastal scrub habitat in the area was searched and no manzanita shrubs observed. This perennial shrub is easily identified and was not observed during site survey. Not expected to occur within study area or be affected by the project.



Species	Status* Fed/CA/CDFW	Habitat Requirements	Probability of Occurrence / Project Site Suitability / Observations
Slender bush-mallow Malacothamnus gracilis	//18.1	Perennial shrub; open chaparral in foothill woodland; 250 – 830 meters in elevation; blooms May – October.	Not expected. Site is outside the elevational range for this species, and this perennial shrub would have been easily visible if present. Not observed during surveys. Not expected to occur within study area or be affected by the project.
Southern curly-leaved monardella Monardella undulata	//4.2	Annual herb; blooms May through September; occurs on dunes and sandy soils in coastal strand, chaparral, northern coastal scrub, coastal sage scrub, at elevations below 300 meters.	Not expected. Marginal habitat is present in coastal scrub habitat on sandy soils adjacent to study area. Not observed during surveys within the blooming period. Not expected to occur within study area or be affected by the project.
Santa Margarita manzanita Arctostaphylos pilosula	//18.2	Perennial shrub; blooms December to March; occurs in closed cone coniferous forests, cismontane woodland, and chaparral, typically on shale outcrops/soils in San Luis Obispo and Monterey counties; ranges from 170 to 1100 meters in elevation.	Not expected. No chaparral or coastal scrub habitats present onsite. Species is easily identified and was not observed during site surveys. Not expected to occur within study area or be affected by the project.
Straight-awned spineflower Chorizanthe rectispina	//18.3	Annual herb; blooms May through July; occurs in chaparral, cismontane woodland, and coastal scrub habitats, ranging in elevation from 200 to 1035 meters; has even been found in vineyards and other frequently disturbed areas. Found in granite sand or disintegrating shale.	Not expected. Marginal habitat present onsite, but species generally occurs at higher elevations and on decomposed granite type soils that are not present onsite. Not observed during surveys. Not expected to occur within study area or be affected by the project.
		INVERTEBRATES	
Obscure bumble bee Bombus caliginosus	/ SA /	The Pacific coast south to central California, restricted to fog belt in southern portion of range.	Not expected. Site may be on the edge of fog belt conditions suitable for the species. Not expected to occur within study area or be affected by the project.
Monarch butterfly Danaus plexippus	/SA/	Wind-protected tree groves of eucalyptus, Monterey pine and cypress with nectar and water sources nearby.	Not expected. No groves of eucalyptus present that would provide suitable autumnal or overwintering habitat onsite. Not expected to occur within study area or be affected by the project.

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Species	Status*	Habitat Requirements	Probability of Occurrence / Project Site Suitability / Observations
		FISH	
Steelhead – South/Central California ESU Oncorhynchus mykiss irideus	T/SSC/	Fresh water, fast flowing, highly oxygenated, clear, cool stream where riffles tend to predominate pools.	Not expected. No suitable aquatic habitat is present in or adjacent to the study area. The small drainage feature is highly ephemeral in nature. Nearest suitable habitat is in Arroyo Grande Creek, approximately 2 miles to the west.
Arroyo chub Gila orcutti	/SSC/	Native to streams and rivers of the Los Angeles plain, and introduced to coastal streams north to Chorro Creek in San Luis Obispo County. Found in slow flowing or backwater areas with sand or mud substrates.	Not expected. No suitable aquatic habitat is present in or adjacent to the study area.
		AMPHIBIANS/REPTILES	
California red-legged frog Rana draytonii	T/SSC/	Lowland and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Not expected. No suitable aquatic habitat is present in or adjacent to the study area. The small drainage feature bisecting study area is highly ephemeral in nature and does not contain any pools suitable for this species.
Coast horned lizard Phrynosoma coronatum (frontale population)	/SSC/	Frequents a wide variety of habitat including grasslands, coastal scrub and woodlands. Open areas for sunning and bushes for cover. Loose soils for burial.	Unlikely. Small areas of suitable habitat for this species exist along the fringes of the agricultural footprint and slopes with coastal scrub habitat that are outside the study area and project footprint. Not observed during surveys and considered unlikely due to small habitat area and project is in disturbed agricultural areas.
Coast Range newt Taricha torosa torosa	/88C/	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitat and breeds in ponds, reservoirs and slow moving streams.	Unlikely. Small drainage feature is highly ephemeral in nature and does not contain any pools suitable for this species. Species is not expected to occur in the farming footprint, but could potentially be present further upstream in the drainage feature outside the study area. Would not be impacted by the proposed project.

From Start to Foundation



Species	Status* Fed/CA/CDFW	Habitat Requirements	Probability of Occurrence / Project Site Suitability / Observations
Foothill yellow-legged frog Rana boylii	/28C/	Rocky streams/rivers and sunny banks in forest, woodland and chaparral habitats. Can also occur in backwaters and in deep, shaded pools typically in mountainous terrain at higher elevations.	Not expected. No suitable mountain streams with rocky/cobbly pools are present for this species onsite. Yellow-legged frog is not known to occur in this area, and CNDDB occurrence from Arroyo Grande Creek is from 1940, and is thought to have been extirpated. Regardless, no suitable habitat present onsite for this species, and no direct impacts to the drainage are proposed.
Silvery legless lizard Anniella pulchra pulchra	/SSC/	Coastal dune, coastal scrub and oak woodland habitat types with loose friable, sandy soils typically covered by leaf litter. Fossorial species prefer soils with higher moisture content.	Unlikely. The sandy soils near the drainage feature and around oak trees could provide potentially suitable habitat. These elements provide the loose friable soils and moisture that this species prefers. Disturbed nature of the study area from farming is not expected to support this species, especially from the proposed project footprint in the flat agricultural field. Could potentially be present in coastal scrub and oak woodland areas along the outer margins of the study area outside the proposed development footprint, and would not be impacted by the project.
Two-striped gartersnake Thamnophis hammondii	/SSC/	Aquatic garter snake known to occur in freshwater creeks in coastal areas.	Not expected. No suitable aquatic habitat present onsite. Small drainage feature is highly ephemeral and does not contain suitable habitat for this species.
Western pond turtle Emys marmorata	/33C/	Permanent or nearly permanent water bodies in many habitats. Basking sites such as partially submerged logs, vegetation mats, or open mud banks.	Not expected. No suitable aquatic habitat is present onsite. Not expected to occur within study area or be affected by the project.



Species	Status* Fed/CA/CDFW	Habitat Requirements	Probability of Occurrence / Project Site Suitability / Observations
		BIRDS	
Prairie falcon Falco mexicanus	/WL/ (nesting)	Catches prey in air and in open ground in grasslands. Nests in cliffs overlooking large areas.	Not expected. No suitable nesting habitat present onsite. Could potentially occur as a seasonal transient flying over or foraging on the site, but not expected to nest in the project area.
		MAMMALS	
American badger Taxidea taxus	/SSC/	Friable soils and open, uncultivated ground. Preys on burrowing rodents.	Unlikely. No potential den sites observed in the study area, and given regular human presence and active farming and equestrian activities, this species is not expected to den onsite. No suitable prey base observed during survey, but this highly mobile species is known to occur in the region, and could potentially travel through the site.
		CRITICAL HABITAT AREAS	
Steelhead - Sou	Steelhead – South/Central California ESU Critical Habitat		Not present onsite. Arroyo Grande Creek, 2 miles to the west, is designated as Critical Habitat for the species.
*C = Chalenasses T = Three of	Spilone D. Carolla de	*E = Endowmend: T = Thundened: D = Dan OE = Oundidate for Endowmend Status SSO = Outline Status I to SA	Company ED = Eilli Burdandi III = 14/26th I into CA

*E = Endangered; T = Threatened; R = Rare CE = Candidate for Endangered Status; SSC = California Special Concern; FP = Fully Protected; WL = Watch List; SA — Special Animal; '—' = no status; California Rare Plant Rank 1B — Rare, threatened, or endangered in California and elsewhere; CRPR 2 — Rare, threatened or endangered in California, but more common elsewhere; CRPR 4 — Limited distribution (Watch List). Source: California Natural Diversity Database (California Department of Fish and Wildlife 2019); California Native Plant Society Online Inventory of Rare Plants, accessed April 2016 (online at www.cnps.org); Special Animals List (California Department of Fish and Wildlife 2019); Special Vascular Plants, Bryophytes, and Lichens List (California Department of Fish and Wildlife 2019).



Table 2 - List of Plants and Animals Observed Onsite

Scientific Name*	Common Name
1	Plants
Amsinckia intermedia	Common fiddleneck
Anagallis arvensis*	Scarlet pimpernel
Anthriscus caucalis*	Bur chervil
Artemisia californica	California sage
Avena barbata*	Slender wild oats
Baccharis pilularis	Coyote brush
Brassica nigra*	Black mustard
Bromus diandrus*	Ripgut brome
Bromus hordeacous*	Soft chess
Bromus madritensis ssp. rubens*	Red brome
Calystegia macrostegia ssp. cyclostegia	Coast morning glory
Carduus pycnocephalus*	Italian thistle
Chenopodium album*	Goosefoot
Clarkia purpurea	Winecups
Claytonia perfoliata	Miner's lettuce
Conium maculatum*	Poison hemlock
Convolvulus arvensis*	Field bindweed
Dichelostemma pulchra	Blue dicks
Elymus glaucus	Western wild rye
Erodium botrys*	Filaree
Erodium cicutarium*	Red-stemmed filaree
Eschscholzia californica	California poppy
Festuca perennis*	Italian rye grass
Filago (=Logfia) gallica*	Narrowleaf cottonrose
Galium aparine	Bedstraw
Gastridium ventricosum*	Nit grass
Heteromeles arbutifolia	Toyon
Hirschfeldia incana*	Summer mustard
Hypochaeris glabra*	Smooth cat's ear
Lactuca serriola*	Wild lettuce
Lupinus bicolor	Miniature lupine
Lupinus nanus	Sky lupine
Marrubium vulgare*	Horehound
Diplacus (=Mimulus) aurantiacus	Monkeyflower
Plantago lanceolata*	English plantain
Quercus agrifolia	Coast live oak
Rhamnus (=Frangula) californica	Coffeeberry
Rubus ursinus	California blackberry
Salix lasiolepis	Arroyo willow
Scrophularia californica	California figwort
Silene gallica	Catchfly
Silybum marinum*	Milk thistle
Solanum americanum	White nightshade
Sonchus asper*	Prickly sow thistle
Toxicodendron diversilobum	Poison oak
	Tomcat clover



Scientific Name*	Common Name
Vulpia myuros*	Rattail fescue
Aniı	mals
Buteo jamaicensis	Red-tailed hawk (fly over)
Callipepla californica	California quail
Calypte anna	Anna's hummingbird
Canis latrans	Coyote (scat)
Cathartes aura	Turkey vulture (fly over)
Euphagus cyanocephalus	Brewer's blackbird
Melanerpes formicivorus	Acorn woodpecker
Odocoileus hemionus	Black-tailed deer (scat)
Sayornis nigricans	Black phoebe
Sceloporus occidentalis	Western fence lizard
Sturnus vulgaris*	European starling
Thomomys bottae	Botta's pocket gopher
Zenaida macroura	Mourning dove
Zonotrichia leucophorys	White crowned sparrow

^{*}Asterisk identifies non-native species.

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