

BIOLOGICAL RESOURCES SURVEY REPORT

Estrella Ranch
5165 Estrella Road
APN: 015-021-023
Paso Robles, CA 93446
Application for Minor Use Permit
Cannabis Outdoor Cultivation

Prepared for:

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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 visit(s) associated with this report.

W. Holland

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EXECUTIVE SUMMARY

An approximate 3-acre area on a 40-acre Estrella Ranch parcel (APN 015-021-023) is being proposed for an outdoor *Cannabis* cultivation project by the Estrella Ranch Partners, LLC. The approximate 83-acre site is located at 5165 Estrella Road, Paso Robles, CA 93446, which is along the west side of Estrella Road. It is approximately 1.5 miles north of Highway 46, 1.9 miles northwest of the Estrella Road/Highway 46 intersection, 9.1 miles northeast of the Highway 101/46 intersection in Paso Robles, and 8.8 miles west of Shandon. The proposed five outdoor *Cannabis* cultivation project sites will be located in repurposed, highly disturbed open areas, horse areas, roping areas, and exercise areas.

V. L. Holland conducted biological surveys of the outdoor Cannabis cultivation site and surrounding areas on October 16 and November 14, 2019. The purpose of these surveys was to carefully examine the existing flora, vegetation, wildlife, and biological habitats on and around the project site with special attention given to the presence or potential presence of special-status species and habitats. During the analysis of the site, the entire proposed sites for the outdoor Cannabis cultivation project and the areas surrounding them were carefully examined for target special-status species and habitats known to occur in the Estrella and eight surrounding 7.5 minute/24,000 feet scale quadrangles.

The five outdoor cultivation sites are highly disturbed and covered by ruderal vegetation consisting of weed, introduced species mixed with bare areas. The surrounding area is highly disturbed and developed. These areas are covered by bare areas with a few scattered patches of weedy plants while surrounding areas have buildings, driveways, parking areas, and landscape plants. There are a few widely scattered *Quercus agrifolia* (coast live oaks), *Quercus douglasii* (blue oak), and *Quercus lobata* (valley oaks) in the pasture and developed areas around the proposed cultivation sites. Several ornamental and fruit trees also occur on the site. These disturbed areas have highly degraded wildlife and plant habitats that support only weedy plants and wildlife that can tolerate human disturbances such as California ground squirrels and Botta's gophers.

The natural vegetation on the undeveloped portion of the 40-acre parcel is composed of a mosaic of coastal valley grassland (California annual grassland) with a few scattered oaks and foothill (oak) woodland (mostly on the hillsides). Neither of these plant communities occur on the proposed outdoor Cannabis cultivation site, and neither of them will be affected by the proposed project;

No special status wildlife species or signs of any were observed in areas near the outdoor Cannabis cultivation site building. However, some special-status species such as the American badger and California kit fox could potentially be found in some of the undeveloped portions of the Estrella Ranch. Also, birds of prey such as the golden eagle, bald eagle, and ferruginous hawk could potentially fly over the site or visit areas around the site as rare transients. Because the area around the cultivation site building is regularly disturbed, none of these birds would nest or forage on the site.

No special status plant species or signs of any were observed in areas near the outdoor Cannabis cultivation sites, and none are expected to occur in these disturbed areas. It is possible, although unlikely, that some special status plant species could occur somewhere on the 40-acre parcel. None of these habitats will be disturbed or affected by the proposed cultivation project.

No bird or other wildlife nests were found anywhere near the proposed outdoor Cannabis cultivation project sites. The proposed project will be confined to areas within the repurposed highly disturbed horse arena, roping area, and exercise area and will not disturb or have any impacts to nesting birds or other wildlife species on the Estrella Ranch.

INTRODUCTION AND PROJECT DESCRIPTION

A small 3-acre portion of the 40-acre parcel (APN 015-021-023) of the Estrella Ranch owned by the Estrella Ranch Partners, LLC is being proposed for an outdoor *Cannabis* cultivation project. The approximate 83-acre site is located at 5165 Estrella Road, Paso Robles, CA 93446. It is approximately 1.5 miles north of Highway 46, 1.9 miles northwest of the Estrella Road/Highway 46 intersection, 9.1 miles northeast of the Highway 101/46 intersection in Paso Robles, and 8.8 miles west of Shandon (Figures 1). The longitude and latitude of the proposed outdoor Cannabis cultivation area is approximately 35°40'34.07" N; 120°31'51.23"W.

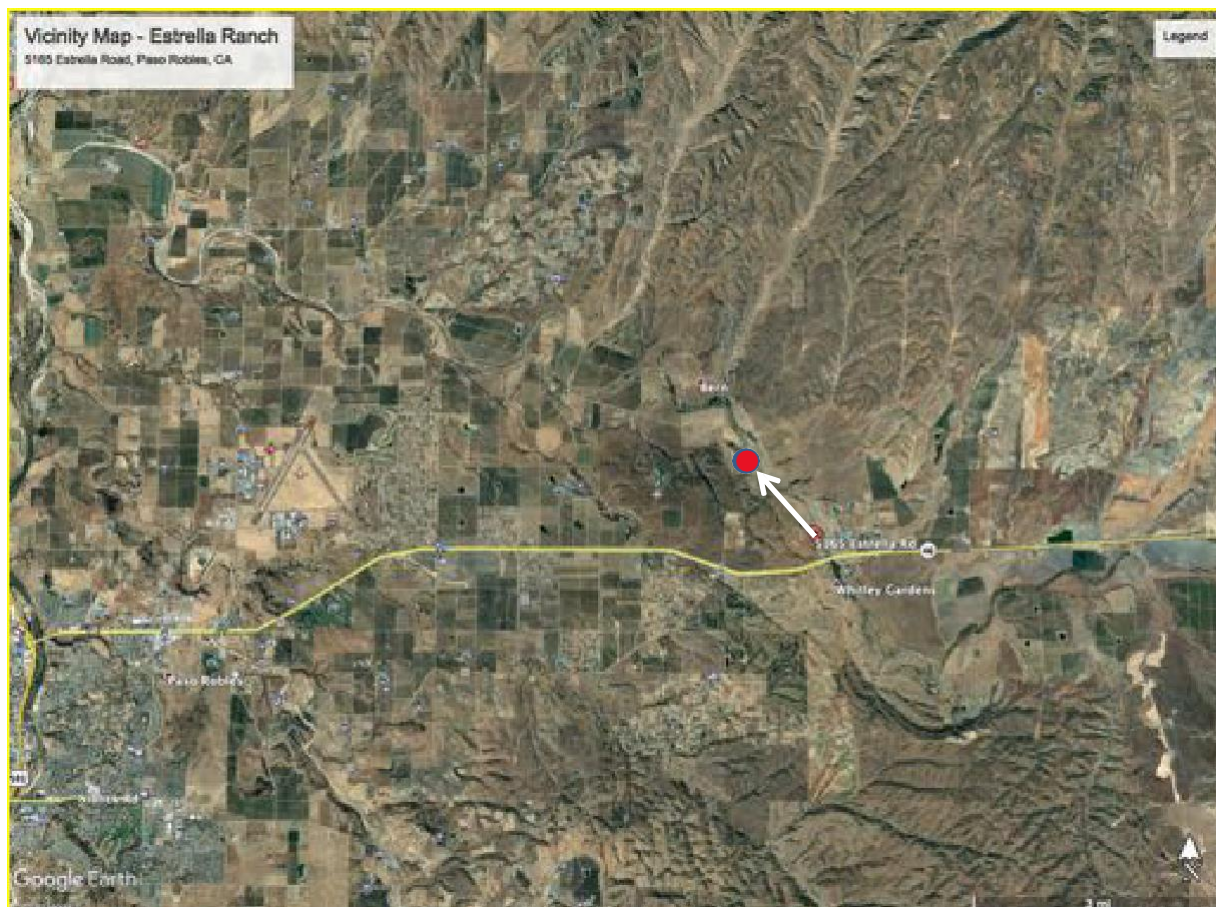


Figure 1. Location of the 40-acre Estrella Ranch parcel (red dot) in which the 3-acre outdoor Cannabis cultivation sites are being proposed.



Figure 2. Location of the 40-acre Estrella Ranch parcel on the Estrella Ranch on which the 3-acre outdoor Cannabis cultivation sites are being proposed. The cultivation sites, which are in blue, are located in a repurposed a horse arena and roping and exercise areas.

The proposed 3-acre outdoor cannabis cultivation project will occur on five sites and in two separate phases. Phase 1 with a total area of 1.10-acres will include two outdoor cannabis cultivation areas. Area #1 (0.75-acres) and Area #2 (0.35 acres). Phase 2, which is approximately 1.9 acres, will also include three areas: Area 3 (0.25-acres), Area 4 (0.4-acres), and Area 5 (1.25 acres). Figures 2-3 show the locations of all the proposed outdoor cultivation sites.

All five outdoor cultivation sites in Phase 1 and Phase 2 are located in highly disturbed areas that were used previous for overflow trailer parking, agriculture, and various uses by horses. The ground is highly disturbed and covered by patches of barren soil with a few introduced, annual, weedy grasses and forbs. No native vegetation was found on these sites and only a few native, weedy species were found.

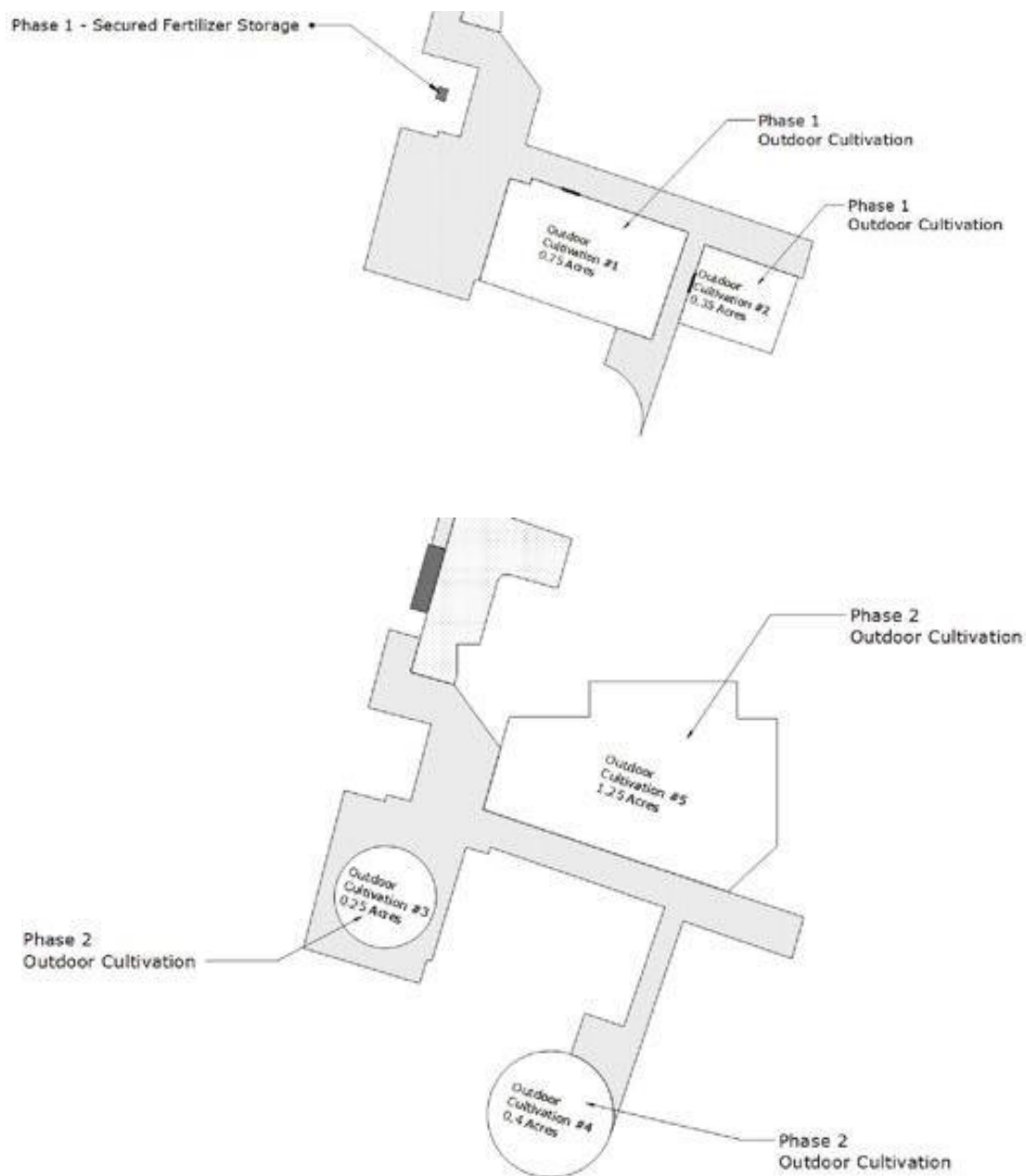


Figure 3. Locations of the proposed five outdoor Cannabis cultivation areas in Phase 1 (top) and Phase 2 (bottom).

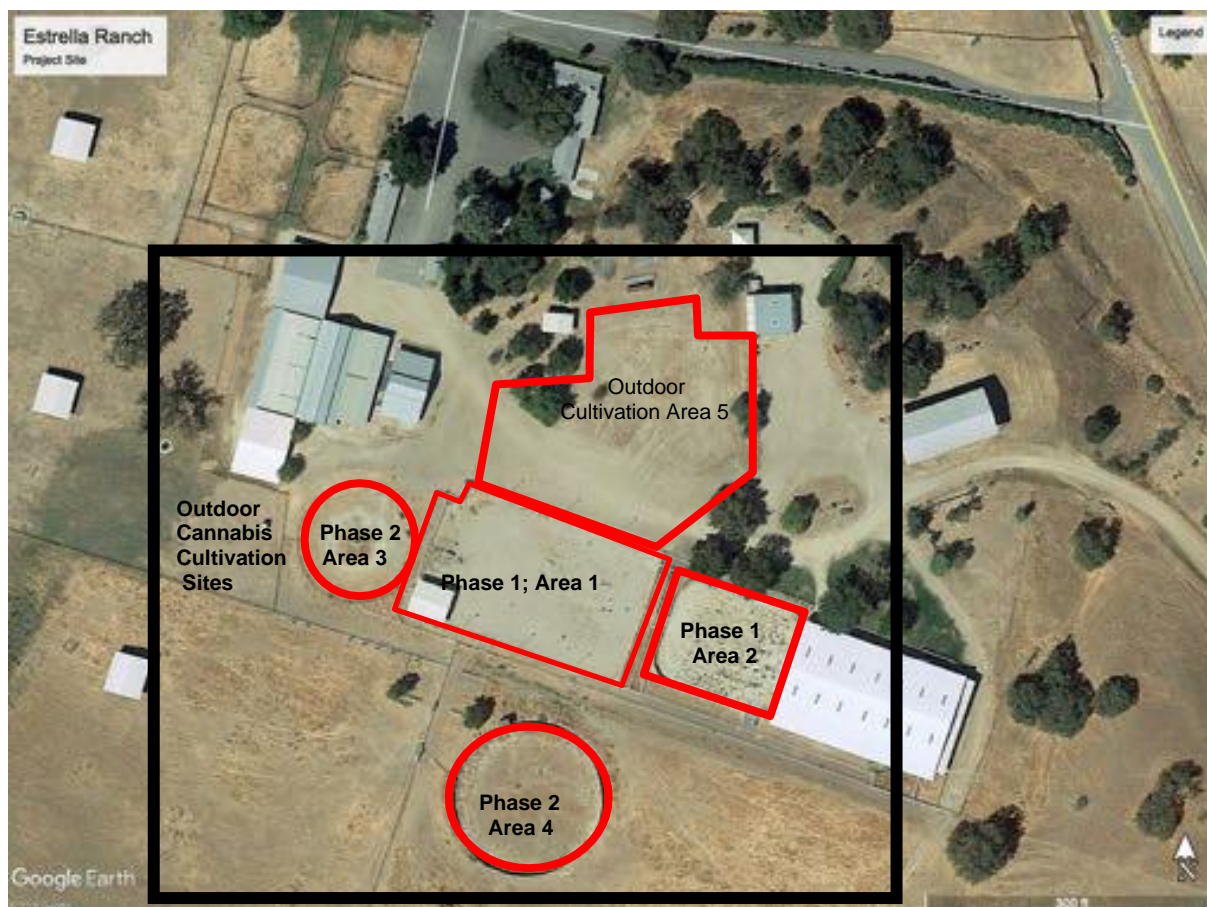


Figure 4. Location the four outdoor Cannabis cultivation sites, which are all are located in repurposed horse areas, roping areas, and exercise areas. All are highly disturbed and covered by bare areas with patches of varies weedy plant species.

The Estrella Ranch is a secure, isolated facility and is only accessible via a private security access gate and existing paved driveway. The site sits approximately 1000 feet above Estrella Road on a plateau surrounded by existing grassland with scattered oak trees. The entire ranch perimeter is fenced, and there are no neighbors nearby. The four outdoor cultivation areas will be fenced and fully enclosed with lockable gates as per Section 22.40.050.D.6.

This outdoor cannabis cultivation project has been designed to have the least possible impact on the environment and local community. The applicant also proposes that drying, curing, processing and other cannabis activities occur at another licensed location, which will reduce the overall footprint for the project both in terms of the areas of disturbance and employee activity. Activated carbon filter technology will be to prevent odors from being detected offsite.

Parking will be restricted to areas outside the secure perimeter to prevent unauthorized access to the site. Each room with cannabis, cannabis waste, cannabis storage, records, or security equipment will be secured using entry locks, and surveillance cameras will be installed that comply with local and state requirements. Exterior lighting will be comprised of a combination of constant and motion-sensor security lighting. All exterior lighting will be dark-skies compliant and will adhere to all applicable regulations. The facility will not be open to the public, and pick-ups and deliveries will be carefully scheduled to avoid overcrowding.

Outdoor cultivation will occur within temporary hoop houses constructed using a 20ft PVC pipe bent to create an arch approximately 8ft tall. A single PVC pipe will run along the peak of the arch for support.

The Wallace Group will update the Water Use Evaluation and prepare a detailed water management plan for the 3-acre outdoor cannabis cultivation sites and buildings. The project sits within the Paso Robles groundwater basin and in an area of severe decline; therefore, a 2:1 water offset will be administered to protect the groundwater, which will be used for irrigation of the cannabis crops.

PURPOSE OF BIOLOGICAL RESOURCES STUDY

The purpose of this study is to characterize the biological resources on the approximate 3-acre proposed outdoor Cannabis cultivation sites as described previously (Figures 2-4; Photos 1-9). There will be no disturbances as a result of this project to any other areas on the ranch outside the cultivation site (Figures 2-4). This report provides technical information that evaluates the proposed project in sufficient detail to assess the potential effects of the project on the biological resources, especially on the presence or potential presence of rare and endangered species and/or sensitive habitats.

During our analysis of the site, we carefully searched the entire 3-acre site for biological resources, sensitive habitats, and/or special status species known to occur in the Estrella and eight surrounding quadrangles (Tables 7-11 in Appendices 1-2). We also examined the areas immediately around the cultivation sites, all of which have been highly disturbed by human and agricultural usage and support only widely scattered weedy plants. The grasslands adjacent to the cultivation site have been grazed and are covered almost entirely by introduced, annual grasses and forbs typical of rangelands in the area. There are a few scattered valley oaks, coast live oaks, and blue oaks on the grounds around the buildings and patches of foothill (oak) woodland on the hillsides on ranch well away from the cultivation sites (Figures 1-4; Photos 1-9). None of these area will be disturbed as a result of this project.

The cultivation sites and adjacent areas are highly disturbed and are largely barren except for a few widely scattered weedy plants (Photos 8-9); therefore, no biological impacts will occur in these areas. No areas of riparian vegetation or wetlands occur within the vicinity of the proposed cultivation sites. The Estrella River, which is not on the Estrella Ranch, is east of Estrella Road and over 1,000 feet east of the cultivation sites.

EXISTING CONDITIONS, LOCATION, AND PHYSICAL FEATURES

Location and Physical Features

The cultivation sites are located on relatively flat ground at an elevation of approximately 880 feet above sea level. The topography of the 40-acre parcel on which the cultivation sites are located is slightly sloping to hilly and has an elevation range of approximately 850 to 900 feet above sea level. The grounds around the cultivation sites have been highly disturbed by construction of several buildings, parking areas, driveways, and landscaping. A few widely scattered native coast live oaks, blue oaks, valley oaks, and sycamores occur in the disturbed areas around the buildings; however, none of these will be disturbed or impacted by the proposed project. Mixed with the oaks and sycamores are several ornamental and fruit trees as well as other landscape plants. Just west of the cultivation sites is rangeland covered by coastal valley grassland with widely scattered oaks. This area will not be affected by the proposed cultivation project.

Soils

According to the USDA Web Soil Survey, the area on and around the outdoor Cannabis cultivation sites are composed of two soil complexes: (1) the Arbuckle-San Ysidro complex and (2) the Arbuckle-Positas complex (Figure 4; Table 1). The Arbuckle-San Ysidro complex consists of moderate to well drained fine sandy loam to sandy loam soils. It is generally relatively deep, has slow to medium runoff, and has slow permeability. It typically occurs on low terraces and alluvium from sedimentary and metamorphic rocks and can occur on a range of slopes from 0 to 75%. On and around the cultivation sites this soil type is found on 2-15% slopes. The Arbuckle-San Ysidro complex is found in areas with a mean annual precipitation of approximately 10-20 inches and the mean annual air temperature of about 59-67 degrees F. It is usually moist between depths of 2 and 26 inches during the rainy winter season from late November or early December to May. They are dry the rest of the year. This soil type is defined taxonomically as loamy, mixed, superactive, smectic, thermic Typic Haploxeralfs-Palexerolls.

The Arbuckle-Positas complex is very similar to the Arbuckle-San Ysidro complex in most soil features. It has a sandy to gravelly loam texture, is deep to very deep, is moderately well drained and has medium to high runoff with slow permeability. The mean annual soil temperature is about 58 degrees to 66 degrees F. Arbuckle-Positas complex soils are usually moist in some or all parts at depths of 2 and 20 inches from late November or early December to May and dry the rest of the year.

They are typically found on alluvium from sedimentary and mixed rock sources on low terraces. The mean annual precipitation is about 10-20 inches and the mean annual air temperature is about 59-65 degrees F. They are defined taxonomically as loamy-gravelly, mixed, superactive, smectic, thermic Typic Haploxeralfs- Mollic Palexerolls

The natural vegetation on the soil types that characterize most of the Estrella Ranch is composed of grasslands with scattered oaks. The climate provides adequate rainfall and soil moisture to support widely spaced trees; however, denser tree growth can occur on the moister hillsides. Blue oaks, valley oaks, and coast live oaks are the most common trees on the surrounding grasslands and hillsides, and a few are scattered on the developed portion of the ranch. No vernal pools or wetland areas were found on the subject parcel.

Climate

The general climate is classified as Warm-Summer Mediterranean using the Köppen-Trewartha system (Trewartha and Horn 1983). Mild, cool winters and hot, dry summers characterize this climate type. Winter high temperatures average approximately 60-64°F and average low temperatures are 32-37°F. Winter lows below 32°F may occur from mid-November through mid-February. Summer high temperatures average approximately 86-91°F, and average low temperatures are 49-53°F. Summer highs above 90°F are common. Temperature lows can reach from 10 to 15 °F in the winter, and highs can reach up to 115 °F in the summer. Precipitation falls as rain, primarily from October through April, and averages approximately 15 inches per year. Less than one inch of precipitation is typically recorded from May 1 to September 30. Snow is rare.

FLORISTIC, VEGETATION, AND WILDLIFE INVENTORY

Methods

V. L. Holland conducted biological surveys of the outdoor Cannabis cultivation sites on October 16 and November 14, 2019. Dr. Mike McGovern examined the wildlife and conducted a kit fox survey on November 14, 2019. The purpose of these surveys was to carefully examine the existing flora, vegetation, wildlife, and biological habitats on and around the proposed outdoor Cannabis cultivation project sites with special attention given to the presence or potential presence of special-status species and habitats. During the analysis of the site, the entire proposed sites for the outdoor Cannabis cultivation project were carefully examined for target special-status species and habitats known to occur in the Estrella and eight surrounding 7.5 minute/24,000 feet scale quadrangles (Tables 7-11 in Appendices 1-2). The areas immediately around the cultivation sites were also examined as part of this study as it is possible that some of the wildlife in the adjacent grassland and oak woodland areas could wander near the areas around the project site.



Figure 5. Soils map showing the two soil types found on the proposed outdoor Cannabis cultivation site and surrounding areas on the Estrella Ranch. Table 1 shows the percent of the site covered by each soil type.

Table 1. Location of the two general soil types found on and around the outdoor Cannabis cultivation sites on the Estrella Ranch.

Map Unit Symbol	Map Unit Name	Percent of Site
102	Arbuckle-Positas complex	36%
106	Arbuckle-San Ysidro complex	64%

The biological surveys were conducted during the day light hours between 12:00 p.m. to approximately 4:00 p.m. The weather was sunny with mild temperatures and little to no wind. During the surveys, many of the plants around the site were in identifiable condition using reproductive features, vegetative features, and the dry remains of last year's standing crop; however, some may not have been identified.

Dr. Mike McGovern and I also recorded the wildlife species observed around the cultivation site and examined the wildlife known to occur in this area of San Luis Obispo

County (Table 6). The site and surrounding areas were carefully searched for any evidence of sensitive wildlife species (scat, tracks, burrows, and visual or auditory observations) and for habitats that are listed by the U.S. Fish and Wildlife Service or California Department of Fish and Game or are known to occur in the general vicinity of the site (Tables 10-11 in Appendix 2). Trees near the proposed cultivation site were examined for nests, roosting sites, etc. No protocol wildlife surveys were conducted because the specific project area was considered outside the range of wildlife species with specific protocol survey requirements or was determined not to support suitable habitat for these species. However, Mike McGovern conducted a separate kit fox survey, which is the subject of a different report.

Consistent with recommended biological survey methodology, the cultivation sites and the areas immediately around the sites were examined using overlapping transects that zigzagged through the sites. A plant list was prepared and notes were taken of any wildlife or signs of wildlife (including scat, tracks, burrows, and visual or auditory observations) around the site. Photographs were also taken. These methods allowed us to conduct a thorough and careful search for evidence of special status plant species, wildlife species, and sensitive habitats that are listed by the U. S. Fish and Wildlife Service, California Department of Fish and Game, California Native Plant Society, or are known to occur in the general vicinity of the site. A list of the common plants found on and around the cultivation sites is provided on Tables 2-3 and wildlife on Table 4.

During our studies, we examined and described any variations in the vegetation, flora, wildlife, and biological habitats shaped by the environmental features and past disturbances. We recorded species presence and relative abundance with the goal of recording all plant species present near the site, including any rare plants. To accomplish this, we surveyed the area around the site until no new species were found.

References used to verify plant identifications include relevant floras: The Jepson Manual: Vascular Plants of California (Baldwin, et al. 2012); Vascular Plants of San Luis Obispo County, California (Hoover 1970); Vascular Plants of San Luis Obispo County, California, 2nd ed. (Keil & Hoover, unpublished); and herbarium specimens housed at the Hoover Herbarium, Cal Poly State University. Nomenclature follows that of the Jepson Manual (Baldwin, et al, 2012), and on-line revisions that can be accessed on the following website (<http://ucjeps.berkeley.edu/IJM.html>). Wildlife references are listed in the bibliography.

RESULTS: FLORA AND VEGETATION ON SITE

Flora

Because of the highly disturbed nature of the proposed cultivation sites, the entire area was either barren or covered by scattered weedy grasses and forbs. However, we also examined some of the undeveloped portion of the parcel around the outdoor Cannabis cultivation sites but did not conduct a detailed survey of the entire ranch as none of this area will be affected by the proposed project. We do include a list of common plants in the areas on and around the project site, but our efforts were centered on the proposed

cultivation sites and areas immediately around them. A list of the plant species found on and around the project sites is included in this report (Tables 2-3).

The area around the outdoor Cannabis cultivation site is mostly barren with a few scattered weedy plants. Because of the high level of disturbances, the species diversity was very low, but a few plants have colonized some of the areas on the horse arena, roping area, and exercise area. We found a total of 24 plant species of which only four are native plants known for their weedy habit. A few widely scattered *Quercus lobata* (valley oak), *Quercus agrifolia* (coast live oak) and *Quercus douglasii* (blue oak) occur on the grounds in the vicinity of the proposed cultivation sites where they mix with some landscape plants. It should be noted that the ornamental landscape plants and fruit trees on the grounds in the vicinity of the cultivation sites are not included in this survey. None of the native or landscape plants outside the proposed outdoor Cannabis cultivation project sites will be affected by the project, which will be confined to the four areas shown on Figure 3.

Vegetation

Vegetation is shaped by the interactions among long-term climate, short-term weather events, local landforms, soils, hydrology, physical tolerances of individual plant species, disturbances, and land use history by animals, including humans. The natural vegetation on the undeveloped portion of the 40-acre parcel outside the project sites is composed of a mosaic of (1) **coastal valley grassland (California annual grassland) with a few scattered oaks** and (2) **foothill (oak) woodland**. Neither of these plant communities will be affected by the proposed project; however, we have included a brief discussion of them for future reference. This entire developed area near where the cultivation sites is located is highly disturbed and has on-going, regular disturbances. The grounds have buildings, driveways, parking areas, landscaping, and other disturbances as described previously. **Anthropogenic communities** are found in the disturbed areas on and around the Cannabis cultivation sites and other developed sites on the Estrella Ranch.

1. Coastal Valley Grasslands (Non-native annual grassland/California annual grassland series) are found in the open fields outside the proposed project sites and will not be disturbed.

Coastal valley grasslands cover the fields and lower hillsides on the undeveloped portion of the 40-acre parcel. None of this area will be disturbed as a result of the proposed project. Coastal valley grassland (also classified as California annual grassland series by Sawyer and Keeler-Wolf, 1995, and non-native grassland by Holland, 1986) occurs in the open portions of the parcel, which is used as rangeland. Grassland also forms the understory of the foothill woodland, which is mostly on the surrounding hillsides. Coastal valley grasslands are dominated by various species of introduced grasses and forbs (wildflowers) although some native herbs are also present. The dominant grasses and forbs are mostly annual species, but a few native perennials are also sometimes present. There are also several weedy species typical of ruderal communities found in the grasslands as a result of recent and past disturbances.

The introduced, annual grasses and forbs of the grassland have seeds that germinate in the fall and mostly reach reproductive maturity in late winter to late spring. After setting seed, the annual plants dry, and the seeds are stored in the soil until they germinate the following fall. The species composition of coastal valley grasslands varies from site to site and from year to year depending on local ecological conditions and weather conditions. Some of the common species in the coastal valley grassland around the proposed cultivation sites are listed in Table 2.

Table 2. Common plant species in the coastal valley grassland in open, relatively undisturbed areas around the proposed outdoor Cannabis cultivation sites.

Scientific Name	Common Name	Origin
HERBS		
<i>Avena barbata</i>	Slender wild oats	Introduced
<i>Avena fatua</i>	Common wild oats	Introduced
<i>Brassica nigra</i>	Black mustard	Introduced
<i>Bromus diandrus</i>	Ripgut brome	Introduced
<i>Bromus hordeaceus</i>	Soft chess brome	Introduced
<i>Bromus rubens</i>	Red brome	Introduced
<i>Centaurea solstitialis</i>	Yellow star thistle	Introduced
<i>Erodium botrys</i>	Storkbill filaree	Introduced
<i>Erodium cicutarium</i>	Redstem filaree	Introduced
<i>Erodium moschatum</i>	Greenstem filaree	Introduced
<i>Festuca myuros</i>	Rattail fescue	Introduced
<i>Festuca perennis</i>	Ryegrass	Introduced
<i>Hordeum murinum</i>	Annual foxtail	Introduced
<i>Hypochaeris glabra</i>	Smooth cat's-ear	Introduced
<i>Lactuca serriola</i>	Prickly lettuce	Introduced
<i>Lupinus spp.</i>	Lupines	Native
<i>Malva parviflora</i>	Common mallow	Introduced
<i>Medicago polymorpha</i>	California bur-clover	Introduced
<i>Rumex spp.</i>	Docks	Introduced
<i>Verbena lasiostachys</i>	Western vervain	Native
<i>Vicia spp.</i>	Vetch	Introduced

Native species are indigenous to California and presumably also to the study site or have spread to the study site via natural means. Naturalized or introduced species are exotics introduced to California in historic times from other parts of the world and now reproducing spontaneously in California and on the study site. Escaped are spontaneous progeny of plants cultivated on or near the study site.

2. Foothill (Oak) Woodland (not found on the proposed cultivation sites but a few oaks are scattered in the grassland around the site and on the hillsides away from the site)

The foothill (oak) woodlands are not found near the proposed outdoor Cannabis cultivation site and were not examined as part of this study. A few scattered valley oaks, coast live oaks, and blue oaks occur in the open fields and in the developed area near the proposed cultivation sites; however, no oaks or any other trees will be removed or impacted as a result of the proposed outdoor Cannabis cultivation site. Since foothill (oak) woodland does occur on the 40-acre parcel and few oaks occur around the buildings and parking areas in the vicinity of the cultivation sites, I have included a brief discussion of this community for reference.

Foothill or oak woodlands are one of the most characteristic vegetation types in the central California foothills, which include some of the hillsides around the Paso Robles, Shandon, and the Estrella Ranch. Foothill (oak) woodlands are dominated by trees (mostly oaks) 15 to 70 feet tall that vary physiologically from open savannas (widely spaced trees with a grassland ground cover) to closed canopy woodlands with an understory of shade tolerant shrubs and/or herbs. In general, the common trees in California's foothill woodlands of the Coast Ranges are *Quercus agrifolia* (coast live oak), *Quercus douglasii* (blue oak), *Quercus lobata* (valley oak), and *Pinus sabiniana* (foothill pine). These trees often grow together; however, various combinations may occur depending on the local environmental conditions. Sometimes one tree species may completely dominate the woodland such as many areas along the immediate coast and in moist areas of the Coast Ranges. In these areas, coast live oaks are often the only tree in the oak woodlands and form coast live oak woodlands. In areas around the project sites, coast live oak is found in the more mesic areas, blue oak in the drier areas, and valley oaks in the deep alluvial, valley soils. Foothill pines are often found associated with the oaks, especially blue oak.

3. Anthropogenic communities are found in the disturbed areas around the Cannabis cultivation site and other developed sites on the Estrella Ranch.

The disturbed areas on and around the proposed outdoor Cannabis cultivation sites are mostly barren or covered by scattered patches of weedy plants typical of anthropogenic plant communities (Photos 1-9). These communities are composed of plants introduced by humans and established or maintained by human disturbances. Some of these communities are entirely artificial such as landscaped areas, cultivated row-crops, lawns, orchards, and vineyards, while others are composed of weedy plants that can occur in areas of human disturbances

Anthropogenic communities are classified under four broad categories: **arval** associations found on cultivated lands, such as row crops and orchards; **pastoral** associations composed of plants used or grown for consumption by grazing livestock; **ruderal** associations consisting mostly of weedy plants that have colonized disturbed and fallow lands; and **castral** or **urban** associations which are composed of intentionally grown horticultural plants such as landscape plants around residences and businesses that often mix with native and ruderal vegetation.

Ornamental plants (castral or urban communities) have been planted in the developed areas of the Estrella Ranch near the proposed cultivation sites and mix with the weedy plants that form the ruderal communities. Many areas around the buildings are covered by bare soil maintained by vehicles regularly driving over the site and parking in the area. Most of these areas have no plant growth or only occasional weedy plants.

Ruderal plant communities occur on the four cultivation sites and the disturbed areas on the around buildings, parking areas, and roadsides near the outdoor Cannabis cultivation sites. Ruderal communities are assemblages of invasive, weedy grasses and forbs that have colonized the disturbed areas, sometimes in spite of human efforts to control them. Ruderal communities, such as those in the developed areas around the proposed cultivation site, occur in highly disturbed areas such as roadsides, heavily used areas, vacant lots, cleared areas for weed abatement, parking areas, and other such disturbed areas. Often only plants capable of withstanding regular disturbances are able to grow in disturbed ruderal communities. Most of the plants in ruderal communities are introduced, weedy plants; however, there are a few native, weedy herbs that can also tolerate disturbances and are found in the ruderal communities.

As mentioned previously, the areas on and around the outdoor Cannabis cultivation sites either have no vegetation or have scattered weedy, invasive plants with bare areas, which is typical of ruderal communities (Photos 1-4). However, there are a few widely scattered *Quercus agrifolia* (coast live oaks) and *Quercus douglasii* (blue oak) in the developed area outside the proposed cultivation site and a few tall *Platanus racemosa* (sycamore) trees around the primary residence, which is over 700 feet north of the proposed project site. Several ornamental and fruit trees also occur on the site such as Ash, Catalpa, fig trees, palm trees, cacti, osage orange, and a few others. I did not include the planted ornamental plants and fruit trees in this report. The common plant species found in the ruderal vegetation in the areas on and around the outdoor Cannabis cultivation sites are listed in Table 3.

Table 3. List of plant species found on and immediately around the proposed outdoor Cannabis cultivation sites on the Estrella Ranch

Scientific name	Common name	Origin
HERBS		
<i>Acroptilon repens</i>	Russian knapweed	Introduced
<i>Amaranthus albus</i>	Tumbleweed	Introduced
<i>Amaranthus blitoides</i>	Prostrate pigweed	Introduced
<i>Ambrosia acanthicarpa</i>	Annual burweed	Introduced
<i>Ambrosia acanthicarpa</i>	Annual bursage	Native
<i>Ambrosia psilostachya</i>	Western ragweed	Native
<i>Anthriscus caucalis</i>	Bur-chervil	Introduced
<i>Avena fatua</i>	Wild oats	Introduced
<i>Bromus diandrus</i>	Ripgut brome	Introduced
<i>Bromus madritensis ssp. rubens</i>	Red brome	Introduced
<i>Centaurea calcitrapa</i>	Purple star thistle	Introduced
<i>Centaurea solstitialis</i>	Yellow star-thistle	Introduced
<i>Eremocarpus setigerus</i>	Turkey mullein	Native
<i>Erigeron bonariensis</i>	Conyza	Introduced
<i>Erigeron canadensis</i>	Horseweed	Introduced
<i>Erodium botrys</i>	Storkbill filaree	Introduced
<i>Erodium cicutarium</i>	Redstem filaree	Introduced
<i>Heliotropium curassavicum</i>	Heliotrope	Native
<i>Hirschfeldia incana</i>	Perennial mustard	Introduced
<i>Hordeum murinum</i>	Foxtail barley	Introduced
<i>Marrubium vulgare</i>	Horehound	Introduced
<i>Medicago polymorpha</i>	Bur-clover	Introduced
<i>Sisymbrium altissimum</i>	Tumble mustard	Introduced
<i>Vulpia myuros</i>	Rattail fescue	Introduced

Native species are indigenous to California and presumably also to the study site or have spread to the study site via natural means. Naturalized or introduced species are exotics introduced to California in historic times from other parts of the world and now reproducing spontaneously in California and on the study site. Escaped are spontaneous progeny of plants cultivated on or near the study site.

WILDLIFE

The Estrella Ranch has been historically used as a horse and livestock ranch for many decades. It is predominantly open land east of the Estrella River, which may offer a conduit to a variety of wildlife species. Part of the Estrella Ranch has been developed with ranch related activities and buildings including the ranch headquarters. The ranch is relatively remote and with little development, which enhances the opportunity of wildlife to visit or occupy the open areas on and around the ranch. However, no wildlife or wildlife habitats were found within the proposed outdoor Cannabis cultivation sites.

The undisturbed (except for grazing) coastal valley grasslands and foothill (oak) woodlands on the hillsides around the project provide potential habitat for a variety of wildlife species. The cultivation sites have a highly modified plant cover dominated by widely scattered weedy, introduced grasses and forbs and large barren areas devoid of plants. As a result, these disturbed areas have a highly degraded wildlife habitat that supports only animals that can tolerate human disturbances such as California ground squirrels, Botta's gophers, cottontail rabbits, fence lizards, and a few others.

The regularly disturbed areas on the ranch near the proposed outdoor Cannabis cultivation sites include buildings, driveways, and parking areas. As a result, there are ongoing human disturbances and modifications of the landscape, which results in very few wildlife species using the site. The wildlife species that use, or might use, the areas around the proposed cultivation sites are species adapted to urban or disturbed sites. These include species such as fence lizards, alligator lizards, sparrows, house finches, mockingbirds, scrub jays, crows, doves, mice, gophers, rabbits, and ground squirrels. These wildlife species are sometimes considered the equivalent to “weedy” plant species because they can occur in disturbed or developed areas.

Very few wildlife species were observed anywhere on the site during our surveys indicating that the area has very low wildlife habitat value. However, we did note that a barred owl, also known as northern barred owl or hoot owl, was using a coast live oak on the site for roosting. This species is a true large owl that is brown to grey with barring on the chest. They are native to eastern North America but have recently invaded the west coast of North America, where they are considered an invasive species. Their habitat includes mostly mature forests, but they are also found in open woodlands. They mostly prey on small mammals but are also known to prey on small birds, reptiles, and amphibians. The wildlife that use the undeveloped areas of the ranch could potentially wander onto the developed portion of the ranch; however, the proposed Cannabis cultivation project site will have no impact on the surrounding grassland and oak woodland habitats. A discussion of potential wildlife in these undisturbed areas is provided below.

Wildlife in coastal valley grasslands and foothill woodland on the 40-acre parcel but not on the proposed project site

We are including a discussion of the wildlife in the grassland and foothill woodland areas because there is a remote chance that some of the species in these areas may wander onto the developed areas of the ranch near the proposed cultivation sites. None are expected to actually use the cultivation sites.

Coastal valley grasslands in the open areas and hillsides near the proposed cultivation sites provide potential foraging areas and habitat for vertebrate wildlife species. Invertebrates such as snails, flies, butterflies, bees, and beetles provide a food source for larger animals such as lizards, birds, and small mammals. Wildlife

species such as sparrows, scrub jays, crows, mockingbirds, Eurasian collared dove, mourning dove, quail, and house finches forage in grasslands. Raptors, such as red-shouldered hawks, red-tailed hawks, American kestrels, and common barn owls hunt in grassland areas and can use the nearby trees in the foothill (oak) woodlands to observe their grassland prey. The trees on the developed area are not likely to be used by raptors due to the highly disturbed habitat and regular human activity.

Some amphibians and reptiles, such as pacific chorus frogs, western fence lizards, southern alligator lizards, and various species of snakes potentially hunt in the open grasslands and the grassland understory among the oak trees. Staff at the ranch have observed coyotes (*Canus latrans*), bobcats (*Lynx rufus*), a variety of birds, ground squirrels, and a mountain lion (*Felis concolor*) resting in the shade of a tree near the main home. The grasslands surrounding the ranch facilities provide habitat for the California ground squirrel (*Ostospermophilus beecheyi*), which is subject to predation from a variety of raptors that include the red-tail hawk (*Buteo Jamaicensis*), the red-shouldered hawk (*Buteo lineatus*), White-tailed kite (*Elanus leucurus*), and prairie falcon (*Falco mexicanus*) all of which could potentially forage in the surrounding grasslands. Mammals such as cottontail rabbits and a variety of small mammals in the genus *Perognathus* (pocket mice) and *Peromyscus* (white footed mice) may potentially occupy the ranch. If there is an adequate rodent population, they would provide prey to fox (*Urocyon cinereoargenteus*), coyotes (*Canis latrans*), bobcats (*Lynx rufus*), barn and great horned owls (*Tyto alba*, *Bubo virginianus*), rattlesnake (*Crotalus atrox*) (observed on site by staff), gopher snakes (*Pituophis catenifer*), California kingsnakes (*Lampropeltis getula californiae*), and others.

Foothill (oak) woodland that covers the hillsides and other areas around the proposed cultivation sites provide wildlife habitat for a variety of wildlife species. The oak trees are important for animal cover, providing vertical and horizontal structure, potential nesting sites for birds, and shelter for a variety of mammals, birds, reptiles, amphibians, and insects. Insects also provide an important food source for wildlife species. Some wildlife species could use the woodlands on the hillside and canyons for cover and nesting sites but depend on the adjacent open grasslands for foraging and hunting.

Acorns are a valuable food source for many animal species, including acorn woodpecker (*Melanerpes formicivorus*), scrub jay (*Aphelocoma corulescens*), western gray squirrel (*Sciurus griseus*), and black-tailed deer (*Odocoileus hemionus*). Oak litter contribute woody debris to the duff in the woodland understory, which provides foraging areas for small mammals and microclimates suitable for amphibians and reptiles in addition to fungi. Snags within the woodlands can provide potential roosts for raptors or nesting cavities for owls, kestrels, woodpeckers, nuthatches, wrens, chickadees, and bluebirds, and fallen logs can provide habitat for invertebrates. Invertebrates provide an important food source for small mammals, reptiles, and birds. Woodland vegetation reduces wind and moderate temperature extremes compared to open, treeless areas. In addition, fog drip and reduced insolation in

woodlands reduce some of the environmental extremes that occur outside of the woodland.

Several avian species also forage in open grassland and understory grassland, including mourning doves, western kingbirds, sparrows, quail, turkeys, and house finches. The woodlands potentially provide nesting and roosting sites for a variety of bird species. It is also expected that the ranch could be host to a variety of passerine birds. The presence of fence lizards and grasshoppers may attract the loggerhead shrike but, as observed many times, this species is not averse to foraging within an active construction site and if present would not be inhibited by existing facilities. The oak trees on the ranch that could attract oak titmouse (*Baeolophus inornatus*), but none was observed. The grasslands on and around the ranch may also be potential habitat for California horned lark (*Eremophila alpestris*) or burrowing owls (*Athene cunicularia*) if ground squirrel or other burrows are present. The proposed facility would not jeopardize these species and other passerine species from utilizing the surrounding grasslands. White crowned sparrows (*Zonotrichia leucophrys*), towhees (*Melospiza crissalis*), valley quail (*Callipepla californica*), California thrashers (*Toxostoma redivivum*), road runners (*Geococcyx californianus*), and other species might also utilize the grassland on and around the ranch.

American badger and California kit fox could wander onto some areas in the undeveloped areas of the Estrella ranch. The San Joaquin kit fox has been observed in the general Whitley Gardens area in the past, and the Estrella River is considered a conduit for the movement of this species; however, none have been reported on the Estrella Ranch. The proposed project would not interfere with the movement or foraging of kit foxes. If it were to occupy the property, the proposed project would not affect kit fox habitat. Kit foxes once lived within the confines of a busy Camp Roberts near San Miguel, CA.

Approximately 16 species of bats may occupy San Luis Obispo County according to the Central Coast Bat Survey. It is plausible that there are a few species of bats on and around the Estrella Ranch. None was observed in the building where the outdoor Cannabis cultivation site will be located. There are also a few trees that could potentially offer day-time roosts. The four bats listed in the CNDDB reports for this quadrangle and the adjacent eight quadrangles are unlikely to be on the ranch. The red bat prefers forested areas and the Pallid and Yuma myotis bat prefer to be near a source of water. Such a source is not near the ranch. The Townsend's big-eared bat prefers rocky areas, old mines, and sometimes old buildings for a roost. If any of the listed bats were to be on the ranch, which is not likely, the proposed project will not interfere with their daily or nightly habits.

In summary, common and characteristic species of wildlife that occur in grassland and oak woodland habitats on and around the Estrella Ranch may include a variety of wildlife species. These species listed in Table 4 are known to occur in the general area around Estrella Ranch. It is important to note that the foothill (oak) woodlands and surrounding grasslands will not be disturbed or affected by the proposed outdoor Cannabis cultivation site; so, no impact to these wildlife habitats will occur as a result of the proposed project.

Table 4. List of some of the common wildlife species known to occur in areas on or near the subject parcel. None of these species are considered rare or have special status. X = observed on or near the project site

Scientific Name	Common Name	Preferred Habitats	Observed on or around site (x)
AMPHIBIANS AND RETILES			
Rattlesnake	<i>Crotalus atrox</i>	Open grassland, woodland	X
California Alligator Lizard	<i>Elgaria multicarinata multicarinata</i>	Open grassland, woodland	X
Common king snake	<i>Lampropeltis sirtalis</i>	Open grassland, woodland	
Pacific Gopher Snake	<i>Pituophis catenifer catenifer</i>	Woodland, grassland, rural	
Western Fence Lizard	<i>Sceloporus occidentalis</i>	Wide range	X
BIRDS			
Western Scrub-Jay	<i>Aphelocoma californica</i>	Grassland and oak woodlands	X
Great Horned Owl	<i>Bubo virginianus</i>	Varied habitats	
Red-tailed Hawk	<i>Buteo jamaicensis</i>	Grassland and oak woodlands	X
Red-shouldered hawk	<i>Buteo lineatus</i>	Grassland and oak woodlands	
California Quail	<i>Callipepla californica</i>	Grassland and oak woodlands	X
Anna's Hummingbird	<i>Calypte anna</i>	Oak woodland	
Lesser Goldfinch	<i>Carduelis psaltria</i>	Oak woodlands	
American Goldfinch	<i>Carduelis tristis</i>	Grassland and oak woodlands	
House Finch	<i>Carpodacus mexicanus</i>	Wide habitat range	X
Turkey Vulture	<i>Cathartes aura</i>	Open country, grassland	X
Evening grosbeak	<i>Coccothraustes vespertinus</i>	Grassland and oak woodlands	
Northern Flicker	<i>Colaptes auratus</i>	Oak woodlands	
American Crow	<i>Corvus brachyrhynchos</i>	Grassland and oak woodlands	
Common Raven	<i>Corvus corax</i>	Grassland and oak woodlands	
Steller's Jay	<i>Cyanocitta stelleri</i>	Oak woodlands	
White-tailed kit	<i>Elanus leucurus</i>	Grassland and oak woodlands	
Continued			

Scientific Name	Common Name	Preferred Habitats	Observed on or around site (x)
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>	Open habitats	
Eurasian collared dove	<i>Streptopelia decaocto</i>	Variable	X
American kestrel	<i>Falco sparverius</i>	Grassland and oak woodlands	X
Dark-eyed Junco	<i>Junco hyemalis</i>	Oak woodland, variable	X
Acorn Woodpecker	<i>Melanerpes formicivorus</i>	Oak woodlands	
Towhees	<i>Melospiza crissalis</i>	Grassland and oak woodlands	X
Nuttall's woodpecker	<i>Picoides nuttallii</i>	Oak woodland, savanna	
Northern Mockingbird	<i>Mimus polyglottos</i>	variable	X
Brown headed cowbird	<i>Molothrus ater</i>	Open areas, variable	
Western Screech owl	<i>Otus kennicottii</i>	Woodlands	
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>	Woodlands	
Downy Woodpecker	<i>Picoides pubescens</i>	Oak woodlands	
Western Tanager	<i>Piranga ludoviciana</i>	Oak, riparian woodlands	
Western Bluebird	<i>Sialia mexicana</i>	Riparian and oak woodland	
Barred owl	<i>Strix varia</i>	Woodlands	X
European Starling	<i>Sturnus vulgaris</i>	Agricultural, urban	
American Robin	<i>Turdus migratorius</i>	variable	X
Barn Owl	<i>Tyto alba</i>	Agricultural, woodlands	
Mourning Dove	<i>Zenaidura macroura</i>	Open and semi-open area	X
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	Open and semi-open area	X
MAMMALS			
Coyote	<i>Canis latrans</i>	Open woodlands, grasslands	X
Opossum	<i>Didelphis marsupialis</i>	Woodlands, streams	
Mountain lion	<i>Felis concolor</i>	Grassland and oak woodlands	X
Cottontail rabbit	<i>Lepus sylvaticus</i>	Grassland, shrublands	X
Bobcat	<i>Lynx rufus</i>	Grassland and oak woodlands	
Striped Skunk	<i>Mephitis mephitis</i>	Grassland and oak woodlands	
California Vole	<i>Microtus californicus</i>	Grassland meadows	
Mule Deer	<i>Odocoileus hemionus</i>	Many habitats	X
California Ground Squirrel	<i>Otospermophilus beecheyi</i>	Grasslands, variable	X
California Mouse	<i>Peromyscus californicus</i>	Grassland and oak woodlands	
Deer Mouse	<i>Peromyscus maniculatus</i>	All dry land habitats	
Raccoon	<i>Procyon lotor</i>	Streams, lakes, rock cliffs,	
Mountain Lion	<i>Puma concolor</i>	Grassland and woodlands,	X
Mole	<i>Scapanus latimanus</i>	Grasslands	
Western Gray Squirrel	<i>Sciurus griseus</i>	Oak, conifer woodlands	
Valley Pocket Gopher	<i>Thomomys bottae</i>	Variety of habitats	X
Gray Fox	<i>Urocyon cinereo argenteus</i>	Chaparral, dry woodlands	
Red Fox	<i>Vulpes fulva</i>	Grasslands and woodlands	

SPECIAL STATUS PLANT SPECIES

To determine the special status plant species that could potentially be present on or around the proposed cultivation site, we conducted a search for target rare plants known to occur within the Estrella (269A), San Miguel (293C), Ranchito Canyon (293D), Shandon (268B), Shedd Canyon (268C), Cholame Hills (292C), Paso Robles (269B), Templeton (269C), and Creston (269D) 7.5 minute/24,000 scale quadrangles (Tables 6-9 in Appendix 1). Table 7 in Appendix 1 provides information on the current rarity status of these target special status species, and Table 8 in Appendix 1 provides information on life form, flowering period, elevation range, and the family in which they belong. We also investigated the habitat requirements for all the special status species found in the nine-quadrangle search and evaluated whether or not potential habitats for these species exist on or near the outdoor Cannabis cultivation project site. Results of these investigations and determinations are shown on Table 9 in Appendix 1. To generate these lists, we referred to the most recent edition of the California Department of Fish and Game Natural Diversity Data Base: Special Vascular Plants, Bryophytes, and Lichen List (CNDDDB) and the most recent edition of the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* database, both of which are accessible through the internet (<http://www.dfg.ca.gov/whdab/html/cnddb.html> and www.cnps.org).

This search revealed 32 special status plant species that occur within the Estrella and the eight surrounding quadrangles. This list includes all rare plant species found on California Rare Plant Rank (CRPR Lists) 1-4 compiled by the California Native Plant Society (CNPS). Most of the rare plants on the list are not expected to occur on the study site because they are highly restricted in distribution range, in habitat requirements, and/or have never been reported growing in the Estrella quadrangle or near the site. The search revealed a total of six special status species that have been reported to occur within the Estrella quadrangle; however, only three are listed by the CRPR 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere. The other three are listed as CRPR List 4: Plants of Limited Distribution - A Watch List (Tables 7-9 in Appendix 1).

I examined the proposed outdoor Cannabis cultivation sites and the areas immediately around the site carefully to see if there were any habitats for or signs of these plants (or of any other special status plant species) being present on or around the proposed cultivation site. None was found or expected to occur on or near the highly disturbed proposed outdoor Cannabis cultivation site.

We did not examine any of the other areas on the Estrella Ranch 40-acre parcel other than the outdoor Cannabis cultivation site and nearby areas; so, I cannot say if any of the special status species are present elsewhere on the ranch outside the proposed cultivation site; however, none of these areas of the parcel will be disturbed or impacted by the proposed cultivation project. I do address

each of the special status species to determine if any of them might have potential habitat somewhere on the undeveloped portions of the Estrella Ranch.

In conclusion, none of the special status species have potential habitat on the highly disturbed proposed outdoor Cannabis cultivation sites or areas around the site. Table 5 below provides information on the habitat requirements of the plant species reported from the Estrella quadrangle and why they would or would not be expected to be found on the project site. In addition, I do not believe any of the listed special status plant species found in the nine quadrangle search have suitable habitat on the ranch; however, it is possible that a few might. A complete survey of the Estrella Ranch would be required to completely rule them out, but these areas will not be affected by the proposed project. I evaluate the habitats and potential presence of each special status plant species found in the Estrella quadrangle in Table 5 and in the nine quadrangle search in Table 8, Appendix 1. In these tables we explain why we do or do not expect them to occur on the study site.

Table 5. List of special status plant species reported to occur within the Estrella quadrangle along with habitat requirements, whether potential habitats are present on the study site, and whether the species was found or expected to occur in the outdoor Cannabis cultivation sites.

Scientific Name	CNPS Rank CRPR	Habitat	Found on project site
<i>Antirrhinum ovatum</i>	4.2	Chaparral, Cismontane woodland, Pinyon and juniper woodland, Valley and foothill grassland. Clay or gypsum, often alkaline	NO. No plants were found within the outdoor Cannabis cultivation sites and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site; however it could potentially occur in somewhere on the undisturbed areas of the Estrella Ranch; although, this is not likely. This species has been reported from areas northwest of the project site.
<i>Chorizanthe douglasii</i>	4.3	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland. Sandy or gravelly soils.	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site; however it could potentially occur in somewhere on the undisturbed areas of the Estrella Ranch; although, this is not likely. Populations occur NW of the study site, Camatta Canyon, and Herohuero Creek bed.
<i>Convolvulus simulans</i>	4.2	Chaparral (openings), Coastal scrub, Valley and foothill grassland. Clay, serpentinite seeps	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. There are no appropriate clay or serpentinite seeps on or near the project site. There is one report of this plant about 3 miles NW of the study site and one report near Cholame.
<i>Continued</i>			

Scientific Name	CNPS Rank CRPR	Habitat	Found on project site
<i>Juncus luciensis</i>	1B.2	Chaparral, Great Basin scrub, Lower montane coniferous forest, Meadows and seeps, Vernal pools	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No meadows, seeps, or vernal pools occur on the site. The closest reported site is about 3 miles northwest of Estrella Ranch.
<i>Lepidium jaredii</i> ssp. <i>jaredii</i>	1B.2	Valley and foothill grassland (alkaline, adobe)	NO. No plants were found the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No appropriate alkaline or adobe soils or habitats on this highly disturbed habitat. There is one report of this plant about 3 miles NW of the study site and one report near Cholame. It mostly occurs in the Carrizo Plain.
<i>Navarretia nigelliformis</i> ssp. <i>radians</i>	1B.2	Cismontane woodland, Valley and foothill grassland, Vernal pools. Sometimes clay.	NO. No plants were found the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site; however it could potentially occur in somewhere on the undisturbed areas of the Estrella Ranch; although, this is not likely. There are no appropriate clay soils or vernal pool habitats on site. This species has been reported from areas northwest of the project site and near Cholame.

SPECIAL STATUS WILDLIFE SPECIES

A number of special status wildlife species are known to occur in the general vicinity of the project site. A CNDDDB search of the Estrella (3512065), San Miguel (351207), Ranchito Canyon (3512075), Shandon (3512064), Shedd Canyon (3512054), Cholame Hills (3512074), Paso Robles (3512066), Templeton (3512056), and Creston (352055) quadrangles provide a list of special status wildlife species that could potentially be on or near the project site (Tables 10-11 in Appendix 2). Table 10 provides a list of special status wildlife species found in the nine U.S.G.S 7.5 minute quadrangles as well as information on the current rarity status of the wildlife species. Table 11 lists the habitat requirements for the special status species revealed in the nine-quadrangle search and whether or not potential habitats for these species exist on the project site.

The details of our investigations of potential special status species revealed that most of the target species that occur in the Estrella and eight surrounding quadrangles are highly restricted both in distribution range and in habitat requirements, and their specialized habitats do not occur on the subject site. There are seven (7) special status wildlife species that have been reported from the Estrella quadrangle: vernal pool fairy shrimp, Pajaro/Salinas hitch, western spadefoot, western pond turtle, loggerhead shrike, American badger, and California kit fox. None of these species would find habitat in the proposed outdoor Cannabis cultivation building site; however, it is possible that the western spadefoot, western pond turtle, prairie falcon, loggerhead shrike, American badger, and California kit fox could wander onto some areas in the undeveloped areas of the Estrella ranch. The San Joaquin kit fox has

been observed in the general Whitley Gardens area in the past, and the Estrella River is considered a conduit for the movement of this species; however, none have been reported on the Estrella Ranch. The proposed project would not interfere with the movement or foraging of kit foxes. If it were to occupy the property, the proposed project would not affect kit fox habitat. Kit foxes once lived within the confines of a busy Camp Roberts near San Miguel, CA.

Of the special status wildlife species, including those not reported from the Estrella quadrangle, there are a few that might visit the undeveloped portions of the Estrella Ranch, although I think it is unlikely. None of the habitats in this undeveloped portion of the ranch will be impacted because no areas outside the outdoor Cannabis cultivation site will be disturbed. As a result, if any of these wildlife species do occur on the ranch, their habitat will not be affected by the proposed outdoor Cannabis cultivation project.

There is also potential habitat for some of the special status wildlife species such as the western pond turtle along the Estrella River; however, because this river is dry most of the year, it is doubtful that western pond turtles would find habitat. The Estrella River is not on the Estrella Ranch. It is east of the ranch and of Estrella Road that forms the boundary of the ranch. In addition, the Estrella River is more than 1,000 feet from the proposed cultivation sites.

Table 6 provides a discussion of the wildlife species found on the Estrella quadrangle and Tables 11 in Appendix 2 provides a discussion of all the special status wildlife species that were revealed in the nine quadrangle search and an explanation as to whether potential habitat for these species occurs on the Estrella Ranch. There is no potential habitat for any of these species within the proposed outdoor Cannabis cultivation site building.

Scientific Name Common Name	Habitat Association	Found on Site and/or Potential to Occur on Site
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	Vernal pool habitats including depressions in sandstone, to small swale, earth slump or basalt-flow depressions with a grassy or, occasionally, muddy bottom in grassland. Vernal pool areas (usually less than 0.05 acres) found in unplowed grasslands of the Central Valley and coastal interior mountains.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. No vernal pools or small depressions found in the grasslands on the proposed project site or subject parcel. This species does not occur on this highly disturbed project site.
<i>Lavinia exilicauda harengus</i> Pajaro/Salinas Hitch	Pajaro/Salinas Hitch are deep-bodied cyprinids that are widely distributed in the Pajaro and Salinas river systems, which are tributaries to Monterey Bay. Monterey hitch can occupy a wide variety of habitats, although they are most abundant in lowland areas with large pools or in small reservoirs with permanent water in summer. The water is clear, warm in late summer and a maximum depth of one meter. Bottom substrates are mostly a mixture of sand and gravel and the presence of cover such as fallen trees, overhanging trees and bushes is important. Although Monterey hitch are in no apparent danger of extinction, the status of populations remains uncertain across major portions of the species' range.	NO. No wildlife were found the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. No stream or pond habitats on the site; therefore, this species does not occur on the study site.
<i>Spea hammondi</i> Western spadefoot	Occurs primarily in grassland habitats but can be found in oak woodlands, chenopod scrub, alkali sink, and in sandy, gravelly washes and river floodplains. Must have vernal pools for breeding and egg lying.	NO. No wildlife were found the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. No potential wetland habitats on the proposed project site. Western spadefoot occurs in ephemeral pools and ponds surrounded by grassland. No vernal pools or wetlands occur on the project site.
Continued		

or might use the areas around the proposed cultivation sites are species adapted to urban or disturbed sites.

The undisturbed coastal valley grasslands and foothill (oak) woodlands on the hillsides west of the proposed outdoor Cannabis cultivation sites provide habitat for a variety of wildlife species. It is possible, although unlikely, that some special status species could venture into or fly over the ranch; however, none of these habitats will be affected by the proposed cultivation project.

Special Status Wildlife Species: The wildlife habitat on and around the outdoor Cannabis cultivation project site is highly disturbed and degraded. No special status wildlife species or signs of any were observed near the project sites or the immediately surrounding areas. However, some special-status species such as the American badger and California kit fox could potentially be found in some of the undeveloped portions of the Estrella Ranch. Also, birds of prey such as the golden eagle, bald eagle, and ferruginous hawk have extensive ranges that cover many habitat types. These birds could potentially fly over the site or visit areas around the site as rare transients. These species are protected under the California Fish and Game Code. Because the area around the proposed cultivation sites are regularly disturbed, none of these birds would nest on the site. After a careful search, no nests were found in any of the trees or shrubs on the developed area of the study site.

Special Status Plant Species: No special status plant species were observed anywhere near the outdoor Cannabis cultivation sites, and none are expected to occur near the proposed project site. It is possible, although unlikely, that some special status species could occur somewhere on the 40-acre Estrella Ranch parcel; however, none of these habitats will be affected by the proposed cultivation project.

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APPENDIX 1. SPECIAL STATUS PLANT SPECIES:

Table 7. List of Special Status Plants Found in the Estrella (3512065), San Miguel (351207), Ranchito Canyon (3512075), Shandon (3512064), Shedd Canyon (3512054), Cholame Hills (3512074), Paso Robles (3512066), Templeton (3512056), and Creston (352055) quadrangles. Current Rarity Status included. Species found in Estrella Quadrangle are in bold

Scientific Name	Common Name	CNPS List CRPR	Global Rank	State Rank	CESA State Status	FESA Federal Status
<i>Amsinckia douglasiana</i>	Douglas' fiddleneck	4.2	G4	S4	None	None
<i>Antirrhinum ovatum</i>	oval-leaved snapdragon	4.2	G3	S3	None	None
<i>Arctostaphylos hooveri</i>	Hoover's manzanita	4.3	G3	S3	None	None
<i>Aristocapsa insignis</i>	Indian Valley spineflower	1B.2	G1	S1	None	None
<i>Astragalus macrodon</i>	Salinas milk-vetch	4.3	G4	S4	None	None
<i>Calochortus simulans</i>	La Panza mariposa lily	1B.3	G2	S2	None	None
<i>Calycadenia villosa</i>	dwarf calycadenia	1B.1	G3	S3	None	None
<i>Camissoniopsis hardhamiae</i>	Hardham's evening-primrose	1B.2	G2	S2	None	None
<i>Castilleja densiflora</i> var. <i>obispoensis</i>	San Luis Obispo owl's-clover	1B.2	G5T2	S2	None	None
<i>Caulanthus lemmonii</i>	Lemmon's jewelflower	1B.2	G3	S3	None	None
<i>Ceanothus cuneatus</i> var. <i>fascicularis</i>	Lompoc ceanothus	4.2	G5T4	S4	None	None
<i>Chorizanthe douglasii</i>	Douglas' spineflower	4.3	G4	S4	None	None
<i>Chorizanthe palmeri</i>	Palmer's spineflower	4.2	G4	S4	None	None
<i>Chorizanthe rectispina</i>	straight-awned spineflower	1B.3	G2	S2	None	None
<i>Convolvulus simulans</i>	small-flowered morning-glory	4.2	G4	S4	None	None
<i>Deinandra halliana</i>	Hall's tarplant	1B.2	G3	S3	None	None
<i>Delphinium gypsophilum</i> ssp. <i>parviflorum</i>	small-flowered gypsum-loving larkspur	3.2	G4T2T3Q	S2S3	None	None
<i>Eriastrum luteum</i>	yellow-flowered eriastrum	1B.2	G2	S2	None	None
<i>Eriogonum elegans</i>	elegant wild buckwheat	4.3	G4G5	S4S5	None	None
<i>Eriogonum temblorense</i>	Temblor buckwheat	1B.2	G2	S2	None	None
<i>Hesperervax caulescens</i>	hogwallow starfish	4.2	G3	S3	None	None
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	1B.1	G4T1	S1	None	None
<i>Horkelia cuneata</i> var. <i>sericea</i>	Kellogg's horkelia	1B.1	G4T1?	S1?	None	None
Continued						

Scientific Name	Common Name	CNPS List CRPR	Global Rank	State Rank	CESA State Status	FESA Federal Status
<i>Juncus luciensis</i>	Santa Lucia dwarf rush	1B.2	G3	S3	None	None
<i>Lepidium jaredii</i> ssp. <i>jaredii</i>	Jared's pepper-grass	1B.2	G2G3T1T2	S1S2	None	None
<i>Malacothamnus jonesii</i>	Jones' bush-mallow	4.3	G4	S4	None	None
<i>Monolopia gracilens</i>	woodland woollythreads	1B.2	G3	S3	None	None
<i>Navarretia fossalis</i>	spreading navarretia	1B.1	G2	S2	None	FT
<i>Navarretia nigelliformis</i> ssp. <i>radicans</i>	shining navarretia	1B.2	G4T2	S2	None	None
<i>Nemacladus secundiflorus</i> var. <i>secundiflorus</i>	large-flowered nemacladus	4.3	G3T3?	S3?	None	None
<i>Senecio aphanactis</i>	chaparral ragwort	2B.2	G3	S2	None	None
<i>Stebbinsoseris decipiens</i>	Santa Cruz microseris	1B.2	G2	S2	None	None

Special-status species are 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 considered "species of concern" by the USFWS; those listed or proposed for listing as rare, threatened, or endangered by the CDFG under the California Endangered Species Act (CESA); animals designated as "Species of Special Concern" by the CDFG; and the CDFG Special Vascular Plants, Bryophytes, and Lichens List (CNPS, 2019).

Key to numbers and symbols used in Table 1 are listed on the next two pages

From: California Native Plant Society (CNPS). 2017. Inventory of Rare and Endangered Plants (online edition, v8-01a). California Native Plant Society. Sacramento, CA.

CRPR: California Rare Plant Rank

California Rare Plant Rank 1A: Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere

Plants with a California Rare Plant Rank of 1A are presumed extirpated or extinct because they have not been seen or collected in the wild in California for many years. A plant is extinct if it no longer occurs anywhere. A plant that is extirpated from California has been eliminated from California, but may still occur elsewhere in its range.

All of the plants constituting California Rare Plant Rank 1A meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Should these taxa be rediscovered, and impacts proposed to individuals or their habitat, they must be analyzed during preparation of environmental documents relating to the California Environmental Quality Act (CEQA), or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380.

California Rare Plant Rank 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere

Plants with a California Rare Plant Rank of 1B are rare throughout their range with the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. California Rare Plant Rank 1B plants constitute the majority of taxa in the CNPS Inventory, with more than 1,000 plants assigned to this category of rarity.

All of the plants constituting California Rare Plant Rank 1B meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125; (c) and/or §15380.

California Rare Plant Rank 2A: Plants Presumed Extirpated in California, But Common Elsewhere

Plants with a California Rare Plant Rank of 2A are presumed extirpated because they have not been observed or documented in California for many years. This list only includes plants that are presumed extirpated in California, but more common elsewhere in their range.

All of the plants constituting California Rare Plant Rank 2A meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Should these species be rediscovered, any impacts proposed to individuals or their habitat must be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380.

California Rare Plant Rank 2B: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

Except for being common beyond the boundaries of California, plants with a California Rare Plant Rank of 2B would have been ranked 1B. From the federal perspective, plants common in other states or countries are not eligible for consideration under the provisions of the Federal Endangered Species Act. With California Rare Plant Rank 2B, we recognize the importance of protecting the geographic range of widespread species. In this way we protect the diversity of our own state's flora and help maintain evolutionary processes and genetic diversity within species.

All of the plants constituting California Rare Plant Rank 2B meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380.

California Rare Plant Rank 3: Plants About Which More Information is Needed - A Review List

Plants with a California Rare Plant Rank of 3 are united by one common theme - we lack the necessary information to assign them to one of the other ranks or to reject them. Nearly all of the plants constituting California Rare Plant Rank 3 are taxonomically problematic. For each California Rare Plant Rank 3 plant we have provided the known information and indicated in the "Notes" section of the CNPS Inventory record where assistance is needed. Data regarding distribution, endangerment, ecology, and taxonomic validity are welcomed and can be submitted by emailing the Rare Plant Botanist at asims@cnps.org.

All of the plants constituting California Rare Plant Rank 3 meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380.

California Rare Plant Rank 4: Plants of Limited Distribution - A Watch List

Plants with a California Rare Plant Rank of 4 are of limited distribution or infrequent throughout a broader area in California, and their status should be monitored regularly. Should the degree of endangerment or rarity of a California Rare Plant Rank 4 plant change, we will transfer it to a more appropriate rank.

Some of the plants constituting California Rare Plant Rank 4 meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and few, if any, are eligible for state listing. Nevertheless, many of them are significant locally, and we strongly recommend that California Rare Plant Rank 4 plants be evaluated for impact significance during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, based on CEQA Guidelines §15125 (c) and/or §15380. This may be particularly appropriate for:

- a) The type locality of a California Rare Plant Rank 4 plant,
- b) Populations at the periphery of a species' range,
- c) Areas where the taxon is especially uncommon,
- d) Areas where the taxon has sustained heavy losses, or
- e) Populations exhibiting unusual morphology or occurring on unusual substrates.

Threat Ranks

- 1) 0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- 2) 0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- 3) 0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

California Dept. of Fish & Game

Endangered Species (CE)

Plant taxa whose prospects for survival are in immediate jeopardy from one or more causes

Threatened Species (CT)

Plant taxa not presently threatened with extinction, but likely to become endangered within the foreseeable future in the absence of special protection and management efforts

Rare Species (CR)

Plant taxa not presently threatened with extinction, but occurring in such small numbers throughout its range that they may become endangered if habitat conditions worsen

State Ranking

- S1** = Less than 6 EOs or less than 1,000 individuals or less than 2,000 acres
- S2** = 6-20 EOs or 1,000–3,000 individuals or 2,000–10,000 acres
- S3** = 21-100 EOs or 3,000-10,000 individuals or 10,000-50,000 acres
- S4** = Apparently secure in California – No threat rank
- S5** = Demonstrably secure in California – No threat rank

Number following S ranks:

- 1 – Very threatened
- 2 – Threatened
- 3 – No current threats

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Endangered Species (FE)

Taxa in danger of extinction throughout all or a significant portion of their range

Threatened Species (FT)

Taxa likely to become endangered within the foreseeable future throughout all or a significant portion of their range

Candidate Species (C)

Taxa for which the Service has on file enough substantial information on biological vulnerability and threat (s) to support proposals to list them as endangered or threatened species, but such action has been delayed by other listing activity

Global Ranking

GX Presumed Extinct

Believed to be extinct throughout its range. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.

GH Possibly Extinct

Known from only historical occurrences, but may nevertheless still be extant; further searching needed.

G1 Critically Imperiled

Critically imperiled globally because of extreme rarity or because of some factor (s) making it especially vulnerable to extinction. Typically 5 or fewer occurrences or very few remaining individuals (<1,000) or acres (<2,000) or linear miles (<10).

G2 Imperiled

Imperiled globally because of rarity or because of some factor (s) making it very vulnerable to extinction or elimination. Typically 6 to 20 occurrences or few remaining individuals (1,000 to 3,000) or acres (2,000 to 10,000) or linear miles (10 to 50).

G3 Vulnerable

Vulnerable globally either because very rare and local throughout its range, found only in a restricted range (even if abundant at some locations), or because of other factors making it vulnerable to extinction or elimination. Typically 21 to 100 occurrences or between 3,000 and 10,000 individuals.

G4 Apparently Secure

Uncommon but not rare (although it may be rare in parts of its range, particularly on the periphery), and usually widespread. Apparently not vulnerable in most of its range, but possibly cause for long-term concern. Typically more than 100 occurrences and more than 10,000 individuals.

G5 Secure

Common, widespread, and abundant (although it may be rare in parts of its range, particularly on the periphery). Not vulnerable in most of its range. Typically with considerably more than 100 occurrences and more than 10,000 individuals.

T# Intraspecific Taxon (trinomial)

The status of intraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank. Rules for assigning T-ranks follow the same principles outlined above. For example, the global rank of a critically imperiled subspecies of an otherwise widespread and common species would be G5T1.

Table 8. List of Special Status Plants Found in the Estrella (3512065), San Miguel (351207), Ranchito Canyon (3512075), Shandon (3512064), Shedd Canyon (3512054), Cholame Hills (3512074), Paso Robles (3512066), Templeton (3512056), and Creston (352055) quadrangles along with family, life form, flowering period, and elevation range. Those in bold are in Estrella quadrangle.

Scientific Name	Common Name	Lifeform	Blooming Period	Elevation Low (m)	Elevation High (m)
<i>Amsinckia douglasiana</i>	Douglas' fiddleneck	annual herb	Mar-May	0	1950
<i>Antirrhinum ovatum</i>	oval-leaved snapdragon	annual herb	May-Nov	200	1000
<i>Arctostaphylos hooveri</i>	Hoover's manzanita	perennial evergreen shrub	Feb-Jun	480	1035
<i>Aristocapsa insignis</i>	Indian Valley spineflower	annual herb	May-Sep	300	600
<i>Astragalus macrodon</i>	Salinas milk-vetch	perennial herb	Apr-Jul	250	950
<i>Calochortus simulans</i>	La Panza mariposa lily	perennial bulbiferous herb	Apr-Jun	325	1150
<i>Calycadenia villosa</i>	dwarf calycadenia	annual herb	May-Oct	240	1350
<i>Camissoniopsis hardhamiae</i>	Hardham's evening-primrose	annual herb	Mar-May	140	945
<i>Castilleja densiflora</i> var. <i>obispoensis</i>	San Luis Obispo owl's-clover	annual herb (hemiparasitic)	Mar-May	10	430
<i>Caulanthus lemmonii</i>	Lemmon's jewelflower	annual herb	Feb-May	80	1580
<i>Ceanothus cuneatus</i> var. <i>fascicularis</i>	Lompoc ceanothus	perennial evergreen shrub	Feb-Apr	5	400
<i>Chorizanthe douglasii</i>	Douglas' spineflower	annual herb	Apr-Jul	55	1600
<i>Chorizanthe palmeri</i>	Palmer's spineflower	annual herb	Apr-Aug	55	945
<i>Chorizanthe rectispina</i>	straight-awned spineflower	annual herb	Apr-Jul	85	1035
<i>Convolvulus simulans</i>	small-flowered morning-glory	annual herb	Mar-Jul	30	740
<i>Deinandra halliana</i>	Hall's tarplant	annual herb	Mar-May	260	950
<i>Delphinium gypsophilum</i> ssp. <i>parviflorum</i>	small-flowered gypsum-loving larkspur	perennial herb	Mar-Jun	190	350
<i>Eriastrum luteum</i>	yellow-flowered eriastrum	annual herb	May-Jun	290	1000
<i>Eriogonum elegans</i>	elegant wild buckwheat	annual herb	May-Nov	200	1525
<i>Eriogonum temblorense</i>	Temblor buckwheat	annual herb	Apr-Sep	300	1000
<i>Hesperervax caulescens</i>	hogwallow starfish	annual herb	Mar-Jun	0	505
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	perennial herb	Feb-Sep	70	810
<i>Horkelia cuneata</i> var. <i>sericea</i>	Kellogg's horkelia	perennial herb	Apr-Sep	10	200
Continued					

Scientific Name	Common Name	Lifeform	Blooming Period	Elevation Low (m)	Elevation High (m)
<i>Juncus luciensis</i>	Santa Lucia dwarf rush	annual herb	Apr-Jul	300	2040
<i>Lepidium jaredii</i> ssp. <i>jaredii</i>	Jared's pepper-grass	annual herb	Mar-May	335	1005
<i>Malacothamnus jonesii</i>	Jones' bush-mallow	perennial deciduous shrub	Mar-Oct	160	1075
<i>Monolopia gracilens</i>	woodland woolythreads	annual herb	Feb-Jul	100	1200
<i>Navarretia fossalis</i>	spreading navarretia	annual herb	Apr-Jun	30	655
<i>Navarretia nigelliformis</i> ssp. <i>radians</i>	shining navarretia	annual herb	Mar-Jul	65	1000
<i>Nemacladus secundiflorus</i> var. <i>secundiflorus</i>	large-flowered nemacladus	annual herb	Apr-Jun	200	2000
<i>Senecio aphanactis</i>	chaparral ragwort	annual herb	Jan-May	15	800
<i>Stebbinsoseris decipiens</i>	Santa Cruz microseris	annual herb	Apr-May	10	500

Table 9. Habitat Requirements of the Special Status Plants Found in Estrella (3512065), San Miguel (351207), Ranchito Canyon (3512075), Shandon (3512064), Shedd Canyon (3512054), Cholame Hills (3512074), Paso Robles (3512066), Templeton (3512056), and Creston (352055) quadrangles along with Preferred Habitats and whether Potential Habitats Occur on the Study Site. Species reported from the Estrella Quadrangle are in bold.

Scientific Name	Habitat	Micro Habitat	Found on Project Site
<i>Amsinckia douglasiana</i>	Cismontane woodland, Valley and foothill grassland	Monterey shale, dry	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. Suitable habitat not present. No Monterey shale on site, and species was not found. Not reported from the Estrella Quadrangle.
<i>Antirrhinum ovatum</i>	Chaparral, Cismontane woodland, Pinyon and juniper woodland, Valley and foothill grassland	clay or gypsum, often alkaline	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site; however it could potentially occur in somewhere on the undisturbed areas of the Estrella Ranch; although, this is not likely. This species has been reported from areas northwest of the project site.
<i>Arctostaphylos hooveri</i>	Broadleafed upland forest, Chaparral (rocky), Cismontane woodland, Lower montane coniferous forest		NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No appropriate Broadleafed upland forest, chaparral (rocky), or lower montane coniferous forest were found on site. The species was not observed and has not been reported from the Estrella Quadrangles. This evergreen shrub is easily identified and it does not occur on the site.
<i>Aristocapsa insignis</i>	Cismontane woodland (sandy)		NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. This species has not reported in the Estrella quadrangle or near the site. Nearest reported sites are south of Creston; so, the site is not in the range of this plant. Habitat is not appropriate.
<i>Continued</i>			

Scientific Name	Habitat	Micro Habitat	Found on Project Site
<i>Astragalus macrodon</i>	Chaparral (openings), Cismontane woodland, Valley and foothill grassland	sandstone, shale, or serpentinite	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. There are no sandstone, shale, or serpentinite soils on site, and the species was not found. Not reported from the Estrella Quadrangle and not found or expected to occur on the site.
<i>Calochortus simulans</i>	Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland	sandy, often granitic, sometimes serpentinite	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. There are no serpentinite or granitic soils on site, and the species was not found. Not reported from the Estrella or Shandon Quadrangles and not found or expected to occur on the site. Only found Atascadero south.
<i>Calycadenia villosa</i>	Chaparral, Cismontane woodland, Meadows and seeps, Valley and foothill grassland	rocky, fine soils	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No appropriate seeps or meadows were found on site, and the soils are not appropriate. The species was not observed and has not been reported from the Estrella or Shandon Quadrangles. Nearest location to subject site is Chimney Rock east of Paso Robles and Camp Roberts.
<i>Camissoniopsis hardhamiae</i>	Chaparral, Cismontane woodland	sandy, decomposed carbonate, disturbed or burned areas	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. There are no decomposed carbonate or burned areas on site. Not reported from the Estrella or Shandon Quadrangles and not found on the site and not expected on the site. Nearest populations are Camatta Ranch and Camp Roberts.
<i>Continued</i>			
Scientific Name	Habitat	Micro Habitat	Found on Project Site

<i>Castilleja densiflora</i> var. <i>obispoensis</i>	Meadows and seeps, Valley and foothill grassland	sometimes serpentinite	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. Not reported from the Estrella or Shandon Quadrangles and not found or expected to occur on the site. Potential habitat not likely present on the site. Subject site is out of the known range for this species, which is mostly along the coast. No meadows, seeps, or serpentinite on the site. The only north county collection near Paso Robles is likely a misidentification according to CNDDB.
<i>Caulanthus lemmonii</i>	Pinyon and juniper woodland, Valley and foothill grassland		NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. Not observed and not expected on site. It has been reported from areas around Shandon east of the subject site and Paso Robles west of the site but not within 10 miles of the Estrella Ranch. Any potential habitat on the ranch will not be disturbed.
<i>Ceanothus cuneatus</i> var. <i>fascicularis</i>	Chaparral (sandy)		NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No suitable chaparral habitats present and not observed on site. No appropriate. The species was not observed and has not been reported from the Estrella Quadrangle. This evergreen shrub is easily identified and it does not occur on the site.
<i>Chorizanthe douglasii</i>	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland	sandy or gravelly	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site; however it could potentially occur in somewhere on the undisturbed areas of the Estrella Ranch; although, this is not likely. Populations occur NW of the study site, Camatta Canyon, and Herohuero Creek.
Scientific Name	Habitat	Micro Habitat	Found on Project Site

[illegible]

<i>Delphinium gypsophilum</i> <i>ssp. parviflorum</i>	Cismontane woodland, Valley and foothill grassland	Rocky clay, sometimes serpentinite.	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. Not reported from the Estrella or quadrangle and not found on the site. No appropriate habitats such as gypsum, serpentinite, or rocky clay. No species of <i>Delphinium</i> were found. Not expected on the site.
<i>Eriastrum luteum</i>	Broadleafed upland forest, Chaparral, Cismontane woodland	sandy or gravelly	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sandy, gravelly soils. This species was not found on the site and not expected to occur on the site. Only reported location near the subject site is from sandy, dry ground in Atascadero in 1950. Not reported from Estrella Quadrangle
<i>Eriogonum elegans</i>	Cismontane woodland, Valley and foothill grassland	Usually sandy or gravelly, often washes, sometimes roadsides	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No appropriate habitats such as sandy, gravelly soils. This species is not expected to occur on the site. No sandy or gravelly washes on the site. Not reported from Estrella Quadrangle.
<i>Eriogonum temblorense</i>	Valley and foothill grassland (clay or sandstone)		NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. Reported from the Shandon quadrangle east of project site. This species could potentially be in the undisturbed portions of the grassland, but even if it were, it will not be affected by the proposed project.
<i>Hesperervax caulescens</i>	Valley and foothill grassland (mesic, clay), Vernal pools (shallow)	sometimes alkaline	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. This species has not been reported from the Estrella quadrangle. There are no mesic clay soils or vernal pools on the project site.
<i>Continued</i>			
Scientific Name	Habitat	Micro Habitat	Found on Project Site

<i>Malacothamnus jonesii</i>	Chaparral, Cismontane woodland		NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No suitable habitats present on site. No appropriate Chaparral occurs on site. The species was not observed and has not been reported from the Estrella Quadrangle. This distinctive shrub is easily identified, and it does not occur on the site.
<i>Monolopia gracilens</i>	Broadleaved upland forest (openings), Chaparral (openings), Cismontane woodland, North Coast coniferous forest (openings), Valley and foothill grassland	Serpentine	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No appropriate habitats such as openings in upland forest or chaparral are present, and no serpentinite soils on the site. The species was not reported from the Estrella or Shandon Quadrangles, not found on the site, and is not expected to occur on the site. Closest reported location to study site is 3 miles west of Paso Robles in 1957.
<i>Navarretia fossalis</i>	Chenopod scrub, Marshes and swamps (assorted shallow freshwater), Playas, Vernal pools		NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No appropriate habitats such as chenopod scrub, marshes, swamps, or vernal pools on site. Not reported from the Estrella or Shandon Quadrangles and not found on the site. Not expected on the site.
<i>Navarretia nigelliformis</i> <i>ssp. radians</i>	Cismontane woodland, Valley and foothill grassland, Vernal pools	Sometimes clay	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site; however it could potentially occur in somewhere on the undisturbed areas of the Estrella Ranch; although, this is not likely. There are no appropriate clay soils or vernal pool habitats on site. This species has been reported from areas northwest of the project site and near Cholame.
<i>Continued</i>			
Scientific Name	Habitat	Micro Habitat	Found on Project Site
<i>Nemacladus secundiflorus</i> <i>var. secundiflorus</i>	Chaparral, Valley and foothill grassland	gravelly, openings	NO. No plants were found within the outdoor Cannabis cultivation

			site and no suitable habitat occurs near the site. This species has not been reported from Estrella Quadrangle. No appropriate habitats such as gravelly openings in chaparral or grassland occur on the project site. This species was not found on the site and not expected to occur on the
<i>Senecio aphanactis</i>	Chaparral, Cismontane woodland, Coastal scrub	sometimes alkaline	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. Not reported from the Estrella or Shandon Quadrangles and not found on the site. No appropriate habitats on this highly disturbed site. Not expected on the site.
<i>Stebbinsoseris decipiens</i>	Broadleafed upland forest, Closed-cone coniferous forest, Chaparral, Coastal prairie, Coastal scrub, Valley and foothill grassland	open areas, sometimes serpentinite	NO. No plants were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No appropriate habitats or serpentinite. Not reported from the Estrella or Shandon Quadrangles and not found on the site. Closest reported locations to study site is Cerro Alto and Paradise Valley east of Atascadero. Not expected on the site.
<i>End</i>			

APPENDIX 2. SPECIAL STATUS WILDLIFE SPECIES:

The list of the special status wildlife species that could potentially be present on the project site based on a nine-quadrangle search is listed below. Reference: California Department of Fish and Wildlife Natural Diversity Data Base (CNDDB).

TABLE 10. List of wildlife species found in the Estrella (3512065), San Miguel (351207), Ranchito Canyon (3512075), Shandon (3512064), Shedd Canyon (3512054), Cholame Hills (3512074), Paso Robles (3512066), Templeton (3512056), and Creston (352055) quadrangles.

KEY: (N = none, T = threatened, E = endangered, C = candidate, SSC = species of special concern, FP = federally proposed for change, WL = watch list, D=delisted)

Scientific Name	Common Name	Fed. Status	State Status	CDFW Status	Found in Study Site	Effect of proposed project
CRUSTACEANS						
Branchinecta lynchi	vernal pool fairy shrimp	T	None	None	No	None
INSECTS						
<i>Bombus crotchii</i>	Crotch bumble bee	None	CE	None	No	None
<i>Polyphylla nubila</i>	Atascadero June beetle	None	None	None	No	None
<i>Trimerotropis occulens</i>	Lompoc grasshopper	None	None	None	No	None
FISH						
<i>Lavinia exilicauda harengus</i>	Pajaro/Salinas hitch	None	None	SSC	No	None
<i>Oncorhynchus mykiss irideus</i> pop. 9	steelhead - south-central California coast DPS	T	None	None	No	None
AMPHIBIANS						
<i>Ambystoma californiense</i>	California tiger salamander	T	T	WL	No	None
<i>Rana draytonii</i>	California red-legged frog	T	None	SSC	No	None
<i>Spea hammondi</i>	western spadefoot	None	None	SSC	No	None
<i>Taricha torosa</i>	Coast Range newt	None	None	SSC	No	None
<i>Continued</i>						

Scientific Name	Common Name	Fed. Status	State Status	CDFW Status	Found in Study Site	Effect of proposed project
REPTILES						None
<i>Anniella pulchra</i>	northern California legless lizard	None	None	SSC	No	None
<i>Arizona elegans occidentalis</i>	California glossy snake	None	None	SSC	No	None
<i>Emys marmorata</i>	western pond turtle	None	None	SSC	No	None
<i>Gambelia sila</i>	blunt-nosed leopard lizard	E	E	FP	No	None
<i>Masticophis flagellum ruddocki</i>	San Joaquin coachwhip	None	None	SSC	No	None
<i>Masticophis flagellum ruddocki</i>	San Joaquin coachwhip	None	None	SSC	No	None
<i>Phrynosoma blainvillii</i>	coast horned lizard	None	None	SSC	No	None
BIRDS						
<i>Agelaius tricolor</i>	tricolored blackbird	None	T	SSC	No	None
<i>Aquila chrysaetos</i>	golden eagle	None	None	FP ; WL	No	None
<i>Ardea alba</i>	great egret	None	None	N	No	None
<i>Ardea herodias</i>	great blue heron	None	None	None	No	None
<i>Athene cunicularia</i>	burrowing owl	None	None	SSC	No	None
<i>Baeolophus inornatus</i>	oak titmouse	None	None	None	No	None
<i>Botaurus lentiginosus</i>	American bittern	None	None	None	No	None
<i>Buteo regalis</i>	ferruginous hawk	None	None	WL	No	None
<i>Buteo swainsoni</i>	Swainson's hawk	None	T	N	No	None
<i>Circus hudsonius</i>	northern harrier	None	None	SSC	No	None
<i>Coturnicops noveboracensis</i>	yellow rail	None	None	SSC	No	None
<i>Elanus leucurus</i>	white-tailed kite	None	None	FP	No	None
<i>Eremophila alpestris actia</i>	California horned lark	None	None	WL	No	None
<i>Falco mexicanus</i>	prairie falcon	None	None	WL	No	None
<i>Gymnogyps californianus</i>	California condor	E	E	FP	No	None
<i>Haliaeetus leucocephalus</i>	bald eagle	De	E	FP	No	None
<i>Icteria virens</i>	yellow-breasted chat	None	None	SSC	No	None
<i>Lanius ludovicianus</i>	loggerhead shrike	None	None	SSC	No	None
<i>Nycticorax nycticorax</i>	black-crowned night heron	None	None	None	No	None
<i>Continued</i>						

Scientific Name	Common Name	Fed. Status	State Status	CDFW Status	Found in Study Site	Effect of proposed project
<i>Pica nuttalli</i>	yellow-billed magpie	None	None	-	No	None
<i>Riparia riparia</i>	bank swallow	None	T	None	No	None
<i>Setophaga petechia</i>	yellow warbler	None	None	SSC	No	None
<i>Vireo bellii pusillus</i>	least Bell's vireo	E	E	None	No	None
MAMMALS						
<i>Ammospermophilus nelsoni</i>	Nelson's antelope squirrel	None	T	None	No	None
<i>Antrozous pallidus</i>	pallid bat	None	None	SSC	No	None
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None	None	SSC	No	None
<i>Eumops perotis californicus</i>	western mastiff bat	None	None	SSC	No	None
<i>Lasiurus blossevillii</i>	western red bat	None	None	SSC	No	None
<i>Myotis evotis</i>	long-eared myotis	None	None	None	No	None
<i>Myotis yumanensis</i>	Yuma myotis	None	None	None	No	None
<i>Neotoma macrotis luciana</i>	Monterey dusky-footed woodrat	None	None	SSC	No	None
<i>Onychomys torridus tularensis</i>	Tulare grasshopper mouse	None	None	SSC	No	None
<i>Perognathus inornatus</i>	San Joaquin Pocket Mouse	None	None	None	No	None
<i>Taxidea taxus</i>	American badger	None	None	SSC	No	None
<i>Vulpes macrotis mutica</i>	San Joaquin kit fox	E	T	None	No	None

Table 11. Habitat Requirements of the Special Status Animals Found in Estrella (3512065), San Miguel (351207), Ranchito Canyon (3512075), Shandon (3512064), Shedd Canyon (3512054), Cholame Hills (3512074), Paso Robles (3512066), Templeton (3512056), and Creston (352055) quadrangles along with preferred habitats and whether Potential Habitats Occur on the Study Site.

Scientific Name Common Name	Habitat Association	Found on Site and/or Potential to Occur on Site
INVERTEBRATES		
<i>Bombus crotchii</i> Crotch's bumble bee	This bee's habitat is grassland and scrub. It builds nests underground and feeds on plants such as lupines, sages, and phacelias. It is found in hot dry habitat types such as the Central Valley of California, where it once was common before spread of urban and agricultural areas. Its historic range was from central California to Baja California. It is thought to have declined about 67% from its historic range within the United States.	No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle and has not been observed near the site.
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	Vernal pool habitats including depressions in sandstone, to small swale, earth slump or basalt-flow depressions with a grassy or, occasionally, muddy bottom in grassland. Vernal pool areas (usually less than 0.05 acres) found in unplowed grasslands of the Central Valley and coastal interior mountains.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. No vernal pools or small depressions found in the grasslands on the proposed project site or subject parcel. This species does not occur on this disturbed project site.
<i>Polyphylla nubile</i> Atascadero June Beetle	Old sand dunes in Templeton, Atascadero, and Paso Robles quadrangles.	No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported from the Estrella quadrangle. There is no suitable sand dune habitats found on the subject site for this species.
<i>Trimerotropis occulens</i> Lompoc grasshopper	Known only from Santa Barbara and San Luis Obispo Counties. <i>Trimerotropis</i> sp. feed on herbaceous plants in arid areas. Often associated with rock outcrops and gravelly soils.	No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been from the Estrella quadrangle. The closest population is one old historical record from Paso Robles area. No grasshopper species were observed on the site and no rock outcrops and gravelly soils occur.
<i>Continued</i>		

Scientific Name Common Name	Habitat Association	Found on Site and/or Potential to Occur on Site
FISH		
<i>Lavinia exilicauda harengus</i> Pajaro/Salinas Hitch	Pajaro/Salinas Hitch are deep-bodied cyprinids that are widely distributed in the Pajaro and Salinas river systems, which are tributaries to Monterey Bay. Monterey hitch can occupy a wide variety of habitats, although they are most abundant in lowland areas with large pools or in small reservoirs with permanent water in summer. The water is clear, warm in late summer and a maximum depth of one meter. Bottom substrates are mostly a mixture of sand and gravel and the presence of cover such as fallen trees, overhanging trees and bushes is important. Although Monterey hitch are in no danger of extinction, the status of populations remains uncertain.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. No stream or pond habitats on the site; therefore, this species does not occur on the study site
<i>Lavinia symmetricus subditus</i> Monterey roach	A cyprinid fish that is mostly a bottom feeder on filamentous algae, aquatic insects, and crustaceans. They move into shallow, flowing water, over bottoms covered with small rocks, and form up into schools. Females lay adhesive eggs in crevices, where they stick to the rocks.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. No stream habitats on the site; therefore, this species is does not occur on the study site. This species has not been reported from the Estrella quadrangle.
<i>Oncorhynchus mykiss irideus</i> Steelhead: South/Central California coast,	Well-vegetated stream margins. Gravel bedded rivers and streams with shaded deep pools and perennial water available. Clear, cool water with stable water flow and abundant in stream cover.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. No stream habitats on the site; therefore, this species is does not occur on the study site. This species has not been reported from the Estrella quadrangle.
AMPHIBIANS		
<i>Rana draytonii</i> California red-legged frog (CRF) Continued	Wetlands and ponds with emergent vegetation and little or no flow. Semi-permanent or permanent water at least 0.5 m deep, bordered by emergent or riparian vegetation. Pools of water at least 2.3 feet deep until at least early June. Presence of fairly sturdy underwater supports plants such as cattails. Deep holes in wetlands and ponds are needed to escape predators.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported from the Estrella quadrangle. There are no wetlands or streams on the project site. Parts of Estrella River could potentially provide habitat, but the river is over 1000 feet away and dry much of the year.

Scientific Name Common Name	Habitat Association	Found on Site and/or Potential to Occur on Site
<i>Spea hammondi</i> Western spadefoot	Occurs primarily in grassland habitats but can be found in oak woodlands, chenopod scrub, alkali sink, and in sandy, gravelly washes and river floodplains. Must have vernal pools for breeding and egg laying.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. No potential wetland habitats on the proposed project site. Western spadefoot occurs in ephemeral pools and ponds surrounded by grassland. No vernal pools or wetlands occur on the project site.
<i>Taricha torosa</i> Coast Range newt	Coastal drainages from Mendocino County to San Diego County. Occurs in cool waters in quiet or slow moving streams, ponds, and lakes. Breeds in ponds, reservoirs, and slow moving streams but also ranges into terrestrial habitats.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. There are no wetlands with cool waters in quiet or slow moving streams, ponds, or lakes that could provide habitat for this species on the site. This species has not been reported from the Estrella quadrangle.
REPTILES		
<i>Anniella pulchra</i> Northern California legless lizard	Typically in dune scrub, coastal scrub, chaparral, oak woodland, and riparian woodland. Requires loose soil or burrowing, moisture, warmth, and plant cover. Burrows in washes, dune sand, loose soil near bases of slopes, and near permanent or temporary streams. Largely along the coast but also inland in moist areas with sandy or loose loamy soils and sparse vegetation. Legless lizards are adapted for burrowing in sandy soils and through leaf litter, but soils must have high moisture content. They spend much of their time underground or beneath duff.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. Northern California legless lizard has not been reported from the Estrella quadrangle or near the proposed project site. It occurs mostly in sandy dune soil along the coast. If it were to occur on the Estrella Ranch it would likely be in the oak woodland, which will not be disturbed. .
<i>Arizona elegans occidentalis</i> California glossy snake Continued	This is a non-poisonous medium sized snake that inhabits arid areas of scrub, rocky washes, grasslands and chaparral habitats mostly in open areas with loose soil for burrowing. It is nocturnal and hides in burrows or under rocks during the day. This species is active during the fall and spring and less so in the summer. It feeds on lizards, small snakes, small birds, and small mammals. It ranges from the San Francisco Bay area to Baja California but is typically rare or absent from the central coast.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported from the Estrella quadrangle; however, it is remotely possible that potential habitat occurs somewhere on the large Estrella Ranch. The areas that it might be found will not be affected by the proposed project.

Scientific Name Common Name	Habitat Association	Found on Site and/or Potential to Occur on Site
<i>Coluber flagellum ruddocki</i> San Joaquin Coachwhip	This is a slender, long snake that can move fast over the ground. It occurs in open, dry, treeless areas with little to no cover such as valley grassland and saltbush scrub. It is found in dry, hot areas in the Central Valley and inner South Coast Ranges. It is active during the daytime and feeds on small animals and bird eggs.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported from the Estrella quadrangle. It is remotely possible that potential habitat occurs somewhere on the Estrella Ranch but not near the highly disturbed project site. The area it could occur will not be affected by the proposed cultivation project.
<i>Emys marmorata</i> Western pond turtle	Quiet waters of ponds, lakes, streams, and marshes with stands of wetland vegetation. This is a highly aquatic species requiring permanently ponded water. Typically, in deepest parts where there are many basking sites such as partially submerged logs, vegetation mats, or open mud banks.	NO. There is no potential habitat for western pond turtles on the proposed cultivation project site. This species requires ponds, lakes, or deeper waters to avoid predators and to feed. There are no wetlands on or near the project site. Western pond turtles can live on land and will often travel overland in search of a source of water or a place to over summer in underground burrows in dry years. They use friable soils for nesting. However, there are no suitable nesting sites within the project site. It is highly unlikely that western pond turtles would venture onto the Estrella Ranch anywhere near the project site. The area it could potentially occur on the ranch will not be affected by the proposed cultivation project.
<i>Gambelia sila</i> Blunt nosed leopard lizard Continued	The blunt-nosed leopard lizard is a relatively large lizard (5 inches long excluding the tail) of the Iguanidae family. It has a long, regenerative tail; long, powerful hind limbs; and a short, blunt. This species is found only in the San Joaquin Valley and adjacent foothills including the Carrizo Plain and Cuyama Valley. It inhabits open, sparsely vegetated areas of low relief on the valley floor, valley saltbush scrub, and the surrounding foothills. It is absent from areas of steep slope and dense vegetation. Leopard lizards use small rodent burrows for shelter but in areas with low mammal burrow density, lizards will construct shallow, simple tunnels in earth berms or under rocks. They feed primarily on insects (i.e., grasshoppers, crickets and moths) and other lizards.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported from the Estrella quadrangle or near the project site. There is no suitable habitats known to occur on the Estrella Ranch.

<p><i>Baeolophus inornatus</i> Oak titmouse</p>	<p>The species is almost entirely restricted to the dry slopes of California that surround the central San Joaquin Valley. Prefers open woodlands of warm, dry oak and oak-pine at low to mid-elevations but can also be found in forests as long as adequate oak trees are present.</p>	<p>NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported from the Estrella quadrangle and has not been found on subject site or from the near the site.. The oak woodland does not appear to provide habitat for this species; however, even if it did, this area will not be affected by the proposed cultivation project. Oak titmouse would not use the highly disturbed project site.</p>
<p><i>Botaurus lentiginosus</i> American Bittern</p>	<p>This is mostly a coastal species, which is a common winter visitor to coastal freshwater marshes that contain dense cattails or bulrushes and is also a rare or irregular visitor to the salt marshes of Morro Bay.</p>	<p>NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported from the Estrella quadrangle and has not been reported near the site. No suitable coastal freshwater marshes that contain dense cattails or bulrushes habitats occur near the site.</p>
<p><i>Buteo regalis</i> Ferruginous hawk</p>	<p>Nonbreeding/wintering in open grasslands, sagebrush flats, desert scrub, low foothills, pinyon-juniper habitats.</p>	<p>NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported from the Estrella quadrangle and has not be reported near the project site. This is an uncommon winter visitor to this area, and the Estrella Ranch does not appear to provide suitable habitat but may provide hunting grounds in the general vicinity of the Estrella Ranch. It is remotely possible that this hawk might fly over the Estrella Ranch, but it is unlikely to use the ranch for foraging</p>
<p><i>Buteo swainsoni</i> Swainson's hawk</p>	<p>Swainson's hawks prefer open habitats such as deserts, grasslands and prairies. Although much of their native prairie and grassland habitats have been converted to crop and grazing land, these hawks have adjusted well to agricultural settings. Swainson's Hawks eat mainly mammals and insects. Nests are of loose bundle of sticks, twigs, and debris items such as rope and wire. Nest construction can take up to 2 weeks, with the finished nest reaching 2 feet in diameter and over a foot high. A major cause of population decline is a chemical used to keep the pests away from the crops.</p>	<p>NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported from the Estrella quadrangle. It is remotely possible that potential habitat occurs somewhere on the large parcel but not near the project site</p>
<p>Continued</p>		

Scientific Name Common Name	Habitat Association	Found on Site and/or Potential to Occur on Site
<i>Circus cyaneus</i> northern harrier	This is a bird of prey that breeds throughout the northern parts of the northern hemisphere in Canada and northern United States. It migrates to more southerly areas in winter. This medium-sized raptor breeds in lowlands, bogs, and farmland. Nests are placed on the ground. In winter, the female Harriers may be found in open country and will roost communally with other raptors. Harriers hunt small mammals and birds and tend to be vocal birds when it glides over its hunting ground.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported from the Estrella quadrangle, was not seen on the project site, and has not been reported from near the site. It is remotely possible that it could fly over the area but would not be expected to use it in any significant way.
<i>Coturnicops noveboracensis</i> yellow rail	Yellow Rails occur in shallow marshes with fairly short vegetation. They nest where water is shallow and vegetation is short. They often nest among sedges and rushes. Yellow Rails also inhabit marshes with bulrushes. This is a tiny, very secretive marsh bird that lives and is one of the hardest birds to see in North America. They are mostly on the ground and rarely take flight.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle. There are no marshes on the site; therefore no habitat for this species within the site.
<i>Dendroica petechia brewsteri</i> Yellow warbler	Common in wet brushy habitats and in riparian and woodland habitats near river bottoms with willows, cottonwoods, aspens, sycamores, and alders for resting and foraging.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle. This species has not reported from anywhere near the site. No wet brushy or riparian habitats occur on the site.
<i>Elanus leucurus</i> White-tailed kite	Yearlong resident in coastal and valley lowlands; rarely away from agricultural areas. Inhabits herbaceous and open, moist habitats mostly in cismontane areas. Habitats include open grassland, meadows, or marshlands for foraging. Needs isolated dense-topped trees for nesting and perching.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle. This species has not reported from near the site. No stands of wet grassland, meadows, or marshlands occur on the subject site. We do not expect this species to use the site.
<i>Eremophila alpestris actia</i> California horned lark <i>Continued</i>	The horned lark is a relatively common resident in a variety of open habitats, usually where trees and large shrubs are absent. California horned larks breed in level or gently sloping short grass prairie, montane meadows, "bald" hills, opens coastal plains, fallow agricultural fields, and salt flats. In San Luis Obispo County, horned larks breed primarily in open fields, (short) grasslands, rangelands, saltbush scrub, and salt flats (e.g. Carrizo Plain).	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle and not reported from the near the site. No signs of California horned larks were found on the project site, and no appropriate habitat conditions are present.

Scientific Name Common Name	Habitat Association	Found on Site and/or Potential to Occur on Site
<i>Falco mexicanus</i> Prairie falcon	The prairie falcon occurs in arid environments and is able to subsist on less food than the peregrine. It ranges from southern Canada, through western United States, and into northern Mexico. The natural habitat of the prairie falcon is open areas with arid summers such as grasslands and high desert. In winter it is more widespread, ranging to low deserts and occasionally to towns. The prairie falcon eats mostly small mammals and small to medium-sized birds, squirrels, prairie dogs, chipmunks, gophers, and rabbits of various species. Reptiles are also sometimes taken.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle, not observed on the project site, and has not been reported from the site. The opportunity for nesting on the hillsides of the site is remote at best; however, they could potentially fly over and utilize the area in the general vicinity of the site for foraging.
<i>Gymnogyps californianus</i> California condor	Condors are found in rocky shrubland, coniferous forests, and oak savannas. They are often found near cliffs or large trees, which they use as nesting sites. Individual birds have a huge range and have been known to travel up to 250 km (160 mi) in search of carrion. California Condors have been reintroduced to mountains of southern and central California, Arizona, Utah, and Baja California. Nesting habitats range from scrubby chaparral to forested mountain regions up to about 6,000 feet elevation. Foraging areas are in open grasslands and can be far from primary nesting sites, requiring substantial daily commutes.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle. It is possible that a condor might fly over the site but no one has reported seeing one as far as I know.
<i>Haliaeetus leucocephalus</i> Bald eagle	Roosts communally in winter in dense, sheltered, remote conifer stands. Nests in large, old growth, or dominant live trees close to lakes and large rivers. Usually seen near lakes, rivers, and along the coast where prey is abundant and prominent trees provide nesting sites.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle. However, this species has been observed north and west of the site such as Camp Roberts and Nacimiento Lake. It is an uncommon permanent resident and may fly over the site, but we do not believe it would use the site.
<i>Icteria virens</i> yellow-breasted chat	The yellow-breasted chat is found throughout North America and breeds from the southern plains of Canada to central Mexico. It mainly migrates to Mexico and Central America for the winter, although some may overwinter in coastal areas farther north. This large songbird breeds in areas of dense shrubbery, swamps, and edges of streams and ponds. Its habitat often includes blackberry bushes. In arid regions of the West it is frequently found in shrubby habitats along rivers. It feeds mostly on insects and fruit, which can make up over half of their diet at certain times of the year. It nests in dense vegetation such as blackberry.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle. No areas of dense shrubbery, swamps, or edges of streams and ponds occur on the site. This species does not have habitat on the project site.

Continued

Scientific Name Common Name	Habitat Association	Found on Site and/or Potential to Occur on Site
<i>Vireo bellii pusillus</i> Least Bell's vireo	Rare migrant in riparian habitats Requires dense cover within 1-2 meters of the ground for nesting and dense, stratified canopy for foraging. Usually found in low growing riparian vegetation. It is a summer breeding migrant,	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle and not found on the site. There is not suitable riparian habitats within the subject site or near the project site.
MAMMALS		
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	This bat requires large cavities for roosting that may include abandoned buildings and mines, caves, and basal cavities of trees. During summer, they inhabit rocky crevices, caves, and derelict buildings. In winter, they hibernate in a variety of dwellings, including rocky crevices, caves, tunnels, mineshafts, spaces under loose tree bark, hollow trees, and buildings. During the summer, males and females occupy separate roosting sites; males are typically solitary, while females form that range in size from 12 bats to 200.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle. There are no large cavities for roosting such as abandoned buildings and mines, caves, and basal cavities of trees on the site. No habitat for this species near the project site.
<i>Ammospermophilus nelson</i> Nelson's or San Joaquin antelope squirrel	The Nelson or San Joaquin antelope squirrel is endemic to the San Joaquin Valley, including slopes and ridge tops along the western edge of the valley. It is found in a much smaller range today than it originally inhabited because of urban and agricultural developments combined with rodenticide use has reduced the squirrels numbers. San Joaquin antelope squirrels are mostly found in the Carrizo Plain where their original habitat remains undisturbed. The squirrels live in small underground familial colonies on sandy, easily excavated grasslands in isolated locations in San Luis Obispo and Kern Counties. The live in hot, arid desert where the common vegetation is saltbush and Ephedra with sometimes with Junipers.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle. There is no suitable habitat on the site especially near the highly disturbed project site. The site is out of the known range for this species.
<i>Continued</i>		

Scientific Name Common Name	Habitat Association	Found on Site and/or Potential to Occur on Site
<i>Myotis evotis</i> long-eared myotis	Long-eared myotis range includes several different environments. It has been known to occur in semiarid shrublands, short grass prairie, and subalpine forests, with habitats ranging from sea level to 2,830 meters (Barclay et. al. 2006). They roost in a variety of places, including tree cavities, rock crevices, caves, and even abandoned buildings. They seem to prefer rock crevices, while individuals in the northern part of the range favor ponderosa and lodgepole pines. Reproducing females generally roost in small, 2-centimeter wide crevices. Most crevices used by the long-eared myotis are vertically oriented and contain an overhang over the opening. The bats occasionally switch roosts, an event that involves the colony as a whole. Roosting sites commonly contain a lot of rock cover, are far from bodies of water, and have little cover from trees and grass. This species of myotis is an insectivore and specializes in hunting beetles.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle, and not been reported from near the site. No signs of bats were found on the project site and do not believe suitable habitat is available.
<i>Myotis yumanensis</i> Yuma myotis (bat)	Yuma myotis inhabits most of western North America from southern Canada to central Mexico. This species is closely associated with open water where it forages. It is closely associated with rivers, streams, ponds, lakes, etc.; however, this species can be found roosting in caves, attics, buildings, mines, underneath bridges, and other similar structures.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle and has not been reported from near the subject site. We did not find any signs of bats on the site and do not believe suitable habitat is available.
<i>Neotoma macrotis luciana</i> Monterey dusky-footed Woodrat	This species occurs in a variety of habitats, both arboreal and terrestrial. Habitats include chaparral, hardwood, conifer, and mixed forests, and riparian woodlands. In most instances, nests are constructed in inaccessible areas, such as thorny thickets, poison oak patches, and at the base or crotch of trees. They build large, domed dens that can reach several feet in height. Dens contain a nest and up to several "pantry" chambers which are used to store leaves and nuts for future consumption. Occasionally, dusky-footed woodrats will build satellite dens in trees. Although these animals are religiously solitary, except in the mating season, dens are frequently found in clusters of up to several dozen, forming rough "communities". The mating system in this species appears to be variable, with promiscuity most generally at high population densities and monogamy at lower densities.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle. There is no suitable habitat on the site and we saw no signs of woodrats or woodrat nests near the site. If present it would be in the oak woodlands, which will not be disturbed.

Continued

Scientific Name Common Name	Habitat Association	Found on Site and/or Potential to Occur on Site
<i>Perognathus inornatus inornatus</i> San Joaquin pocket mouse	Dry, open grasslands, shrubland areas, and blue oak savannas. Needs friable soils to burrow.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle and not found on subject site. Previous identification of this subspecies in San Luis Obispo County is believed to be a result of misidentification according to CNDDB. The mouse found was likely <i>Perognathus inornatus neglectus</i> . The subject subspecies is more common east of the subject site.
<i>Perognathus inornatus psammophilus</i> Salinas pocket mouse	Grasslands and desert shrub communities in the Salinas Valley. Burrows (and nests) in fine textured or sandy soils that are friable.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. This species has not been reported as occurring in the Estrella quadrangle and not found on subject site. This species occurs north of the subject site, mostly in Monterey County. We did not observe this species on site, and the site is also out of its known range
<i>Taxidea taxus</i> American badger	Badgers are largely solitary and almost entirely nocturnal, foraging at night and then remaining underground during the daylight hours. It would be a vagrant that moved across the landscape, digging a new burrow every day or two. Badgers can be found in grasslands where they often dig burrows and forage for small mammals and reptiles; however, badgers can also visit a variety of habitats including chaparral, and oak woodland with friable soils and open, uncultivated ground. No signs of badgers were observed, and no diggings or burrows were found on the subject parcel.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. Potential habitat for the American badger may occur somewhere on the Estrella Ranch; however, none of these areas will be affected by the proposed project. No signs of American badgers or badger burrows near the proposed project site were observed.
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	Annual grassland or grassland with scattered shrubs. Needs friable sandy soils for burrowing and suitable prey base.	NO. No wildlife were found within the outdoor Cannabis cultivation site and no suitable habitat occurs near the site. No sign of this species was found or expected to occur on the site. Potential habitat for Kit foxes may occur somewhere on the Estrella Ranch, but no signs of kit foxes were found near the proposed project site. However, they could potentially occur somewhere on the Estrella Ranch. None of these areas will be affected by the proposed project. It should be noted the kit foxes will be the subject of a separate report.
End		+

APPENDIX 3. PHOTOS OF PROJECT SITE



Photo 1. View of vegetation on Phase 1, Area 1 in the outdoor cultivation site in horse area showing the bare areas with patches of weedy, introduced grasses and forbs in November 2019



Photo 1. View of vegetation on Phase 1, Area 1 in the outdoor cultivation site in horse area showing the bare areas with patches of weedy, introduced grasses and forbs in May 2020.



Photo 3 View of vegetation on Phase 1, Area 2 outdoor cultivation site in horse area showing the bare areas with patches of weedy, introduced grasses and forbs in November 2019



Photo 4 View of vegetation on Phase 1, Area 2 outdoor cultivation site in horse area showing the bare areas with patches of weedy, introduced grasses and forbs in May 2020.



Photo 5. View of vegetation on Phase 2, Area 3 outdoor cultivation site in horse area showing the bare areas with patches of weedy, introduced grasses and forbs in November 2019. The Phase 1, Area 1 cultivation site is visible in upper portion of photo where it adjoins the Phase 2, Area 3 site.



Photo 6. View of vegetation on and around Phase 2, Area 3 cultivation site in horse area (right side of photo) showing the bare areas with patches of weedy, introduced grasses and forbs in May 2020. The Phase 1, Area 1 cultivation site is the fenced area visible in upper portion of photo where it adjoins the Phase 2, Area 3 site.



Photo 7. View of vegetation where Phase 1 cultivation areas 1 and 2 adjoin. The Phase 2, area 4 cultivation site is shown by the white arrow. All these cultivation sites have bare areas with patches of weedy, introduced grasses and forbs. May 2020.



Photo 8. View of the highly disturbed 1.25-acre Outdoor cultivation Area 5 around just north of the Phase 1; Area 1 site visible on the left side of the photo. Area 5 is mostly barren with scattered weedy plants and a very degraded wildlife habitat previously used for overflow trailer parking.



Photo 9. View of the highly disturbed 1.25-acre Outdoor cultivation Area 5 around just north of the Phase 1; Area 1 site visible on the left side of the photo. Area 5 is mostly barren with scattered weedy plants and a very degraded wildlife habitat previously used for overflow trailer parking. The scattered oaks and other trees will not be disturbed Cannabis cultivation project site. No trees disturbed.