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2565 Puesta Del Sol Road #3
Santa Barbara, CA 93105
(805) 682-2065
www.storrerenvironmental.com

REVISED BIOLOGICAL RESOURCES ASSESSMENT
CANNABIS CULTIVATION PROJECT (19CUP-00000-00019)
5423 SANTA RITA ROAD (APN 099-110-060),
SANTA BARBARA COUNTY, CALIFORNIA

Prepared for:

Santa Rita Holdings, LLC
c/o Jason Hillenbrand
5423 Santa Rita Road
Lompoc, CA 93463

Prepared By:

Storrer Environmental Services, LLC
2565 Puesta Del Sol Road #203
Santa Barbara, California 93105

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1.0 INTRODUCTION

This Revised Biological Resources Assessment (Revised Assessment) was prepared in support of a Conditional Use Permit application (19CUP-00000-00019) from the County of Santa Barbara (County) for the Santa Rita Holdings, LLC Cannabis Cultivation Project (Project), located at 5423 Santa Rita Road (APN 099-110-060) in Santa Barbara County, California.

The Revised Assessment has been prepared in compliance with County Ordinance 5027 and the corresponding requirements of Land Use Development Code (LUDC) §35.42.075 (Cannabis Regulations) and is also applicable to the requirements by other California resources agencies (e.g., California Department of Fish and Wildlife [CDFW], Regional Water Quality Control Board [RWQCB]), pursuant to the California Environmental Quality Act (CEQA). The investigations were completed by Storrer Environmental Services, LLC (SES).

The objectives and scope of this Revised Assessment are to 1) further identify the nature and extent of biological resources present within and in proximity to the planned cannabis cultivation area, with focus on native habitats and/or species afforded special protection by federal, state, and/or local policies and regulations; 2) recommend additional measures to minimize Project-related impacts to Environmentally Sensitive Habitat (ESH); 3) include a Tree Protection, Habitat Protection, and/or Wildlife Movement Plan, if necessary; 4) determine whether there are any site-specific impacts not generally assessed in the County's Final Environmental Impact Report (FEIR) for the Cannabis Land Use Ordinance and Licensing Program (County 2017); and 5) address comments from the County and CDFW on the previous Biological Resources Assessment (SES 2019a).

1.1 PROJECT LOCATION & DESCRIPTION

The 120-acre parcel is located at 5423 Santa Rita Road (APN 099-110-060) in an unincorporated part of the County, approximately mid-distance between the Cities of Lompoc and Buellton (Latitude 34.674478°, Longitude -120.312899°) (Figure 1 – Site Vicinity Map). There is an unnamed ephemeral drainage that extends through the parcel from east to west.

The Project is a request on behalf of Santa Rita Holdings, LLC (Operator) to allow cannabis cultivation on approximately 6.3 acres of the property. The cultivation operations will include installation of approximately 2.3 acres of hoop houses, 0.5-acre outdoor ("open-sun") cultivation, a 4,158 square foot nursery, two existing storage sheds (120 square feet each), security measures (e.g., fencing, lighting, and cameras), and installation of three 5,000-gallon irrigation water storage tanks (Figures 2a-2c – Site Plans).

There is existing 8-foot deer fence, comprised of 4-inch square wire mesh, in place around the majority of the proposed cultivation area (3,575 linear feet). An additional 640 linear feet of fencing is proposed for the perimeter of the outdoor cultivation area. A portion of the security fencing is currently located along the top of bank (TOB) of the ephemeral drainage. The security fencing was installed in summer 2019, per discussions with County Staff. The security fencing also prevents cattle from degrading the northern bank of the ephemeral drainage that is adjacent to the cultivation area.

Proposed lighting is 'dark sky' compliant. Water is provided by Vista Hills Mutual Water Company. Septic tanks are serviced by Lee and Neal Septic. Electricity for the existing residence is provided through PG&E's solar program. PG&E will be providing electricity for security cameras and security lights, where possible. A small submersible pump that requires electricity will be used to mix nutrients in the nutrient tank for the nursery. No electricity will be used inside hoop houses. Gravity will be used to irrigate the cultivation areas via drip lines from water tanks. Fuel, agricultural chemicals, and nutrients will be stored in secondary containment in the storage sheds. The Operator has obtained a certified hauler to remove cannabis waste from the property. A covered secured bin is provided by the hauler and removed as needed.

2.0 ENVIRONMENTAL SETTING

The property is located in the Purisima Hills. The parcel is zoned agriculture (AG-II-100). The surrounding dominant land use to the south, east, and west is agriculture (i.e., vineyards or cultivated fields), but the land immediately north, east, and south of the property is undeveloped. For the purposes of this Revised Assessment, the Survey Area includes all proposed cannabis cultivation areas and associated operations areas, existing development, recently disturbed areas, the adjacent ephemeral drainage, and a nearby stock pond (Figure 3 – Survey Area Map).

Based on aerial imagery from Google Earth, a small agricultural operation limited to the open areas surrounding the residence has been active since at least 1994. In 2015 the agricultural operation expanded to the proposed hoop cultivation area in the western portion of the property. The proposed outdoor cultivation area was cleared sometime between December 2015 and June 2017. The remainder of the property is used for livestock grazing.

A deeply incised, unnamed ephemeral drainage trends westward across the parcel, adjacent to the southern boundary of the cannabis cultivation area. The drainage conveys stormwater runoff downstream through several agricultural properties, joining additional small tributaries, which eventually discharge into the Santa Ynez River approximately 5.4 miles to the southwest.

A "Known California Tiger Salamander (CTS) Breeding Pond", designated LOAL-40 by the USFWS (2010), is located just outside of the northeast corner of the parcel (Figure 3 – Survey Area Map). The presence of CTS in LOAL-40 was confirmed by aquatic sampling during a 2019 field investigation (SES 2019b). LOAL-40 is an ephemeral stock pond that would continue to support existing nearby livestock operations, but is not on the property, nor is it a part of the proposed Project.

The Survey Area ranges in elevation from approximately 1,335 feet above mean sea level (msl) at the stock pond (i.e., LOAL-40) to 780 feet above msl at the southwestern corner. Based on review of the Web Soil Survey of the of Santa Barbara County, California, Northern Part the following two soil units are mapped in the Survey Area:

- San Andreas-Tierra Complex (SfG), 30 to 75 percent slopes. The majority of the Survey Area is comprised of the SfG soil type, including the northern portion of the lower cultivated area and the upper cultivated area. San Andreas-Tierra complex is a well-drained, fine sandy loam soil that forms on hills, overlying weathered bedrock. The parent material is residuum weathered from soft sandstone. This soil type is not considered prime farmland (NRCS 2020).

- Corralitos Sand (CtD2), 2 to 15 percent slopes, eroded. CtD2 soil type is present in the western portion of the Survey Area, including the developed area and the majority of the lower cultivated area. Corralitos sand is a somewhat excessively drained sandy soil that forms on alluvial fans, foot slopes, and treads. Parent material is sandy alluvium. Corralitos sand land is not considered prime farmland (NRCS 2020).

3.0 REGULATORY FRAMEWORK

Sensitive biological resources, including special-status plant and wildlife species, unique plant communities, wildlife corridors, nesting birds, and jurisdictional waters and wetlands, are protected under various federal, state, and local laws, regulations, and land use policies. The following sections summarize the regulations and policies administered by resource agencies pertaining to biological resources that are known to occur or have the potential to occur on the property.

3.1 FEDERAL REGULATIONS

3.1.1 Endangered Species Act (16 U.S.C. § 1531 et seq.)

The Endangered Species Act of 1973 (ESA) provides for the protection of plant and animal species listed by the federal government as "endangered" or "threatened," and "the ecosystems upon which they depend." The USFWS and National Marine Fisheries Service (NMFS) share responsibility for administration of the federal ESA. An "endangered" species is one that is "in danger of extinction" throughout all or a significant portion of its range. A "threatened" species is one that is "likely to become endangered" within the foreseeable future. The ESA prohibits "take" of threatened or endangered species except under certain circumstances and only with authorization from the USFWS. "Take" as defined by the ESA, "means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." This can also include the modification of a species' habitat. For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant on federal land and removing, cutting, digging up, damaging, or destroying any listed plant on non-federal land in knowing violation of state law (16 U.S.C. § 1538(c)).

When non-federal entities, such as states, counties, local governments, and private landowners, wish to conduct an otherwise lawful activity that might incidentally, but not intentionally, "take" a listed species, an incidental take permit must first be obtained via formal consultation with the USFWS using one of two methods. If a federal nexus is not available, an incidental take permit (ITP) must be obtained for the project following formal consultation with the USFWS via Section 10 of the ESA (ESA § 10(a)(1)(B)).

If a federal nexus is available, then an incidental take permit may be obtained by the federal agency involved in the nexus (e.g., USACE) via Section 7 of the ESA (ESA § 7). Section 7 stipulates that any federal agency action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat (16 U.S.C. 1536(a)(2)). The Biological Opinion issued by the USFWS at the conclusion of the consultation may include authorization for incidental take of a listed species.

3.1.2 Clean Water Act – Section 404

The Clean Water Act (CWA) is comprehensive legislation established to protect the nation's water from pollution by setting water quality standards and by limiting the discharge of effluents in the waters of the United States. Section 404 of the CWA regulates the discharge of dredged and/or fill material into waters of the U.S., including wetlands. Section 404 of the CWA is jointly administered and enforced by the U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (EPA). Activities in waters of the U.S. regulated under Section 404 include dredge or fill for development, water resources projects (i.e., dams and levees), infrastructure development (i.e., highways and airports), and mining projects. With the exception of certain farming and forestry activities that are exempt from Section 404 regulation, a Section 404 permit is required before any dredged or fill material may be discharged into waters of the U.S. The Section 404 program prohibits discharge of dredged or fill material if waters of the U.S. would be significantly degraded or a practical alternative exists that is less damaging to the aquatic environment.

3.1.3 Waters of the U.S.

On April 21, 2020, the EPA and USACE published the Navigable Waters Protection Rule (2020 Rule) that defines waters of the U.S. and clarifies the limits of federal jurisdiction over wetlands, streams, and ditches under the CWA. The 2020 Rule became effective on June 22, 2020.

3.1.3.1 Jurisdictional Waters

For purposes of the Clean Water Act, 33 U.S.C. 1251 *et seq.* and its implementing regulations, the term "waters of the U.S." means:

(1) The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide;

(2) Tributaries;

(3) Lakes and ponds, and impoundments of jurisdictional waters; and,

(4) Adjacent wetlands.

The limit of USACE's jurisdiction in non-tidal waters extends to the ordinary high water mark (OHWM). The term OHWM means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

The term adjacent wetlands applies to wetlands that:

(i) Abut, meaning to touch at least at one point or side of, a water identified in paragraphs (1), (2), or (3) of this section;

(ii) Are inundated by flooding from a water identified in paragraphs (1), (2), or (3) of this section in a typical year;

(iii) Are physically separated from a water identified in paragraph (1), (2), or (3) of this section only by a natural berm, bank, dune, or similar natural feature; or

(iv) Are physically separated from a water identified in paragraph (1), (2), or (3) of this section only by an artificial dike, barrier, or similar artificial structure so long as that structure allows for a direct hydrologic surface connection between the wetlands and the water identified in paragraph (1), (2), or (3) of this section in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature. An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

The term "lakes and ponds, and impoundments of jurisdictional waters" means:

> Standing bodies of open water that contribute surface water flow to a water identified in paragraph (1) of this section in a typical year either directly or through one or more waters identified in paragraph (2), (3), or (4) of this section. A lake, pond, or impoundment of a jurisdictional water does not lose its jurisdictional status if it contributes surface water flow to a downstream jurisdictional water in a typical year through a channelized non-jurisdictional surface water feature, through a culvert, dike, spillway, or similar artificial feature, or through a debris pile, boulder field, or similar natural feature. A lake or pond, or impoundment of a jurisdictional water is also jurisdictional if it is inundated by flooding from a water identified in paragraph (1), (2), or (3) of this section in a typical year.

3.1.3.2 Non-jurisdictional Waters

Per the 2020 Rule, the following are not "waters of the U.S.":

(1) Waters or water features that are not identified in paragraphs (1), (2), (3), or (4) of the previous section;

(2) Groundwater, including groundwater drained through subsurface drainage systems;

(3) Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools;

(4) Diffuse stormwater run-off and directional sheet flow over upland;

(5) Ditches that are not waters identified in paragraphs (1) or (2) of the previous section, and those portions of ditches constructed in waters identified in paragraph (4) of the previous section that do not satisfy the definitions of adjacent wetlands;

(6) Prior converted cropland;

(7) Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease;

(8) Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters;

(9) Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;

(10) Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off;

(11) Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in non-jurisdictional waters; and,

(12) Waste treatment systems.

3.2 STATE REGULATIONS

3.2.1 California Endangered Species Act (California Fish and Game Code § 2050, et seq.)

Fish and wildlife resources are protected by a number of laws and programs administered by the CDFW, formerly the California Department of Fish and Game. The California Endangered Species Act (CESA) generally parallels the provisions of the federal ESA, and states that "all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved."

Under the CESA, "endangered" is defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range;" and "threatened" is defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts." "Take" is defined as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" an individual of a species, but the definition does not include "harm" or "harass," as the ESA does. As a result, the threshold for a take under the CESA is higher than that under the federal ESA. Exceptions to the take prohibition are limited to authorization of collection for "necessary scientific research".

Consistent with the CESA, CDFW has established lists of endangered, threatened, and candidate species that may or may not be included on a federal ESA list. CDFW also maintains a list of Species of Special Concern for those species that have declining populations, limited distribution, diminishing habitat, or unusual scientific, educational, or recreational value. In addition, CDFW manages a "watch list" of species that have been de-listed or are vulnerable. Species of Special concern and watch list species are not afforded the same legal protection as listed species.

Pursuant to California Fish and Game Code Section 2081, CESA allows for incidental take permits to otherwise lawful development projects that could result in the take of a state-listed threatened or endangered species. The application for an incidental take permit under Section 2081(b) has a number of requirements including the preparation of a conservation plan, generally referred to as a Habitat Conservation Plan. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate mitigation planning to offset project-caused losses of listed species.

3.2.2 Native Plant Protection Act (California Fish and Game Code §§ 1900 - 1913, § 2062 and § 2067)

The CDFW also manages the California Native Plant Protection Act (NPPA), which designates and protects species eligible for state listing. Eligible species include those identified on California Native Plant Society (CNPS) Rare Plant Ranks (CRPRs) 1A, 1B, and 2 meet the definitions of Sections 1901, Chapter 10 (NPPA) or Sections 2062 and 2067 (CESA) of the California Fish and Game Code. CRPR 3 and 4 species, though not meeting the criteria for listing by CDFW, may be considered during project review by the agencies.

3.2.3 Clean Water Act – Section 401

The CWA Section 401 Water Quality Certification (Section 401 Certification) provides states and authorized tribes an opportunity to address the aquatic resource impacts of federally issued permits and licenses, to help protect water quality. Under Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity that may result in any discharge into waters of the U.S. must obtain a Section 401 Certification from the State Water Resources Control Board (SWRCB) that the proposed activity will comply with state water quality standards. In California, Section 401 Certifications are issued by Regional Water Quality Control Boards (RWQCB) located throughout the state. The Central Coast RWQCB issues Section 401 Certifications for projects in the County. The federal CWA Section 404 permit is dependent on and subject to the terms of the Section 401 Certification. Therefore, under Section 401, a federal agency cannot issue a permit or license for an activity that may result in discharge into waters of the U.S. until the RWQCB has granted or waived the Section 401 Certification. Section 401 Certification is limited to federally jurisdictional waters and wetlands. In response to the federal 2020 Rule, SWRCB has adopted a new policy effective on May 28, 2020.

3.2.3.1 Waters of the State

California Code of Regulations, title 23, section 3831(w) states that "all waters of the United States are also 'waters of the state.'" This regulation has remained in effect despite federal decisions which added limitations to what could be considered a water of the U.S. Therefore, the regulation reflects the SWRCB's intent to include a broad interpretation of waters of the U.S. into the definition of waters of the state. Waters of the state includes features that have been determined by the EPA or the USACE to be "waters of the U.S." in an approved jurisdictional determination; "waters of the U.S." identified in an aquatic resource report certified by the USACE upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of "waters of the U.S." or any current or historic federal regulation defining "waters of the U.S."

Because the interpretation of waters of the U.S. in place at the time section 3831(w) was adopted was broader than subsequent definitions (including the 2020 Rule) that incorporated more limitations into the scope of federal jurisdiction, it is consistent with the SWRCB's intent to include both historic and current definitions of waters of the U.S. into the SWRCB's wetland jurisdictional framework. Further, a wetland will continue to be protected when it has been regulated in the past as a water of the U.S. regardless of any subsequent changes in federal regulations. The inclusion of both current and historic definitions of "waters of the U.S." will help ensure some regulatory stability in an area that has otherwise been in flux. Like the other

categories of the SWRCB's wetland jurisdictional framework, the status as a water of the U. S. may only be used to establish that a wetland qualifies as a water of the state; it cannot be used to exclude a wetland from qualifying as a water of the state. In other words, wetlands that are categorically excluded from qualifying as a water of the U.S. may nevertheless qualify as waters of the state under another jurisdictional category.

The SWRCB generally excludes certain areas and activities from the application procedures in order to better align the SWRCB's dredge or fill program with the federal CWA section 404 program. Activities and areas excluded from the procedures include:

(1) Normal farming, ranching, and silviculture activities; constructing and maintaining stock or farm ponds and irrigation ditches; constructing or maintaining farm, forest, or mining roads; maintaining or reconstructing structures that are currently serviceable; and constructing temporary sediment basins for construction;

(2) Suction dredge mining;

(3) Routine emergency operation and maintenance activities;

(4) Prior converted cropland that was cleared, drained, or otherwise manipulated for cropland use prior to December 23, 1985;

(5) Fields used for rice cultivation; and,

(6) Features used for agricultural purposes (e.g., stock ponds, irrigation ditches, etc.).

3.2.4 SWRCB Cannabis Cultivation Policy – Principles and Guidelines for Cannabis Cultivation (Attachment A)

The SWRCB has adopted "General Requirements and Prohibitions" with respect to cannabis cultivation. Among these are "minimum riparian setbacks" measured from the edge of the wetland as determined by a qualified professional familiar with the USACE Wetlands Delineation Manual. Prescribed setbacks for cannabis cultivation and support facilities (e.g., materials/vehicle storage, pumps, water storage tanks) are as follows:

- Perennial watercourses (e.g. lakes, ponds, springs): 150 feet;
- Intermittent watercourses or wetlands: 100 feet;
- Ephemeral watercourses: 50 feet; and,
- Man-made irrigation canals and reservoirs: limits of riparian vegetation zone.

The SWRCB guidelines also include requirements for cleanup, restoration, and mitigation for impacts to riparian vegetation and/or oak trees. A revegetation plan may be required for impacts to these habitat types resulting from cannabis operations.

3.2.5 California Code of Regulations, Title 14, Section 722 – General Lake or Streambed Alteration Agreement or Activities Related to Cannabis Cultivation (General Agreement)

The California Department of Fish and Wildlife (CDFW) requires a General Agreement under the referenced statute for "construction, reconstruction or repair of stream crossings in the form of a bridge, culvert, or rock ford, and water diversion on non-finfish rivers streams and lakes that are used or will be used for the purpose of cannabis cultivation, each a "covered activity"".

3.3 LOCAL LAND USE POLICIES

3.3.1 County Stream and Riparian Habitat Protection

The Environmental Thresholds and Guidelines Manual (County 2008) defines riparian habitat as the "terrestrial or upland area adjacent to freshwater bodies, such as the banks of creeks and streams, the shores of lakes and ponds, and aquifers which emerge at the surface as springs or seeps. This habitat can also occur along arroyos and barrancas, and other types of drainages throughout the County".

County-prescribed setbacks (i.e., buffer areas) from the outer (upland) edge of the riparian canopy, or the top-of-bank of the water body in the absence of riparian vegetation, are 50 feet in urban areas, and 100 feet in rural areas. Intrusion within the buffer areas for riparian habitats and streams may be considered significant.

Per the Hoop Structures Ordinance Amendment (Case No. 17ORD-00000-00005) to the County LUDC (County 2019), the following setbacks apply for cannabis projects on agriculturally zoned land:

- Within the Urban, Inner Rural, and Existing Developed Rural Neighborhood (EDRN) areas hoop structures and shade structures shall be setback 50 feet from the top-of-bank or edge of riparian vegetation of streams and creeks, whichever is more protective of the resource.
- Within the Rural areas hoop structures and shade structures shall be setback 100 feet from the top-of-bank or edge of riparian vegetation of streams and creeks, whichever is more protective of the resource.

3.3.2 Oak Tree Protection

The County's Standard Conditions and Mitigation Measures (County 2011) require that grading, trenching, ground disturbance, construction activities and structural development occur beyond six feet of the dripline of all oak trees. Mitigation for impacted coast live oak trees requires posting of a performance security and tree replacement at a 10:1 ratio, preferably on-site (County 2019).

3.3.3 California Environmental Quality Act (CEQA)

This Revised Assessment is intended to support County review of the proposed Project. The adopted County-wide Programmatic FEIR for the Cannabis Land Use Ordinance and Licensing Program (County 2017) generally covers individual cannabis projects when the EIR CEQA analysis applies. The guidelines for determining CEQA significance are followed in this Revised Assessment. The following threshold criteria, as defined by the CEQA Guidelines Appendix G Initial Study Checklist, were used to evaluate potential effects to biological resources. Based on these criteria, the proposed Project would have a significant effect on biological resources if it would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special-status species in local or regional plans, policies, or regulations, or by the

California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS).

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.

c) Have a substantial adverse effect on State or federally protected wetlands (including marsh, vernal pool, and coastal areas) through direct removal, filling, hydrological interruption, or other means.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f) Conflict with the provisions of an adopted habitat Conservation plan, natural community conservation Plan, or other approved local, regional or state habitat conservation plan.

In addition, based on the following County-adopted CEQA thresholds from the County's Environmental Thresholds and Guidelines Manual (County 2008) the Project would have a significant effect on biological resources if it would:

- Substantially reduce or eliminate species diversity or abundance.
- Substantially reduce or eliminate quantity or quality of nesting areas.
- Substantially limit reproductive capacity through losses of individuals or habitat.
- Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources.
- Substantially limit or fragment range and movement (geographic distribution or animals and/or seed dispersal routes).
- Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends.

3.3.4 County Land Use Development Code (LUDC) §35.42.075

The County LUDC provides development standards, permit requirements, and procedures for commercial cannabis activities (County 2019). As summarized in Appendix J: Cannabis Activities Additional Standards of the LUDC, the following measures are to be implemented to protect biological resources, if present.

A. <u>Tree Protection Plan</u>

A.1. The Applicant for a land use entitlement for a commercial cannabis activity that would involve pruning, damage, or removal of a native tree, shall prepare and submit to the County Planning and Development Department (Department) a Tree Protection Plan prepared by a Department-approved arborist designed to determine whether avoidance, minimization, or compensatory measures are necessary.

B. Habitat Protection Plan

B.1. The Applicant for a land use entitlement for a cannabis activity that would involve clearing of native vegetation or other sensitive vegetation in an area that has been identified as having a medium to high potential of being occupied by a special-status wildlife species, nesting bird, or a Federal or State-listed special-status plant species, shall prepare and submit a Habitat Protection Plan prepared by a Department-approved biologist, in coordination with the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) as required for State or Federal permits and State or Federally listed species, designed to determine whether avoidance, minimization, or compensatory measures are necessary.

B.3. If the project site is located within the known habitat of a species listed as rare, threatened, or endangered by the USFWS and/or CDFW, the issuance of a permit does not relieve the permit-holder of any duties, obligations, or responsibilities under the Endangered Species Act or any other law.

C. Wildlife Movement Plan

C.1. The Applicant shall prepare a Wildlife Movement Plan for all commercial cannabis activities proposed in or near wildlife movement areas for the Department's review and approval. A Department-approved biologist shall review the Plan and confirm the adequacy of design for passage of smaller wildlife and safe prevention of entry by larger mammals, such as deer. The Applicant shall demonstrate to the Department that all perimeter fencing requirements are in place as required prior to commencement of cannabis activities.

4.0 METHODS

4.1 BACKGROUND REVIEW

Prior to the field surveys, SES reviewed available public domain information including the NRCS Web Soil Survey of Northern Santa Barbara County, California (NRCS 2020), USGS CA 7.5-minute quadrangle maps (CNDDB 2020), the National Hydrography Dataset (NHD) (USGS 2020), National Wetlands Inventory (USFWS 2020), California Natural Diversity Data Base (CDFW 2020), and weather data. The CNDDB query provided locations of special-status plant populations, sensitive natural communities, and special-status wildlife documented within a 5-mile radius of the parcel.

4.2 FIELD METHODOLOGY

Biological field investigations included pedestrian surveys of the Survey Area to facilitate mapping of primary vegetation types, documentation of dominant plant species and wildlife, delineation of the limits of ESH, and a spring botanical survey. Mapping of jurisdictional limits and the vegetation sampling points were performed in the field using an iPad tablet with ArcCollector and an EOS Arrow 100 Global Navigation Satellite System (GNSS) receiver. Table 1 provides a summary of survey types, dates, and field personnel.

Table 1 – Biological Surveys Conducted in 2019 and 2020

Type of Survey	Date	Field Personnel	Area Surveyed[1]
Botanical Survey Wildlife Survey ESH/Vegetation Mapping Aquatic Sampling of LOAL-40	April 9, 2019	John Storrer Justine Cooper	Survey Area and stock pond (LOAL-40)[1] (Approximately 28 acres)
Botanical Survey Wildlife Survey Fence Line Mapping	February 5, 2020	John Storrer Jessica Peak	Existing/Proposed Fenced Areas (Approximately 7 acres)
Spring Botanical Survey CNPS Vegetation Rapid Assessment Forms	May 28, 2020	Jessica Peak	Survey Area, excluding stock pond (LOAL-40) (Approximately 28 acres)

[1]See Figure 3 for extent of Survey Area and location of LOAL-40 relative to Project features.

4.2.1 Botanical Surveys

The field investigations included mapping and documentation of primary vegetation types using CDFW-CNPS protocol for Vegetation Rapid Assessment, when applicable (Appendix B – CNPS Vegetation Rapid Assessment Forms). Descriptions of vegetation communities are adapted from *A Manual of California Vegetation, Second Edition* (MV-II) (Sawyer et al. 2009) and *A Manual of California Vegetation Online* (CNPS 2020a). Nomenclature for plant species follows *The Jepson Manual, Second Edition* (Baldwin et al. 2012) and *Jepson eFlora* (Jepson 2020). Vegetation Rapid Assessment Forms were completed at one location for each vegetation community in the Survey Area that meets, or could be adapted to meet, the MV-II classification system (VEG-01 through VEG-04) (Figure 4 – Vegetation Communities & Land Use Types). Vegetation communities and land use types are discussed in detail in Section 5.2 below.

The May 28, 2020 survey was conducted during the appropriate blooming period to detect and identify special-status plant species that have the potential to occur in the Survey Area (e.g., mesa horkelia, black-flowered figwort, etc.). The spring survey was performed by walking through the vegetated areas of the Survey Area to determine whether sensitive plants were present.

4.2.2 Wildlife Surveys

The evaluation of wildlife use of the property was made in part through field reconnaissance, but was also based on habitat suitability within the Survey Area and known occurrence of various species in the Project vicinity. Wildlife species that were observed or detected via vocalizations were recorded. Habitat conditions and current status of special-status wildlife species, were a particular focus of the wildlife surveys. Potential for nesting, roosting, or foraging by sensitive bird species and various raptors was also assessed.

4.2.3 Delineation of Jurisdictional Limits

The jurisdictional limits of ephemeral drainage in the Survey Area were determined. The extent of the TOB of the creek was mapped using an iPad tablet with ArcCollector and an EOS Arrow 100 High Accuracy GNSS receiver (Figures 3 and 5).

4.2.3.1 Waters of the U.S.

Pursuant to Section 401 of the Clean Water Act (CWA), the limit of U.S. army Corps of Engineers (USACE) jurisdiction in non-tidal waters extends to the OHWM and includes all adjacent wetlands. The OHWM is an element used to identify the lateral limits of non-wetland waters based on stream geomorphology and vegetation response to the dominant stream discharge (Lichvar and McColley 2008). Per the 2020 Rule, ephemeral features are not considered Waters of the U.S., which means the ephemeral drainage in the Survey Area is not under USACE jurisdiction.

4.2.3.2 CDFW Streambed

Pursuant to Section 1600 *et seq*. of the California Fish and Game code, the extent of California Department of Fish and Wildlife (CDFW) jurisdiction was determined based on presence of a defined physical bed, bank, and channel. CDFW jurisdiction extends to the TOB or the edge of riparian vegetation, whichever is further.

4.2.3.3 Waters of the State

Per the California Code of Regulations, title 23, section 3831(w), the SWRCB considers ephemeral watercourses to be jurisdictional. The SWRCB jurisdiction extends to the TOB or the edge of riparian vegetation, whichever is further.

4.2.3.4 County Streams

The County considers streams and associated riparian habitat important biological resources. Similar to the CDFW streambed jurisdiction described above, the County jurisdiction was determined based on presence of a defined physical bed, bank, and channel. County jurisdiction extends to the TOB or the edge of riparian vegetation, whichever is further.

5.0 RESULTS

5.1 HYDROLOGY

An unnamed ephemeral drainage trends westward across the parcel, adjacent to the southern boundary of the cannabis cultivation area (Figure 3 – Survey Area Map). The upper reach of the drainage has limited erosion and directs overland flow through coast live oak woodland and California sagebrush scrub habitats. The lower portion of the drainage becomes deeply incised south of the existing ranch road (Appendix A – Site Photographs). The drainage conveys stormwater runoff through a 48-inch culvert at the entrance driveway, downstream through several agricultural properties, and joins additional small tributaries, all of which eventually discharge into the Santa Ynez River approximately 5.4 miles to the southwest (USGS 2020). Streamflow appears to be episodic and when present, surface flow likely percolates into the groundwater table before it reaches the river. Santa Rosa Creek is 1.0 mile east of the property, but there appears to be no connectivity between the drainage in the Survey Area and Santa Rosa Creek.

The upper portion of the drainage sheet flows across an existing ranch road that provides access to the eastern portion of the property and the stock pond (LOAL-40). Erosion features (i.e. rilling) along on the ranch road and sediment washout at the base of the road indicate that overland flow

from both the drainage and the road contribute to the incised portion of the watercourse (Appendix A – Site Photographs).

The near-vertical banks of the lower reach of the drainage rise to about 20-40 feet above the sandy channel bottom. The drainage supports coast live oak trees and California sagebrush scrub habitats, but has little riparian vegetation (i.e., scattered arroyo willow and mulefat near the culvert and entrance). No surface flow was present during any of the field surveys.

As mentioned above, there is an ephemeral stock pond near the northwest corner of the property (LOAL-40) (Appendix A – Site Photographs). This is a man-made, "push-up" pond with a perimeter berm rising 8-10 feet above the surface of the water. There is no connectivity between the stock pond and the ephemeral drainage that is described above. The pond was roughly rectangular in shape, measuring 105 x 75 feet and had a maximum depth of about 3 feet at the time of the April 9, 2019 survey.

5.2 Vegetation Communities & Land Use Types

There are six (6) vegetation communities and land use types present in the Survey Area: coast live oak woodland, California sagebrush scrub, wild oats and annual brome grassland, ruderal/disturbed habitat, ornamental trees, and active agriculture. A CNPS Vegetation Rapid Assessment Form was completed for each vegetation community that meets, or can be adapted to meet, the MV-II classification system (CNPS 2016) (Appendix B).

Vegetation communities were mapped based on field observations using aerial imagery. Representative photographs are provided in Appendix A. Vegetation communities and land use types present in the Survey Area are summarized in Table 2 and the distribution of these communities is illustrated in Figure 4 – Vegetation Communities & Land Use Types.

Table 2 – Summary of Vegetation Communities & Land Use Types in the Survey Area

Vegetation Alliance/Land Use Type[1]	Vegetation Association[1]	Listing Status/ Rarity Ranking[3]	Area in Survey Area (acres)
Sensitive Vegetation Communities & Individual Native Trees			
Coast Live Oak Woodland/Trees *Quercus agrifolia* Woodland Alliance	*Quercus agrifolia – Toxicodendron diversilobum* – Grass	Protected by County/ State policies G5, S4	3.73
Native Vegetation Community			
California Sagebrush Scrub *Artemisia californica* Shrubland Alliance	*Artemisia californica – Acmispon glaber*	G5, S5	15.42
Non-native Vegetation Communities			
Wild Oats and Annual Brome Grassland *Avena* sp. – *Bromus* sp. Herbaceous Alliance	*Bromus diandrus*-Mixed herbs	N/A	0.32
Other Land Use Types			
Active Agriculture/Tilled Area[2]	N/A	N/A	2.34
Ornamental Trees[2]	N/A	N/A	0.48
Ruderal/Disturbed[2]	N/A	N/A	5.13

[1] Vegetation Alliances and Associations follow *A Manual of California Vegetation Online* (MV-II) (CNPS 2020a), where applicable.
[2] Not a recognized community in MV-II.
[3] Listing Status/ Rarity Ranking Notes:

Global/State rarity rankings follow the CDFW California Natural Communities List (CDFW 2019). Natural communities with ranks 1-3 are considered sensitive.

- G1/S1 – Critically imperiled. At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
- G2/S2 – Imperiled. At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
- G3/S3 – Vulnerable. At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
- G4/S4 – Apparently Secure. Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- G5/S5 – Demonstrably Secure. Common; widespread and abundant.

5.2.1 Coast Live Oak Woodland (*Quercus agrifolia* Woodland Alliance)

Coast live oak (*Quercus agrifolia*) is a drought-resistant evergreen tree ranging from 20 to 80 feet in height, with massive spreading branches and a dense canopy of thick, waxy leaves. Coast live oaks are a long-lived species and can survive for 300 years or more. Although seemingly ubiquitous on the central coast of California, coast live oak woodlands are limited in distribution to a 50-mile wide swath along the coast from Mendocino County to northern Baja California and are absent from the interior ranges and Sierra Nevada. Coast live oak woodland is considered an ESH by the County and individual oak trees are protected per County regulations.

This community is dominated by coast live oak trees. The understory consists of a mix of shrubs and herbaceous species characteristic of oak woodlands in the region. These include poison oak (*Toxicodendron diversilobum*), annual grasses (ripgut brome [*Bromus diandrus*], barley [*Hordeum murinum*], Italian rye [*Festuca perennis*], and wild oats [*Avena fatua*]), Douglas' nightshade (*Solanum douglasii*), snowberry (*Symphoricarpos albus*), climbing penstemon (*Keckiella cordifolia*), chickweed (*Stellaria media*), hummingbird sage (*Salvia spathacea*), fiesta flower (*Pholistoma auritum*), and bracken fern (*Pteridium aquilinum*) (see Appendix B – CNPS Vegetation Rapid Assessment Form VEG-04).

5.2.2 California Sagebrush Scrub (*Artemisia californica* Shrubland Alliance)

California sagebrush scrub is the most prevalent vegetation type within the Survey Area (Figure 4 – Vegetation Communities & Land Use Types; Appendix A – Site Photographs). This community is dominated by California sagebrush (*Artemisia californica*) and deerweed (*Acmispon glaber*). There were also frequent expressions of California bush sunflower (*Encelia californica*), black sage (*Salvia mellifera*), poison oak, coyote brush (*Baccharis pilularis* var. *consanguinea*), toyon (*Heteromeles arbutifolia*), giant wild rye (*Leymus condensatus*), California buckwheat (*Eriogonum fasciculatum*), mock heather (*Ericameria ericoides*), elderberry (*Sambucus nigra* ssp. *caerulea*), redberry (*Rhamnus crocea*), bush lupine (*Lupinus arboreus*), purple owl's clover (*Castilleja exserta*), and blue dicks (Dipterostemon [*Dichelostemma*] *capitatum*) (see Appendix B – CNPS Vegetation Rapid Assessment Form VEG-03).

Approximately two acres of this vegetation type had been recently cleared during the April 9, 2019 survey in an area not proposed for cannabis cultivation (Appendix A – Site Photographs). The

California sagebrush scrub habitat had reestablished in this area by the May 28, 2020 survey and was dominated by bush lupine, deerweed, and mock heather (Appendix A – Site Photographs).

5.2.3 Wild Oats and Annual Brome Grasslands (*Avena* sp. – *Bromus* sp. Herbaceous Alliance)

Wild oats and annual brome grassland were observed in the Survey Area around the coast live oak woodland in the northwest portion of the Survey Area. Grassland habitat was also present around the stock pond, outside of the parcel. This community is dominated by ripgut brome and other annual grasses including wild oats, barley, Italian rye, and soft chess (*Bromus hordeaceus*). Spanish clover (*Acmispon americanus*), tocalote (*Centaurea melitensis*), and greenstem filaree (*Erodium moschatum*) were also noted. This community most closely aligns with the *Bromus diandrus*-Mixed Herbs Association in MV-II (see Appendix B – CNPS Vegetation Rapid Assessment Form VEG-02).

5.2.4 Ornamental Trees

There are ornamental trees around the house and barn, including Monterey cypress (*Hesperocyparis macrocarpa*), red gum (*Eucalyptus camaldulensis*), and Peruvian peppertree (*Schinus molle*) (Figure 4 – Vegetation Communities & Land Use Types; Appendix A – Site Photographs). This vegetation type is not a recognized community in MV-II, as it consists of species not native to the region that have been planted and/or exotic species that typically don't occur in the natural landscape outside of urban areas.

5.2.5 Ruderal/Disturbed

Ruderal/disturbed habitat is present in cleared areas, along the access roads, edges of agricultural areas, and around existing structures (Figure 4 – Vegetation Communities & Land Use Types; Appendix A – Site Photographs). This vegetation type is not a recognized community in MV-II, as it consists of species not native to the region that have become naturalized and widespread in disturbed areas (see Appendix B – CNPS Vegetation Rapid Assessment Form VEG-01).

Ruderal (i.e., disturbance adapted) plant species recorded in this community include annual grasses (e.g., bromes, wild oats, barley, Italian rye, etc.), as well as a variety of weedy forbs: greenstem filaree, cheeseweed (*Malva parviflora*), poison hemlock (*Conium maculatum*), summer mustard (*Hirschfeldia incana*), black mustard (*Brassica nigra*), Italian thistle (*Carduus pycnocephalus*), bur clover (*Medicago polymorpha*), Bermuda buttercup (*Oxalis pes-caprae*), wild radish (*Raphanus sativus*), and milk thistle (*Silybum marianum*).

5.2.6 Active Agriculture

The proposed cannabis cultivation areas (hoops and outdoor) are within areas recently used for agricultural purposes (i.e., cultivated within the last 3 to 5 years). The agricultural areas were not in production at the time of the field surveys. Ruderal plant species (e.g., cheeseweed, annual grasses, wild radish, black mustard, etc.) were observed along the edges of agricultural areas and in locations that had been left fallow. Approximately 2.3 acres of the existing agriculture had been tilled at the time of the May 28, 2020 survey (Figure 4 – Vegetation Communities & Land Use Types; Appendix A – Site Photographs). This is the location proposed for hoops.

5.3 General Wildlife Habitat

The oak woodland and coastal scrub habitats that dominate the 120-acre parcel provide moderate to high value habitat for terrestrial wildlife. The existing and proposed fence lines surrounding the cultivation areas are made of 4-inch square wire mesh, which excludes most terrestrial wildlife that could damage the crops (e.g., deer, raccoon, brush rabbit, etc.), but the spacing is large enough to allow reptiles, amphibians, and small mammals (e.g., snake, lizard, salamander, frog, mice, gophers, etc.) to traverse through the fence without harm. There are no other fences or barriers within the property that would inhibit wildlife movement and wildlife would be able to pass through the property around all sides of the fencing.

Bird species typical of oak woodland and coastal scrub habitats were observed during the field surveys. These included red-tailed hawk (*Buteo jamaicensis*), black phoebe (*Sayornis nigricans*), barn swallow, raven (*Corvus corax*), song sparrow (*Melospiza melodia*), house finch (*Carpodacus mexicanus*), and yellow-rumped warbler (*Dendroica coronata*). Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), a California Species of Special Concern was observed in the northeastern corner of the parcel.

The stock pond near the northeastern portion of the parcel is attractive to wildlife when water is present. The pond was surveyed for amphibian larvae in April 2019 and two species were found: California tiger salamander (*Ambystoma californiense*), a federally and state-listed endangered species, and Baja California treefrog (*Pseudacris hypochondriaca*).

Because of its poorly developed habitat and narrow channel width, the drainage provides limited dispersal and migration potential for upland wildlife (e.g., raccoon, gray fox, bobcat). In addition, its ephemeral character precludes habitation and breeding by aquatic and semi-aquatic wildlife. The high quality of the surrounding oak woodland and scrub habitats and lack of fences and structures outside of the cultivation areas allows unrestricted movement by large wildlife species across the landscape. These species include mule deer (*Odocoileus hemionus*), black bear (*Ursus americanus*), and mountain lion (*Felis concolor*).

5.4 Special-status Plants and Wildlife Species

Special-status species and habitats include plant and wildlife taxa, vegetation communities, or other unique biological features that are afforded special protection by local land use policies and/or state and federal regulations. Vegetation communities may warrant special status if they are of limited distribution, support protected plants and animals, have high wildlife value, or are particularly vulnerable to disturbance. Special-status plant and animal species are those that are listed as rare, threatened, or endangered under the state and/or federal Endangered Species Acts or those that appear on various "watch lists" compiled by academic institutions, conservation organizations, and wildlife agencies. These include the CNDDB lists of "*Special Animals*" and "*Special Plants*" (CNDDB 2020), CNPS Inventory of Rare and Endangered Vascular Plants of California (CNPS 2020b), "*California Bird Species of Special Concern*" (Shuford and Gardali 2008), "*Amphibian and Reptile Species of Special Concern in California*" (Jennings and Hayes 1994), and "*Terrestrial Mammal Species of Special Concern in California*" (CDFG 1998).

Ten (10) special-status plant species, eleven (11) special-status wildlife species, and three (3) special-status community are documented (i.e., are tracked by the CNDDB) within a 5-mile radius

of the parcel. The likelihood for special-status plant and wildlife species to occur within the Survey Area was evaluated as part of this Revised Assessment.

Species or communities dependent on coastal habitats (e.g., seaside bird's-beak, dune larkspur, southern curly-leaved monardella) or perennial water sources (e.g., unarmored threespine stickleback, southern California steelhead, southern California steelhead stream) are excluded from consideration in Table 3 due to the lack of suitable aquatic habitat in the Survey Area. The remaining two special-status communities, southern cottonwood willow riparian forest and southern willow scrub, are also excluded from consideration in Table 3 due to a lack of developed riparian habitat associated with the drainage.

Table 3 lists special status plants and animals that have a reasonable possibility to occur in the Survey Area or were observed during field surveys. The assessment is based on habitat suitability, elevation and geographic range, soils, topography, surrounding land uses, and proximity of known occurrences in the CNDDB database to the Survey Area. The likelihood for special-status species to occur within the Survey Area was assessed using information from the various listed sources and wildlife and botanical surveys. Narratives are provided for species for which there are land use planning and regulatory implications.

Table 3. Special-status Plant and Wildlife Species Occurrences Documented within a 5-mile Radius

Common Name ***Scientific Name*** ***(Arranged alphabetically by scientific name)***	**Listing Status***	**Habitat Requirements/Habitat Affinity**	**Suitable Habitat Present in Survey Area (Y/N)**	**Likelihood for Occurrence within Survey Area**
Plants				
Santa Ynez groundstar *Ancistrocarphus keilii*	CRPR 1B.1 G1, S1	Sandy soils in chaparral bordering oak woodland, under shrubs. Elevation range: 100 – 450 feet. Blooming period: March – April.	Yes	Sandy soils and oak woodland habitat are present in the Survey Area; however, Santa Ynez groundstar was not observed during April 2019 and May 2020 field surveys. The only documented occurrence of this species is from 1925 the Santa Ynez River drainage, somewhere between Buellton and Lompoc in the vicinity of Highway 246 (CNDDB 2020). Santa Ynez groundstar is not expected to occur in the Survey Area.
La Purisima manzanita *Arctostaphylos purissima*	CRPR 1B.1 G2, S2	Sandstone outcrops, sandy soils, and chaparral. Elevation range: 0 –1,000 feet. Blooming period: January – March.	No	Although sandy soils are present in the Survey Area, chaparral habitat is not. La Purissima and sand mesa manzanita are evergreen shrubs that would have been identifiable during the field surveys – no manzanita were observed during field surveys. Manzanita species are not expected to occur in the Survey Area.
sand mesa manzanita *Arctostaphylos rudis*	CRPR 1B.2 G2, S2	Sandy soils and chaparral. Elevation range: 0 –1,300 feet. Blooming period: November – February.	No	
Miles' milk-vetch *Astragalus didymocarpus* var. *milesianus*	CRPR 1B.2 G5, S2	Grassy areas in coastal scrub and clay soils. Elevation range: 0 –1,350 feet. Blooming period: March – May.	No	Although California sagebrush scrub is present throughout the Survey Area, the soils are sandy and not suitable for Miles' milk vetch. This species was not observed during April 2019 and May 2020 field surveys. Miles' milk vetch is not expected to occur in the Survey Area.
Vandenberg monkeyflower *Diplacus vandenbergensis*	FE CRPR 1B.1 G1, S1	Open, sandy sites among shrubs. Often in disturbed areas in chaparral, cismontane woodland, and coastal dunes. Elevation range: 200 – 400 feet. Blooming period: April – June.	Yes	Suitable habitat for Vandenberg monkeyflower is present in the Survey Area. Open areas in scrub habitat in the vicinity of cultivation areas were searched, and this species was not observed during April 2019 and May 2020 field surveys. Vandenberg monkeyflower is not expected to occur in the Survey Area.

Table 3. Special-status Plant and Wildlife Species Occurrences Documented within a 5-mile Radius

Common Name ***Scientific Name*** ***(Arranged alphabetically by scientific name)***	**Listing Status***	**Habitat Requirements/Habitat Affinity**	**Suitable Habitat Present in Survey Area (Y/N)**	**Likelihood for Occurrence within Survey Area**
mesa horkelia *Horkelia cuneata* var. *puberula*	CRPR 1B.1 G4, S1	Dry, sandy coastal chaparral. Elevation range: 200 – 2,900 feet. Blooming period: March – July.	Yes	Although sandy soils are present in the Survey Area, chaparral habitat is not. Mesa horkelia was not observed in the Survey Area. A more common variety, wedge leaf horkelia (*Horkelia cuneata* var. *cuneata*) was observed on the road edge, south of Santa Rita Road during the May 2020 field survey. Mesa horkelia is not expected to occur in the Survey Area.
black-flowered figwort *Scrophularia atrata*	CRPR 1B.2 G2, S2	Calcium and diatom-rich soils in chaparral, coastal dunes, coastal scrub, and riparian woodland. Elevation range: 0 – 1,300 feet. Blooming period: April – July.	Yes	Scrub habitat in the Survey Area has the potential to support black-flowered figwort; however, this species was not observed during April 2019 and May 2020 field surveys. Black-flowered figwort is not expected to occur in the Survey Area.
Amphibians				
California tiger salamander *Ambystoma californiense*	FE, ST, WL G2, S2	Inhabits valley foothills and grasslands, savannas, and open woodlands near vernal pools or other seasonal sources of water for breeding. Require upland, underground refuges, often California ground squirrel and Botta's pocket gopher burrows.	Yes	There is a "Known CTS Breeding Pond", LOAL-40, in the Survey Area that was confirmed to have larval CTS present during the aquatic survey of the pond performed on April 2019 survey (SES 2019b; USFWS 2010). Additionally, there are three "Potential CTS Breeding Ponds" within the maximum distance the species is known to migrate or disperse (1.37 miles) from the Survey Area (USFWS 2010). Thus, all suitable upland habitat outside of existing agricultural areas within the parcel is considered potentially occupied by CTS.

Table 3. Special-status Plant and Wildlife Species Occurrences Documented within a 5-mile Radius

Common Name ***Scientific Name*** ***(Arranged alphabetically by scientific name)***	**Listing Status***	**Habitat Requirements/Habitat Affinity**	**Suitable Habitat Present in Survey Area (Y/N)**	**Likelihood for Occurrence within Survey Area**
California red-legged frog (CRLF) *Rana draytonii*	FT, SSC G2, S2	Found primarily in coastal drainages of central California, from Marin County, California, to northern Baja California, Mexico. Uses a variety of aquatic, riparian, and upland habitats. Requires a pond, slow-flowing stream reach, or deep pool within a stream with vegetation or other material to which egg masses may be attached. Uses both riparian and upland habitats for foraging, shelter, cover. Will also use small mammal burrows and moist leaf litter as refugia.	Yes	CRLF could occur in the stock pond in the northeast corner of the property (LOAL-40). Upland habitat is present in the Survey Area, but is degraded in active cultivation areas. The closest documented occurrence is approximately 1.5 miles south of the Survey Area in "Known CTS Breeding Pond" LOAL-2w (CNDDB 2020; USFWS 2010).
western spadefoot *Spea hammondii*	SSC G3, S3	Prefers open areas with sandy or gravelly soils, in a variety of habitats including grasslands, mixed woodlands, coastal sage scrub, chaparral, sandy washes, and river floodplains. Vernal pools or other ephemeral water sources are essential for breeding and egg-laying.	Yes	Western spadefoot could use LOAL-40 for breeding and suitable upland habitat is present in the Survey Area as well. The closest documented occurrence is approximately 1.5 miles south of the Survey Area at the intersection of Campbell Road and Highway 246 adjacent to "Known CTS Breeding Ponds" LOAL-2w and LOAL-2e (CNDDB 2020; USFWS 2010).
Reptiles				
northern California legless lizard *Anniella pulchra*	SSC G3, S3	Inhabits moist soil in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and shrubs in sunny areas and dunes stabilized with bush lupine and mock heather often indicate suitable habitat. Can also be found under surface objects such as rocks, boards, driftwood, and logs.	Yes	There is suitable habitat for northern California legless lizard in the coast live oak woodland and California sagebrush scrub habitat. However, legless lizard would not inhabit cultivated fields and would be unlikely to be found in and around areas of development.

Table 3. Special-status Plant and Wildlife Species Occurrences Documented within a 5-mile Radius

Common Name ***Scientific Name*** ***(Arranged alphabetically by scientific name)***	**Listing Status***	**Habitat Requirements/Habitat Affinity**	**Suitable Habitat Present in Survey Area (Y/N)**	**Likelihood for Occurrence within Survey Area**
coast patch-nosed snake *Salvadora hexalepis virgultea*	SSC G5, S2	Inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains.	Yes	The California sagebrush scrub offers suitable habitat for the coast patch nosed snake. The closest documented occurrence is 4.6 miles northwest of the property in open coastal sage scrub near the Burton Mesa Ecological Reserve in May 2004 (CNDDB 2020). The likelihood of occurrence of this species in the Survey Area is considered low, due to its regional scarcity. It is considered uncommon along the south coast area due to land changes from heavy grazing, development and loss of former habitat, and loss of prey.
Birds				
tricolored blackbird *Agelaius tricolor*	ST, MBTA G2, S2	Found in areas near water including marshes, grasslands, and wetlands. Utilize grasslands and agricultural areas for foraging.	No	Suitable nesting habitat for tricolored blackbird is not present in the Survey Area. The tri-colored blackbird typically forages in suitable areas nearby nesting sites year-round (Lehman 2020) and there is limited foraging habitat within and adjacent to the Survey Area. Therefore, it is unlikely that cultivation would impact foraging habitat. The closest documented occurrence is approximately 4 miles to the northeast near Los Alamos. This nesting record is from 1936 and the nesting colony was presumed extirpated in 1991 (CNDDB 2020). This species is not expected to occur except as a transient.
southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	WL, MBTA G5, S3	Inhabits rocky areas of foothills and lower canyons, in understory of pine-oak woods, or in chaparral or coastal scrub.	Yes	One southern California rufous-crowned sparrow, was observed singing from a perch near the stock pond during the April 2019 survey. The species would most likely be found in rocky areas of sparse or moderately dense scrub.

Table 3. Special-status Plant and Wildlife Species Occurrences Documented within a 5-mile Radius

Common Name ***Scientific Name*** ***(Arranged alphabetically by scientific name)***	**Listing Status***	**Habitat Requirements/Habitat Affinity**	**Suitable Habitat Present in Survey Area (Y/N)**	**Likelihood for Occurrence within Survey Area**
prairie falcon *Falco mexicanus*	WL, MBTA G5, S4	Frequent open country such as grasslands, agricultural areas, ponds, sloughs, river mouths, seacoasts, and offshore for hunting. Nests are typically located on cliffs.	No	Prairie falcon is considered an uncommon winter visitor and rare breeding resident in the interior lowlands of Santa Barbara County (Lehman 2020). The closest documented occurrence of this species is from 1916, 4.75 miles southeast of the Survey Area (CNDDB 2020). The prairie falcon would occur only as a rare transient to the Survey Area.
American peregrine falcon *Falco peregrinus anatum*	FP, BCC, MTBA G4, S3	Uses a variety of open habitats for foraging, often near rivers or lakes, including tundra, marshes, seacoasts, savannahs, grasslands, meadows, open woodlands, and agricultural areas. Riparian areas, as well as coastal and inland wetlands, are important year-round habitats. Requires cliffs or suitable surrogates for breeding that are close to preferred foraging areas.	No	There is limited suitable foraging habitat for American peregrine falcon within the Survey Area. The American peregrine falcon is a wide-ranging species that could occur in the Survey Area as an occasional transient, but is considered unlikely to occur due to the distance from suitable breeding habitat.
Mammals				
American badger *Taxidea taxus*	SSC G5, S3	Most abundant in drier open stages of shrub, forest, and grassland habitats, with friable soils that facilitate burrowing. Needs sufficient food and open, uncultivated ground. Preys mainly on burrowing rodents.	Yes	There is suitable foraging and denning habitat for American badger in the grassland and scrub habitats within the parcel. The closest documented occurrence is a roadkill specimen observed in 1990, 1 mile southwest of the Survey Area near Campbell Road and Highway 246 (CNDDB 2020).

*Listing Status/ Rarity Ranking Notes:
Federal: FE – Federally listed Endangered
FT – Federally listed Threatened
FC – Federal Candidate Species
WL – USFWS Watch list
BCC – USFWS Bird of Conservation Concern
MTBA – Migratory Bird Treaty Act
State: SE – State listed Endangered

ST – State listed Threatened
SC – State Candidate Species
SR – State Rare Species
SA – State Special Animal
FP – CDFW Fully Protected Species
SSC – CDFW Species of Special Concern
WL – CDFW Watch List

CRPR: California Native Plant Society Rare Plant Rank
CBR – Considered but Rejected
1B – Rare, threatened, or endangered in CA and elsewhere
2 – Rare, threatened, or endangered in CA but common elsewhere
4 – Limited distribution (Watch-list)
CBR – Considered but Rejected

CRPR Extensions
0.1 – Seriously endangered in California
0.2 – Fairly endangered in California
0.3 – Not very endangered in California

CNDDB Element Rankings

Global/State Rarity Ranking:
G1/S1 – Critically imperiled. At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2/S2 – Imperiled. At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3/S3 – Vulnerable. At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4/S4 – Apparently Secure. Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5/S5 – Demonstrably Secure. Common; widespread and abundant.

[1] – Unless otherwise noted, habitat, elevation, and blooming period for special-status plant species is from *The Jepson eFlora* (2020) and CNPS 2020b.

5.4.1 Special-status Plant Species

The field surveys conducted in April 2019 and May 2020 were within the typical blooming season to detect/identify all of the special-status plant species that are known to occur in the Project vicinity. No special-status plant species were observed in the Survey Area during the field surveys, and none are expected to occur. Proposed cannabis cultivation will be limited to areas previously used for agricultural purposes and will avoid native habitat that has the potential to support rare plants.

5.4.2 Special-status Wildlife Species

Two special-status wildlife species were observed on the parcel during the April 2019 field survey: southern California rufous-crowned sparrow (SSC, G5, S3) and California tiger salamander Santa Barbara County DPS (FE, SE, G2G3 S2S3).

An additional five (5) special-status wildlife species have a moderate to high potential to utilize the Survey Area or adjacent habitat during dispersal or while foraging: California red-legged frog, western spadefoot, northern California legless lizard, coast patch-nosed snake, and American badger. Sensitive wildlife species that have the potential to occur are discussed in more detail in the following narratives.

The Operator is initiating consultation with CDFW and USFWS regarding appropriate measures to protect all special-status species that have the potential to occur in the property, particularly CTS and CRLF.

5.4.2.1 California Tiger Salamander (Ambystoma californiense)

The Santa Barbara County Distinct Population Segment (DPS) of CTS was emergency listed by the USFWS as endangered under the Federal Endangered Species Act in January of 2000 (USFWS 2000). Its distribution is limited to Santa Barbara County among six discrete regions: West Santa Maria/Orcutt; East Santa Maria; West Los Alamos; East Los Alamos; Purisima Hills, and Santa Rita Valley. The six associated metapopulations inhabit ponds and adjacent uplands.

The California Fish and Game Commission listed the Santa Barbara County DPS of the California tiger salamander as threatened under the California Endangered Species Act in August of 2010 (CDFW 2010).

CTS inhabit low elevation vernal pools and seasonal ponds and associated grassland, oak savanna, and coastal scrub plant communities of the Santa Maria, Los Alamos, and Santa Rita valleys in northwestern Santa Barbara County. CTS in the Purisima Hills occur at higher elevations. Historically, they bred primarily in natural vernal pools, but they have adapted to breeding in man-made stock ponds created for ranching and agricultural purposes. The aquatic larval stage lasts about 3-6 months.

CTS spend most of their life cycle in underground retreats in upland habitat. The most commonly used refugia are burrows of California ground squirrel and Botta's pocket gopher. CTS are known to travel long distances from breeding ponds into upland habitats. Maximum distances moved are difficult to establish for any species, but CTS have been recorded to disperse 1.37 miles (2.2 kilometers) from breeding ponds (Orloff 2011). Cultivated or regularly managed (i.e., tilled) fields

do not afford refuge habitat for CTS because regular manipulation of soil precludes establishment of small mammal burrows.

The stock pond in the northeast corner of the property, LOAL-40, is a USFWS "Known CTS Breeding Pond" (2010). Presence of larval CTS in this pond was confirmed by aquatic sampling during the April 2019 survey effort (SES 2019b) (Appendix A – Site Photographs). Additionally, there are three "Potential CTS Breeding Ponds" within the maximum distance the species is known to migrate or disperse (1.37 miles) from the Survey Area (USFWS 2010).

CTS are expected to use small mammal burrows in the surrounding grasslands, shrublands, and woodlands for harborage. Existing and proposed hardscape and structural development (e.g., residence, barn, nursery, storage sheds, parking) do not contain suitable upland habitat for CTS. The cultivation area proposed for hoops has been consistently tilled in the last 3 to 5 years. It is not considered viable upland refuge habitat because it does not support stable populations of small mammals. due to the regular manipulation of soil for planting and harvest. The proposed outdoor cultivation area was previously used for agricultural purposes, but is currently fallow. The outdoor cultivation area is considered possible dispersal habitat that can be navigated by CTS migrating between aquatic breeding and upland refuge habitats.

5.4.2.2 California Red-legged Frog (Rana draytonii) (CRLF)

The California red-legged frog (CRLF) typically occurs in ponds, slow-flowing stream reaches, or deep pools within a stream with riparian or emergent vegetation. CRLF could occur in LOAL-40. The ephemeral drainage does not hold water long enough to support breeding or long-term habitation by this species. Upland habitat is present in the wild oats and annual brome grassland and ruderal/disturbed habitat adjacent to the existing agricultural areas. The closest documented occurrence is approximately 1.5 miles south of the Survey Area in "Known CTS Breeding Pond" LOAL-2w (CNDDB 2020; USFWS 2010).

LOAL-40 could potentially support CRLF breeding, but the animal has not been documented during aquatic surveys of LOAL-40. Areas proposed for cannabis cultivation and support facilities could be considered dispersal habitat if CRLF were to use LOAL-40 for breeding. Areas routinely in cultivation do not constitute viable upland habitat.

5.4.2.3 Western Spadefoot (Spea hammondii)

The western spadefoot prefers open areas with sandy or gravelly soils, in a variety of habitats including grasslands, mixed woodlands, coastal sage scrub, chaparral, sandy washes, and river floodplains. Vernal pools or other ephemeral water sources are essential for breeding and egg-laying.

Western spadefoot could use LOAL-40 for breeding habitat and suitable upland habitat is present in the Survey Area as well. The closest document occurrence is approximately 1.5 miles south of the Survey Area at the intersection of Campbell Road and Highway 246 adjacent to "Known CTS Breeding Ponds" LOAL-2w and LOAL-2e (CNDDB 2020; USFWS 2010).

The western spadefoot is more likely to be found in the grassland immediately surrounding LOAL-40, but could occupy small mammal burrows in the grassland, woodland and scrub habitats in the

Survey Area. There is no suitable habitat for this species in the areas proposed for cannabis cultivation or support facilities.

5.4.2.4 Northern California Legless Lizard (Anniella pulchra)

The northern California legless lizard occurs in scrub and woodland habitats associated with loose, sandy substrates. The sandy, loamy soil in the scrub habitat and coast live oak woodland within the Survey Area is suitable for the northern California legless lizard. The areas proposed for cannabis cultivation are regularly manipulated and do not offer suitable habitat for this species.

5.4.2.5 Coast patch-nosed snake (Salvadora hexalepis virgultea)

The coast-patch nosed snake inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains. The closest documented occurrence is 4.6 miles northwest of the property in open coastal sage scrub near the Burton Mesa Ecological Reserve in May 2004 (CNDDB 2020). The California sagebrush scrub offers suitable habitat for the coast patch nosed snake. However, the likelihood of occurrence of this species in the Survey Area is considered low due to its regional scarcity.

5.4.2.6 Southern California Rufous-crowned Sparrow (Aimophila ruficeps canescens)

Southern California rufous-crowned sparrow is considered uncommon to locally fairly common in the upper elevations of the interior lowlands of Santa Barbara County (Lehman 2020). A southern California rufous-crowned sparrow was observed singing from a perch near the stock pond during the April 2019 survey. The species inhabits dry, open and rocky chaparral and coastal sage scrub. Although this species utilizes the habitat in the property, southern California rufous-crowned sparrows would not be expected to nest in developed areas or proposed cultivation areas.

5.4.2.7 American Badger (Taxidea taxus)

The American badger is a California Species of Special Concern. Badgers are uncommon, but widespread in grassland and scrub habitats in northern Santa Barbara County. Habitat to support American badger is present in the Survey Area. No badger burrows or signs of this species were observed during the field surveys. This species should be considered a possible resident in the Survey Area based on presence of suitable habitat and prey base. Badgers may traverse cultivated fields, such as those proposed for conversion to cannabis production, but only on a transient basis due to the relative lack of prey.

5.5 ENVIRONMENTALLY SENSITIVE HABITAT

5.5.1 Sensitive Vegetation Communities & Native Trees

Coast live oak woodland and individual coast live oak trees are considered ESH by the County and native habitats, such as the California sagebrush scrub, are protected by the County's Cannabis Regulations (Figure 5 – Sensitive Biological Resources). All of the coast live oak trees in the Survey Area are considered sensitive and protected under County policies.

5.5.2 Jurisdictional Waters

The ephemeral drainage in the Survey Area is regulated by the County, CDFW, and RWQCB. The RWQCB prescribed setback for cannabis cultivation and support facilities for ephemeral watercourses is 50 feet. There is no riparian vegetation along the northern bank drainage, so the RWQCB/County prescribed setback (i.e., buffer area) from TOB is 50 feet for outdoor row crop cultivation and 100 feet for hoops (County 2019, SWRCB 2017). Encroachment within ESH or the buffer areas for streams/drainages may be considered significant by the County and state agencies.

6.0 IMPACT DISCUSSION

The following impact discussion is based on existing conditions within the Survey Area. The sections below describe the potential impacts of the proposed Project to biological resources. Consistent with the County's Environmental Thresholds and Guidelines Manual (County 2008) and the County-wide FEIR for the Cannabis Land Use Ordinance and Licensing Program (County 2017), the impacts on biological resources are considered significant if a proposed Project:

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

6.1 SUMMARY OF PROJECT IMPACTS

Temporary/indirect impacts (e.g., noise, dust) to native trees and habitat around the Survey Area, resulting from ongoing agricultural activities, are minimal and can be mitigated through implementation of the recommended avoidance and minimization measures outlined in Section 7.0.

Direct impacts from the Project are confined to areas already containing existing infrastructure, active agriculture, or ruderal/disturbed habitat. Project impacts are summarized in Table 4.

Table 4 – Summary of Project Impacts (Conversion of Existing Use)

Project Component	Habitat Impacted	Approximate Area	Approx. Area in TOB Setback	Type of Impact
Hoop Cultivation Area	Active Agriculture/Tilled	2.3 acres	0	Permanent
Outdoor Cultivation Area	Ruderal/Disturbed	0.5-acre	0	Permanent
Nursery	Ruderal/Disturbed	4,158 sq. ft.	0	Permanent
Water Tanks	Ruderal/Disturbed	1,000 sq. ft.	0	Permanent
Storage Sheds	Ruderal/Disturbed	240 sq. ft.	0	Permanent
Parking/Loading Areas	Ruderal/Disturbed	1,000 sq. ft.	0	Permanent
Existing Security Fencing	Ruderal/Disturbed	3,575 linear feet	943 linear feet	Permanent
Proposed Security Fencing	Ruderal/Disturbed	640 linear feet	0	Permanent

6.2 Impacts to Ephemeral Drainage and Prescribed Setback

No impacts to the ephemeral drainage are anticipated as a result of the Project. Stormwater runoff Best Management Practices (BMPs) (e.g., fiber rolls, etc.) will be implemented prior to the rainy season (i.e., November 15 through April 1), consistent with RWQCB guidelines and annual cannabis licensing requirements. Gravity-fed drip irrigation will be utilized in cultivation areas and will not result in runoff to the drainage. Plastic/poly hoop coverings will be removed as part of site 'winterization' techniques (metal frames will remain year-round), to reduce the velocity of stormwater runoff during large storms.

Impacts to the 50-foot setback from the ephemeral drainage are limited to the approximately 943 linear feet of existing deer fencing along the TOB of the drainage. The fence was installed following discussions/recommendations by County Staff during a site visit in summer 2019. Because the habitat along the TOB of the drainage was previously disturbed by cattle and ongoing agricultural operations, and there is no riparian vegetation present, installation of the fence did not impact sensitive habitat. In its current configuration, the fence line meets the County Sherriff security requirements and also prevents cattle from accessing and causing further erosion to the northern bank of the drainage. The portion of the fence within the prescribed 50-foot setback is not considered a significant impact to the drainage or surrounding habitat.

With implementation of the avoidance and minimization measures outlined below, potential impacts to the drainage and associated buffer area would be reduced to a less than significant level.

6.3 Impacts to Native Trees and Habitat

No impacts to native trees or habitat are anticipated as a result of the Project. The areas proposed for cultivation are previously disturbed or actively cultivated and do not contain native habitat. The existing and proposed fence lines serve to prevent human intrusion into adjacent coast live oak woodland and California sagebrush scrub habitat. Cultivation activities (e.g., tilling, irrigation, equipment storage) will not occur within 6 feet of the canopy of coast live oak trees that occur within the fence line. With implementation of the avoidance and minimization measures outlined below, potential impacts to coast live oak trees and native scrub habitat would be reduced to a less than significant level.

6.4 Impacts to Special-status Plants

No impacts to special-status plants will occur as a result of the Project. No special-status plant species were observed in the Survey Area during April 2019 and May 2020 field surveys, and none are expected to occur in the vicinity of proposed cannabis cultivation.

6.5 Impacts to Special-status Wildlife

As discussed above, two special-status wildlife species were observed on the parcel during the April 2019 field survey: southern California rufous-crowned sparrow and California tiger salamander. In addition, there are five special-status wildlife species that have the potential to occur in the Survey Area, and possibly use the Survey Area for dispersal or for foraging: California red-legged frog, western spadefoot, northern California legless lizard, coast patch-nosed snake, and American badger. None of these animals are likely to depend on, or permanently reside in areas of current or future cultivation.

Because the proposed outdoor cultivation area is fallow, it is recommended that a qualified biologist conduct a pre-construction survey of that area and adjacent California sagebrush scrub habitat for special-status wildlife, prior to installation of additional fence or planting. The Operator will initiate consultation with CDFW and USFWS regarding the agencies' requirements for avoidance of take of listed species (i.e., CTS and CRLF) and appropriate measures to reduce impacts to all special-status wildlife that have the potential to occur in the Survey Area.

Proposed lighting for the Project is 'dark sky' compliant (i.e., hooded, faced downward) and is motion activated to reduce impacts to wildlife using the ephemeral drainage and adjacent habitats. Cannabis waste will be stored in enclosed bins and removed from the site by a certified hauler, so as not to attract wildlife. There are no sediment basins or impoundments proposed as part of the Project.

6.6 Nesting birds

Project activities related to structures (e.g., nursery, fencing) are temporary and are not expected to impact nesting birds that may occur in the adjacent coast live oak woodland or California sagebrush scrub habitats, including the southern California rufous-crowned sparrow. With implementation of recommended avoidance and minimization measures, potential impacts to nesting birds would be considered less than significant.

6.7 IMPACTS TO WILDLIFE MOVEMENT

No impacts to wildlife corridors are expected as a result of the Project. The existing and proposed fenced areas do not constitute a critical or essential wildlife corridor and because the land is disturbed or has been cultivated historically, there is no loss of native habitat associated with the Project.

There is an abundance of high quality woodland and scrub habitat that can be accessed by wildlife traversing the landscape, on all sides of the Project's fenced areas. The existing and proposed deer fence, made of 4-inch square wire mesh, exclude medium and large terrestrial wildlife that could damage the crops (e.g., deer, raccoon, brush rabbit, etc.), but the spacing is large enough to allow reptiles, amphibians, and small mammals (e.g., snake, lizard, salamander, frog, mice, gophers, etc.) to traverse through the fence without harm. There are no other fences or barriers within the property that would inhibit wildlife movement. Proposed hoops will not serve as a barrier to CTS or CRLF dispersal during the rainy season, when sensitive amphibians are more likely to be migrating, because the plastic/poly on the metal frames will be removed as part of site winterization measures. As mentioned previously, the Operator is initiating consultation with CDFW and USFWS regarding next steps to minimize potential impacts to CTS, CRLF, and other sensitive wildlife that may disperse/migrate through the Survey Area.

7.0 RECOMMENDED AVOIDANCE AND MINIMIZATION MEASURES

The following avoidance and minimization measures are intended to reduce the likelihood of impacts to biological resources that have the potential to result from the Project. Recommended species-specific and sensitive habitat protection measures are listed first, followed by general construction measures and standard Best Management Practices (BMPs).

7.1 SPECIES-SPECIFIC AND ESH AVOIDANCE AND MINIMIZATION MEASURES

- A minimum setback of 50 feet from the TOB of the ephemeral drainage shall be maintained for all outdoor cannabis cultivation and associated structures and a minimum setback of 100 feet shall be maintained for hoops.
- The Operator will initiate consultation with CDFW and USFWS regarding the appropriate course of action to prevent and/or mitigate for impacts to state and/or federally-listed special-status wildlife species (i.e., CTS and CRLF), as well as measures to protect other special-status wildlife species that have the potential to occur.
- A worker environmental awareness training pamphlet will be prepared and available on-site for all employees (including site supervisors, equipment operators, and laborers). The information will emphasize the presence of special-status species that have the potential to occur in the Survey Area (e.g., CTS, CRLF), identification of those species, their habitat requirements, applicable regulatory policies and provisions regarding their protection, measures being implemented to avoid and/or minimize impacts, and penalties for noncompliance. The pamphlet will also emphasize that if listed species are observed within or near the cultivation area, work will be suspended, the species are not be touched or moved, and the CDFW and USFWS should be notified immediately.

- If installation of additional fencing around the outdoor cultivation area is implemented during the bird nesting season (February 1 to August 31), a qualified biologist shall conduct a pre-construction survey of the adjacent California sagebrush scrub habitat and work areas within 7 days of construction commencement (i.e., mobilization, staging, or post hole excavation) to avoid impacts to nesting birds. Surveys shall be conducted in all areas within 500 feet of proposed disturbance areas, or a lesser distance if dense vegetation renders a 500-foot survey radius infeasible. If breeding birds with active nests are found prior to (or during) Project construction, a qualified biologist shall oversee the establishment of a buffer (prescriptively 300 feet for passerines and 500 feet for raptors) around the nest; no activities will be allowed within the buffer(s) until the young have fledged from the nest or the nest fails.
- Prior to installation of additional fencing around the outdoor cultivation area, a qualified biologist shall conduct a pre-construction survey for special-status wildlife species in the adjacent California sagebrush scrub habitat and work areas. The pre-construction survey shall occur no more than 7 days prior to the start of work.
- Coast live oak woodland, California sagebrush scrub, and individual coast live oak trees should be protected consistent with County policies and guidelines. No grading, tilling, or cultivation should occur within 6 feet of the dripline of native trees and no equipment or supplies should be stockpiled or stored under the canopy or within 6 feet of native trees or habitat.
- If incidental damage occurs to native trees (e.g., removal, broken limbs, damage to critical root zones) the trees should be examined by a County-approved arborist or biologist to determine whether compensatory measures are necessary.

7.2 General Construction Avoidance and Minimization Measures

- Precautions shall be taken to prevent sediment transport into the ephemeral drainage. Erosion control measures (e.g., jute netting, fiber rolls, gravel bags, etc.) shall be used (as necessary and in consultation the RWQCB) where sediment runoff from exposed areas could enter the drainage. All erosion control materials shall be free from plastic to prevent entanglement of wildlife.
- Dust generated by tilling and cultivation activities should be kept to a minimum with a goal of reducing impacts to adjacent native habitat. A water truck or sprinkler system should be used to prevent excessive dust.
- Fueling of equipment will not be done within 100 feet of the drainage. Stationary equipment and fluid storage vessels will be equipped with secondary containment. A spill containment and cleanup kit should be kept on-site in the event of an incidental spill.
- All agricultural chemicals and nutrients shall be stored in secondary containment within the storage sheds.
- All motorized equipment used shall be maintained in proper working condition and shall be free of drips and leaks of coolant, hydraulic, and petroleum products. No equipment shall be used for the Project unless such equipment is free of leaks and drips.
- Trash and food items will be kept in closed containers and removed daily.

- Cannabis waste shall be stored in an enclosed bin and removed from the site by a certified hauler.

8.0 CONCLUSIONS

Proposed cannabis cultivation in historically cultivated and disturbed fields will not result in significant impacts to special-status plants, native trees, native scrub/woodland habitat, or the ephemeral drainage. Pending consultation with CDFW and USFWS will help determine the appropriate course of action to prevent and/or mitigate for impacts to state and/or federally-listed special-status wildlife species (i.e., CTS and CRLF), as well as measures to protect other special-status wildlife species that have the potential to occur in the Survey Area.

All proposed outdoor 'open sky' cannabis cultivation will be planted a minimum of 50 feet from the TOB of the ephemeral drainage, and hoops will maintain the prescribed 100-foot setback.

RWQCB-required implementation, maintenance, and monitoring of BMPs and removal of plastic/poly hoop coverings during the rainy season is expected to reduce erosion/sedimentation/stormwater impacts to the ephemeral drainage to a less than significant level.

The existing and proposed fence lines do not impede wildlife movement across the landscape or block an essential wildlife corridor, therefore a Wildlife Movement Plan is not considered necessary. The Project does not include removal of trees or native vegetation, therefore a Tree Protection Plan and Habitat Protection Plan are not required pursuant to the County LUDC.

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FIGURES

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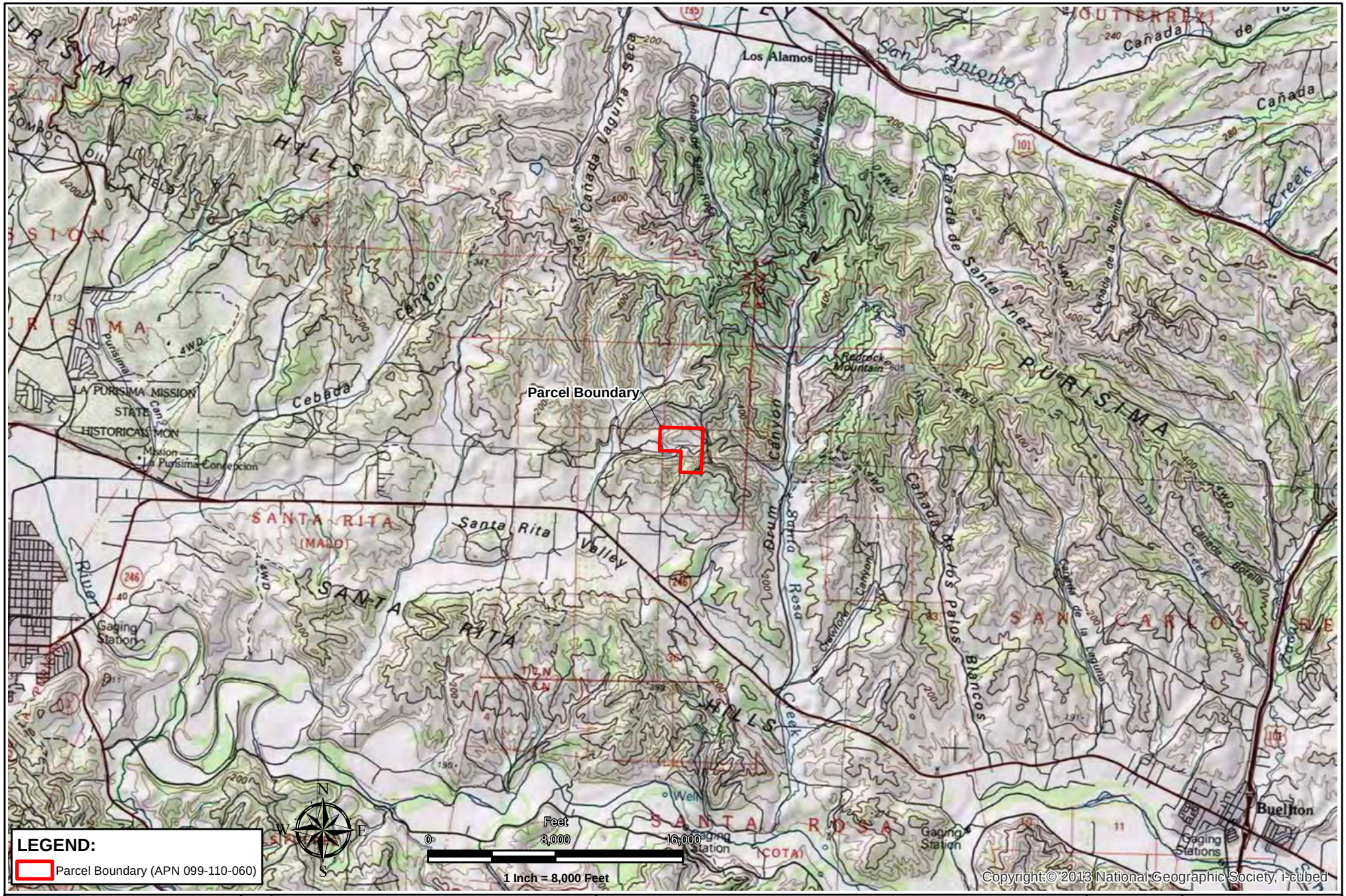

Terra Solutions 777 Mutsuhito Avenue San Luis Obispo, CA. 93401 (805) 782-0969	Storrer Environmental Services 2565 Puesta del Sol #3 Santa Barbara, CA. 93105 (805) 682-2065 www.storrerenvironmental.com	**Site Vicinity Map** **Santa Rita Holdings, LLC Cannabis Cultivation Project** **Revised Biological Resources Assessment** **5423 Santa Rita Road, Lompoc, CA**	**Figure 1**	August 12, 2020

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GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40 ft.

8/11/2020
1974 Hillenbrand Site-CTS Pond.dwg

CTS POND EXHIBIT
SANTA RITA PROJECT
COUNTY OF SANTA BARBARA, CALIFORNIA

BETHEL engineering

2624 Alpark Dr., Santa Maria, California 93455 (805) 934-5767

Terra Solutions
777 Mutsuhito Avenue
San Luis Obispo, CA. 93401
(805) 782-0969

STORRER ENVIRONMENTAL SERVICES
2565 Puesta del Sol #3
Santa Barbara, CA. 93105
(805) 682-2065
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Site Plans
Santa Rita Holdings, LLC Cannabis Cultivation Project
Revised Biological Resources Assessment
5423 Santa Rita Road, Lompoc, CA

Figure 2c

August 12, 2020

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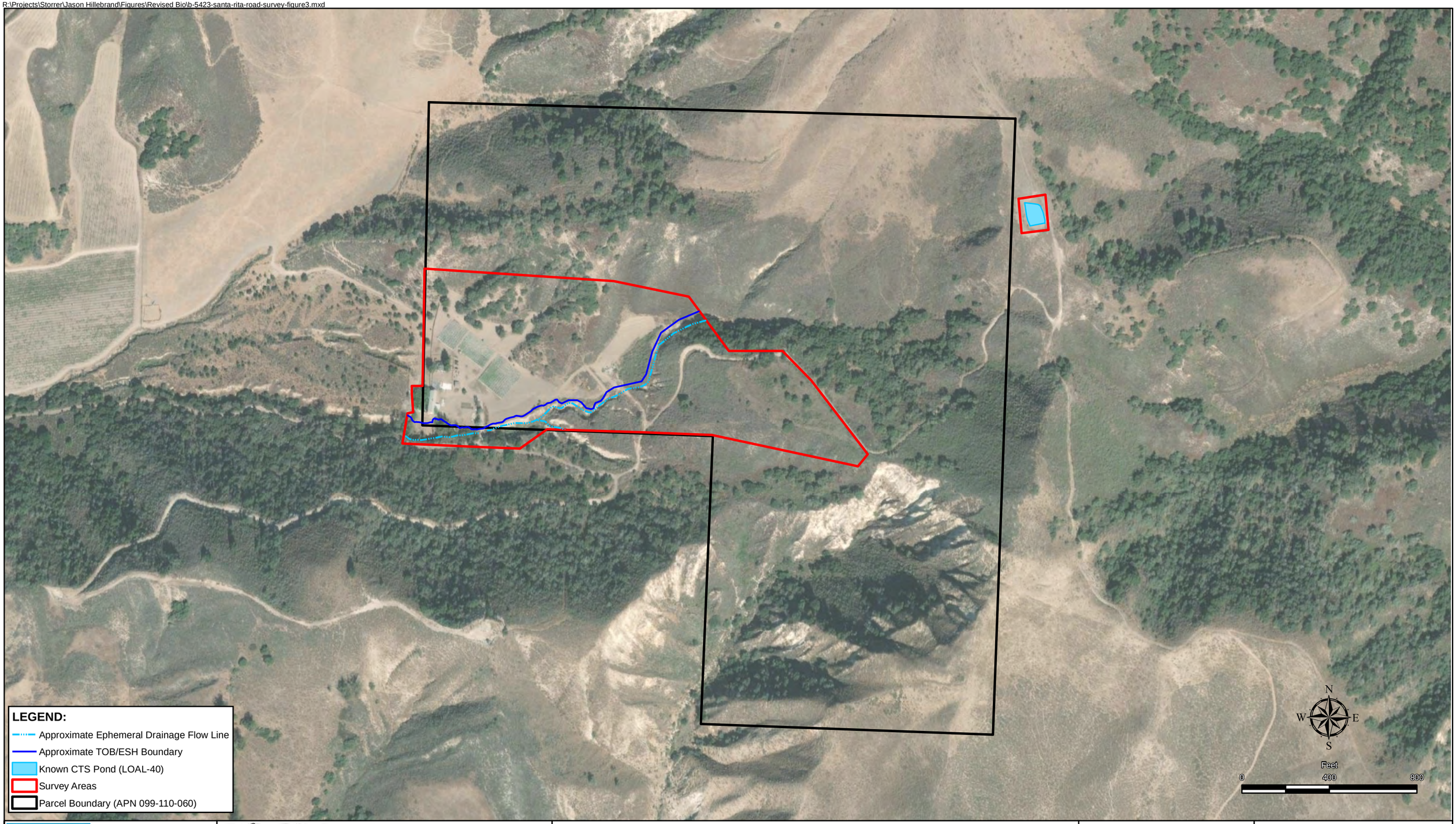

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San Luis Obispo, CA. 93401
(805) 782-0969

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2565 Puesta del Sol #3
Santa Barbara, CA. 93105
(805) 682-2065
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Survey Area Map
Santa Rita Holdings, LLC Cannabis Cultivation Project
Revised Biological Resources Assessment
5423 Santa Rita Road, Lompoc, CA

Figure 3

August 12, 2020

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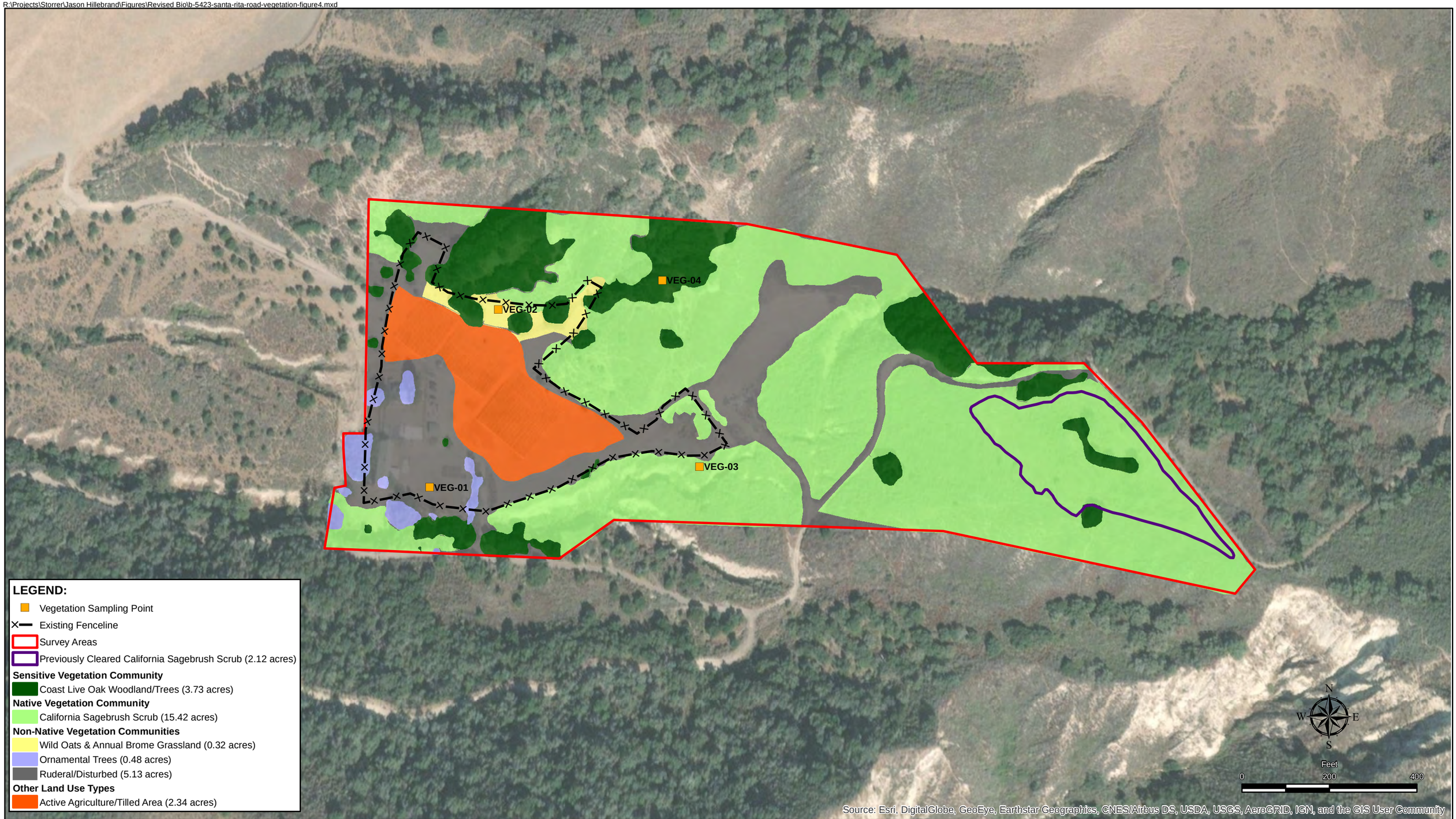

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(805) 782-0969

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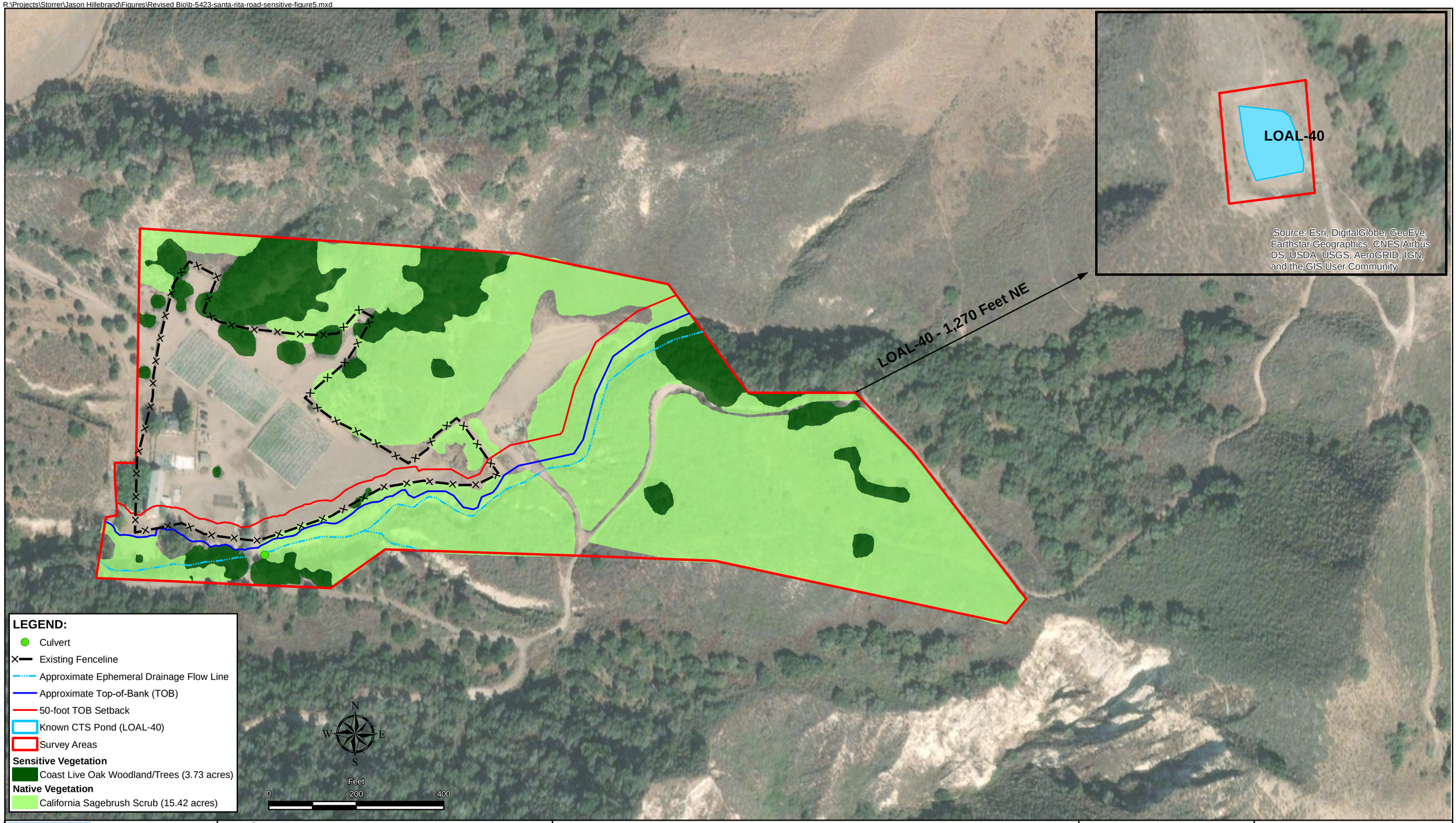
Vegetation Communities and Land Use Types
Santa Rita Holdings, LLC Cannabis Cultivation Project
Revised Biological Resources Assessment
5423 Santa Rita Road, Lompoc, CA

Figure 4

August 12, 2020

R:\Projects\Storrer\Jason Hillebrand\Figures\Revised Bio\b-5423-santa-rita-road-sensitive-figure5.mxd



Terra Solutions
777 Mutsuhito Avenue
San Luis Obispo, CA. 93401
(805) 782-0969

Storrer Environmental Services
2565 Puesta del Sol #3
Santa Barbara, CA. 93105
(805) 682-2065
www.storrerenvironmental.com

Sensitive Biological Resources
Santa Rita Holdings, LLC Cannabis Cultivation Project
Revised Biological Resources Assessment
5423 Santa Rita Road, Lompoc, CA

Figure 5

August 12, 2020

APPENDIX A

SITE PHOTOGRAPHS

(All photographs taken May 28, 2020 unless otherwise noted)

Photo 1 – Ephemeral drainage, active agricultural/tilled area proposed for hoops, existing infrastructure (Aspect: Southwest).

Photo 2 – Disturbed/fallow area proposed for outdoor cultivation with perimeter deer fencing (Aspect: Southwest).

Photo 3 – Upper reach of the ephemeral drainage, outdoor cultivation area, and existing ranch road (Aspect: North).

Photo 4 – Lower reach of the ephemeral drainage and existing fence line along the TOB (Aspect: Southwest).

Photo 5 – Existing culvert at the entrance driveway (Aspect: South).

Photo 6 – Ruderal/disturbed habitat along the fence line in the prescribed 50-foot setback (Aspect: West).

Photo 7 – Active agricultural/tilled area proposed for hoops (Aspect: West).

Photo 8 – Ruderal/disturbed habitat proposed for the nursery area (Aspect: Southwest).

Photo 9 – Coast live oak woodland, California sagebrush scrub, and existing water tank on the slope above the proposed outdoor cultivation area (Aspect: West).

Photo 10 – Area of California sagebrush scrub habitat cleared in 2019 (Aspect: Southwest). Photo taken April 9, 2019.

Photo 11 – Previously cleared area naturally revegetated with bush lupine, mock heather, and other native shrubs.

Photo 12 – Known CTS Breeding Pond LOAL-40 and surrounding habitat (Aspect: South). Photo taken April 9, 2019.

Photo 13 – CTS Larvae Found in Stock Pond (LOAL-40). Photo taken April 9, 2019.

APPENDIX B

CNPS VEGETATION RAPID ASSESSMENT FORM

Combined Vegetation Rapid Assessment and Relevé Field Form

(Revised April 28, 2016)

For Office Use:	Final database #:	Final vegetation type:	Alliance Association

I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION circle: **Relevé** or **RA**

Database #: VEG-01

Date: 5/28/20

Name of recorder: Jessica Peak

Other surveyors:

Location Name: 5423 Santa Rita Road, Buellton

GPS name: ipad/ARRM 100 Receiver For Relevé only: **Bearing°**, left axis at ID point____ **of Long / Short** side

UTME _____ **UTMN** _____ **Zone: 11 NAD83** GPS error: **ft./ m./ PDOP** 8.2 inches

Decimal degrees: **LAT** 34.674877 **LONG** -120.313283

GPS within stand? Yes / No If No, cite from GPS to stand: distance (m)____ bearing °____ inclination °____

and record: **Base point ID** _____ **Projected UTMs: UTME** _____ **UTMN** _____

Camera Name: JP **Cardinal photos at ID point:**

Other photos: photos representative of habitat type

Stand Size (acres): <1, 1-5, >5 | Plot Size (m²): 100 / _____ | Plot Shape ____ x ____ m | RA Radius 20 **m**

Exposure, Actual °: _____ **NE NW SE SW Flat Variable | Steepness, Actual °:** _____ **0° 1-5° >5-25° >25**

Topography: Macro: top upper mid lower bottom | Micro: convex flat concave undulating

Geology code: _____ **Soil Texture code:** _____ **| Upland or Wetland/Riparian** (circle one)

% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)

H_2O: 0 **BA Stems:** 2 **Litter:** 1 **Bedrock:** 0 **Boulder:** 0 **Stone:** 0 **Cobble:** 0 **Gravel:** 3 **Fines:** 95 **=100%**

% Current year bioturbation 1 **Past bioturbation present? Yes / No | % Hoof punch** 0

Fire evidence: Yes / No (circle one) If yes, describe in Site history section, including date of fire, if known.

Site history, stand age, comments:

Ruderal habitat around existing barn & developed area, edges of active agricultural areas

Disturbance code / Intensity (L,M,H): H / 01 / 03 / 04 / 05 / ___ **"Other"** _____ / ___

II. HABITAT DESCRIPTION

Tree DBH : T1 (<1" dbh), **T2** (1-6" dbh), **T3** (6-11" dbh), **T4** (11-24" dbh), **T5** (>24" dbh), **T6** multi-layered (T3 or T4 layer under T5, >60% cover)

Shrub: S1 seedling (<3 yr. old), **S2** young (<1% dead), **S3** mature (1-25% dead), **S4** decadent (>25% dead)

Herbaceous: H1 (<12" plant ht.), **H2** (>12" ht.)

Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), **2** (2-10ft. ht.), **3** (10-20ft. ht.), **4** (>20ft. ht.)

Desert Palm/Joshua Tree: 1 (<1.5" base diameter), **2** (1.5-6" diam.), **3** (>6" diam.)

III. INTERPRETATION OF STAND

Field-assessed vegetation Alliance name: Ruderal / disturbed

Field-assessed Association name (optional): N/A

Adjacent Alliances/direction: Active agriculture (N/W) _____ / _____

Confidence in Alliance identification: L M H Explain: _____

Phenology (E,P,L): Herb P **Shrub** E/P **Tree** P **Other identification or mapping information:**

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised April 28, 2016)
SPECIES SHEET

Database #: VEG-01

IV. VEGETATION DESCRIPTION

% NonVasc cover: 35 **Total % Vasc Veg cover:** 65

% Cover - **Conifer tree / Hardwood tree:** Ø / Ø **Regenerating Tree:** Ø **Shrub:** 2 **Herbaceous:** 98

Height Class - Conifer tree / Hardwood tree: Ø / Ø **Regenerating Tree:** Ø **Shrub:** 1 **Herbaceous:** 1 & 2

Height classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2-5m, 5=5-10m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m

Stratum categories: T=Tree, A = SApling, E = SEedling, S = Shrub, H= Herb, N= Non-vascular
% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

Stratum	Species	% cover	C	Final species determination
H	Bromus diandrus	25-50		
H	Hordeum murinum	15-25		
H	Festuca perennis	15-25		
H	Malva nicaeensis	1-5		
H	Malva parviflora	5-15		
H	Silybum marianum	1-5		
H	Hirschfeldia incana	5-15		
H	Conium maculatum	5-15		
H	Nicotiana glauca	1-5		
H	Carduus pycnocephalus	5-15		
S	Artemisia californica	+		
H	Rumex crispus	r		
H	Vicia benghalensis	1-5		
H	Medicago polymorpha	5-15		
H	Spergularia rubra	+		
H	Verbena lasiostachys	+		
H	Bromus hordeaceus	+		
H	Brassica nigra	5-15		
H	Polygonum aviculare	1-5		
H	Chenopodium album	1-5		
S	Toxicodendron diversilobum	+		
S	Baccharis pilularis	+		
H	Sisymbrium altissimum	+		
H	Centaurea melitensis	15-25		
H	Erodium moschatum	5-15		
H	Bromus madritensis	15-25		
H	Polygonum monspeliensis	1-5		

Unusual species: _____

Combined Vegetation Rapid Assessment and Relevé Field Form

(Revised April 28, 2016)

For Office Use:	Final database #:	Final vegetation type:	Alliance Association

I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION circle: **Relevé** or **RA**

Database #: VEG-02 **Date:** 5/28/20 **Name of recorder:** Jessica Peak

Other surveyors:

Location Name: 5423 Santa Rita Road, Buellton

GPS name: ipad / Arrow 100 receiver For Relevé only: **Bearing°**, left axis at ID point____ of **Long / Short** side

UTME ____ **UTMN** ____ **Zone: 11** **NAD83** **GPS error: ft./ m./ PDOP** 8.6 inches

Decimal degrees: **LAT** 34.676005 **LONG** -120.312791

GPS within stand? **Yes** / **No** If No, cite from GPS to stand: distance (m)____ bearing °____ inclination °____

and record: **Base point ID** ____ **Projected UTMs: UTME** ____ **UTMN** ____

Camera Name: VP **Cardinal photos at ID point:**

Other photos: Representative photos of habitat

Stand Size (acres): **<1** **1-5, >5** | **Plot Size (m²): 100 /** ____ | **Plot Shape** ____ **x** ____ **m** | **RA Radius** 10 **m**

Exposure, Actual °: ____ **NE NW SE SW Flat Variable** | **Steepness, Actual °:** ____ **0° 1-5° > 5-25° > 25**

Topography: Macro: top upper mid lower bottom | **Micro: convex flat concave undulating**

Geology code: ____ **Soil Texture code:** ____ | **Upland** or **Wetland/Riparian** (circle one)

% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)

H_20: 0 **BA Stems:** 2 **Litter:** 1 **Bedrock:** 0 **Boulder:** 0 **Stone:** 0 **Cobble:** 0 **Gravel:** 2 **Fines:** 95 **=100%**

% Current year bioturbation 2 **Past bioturbation present?** **Yes** / **No** | **% Hoof punch** 0

Fire evidence: Yes / **No** (circle one) If yes, describe in Site history section, including date of fire, if known.

Site history, stand age, comments:

wild oats/annual brome grassland on slopes north of active agricultural area, beneath scattered coast live oak trees.

Disturbance code / Intensity (L,M,H): M / 03 / 05 / ___ / ___ / ___ / ___ **"Other"** ____ / ___

II. HABITAT DESCRIPTION

Tree DBH : T1 (<1" dbh), **T2** (1-6" dbh), **T3** (6-11" dbh), **T4** (11-24" dbh), **T5** (>24" dbh), **T6** multi-layered (T3 or T4 layer under T5, >60% cover)

Shrub: S1 seedling (<3 yr. old), **S2** young (<1% dead), **S3** mature (1-25% dead), **S4** decadent (>25% dead)

Herbaceous: H1 (<12" plant ht.), **H2** (>12" ht.)

Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), **2** (2-10ft. ht.), **3** (10-20ft. ht.), **4** (>20ft. ht.)

Desert Palm/Joshua Tree: 1 (<1.5" base diameter), **2** (1.5-6" diam.), **3** (>6" diam.)

III. INTERPRETATION OF STAND

Field-assessed vegetation Alliance name: wild oats & annual brome grassland

Field-assessed Association name (optional): Bromus diandrus & mixed herbs

Adjacent Alliances/direction: active agriculture / ____ / ____ / ____

Confidence in Alliance identification: L M H **Explain:** ____

Phenology (E,P,L): Herb P **Shrub** E/P **Tree** P **Other identification or mapping information:**

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised April 28, 2016)
SPECIES SHEET

Database #: VEG-02

IV. VEGETATION DESCRIPTION

% NonVasc cover: 5 **Total % Vasc Veg cover:** 85

% Cover - **Conifer tree / Hardwood tree:** Ø / Ø **Regenerating Tree:** Ø **Shrub:** 5 **Herbaceous:** 95

Height Class - Conifer tree / Hardwood tree: Ø / Ø **Regenerating Tree:** Ø **Shrub:** 1 & 2 **Herbaceous:** 1 & 2

Height classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2-5m, 5=5-10m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m

Stratum categories: T=Tree, A = SApling, E = SEedling, S = Shrub, H= Herb, N= Non-vascular
% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

Stratum	Species	% cover	C	Final species determination
H	Bromus diandrus	50-75		
H	Avena fatua	25-50		
H	Erodium moschatum	1-5		
H	Acmispon americanus	5-15		
H	Silene gallica	1-5		
H	Castilleja exserta	1-5		
H	Hordeum murinum	5-15		
H	Festuca perennis	5-15		
H	Navarettia hamata	1-5		
H	Vicia bengalensis	1-5		
H	Hordeum brachyantherum	+		
H	Bromus hordeaceus	5-15		
H	Lysimachia arvensis	1-5		
H	Camissonia	+		
H	Hirschfeldia incana	1-5		
H	Sonchus oleraceus	1-5		
H	Bromus madritensis	5-15		
S	Artemisia californica	+		
H	Camissoniopsis	+		
H	Brassica nigra	1-5		
H	Croton californica	+		
H	Clarkia (wine cup)	r		
S	Acmispon glaber	1-5		
S	Diplacus aurantiacus	+		
H	Amsinkia intermedia	1-5		
H	Centaurea melitensis	5-15		
S	Encelia californica	1-5		
H	Festuca myros	1-5		
S	Lupinus truncatus	1-5		
H	Lupinus succulentus	+		
H	Phalaris	+		
H	Silybum marianum	+		
H	Deinandra paniculata	+		

Unusual species: _____

Combined Vegetation Rapid Assessment and Relevé Field Form

(Revised April 28, 2016)

For Office Use:	Final database #:	Final vegetation type:	Alliance Association

I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION circle: **Relevé** or **RA**

Database #: VEG-03 **Date:** 5/28/20 **Name of recorder:** Jessica Peak

Other surveyors:

Location Name: 5423 Santa Rita Road, Buellton

GPS name: IPad/ARROW 100 Receiver For Relevé only: **Bearing°**, left axis at ID point____ of **Long / Short** side

UTME ____ **UTMN** ____ **Zone: 11** **NAD83** **GPS error: ft./ m./ PDOP** 8.5 inches

Decimal degrees: **LAT** 34.675046 **LONG** -120.311234

GPS within stand? **Yes** / **No** If No, cite from GPS to stand: distance (m) ____ bearing ° ____ inclination ° ____

and record: **Base point ID** ____ **Projected UTMs: UTME** ____ **UTMN** ____

Camera Name: JP **Cardinal photos at ID point:**

Other photos: Representative photos of habitat

Stand Size (acres): <1, 1-5, >5 | **Plot Size (m²): 100 /** ____ | **Plot Shape** ____ x ____ m | **RA Radius** 20 m

Exposure, Actual °: ____ NE NW SE SW Flat Variable | **Steepness, Actual °:** ____ 0° 1-5° > 5-25° > 25

Topography: Macro: top upper mid lower bottom | **Micro:** convex flat concave undulating

Geology code: ____ **Soil Texture code:** ____ | **Upland** or **Wetland/Riparian** (circle one)

% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)

H_2O: 0 **BA Stems:** 3 **Litter:** 2 **Bedrock:** 0 **Boulder:** 0 **Stone:** 0 **Cobble:** 0 **Gravel:** 2 **Fines:** 93 **=100%**

% Current year bioturbation 1 **Past bioturbation present?** **Yes** / **No** | **% Hoof punch** 0

Fire evidence: Yes / **No** (circle one) If yes, describe in Site history section, including date of fire, if known.

Site history, stand age, comments:

California sagebrush scrub is present in a small depression in the northeast portion of the Project Area, along the slopes outside/adjacent to the Project Area, & along the unnamed drainage.

Disturbance code / Intensity (L,M,H): M→H 03, 04, 05, 23, ____ **"Other"** ____ / ____

II. HABITAT DESCRIPTION

Tree DBH : T1 (<1" dbh), **T2** (1-6" dbh), **T3** (6-11" dbh), **T4** (11-24" dbh), **T5** (>24" dbh), **T6** multi-layered (T3 or T4 layer under T5, >60% cover)

Shrub: S1 seedling (<3 yr. old), **S2** young (<1% dead), **S3** mature (1-25% dead), **S4** decadent (>25% dead)

Herbaceous: H1 (<12" plant ht.), **H2** (>12" ht.)

Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), **2** (2-10ft. ht.), **3** (10-20ft. ht.), **4** (>20ft. ht.)

Desert Palm/Joshua Tree: 1 (<1.5" base diameter), **2** (1.5-6" diam.), **3** (>6" diam.)

III. INTERPRETATION OF STAND

Field-assessed vegetation Alliance name: California sagebrush scrub

Field-assessed Association name (optional): Artemisia californica - Acmispon glaber

Adjacent Alliances/direction: Ruderal/disturbed, Active agriculture ____ / ____

Confidence in Alliance identification: L M H **Explain:** ____

Phenology (E,P,L): Herb P **Shrub** E/P **Tree** P **Other identification or mapping information:**

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised April 28, 2016)
SPECIES SHEET

Database #: VEG-03

IV. VEGETATION DESCRIPTION

% NonVasc cover: 10 **Total % Vasc Veg cover:** 90

% Cover - **Conifer tree / Hardwood tree:** 0 / 10 **Regenerating Tree:** 1 **Shrub:** 85 **Herbaceous:** 5

Height Class - Conifer tree / Hardwood tree: 0 / 4-6 **Regenerating Tree:** 1 **Shrub:** 3 **Herbaceous:** 1-2

Height classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2-5m, 5=5-10m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m

Stratum categories: T=Tree, A = SApling, E = SEedling, S = Shrub, H= Herb, N= Non-vascular
% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

Stratum	Species	% cover	C	Final species determination
S	Artemisia californica	25-50		
S	Acmispon glaber	15-25		
S	Eriogonum californica	5-15		
S	Salvia mellifera	5-15		
S	Toxicodendron diversilobum	15-25		
S	Diplacus aurantiacus	1-5		
H	Calystegia macrostegia	1-5		
H	Carduus pycnocephalus	1-5		
H	Stipa pulchra	1-5		
H	Brassica nigra	1-5		
S	Baccharis pilularis	5-15		
H	Conium maculatum	1-5		
H	Bromus madritensis	5-15		
H	Festuca myros	1-5		
H	Bromus diandrus	1-5		
H	Avena fatua	+		
H	Silybum marianum	+		
H	Melica imperfecta	+		
S	Eriogonum fasciculatum	5-15		
H	Stipa lepida	1-5		
S	Sambucus nigra caerulea	1-5		
H	Pseudognaphalium californicum	1-5		
H	Dudleya lanceolata	+		
H	Elymus condensatus	1-5		
S	Heteromeles arbutifolia	1-5		
S	Rubus ursinus	1-5		
H	Logfia californica	r		
H	Chorizanthe	+		
S	Salix lasiolepis	1-5		in unnamed drainage
S	Baccharis salicifolia	1-5		" "
H	Asclepias californicus	+		
H	Clarkia unguiculata	+		
S	Ericameria ericoides	1-5		
H	Pteridium aquilinum	1-5		
H	Phacelia cicutarium	+		

Unusual species: _____

Combined Vegetation Rapid Assessment and Relevé Field Form

(Revised April 28, 2016)

For Office Use:	Final database #:	Final vegetation type:	Alliance Association

I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION circle: **Relevé** or **RA**

Database #: VEG-04 **Date:** 5/28/20 **Name of recorder:** Jessica Peak

Other surveyors:

Location Name: 5423 Santa Rita Rd., Bhellton

GPS name: iPad / ARROW 100 RECEIVER **For Relevé only: Bearing°**, left axis at ID point ____ of **Long / Short** side

UTME ____ **UTMN** ____ **Zone: 11** **NAD83** **GPS error: ft./ m./ PDOP** ____

Decimal degrees: **LAT** 34.676212 **LONG** -120.311550

GPS within stand? Yes / No If No, cite from GPS to stand: distance (m) ____ bearing ° ____ inclination ° ____

and record: **Base point ID** ____ **Projected UTMs: UTME** ____ **UTMN** ____

Camera Name: JP **Cardinal photos at ID point:**

Other photos: Representative photos of habitat

Stand Size (acres): <1, 1-5, >5 | **Plot Size (m²): 100 /** ____ | **Plot Shape** ____ x ____ m | **RA Radius** 20 m

Exposure, Actual °: ____ NE NW SE SW Flat Variable | **Steepness, Actual °:** ____ 0° 1-5° 5-25° > 25

Topography: Macro: top upper mid lower bottom | **Micro:** convex flat concave undulating

Geology code: ____ **Soil Texture code:** ____ | **Upland** or **Wetland/Riparian** (circle one)

% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)

H₂0: 0 **BA Stems:** 5 **Litter:** 5 **Bedrock:** 0 **Boulder:** 0 **Stone:** 0 **Cobble:** 2 **Gravel:** 3 **Fines:** 85 **=100%**

% Current year bioturbation 2 **Past bioturbation present? Yes / No** | **% Hoof punch** 3

Fire evidence: Yes / No (circle one) If yes, describe in Site history section, including date of fire, if known.

Site history, stand age, comments:

Coast live oak woodland present on slopes above proposed cultivation areas & scattered along unnamed drainage.

Cattle graze & lounge under coast live oak woodland canopy

Disturbance code / Intensity (L,M,H): M / 01 / 03 / 05 / ___ / ___ / ___ **"Other"** ____ / ___

II. HABITAT DESCRIPTION

Tree DBH : T1 (<1" dbh), **T2** (1-6" dbh), **T3** (6-11" dbh), **T4** (11-24" dbh), **T5** (>24" dbh), **T6** multi-layered (T3 or T4 layer under T5, >60% cover)

Shrub: S1 seedling (<3 yr. old), **S2** young (<1% dead), **S3** mature (1-25% dead), **S4** decadent (>25% dead)

Herbaceous: H1 (<12" plant ht.), **H2** (>12" ht.)

Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), **2** (2-10ft. ht.), **3** (10-20ft. ht.), **4** (>20ft. ht.)

Desert Palm/Joshua Tree: 1 (<1.5" base diameter), **2** (1.5-6" diam.), **3** (>6" diam.)

III. INTERPRETATION OF STAND

Field-assessed vegetation Alliance name: Coast live oak woodland

Field-assessed Association name (optional): Quercus agrifolia - Toxicodendron diversilobum - grass

Adjacent Alliances/direction: California Sagebrush Scrub, wild oats annual brome grassland, active agriculture

Confidence in Alliance identification: L M H Explain: ____

Phenology (E,P,L): Herb P **Shrub** E/P **Tree** P **Other identification or mapping information:**

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised April 28, 2016)
SPECIES SHEET

Database #: VEG-04

IV. VEGETATION DESCRIPTION

% NonVasc cover: 15 **Total % Vasc Veg cover:** 85

% Cover - **Conifer tree / Hardwood tree:** Ø/65 **Regenerating Tree:** 1 **Shrub:** 10 **Herbaceous:** 30

Height Class - Conifer tree / Hardwood tree: Ø/5-7 **Regenerating Tree:** 2 **Shrub:** 2- **Herbaceous:** ____

Height classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2-5m, 5=5-10m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m

Stratum categories: T=Tree, A = SApling, E = SEedling, S = Shrub, H= Herb, N= Non-vascular
% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

Stratum	Species	% cover	C	Final species determination
T	Quercus agrifolia	50-75		
S	Toxicodendron diversilobum	5-15		
S	Ceanothus glaber	1-5		
H	Bromus diandrus	25-50		
S	Symphoricarpus albus	1-5		
S	Solanum douglasii	5-15		
H	Carduus pycnocephalus	1-5		
H	Galium aparine	1-5		
H	Festuca perennis	15-25		
S	Lupinus truncatus	1-5		
H	Sonchus oleraceus	+		
H	Hirschfeldia incana	+		
H	Hordeum murinum	5-15		
H	Pseudognaphalium californicum	+		
H	Avena fatua	5-15		
S	Diplacus aurantiacus	+		
S	Heteromeles arbutifolia	+		
S	Keckiella cordifolia	+		
H	Stellaria media	5-15		
H	Pteridium aquilinum	1-5		
H	Urtica urens	1-5		
H	Marah fabaceus	1-5		
H	Melica imperfecta	1-5		
H	Claytonia perfoliata	1-5		
H	Bloomeria	r		

Unusual species: _____