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**BIOLOGICAL RESOURCES ASSESSMENT FOR THE  
CANNABIS CULTIVATION OPERATION AT  
9850 HIGH VALLEY ROAD, CLEARLAKE OAKS, CALIFORNIA**

December 17, 2019

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# 1. INTRODUCTION

## 1.1. PROJECT LOCATION AND DESCRIPTION

Natural Investigations Company conducted a biological resources assessment for the property at 9850 High Valley Road, in Clearlake Oaks, California. The Cannabis cultivation operation will be conducted on a 79-acre parcel (APN 006-004-19). The operational area is estimated to be 6 acres of this entire parcel (Project Area). Three areas have been identified as possible cultivation areas (see Exhibits). The proposed Cannabis operation will grow the maximum amount of Cannabis allowed by the County, which is currently a total of 4 acres of outdoor Cannabis canopy.

A private unpaved road off of High Valley Road accesses the 3 cultivation areas. The cultivation areas were designed to be located on areas with modest slopes, with sufficient setbacks from watercourses and other sensitive natural resources, and to minimize tree loss. The primary cultivation method will be tilled furrows in native soil amended with imported organic materials. The cultivation compound will be outfitted with the following: portable toilets; and sheds or Conex shipping containers for storage of fertilizers, pesticides and other chemicals. No cannabis processing/manufacturing will take place on site. An existing permitted well will be used to supply the irrigation system. No other existing facilities are located on the parcel. A home that had been constructed on this parcel was destroyed in the 2018 Mendocino Complex Fire.

## 1.2. PURPOSE AND SCOPE OF ASSESSMENT

This Biological Resources Assessment was prepared to assist in compliance with the California Environmental Quality Act and the state and federal Endangered Species Acts. This assessment also functions to fulfill requirements for obtaining enrollment (a Notice of Applicability) in the State Water Resources Control Board's Order WQ 2019-0001-DWQ General Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities (General Order).

This assessment provides information about the biological resources within the Study Area, the regulatory environment affecting such resources, any potential Project-related impacts upon these resources, and finally, to identify mitigation measures and other recommendations to reduce the significance of these impacts. The specific scope of services performed for this assessment consisted of the following tasks:

- Compile all readily-available historical biological resource information about the Study Area;
- Spatially query state and federal databases for any occurrences of special-status species or habitats within the Study Area and vicinity;
- Perform a reconnaissance-level field survey of the Study Area, including photographic documentation;
- Inventory all flora and fauna observed during the field survey;
- Characterize and map the habitat types present within the Study Area, including any potentially-jurisdictional water resources;
- Evaluate the likelihood for the occurrence of any special-status species;
- Assess the potential for the Project to adversely impact any sensitive biological resources;
- Recommend mitigation measures designed to avoid or minimize Project-related impacts; and
- Prepare and submit a report summarizing all of the above tasks.

The scope of services does not include other services that are not described in this Section, such as formal aquatic resource delineations or protocol-level surveys for special-status species.

### 1.3. REGULATORY SETTING

The following section summarizes some applicable regulations of biological resources on real property in California.

#### 1.3.1. Special-status Species Regulations

The United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service implement the Federal Endangered Species Act of 1973 (FESA) (16 USC §1531 *et seq.*). Threatened and endangered species on the federal list (50 CFR §17.11, 17.12) are protected from “take” (direct or indirect harm), unless a FESA Section 10 Permit is granted or a FESA Section 7 Biological Opinion with incidental take provisions is rendered. Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed species may be present in the project area and determine whether the proposed project will have a potentially significant impact upon such species. Under FESA, habitat loss is considered to be an impact to the species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC §1536[3], [4]). Therefore, project-related impacts to these species or their habitats would be considered significant and would require mitigation. Species that are candidates for listing are not protected under FESA; however, USFWS advises that a candidate species could be elevated to listed status at any time, and therefore, applicants should regard these species with special consideration.

The California Endangered Species Act of 1970 (CESA) (California Fish and Game Code §2050 *et seq.*, and CCR Title 14, §670.2, 670.51) prohibits “take” (defined as hunt, pursue, catch, capture, or kill) of species listed under CESA. A CESA permit must be obtained if a project will result in take of listed species, either during construction or over the life of the project. Section 2081 establishes an incidental take permit program for state-listed species. Under CESA, California Department of Fish and Wildlife (CDFW) has the responsibility for maintaining a list of threatened and endangered species designated under state law (CFG Code 2070). CDFW also maintains lists of species of special concern, which serve as “watch lists.” Pursuant to requirements of CESA, an agency reviewing proposed projects within its jurisdiction must determine whether any state-listed species may be present in the Study Area and determine whether the proposed project will have a potentially significant impact upon such species. Project-related impacts to species on the CESA list would be considered significant and would require mitigation.

California Fish and Game Code Sections 4700, 5050, and 5515 designates certain mammal, amphibian, and reptile species “fully protected”, making it unlawful to take, possess, or destroy these species except under issuance of a specific permit. The California Native Plant Protection Act of 1977 (CFG Code §1900 *et seq.*) requires CDFW to establish criteria for determining if a species or variety of native plant is endangered or rare. Section 19131 of the code requires that landowners notify CDFW at least 10 days prior to initiating activities that will destroy a listed plant to allow the salvage of plant material.

Many bird species, especially those that are breeding, migratory, or of limited distribution, are protected under federal and state regulations. Under the Migratory Bird Treaty Act of 1918 (16 USC §703-711), migratory bird species and their nests and eggs that are on the federal list (50 CFR §10.13) are protected from injury or death, and project-related disturbances must be reduced or eliminated during the nesting cycle. California Fish and Game Code (§3503, 3503.5, and 3800) prohibits the possession, incidental take, or needless destruction of any bird nests or eggs. Fish and Game Code §3511 designates certain bird species “fully protected”, making it unlawful to take, possess, or destroy these species except under issuance of a specific permit. The Bald and Golden Eagle Protection Act (16 USC §668) specifically protects bald and golden eagles from harm or trade in parts of these species.

California Environmental Quality Act (CEQA) (Public Resources Code §15380) defines “rare” in a broader sense than the definitions of threatened, endangered, or fully protected. Under the CEQA definition, CDFW can request additional consideration of species not otherwise protected. CEQA requires that the impacts of a project upon environmental resources must be analyzed and assessed using criteria determined by the lead agency. Sensitive species that would qualify for listing but are not currently listed may be afforded protection under CEQA. The CEQA Guidelines (§15065) require that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines (§15380) provide for assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Plant species on the California Native Plant Society (CNPS) Lists 1A, 1B, or 2 are typically considered rare under CEQA. California “Species of Special Concern” is a category conferred by CDFW on those species that are indicators of regional habitat changes or are considered potential future protected species. While they do not have statutory protection, Species of Special Concern are typically considered rare under CEQA and thereby warrant specific protection measures.

### **1.3.2. Water Resource Protection**

Real property that contains water resources are subject to various federal and state regulations and activities occurring in these water resources may require permits, licenses, variances, or similar authorization from federal, state and local agencies, as described next.

The Federal Water Pollution Control Act Amendments of 1972 (as amended), commonly known as the Clean Water Act (CWA), established the basic structure for regulating discharges of pollutants into “waters of the United States”. Waters of the US includes essentially all surface waters, all interstate waters and their tributaries, all impoundments of these waters, and all wetlands adjacent to these waters. CWA Section 404 requires approval prior to dredging or discharging fill material into any waters of the US, especially wetlands. The permitting program is designed to minimize impacts to waters of the US, and when impacts cannot be avoided, requires compensatory mitigation. The US Army Corps of Engineers (USACE) is responsible for administering Section 404 regulations. Substantial impacts to jurisdictional wetlands may require an Individual Permit. Small-scale projects may require only a Nationwide Permit, which typically has an expedited process compared to the Individual Permit process. Mitigation of wetland impacts is required as a condition of the CWA Section 404 Permit and may include on-site preservation, restoration, or enhancement and/or off-site restoration or enhancement. The characteristics of the restored or enhanced wetlands must be equal to or better than those of the affected wetlands to achieve no net loss of wetlands.

Under CWA Section 401, every applicant for a federal permit or license for any activity which may result in a discharge to a water body must obtain State Water Quality Certification that the proposed activity will comply with State water quality standards. The California State Water Resources Control Board is responsible for administering CWA Section 401 regulations.

Section 10 of the Rivers and Harbors Act of 1899 requires approval from USACE prior to the commencement of any work in or over navigable Waters of the US, or which affects the course, location, condition or capacity of such waters. Navigable waters of the United States are defined as waters that have been used in the past, are now used, or are susceptible to use, as a means to transport interstate or foreign commerce up to the head of navigation. Rivers and Harbors Act Section 10 permits are required for construction activities in these waters.

California Fish and Game Code (§1601 - 1607) protects fishery resources by regulating “*any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.*” CDFW requires notification prior to commencement, and issuance of a Lake or Streambed Alteration Agreement, if a proposed project will result in the alteration or degradation of “waters of the State”. The limit of CDFW jurisdiction is subject to the judgment of the Department;

currently, this jurisdiction is interpreted to be the “stream zone”, defined as “*that portion of the stream channel that restricts lateral movement of water*” and delineated at “*the top of the bank or the outer edge of any riparian vegetation, whichever is more landward*”. CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by the CDFW and the applicant is the Streambed Alteration Agreement. Projects that require a Streambed Alteration Agreement may also require a CWA 404 Section Permit and/or CWA Section 401 Water Quality Certification.

For construction projects that disturb one or more acres of soil, the landowner or developer must obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 2009-0009-DWQ).

The State Water Resources Control Board’s Order WQ 2019-0001-DWQ General Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities protects receiving water bodies from water-quality impacts associated with cannabis cultivation using a combination of Best Management Practices, buffer zones, sediment and erosion controls, site management plans, inspections and reporting, and regulatory oversight.

### 1.3.3. Tree Protection

At the State level, in areas inside timberland, any tree removal is subject to the conditions and requirements set forth in the Z’berg-Nejedly Forest Practice Act and the California Forest Practice Rules. If development of a project will result in the removal of commercial tree species, one of the following permits is needed: Less than 3 Acre Conversion Exemption; Christmas Tree; Dead, Dying or Diseased, Fuelwood, or Split Products Exemption; a Public Agency, Public and Private Utility Right of Way Exemption; a Notice of Exemption from Timberland Conversion Permit for Subdivision; or an Application for Timberland Conversion Permit.

Lake County does not have a specific ordinance protecting native trees. However, under the Cannabis Ordinance 3084, Section 4, Subsection iii) Prohibited Activities (a) Tree Removal, Lake County restricts tree removal as follows:

*“The removal of any commercial tree species as defined by the California Code of Regulations section 895.1, Commercial Species for the Coast Forest District and Northern Forest District, and the removal of any true oak species (Quercus species) or Tan Oak (Notholithocarpus species) for the purpose of developing a cannabis cultivation site should be avoided and minimized. This shall not include the pruning of any such tree species for the health of the tree or the removal of such trees if necessary for safety or disease concerns.”*

During the permitting process, Lake County requires mitigation for the removal of protected trees; typical mitigation is tree replacement at a ratio of 2:1 or 3:1.

## 2. ENVIRONMENTAL SETTING

The region has a Mediterranean-type climate, characterized by distinct seasons of hot, dry summers and wet, moderately- cold winters. The Property has been utilized as open space and rural residential. A home that had been constructed on this parcel was destroyed in the 2018 Mendocino Complex Fire. Surrounding land use is largely open space and rural residential estates. The Property has rugged, mountainous topography, consisting of a ridge and sloping hills (see exhibits). The elevation ranges from 2,445 feet to 2,895 feet. The Property drains to the north and south off of the ridge. Water draining north from the ridge flows into Sulphur Creek, thence Long Valley Creek, eventually reaching Cache Creek and the Sacramento River. Water draining south from the ridge flows into various drainages before reaching Schindler Creek, which is tributary to Clear Lake.

### 3. METHODOLOGY

#### 3.1. PRELIMINARY DATA GATHERING AND RESEARCH

Prior to conducting the field survey, the following information sources were reviewed:

- Any readily-available previous biological resource studies pertaining to the Study Area or vicinity
- United States Geologic Service (USGS) 7.5 degree-minute topographic quadrangles of the Study Area and vicinity
- Aerial photography of the Study Area
- California Natural Diversity Database (CNDDDB), electronically updated monthly by subscription
- USFWS species list (IPaC Trust Resources Report).

#### 3.2. FIELD SURVEY

Consulting biologist Tim Nosal, MS. conducted a reconnaissance-level field survey on August 15, 2019. A variable-intensity pedestrian survey was performed, and modified to account for differences in terrain, vegetation density, and visibility. All visible fauna and flora observed were recorded in a field notebook, and identified to the lowest possible taxon. Survey efforts emphasized the search for any special-status species that had documented occurrences in the CNDDDB within the vicinity of the Study Area and those species on the USFWS species list (Appendix 1).

When a specimen could not be identified in the field, a photograph or voucher specimen (depending upon permit requirements) was taken and identified in the laboratory using a dissecting scope where necessary. Dr. Graening holds the following scientific collection permits: CDFW Scientific Collecting Permit No. SC-006802; and CDFW Plant Voucher Specimen Permit 09004. Tim Nosal holds CDFW Plant Voucher Specimen Permit 2081(a)-16-102-V. Taxonomic determinations were facilitated by referencing museum specimens or by various texts, including the following: Powell and Hogue (1979); Pavlik (1991); (1993); Brenzel (2012); Stuart and Sawyer (2001); Lanner (2002); Sibley (2003); Baldwin et al. (2012); Calflora (2019); CDFW (2019b,c); NatureServe 2019; and University of California at Berkeley (2019a,b).

The locations of any special-status species sighted were marked on aerial photographs and/or georeferenced with a geographic positioning system (GPS) receiver. Habitat types occurring in the Study Area were mapped on aerial photographs, and information on habitat conditions and the suitability of the habitats to support special-status species was also recorded. The Study Area was also informally assessed for the presence of potentially-jurisdictional water features, including riparian zones, isolated wetlands and vernal pools, and other biologically-sensitive aquatic habitats

#### 3.3. MAPPING AND OTHER ANALYSES

Locations of species' occurrences and habitat boundaries within the Study Area were digitized to produce the final habitat maps. The boundaries of potentially jurisdictional water resources within the Study Area were identified and measured in the field, and similarly digitized to calculate acreage and to produce informal delineation maps. Geographic analyses were performed using geographical information system software (ArcGIS 10, ESRI, Inc.). Vegetation communities (assemblages of plant species growing in an area of similar biological and environmental factors), were classified by Vegetation Series (distinctive associations of plants, described by dominant species and particular environmental setting) using the CNPS Vegetation Classification system (Sawyer and Keeler-Wolf, 1995). Wetlands and other aquatic habitats were classified using USFWS National Wetlands Inventory Classification System for Wetland and Deepwater Habitats, or "Cowardin class" (Cowardin et al., 1979; USFWS 2007). Informal wetland delineation methods consisted of an abbreviated, visual assessment of the three requisite wetland parameters (hydrophytic vegetation, hydric soils, hydrologic regime) defined in the US Army Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987). Wildlife habitats were

classified according to the CDFW's California Wildlife Habitat Relationships System (CDFW, 2019c). Species' habitat requirements and life histories were identified using the following sources: Baldwin et al. (2012); CNPS (2019), Calflora (2019); CDFW (2019a,b,c); and University of California at Berkeley (2019a,b).



## 4. RESULTS

### 4.1. INVENTORY OF FLORA AND FAUNA FROM FIELD SURVEY

All plants detected during the field survey of the Study Area are listed in Appendix 2. The following animals were detected within the Study Area during the field survey: dragonfly (Odonata); butterfly (Lepidoptera); grasshopper (Orthoptera); cricket (Gryllidea); northwestern fence lizard (*Sceloporus occidentalis occidentalis*); black-tailed jackrabbit (*Lepus californicus*); Columbian black-tailed deer (*Odocoileus hemionus columbianus*); pig (*Sus scrofa*); coyote (*Canis latrans*); Nuttall's woodpecker (*Picoides nuttallii*); acorn woodpecker (*Melanerpes formicivorus*); northern flicker (*Colaptes auratus*); California scrub jay (*Aphelocoma californica*); turkey vulture (*Cathartes aura*); red-breasted nuthatch (*Sitta canadensis*); mourning dove (*Zenaida macroura*); western bluebird (*Sialia mexicanus*); and common songbirds.

### 4.2. VEGETATION COMMUNITIES AND WILDLIFE HABITAT TYPES

#### 4.2.1. Terrestrial Vegetation Communities

The Study Area contains the following terrestrial vegetation communities: ruderal/urbanized, mixed oak / conifer forest, annual grassland, manzanita chaparral, and chamise chaparral. These vegetation communities are discussed here and are delineated in the Exhibits. Aquatic vegetation communities are discussed in the section on jurisdictional waters.

**Chamise chaparral (post-fire)** Found on slopes of the eastern and southern portions of the parcel. The vegetation is recovering after being burned in the 2018 Mendocino Complex fire. Much of the ground was bare at the time of the survey. The dominant species is chamise (*Adenostoma fasciculatum*), which is sprouting at the base of burned shrubs. Toyon (*Heteromeles arbutifolia*) and yerba santa (*Eriodictyon californicum*) are less common, but are also stump-sprouting. Other common species include California scrub oak (*Quercus berberidifolia*), birch-leaf mountain mahogany (*Cercocarpus betuloides*), Spanish lotus (*Acmispon americanus*) and nit grass (*Gastridium phleoides*).

**Manzanita chaparral (post-fire)** Found on the ridge top near the center of the parcel. Most of this vegetation burned in 2018. Some stands of manzanita remained untouched by fire, in other areas manzanita seedlings are sprouting in abundance. Two species of manzanita, common manzanita (*Arctostaphylos manzanita*) and hoary manzanita (*Arctostaphylos canescens* ssp. *canescens*) dominate this vegetation, with gray pine (*Pinus sabiniana*) also common within this habitat. Other common plants include grasses and annual herbs.

**Annual grassland** Found near the center of the southern half of the parcel. The annual grassland may have burned in 2018, but recovery was immediate following the winter rains. Dominant species include wild oats (*Avena* sp.), nit grass, fescue (*Festuca* spp.), Madrid brome (*Bromus madritensis*), yellow star-thistle (*Centaurea solstitialis*), *Navarretia* sp., and *Clarkia* sp.

**Mixed oak-pine forest (post-fire)** Along the ridgetop and north-facing slopes. This habitat is a mosaic of burned and unburned vegetation. California black oak (*Quercus kelloggii*) is the dominant tree (about 75% cover) with ponderosa pine (*Pinus ponderosa*) sub-dominant (10 % cover). Other trees include blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizeni*), Douglas-fir (*Pseudotsuga menziesii*), sugar pine (*Pinus lambertiana*) and northern California black walnut (*Juglans hindsii*). The open understory is characterized by low-growing herbaceous species and occasional shrubs. Typical understory plants include grasses, bedstraw (*Galium* sp.), common Pacific pea (*Lathyrus vestitus*), poison oak (*Toxicodendron diversilobum*), and manzanita (*Arctostaphylos* spp.).

**Ruderal/Disturbed.** These areas consist of disturbed or converted natural habitat that is now either in ruderal state, graded, or urbanized with gravel roads, or structure and utility placement. Vegetation within this habitat type consists primarily of nonnative weedy or invasive species or ornamental plants lacking a consistent community structure. The disturbed and altered condition of these lands greatly reduces their habitat value and ability to sustain rare plants or diverse wildlife assemblages.

#### **4.2.2. Wildlife Habitat Types**

Wildlife habitat types were classified using CDFW's Wildlife Habitat Relationship System. The Study Area contains the following wildlife habitat types: Mixed Chaparral; Blue Oak-Foothill Pine; Barren; Urban; and Annual Grassland.

#### **4.2.3. Critical Habitat and Special-status Habitat**

No critical habitat for any federally-listed species occurs within the Study Area. No special-status habitats were detected within the Study Area. The CNDDDB reported no special-status habitats within the Study Area. The CNDDDB reported the following special-status habitats in a 5-mile radius outside of the Study Area: Clear Lake Drainage Cyprinid/Catostomid Stream; Clear Lake Drainage Seasonal Lakefish Spawning Stream; Coastal and Valley Freshwater Marsh; Great Valley Mixed Riparian Forest; and Northern Basalt Flow Vernal Pool.

#### **4.2.4. Habitat Plans and Wildlife Corridors**

Wildlife movement corridors link remaining areas of functional wildlife habitat that are separated primarily by human disturbance, but natural barriers such as rugged terrain and abrupt changes in vegetation cover are also possible. Wilderness and open lands have been fragmented by urbanization, which can disrupt migratory species and separate interbreeding populations. Corridors allow migratory movements and act as links between these separated populations.

Although there are no designated wildlife corridors, the open space within the Study Area provides unrestricted animal movement. The Study Area is not located within any known adopted Habitat Conservation Plan or Natural Community Conservation Plan.

### **4.3. LISTED SPECIES AND OTHER SPECIAL-STATUS SPECIES**

For the purposes of this assessment, "special status" is defined to be species that are of management concern to state or federal natural resource agencies, and include those species that are:

- Listed as endangered, threatened, proposed, or candidate for listing under the Federal Endangered Species Act;
- Listed as endangered, threatened, rare, or proposed for listing, under the California Endangered Species Act of 1970;
- Designated as endangered or rare, pursuant to California Fish and Game Code (§1901);
- Designated as fully protected, pursuant to California Fish and Game Code (§3511, §4700, or §5050);
- Designated as a species of special concern by CDFW;
- Plants considered to be rare, threatened or endangered in California by the California Native Plant Society (CNPS); this consists of species on Lists 1A, 1B, and 2 of the CNPS Ranking System; or
- Plants listed as rare under the California Native Plant Protection Act.

#### **4.3.1. Reported Occurrences of Listed Species and Other Special-status Species**

A list of special-status plant and animal species that have occurred within the Study Area and vicinity was compiled based upon the following:

- Any previous and readily-available biological resource studies pertaining to the Study Area;
- Informal consultation with USFWS by generating an electronic Species List (Information for Planning and Conservation website at <https://ecos.fws.gov/ipac/>); and

- A spatial query of the CNDDDB.

The CNDDDB was queried and any reported occurrences of special-status species were plotted in relation to the Study Area boundary using GIS software (see exhibits). The CNDDDB reported no special-status species occurrences within the Study Area. Within a 5-mile buffer of the Study Area boundary, the CNDDDB reported several special-status species occurrences, summarized in the following table. A USFWS species list was generated online using the USFWS' IPaC Trust Resource Report System. The following listed species should be considered in the impact assessment:

- Birds
  - Northern Spotted Owl (*Strix occidentalis caurina*) Threatened
- Amphibians
  - California Red-legged Frog (*Rana draytonii*) Threatened
- Fishes
  - Delta Smelt (*Hypomesus transpacificus*) Threatened
- Flowering Plants
  - Burke's Goldfields (*Lasthenia burkei*) Endangered
  - Few-flowered Navarretia (*Navarretia leucocephala* ssp. *pauciflora* = *N. pauciflora*) Endangered
  - Slender Orcutt Grass (*Orcuttia tenuis*) Threatened
- Migratory Birds

Table 1. Special-status Species Reported by CNDDDB in the Vicinity of the Study Area

Scientific Name	Common Name	Status*	General Habitat**	Microhabitat**
<i>Agelaius tricolor</i>	tricolored blackbird	CT	HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.	REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck	CNPS 1B.2	CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	50-500M.
<i>Andrena blennospermatis</i>	Blennosperma vernal pool andrenid bee	SSC	THIS BEE IS OLIGOLECTIC ON VERNAL POOL BLENNOSPERMA.	BEES NEST IN THE UPLANDS AROUND VERNAL POOLS.
<i>Antrozous pallidus</i>	pallid bat	SSC	DESERTS, GRASSLANDS, SHRUBLANDS, WOODLANDS & FORESTS. MOST COMMON IN OPEN, DRY HABITATS WITH ROCKY AREAS FOR ROOSTING.	ROOSTS MUST PROTECT BATS FROM HIGH TEMPERATURES. VERY SENSITIVE TO DISTURBANCE OF ROOSTING SITES.
<i>Archoplites interruptus</i>	Sacramento perch	SSC	HISTORICALLY FOUND IN THE SLOUGHS, SLOW-MOVING RIVERS, AND LAKES OF THE CENTRAL VALLEY.	PREFERS WARM WATER. AQUATIC VEGETATION IS ESSENTIAL FOR YOUNG. TOLERATES WIDE RANGE OF PHYSIO-CHEMICAL WATER CONDITIONS.
<i>Arctostaphylos manzanita</i> ssp. <i>elegans</i>	Konocti manzanita	CNPS 1B.3	CHAPARRAL, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	VOLCANIC SOILS. 395-1615 M.
<i>Arctostaphylos stanfordiana</i> ssp. <i>raichei</i>	Raiche's manzanita	CNPS 1B.1	CHAPARRAL, LOWER MONTANE CONIFEROUS FOREST.	ROCKY, SERPENTINE SITES. SLOPES AND RIDGES. 450-1000 M.
<i>Ardea herodias</i>	great blue heron	SSC	COLONIAL NESTER IN TALL TREES, CLIFFSIDES, AND SEQUESTERED SPOTS ON MARSHES.	ROOKERY SITES IN CLOSE PROXIMITY TO FORAGING AREAS: MARSHES, LAKE MARGINS, TIDE-FLATS, RIVERS AND STREAMS, WET MEADOWS.
<i>Balsamorhiza macrolepis</i>	big-scale balsamroot	CNPS 1B.2	CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND.	SOMETIMES ON SERPENTINE. 90-1555 M.
<i>Bombus caliginosus</i>	obscure bumble bee	SSC		
<i>Brasenia schreberi</i>	watershield	CNPS 2B.3	FRESHWATER MARSHES AND SWAMPS.	AQUATIC FROM WATER BODIES BOTH NATURAL AND ARTIFICIAL IN CALIFORNIA.
<i>Brodiaea rosea</i>	Indian Valley brodiaea	CE		
<i>Calasellus californicus</i>	An isopod	SSC	KNOWN FROM LAKE, NAPA, MARIN, SANTA CRUZ AND SANTA CLARA COUNTIES.	

Scientific Name	Common Name	Status*	General Habitat**	Microhabitat**
<i>Calycadenia micrantha</i>	small-flowered calycadenia	CNPS 1B.2	CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, MEADOWS AND SEEPS.	ROCKY TALUS OR SCREE; SPARSELY VEGETATED AREAS. OCCASIONALLY ON ROADSIDES; SOMETIMES ON SERPENTINE. 5-1500 M.
<i>Ceanothus confusus</i>	Rincon Ridge ceanothus	CNPS 1B.1	CLOSED-CONE CONIFEROUS FOREST, CHAPARRAL, CISMONTANE WOODLAND.	KNOWN FROM VOLCANIC OR SERPENTINE SOILS, DRY SHRUBBY SLOPES. 75-1065 M.
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FT, CE	RIPARIAN FOREST NESTER, ALONG THE BROAD, LOWER FLOOD-BOTTOMS OF LARGER RIVER SYSTEMS.	NESTS IN RIPARIAN JUNGLES OF WILLOW, OFTEN MIXED WITH COTTONWOODS, W/ LOWER STORY OF BLACKBERRY, NETTLES, OR WILD GRAPE.
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	SSC	THROUGHOUT CALIFORNIA IN A WIDE VARIETY OF HABITATS. MOST COMMON IN MESIC SITES.	ROOSTS IN THE OPEN, HANGING FROM WALLS & CEILINGS. ROOSTING SITES LIMITING. EXTREMELY SENSITIVE TO HUMAN DISTURBANCE.
<i>Cryptantha dissita</i>	serpentine cryptantha	CNPS 1B.2	CHAPARRAL.	SERPENTINE OUTCROPS. 330-730M.
<i>Dubiraphia brunnescens</i>	brownish dubiraphian riffle beetle	SSC	AQUATIC; KNOWN ONLY FROM THE NE SHORE OF CLEAR LAKE, LAKE COUNTY.	INHABITS EXPOSED, WAVE-WASHED WILLOW ROOTS.
<i>Emys marmorata</i>	western pond turtle	SSC	A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS & IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BE	NEED BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYIN
<i>Erethizon dorsatum</i>	North American porcupine	SSC		
<i>Eriastrum brandegeae</i>	Brandegee's eriastrum	CNPS 1B.1	CHAPARRAL, CISMONTANE WOODLAND.	ON BARREN VOLCANIC SOILS; OFTEN IN OPEN AREAS. 425-840 M.
<i>Eriastrum tracyi</i>	Tracy's eriastrum	CNPS 3.2	CHAPARRAL, CISMONTANE WOODLAND.	GRAVELLY SHALE OR CLAY; OFTEN IN OPEN AREAS. 315-760 M.
<i>Erigeron greenei</i>	Greene's narrow-leaved daisy	CNPS 1B.2	CHAPARRAL.	SERPENTINE AND VOLCANIC SUBSTRATES, GENERALLY IN SHRUBBY VEGETATION. 80-1005 M.
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	CE,	MARSHES AND SWAMPS (FRESHWATER), VERNAL POOLS.	CLAY SOILS; USUALLY IN VERNAL POOLS, SOMETIMES ON LAKE MARGINS. 10-2375 M.
<i>Hedychridium milleri</i>	Borax Lake cuckoo wasp	SSC	ENDEMIC TO CENTRAL CALIFORNIA. ONLY COLLECTION IS FROM THE TYPE LOCALITY.	EXTERNAL PARASITE OF WASP AND BEE LARVA.
<i>Hesperolinon adenophyllum</i>	glandular western flax	CNPS 1B.2	CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	SERPENTINE SOILS; GENERALLY FOUND IN SEPENTINE CHAPARRAL. 150-1315 M.

Scientific Name	Common Name	Status*	General Habitat**	Microhabitat**
<i>Hesperolinon bicarpellatum</i>	two-carpellate western flax	CNPS 1B.2	SERPENTINE CHAPARRAL.	SERPENTINE BARRENS AT EDGE OF CHAPARRAL. 60-1005 M.
<i>Horkelia bolanderi</i>	Bolander's horkelia	CNPS 1B.2		
<i>Lasionycteris noctivagans</i>	silver-haired bat	SSC	PRIMARILY A COASTAL & MONTANE FOREST DWELLER FEEDING OVER STREAMS, PONDS & OPEN BRUSHY AREAS.	ROOSTS IN HOLLOW TREES, BENEATH EXFOLIATING BARK, ABANDONED WOODPECKER HOLES & RARELY UNDER ROCKS. NEEDS DRINKING WATER.
<i>Lasthenia burkei</i>	Burke's goldfields	FE, CE	VERNAL POOLS, MEADOWS AND SEEPS.	MOST OFTEN IN VERNAL POOLS AND SWALES. 15-600 M.
<i>Lavinia exilicauda chi</i>	Clear Lake hitch	CT	FOUND ONLY IN CLEAR LAKE, LAKE CO, AND ASSOCIATED PONDS. SPAWNS IN STREAMS FLOWING INTO CLEAR LAKE.	ADULTS FOUND IN THE LIMNETIC ZONE. JUVENILES FOUND IN THE NEARSHORE SHALLOW-WATER HABITAT HIDING IN THE VEGETATION.
<i>Layia septentrionalis</i>	Colusa layia	CNPS 1B.2	CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	SCATTERED COLONIES IN FIELDS AND GRASSY SLOPES IN SANDY OR SERPENTINE SOIL. 145-1095M.
<i>Limnanthes floccosa</i> ssp. <i>floccosa</i>	woolly meadowfoam	CNPS 4.2	CHAPPARAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.	VERNALLY WET AREAS, DITCHES, AND PONDS. 60-1335 M.
<i>Lupinus antoninus</i>	Anthony Peak lupine	CNPS 1B.2	UPPER MONTANE CONIFEROUS FOREST, LOWER MONTANE CONIFEROUS FOREST.	OPEN AREAS WITH SURROUNDING FOREST; ROCKY SITES. 1220-2285 M.
<i>Martes caurina humboldtensis</i>	Humboldt marten	CE	OCCURS ONLY IN THE COASTAL REDWOOD ZONE FROM THE OREGON BORDER SOUTH TO SONOMA COUNTY.	ASSOCIATED WITH LATE-SUCCESSIONAL CONIFEROUS FORESTS, PREFER FORESTS WITH LOW, OVERHEAD COVER.
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	Baker's navarretia	CNPS 1B.1	CISMONTANE WOODLAND, MEADOWS AND SEEPS, VERNAL POOLS, VALLEY AND FOOTHILL GRASSLAND, LOWER MONTANE CONIFEROUS FOREST.	VERNAL POOLS AND SWALES; ADOBE OR ALKALINE SOILS. 5-1740 M.
<i>Navarretia leucocephala</i> ssp. <i>pauciflora</i>	few-flowered navarretia	FE, CT	VERNAL POOLS.	VOLCANIC ASH FLOW, AND VOLCANIC SUBSTRATE VERNAL POOLS. 400-855 M.
<i>Pandion haliaetus</i>	osprey	SSC	OCEAN SHORE, BAYS, FRESH-WATER LAKES, AND LARGER STREAMS.	LARGE NESTS BUILT IN TREE-TOPS WITHIN 15 MILES OF A GOOD FISH-PRODUCING BODY OF WATER.
<i>Pekania pennanti</i>	fisher - West Coast DPS	CT	INTERMEDIATE TO LARGE-TREE STAGES OF CONIFEROUS FORESTS & DECIDUOUS-RIPARIAN AREAS WITH HIGH PERCENT CANOPY CLOSURE.	USES CAVITIES, SNAGS, LOGS & ROCKY AREAS FOR COVER & DENNING. NEEDS LARGE AREAS OF MATURE, DENSE FOREST.

Scientific Name	Common Name	Status*	General Habitat**	Microhabitat**
Phalacrocorax auritus	double-crested cormorant	SSC	COLONIAL NESTER ON COASTAL CLIFFS, OFFSHORE ISLANDS, & ALONG LAKE MARGINS IN THE INTERIOR OF THE STATE.	NESTS ALONG COAST ON SEQUESTERED ISLETS, USUALLY ON GROUND WITH SLOPING SURFACE, OR IN TALL TREES ALONG LAKE MARGINS.
Plagiobothrys lithocaryus	Mayacamas popcornflower	CNPS 1A	MEADOWS? VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, CHAPARRAL?	MOIST SITES. 285-450M.
Potamogeton zosteriformis	eel-grass pondweed	CNPS 2B.2	MARSHES AND SWAMPS.	PONDS, LAKES, STREAMS. 0-1860 M.
Rana boylei	foothill yellow-legged frog	CC	PARTLY-SHADED, SHALLOW STREAMS & RIFFLES WITH A ROCKY SUBSTRATE IN A VARIETY OF HABITATS.	NEED AT LEAST SOME COBBLE-SIZED SUBSTRATE FOR EGG-LAYING. NEED AT LEAST 15 WEEKS TO ATTAIN METAMORPHOSIS.
Sedella leiocarpa	Lake County stonecrop	FE, CE	VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS, CISMONTANE WOODLAND.	LEVEL AREAS THAT ARE SEASONALLY WET AND DRY OUT IN LATE SPRING; SUBSTRATE USUALLY OF VOLCANIC ORIGIN. 365-790 M.
Sidalcea oregana ssp. hydrophila	marsh checkerbloom	CNPS 1B.2	MEADOWS AND SEEPS, RIPARIAN FOREST.	WET SOIL OF STREAMBANKS, MEADOWS. 1100-2300 M.
Taricha rivularis	red-bellied newt	SSC		
Taxidea taxus	American badger	SSC	MOST ABUNDANT IN DRIER OPEN STAGES OF MOST SHRUB, FOREST, AND HERBACEOUS HABITATS, WITH FRIABLE SOILS.	NEEDS SUFFICIENT FOOD, FRIABLE SOILS & OPEN, UNCULTIVATED GROUND. PREYS ON BURROWING RODENTS. DIGS BURROWS.
Trichostema ruygtii	Napa bluecurls	CNPS 1B.2	CISMONTANE WOODLAND, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS, LOWER MONTANE CONIFEROUS FOREST.	OFTEN IN OPEN, SUNNY AREAS. ALSO HAS BEEN FOUND IN VERNAL POOLS. 30-590M.

\*Definitions of Status Codes: FE = Federally listed as endangered; FT = Federally listed as threatened; FPE = Federally proposed for listing as endangered; FPT = Federally proposed for listing as threatened; FC = Candidate for Federal listing; MB = Migratory Bird Act; CE = California State listed as endangered; CT = California State listed as threatened; CSSC = California species of special concern; CR = California rare species; CFP = California fully protected species; CNPS (California Native Plant Society) List 1A = Plants presumed extinct in California by CNPS; CNPS List 1B = CNPS designated rare or endangered plants in California and elsewhere; and CNPS List 2 = CNPS designated rare or endangered plants in California, but more common elsewhere. Global Ranking: G1 = Critically Imperiled; G2 = Imperiled; G3 = Vulnerable. State Ranking: S1 = Critically Imperiled; S2 = Imperiled; S3 = Vulnerable.

\*\*Copied verbatim from CNDDDB, unless otherwise noted.

### 4.3.2. Listed Species or Special-status Species Observed During Field Survey

During the field survey, no special-status species were detected within the Study Area.

### 4.3.3. Potential for Listed Species or Special-status Species to Occur in the Study Area

The non-native grasslands within the Study Area have a low potential for harboring special-status plant species due to the dominance of aggressive non-native grasses and forbs. Various special-status plants occur in chaparral habitat in the vicinity of the parcel. The following species have suitable habitat on-site: *Amsinckia lunaris* (bent-flowered fiddleneck); *Lupinus antoninus* (Anthony Peak lupine); and *Eriastrum tracyi* (Tracy's eriastrum). The ephemeral channels have a low to moderate potential to sustain aquatic special-status species because the aquatic habitat does not persist.

## 4.4. POTENTIALLY-JURISDICTIONAL WATER RESOURCES

An informal assessment for the presence of potentially-jurisdictional water resources within the Study Area was also conducted during the field survey.

For purposes of this biological site assessment, non-wetland waters were classified using the California Forest Practice Rules. The California Forest Practice Rules define a Class I watercourse as 1) a watercourse providing habitat for fish always or seasonally, and/or 2) providing a domestic water source; a Class II watercourse is 1) a watercourse capable of supporting non-fish aquatic species, or 2) a watercourse within 1000 feet of a watercourse that seasonally or always has fish present; a Class III watercourse is a watercourse with no aquatic life present and that shows evidence of being capable of transporting sediment to Class I and Class II waters during high water flow conditions.

The USFWS National Wetland Inventory reported no water features within the Study Area. Several ephemeral (Class III) watercourses were detected within the Property during the field survey (see Exhibits). These are potentially-jurisdictional water features. No riparian vegetation occurs along these watercourses. The channels were not flowing at the time of the field visit. There are no vernal pools or wetlands on the Property.

## 5. IMPACT ANALYSES AND MITIGATION MEASURES

This section establishes the impact criteria, then analyzes potential Project-related impacts upon the known biological resources within the Study Area, and then suggests mitigation measures to reduce these impacts to a less-than-significant level.

### 5.1. IMPACT SIGNIFICANCE CRITERIA

The significance of impacts to biological resources depends upon the proximity and quality of vegetation communities and wildlife habitats, the presence or absence of special-status species, and the effectiveness of measures implemented to protect these resources from Project-related impacts. As defined by CEQA, the Project would be considered to have a significant adverse impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a special-status species in local or regional plans, policies, or regulations, or by USFWS or CDFW
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by USFWS or CDFW



- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means
- 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
- Conflict with any county or municipal policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved governmental habitat conservation plan.

Additionally, cultivators who enroll in the State Water Board’s Waste Discharge Requirements for Cannabis Cultivation Order WQ 2019-0001-DWQ must comply with the Minimum Riparian Setbacks, as summarized in the following table. The Project would be considered to have a significant adverse impact on biological resources if it would be non-compliant with these requirements. Cannabis cultivators shall comply with the minimum riparian setbacks described below for all land disturbance, cannabis cultivation activities, and facilities (e.g., material or vehicle storage, diesel powered pump locations, water storage areas, and chemical toilet placement). The riparian setbacks shall be measured from the waterbody’s bankfull stage (high flow water levels that occur every 1.5 to 2 years) or from the top edge of the waterbody bank in incised channels, whichever is more conservative. Riparian setbacks for springheads shall be measured from the springhead in all directions (circular buffer). Riparian setbacks for wetlands shall be measured from the edge of the bankfull water level. The cannabis cultivator shall increase riparian setbacks as needed or implement additional Requirements to meet the performance Requirement of protecting surface water from discharges that threaten water quality. If the cannabis cultivation Site cannot be managed to protect water quality, the Executive Officer of the applicable Regional Water Board may revoke authorization for cannabis cultivation activities at the cannabis cultivation site.

Minimum Riparian Setbacks

Common Name	Watercourse Class	Distance (Low Risk)	Distance (Mod Risk)	Variance
Perennial watercourses, springs, or seeps	I	150 ft.	200 ft.	Compliance Schedule
Intermittent watercourses	II	100 ft.	150 ft.	Compliance Schedule
Ephemeral watercourses	III	50 ft.	100 ft.	Compliance Schedule
Other waterbodies (lakes, etc.) and wetlands	150 ft.	200 ft.	Compliance Schedule	Other waterbodies (lakes, etc.) and wetlands

Notes:

- Riparian setbacks do not apply to man-made irrigation canals, water supply reservoirs, and hydroelectric canals (Watercourse Class IV) that do not support native aquatic species; however cannabis cultivators shall ensure land disturbance, cannabis cultivation activities, and facilities are not located in or disturb the existing riparian and wetland riparian vegetation associated with these Watercourse Class IV waterbodies.
- Risk is defined in Table 1 of this Policy and is based on the natural (prior to land disturbance activities) surface topography.
- Variance to riparian setbacks is only allowed if consistent with this Policy and a work plan and compliance schedule are approved by the applicable Regional Water Board Executive Officer.

## 5.2. IMPACT ANALYSIS

The following discussion evaluates the potential for Project-related activities to adversely affect biological resources. The Project boundaries were digitized and then overlaid on the habitat map using GIS to quantify potential impacts. Historical aerial photos were also analyzed for changes in land use.

### 5.2.1. Potential Direct / Indirect Adverse Effects Upon Special-status Species

- *Will the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Special-status species may occur in aquatic habitat in the watercourses on the parcel, but the Project Areas are several hundred feet away from these features and will not impact aquatic habitat. Chaparral habitat will need to be cleared to establish the cultivation compounds. Various special-status plants occur in chaparral habitat in the vicinity of the parcel. Destruction of chaparral habitat is a potentially-significant impact before mitigation.

The Study Area contains suitable nesting habitat for various bird species because of the presence of trees and poles. However, no nests or nesting activity was observed in the project area during the field survey. Trees must be inspected for the presence of active bird nests before tree felling or ground clearing. If active nests are present in the project area during construction of the project, CDFW should be consulted to develop measures to avoid "take" of active nests prior to the initiation of any construction activities. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site.

### Recommended Mitigation Measures

Special-status plants are afforded some protection under the California Environmental Quality Act, but the level of protection differs depending upon the Lead Agency. CEQA compliance may be triggered for various permits and zoning actions, and when triggered, may protect special-status plants. Avoiding the destruction of chaparral habitat would avoid this potential regulatory burden; a 50-foot buffer (of no land disturbance) around all chaparral habitat is recommended. If chaparral habitat must be cleared, we recommend the performance of a botanical survey to confirm that no special-status plants are present.

### 5.2.2. Potential Direct / Indirect Adverse Effects Upon Special-status Habitats or Natural Communities or Corridors

- *Will the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The Study Area is not within any designated listed species' critical habitat. Chaparral habitat will need to be cleared to establish the cultivation compounds, but this natural community is not special-status. The Study Area does not have any terrestrial special-status habitats. No riparian habitat is present. Ephemeral aquatic habitat is present in Class III channels in the Study Area, but not in the Project Area. There is no evidence that project implementation will impact any special-status habitats. Therefore, no mitigation is required.

### Recommended Mitigation Measures

No mitigation is necessary.

### 5.2.3. Potential Direct / Indirect Adverse Effects On Jurisdictional Water Resources

- *Will the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

There are no water features within the Project Areas. There are several ephemeral channels within the surrounding Study Area. The Project Areas are at least 120 feet away from the nearest channel. No direct impacts to channels or wetlands will occur from project implementation. The proposed project is compliant with the setback requirements of Cannabis Cultivation Order WQ 2019-0001-DWQ. Potential indirect impacts to water resources could occur during construction by increased erosion and sedimentation in receiving water bodies due to soil disturbance. If the total area of ground disturbance from installation of the cultivation operation is 1 acre or more, the Cultivator needs to enroll for coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 2009-0009-DWQ). Potential adverse impacts to water resources could occur during operation of cultivation activities resources by discharge of sediment or other pollutants (fertilizers, pesticides, human waste, etc.) into receiving waterbodies. However, the project proponent must enroll in Cannabis Cultivation Order WQ 2019-0001-DWQ. Compliance with this Order will ensure that cultivation operations will not significantly impact water resources by using a combination of Best Management Practices (BMPs), buffer zones, sediment and erosion controls, site management plans, inspections and reporting, and regulatory oversight.

It is recommended that a formal delineation of jurisdictional waters be performed before construction work, or ground disturbance, is performed near any channel.

#### Recommended Mitigation Measures

No impacts were identified, and therefore no mitigation measures are proposed.

### 5.2.4. Potential Impacts to Wildlife Movement, Corridors, etc.

- *Will the project 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?*

Although no mapped wildlife corridors (such as the California Essential Habitat Connectivity Area layer in CNDDDB) exist within or near the Study Area, the open space and the stream corridors in the Study Area facilitate animal movement and migrations. Although the Study Area may be used by wildlife for movement or migration, the Project would not have a significant impact on this movement because it would not block it and the majority of the Study Area would still be available.

Implementation of the project will not 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.

#### Recommended Mitigation Measures

No mitigation is necessary.

### **5.2.5. Potential Conflicts With Ordinances, Habitat Conservation Plans, etc.**

- *Will the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*
- *Will the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Forest resources occur on the parcel because commercial tree species are present (including black oak). Construction of the project may require the removal of trees protected by Lake County and CalFire. This is a potentially significant impact before mitigation. The Study Area is not within the coverage area of any adopted Habitat Conservation Plan or Natural Community Conservation Plan. The project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or another approved governmental habitat conservation plan.

### **Recommended Mitigation Measures**

Lake County requires mitigation for the removal of commercial tree species and native oak species.

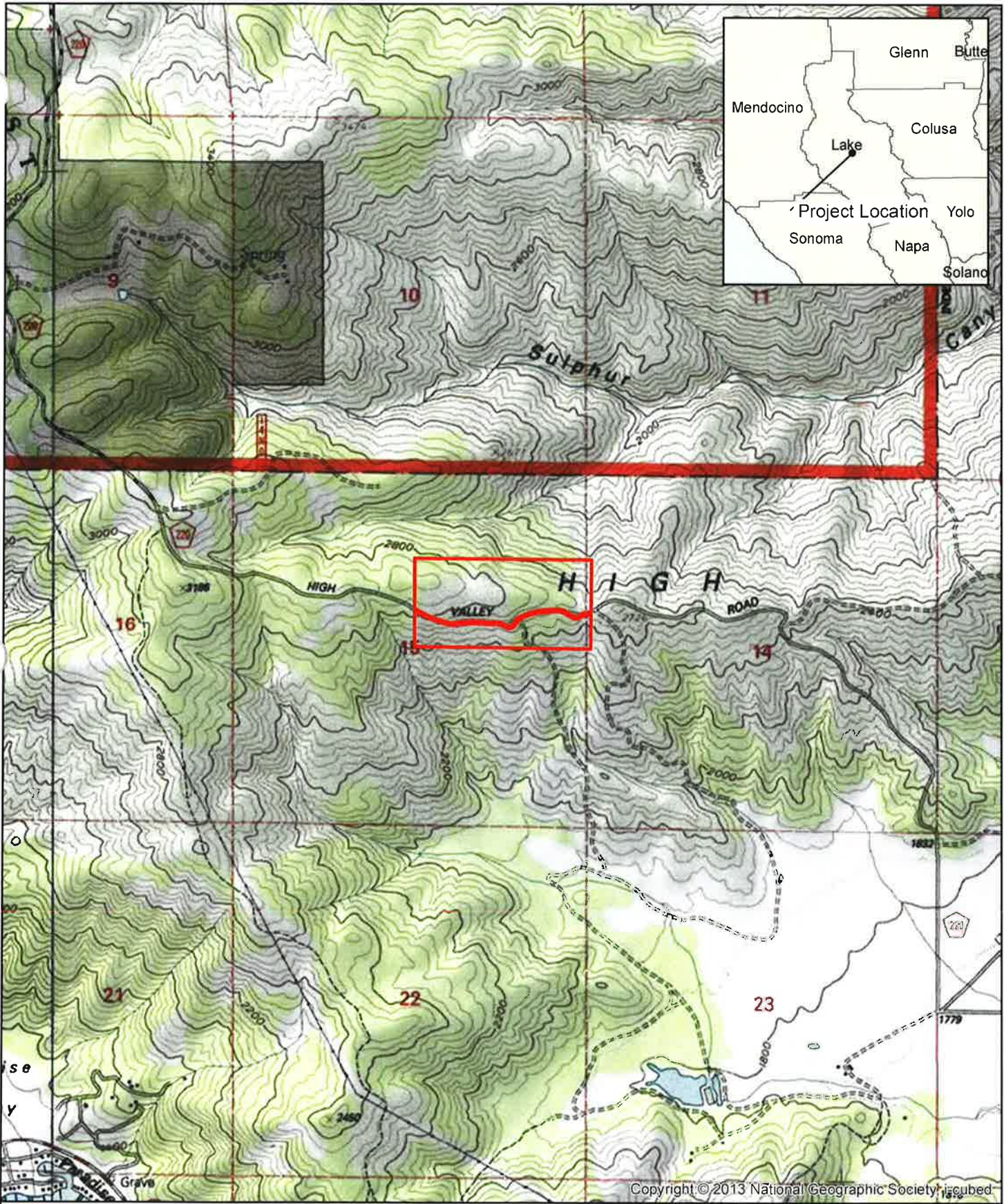
If development of the project will result in the removal of commercial tree species, one of the following permits is needed: Less than 3 Acre Conversion Exemption; Christmas Tree; Dead, Dying or Diseased, Fuelwood, or Split Products Exemption; a Public Agency, Public and Private Utility Right of Way Exemption; a Notice of Exemption from Timberland Conversion Permit for Subdivision; or an Application for Timberland Conversion Permit.

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# EXHIBITS






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 Parcel Location


0 0.5 1 Kilometers

0 0.5 1 Miles



1:24,000

**9850 High Valley Road  
Parcel Location Map**

 NATURAL INVESTIGATIONS COMPANY



# HIGH VALLEY FARM PROPOSED CULTIVATION PROJECT

1.5 Acre  
Canopy  
Area

LIMITS OF 0-15% SLOPE  
AREA 3.2 ACRES

±209'

ACCESS ROAD

2.0 Acre  
Canopy  
Area

LIMITS OF 0-15% SLOPE  
AREA 4.7 ACRES

±196'

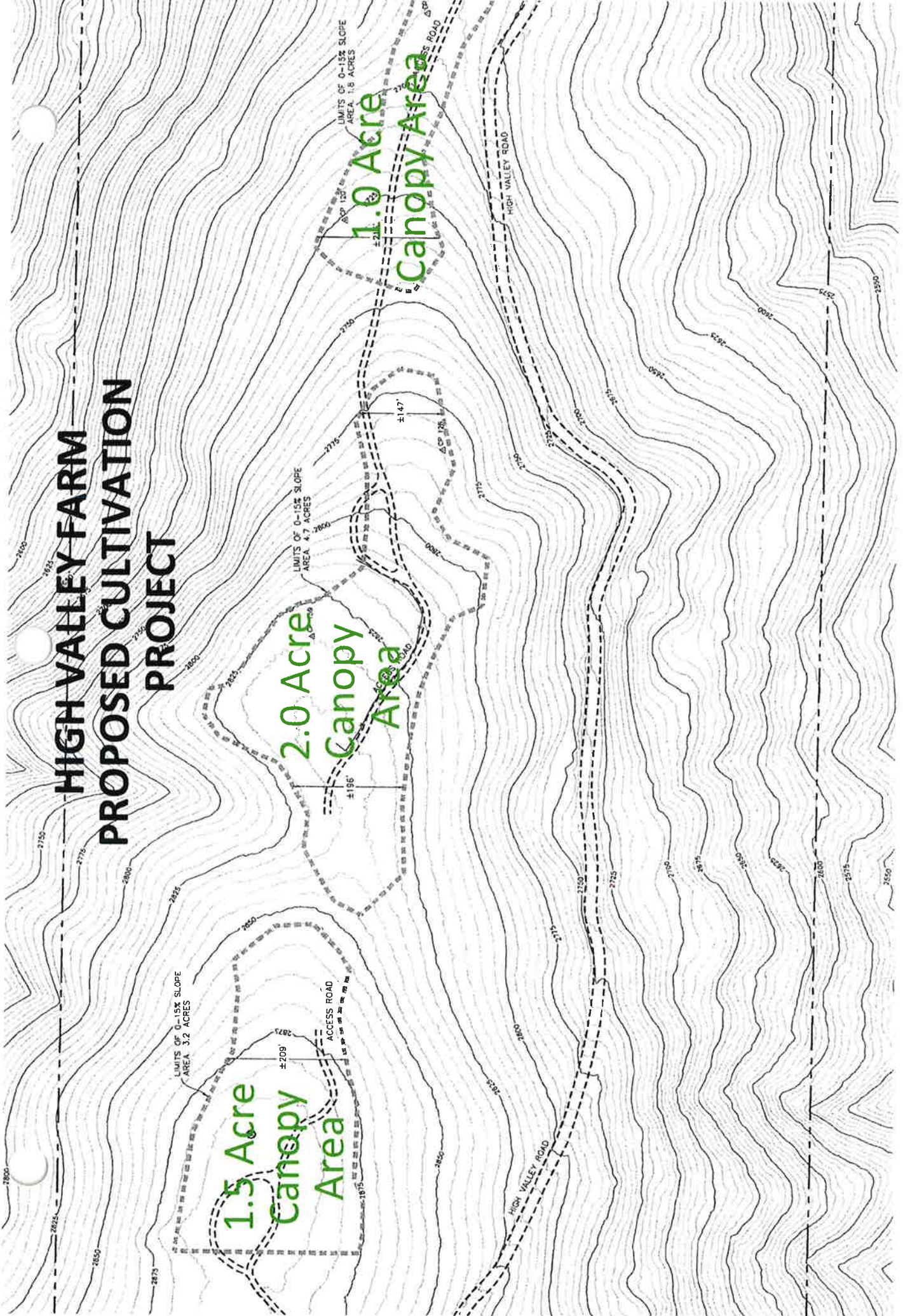
±147'

1.0 Acre  
Canopy  
Area

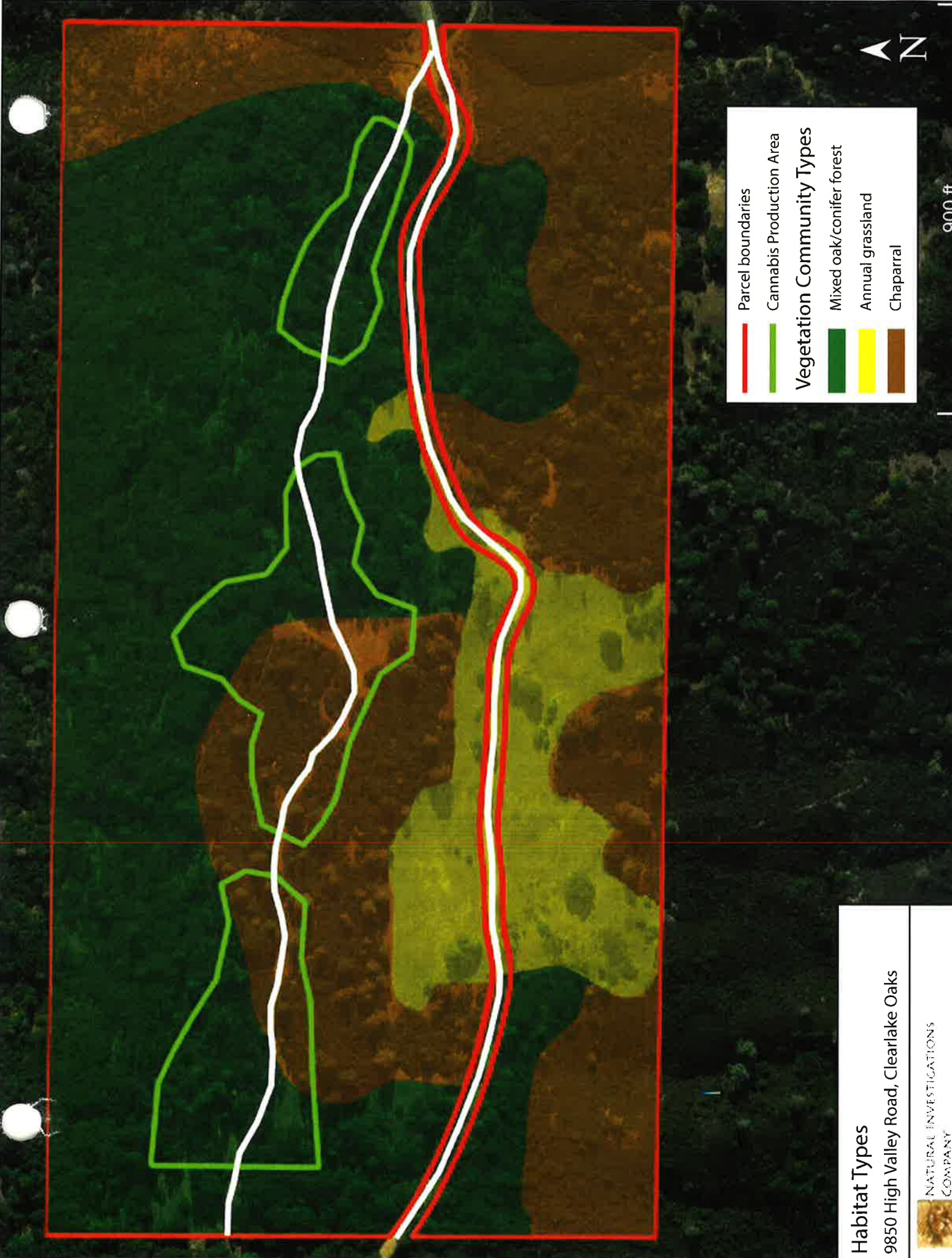
LIMITS OF 0-15% SLOPE  
AREA 1.6 ACRES

±128'

±128'







Parcel boundaries

Cannabis Production Area

**Vegetation Community Types**

Mixed oak/conifer forest

Annual grassland

Chaparral

**Habitat Types**  
 9850 High Valley Road, Clearlake Oaks

NATURAL INVESTIGATIONS  
 COMPANY




900 ft





— Parcel boundaries  
— Potential Cannabis Production Area  
**Water Resources**  
— Class III Watercourse

**Water Resources**  
 9850 High Valley Road, Clearlake Oaks  

 NATURAL INVESTIGATIONS  
 COMPANY

900 ft